M.O.709

AIR MINISTRY
METEOROLOGICAL OFFICE

THE OBSERVATORIES' YEAR BOOK

1955

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

LONDON: HER MAJESTY'S STATIONERY OFFICE
1961

Universal Decimal Classification
550.38(058)
551.506.1
551.510.42(058)
551.594(058)

PREFACE

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.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939-45 war. Restriction on supplies and printing since the war resulted in a regrettably long delay in the resumption of publication. In face of the formidable accumulation of arrears, and taking changed requirements into account, it was decided to adopt an abridged form as outlined below.

It was arranged that the General Introduction to the Meteorological Tables and the parts of the Sectional Introduction which deal with site, instruments, procedure and tabulation included in the volume for 1938 should serve as standards of reference for many years; and that only important departures from these standards, together with any requisite additional information should be included in the relevant parts of the volume for the years after 1938. As compared with the volumes before 1938, the space devoted to the discussion of observations is reduced. Monthly tables of individual hourly values of meteorological elements are omitted, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility is also omitted. No major changes have been made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1955, presents atmospheric electrical and geomagnetic data for Lerwick Observatory; meteorological, atmospheric electrical and geomagnetic data for Eskdalemuir; meteorological, atmospheric electrical and atmospheric pollution data for Kew. Aberdeen Observatory closed at the end of 1947.

Manuscript tabulations of hourly values of the meteorological elements are available at the observatories. Requests for information from these tabulations should be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire.

NOTE ON THE TABLES. – Maximum and minimum values are shown in italics.

CONTENTS

ESKDALEMUIR OBSERVATORY-*continued*

KEW OBSERVATORY

METEOROLOGY

ATMOSPHERIC ELECTRICITY

ATMOSPHERIC POLLUTION

ERRATA IN PREVIOUS VOLUMES

Observatories' Year Book, 1951

Page 47, line 29, for "1 for declination" read "1′ for declination"

Observatories' Year Book, 1953

Page iii, Preface, para. 2, line 4. Insert the words "adopt an" between the words "to" and "abridged"

Page 39 and 94. Headings to Tables 63 and 149. For "*T*" read "*F*"

Page 45, Introduction, lines 12, 13 should read "The highest gust of wind during the year was 32·5 m./sec. (63 knots) on 31 January. The highest hourly speed was 16·3 m./sec. (32 knots) on 11 April"

Page 46, line 5 of Terrestrial Magnetism. For "*T*" read "*F*"

Page 59, Table 89. Heading and second footnote. For "7h." read "9h."

Observatories' Year Book, 1954

Page iii, Preface, para. 2, line 4. Insert the words "adopt an" between the words "to" and "abridged"

Page 6, Table 5(c). Heading. Second "*K*" should read "*K′*". Replace "Other S.F.E." by "Flare or S.F.E."

Page 6, Table 5(c). Last column. In all three entries delete "S.F.E."

Page 10, Table 7. Heading. Adjust spelling of "adjusted"

Page 39, Table 61. Heading. For "Tables 52-54" read "Tables 57-59"

Page 39, Table 63. Heading. For "*T*" read "*F*"

Page 49, Table 70(c). Heading. Second "*K*" should read "*K′*". Replace "Other S.F.E." by "Flare or S.F.E."

Page 49, Table 70(c). Last column. In all three lines insert "Doubtful"

Page 58, Table 89. Heading and second footnote. For "7h." read "9h."

Page 94, Table 149. Heading. For "*T*" read "*F*". Also, Declination heading. For "12°" read "11°"

Page 112, Table 173. Heading and second footnote. For "6h." read "9h."

Observatories' Year Book, 1957

Page 3, Introduction, line 3. For "0°11′W" read "1°11′W"

Page 5. Transfer first sentence of para. 4 to end of para. 3

Page 9, 4th line from foot of page. Delete "d" from word "coild"

Observatories' Year Book, 1958

Page 3, Introduction, line 3. For "0°11′W" read "1°11′W"

Page 60, Table 19. Title. For "Other Scottish Stations" read "British Isles"

LERWICK

LERWICK OBSERVATORY

Latitude	60°08′N.
Longitude	1°11′W.
G.M.T. of Local Mean Noon	12h. 5m.
Height of site above M.S.L. ..	80 to 90 metres

INTRODUCTION

Full details of the site, instruments procedure and tabulations are given in the *Observatories' Year Book*, 1938. Only important changes and additions are mentioned here.

Atmospheric electricity

No changes were made in 1955

Aurora

Table 65 is now 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 Laboratory, University of Edinburgh.

Terrestrial magnetism

Until 1946 the chamber was unheated but in June of that year small, low temperature thermostatically controlled a.c. electric heaters were installed in order to reduce the persistent damp. The diurnal variation of temperature has continued negligibly small.

The average day-to-day change of temperature in the magnetograph house for each of the twelve months of 1955 and for the year as a whole was as follows (in degrees Absolute);

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
·29	·14	·16	·27	·21	·31	·51	·13	·22	·40	·50	·42	·30

There were 21 occasions on which the change reached or exceeded 1°A.

Notes on the results

Beginning with 1947 some changes have been made in the tables accompanying these notes. The month by month commentary on the autographic records has been omitted, and a change has been made in the table formerly headed "Principal Magnetic Disturbances". It is intended that all the disturbances, which would have been included in the previous type of table, will still be included, with, however, additional disturbances of the form of sudden commencements and those which can be recognised as being solar flare effects. The table is thus diveded 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.T.M.E. Bulletins because a somewhat stricter meaning has been given to the words "well marked", and also because the sharp beginnings of small polar disturbances have been omitted. 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 disturbance. The signs given to the movements of *H*, *D* and *Z* are positive for increasing *H* or *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 the Eskdalemuir sections of the *Observatories' Year Book*, even if the disturbance at one of the stations is relatively small.

The factor to change variations of *D* expressed in minutes of arc to units of force (γ) perpendicular to the magnetic meridian was approximately 4·21. Comparing the mean values for all days of 1955 with those for 1954 it is noted that *H* increased by 14γ, *D*(West) decreased by 6'5 and *Z* increased by 26γ. The ranges between the extreme values recorded in 1955 were *H* 2437γ, *D* 3°42'8 and *Z* 914γ.

The *K* index is fully described in *Terrestrial Magnetism and Atmospheric Electricity**. Briefly, a figure is allotted on a scale 0-9 to each 3-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet day variation. The figures are first allotted from the *H* magnetogram, and then increased, if necessary, by inspection of the *D* and *Z* curves, so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Lerwick is

K	0	1	2	3	4	5	6	7	8	9
γ	0	10	20	40	80	140	240	400	660	1000

TABLE I — ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1955			Mean 1932-53			1955			Mean 1932-53		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	108	91	87	100	102	104	98	97	89	63	90	78
February	83	85	97	124	113	123	76	90	99	78	100	92
March	129	123	125	216	149	176	117	131	128	135	132	132
April	174	120	140	204	120	163	158	127	143	128	106	122
May	157	104	113	195	111	141	143	110	115	122	98	106
June	97	78	74	150	94	109	88	83	76	94	83	82
July	88	72	63	158	96	110	80	77	64	99	85	83
August	84	75	67	178	111	135	76	79	68	111	98	101
September	94	89	108	209	133	170	86	94	110	131	118	128
October	91	93	92	188	129	164	83	99	94	118	114	123
November	141	114	129	107	101	112	128	121	132	67	89	84
December	70	86	78	89	93	96	64	92	80	56	82	72
Winter	101	94	98	105	103	109	91	100	100	66	91	82
Equinox	122	106	116	204	134	168	111	113	119	128	119	126
Summer	107	82	79	170	103	123	97	87	81	106	91	92
Year	110	94	98	160	113	133	..	..	..	..	..	..

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

*BARTELS, J., HECK, N.H. and JOHNSTON, H.F.: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore*, **44**, 1939, p.411.

TABLE 2 — FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1955			Percentage distribution					
				H		*D*		*Z*	
	H	*D*	*Z*	1955	1932-53	1955	1932-53	1955	1932-53
				%	%	%	%	%	%
0 – 9	0	0	3	0·0	0·0	0·0	0·0	0·8	0·3
10 – 19	5	7	28	1·4	1·4	1·9	0·4	7·7	6·8
20 – 29	16	9	45	4·4	4·9	2·5	2·3	12·3	10·5
30 – 39	35	16	46	9·6	6·3	4·4	4·0	12·6	9·3
40 – 49	40	45	37	11·0	7·5	12·3	7·3	10·1	7·2
50 – 59	52	48	23	14·2	9·3	13·2	10·0	6·3	6·2
60 – 69	44	58	24	12·0	9·1	15·9	12·3	6·6	5·1
70 – 79	35	39	13	9·6	8·6	10·7	10·5	3·6	4·4
80 – 89	26	20	13	7·1	7·4	5·5	9·2	3·6	3·9
90 – 99	22	21	11	6·0	5·8	5·8	7·0	3·0	3·4
100 – 109	13	17	15	3·6	4·3	4·7	5·6	4·1	3·3
110 – 119	7	10	11	1·9	3·5	2·7	4·0	3·0	2·9
120 – 129	10	5	8	2·7	2·9	1·4	3·6	2·2	2·6
130 – 139	6	15	9	1·6	2·2	4·1	3·1	2·5	2·6
140 – 149	2	11	7	0·5	2·4	3·0	2·9	1·9	2·3
150 – 159	5	7	7	1·4	1·6	1·9	1·8	1·9	2·0
160 – 169	2	5	9	0·5	1·5	1·4	1·9	2·5	1·8
170 – 179	3	2	4	0·8	1·1	0·5	1·4	1·1	1·4
180 – 189	5	4	5	1·4	1·1	1·1	1·5	1·4	1·4
190 – 199	1	4	4	0·3	1·0	1·1	1·1	1·1	1·5
200 +	36	22	43	9·9	18·3	6·0	10·0	11·8	21·1
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 3 — AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53 WITH 1955 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		Z	*H*	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-53	53·3	49·4	9·36	10·3	37·4	8·68	131·1	131·6	14·22
	1955(%)	74	71	88	99	80	83	83	56	90
Winter	1932-53	41·1	24·4	7·87	7·7	15·1	4·65	116·6	85·0	13·84
	1955(%)	91	78	90	87	88	88	97	117	100
Equinox	1932-53	68·8	59·2	10·94	12·9	42·3	9·54	168·9	193·4	18·89
	1955(%)	72	63	86	74	75	74	80	50	79
Summer	1932-53	53·0	72·6	12·72	17·0	57·5	12·77	134·0	156·9	15·61
	1955(%)	60	76	87	111	86	87	68	51	86

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

TABLE 4 — RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1955

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	*D*	·93	1·18	1·09	1·01	1·03	1·07	1·12	1·10	1·03	·96	·91	·91
d	*D*	1·65	1·21	1·27	1·51	1·36	1·17	1·12	1·22	1·28	1·31	1·25	1·20
q	*H*	·88	1·07	1·15	1·20	1·17	1·19	1·11	1·22	1·11	1·11	·83	·99
d	*H*	3·67	1·62	4·43	3·71	2·09	1·16	1·31	1·54	1·44	1·48	3·11	2·49
q	*Z*	1·75	1·30	·96	·62	·74	1·01	·87	1·03	·89	·69	2·09	·70
d	*Z*	1·78	2·30	1·94	1·63	1·77	2·43	2·27	2·16	1·96	2·02	1·76	1·95

TABLE 5 — NOTEWORTHY MAGNETIC DISTURBANCES AT LERWICK

(a) Disturbances without S.C's

Serial Number	From		To		Range (γ)			Notes
	Date	Hour	Date	Hour	*H*	*D*	*Z*	
1a	Jan. 17	12	Jan. 18	09	1283	382	430	
2a	Feb. 28	00	Feb. 28	09	297	140	270	
3a	Mar. 22	09	Mar. 22	22	660	310	285	
4a	Oct. 25	00	Oct. 26	24	372	253	472	
5a	Nov. 18	16	Nov. 18	24	491	360	239	
6a	Dec. 1	13	Dec. 2	08	692	358	455	

(b) Disturbances with a S.C.

Serial Number	Date	Time of S.C.	End of Disturbance		With initial reversed stroke			Magnitude main stroke of S.C.			Range of following disturbance (γ)		
			Date	Hour	*H*	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
								γ	γ	γ			
1b	Jan. 11	12.19			Yes	Yes	No	+8	−8	−6		Small	
2b	Mar. 30	10.39	Mar. 31	24	No	No	No	Small and indistinct			474	284	435
3b	Apr. 24	12.13	Apr. 25	02	Yes	No	No	+3	−8	0	363	192	330
4b	Apr. 27	16.24	Apr. 28	05	Yes	Yes	Yes	+69	−20	−17	1131	447	807
5b	May 25	14.33	May. 26	11	Yes	Yes	Yes	+30	−12	−12	1027	625	565
6b	June 6	17.28			No	No	No	+26	−12	−9		Small	
7b	June 22	10.39			Yes	Yes	No	+7	+8	−2		Small	
8b	Oct. 5	11.18	Oct. 6	10	No	No	No	+20	−28	−5	318	332	340
9b	Oct. 7	22.57			No	No	No	+26	−14	−6		Small	
10b	Nov. 19	13.19	Nov. 21	04	Yes	Yes	No	+112	−120	+60	1479	616	633

(c) Disturbances due to Solar Flare

Serial Number	Date	Commencement	Max.	End	Movement (γ)			*K*	*K'*	Flare of S.F.E.
					H	*D*	*Z*			
1c	July 2	10.18	10.23	10.28	+7	−7	0	2	2	
2c	July 3	16.06	16.20	16.24	+20	−9	−6	2	2	
3c	Aug. 30	16.16	16.20	16.23	+8	−4	−3	2	2	
4c	Nov. 12	11.28	11.33	11.54	−16	−39	+15	3	3	S.W.F., S.F., S.E.A.
5c	Dec. 3	11.03	11.13	11.20	−8	−4	+3	1	1	S.W.F., S.F.,

all these are doubtful S.F.E.

S.E.A. — Sudden enhancement of atmospherics
S.W.F. — Short wave radio fade out
S.F. — Solar Flare

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

6 LERWICK

	JANUARY, factor 1·02				FEBRUARY, factor 1·02				MARCH, factor 1·07			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	133	125	-	125	-206	463	473	(735)	167	-540	672	157
2	85	83	100	125	380	257	93	247	93	107	183	177
3	68	75	100	181	269	465	269	282	245	293	-147	150
4	118	80	93	95	98	149	-	110	108	173	131	103
5	-175	-187	155	-	73	147	145	-	50	88	156	98
6	-	-	93	133	76	Z±	Z±	245	83	111	151	108
7	67	137	75	163	171	247	196	211	48	35	132	152
8	125	200	-57	150	93	181	178	98	116	127	195	127
9	50	129	229	-485	71	132	-	156	76	97	104	109
10	-	-	361	(349)	68	-	-	-210	102	117	-	-
11	137	-	Z±	>647	81	-51	146	>439	153	133	107	153
12	92	224	149	>1046	171	329	146	190	84	77	105	77
13	-	112	322	-	51	149	171	220	87	125	131	3
14	486	>322	372	446	100	159	495	159	100	77	123	126
15	136	211	-	595	71	78	100	171	103	52	129	106
16	99	Z±	112	260	-	-	195	-	77	98	103	163
17	-	-	273	-	-	-	-	-	78	324	155	34
18	-	-	-	198	-	277	196	257	-130	96	Z±	Z±
19	94	185	143	122	Z±	-	355	Z±	-52	339	Z±	183
20	168	210	148	153	125	Z±	269	221	81	107	Z±	207
21	259	405	267	247	157	108	167	-344	126	-	-	262
22	-758	321	111	148	76	111	246	332	181	318	247	263
23	99	148	113	25	258	428	622	197	182	185	224	222
24	-123	136	143	207	104	210	316	259	106	130	114	146
25	106	135	374	369	-	-	151	225	8	146	80	109
26	246	256	-44	197	117	181	122	154	106	157	168	242
27	93	172	431	364	99	136	213	516	133	150	160	163
28	98	172	123	221	149	107	-558	-705	172	126	126	163
29	295	460	553	492					86	153	147	-43
30	598	657	192	239					81	40	110	159
31	245	519	661	593					135	-315	83	145
(a)	169	228	228	292	130	216	239	258	109	142	140	147
(b)	102	236	197	190	129	226	203	170	110	95	98	131
Mean	(a) 229		(b) 181		(a) 211		(b) 182		(a) 135		(b) 109	

	APRIL, factor 1·11				MAY, factor 1·17				JUNE, factor 1·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	35	135	189	162	-	-	285	313	283	348	222	290
2	181	130	1147	540	-	-117	70	93	333	293	154	132
3	(-661)	8	127	162	84	117	-	187	363	271	176	139
4	87	163	827	103	-163	-	-	780	209	108	225	179
5	182	154	298	534	61	154	262	434	123	138	114	153
6	27	-331	298	515	173	280	107	107	98	163	175	184
7	117	299	150	226	112	126	117	154	123	175	132	175
8	305	209	256	128	163	-	187	154	101	71	169	-
9	-27	164	164	224	-126	126	47	84	-	-	101	153
10	235	-	-	-	0	47	93	107	147	37	Z-	129
11	-	-	97	70	107	-	-785	-188	104	122	122	214
12	82	122	55	152	132	157	144	126	132	77	153	177
13	158	131	143	106	94	116	157	166	101	153	138	174
14	158	182	61	(152)	235	501	-157	163	174	320	235	101
15	-	-	106	30	218	147	134	115	98	143	82	122
16	67	-	43	-	452	265	415	109	101	113	153	131
17	-	64	-	-	103	125	162	125	82	91	182	161
18	-	-	122	213	-	-	62	124	85	170	170	204
19	-	-	499	176	109	193	140	498	143	161	176	195
20	91	106	131	161	155	(-84)	77	233	146	152	176	158
21	73	9	128	112	171	109	99	136	115	145	-	230
22	97	213	-152	76	133	146	99	124	312	70	91	127
23	82	116	164	122	130	155	130	109	82	88	100	491
24	94	134	170	271	211	186	77	248	130	182	-	151
25	152	143	70	152	149	93	139	146	91	100	60	106
26	164	122	-	161	93	115	155	248	103	130	565	432
27	365	608	517	-243	195	185	287	226	453	181	-	-
28	-	-	133	133	226	170	155	142	-	-	135	494
29	159	133	199	531	105	124	176	232	144	292	120	105
30	354	190	111	-	371	371	201	185	120	141	169	211
31					228	317	256	379				
(a)	148	161	239	208	162	180	157	208	161	158	165	197
(b)	88	141	247	209	155	172	145	191	154	166	169	190
Mean	(a) 189		(b) 171		(a) 177		(b) 166		(a) 170		(b) 170	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

6 LERWICK

	JULY, factor 1·10				AUGUST, factor 0·99				SEPTEMBER, factor 0·94			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	285	249	285	93	263	191	100	128	31	159	-	-
2	-279	-525	150	99	72	84	72	119	96	-	-	113
3	114	150	51	195	115	131	103	159	150	144	92	250
4	165	156	120	150	186	189	118	152	68	109	51	263
5	165	141	150	180	117	303	185	281	390	85	137	127
6	114	170	60	48	169	197	151	105	-	-	-	-
7	45	120	-	-	104	80	92	126	-	-	-	-
8	-	-	265	563	83	110	107	162	-	-	-	-
9	366	321	231	208	46	131	107	149	-	-	-	-
10	259	203	197	394	119	119	128	116	-	-	-	-
11	96	124	253	253	85	139	91	151	-	-	-	-
12	146	315	225	180	97	91	115	142	-	-	-	-
13	552	366	552	225	69	102	129	120	-	-	-	-
14	208	141	186	129	151	244	138	181	-	-	-	-
15	56	62	197	281	198	453	360	543	-	-	-	-
16	248	338	152	158	54	6	90	422	-	-	-	-
17	113	118	141	169	170	542	-54	378	173	-	-	247
18	113	129	-	197	122	95	389	413	67	107	133	174
19	-	-	-	-	299	411	30	246	27	454	-	107
20	-	-	-	-	147	209	230	401	99	248	403	820
21	-	-	-	-	115	185	(632)	144	-	-	-	375
22	-	-	-	404	88	155	167	305	-	-	-	402
23	216	177	193	145	137	76	117	216	67	-	482	378
24	96	180	177	177	105	93	131	134	182	474	239	188
25	134	160	224	160	93	342	290	510	73	129	73	269
26	80	278	223	415	113	-	29	17	67	91	91	126
27	588	582	216	213	-	144	144	170	81	81	65	27
28	73	86	79	120	95	112	132	100	48	108	-135	164
29	95	117	95	145	31	-23	117	283	81	159	116	157
30	183	576	120	331	77	114	111	171	95	116	86	143
31	188	94	104	440	97	94	131	99				
(a)	188	214	186	225	121	177	158	214	106	176	164	241
(b)	178	191	183	205	121	172	155	223	117	154	113	226
Mean		(a) 203	(b) 189			(a) 167	(b) 168			(a) 172	(b) 153	

	OCTOBER, factor 0·96				NOVEMBER, factor 0·99				DECEMBER, factor 1·03			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	81	132	67	49	31	44	142	145	-52	159	96	-
2	-16	143	-95	154	153	347	250	270	73	46	52	Z±
3	-122	171	79	111	167	306	(639)	367	96	(495)	189	(378)
4	60	81	79	103	279	-36	162	432	Z±	102	134	145
5	79	117	255	Z±	419	446	432	377	12	116	-	137
6	27	79	35	163	335	190	237	516	93	79	64	111
7	57	109	150	125	176	280	140	196	>350	50	-	Z±
8	82	139	188	160	280	308	-	176	>496	<-350	234	88
9	82	95	44	44	70	112	308	280	9	29	117	138
10	144	275	231	158	197	155	37	188	50	439	352	278
11	49	160	163	92	112	309	126	141	111	88	170	176
12	177	393	169	55	56	71	56	99	88	88	176	417
13	101	-183	82	137	113	99	85	107	82	235	147	94
14	82	Z-	137	Z±	85	93	141	85	156	-118	79	59
15	Z±	104	147	115	76	93	85	57	82	244	229	>1028
16	Z±	55	238	(384)	57	65	150	156	89	133	177	(590)
17	293	Z±	82	142	99	156	114	142	147	147	-	-
18	90	71	79	186	85	125	85	142	-	-	-	-
19	85	38	-	77	123	114	85	77	-	-	-	619
20	Z±	179	52	110	71	66	114	66	Z±	Z±	Z±	230
21	>220	55	127	157	71	86	143	92	148	110	178	178
22	47	58	83	115	43	106	71	157	89	148	201	68
23	41	83	162	113	100	77	86	92	124	237	-	192
24	83	119	124	152	192	121	115	115	59	118	178	118
25	44	19	171	110	58	124	187	144	148	118	184	124
26	91	Z±	66	124	-78	86	86	115	95	198	142	216
27	28	179	>496	Z±	0	-37	109	127	Z±	356	128	163
28	Z±	194	139	166	87	92	116	145	-113	>950	Z±	214
29	28	86	208	75	66	87	130	78	Z±	134	149	154
30	208	150	277	175	73	73	131	107	59	89	178	>564
31	72	97	119	64					149	89	119	110
(a)	94	125	147	129	127	151	157	173	122	192	160	253
(b)	67	114	121	117	114	133	157	173	97	150	165	204
Mean		(a) 124	(b) 105			(a) 152	(b) 144			(a) 182	(b) 154	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means					
(a)	136	177	178	212	
(b)	119	163	163	186	
	(a) 176		(b) 158		

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

7 LERWICK

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	+2	-13	-33	-51	-45	-41	-38	-38	-35	-46	-33	-22	-22	-1	-19	+5	+95	+102	+47	+53	+29	+38	+51	+15	+20	2	117
Feb.	-49	-41	-54	-67	-64	-6	+14	+19	+40	-16	+21	-4	-33	-35	-25	+1	+19	+49	+70	+56	+86	+62	+4	-48	+21	3	224
Mar.	-21	-33	-32	-23	-19	-28	-11	-1	+1	-3	-3	-12	+2	+12	+16	+6	+3	+33	+39	+23	+29	+12	+11	-13	-30	7	149
Apr.	+40	+22	+16	+18	+17	-7	-15	-43	-36	-59	-57	-43	-41	-45	-39	-42	+19	+33	+92	+109	+102	+15	-55	-1	+185	4	204
May	+2	-2	+9	+2	0	+18	-4	+8	+8	-40	-48	-23	-8	-23	-14	-4	+17	+25	+17	+24	+19	+16	+4	-2	+13	10	180
June	-6	-12	-8	-19	-14	-2	-6	-3	+2	-27	-13	-13	-11	-10	+7	+23	+14	+18	+10	+11	+8	+4	+25	+22	+21	16	173
July	-11	-9	-7	-8	-3	+29	+39	+59	+33	-12	-19	-38	-15	-32	-11	-6	+7	-16	+10	+30	+17	-3	-17	-19	-15	17	203
Aug.	-8	-28	-34	-40	-31	-7	+2	+3	-1	-34	-14	-7	-7	+5	+5	-14	-5	+12	+25	+37	+50	+61	+29	+1	+7	17	138
Sept.	+6	-12	-23	-61	-71	-77	-81	-58	-19	-73	-97	-66	+75	+40	-35	-63	-27	-59	+23	+103	+185	+150	+133	+110	+269	2	255
Oct.	-37	-29	-43	-43	-40	-18	-16	+10	+14	-7	+11	+3	+17	+19	+11	+36	+46	+74	+52	+14	-1	-24	-24	-26	-18	4	118
Nov.	-46	-42	-41	-31	-12	0	+2	-2	-2	-11	+13	+20	+20	+20	+75	+13	+18	+30	+30	+21	+10	+2	-7	-18	-20	8	127
Dec.	-9	+19	-16	-18	-9	-38	-56	-58	-58	-60	-37	-27	-20	-28	-11	+55	+20	+114	+50	+86	+188	-40	-116	+69	+165	1	170
Year	-11	-15	-22	-28	-24	-15	-14	-9	-4	-32	-23	-19	-4	-7	-3	+1	+19	+35	+39	+48	+60	+24	+3	+7	+51	91	171
Winter	-25	-19	-36	-42	-33	-21	-19	-20	-14	-33	-9	-8	-14	-11	+5	+19	+38	+74	+49	+54	+78	+15	-17	+5	+47	14	159
Equinox	-3	-13	-21	-27	-28	-33	-31	-23	-10	-35	-37	-29	+13	+7	-12	-16	+10	+20	+51	+65	+79	+38	+16	+17	+101	17	181
Summer	-6	-13	-10	-16	-12	+9	+8	+17	+11	-28	-23	-20	-10	-15	-3	0	+8	+10	+15	+25	+23	+19	+10	+1	+7	60	173
	1a and 2a days only*																										
Jan.	-93	-111	-73	-5	-2	-10	-25	+28	+37	+19	+30	+38	+33	+44	+41	+47	-61	-8	+18	+22	+43	+52	-4	-59	-27	9	228
Feb.	-43	-39	-44	-9	-67	-65	-3	-13	+21	+22	+43	+45	+18	+27	+57	+19	+7	+15	+10	+17	+16	-4	-8	-23	-28	6	193
Mar.	+21	+69	+51	-29	-40	-31	-27	-78	-71	-41	-24	-35	-51	-22	-24	+18	+66	+62	+41	+42	+45	+49	+26	-17	+45	9	64
Apr.	-117	-140	-127	-117	-143	-91	-76	-50	-48	-54	-27	+2	+19	+103	+242	+214	+133	+47	+55	+88	+80	+90	+8	-92	-122	7	166
May	+49	-43	-231	-105	-14	+19	-2	-29	-45	-99	+6	+43	+131	+91	-17	+67	+43	+45	-5	-35	+100	+16	+7	+7	-52	2	177
June	-2	+27	+7	-17	-47	-102	-119	-1	-3	-40	-33	-20	-19	-3	+11	+29	+59	+53	+43	+31	+40	+33	+41	+33	-93	4	128
July	-31	-22	-18	+51	+27	+18	+15	+17	+8	-11	-15	+20	+19	+5	-33	-45	-49	+8	-10	-3	+24	+34	-5	-4	-87	4	192
Aug.	-42	-30	-32	-51	-33	+18	+65	+30	+44	-8	-34	-58	-94	-10	-13	-22	-46	+15	+74	+108	+88	+59	+8	-34	-26	7	169
Sept.	+40	-15	-16	+3	+18	+30	+45	+87	+15	-137	+6	+22	-23	-26	-27	-43	-81	-18	+26	+16	+25	+20	+13	+20	-93	4	159
Oct.	-12	-10	-36	-28	-40	-54	-21	+1	+15	-4	-6	-10	-9	+6	+29	+29	+36	+26	+5	+21	+20	+18	+19	+5	-17	7	112
Nov.	+7	-4	-14	-7	+7	+7	-57	-24	-53	-96	-109	-126	-88	-32	-10	+16	+48	+90	+84	+119	+81	+96	+53	+12	-3	8	133
Dec.	+12	-15	-41	-50	-58	-53	-23	-3	+12	+9	-17	-2	+41	+33	+44	+48	+38	+53	+56	+47	+38	-37	-69	-65	-37	3	127
Year	-18	-28	-48	-30	-33	-26	-19	-3	-6	-37	-15	-7	-2	+18	+25	+31	+16	+32	+33	+39	+50	+35	+7	-18	-45	70	154
Winter	-29	-42	-43	-18	-30	-30	-27	-3	+4	-11	-13	-11	+1	+18	+33	+33	+8	+37	+42	+51	+45	+27	-7	-34	-24	26	170
Equinox	-17	-24	-32	-43	-51	-37	-20	-10	-22	-59	-13	-5	-16	+15	+55	+55	+39	+29	+32	+42	+43	+44	+17	-21	-47	27	125
Summer	-7	-17	-69	-31	-17	-12	-10	+4	+1	-39	-19	-4	+9	+21	-13	+7	+2	+30	+25	+25	+63	+35	+13	+1	-65	17	167

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

* For explanation of 0a, 1a, 2a days see p.16. *Observatories' Year Book, 1938*

† See p.10. *Observatories' Year Book, 1938*

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	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	-	-	(2b)	3·1	2a	14·3	1a	1·1	(1b)	0·7	0a	···
2	0a	···	1a	1·1	1a	0·2	1a	1·5	(2a)	(9·2)	0a	···
3	0a	···	0a	···	1b	1·6	(2b)	4·1	(1a)	0·1	0a	···
4	1a	0·6	(0a)	···	1b	0·2	1a	0·7	(2a)	3·2	0a	···
5	(2b)	5·1	(1b)	-	0a	···	0a	···	1a	0·3	0a	···
6	-	-	1c	1·6	1a	0·3	1b	2·6	2b	3·1	0a	···
7	1b	1·0	1b	0·3	1a	1·1	0b	···	2b	3·1	0a	···
8	2b	3·7	(1a)	0·1	1b	0·3	1b	2·7	(1a)	-	(1a)	0·4
9	2b	7·6	(1c)	1·0	2a	3·8	1a	2·7	1a	1·1	(1b)	-
10	-	-	(1b)	2·1	(1a)	0·5	-	-	1c	0·7	1b	2·7
11	(1c)	(1·9)	(1c)	2·9	0a	···	-	-	(2b)	6·4	1b	0·4
12	1b	0·3	1b	0·8	1a	0·5	1b	0·6	1b	0·3	1a	0·1
13	(1c)	(1·6)	1a	0·5	1b	2·2	1a	0·5	(0b)	···	0a	···
14	1c	0·6	1b	0·7	0a	···	(1a)	-	1c	1·5	1b	1·3
15	(1b)	(0·8)	1a	0·6	1b	2·1	(0a)	···	1b	0·4	0a	···
16	(1c)	(1·4)	-	-	2c	3·8	(0a)	···	1c	1·8	1a	0·4
17	-	-	-	-	2c	3·1	(1a)	-	1b	1·3	0a	···
18	-	-	-	-	1c	2·8	(0a)	···	-	-	0a	···
19	1b	0·3	(2c)	3·4	1c	2·4	(0a)	···	1b	0·5	0a	···
20	1b	0·3	1b	1·0	1b	0·7	1a	1·0	(1b)	0·6	0a	···
21	1a	1·2	1b	1·2	-	-	1b	0·2	1b	0·7	(0a)	···
22	2b	6·0	1b	1·0	0a	···	2b	4·8	0a	···	1a	0·8
23	1a	2·7	1a	0·1	0a	···	1a	0·3	0a	···	1b	1·6
24	2a	3·4	1a	0·1	0a	···	0a	···	0a	···	(1b)	-
25	1a	0·3	-	-	1b	2·8	0a	···	0a	···	0a	···
26	2b	4·1	0a	···	1a	0·3	-	-	0a	···	0a	···
27	1a	0·8	0a	···	0a	···	2b	5·5	0a	···	-	-
28	1a	2·3	2b	12·3	1b	0·9	-	-	0a	···	-	-
29	1b	2·9			1a	0·4	0a	···	0a	···	(1a)	0·2
30	1a	0·5			(1b)	-	(0a)	···	0a	···	0a	···
31	1a	0·3			1a	1·9			0a	···		
Total	30	49·7	23	33·9	27	46·2	19	28·3	24	35·0	11	7·9
No. of days used	26	26	24	23	30	29	26	24	30	29	28	26
Mean	1·15	1·9	0·96	1·5	0·90	1·6	0·73	1·2	0·80	1·2	0·39	0·3

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	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	1·7	0b	···	(0a)	···	1b	1·0	2c	4·7	(1b)	2·8
2	(2c)	7·6	0a	···	-	-	1b	2·3	0a	···	(1b)	-
3	0a	···	0a	···	0a	···	1b	1·6	(1b)	1·4	(1c)	1·9
4	0a	···	1a	0·1	1a	0·5	1a	0·2	1a	1·4	1c	1·3
5	0a	···	1a	1·7	1a	1·1	1c	2·9	0b	···	-	-
6	1a	0·4	0a	···	-	-	2b	4·7	1a	1·5	1b	0·5
7	(1a)	0·2	0a	···	-	-	0a	···	(1b)	1·1	(1c)	-
8	(0a)	···	0a	···	-	-	1a	0·1	(0a)	···	1c	1·7
9	0a	···	0a	···	-	-	(0a)	···	1b	0·2	1b	1·1
10	0a	···	0a	···	-	-	0a	···	1a	1·1	1b	1·3
11	0a	···	0a	···	-	-	2b	4·3	1b	1·9	1b	0·5
12	0a	···	0a	···	-	-	1a	0·1	1b	0·2	0a	···
13	0a	···	0a	···	-	-	2b	6·0	1b	0·2	1b	1·1
14	1b	0·5	0a	···	-	-	2c	3·4	0a	···	(1b)	1·3
15	1b	1·2	1a	0·2	-	-	1c	2·2	-	-	1c	1·3
16	1a	0·2	1b	2·2	(1a)	-	(2c)	4·4	0a	···	(1c)	2·4
17	0a	···	(1b)	(2·0)	(1b)	-	1c	2·1	0a	···	-	-
18	(0a)	···	0a	···	1b	0·9	1a	0·3	1a	0·4	-	-
19	-	-	1a	1·2	(1a)	(1·6)	(2b)	(4·5)	0a	···	-	-
20	-	-	(0a)	···	0a	···	1b	1·9	0a	···	2c	3·2
21	-	-	(0a)	···	(1a)	-	(1b)	0·3	0a	···	1b	1·4
22	-	-	0a	···	-	-	0a	···	2b	3·1	1b	0·3
23	0a	···	0a	···	-	-	1a	0·1	0b	···	-	-
24	0a	···	1a	0·2	1a	0·1	1a	0·6	0b	···	1a	0·8
25	0a	···	0a	···	1c	1·9	2a	3·1	1b	1·1	2a	3·1
26	0a	···	-	-	1b	2·3	1c	1·6	1a	1·2	1a	0·5
27	0a	···	(1b)	-	1a	1·3	1c	1·5	2a	5·9	1c	1·7
28	0a	···	0a	···	1b	1·6	1b	0·4	0a	···	2c	4·4
29	0a	···	1a	1·8	1b	2·9	1b	1·9	1a	0·7	1c	1·2
30	0a	···	(0a)	···	1b	1·5	1b	1·1	1a	2·7	1c	0·7
31	1a	0·2	1a	0·3			1b	2·5			1b	0·3
Total	9	12·0	10	9·7	14	15·7	34	55·1	20	28·8	28	34·8
No. of days used	27	27	30	29	17	14	31	31	29	29	26	24
Mean	0·33	0·4	0·33	0·3	0·82	1·1	1·10	1·8	0·69	1·0	1·08	1·5

Annual values: Character 0 1 2 — No. of days used 110 179 35

Mean character figure 0·77 (324 days)

Duration: Total 357·1 hr. — No. of days 311 — Mean 1·15 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

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

9 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JANUARY 1955

	Hour G.M.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	Mean
	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	460	463	460	460	460	464	469	470	468	461	462	460	461	467	468	464	461	464	464	464	461	457	455	457	463
2	447	456	457	460	462	463	464	466	467	467	467	467	468	469	473	473	468	466	467	468	465	465	455	456	464
3	456	456	458	459	461	461	460	460	468	463	458	456	458	464	464	469	470	468	468	467	468	465	465	462	463
4	462	445	432	452	465	468	472	472	470	461	457	456	462	454	455	463	460	454	460	456	452	464	456	457	459
5	454	455	457	458	458	460	461	463	464	461	457	454	457	462	464	466	468	464	467	468	463	479	460	446	461
6	456	453	450	453	459	461	463	466	465	462	457	461	464	468	466	464	459	461	458	453	457	457	461	458	460
7	457	460	466	457	460	461	464	464	464	458	460	458	463	467	457	457	460	460	448	451	457	455	458	460	459
8	457	453	456	457	460	460	462	458	460	461	457	455	456	457	461	463	462	464	460	457	457	466	468	461	459
9 *d*	472	446	452	455	456	457	449	475	473	464	453	442	445	456	464	442	458	456	456	447	458	457	457	457	456
10 *q*	457	455	454	455	457	459	462	466	467	464	457	456	455	457	457	457	451	456	458	459	462	461	460	459	458
11	460	453	449	457	463	468	467	463	463	463	462	461	449	420	427	463	467	469	466	464	461	461	423	429	455
12	422	409	451	457	459	459	462	464	463	462	459	455	452	454	459	464	466	465	466	468	466	464	463	461	457
13	461	464	454	456	468	468	465	468	467	471	459	444	443	446	444	448	456	458	461	459	456	456	456	458	458
14	457	457	458	456	461	466	468	468	468	469	470	470	468	462	451	450	449	448	456	457	461	461	458	458	460
15 *q*	457	458	459	462	464	463	464	464	464	466	464	463	464	463	460	457	461	463	464	464	465	464	464	462	462
16	460	460	461	462	463	465	468	468	467	468	476	479	483	484	476	464	466	465	464	462	463	468	459	461	*467*
17 *d*	460	459	461	461	463	465	465	466	478	482	481	477	470	480	465	470	441	450	453	464	453	457	489	444	465
18 *d*	258	-278	253	260	288	398	440	444	439	435	431	436	441	447	454	441	450	473	444	451	467	432	438	457	*383*
19 *d*	347	348	341	291	343	305	323	347	398	468	459	475	481	481	438	431	441	460	428	427	408	374	393	432	402
20 *d*	428	400	376	430	438	441	446	453	455	452	447	445	445	451	452	444	458	460	457	453	436	456	435	451	442
21	449	445	446	453	454	464	464	464	458	457	455	453	453	457	457	460	460	458	450	454	462	459	457	450	456
22	452	450	453	454	457	457	460	464	468	462	461	460	460	458	461	459	461	462	462	463	463	466	463	457	460
23	451	476	461	456	462	470	472	473	473	462	457	458	457	446	453	464	458	452	459	448	464	449	447	448	459
24 *q*	451	453	453	457	460	464	462	461	460	458	457	457	454	455	455	459	461	461	461	461	460	457	457	456	458
25 *q*	457	458	458	460	460	461	464	466	467	466	461	457	456	457	460	460	462	462	453	453	456	459	462	461	460
26 *q*	459	457	454	457	463	464	464	465	463	460	457	456	456	460	462	463	464	464	463	464	467	467	464	463	461
27	463	462	463	464	465	468	468	468	469	476	472	467	472	473	476	476	476	467	458	474	472	428	451	447	466
28	443	440	462	451	452	462	466	458	454	453	453	453	453	456	458	454	460	462	463	462	458	457	453	461	456
29	460	462	461	461	461	461	463	464	463	463	458	455	457	457	458	461	463	465	464	463	458	463	451	441	460
30	454	451	454	455	460	464	463	464	461	459	461	461	463	459	464	467	463	461	461	455	459	472	457	461	460
31	464	464	458	460	461	460	463	464	461	464	464	460	457	458	462	464	464	464	464	465	463	464	469	469	463
Mean	445	*425*	443	445	450	455	458	461	462	*463*	460	458	459	460	459	459	460	461	459	459	459	457	455	455	455

MAGNETIC DECLINATION (WEST)

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

10 LERWICK (D) — 10° + — JANUARY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	10·3	9·4	8·7	10·0	10·5	11·3	11·3	12·2	13·1	14·5	15·9	16·1	14·6	13·6	13·9	14·3	15·1	14·7	14·6	11·2	9·4	11·6	9·7	10·1	12·3
2	11·0	10·4	9·4	11·3	11·9	11·3	11·6	11·3	11·8	11·9	13·9	15·5	15·9	15·4	15·1	13·9	14·7	13·8	13·2	13·2	12·6	11·5	11·3	12·4	12·7
3	12·6	12·1	12·1	12·0	12·3	12·1	11·6	12·2	12·2	13·0	15·4	15·9	16·1	16·8	14·3	13·1	13·0	12·7	12·0	11·6	11·8	11·7	11·6	11·0	12·9
4	12·3	12·6	6·6	10·7	10·9	11·9	12·3	12·3	12·4	13·0	14·3	15·8	16·1	15·1	13·2	15·2	15·0	12·4	9·1	11·0	9·4	4·7	10·3	11·3	12·0
5	11·3	12·2	12·2	11·7	11·5	12·0	11·6	11·3	11·5	12·0	13·2	13·8	14·7	14·5	13·7	13·9	13·2	13·2	12·4	12·5	11·0	-2·3	8·3	9·3	11·6
6	11·0	11·2	10·9	9·5	5·6	7·1	10·7	11·0	11·6	12·3	13·2	14·3	14·7	15·2	14·4	14·2	13·7	13·5	13·1	6·9	8·5	9·2	10·5	10·1	11·3
7	10·6	11·4	10·4	8·5	10·6	11·3	11·4	11·3	11·2	11·5	13·2	14·4	16·3	16·8	14·9	15·5	15·4	16·4	14·2	13·0	10·7	10·3	11·0	10·9	12·5
8	11·6	12·0	11·3	11·0	11·3	11·3	11·0	11·0	10·6	11·1	11·9	13·2	14·5	14·2	14·4	15·5	14·2	14·1	11·3	10·3	12·7	10·3	10·1	7·5	11·9
9 *d*	-0·7	4·3	10·6	9·1	9·1	8·5	17·4	12·6	14·3	12·7	13·2	14·8	16·1	15·2	21·7	7·8	17·4	15·7	7·6	12·1	12·6	11·4	11·2	10·9	11·9
10 *q*	10·6	10·7	11·0	11·3	12·2	11·7	11·8	11·5	11·5	12·1	12·2	13·0	13·2	12·8	12·5	12·6	12·9	13·1	13·8	11·9	9·7	12·2	11·7	11·4	12·0
11	10·4	13·2	12·7	9·4	11·0	11·9	11·8	11·9	11·8	12·3	12·3	13·6	14·9	17·1	19·4	14·5	14·2	14·7	14·2	13·0	13·1	18·5	-6·1	-2·2	12·0
12	2·3	-5·3	6·5	8·8	10·4	11·1	11·3	10·7	11·5	11·5	11·8	12·4	12·9	12·9	12·6	12·6	12·7	12·8	12·7	12·5	12·8	12·1	11·9	11·4	10·5
13	12·0	10·4	6·8	9·8	10·7	8·4	12·1	12·7	12·1	13·8	14·2	13·6	13·0	14·2	14·8	11·3	13·2	13·9	12·0	11·9	8·8	8·7	9·4	10·4	11·6
14	11·0	11·5	11·4	11·4	11·5	11·5	11·4	11·6	12·0	12·2	13·0	13·8	14·2	14·1	12·9	15·1	16·0	13·3	1·2	11·4	10·5	10·4	10·4	11·2	11·8
15 *q*	11·3	11·1	11·4	12·0	11·5	11·9	12·0	11·9	12·0	12·4	12·4	12·6	12·6	12·4	12·1	12·3	12·3	12·0	11·4	11·1	11·0	10·9	11·1	10·8	11·8
16	11·3	10·5	11·2	10·6	10·8	11·9	11·7	11·9	12·3	13·1	14·5	15·6	16·3	16·2	16·4	17·4	16·2	15·2	14·1	12·0	9·1	7·2	10·6	11·4	12·8
17 *d*	11·1	11·2	11·0	13·0	11·3	10·4	10·6	10·7	11·9	13·9	12·1	10·3	16·8	23·4	23·8	23·0	14·1	11·8	12·6	11·3	10·6	11·3	13·0	9·1	*13·3*
18 *d*	5·8	-11·9	-29·7	0·8	1·0	0·6	2·7	7·5	7·9	8·4	9·8	10·4	11·9	13·2	13·7	13·0	11·9	1·4	9·4	2·2	1·9	4·3	6·7	10·9	*4·7*
19 *d*	8·8	15·4	9·3	14·9	20·8	21·7	35·9	24·8	15·3	6·7	16·5	14·0	12·3	12·6	18·9	12·7	12·2	-4·1	-3·0	2·2	2·1	0·4	6·8	1·2	11·6
20 *d*	4·2	6·1	-1·3	3·4	6·5	10·0	11·3	9·5	10·7	11·6	12·2	12·4	12·6	15·2	15·6	13·1	12·9	12·9	13·6	1·6	3·6	11·4	10·3	8·3	9·5
21	11·7	6·0	8·6	9·7	11·4	11·9	11·8	11·9	11·7	11·9	12·6	14·0	14·2	14·3	12·9	12·9	12·7	14·2	14·7	13·0	13·3	10·6	11·0	11·5	12·0
22	8·4	6·7	9·1	9·4	10·6	10·8	11·9	11·4	11·0	11·3	11·9	12·4	13·2	13·2	12·9	13·2	13·2	13·2	12·4	12·3	12·0	11·0	11·0	9·2	11·3
23	9·3	8·9	6·2	8·2	10·7	10·1	11·6	12·3	14·5	16·3	17·4	16·7	16·3	16·5	15·5	16·0	15·5	10·6	14·4	11·4	-4·7	0·6	3·0	7·7	11·0
24 *q*	10·2	10·5	12·2	11·6	11·8	11·3	11·3	11·6	11·2	11·0	11·3	12·4	12·9	13·8	14·2	14·2	12·7	14·4	13·2	12·3	11·0	10·6	9·5	11·2	11·9
25 *q*	12·7	11·6	11·9	11·5	11·3	11·8	11·9	11·2	11·2	12·0	12·6	13·7	14·6	14·5	14·2	13·3	12·7	12·6	13·4	13·2	11·3	10·9	10·6	10·6	12·3
26 *q*	10·6	11·1	10·9	11·7	11·3	11·7	11·5	11·3	11·3	11·3	12·0	13·1	13·4	13·6	12·5	11·9	12·2	12·6	12·4	12·3	11·9	11·4	11·3	11·3	11·9
27	11·1	11·3	11·5	11·9	11·6	11·3	11·6	11·5	11·7	12·7	13·2	13·7	14·7	15·0	15·4	14·7	15·4	18·7	16·4	14·6	5·1	-0·2	9·4	9·6	12·2
28	8·3	6·9	3·8	5·1	6·8	8·5	11·1	11·5	11·8	11·7	12·1	12·6	13·1	13·3	13·0	12·9	12·4	12·7	13·0	12·6	11·5	10·6	11·9	13·2	10·9
29	10·2	11·3	11·5	11·2	11·0	11·5	11·8	11·8	12·3	13·1	13·0	13·2	13·6	14·3	14·7	13·9	13·6	13·2	13·6	13·8	8·6	0·3	-2·8	5·8	11·0
30	10·7	12·3	12·2	10·1	10·6	10·7	11·1	11·5	11·5	12·2	12·8	13·8	14·7	15·2	15·0	14·9	14·6	13·1	14·7	14·0	11·7	6·5	8·9	9·4	12·2
31	9·4	10·6	10·1	10·4	8·9	10·4	10·6	11·1	11·6	12·7	12·8	13·0	13·0	13·2	13·2	13·2	13·2	12·7	10·6	12·3	12·0	10·6	5·7	8·4	11·2
Mean	9·7	9·2	*8·4*	10·0	10·6	10·9	12·2	11·8	11·9	12·1	13·1	13·7	14·3	14·8	*14·9*	13·9	13·8	12·6	11·9	11·1	9·5	8·7	9·0	9·5	11·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

11 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — JANUARY 1955

	Hour G.M.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	Mean
	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	1139	1133	1136	1138	1139	1138	1138	1137	1138	1140	1137	1139	1138	1138	1140	1141	1143	1144	1145	1151	1154	1155	1160	1161	1143
2	1162	1151	1147	1141	1141	1141	1142	1141	1141	1143	1141	1140	1140	1138	1137	1137	1141	1147	1148	1145	1145	1147	1153	1151	1144
3	1152	1148	1144	1141	1140	1141	1141	1141	1140	1145	1147	1147	1145	1143	1143	1143	1141	1143	1143	1143	1142	1143	1141	1141	1143
4	1131	1104	1129	1140	1138	1137	1136	1138	1140	1145	1147	1145	1142	1145	1148	1147	1147	1154	1152	1150	1153	1145	1143	1143	1142
5	1145	1144	1143	1141	1140	1138	1138	1138	1140	1143	1144	1145	1144	1144	1143	1141	1141	1141	1141	1140	1144	1133	1139	1143	1141
6	1143	1152	1153	1148	1140	1139	1137	1137	1138	1140	1142	1140	1141	1142	1143	1144	1146	1146	1147	1158	1149	1148	1144	1145	1144
7	1147	1142	1130	1135	1137	1137	1135	1135	1137	1138	1139	1140	1140	1141	1148	1150	1151	1152	1166	1168	1161	1157	1150	1144	1145
8	1138	1135	1137	1141	1141	1141	1141	1141	1141	1139	1140	1141	1143	1144	1146	1146	1146	1147	1151	1154	1153	1155	1152	1155	1145
9 *d*	1131	1141	1140	1141	1137	1135	1126	1116	1121	1129	1137	1141	1143	1143	1152	1227	1188	1216	1199	1182	1156	1148	1144	1143	1151
10 *q*	1143	1145	1145	1145	1145	1144	1141	1139	1138	1137	1138	1138	1141	1141	1144	1148	1151	1151	1150	1150	1145	1141	1140	1140	1143
11	1139	1138	1121	1126	1138	1139	1141	1141	1138	1137	1137	1137	1144	1163	1166	1150	1145	1145	1148	1154	1150	1133	1082	1111	1138
12	1132	1108	1134	1141	1143	1144	1144	1144	1142	1140	1138	1137	1137	1138	1140	1141	1143	1143	1143	1141	1141	1140	1140	1139	1139
13	1134	1127	1130	1131	1130	1128	1130	1133	1134	1130	1135	1144	1145	1143	1150	1156	1155	1153	1152	1154	1157	1154	1148	1143	1141
14	1141	1137	1137	1139	1139	1140	1140	1140	1140	1139	1139	1137	1137	1140	1149	1152	1159	1171	1179	1155	1152	1148	1148	1145	1146
15 *q*	1145	1144	1143	1141	1140	1141	1142	1143	1141	1141	1141	1143	1143	1141	1141	1141	1142	1143	1145	1145	1145	1145	1145	1144	1143
16	1144	1140	1141	1141	1141	1141	1141	1141	1142	1141	1140	1137	1137	1140	1143	1153	1151	1154	1156	1158	1158	1152	1149	1145	1145
17 *d*	1147	1145	1143	1141	1135	1137	1137	1138	1133	1133	1133	1139	1141	1141	1255	1277	1189	1171	1168	1168	1168	1152	1157	1155	1158
18 *d*	1084	1057	980	989	1012	1041	1100	1142	1160	1168	1167	1165	1161	1161	1164	1181	1193	1210	1176	1179	1150	1155	1152	1132	1128
19 *d*	996	983	1007	949	936	981	994	1068	1158	1245	1240	1232	1234	1237	1214	1195	1176	1175	1176	1119	1104	1071	1007	1091	*1108*
20 *d*	1083	1042	1050	1093	1117	1129	1141	1151	1152	1151	1153	1156	1155	1156	1162	1169	1156	1154	1156	1171	1168	1144	1112	1104	1134
21	1069	1117	1138	1144	1144	1147	1144	1144	1146	1145	1148	1149	1150	1151	1152	1155	1155	1157	1161	1166	1152	1141	1162	1157	1146
22	1130	1138	1150	1152	1151	1151	1148	1148	1147	1147	1147	1148	1151	1153	1155	1158	1157	1155	1154	1154	1154	1152	1152	1152	1150
23	1152	1123	1120	1137	1144	1144	1144	1143	1140	1141	1143	1147	1150	1161	1161	1162	1164	1181	1176	1202	1188	1148	1141	1144	1152
24 *q*	1146	1151	1152	1152	1151	1148	1148	1146	1147	1144	1143	1144	1147	1148	1152	1155	1159	1158	1158	1158	1159	1160	1158	1152	1151
25 *q*	1144	1145	1148	1151	1152	1151	1151	1148	1145	1144	1147	1149	1151	1152	1154	1154	1155	1155	1159	1160	1159	1155	1152	1150	1151
26 *q*	1151	1151	1152	1152	1151	1151	1150	1148	1147	1145	1145	1145	1145	1146	1149	1151	1152	1154	1152	1151	1148	1147	1147	1147	1149
27	1147	1148	1148	1148	1148	1148	1148	1147	1144	1140	1141	1140	1137	1138	1141	1143	1147	1162	1214	1229	1246	1207	1172	1159	*1160*
28	1126	1093	1093	1126	1139	1140	1142	1145	1148	1148	1150	1149	1147	1145	1147	1154	1157	1156	1155	1155	1158	1160	1150	1130	1142
29	1137	1144	1147	1148	1148	1149	1149	1148	1147	1144	1145	1148	1145	1145	1147	1149	1151	1153	1155	1161	1164	1166	1140	1154	1149
30	1148	1148	1148	1149	1150	1150	1150	1150	1151	1151	1148	1148	1147	1146	1145	1144	1150	1157	1160	1170	1171	1158	1160	1156	1152
31	1148	1139	1139	1141	1144	1145	1146	1145	1147	1147	1148	1148	1148	1145	1145	1147	1148	1149	1152	1151	1152	1153	1139	1131	1146
Mean	1131	*1126*	1127	1129	1131	1133	1136	1139	1143	1146	1146	1147	1147	1149	1154	1158	1155	1158	1159	*1159*	1156	1149	1141	1142	1144

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

12 LERWICK — JANUARY 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	23 43	475	444	23 28	31	24 00	18·0	4·3	20 03	13·7	23 01	1169	1131	01 42	38	1,1,1,1,1,1,3,3	12	0	80·6
2	14 16	476	438	00 04	38	00 01	18·2	7·1	01 53	11·1	00 12	1168	1135	14 17	33	3,0,1,1,0,1,0,2	8	0	80·5
3	16 32	473	452	11 57	21	11 47	17·6	9·4	24 00	8·2	00 37	1152	1137	08 20	15	1,0,1,1,1,1,0,1	6	0	80·5
4	00 49	479	429	01 54	50	12 06	17·2	2·5	21 28	14·7	17 49	1159	1100	01 03	59	3,2,1,1,2,2,2,3	16	1	80·2
5	21 13	516	438	23 51	78	12 36	15·1	-11·3	21 10	26·4	20 58	1151	1121	21 19	30	0,0,1,0,0,1,3,4	9	0	80·3
6	19 49	484	434	19 34	50	13 06	16·0	2·5	04 59	13·5	19 36	1172	1134	07 46	38	2,2,1,1,1,1,3,1	12	1	80·3
7	13 48	472	436	18 43	36	13 10	17·7	7·6	02 56	10·1	19 02	1180	1126	02 34	54	2,1,1,1,2,1,2,1	11	0	80·2
8	23 58	482	450	01 26	32	15 53	16·0	5·8	23 38	10·2	23 41	1161	1129	24 00	32	1,0,1,0,0,1,2,2	7	0	80·3
9 *d*	00 38	485	419	15 24	66	14 49	24·7	-7·9	00 32	32·6	15 30	1269	1100	06 59	169	3,1,3,2,3,4,3,0	19	1	80·0
10 *q*	18 44	468	450	16 46	18	18 57	14·4	8·3	20 08	6·1	17 15	1152	1135	08 59	17	0,0,1,1,1,1,2,0	6	0	80·0
11	21 46	510	325	22 04	185	21 56	44·2	-18·4	22 49	62·6	14 05	1174	1040	21 58	134	2,1,0,1,3,1,1,6	15	1	79·8
12	19 50	475	347	01 20	128	20 09	13·6	-21·7	01 28	35·3	06 55	1145	1089	01 08	56	4,2,1,1,0,0,1,0	9	1	79·0
13	05 06	480	432	14 45	48	14 36	16·7	2·8	21 56	13·9	15 59	1160	1123	02 14	37	3,2,1,2,2,1,2,3	16	1	78·2
14	18 31	479	429	18 12	50	16 04	17·4	-13·6	18 24	31·0	18 23	1202	1135	01 55	67	1,1,1,1,2,2,4,1	13	1	77·5
15 *q*	09 44	467	455	15 08	*12*	11 04	13·0	10·6	23 59	*2·4*	00 30	1146	1139	04 12	*7*	0,0,0,1,1,0,0,1	3	0	76·4
16	13 44	486	456	00 43	30	15 29	18·7	1·9	20 56	16·8	21 11	1161	1135	12 15	26	2,1,1,2,2,1,3,3	15	0	76·2
17 *d*	22 46	535	255	23 59	280	14 30	38·7	-3·1	23 57	41·8	14 33	*1343*	1053	23 57	290	1,2,2,2,5,5,4,6	27	2	75·9
18 *d*	17 47	517	*-748*	01 31	*1265*	01 34	19·7	*-52·0*	01 26	*71·7*	01 31	1334	913	02 35	*421*	9,6,4,2,2,5,4,3	35	2	76·9
19 *d*	12 53	*539*	199	03 33	340	06 29	*46·2*	-14·9	19 08	61·1	12 59	1282	*882*	03 41	400	5,5,6,4,4,4,4,5	37	2	77·0
20 *d*	19 49	476	341	02 16	135	23 59	19·3	-11·4	19 47	30·7	19 38	1186	1033	01 23	153	4,3,2,1,2,2,4,3	21	1	77·0
21	20 34	486	434	23 53	52	00 00	19·7	5·0	01 08	14·7	19 24	1168	1054	00 20	114	4,1,1,0,0,1,3,3	13	0	77·0
22	08 08	473	438	00 01	35	13 04	14·0	3·8	01 00	10·2	15 39	1159	1126	00 53	33	3,1,1,0,1,0,1,1	8	0	77·0
23	01 18	492	436	21 20	56	14 12	18·9	-13·2	20 32	32·1	20 06	1213	1111	02 04	102	3,2,2,1,2,3,4,3	20	1	77·3
24 *q*	17 00	468	447	00 01	21	17 12	15·1	7·8	22 55	7·3	21 52	1163	1143	10 40	20	1,1,0,0,1,1,1,2	7	0	78·6
25 *q*	08 54	468	447	19 04	21	12 24	15·1	10·3	23 53	4·8	19 11	1163	1143	00 33	20	1,0,1,0,1,0,1,1	5	0	79·0
26 *q*	20 29	468	453	02 57	15	13 02	14·0	10·4	00 04	3·6	02 57	1154	1143	09 10	11	0,0,0,0,0,1,0,0	1	0	79·2
27	20 17	499	403	21 20	96	17 39	21·4	-3·3	21 41	24·7	20 10	1261	1135	12 35	126	0,0,1,1,1,3,4,3	13	1	79·3
28	05 35	467	431	00 39	36	23 30	14·3	2·9	02 35	11·4	21 26	1162	1078	01 54	84	3,2,1,1,0,1,0,3	11	0	79·2
29	21 48	486	433	23 10	53	14 35	15·0	-6·6	22 23	21·6	21 06	1178	1127	22 12	51	1,0,1,1,1,0,3,3	10	0	79·1
30	21 18	490	449	01 16	41	12 42	17·1	1·3	21 41	15·8	20 47	1178	1143	15 53	35	1,1,0,1,2,1,2,3	11	0	79·1
31	22 03	494	453	22 38	41	12 03	13·7	2·7	22 28	11·0	21 06	1157	1126	23 10	31	1,1,0,1,0,0,1,3	7	0	79·2
Mean	- -	486	378	- -	108	- -	19·4	2·3	- -	21·6	- -	1188	1101	- -	87	-	-	0·52	79·7

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.

13 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — FEBRUARY 1955

	Hour G.M.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	Mean
	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*	466	464	463	464	464	465	465	465	467	466	464	464	462	464	468	469	467	466	466	461	461	457	457	461	464
2 *q*	457	457	456	458	461	466	469	474	467	464	462	460	457	456	453	443	445	449	458	462	458	450	454	458	458
3	468	453	464	450	467	472	468	467	460	464	468	465	461	462	462	461	458	459	460	461	460	463	461	461	462
4 *d*	461	457	454	461	464	463	473	473	477	472	448	435	450	456	456	457	460	453	460	461	450	402	420	447	455
5 *d*	445	437	443	447	454	456	456	467	466	464	461	450	434	448	453	450	451	455	438	435	453	469	463	435	451
6	451	456	456	460	453	464	465	461	461	459	463	460	453	459	455	441	447	461	461	466	458	452	443	435	456
7	435	450	439	438	443	464	465	464	465	468	466	459	455	448	440	450	457	459	457	450	453	458	460	461	454
8	460	456	456	454	456	461	463	464	466	464	457	458	456	456	459	457	443	443	447	452	458	468	462	455	457
9	457	458	457	454	459	457	457	469	474	475	473	457	462	462	463	464	470	470	449	446	451	454	456	460	461
10 *q*	458	454	448	450	453	453	456	453	461	460	458	457	454	455	463	463	461	463	461	460	462	467	465	464	458
11	461	460	459	461	463	466	463	462	464	467	463	461	458	468	473	464	454	457	460	509	429	465	461	428	461
12	442	451	447	441	444	449	460	460	462	456	450	451	452	455	460	465	464	460	461	455	457	482	457	454	456
13	447	398	436	458	459	461	461	465	463	451	445	450	456	464	470	456	458	456	461	466	466	463	462	462	456
14	461	457	455	457	457	455	464	469	461	453	457	457	460	450	456	462	468	449	456	463	460	443	452	457	457
15	456	440	445	446	454	461	461	468	460	456	457	458	457	455	457	461	462	464	464	464	464	464	464	463	458
16	461	461	461	461	463	464	466	468	469	464	458	462	469	472	461	453	460	465	454	457	454	461	464	464	462
17	465	453	452	463	463	464	468	468	468	466	460	451	443	452	462	464	465	466	466	464	461	467	464	475	462
18	468	464	461	456	468	470	475	473	470	464	460	453	454	458	462	464	466	470	469	455	450	457	449	438	461
19 *q*	460	463	457	453	457	460	463	472	472	468	464	459	458	466	469	466	468	467	467	464	465	466	470	469	464
20	470	467	470	470	472	471	472	475	472	471	467	466	467	473	468	460	459	466	462	461	463	467	465	464	*467*
21	466	462	455	451	432	475	473	480	469	469	467	462	454	450	459	454	457	460	464	464	464	468	468	469	462
22 *d*	473	445	447	432	458	472	468	470	467	453	445	431	443	450	458	467	465	467	468	461	464	479	464	466	459
23 *d*	463	457	445	459	464	473	473	482	474	453	433	427	446	464	469	466	481	484	469	435	467	458	464	464	461
24	463	466	461	461	461	464	464	469	461	464	458	457	461	468	457	457	458	458	462	473	480	475	468	472	464
25	467	453	447	449	460	476	474	473	470	462	458	444	453	471	478	464	463	461	461	460	454	463	470	470	463
26	453	442	461	457	461	458	461	464	461	456	453	458	461	460	463	464	464	464	464	463	465	466	464	464	460
27 *q*	463	461	462	463	461	465	466	464	459	456	451	449	454	455	460	460	467	468	463	469	473	476	482	481	464
28 *d*	479	480	393	287	354	436	449	458	457	455	437	432	445	456	486	470	451	454	458	459	457	458	457	457	*443*
Mean	460	454	452	*449*	454	463	465	*468*	466	462	457	453	455	459	462	460	460	461	460	461	459	461	460	459	459

MAGNETIC DECLINATION (WEST)

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

14 LERWICK (D) — 10° + — FEBRUARY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	10·9	11·6	11·4	11·3	11·3	11·3	11·1	11·1	11·7	12·3	13·0	13·5	13·6	14·1	13·9	13·2	13·1	12·4	11·9	11·9	10·0	10·8	9·9	8·4	11·8
2 *q*	9·0	9·4	10·4	10·4	11·3	11·3	11·2	11·6	11·7	12·8	13·8	14·7	15·3	15·7	15·0	14·3	14·0	14·1	12·8	12·1	11·9	8·5	8·8	8·6	*12·0*
3	4·1	5·8	6·9	12·0	11·1	9·4	11·6	12·7	12·6	13·0	13·5	13·9	14·2	14·7	16·1	16·1	17·4	16·5	15·1	13·4	11·6	9·7	6·5	9·4	12·0
4 *d*	9·7	10·1	9·0	8·7	8·0	8·8	9·1	10·6	12·0	14·4	14·4	19·4	17·7	15·8	15·3	14·3	17·6	14·3	12·7	10·4	−3·1	1·1	4·7	0·1	10·6
5 *d*	7·6	12·8	5·5	8·3	9·0	9·5	11·9	11·3	11·3	10·6	12·1	13·4	15·3	15·9	15·8	15·5	15·4	12·7	4·1	6·5	10·6	7·4	8·4	3·1	10·6
6	8·5	10·4	10·9	9·5	11·0	12·7	10·5	10·8	11·3	12·0	12·9	14·2	12·8	16·1	17·9	17·4	17·4	12·8	12·0	12·9	12·1	3·4	4·2	8·3	11·7
7	7·5	6·7	5·6	7·2	12·1	10·0	11·1	11·4	12·3	13·5	13·8	14·4	15·3	16·3	12·6	12·0	13·3	13·5	11·3	8·4	8·9	9·4	9·5	9·1	11·1
8	12·3	10·7	10·1	9·4	11·3	10·6	11·2	11·4	12·0	12·3	12·3	13·5	14·2	12·5	12·5	13·2	−3·1	8·6	11·3	8·0	3·2	4·7	7·6	8·2	9·9
9	9·8	11·3	9·7	9·7	6·1	6·6	7·6	10·9	12·0	13·1	13·9	13·8	13·6	13·2	12·5	11·7	12·0	13·8	10·2	8·9	10·7	10·7	9·6	10·1	10·9
10 *q*	10·9	10·2	9·1	8·6	8·1	9·4	9·8	10·1	11·8	14·3	14·2	15·2	14·1	13·0	12·2	11·1	10·9	11·1	11·3	9·4	10·0	8·5	9·1	10·9	11·0
11	10·4	10·5	10·4	9·9	10·2	10·3	10·5	11·0	11·7	12·9	13·1	14·6	14·8	16·4	17·5	16·8	14·9	7·7	9·8	14·3	0·0	4·8	11·1	11·0	11·4
12	12·3	9·8	7·9	7·9	8·9	6·5	8·4	9·6	10·7	11·7	13·0	13·3	13·2	12·7	13·7	12·7	13·1	14·3	12·8	11·4	10·1	12·5	10·1	7·9	11·0
13	7·9	13·6	7·4	4·4	7·1	9·0	10·3	11·3	12·1	12·1	15·2	15·2	15·2	14·8	15·2	13·0	11·1	13·7	12·1	8·3	7·9	11·1	11·0	10·6	11·2
14	10·3	10·5	11·0	8·4	8·1	11·1	10·4	11·1	14·8	14·8	14·6	14·0	16·6	15·2	14·6	14·8	14·5	6·1	8·9	12·4	11·1	2·4	8·4	8·1	11·3
15	6·8	1·4	3·2	5·9	5·6	8·5	7·5	8·8	10·4	10·9	11·6	12·6	13·7	13·7	13·2	12·2	11·8	11·9	11·8	11·5	11·0	10·7	10·4	10·3	*9·8*
16	10·5	10·6	10·6	10·6	10·8	10·9	10·6	10·6	10·6	11·5	13·4	14·2	15·2	16·1	17·0	13·6	12·6	12·2	9·1	2·2	10·4	10·2	10·6	9·3	11·4
17	4·6	4·8	9·8	6·1	5·9	8·3	9·5	9·9	10·5	11·0	11·1	13·0	14·6	13·2	13·0	12·3	11·8	11·7	12·1	11·9	11·7	10·6	9·8	7·0	10·2
18	9·4	9·1	8·2	10·7	7·6	5·3	8·4	10·3	10·9	10·6	11·3	12·7	14·2	14·3	14·2	13·3	12·9	12·6	13·4	11·8	14·0	9·5	5·5	11·3	10·9
19 *q*	8·2	11·3	9·2	8·1	9·1	9·0	11·1	11·3	11·2	11·8	13·0	14·2	15·2	16·1	15·9	12·4	12·3	12·0	12·2	11·3	10·6	10·3	7·5	9·7	11·4
20	11·1	11·3	11·7	13·2	10·1	7·9	8·4	9·1	10·6	12·0	13·3	13·2	15·2	17·1	17·8	17·5	12·7	13·1	10·9	3·1	10·4	11·0	10·1	9·4	11·7
21	13·0	6·5	3·4	4·7	9·5	5·4	7·9	10·4	10·2	10·6	12·3	13·6	14·7	16·5	15·4	13·5	12·9	13·0	12·3	9·1	8·4	10·8	10·6	8·8	10·6
22 *d*	7·5	6·9	7·2	7·9	2·7	4·6	7·6	10·1	11·5	13·1	13·2	14·6	16·2	15·2	14·3	11·9	9·9	10·7	11·3	9·0	4·6	10·5	9·4	10·0	10·0
23 *d*	10·4	13·8	16·1	11·4	9·3	8·8	10·4	13·0	14·2	13·1	13·2	16·6	18·5	20·0	15·1	19·8	15·3	4·5	3·9	−1·3	7·6	11·3	10·7	8·4	11·8
24	8·7	9·5	6·8	6·5	9·1	10·6	10·4	11·7	12·3	12·8	13·1	13·5	14·7	17·2	17·3	17·0	17·2	15·7	14·2	9·0	6·6	9·4	8·8	9·3	11·7
25	13·2	11·2	11·8	6·6	8·7	3·6	7·8	9·4	11·3	11·2	12·0	15·2	18·0	17·2	21·0	18·2	13·1	15·2	14·2	11·9	11·0	10·9	8·6	6·9	12·0
26	6·0	6·6	5·9	7·3	7·4	6·1	9·3	9·7	10·4	11·6	12·9	15·1	16·4	15·9	15·7	13·7	12·2	11·2	10·9	9·4	10·8	9·9	10·3	10·3	10·6
27 *q*	10·3	10·3	10·4	10·5	10·7	10·7	10·2	10·2	9·5	10·4	11·3	13·6	15·2	15·4	15·4	13·0	12·3	12·2	9·1	9·1	11·9	11·7	10·8	9·7	11·4
28 *d*	11·3	5·3	4·6	10·4	14·2	−0·8	5·3	7·3	4·0	11·5	14·3	13·6	19·4	19·9	15·2	18·0	15·4	12·5	11·3	10·2	10·2	10·2	10·4	10·0	11·0
Mean	9·4	9·4	8·7	8·8	9·1	*8·4*	9·6	10·6	11·3	12·2	13·1	14·2	15·3	*15·5*	15·2	14·4	13·0	12·1	11·2	9·5	9·1	9·0	9·0	8·7	11·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

15 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — FEBRUARY 1955

	Hour G.M.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	Mean
	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*	1138	1142	1144	1144	1144	1144	1145	1145	1144	1144	1145	1146	1144	1144	1143	1141	1143	1145	1147	1150	1151	1153	1153	1147	1145
2 *q*	1144	1141	1141	1144	1145	1144	1143	1141	1144	1144	1144	1144	1147	1148	1151	1160	1165	1165	1161	1158	1161	1176	1168	1157	1151
3	1143	1134	1138	1136	1127	1129	1133	1134	1137	1140	1141	1145	1147	1147	1147	1150	1152	1154	1156	1159	1165	1161	1157	1155	1145
4 *d*	1152	1151	1150	1144	1135	1138	1135	1134	1133	1134	1143	1144	1141	1147	1149	1152	1156	1166	1164	1170	1190	1163	1111	1132	1147
5 *d*	1144	1112	1119	1144	1145	1141	1138	1133	1135	1137	1139	1145	1157	1161	1164	1169	1169	1165	1185	1186	1161	1141	1095	1113	1146
6	1133	1140	1147	1146	1141	1130	1128	1130	1131	1140	1141	1146	1147	1148	1155	1180	1182	1161	1154	1151	1164	1175	1170	1146	1149
7	1092	1111	1109	1131	1130	1120	1135	1138	1138	1138	1140	1145	1149	1158	1183	1182	1166	1162	1162	1166	1161	1154	1149	1147	1144
8	1140	1142	1149	1151	1151	1147	1151	1141	1140	1138	1141	1144	1147	1148	1151	1158	1191	1175	1172	1170	1159	1137	1087	1124	1148
9	1137	1143	1144	1143	1138	1141	1141	1133	1134	1135	1138	1144	1145	1149	1152	1154	1158	1158	1188	1197	1176	1161	1155	1149	1151
10 *q*	1145	1144	1150	1152	1152	1151	1149	1150	1144	1141	1144	1147	1150	1149	1148	1152	1153	1155	1155	1156	1155	1148	1144	1144	1149
11	1147	1146	1147	1151	1151	1150	1151	1150	1146	1141	1141	1143	1143	1141	1147	1160	1185	1205	1233	1279	1215	1206	1183	1161	*1168*
12	1129	1138	1154	1154	1144	1140	1144	1149	1148	1147	1148	1150	1150	1150	1155	1157	1159	1167	1186	1203	1214	1147	1124	1147	1154
13	1147	1085	1061	1114	1127	1141	1147	1147	1147	1152	1150	1149	1147	1147	1150	1170	1179	1168	1165	1164	1154	1152	1152	1152	1144
14	1151	1150	1141	1142	1143	1141	1135	1140	1141	1147	1145	1149	1148	1151	1152	1153	1160	1182	1171	1158	1161	1172	1157	1154	1152
15	1132	1125	1145	1149	1145	1113	1114	1124	1138	1148	1150	1151	1149	1148	1149	1150	1151	1150	1151	1151	1152	1152	1152	1152	1143
16	1151	1150	1149	1149	1148	1148	1148	1147	1147	1147	1150	1143	1144	1146	1154	1155	1155	1154	1162	1166	1161	1164	1164	1161	1153
17	1135	1151	1143	1128	1137	1140	1141	1144	1145	1144	1147	1145	1145	1144	1145	1147	1147	1147	1147	1150	1154	1152	1155	1146	1145
18	1145	1147	1149	1144	1119	1120	1123	1128	1133	1141	1143	1146	1144	1143	1144	1147	1149	1148	1150	1179	1214	1205	1176	1123	1148
19 *q*	1137	1150	1156	1154	1148	1143	1141	1140	1143	1144	1145	1147	1147	1142	1147	1151	1152	1152	1152	1153	1152	1152	1148	1147	1148
20	1148	1150	1149	1138	1132	1137	1137	1137	1137	1137	1138	1140	1141	1143	1152	1164	1164	1159	1164	1167	1154	1150	1151	1151	1147
21	1124	1116	1135	1141	1135	1095	1116	1123	1134	1135	1137	1143	1149	1152	1157	1172	1180	1169	1164	1162	1161	1154	1152	1151	1144
22 *d*	1134	1120	1111	1113	1090	1096	1117	1130	1137	1141	1145	1154	1153	1152	1155	1161	1164	1158	1155	1157	1157	1141	1140	1143	1139
23 *d*	1147	1135	1111	1106	1126	1129	1130	1123	1123	1132	1140	1142	1150	1174	1211	1188	1207	1210	1200	1206	1147	1105	1111	1128	1149
24	1125	1113	1123	1134	1139	1142	1145	1141	1142	1140	1141	1141	1141	1146	1157	1166	1172	1178	1172	1162	1147	1148	1152	1150	1147
25	1128	1129	1123	1113	1111	1110	1127	1135	1137	1138	1141	1143	1144	1146	1153	1170	1189	1180	1178	1177	1174	1160	1152	1150	1146
26	1139	1120	1135	1141	1116	1131	1144	1147	1148	1148	1146	1141	1141	1146	1152	1159	1162	1160	1158	1158	1152	1150	1150	1150	1146
27 *q*	1150	1150	1151	1151	1153	1152	1152	1152	1152	1151	1147	1144	1137	1138	1144	1152	1152	1154	1158	1155	1148	1146	1143	1141	1149
28 *d*	1112	1104	1089	927	987	1020	1113	1141	1152	1152	1152	1152	1152	1167	1224	1206	1182	1170	1161	1158	1156	1152	1152	1152	*1131*
Mean	1137	1134	1134	1132	1131	*1130*	1137	1138	1140	1142	1144	1145	1146	1149	1157	1162	1166	1165	1167	*1170*	1165	1156	1147	1145	1147

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

16 LERWICK — FEBRUARY 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 *q*	15 48	473	453	23 03	*20*	13 38	15·2	5·6	23 43	*9·6*	22 58	1156	1135	00 10	21	0,0,1,0,1,1,1,2	6	0	79·3
2 *q*	07 10	476	440	15 29	36	14 12	16·1	4·6	21 17	11·5	21 48	1181	1138	02 42	43	1,0,1,1,1,1,1,2	8	0	79·4
3	00 46	502	438	03 14	64	16 06	17·9	-2·9	00 35	20·8	20 55	1168	1124	04 02	44	3,2,1,1,1,1,1,3	13	0	79·3
4 *d*	20 13	516	324	21 59	192	11 53	22·5	*-23·0*	20 13	*45·5*	20 08	1228	1080	22 12	148	1,2,2,3,2,2,5,4	21	1	79·3
5 *d*	21 58	495	396	22 59	99	15 09	18·1	-5·9	18 48	24·0	18 46	1210	1081	22 49	129	3,2,2,2,2,2,3,4	20	1	79·1
6	19 39	476	420	23 39	56	14 54	20·6	-0·8	21 40	21·4	16 13	1193	1091	24 00	102	1,2,1,1,2,2,2,4	15	1	79·0
7	06 34	475	413	00 23	62	13 10	17·8	2·5	00 48	15·3	15 25	1189	1079	00 23	110	3,3,2,1,3,2,2,1	17	1	78·9
8	20 58	508	429	16 04	79	21 27	16·8	-15·9	20 56	32·7	16 40	1201	1069	22 04	132	2,1,1,1,1,4,4,4	18	1	78·5
9	09 04	479	438	19 28	41	17 58	16·1	4·4	04 49	11·7	18 57	1207	1131	00 00	76	2,2,2,2,1,2,3,1	15	0	78·4
10 *q*	22 04	477	446	02 58	31	10 40	15·8	4·9	21 26	10·9	20 02	1160	1140	22 07	*20*	1,1,2,1,1,0,2,2	10	0	78·3
11	19 42	*568*	227	20 55	341	19 11	25·5	-13·6	20 37	39·1	19 34	*1316*	1067	20 54	249	1,0,1,1,1,4,6,5	19	1	78·4
12	21 29	523	425	00 39	98	21 58	20·9	4·1	21 27	16·8	19 51	1224	1106	21 53	118	3,2,2,1,2,1,3,4	18	1	78·3
13	14 54	483	380	01 48	103	01 28	19·4	3·3	03 53	16·1	15 59	1186	1030	02 09	156	4,3,1,2,2,3,3,0	18	1	78·4
14	07 41	476	419	21 57	57	21 53	18·2	-5·2	21 22	23·4	17 42	1188	1132	06 11	56	1,2,2,2,2,3,2,4	18	1	78·3
15	08 16	472	431	01 37	41	13 33	14·2	-0·5	01 25	14·7	21 13	1154	1108	01 02	46	3,3,2,1,1,0,0,0	10	0	78·3
16	13 44	479	438	19 18	41	14 33	17·9	-2·1	19 36	20·0	18 53	1178	1140	11 37	38	0,0,1,1,2,1,3,2	10	0	78·4
17	23 15	490	438	12 42	52	12 26	15·5	0·4	01 00	15·1	22 48	1155	1124	03 28	31	3,1,1,2,1,0,0,2	10	0	78·3
18	07 09	479	418	23 36	61	20 34	15·8	3·4	05 02	12·4	20 53	1224	1109	23 58	115	1,3,1,1,0,0,3,4	13	1	78·0
19 *q*	22 22	478	432	00 02	46	14 15	16·9	5·0	00 16	11·9	02 37	1157	1112	00 00	45	3,1,1,1,1,1,1,2	11	0	78·0
20	07 10	479	449	15 58	30	15 07	18·8	-1·5	19 30	20·3	19 08	1174	1131	03 54	43	0,2,1,1,2,2,3,1	12	1	78·1
21	07 24	494	425	04 24	69	13 31	17·9	-0·2	05 49	18·1	16 14	1188	1083	05 28	105	3,3,2,1,2,2,3,1	17	1	77·4
22 *d*	21 42	504	419	11 30	85	12 28	17·2	-4·8	04 27	22·0	16 49	1167	1076	04 10	91	3,4,2,3,2,2,3,3	22	1	77·5
23 *d*	16 58	510	418	11 21	92	13 47	25·8	-6·1	18 09	31·9	16 57	1269	1096	21 10	173	3,2,2,3,4,4,5,2	25	1	77·4
24	20 00	498	446	14 49	52	13 07	19·5	1·0	20 02	18·5	17 45	1182	1106	01 07	76	2,2,1,2,3,1,3,2	16	1	77·2
25	14 02	482	435	11 40	47	00 19	21·7	0·6	05 17	21·1	16 18	1200	1095	05 03	105	3,3,2,2,2,3,2,2	19	1	77·2
26	00 01	481	431	01 34	50	12 30	16·9	2·2	04 57	14·7	16 43	1164	1106	04 30	58	3,3,1,1,1,1,2,1	13	0	77·2
27 *q*	23 37	490	445	11 32	45	13 54	17·2	3·9	24 00	13·3	18 42	1163	1134	23 59	29	0,0,1,1,1,1,2,2	8	0	77·3
28 *d*	14 17	518	*175*	03 12	*343*	14 00	*26·8*	-7·2	05 39	34·0	14 23	1247	*885*	03 36	*362*	5,6,4,3,4,3,1,1	27	1	77·4
Mean	- -	492	409	- -	83	- -	18·7	-1·6	- -	20·2	- -	1194	1097	- -	97	-	-	-	78·2

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.

17 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MARCH 1955

	Hour G.M.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	Mean
	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*	457	456	457	461	461	459	461	461	459	455	452	453	453	456	461	465	461	459	456	457	455	458	457	461	458
2 *q*	463	467	459	461	462	468	467	466	468	465	461	460	457	456	460	463	462	462	465	468	469	467	466	466	464
3 *q*	466	464	463	462	467	465	472	470	469	464	459	457	458	461	463	466	466	467	469	469	469	469	469	467	465
4 *q*	466	464	464	465	468	469	471	466	458	455	450	451	456	461	466	469	469	475	478	479	461	457	463	474	465
5	456	455	455	458	463	469	467	466	462	453	453	452	458	457	462	466	455	469	461	463	463	449	427	441	457
6	453	446	462	450	457	461	457	456	455	453	444	451	451	458	465	456	457	461	466	471	465	452	461	456	457
7 *d*	447	375	438	455	461	475	459	470	458	450	456	450	449	457	471	470	473	520	459	466	443	439	443	452	456
8	447	427	450	457	459	466	460	455	457	450	444	442	443	452	450	455	471	466	470	446	451	466	455	462	454
9 *d*	470	455	455	450	460	464	453	465	458	443	430	436	441	457	466	488	483	531	547	607	548	493	460	461	476
10	458	449	444	447	451	453	456	443	440	446	453	437	433	467	472	456	459	471	452	458	484	443	453	446	453
11	404	451	447	452	456	460	440	452	449	445	444	453	428	443	451	462	457	465	456	461	466	471	468	466	452
12	465	460	440	413	442	461	464	444	457	455	452	449	444	449	465	475	460	466	458	460	467	453	466	463	455
13	462	455	457	462	457	457	451	456	456	451	448	446	451	453	469	456	465	465	464	457	472	444	451	452	457
14	436	457	453	459	455	461	465	465	456	451	448	436	441	454	466	456	468	462	476	457	453	445	453	457	455
15	456	460	446	405	465	473	461	433	442	436	445	448	450	448	458	467	463	472	474	465	477	452	460	458	455
16	455	446	452	430	446	461	462	457	455	453	449	450	453	458	459	465	470	462	458	468	457	448	420	397	451
17	421	459	460	467	468	470	452	435	452	456	452	450	449	451	449	458	463	465	471	472	473	474	469	469	459
18	478	473	471	471	471	474	470	465	455	458	456	457	447	452	451	461	475	476	455	466	466	456	460	460	463
19	458	459	463	459	459	459	459	462	455	453	450	447	447	451	455	462	469	471	469	467	466	470	466	467	460
20	468	464	460	463	468	469	472	466	458	456	455	455	457	463	463	467	468	472	472	473	473	475	473	482	466
21	458	457	463	466	469	469	470	469	462	454	454	455	455	459	467	465	469	476	477	483	478	465	470	476	466
22 *d*	474	473	475	470	468	470	470	458	448	448	444	462	469	515	676	907	547	536	468	440	443	443	452	456	*496*
23	454	457	460	460	462	465	469	461	456	452	450	447	450	464	458	473	493	480	510	557	528	472	450	453	470
24	449	428	412	433	436	442	455	451	433	430	436	440	443	454	454	455	459	466	466	469	471	469	466	469	449
25	465	463	462	460	459	461	462	459	450	442	432	436	443	451	454	469	462	469	466	476	470	459	468	469	459
26	470	466	466	466	469	464	459	428	426	435	443	436	443	444	457	452	465	472	476	478	480	482	480	474	460
27	469	470	466	468	468	469	469	468	456	454	447	430	439	444	456	460	456	472	473	472	476	475	474	480	463
28	472	466	462	462	465	467	470	468	452	445	441	440	439	450	458	469	472	472	473	476	475	476	469	474	463
29 *q*	469	465	465	469	473	477	471	470	462	451	443	441	441	450	458	466	470	470	471	475	475	475	475	476	465
30 *d*	471	469	471	471	472	472	473	469	460	455	450	452	451	461	462	465	472	474	484	481	475	519	436	374	464
31 *d*	406	385	232	421	436	449	436	340	410	426	435	421	455	465	488	521	503	488	492	484	459	480	458	449	*439*
Mean	456	453	449	455	460	464	462	455	453	450	448	*446*	448	457	468	*480*	470	475	472	475	471	464	459	458	460

MAGNETIC DECLINATION (WEST)

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

18 LERWICK (D) — 10° + — MARCH 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	10·1	10·0	11·3	11·2	9·8	9·6	9·5	9·4	9·2	10·1	12·0	14·7	16·1	15·0	13·6	12·8	11·5	11·1	9·6	9·6	9·4	8·6	8·9	6·7	10·8
2 *q*	8·2	10·2	9·4	7·3	7·7	7·8	8·8	9·4	10·1	11·8	12·7	13·8	14·1	14·2	14·2	14·0	13·0	12·9	12·3	11·9	11·5	10·9	10·6	9·5	11·1
3 *q*	10·4	10·6	10·2	10·6	10·1	11·3	10·4	10·0	10·3	10·6	12·3	14·2	14·9	14·9	14·1	13·0	12·3	11·9	11·8	11·5	11·5	10·9	11·0	10·6	11·6
4 *q*	10·2	10·4	10·4	10·6	10·4	10·3	9·9	9·7	9·9	10·6	11·0	12·9	14·9	15·4	14·7	13·4	12·4	12·3	12·6	13·7	10·9	10·0	10·7	7·9	11·5
5	6·1	6·2	4·6	5·8	6·5	6·5	8·1	8·8	8·6	9·6	12·3	14·2	16·4	17·2	16·4	16·9	14·4	12·0	12·0	10·6	10·6	3·0	3·6	1·5	9·7
6	4·8	5·1	7·9	6·9	8·7	8·6	10·6	9·8	9·6	10·7	11·0	13·2	13·9	16·9	17·1	15·2	13·3	12·5	11·3	13·5	7·6	10·6	9·4	8·4	10·7
7 *d*	10·6	10·8	-5·5	-2·5	3·4	5·9	9·4	10·9	15·2	12·0	10·9	13·0	14·2	14·7	15·2	16·2	14·6	5·0	8·1	9·0	4·1	-3·8	2·5	4·0	*8·2*
8	8·6	10·4	8·8	4·2	3·8	5·3	8·7	9·7	9·4	9·1	10·8	12·7	14·7	16·4	16·3	13·9	15·2	2·0	-10·6	3·4	8·9	9·0	12·8	6·1	8·7
9 *d*	8·2	8·4	5·9	6·5	6·4	7·0	11·0	10·6	9·1	11·5	15·4	18·8	20·5	23·3	25·3	22·4	22·2	20·0	-9·0	7·3	14·8	8·7	10·7	11·8	12·4
10	10·4	9·6	7·1	7·3	8·4	10·6	8·9	11·5	11·3	11·3	15·5	16·2	16·1	16·4	13·2	15·0	13·2	12·9	10·9	7·9	0·8	4·9	8·1	8·4	10·7
11	9·9	6·8	6·1	7·7	8·4	8·5	10·6	12·5	9·9	10·6	13·0	16·5	17·5	17·0	15·3	15·8	4·8	5·8	12·8	12·3	10·9	10·1	10·2	10·6	11·0
12	10·0	9·5	9·1	15·5	7·3	8·1	8·7	10·9	13·7	12·0	14·2	14·2	16·1	13·9	15·4	17·1	10·6	10·8	12·1	12·3	10·9	10·2	8·1	9·3	11·7
13	7·9	11·0	10·6	8·2	7·8	8·8	10·1	9·4	10·1	11·8	13·0	13·9	15·5	15·4	16·6	15·1	14·5	10·5	10·1	10·8	-0·2	4·0	8·9	6·9	10·4
14	19·6	6·0	5·6	7·1	7·2	9·9	8·9	9·1	8·9	10·4	12·3	14·2	15·5	16·1	17·0	12·1	10·6	10·6	-3·1	10·4	6·5	2·9	6·9	11·7	9·9
15	9·9	-0·2	3·3	9·6	4·1	5·0	10·7	14·8	19·3	16·1	15·7	12·1	16·4	15·9	14·1	14·0	12·7	12·5	12·1	10·9	9·6	9·6	12·5	9·6	11·3
16	8·2	8·1	4·6	2·1	10·2	8·7	9·2	9·4	9·2	10·7	11·3	12·7	14·2	14·4	14·9	14·1	13·9	10·6	12·3	10·6	3·8	-5·2	-1·8	-6·2	8·3
17	5·8	4·9	7·3	8·6	9·7	8·9	9·8	12·8	15·9	15·5	13·7	14·9	15·8	16·8	16·3	13·4	13·2	11·3	11·6	11·8	11·5	11·5	10·6	10·2	11·7
18	10·5	9·4	9·1	9·0	8·9	9·7	9·1	10·6	12·8	10·6	11·3	15·6	15·3	17·3	17·4	16·7	9·9	-5·5	13·7	9·8	5·6	5·8	9·2	8·5	10·4
19	10·6	8·9	6·3	6·5	8·0	8·9	9·6	8·8	8·6	9·3	10·0	11·8	14·4	15·4	15·4	14·6	13·0	12·5	11·5	10·6	4·8	7·8	10·6	10·9	10·4
20	10·8	11·8	9·9	8·4	8·4	8·2	8·6	8·4	9·4	9·9	12·3	14·5	15·2	16·3	14·6	12·5	10·9	10·8	10·9	10·8	11·3	11·5	10·6	0·8	10·7
21	-1·6	6·0	8·0	7·0	7·1	7·5	8·2	7·8	8·0	9·4	10·8	13·7	15·4	15·9	15·7	13·1	11·3	10·8	12·6	12·6	10·2	0·9	4·7	8·0	9·3
22 *d*	10·4	10·6	10·4	9·2	9·5	9·4	8·3	8·1	11·7	14·4	18·4	17·6	17·5	18·7	20·5	19·3	22·1	10·4	3·4	10·5	11·0	9·2	11·1	10·2	12·6
23	9·4	9·7	9·4	9·2	8·8	8·8	8·2	8·0	7·8	8·4	10·1	13·0	14·3	16·8	15·4	13·7	16·0	13·5	17·6	16·4	7·2	-18·6	4·1	8·9	9·8
24	9·3	8·8	8·1	-0·7	2·7	7·0	6·7	7·2	8·4	9·2	10·4	13·7	15·4	16·4	17·2	15·8	14·3	12·7	11·1	10·5	10·6	9·8	9·5	9·7	10·2
25	9·7	10·0	9·8	9·9	8·9	8·3	8·0	6·7	6·5	8·8	11·9	13·5	16·2	17·0	16·5	15·5	13·7	11·9	12·0	6·2	2·3	6·4	8·7	9·5	10·3
26	9·4	9·7	9·4	9·1	8·7	9·5	12·4	19·1	19·1	20·2	19·4	18·1	18·7	22·1	20·2	16·6	14·3	13·3	12·4	11·6	10·8	10·6	10·6	10·4	*14·0*
27	10·1	9·7	9·7	10·4	8·8	8·2	7·2	7·8	6·8	7·5	11·5	14·8	18·1	20·3	22·3	18·7	14·3	12·3	11·3	10·3	10·8	10·4	9·8	7·5	11·6
28	9·4	8·8	8·4	8·4	9·0	8·9	8·2	7·5	8·3	9·5	11·6	14·4	15·2	16·4	15·1	13·4	12·0	11·1	11·1	11·3	11·0	10·4	7·2	6·8	10·6
29 *q*	5·2	6·6	8·1	8·4	8·9	8·9	9·3	8·9	8·3	8·4	10·4	13·7	16·4	17·1	15·3	13·6	12·0	11·3	10·5	10·8	10·9	10·7	10·6	10·0	10·6
30 *d*	10·5	12·0	10·7	9·1	8·8	8·3	8·2	7·8	8·4	9·4	11·6	15·6	17·6	18·6	19·5	15·4	17·2	15·6	13·7	1·9	8·6	-2·5	-2·7	5·3	10·4
31 *d*	7·5	7·6	-4·1	-14·3	1·4	5·1	7·5	21·0	26·0	13·2	13·3	13·2	16·2	18·0	18·0	7·7	7·2	8·9	12·8	-0·2	10·1	4·1	10·0	7·6	9·1
Mean	9·0	8·6	7·4	7·0	7·7	8·3	9·1	10·2	11·0	11·1	12·6	14·4	15·9	*16·8*	16·5	14·9	13·2	10·8	9·7	10·0	8·7	*6·2*	8·3	7·8	10·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

19 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — MARCH 1955

	Hour G.M.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	Mean
	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*	1150	1149	1147	1147	1150	1152	1152	1152	1153	1152	1148	1144	1146	1148	1151	1152	1154	1156	1158	1159	1163	1158	1154	1146	1152
2 *q*	1140	1131	1134	1140	1144	1143	1145	1146	1146	1146	1145	1146	1147	1146	1147	1150	1152	1152	1152	1152	1151	1152	1152	1152	1146
3 *q*	1151	1150	1150	1148	1145	1145	1142	1145	1147	1147	1146	1144	1145	1145	1143	1144	1147	1147	1147	1147	1148	1150	1149	1149	1147
4 *q*	1150	1150	1148	1145	1143	1143	1142	1145	1147	1147	1144	1143	1142	1143	1143	1144	1144	1143	1144	1147	1162	1172	1165	1147	1148
5	1135	1125	1135	1141	1134	1128	1132	1137	1140	1145	1142	1142	1144	1148	1151	1158	1160	1158	1164	1160	1155	1141	1114	1129	1142
6	1139	1140	1104	1127	1143	1143	1146	1146	1144	1147	1150	1150	1151	1151	1153	1161	1161	1157	1152	1158	1180	1178	1167	1164	1151
7 *d*	1143	1059	1093	1100	1117	1111	1110	1110	1120	1129	1139	1143	1148	1148	1148	1158	1179	1209	1191	1182	1049	1105	1121	1141	1131
8	1145	1104	1107	1137	1137	1125	1129	1140	1141	1146	1147	1150	1152	1158	1167	1167	1166	1193	1185	1164	1156	1147	1117	1111	1145
9 *d*	1111	1123	1138	1143	1135	1134	1135	1134	1141	1141	1143	1145	1148	1157	1174	1223	1210	1268	1276	1246	1246	1261	1200	1175	1175
10	1169	1165	1152	1147	1155	1154	1148	1152	1160	1154	1154	1162	1172	1174	1207	1188	1170	1166	1199	1205	1169	1159	1136	1111	1164
11	1107	1106	1129	1147	1153	1148	1157	1141	1142	1144	1144	1144	1165	1161	1157	1166	1197	1188	1165	1158	1154	1149	1144	1150	1151
12	1152	1152	1144	1082	1076	1119	1127	1135	1130	1137	1141	1143	1151	1162	1162	1165	1196	1208	1207	1205	1186	1119	1144	1152	1150
13	1147	1148	1145	1150	1151	1152	1153	1152	1150	1148	1144	1144	1145	1148	1158	1169	1172	1190	1186	1184	1173	1156	1152	1150	1153
14	1092	1084	1121	1138	1147	1147	1150	1152	1153	1154	1152	1152	1150	1151	1157	1169	1174	1182	1184	1172	1180	1174	1157	1148	1152
15	1122	1110	1116	1073	1062	1099	1119	1126	1115	1127	1128	1139	1144	1152	1155	1156	1157	1155	1158	1171	1188	1188	1145	1123	1135
16	1139	1125	1100	1123	1127	1140	1147	1152	1155	1152	1154	1150	1149	1146	1149	1150	1161	1179	1168	1164	1168	1140	1112	1086	1143
17	1069	1097	1131	1139	1142	1140	1138	1128	1116	1120	1132	1148	1155	1152	1167	1177	1165	1159	1152	1150	1150	1150	1152	1154	1141
18	1148	1151	1151	1150	1147	1145	1145	1147	1145	1143	1143	1145	1154	1154	1157	1165	1186	1233	1205	1205	1164	1165	1159	1157	1161
19	1149	1117	1129	1139	1143	1144	1147	1147	1152	1148	1145	1144	1144	1145	1148	1149	1152	1158	1159	1161	1161	1149	1149	1151	1147
20	1150	1145	1142	1144	1144	1145	1144	1147	1147	1142	1139	1138	1141	1144	1148	1147	1150	1149	1148	1149	1148	1148	1150	1126	1145
21	1109	1126	1135	1141	1141	1141	1140	1140	1141	1140	1140	1138	1139	1143	1146	1149	1151	1150	1147	1144	1151	1154	1118	1126	1140
22 *d*	1141	1147	1148	1151	1149	1145	1144	1144	1137	1127	1127	1141	1185	1254	1336	1300	1318	1322	1289	1211	1173	1155	1148	1147	*1189*
23	1156	1158	1159	1159	1158	1154	1151	1155	1154	1153	1150	1149	1146	1147	1158	1155	1166	1203	1246	1307	1275	1177	1153	1157	1173
24	1152	1095	1057	1078	1114	1117	1137	1147	1153	1157	1151	1152	1159	1166	1169	1167	1165	1165	1164	1159	1156	1156	1158	1151	1144
25	1152	1155	1158	1159	1158	1158	1156	1155	1152	1150	1151	1148	1147	1149	1155	1160	1176	1182	1190	1188	1164	1152	1144	ı144	1158
26	1147	1152	1157	1158	1156	1156	1145	1144	1131	1124	1123	1132	1145	1158	1185	1188	1168	1157	1155	1152	1151	1147	1151	1154	1151
27	1156	1154	1156	1154	1154	1151	1152	1151	1151	1145	1141	1152	1145	1144	1152	1161	1162	1164	1165	1164	1157	1155	1152	1140	1153
28	1142	1147	1152	1154	1154	1155	1155	1155	1155	1151	1147	1145	1143	1144	1147	1151	1155	1157	1156	1154	1155	1152	1155	1135	1151
29 *q*	1135	1141	1146	1148	1149	1150	1152	1152	1152	1152	1148	1141	1137	1137	1143	1147	1152	1155	1156	1153	1152	1152	1151	1147	1148
30 *d*	1147	1144	1141	1147	1148	1150	1152	1152	1152	1148	1144	1133	1130	1133	1143	1155	1159	1165	1172	1220	1176	1088	1054	1018	1140
31 *d*	1038	1029	903	939	1051	1088	1109	1116	1082	1129	1170	1168	1168	1181	1193	1236	1233	1224	1211	1138	1152	1127	1093	1117	*1121*
Mean	1135	1128	*1127*	1131	1136	1139	1142	1143	1142	1143	1144	1146	1150	1154	1164	1169	1173	*1180*	1179	1175	1165	1154	1142	1137	1150

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

20 LERWICK — MARCH 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range					
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m. γ	γ h. m.	γ					°A.
1 *q*	15 27	469	448	10 57	*21*	12 47 16·6	5·8 23 40	10·8	20 20 1164	1141 24 00	23	1,1,1,1,1,2,1,1	9	0	77·8
2 *q*	01 02	479	454	13 20	25	14 20 14·7	6·0 00 00	8·7	19 00 1155	1129 02 00	26	2,1,2,1,2,1,0,1	10	0	78·0
3 *q*	07 57	477	453	11 34	24	13 07 15·4	8·7 07 45	*6·7*	00 00 1152	1141 06 09	*11*	0,1,1,1,1,1,0,1	6	0	77·8
4 *q*	23 47	485	448	11 00	37	13 33 15·5	3·0 24 00	12·5	21 37 1177	1134 23 54	43	0,0,1,1,1,1,2,2	8	0	78·0
5	17 28	476	402	22 22	74	13 02 18·5	-6·9 21 10	25·4	21 17 1170	1093 22 07	77	2,1,1,1,2,2,3,4	16	1	77·7
6	20 17	482	438	10 39	44	13 28 20·0	2·1 20 32	17·9	21 08 1190	1087 02 34	103	3,3,2,1,2,1,3,2	17	1	77·7
7 *d*	20 06	732	316	20 30	416	20 28 40·9	-15·6 17 41	56·5	17 36 1271	940 20 27	331	5,3,2,2,1,5,6,4	28	1	78·0
8	18 02	495	416	01 49	79	14 39 17·7	-20·4 17 54	38·1	17 47 1216	1073 01 48	143	3,2,2,1,2,5,4,3	22	1	78·0
9 *d*	19 54	738	425	10 40	313	20 09 32·7	-25·9 18 17	58·6	17 58 1373	1107 00 50	266	3,2,2,2,3,5,6,4	27	1	78·0
10	20 18	503	418	11 58	85	13 41 19·2	-6·2 20 13	25·4	14 20 1221	1095 23 07	126	2,2,2,3,3,3,4,4	23	1	78·0
11	16 57	479	358	00 31	121	12 19 19·6	-5·0 16 50	24·6	16 47 1207	1089 00 33	118	4,2,2,2,2,4,1,1	18	1	78·1
12	16 56	491	401	03 36	90	21 00 24·3	-0·4 16 50	24·7	17 22 1215	1061 03 48	154	3,3,2,2,2,4,4,4	24	1	78·3
13	20 29	512	433	21 33	79	12 40 17·8	-17·5 20 24	35·3	17 30 1202	1141 02 20	61	2,2,2,2,2,3,4,3	20	1	78·5
14	18 12	501	422	00 08	79	00 22 25·8	-17·6 18 10	43·4	17 56 1211	1059 00 50	152	4,2,1,2,2,4,4,3	22	1	78·6
15	20 46	502	392	03 36	110	21 00 22·0	-1·8 01 43	23·8	21 07 1218	1039 03 49	179	3,4,3,3,2,2,3,4	24	1	78·5
16	16 16	478	371	23 53	107	14 00 15·4	-10·8 23 30	26·2	17 28 1183	1078 23 53	105	3,3,1,1,1,2,4,4	19	1	78·6
17	21 09	488	392	00 08	96	09 07 18·0	1·4 00 00	16·6	15 28 1180	1061 00 48	119	4,1,3,3,2,2,1,2	18	1	78·0
18	20 21	511	425	20 56	86	13 58 19·4	-16·6 17 05	36·0	17 22 1241	1132 20 33	109	1,1,2,2,2,5,4,2	19	1	77·8
19	17 02	477	444	12 01	33	14 04 15·8	0·3 20 34	15·5	20 18 1166	1113 01 19	53	3,1,1,1,1,1,3,2	13	0	77·9
20	23 20	494	451	11 00	43	13 40 17·3	-5·2 24 00	22·5	23 01 1152	1108 24 00	44	2,1,1,1,2,1,0,3	11	0	77·4
21	19 32	487	447	00 58	40	14 01 17·5	-5·8 21 04	23·3	21 27 1168	1104 00 08	64	3,1,1,1,2,1,3,3	15	0	77·5
22 *d*	15 28	*1084*	424	10 14	*660*	15 30 *51·6*	-22·0 15 23	*73·6*	16 05 *1405*	1120 10 14	285	1,1,2,3,7,7,5,2	28	2	77·6
23	21 00	661	434	22 53	227	19 07 21·8	-30·6 21 22	52·4	19 37 1341	1141 21 54	200	1,0,1,1,3,3,5,5	19	1	77·7
24	19 02	473	394	02 24	79	14 25 18·9	-3·1 03 48	22·0	14 52 1171	1044 02 25	127	4,3,2,2,2,1,1,1	16	1	77·7
25	19 33	496	424	10 29	72	13 43 17·6	-3·8 19 31	21·4	19 28 1210	1141 23 30	69	1,0,1,1,1,2,3,2	11	0	77·7
26	21 55	491	423	08 20	68	14 00 25·5	8·2 04 46	17·3	14 53 1196	1116 11 01	80	1,1,3,2,3,3,1,2	16	0	77·6
27	23 16	492	416	11 03	76	14 24 25·1	5·1 08 49	20·0	18 32 1169	1134 23 31	35	1,1,1,3,2,2,1,2	13	0	77·7
28	19 24	480	435	12 37	45	13 25 17·3	3·4 23 54	13·9	16 50 1159	1130 23 31	29	1,0,1,1,1,1,0,2	7	0	77·7
29 *q*	05 09	479	438	12 04	41	13 42 17·3	3·6 00 00	13·7	18 14 1158	1131 00 00	27	1,0,0,0,1,0,0,0	2	0	77·4
30 *d*	21 17	597	324	23 33	273	14 34 21·9	*-32·4* 21 14	54·3	19 38 1242	966 23 31	276	1,0,0,3,2,2,4,6	18	1	77·4
31 *d*	18 45	592	*123*	02 28	469	08 07 35·1	-30·6 02 57	65·7	18 44 1289	*854* 02 27	*435*	6,5,5,4,3,4,5,4	36	2	78·0
Mean	- -	536	406	- -	129	- - 21·8	-7·4 - -	29·3	- - 1212	1087 - -	125	-	-	0·68	77·9

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 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — APRIL 1955

	Hour G.M.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	Mean
	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	434	437	437	430	447	442	449	446	444	434	427	428	442	457	469	465	463	466	471	469	475	477	428	424	448
2	454	456	454	458	450	455	465	450	446	436	430	438	458	471	502	516	523	519	490	458	459	427	465	463	464
3	464	454	440	455	459	455	450	458	455	445	425	442	450	462	467	473	473	473	467	464	469	465	455	469	458
4	466	462	460	464	463	460	460	460	455	442	428	436	444	457	463	460	473	495	479	468	465	472	467	476	461
5 *d*	426	406	429	465	466	466	447	455	447	436	432	442	451	455	456	471	472	470	477	493	478	470	466	466	456
6	473	436	440	455	457	456	465	456	450	445	441	421	435	446	458	455	465	465	472	476	484	492	458	414	455
7 *d*	434	418	411	419	463	468	466	448	444	440	419	433	448	463	466	461	459	474	485	493	470	468	459	449	452
8	477	469	469	467	467	456	448	467	459	448	437	433	444	451	459	463	473	478	473	476	473	461	470	474	462
9	470	469	468	468	464	463	467	466	457	448	441	440	446	457	464	469	475	476	473	477	479	479	485	467	465
10	466	469	468	468	469	470	472	470	464	457	444	438	441	437	470	468	470	464	476	470	464	464	462	459	463
11	466	463	467	448	438	458	457	463	460	459	451	452	453	466	464	473	470	478	471	472	473	474	470	472	463
12	473	470	460	460	461	471	472	468	463	451	443	443	437	464	463	466	474	471	485	474	473	442	433	445	461
13	453	418	411	444	461	471	472	464	454	446	435	438	447	447	459	467	475	477	482	488	481	483	485	463	459
14	473	468	467	468	469	466	463	465	456	453	448	441	447	451	448	459	466	472	474	476	476	476	477	473	464
15	472	474	471	473	472	475	478	477	469	456	452	445	448	461	466	460	459	468	482	484	482	482	480	478	469
16 *q*	475	471	470	470	471	477	478	474	464	457	451	451	457	458	456	463	471	478	492	493	480	478	479	474	*470*
17 *q*	478	475	478	474	476	478	473	463	458	451	442	441	442	459	464	474	472	479	485	490	486	479	478	477	470
18 *q*	474	471	470	469	470	470	469	464	459	451	450	451	459	463	464	477	481	476	478	482	479	476	475	476	469
19 *q*	476	474	469	463	461	462	470	468	463	453	445	444	451	459	470	474	479	484	486	484	485	485	490	490	470
20	489	486	483	482	477	467	463	464	457	445	438	443	451	464	458	468	464	479	482	475	469	474	472	471	468
21	470	470	463	463	463	463	467	462	451	441	442	443	445	454	442	466	482	493	482	485	478	478	479	479	465
22	475	474	460	454	446	471	466	456	451	444	439	436	438	445	459	469	472	481	484	486	487	480	481	477	464
23 *q*	474	472	470	470	471	471	469	467	459	448	432	429	440	447	452	457	467	475	481	480	478	478	478	479	464
24	476	475	472	472	475	477	477	470	457	452	449	452	461	465	430	476	488	541	586	491	424	361	415	463	467
25	470	466	458	443	447	463	460	452	441	435	434	436	447	458	472	478	467	487	495	490	466	459	464	456	460
26	472	442	446	453	454	458	456	444	427	436	438	428	442	450	460	459	474	473	496	495	477	455	429	393	452
27 *d*	422	419	440	456	456	446	463	454	443	444	443	446	449	458	469	475	514	543	589	494	176	74	−135	14	*394*
28 *d*	−217	283	418	373	382	400	403	418	424	429	435	455	467	447	466	454	474	494	518	511	463	349	422	361	401
29 *d*	280	367	316	433	446	445	445	440	432	405	394	405	420	469	475	454	487	481	504	484	478	413	424	422	430
30	377	360	431	458	454	433	448	450	441	433	441	432	444	448	451	465	456	470	478	483	480	470	461	456	447
Mean	*433*	446	450	456	459	460	461	459	452	444	438	439	447	456	462	468	475	483	*490*	482	464	448	442	443	456

MAGNETIC DECLINATION (WEST)

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

22 LERWICK (D) — 10° + — APRIL 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	11·7	11·6	9·7	8·4	5·0	7·0	8·2	7·1	8·1	10·1	12·2	16·5	15·6	14·7	12·3	11·8	10·7	10·4	9·6	10·1	9·4	−4·6	−3·9	1·9	8·9
2	10·6	6·5	4·4	4·7	6·0	7·7	7·6	9·5	9·6	9·7	11·3	13·2	19·7	21·2	20·2	20·4	19·3	17·4	11·5	9·4	8·2	8·2	3·5	9·4	11·2
3	9·5	8·3	7·5	7·5	8·9	7·5	7·1	7·9	6·7	9·4	11·0	14·4	13·2	20·0	21·9	21·4	17·3	16·4	12·6	11·5	9·5	12·5	11·6	10·8	11·9
4	10·1	9·1	10·6	8·4	8·4	7·9	9·5	9·5	8·4	9·3	12·3	15·9	15·8	15·8	15·1	13·9	13·3	14·2	5·7	1·7	9·3	11·1	3·6	0·5	10·0
5 *d*	−5·7	4·6	11·0	8·8	7·0	6·4	8·7	8·4	7·7	8·2	10·5	14·0	16·8	20·1	17·5	16·8	16·8	15·6	13·0	6·9	8·8	8·4	9·4	9·3	10·4
6	10·3	9·8	11·3	5·8	7·1	8·2	8·7	7·9	7·8	8·8	11·3	14·3	15·9	18·4	19·3	16·8	13·2	11·7	10·9	10·5	10·1	−4·8	−2·9	0·3	9·6
7 *d*	13·1	13·2	5·3	13·1	5·6	6·3	6·1	6·3	5·8	9·1	10·8	13·8	16·0	19·0	17·2	16·1	13·4	12·4	6·5	2·8	5·7	6·0	8·7	12·0	10·2
8	11·3	10·1	9·2	8·7	8·2	9·2	13·6	14·7	15·7	9·6	11·0	13·2	15·6	16·7	16·4	15·4	13·9	14·2	11·9	12·8	12·1	3·6	8·7	10·8	*11·9*
9	10·3	9·7	10·2	8·4	8·4	8·5	8·9	8·7	8·2	8·4	10·1	12·6	14·4	14·4	13·7	12·4	12·2	11·8	11·3	11·3	11·9	11·7	4·1	4·0	10·2
10	9·5	9·8	8·9	8·5	7·8	7·8	7·8	7·7	7·5	7·4	10·7	16·1	22·1	23·7	20·8	18·7	17·1	6·7	10·5	11·0	8·4	5·7	8·2	7·3	11·2
11	10·1	9·4	8·0	8·0	10·1	7·5	6·8	8·1	9·5	10·7	12·3	14·9	16·0	17·1	16·0	15·2	14·6	13·7	13·0	12·3	12·8	11·3	10·4	10·1	11·6
12	9·8	9·2	7·8	−0·2	1·7	5·4	8·2	8·4	8·7	8·7	11·4	14·9	15·5	13·3	12·9	11·7	11·3	10·6	11·7	11·6	11·2	−0·6	3·5	−1·7	8·5
13	1·1	2·7	0·4	−6·9	−0·1	6·6	6·6	8·0	8·2	9·7	12·0	14·4	17·1	17·6	15·6	13·9	13·9	13·5	12·6	12·7	12·3	12·6	10·7	13·9	9·5
14	8·4	7·4	8·1	8·4	8·4	11·7	13·6	14·2	14·2	10·4	11·2	14·1	15·4	14·9	14·3	13·9	13·2	12·9	12·0	11·6	10·8	10·1	8·0	8·4	11·5
15	9·6	9·2	10·2	8·7	8·3	8·4	8·3	6·8	7·5	8·3	9·9	13·0	15·5	16·7	16·1	16·4	14·2	12·3	12·0	12·3	11·7	11·0	9·4	9·0	11·0
16 *q*	8·7	9·1	9·3	8·8	9·0	8·7	8·7	7·9	7·0	7·7	10·2	13·9	12·7	17·8	16·6	14·0	13·2	12·3	12·0	11·2	9·3	9·1	10·2	9·9	10·7
17 *q*	9·7	10·1	9·1	7·8	7·5	7·2	6·5	7·8	8·7	9·9	12·3	15·5	17·5	16·1	14·3	13·5	12·8	12·8	12·3	12·8	12·3	11·3	10·9	10·3	11·2
18 *q*	9·9	9·1	8·6	8·4	8·3	8·2	7·9	7·0	7·2	7·5	9·4	11·3	15·2	16·3	14·3	13·0	11·0	11·6	12·4	12·0	11·5	10·9	10·4	10·4	10·5
19 *q*	10·1	9·3	8·2	7·8	8·5	8·6	7·9	7·2	7·9	9·2	11·0	13·2	15·0	15·0	14·0	13·5	13·2	13·3	13·0	11·8	11·5	11·5	10·6	10·3	10·9
20	9·5	8·1	7·5	7·7	7·0	6·1	6·0	8·2	6·9	7·5	10·0	12·7	16·2	18·0	16·0	15·2	13·0	13·2	12·3	11·2	9·5	10·4	9·4	8·4	10·4
21	8·5	8·2	8·4	7·9	6·4	7·5	6·7	6·8	8·8	9·1	9·4	13·2	16·8	18·4	16·1	15·2	14·7	13·8	12·8	11·3	10·0	9·4	11·3	9·4	10·8
22	9·4	9·3	13·0	10·4	10·4	5·7	4·6	4·2	4·1	7·2	10·7	13·3	15·5	16·5	15·5	13·8	12·8	12·3	10·6	7·8	4·5	8·1	8·2	9·6	9·9
23 *q*	9·4	9·3	8·5	8·1	7·5	6·5	6·0	5·7	6·3	7·8	9·2	11·8	14·2	14·9	13·2	12·3	11·3	10·8	10·3	9·7	10·0	10·4	10·1	9·7	9·7
24	10·0	10·3	7·8	7·5	6·6	6·0	5·9	5·6	6·2	6·9	9·4	12·8	17·3	20·3	19·7	18·4	18·9	19·0	17·8	7·5	1·3	9·0	4·1	−9·3	10·0
25	2·7	5·1	4·3	4·7	6·6	5·6	5·3	5·3	6·7	9·3	12·2	14·9	18·0	18·4	17·6	14·3	14·1	14·6	10·7	11·9	1·6	1·1	3·3	4·9	8·9
26	5·3	1·2	−3·4	0·5	0·5	4·1	8·8	11·6	11·9	11·4	12·7	14·9	15·8	16·9	15·9	14·2	12·8	11·1	12·2	10·0	5·5	2·9	1·6	1·4	8·3
27 *d*	−4·7	2·1	8·0	1·2	2·1	6·2	5·1	7·9	8·2	9·0	9·8	11·9	14·2	15·4	14·5	14·4	16·6	20·7	21·2	15·3	−24·8	−7·6	−20·9	−25·5	*5·0*
28 *d*	−29·0	−12·2	3·5	6·0	4·8	5·0	5·6	3·0	5·8	7·9	10·6	12·1	12·8	14·8	16·1	14·6	15·1	15·3	15·8	11·7	13·0	9·9	0·2	7·1	7·1
29 *d*	8·7	2·7	−4·4	2·7	3·6	3·1	5·9	6·2	4·6	7·8	6·9	11·5	14·6	15·1	12·3	12·8	14·6	10·6	3·9	11·8	9·6	−2·7	−1·1	2·8	6·8
30	4·1	3·1	8·2	2·9	4·8	5·2	7·5	7·8	7·2	8·8	11·0	11·2	12·3	15·2	14·7	13·4	12·3	11·5	10·6	4·8	3·4	8·4	9·6	9·4	8·6
Mean	6·7	7·2	7·3	6·4	6·5	7·0	7·6	7·8	8·0	8·8	10·8	13·7	15·8	*17·1*	16·0	14·9	14·0	13·2	11·8	10·3	8·0	6·8	*5·7*	5·8	9·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

23 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — APRIL 1955

	Hour G.M.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	Mean
	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	1112	1102	1130	1138	1138	1136	1129	1150	1157	1158	1159	1161	1161	1156	1165	1165	1160	1158	1161	1159	1156	1108	1073	1090	1141
2	1096	1115	1139	1148	1135	1129	1131	1133	1133	1141	1148	1144	1151	1170	1194	1220	1244	1270	1275	1225	1183	1123	1097	1135	*1162*
3	1148	1145	1121	1129	1147	1144	1143	1140	1144	1147	1155	1149	1152	1163	1184	1203	1217	1199	1196	1187	1169	1151	1127	1135	1158
4	1147	1152	1154	1149	1150	1144	1145	1150	1150	1152	1152	1148	1148	1157	1154	1152	1151	1170	1217	1208	1179	1166	1137	1075	1154
5 *d*	1082	1070	1065	1116	1137	1138	1147	1148	1148	1152	1151	1149	1153	1166	1195	1179	1182	1182	1182	1157	1148	1154	1147	1139	1145
6	1119	1112	1076	1095	1118	1137	1138	1147	1147	1148	1150	1157	1155	1152	1156	1166	1168	1160	1158	1160	1155	1137	1107	1062	1137
7 *d*	1041	1049	1061	1055	1086	1119	1135	1145	1154	1154	1161	1157	1153	1160	1166	1170	1169	1166	1167	1155	1150	1147	1138	1104	1132
8	1117	1147	1156	1158	1155	1154	1142	1132	1141	1145	1144	1146	1148	1153	1159	1166	1168	1174	1179	1168	1157	1149	1146	1149	1152
9	1151	1152	1152	1147	1150	1151	1151	1151	1152	1150	1144	1141	1140	1143	1148	1152	1155	1157	1157	1154	1150	1150	1126	1131	1148
10	1140	1148	1154	1155	1155	1153	1151	1151	1150	1147	1147	1144	1143	1166	1176	1179	1180	1197	1173	1161	1162	1161	1149	1130	1157
11	1115	1141	1149	1150	1124	1125	1138	1140	1138	1138	1141	1141	1142	1150	1155	1156	1161	1166	1168	1166	1158	1155	1155	1152	1147
12	1152	1147	1114	1098	1123	1127	1132	1137	1141	1149	1145	1143	1144	1145	1147	1152	1155	1161	1156	1166	1174	1172	1137	1121	1143
13	1116	1086	1046	1073	1114	1135	1140	1143	1147	1144	1144	1139	1139	1144	1145	1147	1151	1158	1161	1162	1169	1173	1166	1108	1135
14	1124	1152	1155	1153	1148	1140	1131	1130	1133	1141	1144	1147	1149	1151	1156	1152	1152	1152	1155	1155	1156	1157	1154	1154	1148
15	1152	1148	1144	1144	1147	1148	1149	1150	1149	1148	1147	1144	1139	1138	1143	1150	1155	1156	1154	1155	1155	1155	1155	1151	1149
16 *q*	1150	1152	1151	1150	1150	1148	1149	1150	1150	1147	1145	1144	1144	1151	1151	1147	1149	1151	1150	1156	1166	1161	1154	1155	1151
17 *q*	1154	1152	1150	1152	1150	1148	1149	1150	1146	1145	1146	1146	1147	1147	1151	1153	1156	1152	1152	1150	1153	1155	1154	1154	1151
18 *q*	1155	1155	1154	1153	1151	1151	1152	1151	1151	1151	1148	1144	1143	1147	1152	1154	1164	1166	1156	1150	1150	1151	1151	1150	1152
19 *q*	1150	1151	1154	1152	1144	1138	1138	1141	1142	1144	1143	1137	1136	1143	1147	1145	1145	1144	1144	1147	1147	1147	1147	1148	1145
20	1148	1150	1150	1148	1148	1148	1144	1141	1147	1150	1146	1140	1141	1148	1157	1162	1172	1167	1172	1170	1161	1155	1152	1152	1153
21	1151	1148	1154	1152	1152	1147	1141	1139	1139	1141	1141	1138	1141	1154	1165	1158	1158	1160	1169	1166	1166	1155	1143	1136	1151
22	1141	1146	1147	1126	1114	1112	1129	1138	1138	1140	1143	1144	1146	1147	1150	1152	1152	1153	1153	1152	1148	1143	1144	1147	1142
23 *q*	1152	1154	1155	1157	1155	1154	1152	1151	1149	1146	1143	1140	1137	1143	1147	1150	1151	1151	1149	1149	1149	1147	1147	1147	1149
24	1150	1145	1148	1151	1152	1149	1147	1145	1143	1138	1137	1132	1130	1147	1164	1158	1169	1195	1278	1241	1158	1045	1021	1032	1145
25	1055	1120	1140	1151	1144	1151	1159	1160	1156	1151	1148	1150	1144	1147	1161	1171	1179	1175	1188	1138	1135	1139	1143	1135	1147
26	1076	1057	1085	1121	1133	1137	1130	1128	1130	1129	1135	1155	1160	1152	1155	1157	1157	1164	1162	1181	1147	1128	1091	1019	*1129*
27 *d*	1054	1076	1057	1100	1128	1127	1130	1135	1143	1144	1145	1144	1144	1151	1155	1151	1148	1170	1252	1274	1161	1268	1284	925	1144
28 *d*	1068	955	1104	1107	1120	1133	1138	1152	1161	1170	1169	1176	1167	1155	1164	1173	1170	1182	1199	1211	1170	1021	1082	1076	1134
29 *d*	1014	1009	1034	1106	1129	1147	1151	1159	1164	1176	1188	1182	1176	1182	1202	1182	1179	1203	1205	1186	1164	1082	1075	1103	1142
30	1085	1052	1066	1116	1138	1144	1145	1147	1152	1154	1158	1176	1171	1162	1158	1157	1167	1162	1166	1178	1174	1168	1155	1094	1144
Mean	1117	1116	1122	1132	1138	1140	1142	1144	1147	1148	1149	1149	1148	1153	1161	1163	1166	1171	*1178*	1173	1159	1144	1135	*1114*	1146

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

24 LERWICK — APRIL 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	h. m.	γ	γ	h. m.	′	′ h. m.	′	γ	h. m.	γ	γ	h. m.	γ				°A.
1	21 24	562	23 57	411	151	12 12	17·8	-29·1 21	46·9	15 21	1168	1040	21 54	128	3,2,3,2,2,2,1,5	20	1	78·1
2	16 30	542	21 37	367	175	13 35	25·2	-8·6 21	33·8	18 03	1292	1068	22 05	224	3,2,2,2,3,3,4,4	23	1	78·1
3	16 48	486	10 34	417	69	14 38	24·1	5·9 08	18·2	16 27	1225	1113	02 45	112	2,3,2,2,3,2,3,2	19	1	78·2
4	17 26	513	10 39	420	93	11 48	17·8	-11·0 23	28·8	18 50	1231	1058	23 38	173	1,1,1,2,2,3,4,4	18	1	78·5
5 *d*	19 37	535	01 58	348	187	13 53	23·1	-9·0 00	32·1	14 27	1202	1033	01 54	169	4,3,2,2,3,2,3,2	21	1	78·4
6	21 23	514	23 32	393	121	14 30	21·4	-8·6 21	30·0	16 32	1171	1023	24 00	148	3,3,1,2,3,2,1,4	19	1	78·4
7 *d*	18 54	511	02 56	342	169	01 10	21·2	-3·4 18	24·6	18 48	1174	1021	00 03	153	4,4,2,2,2,2,3,3	22	1	82·0
8	17 30	490	11 24	432	58	12 58	17·6	1·1 21	16·5	17 55	1185	1107	00 10	78	3,1,2,1,1,2,2,3	15	1	82·4
9	22 13	518	10 51	438	80	13 37	14·7	-1·3 22	16·0	17 48	1159	1106	22 20	53	1,1,1,1,1,1,0,3	9	0	82·7
10	14 42	493	13 04	419	74	12 50	26·0	1·7 17	24·3	17 27	1211	1115	24 00	96	2,0,0,2,3,3,2,3	15	1	82·7
11	15 37	496	04 13	430	66	13 30	18·9	5·4 06	13·5	18 03	1172	1108	00 10	64	3,2,2,1,2,2,1,1	14	0	82·5
12	18 44	496	22 08	418	78	12 29	16·4	-4·3 21	20·7	21 04	1181	1092	03 11	89	3,3,1,1,2,1,3,3	17	1	82·7
13	22 48	505	01 49	381	124	23 20	18·9	-8·3 03	27·2	22 45	1181	1030	02 33	151	4,4,2,1,2,2,2,4	21	1	82·6
14	22 43	480	11 52	433	*47*	12 15	16·5	5·9 01	10·6	14 27	1161	1107	00 00	54	3,2,1,2,2,1,0,1	12	0	82·6
15	18 35	491	11 13	441	50	13 33	18·0	6·2 07	11·8	16 49	1160	1135	13 20	25	1,1,1,1,2,2,1,0	9	0	82·3
16 *q*	19 27	499	11 29	449	50	13 03	18·3	6·8 08	11·5	20 50	1171	1143	11 01	28	0,0,1,0,2,2,2,1	8	0	82·6
17 *q*	20 02	493	12 15	433	60	12 20	18·2	5·7 06	12·5	16 21	1158	1143	11 14	*15*	1,0,2,1,2,1,1,0	8	0	82·4
18 *q*	16 32	496	10 40	447	49	13 23	16·7	6·6 07	10·1	16 58	1172	1141	12 29	31	1,0,0,1,1,2,1,0	6	0	82·2
19 *q*	22 20	493	11 09	441	52	13 14	15·8	6·7 03	*9·1*	08 44	1155	1134	12 10	21	1,1,1,0,1,1,1,1	7	0	82·2
20	19 03	496	10 13	437	59	13 28	18·8	3·3 06	15·5	16 40	1176	1138	07 30	38	1,2,2,1,2,2,2,1	13	0	82·4
21	16 51	503	08 56	434	69	13 37	20·0	5·4 04	14·6	18 50	1171	1134	23 09	37	1,1,2,2,3,3,2,2	16	1	82·2
22	20 12	510	11 09	428	82	13 18	17·1	1·7 19	15·4	19 06	1157	1106	05 17	51	2,2,2,1,1,1,3,1	13	1	81·7
23 *q*	18 44	484	11 14	426	58	12 56	15·6	5·3 07	10·3	03 40	1157	1136	12 30	21	1,0,1,1,1,1,1,0	6	0	81·9
24	18 16	*665*	21 17	302	363	18 22	27·1	-18·4 23	45·5	18 10	1306	976	21 12	330	1,1,1,1,4,5,6,5	24	1	81·7
25	19 12	517	10 55	429	88	12 36	19·2	-3·4 20	22·6	18 17	1197	1024	00 00	173	4,2,2,1,2,2,4,2	19	1	81·7
26	20 24	508	23 04	323	185	13 18	17·5	-7·9 02	25·4	19 43	1188	992	23 12	196	3,2,2,3,2,2,4,5	23	1	81·7
27 *d*	19 37	650	-*502*	22 14	*1152*	19 40	*78·5*	-*65·1* 23	50 *143·6*	22 07	*1642*	*835*	23 17	*807*	3,3,2,2,1,4,8,8	31	2	81·8
28 *d*	18 17	533	-481	00 06	1014	21 06	42·1	-64·3 00	04 106·4	00 43	1228	877	00 04	351	8,3,4,3,3,3,5,6	35	2	82·0
29 *d*	20 44	536	146	00 50	390	00 46	18·0	-16·7 21	52 34·7	17 53	1221	969	00 57	252	6,4,2,2,4,3,4,4	29	1	82·3
30	19 42	489	322	00 30	167	13 48	15·7	-4·8 01	49 20·5	11 42	1185	1039	01 17	146	5,3,2,3,2,2,3,3	23	1	82·2
Mean	- -	501	327	- -	174	- -	21·9	-6·6 - -	28·4	- -	1205	1065	- -	140	-	-	0·73	81·4

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.

25 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MAY 1955

	Hour G.M.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	Mean
	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	454	457	454	448	443	451	454	448	445	440	436	437	444	452	459	457	462	471	473	482	474	477	463	468	456
2	468	463	463	461	461	459	457	453	448	444	445	443	449	452	467	455	464	475	479	486	482	475	475	476	463
3	470	463	464	467	467	466	463	458	448	448	447	450	454	460	466	495	485	496	489	484	483	485	485	482	470
4	478	477	474	466	466	463	459	454	447	442	445	453	468	477	478	464	462	475	480	483	468	463	445	458	464
5	468	464	463	463	474	469	464	462	453	444	435	433	441	470	483	483	472	483	495	492	493	496	497	495	471
6 *d*	473	473	471	475	472	459	458	463	453	426	407	418	429	449	450	461	462	473	499	488	480	473	374	425	455
7 *d*	392	415	419	452	393	379	443	438	406	391	424	434	445	458	479	474	473	482	494	512	491	473	446	450	444
8 *d*	457	419	433	440	409	422	441	443	431	421	422	441	460	455	467	522	486	519	519	498	478	428	395	449	452
9	459	461	456	453	456	451	457	448	441	428	430	439	451	460	476	466	496	508	504	482	479	479	476	470	464
10	451	464	462	442	463	467	460	453	452	444	437	429	437	451	459	468	473	490	485	498	483	477	462	466	461
11	467	468	467	463	463	467	466	457	451	464	436	433	438	444	456	463	474	486	484	486	486	482	474	477	465
12	470	468	469	466	457	459	456	452	441	438	440	440	452	457	464	473	478	496	500	497	488	479	466	463	465
13	457	472	467	470	474	470	463	452	452	442	441	448	453	459	467	475	502	507	495	489	498	493	492	482	472
14	479	478	476	473	468	464	463	467	458	448	430	426	449	454	471	459	486	504	489	495	482	473	473	469	468
15	468	463	461	454	463	463	458	457	460	451	443	442	443	445	454	464	476	486	485	486	486	487	493	494	466
16	487	492	472	373	447	475	483	474	457	447	434	434	438	450	462	464	474	482	487	482	477	474	490	488	464
17 *q*	475	470	470	466	464	467	461	456	448	438	433	438	448	456	466	475	487	490	485	483	481	481	484	488	467
18	484	478	476	470	472	473	466	459	452	444	441	444	448	453	457	473	472	484	488	486	489	489	487	485	470
19 *q*	482	481	479	478	477	473	464	458	449	444	442	448	458	464	466	473	478	486	488	488	488	482	482	480	471
20	478	476	472	470	474	476	480	470	456	447	443	434	452	459	470	474	486	495	503	496	486	483	482	481	473
21 *q*	479	476	477	480	481	481	478	470	459	447	441	444	452	474	485	483	485	492	496	488	486	485	484	480	475
22	479	479	478	479	479	479	476	470	458	444	437	440	449	463	474	479	484	487	489	493	488	484	485	483	473
23 *q*	482	482	482	481	480	478	471	463	453	446	445	450	462	473	474	482	480	489	496	496	494	491	487	486	*476*
24 *q*	483	482	479	478	478	477	477	470	458	453	447	452	458	468	482	482	483	482	489	493	490	488	488	485	476
25 *d*	483	479	478	481	482	482	482	474	463	451	444	443	449	456	474	489	515	530	556	523	494	385	72	-77	438
26 *d*	-159	230	172	429	422	400	410	417	406	387	428	450	458	459	458	452	475	483	485	484	470	467	467	459	*400*
27	463	456	453	461	466	464	461	452	442	433	433	435	466	463	496	574	523	505	524	525	473	429	384	365	464
28	435	405	412	424	437	424	404	438	426	412	419	453	446	469	493	498	486	477	488	493	475	472	468	477	451
29	466	469	464	455	447	444	450	449	437	437	441	441	463	476	479	488	463	482	481	478	481	480	474	468	463
30	463	466	464	464	462	457	451	444	442	450	453	456	456	462	473	470	474	488	500	499	468	475	477	474	466
31	476	472	467	470	472	466	457	452	448	441	440	443	452	461	468	464	474	482	490	487	485	481	477	483	467
Mean	447	458	455	460	460	459	459	455	447	439	*437*	441	451	460	470	477	480	490	*494*	492	483	474	455	453	462

MAGNETIC DECLINATION (WEST)

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

26 LERWICK (D) — 10° + — MAY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·5	6·5	6·6	6·8	6·6	5·9	4·9	5·2	5·4	7·6	9·5	11·5	13·0	12·5	11·9	11·0	9·6	9·6	10·5	10·7	10·5	7·6	7·7	8·9	8·7
2	8·3	7·9	7·4	6·6	6·4	6·1	4·9	4·2	5·4	7·6	11·0	10·7	16·5	14·8	13·8	11·5	11·5	11·7	11·1	11·4	10·7	8·2	7·2	5·9	9·2
3	8·0	10·2	9·8	5·3	3·5	4·7	4·7	5·7	6·4	8·8	11·0	13·1	14·3	14·5	13·9	15·1	15·4	16·0	14·5	14·3	12·2	11·0	10·6	9·5	10·5
4	8·9	8·5	7·9	7·8	6·9	6·9	7·2	7·4	8·5	9·1	11·3	14·6	16·9	15·7	15·1	13·9	11·8	12·1	11·7	10·5	8·5	8·3	6·1	8·8	10·2
5	6·0	6·9	6·6	7·4	4·6	5·2	5·2	7·2	6·2	7·6	10·0	13·1	14·3	17·5	18·2	15·5	13·4	12·5	13·3	13·2	13·1	12·4	11·1	11·6	10·5
6 *d*	6·3	1·3	2·4	4·2	3·2	1·1	3·7	4·7	3·7	7·0	9·4	16·8	16·7	19·1	20·2	17·7	16·2	13·1	14·1	10·7	11·5	7·9	7·9	-6·4	8·9
7 *d*	-0·6	1·6	-5·9	1·4	-0·7	6·0	6·2	3·5	4·8	8·5	12·1	15·9	17·4	17·2	17·0	14·3	14·3	14·1	13·1	1·8	7·6	9·6	10·0	-1·6	7·8
8 *d*	-5·8	6·6	8·0	9·3	5·3	8·7	4·2	5·2	4·7	6·1	9·7	13·6	13·8	13·8	17·7	19·1	15·5	16·7	14·1	6·0	8·5	2·3	1·9	10·5	9·0
9	9·2	6·6	7·6	7·8	6·6	6·3	6·4	5·1	5·2	7·3	10·9	13·4	14·3	14·4	14·8	13·3	13·9	12·9	9·3	12·1	11·4	9·9	8·3	5·3	9·7
10	10·9	6·9	9·5	8·5	8·2	7·1	5·9	4·9	5·5	6·6	9·0	11·5	13·6	14·3	13·7	12·7	11·8	11·5	11·1	11·8	10·1	7·3	6·6	8·3	9·5
11	7·4	8·1	7·9	8·0	6·8	4·7	4·4	4·4	5·5	6·7	9·0	10·9	12·2	12·6	13·0	12·7	11·7	11·1	10·0	10·2	10·0	8·6	8·2	6·7	8·8
12	8·3	7·7	7·7	6·0	5·8	7·0	5·2	3·5	4·2	5·9	9·1	12·5	14·3	15·6	16·8	16·6	15·3	15·0	13·6	11·7	7·8	6·4	5·5	4·4	9·4
13	7·2	4·6	2·9	5·1	5·1	4·2	4·7	6·6	7·0	8·3	10·7	14·5	18·4	19·9	18·2	16·7	16·5	16·4	14·8	14·8	12·4	9·4	5·0	9·5	10·5
14	11·4	9·3	6·0	5·6	7·6	8·3	10·1	11·4	8·0	8·3	12·0	14·6	15·5	16·2	16·0	13·9	14·0	13·7	11·4	10·3	9·0	10·3	8·5	9·5	*10·9*
15	9·8	9·1	9·7	10·7	8·0	6·9	7·1	6·1	4·8	5·5	7·6	10·3	12·7	13·0	13·0	12·8	12·4	11·8	10·1	10·3	11·1	11·0	10·7	11·8	9·8
16	13·7	3·4	0·9	10·2	7·7	5·5	3·5	3·7	5·1	7·3	10·0	12·8	14·5	15·0	14·8	14·5	13·3	11·1	9·5	10·0	10·1	9·6	9·6	10·0	9·4
17 *q*	9·5	9·7	9·2	8·0	7·1	5·7	4·4	3·3	4·1	4·7	7·3	10·0	12·2	13·6	14·3	13·8	13·2	12·3	11·8	10·8	10·7	10·8	10·7	10·2	9·5
18	9·7	8·0	8·9	8·5	8·2	6·2	4·9	3·7	3·5	5·8	8·1	10·8	13·3	14·7	13·9	13·1	12·1	12·5	11·5	11·1	11·1	11·1	10·7	10·5	9·7
19 *q*	10·1	9·9	8·6	7·7	5·8	4·7	3·9	4·4	6·3	8·5	11·1	14·4	15·8	15·8	13·9	12·1	11·4	11·5	11·9	11·8	10·8	11·5	11·9	11·2	10·2
20	10·2	9·9	9·2	9·6	8·4	7·2	5·8	4·3	5·8	9·5	11·1	13·0	14·3	14·7	14·4	13·4	12·9	11·5	11·6	11·8	11·8	11·4	11·1	10·5	10·6
21 *q*	9·6	9·2	9·0	8·0	6·7	5·6	5·3	5·8	6·2	8·1	11·4	14·2	15·5	16·3	15·1	13·8	12·5	11·5	11·5	11·0	10·8	10·9	10·6	10·5	10·4
22	9·9	9·6	9·0	8·0	6·7	3·6	2·4	2·5	4·1	6·0	8·4	11·0	13·0	14·1	14·4	14·4	13·4	12·1	11·9	11·5	11·9	11·1	10·6	9·9	9·6
23 *q*	10·0	10·1	8·6	7·2	6·0	4·9	4·1	3·3	4·1	6·7	10·3	13·2	14·5	15·5	14·6	14·1	13·8	13·2	12·5	12·0	11·5	10·8	10·3	9·7	10·0
24 *q*	9·2	8·4	7·6	7·2	6·1	5·3	4·6	4·8	5·1	6·4	9·4	13·4	15·6	12·5	17·6	16·4	14·9	13·1	12·8	12·1	11·1	11·1	10·9	9·3	10·2
25 *d*	9·6	9·1	8·9	7·4	6·0	5·3	4·2	3·2	2·9	3·8	7·4	11·6	13·8	14·9	16·9	21·4	22·7	23·3	22·8	13·9	6·3	-4·8	-11·8	-30·8	7·8
26 *d*	-7·3	-17·7	-5·8	0·3	-0·5	-0·7	1·0	1·0	1·0	6·7	9·6	13·0	14·5	13·4	14·4	13·9	12·5	12·7	12·9	10·8	10·3	10·3	10·1	11·6	6·2
27	8·3	6·8	7·0	7·2	4·8	3·4	2·4	3·7	3·8	5·0	6·7	9·9	14·2	18·0	18·2	16·3	16·8	17·5	15·7	8·7	10·7	5·8	8·9	5·6	9·4
28	3·0	1·4	9·5	4·8	3·3	5·2	8·6	10·4	9·7	8·8	9·6	8·4	12·8	15·9	12·6	13·2	15·0	12·5	12·1	10·6	12·2	12·5	11·0	8·0	9·6
29	9·8	7·7	6·0	4·1	4·8	4·3	5·3	4·1	3·4	5·1	8·6	12·1	14·7	13·7	13·9	13·2	10·0	10·0	10·8	11·5	12·4	10·8	8·9	9·8	9·0
30	9·6	9·0	8·3	7·3	6·2	5·3	4·3	4·7	6·2	7·6	9·6	12·5	14·1	15·4	14·5	14·1	12·0	10·1	12·5	12·5	12·0	10·9	9·1	9·2	9·9
31	9·8	6·2	8·3	4·2	3·6	1·9	1·7	2·9	5·3	8·0	10·8	12·6	14·9	16·6	17·3	16·6	14·6	13·0	11·6	12·0	11·9	11·2	12·3	8·4	9·8
Mean	7·7	6·5	6·7	6·8	5·6	5·2	4·9	*4·9*	5·2	7·1	9·7	12·6	14·6	15·2	*15·3*	14·6	13·7	13·1	12·5	11·0	10·6	9·2	8·4	7·0	9·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

27 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — MAY 1955

	Hour G.M.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	Mean
	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	1112	1119	1139	1148	1147	1145	1154	1157	1158	1160	1158	1155	1154	1153	1156	1158	1164	1166	1164	1162	1167	1155	1155	1157	1153
2	1154	1158	1159	1161	1158	1158	1156	1155	1154	1152	1147	1144	1138	1145	1152	1167	1162	1160	1158	1156	1158	1165	1159	1151	1155
3	1150	1151	1144	1151	1154	1151	1148	1150	1149	1144	1138	1137	1138	1143	1148	1149	1162	1168	1178	1174	1166	1158	1156	1155	1153
4	1158	1158	1160	1160	1158	1158	1159	1157	1153	1153	1153	1148	1138	1147	1157	1172	1171	1161	1155	1159	1170	1145	1137	1111	1154
5	1135	1152	1155	1148	1142	1146	1150	1150	1151	1152	1154	1152	1147	1147	1159	1180	1196	1178	1162	1157	1151	1148	1150	1147	1155
6 *d*	1138	1143	1154	1159	1158	1155	1148	1145	1146	1150	1152	1143	1176	1237	1249	1208	1173	1166	1157	1162	1161	1144	1094	1045	1157
7 *d*	1030	974	1016	1086	1102	1078	1100	1141	1148	1158	1154	1147	1141	1151	1168	1181	1168	1161	1162	1167	1157	1152	1116	1079	*1122*
8 *d*	1085	1096	1072	1069	1059	1068	1106	1133	1148	1155	1150	1150	1183	1196	1164	1172	1208	1188	1199	1162	1154	1127	1084	1048	1132
9	1093	1131	1145	1149	1145	1152	1152	1162	1159	1158	1153	1146	1141	1150	1154	1165	1163	1175	1178	1169	1161	1159	1154	1137	1152
10	1102	1117	1139	1135	1143	1155	1161	1161	1158	1153	1156	1158	1150	1151	1155	1157	1158	1158	1161	1159	1174	1160	1162	1157	1152
11	1156	1158	1157	1159	1155	1158	1162	1164	1161	1158	1158	1156	1154	1155	1158	1160	1161	1160	1164	1163	1162	1161	1161	1154	1159
12	1155	1155	1157	1158	1160	1155	1159	1161	1159	1152	1146	1147	1147	1149	1151	1160	1169	1171	1180	1187	1183	1147	1090	1111	1155
13	1103	1105	1135	1151	1156	1158	1158	1160	1158	1159	1149	1137	1133	1137	1138	1144	1148	1171	1180	1177	1165	1159	1154	1151	1149
14	1135	1132	1147	1155	1148	1147	1144	1143	1148	1152	1161	1161	1158	1165	1164	1170	1164	1176	1189	1179	1176	1165	1155	1150	1158
15	1148	1154	1151	1145	1147	1155	1157	1158	1154	1158	1157	1155	1156	1155	1152	1150	1152	1159	1166	1165	1162	1160	1157	1148	1155
16	1097	1065	1052	1007	1031	1082	1130	1143	1151	1151	1154	1154	1157	1159	1161	1158	1157	1158	1162	1164	1161	1161	1161	1160	1131
17 *q*	1155	1152	1150	1153	1155	1156	1158	1163	1163	1158	1154	1155	1155	1158	1158	1155	1155	1156	1158	1158	1157	1157	1156	1151	1156
18	1138	1142	1151	1154	1153	1152	1156	1155	1152	1151	1148	1148	1147	1145	1146	1149	1151	1148	1151	1155	1152	1154	1154	1155	1150
19 *q*	1158	1158	1158	1159	1158	1158	1158	1154	1151	1152	1150	1147	1145	1147	1152	1154	1152	1152	1154	1154	1157	1156	1154	1155	1154
20	1156	1156	1157	1154	1148	1145	1141	1145	1144	1141	1136	1134	1135	1145	1148	1155	1157	1158	1152	1152	1152	1152	1152	1154	1149
21 *q*	1158	1158	1158	1158	1158	1154	1152	1152	1150	1147	1143	1137	1137	1138	1149	1162	1166	1162	1157	1155	1152	1152	1152	1154	1153
22	1156	1157	1158	1159	1158	1154	1152	1150	1146	1141	1143	1139	1138	1141	1150	1158	1159	1160	1156	1153	1152	1152	1152	1152	1151
23 *q*	1155	1155	1156	1160	1160	1160	1158	1155	1149	1139	1132	1131	1135	1143	1150	1149	1151	1149	1152	1152	1151	1151	1151	1150	1150
24 *q*	1152	1152	1153	1155	1153	1150	1152	1154	1152	1144	1137	1134	1135	1145	1151	1158	1162	1167	1160	1159	1159	1157	1152	1148	1152
25 *d*	1150	1154	1154	1157	1158	1157	1158	1162	1164	1156	1148	1138	1137	1138	1134	1129	1131	1138	1140	1185	1168	1128	1158	982	1143
26 *d*	1020	909	961	961	1026	1068	1133	1154	1175	1189	1171	1158	1155	1161	1182	1193	1189	1180	1179	1178	1172	1166	1157	1147	1124
27	1127	1141	1153	1158	1163	1166	1166	1166	1164	1162	1158	1151	1151	1164	1161	1188	1210	1196	1187	1179	1151	1109	1047	1040	1152
28	1071	1072	1083	1090	1115	1124	1127	1119	1143	1150	1154	1180	1196	1180	1188	1187	1176	1178	1179	1172	1164	1159	1147	1127	1145
29	1123	1141	1155	1155	1152	1152	1154	1162	1168	1169	1168	1162	1158	1166	1171	1176	1182	1171	1169	1167	1162	1160	1162	1158	*1161*
30	1162	1161	1162	1162	1163	1163	1164	1167	1166	1157	1152	1148	1151	1150	1153	1161	1167	1170	1164	1164	1170	1168	1160	1158	*1161*
31	1149	1143	1140	1135	1144	1148	1154	1157	1155	1154	1152	1147	1144	1147	1152	1158	1155	1155	1159	1162	1160	1160	1152	1132	1151
Mean	1128	*1126*	1133	1136	1140	1143	1149	1153	1155	1154	1151	1148	1149	1155	1159	1164	*1166*	1165	1166	1165	1162	1153	1144	1130	1150

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

28 LERWICK — MAY 1955

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	21 24	497	432	11 07	65	12 39	13·8	4·1	08 10	9·7	21 10	1169	1103	00 00	66	3,2,1,1,1,1,1,2	12	0	82·2
2	19 44	494	438	10 37	56	12 15	16·8	3·4	23 03	13·4	15 30	1170	1136	12 20	34	0,1,1,1,2,2,1,2	10	0	82·8
3	15 50	504	445	09 24	59	17 47	16·5	2·9	04 44	13·6	18 48	1183	1136	10 40	47	2,1,1,1,1,3,1,1	11	0	82·4
4	18 32	487	439	23 04	*48*	12 46	17·6	2·4	22 22	15·2	20 35	1178	1100	23 23	78	1,1,1,2,2,2,2,3	14	1	82·5
5	14 54	512	430	12 09	82	14 29	19·1	3·6	04 23	15·5	16 12	1203	1126	00 00	77	2,2,1,1,3,3,1,1	14	1	82·6
6 *d*	14 00	547	222	22 44	325	13 58	27·4	−15·5	23 42	42·9	14 27	1272	979	22 58	293	3,2,2,3,4,3,2,6	25	1	82·9
7 *d*	19 37	528	323	00 25	205	12 53	18·5	−15·1	00 17	33·6	15 10	1186	955	01 51	231	5,4,4,3,2,2,3,4	27	1	82·8
8 *d*	18 42	574	365	22 08	209	18 48	28·1	−10·2	00 06	38·3	18 23	1236	1036	23 01	200	4,3,4,3,3,4,4,4	29	1	82·8
9	18 09	530	424	10 03	106	14 40	15·9	2·5	23 48	13·4	17 54	1187	1053	00 00	134	4,1,1,2,2,3,3,2	18	1	82·9
10	21 30	510	418	11 28	92	00 12	15·9	1·3	22 03	14·6	20 52	1182	1082	00 30	100	3,3,2,2,1,2,2,3	18	1	82·4
11	18 55	495	431	10 50	64	15 23	13·3	3·5	05 56	9·8	19 32	1165	1152	23 34	*13*	1,1,1,1,1,1,1,2	9	0	82·0
12	18 16	506	433	09 54	73	14 56	17·2	1·2	21 41	16·0	20 04	1192	1084	22 29	108	0,2,1,2,1,2,2,4	14	1	81·8
13	17 19	522	436	10 55	86	12 45	20·6	1·8	01 53	18·8	18 17	1191	1094	01 25	97	3,1,1,2,2,2,3,2	16	1	82·0
14	17 18	511	418	11 15	93	13 01	17·9	3·5	05 10	14·4	18 17	1196	1128	01 19	68	2,3,2,2,2,3,2,2	18	1	81·8
15	22 54	499	440	12 21	59	23 56	14·7	4·3	08 42	10·4	19 09	1169	1131	24 00	38	2,2,2,1,1,2,1,2	13	0	81·6
16	02 08	501	320	03 33	181	00 16	16·6	−3·3	02 20	19·9	19 11	1166	957	03 41	209	4,5,3,2,1,1,1,1	18	1	81·4
17 *q*	23 57	495	431	10 19	64	16 04	14·6	2·3	07 26	12·3	08 00	1165	1141	24 00	24	1,1,1,1,1,1,0,2	8	0	81·8
18	20 42	496	440	10 11	56	13 35	14·8	3·1	07 52	11·7	04 13	1158	1134	00 17	24	1,1,1,0,2,2,1,1	9	0	81·6
19 *q*	19 59	494	436	10 06	58	13 14	15·9	2·4	06 35	13·5	05 11	1161	1144	12 10	17	0,1,1,1,2,1,1,1	8	0	81·5
20	18 42	510	431	11 16	79	13 31	14·9	3·6	07 54	11·3	16 19	1160	1131	12 08	29	1,1,1,2,1,1,2,1	10	0	81·4
21 *q*	17 47	499	436	10 56	63	14 47	16·6	4·8	05 25	11·8	16 41	1168	1135	11 54	33	0,0,0,1,2,2,1,1	7	0	81·2
22	18 04	501	435	11 10	66	14 57	14·6	1·9	06 50	12·7	16 54	1163	1137	11 56	26	1,1,1,1,1,2,2,1	10	0	81·2
23 *q*	19 53	498	441	10 17	57	13 50	15·6	2·7	07 46	12·9	05 35	1161	1130	11 48	31	0,0,1,1,2,2,0,0	6	0	81·3
24 *q*	18 56	499	445	10 23	54	14 58	18·0	4·1	06 08	13·9	17 18	1169	1132	12 03	37	0,1,1,1,1,2,1,1	8	0	81·9
25 *d*	18 35	*649*	−339	23 27	*988*	18 36	26·0	−92·8	23 26	118·8	22 48	1250	831	23 26	419	0,1,1,1,3,3,5,8	22	2	82·2
26 *d*	17 41	500	*−378*	00 09	878	00 21	*37·0*	*−111·6*	00 09	*148·6*	00 12	*1293*	*728*	00 58	*565*	8,6,4,4,3,3,2,2	32	2	82·1
27	15 49	627	263	23 00	364	15 17	22·4	−10·0	19 34	32·4	16 28	1220	1009	23 12	211	2,1,1,1,4,5,4,5	23	1	82·3
28	19 34	508	356	01 54	152	13 38	16·5	−3·5	01 06	20·0	12 00	1206	1055	00 07	151	4,3,4,4,3,3,2,3	26	1	82·4
29	15 17	497	426	09 18	71	12 23	15·7	1·0	08 13	14·7	16 12	1188	1119	00 17	69	2,2,2,2,2,3,1,2	16	1	82·5
30	19 20	504	437	08 05	67	13 30	15·6	4·0	06 43	11·6	17 19	1174	1146	11 36	28	1,1,2,1,1,2,2,1	11	0	82·6
31	18 40	494	435	10 23	59	14 18	17·6	0·9	06 21	16·7	19 24	1162	1126	23 18	36	2,1,1,1,1,1,1,2	10	0	82·5
Mean	− −	516	358	− −	157	− −	18·3	−6·3	− −	24·6	− −	1189	1076	− −	113	−	−	0·58	82·1

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.

29 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JUNE 1955

	Hour G.M.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	Mean
	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	477	470	457	473	466	457	466	457	448	441	437	444	453	468	470	492	508	514	500	493	489	486	480	475	472
2	469	472	472	477	474	469	460	448	437	437	433	439	450	455	465	478	482	482	489	492	484	484	482	482	467
3	478	479	474	474	475	473	463	454	444	443	449	451	460	463	474	478	485	500	492	501	492	486	483	482	473
4	479	480	479	478	477	471	452	444	448	438	438	448	458	460	466	466	483	500	503	504	494	478	473	473	470
5 *q*	475	467	470	474	472	467	458	449	438	432	433	441	447	457	473	474	492	507	507	502	490	482	480	479	469
6	477	475	475	474	475	469	464	455	447	441	437	436	446	453	468	475	486	513	525	528	504	485	470	459	472
7	458	460	475	470	478	472	465	455	444	437	432	444	456	469	470	474	478	487	482	484	485	485	490	489	468
8 *d*	477	482	482	402	428	467	464	464	448	440	431	437	436	479	490	476	536	561	517	504	493	479	485	464	473
9	466	469	470	472	469	457	449	447	437	433	433	443	450	454	465	476	487	493	501	499	493	483	479	479	467
10 *q*	474	475	479	479	476	469	465	457	448	437	429	430	444	453	462	482	486	486	482	479	482	478	474	470	467
11	471	471	469	471	471	468	463	458	449	448	452	447	453	464	466	467	485	518	502	498	496	496	501	487	474
12	485	490	487	488	483	470	485	485	470	454	456	464	466	481	475	485	486	489	503	498	493	491	484	485	*481*
13	470	475	471	474	476	474	472	461	458	459	455	458	458	485	466	461	492	507	495	504	502	499	498	493	478
14	482	489	489	490	495	494	483	465	451	451	444	463	455	470	483	504	492	496	501	498	496	484	482	478	481
15 *d*	477	470	438	450	452	476	470	448	413	419	428	426	450	457	463	481	483	496	503	503	493	486	488	482	465
16 *d*	476	422	469	464	466	461	458	445	441	429	429	420	464	470	455	472	473	475	492	498	496	487	483	479	463
17	475	467	461	442	454	455	468	464	456	445	422	425	446	464	485	467	475	501	499	505	504	491	493	480	469
18	477	477	475	476	477	477	470	461	447	422	431	444	448	451	462	476	480	487	495	501	494	489	482	478	470
19	474	477	470	467	490	483	468	466	466	455	454	454	469	458	467	476	485	496	505	502	489	483	479	474	475
20	470	470	468	473	471	469	460	451	443	433	430	432	451	467	480	494	519	499	502	500	491	485	482	480	472
21 *q*	480	474	474	479	477	470	463	456	443	430	432	441	453	462	471	486	490	493	493	499	493	489	486	483	472
22	490	479	482	484	485	483	476	466	459	454	456	450	452	460	483	484	486	496	514	518	508	492	485	477	480
23 *d*	482	475	481	479	464	458	464	467	464	447	437	444	452	459	473	484	492	511	518	504	511	482	468	428	473
24 *d*	367	422	424	429	463	472	463	452	434	447	452	453	440	454	456	467	480	480	499	493	498	488	474	475	*458*
25	469	452	467	460	461	467	466	463	444	428	427	425	449	457	463	468	478	492	495	508	494	485	482	483	466
26 *q*	478	476	470	470	476	475	470	460	450	441	441	438	447	453	467	470	476	490	495	499	496	485	477	472	470
27	467	463	464	470	469	467	461	454	453	451	448	456	458	457	462	469	480	466	481	488	487	483	480	477	467
28	476	477	468	471	463	458	468	469	457	446	435	452	457	462	459	464	472	477	484	484	490	485	472	475	468
29	472	475	472	472	474	474	465	467	464	456	449	450	461	472	467	468	482	492	501	496	490	481	481	481	473
30 *q*	482	481	481	479	475	473	465	459	455	446	443	445	454	466	477	481	482	485	495	492	489	484	482	484	473
Mean	472	470	470	469	471	470	465	458	449	441	*439*	443	453	463	469	477	487	496	499	*499*	494	486	482	477	471

MAGNETIC DECLINATION (WEST)

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

30 LERWICK (D) — 10° + — JUNE 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	8·4	7·9	6·1	4·1	1·0	0·4	1·5	3·3	4·5	8·3	11·5	13·8	15·7	17·5	18·7	18·7	17·2	9·2	13·4	13·6	12·3	11·5	10·2	10·1	10·0
2	12·2	9·1	7·4	6·0	4·0	3·1	3·2	4·5	6·5	7·8	11·2	13·8	16·8	18·4	16·7	14·0	12·4	11·3	10·3	10·5	10·1	11·2	11·5	11·3	10·1
3	9·7	9·6	10·1	9·3	5·4	2·5	1·8	3·7	5·1	7·8	10·1	12·7	15·4	15·1	14·4	14·4	14·8	14·4	13·0	12·1	8·9	11·2	9·8	10·4	10·1
4	9·0	7·7	7·3	5·8	4·9	3·6	2·3	6·7	7·3	10·3	11·9	15·4	19·5	17·3	15·9	14·4	13·6	13·2	11·9	12·0	6·7	8·0	9·3	9·0	10·1
5 *q*	8·0	6·7	6·0	5·8	5·2	4·2	3·3	2·2	2·9	6·0	9·0	11·3	13·2	14·3	16·1	15·7	14·9	14·4	13·2	10·8	9·8	9·2	10·4	9·6	9·3
6	9·1	8·2	7·5	6·0	4·3	3·7	2·3	3·1	4·2	6·4	9·9	13·6	16·2	15·6	15·4	13·7	12·4	13·6	13·2	14·2	12·5	11·5	4·3	0·0	9·2
7	1·0	1·0	2·9	6·1	1·9	0·9	1·3	3·6	6·1	7·9	12·4	15·6	16·6	16·5	15·4	14·2	12·8	12·2	11·2	11·3	11·1	10·8	10·8	8·0	8·8
8 *d*	2·7	3·5	2·7	10·6	11·3	3·8	-1·9	-2·4	2·9	7·1	10·3	14·4	17·1	17·8	16·8	23·6	19·8	12·2	13·4	14·1	13·8	12·7	8·0	10·6	10·2
9	9·3	8·6	8·0	7·3	5·4	3·4	3·2	4·5	4·8	8·0	11·5	13·4	13·8	15·8	17·3	17·9	17·6	16·3	15·7	14·1	12·3	5·2	10·8	10·6	*10·6*
10 *q*	8·0	6·5	5·8	5·6	3·8	2·3	1·5	2·5	3·8	6·0	8·1	10·8	13·1	13·4	12·5	12·0	11·3	10·4	10·9	11·3	11·3	10·6	10·4	10·6	8·4
11	8·5	7·9	6·5	6·0	5·5	5·5	4·5	4·2	5·1	6·5	7·9	11·7	14·6	15·8	16·0	14·9	14·6	15·4	13·3	12·0	11·8	10·8	6·5	9·6	9·8
12	8·1	7·4	6·4	5·3	8·4	12·5	12·5	11·1	9·0	8·5	11·7	11·4	12·4	13·1	12·7	11·5	11·3	10·6	10·1	9·2	9·6	9·8	10·8	9·7	10·1
13	9·3	10·5	9·1	7·6	6·2	4·7	5·8	7·1	8·4	9·0	10·8	12·3	14·4	13·4	10·6	12·5	12·6	12·5	12·0	11·5	11·5	11·6	8·6	8·3	10·0
14	7·8	9·2	9·1	7·2	5·6	4·3	2·9	1·6	5·1	10·1	10·1	13·0	15·6	14·4	15·4	10·4	12·7	12·7	11·9	12·1	12·1	11·1	11·5	10·9	9·9
15 *d*	10·3	10·7	16·9	8·6	8·0	1·9	3·1	4·0	7·2	12·0	11·4	12·5	13·3	13·4	13·6	13·4	12·6	11·9	9·9	10·7	11·6	11·5	10·2	8·4	10·3
16 *d*	5·9	13·9	11·0	6·7	5·4	1·2	1·4	2·9	5·8	4·9	6·0	8·2	10·8	11·3	13·5	12·7	13·2	13·7	13·8	13·0	12·5	10·8	9·4	10·6	9·1
17	10·7	13·9	11·1	8·8	5·7	6·0	4·6	3·3	4·0	5·5	8·1	12·0	13·5	14·4	13·3	12·1	11·7	10·6	11·5	12·4	11·0	11·4	7·9	9·6	9·7
18	9·2	8·3	7·4	8·4	9·6	4·3	2·6	2·9	4·0	6·5	10·9	12·8	13·7	12·3	13·3	14·4	12·5	12·3	12·0	11·3	11·3	9·6	10·4	10·8	9·6
19	9·6	9·8	15·0	7·7	7·6	5·1	4·8	5·8	7·2	9·2	10·0	12·5	13·2	13·9	12·9	12·5	11·2	10·9	11·9	11·4	10·6	10·3	10·6	9·8	10·1
20	9·6	8·5	7·5	6·4	5·8	4·3	2·8	2·3	3·8	5·9	8·6	12·4	15·5	16·8	16·9	15·4	14·4	13·1	10·6	11·9	11·1	11·2	11·1	10·5	9·9
21 *q*	10·8	11·2	6·3	5·6	3·4	3·7	4·6	3·6	3·7	4·8	8·0	12·4	15·0	14·9	11·9	9·9	10·2	11·1	11·6	12·2	11·7	11·8	10·8	10·3	9·1
22	9·4	7·6	6·0	4·8	3·6	3·0	2·9	3·8	4·4	6·5	8·8	12·6	14·4	13·4	14·6	16·7	16·7	14·5	13·7	14·7	11·7	8·6	12·1	12·7	9·9
23 *d*	5·6	6·7	6·5	3·0	5·3	9·1	8·4	4·1	1·3	4·8	7·3	11·6	14·8	17·2	18·4	19·6	18·1	18·1	16·3	10·3	12·5	1·0	1·8	-6·2	9·0
24 *d*	-10·8	-11·0	-13·8	-9·2	-4·8	-2·0	-1·9	-2·1	2·4	5·1	5·9	11·5	15·4	17·5	18·2	18·5	19·2	17·0	13·8	12·3	13·0	8·3	9·6	8·6	*5·9*
25	7·2	9·6	10·1	6·6	6·7	5·0	2·2	3·6	11·6	12·5	9·7	10·9	11·6	15·1	16·6	16·3	14·9	13·6	11·7	7·7	10·4	10·6	10·3	10·5	10·2
26 *q*	9·6	8·5	8·7	8·0	4·8	2·5	2·6	3·1	4·3	6·7	8·2	11·1	11·8	11·5	13·0	11·9	11·2	11·2	11·7	11·8	12·0	11·3	10·5	9·2	9·0
27	8·6	8·0	5·9	6·0	6·6	4·8	3·2	4·8	7·2	8·0	11·2	13·2	13·4	13·0	13·5	12·9	13·0	12·1	12·5	11·8	10·9	10·3	9·6	9·3	9·6
28	8·7	7·7	7·2	6·6	5·2	5·3	7·0	5·9	6·5	8·6	11·8	13·8	15·9	16·3	15·5	13·8	12·5	11·5	11·5	10·9	10·9	10·9	9·9	13·5	10·3
29	9·1	7·1	4·8	5·2	4·7	3·4	2·6	2·8	3·1	3·4	5·7	8·0	9·1	10·9	11·7	10·2	11·3	11·7	12·8	11·7	8·3	9·2	9·6	9·6	7·7
30 *q*	8·4	2·5	4·6	4·1	4·5	4·2	5·0	5·4	7·4	9·4	10·7	12·4	13·9	14·7	15·8	15·1	12·5	11·6	11·7	11·6	11·1	10·9	10·6	9·9	9·5
Mean	7·8	7·6	7·0	6·0	5·2	3·9	*3·3*	3·7	5·3	7·5	9·6	12·4	14·3	14·8	*14·9*	14·4	13·8	12·8	12·3	11·8	11·1	10·1	9·6	9·2	9·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

31 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — JUNE 1955

	Hour G.M.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	Mean
	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	1138	1139	1139	1132	1139	1150	1151	1148	1153	1155	1153	1151	1152	1150	1152	1149	1162	1188	1182	1166	1161	1158	1158	1156	1153
2	1148	1143	1153	1156	1160	1159	1158	1156	1156	1154	1148	1143	1151	1161	1158	1152	1154	1153	1156	1162	1166	1161	1159	1159	1155
3	1161	1161	1159	1151	1152	1155	1156	1156	1157	1154	1154	1154	1153	1156	1155	1155	1158	1157	1170	1166	1172	1161	1159	1158	1158
4	1157	1158	1157	1160	1158	1157	1158	1145	1143	1142	1142	1149	1153	1157	1166	1168	1165	1164	1170	1169	1169	1156	1156	1155	1157
5 *q*	1152	1155	1156	1160	1162	1164	1162	1160	1153	1151	1145	1141	1143	1149	1157	1167	1168	1170	1175	1174	1166	1159	1155	1155	1158
6	1156	1158	1160	1160	1160	1159	1155	1154	1152	1150	1149	1149	1150	1151	1157	1161	1163	1161	1166	1168	1180	1172	1160	1129	1157
7	1116	1125	1114	1107	1133	1152	1159	1160	1158	1155	1148	1143	1142	1148	1154	1156	1156	1156	1158	1155	1152	1152	1149	1110	1144
8 *d*	1111	1127	1119	1064	1018	1069	1110	1129	1142	1142	1146	1145	1148	1161	1197	1237	1235	1262	1218	1192	1179	1170	1118	1135	1149
9	1151	1158	1162	1162	1164	1163	1163	1158	1157	1157	1153	1148	1155	1162	1167	1169	1170	1166	1158	1158	1160	1169	1158	1150	1160
10 *q*	1151	1154	1158	1160	1161	1160	1161	1160	1156	1149	1149	1148	1145	1145	1148	1152	1167	1176	1172	1168	1160	1160	1157	1149	1157
11	1149	1150	1152	1154	1156	1161	1161	1158	1153	1145	1142	1142	1141	1145	1153	1158	1160	1164	1178	1179	1175	1168	1143	1137	1155
12	1133	1135	1139	1151	1155	1151	1133	1139	1148	1154	1153	1158	1162	1164	1169	1168	1166	1166	1167	1170	1173	1170	1166	1151	1156
13	1153	1152	1159	1161	1162	1167	1164	1168	1163	1157	1159	1157	1155	1164	1183	1184	1176	1179	1178	1170	1169	1166	1159	1146	1165
14	1143	1149	1153	1155	1152	1156	1158	1163	1160	1151	1157	1158	1163	1172	1176	1191	1199	1200	1196	1191	1179	1172	1165	1161	*1167*
15 *d*	1156	1151	1096	1087	1117	1129	1143	1155	1171	1162	1165	1169	1169	1177	1178	1163	1169	1176	1187	1176	1169	1166	1155	1119	1154
16 *d*	1096	1076	1046	1123	1139	1152	1154	1156	1156	1159	1166	1179	1174	1192	1191	1176	1176	1166	1157	1163	1162	1164	1164	1159	1152
17	1151	1146	1139	1133	1141	1141	1141	1155	1162	1163	1164	1163	1164	1166	1170	1179	1176	1170	1167	1164	1169	1158	1127	1141	1156
18	1156	1159	1160	1155	1141	1143	1155	1158	1155	1161	1155	1149	1150	1153	1162	1162	1164	1165	1164	1166	1169	1169	1166	1162	1158
19	1162	1161	1145	1115	1133	1139	1147	1147	1151	1157	1154	1153	1150	1157	1157	1165	1164	1165	1164	1165	1169	1165	1161	1161	1154
20	1162	1161	1162	1161	1163	1160	1160	1157	1155	1154	1149	1143	1142	1145	1148	1146	1156	1178	1179	1166	1161	1158	1155	1154	1157
21 *q*	1152	1136	1134	1145	1153	1157	1155	1154	1156	1151	1146	1144	1143	1151	1152	1157	1163	1166	1161	1158	1158	1155	1153	1154	1152
22	1145	1151	1156	1161	1161	1162	1160	1157	1154	1148	1143	1138	1133	1136	1142	1156	1156	1161	1164	1170	1172	1170	1154	1157	1154
23 *d*	1118	1139	1143	1149	1154	1143	1142	1152	1154	1151	1144	1135	1135	1135	1137	1142	1146	1148	1162	1185	1167	1130	1136	1088	1143
24 *d*	1045	1018	1002	1031	1076	1116	1142	1142	1151	1151	1148	1145	1145	1146	1168	1170	1178	1181	1171	1162	1154	1165	1162	1136	*1129*
25	1136	1133	1122	1145	1151	1152	1153	1158	1145	1152	1159	1162	1160	1151	1158	1166	1176	1179	1176	1176	1164	1160	1156	1153	1156
26 *q*	1151	1152	1153	1148	1146	1152	1154	1158	1161	1159	1154	1154	1151	1151	1146	1152	1161	1164	1170	1172	1171	1169	1143	1139	1155
27	1143	1140	1145	1150	1155	1159	1158	1158	1153	1153	1152	1143	1141	1145	1145	1153	1163	1171	1164	1160	1161	1163	1161	1159	1154
28	1151	1135	1140	1149	1152	1145	1140	1149	1153	1154	1153	1145	1151	1155	1157	1153	1148	1152	1156	1157	1158	1158	1162	1128	1150
29	1130	1141	1151	1157	1155	1156	1159	1157	1155	1155	1154	1151	1142	1141	1149	1153	1151	1153	1156	1162	1168	1162	1158	1154	1153
30 *q*	1141	1137	1136	1142	1151	1152	1152	1155	1156	1151	1143	1142	1142	1141	1148	1153	1156	1157	1155	1156	1156	1158	1157	1156	1150
Mean	1140	1140	*1137*	1139	1144	1149	1152	1154	1155	1153	1152	1150	1150	1154	1160	1164	1167	*1170*	1170	1168	1166	1162	1154	1146	1154

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

32 LERWICK — JUNE 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	h. m.	γ	γ	h. m.	′ ′	′	h. m.	γ	h. m.	γ	γ				°A.
1	17 17	529	10 55	433	96	14 46	19·4	−0·7	05 44	20·1	17 42	1195	1126 03 23	69	2,2,1,1,3,3,2,1	15	1	82·6
2	19 08	501	08 56	428	73	13 27	19·0	2·3	05 56	16·7	20 10	1169	1139 11 32	30	2,1,1,1,2,2,2,1	12	0	82·5
3	17 52	522	08 44	440	82	13 18	15·9	1·3	05 58	14·6	18 32	1176	1149 03 38	*27*	1,2,1,1,1,3,2,1	12	0	82·3
4	19 01	511	10 07	431	80	12 47	20·1	1·0	06 08	19·1	20 14	1184	1139 07 55	45	1,1,2,2,2,2,2,1	13	0	83·7
5 *q*	17 32	517	09 05	428	89	15 01	17·2	1·2	07 48	16·0	19 28	1177	1139 11 32	38	1,1,1,2,2,2,2,1	12	0	84·0
6	19 36	538	11 01	433	105	17 51	16·6	−7·7	23 13	24·3	20 07	1188	1102 23 52	86	0,1,1,1,2,3,3,3	14	1	83·8
7	23 04	496	10 10	422	74	12 31	18·0	−1·2	00 24	19·2	15 12	1162	1096 23 38	66	3,3,2,2,2,2,1,3	18	1	83·8
8 *d*	17 10	*588*	*283* 04 10	*305*	15 28	*27·7*	−4·7	07 03	32·4	17 29	*1303*	*985* 04 27	*318*	2,5,3,2,3,4,3,4	26	1	83·5
9	18 48	505	09 38	429	76	14 31	18·8	0·5	21 39	18·3	21 29	1178	1145 00 00	33	1,2,1,2,2,2,2,3	15	0	83·5
10 *q*	16 57	493	10 55	422	71	13 15	14·3	0·0	06 00	14·3	17 38	1179	1142 12 55	37	1,1,1,1,1,2,1,1	9	0	83·0
11	17 43	528	12 25	437	91	14 10	16·9	2·3	22 10	14·6	18 47	1182	1133 23 00	49	1,1,1,2,3,3,2,3	16	1	83·0
12	18 41	507	10 17	450	57	05 40	14·6	4·4	03 47	*10·2*	13 53	1176	1129 00 30	47	2,3,2,2,3,1,1,2	16	1	82·7
13	17 33	524	12 16	448	76	12 37	14·9	3·9	05 48	11·0	15 03	1192	1142 23 53	50	2,1,1,1,3,3,2,1	14	1	83·0
14	15 47	534	10 24	425	109	12 15	17·9	−1·4	08 08	19·3	16 25	1204	1142 00 03	62	2,1,2,3,3,3,2,1	17	1	83·3
15 *d*	18 48	514	08 24	402	112	02 38	20·5	−1·2	05 50	21·7	18 36	1194	1069 03 02	125	4,3,3,3,3,3,2,3	24	1	83·3
16 *d*	19 12	504	01 41	381	123	01 52	27·2	−0·5	06 35	27·7	13 53	1202	1010 01 58	192	4,3,2,3,3,3,1,1	20	1	83·5
17	19 53	515	11 03	403	112	01 42	15·8	2·8	07 13	13·0	15 22	1185	1120 22 46	65	2,2,2,3,3,3,2,3	20	1	83·3
18	19 31	506	09 50	416	90	15 27	15·1	−1·5	07 13	16·6	21 04	1170	1135 04 50	35	1,2,2,2,1,2,1,1	12	0	83·4
19	18 38	508	13 30	446	62	02 48	22·6	3·7	05 32	18·9	20 10	1170	1099 03 10	71	3,3,2,1,3,2,2,0	16	1	83·3
20	16 42	537	11 22	426	111	14 35	17·6	1·9	07 43	15·7	17 55	1189	1141 11 50	48	1,1,1,1,2,3,2,1	12	0	83·2
21 *q*	19 13	504	09 40	427	77	13 07	15·7	2·7	08 08	13·0	17 22	1168	1129 02 07	39	2,1,1,1,2,2,1,1	11	0	83·7
22	18 48	538	11 47	436	102	16 23	19·0	2·4	06 07	16·6	21 13	1178	1118 23 48	60	1,0,0,3,3,3 3,3	16	1	83·8
23 *d*	20 42	542	24 00	367	175	15 56	20·4	−13·2	23 54	33·6	19 23	1198	1033 23 52	165	2,3,3,1,2,2,3,4	20	1	84·0
24 *d*	20 41	509	00 38	352	157	14 09	21·2	*−21·3*	00 22	*42·5*	16 58	1186	994 02 26	192	4,4,3,3,3,3,2,2	24	1	84·0
25	19 32	515	11 17	411	104	15 10	17·4	0·0	06 45	17·4	19 04	1186	1114 02 20	72	3,1,3,3,2,2,3,1	18	1	84·0
26 *q*	19 32	503	11 25	435	68	22 16	13·8	1·9	06 19	11·9	19 02	1175	1132 22 58	43	1,1,1,1,1,1,1,2	9	0	84·1
27	16 24	495	10 40	444	*51*	16 25	14·4	2·7	06 36	11·7	17 07	1175	1135 01 43	40	1,1,2,1,2,3,2,0	12	0	84·0
28	20 33	496	10 30	427	69	23 02	21·3	2·9	05 12	18·4	22 23	1163	1122 23 17	41	2,2,1,2,3,1,1,3	15	0	87·4
29	18 53	508	11 01	441	67	19 08	13·2	1·9	06 41	11·3	20 13	1172	1127 00 00	45	2,0,2,1,3,2,2,1	13	0	87·4
30 *q*	18 52	498	10 07	440	58	14 54	16·2	1·2	01 38	15·0	17 12	1159	1129 01 02	30	2,2,1,1,1,2,1,1	11	0	87·6
Mean	− −	516	− −	419	97	− −	18·1	−0·4	− −	18·5	− −	1185	1111 − −	74	−	−	0·53	83·8

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.

33 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JULY 1955

	Hour G.M.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	Mean
	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	484	480	479	476	474	469	463	469	460	452	447	450	452	459	470	478	487	497	497	499	497	492	489	486	475
2 *d*	485	483	477	491	489	481	472	461	451	446	450	454	460	475	467	481	477	539	547	473	446	433	472	463	474
3	466	460	443	422	436	452	456	458	450	443	436	438	443	443	458	463	475	480	488	495	495	487	475	472	*460*
4 *q*	473	471	467	466	469	470	460	463	458	456	449	448	442	451	461	468	476	485	487	491	491	480	474	472	468
5 *q*	470	468	464	472	470	467	466	468	459	450	443	443	451	456	470	477	487	482	487	486	493	487	480	478	470
6	476	472	476	477	474	466	462	461	458	451	447	452	459	461	472	498	486	505	523	513	520	526	515	497	*481*
7	495	491	439	476	475	474	475	474	464	446	433	437	440	451	474	484	497	495	495	493	485	486	481	477	472
8	479	478	472	464	469	471	467	459	456	441	445	450	450	449	468	481	526	491	513	527	514	489	483	478	476
9	474	477	477	481	482	479	470	463	455	449	443	445	443	467	470	467	481	487	487	487	486	482	482	485	472
10	473	473	475	476	471	471	471	466	456	443	444	448	428	453	496	501	496	495	510	500	491	490	475	469	474
11 *d*	467	452	452	469	475	473	463	443	431	407	420	439	486	466	474	482	504	474	471	479	481	477	487	478	465
12 *d*	440	388	463	470	471	470	469	459	432	435	445	445	444	469	492	515	529	524	510	496	483	452	414	425	464
13	433	456	477	473	469	465	465	462	456	452	449	450	459	449	469	489	463	483	485	492	490	485	477	472	467
14	474	466	472	475	479	472	463	466	468	452	449	448	460	468	469	485	503	492	499	494	486	481	478	475	474
15 *d*	474	477	477	475	474	470	466	464	452	446	443	452	457	479	493	492	475	498	506	505	501	497	481	477	476
16	467	432	451	461	472	479	472	457	446	440	441	442	442	464	473	485	494	509	500	509	499	490	480	479	470
17	477	475	477	476	459	460	478	471	457	450	441	437	446	453	465	475	487	494	491	493	494	493	486	478	471
18	477	480	481	481	470	452	453	459	453	447	445	452	448	467	477	482	488	490	498	503	492	489	484	479	473
19 *q*	475	471	475	475	475	472	466	457	447	437	438	453	461	474	475	478	482	484	488	488	486	485	484	485	471
20	482	482	483	483	482	476	468	462	453	449	448	446	453	462	488	483	487	503	507	511	500	486	478	474	477
21 *q*	477	474	479	484	482	477	472	465	451	439	436	445	459	468	476	488	495	503	507	502	494	498	482	478	476
22	478	479	480	478	472	474	469	461	452	449	453	445	447	449	456	468	481	497	493	493	488	492	496	485	472
23	465	481	485	489	492	489	482	474	465	453	443	447	447	453	465	472	488	498	510	510	500	484	478	468	477
24	475	491	500	500	485	480	472	462	453	449	443	442	433	443	455	463	485	484	491	491	491	490	489	487	473
25	485	476	476	482	482	480	472	467	458	443	431	435	445	460	469	482	482	482	486	489	493	491	491	480	472
26 *d*	472	474	473	472	472	474	477	481	478	475	453	443	451	454	467	474	485	500	500	503	500	485	486	485	476
27	477	482	464	469	475	474	471	463	458	452	446	445	451	462	469	474	483	491	497	501	506	492	488	486	474
28 *q*	482	484	483	482	479	476	476	472	466	456	447	442	453	464	468	478	487	482	487	491	491	489	485	485	475
29	479	475	480	481	481	477	475	476	469	461	453	446	452	461	472	488	500	504	510	498	497	483	488	490	479
30	481	481	482	484	481	477	470	464	456	456	448	441	441	448	461	473	483	487	495	493	500	492	489	477	473
31	472	486	479	476	474	469	460	466	463	453	443	447	454	446	460	466	486	495	493	495	491	485	479	476	471
Mean	474	471	473	475	475	472	468	464	456	448	*444*	445	450	459	471	480	489	495	*499*	497	493	486	481	477	473

MAGNETIC DECLINATION (WEST)

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

34 LERWICK (D) — 10° + — JULY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	10·6	10·2	7·5	5·8	3·4	3·6	4·8	2·7	2·2	2·9	5·7	8·6	11·8	14·4	14·9	14·0	12·2	11·8	11·5	11·3	10·9	10·9	10·8	10·4	8·9
2 *d*	9·6	9·6	8·4	2·4	−0·7	1·0	0·7	2·1	4·1	5·6	7·3	10·8	14·8	18·4	18·9	18·6	15·8	16·6	17·1	9·7	−1·2	0·8	6·4	8·4	8·5
3	7·4	10·2	5·1	4·3	11·3	5·3	4·2	2·9	3·2	3·6	6·9	10·1	12·3	14·1	14·6	13·0	11·7	11·1	10·8	9·6	8·8	7·6	7·3	7·5	8·5
4 *q*	7·7	7·3	6·3	7·0	6·0	4·1	2·7	2·4	2·7	4·6	7·5	10·4	13·1	15·3	15·6	14·3	12·7	11·8	10·6	10·1	9·1	8·3	7·9	7·7	8·5
5 *q*	7·2	6·9	8·0	7·2	4·3	2·6	1·6	1·6	1·6	2·7	5·5	9·0	12·3	14·3	15·2	15·3	14·2	11·2	10·3	9·8	9·1	8·5	8·0	7·5	8·1
6	7·3	6·0	5·1	5·4	5·0	3·2	4·0	4·3	6·5	8·4	10·5	13·2	15·6	16·5	17·1	17·8	16·8	16·8	16·3	16·0	15·6	13·8	9·7	8·4	*10·8*
7	9·2	8·3	7·4	3·7	1·2	3·5	3·4	4·7	4·7	5·6	7·4	11·1	13·2	14·7	15·4	14·6	12·4	12·4	11·5	9·5	9·1	9·2	8·0	9·8	8·7
8	8·4	7·9	7·8	7·2	6·2	4·0	2·2	1·5	1·3	4·3	8·8	11·1	15·0	15·4	14·6	13·9	14·4	11·1	12·2	11·7	7·0	11·2	10·9	9·6	9·1
9	8·6	7·7	7·1	5·8	4·0	2·2	2·1	2·4	3·5	6·0	10·2	13·8	15·6	14·4	13·4	11·8	10·8	10·0	9·6	9·2	9·8	9·4	10·2	6·9	8·5
10	7·1	7·2	7·9	8·4	7·2	6·0	4·8	3·1	4·0	6·3	9·7	12·5	12·5	14·4	15·8	15·7	15·2	13·2	11·8	11·9	12·7	12·2	8·4	8·4	9·9
11 *d*	7·7	8·9	10·8	4·3	0·5	0·3	0·8	3·4	8·8	8·0	11·1	11·2	13·6	14·4	12·0	11·5	14·4	11·7	10·6	11·5	9·7	9·1	10·8	12·5	9·1
12 *d*	16·1	9·8	3·4	3·0	2·3	1·5	2·2	6·0	10·1	12·5	10·5	7·9	10·6	9·9	9·8	11·5	10·6	10·9	13·0	13·9	12·8	15·4	11·1	3·2	9·1
13	7·4	11·0	6·4	6·0	5·8	6·2	3·5	2·9	3·3	5·1	8·2	11·0	13·7	14·4	16·3	16·3	12·5	10·8	10·8	10·8	9·7	10·1	10·6	9·4	9·3
14	8·3	8·1	6·7	4·9	4·0	4·2	6·2	5·7	5·0	7·5	8·6	10·8	12·8	14·6	14·6	12·3	12·3	10·0	10·1	11·5	11·2	10·1	9·3	8·4	9·1
15 *d*	7·9	7·4	6·0	4·9	3·4	3·1	3·2	2·5	1·9	3·2	7·0	10·8	13·6	14·4	14·4	15·7	15·4	15·4	14·2	13·6	9·6	5·2	10·2	9·6	8·9
16	11·3	13·5	8·3	6·0	6·4	3·1	2·6	2·9	3·2	4·5	6·2	9·3	13·0	13·4	13·1	12·9	13·3	13·0	11·6	11·8	9·2	4·1	8·4	8·6	8·7
17	7·7	6·9	7·0	5·0	6·0	8·9	3·2	1·9	3·4	3·6	8·0	10·5	12·7	13·2	13·1	12·7	11·3	11·5	11·3	10·9	10·8	7·4	7·7	7·0	8·4
18	7·3	6·6	6·0	6·2	4·5	8·6	8·0	7·7	5·5	5·1	6·7	12·0	15·6	14·4	11·7	11·1	10·2	8·4	8·8	9·6	10·8	10·8	10·6	10·1	9·0
19 *q*	9·8	8·2	6·4	4·8	4·0	2·6	2·9	3·2	4·6	7·4	11·0	13·4	15·8	17·3	15·6	14·4	12·2	10·8	10·8	10·3	9·8	9·6	9·4	8·9	9·3
20	8·6	8·1	8·0	6·2	4·8	4·2	5·3	5·1	5·1	7·7	11·2	13·2	13·0	12·5	12·5	12·3	10·6	9·6	10·1	10·8	8·3	8·4	9·1	8·4	8·9
21 *q*	8·2	8·3	6·4	6·2	4·9	3·6	2·5	2·1	3·2	6·3	10·1	13·0	15·9	16·5	15·6	13·8	11·1	10·6	10·8	11·0	10·1	7·3	3·2	6·4	8·6
22	7·7	6·9	6·9	6·7	4·7	4·3	3·1	2·7	4·2	6·7	9·4	12·0	14·4	15·1	15·7	15·0	12·8	10·6	9·1	8·9	9·1	9·7	8·4	2·4	8·6
23	4·8	5·8	5·8	4·5	3·2	2·8	2·6	3·5	4·0	5·3	8·0	11·0	15·4	16·4	16·3	14·6	12·8	11·1	11·1	10·8	10·8	8·5	6·0	4·3	8·3
24	2·1	5·1	4·7	5·1	1·2	2·1	1·0	1·3	2·4	3·8	6·7	10·0	13·1	14·7	14·6	13·2	12·5	11·0	9·9	9·6	9·4	9·8	9·4	7·2	*7·5*
25	5·0	5·3	6·0	4·1	3·8	2·4	4·8	4·0	4·2	5·6	8·6	10·8	13·2	15·8	16·8	15·4	12·9	11·3	10·8	10·1	10·0	9·6	7·7	6·7	8·5
26 *d*	3·6	6·7	4·4	4·6	2·6	2·7	0·7	1·0	1·8	4·8	8·9	12·0	15·6	16·6	17·0	14·9	14·4	13·2	11·5	12·7	2·5	7·2	5·8	8·4	8·1
27	8·8	6·7	6·2	6·2	3·7	1·7	1·9	2·1	2·2	4·0	8·4	10·6	12·9	14·9	15·1	13·9	13·4	13·2	13·2	11·8	10·1	8·4	8·6	7·6	8·6
28 *q*	6·9	6·7	6·0	6·7	5·6	4·3	3·9	2·4	1·9	2·4	4·3	6·5	10·0	13·1	14·4	14·1	12·8	10·1	9·3	9·8	9·9	8·9	8·3	6·2	7·7
29	7·2	9·4	9·8	5·2	4·3	3·4	4·2	3·8	3·4	4·4	8·1	12·2	15·9	17·7	17·3	15·6	13·9	13·4	13·2	12·0	6·9	9·1	9·6	7·9	9·5
30	8·4	7·4	6·4	5·9	4·1	1·9	1·8	4·6	4·9	3·2	6·0	9·4	14·1	16·6	15·9	14·0	12·7	11·0	9·9	9·1	10·4	9·8	6·8	6·3	8·4
31	7·9	9·8	6·3	3·2	1·5	0·2	2·9	4·0	4·5	6·9	9·3	13·0	15·8	15·6	15·8	14·3	13·2	12·0	10·7	10·3	9·6	9·5	9·1	8·7	8·9
Mean	7·9	8·0	6·7	5·4	4·2	3·5	*3·2*	3·2	3·9	5·4	8·3	11·0	13·8	*14·9*	14·9	14·1	13·0	11·8	11·4	11·0	9·4	9·0	8·6	7·8	8·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

35 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — JULY 1955

	Hour G.M.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	Mean
	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	1153	1145	1146	1153	1155	1154	1148	1147	1149	1146	1144	1142	1146	1145	1144	1147	1150	1150	1151	1154	1159	1159	1158	1158	1150
2 *d*	1158	1152	1143	1128	1137	1144	1147	1149	1145	1137	1139	1141	1143	1138	1141	1143	1151	1150	1174	1156	1091	1092	1158	1161	*1142*
3	1158	1130	1120	1121	1091	1107	1123	1133	1144	1152	1154	1155	1154	1161	1161	1160	1159	1166	1162	1164	1165	1164	1158	1156	1147
4 *q*	1154	1155	1155	1156	1152	1150	1152	1151	1156	1158	1154	1149	1153	1152	1154	1157	1159	1161	1161	1160	1160	1163	1163	1160	1156
5 *q*	1159	1159	1159	1159	1159	1160	1156	1153	1153	1154	1155	1149	1151	1156	1157	1162	1165	1168	1166	1164	1160	1162	1159	1156	1158
6	1152	1154	1157	1160	1161	1159	1154	1154	1151	1148	1147	1147	1151	1152	1152	1151	1164	1166	1170	1170	1164	1157	1160	1163	1157
7	1154	1132	1098	1059	1089	1112	1128	1138	1149	1156	1157	1156	1153	1150	1151	1163	1177	1180	1170	1169	1163	1157	1154	1146	1144
8	1148	1157	1158	1158	1150	1152	1152	1153	1150	1154	1156	1150	1153	1163	1158	1164	1170	1189	1183	1187	1184	1171	1164	1161	1162
9	1161	1160	1162	1164	1167	1168	1165	1161	1158	1156	1151	1151	1152	1152	1162	1168	1166	1166	1165	1162	1162	1160	1155	1145	1160
10	1145	1152	1156	1158	1158	1159	1152	1154	1155	1158	1158	1154	1166	1154	1163	1184	1206	1210	1201	1189	1178	1168	1158	1145	*1166*
11 *d*	1133	1136	1107	1115	1139	1153	1154	1157	1154	1166	1160	1156	1154	1170	1180	1183	1171	1174	1172	1164	1166	1167	1162	1156	1156
12 *d*	1076	994	1094	1142	1158	1160	1156	1158	1164	1161	1162	1184	1197	1206	1228	1243	1238	1236	1224	1208	1188	1132	1106	1100	1163
13	1115	1095	1130	1151	1160	1162	1165	1168	1166	1164	1163	1158	1162	1170	1162	1165	1179	1174	1176	1172	1175	1174	1167	1161	1160
14	1158	1156	1161	1161	1156	1155	1151	1146	1152	1157	1158	1152	1150	1158	1162	1158	1168	1184	1178	1171	1168	1166	1165	1164	1161
15 *d*	1163	1160	1161	1160	1160	1160	1158	1158	1158	1156	1151	1150	1151	1149	1166	1176	1180	1164	1158	1162	1170	1163	1158	1160	1161
16	1156	1086	1091	1120	1124	1133	1145	1150	1154	1152	1154	1154	1155	1155	1159	1164	1166	1167	1170	1165	1169	1169	1162	1158	1149
17	1158	1161	1158	1157	1155	1134	1129	1144	1151	1159	1164	1157	1154	1155	1158	1163	1163	1163	1158	1156	1156	1157	1152	1156	1155
18	1160	1161	1163	1162	1158	1150	1130	1126	1132	1138	1144	1150	1158	1162	1169	1178	1183	1181	1174	1170	1164	1162	1160	1159	1158
19 *q*	1159	1161	1162	1160	1159	1158	1158	1157	1155	1152	1144	1139	1143	1146	1151	1156	1162	1160	1155	1155	1154	1153	1153	1152	1154
20	1154	1156	1156	1160	1159	1158	1158	1154	1150	1145	1139	1135	1138	1145	1149	1161	1162	1160	1158	1158	1164	1161	1157	1154	1154
21 *q*	1154	1149	1147	1151	1156	1158	1158	1157	1159	1155	1150	1143	1138	1139	1145	1155	1164	1169	1174	1175	1172	1158	1140	1146	1155
22	1151	1154	1156	1160	1162	1162	1162	1162	1159	1152	1146	1146	1144	1147	1151	1151	1156	1161	1164	1163	1160	1156	1148	1140	1155
23	1138	1133	1144	1152	1157	1158	1160	1160	1157	1151	1150	1148	1146	1141	1142	1150	1157	1160	1156	1158	1162	1167	1159	1120	1151
24	1134	1138	1144	1150	1156	1160	1160	1158	1156	1150	1146	1143	1140	1141	1144	1144	1150	1157	1156	1156	1156	1153	1151	1148	1150
25	1145	1144	1139	1138	1149	1151	1151	1155	1152	1155	1155	1151	1146	1146	1146	1147	1158	1162	1162	1159	1156	1156	1151	1144	1151
26 *d*	1139	1138	1140	1147	1147	1148	1146	1141	1143	1142	1144	1142	1139	1143	1143	1146	1148	1149	1158	1162	1168	1142	1136	1144	1146
27	1135	1121	1137	1138	1147	1151	1152	1151	1147	1148	1148	1145	1144	1144	1146	1151	1152	1152	1154	1155	1147	1150	1153	1155	1147
28 *q*	1154	1152	1152	1152	1153	1153	1151	1152	1156	1157	1156	1150	1145	1146	1146	1146	1155	1164	1163	1160	1160	1158	1153	1146	1153
29	1152	1153	1144	1144	1151	1154	1154	1156	1154	1152	1152	1150	1144	1144	1146	1145	1150	1153	1155	1162	1169	1168	1160	1138	1152
30	1150	1155	1156	1156	1156	1155	1156	1155	1147	1146	1145	1142	1146	1142	1138	1143	1150	1152	1151	1152	1150	1152	1151	1156	1150
31	1152	1133	1140	1149	1154	1153	1152	1149	1152	1149	1150	1154	1155	1158	1160	1164	1163	1168	1166	1161	1157	1157	1157	1156	1155
Mean	1148	*1140*	1143	1146	1150	1151	1151	1152	1153	1152	1151	1150	1151	1153	1156	1161	1166	*1168*	1167	1165	1162	1157	1154	1150	1154

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

36 LERWICK — JULY 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	18 58	501	440	10 57	61	14 04	15·3	1·6	07 46	13·7	21 48	1159	1140	11 41	19	1,1,2,1,1,1,1,1	9	0	87·6
2 *d*	18 34	*568*	368	19 39	200	13 51	20·4	*-14·4*	20 53	*34·8*	19 14	1198	1056	21 04	142	2,2,1,2,3,4,5,4	23	1	87·6
3	20 23	501	413	03 39	88	04 07	15·5	0·5	03 22	15·0	17 39	1168	1080	04 43	88	3,3,2,2,1,2,2,1	16	1	87·6
4 *q*	20 00	497	436	12 37	61	13 32	16·0	1·6	06 53	14·4	21 51	1165	1148	11 42	*17*	1,1,2,1,1,0,1,0	7	0	87·6
5 *q*	20 57	497	440	11 31	*57*	15 04	15·8	0·4	08 15	15·4	16 57	1170	1148	11 29	22	1,1,1,1,1,2,1,1	9	0	87·6
6	21 18	530	446	10 31	84	15 25	18·5	2·3	05 15	16·2	19 05	1174	1146	15 18	28	1,1,1,1,1,2,2,3	12	0	87·3
7	15 59	511	423	02 50	88	14 52	16·5	-0·7	03 45	17·2	17 21	1183	1047	03 30	136	4,3,2,2,2,2,1,2	18	1	87·8
8	16 44	559	433	09 46	126	13 33	16·5	-0·6	08 12	17·1	17 16	1200	1143	00 00	57	1,1,1,2,2,4,3,2	16	1	87·7
9	20 18	492	434	10 32	58	12 37	16·3	1·2	05 43	15·1	15 25	1170	1141	23 56	29	1,1,1,2,2,1,1,2	11	0	88·0
10	15 58	524	418	12 13	106	15 59	18·9	2·1	07 05	16·8	16 44	1216	1134	23 59	82	1,1,2,2,3,3,2,2	16	1	88·1
11 *d*	16 48	527	387	09 47	140	16 35	17·0	-0·7	05 25	17·7	15 47	1190	1097	02 34	93	3,3,3,4,3,3,1,2	22	1	88·2
12 *d*	16 37	541	*328*	01 00	*213*	00 35	*32·2*	0·0	04 50	32·2	15 48	*1251*	*923*	00 59	*328*	5,2,2,3,3,2,3,4	24	1	91·4
13	15 38	513	420	00 00	93	14 45	16·9	2·2	07 32	14·7	16 10	1183	1079	01 23	104	3,2,1,1,3,3,1,1	15	1	92·7
14	16 48	511	445	10 52	66	14 07	15·7	2·1	04 54	13·6	17 40	1189	1144	12 17	45	1,2,2,1,2,2,1,0	11	0	91·6
15 *d*	15 26	549	438	12 16	111	15 23	18·4	-4·1	21 01	22·5	16 01	1194	1145	13 32	49	1,1,1,2,3,4,3,3	18	1	92·4
16	19 30	520	421	01 27	99	01 01	17·7	-2·2	21 19	19·9	21 15	1174	1068	01 40	106	4,2,1,1,2,2,2,3	17	0	91·0
17	20 17	499	431	11 17	68	13 14	13·5	0·6	07 40	12·9	10 08	1166	1120	06 02	46	1,3,2,1,1,1,1,2	12	0	91·0
18	19 22	508	441	10 27	67	12 50	16·0	2·0	04 54	14·0	16 39	1184	1123	07 33	61	1,3,2,2,2,1,1,0	12	0	91·0
19 *q*	17 56	490	433	09 46	*57*	13 33	17·6	2·1	05 56	15·5	16 46	1164	1138	11 51	26	1,1,0,2,2,1,0,1	8	0	91·6
20	19 17	516	441	11 44	75	11 25	13·9	3·9	05 12	*10·0*	20 40	1167	1133	11 20	34	1,1,1,1,2,1,2,1	10	0	90·6
21 *q*	21 49	519	434	10 22	85	12 55	16·9	1·6	07 38	15·3	19 57	1176	1135	21 57	41	1,1,0,1,1,1,1,3	9	0	87·5
22	17 19	500	442	11 30	58	14 23	15·9	0·6	23 55	15·3	18 09	1166	1137	23 54	29	1,1,0,1,1,2,0,2	8	0	87·4
23	19 10	523	437	11 11	86	13 17	16·7	-0·2	23 59	16·9	21 32	1170	1109	23 42	61	2,1,1,1,1,1,2,3	12	0	87·5
24	03 32	505	420	11 48	85	13 40	15·5	-2·1	04 07	17·6	06 33	1162	1122	00 00	40	3,2,2,2,1,2,1,1	14	1	87·5
25	20 43	498	428	10 24	70	14 20	17·5	1·5	05 45	16·0	17 41	1164	1133	03 10	31	1,1,1,1,1,2,1,1	9	0	87·2
26 *d*	19 35	510	416	13 03	94	21 21	19·6	-2·4	20 50	22·0	21 01	1172	1117	21 46	55	2,1,2,3,3,3,3,3	20	1	87·4
27	20 07	511	441	09 40	70	14 27	15·6	0·4	05 45	15·2	19 40	1157	1114	01 12	43	2,1,1,1,1,1,2,1	10	0	87·7
28 *q*	23 02	497	440	11 35	*57*	15 00	15·1	1·0	08 00	14·1	17 30	1166	1141	15 14	25	1,1,1,1,2,2,1,1	10	0	87·5
29	18 32	520	443	11 40	77	13 22	17·9	0·8	20 42	17·1	20 43	1181	1134	23 23	47	2,1,1,1,0,1,3,2	11	0	87·7
30	18 12	506	430	12 49	76	13 48	16·8	1·0	06 03	15·8	23 12	1159	1135	14 27	24	1,1,1,2,1,2,1,3	12	0	87·4
31	17 34	501	439	10 55	62	12 28	16·4	-0·3	05 39	16·7	17 55	1169	1123	01 38	46	2,1,2,1,2,2,1,0	11	0	87·6
Mean	- -	514	426	- -	88	- -	17·2	0·1	- -	17·1	- -	1178	1115	- -	63	-	-	0·35	88·7

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.

37 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — AUGUST 1955

	Hour G.M.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	Mean
	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*	473	472	472	474	477	477	472	465	454	447	443	443	452	467	465	471	484	509	504	493	489	487	485	486	473
2	484	479	467	477	481	477	472	464	456	452	449	452	458	465	473	476	484	492	496	501	501	494	473	465	475
3	475	445	442	484	485	486	472	458	449	445	440	447	453	475	479	469	477	498	491	495	492	489	492	483	472
4 *d*	460	464	484	488	472	471	491	477	454	438	397	391	394	485	501	532	562	577	521	488	476	472	428	456	474
5 *d*	464	466	470	468	465	470	463	449	421	428	441	435	417	440	468	472	482	488	494	508	500	477	472	446	463
6 *d*	451	471	478	484	477	472	425	390	402	418	416	445	454	494	538	568	557	566	523	505	498	455	448	423	473
7 *d*	424	417	443	452	458	447	433	432	421	417	425	425	443	457	478	487	491	503	516	508	518	487	481	477	*460*
8	469	452	458	467	468	466	461	461	453	436	426	436	440	447	454	479	491	502	498	488	483	479	476	474	465
9	465	465	471	469	471	472	471	463	455	446	436	436	447	459	463	473	471	479	488	493	493	483	480	476	468
10	474	473	472	473	478	482	479	470	459	447	441	446	461	462	470	479	481	492	493	495	491	487	485	478	474
11 *q*	478	478	475	480	476	473	468	460	456	451	452	452	460	469	475	482	484	491	491	495	491	492	485	480	475
12	482	485	482	473	474	478	476	469	461	450	450	453	456	461	462	468	478	487	495	491	493	487	485	482	474
13	479	479	471	473	476	468	459	455	447	441	448	458	465	474	482	479	487	490	491	492	498	497	497	484	475
14	471	469	480	486	485	482	475	471	466	459	454	446	458	464	469	481	506	540	510	511	500	480	483	498	*481*
15	489	479	477	493	496	484	464	459	453	451	446	453	472	474	462	467	474	470	472	478	479	477	473	471	471
16	469	469	471	469	464	465	463	475	469	461	455	450	450	447	451	461	470	478	484	488	484	480	480	478	468
17	478	476	475	474	473	473	469	460	448	439	439	436	451	452	464	473	503	509	491	491	490	487	483	484	472
18	477	476	480	479	480	471	459	471	467	458	449	444	456	472	481	467	476	489	501	495	480	486	482	472	474
19	468	469	469	476	482	466	471	472	464	458	453	452	450	460	474	485	485	489	488	488	489	484	475	477	473
20	479	475	475	476	474	471	467	461	451	440	433	436	446	460	479	479	477	492	496	487	484	484	482	483	470
21	488	481	474	477	469	474	470	464	460	455	449	451	458	471	481	481	484	490	494	491	487	484	481	483	475
22 *q*	482	481	478	478	476	472	466	459	454	454	452	452	458	472	479	482	480	478	480	487	489	487	485	481	473
23 *q*	482	489	489	489	487	485	476	467	458	453	450	446	450	457	468	476	482	487	492	494	491	485	484	484	476
24	482	480	477	476	478	480	483	479	469	458	456	446	446	463	468	472	479	491	496	495	498	491	487	484	476
25 *q*	484	484	483	482	481	480	475	469	461	458	456	460	468	462	473	483	477	491	496	499	489	488	488	489	478
26	488	485	481	479	474	469	466	456	446	440	451	455	466	474	476	478	469	473	481	484	485	484	481	482	472
27	483	479	478	476	474	473	469	465	461	454	456	458	463	473	479	483	478	486	482	489	499	497	490	485	476
28 *d*	487	484	484	484	470	458	424	406	402	445	463	452	459	461	463	465	472	475	476	484	484	482	482	481	464
29	483	480	474	469	461	450	454	463	459	448	446	447	460	468	488	474	472	470	472	487	482	469	465	466	467
30	470	469	458	462	468	467	462	457	448	443	436	436	452	465	474	475	472	468	473	479	481	484	481	484	465
31	476	476	472	472	473	474	471	462	453	449	452	450	457	469	475	469	470	472	484	484	488	488	489	473	471
Mean	475	472	473	476	475	472	465	459	451	446	*444*	445	452	465	475	480	486	*494*	493	492	490	484	479	476	472

MAGNETIC DECLINATION (WEST)

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

38 LERWICK (D) — 10° + — AUGUST 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	9·1	7·3	6·9	5·5	4·1	3·3	3·6	3·6	4·3	6·0	8·3	11·5	13·7	13·8	12·7	12·4	11·9	11·0	10·8	11·5	10·8	8·3	8·6	9·0	8·7
2	9·3	9·6	13·2	6·3	3·4	2·1	2·6	3·1	4·2	5·8	8·1	10·2	11·7	13·4	13·9	13·2	12·5	11·0	10·6	10·8	11·7	4·8	3·3	4·8	8·3
3	−1·5	3·2	11·7	2·3	1·9	1·7	2·9	5·7	6·4	4·1	6·8	12·1	16·9	18·7	18·3	16·0	13·1	12·7	10·8	10·8	11·1	9·8	9·2	3·5	8·7
4 *d*	2·1	−0·6	0·7	1·6	4·8	11·0	5·0	2·6	4·4	5·3	6·7	15·4	19·6	20·2	22·6	16·6	13·8	9·1	2·2	9·6	11·7	7·0	−1·0	4·9	8·1
5 *d*	9·0	9·6	6·5	5·4	4·3	2·7	2·7	3·4	8·3	8·2	9·2	12·8	15·8	15·9	14·4	13·6	11·7	10·8	9·6	10·8	3·2	2·5	7·1	16·0	8·9
6 *d*	4·3	3·5	2·5	6·7	9·6	9·6	10·1	14·8	10·8	9·4	10·8	11·3	17·3	18·2	21·8	21·3	17·6	14·4	15·6	13·6	10·4	5·2	−1·9	−4·1	10·5
7 *d*	−6·0	−1·4	−5·3	−0·7	−0·6	0·0	4·5	2·6	3·2	5·3	10·8	14·4	15·8	16·8	15·6	15·6	14·6	13·6	11·3	8·6	7·7	6·4	6·3	6·4	*6·9*
8	6·4	5·4	7·9	6·4	5·2	4·6	5·4	4·3	3·1	4·8	8·3	11·8	13·4	13·8	13·0	11·0	10·9	7·2	6·5	9·0	10·0	9·8	8·9	9·8	8·2
9	8·4	7·3	6·5	6·0	4·1	4·2	3·6	5·1	6·0	7·2	10·3	12·7	14·7	14·9	13·0	10·8	9·0	8·1	8·2	9·3	9·6	8·3	7·2	8·3	8·5
10	8·9	9·1	9·2	11·5	5·0	2·6	3·4	3·8	5·7	6·5	10·4	12·7	16·7	16·3	13·4	10·5	9·2	7·5	8·2	9·8	10·0	9·4	6·7	10·3	9·0
11 *q*	9·6	8·4	8·6	6·7	3·5	2·5	3·5	4·8	6·0	7·5	9·4	11·5	12·0	11·4	10·1	8·1	6·9	6·7	8·1	9·3	9·9	10·6	10·1	9·4	8·1
12	10·0	8·8	7·3	4·1	2·6	0·9	1·5	3·1	5·1	7·0	9·4	11·3	12·9	13·4	12·0	10·8	9·6	9·6	10·8	10·3	8·0	9·6	9·6	9·0	8·2
13	8·6	9·2	9·0	4·8	3·6	2·9	5·3	5·5	4·7	5·8	8·2	12·3	15·6	15·1	12·5	10·8	10·4	10·2	11·9	12·2	11·5	10·8	6·2	1·2	8·7
14	0·4	4·0	2·5	0·6	1·3	2·6	6·0	5·8	5·3	7·0	11·5	13·0	13·9	15·0	14·0	13·2	12·3	13·7	12·3	12·3	6·9	6·1	9·3	7·9	8·2
15	6·8	5·1	3·4	3·7	2·5	2·5	3·1	4·2	4·3	6·8	9·2	12·2	13·2	12·2	10·6	8·4	7·6	7·5	8·4	8·8	8·6	8·4	9·0	8·2	7·3
16	7·4	7·3	6·9	6·2	6·3	6·9	8·8	6·8	6·0	6·7	9·8	12·6	14·9	14·6	12·8	10·3	8·4	7·9	8·3	8·8	9·0	8·8	8·2	7·7	8·8
17	8·0	7·7	6·7	6·4	6·0	5·2	4·1	3·4	4·1	7·2	9·8	12·5	15·1	16·0	15·8	13·4	10·9	10·3	5·9	9·8	9·1	3·8	4·8	7·4	8·5
18	7·7	7·0	6·1	5·6	5·8	7·6	10·3	7·6	7·2	7·5	10·6	11·5	12·0	14·3	15·6	14·0	11·5	11·1	10·2	9·3	7·4	8·6	7·4	5·8	9·2
19	5·0	5·4	6·7	6·6	3·6	6·0	6·9	5·0	6·7	7·3	10·1	13·6	15·4	15·1	13·8	12·2	10·7	9·2	8·6	8·9	6·0	0·8	4·4	6·8	8·1
20	7·4	7·2	7·4	6·0	4·6	2·9	1·9	2·1	4·7	7·5	11·3	13·9	15·4	15·2	13·4	11·0	8·2	8·2	8·6	8·4	9·6	9·8	9·2	8·3	8·4
21	12·2	7·6	6·8	5·9	6·2	5·8	3·8	3·1	4·8	7·6	11·1	14·4	15·6	14·9	13·0	11·0	9·2	8·5	7·7	8·5	8·5	7·9	8·4	8·4	8·8
22 *q*	8·0	7·4	6·7	6·4	5·1	3·6	3·0	4·0	5·5	7·4	10·3	14·3	16·3	16·1	14·1	11·8	10·5	9·6	9·6	9·4	9·0	8·0	7·3	6·5	8·7
23 *q*	7·0	6·2	5·6	5·6	5·4	4·2	3·8	5·2	5·8	7·5	10·6	14·1	16·3	16·9	14·5	11·7	10·1	9·6	9·6	10·6	10·0	8·6	7·4	8·3	8·9
24	8·2	7·3	6·4	5·8	4·2	3·2	2·4	2·8	4·9	7·4	9·9	13·8	15·7	16·3	15·3	14·7	13·5	12·2	11·5	11·0	11·0	9·6	8·4	7·5	9·3
25 *q*	7·3	6·7	6·3	5·6	5·3	4·5	3·6	4·3	4·8	7·5	10·3	13·0	15·6	15·6	14·4	13·2	11·9	10·8	10·3	11·9	12·1	9·4	8·4	8·3	9·2
26	7·4	6·6	5·9	3·6	3·2	3·2	3·6	4·1	5·1	6·8	9·5	12·4	14·3	16·1	14·7	13·1	10·7	9·3	9·3	9·1	8·5	8·5	6·8	4·5	8·2
27	4·7	5·6	5·5	5·9	4·9	4·9	4·9	6·3	7·7	9·2	11·2	13·8	14·2	13·5	12·1	11·3	11·1	10·9	11·0	12·5	12·1	9·7	8·2	8·0	9·1
28 *d*	8·1	7·9	7·5	7·3	3·2	6·1	2·0	17·3	13·5	12·4	10·6	12·6	16·8	18·0	16·0	14·7	12·8	13·2	11·6	10·5	10·1	9·7	8·5	7·4	*10·7*
29	6·5	5·7	6·1	5·5	4·9	4·4	4·0	2·2	4·5	6·8	11·0	12·7	15·0	15·1	13·8	10·9	9·9	9·0	8·9	9·7	5·2	−3·3	2·9	5·7	7·4
30	6·6	6·2	7·9	5·7	4·1	3·6	3·7	4·7	4·4	7·3	10·9	13·6	14·5	13·1	10·4	8·3	7·4	7·8	8·8	9·4	8·8	8·7	7·7	7·1	7·9
31	6·3	6·4	5·2	5·1	4·9	4·7	4·9	4·1	5·9	8·8	11·7	13·3	14·0	14·4	12·6	8·7	6·9	6·5	7·1	7·6	8·7	7·6	2·2	3·3	7·5
Mean	6·6	6·3	6·3	5·3	4·3	*4·2*	4·4	5·0	5·7	7·1	9·9	12·8	15·0	*15·3*	14·2	12·3	10·8	9·9	9·4	10·1	9·2	7·2	6·7	7·0	8·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

39 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — AUGUST 1955

	Hour G.M.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	Mean
	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*	1156	1153	1156	1159	1159	1156	1155	1157	1156	1149	1146	1146	1141	1142	1152	1156	1156	1162	1173	1174	1167	1158	1152	1150	1155
2	1149	1142	1138	1132	1148	1152	1152	1150	1147	1147	1145	1144	1143	1146	1149	1154	1157	1157	1154	1153	1152	1156	1150	1115	1147
3	1111	1131	1100	1092	1133	1145	1150	1155	1152	1150	1150	1151	1152	1150	1152	1169	1168	1170	1174	1168	1160	1157	1150	1109	*1146*
4 *d*	1107	1103	1131	1149	1149	1129	1122	1134	1141	1147	1163	1166	1172	1174	1216	1270	1261	1277	1249	1217	1193	1172	1108	1109	*1169*
5 *d*	1123	1132	1158	1161	1168	1168	1168	1162	1163	1164	1158	1162	1165	1160	1168	1188	1180	1189	1181	1172	1161	1147	1148	1086	1160
6 *d*	1058	1096	1134	1141	1128	1127	1133	1114	1123	1149	1151	1159	1178	1224	1241	1243	1241	1200	1187	1193	1194	1176	1066	1078	1156
7 *d*	1081	1061	1061	1105	1125	1134	1117	1130	1157	1162	1157	1155	1164	1195	1193	1186	1188	1187	1194	1200	1177	1166	1166	1160	1151
8	1154	1154	1154	1163	1168	1169	1166	1165	1169	1171	1166	1163	1155	1165	1162	1165	1181	1195	1200	1182	1171	1165	1161	1154	1167
9	1130	1146	1152	1162	1168	1166	1166	1166	1164	1163	1165	1161	1163	1162	1164	1169	1175	1175	1176	1173	1171	1169	1163	1159	1164
10	1157	1156	1157	1150	1144	1152	1155	1158	1159	1160	1159	1152	1153	1160	1168	1175	1181	1178	1179	1175	1174	1170	1163	1157	1162
11 *q*	1160	1162	1160	1158	1164	1167	1167	1163	1156	1152	1156	1159	1159	1160	1163	1163	1164	1168	1168	1165	1164	1163	1162	1162	1162
12	1158	1152	1152	1154	1156	1154	1154	1154	1152	1148	1142	1140	1143	1147	1152	1158	1160	1158	1157	1162	1166	1163	1160	1158	1154
13	1157	1150	1146	1145	1151	1154	1154	1152	1152	1149	1149	1144	1140	1145	1153	1157	1156	1156	1159	1159	1159	1159	1154	1142	1152
14	1130	1127	1120	1140	1151	1153	1151	1150	1151	1150	1149	1151	1147	1155	1162	1168	1183	1202	1232	1204	1182	1160	1160	1159	1160
15	1173	1167	1168	1159	1152	1154	1157	1154	1155	1152	1156	1156	1154	1160	1172	1172	1168	1165	1159	1157	1157	1158	1158	1158	1160
16	1161	1161	1161	1161	1161	1151	1140	1130	1139	1147	1152	1153	1155	1159	1161	1161	1161	1158	1155	1153	1153	1154	1154	1156	1154
17	1157	1159	1161	1162	1163	1161	1160	1160	1162	1155	1147	1142	1140	1149	1155	1158	1167	1176	1186	1172	1165	1148	1130	1123	1157
18	1136	1148	1156	1160	1158	1157	1153	1147	1146	1148	1147	1151	1151	1153	1164	1174	1176	1176	1176	1176	1178	1161	1153	1140	1158
19	1137	1147	1152	1153	1154	1158	1147	1146	1150	1152	1153	1152	1154	1152	1156	1164	1168	1166	1163	1160	1160	1159	1147	1148	1154
20	1153	1154	1155	1159	1163	1165	1164	1160	1156	1151	1150	1146	1145	1151	1159	1170	1176	1168	1165	1165	1161	1156	1153	1150	1158
21	1131	1128	1143	1151	1158	1156	1160	1158	1154	1153	1150	1149	1151	1154	1160	1164	1166	1167	1169	1170	1167	1161	1158	1155	1156
22 *q*	1155	1155	1158	1159	1162	1163	1162	1161	1157	1151	1144	1137	1136	1144	1151	1157	1160	1158	1160	1160	1160	1159	1156	1155	1155
23 *q*	1153	1152	1152	1149	1152	1147	1149	1152	1149	1151	1147	1142	1141	1144	1152	1156	1162	1161	1160	1161	1161	1159	1158	1154	1153
24	1153	1154	1155	1156	1158	1156	1154	1157	1158	1156	1152	1151	1150	1150	1154	1157	1158	1156	1156	1156	1155	1157	1157	1157	1155
25 *q*	1154	1153	1153	1154	1155	1154	1155	1155	1154	1150	1145	1145	1141	1146	1147	1151	1154	1154	1163	1171	1181	1172	1163	1156	1155
26	1151	1145	1141	1148	1153	1156	1156	1157	1155	1150	1144	1143	1146	1150	1157	1162	1165	1159	1153	1153	1154	1156	1155	1153	1153
27	1149	1151	1152	1153	1154	1152	1152	1152	1150	1147	1146	1148	1145	1146	1149	1149	1153	1152	1158	1157	1153	1157	1153	1157	1151
28 *d*	1155	1154	1154	1151	1149	1134	1132	1131	1125	1119	1132	1145	1146	1155	1176	1175	1170	1163	1157	1156	1159	1163	1160	1160	1151
29	1159	1159	1160	1160	1162	1159	1148	1145	1145	1145	1147	1149	1148	1153	1159	1164	1157	1154	1152	1150	1166	1148	1148	1154	1154
30	1157	1158	1156	1149	1157	1162	1164	1164	1162	1159	1157	1156	1153	1156	1161	1168	1166	1161	1157	1154	1156	1156	1157	1152	1158
31	1148	1149	1156	1157	1156	1156	1156	1158	1157	1151	1147	1153	1154	1156	1160	1165	1166	1163	1160	1159	1158	1156	1133	1121	1154
Mean	*1142*	1144	1147	1150	1154	1154	1152	1151	1152	1151	1151	1151	1151	1157	1164	1171	*1172*	1172	1172	1169	1166	1160	1150	1143	1156

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

40 LERWICK — AUGUST 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 *q*	17 34	516	435	11 48	81	13 32	14·7	2·9	05 40	11·8	18 53	1177	1135	12 47	42	1,1,0,1,2,2,2,1	10	0	87·6
2	20 38	509	448	10 11	61	02 48	15·3	1·4	23 37	13·9	16 29	1158	1091	24 00	67	2,2,0,1,1,0,1,3	10	0	87·9
3	17 21	521	425	02 11	96	13 46	19·2	-3·8	00 33	23·0	18 06	1181	1074	02 54	107	3,3,2,1,2,3,2,3	19	1	87·8
4 *d*	17 23	599	372	12 12	227	14 19	24·5	-12·0	22 02	36·5	17 52	*1312*	1077	22 43	*235*	3,3,3,3,4,4,4,4	28	1	87·7
5 *d*	17 04	538	403	12 01	135	23 13	19·4	-11·5	20 33	30·9	17 30	1196	1029	23 59	167	3,1,2,3,3,3,4,4	23	1	87·7
6 *d*	17 05	*624*	*367*	07 04	*257*	14 03	*25·5*	*-17·3*	22 18	*42·8*	15 20	1250	*1015*	22 35	*235*	4,3,4,4,4,4,3,5	31	1	87·6
7 *d*	20 51	538	401	09 20	137	13 17	19·6	-8·6	00 03	28·2	19 21	1210	1042	02 13	168	3,3,3,3,3,2,3,3	23	1	87·3
8	18 12	517	417	10 29	100	12 56	15·4	1·3	08 18	14·1	18 28	1205	1138	24 00	67	2,1,2,2,3,2,2,1	15	1	87·1
9	20 22	508	426	10 47	82	13 03	15·8	2·8	06 38	13·0	18 27	1177	1122	00 15	55	2,1,1,1,2,1,2,1	11	0	87·0
10	18 27	500	436	10 38	64	12 43	18·0	2·4	05 58	15·6	16 13	1184	1138	04 09	46	1,2,1,1,2,2,1,2	12	0	87·2
11 *q*	20 00	501	450	11 27	51	12 43	12·8	2·1	05 48	10·7	18 06	1170	1151	09 35	19	1,1,1,1,1,1,1,1	8	0	87·3
12	18 53	497	445	11 04	52	13 02	14·0	0·3	05 55	13·7	20 15	1168	1138	11 22	30	1,1,1,1,2,1,1,1	9	0	87·3
13	22 30	505	437	09 08	68	12 48	16·7	-1·8	23 58	18·5	21 12	1162	1133	23 59	29	1,1,1,2,1,1,1,3	11	0	87·3
14	17 37	549	440	11 25	109	17 52	15·7	-1·9	00 02	17·6	18 36	1239	1111	02 04	128	3,2,1,2,2,3,3,3	19	1	87·6
15	03 57	503	439	10 31	64	12 18	13·9	-0·3	01 48	14·2	02 04	1176	1149	04 26	27	3,3,1,1,3,1,1,1	14	0	87·3
16	20 04	493	440	13 00	53	12 50	15·2	5·4	05 08	*9·8*	15 56	1163	1125	07 02	38	0,2,2,1,2,1,1,1	10	0	87·9
17	17 26	519	431	10 37	88	13 50	16·8	1·3	21 39	15·5	18 16	1191	1115	23 10	76	1,1,1,1,2,3,2,3	14	0	87·8
18	19 15	507	433	11 13	74	14 18	15·9	2·2	23 21	13·7	20 10	1186	1126	24 00	60	2,2,2,2,1,1,2,2	14	0	88·0
19	15 33	492	443	12 38	49	12 30	16·2	-1·2	21 03	17·4	16 07	1170	1126	00 00	44	2,2,2,1,1,2,3,3	16	0	87·7
20	18 08	503	419	10 42	84	12 28	16·0	1·1	07 12	14·9	16 18	1178	1143	13 07	35	1,1,1,2,2,2,2,1	12	0	88·0
21	18 18	498	447	10 31	51	12 55	16·0	2·4	07 06	13·6	19 23	1173	1117	00 40	56	2,1,2,1,1,1,1,1	10	0	88·0
22 *q*	20 40	493	450	11 02	*43*	12 51	16·7	2·9	06 17	13·8	05 33	1164	1134	12 10	30	0,1,1,1,1 1,1,1	7	0	88·0
23 *q*	18 52	499	445	11 37	54	13 10	17·3	3·6	06 19	13·7	16 42	1164	1140	12 30	24	1,1,2,0,1,1,1,1	8	0	88·0
24	19 48	500	435	12 02	65	13 58	16·9	1·9	07 35	15·0	08 07	1160	1146	10 40	*14*	0,1,1,2,2,1,1,1	9	0	88·0
25 *q*	19 49	504	453	10 26	51	12 48	17·5	3·4	06 34	14·1	20 24	1182	1138	12 49	44	1,1,1,1,2,2,2,1	11	0	88·1
26	15 04	493	439	09 04	54	13 32	16·8	2·5	04 02	14·3	16 10	1166	1138	02 31	28	1,1,1,3,2,3,1,2	14	0	88·0
27	21 04	504	450	09 40	54	11 59	14·8	4·3	00 12	10·5	21 50	1164	1143	12 58	21	1,1,1,1,1,2,2,2	11	0	88·0
28 *d*	20 11	489	379	08 08	110	07 44	23·5	-2·8	06 35	26·3	14 35	1181	1113	09 20	68	0,3,4,3,2,2,1,1	16	1	88·1
29	21 10	506	439	10 41	67	12 40	16·1	-8·2	21 37	24·3	20 37	1176	1133	21 22	43	2,2,2,2,2,3,3,3	19	1	88·0
30	23 57	488	430	11 09	58	12 00	15·0	2·9	08 00	12·1	16 00	1169	1144	03 18	25	1,1,1,1,2,2,1,1	10	0	88·0
31	22 15	506	443	11 14	63	13 01	15·0	-1·1	22 12	16·1	16 10	1167	1117	23 22	50	1,1,1,2,1,2,1,3	12	0	88·0
Mean	- -	514	430	- -	84	- -	17·0	-0·8	- -	17·7	- -	1185	1117	- -	67	-	-	0·29	87·7

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.

41 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — SEPTEMBER 1955

	Hour G.M.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	Mean
	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	476	478	479	480	480	481	480	472	453	447	451	458	470	464	483	495	472	480	485	491	478	468	469	469	473
2	459	445	448	463	476	484	485	476	468	459	425	417	439	466	475	482	466	474	477	480	480	474	477	466	465
3	469	457	439	466	475	480	465	450	443	438	421	436	433	458	472	471	467	466	472	475	488	476	473	473	461
4	484	473	479	468	465	477	479	467	447	415	408	431	448	462	496	483	445	466	479	482	478	480	460	468	464
5 *d*	446	411	450	473	475	435	425	430	431	413	418	424	460	479	477	466	480	494	481	495	476	477	482	472	457
6	465	469	469	460	461	466	465	453	435	433	427	435	443	446	459	458	465	493	495	492	476	476	478	465	462
7	469	453	459	465	466	470	468	462	445	422	424	435	449	455	460	456	465	471	475	484	484	480	477	476	461
8	475	472	472	473	475	474	470	467	458	442	433	442	452	461	468	487	466	461	469	479	481	481	483	484	468
9	471	465	460	469	476	475	470	461	450	440	435	439	445	450	465	473	468	472	481	484	480	479	481	478	465
10	479	474	472	475	475	470	471	454	456	447	450	444	449	460	472	472	469	472	475	477	478	477	475	475	467
11 *q*	476	472	475	473	473	476	472	472	465	460	453	450	456	453	459	470	465	474	484	488	486	485	487	482	471
12	474	483	482	481	472	488	439	455	472	461	443	428	450	461	465	456	466	474	470	476	481	483	486	478	468
13 *d*	464	446	456	435	469	473	467	440	443	447	417	437	450	471	500	489	484	484	472	472	467	471	472	473	462
14	472	469	470	470	469	463	459	447	442	437	430	430	431	449	462	465	459	467	471	476	474	473	475	474	460
15 *q*	471	469	465	465	465	470	472	469	461	453	445	446	451	461	461	462	470	482	485	484	476	472	475	478	467
16	480	478	466	461	475	477	462	465	461	445	429	431	444	470	478	462	469	471	476	478	480	481	487	482	467
17	482	465	465	459	455	485	469	453	454	445	445	453	450	452	460	472	475	480	484	477	472	463	454	469	464
18	472	473	474	473	477	478	472	464	453	440	443	443	452	447	463	480	480	479	471	472	475	475	476	476	467
19	475	469	465	465	474	480	476	468	453	439	437	430	443	462	477	462	465	466	472	477	470	473	474	476	465
20	474	467	462	466	474	478	479	476	459	438	446	452	458	463	472	472	472	478	484	492	482	486	480	477	470
21 *q*	476	475	474	473	478	479	475	469	454	440	439	443	448	454	459	462	469	475	481	480	483	484	485	478	468
22	474	471	476	474	472	474	477	476	468	458	453	450	453	458	463	466	472	478	491	494	485	477	489	485	472
23	487	489	489	489	493	489	484	467	456	428	434	440	455	448	447	458	468	472	480	468	455	444	439	442	463
24	466	472	469	472	476	476	474	468	458	448	445	447	451	459	465	465	477	481	479	472	477	478	476	476	468
25 *q*	474	467	472	474	474	473	475	470	462	450	443	439	443	449	457	462	468	476	481	484	484	489	479	479	468
26 *q*	477	475	480	480	479	476	473	467	459	452	448	450	454	460	463	469	477	482	487	487	487	487	486	485	473
27 *d*	480	472	475	497	499	497	492	484	468	443	447	445	430	452	467	482	487	490	507	472	488	484	472	473	475
28	472	468	470	464	471	484	469	464	450	443	446	447	454	461	456	472	479	482	480	462	453	462	472	469	465
29 *d*	452	434	464	468	476	483	487	481	469	456	458	455	456	459	482	490	495	587	493	507	482	487	454	461	*477*
30 *d*	429	434	469	469	467	428	393	423	436	444	417	428	441	478	451	471	477	470	477	479	459	428	425	452	*448*
Mean	471	465	468	470	474	475	468	462	454	443	*437*	440	449	459	468	471	471	480	480	*481*	477	475	473	473	466

MAGNETIC DECLINATION (WEST)

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

42 LERWICK (D) — 10° + — SEPTEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	4·0	6·5	5·5	5·3	5·6	4·5	3·3	4·5	7·3	11·6	10·8	12·6	15·7	15·7	16·6	14·1	11·3	10·9	8·3	0·8	3·9	4·9	5·7	5·9	8·1
2	4·9	7·3	12·6	9·6	0·4	6·3	6·4	6·8	7·1	8·6	12·9	15·7	18·7	18·1	14·7	12·1	9·0	7·4	8·0	8·5	7·3	8·1	7·0	3·3	9·2
3	4·7	6·5	14·5	6·3	1·6	2·6	4·7	5·2	3·9	7·9	13·3	14·1	15·2	15·7	14·1	11·0	8·6	8·1	7·5	6·5	3·0	4·3	6·9	7·5	8·1
4	3·6	4·2	4·5	7·6	5·2	1·5	2·7	3·5	4·5	8·2	13·3	16·4	18·9	18·5	18·3	15·2	9·7	7·3	8·3	9·7	8·2	-1·0	4·0	2·9	8·1
5 *d*	4·4	10·4	9·3	3·3	2·8	5·9	12·8	15·7	10·0	6·3	9·4	13·7	13·9	13·2	14·9	10·1	8·4	7·1	7·5	5·6	8·8	7·9	7·3	3·7	8·9
6	5·6	7·4	6·2	10·1	9·9	7·3	5·1	6·0	7·6	11·3	12·0	13·7	14·1	12·9	12·1	10·2	8·3	8·7	7·0	-1·3	4·7	7·8	8·1	10·1	8·5
7	8·0	3·8	4·4	2·4	2·3	4·0	3·0	2·7	4·8	7·4	10·9	13·1	15·0	15·1	13·5	10·9	8·7	8·5	8·8	8·7	8·7	7·8	6·0	6·7	7·7
8	7·4	7·1	7·6	7·3	6·1	4·3	4·1	4·1	4·9	6·3	9·7	13·1	16·8	18·1	16·0	12·0	9·8	9·2	9·5	9·7	9·6	9·0	7·6	4·9	8·9
9	5·8	11·4	8·1	4·6	2·9	2·7	2·7	2·4	3·3	5·2	8·1	11·3	13·2	13·0	12·3	10·9	7·5	7·3	8·3	8·9	9·2	8·6	8·7	5·0	7·6
10	6·1	6·7	8·3	6·4	6·1	7·5	6·9	7·6	8·7	10·6	11·8	12·3	12·4	12·1	11·2	9·5	8·7	8·8	8·3	8·5	7·8	8·0	6·9	6·8	8·7
11 *q*	7·3	8·1	4·3	2·9	2·6	3·4	4·6	4·2	3·7	4·9	6·9	10·0	13·1	13·3	12·6	11·0	9·4	8·6	8·7	9·2	9·7	8·9	9·0	4·9	7·6
12	2·0	5·2	5·9	2·5	6·1	6·1	6·4	15·1	12·6	6·1	9·0	11·8	14·8	13·7	11·4	8·8	4·9	4·8	6·8	8·7	8·8	8·5	8·7	0·5	7·9
13 *d*	-0·6	6·2	2·3	9·2	4·9	2·6	6·1	6·5	5·4	8·2	9·3	10·2	12·3	14·1	11·6	12·6	6·3	6·3	8·2	7·3	5·4	7·5	7·8	7·9	7·4
14	7·8	7·0	6·4	6·0	5·8	4·5	5·4	8·2	10·3	9·8	11·6	11·9	14·0	15·2	13·2	10·5	9·2	9·1	9·1	8·8	7·7	5·0	7·0	7·9	8·8
15 *q*	9·4	8·0	6·6	5·7	6·4	6·8	6·2	6·4	6·3	7·2	8·5	10·8	12·5	13·1	11·7	10·7	10·4	9·3	6·0	2·2	1·0	6·6	7·5	7·9	7·8
16	8·7	6·1	3·1	5·0	5·5	4·3	5·8	4·8	5·2	6·8	9·0	12·9	15·9	16·9	16·4	13·7	10·0	9·2	8·5	8·3	7·8	6·1	2·1	-0·4	8·0
17	1·7	4·8	8·7	4·6	11·6	13·9	11·6	13·6	10·2	9·5	9·5	13·5	14·6	13·8	12·9	11·3	9·6	8·6	7·7	6·1	4·1	2·7	0·1	4·1	8·7
18	6·5	7·8	8·7	6·1	2·0	3·0	4·6	5·5	6·8	7·8	10·2	13·1	15·4	14·0	14·0	13·5	10·5	10·0	7·9	6·8	6·7	6·9	7·3	7·8	8·5
19	8·5	6·5	7·0	6·3	5·2	3·8	3·7	3·7	4·1	5·7	8·8	11·2	13·8	15·1	14·5	12·3	8·7	8·5	8·5	7·9	7·0	6·2	7·1	6·0	7·9
20	-2·3	4·2	5·9	8·9	5·5	4·1	4·0	4·5	6·1	10·5	11·0	12·1	13·9	14·0	12·9	11·1	9·7	9·2	9·0	8·8	7·6	8·0	4·3	5·8	7·9
21 *q*	6·8	6·0	6·6	6·8	6·1	5·4	4·4	3·7	4·4	6·0	7·7	9·7	11·1	11·6	10·9	9·5	8·6	8·7	8·7	8·1	7·3	6·8	7·7	8·2	7·5
22	11·4	2·0	1·2	-3·9	2·0	4·1	4·1	3·9	4·9	6·1	8·3	10·6	12·1	12·6	12·4	10·9	9·6	9·2	9·8	10·9	10·6	8·2	7·3	7·9	7·3
23	7·7	7·1	6·1	6·5	5·9	4·8	6·5	7·1	5·7	10·3	14·0	11·2	11·7	13·4	12·4	10·7	9·3	8·8	8·9	3·2	1·9	1·5	3·5	1·9	7·5
24	6·9	2·3	3·0	3·5	4·2	3·8	3·0	2·1	3·4	5·8	8·3	10·9	11·6	11·9	11·3	9·8	9·4	7·6	3·2	9·0	9·7	8·9	7·9	7·5	6·9
25 *q*	6·8	8·5	7·1	6·1	5·4	5·0	4·9	4·9	5·4	6·4	7·8	9·0	10·4	11·0	11·0	10·1	9·2	8·4	8·8	9·2	9·1	7·0	6·1	6·5	7·7
26 *q*	5·9	6·0	6·6	5·7	5·5	5·0	4·8	4·2	4·8	5·4	7·6	9·9	10·9	10·8	10·4	10·5	10·5	10·1	10·0	9·8	9·6	8·9	7·8	6·1	7·8
27 *d*	5·7	6·9	7·4	4·2	0·5	2·5	3·7	4·3	4·1	7·3	11·8	13·4	15·4	15·5	13·3	15·2	6·3	4·4	1·5	4·4	-1·1	5·6	4·2	7·0	6·8
28	5·5	7·8	5·8	4·9	9·7	7·1	17·0	13·9	11·6	8·3	9·7	9·7	10·9	12·0	10·7	9·7	8·9	7·7	-1·5	-8·1	1·4	3·5	3·8	2·3	7·2
29 *d*	0·3	1·8	8·2	1·8	4·0	4·2	4·9	6·7	6·0	5·4	6·1	7·9	10·0	11·1	14·1	16·5	16·0	13·3	8·0	8·9	2·6	-4·4	-5·7	-5·9	*5·9*
30 *d*	-7·5	5·3	4·7	5·4	7·5	26·2	41·5	21·7	9·2	7·5	8·6	8·5	11·7	10·8	11·0	9·3	3·7	0·6	-4·7	-7·3	-10·8	-9·6	1·2	0·2	6·4
Mean	5·1	6·3	6·6	5·4	*5·0*	5·6	6·8	6·8	6·4	7·6	9·9	11·8	13·7	*13·9*	13·1	11·5	9·0	8·2	7·2	6·3	5·9	5·6	5·8	5·0	7·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

43 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — SEPTEMBER 1955

	Hour G.M.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	Mean
	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	1131	1146	1154	1159	1158	1158	1158	1156	1160	1154	1150	1150	1150	1161	1172	1182	1203	1198	1193	1172	1132	1154	1161	1152	1161
2	1139	1129	1107	1055	1084	1103	1109	1122	1133	1139	1156	1165	1172	1172	1182	1192	1196	1196	1185	1174	1165	1156	1142	1138	1146
3	1139	1143	1121	1105	1133	1144	1150	1156	1160	1151	1150	1170	1178	1160	1159	1163	1164	1161	1162	1164	1158	1151	1145	1136	1151
4	1054	1086	1126	1128	1120	1144	1148	1152	1155	1160	1158	1158	1157	1153	1162	1200	1205	1185	1178	1168	1160	1120	1111	1106	1146
5 *d*	1052	1043	1064	1128	1141	1144	1105	1105	1116	1145	1164	1160	1182	1186	1184	1185	1186	1196	1198	1169	1158	1159	1153	1136	1144
6	1118	1125	1138	1143	1118	1120	1137	1150	1156	1152	1158	1161	1165	1168	1165	1174	1174	1174	1189	1190	1177	1166	1156	1126	1154
7	1095	1107	1124	1150	1157	1159	1164	1168	1171	1172	1163	1155	1153	1155	1156	1162	1164	1163	1160	1162	1162	1163	1163	1159	1154
8	1156	1156	1155	1156	1157	1160	1162	1164	1163	1163	1159	1152	1150	1155	1170	1188	1207	1201	1178	1167	1165	1162	1159	1138	1164
9	1153	1143	1114	1119	1139	1151	1156	1159	1160	1161	1159	1155	1150	1153	1154	1157	1165	1165	1163	1162	1162	1162	1159	1159	1153
10	1156	1154	1154	1151	1151	1151	1148	1152	1149	1156	1162	1163	1160	1156	1163	1171	1166	1161	1162	1162	1163	1163	1162	1161	1158
11 *q*	1154	1147	1140	1145	1147	1148	1151	1149	1153	1157	1158	1158	1156	1158	1157	1158	1162	1161	1157	1158	1159	1160	1159	1153	1154
12	1143	1138	1145	1144	1149	1142	1158	1130	1131	1145	1154	1163	1166	1182	1196	1204	1194	1179	1167	1160	1156	1158	1155	1137	1158
13 *d*	1085	1060	1048	1048	1070	1089	1116	1145	1156	1156	1166	1176	1173	1181	1212	1232	1261	1235	1211	1194	1187	1174	1167	1165	1154
14	1166	1167	1165	1164	1164	1164	1163	1158	1156	1156	1162	1170	1171	1166	1172	1181	1173	1165	1162	1160	1163	1164	1162	1158	*1165*
15 *q*	1154	1148	1154	1154	1157	1156	1155	1154	1155	1156	1156	1158	1157	1156	1163	1165	1162	1162	1171	1168	1161	1161	1160	1159	1158
16	1153	1131	1130	1147	1152	1153	1155	1153	1155	1158	1164	1167	1162	1169	1182	1187	1182	1175	1167	1163	1160	1161	1159	1141	1159
17	1126	1137	1133	1132	1107	1092	1108	1115	1123	1139	1143	1145	1158	1167	1168	1170	1169	1166	1168	1173	1174	1169	1156	1138	1145
18	1143	1141	1133	1132	1137	1145	1151	1154	1157	1162	1159	1160	1166	1169	1170	1177	1195	1201	1211	1190	1172	1163	1159	1158	1163
19	1143	1121	1141	1144	1147	1154	1158	1160	1162	1161	1161	1161	1162	1160	1172	1181	1179	1178	1172	1169	1170	1165	1160	1150	1160
20	1114	1126	1145	1142	1145	1152	1156	1159	1161	1160	1155	1154	1152	1148	1150	1154	1158	1161	1160	1160	1168	1153	1147	1152	1151
21 *q*	1153	1154	1156	1159	1159	1161	1164	1164	1164	1162	1154	1148	1147	1150	1154	1156	1160	1159	1160	1165	1166	1162	1158	1152	1158
22	1126	1128	1088	1115	1141	1152	1156	1156	1157	1152	1146	1146	1146	1149	1149	1152	1154	1156	1154	1160	1172	1179	1168	1160	1148
23	1157	1157	1160	1163	1160	1163	1160	1157	1160	1163	1154	1154	1156	1157	1160	1164	1171	1184	1195	1209	1176	1161	1097	1074	1159
24	1065	1077	1124	1142	1151	1157	1161	1164	1164	1163	1157	1154	1152	1151	1156	1156	1159	1170	1184	1177	1166	1163	1163	1161	1152
25 *q*	1158	1156	1144	1146	1152	1156	1158	1160	1162	1163	1159	1156	1154	1153	1156	1159	1159	1160	1159	1158	1159	1155	1156	1158	1157
26 *q*	1158	1159	1155	1155	1155	1158	1158	1160	1160	1159	1158	1152	1150	1149	1151	1152	1151	1152	1154	1155	1157	1160	1161	1159	1156
27 *d*	1159	1160	1141	1126	1125	1134	1136	1142	1146	1153	1148	1153	1158	1169	1182	1179	1218	1211	1229	1193	1186	1123	1150	1148	1161
28	1136	1146	1150	1143	1097	1085	1098	1109	1130	1148	1157	1159	1163	1168	1172	1171	1170	1176	1194	1189	1176	1162	1145	1126	1149
29 *d*	1120	1113	1089	1118	1130	1135	1141	1144	1149	1155	1159	1156	1158	1159	1162	1176	1229	1271	1255	1260	1218	1156	1128	1116	1162
30 *d*	1113	1099	1137	1158	1143	1088	1028	1059	1124	1142	1165	1216	1208	1223	1193	1196	1199	1198	1191	1163	1137	1129	1088	1054	*1144*
Mean	1131	*1130*	1131	1136	1138	1141	1142	1146	1152	1155	1157	1160	1161	1163	1168	1175	*1181*	1181	1180	1174	1166	1158	1150	1141	1155

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

44 LERWICK — SEPTEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	h. m.	γ	γ	h. m.	′	′	h. m.	′	h. m.	γ	h. m.	γ	γ					°A.
1	19 51	514	08 47	438	76	14 13	18·6	*-17·9*	19 46	36·5	16 40	1207	20 22	1114	93	2,1,2,2,2,3,4,2	18	1	88·0
2	15 26	507	11 21	408	99	12 55	19·7	-1·8	04 25	21·5	15 58	1206	03 35	1044	162	3,3,2,3,3,3,2,2	21	1	87·4
3	20 58	497	10 59	394	103	02 32	18·1	0·4	05 03	17·7	12 32	1185	03 03	1085	100	3,3,2,3,3,1,2,2	19	1	87·8
4	14 50	512	10 04	393	119	12 57	20·2	-12·6	21 24	32·8	15 48	1218	00 38	1011	207	4,3,3,3,3,4,2,4	26	1	87·7
5 *d*	19 18	516	06 03	390	126	07 13	18·5	-4·1	00 12	22·6	13 01	1205	00 42	1018	187	4,4,3,3,3,3,3,2	25	1	87·8
6	17 48	504	11 00	414	90	23 52	17·3	-7·2	19 37	24·5	18 55	1195	24 00	1093	102	2,2,2,2,2,3,3,3	19	1	87·8
7	20 44	487	09 53	418	69	13 24	15·7	1·7	04 38	14·0	09 10	1174	00 10	1090	84	3,1,2,2,2,2,1,1	14	0	87·8
8	23 08	499	10 56	425	74	14 01	19·2	2·5	23 59	16·7	16 50	1212	23 22	1128	84	0,1,1,2,2,3,2,2	13	0	87·9
9	19 58	488	10 21	431	57	01 44	13·9	1·8	07 32	12·1	16 53	1168	03 11	1105	63	3,3,1,1,1,1,1,2	13	0	88·0
10	15 20	485	11 46	438	47	12 13	13·4	5·5	00 22	7·9	15 43	1172	06 07	1145	27	1,1,2,2,1,2,1,1	11	0	88·0
11 *q*	18 58	497	11 52	446	51	13 03	14·9	1·3	23 59	13·6	16 53	1165	02 16	1134	31	2,1,1,1,2,2,1,2	12	0	88·0
12	05 27	496	06 48	420	76	07 11	19·4	-10·5	23 52	29·9	15 17	1206	24 00	1110	96	2,2,3,2,3,2,1,4	19	1	87·7
13 *d*	15 23	511	01 06	389	122	15 36	16·3	-6·1	00 01	22·4	16 07	1271	03 40	1035	236	4,3,3,3,3,3,3,1	23	1	87·4
14	21 12	484	11 03	416	68	13 26	15·9	2·5	21 25	13·4	15 44	1183	08 52	1151	32	1,1,2,2,2,2,1,2	13	0	87·2
15 *q*	19 13	500	10 29	443	57	13 03	13·3	-4·5	19 06	17·8	18 56	1179	01 25	1146	33	2,1,0,1,2,2,3,1	12	0	86·8
16	22 50	495	10 36	423	72	13 40	17·3	-2·6	23 12	19·9	15 33	1188	02 08	1125	63	3,2,2,1,3,1,0,2	14	0	87·0
17	17 15	493	10 57	440	53	05 10	16·4	-1·6	22 07	18·0	19 52	1180	05 20	1087	93	3,3,3,2,2,2,2,2	19	1	86·9
18	16 07	495	09 27	434	61	13 00	16·3	1·2	04 31	15·1	18 10	1216	02 48	1128	88	1,2,1,2,2,2,3,1	14	1	86·7
19	23 58	495	11 33	418	77	13 28	15·7	1·3	23 59	14·4	15 12	1182	01 33	1113	69	3,2,2,1,2,1,1,2	14	1	86·7
20	21 50	500	09 19	431	69	13 04	14·5	-3·8	00 22	18·3	20 25	1171	00 43	1111	60	3,2,2,2,1,1,1,2	14	0	86·9
21 *q*	22 40	488	09 58	433	55	13 20	12·2	3·4	07 37	8·8	20 23	1168	24 00	1141	27	1,1,1,1,1,1,1,3	10	0	87·1
22	19 04	502	02 04	429	73	00 11	15·9	-6·6	03 07	22·5	21 20	1180	02 38	1068	112	3,3,1,1,1,1,2,2	14	1	87·3
23	18 31	486	09 32	422	64	13 03	15·7	-1·1	20 44	16·8	19 10	1228	23 44	1066	162	1,1,2,3,2,2,3,4	18	1	87·6
24	18 12	492	11 02	443	49	13 39	12·8	-1·4	00 06	14·2	18 03	1188	00 41	1051	137	4,2,1,1,1,2,3,0	14	0	87·8
25 *q*	21 42	500	11 35	437	63	14 09	11·3	4·5	07 34	*6·8*	09 32	1164	02 10	1143	21	1,1,1,1,1,1,0,2	8	0	87·4
26 *q*	20 14	491	10 44	446	*45*	12 42	11·4	4·0	07 40	7·4	23 17	1162	13 14	1148	*14*	1,1,0,0,1,1,1,1	6	0	87·1
27 *d*	18 28	591	12 04	420	171	13 12	17·2	-16·9	18 36	34·1	18 28	1305	21 28	1104	201	2,2,2,3,3,4,5,4	25	1	86·8
28	18 55	500	09 10	433	67	06 35	19·0	-13·5	18 51	32·5	18 44	1210	05 10	1080	130	2,3,3,2,2,2,4,3	21	1	86·8
29 *d*	17 47	*929*	01 45	426	*503*	16 08	20·4	-16·0	22 54	36·4	17 47	*1372*	02 32	1076	*296*	3,2,1,2,2,7,4,4	25	1	86·8
30 *d*	13 27	512	06 15	*358*	154	06 18	*46·9*	-17·7	20 09	*64·6*	11 50	1237	*1003*	06 27	234	4,5,5,4,4,4,4,4	34	1	86·7
Mean	- -	516	- -	422	94	- -	17·2	-3·9	- -	21·1	- -	1203	1095	- -	108	-	-	0·57	87·4

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.

45 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — OCTOBER 1955

	Hour G.M.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	Mean
	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	457	460	461	460	463	467	464	457	448	445	433	447	446	451	451	464	465	470	471	470	470	474	473	475	460
2	469	464	460	471	475	475	475	467	449	437	442	435	439	429	460	457	476	486	464	473	477	471	471	471	462
3	466	463	435	433	471	480	461	469	451	437	441	469	444	457	462	442	461	465	467	473	473	471	469	473	460
4	476	469	471	459	462	480	485	471	459	452	413	419	435	442	449	457	465	471	473	472	466	469	467	473	461
5 *d*	474	473	465	467	474	474	478	475	459	446	429	439	429	433	451	465	499	484	496	459	407	388	339	447	452
6 *d*	460	458	402	427	474	471	472	467	437	405	408	424	440	444	459	477	485	486	465	465	463	466	464	466	454
7	464	462	462	464	467	471	469	462	455	439	434	431	433	447	463	471	466	471	478	478	473	474	472	488	462
8	481	491	491	492	494	489	492	477	468	457	443	440	442	447	459	465	475	477	487	485	486	487	479	476	474
9	472	471	476	472	476	476	478	476	466	451	442	439	443	448	458	469	478	483	482	481	479	508	492	463	470
10	468	474	476	474	478	488	488	486	476	444	439	438	438	427	456	463	466	469	480	477	476	479	477	476	467
11	475	474	473	472	471	472	468	455	430	424	417	424	427	439	469	460	462	461	470	469	470	472	471	470	458
12 *q*	469	469	469	469	470	469	469	468	462	453	447	444	445	449	453	457	464	468	472	475	474	472	467	469	463
13 *q*	468	470	471	471	472	474	474	474	469	462	452	447	447	455	459	464	469	470	472	466	457	464	472	471	465
14	471	471	472	474	475	477	482	476	466	466	457	457	459	458	462	468	471	476	473	474	477	476	482	478	471
15	474	474	475	471	479	481	478	475	469	463	457	453	458	463	468	469	473	476	479	482	484	483	482	475	473
16	467	468	473	476	481	484	485	477	469	462	457	458	463	468	472	474	479	486	489	490	490	487	485	482	476
17	480	473	476	482	482	485	487	486	484	475	468	462	460	464	469	476	479	484	491	489	488	489	488	486	*479*
18 *q*	481	481	479	480	479	479	476	472	463	454	450	453	462	472	477	479	481	482	483	482	483	484	484	482	475
19 *q*	481	478	479	480	481	479	477	473	466	456	452	456	465	473	479	481	484	484	484	486	487	484	484	487	477
20	482	484	479	482	485	484	483	482	464	449	458	462	472	471	476	474	462	470	478	474	472	478	475	477	474
21	475	475	475	475	475	475	473	469	469	463	458	453	456	465	469	469	473	472	474	474	469	472	470	469	469
22	472	471	472	476	478	479	478	476	475	460	450	443	454	454	455	462	457	465	463	468	478	478	476	474	467
23	471	470	474	472	473	474	476	471	461	453	448	452	445	453	467	475	473	475	473	478	481	480	480	478	469
24 *q*	478	477	476	475	478	479	480	475	470	460	453	451	453	459	465	471	476	478	482	481	484	482	480	475	472
25 *d*	455	446	451	465	493	494	489	445	427	449	423	452	496	523	468	526	517	509	478	449	437	428	429	384	464
26 *d*	296	394	445	398	359	448	450	452	445	432	436	424	453	459	455	455	472	472	444	424	418	451	450	445	*432*
27	462	458	454	439	448	458	458	456	444	446	442	445	452	453	454	447	461	461	462	460	468	474	462	459	455
28	461	457	460	454	460	465	468	462	459	447	438	444	451	451	465	447	459	463	462	466	469	460	464	465	458
29	466	465	463	469	471	462	458	458	461	455	455	455	451	455	464	467	454	463	469	454	459	468	458	465	461
30	465	465	465	466	466	466	465	462	459	454	450	450	447	456	462	467	474	458	449	457	452	465	465	465	460
31 *d*	463	462	453	467	475	469	455	458	460	458	461	460	468	467	470	482	459	471	470	483	480	361	411	426	458
Mean	464	467	466	466	470	*475*	474	469	459	450	*444*	446	451	456	463	468	472	474	474	471	469	468	466	467	465

MAGNETIC DECLINATION (WEST)

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

46 LERWICK (D) — 10° + — OCTOBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	5·4	4·1	4·6	5·5	5·9	5·9	4·9	5·2	5·3	6·3	6·1	7·4	10·3	12·1	11·1	11·0	10·5	8·5	8·5	6·1	4·4	4·9	5·1	5·1	6·8
2	7·8	6·8	7·0	7·4	6·1	5·9	5·6	5·1	6·1	5·2	5·5	10·2	13·7	13·8	14·6	6·5	11·9	−4·2	5·9	−5·5	2·4	7·3	4·7	5·4	6·5
3	7·8	8·5	8·1	12·1	8·7	6·8	6·4	6·1	8·1	8·8	10·2	11·3	12·1	12·9	13·1	10·9	3·9	5·5	8·9	8·5	7·7	7·3	6·3	6·2	8·6
4	5·4	5·2	5·1	6·1	9·2	8·1	7·3	5·2	3·5	6·1	9·1	11·6	13·7	14·5	13·5	11·3	9·5	8·2	7·3	7·1	4·4	5·2	4·4	3·7	7·7
5 *d*	4·8	6·3	6·0	6·2	5·9	4·9	3·5	3·0	2·4	3·5	5·9	11·1	13·7	15·0	15·9	8·9	9·1	7·3	8·7	4·0	−0·2	−9·9	−19·4	0·9	4·9
6 *d*	3·6	5·4	10·9	11·1	5·9	7·3	5·1	3·8	2·8	4·3	8·1	10·3	12·6	14·8	15·7	13·1	8·0	6·7	10·6	8·1	4·9	4·9	5·7	5·4	7·9
7	4·3	4·9	4·8	7·6	6·2	5·2	4·9	4·9	4·6	4·9	7·7	11·9	15·9	17·9	15·9	15·5	11·8	9·2	8·5	8·7	8·1	8·5	3·4	4·9	8·3
8	7·3	7·5	6·3	6·6	6·8	5·5	5·9	7·1	8·3	6·6	8·4	11·1	14·1	13·9	12·7	10·5	9·2	9·0	10·2	9·9	9·1	8·5	6·2	4·9	8·6
9	6·6	5·4	4·6	5·2	5·1	5·1	5·2	4·7	3·9	4·4	7·0	9·7	12·1	12·9	12·7	11·6	10·9	11·6	10·8	9·9	8·5	−4·3	−3·5	−3·5	6·5
10	0·1	6·3	5·9	4·9	6·8	4·9	6·6	5·8	4·9	6·3	9·7	10·9	15·7	10·9	11·3	11·4	8·4	−0·9	5·9	8·3	7·6	7·3	6·1	6·8	7·2
11	7·1	7·0	6·9	7·5	7·6	7·0	7·4	8·3	7·3	8·3	10·3	11·9	13·3	11·8	8·7	9·5	3·2	6·8	4·9	7·0	7·6	7·5	7·5	7·4	8·0
12 *q*	7·3	7·2	7·0	6·8	6·8	6·1	5·5	4·9	3·5	3·5	5·1	7·8	9·7	10·3	10·2	9·2	7·8	6·8	7·0	7·1	7·8	7·8	7·3	7·6	7·1
13 *q*	8·0	7·0	7·3	7·3	7·3	7·3	6·4	4·9	3·6	3·7	6·8	10·0	11·2	11·6	10·9	9·0	7·8	7·8	7·5	7·8	4·1	5·4	7·3	7·6	7·4
14	5·9	7·5	8·4	8·1	7·2	7·1	9·3	9·4	10·2	9·7	10·9	12·1	13·1	13·0	11·1	9·8	9·1	8·3	7·2	8·3	7·3	6·8	5·1	6·1	8·8
15	6·1	6·3	6·1	7·1	7·0	6·4	6·6	6·7	5·9	4·7	6·3	8·5	10·7	10·9	10·9	9·9	9·0	8·4	8·2	7·6	7·6	7·3	7·3	0·3	7·3
16	−5·0	0·7	3·4	4·5	5·4	5·1	5·9	5·7	4·7	4·2	6·1	8·7	10·5	10·9	11·1	9·7	8·7	8·8	8·9	8·5	8·3	8·0	4·5	5·6	6·4
17	6·2	5·4	6·4	5·0	4·7	5·4	5·2	5·2	5·0	5·5	7·2	9·7	10·5	10·9	10·9	9·9	9·0	8·5	8·9	8·5	8·0	7·8	7·5	7·2	7·4
18 *q*	6·8	6·5	6·3	6·4	6·3	6·3	5·9	4·9	4·2	4·8	6·6	9·2	10·8	11·0	10·7	9·7	9·2	8·7	8·3	7·8	7·3	7·2	6·9	6·7	7·4
19 *q*	6·3	5·8	6·5	6·8	6·8	6·7	6·3	5·7	4·9	5·6	8·4	11·2	12·5	11·9	10·7	9·1	8·3	8·4	8·3	8·2	8·0	7·4	7·0	7·0	7·9
20	6·6	6·2	5·7	6·8	5·8	5·1	5·8	5·3	7·3	10·0	12·6	13·7	14·7	15·0	15·0	14·9	12·2	10·1	9·0	8·0	6·2	6·3	6·3	6·5	9·0
21	6·4	6·5	6·2	6·3	6·6	6·2	6·3	7·0	6·2	7·2	9·4	11·5	12·8	13·1	12·9	10·6	10·5	10·1	8·7	7·6	7·1	−0·2	2·0	3·0	7·7
22	4·6	5·1	5·9	6·1	5·9	5·6	6·1	5·6	5·2	6·8	9·0	11·0	14·5	16·6	17·9	14·2	13·9	11·6	8·7	6·1	6·3	6·5	6·8	7·1	8·6
23	6·3	7·7	3·7	5·3	6·3	6·4	6·1	5·4	4·7	5·7	7·8	11·8	12·6	11·8	11·6	11·1	10·2	9·5	8·7	9·0	8·4	7·4	6·8	6·8	8·0
24 *q*	6·8	6·5	6·8	7·1	6·9	6·8	6·2	5·5	4·9	4·4	6·4	8·8	11·3	10·9	10·3	9·3	9·3	9·2	9·1	8·5	8·3	8·1	6·7	3·2	7·6
25 *d*	−1·0	4·4	−8·8	−3·7	1·5	3·5	8·7	9·2	8·7	10·7	8·7	19·2	19·1	20·5	25·5	22·7	−0·9	−6·8	4·4	−2·3	−1·8	4·2	−2·8	3·3	6·1
26 *d*	8·3	−6·6	−2·8	−3·1	2·0	3·9	6·0	3·0	3·5	3·7	7·5	7·3	8·9	14·3	9·5	10·9	−2·3	−11·4	−14·0	−6·6	4·7	3·5	7·3	6·1	2·7
27	5·1	4·9	6·3	8·0	6·8	6·3	6·1	6·1	6·4	8·5	10·9	11·3	11·6	12·1	10·7	6·8	−0·4	2·3	6·5	4·2	4·2	1·3	4·6	5·4	6·5
28	5·4	5·9	5·9	5·2	5·6	5·4	5·4	5·6	6·5	8·2	10·1	12·3	13·5	14·2	14·0	9·8	8·2	6·8	6·1	6·2	6·3	3·2	4·6	4·1	7·4
29	6·1	6·1	6·4	7·3	4·2	4·2	5·1	5·1	5·5	5·7	7·2	10·5	9·6	10·5	11·1	10·7	10·7	8·7	1·1	2·3	6·1	3·3	0·8	6·1	6·4
30	5·6	5·5	5·8	5·5	5·9	5·7	5·4	5·3	5·1	5·2	8·0	10·9	11·3	10·9	10·5	9·2	8·3	2·0	−2·1	−0·7	1·1	4·4	5·4	6·1	5·8
31 *d*	6·1	10·0	8·7	8·4	8·6	6·6	6·8	9·0	8·7	7·3	9·2	10·5	13·8	16·1	18·3	21·2	17·0	11·6	11·9	8·5	−7·2	−10·5	−7·3	0·6	8·1
Mean	5·4	5·7	5·5	6·2	6·2	5·9	6·1	5·8	5·5	6·1	8·1	10·8	12·6	*13·1*	12·9	11·2	8·5	6·4	6·9	6·0	5·6	4·6	*3·9*	5·0	7·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

47 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — OCTOBER 1955

	Hour G.M.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	Mean
	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	1081	1137	1155	1161	1162	1161	1164	1164	1165	1164	1170	1174	1173	1168	1176	1173	1169	1167	1167	1172	1176	1162	1164	1161	1162
2	1145	1143	1148	1145	1152	1157	1158	1162	1163	1165	1164	1162	1165	1168	1184	1214	1211	1225	1209	1196	1141	1151	1153	1152	1168
3	1151	1156	1143	1134	1143	1151	1156	1156	1160	1164	1165	1171	1169	1166	1169	1182	1206	1211	1187	1174	1167	1166	1164	1161	1165
4	1154	1148	1140	1147	1144	1136	1142	1153	1160	1162	1172	1169	1164	1166	1171	1173	1174	1172	1172	1174	1178	1169	1158	1146	1160
5 *d*	1133	1144	1151	1155	1157	1164	1168	1168	1169	1167	1167	1158	1165	1169	1171	1208	1215	1242	1274	1133	1087	1070	1001	1084	1155
6 *d*	1117	1141	1127	1084	1114	1135	1153	1164	1176	1186	1179	1167	1162	1166	1184	1208	1229	1223	1204	1197	1188	1175	1167	1158	1167
7	1146	1145	1152	1159	1166	1167	1169	1171	1173	1176	1174	1171	1170	1166	1169	1175	1180	1177	1173	1174	1175	1166	1167	1155	1167
8	1158	1158	1162	1158	1157	1158	1159	1166	1161	1159	1158	1157	1153	1153	1156	1160	1161	1161	1160	1161	1163	1163	1168	1168	1160
9	1164	1161	1155	1158	1158	1161	1161	1164	1169	1170	1169	1165	1161	1157	1156	1159	1160	1162	1164	1166	1169	1142	1101	1093	1156
10	1116	1141	1151	1155	1155	1150	1150	1151	1154	1166	1169	1170	1172	1180	1176	1184	1189	1192	1174	1168	1166	1161	1160	1163	1163
11	1164	1163	1162	1161	1160	1159	1161	1163	1169	1185	1187	1186	1188	1195	1212	1205	1202	1184	1172	1167	1164	1164	1164	1167	*1175*
12 *q*	1167	1167	1165	1165	1163	1162	1162	1162	1164	1162	1161	1161	1162	1163	1164	1165	1164	1164	1161	1160	1161	1162	1166	1166	1163
13 *q*	1165	1167	1165	1164	1163	1161	1159	1161	1162	1161	1161	1161	1160	1161	1165	1169	1171	1167	1164	1167	1171	1171	1163	1161	1164
14	1156	1158	1155	1151	1154	1153	1144	1142	1145	1145	1148	1152	1156	1161	1163	1167	1165	1164	1165	1164	1161	1161	1156	1155	1156
15	1160	1163	1162	1162	1155	1153	1153	1153	1155	1156	1156	1156	1154	1155	1158	1163	1164	1162	1161	1158	1157	1159	1157	1133	1157
16	1134	1145	1153	1158	1158	1158	1156	1158	1159	1159	1157	1153	1151	1152	1153	1158	1158	1157	1155	1155	1155	1155	1155	1158	1155
17	1157	1158	1149	1145	1151	1152	1152	1153	1151	1151	1149	1149	1151	1151	1155	1158	1158	1158	1156	1158	1156	1155	1155	1157	1154
18 *q*	1160	1161	1162	1163	1162	1162	1162	1163	1164	1161	1153	1150	1149	1151	1155	1158	1158	1157	1156	1156	1155	1155	1155	1155	1158
19 *q*	1156	1158	1158	1159	1158	1159	1159	1160	1161	1157	1152	1146	1144	1146	1152	1156	1156	1157	1157	1156	1155	1158	1155	1156	1155
20	1156	1157	1158	1152	1152	1155	1156	1156	1158	1160	1152	1146	1150	1160	1166	1176	1183	1181	1179	1181	1181	1168	1166	1162	1163
21	1161	1161	1161	1161	1161	1162	1162	1162	1161	1161	1156	1153	1152	1152	1158	1164	1169	1172	1173	1172	1176	1172	1161	1153	1162
22	1156	1158	1159	1159	1159	1159	1159	1161	1161	1164	1160	1160	1159	1168	1182	1189	1198	1201	1214	1199	1179	1170	1165	1160	1171
23	1147	1141	1140	1151	1155	1159	1161	1165	1169	1168	1162	1159	1162	1158	1162	1166	1167	1165	1167	1164	1164	1164	1164	1164	1160
24 *q*	1161	1160	1159	1159	1158	1158	1158	1161	1163	1163	1161	1159	1157	1156	1158	1160	1158	1158	1157	1159	1159	1161	1161	1162	1159
25 *d*	1152	1083	1071	1097	1092	1106	1116	1120	1124	1133	1169	1201	1231	1284	1259	1283	1336	1325	1289	1216	1063	1064	1123	1030	1165
26 *d*	932	1037	1105	1094	1072	1116	1146	1174	1179	1187	1188	1207	1192	1191	1200	1192	1204	1199	1204	1148	1082	1113	1119	1099	*1141*
27	1135	1149	1156	1157	1143	1148	1155	1161	1172	1177	1174	1178	1181	1181	1187	1190	1199	1191	1182	1182	1168	1138	1156	1161	1168
28	1156	1162	1162	1164	1163	1163	1162	1165	1166	1171	1175	1177	1187	1199	1210	1207	1188	1176	1173	1170	1169	1176	1173	1169	1174
29	1170	1171	1170	1161	1151	1151	1155	1159	1160	1165	1168	1169	1176	1179	1181	1191	1191	1195	1207	1192	1183	1167	1151	1162	1172
30	1169	1171	1172	1171	1170	1169	1167	1165	1164	1163	1162	1166	1174	1174	1171	1172	1172	1194	1205	1194	1180	1175	1174	1172	1174
31 *d*	1170	1155	1109	1093	1077	1102	1132	1146	1149	1150	1151	1157	1166	1179	1195	1213	1220	1199	1202	1221	1187	1115	1105	1110	1154
Mean	*1144*	1149	1150	1148	1148	1152	1155	1159	1161	1164	1164	1165	1166	1170	1175	1182	*1186*	1186	1183	1173	1159	1153	1150	1147	1162

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

48 LERWICK — OCTOBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	20 54	490	413	10 39	77	14 00	13·8	-1·4	20 51	15·2	19 59	1184	1040	00 00	144	4,1,1,3,2,1,3,2	17	0	88·0
2	19 55	515	421	13 06	94	14 07	16·6	-19·5	19 48	36·1	17 08	1247	1130	00 45	117	3,1,2,2,3,4,4,1	20	1	86·8
3	05 18	486	407	03 07	79	14 59	13·9	-4·5	16 50	18·4	16 55	1222	1131	02 56	91	3,3,2,2,2,3,2,1	18	1	86·8
4	06 13	490	405	10 35	85	13 47	15·2	1·5	08 54	13·7	20 32	1179	1133	05 06	46	2,3,2,3,1,1,1,2	15	0	86·6
5 *d*	19 39	530	212	22 08	318	19 54	*45·2*	-33·7	22 25	*78·9*	18 33	1293	953	19 51	340	2,2,1,2,3,4,6,6	26	1	86·3
6 *d*	17 06	516	367	03 04	149	02 48	20·4	-6·1	17 03	26·5	16 47	1248	1067	03 02	181	4,4,3,2,2,4,2,2	23	1	83·7
7	23 02	503	425	11 50	78	12 57	18·1	2·0	00 29	16·1	16 23	1182	1143	01 00	39	1,1,1,1,2,2,1,3	12	0	83·5
8	04 04	501	435	11 27	66	12 58	14·9	3·2	23 11	11·7	22 39	1170	1151	12 21	19	2,1,2,2,1,2,1,1	12	0	83·3
9	21 33	529	435	11 52	94	14 03	13·8	-10·0	21 30	23·8	09 52	1172	1084	22 59	88	1,1,1,1,0,2,1,3	10	0	83·6
10	17 59	501	411	13 21	90	12 47	17·8	-7·3	17 37	25·1	17 28	1198	1105	00 00	93	3,2,2,2,3,3,2,1	18	1	83·8
11	18 57	482	413	10 59	69	13 10	14·3	-0·1	18 47	14·4	14 43	1213	1156	05 48	57	0,1,3,2,3,2,2,1	14	0	84·2
12 *q*	19 50	476	443	11 07	33	13 52	10·7	2·8	09 12	7·9	00 57	1168	1159	19 27	*9*	0,0,1,0,1,0,0,1	3	0	84·0
13 *q*	06 59	476	443	12 03	33	12 53	11·9	2·7	20 30	9·2	20 30	1174	1158	06 07	16	0,0,1,1,1,1,2,2	8	0	84·1
14	23 00	487	454	10 31	33	12 52	14·9	3·7	22 30	11·2	15 28	1168	1141	06 48	27	2,1,1,2,2,1,1,1	11	0	84·1
15	23 00	496	450	11 36	46	14 11	11·0	-4·8	23 58	15·8	03 31	1166	1124	23 20	42	0,1,0,1,1,0,0,3	6	0	84·1
16	20 02	494	456	10 53	38	14 01	12·2	-7·1	00 30	19·3	08 45	1161	1127	00 28	34	3,1,1,0,1,1,0,1	8	0	83·1
17	18 43	499	458	12 45	41	13 35	11·1	3·9	06 30	7·2	01 43	1160	1144	03 22	16	1,1,1,1,1,0,1,1	7	0	83·0
18 *q*	21 52	486	449	10 37	37	13 36	11·2	3·9	08 40	7·3	08 33	1164	1148	12 40	16	1,0,0,1,1,1,0,1	5	0	83·0
19 *q*	22 55	490	450	10 40	40	12 48	13·1	4·1	08 37	9·0	08 00	1162	1143	12 00	19	0,0,0,1,1,1,0,1	4	0	81·6
20	04 16	487	446	09 22	41	12 53	17·6	3·4	20 11	14·2	16 08	1186	1144	11 48	42	1,1,1,2,2,2,2,1	12	0	81·4
21	21 35	482	451	11 10	*31*	13 50	14·1	-4·3	21 40	18·4	22 04	1178	1143	22 54	35	0,0,1,1,1,1,1,3	8	0	81·9
22	05 13	481	439	11 46	42	13 52	21·1	3·7	08 10	17·4	18 23	1222	1151	24 00	71	0,0,1,1,2,3,1,1	10	0	81·4
23	20 00	485	439	12 32	46	12 19	13·9	3·0	02 34	10·9	08 36	1170	1133	02 03	37	2,1,1,1,1,1,1,0	8	0	81·5
24 *q*	20 41	486	447	11 53	39	12 33	13·0	2·5	24 00	10·5	23 12	1165	1156	12 52	*9*	0,0,1,1,1,1,0,1	5	0	81·9
25 *d*	15 48	*618*	337	24 00	281	14 12	35·1	-21·3	17 02	56·4	16 09	*1375*	930	23 58	*445*	4,3,4,4,5,5,6,5	36	1	81·8
26 *d*	19 44	545	246	00 17	299	00 13	22·4	-24·9	19 43	47·3	16 29	1224	*903*	00 19	321	5,5,3,3,3,4,5,3	31	1	81·9
27	21 20	494	431	03 38	63	12 50	13·2	-8·5	16 43	21·7	16 33	1204	1129	21 25	75	3,2,2,2,2,2,3,3	20	1	81·5
28	22 42	473	433	10 30	40	14 21	15·7	-1·5	21 42	17·2	15 07	1217	1154	00 28	63	1,1,1,1,3,3,0,2	12	0	81·1
29	18 44	486	439	22 04	47	15 37	12·3	-5·4	21 33	17·7	18 23	1223	1136	22 01	87	0,2,2,1,1,3,3,3	15	0	81·2
30	17 02	485	440	18 53	45	12 02	13·1	-13·7	18 00	26·8	18 01	1215	1161	09 43	54	1,1,1,1,2,4,4,2	16	0	81·2
31 *d*	20 10	554	*209*	21 15	*345*	15 48	23·7	*-36·6*	21 03	60·3	20 10	1270	1061	21 14	209	3,3,3,2,3,3,5,6	28	1	81·0
Mean	- -	501	410	- -	91	- -	16·6	-5·5	- -	22·1	- -	1203	1111	- -	92	-	-	0·29	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.

49 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — NOVEMBER 1955

	Hour G.M.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	Mean
	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	424	441	444	430	439	469	465	455	454	449	440	436	439	447	454	458	464	462	471	467	453	462	469	462	452
2	459	458	456	461	466	464	469	466	463	458	452	443	443	453	458	464	459	455	464	473	480	478	475	477	462
3 q	473	473	472	473	473	472	472	468	462	448	443	445	448	458	468	470	470	472	473	477	477	471	469	473	467
4 d	462	449	465	468	457	429	463	465	467	468	454	439	454	461	463	468	462	468	466	466	454	410	401	421	453
5	446	450	447	446	458	477	469	469	448	443	440	447	447	450	458	462	463	465	466	462	465	462	460	459	457
6 q	467	473	469	468	469	472	475	474	467	458	450	447	449	452	457	462	465	469	472	469	472	471	465	466	465
7 q	472	468	466	468	469	471	473	476	469	461	453	450	454	455	460	467	470	472	473	477	477	477	475	474	468
8	475	478	478	479	478	482	492	489	477	470	467	463	461	463	468	473	475	475	468	475	477	475	453	418	471
9	463	461	464	467	468	463	467	471	469	463	460	451	450	456	464	467	471	471	469	471	473	475	471	474	466
10	472	467	466	468	471	474	475	475	470	462	453	445	449	457	464	470	476	471	474	473	474	475	479	479	468
11	474	471	475	474	476	479	479	478	471	463	455	453	457	461	468	473	464	475	474	475	471	483	478	477	471
12	474	473	475	475	475	479	479	479	438	419	435	438	458	456	461	469	482	490	504	459	466	467	468	468	466
13	467	466	463	459	464	469	474	471	467	457	449	448	452	456	461	465	469	470	469	471	473	472	471	475	465
14	470	469	469	471	473	474	474	471	468	461	453	451	460	467	474	467	476	479	481	481	477	475	478	479	471
15	479	478	478	479	482	482	488	473	469	468	456	449	448	460	456	448	452	453	456	441	438	453	419	443	460
16 d	445	429	389	435	451	451	453	456	452	449	452	452	453	459	471	460	461	464	467	464	441	419	450	460	449
17	457	451	461	460	463	464	468	468	462	453	446	444	449	452	452	456	464	468	469	467	464	460	463	464	459
18 d	464	464	464	460	460	467	469	476	453	458	458	457	467	464	472	479	487	605	746	509	507	482	452	448	486
19 d	447	438	441	449	453	455	455	458	460	427	383	416	466	604	1252	965	504	555	452	425	431	428	400	394	*507*
20 d	332	294	398	418	423	420	418	408	379	414	408	412	471	479	460	480	580	551	470	387	386	368	410	375	*423*
21	404	400	425	431	448	452	448	445	439	435	434	435	436	440	444	447	449	452	453	455	455	459	459	457	442
22 q	455	455	455	457	460	460	460	463	460	453	449	442	434	436	445	449	455	458	458	460	461	463	464	463	455
23 q	461	461	460	464	468	467	465	464	460	454	450	454	453	456	461	463	465	467	467	466	463	466	461	459	461
24	465	468	468	468	469	471	474	469	460	458	458	454	449	456	456	460	456	453	452	460	457	456	463	457	461
25	460	459	467	467	469	475	471	474	464	457	458	456	449	445	462	468	449	463	468	471	469	466	466	470	463
26	476	465	469	470	473	474	479	476	468	460	450	450	453	458	457	462	467	471	472	471	469	467	463	465	466
27	478	470	470	472	473	475	475	472	471	460	458	453	454	461	467	465	469	468	472	473	471	463	460	472	468
28	471	468	470	473	476	477	475	475	474	467	449	440	451	459	463	464	458	469	471	475	472	454	408	452	463
29	465	468	463	464	472	479	479	474	467	464	457	450	456	459	460	465	467	464	465	467	457	453	465	468	465
30	468	470	470	468	474	474	478	476	472	468	464	459	458	463	460	461	465	468	460	468	472	470	468	468	468
Mean	457	455	459	461	465	467	469	468	460	454	448	*446*	452	461	*487*	481	471	477	477	465	463	459	456	457	463

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

50 LERWICK (D) — 10° + — NOVEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	5·3	5·8	4·2	3·1	6·3	1·0	5·1	4·1	4·6	5·7	6·8	8·6	9·9	11·0	9·9	8·5	7·4	8·0	2·4	-4·5	5·6	5·5	6·8	6·6	5·7
2	5·6	5·7	7·4	6·3	5·5	5·4	4·9	4·9	4·1	5·2	8·7	10·7	10·9	11·1	10·5	7·9	8·7	7·8	8·3	7·7	7·5	6·7	5·5	4·2	7·1
3 q	5·6	6·2	6·7	6·8	6·2	6·2	5·9	5·4	4·6	4·2	6·0	8·5	9·7	9·5	10·2	9·5	8·2	7·6	7·4	7·1	8·0	8·7	7·5	6·6	7·2
4 d	3·7	-3·3	4·0	14·2	21·4	17·3	13·0	1·4	2·4	4·1	7·5	8·3	8·1	8·5	7·7	6·3	6·8	8·1	7·4	4·2	-3·5	-1·1	-2·0	-11·2	5·6
5	-7·0	-3·2	0·4	2·5	6·8	2·7	4·2	5·7	6·1	7·8	8·2	10·1	10·9	11·0	10·7	8·7	7·9	7·3	8·3	7·6	6·5	5·9	3·7	5·5	5·8
6 q	5·3	3·5	4·9	5·9	5·4	4·6	4·7	4·6	4·3	4·3	5·6	7·8	9·3	9·9	9·0	8·2	7·6	7·3	7·1	6·8	2·9	3·6	3·5	4·6	5·9
7 q	4·1	4·9	5·7	5·2	4·9	5·6	5·7	5·1	4·9	5·1	6·1	8·1	10·0	10·9	9·7	8·7	8·7	9·2	8·2	7·4	6·7	6·5	6·3	6·3	6·8
8	6·5	7·2	7·1	6·0	5·4	7·4	7·8	8·0	7·1	7·5	9·4	10·3	10·7	11·0	12·1	16·7	19·8	9·2	10·9	7·0	7·3	5·8	3·7	-1·7	*8·4*
9	8·6	5·7	5·4	5·9	3·0	5·5	5·1	5·2	5·5	4·5	7·1	8·5	9·8	10·9	11·4	10·6	10·5	9·6	9·5	8·0	7·1	6·3	5·9	5·6	7·3
10	4·4	5·2	6·1	6·1	6·2	5·7	5·2	4·9	3·7	3·9	6·3	8·2	9·9	10·4	10·4	8·7	8·4	8·1	7·1	0·4	6·5	6·1	6·8	3·6	6·3
11	2·4	5·9	6·1	7·3	6·6	6·1	6·2	5·7	4·7	4·7	5·8	8·1	10·7	11·3	12·3	11·1	8·8	7·5	7·8	5·8	2·6	-2·1	4·5	6·1	6·5
12	6·5	7·4	6·3	5·5	5·9	5·9	5·8	4·9	3·4	10·8	13·0	15·7	15·1	11·7	10·7	10·4	13·5	11·4	-0·9	8·3	6·3	5·7	5·9	5·3	8·1
13	6·1	6·1	4·5	4·7	1·7	2·9	4·9	4·4	4·1	4·8	6·7	9·4	11·5	11·2	10·2	9·0	8·5	8·1	6·7	6·9	6·3	6·0	6·0	5·5	6·5
14	4·9	6·0	6·5	6·2	5·8	5·8	5·7	5·2	4·7	5·0	6·1	8·1	10·8	10·5	11·1	9·0	8·8	10·3	9·1	8·8	2·2	5·6	5·7	5·5	7·0
15	7·2	7·2	6·8	6·5	6·6	7·4	7·3	7·3	7·7	9·4	9·0	13·2	16·3	16·9	15·5	13·5	8·7	4·9	7·3	-4·9	-5·9	-1·2	3·5	1·2	7·1
16 d	-2·5	0·3	5·9	-0·1	4·5	6·8	17·0	14·2	9·5	6·8	7·3	9·9	11·2	15·0	18·4	14·5	13·5	10·7	6·0	-1·6	-1·8	-0·8	-7·6	2·1	6·6
17	3·9	4·3	5·0	2·7	14·4	5·1	5·1	5·5	5·1	4·9	6·2	7·4	8·7	9·4	10·2	9·3	7·8	6·6	6·1	6·0	5·5	3·7	5·3	5·2	6·4
18 d	6·1	5·5	4·9	4·4	5·3	4·8	9·8	9·9	7·5	6·2	8·4	10·9	13·5	14·0	12·0	14·9	18·0	-1·6	19·8	11·9	4·5	2·5	1·3	5·7	8·3
19 d	8·9	8·3	4·4	4·4	4·5	4·4	4·2	4·3	5·1	3·9	3·6	6·1	12·6	22·0	27·0	18·3	12·9	4·9	5·0	2·0	5·1	4·9	2·4	-14·0	6·9
20 d	1·6	6·1	-6·6	-4·7	2·2	1·7	6·5	7·0	9·3	10·4	6·3	8·3	9·2	11·0	13·6	12·7	9·1	0·1	0·6	-7·1	-10·8	-6·3	2·6	-8·3	*3·1*
21	-1·8	2·2	8·8	8·2	8·8	6·5	6·1	6·5	6·4	6·1	5·9	6·3	7·2	7·4	7·1	6·2	6·0	5·5	5·4	5·2	4·9	5·0	5·1	5·2	5·8
22 q	5·0	5·1	5·1	5·3	5·3	5·1	5·0	5·5	4·4	4·5	6·3	8·8	9·1	9·9	9·7	7·3	5·9	5·1	4·9	4·9	4·6	4·7	5·2	5·3	5·9
23 q	5·3	5·2	5·2	5·3	5·5	6·0	5·3	4·3	4·5	3·7	4·5	7·1	7·9	8·5	8·4	7·7	7·3	6·2	6·1	6·3	6·6	-0·2	2·0	3·7	5·5
24	6·3	6·6	5·5	5·2	5·7	5·6	5·4	6·5	5·5	5·8	7·6	8·5	11·6	11·6	13·2	14·2	14·6	11·8	8·7	6·1	3·9	3·4	2·7	1·7	7·4
25	5·9	11·1	3·7	3·5	4·5	4·9	5·2	5·2	6·1	6·6	7·5	9·9	11·6	10·3	10·3	12·2	2·6	7·5	6·1	5·9	5·3	4·5	4·5	5·5	6·7
26	5·1	8·9	4·9	3·8	3·7	4·9	5·1	5·5	5·1	5·2	6·0	8·1	9·2	9·3	8·5	8·0	7·5	6·9	6·8	6·3	5·2	3·5	2·6	5·0	6·0
27	5·8	6·4	6·8	6·6	6·4	6·1	5·6	5·9	5·6	5·4	7·2	9·2	9·9	10·9	11·8	9·7	8·5	7·5	6·9	6·5	6·1	4·6	4·5	5·9	7·1
28	5·1	6·6	6·8	6·3	6·4	6·1	5·6	5·2	5·2	5·9	7·9	11·6	12·1	10·9	10·7	9·1	7·4	6·9	6·5	6·5	5·9	1·7	-5·3	-3·5	6·1
29	2·4	5·3	3·0	4·3	6·1	4·8	5·2	6·2	7·1	7·2	6·8	8·5	8·2	8·4	8·5	7·5	7·3	6·4	5·2	5·3	-0·7	2·0	3·9	6·1	5·6
30	6·2	6·3	6·1	6·9	6·8	4·7	5·5	5·3	5·4	5·4	6·5	8·1	8·9	9·7	10·0	8·4	9·0	7·6	5·1	5·5	5·6	5·5	4·9	5·5	6·6
Mean	4·4	5·3	5·1	5·1	6·3	5·6	6·3	5·8	5·5	5·8	7·0	9·1	10·5	11·1	*11·4*	10·2	9·3	7·2	6·9	4·9	3·9	3·6	3·6	*2·8*	6·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

51 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — NOVEMBER 1955

	Hour G.M.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	Mean
	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	1127	1139	1165	1149	1087	1092	1126	1151	1166	1171	1172	1174	1174	1174	1176	1176	1175	1184	1196	1181	1172	1167	1157	1153	1159
2	1166	1170	1171	1170	1171	1174	1171	1174	1173	1171	1170	1171	1176	1181	1203	1203	1196	1201	1192	1183	1174	1172	1170	1166	1178
3 *q*	1167	1167	1168	1169	1170	1169	1170	1169	1169	1172	1170	1168	1166	1162	1164	1167	1171	1170	1170	1168	1166	1164	1165	1159	1167
4 *d*	1147	1112	1109	1067	1025	1022	1044	1101	1141	1155	1163	1170	1168	1168	1173	1178	1180	1178	1178	1181	1186	1164	1077	1109	*1133*
5	1111	1115	1117	1117	1115	1122	1150	1161	1170	1175	1170	1166	1176	1177	1174	1177	1179	1179	1179	1183	1181	1179	1177	1166	1159
6 *q*	1150	1150	1156	1160	1162	1164	1165	1166	1171	1174	1175	1172	1169	1169	1170	1171	1172	1172	1172	1173	1172	1170	1169	1166	1167
7 *q*	1158	1151	1153	1158	1162	1164	1166	1168	1172	1176	1177	1176	1173	1172	1175	1175	1174	1173	1172	1171	1172	1171	1170	1169	1169
8	1167	1164	1160	1158	1158	1157	1158	1157	1164	1166	1162	1166	1173	1174	1181	1204	1257	1244	1248	1208	1182	1174	1178	1164	1180
9	1074	1143	1163	1167	1164	1163	1162	1165	1168	1171	1169	1171	1172	1172	1171	1170	1170	1171	1172	1172	1171	1172	1175	1174	1164
10	1170	1170	1169	1168	1168	1166	1165	1166	1170	1174	1174	1174	1174	1172	1170	1169	1169	1172	1172	1178	1169	1170	1165	1152	1169
11	1154	1159	1159	1164	1165	1164	1163	1164	1168	1169	1173	1171	1168	1170	1173	1172	1178	1174	1170	1170	1172	1159	1155	1161	1166
12	1166	1167	1168	1167	1166	1162	1161	1163	1179	1176	1161	1164	1165	1168	1168	1170	1176	1221	1320	1236	1211	1188	1176	1169	1182
13	1172	1174	1173	1169	1162	1170	1168	1171	1172	1172	1171	1172	1173	1173	1175	1176	1176	1178	1181	1176	1174	1173	1172	1168	1173
14	1172	1174	1174	1173	1172	1170	1168	1168	1168	1168	1172	1168	1166	1168	1171	1179	1178	1173	1172	1175	1184	1178	1173	1169	1172
15	1169	1169	1171	1171	1169	1167	1161	1166	1163	1163	1169	1177	1198	1217	1215	1217	1227	1229	1220	1246	1205	1170	1135	1092	1183
16 *d*	1114	1097	1034	1024	1096	1119	1113	1126	1148	1166	1178	1183	1191	1197	1215	1213	1228	1266	1302	1292	1240	1143	1113	1152	1165
17	1163	1160	1166	1166	1107	1134	1159	1170	1174	1178	1178	1177	1176	1182	1184	1184	1179	1179	1178	1176	1178	1184	1181	1176	1170
18 *d*	1172	1174	1174	1171	1158	1124	1142	1156	1171	1172	1169	1168	1167	1174	1176	1174	1185	1320	1267	1298	1261	1231	1218	1207	1193
19 *d*	1204	1202	1194	1192	1189	1187	1186	1182	1181	1192	1212	1241	1270	1326	1201	1332	1393	1348	1267	1215	1196	1207	1217	1138	*1228*
20 *d*	1092	963	1040	1133	1141	1144	1149	1175	1191	1220	1238	1238	1267	1271	1266	1327	1342	1297	1295	1202	1179	1151	1113	1056	1187
21	1035	1060	1086	1135	1149	1167	1177	1185	1188	1194	1195	1194	1191	1188	1188	1188	1187	1187	1188	1187	1187	1187	1185	1185	1167
22 *q*	1185	1184	1184	1182	1182	1183	1184	1182	1182	1185	1185	1187	1192	1192	1189	1188	1187	1188	1187	1185	1184	1182	1181	1181	1185
23 *q*	1180	1179	1178	1178	1176	1178	1177	1179	1182	1184	1184	1178	1175	1174	1174	1178	1178	1178	1179	1182	1186	1185	1184	1182	1179
24	1179	1178	1178	1176	1175	1174	1172	1174	1177	1178	1178	1180	1183	1182	1188	1192	1202	1215	1221	1211	1210	1197	1178	1168	1186
25	1167	1121	1132	1150	1164	1168	1172	1173	1176	1177	1176	1174	1178	1184	1182	1184	1210	1189	1181	1176	1176	1179	1179	1176	1173
26	1166	1163	1162	1162	1164	1166	1165	1168	1172	1177	1180	1180	1179	1178	1178	1179	1176	1174	1173	1174	1177	1179	1181	1176	1173
27	1149	1164	1172	1172	1172	1172	1170	1171	1172	1176	1177	1182	1184	1179	1180	1183	1181	1181	1178	1175	1178	1184	1186	1174	1175
28	1167	1173	1174	1173	1170	1169	1169	1168	1169	1170	1177	1178	1178	1178	1179	1184	1189	1180	1177	1174	1175	1183	1119	1120	1171
29	1156	1161	1162	1165	1164	1166	1167	1168	1168	1168	1172	1179	1180	1180	1180	1182	1182	1182	1182	1176	1182	1178	1174	1174	1173
30	1176	1176	1178	1178	1168	1168	1166	1167	1169	1170	1172	1176	1178	1177	1185	1188	1187	1188	1192	1185	1178	1176	1175	1174	1177
Mean	1153	*1149*	1153	1156	1153	1155	1159	1165	1171	1175	1177	1179	1183	1186	1184	1193	1199	*1203*	1203	1194	1186	1177	1167	1159	1174

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

52 LERWICK — NOVEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	h. m.	γ	γ	′	′	′	h. m.	γ	h. m.	γ	γ				°A.
1	18 54	525	03 57	403	122	13 20	11·5	−17·7	18 52	29·2	18 50	1207	04 57	1073	134	3,4,3,1,1,2,4,2	20	1	81·0
2	20 27	488	11 51	435	53	14 08	13·7	3·4	08 14	10·3	14 46	1220	00 00	1161	59	1,1,1,2,3,2,2,1	13	0	81·8
3 *q*	20 50	480	10 31	442	38	14 45	10·4	3·3	09 14	*7·1*	09 24	1172	23 59	1154	18	0,0,1,1,1,1,1,1	6	0	79·6
4 *d*	04 11	492	21 58	360	132	04 43	29·6	−14·6	23 38	44·2	20 40	1190	05 00	1003	187	3,4,4,3,1,1,3,4	23	1	79·9
5	05 23	480	10 10	431	49	12 55	12·6	−8·8	00 54	21·4	19 42	1184	00 52	1102	82	3,3,2,2,1,1,1,2	15	0	80·1
6 *q*	20 35	481	11 03	446	35	13 33	10·2	0·9	20 35	9·3	20 08	1179	01 00	1145	34	2,0,0,1,0,0,2,2	7	0	80·5
7 *q*	19 21	478	11 49	448	30	12 50	11·4	2·9	00 23	8·5	10 10	1178	01 10	1149	29	1,0,0,1,0,0,1,1	4	0	80·7
8	06 58	496	23 34	362	134	16 14	26·2	−11·7	23 33	37·9	17 07	1270	24 00	1090	180	1,1,1,1,2,4,4,5	19	1	83·4
9	00 00	493	00 33	438	55	00 20	15·7	0·6	01 05	15·1	23 11	1178	00 18	1042	136	4,2,1,2,1,0,1,1	12	0	84·0
10	22 54	487	11 39	441	46	14 07	11·4	−2·3	19 07	13 7	19 07	1183	23 05	1145	38	1,0,1,1,1,1,3,2	10	0	84·2
11	21 37	488	11 14	453	35	14 25	12·6	−3·9	21 05	16·5	16 42	1182	00 19	1153	29	2,1,1,1,1,2,2,3	13	0	84·1
12	18 01	601	09 10	401	200	11 34	22·0	−9·1	18 17	31·1	18 14	1350	10 08	1155	195	1,0,3,3,2,5,5,2	21	1	84·0
13	23 44	485	11 24	442	43	12 57	12·4	0·5	04 33	11·9	18 23	1184	04 34	1158	26	1,1,0,2,1,1,1,1	8	0	83·5
14	20 39	489	10 52	449	40	12 24	12·3	−1·5	20 28	13·8	20 23	1192	12 30	1165	27	0,0,0,1,1,2,3,1	8	0	83·4
15	06 09	494	22 58	387	107	12 58	22·8	−10·9	19 50	33·7	19 42	1267	23 37	1086	181	1,1,2,3,2,3,4,4	20	1	83·3
16 *d*	14 13	481	02 10	344	137	14 36	20·9	−17·6	22 18	38·5	18 18	1314	03 11	973	341	4,5,3,2,3,4,4,4	29	1	83·2
17	04 25	483	11 11	442	41	04 21	21·2	0·8	03 25	20·4	21 42	1187	04 38	1081	106	2,4,2,1,1,1,0,2	13	0	83·2
18 *d*	18 27	884	19 43	393	491	18 21	64·9	−20·7	17 43	85·6	18 04	1385	05 36	1111	274	1,3,3,2,2,6,7,4	28	1	83·6
19 *d*	14 37	*1689*	23 16	*1333*	*111·2*	14 38	−27·7	23 28	*138·9*	15 18	*1539*	*906*	14 37	*633*	2,1,2,3,9,8,5,4	34	2	83·8
20 *d*	16 51	774	*210*	00 43	564	17 34	27·9	*−34·9*	17 10	62·8	17 05	1413	922	01 21	491	5,3,3,3,4,6,5,4	33	1	83·8
21	21 48	460	331	00 00	129	02 41	11·2	−7·2	01 08	18·4	10 50	1195	1030	00 11	165	4,3,1,1,0,0,0,1	10	0	83·5
22 *q*	07 54	465	430	12 38	35	14 13	10·9	3·7	09 37	7·2	12 29	1194	1179	24 00	*15*	0,0,1,1,1,1,0,1	5	0	83·7
23 *q*	21 55	476	448	11 03	*28*	11 43	10·2	−4·2	21 48	14·4	21 25	1189	1173	14 22	16	0,0,1,2,1,0,1,3	8	0	83·1
24	06 10	478	444	18 20	34	16 10	16·2	−0·6	23 08	16·8	18 20	1225	1165	23 00	60	1,0,1,1,2,2,3,3	13	0	83·0
25	24 00	490	438	13 11	52	01 00	23·4	−1·6	16 24	25·0	16 32	1220	1108	01 24	112	4,2,1,1,2,3,0,2	15	1	83·0
26	00 07	497	445	10 16	52	23 59	12·7	0·7	22 11	12·0	22 35	1182	1157	01 30	25	2,1,1,1,0,0,0,3	8	0	80·0
27	00 20	485	449	11 41	36	00 01	13·1	2·6	22 15	10·5	22 00	1190	1139	00 21	51	3,0,0,1,1,1,0,2	8	0	80·2
28	04 48	478	373	22 42	105	12 51	13·1	−22·7	22 52	35·8	16 18	1192	1046	22 36	146	1,0,0,2,1,1,1,5	11	0	79·9
29	06 40	482	445	21 17	37	11 53	9·6	−2·2	20 23	11·8	20 42	1187	1146	00 00	41	1,1,1,1,1,1,2,2	10	0	79·4
30	04 49	482	453	14 42	29	14 38	10·3	3·2	05 09	*7·1*	18 38	1196	1162	04 50	34	0,2,0,1,1,1,2,1	8	0	80·0
Mean	− −	552	411	− −	141	− −	20·4	−6·6	− −	27·0	− −	1232	1103	− −	129	−	−	0·37	82·2

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.

53 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — DECEMBER 1955

	Hour G.M.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	Mean
	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*	470	470	473	475	475	476	476	475	480	472	458	456	464	471	456	474	471	498	702	646	425	351	333	358	471
2	367	389	384	421	441	462	443	444	433	436	442	449	456	450	455	460	463	464	463	463	463	463	463	461	*443*
3	460	461	463	465	466	469	472	469	469	466	459	452	450	450	459	459	461	471	478	475	484	462	475	469	465
4	470	454	463	469	471	476	469	467	463	458	454	456	460	463	463	466	467	469	470	471	469	471	472	469	466
5	467	467	468	472	476	477	471	470	464	463	460	463	470	472	475	471	473	474	471	478	477	473	497	482	472
6 *d*	455	454	447	453	449	458	463	456	453	453	453	452	461	465	466	468	471	471	471	474	469	471	445	438	459
7	460	458	451	474	457	458	458	460	459	460	456	459	461	464	467	471	475	475	474	474	474	474	475	472	465
8	471	474	477	471	474	484	478	471	467	463	463	461	462	463	471	472	461	470	473	477	467	456	460	469	469
9	473	460	466	467	473	485	482	470	463	467	463	454	450	445	459	462	465	475	472	472	471	469	471	471	467
10	470	471	468	468	467	471	472	470	471	469	463	461	456	457	469	473	469	467	467	478	471	474	474	475	469
11	473	473	472	473	472	471	471	470	470	468	460	456	456	462	472	475	475	477	475	478	478	475	471	472	471
12	478	474	473	474	475	475	475	475	473	469	467	465	464	469	475	481	481	478	477	475	467	469	471	473	473
13 *q*	472	472	472	473	475	476	477	476	475	470	463	460	460	469	475	478	477	482	481	481	481	482	481	479	474
14 *q*	478	479	479	480	482	484	486	484	486	482	475	470	467	472	476	479	482	482	483	482	482	481	478	478	479
15	478	482	478	473	473	478	482	482	482	478	472	469	469	475	478	480	482	483	477	466	463	465	466	473	475
16	467	469	470	475	481	487	489	489	481	475	475	470	464	462	461	469	468	468	473	475	478	475	475	475	474
17	475	478	476	478	480	485	482	482	482	478	473	470	471	473	474	475	471	471	473	478	477	476	475	477	476
18 *q*	475	475	479	482	482	485	485	486	486	481	472	464	465	468	475	478	483	484	486	486	485	482	479	478	479
19	478	476	476	478	482	486	487	485	477	472	476	475	469	466	476	479	465	460	466	451	456	458	460	468	472
20	463	466	462	478	481	474	476	485	478	473	466	459	458	466	466	456	465	470	473	475	472	467	460	461	469
21	464	467	467	475	478	482	487	486	480	472	467	466	461	465	462	462	463	459	466	463	452	456	448	460	467
22	465	466	467	471	479	483	483	480	473	467	461	460	462	467	467	467	473	475	472	473	476	475	474	475	471
23 *q*	475	478	478	478	483	486	484	484	480	474	470	467	467	472	475	475	476	478	479	477	476	473	472	475	476
24	478	477	476	476	480	482	483	486	485	480	477	475	476	480	486	487	477	476	480	482	483	486	485	493	*481*
25 *d*	465	467	467	468	478	463	496	487	475	470	465	461	469	472	452	462	479	491	474	478	454	462	461	462	470
26 *d*	463	463	462	467	472	475	477	473	468	467	460	442	442	456	467	474	449	463	470	465	460	470	403	382	458
27 *d*	436	443	447	427	469	482	470	472	466	454	446	451	455	465	460	463	465	475	467	469	469	475	466	467	461
28	467	467	469	470	472	475	476	476	478	475	464	466	467	471	469	457	461	464	462	461	467	470	472	471	469
29 *q*	471	471	471	475	477	479	479	477	473	468	466	465	467	469	475	476	476	476	478	475	475	475	475	474	473
30	474	472	472	473	476	481	481	479	479	475	471	470	470	468	469	465	473	474	478	479	479	481	482	481	475
31	480	477	478	479	485	488	485	482	486	487	475	474	474	478	464	482	475	463	470	469	473	467	468	471	476
Mean	466	466	466	471	474	477	477	476	473	469	464	*462*	463	466	468	471	471	474	*481*	479	470	467	464	465	470

479 at 0-1h. January 1, 1956.

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

54 LERWICK (D) — 10° + — DECEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *d*	6·5	10·7	6·5	7·1	6·7	5·9	5·9	5·4	5·6	6·3	8·3	11·4	12·2	12·4	11·3	14·2	14·6	10·7	15·9	20·3	9·7	−1·7	−7·6	−12·9	7·7
2	−15·1	−13·6	−12·1	−15·0	−6·2	3·0	8·5	13·5	11·2	9·7	11·2	10·4	11·4	9·7	8·7	7·5	6·8	6·1	5·9	5·1	4·6	4·5	4·4	4·7	3·5
3	5·0	5·5	5·6	6·1	5·9	5·7	5·6	5·3	5·4	5·4	6·5	8·8	10·2	11·7	12·3	10·8	11·5	7·7	7·1	8·1	0·6	4·2	6·0	5·5	6·9
4	6·4	2·3	6·9	6·2	5·7	5·6	5·7	5·5	5·4	5·1	6·1	8·2	8·2	7·9	7·6	7·4	7·1	6·4	6·2	6·1	5·5	5·2	4·4	4·9	6·1
5	5·2	5·3	6·2	6·3	6·2	6·1	6·1	6·0	6·0	6·2	6·9	8·1	9·3	10·0	10·0	9·1	9·2	8·6	6·5	7·9	7·5	5·6	1·3	−7·9	6·3
6 *d*	−1·9	−0·6	−2·0	1·8	−2·1	0·1	0·0	3·7	4·1	5·2	5·9	7·6	8·8	8·6	8·6	7·5	7·2	6·8	6·3	6·0	4·6	−8·4	−5·1	−2·3	*2·9*
7	−0·4	3·4	1·3	0·9	4·6	2·3	3·4	3·9	4·4	6·2	7·1	9·1	8·8	8·1	8·1	7·7	6·9	6·3	6·1	5·7	5·5	5·4	5·2	5·5	5·2
8	6·2	6·0	5·4	6·0	6·8	4·1	5·0	4·5	4·2	4·7	6·6	6·7	8·5	9·1	9·8	10·6	6·8	7·8	7·2	6·2	−3·8	−1·5	3·5	4·6	5·6
9	4·6	8·7	3·6	4·3	5·9	6·2	6·7	9·6	7·5	5·3	6·3	8·0	10·1	10·8	10·4	8·6	6·1	8·0	8·1	7·1	5·4	4·7	4·6	4·5	6·9
10	4·5	6·1	5·2	5·3	5·2	5·4	5·5	5·2	5·1	4·8	5·6	7·6	8·9	10·0	8·2	8·0	8·6	10·9	6·8	6·5	6·5	5·5	5·0	5·4	6·5
11	5·7	6·3	5·8	5·7	5·9	5·5	5·2	5·2	4·9	4·8	4·9	6·5	8·5	9·1	8·9	8·9	8·0	8·5	8·3	6·7	6·1	4·6	2·0	0·2	6·1
12	4·2	5·3	6·2	6·3	5·9	5·6	5·6	5·6	5·2	5·4	6·2	7·4	8·7	9·2	9·3	9·1	9·0	11·1	9·9	6·3	8·2	3·9	2·7	4·9	6·7
13 *q*	5·7	6·3	6·5	6·2	5·9	5·6	5·2	5·1	5·1	5·1	6·0	7·5	8·1	8·7	8·7	8·7	8·0	8·5	8·3	6·9	6·1	5·6	5·8	5·6	6·6
14 *q*	6·1	6·3	6·7	7·0	7·0	6·7	6·3	6·2	6·1	6·0	6·3	7·4	8·4	9·1	8·8	8·1	7·7	7·6	7·3	7·0	6·5	6·3	6·1	5·6	6·9
15	5·1	3·6	4·1	5·7	5·8	5·9	5·8	5·6	5·6	6·1	6·5	8·3	9·9	10·2	9·9	9·1	9·4	9·3	8·0	4·4	6·9	5·1	1·1	−2·4	6·2
16	3·9	6·6	7·7	8·3	3·5	3·9	5·1	6·0	6·1	7·7	8·7	11·2	13·5	13·0	11·0	10·2	11·6	8·9	10·6	7·1	6·1	5·4	6·1	6·1	*7·8*
17	6·0	6·8	7·8	7·9	7·9	6·5	6·3	5·7	5·6	5·6	6·3	7·7	8·0	8·8	8·7	8·3	9·1	9·4	8·0	6·7	6·0	5·1	5·1	5·2	7·0
18 *q*	5·8	7·2	7·7	6·2	6·2	6·3	5·8	5·6	5·7	5·8	6·3	7·0	8·2	8·7	8·3	7·7	7·4	7·3	7·2	6·5	6·1	5·5	5·1	5·1	6·6
19	5·3	5·5	6·1	6·3	6·5	6·7	6·8	6·3	6·3	6·3	9·1	10·1	11·1	13·1	13·5	14·5	21·2	11·1	8·6	2·9	1·5	1·6	1·5	−1·0	7·5
20	0·1	0·6	5·1	8·6	3·5	7·2	10·4	9·1	8·3	9·2	9·4	8·9	10·3	13·1	17·6	14·7	9·7	8·0	7·7	6·5	6·3	4·6	2·2	1·9	7·6
21	2·2	6·1	7·2	7·0	6·5	7·3	7·5	6·7	6·1	6·5	8·6	8·7	12·0	13·4	17·2	17·2	11·1	9·9	7·6	5·6	2·9	1·1	−1·0	2·0	7·5
22	4·4	7·0	7·0	7·5	8·9	6·4	5·5	5·5	5·6	5·7	5·9	6·5	7·5	9·1	8·3	8·5	7·5	7·6	7·5	6·7	5·8	5·3	5·3	5·7	6·7
23 *q*	5·9	5·9	6·3	6·8	7·0	6·1	5·3	4·7	4·1	5·1	6·3	6·6	7·3	8·0	7·2	6·7	6·7	6·7	6·7	7·0	6·4	5·4	4·4	5·1	6·1
24	6·3	7·0	7·5	7·2	6·3	6·3	6·2	6·1	5·8	6·1	6·8	8·9	10·0	10·7	9·9	10·9	11·8	9·6	8·9	7·3	5·7	5·1	5·3	−1·1	7·3
25 *d*	−7·9	−3·8	1·5	2·2	2·4	9·7	8·4	9·4	8·0	5·9	7·1	8·3	11·5	14·7	18·7	18·5	14·2	13·7	6·3	0·6	−3·0	3·4	4·8	4·3	6·6
26 *d*	4·8	5·4	5·6	6·1	5·8	5·6	5·3	5·1	5·1	5·8	7·7	8·0	10·4	13·1	13·7	20·3	15·1	7·8	6·7	6·5	−2·1	−17·0	−7·4	−7·0	5·4
27 *d*	−7·2	3·2	11·6	6·1	−1·3	4·6	6·1	6·3	6·5	7·7	8·5	10·7	8·2	10·1	9·4	7·4	4·8	1·5	6·6	6·3	5·1	6·3	3·4	5·3	5·7
28	5·8	6·1	6·5	6·3	5·8	5·7	5·1	5·1	4·5	6·3	7·2	8·1	8·6	9·3	8·7	7·0	6·5	9·6	5·1	2·4	4·9	4·5	3·8	5·3	6·2
29 *q*	6·3	6·6	6·3	6·5	6·5	6·2	5·8	5·4	5·1	5·3	5·9	6·7	7·6	7·7	7·1	6·9	6·9	7·1	6·9	5·7	4·8	4·6	4·6	4·7	6·1
30	5·1	6·1	6·8	6·5	6·1	6·3	6·1	5·7	5·5	6·1	6·7	7·8	8·7	9·7	10·4	8·9	8·2	7·6	7·0	6·4	5·6	5·4	5·2	4·5	6·8
31	5·5	6·1	6·4	7·0	8·0	8·1	6·3	6·1	5·8	6·2	6·2	8·8	8·2	9·5	9·2	8·5	11·1	11·7	9·3	4·2	−1·4	1·0	1·0	−1·1	6·3
Mean	3·2	4·6	5·3	5·4	5·1	5·7	5·9	6·1	5·8	6·1	7·0	8·3	9·4	10·2	*10·3*	10·0	9·3	8·4	7·7	6·4	4·5	3·1	2·9	*2·3*	6·4

−3·5 at 0-1h. January 1, 1956.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

55 LERWICK (Z) — 46,000γ (0·46 C.G.S. unit) + — DECEMBER 1955

	Hour G.M.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	Mean
	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*	1170	1161	1163	1172	1176	1176	1174	1172	1168	1170	1175	1174	1174	1186	1197	1199	1267	1280	1325	1297	1241	1167	1081	1095	*1190*
2	1097	1109	1086	1092	1089	1097	1127	1136	1156	1162	1167	1174	1180	1183	1182	1186	1185	1186	1185	1184	1182	1179	1178	1178	*1153*
3	1178	1176	1180	1181	1181	1182	1179	1180	1178	1177	1174	1176	1179	1186	1197	1210	1207	1192	1186	1205	1224	1213	1184	1182	1188
4	1179	1179	1175	1174	1178	1176	1179	1180	1180	1180	1180	1178	1178	1179	1179	1180	1182	1183	1183	1182	1182	1180	1177	1176	1179
5	1174	1174	1174	1174	1174	1174	1175	1175	1178	1178	1178	1175	1172	1169	1170	1175	1176	1176	1185	1179	1184	1186	1172	1154	1175
6 *d*	1157	1146	1151	1142	1145	1149	1155	1162	1170	1172	1176	1179	1179	1176	1180	1180	1179	1179	1180	1180	1186	1184	1146	1138	1166
7	1145	1158	1156	1138	1142	1158	1169	1174	1178	1178	1179	1179	1179	1178	1180	1180	1179	1178	1178	1178	1179	1178	1175	1176	1171
8	1175	1171	1163	1165	1162	1152	1153	1156	1160	1167	1169	1170	1169	1170	1173	1179	1188	1185	1181	1176	1184	1182	1180	1176	1171
9	1155	1129	1141	1163	1167	1164	1168	1167	1170	1174	1174	1179	1182	1199	1208	1204	1210	1191	1182	1182	1186	1187	1183	1181	1177
10	1180	1179	1179	1176	1174	1173	1173	1173	1172	1173	1173	1177	1181	1182	1180	1180	1180	1184	1186	1176	1180	1180	1182	1180	1178
11	1180	1178	1179	1176	1174	1174	1172	1172	1172	1173	1176	1179	1180	1178	1179	1181	1180	1178	1179	1179	1178	1180	1184	1185	1178
12	1179	1177	1176	1173	1172	1172	1169	1170	1171	1172	1172	1170	1173	1176	1178	1177	1176	1176	1180	1185	1191	1194	1191	1185	1177
13 *q*	1181	1179	1178	1177	1176	1174	1172	1170	1170	1169	1171	1172	1172	1172	1173	1174	1176	1174	1171	1170	1170	1169	1169	1170	1173
14 *q*	1170	1170	1170	1170	1169	1168	1166	1164	1162	1163	1164	1167	1167	1168	1169	1170	1170	1170	1169	1168	1168	1167	1169	1169	1168
15	1168	1164	1165	1170	1170	1170	1168	1165	1164	1164	1165	1166	1166	1166	1166	1170	1170	1173	1181	1194	1187	1185	1178	1166	1171
16	1168	1167	1168	1156	1155	1152	1155	1159	1164	1163	1164	1164	1166	1173	1184	1184	1187	1192	1189	1188	1182	1179	1173	1173	1171
17	1170	1169	1169	1171	1170	1168	1170	1169	1168	1166	1164	1162	1164	1165	1170	1174	1178	1180	1181	1177	1175	1172	1171	1167	1170
18 *q*	1167	1165	1162	1165	1168	1169	1169	1168	1166	1166	1169	1170	1170	1168	1170	1170	1170	1168	1170	1168	1169	1169	1169	1170	1168
19	1169	1168	1169	1167	1166	1167	1166	1167	1170	1169	1165	1163	1166	1169	1173	1182	1210	1229	1217	1227	1215	1201	1182	1152	1180
20	1149	1149	1153	1132	1143	1155	1152	1155	1164	1166	1170	1174	1174	1177	1186	1205	1211	1202	1192	1186	1184	1181	1178	1161	1171
21	1151	1152	1158	1160	1164	1166	1168	1169	1172	1174	1174	1174	1176	1179	1195	1230	1259	1227	1202	1195	1199	1182	1178	1170	1182
22	1165	1165	1169	1169	1156	1158	1166	1170	1173	1174	1174	1172	1171	1170	1176	1176	1172	1174	1176	1175	1173	1172	1171	1170	1170
23 *q*	1167	1163	1161	1162	1162	1162	1167	1169	1171	1173	1174	1176	1176	1173	1173	1172	1171	1172	1173	1175	1176	1177	1176	1172	1171
24	1168	1167	1166	1166	1167	1168	1168	1168	1170	1173	1176	1174	1174	1170	1170	1171	1177	1180	1176	1179	1178	1176	1178	1158	1172
25 *d*	1104	1098	1133	1152	1144	1138	1126	1149	1160	1164	1170	1174	1174	1179	1211	1229	1243	1262	1278	1261	1218	1198	1190	1184	1181
26 *d*	1182	1180	1179	1178	1175	1172	1171	1172	1174	1175	1179	1189	1194	1192	1201	1241	1270	1217	1192	1192	1232	1145	1147	1106	1186
27 *d*	1120	1107	1124	1087	1060	1083	1129	1151	1164	1171	1179	1183	1186	1191	1195	1197	1202	1196	1186	1183	1186	1170	1179	1178	1159
28	1180	1179	1178	1178	1176	1173	1173	1172	1172	1172	1177	1175	1178	1182	1186	1195	1198	1197	1198	1199	1184	1180	1175	1175	1181
29 *q*	1175	1176	1178	1177	1176	1174	1174	1172	1173	1174	1172	1170	1173	1172	1175	1178	1178	1178	1178	1175	1172	1172	1172	1172	1174
30	1171	1172	1172	1173	1172	1172	1172	1171	1170	1168	1169	1167	1169	1173	1179	1182	1181	1180	1176	1175	1172	1170	1169	1170	1173
31	1171	1170	1169	1170	1165	1158	1155	1158	1160	1161	1166	1165	1163	1162	1170	1178	1187	1200	1202	1216	1207	1192	1185	1176	1175
Mean	1163	1161	1163	1161	*1160*	1161	1164	1166	1169	1170	1172	1173	1174	1176	1181	1187	*1194*	1192	1192	1191	1189	1180	1172	1167	1174

1144 at 0-1h. January 1, 1956.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

56 LERWICK — DECEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1 *d*	18 28	*802*	*110*	21 56	*692*	20 36	*49·7*	*-35·3*	22 06	*85·0*	18 15	*1371*	*916*	22 10	*455*		2,1,1,2,3,4,7,6	26	2	80·1
2	05 38	469	352	00 30	117	07 17	15·1	-20·0	03 23	35·1	17 35	1187	1057	02 36	130		4,4,3,2,1,1,0,1	16	1	80·0
3	20 37	520	440	13 10	80	16 23	14·5	-11·5	20 36	26·0	20 16	1234	1174	11 00	60		0,0,1,1,2,2,4,3	13	1	80·1
4	05 42	480	445	01 51	35	11 35	9·2	1·1	01 50	8·1	18 43	1184	1170	03 23	14		2,1,1,1,1,0,0,1	7	0	80·2
5	22 33	523	459	10 57	64	13 40	10·6	-10·7	23 05	21·3	21 55	1190	1146	23 27	44		1,0,0,0,1,1,1,3	7	0	79·9
6 *d*	21 18	519	425	22 59	94	11 53	9·5	-23·2	21 11	32·7	21 05	1211	1127	23 16	84		2,2,3,1,1,0,3,4	16	1	80·6
7	03 42	490	438	00 06	52	11 39	9·9	-8·4	00 21	18·3	14 08	1181	1133	03 13	48		3,3,1,1,1,0,0,1	10	0	80·0
8	05 37	486	449	21 08	37	15 27	11·4	-15·8	20 49	27·2	16 50	1195	1151	05 30	44		1,1,1,1,1,2,4,3	14	0	79·9
9	05 29	489	434	13 56	55	13 12	15·4	0·9	16 04	14·5	13 57	1225	1110	01 42	115		3,2,2,2,3,3,1,1	17	0	79·6
10	19 24	494	447	12 58	47	17 05	13·1	2·6	19 19	10·5	18 29	1189	1167	19 28	22		1,1,0,1,2,2,2,1	10	0	79·1
11	23 54	486	454	12 26	32	13 04	9·6	-1·7	23 48	11·3	23 28	1187	1170	07 00	17		1,1,1,1,1,1,1,2	9	0	77·5
12	00 02	485	460	20 51	25	17 40	12·0	0·9	22 02	11·1	21 07	1196	1169	06 40	27		2,1,1,0,1,1,2,2	10	0	77·4
13 *q*	17 15	486	459	12 33	27	17 42	9·4	4·8	09 37	4·6	00 00	1183	1168	08 40	15		0,0,0,0,1,1,1,1	4	0	77·0
14 *q*	08 50	488	465	12 20	23	13 50	9·4	5·4	23 20	*4·0*	15 47	1171	1161	08 40	*10*		0,0,1,1,0,0,0,1	3	0	77·7
15	16 04	486	460	20 41	26	13 11	10·5	6·1	23 10	16·6	19 30	1197	1162	23 41	35		1,1,1,0,0,1,2,3	9	0	78·1
16	07 29	493	456	14 32	37	13 02	14·4	1·9	00 00	12·5	17 22	1193	1148	03 41	45		2,2,1,2,2,2,2,1	14	0	78·1
17	05 07	486	467	11 52	19	17 14	10·2	3·2	21 53	7·0	18 07	1182	1161	11 44	21		0,1,0,1,1,1,1,1	6	0	77·4
18 *q*	16 45	489	462	11 52	27	14 03	8·8	4·6	22 48	4·2	12 00	1172	1161	02 50	11		1,1,1,1,0,0,0,0	4	0	77·2
19	07 05	489	444	19 14	45	16 33	24·9	-2·6	23 11	27·5	17 17	1235	1143	23 56	92		0,0,1,1,2,3,3,3	13	1	77·5
20	06 51	487	452	15 28	35	15 01	19·2	-2·1	00 00	21·3	16 21	1215	1123	03 44	92		3,3,2,1,3,3,1,2	18	0	77·0
21	06 54	489	445	22 40	44	15 06	20·4	-3·1	22 02	23·5	16 14	1277	1148	01 27	129		2,1,1,1,2,3,2,2	14	0	77·0
22	04 45	488	458	10 53	30	04 13	11·4	2·7	00 03	8·7	15 02	1179	1151	04 46	28		1,2,1,1,1,0,1,1	8	0	76·5
23 *q*	05 08	487	465	12 41	22	13 24	8·4	3·7	22 08	4·7	21 30	1178	1159	04 45	19		1,0,0,0,0,0,0,1	2	0	76·0
24	23 48	504	467	16 49	37	16 44	13·3	-6·2	23 30	19·5	16 52	1186	1129	24 00	57		0,0,1,0,0,2,1,3	7	0	77·5
25 *d*	19 49	518	438	00 53	80	15 08	21·2	-18·1	19 57	39·3	17 54	1314	1086	00 40	228		3,3,3,1,3,4,4,2	23	1	78·0
26 *d*	21 11	547	359	23 21	188	15 36	29·5	-28·6	21 14	58·1	16 37	1279	1020	21 43	259		0,1,1,2,3,4,4,6	21	1	78·5
27 *d*	04 42	496	411	03 34	85	02 54	17·9	-17·0	00 07	34·9	16 54	1212	1046	04 39	166		5,4,3,1,2,3,1,3	22	1	78·7
28	07 51	482	450	18 53	32	17 10	11·1	-2·5	19 02	13·6	19 10	1210	1169	07 52	41		0,0,1,1,1,2,3,1	9	0	78·9
29 *q*	18 27	482	464	11 47	*18*	13 44	8·3	3·9	21 17	4·4	20 07	1181	1169	11 47	12		0,0,0,0,0,0,1,1	2	0	79·0
30	23 26	485	458	15 27	27	14 40	10·7	3·8	23 22	6·9	15 34	1184	1166	11 50	18		1,0,0,0,1,1,0,1	4	0	78·8
31	05 07	494	451	20 13	43	17 37	13·4	-8·3	20 23	21·7	19 19	1229	1152	06 24	77		1,1,1,1,1,2,3,2	12	0	78·0
Mean	- -	504	434	- -	70	- -	14·6	-5·9	- -	20·5	- -	1211	1133	- -	78		-	-	0·29	78·4

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

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

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

57 LERWICK

HORIZONTAL FORCE

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-10·3	-29·7	-12·4	-10·6	-4·8	-0·1	+3·0	+5·3	+6·9	+7·3	+4·4	+3·0	+3·6	+4·3	+3·5	+4·1	+4·9	+6·2	+3·6	+3·4	+3·4	+1·6	-0·2	-0·4
Feb.	+0·7	-4·8	-7·4	-10·6	-4·7	+3·6	+5·7	+8·5	+6·6	+2·9	-1·9	-5·9	-4·4	-0·2	+2·9	+0·5	+1·1	+1·9	+1·0	+1·4	0·0	+2·2	+1·0	-0·1
Mar.	-4·2	-7·6	-11·0	-5·8	0·0	+4·1	+1·5	-5·8	-7·7	-10·7	-12·8	-14·0	-12·2	-3·6	+7·7	+19·8	+9·9	+14·8	+11·6	+14·5	+10·8	+3·9	-1·1	-2·1
Apr.	-23·3	-10·7	-6·5	-0·6	+2·1	+4·0	+4·8	+2·2	-4·7	-12·4	-18·9	-17·8	-9·6	-0·1	+5·7	+11·4	+18·1	+26·3	+33·4	+25·6	+7·2	-8·5	-14·0	-13·7
May	-14·9	-4·3	-7·6	-2·6	-2·0	-3·3	-3·2	-6·8	-15·7	-23·8	-25·5	-21·3	-11·6	-2·7	+7·9	+15·1	+18·0	+27·6	+31·7	+29·7	+20·9	+11·4	-7·2	-9·8
June	+0·9	-0·4	-0·4	-2·1	+0·3	-0·9	-5·3	-12·6	-22·3	-29·5	-31·7	-27·5	-18·0	-8·1	-1·4	+5·7	+16·2	+25·6	+28·2	+28·3	+23·1	+14·9	+11·0	+6·0
July	+1·1	-1·1	+0·3	+2·8	+1·9	-0·5	-4·2	-8·3	-16·7	-24·9	-29·0	-27·2	-22·4	-13·8	-1·6	+7·7	+16·3	+21·9	+26·0	+24·2	+20·4	+13·5	+8·9	+4·7
Aug.	+2·9	+0·9	+1·2	+4·4	+3·2	+0·3	-6·2	-12·7	-20·8	-25·3	-27·8	-26·8	-19·5	-6·6	+2·9	+8·5	+14·0	+22·6	+20·8	+20·7	+18·7	+12·4	+7·6	+4·6
Sept.	+4·7	-1·2	+2·2	+3·9	+7·7	+8·6	+2·1	-3·7	-11·7	-23·2	-29·0	-25·9	-17·4	-7·1	+1·8	+5·0	+5·2	+13·9	+14·5	+15·1	+11·2	+9·0	+7·3	+7·0
Oct.	0·0	+2·2	+1·1	+1·0	+6·0	+10·5	+9·4	+4·2	-5·1	-14·4	-20·9	-18·5	-13·8	-8·6	-1·7	+3·2	+7·6	+9·9	+9·0	+6·9	+4·8	+3·1	+1·2	+2·9
Nov.	-5·8	-8·7	-4·6	-1·9	+1·8	+4·0	+6·1	+4·6	-3·2	-9·1	-15·4	-17·3	-10·9	-1·9	+24·0	+17·7	+7·2	+14·2	+14·2	+1·9	+0·2	-3·9	-7·2	-6·0
Dec.	-4·2	-3·9	-3·7	+0·7	+3·7	+7·2	+7·4	+5·8	+2·8	-0·9	-5·6	-8·0	-7·2	-4·0	-1·7	+0·9	+0·8	+3·6	+10·8	+9·0	+0·2	-2·8	-5·8	-5·1
Year	-4·4	-5·8	-4·1	-1·8	+1·3	+3·1	+1·8	-1·6	-7·6	-13·7	-17·8	-17·3	-11·9	-4·4	+4·2	+8·3	+9·9	+15·7	+17·1	+15·1	+10·1	+4·7	+0·1	-1·0
Winter	-4·9	-11·7	-7·0	-5·6	-1·0	+3·7	+5·5	+6·1	+3·3	+0·1	-4·6	-7·1	-4·7	-0·5	+7·2	+5·8	+3·5	+6·5	+7·4	+3·9	+0·9	-0·7	-3·1	-2·9
Equinox	-5·7	-4·3	-3·5	-0·4	+3·9	+6·8	+4·5	-0·8	-7·3	-15·2	-20·4	-19·1	-13·3	-4·9	+3·4	+9·9	+10·2	+16·2	+17·1	+15·5	+8·5	+1·9	-1·7	-1·5
Summer	-2·5	-1·2	-1·6	+0·6	+0·9	-1·1	-4·7	-10·1	-18·9	-25·9	-28·5	-25·7	-17·9	-7·8	+1·9	+9·3	+16·1	+24·4	+26·7	+25·7	+20·8	+13·1	+5·1	+1·4

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·85	-2·36	-3·17	-1·57	-1·01	-0·67	+0·60	+0·27	+0·28	+0·57	+1·56	+2·10	+2·73	+3·20	+3·33	+2·37	+2·24	+1·06	+0·31	-0·45	-2·03	-2·91	-2·56	-2·04
Feb.	-1·75	-1·75	-2·40	-2·34	-2·03	-2·70	-1·50	-0·51	+0·15	+1·10	+1·95	+3·13	+4·15	+4·40	+4·07	+3·26	+1·89	+1·04	+0·07	-1·59	-2·04	-2·11	-2·10	-2·39
Mar.	-1·59	-2·00	-3·21	-3·66	-2·96	-2·32	-1·51	-0·42	+0·33	+0·42	+1·95	+3·74	+5·25	+6·15	+5·91	+4·24	+2·62	+0·15	-0·90	-0·62	-1·98	-4·42	-2·32	-2·85
Apr.	-3·15	-2·71	-2·58	-3·46	-3·41	-2·90	-2·28	-2·04	-1·85	-1·05	+0·87	+3·77	+5·87	+7·21	+6·11	+5·02	+4·15	+3·33	+1·87	+0·43	-1·88	-3·08	-4·18	-4·06
May	-1·77	-2·98	-2·81	-2·72	-3·86	-4·27	-4·62	-4·63	-4·28	-2·45	+0·23	+3·08	+5·07	+5·69	+5·80	+5·05	+4·19	+3·59	+2·95	+1·53	+1·15	-0·31	-1·11	-2·52
June	-1·75	-1·96	-2·51	-3·52	-4·35	-5·63	-6·18	-5·79	-4·19	-2·07	+0·10	+2·85	+4·80	+5·31	+5·38	+4·92	+4·25	+3·26	+2·83	+2·30	+1·64	+0·58	+0·06	-0·33
July	-0·84	-0·77	-2·04	-3·38	-4·60	-5·30	-5·62	-5·53	-4·85	-3·35	-0·52	+2·25	+5·00	+6·18	+6·17	+5·38	+4·18	+3·02	+2·60	+2·19	+0·64	+0·26	-0·13	-0·94
Aug.	-1·99	-2·20	-2·27	-3·25	-4·25	-4·35	-4·20	-3·53	-2·82	-1·39	+1·33	+4·27	+6·44	+6·76	+5·66	+3·80	+2·25	+1·37	+0·89	+1·53	+0·69	-1·35	-1·80	-1·59
Sept.	-2·74	-1·54	-1·29	-2·47	-2·86	-2·28	-1·01	-1·06	-1·43	-0·23	+2·02	+3·97	+5·83	+6·04	+5·24	+3·62	+1·17	+0·34	-0·69	-1·58	-1·93	-2·23	-2·08	-2·81
Oct.	-1·82	-1·53	-1·71	-1·07	-1·05	-1·36	-1·18	-1·48	-1·69	-1·12	+0·90	+3·51	+5·34	+5·89	+5·63	+3·98	+1·21	-0·89	-0·38	-1·22	-1·67	-2·65	-3·35	-2·29
Nov.	-2·10	-1·24	-1·47	-1·38	-0·26	-0·95	-0·25	-0·73	-1·06	-0·69	+0·49	+2·55	+3·96	+4·62	+4·84	+3·71	+2·80	+0·70	+0·34	-1·64	-2·65	-2·96	-2·94	-3·69
Dec.	-3·15	-1·73	-1·12	-1·01	-1·26	-0·68	-0·49	-0·28	-0·58	-0·33	+0·62	+1·90	+3·01	+3·83	+3·93	+3·67	+2·97	+2·07	+1·32	+0·03	-1·84	-3·27	-3·52	-4·09
Year	-2·04	-1·90	-2·21	-2·49	-2·66	-2·78	-2·35	-2·14	-1·83	-0·88	+0·96	+3·09	+4·79	+5·44	+5·17	+4·09	+2·83	+1·59	+0·93	+0·08	-0·99	-2·04	-2·17	-2·47
Winter	-2·21	-1·77	-2·04	-1·57	-1·14	-1·25	-0·41	-0·31	-0·30	+0·16	+1·15	+2·42	+3·46	+4·01	+4·04	+3·25	+2·47	+1·22	+0·51	-0·91	-2·14	-2·81	-2·78	-3·05
Equinox	-2·33	-1·95	-2·20	-2·67	-2·57	-2·21	-1·49	-1·25	-1·16	-0·49	+1·43	+3·75	+5·57	+6·32	+5·72	+4·21	+2·29	+0·73	-0·03	-0·75	-1·87	-3·09	-2·98	-3·00
Summer	-1·59	-1·98	-2·41	-3·22	-4·27	-4·89	-5·15	-4·87	-4·03	-2·31	+0·29	+3·11	+5·33	+5·99	+5·75	+4·79	+3·72	+2·81	+2·32	+1·89	+1·03	-0·21	-0·75	-1·35

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-12·9	-18·1	-17·7	-15·1	-13·6	-10·9	-8·7	-5·1	-1·6	+1·5	+2·2	+2·8	+3·1	+4·4	+9·8	+14·1	+10·5	+13·7	+15·0	+15·2	+12·0	+4·5	-3·0	-2·1
Feb.	-10·0	-13·9	-13·1	-15·8	-16·8	-17·7	-11·0	-8·9	-7·1	-5·4	-3·9	-1·9	-1·1	+1·7	+9·3	+14·2	+18·4	+17·5	+19·3	+22·9	+17·4	+8·9	-1·0	-2·0
Mar.	-15·1	-21·6	-23·3	-19·4	-13·6	-10·5	-8·0	-6·6	-7·9	-6·6	-5·7	-4·4	-0·4	+4·5	+13·5	+18·6	+22·8	+30·6	+29·1	+25·1	+14·9	+4·1	-7·5	-12·6
Apr.	-29·0	-29·9	-24·0	-14·5	-8·4	-5·6	-4·3	-1·7	+0·3	+1·8	+2·7	+2·4	+1·9	+6·8	+14·5	+16·4	+19·9	+24·6	+32·3	+26·7	+12·8	-2·1	-11·0	-32·6
May	-21·3	-23·4	-16·4	-14·0	-10·1	-7·0	-0·4	+3·6	+5·0	+4·2	+1·5	-1·4	-0·3	+5·3	+9·4	+14·2	+16·1	+15·2	+15·8	+14·9	+11·8	+3·3	-6·1	-19·9
June	-13·6	-14·1	-17·0	-14·6	-10·1	-4·7	-2·0	0·0	+0·6	-0·9	-2·5	-4·1	-3·9	+0·1	+6·0	+9·7	+12·6	+16·4	+15·8	+14·1	+12·3	+8·0	+0·3	-8·4
July	-6·4	-14·4	-10·9	-7·6	-4·6	-2·7	-3·0	-2·3	-1·5	-1·6	-2·6	-4·2	-3·4	-1·5	+1·9	+6·8	+11·8	+14·3	+13·2	+11·0	+7·8	+3·1	+0·4	-3·6
Aug.	-13·7	-12·3	-9·4	-6·0	-1·9	-2·3	-3·9	-4·6	-4·1	-4·6	-5·4	-5·4	-5·0	+0·8	+7·9	+14·5	+16·3	+15·9	+15·9	+12·5	+9·4	+3·9	-5·9	-12·6
Sept.	-24·2	-25·0	-23·6	-19·2	-16·6	-14·3	-12·5	-9·0	-3·2	+0·5	+2·3	+4·9	+6·3	+8·5	+13·3	+19·9	+26·4	+25·8	+24·8	+18·9	+11·4	+2·9	-4·5	-13·8
Oct.	-18·5	-13·1	-12·4	-13·6	-14·2	-10·2	-6·7	-3·1	-0·5	+1·7	+2·2	+2·7	+4·3	+8·1	+12·8	+19·8	+24·2	+23·7	+21·2	+10·6	-2·8	-8·9	-12·1	-15·2
Nov.	-21·6	-24·8	-21·2	-18·0	-21·1	-19·3	-15·2	-9·0	-3·1	+1·2	+3·2	+5·1	+8·6	+11·9	+9·9	+18·6	+25·4	+28·9	+28·6	+19·5	+11·7	+3·1	-7·5	-14·9
Dec.	-10·7	-13·0	-11·5	-12·6	-13·9	-13·1	-10·2	-7·9	-5·2	-3·7	-2·1	-1·0	+0·2	+2·1	+7·3	+13·2	+20·1	+18·0	+17·3	+16·4	+14·3	+5·4	-1·8	-7·6
Year	-16·4	-18·6	-16·7	-14·2	-12·1	-9·9	-7·2	-4·5	-2·4	-1·0	-0·7	-0·4	+0·9	+4·4	+9·6	+15·0	+18·7	+20·4	+20·7	+17·3	+11·1	+3·0	-5·0	-12·1
Winter	-13·8	-17·5	-15·9	-15·4	-16·3	-15·3	-11·3	-7·7	-4·3	-1·6	-0·1	+1·3	+2·7	+5·0	+9·1	+15·0	+18·6	+19·5	+20·1	+18·5	+13·9	+5·5	-3·3	-6·7
Equinox	-21·7	-22·4	-20·8	-16·7	-13·2	-10·1	-7·9	-5·1	-2·8	-0·7	+0·4	+1·4	+3·0	+7·0	+13·5	+18·7	+23·3	+26·2	+26·9	+20·3	+9·1	-1·0	-8·8	-18·5
Summer	-13·7	-16·1	-13·4	-10·5	-6·7	-4·2	-2·3	-0·8	0·0	-0·7	-2·3	-3·8	-3·1	+1·2	+6·3	+11·3	+14·2	+15·5	+15·2	+13·1	+10·3	+4·6	-2·8	-11·1

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

INTERNATIONAL QUIET DAYS

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

58 LERWICK

HORIZONTAL FORCE

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-3·8	-3·8	-4·5	-1·8	+0·8	+2·2	+3·2	+4·4	+4·1	+2·8	-0·8	-2·2	-3·0	-1·6	-1·3	-0·8	-0·2	+1·2	-0·2	+0·2	+1·9	+1·6	+1·4	+0·2
Feb.	-0·8	-1·9	-4·5	-4·0	-2·5	+0·1	+2·2	+3·9	+3·5	+1·2	-1·9	-3·9	-4·6	-2·5	+0·9	-1·4	-0·1	+0·9	+1·4	+1·5	+2·1	+1·6	+3·9	+4·9
Mar.	+0·9	-0·2	-1·7	+0·2	+2·8	+4·3	+5·0	+3·2	-0·1	-5·4	-10·3	-11·0	-10·3	-6·6	-1·7	+2·4	+2·2	+3·3	+4·4	+6·2	+2·5	+1·8	+2·7	+5·4
Apr.	+6·7	+3·9	+2·7	+0·5	+1·1	+3·0	+3·1	-1·5	-8·1	-16·7	-24·7	-25·5	-18·9	-11·5	-7·5	+0·3	+5·3	+9·8	+15·7	+17·1	+12·9	+10·5	+11·3	+10·5
May	+7·2	+5·1	+4·4	+3·5	+3·0	+2·1	-2·8	-9·7	-19·6	-27·5	-31·4	-26·7	-17·4	-6·1	+1·6	+5·9	+9·6	+14·7	+17·8	+16·5	+14·8	+12·3	+12·0	+10·7
June	+7·8	+4·5	+4·8	+6·1	+5·2	+0·7	-5·8	-13·9	-23·2	-32·9	-34·4	-31·1	-21·0	-11·9	0·0	+8·5	+15·2	+22·1	+24·4	+24·1	+20·0	+13·5	+9·8	+7·5
July	+3·3	+1·6	+1·5	+3·7	+2·9	+0·4	-4·1	-7·1	-15·9	-24·4	-29·5	-25·9	-18·9	-9·4	-2·1	+5·7	+13·3	+15·2	+19·1	+19·5	+18·9	+15·8	+8·9	+7·5
Aug.	+4·7	+5·7	+4·2	+5·5	+4·3	+2·3	-3·7	-11·1	-18·6	-22·5	-24·5	-24·5	-17·5	-9·7	-3·2	+3·7	+6·3	+16·1	+17·5	+18·5	+14·6	+12·7	+10·3	+8·9
Sept.	+5·6	+2·3	+4·0	+3·7	+4·5	+5·6	+4·1	+0·1	-9·0	-18·3	-23·6	-23·7	-18·8	-13·9	-9·4	-4·3	+0·5	+8·6	+14·3	+15·3	+14·0	+14·1	+13·2	+11·1
Oct.	+4·8	+4·5	+4·2	+4·5	+5·5	+5·4	+4·7	+1·9	-4·6	-13·5	-19·8	-20·3	-16·2	-8·9	-4·0	-0·1	+4·3	+5·8	+8·1	+7·5	+6·4	+6·7	+6·8	+6·3
Nov.	+2·5	+2·8	+1·3	+2·9	+4·7	+5·2	+5·9	+5·9	+0·5	-8·4	-14·1	-15·5	-15·5	-11·8	-4·9	-0·9	+1·9	+4·4	+5·5	+6·7	+6·9	+6·4	+3·7	+3·9
Dec.	-2·4	-1·6	-0·7	+1·0	+3·2	+5·4	+5·6	+4·8	+3·5	-1·6	-7·4	-11·4	-11·4	-6·6	-1·3	+0·6	+2·2	+3·8	+4·8	+3·6	+3·3	+2·0	+0·4	+0·2
Year	+3·0	+1·9	+1·3	+2·1	+3·0	+3·1	+1·5	-1·6	-7·3	-13·9	-18·5	-18·5	-14·5	-8·3	-2·7	+1·6	+5·0	+8·8	+11·1	+11·4	+9·9	+8·3	+7·0	+6·4
Winter	-1·1	-1·1	-2·1	-0·5	+1·5	+3·2	+4·2	+4·7	+2·9	-1·5	-6·1	-8·3	-8·6	-5·6	-1·7	-0·6	+0·9	+2·6	+2·9	+3·0	+3·5	+2·9	+2·3	+2·3
Equinox	+4·5	+2·6	+2·3	+2·2	+3·5	+4·6	+4·2	+0·9	-5·5	-13·5	-19·6	-20·1	-16·1	-10·2	-5·7	-0·4	+3·1	+6·9	+10·6	+11·5	+8·9	+8·3	+8·5	+8·3
Summer	+5·7	+4·2	+3·7	+4·7	+3·9	+1·4	-4·1	-10·5	-19·3	-26·8	-29·9	-27·1	-18·7	-9·3	-0·9	+5·9	+11·1	+17·0	+19·7	+19·7	+17·1	+13·6	+10·3	+8·7

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·89	-0·97	-0·48	-0·35	-0·35	-0·29	-0·27	-0·47	-0·52	-0·21	+0·13	+0·99	+1·37	+1·45	+1·14	+0·89	+0·59	+0·97	+0·87	+0·19	-0·98	-0·77	-1·13	-0·91
Feb.	-1·66	-0·96	-1·43	-1·74	-1·42	-1·18	-0·84	-0·66	-0·35	+0·80	+1·54	+2·72	+3·16	+3·34	+2·95	+1·28	+1·00	+0·84	-0·06	-0·76	-0·65	-1·56	-2·30	-2·06
Mar.	-2·30	-1·57	-1·24	-1·51	-1·74	-1·55	-1·54	-1·65	-1·56	-0·83	+0·56	+2·73	+4·16	+4·19	+3·26	+2·23	+1·12	+0·77	+0·24	+0·37	-0·28	-0·91	-0·76	-2·19
Apr.	-1·04	-1·23	-1·86	-2·43	-2·45	-2·76	-3·21	-3·49	-3·18	-2·19	-0·18	+2·53	+4·32	+5·41	+3·88	+2·65	+1·69	+1·56	+1·39	+0·89	+0·32	+0·03	-0·16	-0·49
May	-0·38	-0·60	-1·47	-2·44	-3·72	-4·82	-5·60	-5·74	-4·91	-3·18	-0·16	+2·98	+4·66	+4·68	+5·03	+3·98	+3·10	+2·26	+2·04	+1·48	+0·91	+0·96	+0·82	+0·12
June	-0·10	-1·98	-2·79	-3·24	-4·72	-5·68	-5·66	-5·70	-4·65	-2·48	-0·26	+2·54	+4·34	+4·70	+4·79	+3·86	+2·96	+2·68	+2·76	+2·48	+2·11	+1·70	+1·48	+0·86
July	-0·49	-0·97	-1·83	-2·07	-3·49	-5·00	-5·73	-6·11	-5·65	-3·77	-0·77	+2·01	+4·97	+6·85	+6·83	+5·93	+4·15	+2·46	+1·91	+1·75	+1·15	+0·07	-1·09	-1·11
Aug.	-0·54	-1·53	-1·92	-2·77	-4·06	-5·11	-5·24	-4·35	-3·46	-1·55	+1·04	+4·15	+6·04	+6·03	+4·42	+2·71	+1·52	+0·81	+0·94	+1·81	+1·62	+0·25	-0·38	-0·43
Sept.	-0·43	-0·35	-1·42	-2·23	-2·47	-2·55	-2·69	-2·99	-2·74	-1·69	+0·03	+2·21	+3·93	+4·29	+3·66	+2·69	+1·95	+1·35	+0·77	+0·03	-0·32	-0·03	-0·05	-0·95
Oct.	-0·43	-0·67	-0·69	-0·59	-0·65	-0·82	-1·41	-2·29	-3·25	-3·07	-0·81	+1·93	+3·63	+3·67	+3·09	+1·79	+1·01	+0·72	+0·57	+0·41	-0·37	-0·29	-0·43	-1·05
Nov.	-1·20	-1·28	-0·75	-0·56	-0·80	-0·76	-0·94	-1·28	-1·73	-1·90	-0·56	+1·80	+2·94	+3·48	+3·13	+2·02	+1·28	+0·82	+0·48	+0·24	-0·51	-1·60	-1·36	-0·96
Dec.	-0·54	-0·03	+0·20	+0·05	+0·02	-0·31	-0·82	-1·09	-1·28	-1·03	-0·34	+0·55	+1·42	+1·95	+1·52	+1·13	+0·84	+0·95	+0·78	+0·13	-0·52	-1·01	-1·30	-1·27
Year	-0·83	-1·01	-1·31	-1·66	-2·15	-2·57	-2·83	-2·99	-2·77	-1·76	+0·02	+2·26	+3·75	+4·17	+3·64	+2·60	+1·77	+1·35	+1·06	+0·75	+0·21	-0·26	-0·55	-0·87
Winter	-1·07	-0·81	-0·61	-0·65	-0·64	-0·63	-0·72	-0·87	-0·97	-0·59	+0·19	+1·51	+2·22	+2·55	+2·19	+1·33	+0·93	+0·89	+0·52	-0·05	-0·67	-1·23	-1·52	-1·30
Equinox	-1·05	-0·95	-1·30	-1·69	-1·83	-1·92	-2·21	-2·61	-2·68	-1·95	-0·10	+2·35	+4·01	+4·39	+3·47	+2·34	+1·44	+1·10	+0·74	+0·43	-0·16	-0·30	-0·35	-1·17
Summer	-0·38	-1·27	-2·00	-2·63	-4·00	-5·15	-5·56	-5·47	-4·67	-2·75	-0·04	+2·92	+5·00	+5·57	+5·27	+4·12	+2·93	+2·05	+1·91	+1·88	+1·45	+0·75	+0·21	-0·14

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-1·8	-0·3	+0·4	+0·6	+0·2	-0·5	-1·2	-2·8	-4·0	-5·3	-4·8	-3·8	-2·2	-1·9	+0·4	+2·2	+4·2	+4·7	+5·2	+5·2	+3·6	+2·1	+0·8	-1·0
Feb.	-5·6	-2·9	-0·1	+0·6	-0·1	-1·7	-2·4	-2·9	-3·1	-3·6	-3·5	-2·9	-3·6	-4·3	-1·9	+2·8	+4·5	+5·7	+6·2	+5·9	+4·9	+6·6	+2·7	-1·3
Mar.	-2·9	-3·8	-3·0	-2·5	-1·8	-1·4	-1·5	0·0	+1·0	+0·7	-1·8	-4·4	-4·7	-4·2	-2·6	-0·7	+1·8	+2·6	+3·3	+3·6	+7·2	+8·7	+6·2	+0·2
Apr.	+2·7	+3·4	+3·4	+3·3	+0·6	-1·6	-1·5	-0·8	-1·8	-2·9	-4·4	-7·2	-8·1	-3·2	+0·2	+0·3	+3·6	+3·4	+0·7	+1·0	+3·6	+2·7	+1·2	+1·4
May	+2·8	+2·2	+2·2	+4·2	+4·0	+2·9	+2·8	+2·8	+0·2	-4·8	-9·6	-12·0	-11·4	-6·6	-0·8	+2·8	+4·4	+4·5	+3·4	+2·8	+2·4	+1·8	+0·2	-1·2
June	-5·1	-7·8	-7·1	-3·5	+0·1	+2·4	+2·3	+2·9	+1·9	-2·4	-7·1	-8·7	-9·7	-7·2	-4·3	+1·7	+8·5	+12·0	+12·1	+11·1	+7·7	+5·6	-1·5	-3·9
July	+0·6	-0·1	-0·4	+0·3	+0·4	+0·5	-0·4	-1·3	+0·4	-0·1	-3·6	-9·3	-9·4	-7·5	-4·8	-0·1	+5·6	+9·1	+8·4	+7·5	+5·8	+3·5	-1·8	-3·3
Aug.	-0·4	-1·1	-0·2	-0·3	+2·4	+1·3	+1·6	+1·5	-1·6	-5·5	-8·4	-10·3	-12·4	-8·9	-3·0	+0·5	+3·2	+4·5	+8·8	+10·1	+10·6	+6·1	+2·2	-0·7
Sept.	-1·1	-3·8	-6·8	-4·7	-2·6	-0·8	+0·7	+0·8	+2·2	+2·9	+0·4	-2·2	-3·7	-3·4	-0·4	+1·5	+2·2	+2·2	+3·7	+4·2	+3·8	+3·1	+2·2	-0·4
Oct.	+1·8	+2·6	+1·8	+2·0	+0·8	+0·5	0·0	+1·4	+2·8	+0·8	-2·4	-4·6	-5·6	-4·6	-1·2	+1·6	+1·4	+0·7	-1·0	-0·4	+0·2	+1·4	0·0	0·0
Nov.	-5·5	-7·4	-5·7	-4·2	-3·2	-1·9	-1·2	-0·8	+1·7	+4·6	+4·7	+2·6	+1·5	+0·2	+0·9	+2·2	+2·8	+2·7	+2·4	+2·2	+2·5	+0·8	+0·3	-2·2
Dec.	+1·2	-0·1	-1·0	-0·5	-0·6	-1·3	-1·2	-2·1	-2·4	-1·7	-0·8	+0·3	+0·8	-0·1	+1·2	+2·1	+2·2	+1·7	+1·4	+0·5	+0·2	+0·1	+0·2	-0·1
Year	-1·1	-1·6	-1·4	-0·4	0·0	-0·1	-0·2	-0·1	-0·2	-1·4	-3·4	-5·2	-5·7	-4·3	-1·4	+1·4	+3·7	+4·5	+4·5	+4·5	+4·4	+3·5	+1·1	-1·0
Winter	-2·9	-2·7	-1·6	-0·9	-0·9	-1·3	-1·5	-2·1	-1·9	-1·5	-1·1	-0·9	-0·9	-1·5	+0·1	+2·3	+3·4	+3·7	+3·8	+3·5	+2·8	+2·4	+1·0	-1·1
Equinox	+0·1	-0·4	-1·1	-0·5	-0·7	-0·8	-0·6	+0·3	+1·1	+0·4	-2·1	-4·6	-5·5	-3·9	-1·0	+0·7	+2·3	+2·2	+1·7	+2·1	+3·7	+4·0	+2·4	+0·3
Summer	-0·5	-1·7	-1·4	+0·2	+1·7	+1·8	+1·6	+1·5	+0·2	-3·2	-7·2	-10·1	-10·7	-7·5	-3·2	+1·2	+5·4	+7·5	+8·2	+7·9	+6·6	+4·3	-0·2	-2·3

"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)

59 LERWICK

HORIZONTAL FORCE

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−36·5	*−154·6*	−53·0	−50·1	−32·0	−16·4	−4·9	+7·4	+19·0	+30·7	+24·6	+25·4	+26·9	*+33·4*	+25·0	+16·1	+20·0	+30·2	+18·1	+18·8	+14·8	+5·7	+12·8	+18·6
Feb.	+10·4	+1·5	−17·3	*−36·6*	−14·9	+6·3	+10·0	*+16·3*	+14·5	+5·6	−8·9	−18·7	−10·2	+1·1	+10·7	+8·2	+7·9	+8·9	+4·8	−3·5	+4·5	−0·6	−0·1	+0·1
Mar.	−12·6	−34·9	*−52·0*	−12·8	−6·8	−0·3	−8·0	−25·8	−19·4	−21·9	−23·2	−22·0	−13·2	+4·7	+46·4	*+104·0*	+29·4	+43·5	+23·8	+29·4	+7·4	+8·5	−16·4	−27·8
Apr.	*−157·6*	−48·1	−23·9	+2·6	+15·9	+18·3	+18·2	+16·3	+11·3	+4·2	−2·1	+9·5	+20·4	+31·7	+39·7	+36·4	+54·5	+65·7	*+88·0*	+68·3	−13·7	−71·8	−99·5	−84·3
May	*−108·7*	−34·7	−43·2	+17·5	−2·3	−9·5	+8·9	+9·1	−6·0	−22·7	−12·9	−0·7	+10·3	+17·5	+27·8	+41·7	+44·3	+59·5	*+72·7*	+63·1	+44·8	+7·3	−87·1	−96·7
June	−10·4	−12·0	−7·4	−21·4	−11·6	+0·6	−2·4	−11·0	−26·2	−29·8	*−30·8*	−30·2	−17·8	−2·4	+1·2	+9·8	+26·6	+38·4	*+39·6*	+34·2	+32·0	+18·2	+13·4	−0·6
July	−3·4	−16·3	−2·7	+4·4	+5·1	+2·5	−1·6	−9·5	−22·3	*−29·2*	−28·9	−24·5	−11·4	−2·5	+7·5	+17·8	+22·9	*+35·9*	+35·8	+20·1	+11·1	−2·2	−3·1	−5·5
Aug.	−9·6	−6·5	+4·9	+8·4	+1·5	−3·3	−19·6	−36·1	*−46·9*	−37·6	−38·5	−37·3	−33·4	+0·5	+22·7	+38·0	+45·9	*+54·9*	+39·2	+31·7	+28·3	+7·8	−4·7	−10·3
Sept.	−9·6	−24·3	−1·0	+4·6	+13·4	−0·5	−11·0	−12·2	−14·4	−23·1	*−32·4*	−26·0	−16·4	+4·1	+11·6	+15·8	+20·8	*+41·3*	+22·2	+21·2	+10·6	+5·7	−2·8	+2·4
Oct.	−22·4	−5·3	−8·8	−7·1	+3·0	+19·3	+16·8	+7·5	−6·4	−13·9	−20·6	−12·1	+5·2	+13·3	+8·6	+29·1	*+34·4*	+32·5	+18·6	+4·1	−11·0	−33·1	*−33·4*	−18·3
Nov.	−33·6	*−48·8*	−32·1	−17·6	−14·8	−19·2	−12·0	−11·0	−21·3	−20·4	−32·6	−28·4	−1·4	+29·8	*+160·1*	+106·8	+35·2	+65·0	+56·6	−13·4	−19·7	−42·2	−41·0	−44·0
Dec.	−6·0	−4·3	−4·5	−5·8	+4·9	+7·1	+12·6	+8·9	+4·7	−0·6	−7·3	−11·3	−5·6	+2·1	−3·5	+4·4	+3·3	+15·9	*+53·0*	+42·7	−8·3	−18·0	−42·1	*−42·3*
Year	*−33·3*	−32·4	−20·1	−9·5	−3·2	+0·4	+0·6	−3·3	−9·5	−13·2	−17·8	−14·7	−3·9	+11·1	+29·8	+35·7	+28·8	*+41·0*	+39·4	+26·4	+8·4	−9·6	−25·3	−25·7
Winter	−16·4	*−51·5*	−26·7	−27·5	−14·2	−5·5	+1·4	+5·4	+4·2	+3·8	−6·1	−8·3	+2·4	+16·6	*+48·1*	+33·9	+16·6	+30·0	+33·1	+11·1	−2·2	−13·8	−17·6	−16·9
Equinox	*−50·5*	−28·1	−21·4	−3·2	+6·4	+9·2	+4·0	−3·5	−7·2	−13·8	−19·6	−12·7	−1·0	+13·5	+26·6	*+46·3*	+34·8	+45·7	+38·1	+30·7	−1·7	−22·7	−38·0	−32·0
Summer	*−33·0*	−17·4	−12·1	+2·2	−1·8	−2·4	−3·7	−11·9	−25·3	−29·8	−27·8	−23·2	−13·1	+3·3	+14·8	+26·8	+34·9	*+47·2*	+46·8	+37·3	+29·1	+7·8	−20·4	−28·3

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−4·36	−5·18	*−10·21*	−1·96	−0·46	+0·04	+5·38	+2·82	+1·83	+0·46	+2·56	+2·18	+3·74	+5·72	*+8·55*	+3·72	+3·50	−2·66	−2·16	−4·32	−4·03	−2·44	−0·60	−2·12
Feb.	−1·50	−1·03	−2·33	−1·46	−2·17	−4·63	−1·94	−0·35	−0·21	+1·74	+2·63	+4·71	*+6·62*	+6·55	+4·33	+5·10	+3·91	+0·13	−2·14	−3·85	*−4·83*	−2·70	−2·09	−4·49
Mar.	−1·08	−0·65	−7·04	*−8·93*	−4·62	−3·39	−1·64	+1·15	+3·56	+1·57	+3·40	+5·11	+6·68	+8·13	*+9·18*	+5·67	+6·14	+1·45	−4·72	−4·83	−0·80	−7·39	−4·20	−2·75
Apr.	*−11·41*	−5·81	−3·21	−1·53	−3·27	−2·48	−1·61	−1·53	−1·47	+0·51	+1·83	+4·77	+6·99	*+8·99*	+7·63	+7·05	+7·41	+7·04	+4·19	+1·81	−5·43	−5·09	−8·63	−6·75
May	−7·49	−7·75	−6·41	−3·41	−5·27	−3·85	−4·07	−4·41	−4·51	−1·51	+1·71	+6·25	+7·31	+7·75	+9·31	*+9·35*	+8·31	+8·05	+7·47	+0·71	+0·91	−2·87	−4·31	*−11·27*
June	−6·15	−4·13	−4·23	−4·95	−3·85	−6·10	−7·07	*−7·59*	−4·97	−2·11	−0·71	+2·75	+5·39	+6·55	+7·21	*+8·67*	+7·69	+5·68	+4·55	+3·19	+3·79	−0·03	−1·09	−2·49
July	+0·26	−0·25	−2·12	−4·89	−7·10	−7·01	*−7·20*	−5·73	−3·38	−1·91	+0·24	+1·81	+4·92	*+6·01*	+5·70	+5·71	+5·40	+4·83	+4·56	+3·55	−2·04	−1·19	+0·14	−0·31
Aug.	−5·54	−5·24	*−6·66*	−4·98	−4·78	−3·17	−4·18	−0·90	−1·00	−0·92	+0·58	+4·26	+8·02	+8·78	*+9·04*	+7·32	+5·06	+3·17	+1·02	+1·58	−0·42	−2·88	−5·24	−2·92
Sept.	*−6·63*	−0·96	−0·70	−2·31	−3·14	+1·20	*+6·71*	+3·90	−0·14	−0·15	+1·96	+3·66	+5·57	+5·86	+5·90	+5·65	+1·06	−0·74	−2·99	−3·30	−6·10	−5·69	−4·12	−4·50
Oct.	−1·56	−2·02	−3·12	−2·14	−1·14	−0·67	+0·10	−0·32	−0·70	−0·02	+1·96	+5·76	+7·70	+10·22	*+11·06*	+9·44	+0·26	−4·43	−1·60	−3·58	−5·84	−7·48	*−9·22*	−2·66
Nov.	−2·55	−2·72	−3·58	−2·47	+1·48	+0·90	+3·99	+1·26	+0·66	+0·17	+0·52	+2·60	+4·81	+8·00	*+9·64*	+7·23	+5·96	−1·66	+1·65	−4·22	−7·40	−6·27	−6·76	*−11·24*
Dec.	−6·82	−2·71	−1·04	−1·03	−3·39	−0·50	−0·55	+0·29	+0·18	+0·49	+1·82	+3·51	+4·54	+6·09	+6·66	*+7·89*	+5·49	+2·42	+2·67	+2·25	−2·82	*−9·17*	−8·06	−8·21
Year	−4·57	−3·20	−4·22	−3·34	−3·14	−2·47	−1·01	−0·95	−0·85	−0·14	+1·54	+3·95	+6·02	+7·39	*+7·85*	+6·90	+5·02	+1·94	+1·04	−0·92	−2·92	−4·43	−4·51	*−4·98*
Winter	−3·81	−2·91	−4·29	−1·73	−1·13	−1·05	+1·72	+1·01	+0·61	+0·71	+1·88	+3·25	+4·93	+6·59	*+7·29*	+5·99	+4·71	−0·44	+0·01	−2·53	−4·77	−5·15	−4·38	*−6·51*
Equinox	−5·15	−2·36	−3·52	−3·73	−3·04	−1·33	+0·89	+0·80	+0·31	+0·48	+2·29	+4·83	+6·73	+8·30	*+8·44*	+6·95	+3·72	+0·83	−1·28	−2·47	−4·54	−6·41	*−6·54*	−4·17
Summer	−4·73	−4·34	−4·85	−4·56	−5·25	−5·03	*−5·63*	−4·66	−3·47	−1·61	+0·45	+3·77	+6·41	+7·27	*+7·81*	+7·76	+6·61	+5·43	+4·40	+2·26	+0·56	−1·74	−2·63	−4·25

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−47·9	−62·5	−72·1	*−73·5*	−68·7	−51·4	−36·5	−13·1	+8·7	+29·1	+29·9	+30·5	+30·7	+31·5	+53·3	*+73·7*	+44·3	+49·2	+38·9	+27·7	+13·1	−2·1	−21·7	−11·1
Feb.	−4·4	−17·9	−26·2	*−55·5*	−45·6	−37·5	−15·6	−10·1	−6·2	−3·1	+1·6	+5·1	+8·4	+17·9	*+38·4*	+32·9	+33·4	+31·5	+30·8	+33·1	+20·0	−1·9	−20·4	−8·7
Mar.	−35·4	−50·9	*−66·8*	−55·4	−31·4	−25·7	−21·4	−20·2	−25·0	−16·5	−6·8	−5·4	+4·4	+23·3	+47·4	+63·0	+68·4	*+86·3*	+76·4	+48·0	+7·8	−4·1	−28·2	−31·8
Apr.	−87·6	*−107·7*	−75·3	−42·6	−19·5	−6·7	+0·8	+8·3	+14·5	+19·8	+23·3	+22·1	+19·2	+23·3	+36·9	+31·6	+30·1	+41·1	*+61·6*	+57·1	+19·1	−5·0	+5·7	−70·1
May	−51·1	*−80·5*	−64·3	−49·3	−35·1	−30·5	−6·7	+11·3	+20·5	+25·9	+19·3	+11·5	+22·7	+40·9	*+43·7*	+40·9	+38·1	+30·9	+31·7	+35·1	+26·7	+7·7	−13·9	−75·5
June	−40·4	−43·3	*−64·4*	−54·7	−44·7	−23·8	−7·3	+1·3	+9·2	+7·5	+8·2	+9·1	+8·6	+16·7	+28·6	+32·1	+35·3	*+41·0*	+33·5	+30·1	+20·6	+13·5	+1·4	−18·1
July	−19·8	*−37·5*	−24·6	−15·2	−5·4	−0·5	−1·4	−1·0	−0·8	−1·1	−2·4	+1·0	+3·2	+7·7	+18·0	*+24·6*	+24·0	+21·1	+23·6	+16·8	+3·0	−14·3	−9·6	−9·4
Aug.	*−52·4*	−48·1	−29·6	−15·8	−13·4	−18·9	−22·8	−23·0	−15·4	−9·1	−5·0	+0·2	+7·8	+24·3	+41·6	*+55·2*	+50·8	+45·9	+36·4	+30·4	+19·6	+7·5	−27·6	−38·6
Sept.	−47·4	*−58·2*	−57·4	−37·6	−31·4	−35·1	−48·0	−34·2	−15·0	−3·0	+7·2	+19·0	+22·6	+30·4	+33·4	+40·4	+65·4	*+69·1*	+63·6	+42·6	+24·0	−5·0	−16·0	−29·4
Oct.	−55·6	−44·5	−43·8	−51·9	−54·0	−31·9	−13·4	−2·1	+3·0	+8·1	+14·4	+21·5	+26·8	+41·3	+45·4	+64·3	*+84·4*	+81·1	+78·2	+26·5	−35·0	−49·1	−53·4	*−60·3*
Nov.	−35·4	*−71·5*	−71·0	−63·7	−59·3	−62·0	−54·3	−33·1	−14·8	−0·1	+10·8	+18·9	+31·4	+46·1	+25·0	+63·7	+84·5	*+100·6*	+80·7	+56·5	+31·2	−1·9	−33·6	−48·7
Dec.	−29·6	*−37·9*	−26·3	−30·0	−36·3	−32·7	−25·2	−15·1	−9·1	−5·8	−0·5	+3·5	+5·2	+8·5	+20·5	+33·0	+55·9	+50·5	*+56·0*	+46·3	+36·3	−3·4	−27·7	−36·1
Year	−42·3	*−55·0*	−51·8	−45·4	−37·1	−29·7	−21·0	−10·9	−2·5	+4·3	+8·3	+11·4	+15·9	+26·0	+26·0	+46·3	+51·2	*+54·0*	+50·9	+37·5	+15·5	−4·8	−20·4	−36·5
Winter	−29·3	−47·5	−48·9	*−55·7*	−52·5	−45·9	−32·9	−17·9	−5·3	+5·0	+10·5	+14·5	+18·9	+26·0	+34·3	+50·8	+54·5	*+57·9*	+51·6	+40·9	+25·1	−2·3	−25·9	−26·1
Equinox	−56·5	*−65·3*	−60·8	−46·9	−34·1	−24·9	−20·5	−12·1	−5·6	+2·1	+9·5	+14·3	+18·3	+29·6	+40·8	+49·8	+62·1	+69·4	*+69·9*	+43·5	+4·0	−15·8	−23·0	−47·9
Summer	−40·9	*−52·3*	−45·7	−33·7	−24·7	−18·4	−9·5	−2·9	+3·4	+5·8	+5·0	+5·5	+10·6	+22·4	+33·0	*+38·2*	+37·1	+34·7	+31·3	+28·1	+17·5	+3·6	−12·4	−35·4

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

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1955

The ranges are derived from the diurnal inequalities printed in Tables 57 to 59

60 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	37·0	6·50	33·3	8·9	2·58	10·5	188·0	18·76	147·2
Feb.	19·1	7·10	40·6	9·5	5·64	12·2	52·9	11·45	93·9
Mar.	33·8	10·57	53·9	17·2	6·49	13·4	156·0	18·11	153·1
Apr.	56·7	11·39	64·9	42·6	8·90	11·7	245·6	20·40	169·3
May	57·2	10·43	39·5	49·2	10·77	16·5	181·4	20·62	124·2
June	60·0	11·56	33·4	58·8	10·49	21·8	70·4	16·26	105·4
July	55·0	11·80	28·7	49·0	12·96	18·5	65·1	13·21	62·1
Aug.	50·4	11·11	30·0	43·0	11·28	23·0	101·8	15·70	107·6
Sept.	44·1	8·90	51·4	39·0	7·28	11·0	73·7	13·34	127·3
Oct.	31·4	9·24	42·7	28·4	6·92	8·4	67·8	20·28	144·7
Nov.	41·3	8·53	53·7	22·4	5·38	12·1	208·9	20·88	172·1
Dec.	18·8	8·02	34·0	17·0	3·25	4·6	95·3	17·06	93·9
Year	34·9	8·22	39·3	29·9	7·16	10·2	74·3	12·83	109·0
Winter	19·1	7·09	37·6	13·3	4·07	6·7	99·6	13·80	113·6
Equinox	37·5	9·41	49·3	31·6	7·07	9·5	96·8	14·98	135·2
Summer	55·2	11·14	31·6	49·6	11·13	18·9	80·2	13·44	90·5

AVERAGE DEPARTURES

Arithmetical averages of diurnal inequalities in Tables 57 to 59 taken regardless of sign

61 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	5·7	1·72	9·1	2·0	0·72	2·5	29·0	3·37	38·4
Feb.	3·3	2·10	10·8	2·4	1·47	3·3	9·2	2·98	21·1
Mar.	8·2	2·56	13·6	3·9	1·64	2·9	24·8	4·34	35·4
Apr.	11·7	3·22	13·6	9·5	2·06	2·6	41·7	4·85	34·5
May	13·5	3·19	10·0	11·8	2·75	3·9	35·4	5·59	33·9
June	13·3	3·19	8·0	14·5	3·11	5·7	17·8	4·62	24·7
July	12·5	3·16	5·9	11·4	3·17	3·5	13·6	3·59	11·9
Aug.	12·1	2·92	8·1	11·3	2·61	4·4	23·7	4·07	26·6
Sept.	9·9	2·35	13·8	10·1	1·74	2·5	14·5	3·46	34·8
Oct.	6·9	2·21	10·9	7·3	1·40	1·7	16·0	3·87	41·3
Nov.	8·0	2·00	14·6	5·9	1·35	2·7	37·8	4·07	45·8
Dec.	4·4	1·95	9·5	3·7	0·79	1·0	13·3	3·69	26·3
Year	7·6	2·41	10·1	7·1	1·80	2·3	18·5	3·47	29·8
Winter	4·5	1·89	10·8	3·1	1·03	1·9	17·2	3·23	32·5
Equinox	8·2	2·50	12·5	7·6	1·69	1·8	21·3	3·71	34·4
Summer	12·2	3·09	7·6	12·2	2·84	4·0	20·9	4·39	23·0

NON-CYCLIC CHANGE

62 LERWICK

	All days			Quiet days			Disturbed days		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0·2	−0·03	−0·2	+3·9	+0·44	−0·5	−4·0	+1·22	−11·9
Feb.	−0·4	+0·01	+0·6	+7·2	−0·46	+1·6	−9·7	−0·77	−4·4
Mar.	−0·5	−0·01	−1·2	+2·0	+0·24	+0·4	−12·1	+0·15	+7·2
Apr.	−0·5	−0·01	−0·4	+3·0	+0·28	−0·7	+9·9	+4·49	+33·4
May	+0·8	−0·03	+1·0	+0·2	+0·05	−3·9	−10·6	+0·56	−16·8
June	+0·1	+0·06	+0·6	−0·8	+0·08	−1·4	−5·2	+0·68	+5·5
July	−0·3	−0·04	0·0	+2·3	−0·64	−3·6	−11·5	+0·18	−7·5
Aug.	0·0	−0·17	−1·0	−0·5	+0·10	−1·7	+3·7	+0·50	+10·5
Sept.	−0·7	−0·03	−1·9	+3·2	−0·34	−4·7	−0·6	+2·17	+6·0
Oct.	−1·0	0·00	+1·6	−2·1	−1·30	−3·3	−11·8	+0·39	−16·0
Nov.	+1·5	+0·10	+1·8	+2·0	+0·23	−1·6	−18·8	−4·26	−23·4
Dec.	+0·2	−0·27	−0·4	+2·4	−0·25	−2·8	−27·6	−1·28	−8·4
Year	−0·1	−0·03	0·0	+1·9	−0·13	−1·9	−8·2	+0·34	−2·1
Winter	+0·4	−0·05	+0·5	+3·9	−0·01	−0·8	−15·0	−1·27	−12·0
Equinox	−0·7	−0·01	−0·5	+1·5	−0·28	−2·1	−3·7	+1·80	+7·7
Summer	+0·1	−0·05	+0·1	+0·3	−0·10	−2·7	−5·9	+0·48	−2·1

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

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, *a*, quiet, *q*, and disturbed, *d*, days for *H*, *D* and *Z* and for all days for *N*, *W*, *I* and *F*

63 LERWICK

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	*q*	*d*	*a*	*q*	*d*	*a*	*q*	*d*				
	14,000γ +			10° +			46,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	455	460	430	11·6	12·0	10·2	1144	1148	1136	14227	2558	72 57·2	49311
Feb.	459	462	454	11·1	11·5	10·8	1147	1149	1142	14231	2557	72 57·0	49315
Mar.	460	463	466	10·6	11·1	10·5	1150	1148	1151	14233	2555	72 57·0	49318
Apr.	456	469	427	9·9	10·6	7·9	1146	1149	1139	14229	2551	72 57·2	49313
May	462	473	438	9·5	10·1	7·9	1150	1153	1136	14236	2551	72 56·9	49318
June	471	470	466	9·5	9·1	8·9	1154	1155	1145	14244	2552	72 56·4	49325
July	473	472	471	8·8	8·5	8·7	1154	1155	1154	14246	2549	72 56·3	49325
Aug.	472	475	467	8·5	8·7	9·0	1156	1156	1157	14245	2548	72 56·3	49327
Sept.	466	469	464	7·8	7·7	7·1	1155	1157	1153	14240	2544	72 56·7	49324
Oct.	465	471	452	7·2	7·5	5·9	1162	1160	1157	14239	2542	72 57·0	49330
Nov.	463	463	464	6·5	6·3	6·1	1174	1174	1181	14239	2539	72 57·3	49341
Dec.	470	477	464	6·4	6·5	5·7	1174	1171	1176	14245	2539	72 56·8	49343
Year	464	469	455	9·0	9·1	8·2	1156	1156	1152	14238	2549	72 56·8	49324

64 LERWICK

Night commencing				Night commencing				Night commencing			
			JANUARY				MARCH (contd.)				OCTOBER (contd.)
3	ca	••	Cloudy to fair	20	ca	••	Cloudy	27	cb	••	Cloudy. Moonlight
10	cb	••	Fine to cloudy. Moonlight	21	ca	••	Cloudy	28	cb	••	Cloudy. Moonlight
11	ca-cb	◌̲	Fair. Moonlight. Rays at 22h. Faint glow 24h. Arc with moderate rays 00h.50m.	22	ca	••	Cloudy to fair	29	cb	••	Fair. Moonlight
				26	ca	••	Fair	30	cb	••	Fine to cloudy. Moonlight
12	ca	••	Fair to cloudy	28	ca	••	Fine to fair				
13	ca	••	Fair	29	ca	••	Cloudy				
14	ca	••	Cloudy to fair								
15	ca	••	Fair to fine				APRIL				NOVEMBER
16	ca	••	Cloudy to fair								
17	ca	◌̲	Fair to cloudy. Faint glow 19h. to 22h. Rays at 01h.30m. no longer visible 02h.40m.	1	a	••	Fine	11	ca	••	Fair to cloudy
				3	b	••	Fine	12	ca	◌̲	Cloudy to fair. Diffuse surface 17h.55m. to 20h.35m., faint to moderate
18	ca	◌̲	Cloudy to fine. Faint glow 19h. becoming diffuse surface 19h.30m. Arc at 21h.15m. becoming faint glow 21h.40m. till 02h.	7	ca-cb	••	Fair Moonlight				
				9	a	••	Fine				
				12	ca	••	Cloudy to fair	14	ca	••	Fair. Cloudy
				13	c	◌̲	Cloudy. Faint glow 22h.45m., 23h.45m.	16	ca	••	Cloudy to fair
19	a	◌̲	Fine. Faint rays 19h.07m. occasionally moderate. Faint glow 20h.10m. to 23h. Diffuse band 24h., 01h.					19	c	◌̲	Cloudy. Faint rayed arc first observed 22h.45m. became homogeneous arc 23h.05m. and faint glow 23h.40m. Faint homogeneous arc 00h.05m. becoming moderate flaming aurora 00h.30m. to 00h.40m. then faint rays and finally faint glow at 04h.45m.
				14	ca	••	Fair				
				15	a	••	Fine				
				16	ca	••	Cloudy to fair				
				17	a	••	Fair to fine				
20	ca	••	Fair to cloudy	18	ca	••	Fair to cloudy				
24	a	••	Fair	19	ca	••	Fair to cloudy				
25	c	••	Cloudy	20	ca	••	Cloudy to fair				
26	ca	••	Cloudy then fine	21	ca	••	Fair to cloudy	20	cb	◌̲	Fair to cloudy. Moonlight. Moderate homogeneous band 17h. becoming rayed band, rays, corona, bright at times fading to diffuse surface by 20h.
30	ca	••	Fair to cloudy	24	ca	••	Cloudy to fair				
31	c	••	Cloudy	28	a	◌̲	Fine to fair. Faint glow 23h.45m.				
				29	a	••	Fair to fine				
				30	ca	••	Cloudy to fair				
								22	b	••	Cloudy to fair. Moonlight
			FEBRUARY				AUGUST	26	cb	••	Cloudy to fair. Moonlight
								27	cb	••	Cloudy. Moonlight
3	cb	••	Fair to fine. Moonlight	14	c	◌̲	Overcast till midnight then fair to cloudy. Faint glow 24h.	28	cb	••	Cloudy. Moonlight
4	cb	••	Fair to fine. Moonlight								
5	cb	••	Fair. Moonlight								
6	cb	••	Fair to cloudy. Moonlight								
8	cb	••	Fair to fine. Moonlight				SEPTEMBER				
9	ca-cb	••	Cloudy to fine. Moonlight								DECEMBER
10	a	••	Fine	3	cb	••	Fine to cloudy. Moonlight				
11	ca	◌̲	Cloudy to fair. Faint glow 20h.05m. becoming moderate homogeneous band 20h.15m. and moderate rayed arc 20h.20m. Decreased to faint glow 20h.30m. which persisted till 22h.	5	cb	••	Fair to cloudy. Moonlight	1	cb	◌̲	Cloudy to fair. Moonlight. Faint glow 18h. to 19h. becoming moderate rays 20h.15m. then bright with bright corona 20h.28m.; pulsating surface, flaming, moderate rays 20h.40m. fading by 20h.45m.
				11	a	◌̲	Fair to fine. Faint diffuse surface 20h.10m., 20h.40m.				
				12	ca	◌̲	Cloudy. Faint glow 04h.				
				13	a	••	Fair to fine				
12	a	••	Fair to cloudy	14	ca	••	Cloudy to fine				
13	ca	••	Cloudy to fair	15	c	◌̲	Cloudy to fair. Faint glow 01h.	2	cb	••	Fair to cloudy. Moonlight
14	ca	••	Fair to cloudy	16	ca	◌̲	Fair to cloudy. Faint glow 23h.50m.	3	ca-cb	◌̲	Cloudy to fair. Moonlight. Faint glow 20h.30m. to 20h.40m.
15	ca	••	Fair to fine	17	a	••	Fair				
16	ca	••	Fair to cloudy	18	ca	••	Cloudy	4	ca	••	Fair to cloudy
18	a	◌̲	Fair. Faint glow 19h. to 23h., occasionally moderate	20	ca	••	Cloudy to fine	6	ca	••	Cloudy to fair
				23	ca	◌̲	Cloudy to fair. Faint diffuse surface 20h.15m., 20h.30m.	7	ca	••	Cloudy to fair
20	ca	••	Cloudy to fair					8	a	◌̲	Fine. Faint glow 18h.15m. to 21h.40m.
21	ca	••	Fair to cloudy	24	ca	••	Cloudy to fine				
22	ca	••	Fair	25	cb	••	Cloudy to fair. Moonlight	9	a	••	Fine to fair
23	a	◌̲	Fine. Faint homogeneous arc at 20h.30m. became moderate rayed arc 20h.45m. Faint rays at 21h.15m. but moderate at times. Faint glow 21h.45m. to 03h.	26	cb	••	Cloudy to fair. Moonlight	10	a	◌̲	Faint glow 19h.15m. Faint rays 19h.30m.
				27	cb	••	Cloudy to fair. Moonlight				
				30	cb	••	Cloudy to fair. Moonlight	11	a	••	Fair to fine
								12	ca	••	Cloudy to fair
								16	a	••	Fair to fine
24	ca	••	Fine				OCTOBER	17	ca	••	Cloudy to fair
25	ca	◌̲	Cloudy. Faint glow 01h.45m.					18	a	••	Fair
26	ca	••	Cloudy	2	c	••	Fair to cloudy	19	ca	◌̲	Fine to cloudy. Faint glow 18h.30m. to 19h. becoming faint homogeneous arc 19h.15m. Moderate diffuse surface 20h.30m. Faint glow 02h.45m.
27	ca	••	Fair	3	cb	••	Cloudy to fine. Moonlight				
				15	ca	••	Fair to cloudy				
				16	ca	••	Cloudy to fair				
				17	a	••	Fine to fair				
			MARCH	18	a	••	Fair to fine	20	ca	◌̲	Cloudy to fair. Faint glow 01h.
				20	b	◌̲	Fair to fine. Faint diffuse surface 20h.10m.	21	b	◌̲	Cloudy then mainly fine. Moonlight. Faint glow 17h.45m. to 19h. Faint homogeneous arc and occasional rays 19h. to 21h. Faint glow 22h. and 01h.
2	b	••	Fine. Moonlight								
3	cb	••	Cloudy to fine. Moonlight	21	a	◌̲	Fair to fine. Faint glow 22h.45m.				
5	cb	••	Fair to fine. Moonlight	23	cb	••	Cloudy to fine. Moonlight				
12	ca	••	Cloudy to fair	25	b	◌̲	Fair to fine. Moonlight. Bright rayed arc 19h.05m., 19h.15m. Bright glow 19h.20m. became fainter 20h.25m. Not visible 20h.40m. Faint glow 23h.50m. Faint rayed band 00h.45m. becoming faint glow again by 01h.50m.	24	b	••	Fair. Moonlight
15	ca	◌̲	Cloudy to fair. Faint glow 21h.30m., 02h. Faint homogeneous arc 03h.					25	cb	••	Fair to cloudy. Moonlight
								26	cb	◌̲	Fair to cloudy. Moonlight. Moderate homogeneous band 20h.40m. obscured by cloud 21h.15m.
16	ca	◌̲	Fair. Faint glow 19h. to 22h.								
17	ca	••	Fair to cloudy					30	cb	••	Fair to cloudy. Moonlight
18	ca	••	Cloudy					31	cb	••	Fair to cloudy. Moonlight
19	a	••	Cloudy to fine								

In the interests of brevity there have been omitted from Table 64 all dates on which the sky throughout the evening remained 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 ◌̲. 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 ••; 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 aurora.

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

a = Conditions favourable for seeing aurora
b = Unfavourable for faint aurora (moonlight, mist, Cs, etc.) but not such as to mask bright aurora
c = Cloudy, but aurora not seen in clear intervals
ca, cb = Have been used for "Cloudy, with conditions a or b in the intervals"
Changing conditions have been indicated by a hyphen, e.g. a-c

65 BRITISH ISLES

Date	Φ_1	Forms	Time	Φ_2	Date	Φ_1	Forms	Time	Φ_2	Date	Φ_1	Forms	Time	Φ_2
JANUARY					MARCH (contd.)					SEPTEMBER				
1-2	61	HA,R	0120-0145		28-29	62	G	2255-2315		9-10	63	HA	0300	
5-6	63	RA	0045-0323		30-31	59	HA	2230-2400	64	10-11	63	G	2230	
11-12	62	HA,RA,RB	2100-0050	68	31-1	63	G	2200-2240		11-12	61	S,R	2010-2400	
12-13	59	G,R	2100-0001	69						12-13	61	G	2200-0154	
13-14	59	G	2255-0600							15-16	63	G	0100	
14-15	61	G	1900-0600							16-17	61	G	2350-0300	
16-17	60	G	2000-0330		APRIL					17-18	60	G	2100-0300	
17-18	55	HA,RA,RB,F	1900-0700	60						20-21	59	RB	2140-2255	
18-19	56	HA,RA,RB	1830-0700	64	1-2	61	HA	2300-2400		22-23	63	HB	2200	
19-20	58	HA,RA,HB	1700-0600		4-5	61	HA	2130-2330		23-24	60	G,S	2015-0200	
20-21	63	RB	2300-0130		9-10	62	G	0400		27-28	61	G	0350-0500	
21-22	58	G	2000-2250		10-11	59	G	2045-2100		30-1	63	G		
23-24	63	G			11-12	63	HA	0123-0300						
27-28	58	HA,RA,RB	1930-0400	66	12-13	57	HA,HB,R	2025-2400	66					
28-29	60	HA,HB	2030-0001		13-14	55	HA,R	2000-0250	65					
29-30	61	HA,RA	2100-0030		15-16	62	G	2230-2300		OCTOBER				
30-31	62	HA	2100-2145		16-17	61	G	2130-2245						
					17-18	61	RB	0150-0445		1-2	63	G		
					20-21	61	HB	2230-0200		2-3	63	G		
					22-23	62	G	2145-2200		9-10	63	HA	2350	67
FEBRUARY					23-24	62	G	2200-2400		15-16	59	G	0001	
					24-25	56	HA	2205-2354		20-21	63	S	2010-2100	
4-5	61	RB	2130-2150		26-27	61	HA	2230-2252	66	21-22	60	HA	2000-2335	
5-6	63	G	1855		27-28	56	HA,RB,F	2200-0230	59	22-23	61	HA	2200	
6-7	63	G	2045-2330		28-29	61	HA,HB	2345-0200					and	
8-9	61	G	1850-1950		29-30	62	G	2215-2230					0001	
			and		30-1	62	G	0300		24-25	60	HB	0130-0230	
			0400-0530							25-26	60	RA	1900-0525	63
9-10	63	G	1830-1940							26-27	59	RA	1945-0400	
11-12	59	HA,RA,HB,F	1900-0200	64						29-30	61	R	1845	
12-13	59	HA	1830-0200		MAY					30-31	63	G	0001	
13-14	60	G	1900-2045							31-1	63	RA	2100	
14-15	58	RA	2030-0500		5-6	62	G	2300-2330					and	
15-16	58	G	1900-2100		6-7	60	HA	0030	64				0300	
16-17	59	G	2000-2100		10-11	56	G	2300-2400						
			and		12-13	60	G	2400-0100						
			0400		14-15	60	G	2400-0200						
17-18	58	G	0455-0550		15-16	58	G	2220-0130		NOVEMBER				
18-19	59	RA,RB	1900-0150		17-18	60	G	2330-0145						
19-20	62	G	0500		25-26	54	RA	2243-0001		4-5	59	HA,RA	2000-0300	64
20-21	63	G								5-6	62	G,R	2115-2120	
21-22	62	G	0200-0330							8-9	61	G	1900-2245	
23-24	60	HA,RA,RB	1900-0300							10-11	61	G,HB	2300-0200	
24-25	60	HB,R	2235-0245		JUNE					11-12	61	HA	1730-1800	
25-26	60	HA,HB	2248-0400							12-13	58	HA,RA,S	1730-0200	64
27-28	63	G			8-9	59	G,R	0001-0200		13-14	62	G	0001	
					18-19	61	RA	2350-0001		15-16	58	HA	1900-0600	64
										16-17	60	HA,RA	1810-2300	65
MARCH										18-19	56	HA,RA	1810-2200	59
					JULY					19-20	56	HA,RA,S	2200-0445	63
5-6	63	G								20-21	56	RA,HB,RB,S	1700-2320	63
6-7	63	G			3-4	55	G,R	0020-0035		24-25	57	HA	2300-0400	
7-8	63	G			4-5	60	G	0210						
9-10	56	HA,RA	1930-0200	63	15-16	61	G	0230						
10-11	60	G	1950-2300		16-17	59	PA	0030		DECEMBER				
11-12	60	HA,RA	2030-0345	64	25-26	62	G							
12-13	57	HA	2030-2330							1-2	57	RB,F	1730-2200	63
13-14	60	G	2100-2300							3-4	60	G	2000-2200	
14-15	63	G	2330							7-8	61	G	0150-0245	
15-16	59	HA	2130-0300	63	AUGUST					8-9	61	G	1815-2140	
16-17	58	HA	2050-0145	62						10-11	62	G,R	1915-1930	
17-18	60	G	2215-2245		3-4	62	G	0400		11-12	61	G	2300	
18-19	62	G	0100		5-6	60	HA	0120-0135		15-16	60	G	2300	
20-21	63	G	2300		10-11	61	G	2340-2351		19-20	59	HA,RA,RB,S	1830-0500	
21-22	61	G	2000		13-14	60	G	2250		20-21	60	HA	2200-0400	
23-24	56	HA,PA	2045-2150		14-15	61	G	2249-0030		21-22	61	HA,R	1745-0100	
25-26	63	G			15-16	61	G	2247-2254		24-25	60	G,R	0345-0645	
26-27	61	G	2320-2400		20-21	61	G	2300		26-27	62	HB	2040	

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; PA = pulsating arc; RA = rayed arc; HB = homogeneous band; RB = rayed band; R = rays; S = surface; P = pulsating; F = flaming. If the forms could not be determined because of cloud or twilight, but auroral light was positively identified, the abbreviation L is used. Under Φ_2 is given the lowest geomagnetic latitude of overhead occurrence in the longitudes considered. In the absence of direct visual observations, Φ_2 is deduced from elevation measurements made in other latitudes, assuming a height of 100 Km. for the lower edges of arcs and bands.

Because of varying observing conditions, these data are in some 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.

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude	55°19′N.
Longitude	3°12′W.
G.M.T. of Local Mean Noon ..	12h.13m.
Height of site above M.S.L. ..	235 to 250 metres

INTRODUCTION

Reference should be made to the 1938 volume for details of site and meteorological instruments. The only important change since that date was the replacement of the Beckley rain-gauge by the Dines tilting-siphon recorder in September 1940.

Notes on the meteorological summaries

The extreme temperatures during the year were 300·3°A. (81·1°F.) on 24 August and 260·0°A. (8·6°F.) on 14 January. With a mean temperature of 264·9°A. (23·9°F.), 13 January was the coldest day of the year and 23 August, with 293·4°A. (59·0°F.) was the hottest. There were sixteen "ice-days", that is, days with maximum temperature below 273°A.; these occurred on 11, 12, 13, 14, 15, 16, 17 January, 17, 19, 20, 21, 22, 23, 26, 27 February, 21 December.

The total rainfall for the year, 1114·5mm. (43·88in.), was only 78 per cent of the average. Snow fell on 42 days.

The total duration of bright sunshine, 1533·5hr., was almost 30 per cent greater than average.

The highest gust of wind during the year, 27·0 m./sec. (52 knots) and the highest hourly speed, 15·9 m./sec. (31 knots), both occurred on 28 December.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. For purposes of comparison the corresponding data are also given derived from the mean inequalities for the period 1911-1920 by Dr. A. Crichton Mitchell*.

---

*MITCHELL, A.C.: On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfries-shire. *Quart. J.R. met. Soc. London*, 50, 1924, p.127.

TABLE 66 - HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE

Values of c_n, α_n, in the series $\sum c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1955	1911-1920	1955	1911-1920	1955	1911-1920	1955	1911-1920	1955	1911-1920	1955	1911-1920	1955	1911-1920	1955	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.31	0.09	145	346	0.27	0.23	138	152	0.18	0.13	345	345	0.07	0.05	253	214
February	0.28	0.12	145	215	0.38	0.27	115	138	0.09	0.08	341	341	0.06	0.04	123	68
March	0.35	0.13	92	185	0.30	0.30	140	145	0.04	0.05	333	335	0.08	0.05	31	25
April	0.13	0.21	342	92	0.28	0.30	155	155	0.05	0.02	194	156	0.03	0.05	16	356
May	0.05	0.23	43	53	0.33	0.27	141	147	0.08	0.07	195	160	0.02	0.03	341	330
June	0.17	0.15	95	54	0.22	0.23	143	146	0.08	0.08	168	161	0.01	0.02	73	326
July	0.40	0.17	42	69	0.25	0.21	138	141	0.11	0.08	130	156	0.01	0.02	355	300
August	0.23	0.11	59	115	0.32	0.24	135	148	0.04	0.06	202	157	0.05	0.05	298	331
September	0.18	0.12	170	88	0.35	0.31	156	152	0.04	0.01	89	111	0.08	0.05	337	345
October	0.09	0.11	55	76	0.27	0.31	170	159	0.10	0.06	334	8	0.03	0.04	5	33
November	0.24	0.13	299	183	0.31	0.24	165	168	0.13	0.10	8	9	0.02	0.01	232	146
December	0.17	0.14	203	97	0.30	0.21	166	147	0.11	0.12	17	4	0.05	0.07	212	213
Arithmetic mean	0.22	0.14			0.30	0.26			0.09	0.07			0.04	0.04		
Year	0.09	0.09	98	91	0.28	0.26	145	150	0.02	0.02	17	42	0.02	0.02	313	342
Winter	0.13	0.04	173	165	0.29	0.24	145	151	0.12	0.11	357	355	0.03	0.02	212	189
Equinox	0.11	0.11	92	104	0.30	0.31	155	153	0.02	0.02	338	4	0.05	0.04	7	9
Summer	0.20	0.15	57	67	0.28	0.24	139	146	0.07	0.07	165	159	0.02	0.03	316	324

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

Terrestrial magnetism

Reference should be made to the 1938 volume for notes on the instruments and tables.

Notes on the results

Comparing mean values on all days of 1955 with those for 1954, it is noted that *H* increased by 17γ, *D*(West) decreased by 7'.1 and *Z* increased by 22γ. The changes in the deduced quantities *N*, *W*, *I*, and *F* are +24γ, −30γ, −0'.6 and +27γ. If these changes are compared with those for previous years the discontinuities introduced on 1 January 1934 in *H* and *Z* and the components derived from them must be kept in mind.

The ranges between the extreme values recorded during 1955 were *H* 880γ, *D* 86'.5 and *Z* 860γ. The range of 1°26'.5 in declination is equivalent to a range of about 420γ in the component of force perpendicular to the magnetic meridian.

The *K* index is fully described in *Terrestrial Magnetism and Atmospheric Electricity**. Briefly, a figure is allotted on a scale 0-9 to each 3-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet day variation. The figures are first allotted from the *H* magnetograms and then increased, if necessary, by inspection of the *D* and *Z* curves so that the most disturbed component determines the final figure. The scale of ranges in γ

*BARTELS, J., KEEK, N.H. and JOHNSTON, H.F.: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore, Ma.* 44, 1939, p.411.

corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Eskdalemuir is:

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	8	15	30	60	105	180	300	500	750

Beginning with 1947 some changes have been made in the tables accompanying these notes. The month by month commentary on the autographic records has been omitted, and a change has been made in the table formerly headed "Principal Magnetic Disturbances". It is intended that all the disturbances, which would have been included in the previous type of table, will still be included, with, however, additional disturbances of the form of sudden commencements and those which can be recognised as being solar flare effects. The table is thus 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.T.M.E. Bulletins because a somewhat stricter meaning has been given to the words "well marked", and also because the sharp beginnings of small polar disturbances have been omitted. 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 disturbance. The signs given to the movements of *H*, *D* and *Z* are positive increasing *H* or *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 the Eskdalemuir sections of the *Observatories' Year Book*, even if the disturbance at one of the stations is relatively small.

In Table 67 the values of mean absolute daily range for the months and seasons are brought together. For convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian. Table 68 gives the frequency distribution of absolute daily ranges and compares the percentage distribution for 1955 with that for the 22-year period 1932-1953. Table 69 gives the average values of the diurnal inequality ranges for the year and seasons for the period 1932-1953 (not the values of the range of the representative mean diurnal inequalities for this period) along with the 1955 values expressed as a percentage of the average values. The units employed are 1γ for force and 1′ for declination.

TABLE 67 - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1955			Mean 1932-53			1955			Mean 1932-53		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	74	69	39	78	83	47	94	91	85	76	90	75
February	64	69	38	84	89	53	81	91	83	82	97	84
March	85	96	59	126	113	85	108	125	128	124	123	135
April	100	88	73	125	103	77	127	116	159	123	112	122
May	94	76	54	116	91	71	119	99	117	114	99	113
June	85	70	37	105	84	55	108	92	80	103	91	87
July	79	69	34	110	85	56	100	90	74	108	92	89
August	72	70	34	113	93	68	91	92	74	111	101	108
September	81	80	47	117	106	81	103	104	102	115	116	129
October	74	78	41	107	102	76	94	103	89	105	111	121
November	86	84	64	73	79	47	109	111	139	72	86	75
December	55	66	30	66	74	42	70	87	65	65	80	67
Winter	70	72	43	75	81	47	89	95	93	74	88	75
Equinox	85	85	55	119	106	80	108	112	120	117	115	127
Summer	83	71	40	111	88	63	105	94	87	109	96	100
Year	79	76	46	102	92	63	..	..	..	..	..	..

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

TABLE 68 - FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1955			Percentage distribution					
				H		*D*		*Z*	
	H	*D*	*Z*	1955	1932-53	1955	1932-53	1955	1932-53
γ				%	%	%	%	%	%
0 – 9	0	0	7	0·0	0·0	0·0	0·0	1·9	2·3
10 – 19	5	3	68	1·4	0·8	0·8	0·4	18·6	14·1
20 – 29	15	12	96	4·1	3·9	3·3	2·5	26·3	19·8
30 – 39	21	27	64	5·8	6·0	7·4	5·0	17·5	16·0
40 – 49	54	36	44	14·8	7·8	9·9	7·4	12·1	10·2
50 – 59	55	67	22	15·1	10·4	18·4	12·1	6·0	7·5
60 – 69	48	62	16	13·2	11·7	17·0	12·9	4·4	5·6
70 – 79	40	42	9	11·0	10·6	11·5	12·3	2·5	3·6
80 – 89	29	30	10	7·9	9·0	8·2	10·7	2·7	3·0
90 – 99	28	13	4	7·7	7·3	3·6	8·3	1·1	2·4
100 – 109	17	11	3	4·7	5·8	3·0	5·9	0·8	2·1
110 – 119	12	15	1	3·3	5·1	4·1	4·0	0·3	1·7
120 – 129	3	11	2	0·8	3·3	3·0	3·5	0·6	1·7
130 – 139	8	8	5	2·2	2·9	2·2	2·6	1·5	1·2
140 – 149	2	4	2	0·6	2·3	1·1	2·2	0·6	0·8
150 – 159	9	3	0	2·5	1·9	0·8	1·7	0·0	0·9
160 – 169	4	4	0	1·1	1·5	1·1	1·6	0·0	0·7
170 – 179	2	2	2	0·6	1·5	0·6	1·2	0·6	0·4
180 – 189	2	2	1	0·6	0·9	0·6	1·0	0·3	0·6
190 – 199	1	4	0	0·3	0·9	1·1	0·8	0·0	0·5
200 +	10	9	9	2·7	6·3	2·5	4·0	2·5	4·8
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 69 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53 WITH 1955 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		Z	*H*	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-53	28·7	37·8	8·66	13·7	34·4	8·43	82·1	53·9	11·93
	1955(%)	71	69	83	96	77	82	67	61	90
Winter	1932-53	21·2	19·3	6·95	5·9	16·2	4·44	66·5	34·4	11·45
	1955(%)	89	82	86	102	90	85	88	73	96
Equinox	1932-53	37·1	43·1	10·18	14·8	39·7	9·69	108·9	75·4	15·11
	1955(%)	63	65	81	93	69	74	62	47	84
Summer	1932-53	33·9	59·7	11·84	21·9	50·4	11·76	82·4	83·7	13·11
	1955(%)	69	77	85	97	83	88	50	74	90

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

TABLE 70 - NOTEWORTHY MAGNETIC DISTURBANCES AT ESKDALEMUIR

(a) Disturbances without S.C's

Serial Number	From		To		Range (γ)			Notes
	Date	Hour	Date	Hour	*H*	*D*	*Z*	
1a	Jan. 17	12	Jan. 18	09	444	220	314	
2a	Feb. 28	00	Feb. 28	09	117	128	98	
3a	Mar. 22	09	Mar. 22	22	327	181	334	
4a	Oct. 25	00	Oct. 26	24	181	223	190	
5a	Nov. 18	16	Nov. 18	24	157	167	200	
6a	Dec. 1	13	Dec. 2	08	146	156	139	

(b) Disturbances with a S.C.

Serial Number	Date	Time of S.C.	End of Disturbance Date	Hour	With initial reversed stroke *H*	*D*	*Z*	Magnitude main stroke of S.C. *H*	*D*	*Z*	Range of following disturbance (γ) *H*	*D*	*Z*
								γ	γ	γ			
1b	Jan. 11	12.19			Yes	Yes	No	+16	−8	−2		Small	
2b	Mar. 30	10.39	Mar. 31	24	No	No	No	Small and indistinct			250	216	174
3b	Apr. 24	12.13	Apr. 25	02	Yes	No	No	+4	−9	+2	121	145	112
4b	Apr. 27	16.24	Apr. 28	05	Yes	Yes	No	+85	−26	−17	533	214	457
5b	May 25	14.33	May 26	11	Yes	Yes	No	+45	−19	−6	379	219	278
6b	June 6	17.28			No	No	No	+44	−13	−4		Small	
7b	June 22	10.39			Yes	Yes	No	+8	+9	−4		Small	
8b	Oct. 5	11.18	Oct. 6	10	No	No	No	+24	−26	−3	227	193	93
9b	Oct. 7	22.57			No	No	No	+48	−16	−6		Small	
10b	Nov. 19	13.19	Nov. 21	04	Yes	Yes	No	+73	−66	+2	573	420	568

(c) Disturbances due to Solar Flare

Serial Number	Date	Commence-ment	Max.	End	Movement (γ) *H*	*D*	*Z*	*K*	*K'*	Flare or S.F.E.
1c	July 2	10.18	10.22	10.26	+8	−4	0	2	2	
2c	July 3	16.06	16.20	16.24	+28	−7	−3	3	2	

(c) Disturbances due to Solar Flare (contd.)

Serial Number	Date	Commencement	Max.	End	Movement (γ) H	D	Z	K	K'	Flare or S.F.E.
3c	Aug. 30	16.17	16.20	16.23	+12	-4	0	3	3	
4c	Nov. 12	11.28	11.33	11.53	-36	-35	+4	4	3	S.W.F. S.F. S.E.A.
5c	Dec. 3	11.04	11.14	11.20	-16	-4	0	3	1	S.W.F. S.F.

all these are doubtful S.F.E.
S.E.A. – Sudden enhancement of atmospherics
S.W.F. – Short wave radio fade out
S.F. – Solar Flare

Irregular changes in declination

In connection with the supply of declination data to mine surveyors, it has been the practice to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits which were adopted in consultation with representative mine surveyors are; less than 5′, between 5′ and 15′, between 15′ and 30′ and greater than 30′. The range is less than 5′ in about 85 per cent of the hourly periods. The actual frequencies of occurrence in the last three of the four divisions mentioned are set out below.

Number of cases per month

Range interval	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
5′ – 15′	72	79	94	73	57	52	30	34	81	85	76	49	782
15′ – 30′	12	6	21	9	7	1	2	0	9	13	10	10	100
>30′	2	0	1	2	0	0	0	0	0	1	3	0	9

Hourly distribution

Range interval	*Hour ending at (G.M.T.)* 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5′ – 15′	58	49	44	45	30	17	18	15	14	12	17	21	19	15	13	13	28	33	43	47	61	55	55	60
15′ – 30′	4	3	4	2	1	1	0	2	0	0	0	0	0	1	1	2	5	13	9	10	14	17	5	6
>30′	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	1	0	0	2	0

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

71 ESKDALEMUIR: h_b(height of barometer cistern above M.S.L.) = 237·3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	07·5	01·8	04·8	63·1	55·3	60·7	97·8	87·0	90·5	94·6	92·6	93·9	81·4	63·4	72·5	93·7	88·9	91·0
2	*08·9*	06·5	*07·6*	62·7	53·4	59·4	04·4	97·8	02·5	92·6	80·1	85·3	75·2	62·0	68·4	90·1	86·8	88·4
3	06·6	99·8	03·1	61·9	58·0	59·6	02·3	97·4	99·8	81·5	79·2	80·4	75·3	56·7	67·1	91·1	87·2	89·5
4	99·8	94·1	96·2	62·2	56·8	59·5	04·0	00·3	02·5	84·0	80·0	81·6	58·7	*56·0*	*57·2*	87·2	77·3	80·9
5	97·0	91·8	95·1	74·9	57·1	66·3	01·9	91·5	96·7	85·3	82·8	83·9	74·2	57·7	65·1	87·0	81·5	84·5
6	93·0	89·5	91·3	85·8	74·9	81·8	94·1	91·3	92·9	86·1	82·1	83·8	80·9	73·9	76·0	86·9	81·8	84·4
7	90·4	86·9	88·5	83·3	65·9	70·9	92·7	82·4	87·3	87·5	85·0	86·5	90·9	80·9	88·0	81·8	76·9	78·7
8	86·9	80·8	84·5	78·2	65·3	69·2	87·7	79·3	82·1	88·1	85·9	87·0	87·2	78·0	81·4	83·6	75·4	78·3
9	80·8	63·4	74·6	82·0	78·2	80·0	98·5	87·7	93·1	90·2	84·8	88·6	78·0	72·6	74·0	88·8	83·4	85·9
10	63·4	*55·2*	*58·6*	89·9	82·0	87·2	03·0	98·5	01·6	89·4	83·0	86·5	88·3	72·6	81·2	90·8	88·5	90·0
11	71·3	61·9	67·1	89·5	79·0	83·9	03·4	02·0	*02·8*	98·0	88·8	93·9	88·5	85·7	87·2	90·6	79·2	86·4
12	71·1	59·1	64·2	90·2	77·0	82·5	03·3	00·4	01·8	00·7	96·9	98·5	85·7	72·6	80·6	82·5	*73·4*	*76·8*
13	74·4	65·5	70·4	94·1	89·3	92·3	01·8	98·9	00·6	05·0	00·7	02·6	72·6	69·7	68·9	88·2	82·5	86·6
14	79·3	65·3	72·7	89·3	77·0	82·0	01·9	98·7	00·2	05·1	03·4	04·3	72·7	69·5	70·8	86·8	80·6	82·1
15	78·9	62·2	70·3	86·8	81·2	84·9	98·7	92·8	95·9	03·9	01·1	02·7	74·0	72·2	72·9	94·7	84·0	90·0
16	70·5	61·2	65·7	81·6	67·2	73·6	92·8	87·5	89·8	07·8	03·1	05·1	78·4	72·7	76·1	95·5	94·2	94·7
17	70·6	64·9	67·4	67·2	*53·1*	*58·9*	93·8	90·9	92·6	*09·7*	07·8	*08·8*	77·1	73·9	75·4	*96·2*	94·7	*95·3*
18	75·6	65·1	71·9	69·2	60·5	64·0	93·5	84·0	88·4	09·5	05·4	07·5	85·4	75·6	79·6	96·1	90·3	93·0
19	82·1	74·1	77·3	71·9	68·7	70·2	85·4	83·0	84·1	05·4	98·1	01·5	91·4	85·2	87·5	90·3	82·7	85·2
20	82·1	78·1	80·3	78·8	71·7	74·9	83·0	62·4	73·5	98·1	92·3	95·1	94·0	90·9	92·2	89·1	82·4	84·9
21	78·1	66·3	71·1	86·9	78·8	82·2	69·1	*59·9*	*63·9*	94·7	92·5	93·7	98·1	94·0	96·1	93·4	89·1	92·1
22	94·0	68·0	79·7	88·5	86·1	87·4	80·0	69·1	75·6	92·7	87·1	90·4	98·9	94·1	97·3	92·9	90·2	91·0
23	98·1	94·0	96·0	88·2	86·0	86·9	79·6	64·0	70·9	91·7	84·3	86·5	95·4	92·2	93·4	90·2	77·2	85·4
24	94·4	87·1	89·9	86·1	80·2	82·4	77·9	65·8	71·1	95·2	91·7	94·3	96·0	91·3	93·9	90·8	77·1	85·6
25	88·9	77·4	83·9	87·4	83·3	83·9	77·8	73·3	74·3	94·7	80·1	88·1	91·3	85·7	87·9	93·1	90·8	92·3
26	79·8	72·4	76·5	88·2	85·0	86·6	82·0	72·9	75·9	82·0	78·5	80·1	86·8	83·3	85·1	93·1	92·5	92·8
27	78·9	70·4	74·4	*94·7*	88·2	*91·9*	97·5	82·0	91·0	80·9	72·6	*75·3*	88·6	84·8	86·4	92·9	88·3	91·6
28	71·4	68·6	70·0	94·5	90·0	91·8	98·6	97·1	97·8	83·3	*72·3*	78·1	96·6	88·0	91·3	88·3	77·0	81·8
29	71·8	64·6	67·2				04·9	97·2	01·0	83·4	78·7	81·3	*02·7*	96·6	99·8	82·4	75·8	78·0
30	65·3	62·5	64·0				*05·2*	98·5	02·0	83·0	79·4	81·8	*02·7*	98·6	*00·8*	87·1	82·4	85·1
31	63·3	60·6	62·0				98·5	93·3	95·2				98·9	93·5	95·9			
Mean	83·04	74·81	78·93	81·33	72·47	76·96	94·04	86·67	90·23	93·47	88·34	90·90	86·00	78·84	82·26	89·84	83·74	86·76

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	86·7	76·2	79·7	93·1	91·5	92·4	85·6	74·2	80·6	*98·2*	91·5	*96·1*	85·0	81·3	82·9	85·0	76·5	79·9
2	81·2	78·8	80·4	93·1	90·9	92·1	78·6	*69·0*	*72·1*	91·5	80·6	84·1	81·3	65·3	72·4	85·2	78·4	82·8
3	79·6	*68·2*	*72·8*	95·0	91·3	93·1	84·3	78·6	82·5	83·1	80·1	81·4	72·8	61·5	69·2	91·2	78·2	83·7
4	90·3	76·6	83·3	95·2	93·9	94·4	83·8	77·9	82·3	82·9	80·0	81·7	70·2	*60·3*	*65·2*	*01·1*	91·2	*98·5*
5	95·8	90·3	93·0	93·9	89·2	91·8	83·4	73·7	77·6	80·7	58·0	70·7	76·4	70·2	73·6	99·9	85·8	92·7
6	00·6	95·8	98·0	91·4	87·9	89·4	90·7	83·4	87·3	85·6	58·2	72·5	81·0	75·8	79·1	86·5	83·0	84·9
7	03·5	00·5	02·0	91·1	89·4	90·4	91·7	88·2	90·2	88·1	85·0	86·5	79·8	69·6	74·7	91·5	80·2	83·8
8	*03·8*	01·6	*02·8*	91·1	88·6	90·0	88·2	76·2	82·2	83·5	91·2	86·7	73·4	70·0	71·9	97·0	89·0	94·1
9	02·0	98·5	00·4	97·1	88·9	92·1	84·3	75·9	78·4	94·1	91·3	93·1	70·0	62·7	65·8	89·0	61·8	75·7
10	98·7	93·2	95·5	*00·9*	97·1	*99·7*	87·6	80·7	85·4	93·5	89·1	90·6	69·9	62·7	67·0	76·2	56·4	63·7
11	93·2	90·0	91·1	00·7	95·9	98·4	88·1	76·2	82·9	89·3	87·4	88·3	73·1	65·1	67·1	85·5	76·1	82·2
12	91·4	89·9	90·8	96·6	92·3	93·8	87·6	78·7	83·8	92·2	87·8	89·7	94·7	73·1	86·2	85·5	81·9	84·3
13	91·0	89·1	90·2	92·3	88·4	90·3	78·7	73·0	74·9	92·0	89·6	90·7	98·9	94·6	96·8	81·9	65·3	72·7
14	94·8	90·3	92·0	89·6	85·9	87·4	74·9	72·7	73·8	91·9	84·9	88·4	04·4	98·7	00·9	65·3	*42·1*	52·1
15	96·1	94·5	95·2	88·3	86·9	87·7	82·0	74·7	77·6	97·1	84·7	90·8	08·1	04·4	06·6	48·3	46·8	*47·5*
16	96·3	92·3	94·3	88·6	84·1	87·3	84·7	80·7	81·8	96·0	75·8	83·3	08·7	07·7	08·1	61·6	48·2	54·1
17	93·6	91·3	92·0	85·9	*79·2*	*81·8*	87·9	83·6	85·1	77·6	73·7	75·6	08·3	05·6	06·7	79·1	61·6	69·8
18	94·2	92·3	93·5	86·2	84·3	85·3	93·9	87·9	91·5	77·5	62·7	73·2	07·8	05·3	02·1	85·5	79·1	83·4
19	95·9	93·4	94·4	93·8	84·5	87·5	93·5	91·1	92·0	62·7	*49·4*	*54·0*	*09·9*	07·8	*08·9*	85·5	77·5	82·6
20	96·0	94·1	95·2	98·9	93·8	96·4	91·4	86·1	89·2	71·2	49·7	61·1	08·9	06·0	07·2	77·5	68·5	71·2
21	95·1	93·6	94·5	99·6	96·7	98·4	86·1	83·6	84·5	88·0	71·2	80·9	08·5	05·2	07·2	83·2	71·0	77·9
22	96·3	94·9	95·5	97·6	95·5	96·6	83·6	76·5	78·6	94·5	87·9	91·8	05·2	99·2	03·1	83·0	60·5	73·2
23	98·0	96·1	96·9	98·2	96·3	97·2	88·1	78·1	83·0	94·5	92·2	93·5	99·2	94·0	98·0	61·8	55·2	60·0
24	98·1	95·2	96·9	98·0	94·5	96·4	88·1	81·8	85·3	96·7	93·4	95·2	01·2	91·8	96·3	81·0	61·5	70·5
25	96·3	93·9	94·9	95·1	89·9	92·4	86·8	84·5	86·0	96·5	84·2	92·1	01·2	97·1	99·7	86·1	72·5	81·5
26	94·8	91·4	92·9	90·2	87·4	89·0	94·7	86·8	90·8	90·0	82·9	86·8	97·1	94·1	94·8	72·5	67·2	70·3
27	92·0	89·6	90·9	94·9	89·1	91·4	97·1	93·9	95·9	89·3	83·4	85·3	93·9	91·3	92·9	76·4	70·9	73·5
28	92·9	90·8	91·8	95·2	91·9	93·9	97·2	95·6	*96·2*	92·4	84·1	88·4	91·3	86·3	88·2	71·9	60·8	64·1
29	94·0	92·6	93·2	91·9	88·1	89·5	95·9	90·2	94·1	91·9	82·6	86·6	92·1	86·9	90·0	68·6	64·4	66·7
30	93·9	92·4	93·2	88·3	85·0	86·3	*97·3*	87·5	93·7	88·5	85·5	87·0	91·4	78·5	85·2	79·5	63·9	74·2
31	94·0	93·0	93·4	86·1	83·0	84·1				88·3	85·0	86·7				87·0	78·9	83·7
Mean	94·52	90·98	92·61	93·48	89·72	91·49	87·86	81·37	84·65	88·36	80·10	84·29	92·12	85·74	89·06	80·94	69·50	75·32
									Annual	88·79	81·90	85·33						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

72 ESKDALEMUIR: h_b = 237·3 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*79·87*	79·70	79·61	79·49	79·13	78·73	78·60	78·63	78·85	79·06	79·19	79·25	78·93	78·73	*78·51*	78·53	78·59	78·56	78·77	78·90	78·89	78·93	78·78	78·71	78·55	78·93
Feb.	76·99	76·90	76·71	76·44	76·11	76·39	*75·97*	76·11	76·40	76·66	76·91	77·21	77·23	77·14	76·92	76·90	76·89	77·03	77·21	77·36	77·50	77·70	77·83	77·97	*78·02*	76·96
Mar.	90·71	90·68	90·54	90·25	90·00	89·96	89·97	90·08	90·17	90·14	90·12	90·22	90·14	90·07	89·84	89·74	*89·69*	89·82	90·09	90·38	90·59	90·72	90·74	*90·86*	90·83	90·23
Apr.	91·21	91·06	90·93	90·85	90·83	90·82	91·07	91·20	91·23	*91·24*	91·23	91·19	91·11	90·94	90·79	90·58	90·45	*90·42*	90·48	90·59	90·84	90·91	90·94	90·87	90·79	90·90
May	82·29	82·16	82·04	81·90	*81·77*	81·97	82·06	82·22	82·25	82·38	82·47	82·48	82·45	82·32	82·22	82·10	81·98	81·92	81·95	82·21	82·49	82·75	*82·81*	82·80	82·69	82·26
June	*87·22*	87·11	86·86	86·72	86·60	86·73	86·76	86·77	86·75	86·84	86·76	86·75	86·73	86·67	86·61	86·51	86·46	*86·41*	86·50	86·59	86·80	87·03	87·06	87·07	86·99	86·76
July	92·99	92·99	92·84	92·63	92·57	92·62	92·77	92·84	92·86	92·78	92·72	92·61	92·43	92·32	92·25	92·19	92·11	*92·04*	92·08	92·27	92·48	92·80	93·05	93·18	*93·20*	92·61
Aug.	*92·00*	91·89	91·79	91·63	91·48	91·41	91·47	91·49	91·60	91·69	91·69	91·65	91·49	91·43	91·25	91·11	91·00	*90·87*	90·93	91·16	91·54	91·76	91·77	91·85	91·76	91·49
Sept.	84·67	84·54	84·36	84·14	*83·94*	83·97	84·11	84·51	84·67	84·81	84·85	84·76	84·70	84·69	84·57	84·59	84·52	84·55	84·67	84·95	85·17	*85·28*	85·23	85·18	85·06	84·65
Oct.	84·55	84·55	84·48	84·35	84·33	84·27	84·20	84·39	84·60	*84·62*	84·54	84·55	84·35	84·15	83·94	83·79	*83·77*	83·95	84·16	84·37	84·36	84·38	84·38	84·23	84·15	84·29
Nov.	89·06	89·00	88·95	88·89	88·82	88·86	88·98	89·20	89·46	89·70	*89·73*	89·69	89·34	89·07	88·89	*88·72*	88·78	88·78	88·94	88·96	88·96	88·96	88·97	88·85	88·84	89·06
Dec.	75·29	75·15	75·08	74·95	*74·81*	74·85	74·90	75·14	75·35	75·57	75·72	*75·74*	75·39	75·26	75·13	75·11	75·33	75·42	75·43	75·55	75·63	75·62	75·65	75·55	75·38	75·32
Annual	85·61	85·52	85·39	85·23	85·08	85·09	85·11	85·26	85·39	85·50	85·54	85·55	85·40	85·27	85·12	85·13	*85·00*	85·02	85·14	85·31	85·47	85·61	*85·64*	85·63	85·56	85·33

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

73 ESKDALEMUIR: h_b = 237·3 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*09·28*	09·09	09·01	08·84	08·60	08·20	07·91	07·92	08·18	08·39	08·54	08·50	08·13	07·89	*07·67*	07·73	07·84	07·85	08·08	08·23	08·24	08·27	08·14	08·06	07·92	08·23
Feb.	06·50	06·43	06·28	05·97	05·63	05·91	*05·48*	05·65	05·93	06·14	06·28	06·48	06·46	06·33	06·09	06·10	06·14	06·41	06·65	06·83	07·00	07·22	07·35	07·51	*07·57*	06·39
Mar.	20·51	20·51	20·37	20·10	19·84	19·79	19·81	19·83	19·90	19·73	19·57	19·56	19·44	19·33	19·08	18·95	*18·94*	19·15	19·55	19·97	20·24	20·43	20·47	20·62	*20·64*	19·83
Apr.	20·45	20·32	20·19	20·13	20·15	20·16	20·39	*20·52*	20·23	20·07	19·98	19·93	19·67	19·44	19·23	19·04	*18·98*	19·00	19·18	19·44	19·84	19·99	20·06	20·03	19·98	19·83
May	11·25	11·14	11·05	10·95	10·84	11·04	11·03	11·01	10·87	10·89	10·93	10·87	10·80	10·62	10·52	10·38	10·29	*10·26*	10·39	10·77	11·20	11·58	11·71	*11·75*	11·65	10·93
June	15·94	*15·97*	15·64	15·51	15·40	15·50	15·42	15·25	15·08	15·07	14·95	14·86	14·90	14·71	14·66	14·53	*14·52*	14·52	14·73	14·88	15·21	15·55	15·65	15·72	15·71	15·16
July	21·50	21·56	21·44	21·27	21·25	21·28	21·30	21·14	20·95	20·72	20·53	20·31	20·04	19·87	19·76	19·67	*19·60*	19·61	19·74	20·03	20·45	20·96	21·34	21·57	*21·69*	20·66
Aug.	*20·45*	20·37	20·29	20·36	19·97	19·90	19·93	19·82	19·75	19·69	19·71	19·50	19·25	19·11	18·90	18·74	18·64	*18·55*	18·71	19·10	19·66	20·01	20·10	20·25	20·21	19·59
Sept.	13·09	12·99	12·81	12·60	*12·41*	12·45	12·61	12·97	13·01	13·05	13·00	12·84	12·74	12·67	12·51	12·55	12·54	12·61	12·84	13·23	13·57	*13·66*	13·63	13·60	13·50	12·92
Oct.	13·56	13·59	13·53	13·41	13·43	13·40	13·32	13·49	*13·63*	13·45	13·37	13·29	13·02	12·72	12·54	*12·32*	12·45	12·74	13·02	13·29	13·32	13·28	13·38	13·24	13·17	13·12
Nov.	18·15	18·09	18·03	17·98	17·94	18·11	18·14	18·20	18·69	18·86	18·74	18·60	18·17	17·86	17·69	*17·56*	17·69	17·76	17·96	18·01	18·02	18·04	18·07	*18·95*	18·94	18·09
Dec.	04·26	04·13	04·05	03·91	*03·77*	03·82	03·88	04·12	04·34	04·56	*04·65*	04·62	04·22	04·07	03·95	03·95	04·21	04·35	04·37	04·51	04·58	04·58	04·61	04·53	04·35	04·25
Annual	*14·61*	14·54	14·42	14·27	14·13	14·14	14·13	14·21	14·24	14·25	14·20	14·13	13·92	13·74	13·57	13·59	*13·50*	13·58	13·78	14·05	14·29	14·49	14·57	14·59	14·55	14·11

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

74 ESKDALEMUIR: Louvered hut: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	*72·87*	72·97	72·89	73·30	73·38	73·38	73·44	73·56	73·33	73·31	73·81	74·22	74·57	*74·79*	74·78	74·47	74·03	73·61	73·45	73·32	73·21	73·20	73·06	73·06	72·97	73·59
Feb.	71·29	71·07	*70·74*	70·88	70·94	70·95	70·97	70·75	70·91	71·46	72·50	73·40	73·84	74·09	*74·28*	74·00	73·49	72·49	71·93	71·68	71·37	71·36	71·37	71·23	71·15	71·95
Mar.	72·35	72·07	72·09	71·85	71·81	71·87	*71·79*	71·91	72·83	74·08	75·33	76·27	76·68	77·04	77·15	*77·35*	77·01	76·28	75·19	74·16	73·65	73·13	72·99	72·70	72·29	74·07
Apr.	77·43	77·22	77·14	76·89	76·59	*76·41*	76·67	77·66	79·58	81·17	82·04	83·01	83·79	84·35	*84·75*	84·54	84·06	83·32	82·17	80·88	79·47	78·76	78·42	78·05	77·74	80·19
May	77·59	77·33	77·04	76·68	*76·39*	76·46	77·45	79·06	80·68	81·85	82·37	82·95	83·37	83·83	83·81	*83·91*	83·68	83·33	82·42	81·27	80·02	78·90	78·26	77·86	77·63	80·27
June	81·05	80·61	80·37	80·20	*80·13*	80·36	81·40	83·17	84·53	85·55	85·97	86·80	87·18	87·43	87·33	*87·59*	87·15	86·67	85·56	84·99	83·84	82·87	82·21	81·63	80·97	83·94
July	84·52	83·90	83·54	83·21	*82·78*	83·04	84·16	86·36	88·37	89·91	91·10	92·21	93·06	93·70	94·03	*94·34*	94·05	93·24	92·42	91·25	89·50	87·78	86·58	85·62	84·71	88·70
Aug.	84·78	84·39	84·22	84·28	*84·13*	84·14	84·41	85·68	87·46	88·91	89·71	90·47	91·16	92·00	92·30	*92·49*	92·24	91·80	90·75	89·30	87·71	86·58	85·79	85·14	84·67	87·91
Sept.	83·01	82·82	82·63	82·49	82·31	82·31	*82·20*	82·66	83·81	84·75	85·67	86·43	86·79	87·39	*87·69*	87·45	86·86	86·43	85·42	84·39	83·88	83·59	83·40	83·25	83·06	84·49
Oct.	78·36	78·05	78·05	77·68	77·43	*77·24*	77·29	77·52	78·27	79·31	80·18	81·07	81·72	82·05	*82·18*	81·95	81·35	80·42	79·80	79·24	78·83	78·65	78·43	78·32	78·17	79·30
Nov.	78·15	78·16	78·23	78·14	77·83	77·57	77·48	77·19	*77·04*	77·71	79·08	80·05	80·65	*80·96*	80·85	80·40	79·76	79·13	78·79	78·58	78·42	78·28	78·07	78·06	78·05	78·69
Dec.	75·53	75·51	75·53	75·55	75·61	75·53	75·40	75·48	*75·37*	75·48	76·05	76·52	76·90	*77·01*	76·90	76·66	76·27	75·97	75·89	75·74	75·79	75·78	75·67	75·57	75·61	75·91
Annual	78·11	77·88	77·74	77·63	77·48	*77·47*	77·76	78·48	79·40	80·34	81·20	82·00	82·52	82·94	*83·05*	82·98	82·55	81·95	81·23	80·45	79·69	79·12	78·73	78·41	78·12	79·96

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

75 **ESKDALEMUIR**: Louvered hut: h_t(height of thermometer bulb above ground) = 0·9 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	75·4	72·7	74·6	79·0	76·3	77·4	73·9	71·9	73·1	84·2	68·9	75·6	84·0	79·0	80·6	92·5	77·3	85·3
2	75·2	73·6	74·5	79·1	72·2	76·5	76·9	70·2	73·5	82·0	*68·0*	*75·3*	86·7	77·9	81·0	93·2	77·4	86·0
3	75·6	72·9	74·2	77·5	72·8	74·9	75·9	69·2	72·6	84·8	76·1	79·3	84·0	74·5	79·9	90·8	78·3	84·4
4	74·1	72·0	73·4	79·0	73·0	75·2	77·8	72·0	74·9	83·2	78·6	80·2	82·1	79·8	80·4	89·4	78·5	84·2
5	73·8	72·9	73·3	76·6	71·7	74·7	76·2	72·5	74·7	84·0	79·2	81·1	84·0	79·3	81·0	91·1	78·0	85·3
6	75·0	73·4	74·0	77·0	70·1	72·9	75·1	72·3	73·9	84·1	77·1	80·3	85·3	79·0	81·4	*93·9*	81·2	*87·4*
7	74·8	72·2	73·7	77·0	71·5	73·8	75·1	71·4	73·3	81·8	76·6	79·2	86·3	76·5	81·1	81·7	78·2	79·7
8	74·9	73·0	73·7	*79·7*	74·7	*78·1*	75·8	71·6	74·4	85·0	79·4	81·5	83·3	80·0	81·3	87·0	77·7	81·7
9	75·7	72·6	73·3	76·4	71·2	73·1	77·1	71·3	74·4	83·6	78·0	80·3	85·4	80·0	81·5	86·3	75·6	81·2
10	80·5	69·0	74·7	75·5	69·7	73·3	80·4	69·4	74·9	86·0	79·1	82·5	80·3	73·2	76·7	85·3	74·5	*79·6*
11	71·5	62·7	68·7	75·5	69·4	71·4	81·5	68·8	74·9	85·7	79·9	82·4	83·6	72·4	78·9	85·5	*72·0*	80·2
12	72·3	62·6	69·8	74·3	70·6	72·3	79·4	69·0	73·9	86·7	79·0	*82·7*	82·7	77·9	79·5	83·7	79·2	81·3
13	68·5	60·8	*64·9*	75·2	69·2	72·2	81·0	67·1	73·2	85·0	74·8	80·5	82·3	74·4	78·1	88·8	78·1	83·7
14	70·1	*60·0*	66·2	73·9	68·5	72·1	82·3	68·5	74·6	85·2	72·6	78·8	82·9	73·6	77·5	89·7	81·0	85·2
15	71·9	64·3	69·8	75·7	68·8	72·7	80·8	71·2	*77·8*	87·3	71·0	79·3	81·8	71·5	*76·2*	91·6	81·8	86·0
16	72·1	64·3	67·9	75·2	68·4	72·2	80·3	71·0	77·2	88·3	73·1	80·2	81·8	*69·5*	76·5	86·6	77·5	83·0
17	72·0	64·3	69·4	72·9	67·4	70·6	78·0	69·8	73·4	86·2	71·8	78·4	81·5	74·3	77·4	91·1	77·1	84·6
18	73·4	69·1	71·5	73·3	68·1	70·6	78·0	68·5	73·0	89·0	69·9	79·6	82·1	74·0	77·2	92·1	75·1	84·4
19	75·2	68·7	72·3	72·4	60·7	67·2	77·3	66·0	72·3	*91·7*	71·2	81·9	82·9	71·9	77·4	89·0	75·7	82·6
20	73·7	67·0	71·1	70·6	61·0	67·1	76·0	*63·0*	*70·0*	91·3	73·0	82·6	82·0	71·9	76·6	84·9	80·5	82·5
21	77·2	72·8	75·0	72·5	64·4	68·7	74·9	65·4	71·3	84·3	76·1	79·3	83·1	72·6	77·9	91·6	77·9	85·6
22	77·5	74·0	75·7	70·9	62·5	67·8	77·9	71·6	74·0	87·0	76·9	80·9	84·4	73·8	79·8	90·6	82·3	85·3
23	76·3	68·3	72·9	72·4	68·5	70·6	74·4	72·4	73·8	87·1	74·0	80·5	88·3	81·4	84·0	87·8	82·2	84·8
24	79·8	75·6	77·7	73·4	70·0	71·5	75·5	73·6	74·4	85·5	70·8	78·3	89·7	76·9	83·5	88·8	81·1	84·8
25	79·6	77·1	78·6	73·2	68·5	70·8	80·5	74·2	76·7	83·8	70·6	78·0	91·1	73·7	83·3	86·6	77·3	83·1
26	79·3	75·0	77·3	72·9	64·0	68·7	77·4	73·6	75·4	86·3	77·8	80·9	87·6	75·9	81·7	89·2	82·9	85·6
27	78·3	73·0	75·7	72·7	*60·1*	*66·6*	79·9	70·6	74·9	82·6	79·2	81·0	87·9	75·4	82·0	90·3	81·9	85·8
28	80·2	78·0	79·2	73·8	67·9	71·7	79·1	68·4	73·6	86·9	78·3	82·1	87·9	75·9	81·8	86·2	84·1	85·0
29	*81·2*	79·3	*80·2*				79·2	69·0	73·5	86·1	77·9	81·7	91·6	76·0	83·8	88·6	83·1	85·6
30	80·2	78·0	79·3				81·8	63·8	73·3	84·9	79·6	81·2	93·8	73·9	84·6	88·2	79·2	84·9
31	80·2	76·9	78·6				*83·0*	67·2	75·2				*95·3*	73·8	*85·5*			
Mean	75·7	70·8	73·6	74·9	68·6	72·0	78·1	69·8	74·1	85·7	75·3	80·2	85·3	75·5	80·3	88·7	78·9	83·9

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	88·0	*76·5*	*82·3*	97·2	82·3	90·4	90·0	81·0	85·4	86·8	81·0	83·6	79·3	75·0	77·7	78·6	74·1	76·6
2	88·4	81·0	83·7	91·1	79·9	87·6	90·0	82·9	87·5	84·9	77·0	81·6	80·7	73·3	76·6	81·5	77·7	79·4
3	86·9	80·8	82·5	92·2	79·0	87·4	88·3	78·7	84·4	86·0	74·0	79·1	85·1	80·7	82·4	81·5	77·6	79·1
4	90·1	81·3	85·8	94·1	81·0	87·3	89·4	84·6	86·3	84·4	71·0	77·6	85·0	74·4	81·3	80·8	75·4	77·8
5	93·0	81·2	87·4	94·5	*76·8*	87·1	91·0	81·9	86·2	81·5	74·8	79·2	85·0	75·1	80·6	83·1	78·3	82·0
6	95·7	77·3	88·2	92·0	82·9	87·7	94·0	82·4	87·7	82·9	78·0	80·7	85·3	79·7	82·8	83·7	82·4	*83·1*
7	97·1	84·0	91·3	90·2	79·9	85·0	*95·8*	80·3	*88·3*	82·1	73·5	79·1	*85·4*	80·8	*82·8*	83·8	72·6	80·1
8	99·2	85·5	*92·6*	93·0	77·1	84·7	92·4	80·0	86·4	86·5	80·7	84·2	83·2	80·3	82·0	74·0	69·3	71·5
9	96·5	82·8	89·3	87·1	79·8	*84·0*	90·1	83·2	85·5	87·6	85·6	86·6	84·1	79·6	81·8	75·3	71·6	72·9
10	97·6	81·0	89·8	91·0	81·0	85·7	85·8	78·8	83·8	86·1	81·9	84·6	82·7	79·8	81·1	77·4	72·0	75·3
11	97·4	81·9	90·7	94·1	83·7	87·2	89·2	80·6	85·5	88·1	80·0	83·8	83·0	77·9	80·7	74·4	68·8	71·5
12	*99·9*	86·0	92·2	94·3	84·3	87·2	88·0	78·1	82·9	87·4	76·0	82·9	83·3	74·0	78·9	74·5	67·5	70·7
13	99·7	84·5	92·5	94·7	81·5	87·1	87·0	79·0	82·0	86·6	79·2	84·8	79·7	76·6	77·9	76·0	70·6	73·6
14	94·4	82·0	88·6	94·7	79·1	87·2	86·1	77·0	*81·5*	*89·4*	83·7	*86·7*	81·5	70·9	76·8	81·2	74·9	78·5
15	93·4	77·4	86·5	92·8	80·8	87·5	85·4	*76·7*	82·3	83·8	69·9	78·1	79·6	75·6	77·7	80·3	78·5	79·4
16	97·0	79·0	89·9	92·5	86·0	89·0	87·0	79·0	82·7	80·0	67·2	74·1	79·7	69·1	73·2	79·8	76·1	78·4
17	95·1	84·6	89·5	93·0	79·5	87·6	86·0	79·6	82·9	80·6	71·2	75·2	77·0	71·9	74·7	76·2	70·9	73·8
18	89·9	86·6	88·0	90·4	78·3	86·8	86·5	78·9	83·3	79·8	65·8	73·9	80·2	70·7	75·5	74·1	63·7	69·3
19	95·4	84·5	89·7	92·4	81·0	88·4	88·9	78·0	84·3	83·2	75·9	79·4	79·9	70·7	75·2	73·1	*62·7*	*67·3*
20	94·9	82·1	88·8	93·9	79·3	87·0	91·1	78·0	83·6	83·2	77·7	79·9	84·5	75·4	80·2	73·3	66·5	71·3
21	97·2	85·1	91·2	90·3	85·1	87·2	89·1	78·9	84·4	81·5	74·2	78·2	83·8	77·0	80·7	72·5	65·5	70·0
22	97·0	81·3	90·1	96·0	87·4	91·0	87·9	80·0	84·2	82·1	74·5	77·5	81·9	76·6	79·4	76·7	64·5	71·9
23	97·0	81·9	89·7	99·3	88·0	*93·4*	89·9	81·3	84·9	83·0	73·5	78·4	82·2	76·4	79·3	79·9	75·1	76·9
24	94·8	84·0	88·9	*00·3*	85·9	92·7	87·0	83·0	85·0	85·4	76·1	81·4	82·0	70·8	77·7	80·1	76·0	78·5
25	96·3	81·0	88·3	98·7	83·9	91·1	88·6	81·4	84·0	84·1	78·0	81·8	77·7	*66·2*	*72·0*	82·0	74·8	78·5
26	98·0	77·8	88·8	98·0	81·8	89·5	86·1	79·5	82·1	83·9	72·4	77·7	81·2	75·0	78·5	83·1	77·8	79·9
27	99·2	80·3	90·4	96·2	82·9	88·7	85·1	80·5	82·6	79·2	71·3	74·4	80·5	78·0	79·4	*83·9*	77·7	80·3
28	94·9	83·1	88·7	88·0	84·8	86·4	87·0	79·3	83·5	80·0	68·5	74·8	81·3	76·9	79·3	83·4	75·4	80·3
29	92·8	81·6	87·4	92·0	85·7	88·1	88·8	85·0	86·9	78·9	*65·7*	*72·8*	80·4	76·4	78·4	77·8	70·8	75·1
30	96·1	78·5	87·8	90·4	87·0	88·2	86·4	81·7	84·3	78·1	68·6	73·3	77·4	74·0	76·3	75·5	70·9	73·7
31	95·7	85·2	90·1	91·8	81·6	86·8				77·6	67·3	72·8				78·3	74·3	76·2
Mean	95·1	81·9	88·7	93·4	82·2	87·9	88·6	80·3	84·5	83·4	74·7	79·3	81·8	75·3	78·7	78·6	72·7	75·9
									Annual	84·2	75·5	80·0						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

76 ESKDALEMUIR: Louvered hut: h_t = 0·9 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	82·0	5·6	93·4	*7·8*	91·5	5·6	79·5	5·9	91·2	9·5	*61·8*	8·8	88·9	*10·4*	83·0	16·5	94·5	13·6	81·1	10·4	90·2	7·7	94·1	6·3
2	84·6	5·8	93·7	7·4	91·8	5·8	85·0	6·1	81·5	8·7	71·7	10·7	81·1	10·4	87·5	14·5	85·4	14·1	92·9	10·4	75·8	6·0	97·5	9·4
3	93·4	6·2	95·5	6·7	80·0	4·7	91·0	8·7	89·3	8·9	65·1	8·8	*95·0*	11·3	85·3	14·0	80·6	10·9	90·3	8·5	93·4	11·0	*79·9*	7·5
4	90·5	5·7	92·0	6·6	82·2	5·8	97·4	9·9	93·4	9·6	79·4	10·6	74·6	11·0	79·6	13·0	93·2	14·2	94·3	8·0	92·8	10·2	90·3	7·8
5	90·9	5·7	84·9	5·9	73·9	5·1	97·5	10·5	92·0	9·9	75·7	10·8	80·3	13·2	83·3	13·4	83·1	12·6	96·4	9·1	92·8	9·7	94·7	10·9
6	86·7	5·7	77·2	4·7	86·1	5·6	94·9	9·7	86·0	9·5	69·2	11·4	79·3	13·7	*70·3*	11·8	84·4	14·1	74·8	7·9	91·9	11·1	95·0	*11·7*
7	89·0	5·7	*99·1*	6·4	88·4	5·5	96·6	9·2	72·6	7·8	93·4	9·2	78·8	16·6	70·3	*9·9*	80·5	14·0	82·7	7·8	96·0	*11·6*	85·2	8·6
8	92·5	5·9	84·9	7·5	80·7	5·5	97·0	*10·8*	*98·2*	10·8	79·1	8·9	75·9	17·3	79·7	11·0	86·9	13·4	*99·6*	13·3	94·9	10·9	84·4	4·6
9	94·3	5·9	82·0	5·0	85·7	5·8	83·7	8·6	92·5	10·3	66·4	*7·2*	79·7	14·8	93·8	12·3	90·7	13·2	98·0	*15·3*	93·6	10·6	98·7	6·0
10	93·6	6·5	75·5	4·7	81·3	5·7	85·7	10·2	83·3	6·6	83·8	8·2	73·0	14·0	88·2	13·0	90·0	11·7	89·8	12·3	96·3	10·4	95·6	6·9
11	80·5	3·6	78·7	4·3	82·4	5·8	83·0	9·8	78·1	7·3	80·6	8·2	76·7	15·5	85·1	13·8	80·0	11·6	92·8	12·0	95·7	10·1	92·7	5·1
12	*79·9*	3·9	86·0	5·0	74·4	4·9	83·1	10·0	88·1	8·5	87·6	9·6	79·9	*17·8*	87·2	14·1	84·9	10·4	93·5	11·4	88·8	8·3	83·8	4·3
13	82·5	*2·8*	79·4	4·6	84·4	5·2	71·2	7·4	79·2	7·0	79·3	10·2	76·2	17·3	85·8	13·8	81·3	9·3	97·3	13·5	87·5	7·6	87·6	5·6
14	88·0	3·3	88·0	5·0	85·1	5·8	73·9	6·8	72·0	6·1	96·1	13·7	83·6	14·8	82·4	13·0	79·3	*8·8*	93·6	14·7	83·0	6·7	96·5	8·7
15	95·3	4·6	81·8	4·9	80·8	7·0	71·8	6·9	80·5	6·2	71·9	10·8	78·7	12·2	89·7	14·8	80·7	9·5	73·0	6·4	86·2	7·4	*98·9*	9·5
16	92·8	3·9	*74·7*	4·3	83·8	6·9	71·7	7·3	76·6	6·0	85·2	10·5	78·4	15·1	90·6	16·5	86·5	10·4	89·3	5·9	85·2	5·3	97·2	8·7
17	89·9	4·2	87·9	4·5	70·8	4·5	82·6	7·4	74·5	6·2	72·5	10·0	77·4	14·5	88·2	14·7	88·1	10·7	74·8	5·4	90·7	6·3	87·0	5·6
18	85·3	4·7	90·3	4·6	78·6	4·8	58·3	*5·7*	73·0	6·0	67·0	9·0	91·9	15·7	*95·4*	15·1	88·7	11·1	81·3	5·3	82·6	6·1	80·2	3·7
19	89·3	5·2	81·9	3·3	77·5	4·5	*50·3*	5·7	65·4	*5·5*	74·8	9·0	78·0	14·8	93·2	16·3	88·2	11·8	89·0	8·6	90·9	6·5	89·8	*3·6*
20	82·7	4·4	88·1	3·5	90·8	4·4	65·3	7·8	74·8	5·9	90·5	10·7	85·5	15·3	82·4	13·2	86·2	11·0	82·4	8·2	88·5	9·0	91·4	4·9
21	92·3	6·5	90·3	4·0	91·2	4·9	80·7	7·7	76·9	6·7	81·9	12·0	81·2	17·0	92·8	15·0	*97·6*	13·2	74·0	6·5	81·4	8·6	79·9	3·9
22	92·0	6·8	88·1	3·7	80·3	5·3	76·5	8·2	86·5	8·5	91·2	13·1	77·2	15·1	92·2	19·0	93·2	12·4	78·1	6·6	83·6	8·0	94·4	5·3
23	85·5	5·2	86·0	4·4	92·3	6·0	84·9	8·8	86·3	*11·3*	92·8	12·8	85·5	16·3	80·6	*19·3*	89·6	12·5	86·3	7·7	*75·7*	7·2	88·9	7·2
24	99·7	8·5	90·9	5·0	*98·0*	6·6	67·8	6·0	81·9	10·4	78·0	10·8	80·2	14·5	80·1	18·4	94·2	13·2	87·7	9·7	77·0	6·6	86·0	7·8
25	97·6	8·9	86·6	4·5	96·0	*7·7*	79·9	7·0	75·8	9·5	84·8	10·5	73·1	12·7	83·4	17·3	85·5	11·2	93·3	10·6	91·3	*5·2*	93·3	8·4
26	92·3	7·7	76·3	3·4	84·3	6·1	87·3	9·3	77·8	8·8	88·1	12·9	*61·4*	11·0	76·5	14·4	81·1	9·4	95·2	7·3	91·0	8·2	87·2	8·7
27	95·6	7·1	82·2	*3·1*	75·7	5·3	*97·6*	10·5	70·0	8·0	84·4	12·5	68·6	13·6	78·0	13·9	83·0	9·9	80·8	5·5	88·7	8·5	90·5	9·3
28	*99·8*	9·5	81·3	4·5	71·0	4·5	78·3	9·1	70·9	8·0	*98·3*	*13·8*	77·5	13·8	87·6	13·5	86·1	10·9	*72·1*	5·0	96·3	9·2	85·4	8·7
29	96·6	*9·8*			73·7	4·7	86·1	9·7	66·9	8·7	89·7	13·1	84·4	13·9	87·7	15·0	96·9	*15·4*	89·7	5·4	*96·7*	8·7	85·6	6·1
30	96·3	9·2			*69·2*	*4·3*	90·7	9·2	63·0	8·6	74·6	10·4	84·6	14·2	92·5	16·0	*79·0*	10·6	74·0	*4·6*	91·0	7·1	83·8	5·4
31	92·7	8·4			75·3	5·4			*62·2*	9·0			86·8	16·9	81·8	12·9			93·5	5·6			84·4	6·5
Mean*	90·5	6·0	85·6	5·0	82·5	5·5	81·6	8·3	79·4	8·2	80·5	10·6	79·8	14·3	84·8	14·5	86·7	11·8	86·5	8·7	89·0	8·1	89·7	7·0

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

77 ESKDALEMUIR: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent																									
Jan.	91·2	90·6	91·3	91·6	91·5	91·5	*92·6*	92·1	91·7	91·5	90·9	90·0	88·3	*87·7*	87·8	88·3	89·3	90·2	91·7	91·1	90·6	89·8	89·8	90·0	91·0	90·5
Feb.	87·2	87·5	88·0	88·8	88·9	88·8	88·8	*89·2*	89·0	87·3	84·8	82·5	81·0	79·5	*79·2*	79·7	80·5	82·8	85·1	86·2	87·4	87·5	87·4	87·0	87·2	85·6
Mar.	87·7	87·7	87·9	87·9	*88·0*	87·5	87·7	87·5	86·2	83·0	80·3	77·5	74·5	73·5	72·9	*72·7*	73·3	75·5	79·8	83·5	85·1	86·1	86·6	87·1	87·5	82·5
Apr.	89·8	*90·9*	*90·9*	90·6	90·1	90·1	90·5	90·4	86·0	79·3	75·1	70·8	68·6	66·7	*65·9*	68·0	70·3	73·5	78·0	81·8	85·6	88·1	88·9	89·6	90·0	81·7
May	89·1	89·8	90·5	91·0	*91·0*	90·6	89·5	85·6	79·3	74·4	71·2	69·3	66·7	67·0	*66·3*	67·5	70·1	70·7	72·4	76·6	79·9	83·2	85·8	87·7	88·3	79·4
June	89·0	89·7	90·4	90·7	91·0	*91·3*	90·7	86·7	81·3	77·1	73·9	71·7	69·5	68·7	*68·6*	68·7	70·0	71·7	74·1	77·5	80·8	84·2	86·2	88·2	89·8	80·5
July	90·5	91·3	91·5	91·8	*91·8*	91·1	90·8	87·5	80·9	75·9	71·7	69·7	67·7	66·9	66·7	*66·5*	68·7	70·9	71·1	74·7	79·6	82·7	86·1	88·5	90·6	79·8
Aug.	92·3	93·3	93·9	94·3	*94·7*	94·5	94·6	93·4	89·9	83·2	79·8	76·8	75·3	73·5	72·0	*70·9*	72·4	73·9	77·5	81·7	86·0	88·8	89·9	91·2	92·3	84·8
Sept.	91·3	91·8	92·4	92·8	93·0	93·5	*93·9*	92·9	90·3	86·4	82·2	78·7	76·6	75·6	*75·4*	76·7	79·9	81·7	84·6	88·0	89·6	90·4	90·9	91·2	91·3	86·7
Oct.	89·7	90·0	89·4	89·9	90·1	90·5	*91·0*	90·7	90·1	88·5	86·1	83·3	79·5	77·9	*76·3*	78·4	80·7	83·9	86·7	87·8	88·1	88·9	89·3	89·2	89·9	86·5
Nov.	91·0	92·5	92·6	92·3	92·6	*93·1*	92·8	92·7	92·4	91·9	87·7	84·3	80·9	*79·0*	80·1	82·2	85·3	87·5	89·3	90·0	91·1	91·4	91·7	91·3	91·1	89·0
Dec.	90·4	90·2	90·3	90·1	89·0	89·1	89·4	88·8	89·3	90·0	89·5	88·6	87·2	*86·7*	86·7	87·8	89·0	91·1	91·5	*92·1*	92·0	91·3	91·1	90·8	90·3	89·7
Annual	90·0	90·5	90·8	91·0	91·0	*91·0*	91·0	89·8	87·2	84·0	81·1	78·6	76·3	75·2	*74·8*	75·6	77·4	79·4	81·8	84·2	86·3	87·7	88·7	89·3	89·9	84·7

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

78 ESKDALEMUIR: h_t = 0·9 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·5	5·5	5·5	5·7	5·7	5·7	5·8	5·9	5·7	5·7	5·9	6·0	6·0	6·1	*6·1*	6·0	5·9	5·8	5·8	5·7	5·6	5·6	5·5	*5·5*	5·5	5·8
Feb.	4·7	4·6	*4·5*	4·6	4·7	4·7	4·7	4·6	4·7	4·8	5·0	5·2	5·3	5·3	*5·3*	5·2	5·1	4·9	4·8	4·8	4·7	4·7	4·7	4·7	4·9	4·8
Mar.	5·1	5·0	5·0	4·9	4·9	4·9	*4·9*	4·9	5·2	5·5	5·8	6·0	5·9	6·0	6·0	*6·1*	6·0	5·8	5·7	5·6	5·4	5·3	5·3	5·2	5·1	5·4
Apr.	7·5	7·5	7·5	7·3	7·1	*7·0*	7·2	7·7	8·4	8·6	8·6	8·7	8·9	9·0	9·1	9·3	*9·3*	9·2	9·1	8·9	8·3	8·1	8·1	7·8	7·7	8·3
May	7·6	7·5	7·5	7·2	7·1	*7·1*	7·5	8·0	8·3	8·5	8·4	8·5	8·4	8·7	8·6	8·8	*9·0*	8·9	8·6	8·4	8·0	7·7	7·6	7·6	7·5	8·0
June	9·6	9·4	9·3	9·2	*9·2*	9·4	10·0	10·8	11·1	11·2	11·0	11·3	11·2	11·3	11·2	*11·4*	11·3	11·2	10·8	10·9	10·5	10·3	10·0	9·9	9·6	10·5
July	12·3	11·9	11·7	11·4	*11·1*	11·2	12·0	13·4	14·1	14·6	14·9	15·5	15·9	16·3	16·6	16·9	*17·1*	16·8	16·0	15·7	14·9	13·9	13·4	12·9	12·5	14·2
Aug.	12·8	12·6	*12·5*	12·6	12·5	12·5	12·8	13·7	14·8	15·0	15·2	15·3	15·7	*16·2*	16·1	16·1	16·2	16·0	15·8	15·2	14·4	13·8	13·3	12·9	12·7	14·3
Sept.	11·2	11·1	11·1	11·0	10·9	11·0	*10·9*	11·2	11·7	11·9	12·1	12·1	12·1	12·4	12·6	12·6	*12·7*	12·6	12·2	11·8	11·7	11·6	11·5	11·4	11·2	11·7
Oct.	8·0	7·9	7·8	7·7	7·6	*7·5*	7·6	7·7	8·0	8·5	8·7	*9·0*	9·0	9·0	8·9	9·0	8·9	8·7	8·6	8·4	8·2	8·1	8·0	8·0	7·9	8·3
Nov.	8·0	8·2	8·2	8·1	8·0	7·9	7·8	7·6	*7·5*	7·9	8·3	8·5	8·5	8·5	*8·5*	8·5	8·4	8·3	8·3	8·2	8·2	8·1	8·0	8·0	8·0	8·1
Dec.	6·6	6·6	6·6	6·6	6·6	6·5	6·5	6·5	*6·5*	6·6	6·8	7·0	7·0	*7·1*	7·0	7·0	6·9	6·9	6·9	6·9	6·9	6·8	6·8	6·7	6·7	6·8
Annual	7·9	7·8	7·8	7·7	7·7	7·7	7·8	8·1	8·4	8·6	8·8	9·0	9·1	9·2	9·2	9·3	9·2	9·1	8·9	8·7	8·5	8·3	8·1	8·0	7·9	8·5

* Mean of values, 1,2,.....23, ½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

79 ESKDALEMUIR: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 242·0 m. + 0·4 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	2·0	2·0	3	12·5	7·5	–	...	...	...	7·0	8·4	43	...	...	...
2	0·1	0·1	...	13·2	8·7	*18*	...	...	...	6·0	5·5	4	0·9	0·2	12	...	...	...
3	0·6	1·2	1	0·4	0·4	(4)	...	...	...	1·3	1·6	6	14·2	7·9	9	0·4	2·5	...
4	1·1	1·6	1	...	...	...	...	...	...	0·6	2·1	(2)	8·9	11·0	9	0·6	1·1	(4)
5	0·1	0·2	...	...	...	...	0·1	0·1	...	7·9	6·3	7	*25·4*	12·0	*78*	...	...	...
6	...	...	...	...	...	...	2·4	1·8	–	1·9	3·5	...	1·6	2·0	8	...	...	...
7	...	...	...	10·9	*10·4*	3	2·1	*9·7*	–	1·9	9·0	(4)	...	...	...	10·3	7·4	8
8	0·2	0·3	...	3·3	4·7	4	1·5	0·4	5	4·5	8·8	2	17·8	*15·2*	8	0·4	0·7	...
9	8·7	5·0	3	...	...	...	...	...	...	4·7	5·8	3	8·8	11·6	12	...	...	...
10	*42·4*	*17·8*	20	...	...	...	...	...	...	1·8	5·0	(4)	1·4	4·6	(4)	1·7	1·4	(5)
11	...	...	...	2·6	2·5	–	...	...	...	...	...	...	1·0	1·4	3	0·8	1·9	(5)
12	2·6	1·0	(3)	8·2	8·0	–	...	...	...	...	...	...	3·5	6·7	3	2·3	7·0	...
13	0·1	0·1	...	2·1	2·3	–	...	...	...	...	...	...	5·3	7·6	1	0·7	1·0	(1)
14	1·0	2·3	...	3·1	2·4	–	...	...	...	...	...	...	0·9	1·0	1	13·3	12·3	24
15	4·0	8·6	–	...	...	...	...	...	...	...	...	...	1·3	1·9	4	...	...	...
16	3·9	8·0	–	0·1	0·1	...	0·2	0·2	1	...	...	...	0·1	0·3	...	0·2	0·8	...
17	0·2	0·3	...	*27·1*	9·3	–	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	5·3	4·0	–	1·6	3·9	(4)	...	...	...	1·2	1·2	3	...	...	...
19	0·1	0·2	...	0·5	0·8	–	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	0·7	3·9	–	13·3	6·3	–	...	...	...	0·6	0·7	2	1·5	3·5	(1)
21	7·7	8·7	3	0·6	0·5	–	15·5	4·4	–	...	...	...	0·4	0·5	...	...	...	...
22	0·6	3·5	...	0·9	1·7	–	...	...	...	...	...	...	1·5	4·3	(4)	5·8	6·0	6
23	...	...	...	2·9	3·6	–	11·1	8·9	–	0·8	3·8	...	2·7	6·6	(7)	10·9	7·6	*93*
24	2·2	2·4	1	3·6	6·7	–	10·9	8·2	3	...	...	...	...	...	...	1·4	1·6	2
25	3·8	6·5	(3)	...	...	...	*15·6*	7·6	*7*	4·0	3·9	(2)	...	...	...	1·4	4·5	(2)
26	4·8	4·0	4	...	...	...	...	...	...	2·1	2·7	1	...	...	...	2·8	2·0	17
27	11·7	10·2	3	...	...	...	...	...	...	*22·6*	*20·0*	*22*	...	...	...	0·4	0·4	(1)
28	16·5	11·3	9	1·0	2·0	...	...	...	...	1·6	0·6	5	...	...	...	*20·9*	*15·6*	19
29	20·5	9·5	21				...	...	...	1·6	3·9	(4)	...	...	...	2·1	2·0	13
30	9·6	8·4	*23*				...	...	...	0·2	0·3	(3)	...	...	...	...	...	...
31	3·0	2·6	3				...	...	...				...	...	...			
Total	145·5	113·8	–	88·5	74·0	–	86·8	59·0	–	63·5	82·8	–	104·5	105·1	–	77·9	79·3	–

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	18·5	4·2	17	...	...	...	6·7	*11·3*	2	...	...	...	0·1	0·8	...	0·3	1·3	...
2	0·8	1·3	3	1·0	1·9	(4)	12·1	5·4	53	4·5	4·2	33	2·7	4·7	5	5·0	7·4	5
3	*43·3*	*19·2*	22	...	...	...	0·3	0·4	2	...	...	...	3·8	1·9	17	2·1	0·7	25
4	...	...	...	...	...	...	9·4	7·5	36	0·4	1·0	1	2·4	2·0	5	1·4	0·8	5
5	...	...	...	...	...	...	8·0	6·0	33	8·0	6·4	*61*	0·1	0·2	...	1·1	7·6	...
6	...	...	...	...	...	...	...	...	...	0·9	2·0	(1)	1·9	2·9	2	17·0	19·9	11
7	...	...	...	...	...	...	...	...	...	0·3	0·4	...	*11·4*	*8·4*	20	4·7	6·5	5
8	...	...	...	...	...	...	4·4	3·3	20	7·1	*13·5*	6	9·8	6·0	*27*	...	...	...
9	...	...	...	*11·8*	*14·4*	3	13·6	4·3	*61*	1·2	0·8	8	0·8	2·0	(4)	19·6	*20·8*	3
10	...	...	...	...	...	...	1·2	3·4	(1)	...	...	...	4·8	5·7	7	5·4	10·3	(1)
11	...	...	...	...	...	...	8·8	4·5	5	...	...	...	7·8	5·2	20	0·2	1·6	...
12	2·5	0·5	*35*	...	...	...	9·1	3·0	51	2·8	6·8	(1)	...	...	...	...	...	...
13	...	...	...	...	...	...	5·2	3·5	12	1·8	7·9	...	...	...	...	10·6	9·0	7
14	...	...	...	...	...	...	0·9	0·9	12	5·3	7·2	16	...	...	...	15·6	8·2	13
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7·2	10·5	13
16	...	...	...	...	...	...	1·4	0·9	12	4·9	2·5	30	...	...	...	2·2	5·3	2
17	...	...	...	7·6	2·6	*68*	1·4	1·0	6	...	...	...	...	...	...	0·4	0·9	...
18	...	...	...	1·6	4·6	8	0·2	0·2	(1)	2·9	1·6	17	...	...	...	...	...	...
19	...	...	...	5·0	9·3	11	...	...	...	*23·8*	12·6	37	...	...	...	...	...	...
20	...	...	...	1·1	1·4	3	...	...	...	0·3	0·9	...	...	...	...	0·6	5·8	...
21	...	...	...	7·5	10·4	2	*17·3*	7·2	22	...	...	...	...	...	...	...	...	...
22	...	...	...	1·8	2·9	(4)	0·8	1·1	(2)	...	...	...	0·2	0·4	...	4·7	4·7	–
23	...	...	...	...	...	...	1·8	1·8	11	...	...	...	...	...	...	13·0	6·6	13
24	...	...	...	...	...	...	9·6	6·3	7	0·3	1·2	...	0·2	0·4	...	5·0	3·0	13
25	...	...	...	...	...	...	0·7	1·1	5	2·5	6·7	(1)	0·1	0·3	...	20·0	7·9	22
26	...	...	...	...	...	...	3·2	3·2	6	7·4	8·9	20	0·7	1·7	1	8·0	3·8	26
27	...	...	...	...	...	...	...	...	...	0·4	0·6	(4)	0·5	0·8	2	15·5	13·1	12
28	...	...	...	...	...	...	...	...	...	0·2	0·2	...	0·3	0·5	...	*29·4*	11·1	*52*
29	...	...	...	...	...	...	1·2	4·2	(5)	1·6	1·2	12	0·6	1·9	...	7·7	3·4	13
30	...	...	...	1·3	1·2	6	1·3	1·6	(4)	...	...	...	...	...	...	1·2	0·7	1
31	...	...	...	...	...	...				2·3	6·8	7				0·4	1·2	...
Total	65·1	25·2	–	38·7	48·7	–	118·6	82·1	–	78·9	93·4	–	48·2	45·8	–	198·3	172·1	–

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

80 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m.

	Hour G.M.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	0-24
	millimetres																								
Jan.	5·5	7·1	8·9	5·9	4·2	7·3	10·8	7·3	6·9	4·6	10·3	*11·2*	8·1	6·9	7·0	5·8	4·6	2·8	2·3	3·9	3·7	2·6	3·9	3·9	145·5
Feb.	1·7	2·1	2·4	2·7	6·1	7·4	5·5	6·5	*9·3*	7·8	5·4	4·3	2·9	1·5	2·5	0·5	1·5	0·5	1·0	3·1	4·5	2·8	3·8	2·7	88·5
Mar.	4·0	4·0	5·1	6·2	3·4	5·7	*6·8*	5·3	3·4	3·8	4·9	3·9	4·3	4·1	2·5	1·4	1·1	0·8	1·4	1·4	2·6	3·5	3·3	3·9	86·8
Apr.	3·5	2·5	1·6	1·6	1·2	1·2	1·5	1·4	1·6	0·5	2·1	2·2	3·1	1·0	1·0	2·7	1·0	4·9	4·7	4·3	4·2	4·8	*5·7*	5·2	63·5
May	4·8	*9·6*	5·8	4·5	6·6	3·8	4·8	3·2	4·5	6·4	2·4	0·7	7·1	4·6	6·8	3·1	7·1	2·8	1·6	1·2	3·3	2·6	3·7	3·5	104·5
June	2·4	1·9	1·3	3·7	3·6	1·8	4·3	3·1	0·9	2·0	1·2	4·0	3·3	3·6	2·2	2·5	*6·8*	6·2	5·7	2·7	2·9	4·6	4·4	2·8	77·9
July	0·2	0·8	2·2	1·7	2·6	3·8	4·8	4·3	4·9	3·5	*8·5*	7·6	6·6	3·5	···	0·3	3·4	2·9	0·3	0·3	0·7	1·4	0·5	0·3	65·1
Aug.	0·4	0·5	1·2	1·6	1·1	2·6	1·8	2·8	1·5	1·2	4·6	3·4	0·5	1·4	*4·7*	1·6	1·7	2·5	1·0	1·3	0·8	0·2	0·2	0·1	38·7
Sept.	1·6	0·9	2·4	5·8	*13·7*	10·9	4·1	4·2	3·7	8·9	8·4	10·2	3·6	6·6	3·5	7·9	3·8	0·7	1·5	1·0	1·7	3·1	3·8	6·6	118·6
Oct.	4·5	4·2	3·7	2·4	2·3	2·5	4·9	*5·9*	3·9	1·7	3·8	2·0	2·1	4·9	2·4	4·1	3·0	2·9	1·6	4·7	3·8	3·3	1·9	2·4	78·9
Nov.	1·6	1·9	2·7	*4·1*	2·6	1·6	1·0	2·0	1·5	0·4	···	0·5	1·2	2·2	2·4	3·7	2·9	3·3	2·9	2·2	1·7	0·7	3·2	1·9	48·2
Dec.	6·3	3·5	7·5	4·7	7·7	6·0	4·9	7·2	6·1	3·9	3·7	10·9	10·4	11·2	11·0	8·4	11·0	*14·8*	10·4	*14·8*	10·4	10·9	7·2	5·4	198·3
Annual	36·5	39·0	44·8	44·9	55·1	54·6	55·2	53·2	40·2	44·7	55·3	*60·9*	53·2	51·5	46·0	42·0	47·9	45·1	*34·4*	40·9	40·3	40·5	41·6	38·7	1114·5

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

81 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m.

	Hour G.M.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	0-24
	hours																								
Jan.	4·6	6·0	5·4	4·7	2·6	5·4	*8·2*	4·7	5·3	3·7	8·1	5·9	6·3	5·6	6·8	5·3	4·1	3·0	2·6	3·4	2·8	3·0	2·7	3·6	113·8
Feb.	2·1	3·6	3·9	3·0	4·0	3·5	5·1	4·4	5·1	3·7	2·7	1·5	2·5	1·1	1·6	1·0	1·5	1·0	1·8	3·5	3·7	3·7	*5·5*	4·5	74·0
Mar.	1·8	1·3	2·5	2·1	1·6	2·8	3·8	3·6	3·4	*4·2*	4·1	2·2	2·6	2·3	2·1	2·3	2·3	1·6	2·1	3·1	2·7	2·1	1·3	1·1	59·0
Apr.	4·5	5·5	5·3	4·2	3·3	2·5	2·0	1·3	2·8	1·3	1·1	1·6	2·0	1·4	2·2	3·0	3·2	3·7	4·0	4·0	*6·7*	6·0	5·3	5·9	82·8
May	6·3	6·6	6·2	5·3	*6·7*	5·2	6·1	4·7	3·9	4·0	3·2	1·5	3·8	3·5	4·9	3·5	3·9	3·1	1·7	2·0	3·0	5·2	6·2	4·6	105·1
June	*5·0*	3·4	2·0	2·7	3·1	3·1	4·8	4·2	2·6	1·8	2·0	1·4	3·2	3·3	3·8	3·0	4·3	4·4	4·5	2·8	2·5	3·6	3·3	4·5	79·3
July	1·0	1·0	1·0	1·0	1·0	1·0	1·3	1·0	1·2	1·2	*2·0*	1·6	1·3	1·8	···	0·6	0·8	1·2	0·7	1·0	0·9	0·5	1·0	1·1	25·2
Aug.	1·6	2·5	2·6	1·9	2·6	2·6	3·0	2·8	2·2	2·5	2·6	*3·2*	1·5	1·6	2·0	3·0	1·6	2·4	2·2	1·0	1·0	0·2	1·1	1·0	48·7
Sept.	2·0	2·0	3·7	4·1	5·2	*6·5*	4·6	4·4	3·2	4·8	4·0	3·7	3·4	4·0	3·9	4·8	2·9	1·3	1·1	1·5	2·2	2·7	3·0	3·1	82·1
Oct.	3·4	4·4	3·2	4·7	*5·7*	5·6	5·0	4·5	4·9	3·5	3·7	3·4	3·5	4·5	2·3	3·2	4·3	4·7	3·0	4·3	3·7	2·5	3·2	2·2	93·4
Nov.	2·5	*3·4*	2·2	1·1	1·7	2·1	1·0	2·0	1·0	0·9	···	0·8	0·8	1·4	1·3	2·9	2·7	2·2	3·3	2·5	2·2	2·1	2·8	2·9	45·8
Dec.	8·1	6·3	6·8	5·6	6·2	5·3	4·7	5·7	3·7	5·6	6·2	8·1	8·6	8·2	8·2	8·2	10·8	*11·4*	8·8	8·5	7·9	6·4	5·8	7·0	172·1
Annual	42·9	46·0	44·8	40·4	43·7	45·6	*49·6*	43·3	39·3	37·2	39·7	*34·9*	39·5	38·7	39·1	40·8	42·4	40·0	35·8	37·6	39·3	38·0	41·2	41·5	981·3

NOTES ON RAINFALL

82 ESKDALEMUIR

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought" 13 July–1 August
"Partial drought" 4 July–8 August
"Dry spells" 13 July–1 August; 12 November–1 December

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell" No occasions
"Wet spell" No occasions

Rainfall Duration

There were 154 days on which no duration of rainfall was registered. The day with the greatest duration was 9 December when the duration was 20·8 hr., the amount falling being 19·6 mm.

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	48	37	57	57	12

Notable falls of the Year

The greatest amount in a 60 min. period was 6·0 mm. which was recorded between 12h. and 13h. on 1 July; on this occasion 5 mm. of rain fell in 48 min. Falls of 5 mm. in one hour or less occurred on 9 days.

Details of the greatest continuous falls are as follows

	January 9–10	April 27	July 2–3	December 27–28
Amount (mm.)	51·1	22·5	34·7	31·0
Duration of rainfall (hr.)	22·8	19·9	12·1	20·2

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 93 mm./hr. at 22h.20m. on 23 June. The maximum rate exceeded 50 mm./hr. three times on 9 September, twice on 5 May, 17 August, 12 September and once on 23 June, 2 September, 5 October and 28 December.

Brackets in Table 79 indicate that readings are estimated from the Dines tilting-siphon recorder.

83 ESKDALEMUIR: h_s(height of recorder above ground) = 1·5 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	···	···	···	···	···	···	10·9	84	0·8	5	*14·8*	*87*	1·2	7	9·2	58	···	···	1·2	10	···	···	···	···
2	···	···	···	···	7·2	67	···	···	7·3	48	9·8	58	5·0	29	0·8	5	6·3	45	1·5	13	···	···	···	···
3	0·4	6	···	···	···	···	5·8	44	0·9	6	4·4	26	···	···	4·1	26	4·2	31	5·4	47	1·2	13	3·4	46
4	···	···	4·8	55	7·5	69	0·2	2	···	···	5·9	35	5·5	32	11·9	76	0·6	4	0·5	4	5·4	60	2·9	39
5	···	···	0·1	1	3·5	32	···	···	3·5	23	9·8	37	8·9	52	7·9	50	4·2	31	0·2	2	3·8	42	···	···
6	0·3	4	6·7	75	4·2	38	0·7	5	3·4	22	8·2	48	5·9	34	9·4	60	8·4	62	2·2	20	3·1	35	···	···
7	···	···	···	···	0·1	1	···	···	9·4	60	···	···	0·9	5	9·0	58	*10·7*	*80*	0·6	5	···	···	3·5	48
8	···	···	3·1	34	3·1	28	0·2	1	···	···	7·8	45	12·8	75	*12·9*	83	6·3	47	···	···	···	···	···	···
9	···	···	3·6	39	1·1	10	3·6	27	2·9	18	13·1	76	10·9	64	0·4	3	3·1	24	···	···	0·9	10	···	···
10	···	···	7·2	78	9·5	*84*	1·9	14	2·1	13	2·5	15	13·1	77	4·0	26	1·8	14	0·3	3	0·1	1	···	···
11	5·9	79	1·6	17	8·3	73	3·2	23	6·8	43	3·5	20	11·3	66	8·3	54	8·7	67	2·8	26	2·0	23	5·0	70
12	*6·0*	*80*	5·5	59	9·6	*84*	1·3	9	0·2	1	1·0	6	10·1	60	5·0	33	5·4	41	3·6	33	*7·2*	*84*	3·7	52
13	3·4	45	7·1	75	5·7	49	11·1	80	6·5	41	6·3	36	13·8	82	7·6	50	7·8	60	···	···	···	···	···	···
14	···	···	1·1	12	3·1	27	12·1	87	6·9	43	···	···	4·3	25	7·8	52	7·2	56	1·7	16	4·7	56	···	···
15	···	···	0·4	6	0·4	3	10·8	77	7·7	48	11·7	67	12·5	74	4·5	30	2·0	16	6·6	63	···	···	···	···
16	2·0	26	5·5	57	1·4	12	*12·5*	*89*	5·1	32	···	···	13·8	82	2·8	19	1·4	11	2·5	24	5·6	68	···	···
17	4·0	52	0·4	4	8·9	75	6·3	44	6·0	37	11·9	69	7·3	44	3·9	26	1·0	8	6·4	62	···	···	0·1	1
18	5·9	76	4·6	47	4·1	34	12·1	85	7·7	47	14·3	83	···	···	0·4	3	0·4	3	3·1	30	3·3	40	*6·0*	*86*
19	1·9	24	7·5	76	9·4	79	12·2	85	12·0	74	6·4	37	10·5	63	3·0	20	3·0	24	3·7	36	2·5	31	1·7	24
20	···	···	7·4	75	2·7	22	11·3	79	7·3	45	···	···	6·2	37	5·1	35	7·8	63	3·9	38	1·0	12	···	···
21	···	···	4·0	40	2·8	23	2·4	17	8·5	52	11·5	66	9·0	54	···	···	2·2	18	7·2	71	2·7	34	4·5	64
22	···	···	4·4	44	6·8	56	2·7	19	3·1	19	2·3	13	11·4	69	5·6	39	0·1	1	4·2	42	1·8	23	···	···
23	5·2	65	0·9	9	···	···	2·0	14	3·2	19	0·6	3	4·8	29	7·3	50	5·5	45	3·4	34	4·3	55	···	···
24	···	···	···	···	···	···	7·9	54	3·4	21	5·8	33	11·6	71	11·6	81	···	···	1·5	15	5·3	68	1·9	27
25	···	···	3·4	33	1·4	11	1·0	7	12·4	75	0·6	3	13·0	80	11·1	78	3·9	32	···	···	0·3	4	···	···
26	3·8	46	*8·7*	*84*	0·5	4	6·6	45	11·9	71	3·5	20	*14·0*	*86*	11·7	82	4·7	39	4·1	42	0·8	10	···	···
27	···	···	7·6	72	8·5	68	···	···	11·5	69	2·5	14	11·6	71	11·9	*84*	···	···	2·6	27	···	···	···	···
28	···	···	···	···	1·7	13	7·6	51	13·1	78	···	···	13·1	81	···	···	1·2	10	*7·3*	*76*	···	···	0·3	4
29	···	···			9·2	72	2·6	18	*14·2*	*85*	0·7	4	1·5	9	2·8	20	···	···	···	···	···	···	2·8	40
30	···	···			*9·9*	77	2·8	19	13·7	81	4·2	24	9·3	58	···	···	7·3	63	6·5	69	···	···	4·8	68
31	0·7	8			7·3	57			13·0	77			4·1	26	5·5	40			···	···			3·4	48
Mean	1·27	17	3·41	36	4·45	38	5·06	36	6·60	41	5·44	32	8·30	50	5·98	40	3·84	30	2·68	26	1·87	23	1·42	20
											Annual mean		4·20	32										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

84 ESKDALEMUIR: h_s = 1·5 m.

	Hour L.A.T. 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	Total	Per cent of possible
	hours																			%
Jan.	–	–	–	–	···	1·2	4·9	5·8	*7·4*	7·1	7·2	5·3	0·6	···	–	–	–	–	39·5	17
Feb.	–	–	–	···	1·8	7·6	12·2	*15·1*	13·2	*15·1*	13·8	10·6	6·1	0·1	···	–	–	–	95·6	36
Mar.	–	–	···	0·9	9·8	13·7	*16·8*	*16·8*	15·2	16·4	15·0	15·4	11·5	5·6	0·8	···	–	–	137·9	38
Apr.	–	···	1·5	8·1	10·8	12·8	12·8	15·7	14·6	*16·7*	15·5	13·0	11·6	10·3	7·2	1·2	···	–	151·8	36
May	···	0·6	9·8	14·3	15·5	*17·4*	*17·4*	16·0	14·8	14·7	15·2	15·2	16·2	15·9	13·3	7·8	0·4	···	204·5	41
June	···	1·1	7·4	13·2	14·1	13·4	13·2	*14·5*	14·0	11·6	9·0	13·2	10·8	10·3	8·2	7·2	1·9	···	163·1	32
July	···	0·9	9·3	17·8	19·4	19·3	21·5	20·5	*23·2*	21·5	19·2	17·8	17·4	15·5	17·9	13·9	2·3	···	257·4	50
Aug.	–	···	3·1	9·2	12·2	12·2	12·6	15·9	15·9	*18·0*	17·4	16·8	17·2	17·8	12·6	4·6	···	–	185·5	40
Sept.	–	–	0·2	3·3	7·0	8·6	10·7	11·1	11·9	*15·1*	14·2	12·0	9·1	7·9	4·1	···	–	–	115·2	30
Oct.	–	–	–	···	2·9	8·4	7·9	8·4	9·5	*12·2*	*12·2*	11·8	7·3	2·4	···	–	–	–	83·0	26
Nov.	–	–	–	–	···	0·9	7·8	*10·9*	10·4	9·1	8·2	6·1	2·6	···	–	–	–	–	56·0	23
Dec.	–	–	–	–	–	0·2	4·7	8·5	*9·5*	9·2	7·7	4·2	···	–	–	–	–	–	44·0	20
Annual	···	2·6	31·3	66·8	93·5	115·7	142·5	159·2	159·6	*166·7*	154·6	141·4	110·4	85·8	64·1	34·7	4·6	···	1533·5	32

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

85 ESKDALEMUIR: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 235 m. + 15 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	2·1	9	2·8	12	5·5	19	1·0	9	3·3	13	3·9	13	2·4	14	1·4	10	3·4	17	3·0	10	2·5	12	0·5	4
2	2·1	12	5·3	21	0·7	4	3·3	15	4·2	15	5·0	17	4·0	15	0·8	6	*7·1*	*22*	4·5	15	*4·6*	*17*	5·8	19
3	·3·9	15	2·6	10	1·6	14	4·8	15	5·9	21	4·2	18	*4·1*	15	1·1	6	2·7	12	2·1	11	3·5	12	5·8	17
4	7·0	21	1·7	10	3·5	13	4·0	13	*10·2*	*21*	*7·3*	23	2·3	13	1·2	6	4·5	13	*0·6*	7	2·8	11	2·7	13
5	5·9	16	2·7	14	6·3	*25*	3·2	14	8·3	21	*1·3*	8	1·2	9	2·3	12	3·6	19	3·2	16	1·2	9	8·2	20
6	4·6	17	1·9	13	5·5	22	3·4	13	2·8	11	4·1	15	0·8	8	3·0	13	1·9	10	6·2	*22*	1·9	9	9·2	20
7	1·4	12	1·7	13	3·5	14	3·6	15	3·5	13	6·0	21	0·6	5	2·1	11	*0·7*	7	0·9	13	3·8	13	4·3	15
8	*0·0*	0	6·7	23	*6·3*	24	4·3	14	8·5	20	6·8	20	1·2	9	1·1	8	2·1	10	2·6	14	3·1	9	*0·3*	5
9	0·7	10	0·9	7	2·7	10	5·0	14	6·0	18	3·7	14	2·1	9	0·9	6	3·3	14	3·8	13	2·0	9	1·9	7
10	5·1	21	3·8	17	0·5	8	3·7	14	3·5	15	1·4	13	1·9	8	2·8	10	3·6	15	2·6	14	2·3	11	3·4	13
11	*		4·3	17	1·0	5	3·6	17	4·3	17	2·5	13	1·8	9	2·5	9	4·1	19	0·8	8	3·4	17	1·5	7
12	*		5·2	17	1·1	5	3·7	15	6·7	16	3·4	14	0·9	*15*	2·5	9	3·6	15	0·8	7	0·6	5	1·3	8
13	*		2·9	11	0·7	9	3·1	15	3·1	16	2·7	13	1·2	7	2·0	9	2·6	12	5·3	16	0·1	2	2·5	12
14	*		3·4	15	*0·4*	5	1·8	9	2·0	15	6·9	17	1·1	9	1·1	9	2·5	15	*7·3*	21	0·9	7	5·7	19
15	*		2·5	13	3·2	18	1·2	8	2·7	15	3·5	15	1·4	9	3·6	14	3·3	13	3·9	18	0·1	2	1·5	11
16	*		5·2	17	4·0	19	2·1	7	1·7	9	1·5	6	1·5	10	*6·1*	*17*	1·8	12	2·4	15	0·1	4	1·0	11
17	*		6·8	*25*	4·1	18	*0·9*	5	4·5	16	2·0	9	1·7	8	3·8	16	5·4	18	3·6	17	*0·1*	4	2·4	10
18	*		3·2	12	3·7	16	2·4	13	4·9	20	1·9	9	1·4	8	2·6	13	2·5	11	2·5	13	0·3	5	1·2	7
19	*		1·3	10	3·7	15	1·1	8	3·6	14	3·9	11	*0·4*	4	4·2	16	4·1	16	4·3	17	0·1	3	0·6	6
20	*		2·5	11	3·9	14	1·9	12	1·5	7	1·7	7	0·6	6	0·9	8	1·7	10	2·5	7	1·2	8	3·1	12
21	*		3·5	11	2·3	15	2·5	10	2·2	12	2·5	11	0·6	5	1·5	8	1·8	10	4·8	18	0·9	6	2·1	9
22	*		3·6	12	2·9	13	2·9	13	3·7	13	5·1	17	1·0	9	2·1	9	2·7	16	3·3	13	1·4	9	2·4	13
23	*		4·9	17	6·1	25	2·8	11	2·4	12	6·0	*25*	0·9	7	1·3	7	2·9	12	1·1	5	2·5	13	8·4	26
24	*		*7·4*	16	2·5	13	1·3	9	*1·2*	7	6·0	24	2·9	10	0·5	4	5·6	17	2·7	16	3·7	12	4·1	15
25	*		6·0	17	1·3	8	3·9	16	2·5	12	3·1	11	2·3	7	0·6	5	4·9	15	5·0	16	0·4	9	6·2	23
26	5·0	18	2·1	9	5·4	19	4·0	14	3·5	10	3·1	13	1·9	8	*0·3*	5	3·6	15	2·8	15	2·1	9	8·7	23
27	2·1	12	*0·9*	5	2·7	11	6·3	17	6·2	17	3·8	14	0·5	4	2·2	12	2·5	14	1·9	13	3·1	11	7·4	18
28	4·5	13	4·5	12	0·9	6	3·5	14	4·8	14	7·0	17	2·7	10	1·6	10	2·1	10	4·2	19	2·4	10	*11·0*	*27*
29	5·5	17			2·5	12	2·4	14	1·8	8	3·1	15	0·6	5	2·4	11	5·1	15	1·2	8	1·2	12	4·5	23
30	*8·2*	*22*			0·5	5	*6·5*	*18*	*1·2*	7	1·4	8	1·4	9	3·2	11	4·6	20	1·5	7	0·8	8	1·2	12
31	5·3	15			1·4	11			1·6	9			0·9	8	1·4	11			0·6	5			2·0	11

*Defective Record

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

86 ESKDALEMUIR: h_a = 235 m. + 15 m.

	Hour G.M.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	Mean
	metres per second																								
Jan.	4·2	4·1	4·1	3·8	3·8	4·3	4·3	4·2	3·9	3·8	3·9	4·1	4·1	*5·0*	4·5	4·2	4·1	3·6	3·5	3·4	3·4	3·9	3·4	3·7	4·0
Feb.	2·9	3·0	3·2	3·5	3·5	3·7	4·0	3·8	4·1	3·9	4·1	*4·3*	4·2	4·1	4·3	3·8	3·7	3·2	3·3	2·9	3·0	3·5	3·1	2·9	3·6
Mar.	2·7	2·6	2·6	2·5	2·7	2·5	2·6	2·5	3·1	3·5	*3·8*	3·6	3·5	3·5	3·2	3·1	3·1	2·8	2·7	2·6	2·4	2·6	2·7	2·8	2·9
Apr.	2·3	2·6	2·5	2·2	1·9	1·7	1·9	2·1	3·2	3·8	4·0	4·5	4·5	4·5	*4·6*	4·4	4·1	3·8	3·4	2·9	2·4	2·7	2·7	2·6	3·1
May	3·1	2·8	2·8	3·1	3·3	3·2	3·9	4·3	4·7	4·6	4·5	4·6	4·7	4·8	4·8	4·8	4·7	*4·9*	4·6	4·1	3·2	2·9	3·0	3·1	3·9
June	2·6	2·7	2·6	2·6	2·5	2·8	3·1	3·8	4·2	4·3	4·7	4·8	5·2	5·1	*5·3*	5·3	5·2	5·1	4·8	4·3	3·1	2·8	2·6	2·5	3·8
July	0·8	0·7	0·6	0·7	0·8	0·8	1·2	1·2	1·6	1·9	2·0	2·2	2·3	2·1	2·2	2·6	2·7	*2·8*	2·1	1·8	1·3	1·3	1·0	0·9	1·6
Aug.	1·4	1·2	1·2	1·4	1·5	1·3	1·4	1·8	2·4	2·8	3·1	3·1	3·1	*3·2*	3·1	3·0	2·7	2·5	1·8	1·5	1·3	1·3	1·4	1·3	2·0
Sept.	2·9	2·7	2·8	2·5	2·5	2·5	2·3	2·5	3·0	3·7	4·4	4·7	4·8	4·9	*5·0*	4·6	4·2	3·7	3·1	2·8	2·7	2·4	2·6	2·9	3·3
Oct.	2·3	2·3	2·2	2·1	2·0	2·3	2·4	2·6	3·0	3·7	4·0	*4·4*	4·4	4·3	4·4	3·8	3·4	3·0	2·6	2·5	2·5	2·4	2·4	2·3	3·0
Nov.	1·5	1·6	1·6	1·5	1·1	1·0	0·9	0·9	1·0	1·5	2·4	2·7	*3·1*	2·9	2·5	2·3	2·0	2·0	1·9	2·0	1·8	1·7	1·6	1·6	1·8
Dec.	3·8	3·8	3·7	3·6	4·1	4·1	4·0	4·0	3·9	3·8	4·2	*4·3*	4·1	4·2	4·1	3·9	3·5	3·5	3·5	3·8	3·7	3·9	3·8	3·7	3·9
Annual	2·4	2·3	2·3	2·3	*2·3*	2·3	2·5	2·6	3·0	3·3	3·6	3·8	3·8	*3·8*	3·8	3·6	3·4	3·2	3·0	2·7	2·4	2·5	2·4	2·4	2·9

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

87 ESKDALEMUIR: h_a = 235 m. + 15 m.

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Date of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	2	4	114	181	85	360	200	11	30 06	22	30 10 20
Feb.	–	0	2	3	132	370	167	0	10	15	17 09	25	17 08 25
Mar.	–	0	4	7	117	343	277	0	80	15	23 10	25	5 21 55
Apr.	–	0	1	1	112	421	186	0	200	11	30 14	18	30 13 35
May	–	0	3	14	187	396	147	0	220	13	3 18	21	4 17 05
June	–	0	5	14	168	382	156	0	230	14	23 24	25	23 22 50
July	–	0	–	0	15	306	423	0	010	7	3 18	15	12 17 20
Aug.	–	0	–	0	53	339	352	0	230	9	16 16	17	16 14 30
Sept.	–	0	2	3	125	419	173	0	220	12	30 03	22	2 01 25
Oct.	–	0	–	0	127	349	268	0	230	11	14 17	22	6 09 25
Nov.	–	0	–	0	40	276	404	0	130	9	2 18	17	2 18 00
Dec.	–	0	6	36	188	274	246	0	210	16	28 07	27	28 20 35
Year	–	0	25	82	1378	4056	2884	360	210	16	Dec. 28 07	27	Dec. 28 20 35

88 ESKDALEMUIR

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	78·6	79·6	78·0	78·3	75·0	77·8	76·7	77·4	82·0	80·1	85·1	81·5	85·6	83·4	89·4	86·2	88·2	86·7	85·7	85·6	79·8	83·4	80·0	81·4
2	78·0	79·4	78·0	78·4	75·1	77·8	77·0	77·4	82·0	80·1	85·1	81·7	85·4	83·7	89·6	86·2	88·1	86·6	85·3	85·5	79·9	83·4	80·0	82·2
3	77·6	79·9	77·6	78·4	75·1	77·7	77·2	77·3	82·0	80·1	85·1	81·8	85·5	83·5	89·3	86·2	87·9	86·6	84·7	85·4	80·3	83·3	80·3	82·0
4	77·6	79·9	77·1	78·6	75·1	77·7	77·2	77·3	81·8	80·1	84·9	81·8	85·1	83·7	89·1	86·1	87·6	86·6	84·0	85·3	81·0	83·1	80·0	81·8
5	77·2	79·7	77·0	78·7	75·1	77·7	78·4	77·7	81·6	80·3	85·0	81·8	85·6	83·7	89·1	86·1	87·9	86·6	84·1	85·3	80·9	82·9	80·0	81·3
6	76·9	79·8	76·9	78·7	75·1	77·7	78·4	77·7	81·8	80·2	85·1	82·1	86·1	83·6	89·1	86·1	87·9	86·6	83·9	85·3	81·3	82·8	80·5	81·3
7	76·9	79·5	76·6	78·5	75·0	77·7	79·1	77·8	82·1	80·3	85·1	82·1	86·8	83·7	88·8	86·3	88·0	86·7	83·6	85·2	81·7	83·0	81·1	81·7
8	76·7	79·5	76·3	78·6	75·0	77·5	79·3	77·9	82·5	80·4	84·2	82·2	86·8	83·7	88·6	86·4	88·1	86·6	83·8	85·0	81·9	82·8	80·1	81·8
9	76·6	79·5	76·5	78·6	75·2	77·5	79·5	78·0	82·3	80·4	84·1	82·2	87·4	83·7	88·4	86·2	87·9	86·6	84·5	85·1	81·9	82·8	79·6	81·7
10	76·6	79·4	76·3	78·5	75·4	77·5	79·9	78·0	82·5	80·5	84·0	82·4	88·4	83·9	88·2	86·2	87·7	86·6	84·9	85·1	82·0	82·8	78·9	81·7
11	76·7	79·4	76·0	78·5	75·9	77·5	80·2	78·2	82·0	80·6	83·8	82·4	88·4	83·9	88·0	86·2	87·4	86·6	84·9	85·1	81·9	82·9	78·4	81·7
12	76·3	79·3	75·9	78·3	76·1	77·5	80·5	78·3	81·8	80·5	84·0	82·3	88·7	84·2	88·2	86·2	87·4	86·6	85·0	85·1	81·8	83·0	78·1	81·5
13	76·1	79·2	75·9	78·4	76·1	77·4	80·6	78·4	81·8	80·7	84·0	82·4	89·3	84·3	88·4	86·2	86·7	86·6	84·9	85·1	81·7	83·0	77·9	81·4
14	76·1	79·2	75·5	78·2	76·0	77·5	80·6	78·6	81·6	80·7	84·1	82·4	89·6	84·4	88·5	86·3	86·6	86·5	84·9	85·1	81·0	83·0	77·9	81·3
15	76·0	79·1	75·5	78·1	76·0	77·3	80·6	78·6	81·8	80·8	84·3	82·5	89·0	84·6	88·5	86·2	86·1	86·4	85·0	85·1	81·0	83·1	78·0	81·3
16	75·8	78·9	75·5	78·1	76·3	77·3	80·6	78·6	81·8	80·8	85·0	82·5	89·0	84·9	88·7	86·2	85·8	86·4	83·7	85·1	80·6	82·9	78·3	81·1
17	75·8	78·9	75·5	78·2	76·4	77·3	80·8	78·8	81·6	80·9	85·0	82·6	89·4	84·9	88·6	86·2	85·9	86·2	82·9	85·1	80·1	82·8	78·2	80·9
18	75·8	78·9	75·5	78·2	76·1	77·8	80·8	78·9	81·6	80·9	85·2	82·8	89·2	85·0	88·2	86·2	85·9	86·2	82·0	85·0	80·0	82·8	78·1	80·9
19	75·7	78·8	75·5	78·1	76·3	77·7	80·8	79·1	81·5	80·8	85·6	82·8	89·0	85·1	88·4	86·3	85·8	86·2	81·9	84·9	79·7	82·7	77·6	80·9
20	75·7	78·8	75·3	78·1	76·1	77·6	80·8	79·1	81·7	80·9	85·2	82·7	89·1	85·1	88·2	86·3	85·7	86·1	82·2	84·8	79·9	82·7	77·3	80·9
21	75·7	78·8	75·3	78·1	76·3	77·7	81·4	79·2	81·6	80·9	85·1	82·9	89·1	85·2	88·2	86·2	85·9	86·0	82·2	84·8	80·1	82·7	77·0	80·8
22	75·7	78·8	75·2	77·9	76·0	77·6	81·3	79·4	81·8	80·8	85·6	83·0	89·7	85·3	88·3	86·3	85·8	86·0	81·9	84·6	80·6	82·5	76·8	80·7
23	75·7	78·4	75·2	77·9	76·4	77·5	81·2	79·4	82·2	80·9	85·6	83·1	89·8	85·3	89·0	86·3	85·6	85·7	81·5	84·4	80·5	82·4	76·8	80·5
24	75·4	78·4	75·2	77·9	76·0	77·5	81·2	79·5	82·8	80·9	85·6	83·1	89·7	85·4	89·6	86·3	86·0	85·9	81·7	84·3	80·5	82·4	76·9	80·5
25	75·7	78·4	75·2	77·9	75·9	77·4	81·1	79·5	83·3	80·9	85·8	83·2	89·7	85·4	89·9	86·3	85·7	85·7	82·1	84·1	79·6	82·0	77·0	80·3
26	76·0	78·3	75·2	77·9	76·4	77·5	81·1	79·6	83·8	81·1	85·8	83·2	89·5	85·8	89·9	86·4	85·5	85·8	82·2	84·1	79·4	82·1	77·3	80·2
27	76·2	78·4	75·1	77·9	76·4	77·4	81·6	79·7	84·0	81·1	86·0	83·2	89·6	85·8	89·8	86·5	85·2	85·8	81·7	83·9	79·8	82·1	77·8	80·8
28	76·6	78·4	75·0	77·8	76·4	77·4	81·5	79·7	83·8	81·1	86·2	83·3	89·7	85·8	89·3	86·3	85·1	85·7	81·0	83·9	79·8	82·1	78·4	80·7
29	77·1	78·2			76·4	77·4	82·0	79·8	83·8	81·3	86·0	83·3	89·5	85·9	88·9	86·5	85·6	85·7	80·2	83·8	80·1	82·1	78·7	80·1
30	77·6	78·3			76·6	77·4	82·1	80·0	84·1	81·3	86·1	83·4	89·2	86·0	88·9	86·5	85·8	85·8	80·1	83·7	80·1	81·5	78·0	80·1
31	77·9	78·2			76·5	77·4			84·7	81·3			89·3	86·2	88·7	86·7			79·7	83·7			77·7	80·1
Mean	76·5	79·0	76·0	78·2	75·9	77·5	80·1	78·6	82·4	80·7	85·1	82·6	88·3	84·7	88·8	86·3	86·6	86·3	83·1	84·8	80·6	82·7	78·5	81·1
												Year	81·9	81·9										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 9h., G.M.T.

89 ESKDALEMUIR

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	70·0	75·8	70·2	66·1	78·2	74·3	74·4	79·7	78·9	80·3	70·5	71·7
2	72·2	75·0	70·4	*65·0*	77·7	74·7	79·6	84·1	86·0	80·0	68·4	69·8
3	73·4	70·1	67·5	74·4	72·2	79·3	80·8	76·0	74·9	71·3	76·9	76·1
4	70·1	71·1	69·2	78·0	79·3	76·8	79·7	78·4	84·0	67·9	81·3	72·7
5	70·0	72·6	70·0	79·0	77·8	74·5	80·8	74·1	84·2	73·8	69·8	74·3
6	72·2	67·8	70·4	78·1	77·6	80·2	74·4	82·6	78·0	76·2	75·0	81·1
7	72·0	69·0	70·4	75·0	73·8	79·8	83·3	79·0	77·9	69·1	76·8	81·1
8	72·0	73·5	72·6	79·4	78·5	77·7	81·9	*72·8*	75·7	79·5	80·0	66·0
9	72·3	68·2	69·8	76·0	80·3	76·7	81·5	79·6	80·0	85·8	77·1	70·9
10	72·8	68·1	68·9	78·7	74·0	73·0	78·2	76·3	74·6	83·1	79·0	73·0
11	65·2	66·0	66·4	78·5	69·4	*68·8*	77·8	80·3	83·6	75·2	74·0	65·9
12	57·8	67·6	67·0	80·7	77·2	79·0	84·6	82·9	74·2	80·5	71·1	63·0
13	59·9	69·5	64·9	75·2	76·2	75·0	82·3	82·6	77·2	73·0	72·6	65·8
14	*57·5*	66·1	65·1	69·4	71·1	80·8	79·7	76·9	*72·9*	86·2	66·2	74·2
15	58·0	69·6	68·6	67·8	70·0	81·0	73·6	77·7	73·2	78·6	73·1	75·6
16	68·0	65·0	76·4	69·5	*66·7*	80·2	76·5	87·5	76·9	62·7	64·6	77·9
17	59·4	65·0	68·0	69·7	72·8	74·9	80·8	82·8	74·8	67·2	65·6	72·6
18	66·0	66·1	65·0	66·1	72·6	72·0	86·3	75·3	76·5	*60·4*	70·5	65·1
19	65·8	63·1	65·9	67·8	68·1	73·8	81·4	88·5	81·0	74·0	66·6	*59·6*
20	63·4	*55·8*	*60·2*	71·9	68·6	80·2	79·1	76·2	73·9	74·7	70·1	62·1
21	72·4	63·0	62·9	75·8	69·9	76·1	83·4	83·8	74·3	74·1	72·0	65·7
22	73·4	59·0	67·5	74·0	72·8	83·0	77·5	86·9	77·3	69·3	75·9	59·9
23	65·4	64·7	72·1	78·7	80·9	80·9	80·0	87·0	80·7	68·9	73·0	73·3
24	73·0	69·4	73·1	66·1	75·6	80·5	85·3	82·9	77·5	71·5	74·0	74·6
25	78·0	69·9	74·0	67·3	71·9	74·0	78·6	81·2	80·0	74·2	*62·2*	72·6
26	76·3	63·4	73·9	77·3	73·3	82·1	*72·8*	80·2	77·4	75·2	71·7	79·4
27	72·0	61·9	70·8	78·7	75·0	80·0	77·1	78·9	78·2	66·9	75·1	76·6
28	76·0	63·3	65·4	76·7	73·2	84·6	80·4	83·0	73·5	67·9	74·2	79·4
29	79·0		65·2	76·0	72·4	84·0	81·9	85·0	84·0	60·8	78·1	73·1
30	78·4		60·8	79·1	70·0	76·1	75·1	86·1	80·7	65·3	75·3	66·0
31	77·6		64·3		70·1		82·1	82·1		63·0		71·3
Mean	69·7	67·1	68·3	73·9	73·8	77·8	79·7	81·0	78·1	72·8	72·7	71·3
						Year	73·9					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 9h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

90 ESKDALEMUIR

	JANUARY, factor 8·14				FEBRUARY, factor 7·38				MARCH, factor 7·96			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	120	105	105	165	Z-	180	185	295	290	370	Z-	290
2	85	75	145	125	-80	Z-	165	115	745	600	155	230
3	80	65	-15	145	95	120	100	230	360	340	475	350
4	120	Z-	155	105	65	35	160	280	180	180	290	455
5	65	80	-	140	180	185	150	140	245	145	205	455
6	100	100	130	190	100	145	130	125	130	140	120	195
7	80	130	230	295	135	280	110	135	85	85	195	Z-
8	80	95	60	50	Z-	65	80	110	175	155	180	130
9	80	140	90	Z-	50	25	130	230	170	155	260	250
10	Z-	Z-	435	455	5	90	85	215	140	85	95	110
11	265	550	Z+	410	155	140	Z+	220	125	110	185	335
12	290	200	490	455	Z+	25	350	Z+	95	115	110	95
13	195	165	320	490	120	275	455	510	50	170	180	170
14	305	100	80	145	280	305	215	Z+	160	120	65	185
15	45	55	-	-	455	210	485	565	125	105	115	150
16	Z+	Z+	680	615	280	395	280	370	90	65	105	75
17	340	215	670	700	515	Z+	-	-	180	195	135	255
18	930	320	290	360	-	-	220	Z+	195	175	150	Z±
19	125	355	425	300	250	195	600	180	155	150	115	65
20	215	160	285	250	165	485	185	190	90	145	45	Z-
21	220	505	Z-	70	265	380	130	Z±	Z+	-	445	545
22	Z-	450	85	60	165	325	360	290	125	350	180	250
23	150	90	355	275	120	100	410	465	165	Z+	-160	220
24	90	100	-	-	Z±	195	510	Z+	Z-	Z-	75	75
25	-	-	90	90	Z+	Z+	410	340	Z-	140	-	-
26	65	Z-	175	300	95	120	245	505	-	-	95	105
27	125	120	Z-	85	185	200	290	255	65	50	120	105
28	140	45	275	345	330	255	310	230	10	30	80	50
29	90	-160	135	Z-					145	110	130	55
30	225	145	85	160					20	35	110	15
31	Z-	105	295	300					-	40	-	85
(a)	178	179	252	262	191	197	260	273	166	162	163	197
(b)	216	148	245	278	164	202	264	289	166	162	162	190
Mean	(a) 218		(b) 222		(a) 230		(b) 230		(a) 172		(b) 170	

	APRIL, factor 8·79				MAY, factor 8·39				JUNE, factor 8·15			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	105	120	155	105	80	155	Z-	40	90	205	155	105
2	65	65	-25	Z-	55	165	85	260	130	130	80	50
3	220	Z-	55	90	75	145	Z±	Z±	10	5	120	95
4	115	100	45	50	Z-	45	Z-	40	55	85	130	105
5	25	40	55	115	Z-	Z-	Z-	160	65	140	100	25
6	20	230	105	180	125	140	Z-	95	60	120	-	-
7	95	130	165	80	60	95	95	110	-	-	-40	55
8	40	95	95	Z-	Z-	125	160	Z-	75	115	-	105
9	80	75	65	15	Z+	Z-	Z-	100	30	120	110	70
10	60	80	65	90	70	90	85	70	25	55	120	50
11	105	90	50	125	85	95	160	155	100	85	85	95
12	40	40	35	150	-5	75	65	75	Z-	85	35	45
13	90	75	135	100	Z-	105	150	130	25	45	75	115
14	65	125	185	15	80	-	90	Z+	10	260	115	35
15	50	85	170	90	105	105	Z+	90	85	130	155	70
16	65	55	180	75	50	125	-20	Z±	40	10	50	35
17	75	50	95	30	75	80	135	80	20	130	105	25
18	30	165	240	155	100	-	Z±	140	65	145	145	180
19	150	95	35	15	175	165	Z±	145	105	180	140	55
20	10	265	140	70	100	95	Z±	65	90	25	25	35
21	10	5	40	155	50	130	40	35	100	125	80	60
22	125	50	120	125	30	100	-95	205	150	195	65	130
23	-25	Z-	80	25	130	170	80	15	150	135	110	105
24	40	150	95	65	35	50	75	15	120	85	145	-10
25	15	40	80	10	65	250	80	80	60	135	65	Z-
26	-40	170	140	85	30	175	170	10	135	155	25	45
27	-5	10	300	Z-	15	105	130	210	100	85	130	60
28	35	125	-	-	105	130	85	125	255	330	140	Z-
29	-	-	145	155	85	90	95	40	310	190	160	165
30	150	190	30	160	25	125	135	40	105	120	-	-
31					30	85	60	65				
(a)	72	102	111	99	73	119	104	96	92	125	103	77
(b)	64	101	101	90	55	118	87	93	87	118	106	74
Mean	(a) 96		(b) 89		(a) 98		(b) 88		(a) 99		(b) 96	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

90 ESKDALEMUIR

	JULY, factor*				AUGUST, factor 9·90				SEPTEMBER, factor 10·14			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	-	-	305	160	80	105	125	225	85	75	220	165
2	80	Z-	95	80	60	90	135	100	50	145	85	80
3	Z-	Z-	-	-	100	225	75	70	55	105	95	5
4	-	-	50	100	55	175	155	105	115	195	100	25
5	50	100	-	130	240	210	175	195	20	140	115	120
6	60	95	75	-	150	170	120	80	20	85	110	35
7	-	-	-	-	80	170	-	-	10	190	150	35
8	-	-	-	-	-	-	120	30	10	15	25	0
9	-	-	-	-	20	45	185	100	240	180	Z±	100
10	-	-	-	-	60	165	75	60	100	130	100	120
11	-	-	-	-	50	140	180	165	45	190	150	60
12	-	-	-	-	70	55	140	170	85	125	Z-	Z±
13	-	-	-	-	250	240	190	155	15	Z±	Z-	210
14	-	-	-	-	230	165	155	115	180	185	Z-	65
15	-	-	150	240	270	270	135	35	175	115	25	110
16	80	120	190	170	35	165	105	50	55	185	120	190
17	215	135	105	45	120	Z±	Z-	290	90	120	-60	65
18	30	-30	15	15	75	185	160	185	120	90	75	165
19	70	100	95	75	425	350	565	170	35	120	190	160
20	80	-	55	55	90	135	135	180	120	190	140	195
21	75	215	90	50	10	270	60	10	190	210	175	425
22	45	90	95	145	Z±	340	105	110	210	220	165	105
23	80	70	115	360	100	75	80	140	105	180	175	190
24	70	100	240	240	135	100	105	135	75	130	105	425
25	135	150	-	-	100	50	95	70	160	90	Z-	145
26	-	110	150	100	60	50	90	65	75	80	140	145
27	100	135	125	65	40	150	125	45	-160	85	85	125
28	95	165	95	120	35	0	5	30	85	115	135	85
29	-35	95	75	70	15	100	75	85	320	355	45	110
30	80	190	195	170	30	210	105	180	Z-	155	130	155
31	60	85	100	100	230	90	80	95				
(a)	82	122	121	125	111	155	133	115	102	145	119	132
(b)	74	113	118	125	112	148	134	112	84	144	111	131
Mean	(a) 113		(b) 107		(a) 123		(b) 127		(a) 125		(b) 117	

*factor 9·06 1-6 JULY, 3·01 15-20 JULY, 9·46 21-31 JULY.

	OCTOBER, factor 9·87				NOVEMBER, factor 9·56				DECEMBER, factor 9·51			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	105	145	135	75	100	-	160	145	95	105	5	325
2	95	200	65	-	140	220	-75	-40	230	135	40	150
3	-	-	-340	40	190	195	175	190	105	105	125	195
4	35	20	130	25	140	210	185	190	40	15	170	510
5	40	50	105	-330	160	150	160	190	125	190	115	65
6	40	-30	170	300	85	125	190	190	75	60	Z-	Z-
7	20	-	65	-	35	-370	Z-	235	60	75	150	160
8	-	-	20	55	Z-	390	135	150	170	70	180	140
9	35	55	50	65	200	245	185	280	290	85	-120	20
10	-	90	160	15	135	375	85	Z-	Z-	75	-45	165
11	10	10	-	-	225	150	Z±	95	120	145	210	190
12	-	-	220	10	155	95	85	70	225	125	525	405
13	40	100	65	80	40	50	65	50	225	215	Z-	0
14	120	200	105	-10	35	170	85	140	165	435	-315	-185
15	45	-75	185	110	55	65	100	105	170	185	255	260
16	35	100	Z±	130	75	90	160	75	85	85	190	65
17	200	95	170	230	55	60	45	115	80	95	250	110
18	40	50	Z±	265	80	70	150	95	260	260	200	145
19	Z-	Z-	185	Z±	95	75	120	195	120	235	310	455
20	70	95	145	95	120	140	245	85	270	40	140	180
21	90	130	135	220	25	-45	135	290	130	235	220	290
22	110	90	120	160	70	160	Z-	80	125	-15	Z-	325
23	55	120	110	200	90	65	200	150	-90	125	85	Z-
24	75	95	-	-	65	-180	165	295	60	90	130	160
25	-	-	50	145	85	85	170	230	110	125	40	Z-
26	Z-	95	170	130	5	-	100	140	200	90	115	85
27	85	200	Z+	270	85	75	85	235	80	110	125	Z-
28	190	165	-	-	105	85	40	250	Z-	Z±	145	Z+
29	-	-	55	120	130	125	45	210	Z±	90	Z+	210
30	80	95	150	235	230	250	105	185	175	155	390	220
31	60	160	90	155					70	100	150	150
(a)	73	107	119	136	104	149	130	167	143	133	178	207
(b)	75	83	124	107	106	105	123	181	148	139	156	186
Mean	(a) 109		(b) 97		(a) 137		(b) 129		(a) 165		(b) 157	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means	(a)	116	141	149	157
	(b)	113	132	144	155
		(a) 141		(b) 136	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

91 ESKDALEMUIR

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	+7	−5	−24	−51	−58	−26	−75	−76	−64	*−118*	−72	−20	+4	+17	+49	+18	+20	+38	+55	+59	+101	*+107*	+78	+45	−89	8	242
Feb.	*+140*	+122	+113	+101	+44	+50	+30	+6	−21	−23	−23	+1	+54	+58	+30	−52	−67	−2	+24	−50	−60	−121	−164	*−196*	+419	7	219
Mar.	−14	−19	+5	+12	−16	*−26*	−14	−8	+1	+3	+4	+9	+6	−6	−12	−4	−6	+1	+3	+6	+31	*+34*	+4	−8	−6	13	161
Apr.	+4	−17	−20	−28	−18	−28	*−45*	−27	−13	0	−4	−3	+21	+27	+7	+13	+10	+6	+13	+7	*+44*	+35	+31	−4	−14	2	88
May	−18	−29	*−31*	−22	−10	+3	+10	*+41*	+34	+25	+16	+20	+4	+8	+14	+11	+11	+3	+8	−16	−26	−22	−18	−25	−3	7	83
June	−43	−47	−32	−9	−5	+23	+38	+45	*+56*	+21	+12	+17	+18	+18	+22	+4	+10	+4	+16	+36	−26	*−70*	−65	−56	+22	4	101
July	−23	*−42*	−35	−33	−8	+16	*+37*	+34	+5	−2	+5	+15	+17	+22	+4	+1	+6	+3	+11	+8	+15	−9	−17	−27	−2	11	124
Aug.	−15	−23	−11	*−27*	−9	+18	*+46*	+32	+6	−5	−6	−8	−9	0	+2	0	0	+3	0	+8	0	+9	−11	−11	−16	13	123
Sept.	−11	+11	−39	*−42*	−33	−5	+47	+39	−7	−25	+25	−18	−24	−33	−18	0	+28	*+57*	+7	+7	+30	+12	−5	−4	−26	3	137
Oct.	−9	−20	−42	*−51*	−26	−26	−24	−18	−29	−26	−15	−6	+6	+20	+7	−4	+7	+30	+33	+44	*+61*	+33	+22	+18	−52	6	121
Nov.	−18	*−34*	−24	−18	−13	−22	−21	−18	−11	+7	+4	+4	+20	+5	0	+9	+11	+22	*+31*	+11	+24	+22	+15	+5	−21	9	107
Dec.	−45	−7	−34	−51	−71	*−89*	−74	−58	−32	−27	−9	−4	+22	+38	+54	+69	+65	+72	+61	*+78*	+45	+25	−7	−43	+27	6	215
Year	−4	−9	−15	−18	−19	−9	−4	−1	−6	−14	−5	+1	+12	+15	+13	+5	+8	+20	*+22*	+17	+20	+5	−11	*−25*	–	–	143
Winter	+21	+19	+8	−5	−25	−22	−35	−37	−32	−40	−25	−5	+25	+29	+33	+11	+7	+33	*+43*	+25	+27	+8	−19	*−47*	–	–	196
Equinox	−7	−11	−24	*−27*	−23	−21	−9	−3	−12	−12	+3	−5	+2	+2	−4	+1	+10	+23	+14	+16	*+41*	+29	+13	+1	–	–	127
Summer	−25	*−35*	−27	−23	−8	+15	+33	*+38*	+25	+10	+7	+11	+7	+12	+11	+4	+7	+3	+9	+9	−9	−23	−28	−30	–	–	108
	1a and 2a days only*																										
Jan.	+16	+12	−18	−25	−52	−33	−46	*−112*	−94	−87	−30	−52	0	+81	+53	+93	+35	*+101*	+68	+45	+54	−18	0	+3	−8	5	208
Feb.	+16	−17	*−87*	−48	−27	−16	−62	−33	−6	−24	−24	−1	+11	+17	+4	+8	−11	+35	+37	+19	*+82*	+69	+21	+27	−69	2	113
Mar.	−10	0	−47	−52	−25	−32	−49	−51	−42	+84	+47	+14	*+93*	+18	+28	+18	+40	+73	*−58*	−34	−14	+13	+3	−19	−93	3	213
Apr.	*−25*	*−25*	−25	−21	−17	−6	+8	+7	+22	+8	+10	+17	+20	+22	+18	+10	+14	+8	−4	−14	+4	+4	−11	−20	+4	15	90
May	−35	*−51*	−37	−23	−10	+10	+23	+22	*+31*	+22	+23	+11	+14	+14	−29	−10	−10	+23	+7	+18	+10	+7	−14	−30	+70	4	98
June	−26	−23	−8	−8	−5	+9	+6	+12	+8	*+32*	+29	+17	+10	+12	+9	−12	−6	+9	+4	+1	−12	−19	−22	*−31*	−3	11	93
July	+23	−32	−46	*−54*	−28	+5	+9	−19	−9	−35	−15	−11	+16	+15	+6	+21	*+35*	+35	+7	+8	+8	+29	+15	+16	−10	2	39
Aug.	−9	−12	−14	−17	−17	+35	+36	*+43*	+20	+17	+5	−18	+8	+21	−3	−14	+20	+15	−12	−11	*−30*	*−30*	−8	−9	+52	10	118
Sept.	−16	−9	*−44*	−19	−2	−12	+21	+19	*+35*	+26	+16	+14	+16	+7	+7	+9	+4	+9	−5	−7	−26	−35	−7	+2	−5	11	123
Oct.	−9	−2	+9	+18	+17	+17	+31	+62	+35	+26	*+88*	+29	+6	+15	+14	+4	+2	*−72*	−55	−66	−37	−31	−37	−42	+73	4	90
Nov.	−15	−24	+7	+4	−36	*−56*	−27	0	−4	+15	+13	+18	+15	+22	0	−18	−25	−20	+25	*+76*	+53	+16	−7	−35	+62	8	127
Dec.	−20	−31	−18	−16	−7	−2	−16	−32	*−54*	−9	+31	*+112*	+65	+45	+56	+29	−14	+2	+16	+14	−20	−51	−40	−40	−22	4	172
Year	−9	−18	*−27*	−22	−17	−7	−5	−7	−5	+6	+16	+13	+23	*+24*	+14	+11	+7	+18	+3	+4	+6	−4	−9	−17	–	–	124
Winter	−1	−15	−29	−21	−31	−27	−38	*−44*	−39	−26	−3	+19	+23	+41	+28	+28	−4	+29	+37	+39	*+42*	+4	−7	−11	–	–	155
Equinox	−15	−9	−27	−19	−7	−8	+3	+9	+13	+36	*+40*	+19	+34	+15	+17	+10	+15	+5	*−31*	−30	−18	−12	−13	−20	–	–	129
Summer	−12	*−29*	−26	−25	−15	+15	+19	+15	+13	+9	+11	0	+12	+15	−4	−4	+10	*+21*	+1	+4	−6	−3	−7	−13	–	–	87

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation of 0a, 1a, 2a days see p.90, *Observatories' Year Book, 1938*.

† See p.10, *Observatories' Year Book, 1938*.

92 ESKDALEMUIR

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	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	0a	···	1c	2·1	2b	5·2	0a	···	2c	6·9	0a	···
2	1a	0·3	2c	7·1	0a	···	2b	4·5	1b	2·0	(0a)	···
3	1b	1·9	1a	0·1	1a	0·1	2c	4·7	2c	5·9	1a	1·3
4	1b	0·5	0a	···	0a	···	1a	1·6	2c	6·8	1b	1·0
5	(1a)	(0·2)	0a	···	0b	···	1a	1·2	2c	11·0	0a	···
6	0a	···	1a	0·1	1b	0·7	1a	1·3	1b	2·7	(0a)	···
7	0a	···	2c	3·6	2b	4·3	1b	2·1	1a	0·5	2b	6·9
8	1a	0·2	2b	4·6	1b	0·2	2b	5·7	(2c)	7·7	1b	0·8
9	2b	3·9	0a	···	0a	···	2b	4·5	(2c)	8·1	1a	0·5
10	2c	9·0	1a	0·3	0a	···	1a	0·4	(2b)	5·9	2b	3·4
11	1c	0·5	1b	0·4	0a	···	1a	0·1	1c	1·7	1b	1·5
12	0a	···	1c	1·7	0a	···	0a	···	2b	5·3	2b	6·3
13	0a	···	1b	0·5	1b	0·4	1a	0·1	2c	6·7	1a	0·5
14	1a	0·3	0b	···	0a	···	1a	0·4	(1c)	1·1	2b	3·8
15	(0b)	···	0a	···	0a	···	1a	0·2	1b	1·2	1a	0·1
16	1b	0·2	0b	···	1a	0·9	1a	0·5	2c	3·4	1a	0·7
17	1a	0·1	(1b)	0·5	0a	···	1a	0·1	0a	···	0a	···
18	0a	···	(1b)	1·1	1b	0·9	1a	0·1	1c	1·4	0a	···
19	0a	···	0a	···	1a	0·2	1a	0·6	1b	0·1	1a	0·5
20	0a	···	1b	0·1	2c	5·7	1a	1·7	1c	2·6	2a	3·5
21	2b	6·0	1b	0·6	1b	2·1	1a	2·0	1b	1·2	1a	0·3
22	1b	1·5	1b	0·5	0a	···	(1a)	1·1	1a	1·9	1a	0·6
23	1a	0·4	1c	1·3	1c	2·8	2b	3·1	0a	···	1b	1·9
24	(1a)	0·9	1b	1·2	2c	9·4	1a	0·7	0a	···	1b	0·7
25	(0a)	···	0a	···	(2c)	5·6	1b	2·9	0a	···	2b	4·9
26	1b	2·7	0a	···	(1a)	0·1	2b	3·2	1a	0·9	1b	2·1
27	2c	6·7	0a	···	0a	···	2b	7·1	1a	1·3	1a	0·1
28	2b	6·5	1b	1·7	0a	···	(1b)	0·9	(0a)	···	2b	5·1
29	2b	8·4			0a	···	1b	1·4	0a	···	1a	0·1
30	2c	3·9			0a	···	1a	0·7	0a	···	(0a)	···
31	1b	1·9			0a	···			0a	···		
Total	-	56·0	-	27·5	-	38·6	-	52·9	-	86·3	-	46·6
No. of days used	-	31	-	28	-	31	-	30	-	31	-	30
Mean	-	1·8	-	1·0	-	1·2	-	1·8	-	2·8	-	1·6

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	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)	1·2	0a	···	1a	0·4	0a	···	1a	0·1	1b	1·5
2	1b	2·0	1a	0·2	1b	2·6	2c	3·1	2b	7·6	1b	2·4
3	(2b)	8·8	(0a)	···	1a	0·9	1b	1·2	1b	2·2	1c	1·6
4	(0a)	···	0a	···	1a	2·9	1a	0·4	1a	0·4	1b	1·3
5	(0a)	···	0a	···	1b	2·5	2c	4·5	1b	0·9	1a	0·2
6	(0a)	···	0a	···	1a	0·1	2b	4·0	1b	1·9	2c	6·4
7	(0a)	···	(0a)	···	1a	0·5	0a	···	2c	6·5	1b	2·7
8	(0a)	···	(0a)	···	1b	2·8	0a	···	2b	3·6	0a	···
9	(0a)	···	1a	0·6	2c	4·1	0a	···	1a	2·5	2c	10·6
10	(0a)	···	0a	···	0a	···	0a	···	2b	4·3	2c	8·1
11	(0a)	···	0a	···	1b	2·7	0a	···	2c	5·2	0a	···
12	(1b)	1·0	1a	0·1	2c	5·2	0a	···	0a	···	0a	···
13	(0a)	···	0a	···	1b	2·5	1a	0·5	0a	···	2c	9·4
14	(0a)	···	1a	0·2	2b	3·3	1a	1·4	0a	···	2c	8·4
15	(0a)	···	1a	0·3	1b	1·6	1b	0·7	0a	···	1b	2·7
16	0a	···	1a	0·1	1b	1·0	2c	4·1	1a	0·1	2b	5·1
17	0a	···	(1b)	2·5	1b	1·0	0a	···	0a	···	1a	0·6
18	2a	6·0	1a	0·1	0a	···	1b	1·8	0a	···	0a	···
19	0a	···	1b	0·3	1a	0·3	2c	11·7	0a	···	0a	···
20	0b	···	1b	0·7	1a	0·1	1b	2·2	1a	0·6	1a	0·3
21	0a	···	2b	5·2	1b	1·5	1a	0·2	1a	0·6	0a	···
22	0a	···	1b	0·3	1a	0·3	0a	···	1b	0·9	2b	5·4
23	0a	···	0a	···	0a	···	0a	···	0a	···	2c	5·8
24	0a	···	0a	···	1b	2·5	0a	···	1b	1·8	1b	2·0
25	(0a)	···	0a	···	1b	1·0	0a	···	1b	0·8	2c	7·6
26	(0a)	···	0a	···	2c	3·4	1b	1·3	1b	2·1	1b	2·8
27	0a	···	0a	···	1a	0·4	1b	0·1	1a	0·1	2b	6·1
28	0a	···	1a	2·5	1a	0·3	1b	0·2	1a	0·4	2c	8·3
29	1a	2·8	1a	0·5	1a	0·1	1b	1·9	1a	0·5	2c	3·3
30	0a	···	1a	0·5	1b	0·9	0a	···	0a	···	1a	0·1
31	0a	···	0a	···			2b	3·3			1b	1·1
Total	-	21·8	-	14·1	-	44·9	-	42·6	-	43·1	-	103·8
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	0·7	-	0·5	-	1·5	-	1·4	-	1·4	-	3·4

Annual values: Character 0 1 2
No. of days used 125 171 69

Duration: Total 578·2 hr.
No. of days 365
Mean 1·58 hr.

In early July Electrograph dismantled for investigation of source of contamination. Character figures estimated from weather data.

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

93 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JANUARY 1955

	Hour G.M.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	Mean
	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	661	665	662	661	663	668	673	675	673	665	667	662	666	671	671	667	664	667	668	665	664	659	652	654	665
2	645	656	658	662	665	667	667	669	669	669	670	670	673	677	680	677	670	668	670	672	669	668	657	659	667
3	659	660	662	663	666	665	664	665	672	663	657	655	661	668	669	674	673	672	671	672	673	670	671	665	666
4	673	655	639	656	669	672	675	675	673	661	656	659	667	660	663	667	662	656	662	658	652	663	658	659	662
5	657	659	662	662	663	663	665	667	665	663	659	658	653	670	673	673	674	671	673	675	669	678	665	653	665
6	660	657	656	660	663	667	669	674	672	668	662	668	672	675	675	672	664	665	662	656	661	663	667	663	665
7	662	667	673	662	663	667	671	670	666	664	667	662	668	671	662	662	663	662	646	652	657	658	663	663	663
8	663	660	660	660	663	663	666	662	663	665	662	658	661	663	666	667	668	669	663	662	660	668	671	660	663
9 *d*	673	650	658	661	663	662	665	679	680	665	654	644	649	662	660	620	656	640	652	650	664	661	663	662	658
10 *q*	661	659	660	661	664	667	671	673	673	666	660	658	657	660	659	656	654	658	663	662	665	663	662	662	662
11	662	660	659	660	665	671	669	667	667	668	667	665	648	621	634	669	671	671	668	663	662	673	641	623	659
12	624	623	650	657	659	660	663	667	664	664	664	661	657	660	663	666	668	667	669	672	670	665	665	662	660
13	664	667	658	659	671	670	669	673	672	678	670	645	648	656	646	639	656	661	663	660	658	657	659	660	661
14	659	661	662	660	666	669	672	671	672	672	674	676	674	666	652	651	646	645	653	662	663	663	660	661	663
15 *q*	659	660	662	665	667	666	667	667	668	667	664	661	662	664	662	660	663	665	667	667	667	667	667	663	664
16	663	663	663	663	665	668	670	671	669	669	677	683	684	683	674	665	667	666	665	660	661	667	660	663	*668*
17 *d*	661	660	660	665	667	667	667	669	680	688	683	673	667	672	591	622	638	647	647	663	654	659	682	641	659
18 *d*	600	437	619	603	587	622	631	629	625	623	621	628	636	641	645	625	634	643	636	643	661	630	632	662	621
19 *d*	642	618	626	612	628	592	616	592	576	580	599	615	615	629	610	623	635	645	618	645	617	618	633	628	*617*
20 *d*	643	635	605	630	634	639	645	647	650	647	642	639	642	646	645	640	657	657	652	643	638	659	641	663	643
21	658	638	643	649	653	663	663	662	657	655	655	653	654	656	657	656	658	655	647	649	665	655	652	656	655
22	656	647	650	653	657	655	662	666	669	662	662	662	662	659	660	656	659	660	660	661	662	665	663	655	659
23	655	682	658	655	661	669	673	674	677	667	663	662	656	642	654	661	655	649	654	637	659	652	646	649	659
24 *q*	653	654	656	658	661	666	664	663	662	659	658	658	656	656	655	658	660	661	660	660	659	655	654	656	658
25 *q*	663	659	660	662	662	665	667	668	670	669	662	658	656	659	664	665	666	665	656	656	658	662	665	664	663
26 *q*	662	660	658	662	667	667	670	671	669	664	660	660	662	667	667	668	667	667	668	670	671	671	668	667	666
27	667	667	667	669	670	673	673	673	676	682	671	673	680	682	684	681	677	660	642	641	636	622	649	649	665
28	655	656	651	651	653	664	667	661	657	657	656	658	659	665	666	658	662	665	667	665	662	660	661	670	660
29	662	663	664	665	665	666	667	668	668	669	662	659	662	663	665	666	665	669	667	665	659	665	649	641	663
30	657	655	659	659	663	667	667	669	663	662	662	663	665	661	673	673	665	663	663	656	660	673	660	662	663
31	665	669	660	664	664	664	667	669	665	669	667	665	662	665	668	667	667	667	667	668	666	666	673	672	667
Mean	656	*649*	654	656	659	661	664	*665*	664	662	660	658	659	661	659	658	661	661	659	659	659	660	658	657	659

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

94 ESKDALEMUIR (D) — 10° + — JANUARY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	58·1	57·2	57·4	58·4	58·8	59·1	59·1	59·8	60·2	61·5	62·3	63·2	62·7	61·6	61·0	61·1	61·8	61·7	61·6	59·0	57·8	59·3	57·9	57·4	59·9
2	59·0	58·6	57·8	59·1	59·7	59·2	59·4	59·2	59·5	60·2	61·5	63·2	63·9	63·3	62·2	60·8	61·7	61·0	60·8	60·5	60·0	59·5	59·1	60·0	60·4
3	60·1	59·9	59·8	59·8	59·9	59·8	59·4	59·8	59·2	59·9	62·4	63·5	64·0	64·2	61·7	60·8	60·4	60·1	59·6	59·3	59·3	59·2	59·2	58·8	60·4
4	59·1	58·8	56·7	59·5	59·3	59·7	59·8	59·5	59·6	60·0	61·5	63·0	63·7	62·3	60·6	62·2	61·9	60·1	57·7	59·1	58·0	54·5	58·4	59·0	59·7
5	59·4	59·9	59·9	59·6	59·5	59·7	59·3	59·0	58·9	58·8	60·1	61·0	62·1	61·7	60·9	60·6	60·0	59·9	59·4	59·1	58·5	49·7	56·6	57·0	59·2
6	58·1	58·5	58·6	57·2	54·5	55·7	57·9	58·0	58·1	59·3	59·9	61·0	62·1	62·4	61·4	60·9	60·8	60·5	60·3	55·6	57·0	57·7	58·1	58·0	58·8
7	58·4	58·8	57·6	57·3	58·8	59·1	59·0	58·7	58·6	59·0	60·2	61·6	63·7	63·9	62·1	62·4	62·5	62·9	61·3	60·8	58·8	58·1	58·9	58·6	60·0
8	59·1	59·5	59·3	59·5	59·6	59·5	58·9	59·0	58·6	58·4	59·1	60·6	62·1	61·8	61·6	62·3	60·9	60·8	59·2	58·1	59·7	58·1	57·7	55·8	59·5
9 *d*	49·6	54·1	58·9	57·7	57·5	57·1	63·8	59·5	60·3	59·0	60·0	61·8	63·2	62·5	67·0	58·1	63·6	62·2	57·2	60·1	59·5	58·9	58·7	58·5	59·5
10 *q*	58·4	58·5	58·6	58·9	59·5	59·1	59·0	58·6	58·6	59·5	59·8	60·6	61·6	60·9	60·1	60·7	60·8	60·9	61·2	59·7	58·3	59·8	59·5	59·2	59·7
11	58·5	60·5	60·3	58·1	59·3	59·8	59·5	59·5	59·3	59·8	59·9	60·9	62·4	64·5	65·5	61·7	61·8	61·9	61·7	60·7	60·3	60·7	49·1	49·3	59·8
12	53·3	47·5	55·9	57·5	58·8	59·0	59·5	59·7	59·3	59·5	59·4	60·0	61·0	60·9	60·5	60·2	60·4	60·5	60·4	60·1	60·1	59·7	59·6	59·3	58·8
13	59·5	58·5	56·2	58·5	58·6	57·2	59·8	60·1	59·6	60·8	61·7	61·3	60·9	61·8	62·2	59·5	60·9	61·2	59·9	59·5	57·5	57·5	58·1	58·5	59·6
14	59·0	59·2	59·1	59·5	59·7	59·4	59·3	59·3	59·7	60·2	60·8	61·4	61·7	61·5	60·2	61·8	62·5	61·0	53·9	59·2	58·5	58·2	58·2	58·7	59·7
15 *q*	58·8	58·9	59·1	59·5	59·1	59·5	59·4	59·2	59·5	60·2	60·2	60·8	60·8	60·6	59·9	60·0	60·2	59·8	59·3	59·0	58·7	58·9	59·0	58·8	59·5
16	59·2	58·7	59·3	58·8	58·9	59·7	59·2	59·2	59·5	60·4	61·7	62·4	63·5	63·5	62·8	63·6	62·7	61·9	61·1	59·5	57·2	56·1	58·6	59·1	60·3
17 *d*	58·8	59·0	58·7	60·5	58·9	58·4	58·6	58·6	59·0	61·2	60·1	59·1	63·7	68·4	70·6	68·3	61·3	59·5	60·5	59·9	58·4	58·9	59·6	57·2	*60·7*
18 *d*	57·6	60·1	39·8	55·8	54·5	51·7	52·1	56·0	55·9	56·9	57·7	58·6	60·1	61·3	61·2	60·3	59·8	54·5	57·8	53·5	52·5	54·4	55·9	57·7	*56·1*
19 *d*	60·8	61·1	60·4	66·0	66·7	70·1	78·5	71·7	65·2	58·8	64·8	63·2	60·3	60·7	64·8	60·8	59·7	48·4	49·5	52·3	51·6	51·9	55·4	52·3	60·6
20 *d*	54·1	54·8	51·7	54·4	55·9	58·6	59·4	58·1	58·4	58·9	59·5	60·3	60·8	62·6	62·9	61·2	60·5	60·3	60·7	54·1	54·8	59·1	57·7	56·4	58·1
21	58·7	55·2	57·3	58·0	59·3	59·6	59·6	59·5	59·1	58·7	59·5	60·6	61·5	61·6	60·6	60·8	60·3	61·0	61·7	60·6	60·3	58·6	59·0	59·4	59·6
22	56·6	55·8	57·7	57·9	58·9	59·2	59·9	59·2	58·9	58·9	59·7	60·2	61·6	60·7	60·7	60·6	60·7	60·6	59·9	59·8	59·5	59·0	58·9	57·6	59·3
23	58·1	56·6	55·0	57·3	59·1	59·2	59·4	60·0	61·0	62·0	62·4	62·2	62·4	62·9	62·3	62·6	61·7	57·8	61·0	59·3	47·3	50·9	52·5	56·0	58·7
24 *q*	57·6	57·9	59·2	58·9	58·9	58·6	58·5	58·6	57·9	58·6	58·9	59·9	60·1	61·1	61·5	61·5	60·3	61·3	60·4	59·7	58·7	58·3	57·6	58·6	59·3
25 *q*	59·8	58·9	59·2	59·3	59·2	59·7	59·7	59·0	59·0	58·8	59·3	60·7	61·6	61·7	61·2	60·6	59·8	59·7	60·2	60·3	58·9	58·3	58·0	58·1	59·6
26 *q*	58·0	58·6	58·6	59·5	59·1	59·3	59·0	58·5	58·2	58·6	59·2	60·7	61·7	61·6	61·2	60·5	59·8	59·7	60·2	60·3	59·9	58·3	58·0	58·0	59·4
27	58·0	58·6	58·5	59·3	59·0	59·3	58·9	58·5	58·1	60·4	60·0	60·6	61·7	62·1	62·5	61·7	61·9	63·7	63·5	61·3	54·0	50·2	57·5	57·6	59·5
28	56·7	55·5	53·6	54·5	56·2	56·6	58·2	58·3	58·4	58·7	59·1	59·8	60·3	60·7	60·1	60·0	60·0	60·1	60·2	59·8	59·1	58·5	59·1	59·7	58·5
29	57·8	58·9	59·2	59·0	58·9	59·2	59·2	59·1	59·5	59·5	59·5	59·9	60·6	61·1	61·6	60·7	60·3	60·0	60·2	60·5	56·7	50·7	48·0	54·7	58·5
30	58·2	59·5	59·4	58·0	58·5	58·4	58·7	58·9	58·5	59·5	59·9	60·6	61·6	61·9	61·9	61·5	61·2	60·2	61·3	61·2	59·9	55·4	57·5	57·4	59·5
31	57·2	57·7	57·7	58·0	57·1	58·0	58·2	58·6	59·2	59·9	60·8	60·0	60·3	60·8	60·9	60·7	60·6	60·0	58·7	59·8	59·5	58·7	54·3	56·7	58·9
Mean	57·9	57·9	57·4	58·6	58·8	59·0	59·7	59·4	59·2	59·5	60·4	61·1	61·9	*62·1*	62·1	61·2	61·0	60·1	59·7	59·1	57·7	*57·0*	57·3	57·5	59·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

95 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — JANUARY 1955

	Hour G.M.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	Mean
	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	1237	1234	1236	1236	1237	1235	1234	1234	1234	1234	1233	1233	1233	1237	1239	1238	1239	1239	1239	1243	1244	1244	1247	1249	1238
2	1248	1244	1243	1239	1238	1238	1238	1238	1237	1237	1233	1233	1232	1232	1233	1233	1236	1238	1239	1238	1238	1239	1243	1240	1238
3	1240	1239	1238	1237	1236	1237	1237	1238	1238	1240	1239	1238	1238	1238	1238	1238	1238	1238	1238	1238	1237	1238	1237	1237	1238
4	1234	1222	1232	1234	1234	1233	1233	1236	1238	1240	1239	1238	1233	1236	1241	1240	1240	1244	1244	1244	1244	1243	1239	1238	1237
5	1239	1238	1237	1235	1236	1236	1235	1238	1239	1242	1243	1243	1241	1241	1240	1238	1238	1239	1239	1239	1243	1241	1239	1242	1239
6	1243	1244	1244	1240	1239	1238	1238	1238	1238	1239	1238	1236	1237	1238	1238	1237	1239	1240	1243	1247	1244	1244	1241	1241	1240
7	1240	1238	1233	1233	1233	1233	1233	1233	1237	1238	1237	1236	1237	1238	1241	1241	1243	1244	1250	1253	1251	1249	1247	1243	1240
8	1238	1237	1236	1238	1237	1237	1238	1238	1238	1239	1238	1238	1238	1241	1244	1243	1242	1241	1244	1245	1245	1248	1246	1250	1241
9 *d*	1244	1241	1238	1238	1234	1234	1227	1226	1227	1233	1236	1237	1238	1238	1244	1274	1263	1271	1267	1259	1250	1247	1245	1244	1244
10 *q*	1244	1244	1243	1242	1239	1238	1238	1237	1237	1235	1236	1234	1233	1236	1237	1238	1239	1238	1238	1240	1238	1237	1238	1238	1238
11	1238	1237	1228	1232	1233	1234	1234	1236	1234	1235	1236	1233	1234	1247	1245	1242	1240	1240	1240	1244	1243	1243	1229	1238	1237
12	1243	1234	1238	1238	1238	1238	1238	1238	1237	1234	1234	1232	1232	1233	1233	1237	1238	1238	1238	1238	1237	1237	1237	1238	1237
13	1237	1233	1233	1233	1233	1232	1231	1230	1230	1227	1232	1233	1237	1234	1237	1243	1244	1244	1243	1243	1244	1243	1240	1238	1236
14	1238	1236	1236	1236	1235	1236	1234	1233	1232	1233	1233	1233	1233	1237	1243	1244	1247	1252	1257	1245	1244	1241	1241	1239	1239
15 *q*	1240	1240	1239	1238	1238	1238	1238	1238	1237	1238	1239	1240	1239	1242	1241	1238	1238	1239	1239	1238	1238	1238	1238	1238	1239
16	1238	1237	1237	1238	1238	1238	1238	1237	1236	1237	1234	1233	1234	1237	1238	1241	1240	1243	1244	1248	1247	1245	1242	1239	1239
17 *d*	1239	1239	1238	1237	1233	1233	1234	1233	1232	1229	1228	1233	1233	1234	1274	1286	1268	1261	1256	1252	1251	1250	1249	1253	1245
18 *d*	1217	1067	1143	1162	1164	1190	1217	1236	1249	1253	1252	1251	1247	1249	1251	1259	1265	1273	1262	1261	1248	1250	1252	1243	*1228*
19 *d*	1192	1176	1182	1158	1150	1158	1160	1193	1232	1271	1282	1287	1297	1304	1286	1272	1263	1266	1264	1245	1238	1234	1201	1228	1231
20 *d*	1225	1209	1209	1221	1229	1233	1239	1245	1245	1246	1247	1246	1244	1248	1251	1255	1250	1249	1251	1260	1257	1248	1237	1235	1241
21	1217	1232	1238	1240	1240	1239	1239	1240	1241	1244	1244	1243	1240	1243	1244	1245	1245	1246	1249	1252	1248	1243	1251	1248	1242
22	1240	1243	1244	1244	1244	1243	1241	1241	1239	1239	1238	1240	1240	1241	1244	1245	1244	1244	1244	1244	1244	1244	1244	1245	1242
23	1245	1233	1232	1236	1238	1238	1238	1238	1237	1238	1238	1243	1244	1248	1249	1251	1252	1260	1256	1267	1267	1252	1247	1245	*1245*
24 *q*	1245	1247	1247	1246	1245	1244	1244	1244	1244	1238	1237	1238	1238	1239	1243	1245	1247	1245	1246	1247	1248	1250	1250	1248	1244
25 *q*	1243	1243	1243	1243	1244	1243	1241	1240	1240	1241	1244	1244	1243	1244	1245	1245	1245	1245	1247	1248	1248	1247	1245	1245	1244
26 *q*	1245	1245	1245	1244	1243	1243	1242	1240	1239	1239	1239	1238	1236	1237	1240	1242	1243	1243	1243	1242	1241	1240	1240	1241	1241
27	1241	1243	1242	1241	1241	1241	1240	1238	1238	1234	1234	1233	1231	1233	1232	1234	1237	1244	1262	1271	1284	1278	1260	1254	1245
28	1242	1228	1226	1234	1240	1240	1239	1241	1243	1243	1242	1239	1238	1237	1239	1243	1244	1245	1244	1244	1245	1247	1244	1236	1240
29	1238	1239	1241	1242	1242	1240	1240	1239	1238	1239	1240	1240	1240	1240	1242	1244	1245	1244	1246	1248	1251	1254	1247	1249	1243
30	1245	1244	1244	1244	1244	1244	1243	1241	1243	1240	1239	1239	1238	1238	1237	1238	1240	1245	1245	1249	1252	1249	1249	1246	1243
31	1244	1240	1239	1239	1241	1242	1241	1241	1240	1238	1238	1238	1237	1234	1237	1238	1239	1242	1243	1240	1241	1244	1240	1233	1240
Mean	1237	*1230*	1232	1233	1233	1234	1234	1236	1238	1239	1239	1239	1239	1241	1243	1245	1245	1247	1247	*1247*	1247	1245	1242	1242	1240

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

96 ESKDALEMUIR — JANUARY 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1	07 15	676	641	23 30	35	11 19	63·4	55·4	20 00	8·0	23 07	1251	1233	10 36	18	1,0,1,1,1,1,2,2	9	0	84·4
2	14 14	687	639	00 19	48	11 50	64·2	56·3	01 54	7·9	00 25	1249	1232	13 50	17	2,1,1,1,1,2,1,2	11	0	84·4
3	15 49	677	651	11 44	26	11 49	65·0	57·9	24 00	7·1	00 06	1241	1235	23 46	*6*	1,0,1,1,1,1,0,2	7	0	84·4
4	01 00	699	633	02 19	66	12 06	64·4	52·8	21 30	11·6	17 49	1246	1222	01 25	24	4,2,1,1,2,2,2,2	16	1	84·4
5	21 15	712	647	23 51	65	13 10	62·6	44·1	21 12	18·5	21 00	1245	1234	06 00	11	1,0,0,0,1,1,3,4	10	0	84·4
6	19 50	691	637	19 34	54	13 07	63·1	52·5	05 00	10·6	19 36	1253	1236	12 03	17	2,2,1,1,1,2,3,1	13	1	84·4
7	13 48	680	628	18 43	52	13 03	64·4	56·6	02 55	7·8	19 00	1255	1232	02 39	23	2,1,1,1,2,1,3,2	13	0	84·4
8	23 57	695	648	23 39	47	13 29	62·4	54·9	23 40	7·5	23 40	1253	1236	02 30	17	1,0,1,1,0,1,2,3	9	0	84·4
9 *d*	00 00	693	582	15 21	111	14 57	68·8	45·2	00 35	23·6	15 38	1285	1220	06 52	65	4,1,3,2,3,4,3,0	20	1	84·4
10 *q*	08 51	676	652	16 23	24	12 30	61·8	57·9	20 10	3·9	00 40	1244	1233	12 03	11	0,0,1,1,1,1,2,0	6	0	84·4
11	21 51	*755*	595	13 08	160	22 00	71·7	39·2	22 43	32·5	21 41	1252	1214	22 02	38	2,1,1,1,4,1,2,5	17	1	84·1
12	19 50	682	589	01 23	93	13 05	61·3	38·9	01 33	22·4	00 31	1245	1229	11 51	16	4,1,1,1,0,1,1,0	9	1	84·1
13	09 33	684	634	14 44	50	14 37	63·5	53·7	02 21	9·8	16 00	1246	1227	09 35	19	3,2,2,3,2,1,1,2	16	0	84·4
14	18 35	684	615	18 12	69	16 06	63·4	45·0	18 26	18·4	18 24	1264	1232	09 15	32	0,0,1,1,3,2,4,1	12	1	84·4
15 *q*	08 56	669	656	15 25	*13*	11 05	60·9	58·5	00 13	2·4	14 11	1243	1236	09 19	7	0,0,0,0,0,0,0,0	0	0	84·4
16	12 20	688	655	18 49	33	15 30	64·3	53·4	20 57	10·9	21 05	1249	1233	11 15	16	1,1,1,2,2,1,2,2	12	0	84·4
17 *d*	18 58	749	517	14 35	232	14 31	78·4	52·1	23 38	26·3	14 36	1298	1228	10 27	70	0,2,2,3,6,4,5,5	27	2	84·4
18 *d*	17 48	704	*305*	01 29	*399*	01 18	74·1	*33·0*	02 24	*41·1*	17 35	1285	*984*	01 30	*301*	7,5,4,2,2,5,4,4	33	2	84·4
19 *d*	19 10	692	555	09 35	137	06 26	*82·7*	42·9	19 10	39·8	13 00	*1314*	1131	03 40	183	4,4,5,4,3,4,4,4	32	1	84·4
20 *d*	23 54	687	589	02 17	98	24 00	64·0	45·4	19 50	18·6	20 06	1262	1205	02 12	57	4,2,2,1,2,2,4,3	20	1	84·3
21	20 38	690	635	01 32	55	00 01	64·2	54·3	01 08	9·9	20 06	1254	1214	00 20	40	3,1,1,0,0,1,3,2	11	0	84·4
22	08 01	672	642	01 29	30	12 51	61·6	53·6	01 00	8·0	15 33	1247	1238	10 30	9	3,1,1,0,1,0,0,1	7	0	84·5
23	01 15	702	630	20 21	72	14 12	64·8	42·2	20 22	22·6	20 21	1274	1230	02 03	44	3,2,2,2,2,3,4,3	21	1	84·5
24 *q*	06 04	668	649	00 00	19	15 45	61·7	56·7	22 57	5·0	21 50	1251	1236	10 44	15	1,1,0,1,1,1,0,1	6	0	84·5
25 *q*	08 55	672	649	19 02	23	12 25	61·8	57·8	23 51	4·0	20 40	1249	1238	08 59	11	0,0,0,1,1,0,1,1	4	0	84·5
26 *q*	21 24	672	656	10 20	16	12 24	61·9	57·7	23 50	4·2	00 01	1245	1238	08 40	7	0,0,0,1,1,1,1,0	4	0	84·5
27	14 00	691	598	21 21	93	17 50	65·2	48·5	21 10	16·7	20 34	1288	1231	12 40	57	0,0,0,2,1,4,4,4	15	1	84·5
28	23 19	678	641	00 40	37	12 52	60·8	53·0	02 25	7·8	21 24	1248	1222	02 15	26	2,2,1,1,0,1,1,2	10	0	84·5
29	21 51	692	627	22 40	65	14 17	61·7	45·7	22 23	16·0	21 20	1257	1236	00 00	21	1,0,0,1,0,1,3,4	10	0	84·5
30	21 19	695	647	13 05	48	12 41	63·5	53·0	21 41	10·5	20 49	1255	1236	14 28	19	1,1,0,1,2,2,2,3	12	0	84·5
31	22 05	692	655	02 40	37	14 17	61·3	52·3	22 18	9·0	00 00	1245	1233	23 15	12	2,1,1,1,0,1,1,3	10	0	84·5
Mean	- -	690	616	- -	74	- -	64·9	50·7	- -	14·3	- -	1258	1219	- -	39	-	-	0·45	84·4

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.

97 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — FEBRUARY 1955

	Hour G.M.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	Mean
	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*	667	666	666	666	668	669	668	670	672	668	666	667	665	670	674	675	671	669	668	664	664	661	660	664	667
2 *q*	661	659	659	660	664	670	674	677	671	669	668	664	660	656	654	643	646	651	661	664	658	648	656	659	661
3	670	658	649	661	672	672	671	670	665	670	674	669	666	668	664	662	658	661	661	661	658	663	660	663	664
4 *d*	662	660	658	665	666	665	676	679	683	678	651	647	658	663	660	658	654	650	657	649	635	621	636	648	657
5 *d*	649	659	645	646	655	656	659	669	668	666	664	651	633	650	653	646	648	653	633	638	655	673	679	636	653
6	654	657	657	661	657	670	668	664	664	660	666	661	659	664	654	634	643	662	663	666	654	648	642	647	657
7	661	657	647	642	656	669	662	664	668	669	667	659	655	644	631	648	656	657	656	649	657	659	661	660	656
8	664	657	657	655	658	662	664	666	668	669	663	663	661	664	665	660	637	646	649	654	649	686	673	655	660
9	658	660	661	660	661	657	660	671	674	676	672	657	666	665	666	666	670	668	639	642	653	657	658	661	662
10 *q*	662	657	653	655	655	657	657	655	664	664	663	661	659	663	671	667	665	666	665	663	666	669	669	667	662
11	666	663	662	664	668	670	666	666	667	669	666	664	666	675	675	661	648	651	637	618	630	612	646	641	656
12	655	649	647	643	650	655	660	658	663	658	654	653	657	659	661	665	662	656	651	643	654	686	661	650	656
13	652	655	657	659	658	662	663	665	664	649	651	654	661	667	670	649	653	655	659	665	666	666	664	664	659
14	662	661	660	659	659	662	669	674	669	654	658	659	664	652	661	663	662	640	658	666	660	647	652	658	659
15	666	638	642	648	657	671	664	668	656	654	658	657	659	659	660	661	661	664	664	665	664	665	665	664	660
16	662	662	662	664	666	668	670	671	672	666	664	668	674	672	659	656	658	664	650	659	655	658	663	664	664
17	666	649	659	664	661	663	666	666	668	669	666	657	651	661	666	664	664	666	668	666	664	672	667	677	664
18	670	667	663	665	674	672	676	674	672	666	663	655	658	665	668	666	667	670	668	646	636	651	649	660	663
19 *q*	659	663	658	656	661	662	667	676	675	672	668	662	666	676	676	671	669	666	666	666	666	666	671	670	667
20	670	669	672	679	675	670	674	675	674	675	671	671	675	676	668	658	661	665	659	663	667	670	666	665	*669*
21	682	668	657	656	651	685	676	684	673	674	672	663	655	649	657	648	655	658	664	664	663	670	669	668	665
22 *d*	672	653	653	651	674	677	664	668	667	656	646	630	651	657	662	666	662	664	667	661	667	681	666	666	662
23 *d*	663	668	663	666	666	674	678	688	679	655	633	633	644	646	649	655	644	664	638	629	672	666	670	662	659
24	666	668	661	659	661	665	665	672	666	671	666	664	670	669	657	656	655	653	662	675	682	674	667	672	666
25	679	662	661	655	670	676	672	672	670	664	660	645	660	675	676	661	657	659	658	657	657	666	667	666	664
26	657	653	658	662	670	658	662	664	662	659	659	666	667	664	665	665	664	665	665	666	669	670	666	666	663
27 *q*	665	664	666	666	665	670	670	668	662	658	655	654	663	666	664	664	670	669	666	674	679	681	688	684	668
28 *d*	699	685	634	645	637	647	643	656	654	653	638	636	643	643	641	651	650	656	661	661	659	661	660	658	*653*
Mean	665	660	*657*	658	662	666	667	*670*	668	665	661	657	659	662	662	659	657	660	658	657	659	662	663	661	661

MAGNETIC DECLINATION (WEST)

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

98 ESKDALEMUIR (D) — 11° + — FEBRUARY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	58·3	59·0	59·0	58·9	58·8	58·7	58·7	58·7	59·1	59·8	60·3	61·0	61·2	61·9	61·6	60·6	60·3	59·9	59·3	59·2	58·1	58·8	58·1	56·6	59·4
2 *q*	57·1	57·2	58·0	58·5	58·9	58·9	58·9	58·9	59·0	59·8	60·7	61·8	62·6	62·7	62·1	61·8	61·8	61·6	60·4	59·8	59·6	57·3	57·6	57·0	*59·7*
3	53·0	54·9	56·3	60·3	58·9	57·4	59·0	59·9	60·2	60·6	60·7	60·9	61·5	62·7	62·5	62·6	63·3	62·7	61·8	60·8	59·3	58·2	55·9	57·7	59·6
4 *d*	57·4	57·9	56·9	56·7	56·5	57·1	57·3	58·3	59·1	61·0	61·2	65·7	63·8	62·7	62·1	61·4	63·5	61·7	59·8	59·0	50·0	54·3	54·1	51·2	58·7
5 *d*	56·3	59·8	54·7	57·4	57·7	57·6	59·5	58·8	59·0	58·4	59·1	60·5	62·4	63·1	62·8	62·1	62·3	60·2	54·5	56·2	58·6	55·9	55·0	53·1	58·5
6	57·5	58·6	58·9	57·8	58·9	60·4	58·1	58·5	58·8	58·6	60·1	61·1	60·4	63·0	63·9	63·9	63·8	60·2	59·8	60·3	59·7	54·1	54·5	57·4	59·5
7	55·1	55·2	54·6	56·0	60·3	57·7	58·5	59·0	59·8	60·4	60·7	61·1	62·6	63·1	60·7	60·2	60·9	60·9	59·0	56·9	57·6	57·8	57·9	57·2	58·9
8	59·4	58·6	58·4	58·0	59·1	58·6	58·6	58·9	59·3	58·5	58·6	60·0	60·9	59·9	59·5	59·7	49·1	56·8	58·6	56·2	53·9	54·2	54·4	56·0	*57·7*
9	57·2	58·6	57·2	57·4	55·0	55·5	56·0	58·2	59·0	59·9	60·3	60·6	60·6	60·6	60·0	59·4	59·6	60·3	58·8	57·7	58·6	58·5	57·8	57·9	58·6
10 *q*	58·0	57·8	57·8	57·4	56·7	57·8	57·6	58·0	59·7	60·1	60·5	61·4	60·8	59·9	59·0	57·9	57·8	58·0	58·3	57·1	57·6	55·3	56·7	57·8	58·3
11	57·4	57·8	58·0	57·5	57·8	58·8	57·9	58·0	58·5	59·2	59·6	61·0	61·5	62·7	62·8	62·3	61·5	56·9	57·5	58·3	49·3	53·4	58·2	58·4	58·5
12	59·5	57·2	56·2	56·3	57·3	56·6	56·4	57·2	58·2	57·2	59·3	60·3	60·5	60·5	60·8	59·8	60·1	60·8	61·0	59·5	58·6	57·4	56·3	56·1	58·5
13	56·3	62·0	55·2	53·7	56·6	55·9	57·7	59·2	58·3	59·2	61·8	62·2	62·1	62·1	62·0	60·1	59·7	60·9	59·7	56·5	56·3	58·3	58·2	57·8	58·8
14	57·8	58·0	58·2	56·7	56·2	58·8	57·4	58·8	60·8	61·2	61·1	61·1	63·2	62·1	61·8	61·4	61·0	55·8	57·7	59·7	58·8	53·2	57·4	56·7	59·0
15	55·3	51·4	53·3	55·0	54·7	56·2	55·7	57·1	58·3	58·5	59·0	60·3	61·5	60·9	60·6	59·8	59·3	59·3	59·4	59·1	58·7	58·5	58·3	58·1	57·8
16	58·1	58·3	58·4	58·5	58·5	58·5	58·3	58·2	58·4	59·2	60·6	60·6	62·1	62·6	63·1	60·5	59·9	59·8	57·4	52·9	58·8	58·5	58·5	56·7	59·0
17	54·3	54·2	57·8	54·6	55·0	56·8	57·5	57·7	58·2	58·1	58·2	60·0	61·3	60·4	59·9	59·6	59·1	59·1	59·4	59·1	59·1	58·2	57·6	55·4	57·9
18	57·2	57·1	56·3	58·1	55·2	53·9	56·0	57·4	58·1	58·0	58·3	59·5	61·3	61·7	61·3	60·6	59·9	59·8	60·1	59·1	61·3	58·5	54·7	58·8	58·4
19 *q*	56·4	58·5	56·9	56·4	57·1	56·6	58·1	58·2	58·1	58·7	59·7	60·8	62·2	62·8	61·8	59·2	59·3	59·3	59·3	59·0	58·3	57·9	56·2	57·7	58·7
20	58·6	58·8	59·2	60·2	57·7	56·1	56·4	56·8	57·8	58·7	59·4	60·3	62·1	63·3	63·2	62·5	59·4	59·8	58·4	52·5	57·7	58·0	57·4	56·9	58·8
21	58·7	53·7	52·5	53·9	58·9	54·0	55·6	57·1	57·1	57·8	58·6	59·8	61·3	63·2	62·4	60·5	60·3	60·2	59·1	57·3	56·5	58·4	58·0	56·7	58·0
22 *d*	55·1	55·8	55·6	56·5	51·9	53·2	55·7	57·4	58·5	59·5	60·4	62·0	63·9	62·4	61·2	59·5	57·7	58·4	58·7	57·1	54·6	56·9	57·1	57·7	57·8
23 *d*	58·1	60·2	61·6	58·5	57·2	56·6	57·6	59·0	59·5	59·8	61·2	63·9	64·9	65·8	61·9	65·3	61·4	53·6	53·2	49·8	55·7	57·8	57·7	56·5	59·0
24	56·4	56·8	55·3	55·1	57·1	58·3	58·1	58·7	59·2	59·5	59·8	60·2	61·3	63·4	63·1	63·1	63·4	62·1	60·7	56·8	55·4	56·9	56·9	57·0	58·9
25	59·6	58·7	59·3	55·4	56·4	53·1	55·9	57·1	57·8	57·5	58·6	61·7	64·3	63·5	64·6	63·9	60·3	61·9	61·1	59·3	58·8	58·5	56·8	55·4	59·3
26	55·1	55·8	55·0	55·4	55·3	55·3	57·4	57·4	57·5	58·6	59·5	61·4	62·7	62·6	62·9	61·2	59·5	59·0	58·4	57·5	58·3	57·7	58·0	57·8	58·3
27 *q*	57·7	57·8	58·0	58·1	58·4	58·2	57·6	57·4	56·9	57·2	58·2	60·0	60·1	62·5	62·3	60·3	59·5	59·5	57·3	57·3	59·0	58·9	58·5	56·8	58·6
28 *d*	56·7	52·9	57·2	61·4	63·0	48·7	54·0	55·1	56·2	58·1	61·1	64·4	65·6	65·8	62·6	64·4	62·1	60·0	58·8	58·0	58·6	57·6	57·9	57·6	59·1
Mean	57·1	57·2	57·0	57·1	57·3	*56·6*	57·3	58·0	58·6	59·0	59·9	61·2	62·1	*62·4*	61·9	61·2	60·2	59·6	58·8	57·6	57·4	57·1	57·0	56·8	58·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

99 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — FEBRUARY 1955

	Hour G.M.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	Mean
	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*	1234	1236	1237	1238	1238	1238	1239	1238	1237	1237	1237	1238	1238	1235	1234	1237	1237	1238	1239	1240	1241	1241	1243	1239	*1238*
2 *q*	1238	1238	1238	1238	1239	1238	1238	1238	1238	1236	1233	1233	1237	1238	1240	1245	1249	1250	1249	1248	1249	1255	1253	1248	1242
3	1243	1238	1238	1233	1230	1232	1233	1233	1232	1233	1233	1236	1237	1233	1233	1238	1239	1244	1243	1248	1250	1250	1249	1245	1238
4 *d*	1244	1243	1240	1238	1234	1234	1233	1232	1229	1228	1234	1233	1232	1233	1235	1240	1247	1249	1251	1253	1267	1256	1240	1243	1240
5 *d*	1243	1230	1232	1238	1239	1238	1237	1233	1233	1233	1233	1233	1238	1244	1247	1250	1251	1251	1261	1262	1253	1245	1228	1233	1241
6	1237	1238	1239	1239	1237	1232	1232	1232	1233	1234	1235	1236	1234	1233	1239	1252	1252	1248	1245	1244	1250	1256	1256	1249	1241
7	1228	1232	1232	1236	1232	1226	1233	1233	1232	1233	1234	1234	1234	1240	1255	1255	1249	1248	1249	1251	1249	1244	1244	1244	1239
8	1240	1240	1242	1243	1239	1238	1238	1236	1233	1238	1238	1237	1238	1239	1244	1249	1267	1260	1257	1256	1254	1234	1222	1234	1242
9	1240	1243	1243	1243	1240	1240	1240	1235	1237	1236	1237	1241	1240	1243	1244	1246	1249	1249	1260	1264	1257	1251	1250	1247	1245
10 *q*	1244	1244	1245	1245	1245	1244	1241	1239	1238	1240	1243	1243	1244	1244	1245	1245	1247	1248	1249	1247	1247	1244	1244	1243	1244
11	1244	1244	1244	1244	1244	1244	1243	1241	1240	1239	1240	1240	1239	1238	1242	1250	1259	1272	1275	1301	1297	1289	1272	1260	*1254*
12	1246	1246	1251	1249	1246	1243	1243	1244	1244	1245	1244	1243	1243	1243	1248	1250	1251	1253	1262	1267	1266	1252	1240	1245	1249
13	1248	1225	1214	1232	1236	1241	1243	1244	1244	1240	1237	1237	1238	1240	1244	1255	1260	1253	1252	1251	1249	1245	1245	1244	1242
14	1245	1244	1241	1243	1243	1240	1238	1237	1236	1238	1239	1240	1238	1240	1241	1245	1251	1259	1256	1249	1251	1259	1250	1249	1245
15	1243	1241	1246	1247	1243	1232	1228	1232	1237	1239	1239	1239	1238	1236	1239	1244	1244	1244	1244	1244	1244	1245	1245	1245	1241
16	1244	1244	1243	1243	1243	1243	1242	1241	1240	1240	1239	1238	1239	1240	1244	1244	1246	1247	1252	1254	1251	1252	1252	1252	1245
17	1244	1247	1240	1235	1238	1238	1239	1239	1239	1238	1238	1233	1233	1232	1237	1243	1244	1244	1244	1245	1247	1248	1249	1245	1241
18	1244	1244	1244	1241	1233	1233	1233	1233	1236	1239	1238	1236	1233	1233	1233	1238	1242	1243	1245	1257	1270	1271	1266	1245	1243
19 *q*	1245	1246	1248	1247	1244	1241	1239	1238	1239	1239	1238	1234	1233	1233	1237	1241	1244	1244	1244	1245	1246	1246	1245	1244	1242
20	1244	1244	1243	1237	1234	1236	1236	1234	1233	1233	1233	1233	1233	1236	1243	1248	1248	1249	1252	1255	1248	1245	1245	1246	1241
21	1236	1232	1237	1240	1234	1218	1226	1228	1234	1236	1234	1235	1238	1241	1248	1256	1257	1253	1250	1251	1250	1248	1247	1248	1241
22 *d*	1243	1237	1233	1232	1222	1220	1226	1232	1234	1233	1236	1238	1238	1238	1243	1249	1251	1249	1246	1248	1249	1243	1241	1243	1239
23 *d*	1244	1238	1228	1224	1232	1233	1232	1226	1228	1231	1233	1233	1237	1247	1266	1263	1275	1285	1275	1275	1254	1233	1232	1238	1244
24	1237	1233	1234	1237	1238	1238	1239	1238	1237	1233	1232	1232	1233	1238	1243	1248	1252	1255	1253	1251	1245	1244	1247	1246	1241
25	1236	1236	1232	1231	1227	1225	1229	1233	1234	1237	1238	1239	1238	1240	1244	1252	1263	1260	1257	1257	1257	1252	1251	1252	1243
26	1249	1241	1245	1247	1233	1237	1238	1241	1243	1238	1237	1234	1236	1238	1243	1248	1250	1253	1248	1247	1244	1244	1244	1244	1243
27 *q*	1245	1245	1245	1245	1245	1244	1244	1244	1246	1245	1243	1238	1233	1233	1237	1245	1248	1249	1249	1247	1244	1244	1241	1244	1243
28 *d*	1233	1228	1226	1160	1172	1193	1225	1237	1244	1244	1243	1238	1239	1252	1278	1279	1266	1262	1256	1254	1252	1251	1250	1250	1239
Mean	1241	1239	1239	1237	1235	*1234*	1236	1236	1237	1237	1237	1237	1237	1239	1244	1248	1251	1252	1252	*1254*	1253	1249	1246	1245	1242

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

100 ESKDALEMUIR — FEBRUARY 1955

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 *q*	13 36	679	656	22 50	*23*	13 38	62·8	54·9	23 42	7·9	22 52	1244	1233	00 10	*11*	0,0,0,1,2,1,1,2	7	0	84·5
2 *q*	07 19	679	637	15 27	42	13 30	63·1	54·8	21 18	8·3	21 49	1256	1233	10 51	23	1,0,1,1,2,1,2,2	10	0	84·5
3	00 49	684	645	03 00	39	16 10	63·6	48·7	00 44	14·9	20 56	1251	1229	04 00	22	3,2,2,1,1,1,1,3	14	0	84·5
4 *d*	08 46	690	589	21 44	101	11 45	67·5	*38·8*	20 14	*28·7*	20 13	1279	1228	09 20	51	1,2,2,3,3,3,4,4	22	1	84·5
5 *d*	22 01	704	618	23 05	86	15 09	64·1	49·1	18 50	15·0	18 50	1268	1224	22 51	44	3,1,2,2,2,2,3,4	19	1	84·5
6	24 00	686	618	15 31	68	14 55	65·9	51·8	21 40	14·1	21 43	1259	1230	08 22	29	2,2,2,2,3,3,3,3	20	1	84·5
7	00 00	686	616	14 25	70	13 10	64·3	53·0	00 46	11·3	15 22	1259	1224	00 21	35	3,3,2,2,3,2,2,1	18	1	84·5
8	21 52	714	617	16 19	97	12 22	61·9	40·3	20 57	21·6	16 40	1273	1217	22 16	56	2,1,1,2,1,4,3,4	18	1	84·5
9	09 05	682	627	19 31	55	18 04	61·9	53·9	04 48	8·0	18 58	1267	1234	07 30	33	1,2,3,2,2,2,2,1	15	0	84·5
10 *q*	22 00	678	649	02 58	29	11 27	61·7	54·4	14 48	*7·3*	20 03	1249	1237	09 52	12	1,0,2,1,1,1,2,2	10	0	84·5
11	14 00	682	*575*	21 02	107	19 15	67·0	40·1	20 37	26·9	19 45	*1314*	1238	13 50	76	1,0,1,0,2,4,5,4	17	1	84·5
12	21 36	722	625	19 50	97	14 18	63·2	52·7	21 27	10·5	19 52	1274	1238	00 53	36	3,2,2,1,2,2,3,4	19	1	84·5
13	20 17	680	631	15 43	49	10 47	63·3	53·8	20 13	9·5	16 15	1262	1203	02 00	59	3,2,1,2,2,3,3,0	16	0	84·5
14	07 41	683	625	17 28	58	12 37	64·0	47·7	21 21	16·3	17 57	1263	1234	08 05	29	1,2,2,1,2,3,2,4	17	1	84·4
15	00 42	678	629	01 34	49	12 30	61·7	50·0	01 14	11·7	00 01	1250	1227	06 05	23	3,2,2,2,1,0,0,0	10	0	84·4
16	23 51	684	633	18 42	51	14 25	63·6	51·0	19 35	12·6	18 51	1257	1237	11 28	20	0,0,1,2,3,1,3,3	13	0	84·2
17	23 15	690	645	01 12	45	12 21	62·5	51·1	00 52	11·4	22 50	1250	1232	13 11	18	3,2,1,2,2,1,0,2	13	0	84·2
18	04 30	679	627	20 48	52	23 38	63·1	52·5	04 57	10·6	21 08	1276	1231	07 10	45	1,3,2,1,1,1,3,3	15	0	84·2
19 *q*	14 15	681	641	00 07	40	13 27	63·1	54·5	00 16	8·6	03 14	1248	1232	13 20	16	2,1,2,1,2,1,1,1	11	0	84·2
20	13 00	683	650	15 58	33	13 00	64·4	49·9	19 30	14·5	19 08	1257	1232	09 56	25	1,3,1,1,2,2,3,1	14	0	84·2
21	07 25	700	633	04 30	67	13 31	64·3	49·9	05 48	14·4	16 10	1263	1217	05 29	46	3,3,2,2,2,2,2,1	17	1	84·2
22 *d*	21 44	704	618	11 29	86	12 27	64·5	47·2	04 30	17·3	16 45	1253	1218	05 10	35	3,4,2,3,2,3,3,3	23	1	84·0
23 *d*	20 51	*734*	601	18 57	*133*	13 48	70·2	46·7	19 10	23·5	17 07	1296	1221	03 18	75	2,2,2,3,3,4,5,3	24	1	84·0
24	20 05	696	644	14 50	52	12 57	65·5	51·8	20 01	13·7	17 45	1256	1231	01 53	25	3,2,2,2,3,1,3,2	18	0	84·1
25	00 16	692	637	11 40	55	15 00	65·3	50·9	05 17	14·4	16 30	1266	1222	05 02	44	3,3,2,2,2,3,1,2	18	1	84·0
26	04 18	684	638	01 11	46	14 43	63·2	52·1	04 57	11·1	17 05	1251	1231	04 28	20	3,3,1,2,1,1,2,1	14	0	84·0
27 *q*	23 37	698	650	11 25	48	13 55	64·1	53·9	24 00	10·2	18 47	1251	1232	13 48	19	0,0,1,1,1,1,2,2	8	0	84·1
28 *d*	00 14	716	599	02 36	117	14 00	*71·0*	44·6	05 29	26·4	14 59	1285	*1150*	03 38	*135*	5,5,3,3,4,3,0,1	24	1	84·1
Mean	- -	692	628	- -	64	- -	64·3	50·0	- -	14·3	- -	1263	1225	- -	38	-	-	0·46	84·3

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.

101 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MARCH 1955

	Hour G.M.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	Mean
	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*	656	655	660	664	661	661	662	663	660	658	658	659	657	657	660	664	660	658	657	660	659	661	660	662	660
2 *q*	663	670	663	662	663	669	669	669	673	672	665	662	661	664	666	666	663	664	669	671	673	669	669	668	667
3 *q*	667	667	666	665	669	670	675	676	675	669	666	663	664	666	670	669	669	670	672	672	673	672	673	670	669
4 *q*	668	667	667	668	671	674	676	670	665	660	655	656	660	665	671	673	673	678	681	680	660	654	665	675	668
5	665	660	654	658	665	672	668	668	666	658	660	659	665	662	662	664	654	666	658	665	664	662	638	641	661
6	654	648	679	650	658	662	660	660	663	660	651	658	658	665	668	656	660	663	669	667	652	650	660	656	659
7 *d*	664	652	647	661	661	677	664	675	665	653	662	652	650	662	674	669	659	670	653	648	684	623	645	646	659
8	650	654	653	655	658	664	657	655	659	651	647	645	647	651	648	658	667	647	662	651	652	666	669	661	655
9 *d*	675	656	656	653	663	662	658	668	661	650	638	640	642	653	655	654	667	660	673	637	619	638	653	655	654
10	652	649	650	651	652	657	660	641	642	647	658	636	629	662	650	652	660	668	636	647	671	639	663	654	651
11	641	660	648	649	656	662	641	663	651	648	650	651	622	647	656	658	641	660	659	663	667	671	667	665	654
12	664	661	655	658	664	661	667	653	666	659	653	647	639	646	663	668	645	653	648	651	672	665	660	660	657
13	659	658	659	662	656	657	655	658	659	656	653	651	658	657	663	654	660	658	657	654	669	648	654	656	657
14	673	664	651	657	655	663	666	665	660	654	650	637	645	656	662	653	664	650	673	658	650	646	656	665	657
15	668	664	656	650	673	670	666	644	656	645	652	648	651	643	653	662	662	671	670	659	656	646	670	660	658
16	655	654	659	639	654	660	662	658	657	657	650	657	658	665	665	668	664	658	659	669	654	658	638	628	656
17	649	660	658	665	669	671	656	650	671	668	657	650	652	654	643	653	659	664	673	674	675	676	670	669	662
18	680	673	671	671	673	678	673	670	665	664	658	656	643	654	652	655	656	655	647	649	667	653	661	661	662
19	666	667	663	658	658	658	659	662	655	660	658	656	656	657	660	666	669	669	668	665	665	672	669	668	663
20	670	669	664	664	667	669	673	668	663	665	665	664	662	668	665	669	667	671	671	672	674	675	674	687	669
21	661	655	663	665	668	667	670	670	665	664	666	667	666	670	672	669	671	677	678	685	677	674	677	677	670
22 *d*	673	674	677	671	670	673	673	665	662	673	664	656	633	653	671	750	654	617	604	637	647	650	660	658	661
23	656	658	660	661	665	667	669	658	656	651	651	648	655	668	655	672	677	652	659	649	647	654	642	650	657
24	654	662	651	645	637	647	650	646	629	627	637	640	641	652	654	660	663	665	664	669	670	667	664	669	653
25	665	664	662	661	660	662	663	663	653	644	636	641	650	656	656	668	656	661	656	665	666	658	668	669	658
26	669	666	667	667	671	668	666	654	650	659	659	650	643	640	649	651	669	676	678	681	681	685	681	674	665
27	669	671	668	671	671	672	674	674	663	658	652	628	644	650	658	665	661	671	671	673	677	676	675	679	665
28	671	667	662	663	666	668	671	669	654	649	646	646	647	657	664	671	672	673	674	677	675	675	667	676	665
29 *q*	666	663	665	669	673	677	672	673	665	653	646	645	649	658	663	668	671	671	673	677	675	674	675	675	667
30 *d*	672	673	673	671	673	673	676	674	666	664	662	666	665	671	667	669	675	674	682	656	675	720	660	650	*671*
31 *d*	659	658	626	667	643	657	644	580	638	625	622	614	644	642	655	662	657	658	673	684	655	684	670	652	*649*
Mean	663	662	660	660	663	*666*	664	660	659	655	653	*650*	650	657	660	666	663	663	663	663	665	663	663	663	661

MAGNETIC DECLINATION (WEST)

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

102 ESKDALEMUIR (D) — 10° + — MARCH 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	57·5	57·5	58·5	58·3	57·2	57·3	57·2	57·1	56·7	57·2	59·0	61·3	63·1	62·4	61·3	60·2	59·1	58·7	57·6	57·2	57·5	57·0	57·2	55·8	58·4
2 *q*	56·3	57·1	56·8	55·5	56·0	55·8	56·4	57·1	57·2	57·8	58·7	60·3	61·1	61·6	61·6	60·8	59·6	59·7	59·5	58·9	58·7	58·3	58·0	57·3	58·3
3 *q*	57·6	58·0	57·7	57·7	57·6	57·7	57·6	57·6	57·2	57·6	59·0	60·9	62·0	62·3	61·3	60·2	59·2	59·0	59·0	58·6	58·5	58·2	58·2	57·8	58·8
4 *q*	57·5	57·7	57·9	58·1	57·8	57·7	57·2	57·0	56·5	57·1	57·4	59·5	61·8	62·6	62·1	60·9	59·8	59·7	59·7	60·3	58·5	58·4	58·5	55·6	58·7
5	55·5	55·0	54·0	54·8	54·8	54·7	55·9	56·7	56·4	57·3	59·1	60·9	63·1	63·6	63·3	63·5	62·9	59·3	59·5	59·1	57·5	52·5	52·3	51·9	57·7
6	54·3	54·6	54·5	55·7	57·0	56·7	58·0	57·2	56·7	58·0	58·5	60·4	61·5	63·5	63·3	61·6	60·3	59·7	58·7	59·9	56·0	58·2	57·2	56·5	58·3
7 *d*	58·1	57·9	47·5	48·7	52·8	53·8	56·8	57·5	60·3	58·1	58·1	60·2	61·8	62·1	62·1	62·2	61·0	51·9	56·1	56·8	49·5	48·9	52·3	53·2	*56·2*
8	56·5	58·2	56·7	53·6	53·2	53·5	55·9	57·2	56·6	56·5	57·7	59·7	61·9	63·5	63·2	61·4	61·7	52·9	45·1	54·1	57·4	57·1	59·5	54·3	57·0
9 *d*	55·7	56·7	55·0	55·9	55·7	55·7	58·5	57·7	56·9	58·6	61·7	65·3	67·0	69·2	70·3	68·3	66·2	65·3	42·4	52·3	57·1	56·8	58·5	59·1	59·4
10	57·8	57·2	55·7	55·7	56·9	58·1	56·7	58·6	59·1	58·3	61·8	63·0	63·8	63·9	61·7	62·4	60·8	60·1	58·1	55·8	50·2	52·9	55·9	55·9	58·3
11	59·3	55·4	54·8	56·3	56·8	56·1	58·5	58·7	56·6	57·9	59·9	63·4	64·6	64·4	62·9	63·1	55·5	55·7	60·3	59·8	58·7	57·7	57·7	58·4	58·9
12	57·8	57·6	57·1	62·2	55·4	56·0	56·1	58·6	59·3	58·6	60·2	61·1	62·9	61·9	62·4	63·3	58·5	58·6	59·5	59·7	59·0	56·9	56·2	57·0	59·0
13	55·8	59·0	58·1	56·3	56·4	56·9	58·1	57·3	57·7	58·6	59·6	61·3	63·0	62·8	63·6	62·1	61·6	58·5	58·2	57·9	50·1	53·1	56·8	55·4	58·3
14	63·5	55·4	54·2	55·8	56·3	57·8	57·1	56·9	56·4	57·3	59·3	60·7	62·6	63·2	63·6	59·7	58·6	57·6	49·3	57·9	55·5	53·1	56·3	59·1	57·8
15	57·7	50·2	52·7	58·3	52·5	53·2	57·7	61·3	62·7	61·6	61·5	59·5	63·0	62·6	61·1	61·3	60·0	59·5	59·3	58·2	56·7	57·3	58·8	57·1	58·5
16	56·5	56·0	52·8	53·2	58·5	57·0	57·3	57·3	57·1	57·8	58·7	60·7	62·1	61·7	61·7	61·1	60·7	58·3	59·7	58·1	52·7	46·9	49·7	47·8	56·8
17	55·2	53·5	56·0	56·5	57·2	56·2	57·2	59·0	60·4	59·5	59·2	61·3	62·1	62·0	61·8	60·4	60·3	58·3	58·5	58·8	58·4	58·5	58·0	57·8	58·6
18	57·6	57·1	56·8	56·9	56·7	57·2	56·8	58·1	58·8	57·3	57·8	62·1	63·0	64·0	63·9	63·4	59·0	47·7	61·2	58·0	53·3	55·7	57·4	56·9	58·2
19	57·7	56·7	54·8	55·3	56·2	57·0	57·4	56·5	56·2	56·4	57·0	59·0	61·2	62·1	61·8	61·6	60·0	59·4	58·7	57·9	54·1	55·9	58·1	58·4	57·9
20	58·3	58·6	57·7	56·5	56·6	56·4	56·6	56·2	56·7	56·8	59·2	61·8	62·7	63·6	62·1	59·9	58·6	58·5	58·6	58·5	58·8	59·0	58·4	50·9	58·4
21	49·0	55·6	56·5	56·0	55·9	55·7	56·1	55·7	55·6	56·3	57·7	60·7	62·1	62·8	62·4	60·1	58·5	58·0	59·3	59·2	57·9	51·4	53·0	55·6	57·1
22 *d*	57·7	57·8	57·6	56·7	56·8	56·6	55·7	55·6	57·9	60·4	63·4	64·0	65·7	67·7	69·4	63·9	62·5	54·5	52·6	58·5	58·1	56·8	57·8	57·2	59·4
23	57·1	57·2	57·1	56·7	56·6	56·4	56·0	55·5	55·3	55·9	57·5	60·2	61·8	63·6	62·0	61·1	62·1	63·7	63·1	61·2	55·8	37·8	54·5	56·8	57·7
24	57·0	55·9	56·2	50·8	52·6	55·8	54·8	54·8	55·9	56·7	57·7	61·2	62·6	63·7	64·2	62·7	61·0	59·5	58·6	57·9	58·0	57·3	57·0	56·9	57·9
25	57·1	57·5	57·2	57·6	56·9	56·3	55·9	54·1	53·7	55·8	59·1	60·9	63·6	64·3	63·9	63·1	60·9	59·5	59·4	54·7	51·7	54·7	56·7	57·2	58·0
26	57·1	57·4	57·2	57·2	56·8	57·6	59·3	64·6	63·3	63·5	63·4	63·8	64·9	67·5	66·5	63·1	60·9	60·0	59·1	58·6	58·0	57·7	57·7	57·2	*60·5*
27	57·3	57·0	57·2	57·7	56·5	55·9	55·3	54·9	54·0	54·2	58·2	61·8	64·9	66·7	68·2	65·3	61·5	59·6	58·8	57·8	57·7	57·8	57·3	55·2	58·8
28	56·9	56·4	56·3	56·8	57·1	57·2	56·6	55·4	55·8	56·0	57·7	60·9	62·1	63·9	62·9	61·4	59·6	58·7	58·5	58·8	58·4	57·8	55·9	54·9	58·2
29 *q*	54·0	55·3	56·4	57·1	57·2	57·2	57·7	56·8	55·5	55·7	57·1	59·9	62·1	63·6	62·7	61·3	59·5	59·0	58·4	58·3	58·4	58·2	58·1	57·6	58·2
30 *d*	57·9	59·0	58·1	57·1	56·7	56·5	56·4	55·9	56·1	56·5	58·0	62·1	64·3	65·2	65·8	62·2	63·3	62·1	60·6	51·7	56·7	47·7	48·7	54·3	58·0
31 *d*	56·7	56·5	53·8	43·0	51·7	54·2	54·8	66·6	68·5	59·8	60·9	60·6	63·6	65·3	65·2	57·7	55·9	57·0	59·4	49·0	57·7	52·0	55·9	56·1	57·6
Mean	56·9	56·6	55·9	55·7	56·0	56·3	56·8	57·5	57·7	57·7	59·2	61·2	63·0	*63·8*	63·5	61·9	60·3	58·4	57·6	57·5	56·3	*54·9*	56·4	56·0	58·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

103 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — MARCH 1955

	Hour G.M.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	Mean
	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*	1249	1248	1247	1244	1245	1246	1245	1247	1247	1247	1243	1238	1239	1244	1250	1252	1252	1251	1251	1251	1251	1250	1249	1246	1247
2 *q*	1243	1238	1238	1241	1243	1242	1242	1241	1241	1239	1240	1239	1238	1238	1238	1243	1248	1248	1246	1246	1245	1246	1246	1246	1242
3 *q*	1245	1244	1244	1244	1243	1242	1240	1241	1243	1241	1238	1236	1237	1238	1240	1243	1246	1245	1244	1244	1245	1245	1245	1244	1242
4 *q*	1244	1244	1244	1244	1243	1243	1242	1243	1243	1243	1239	1235	1234	1236	1238	1240	1241	1241	1241	1243	1250	1255	1253	1247	1243
5	1241	1237	1239	1240	1238	1234	1234	1235	1237	1235	1232	1231	1230	1235	1240	1247	1248	1249	1250	1250	1249	1247	1239	1241	1240
6	1243	1244	1228	1232	1238	1239	1239	1238	1237	1237	1238	1237	1236	1238	1243	1247	1249	1248	1247	1249	1260	1260	1256	1256	1243
7 *d*	1247	1216	1228	1227	1230	1226	1223	1221	1221	1228	1232	1232	1232	1234	1239	1246	1258	1281	1268	1264	1228	1237	1240	1247	1238
8	1248	1232	1229	1239	1239	1239	1233	1237	1237	1239	1238	1238	1238	1241	1248	1250	1253	1267	1269	1255	1250	1247	1235	1234	1243
9 *d*	1232	1233	1239	1240	1237	1236	1233	1234	1238	1238	1235	1236	1239	1244	1252	1271	1272	1290	1323	1316	1322	1308	1278	1266	1259
10	1261	1257	1253	1251	1250	1248	1245	1246	1247	1245	1240	1241	1247	1253	1272	1263	1256	1257	1271	1272	1264	1260	1252	1241	1254
11	1235	1233	1240	1245	1248	1245	1245	1237	1237	1234	1232	1228	1237	1240	1244	1251	1267	1264	1251	1249	1249	1249	1245	1247	1244
12	1248	1249	1246	1218	1216	1229	1232	1233	1232	1237	1236	1236	1241	1247	1251	1256	1267	1274	1272	1271	1264	1243	1249	1250	1246
13	1249	1247	1245	1247	1248	1247	1246	1245	1243	1239	1238	1238	1238	1240	1249	1256	1260	1266	1265	1263	1262	1254	1251	1250	1249
14	1227	1225	1236	1243	1245	1244	1245	1245	1245	1245	1244	1242	1240	1244	1250	1256	1262	1263	1267	1257	1262	1262	1254	1248	1248
15	1239	1237	1235	1218	1211	1222	1227	1228	1222	1225	1227	1234	1236	1242	1249	1251	1251	1251	1251	1257	1265	1265	1249	1239	1239
16	1244	1241	1232	1237	1234	1241	1244	1247	1248	1246	1244	1239	1238	1238	1241	1246	1255	1262	1256	1255	1259	1252	1243	1234	1245
17	1222	1228	1238	1242	1244	1241	1238	1232	1221	1224	1229	1236	1239	1241	1251	1260	1256	1256	1252	1249	1248	1248	1249	1249	1241
18	1246	1248	1247	1246	1245	1244	1244	1244	1244	1242	1236	1231	1237	1240	1243	1249	1266	1292	1273	1274	1265	1259	1256	1254	1251
19	1249	1238	1240	1244	1245	1244	1245	1247	1247	1241	1234	1231	1232	1233	1238	1243	1248	1252	1255	1255	1256	1249	1247	1249	1244
20	1246	1244	1242	1244	1244	1244	1244	1247	1247	1240	1233	1231	1232	1236	1241	1244	1248	1248	1247	1246	1246	1246	1248	1243	1243
21	1233	1236	1239	1242	1242	1242	1240	1240	1238	1237	1232	1227	1229	1232	1239	1244	1248	1248	1245	1246	1249	1253	1241	1239	1240
22 *d*	1244	1245	1246	1247	1245	1245	1245	1243	1237	1226	1225	1237	1260	1283	1330	1444	1370	1354	1333	1287	1270	1262	1256	1255	*1275*
23	1256	1256	1256	1255	1253	1252	1252	1255	1252	1249	1247	1244	1241	1240	1249	1252	1262	1275	1287	1313	1313	1294	1264	1260	1262
24	1256	1237	1217	1224	1233	1234	1243	1247	1248	1247	1243	1239	1241	1247	1252	1254	1255	1257	1256	1255	1252	1252	1254	1251	1246
25	1252	1252	1253	1254	1253	1252	1252	1251	1249	1244	1243	1239	1238	1242	1249	1254	1263	1267	1268	1270	1262	1256	1251	1249	1253
26	1249	1250	1251	1251	1250	1249	1244	1241	1234	1229	1224	1225	1237	1246	1262	1266	1261	1256	1252	1250	1250	1249	1250	1251	1247
27	1252	1251	1251	1250	1249	1248	1248	1246	1245	1240	1237	1238	1233	1234	1240	1248	1250	1255	1255	1254	1252	1251	1250	1247	1247
28	1245	1248	1250	1250	1250	1249	1250	1250	1250	1245	1240	1234	1233	1234	1240	1247	1251	1251	1249	1249	1248	1248	1250	1245	1246
29 *q*	1244	1245	1245	1246	1246	1245	1247	1248	1246	1245	1241	1230	1225	1229	1238	1245	1249	1250	1249	1248	1247	1247	1246	1245	1244
30 *d*	1245	1244	1244	1245	1245	1245	1245	1244	1238	1232	1232	1220	1216	1222	1234	1245	1249	1252	1257	1279	1264	1238	1224	1209	1241
31 *d*	1211	1206	1149	1164	1202	1214	1224	1225	1211	1233	1243	1245	1245	1254	1267	1294	1298	1293	1283	1262	1255	1250	1229	1237	*1237*
Mean	1243	1240	1238	1239	1241	1241	1241	1241	1240	1239	1237	*1235*	1237	1241	1249	1258	1260	*1263*	1262	1261	1258	1254	1248	1246	1246

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

104 ESKDALEMUIR — MARCH 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′ h. m.	′	γ	h. m.	γ	γ	h. m.	γ				°A.
1 *q*	15 27	669	653	01 31	*16*	12 42	63·5	55·0 24 00	8·5	15 58	1253	1238	11 50	15	1,1,1,2,2,2,1,1	11	0	84·2
2 *q*	01 02	681	659	00 22	22	13 41	61·8	55·2 00 00	6·6	16 42	1249	1237	01 59	12	2,1,2,2,2,1,1,0	11	0	84·2
3 *q*	07 57	684	660	11 22	24	13 05	62·6	57·0 07 43	*5·6*	16 40	1247	1236	11 47	*11*	0,1,1,2,2,1,0,0	7	0	84·0
4 *q*	23 38	686	645	21 35	41	13 32	63·0	52·4 24 00	10·6	21 40	1256	1233	11 56	23	0,1,0,2,2,0,2,3	9	0	84·0
5	22 00	686	612	22 25	74	13 01	64·6	48·1 21 11	16·5	21 16	1256	1230	12 35	26	2,2,1,2,2,2,2,4	17	1	84·0
6	02 16	704	634	20 53	70	13 26	65·9	52·9 01 57	13·0	20 45	1264	1223	02 41	41	3,2,2,2,2,1,3,2	17	1	84·0
7 *d*	20 10	872	591	20 31	281	01 04	65·8	35·6 20 07	30·2	17 42	1292	1208	01 33	84	5,3,3,2,1,5,7,3	29	1	84·0
8	22 26	685	623	17 42	62	14 39	64·4	38·3 18 00	26·1	18 10	1276	1222	01 50	54	3,2,2,2,2,5,4,3	23	1	84·0
9 *d*	18 24	697	595	19 04	102	15 34	71·6	*30·2* 18 21	*41·4*	18 16	1362	1228	00 48	134	3,2,2,1,2,3,5,4	22	1	84·0
10	20 22	689	617	11 56	72	13 41	66·2	47·2 20 17	19·0	14 25	1276	1237	10 55	39	2,2,3,3,3,2,3,3	21	1	84·0
11	21 47	679	608	12 33	71	12 18	65·8	49·0 16 50	16·8	16 49	1273	1227	11 30	46	3,2,3,3,3,4,1,2	21	1	84·0
12	20 55	719	622	16 34	97	03 10	67·1	52·5 16 49	14·6	17 10	1279	1213	03 47	66	3,4,3,2,2,3,4,4	25	1	84·0
13	20 30	706	632	20 00	74	12 40	65·1	40·1 20 24	25·0	20 20	1271	1237	11 28	34	2,2,2,2,3,3,4,3	21	1	84·0
14	18 18	692	610	17 56	82	00 21	67·1	40·1 18 10	27·0	18 01	1276	1219	00 45	57	4,2,1,2,2,4,4,3	22	1	84·0
15	22 40	686	625	21 12	61	08 05	65·6	49·4 01 43	16·2	21 13	1270	1206	03 56	64	3,3,3,3,3,2,3,3	23	1	84·0
16	15 56	675	617	23 12	58	12 30	62·7	43·8 21 11	18·9	17 19	1266	1227	24 00	39	3,3,1,2,2,2,4,3	20	1	83·9
17	21 08	693	625	00 20	68	13 25	62·6	51·8 00 03	10·8	15 29	1262	1217	00 44	45	3,1,3,3,3,3,1,2	19	0	83·8
18	20 24	717	609	16 52	108	13 47	65·6	40·6 17 12	25·0	17 20	1296	1229	11 37	67	2,1,2,2,3,5,4,3	22	1	83·8
19	00 50	678	652	20 17	26	14 04	62·6	51·4 20 35	11·2	20 30	1256	1230	11 21	26	3,1,1,2,2,1,3,2	15	0	83·9
20	23 26	701	657	13 24	44	13 40	64·4	46·6 24 00	17·8	23 02	1250	1230	11 30	20	1,1,1,2,2,1,1,3	12	0	83·8
21	21 41	690	647	00 59	43	14 00	63·7	45·9 00 06	17·8	21 13	1259	1228	11 31	31	3,0,1,2,2,1,3,3	15	0	83·8
22 *d*	15 30	*909*	582	18 02	*327*	15 34	*81·4*	44·2 18 05	37·2	15 38	*1555*	1221	09 56	*334*	2,1,2,3,5,7,4,2	26	2	83·8
23	21 02	724	630	21 11	94	14 00	66·9	31·7 21 12	35·2	21 03	1337	1239	13 01	98	2,0,1,1,3,4,4,5	20	1	83·8
24	01 27	676	616	09 28	60	14 24	65·4	49·1 04 04	16·3	17 44	1259	1216	02 33	43	3,3,2,3,2,1,1,1	16	0	83·8
25	19 37	688	626	10 55	62	13 45	64·7	49·6 19 32	15·1	19 29	1273	1238	12 41	35	0,0,1,1,2,2,3,2	11	0	83·8
26	21 53	693	631	14 02	62	14 00	70·2	56·1 23 45	14·1	15 04	1268	1222	10 52	46	1,1,3,3,2,2,1,3	16	0	83·8
27	23 19	690	612	11 04	78	14 25	69·8	52·4 08 49	17·4	18 20	1257	1233	12 40	24	1,1,1,3,2,3,1,2	14	0	83·8
28	23 03	683	637	11 17	46	13 25	64·1	52·8 23 55	11·3	16 41	1252	1232	12 00	20	1,1,1,1,1,1,1,2	9	0	83·8
29 *q*	19 25	680	642	12 04	38	13 42	64·1	52·8 00 00	11·3	17 16	1251	1224	12 31	27	2,1,1,1,1,0,0,1	7	0	83·8
30 *d*	21 30	805	624	22 50	181	14 34	67·7	30·7 21 15	37·0	19 40	1285	1198	23 34	87	1,0,1,3,3,2,4,6	20	1	83·8
31 *d*	21 42	757	*555*	07 21	202	07 50	75·2	38·4 03 31	36·8	16 47	1302	*1128*	02 34	174	5,5,5,3,3,4,4,5	34	1	83·8
Mean	- -	709	624	- -	85	- -	66·2	46·5 - -	19·7	- -	1281	1223	- -	59	-	-	0·58	83·9

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.

105 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — APRIL 1955

	Hour G.M.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	Mean
	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	650	655	644	653	649	648	651	644	645	636	629	628	647	657	666	663	664	666	668	671	676	696	646	638	654
2	668	656	652	655	657	661	667	657	653	642	635	646	653	654	673	673	671	664	644	648	659	659	670	661	657
3	664	660	656	656	659	658	653	667	659	646	626	648	651	654	647	654	657	664	662	659	668	673	668	668	657
4	666	664	664	667	667	664	662	664	661	644	633	645	652	655	664	665	675	674	653	658	664	676	677	693	663
5 *d*	644	647	664	665	667	668	649	661	655	640	641	649	655	644	648	672	667	668	671	696	675	668	669	673	661
6	681	662	668	664	660	661	669	661	655	646	642	622	638	651	660	656	667	670	676	677	684	690	673	653	662
7 *d*	668	656	642	666	670	668	667	647	647	640	616	638	652	659	664	661	661	675	681	693	674	668	670	671	661
8	677	668	668	668	671	664	661	679	662	650	642	637	647	652	661	663	674	672	672	675	676	667	672	674	665
9	674	672	674	672	668	667	669	666	661	653	649	652	657	666	671	674	678	678	676	680	683	683	688	668	670
10	668	669	670	671	673	675	677	677	673	663	647	639	641	639	669	665	665	659	677	671	665	665	666	671	665
11	672	664	668	657	659	667	662	672	670	670	659	661	662	668	669	676	671	676	671	674	676	677	672	674	669
12	675	677	677	668	665	677	681	673	668	649	645	646	644	668	665	668	674	671	685	670	667	642	649	653	665
13	662	652	663	661	660	677	676	668	661	653	644	651	657	656	668	673	678	677	683	687	681	681	683	687	668
14	674	666	668	670	674	676	676	677	667	656	649	644	647	652	651	664	668	675	675	678	677	677	677	674	667
15	675	676	677	677	675	678	681	682	676	665	659	655	661	669	670	666	662	670	684	685	684	685	680	680	674
16 *q*	677	673	674	672	674	680	681	678	672	667	659	656	659	657	660	672	677	683	693	691	679	680	682	675	674
17 *q*	680	679	680	676	680	680	674	672	670	659	649	646	649	664	668	674	676	683	688	693	685	680	681	679	674
18 *q*	677	673	672	672	672	672	671	671	667	660	659	660	666	666	666	677	692	677	681	685	683	680	680	680	673
19 *q*	681	679	673	669	670	674	675	676	672	662	657	657	662	667	674	681	686	688	689	686	688	690	695	695	677
20	693	690	685	686	682	671	664	671	659	651	650	656	663	670	665	670	663	683	677	672	674	679	677	676	672
21	676	675	668	670	670	673	675	671	663	653	654	654	653	655	649	674	686	692	678	685	679	683	688	685	671
22	680	680	676	670	668	680	669	664	662	653	646	644	644	653	666	675	679	685	686	687	688	685	684	680	671
23 *q*	677	676	675	674	676	674	674	671	663	654	641	641	652	655	660	664	675	681	684	682	681	682	683	683	670
24	681	683	677	676	681	683	681	676	668	664	660	664	670	655	637	683	683	702	682	644	643	646	680	683	671
25	663	660	658	648	659	663	659	655	646	642	639	643	656	666	671	678	666	686	690	698	667	657	664	666	663
26	696	668	649	655	655	665	668	659	663	644	644	624	644	651	657	662	674	676	693	682	687	663	666	663	663
27 *d*	649	649	679	658	660	659	668	665	653	653	648	647	651	658	671	679	716	727	717	658	576	538	504	607	650
28 *d*	525	647	637	633	623	623	621	617	620	618	620	626	658	649	655	650	673	680	688	679	677	648	645	642	640
29 *d*	632	661	606	646	655	643	651	641	633	606	585	603	626	649	654	652	672	655	684	675	679	646	643	646	643
30	636	641	664	657	659	636	657	656	646	636	637	625	649	654	655	664	656	671	676	676	674	670	670	677	656
Mean	665	666	664	664	665	666	666	665	659	649	642	644	652	657	662	668	673	678	679	677	672	668	667	669	664

MAGNETIC DECLINATION (WEST)

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

106 ESKDALEMUIR (D) — 10° + — APRIL 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	59·5	58·9	58·5	56·9	53·7	55·9	56·2	55·4	55·6	56·6	58·9	62·8	62·7	61·8	59·9	58·7	57·5	57·2	56·7	57·1	56·7	46·4	46·6	50·7	56·7
2	56·8	53·7	53·1	53·1	54·3	55·0	54·1	54·9	55·1	56·2	58·2	59·9	65·7	66·9	66·2	66·5	64·3	62·1	57·7	57·1	55·9	55·9	51·7	56·6	58·0
3	56·8	55·9	55·2	55·2	56·3	54·9	54·9	54·8	53·4	55·6	57·9	61·4	64·5	66·1	67·4	66·3	62·5	61·7	59·1	58·1	56·6	58·5	58·1	57·2	58·7
4	56·9	56·5	57·7	55·7	55·9	55·2	56·5	56·3	55·0	56·2	59·3	62·2	62·6	63·2	62·0	60·5	59·9	59·8	54·3	50·4	57·2	58·1	52·5	48·5	57·2
5 *d*	45·6	54·5	57·8	55·8	54·9	53·8	55·8	55·2	54·5	55·7	57·2	60·7	63·1	65·8	63·8	62·7	62·1	61·4	59·0	53·6	55·4	55·6	56·1	56·0	57·3
6	55·9	57·7	58·0	53·8	54·5	56·2	55·5	54·9	54·4	55·5	58·5	62·1	63·5	65·2	65·2	63·2	60·5	59·0	57·8	57·5	57·1	46·4	48·1	50·1	57·1
7 *d*	59·6	60·5	54·9	60·2	53·9	54·2	53·6	53·9	53·7	56·7	58·4	61·4	63·2	65·6	63·7	62·6	60·8	59·5	55·0	51·6	54·1	54·5	56·3	58·7	57·8
8	57·7	57·4	57·0	56·3	56·0	56·6	60·2	59·3	56·5	56·1	57·5	59·9	62·8	63·8	63·4	62·3	60·9	60·7	58·8	59·1	58·6	53·0	56·6	58·0	58·7
9	57·4	57·1	57·6	56·3	56·3	56·7	56·7	55·9	55·4	55·0	56·5	58·9	61·1	61·8	61·2	60·0	59·5	58·9	58·5	58·5	58·6	58·1	51·6	52·9	57·5
10	57·0	57·2	56·6	56·2	55·6	55·7	55·6	55·4	54·9	54·8	58·3	62·9	68·6	69·6	66·8	64·5	63·4	56·2	57·8	58·0	56·5	54·1	55·9	55·5	58·6
11	56·7	56·7	55·7	56·7	57·8	55·0	55·0	55·5	56·1	57·6	59·0	61·3	62·6	64·1	63·0	62·1	61·0	60·5	59·8	59·4	59·5	58·3	57·6	57·2	58·7
12	57·1	56·0	54·7	49·5	51·8	53·7	55·8	55·4	55·8	56·0	58·4	61·8	61·9	60·7	59·8	58·9	58·6	58·0	58·7	58·3	57·8	49·7	52·6	49·6	56·3
13	51·0	53·3	50·9	46·5	50·4	54·5	54·3	55·1	55·4	56·4	58·7	60·8	63·2	63·6	61·8	60·5	60·7	60·2	59·5	59·4	59·5	58·8	57·0	59·0	57·1
14	55·9	55·7	56·2	56·3	56·3	58·5	59·2	59·7	59·7	57·0	57·9	60·6	62·3	62·5	61·9	61·6	61·0	60·0	59·2	58·7	58·1	57·7	56·1	56·3	58·7
15	57·3	56·8	57·5	56·5	56·3	56·5	56·5	55·1	54·8	55·0	56·7	59·1	61·9	63·5	63·0	62·9	61·0	60·0	59·1	59·1	59·0	58·4	57·1	56·7	58·3
16 *q*	56·4	56·6	57·0	56·4	56·8	56·7	56·7	55·8	54·5	55·3	57·6	61·3	64·9	65·4	63·8	61·6	60·7	59·9	59·0	58·3	57·3	57·2	57·9	57·7	58·5
17 *q*	57·3	57·4	56·7	55·9	55·7	55·3	54·6	55·3	55·6	56·4	58·7	62·1	64·0	63·4	61·8	61·0	60·4	59·6	58·9	59·5	59·1	58·3	58·0	57·6	58·4
18 *q*	57·3	57·0	56·4	56·2	56·2	56·2	55·6	55·3	54·7	54·9	57·2	59·1	61·9	63·4	61·9	60·8	59·3	59·3	59·6	59·1	58·6	58·1	57·8	57·8	58·1
19 *q*	57·4	56·9	56·2	55·5	56·2	56·2	55·4	54·7	54·6	55·9	57·8	60·4	62·5	62·8	61·6	60·3	59·8	59·9	59·8	58·6	58·5	58·4	58·0	57·5	58·1
20	56·9	56·1	55·3	55·3	55·0	54·0	54·1	55·5	53·9	54·8	56·9	60·0	63·3	64·9	63·2	62·5	60·7	60·1	59·1	57·9	57·2	57·9	57·1	56·2	57·8
21	56·3	56·0	56·4	56·1	55·0	55·8	54·5	54·0	54·9	54·9	56·7	60·5	63·9	65·9	63·8	62·3	61·6	60·7	59·5	58·2	57·8	57·1	58·0	56·6	58·2
22	56·9	56·6	60·2	58·1	58·1	53·2	52·8	52·0	51·7	54·1	57·2	59·9	62·4	63·7	62·8	61·3	60·1	59·2	57·6	55·7	53·1	55·8	56·1	57·1	57·3
23 *q*	57·1	56·9	56·5	56·2	55·8	55·3	54·6	53·9	54·0	54·8	56·3	58·8	61·3	62·5	61·2	59·5	58·8	58·1	57·4	56·9	57·1	57·6	57·5	57·2	57·3
24	57·5	57·2	55·7	55·5	55·3	54·2	53·7	52·9	52·7	53·5	56·1	59·6	63·9	66·7	65·9	65·0	65·3	64·3	60·6	53·1	49·9	55·6	50·3	43·9	57·0
25	51·1	53·3	53·1	54·5	55·7	54·3	54·1	56·0	54·1	56·2	58·9	61·4	64·2	64·4	63·7	60·8	60·7	61·1	57·6	56·8	50·3	51·0	52·7	53·6	56·7
26	51·8	49·8	48·3	51·1	50·6	52·5	55·3	56·5	57·2	57·1	59·1	61·6	62·9	63·2	62·4	61·0	59·9	59·0	59·1	56·9	53·1	51·8	51·7	51·3	56·0
27 *d*	46·8	53·1	54·7	51·1	51·3	54·9	53·6	54·9	55·8	56·3	57·2	59·2	61·2	62·6	61·8	61·7	63·4	65·9	66·0	57·6	30·7	39·2	51·3	39·7	54·6
28 *d*	47·7	46·4	52·4	54·8	54·9	54·1	54·9	52·7	54·4	55·6	57·9	59·8	59·9	61·3	62·6	61·9	61·8	62·2	61·3	57·4	55·4	57·2	49·8	56·0	56·3
29 *d*	58·9	52·6	51·3	53·6	52·7	52·7	54·1	53·7	52·7	56·2	56·8	59·9	61·7	62·5	60·0	59·9	60·8	58·0	53·7	58·4	54·7	47·6	49·9	51·8	55·6
30	54·7	55·1	55·9	51·9	53·4	54·3	55·0	54·3	54·1	54·2	58·4	59·6	60·6	61·9	61·6	60·6	59·6	59·1	58·0	53·7	52·8	56·3	56·7	56·0	56·6
Mean	55·5	55·6	55·6	54·9	54·9	55·1	55·3	55·1	54·8	55·7	57·8	60·6	62·9	64·0	62·9	61·8	60·9	60·1	58·6	57·1	55·5	54·7	54·6	54·4	57·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

107 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — APRIL 1955

	Hour G.M.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	Mean
	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	1233	1229	1238	1242	1244	1243	1241	1249	1249	1246	1243	1242	1244	1247	1257	1260	1258	1259	1260	1256	1256	1244	1229	1234	1246
2	1232	1239	1247	1250	1245	1241	1243	1240	1238	1237	1235	1232	1234	1247	1267	1283	1297	1309	1312	1293	1275	1254	1240	1245	*1256*
3	1249	1250	1243	1244	1250	1249	1249	1247	1248	1243	1240	1235	1237	1243	1260	1271	1278	1278	1275	1272	1266	1258	1247	1248	1253
4	1251	1252	1251	1250	1249	1248	1249	1250	1247	1242	1241	1238	1239	1248	1251	1249	1249	1263	1283	1285	1267	1262	1254	1232	1252
5 *d*	1232	1224	1215	1232	1241	1243	1245	1244	1244	1241	1238	1234	1237	1246	1261	1259	1263	1266	1267	1260	1254	1256	1253	1250	1246
6	1241	1237	1221	1226	1233	1240	1241	1247	1247	1242	1240	1237	1235	1238	1244	1252	1255	1252	1251	1251	1251	1250	1237	1222	1241
7 *d*	1207	1205	1212	1203	1217	1228	1237	1243	1245	1243	1245	1243	1239	1242	1249	1252	1254	1255	1257	1255	1251	1251	1248	1234	1238
8	1237	1246	1250	1250	1249	1248	1240	1237	1240	1240	1237	1237	1238	1244	1250	1255	1256	1262	1262	1258	1255	1253	1249	1250	1248
9	1250	1250	1249	1247	1247	1247	1246	1248	1249	1245	1238	1233	1232	1241	1247	1249	1250	1251	1250	1248	1246	1249	1245	1244	1246
10	1245	1248	1250	1250	1249	1247	1247	1247	1245	1240	1237	1233	1234	1242	1253	1259	1263	1272	1264	1257	1257	1257	1253	1246	1250
11	1238	1246	1249	1249	1237	1237	1242	1242	1240	1237	1237	1236	1235	1244	1249	1253	1255	1256	1256	1255	1251	1250	1250	1249	1246
12	1250	1248	1236	1229	1235	1236	1235	1239	1243	1245	1239	1238	1237	1243	1247	1251	1253	1255	1252	1256	1260	1267	1255	1248	1246
13	1244	1231	1213	1220	1232	1238	1240	1239	1238	1233	1232	1229	1229	1235	1241	1245	1247	1251	1253	1254	1256	1258	1261	1238	1240
14	1240	1249	1250	1250	1247	1243	1237	1233	1234	1238	1237	1232	1234	1239	1243	1244	1246	1249	1250	1250	1250	1250	1250	1249	1243
15	1248	1245	1244	1244	1244	1244	1245	1244	1241	1239	1236	1232	1227	1232	1239	1241	1246	1250	1250	1250	1250	1250	1250	1248	1243
16 *q*	1247	1248	1247	1247	1245	1245	1246	1246	1244	1238	1233	1231	1233	1237	1238	1239	1244	1247	1248	1251	1253	1252	1248	1248	1244
17 *q*	1247	1246	1245	1245	1244	1244	1245	1243	1238	1239	1238	1235	1234	1239	1245	1250	1251	1251	1249	1248	1248	1249	1249	1249	1245
18 *q*	1248	1248	1248	1248	1246	1247	1248	1247	1244	1241	1237	1234	1233	1235	1243	1249	1255	1255	1253	1250	1249	1249	1248	1247	1246
19 *q*	1245	1245	1248	1248	1244	1239	1239	1240	1238	1237	1229	1222	1223	1231	1240	1240	1240	1243	1244	1244	1244	1244	1244	1244	1240
20	1244	1245	1244	1244	1244	1244	1245	1244	1244	1238	1231	1227	1229	1237	1244	1249	1256	1256	1261	1261	1256	1252	1251	1251	1246
21	1249	1247	1248	1247	1247	1243	1240	1238	1238	1238	1233	1226	1228	1238	1247	1247	1251	1256	1259	1257	1256	1252	1247	1244	1245
22	1244	1245	1243	1236	1229	1228	1235	1238	1238	1235	1234	1233	1233	1234	1241	1244	1245	1248	1250	1249	1248	1244	1244	1245	1240
23 *q*	1247	1247	1247	1248	1247	1246	1245	1244	1243	1236	1229	1223	1225	1231	1238	1241	1243	1244	1245	1245	1244	1244	1244	1245	1241
24	1245	1244	1244	1244	1244	1243	1239	1240	1240	1234	1231	1224	1225	1237	1240	1244	1252	1268	1310	1312	1280	1233	1217	1218	1246
25	1217	1234	1244	1248	1244	1248	1251	1248	1244	1240	1234	1234	1233	1238	1249	1256	1260	1260	1270	1256	1253	1252	1251	1248	1246
26	1226	1215	1223	1234	1239	1238	1232	1227	1227	1228	1229	1233	1236	1240	1248	1250	1252	1256	1258	1267	1258	1249	1237	1206	1238
27 *d*	1218	1221	1210	1226	1237	1233	1233	1234	1234	1234	1236	1233	1234	1243	1248	1248	1248	1260	1294	1309	1261	1171	1063	1114	*1227*
28 *d*	1024	1113	1218	1218	1226	1233	1237	1248	1251	1252	1255	1259	1261	1256	1260	1262	1262	1271	1283	1291	1286	1219	1238	1228	1235
29 *d*	1188	1187	1187	1225	1235	1244	1245	1250	1251	1249	1254	1252	1250	1260	1272	1267	1271	1282	1288	1275	1271	1242	1233	1237	1246
30	1226	1207	1213	1234	1243	1244	1244	1245	1244	1243	1244	1251	1250	1249	1250	1253	1256	1256	1260	1267	1266	1260	1255	1234	1246
Mean	*1230*	1233	1236	1239	1241	1242	1242	1243	1242	1240	1237	1235	1235	1241	1249	1252	1255	1259	*1264*	1263	1257	1247	1240	1237	1244

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

108 ESKDALEMUIR — APRIL 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	21 26	759	618	11 21	141	12 14	63·9	31·1	21 20	32·8	18 46	1260	1222	22 03	38	2,2,1,2,2,1,1,5	16	1	83·8
2	22 00	688	626	18 44	62	13 36	69·4	48·3	21 49	21·1	18 10	1315	1229	00 17	86	2,2,2,2,3,3,3,4	21	1	83·3
3	21 40	683	620	10 34	63	14 33	68·5	52·9	08 38	15·6	16 28	1281	1234	11 50	47	2,2,2,3,3,3,2,2	19	1	83·3
4	23 27	713	624	10 26	89	13 00	64·6	44·8	19 00	19·8	19 17	1293	1225	23 43	68	1,1,1,3,3,4,4,4	21	1	83·8
5 *d*	19 39	741	605	13 58	136	13 54	68·0	43·7	00 36	24·3	19 00	1270	1209	02 04	61	4,2,2,3,4,2,4,2	23	1	83·8
6	21 28	709	614	11 46	95	14 30	67·2	43·6	21 24	23·6	16 09	1256	1208	24 00	48	3,3,2,3,3,3,1,4	22	1	83·8
7 *d*	18 58	706	599	10 25	107	01 06	66·5	49·0	18 51	17·5	18 49	1260	1198	03 12	62	4,3,3,3,3,2,3,3	24	1	83·8
8	00 15	685	636	11 37	49	13 00	64·5	50·8	21 20	13·7	18 21	1265	1233	00 09	32	2,2,2,1,2,2,2,3	16	0	83·8
9	22 15	729	646	10 11	83	13 29	62·0	49·5	22 42	12·5	17 47	1251	1230	12 11	21	1,2,1,1,1,1,1,4	12	0	83·8
10	14 36	685	620	13 04	65	12 50	71·2	53·1	21 14	18·1	17 33	1275	1233	12 27	42	1,0,0,3,3,3,2,2	14	1	83·8
11	15 38	694	651	03 32	43	13 31	65·7	53·8	06 16	11·9	17 55	1258	1234	12 05	24	2,2,2,1,3,3,2,2	17	0	83·8
12	18 44	696	629	21 47	67	12 28	62·5	47·5	21 43	15·0	21 33	1268	1228	03 10	40	2,3,2,2,3,2,3,3	20	1	83·8
13	23 13	718	636	01 50	82	12 56	64·3	45·4	03 52	18·9	22 50	1262	1209	02 47	53	3,3,2,2,2,3,2,3	20	1	83·8
14	06 44	684	636	11 51	48	12 48	63·1	54·5	01 42	*8·6*	01 48	1251	1231	11 40	20	2,2,1,2,3,1,1,1	13	0	83·8
15	18 35	693	639	16 24	54	13 34	64·4	54·4	07 29	10·0	19 30	1251	1226	12 42	25	1,1,1,1,3,3,1,1	12	0	83·9
16 *q*	18 40	699	653	11 30	46	13 02	65·8	54·3	08 46	11·5	20 50	1256	1230	11 48	26	0,1,1,1,2,1,2,2	10	0	84·0
17 *q*	19 56	696	639	12 05	57	12 50	64·5	54·1	06 34	10·4	16 24	1252	1234	12 30	*18*	1,1,1,1,2,2,2,1	11	0	84·1
18 *q*	16 31	696	656	10 40	*40*	13 24	63·8	54·1	09 10	9·7	16 47	1256	1232	12 26	24	0,0,0,1,2,2,1,0	6	0	84·0
19 *q*	22 20	698	653	11 46	45	13 15	63·5	54·5	08 16	9·0	03 39	1249	1221	12 10	28	1,1,1,0,1,1,1,1	17	0	84·0
20	00 00	696	647	10 14	49	13 30	65·2	51·4	06 00	13·8	19 00	1263	1226	11 36	37	2,2,2,2,2,2,2,1	15	0	84·0
21	16 51	709	637	14 04	72	13 36	67·2	53·5	07 39	13·7	18 50	1260	1226	11 32	34	2,1,2,2,3,3,2,2	17	0	84·2
22	20 12	714	635	11 08	79	13 50	64·1	50·5	08 09	13·6	19 00	1251	1226	05 14	25	2,3,1,2,1,2,3,1	15	0	84·2
23 *q*	18 43	687	636	11 13	51	12 54	62·8	53·6	07 12	9·2	03 25	1248	1222	11 43	26	0,0,0,1,2,2,0,0	5	0	84·2
24	17 20	735	614	21 24	121	13 09	68·5	38·7	23 39	29·8	19 00	1322	1210	23 56	112	1,1,1,1,4,4,4,4	20	1	84·2
25	19 16	730	631	10 55	99	12 35	65·0	48·0	20 17	17·0	18 27	1272	1210	00 00	62	2,2,1,1,2,3,4,2	17	1	84·4
26	20 25	725	615	11 12	110	13 19	63·8	44·1	02 15	19·7	20 00	1270	1199	23 18	71	4,2,3,3,2,2,4,4	24	1	84·4
27 *d*	16 28	*768*	*235*	22 08	*533*	18 53	69·8	26·0	20 13	43·8	19 42	*1347*	*890*	22 09	*457*	3,2,2,0,1,4,6,7	25	2	84·4
28 *d*	20 44	728	469	00 04	259	21 07	*72·7*	*25·7*	00 04	*47·0*	20 03	1303	898	00 50	405	6,3,3,3,3,4,4,5	31	2	84·4
29 *d*	20 46	750	574	10 15	176	13 19	63·5	40·3	21 51	23·2	18 03	1296	1161	00 55	135	4,3,2,3,3,3,4,4	26	1	84·4
30	23 05	695	610	00 31	85	13 49	62·5	50·6	03 30	11·9	19 30	1270	1203	01 17	67	4,3,2,2,2,3,3,3	22	1	84·4
Mean	- -	710	610	- -	100	- -	65·6	47·4	- -	18·2	- -	1271	1198	- -	73	-	-	0·63	83·9

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.

109 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MAY 1955

	Hour G.M.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	Mean
	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	664	662	655	655	649	656	655	651	647	641	637	642	651	658	662	658	659	667	672	679	671	679	665	671	659
2	670	665	660	663	663	663	661	658	655	652	653	654	662	659	668	654	666	676	679	687	680	675	678	679	666
3	674	672	671	669	667	667	663	658	655	659	661	663	667	670	674	695	680	689	679	682	684	688	687	683	673
4	679	679	674	670	667	662	658	657	653	647	650	664	684	682	680	665	668	681	682	679	669	671	660	672	669
5	669	665	666	673	677	671	670	671	662	653	641	641	653	677	683	674	666	684	699	699	700	704	702	703	675
6 *d*	680	677	670	675	676	664	663	669	660	632	607	626	605	611	609	658	676	682	705	682	682	673	655	674	659
7 *d*	656	679	640	656	622	631	650	636	608	594	630	638	645	652	664	666	675	682	690	698	685	673	670	667	654
8 *d*	662	648	668	682	640	650	643	642	624	619	627	640	628	647	672	695	661	706	693	685	674	648	642	677	657
9	662	663	659	662	659	654	658	647	642	630	633	644	656	662	678	667	694	694	694	680	678	677	677	675	664
10	678	666	670	653	668	668	658	655	655	647	634	622	646	656	661	669	673	691	684	695	676	679	661	667	664
11	667	670	669	668	669	670	666	658	655	647	637	635	639	644	656	663	675	686	684	685	686	682	675	679	665
12	671	670	671	668	661	663	656	651	643	643	648	645	652	656	667	675	676	692	689	687	681	692	680	669	667
13	667	678	663	668	671	671	664	655	652	646	652	661	663	673	676	685	703	695	694	691	701	694	693	687	675
14	691	687	676	674	676	671	672	674	661	654	631	628	650	652	668	660	687	695	682	689	681	676	677	675	670
15	674	669	667	665	668	666	663	664	663	655	648	642	642	646	657	669	676	683	682	687	689	692	698	703	669
16	714	704	688	646	671	674	679	671	660	650	634	632	635	648	662	667	676	682	683	680	678	676	674	674	669
17 *q*	677	674	674	667	668	669	662	654	648	642	639	641	650	656	667	679	688	691	687	685	683	684	688	694	669
18	692	681	679	675	678	677	668	662	658	652	647	648	655	661	665	676	676	687	686	686	692	692	691	690	674
19 *q*	686	685	682	681	680	675	665	658	650	647	647	654	663	670	673	677	681	688	689	689	688	685	686	685	674
20	682	681	677	678	680	684	685	673	666	655	655	653	663	665	676	676	687	695	702	694	688	686	686	684	678
21 *q*	680	679	680	683	684	684	681	673	663	652	650	654	663	680	681	681	685	694	694	688	688	686	688	684	678
22	682	682	682	682	686	683	680	672	662	652	645	653	660	668	676	678	684	668	669	672	668	686	687	686	673
23 *q*	684	686	684	683	683	680	673	666	663	659	660	664	670	678	676	693	691	698	699	699	697	693	689	690	*682*
24 *q*	686	685	683	683	683	682	677	670	664	663	656	661	660	670	686	680	683	680	693	692	691	688	688	686	679
25 *d*	686	681	680	683	686	687	683	672	659	651	649	652	656	660	688	706	730	742	737	708	689	662	583	569	675
26 *d*	596	628	622	658	659	622	611	612	591	575	626	644	650	644	637	635	662	676	679	677	667	666	668	667	*641*
27	667	656	657	663	664	665	662	654	644	635	630	634	654	647	680	730	678	690	711	708	679	657	653	646	665
28	658	643	654	653	653	637	632	656	635	624	629	627	636	655	668	681	678	671	680	682	674	675	674	686	657
29	668	666	663	661	656	652	650	645	635	634	639	641	656	664	667	673	658	680	678	678	682	679	673	669	661
30	665	667	666	666	663	658	652	645	646	651	655	656	658	663	672	668	672	684	695	693	682	676	679	677	667
31	683	673	675	671	672	662	655	651	649	645	648	651	660	662	670	667	680	684	691	687	686	683	684	690	670
Mean	673	672	669	669	668	665	662	657	649	642	*642*	645	653	659	668	675	679	687	*690*	688	683	680	675	676	668

MAGNETIC DECLINATION (WEST)

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

110 ESKDALEMUIR (D) — 10° + — MAY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	56·4	54·4	55·0	55·0	55·1	53·9	52·8	52·6	52·9	54·7	56·2	58·5	60·1	60·0	59·0	58·0	57·3	57·3	57·7	57·4	57·4	55·0	55·6	56·3	56·2
2	55·7	55·6	55·4	54·9	54·6	54·1	52·9	52·1	52·9	55·0	57·7	60·9	62·7	62·1	61·3	59·0	59·0	59·0	58·2	58·3	57·6	56·2	55·3	54·4	56·9
3	55·8	57·6	56·7	53·9	52·7	52·8	52·4	53·1	54·1	56·1	57·7	59·5	60·8	61·1	60·8	61·3	61·0	61·7	60·9	60·6	58·9	58·1	57·6	56·7	57·6
4	56·6	56·3	55·7	55·6	55·1	54·9	55·0	55·0	55·3	56·0	58·4	61·9	63·8	63·0	61·8	60·3	58·7	58·8	58·2	57·2	55·7	55·8	54·3	56·0	57·5
5	54·3	55·3	55·1	55·4	53·1	53·1	53·1	54·7	53·1	54·7	57·1	59·6	61·4	64·4	64·8	62·5	60·8	59·2	59·3	59·2	59·4	58·9	57·8	57·9	57·7
6 *d*	53·3	50·5	51·9	53·2	52·1	50·5	51·9	52·1	51·2	54·7	57·2	63·2	64·7	66·7	67·0	63·9	62·0	59·7	59·8	56·9	58·4	54·2	55·2	45·1	56·5
7 *d*	48·1	49·0	46·4	50·5	52·0	57·6	54·0	50·8	51·4	54·5	58·9	62·4	63·8	64·0	64·2	62·0	61·3	60·6	59·4	51·4	55·4	56·6	56·2	48·2	55·8
8 *d*	45·9	57·0	56·2	55·7	54·5	55·3	53·3	53·2	52·2	54·0	57·2	61·3	63·1	62·3	64·4	65·5	62·4	62·0	59·0	53·4	55·3	50·8	51·8	55·9	56·7
9	55·7	54·8	56·0	57·3	54·9	55·0	54·0	52·6	52·6	54·7	58·2	60·8	61·8	62·1	62·1	60·9	60·8	59·6	56·5	58·4	57·9	57·0	55·8	53·6	57·2
10	56·4	54·6	56·7	57·4	56·1	55·0	54·0	52·8	52·7	53·5	56·2	58·9	60·9	61·7	61·0	60·0	59·0	58·5	58·1	57·7	56·4	54·3	54·6	55·9	56·8
11	55·5	55·9	55·9	56·2	54·9	53·2	53·0	52·2	52·5	53·5	55·5	58·1	59·7	60·5	60·9	60·9	59·9	59·1	57·7	57·6	57·5	56·4	56·1	55·1	56·6
12	55·9	55·5	55·7	54·5	54·9	55·3	52·5	51·2	51·4	52·6	55·5	59·1	61·3	62·5	63·3	63·0	62·1	61·6	59·8	58·1	55·4	54·1	53·4	52·8	56·7
13	54·6	52·8	52·4	53·9	53·9	52·9	53·1	54·5	54·1	55·7	57·7	61·4	64·8	66·2	64·9	63·3	63·1	62·6	61·2	60·9	59·1	56·9	54·1	56·3	57·9
14	57·7	56·1	54·5	54·7	55·7	56·8	57·0	57·2	54·6	55·3	59·1	61·7	62·8	63·3	63·3	61·3	61·1	60·4	58·4	57·6	56·6	57·6	56·2	56·6	*58·1*
15	57·2	57·0	57·6	58·7	57·3	55·1	55·1	54·1	52·6	53·1	55·1	57·8	59·5	60·1	60·6	60·0	59·5	59·0	57·7	57·7	58·1	58·2	58·0	58·3	57·4
16	58·2	51·1	50·5	59·4	55·4	53·4	52·3	51·7	52·3	54·4	57·5	59·4	61·4	62·4	61·9	61·4	60·3	58·2	56·9	57·2	57·3	57·2	57·2	57·5	56·9
17 *q*	56·8	57·1	56·7	56·2	55·6	54·1	53·1	52·0	51·9	52·0	54·6	57·5	59·8	61·3	61·0	60·8	60·0	58·9	58·5	58·0	57·7	58·0	57·6	57·0	56·9
18	56·4	55·7	56·4	56·4	56·3	54·2	52·6	50·7	50·5	52·3	54·7	57·7	60·2	61·3	60·6	59·9	59·1	59·0	58·4	58·1	58·4	58·2	57·9	57·6	56·8
19 *q*	57·2	57·2	56·4	55·7	54·4	53·0	52·3	52·1	53·6	55·9	58·3	61·7	63·3	62·9	61·4	59·5	58·3	58·1	58·2	58·1	57·5	58·2	58·2	58·0	57·5
20	57·2	57·9	57·6	57·3	56·0	54·5	52·6	51·7	52·8	55·8	58·8	58·5	60·3	61·7	61·8	60·8	59·7	58·1	58·0	57·9	58·1	58·2	57·9	57·5	57·5
21 *q*	57·2	57·0	56·9	57·2	54·9	53·5	53·0	52·9	53·1	54·5	57·3	60·2	62·1	62·9	62·2	61·1	59·5	58·1	57·6	57·4	57·3	57·5	57·2	57·2	57·4
22	57·3	56·8	57·7	56·0	54·8	52·1	50·5	50·5	51·7	53·2	56·0	58·7	60·5	61·2	61·7	61·7	60·7	59·3	58·3	58·0	58·2	57·8	57·5	57·1	57·0
23 *q*	57·2	57·3	56·3	55·5	54·5	53·1	52·0	51·2	51·5	53·3	56·6	59·7	61·6	62·2	61·0	60·8	60·0	59·3	59·0	58·5	58·2	57·5	57·2	56·8	57·1
24 *q*	56·5	55·9	55·4	55·5	54·5	53·5	52·8	52·6	52·6	53·5	55·9	59·9	62·2	63·9	64·1	62·7	61·3	60·1	59·9	58·7	57·7	57·8	57·7	56·6	57·6
25 *d*	56·6	56·5	56·7	55·5	54·4	53·5	52·5	51·6	51·2	51·9	54·7	57·3	59·8	61·2	63·5	66·7	67·5	68·2	66·1	59·2	52·4	45·4	40·3	37·3	55·8
26 *d*	41·4	41·9	53·2	52·4	49·6	50·4	51·0	51·1	50·9	55·8	57·4	59·7	61·3	60·9	61·0	60·8	59·8	59·7	59·0	57·5	56·9	57·2	56·6	57·6	*55·1*
27	54·9	54·6	55·3	55·7	53·1	52·2	51·0	51·2	50·9	51·7	54·1	57·2	61·3	63·9	65·1	63·6	62·7	63·5	60·3	54·1	55·8	52·6	55·8	54·6	56·5
28	51·8	51·4	57·1	53·2	52·8	54·0	56·0	56·6	57·2	55·4	56·9	57·3	60·0	62·5	60·7	60·3	60·9	59·0	58·5	56·7	57·8	58·5	57·1	54·7	56·9
29	56·8	55·4	54·3	52·9	53·5	52·7	52·3	51·3	50·9	52·7	56·5	59·1	61·5	61·6	61·1	60·2	57·5	57·0	57·5	58·1	58·4	57·4	55·7	56·9	56·3
30	57·0	56·5	56·3	55·4	54·6	53·3	52·1	52·4	54·1	55·3	57·1	59·5	61·6	62·1	61·7	60·8	58·7	57·7	58·9	58·5	58·2	57·9	56·6	56·6	57·2
31	56·6	54·0	55·9	53·1	52·3	50·5	50·4	52·0	53·1	55·1	57·9	60·1	62·1	63·4	64·0	63·4	61·5	59·9	58·1	58·4	58·2	57·7	58·2	55·0	57·1
Mean	55·1	54·8	55·3	55·3	54·3	53·7	52·9	*52·6*	52·6	54·2	56·8	59·6	61·6	*62·4*	62·3	61·5	60·5	59·8	58·9	57·6	57·3	56·4	55·8	55·1	56·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

111 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — MAY 1955

	Hour G.M.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	Mean
	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	1235	1238	1244	1248	1248	1248	1251	1252	1252	1249	1244	1238	1239	1244	1248	1251	1255	1257	1258	1260	1261	1256	1255	1253	1249
2	1252	1253	1254	1255	1255	1253	1254	1253	1250	1246	1239	1231	1226	1234	1245	1255	1255	1255	1255	1254	1256	1259	1256	1253	1250
3	1250	1249	1246	1249	1251	1249	1247	1246	1247	1239	1232	1228	1229	1234	1242	1248	1253	1257	1262	1259	1256	1255	1253	1252	1247
4	1252	1252	1252	1253	1253	1252	1254	1252	1249	1244	1242	1234	1231	1243	1249	1257	1256	1256	1254	1256	1262	1254	1252	1240	1250
5	1246	1249	1250	1247	1245	1245	1245	1244	1243	1239	1239	1236	1233	1234	1244	1256	1262	1257	1254	1251	1247	1245	1246	1245	1246
6 *d*	1248	1249	1251	1251	1250	1249	1245	1243	1241	1238	1237	1229	1237	1260	1274	1272	1263	1260	1256	1257	1255	1255	1241	1222	1249
7 *d*	1216	1186	1199	1219	1225	1209	1219	1231	1230	1234	1230	1227	1226	1236	1252	1260	1259	1255	1256	1262	1256	1253	1242	1232	1234
8 *d*	1230	1229	1217	1212	1202	1203	1224	1233	1242	1240	1233	1230	1245	1255	1249	1262	1275	1271	1285	1272	1262	1255	1241	1220	1241
9	1229	1241	1247	1248	1247	1250	1251	1255	1252	1243	1237	1233	1237	1244	1252	1255	1256	1265	1267	1261	1256	1256	1255	1250	1249
10	1234	1239	1244	1241	1244	1250	1252	1254	1252	1247	1240	1240	1238	1243	1251	1255	1255	1255	1256	1258	1264	1260	1259	1256	1249
11	1255	1254	1254	1253	1251	1253	1255	1255	1254	1251	1247	1242	1241	1247	1250	1251	1253	1254	1256	1255	1254	1255	1255	1253	1252
12	1252	1252	1252	1252	1254	1252	1253	1253	1250	1243	1236	1233	1235	1242	1245	1250	1256	1260	1267	1270	1269	1257	1234	1239	1250
13	1234	1232	1243	1248	1252	1252	1251	1250	1249	1245	1236	1225	1222	1228	1234	1239	1245	1258	1261	1260	1256	1255	1254	1250	1245
14	1242	1240	1245	1249	1245	1245	1244	1244	1245	1244	1245	1247	1247	1248	1250	1253	1255	1264	1268	1264	1262	1257	1253	1249	1250
15	1248	1248	1247	1245	1248	1250	1251	1250	1250	1249	1244	1243	1243	1245	1245	1248	1251	1255	1258	1257	1254	1252	1249	1245	1249
16	1226	1214	1208	1186	1192	1214	1236	1243	1244	1243	1238	1237	1239	1245	1248	1251	1255	1256	1259	1259	1256	1255	1254	1252	1238
17 *q*	1251	1249	1249	1251	1252	1256	1257	1259	1256	1247	1244	1243	1243	1248	1251	1252	1252	1254	1255	1253	1253	1251	1251	1250	1251
18	1244	1244	1247	1249	1249	1250	1251	1250	1248	1239	1233	1233	1233	1233	1234	1240	1244	1245	1249	1250	1249	1249	1249	1249	1244
19 *q*	1250	1249	1249	1250	1253	1254	1253	1251	1247	1240	1235	1233	1233	1237	1243	1249	1251	1251	1250	1251	1252	1251	1250	1250	1247
20	1250	1249	1248	1246	1246	1244	1243	1242	1236	1230	1222	1220	1222	1227	1235	1242	1249	1252	1251	1249	1248	1247	1247	1248	1241
21 *q*	1249	1250	1250	1249	1249	1248	1247	1247	1245	1238	1227	1222	1224	1230	1243	1249	1254	1255	1255	1251	1250	1248	1248	1248	1245
22	1249	1249	1249	1250	1251	1251	1249	1246	1244	1237	1230	1232	1233	1233	1241	1247	1250	1251	1249	1247	1246	1246	1246	1247	1245
23 *q*	1248	1248	1248	1249	1250	1250	1249	1246	1240	1232	1226	1223	1226	1236	1245	1244	1241	1243	1244	1245	1241	1246	1247	1246	1242
24 *q*	1246	1247	1247	1247	1247	1244	1246	1248	1244	1238	1232	1225	1226	1234	1245	1253	1253	1254	1253	1254	1252	1248	1245	1244	1245
25 *d*	1245	1244	1245	1248	1248	1248	1249	1253	1253	1252	1240	1233	1233	1234	1231	1228	1232	1234	1241	1262	1269	1252	1170	1088	1235
26 *d*	1033	1137	1122	1149	1185	1202	1232	1248	1255	1257	1255	1256	1255	1258	1267	1273	1275	1271	1270	1270	1265	1261	1257	1253	*1229*
27	1247	1251	1255	1255	1259	1261	1261	1256	1251	1249	1246	1238	1237	1249	1252	1274	1283	1276	1278	1274	1265	1251	1226	1213	1254
28	1226	1225	1220	1224	1234	1237	1237	1235	1242	1238	1239	1251	1257	1255	1266	1271	1270	1271	1271	1270	1263	1257	1254	1247	1248
29	1241	1249	1254	1254	1253	1253	1255	1256	1256	1253	1251	1249	1247	1253	1257	1264	1264	1262	1262	1261	1259	1256	1256	1255	*1255*
30	1256	1256	1256	1256	1258	1260	1259	1257	1256	1251	1243	1240	1241	1247	1251	1255	1258	1260	1261	1261	1261	1260	1256	1255	1255
31	1251	1249	1245	1246	1249	1251	1250	1249	1248	1244	1238	1233	1233	1235	1240	1245	1247	1253	1256	1255	1256	1255	1253	1245	1247
Mean	1237	1239	1240	1241	1243	1245	1247	1248	1247	1243	1238	*1235*	1236	1242	1248	1253	1256	1257	*1259*	1258	1257	1253	1247	1240	1246

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

112 ESKDALEMUIR — MAY 1955

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	21 25	698	634	10 00	64	12 39	60·8	52·0	08 14	8·8	20 17	1262	1233	00 07	29	2,2,1,1,1,2,2,3	14	0	84·5
2	19 37	696	646	15 29	50	12 49	63·1	51·8	07 34	11·3	21 36	1260	1224	12 38	36	0,0,1,2,2,2,2,2	11	0	84·5
3	15 46	704	651	08 20	53	17 47	62·0	52·0	06 26	10·0	18 23	1263	1226	11 49	37	2,1,1,1,2,3,2,1	13	0	84·5
4	18 30	691	644	09 33	47	12 46	64·3	51·7	22 22	12·6	20 36	1265	1228	12 20	37	1,0,1,2,3,2,2,3	14	0	84·5
5	21 58	710	636	10 44	74	13 41	65·8	52·5	04 31	13·3	16 10	1265	1231	13 00	34	1,1,2,2,3,4,2,2	17	1	84·4
6 *d*	18 46	723	561	13 15	162	14 00	*74·3*	40·1	23 40	34·2	14 36	1277	1203	22 52	74	3,2,2,3,5,3,3,5	26	1	84·4
7 *d*	00 59	734	577	09 10	157	14 22	65·3	41·6	02 08	23·7	19 28	1266	1181	01 50	85	5,3,3,4,3,3,3,4	28	1	84·4
8 *d*	18 44	769	610	09 14	159	15 06	66·7	43·1	00 11	23·6	18 28	*1294*	1199	04 26	95	4,4,3,3,3,4,5,4	30	1	84·4
9	18 09	719	625	10 02	94	14 40	63·1	51·8	07 15	11·3	18 19	1271	1217	00 00	54	2,2,2,2,2,3,3,2	18	0	84·4
10	21 34	704	610	11 27	94	13 16	61·8	51·6	22 04	10·2	21 02	1266	1231	00 33	35	3,2,2,3,1,2,3,3	19	1	84·4
11	18 53	699	630	10 50	69	15 04	61·3	51·8	07 59	9·5	18 18	1256	1238	11 52	*18*	1,1,1,1,1,2,2,1	10	0	84·4
12	21 50	720	638	09 03	82	14 31	63·3	49·6	21 41	13·7	20 08	1273	1232	11 30	41	0,1,1,2,1,2,3,3	13	0	84·4
13	18 44	717	645	09 27	72	13 12	67·0	50·9	01 53	16·1	18 10	1263	1221	12 20	42	2,1,1,2,3,3,3,2	17	1	84·4
14	17 16	709	618	11 15	91	13 03	64·9	52·7	05 08	12·2	18 17	1270	1238	01 20	32	2,3,2,3,3,3,2,2	20	1	84·5
15	23 56	716	638	12 04	78	14 08	60·8	52·2	08 41	*8·6*	19 05	1260	1239	24 00	21	2,2,2,1,1,2,2,3	15	0	84·5
16	00 25	727	602	03 50	125	03 24	63·9	46·8	02 20	17·1	18 42	1260	1171	03 42	89	4,4,2,3,1,1,1,1	17	1	84·5
17 *q*	24 00	706	636	10 42	70	13 39	61·8	51·2	07 43	10·6	07 50	1260	1241	10 21	19	1,1,1,0,1,1,0,2	7	0	84·5
18	00 02	706	645	11 05	61	15 12	61·7	50·1	08 21	11·6	06 37	1252	1232	13 35	20	2,1,1,0,2,3,2,1	12	0	84·5
19 *q*	20 00	694	641	10 07	53	12 24	63·6	50·8	06 35	12·8	05 56	1255	1232	11 33	23	1,1,2,1,1,1,1,1	9	0	84·5
20	18 40	712	647	09 51	65	14 09	62·3	51·0	07 16	11·3	17 58	1254	1219	10 37	35	1,1,1,2,1,2,2,2	12	0	84·5
21 *q*	17 40	699	645	10 52	54	13 50	63 2	52 7	08 10	10 5	17 55	1256	1221	11 50	35	1,0,1,1,2,2,1,2	10	0	84·4
22	18 03	709	643	10 17	66	14 56	62·1	50·3	07 16	11·8	04 05	1252	1230	10 37	22	2,2,0,1,1,2,3,1	12	0	84·4
23 *q*	18 00	703	656	10 12	47	13 47	62·6	50·9	07 36	11·7	05 30	1251	1222	11 50	29	1,0,1,1,2,2,1,0	8	0	84·4
24 *q*	18 46	700	655	10 45	*45*	13 33	64·4	52·1	07 33	12·3	17 30	1255	1223	12 00	32	0,1,1,0,2,3,2,1	10	0	84·4
25 *d*	18 30	*860*	*481*	23 24	*379*	18 31	69·2	*24·1*	23 25	*45·1*	21 30	1282	1059	23 31	223	1,1,1,1,4,4,5,6	23	2	84·4
26 *d*	17 39	699	534	00 07	165	02 28	63·1	30·2	00 01	32·9	16 21	1279	*1004*	00 21	*275*	5,4,3,5,3,4,3,1	28	1	84·4
27	15 44	772	612	23 00	160	15 18	67·6	43·6	19 34	24·0	15 56	1285	1205	23 22	80	2,1,1,1,4,5,4,4	22	1	84·4
28	23 34	698	604	11 16	94	13 37	63·1	48·8	01 07	14·3	15 00	1273	1216	02 56	57	3,3,4,3,3,3,3,3	25	1	84·4
29	20 34	687	622	09 18	65	14 08	62·4	48·9	08 12	13·5	16 07	1267	1240	00 15	27	2,1,2,2,2,3,1,2	15	0	84·4
30	19 22	701	640	08 04	61	13 09	62·5	51·9	06 35	10·6	20 50	1262	1238	12 32	24	1,1,2,1,2,2,2,1	12	0	84·5
31	23 21	694	643	10 20	51	14 15	64·4	49·5	06 17	14·9	18 57	1256	1232	12 30	24	2,2,2,1,2,1,1,2	13	0	84·5
Mean	- -	715	622	- -	94	- -	63·9	48·3	- -	15·6	- -	1265	1211	- -	54	-	-	0·42	84·4

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.

113 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JUNE 1955

	Hour G.M.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	Mean
	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	679	677	668	681	683	674	668	664	651	644	643	651	658	672	673	694	698	700	692	694	690	689	682	679	675
2	679	675	673	678	674	669	659	650	640	640	644	647	653	659	675	683	685	683	685	684	682	683	683	681	669
3	678	681	679	681	678	674	663	655	650	651	657	655	662	662	674	680	685	696	683	698	687	687	683	684	674
4	682	681	681	680	682	675	655	656	653	646	645	650	660	665	665	670	685	697	696	696	692	675	675	675	672
5 q	677	669	670	674	674	668	659	654	644	642	645	654	655	661	673	673	690	703	699	692	688	682	683	681	671
6	679	677	678	678	678	676	672	662	657	652	646	641	648	660	669	680	688	710	716	718	696	676	669	673	675
7	664	662	688	687	679	674	667	655	646	642	640	652	663	675	674	680	682	690	683	687	689	688	692	701	673
8 d	683	684	691	662	699	679	670	666	652	643	637	639	641	669	661	651	697	706	698	695	689	679	698	666	673
9	667	670	670	675	672	664	654	652	639	634	634	643	648	653	666	679	691	698	705	702	692	679	684	683	669
10 q	677	678	679	681	679	675	668	660	653	646	636	634	646	652	666	682	678	677	680	681	683	679	678	677	669
11	675	674	672	674	673	670	666	662	656	665	665	656	663	673	675	680	698	721	700	701	701	706	716	703	681
12	700	705	700	695	696	691	703	705	683	659	656	656	657	667	671	675	680	682	693	689	687	688	682	687	*684*
13	673	675	670	672	675	672	672	662	663	662	651	655	656	669	649	662	684	693	692	699	696	696	698	697	675
14	686	688	689	692	698	693	682	665	659	662	649	661	653	664	668	685	669	675	682	686	692	684	683	681	677
15 d	683	682	681	668	671	679	672	649	617	631	629	623	647	651	659	679	678	685	688	697	693	685	690	698	668
16 d	688	673	681	664	671	662	658	648	644	634	629	620	653	654	647	667	668	678	694	695	696	685	683	684	666
17	681	681	671	660	662	664	667	658	653	644	624	625	648	662	674	661	668	692	696	700	697	693	696	681	669
18	678	679	677	681	688	677	668	662	653	630	644	652	657	659	664	678	683	685	692	694	689	685	682	680	672
19	678	683	690	678	696	683	672	670	669	655	658	659	670	660	672	675	686	693	701	696	683	682	681	677	678
20	674	674	672	675	675	674	664	655	646	638	637	641	658	672	684	696	711	682	696	698	691	686	683	685	674
21 q	686	686	677	679	679	675	674	659	646	640	639	647	658	665	676	688	689	692	694	697	692	691	688	686	675
22	694	683	683	687	690	687	679	673	667	661	662	657	664	666	685	680	694	698	710	710	701	694	695	692	684
23 d	689	680	686	681	672	674	672	673	670	658	650	657	661	670	685	694	697	713	713	694	714	685	666	654	679
24 d	638	662	663	659	672	672	663	653	639	641	645	649	642	649	645	668	670	678	698	694	701	683	676	683	*664*
25	677	667	676	666	666	670	666	645	651	631	625	621	650	661	659	661	670	687	688	704	694	686	685	686	666
26 q	682	679	676	678	681	679	671	659	649	645	641	638	647	654	668	670	675	688	692	696	694	684	688	674	671
27	672	669	666	671	671	672	666	660	660	658	657	668	666	666	674	676	678	670	688	694	691	687	685	684	673
28	685	688	673	675	671	669	677	674	661	648	640	655	656	657	662	672	680	680	685	686	692	688	681	693	673
29	680	678	673	674	679	676	671	674	670	661	657	657	672	682	673	672	687	694	705	693	688	684	686	685	678
30 q	693	685	689	682	679	677	672	663	658	656	655	658	662	674	681	683	686	689	698	693	691	687	687	688	679
Mean	679	678	678	676	679	675	669	661	653	647	*645*	647	656	663	669	677	684	691	695	*695*	692	686	685	683	673

MAGNETIC DECLINATION (WEST)

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

114 ESKDALEMUIR (D) — 10° + — JUNE 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	55·3	55·3	54·1	53·0	49·8	49·0	49·6	50·7	52·3	55·2	58·0	60·2	62·1	63·7	64·7	64·3	62·4	56·8	59·0	59·5	58·8	58·0	57·1	56·8	56·9
2	58·6	56·2	55·3	54·4	52·8	51·4	51·4	52·3	53·8	55·1	57·4	60·0	63·2	64·3	65·2	61·0	59·5	58·4	57·3	57·3	57·2	58·0	58·0	57·8	57·3
3	57·9	57·9	57·3	56·7	53·6	51·1	50·3	51·7	52·5	55·0	57·6	60·2	62·8	62·9	62·5	61·8	61·1	60·3	59·5	58·1	55·9	57·7	57·0	57·1	57·4
4	56·3	55·5	55·0	54·4	53·6	51·9	51·2	54·3	54·3	56·0	58·2	61·9	65·0	63·3	62·4	61·1	59·9	59·2	58·1	57·6	53·6	55·0	56·4	56·2	57·1
5 q	55·3	54·6	54·3	54·1	53·3	52·3	51·2	49·8	50·5	53·2	56·2	59·0	60·8	61·6	63·1	62·1	61·4	60·6	59·2	56·9	56·4	55·9	57·1	56·6	56·5
6	56·2	55·5	55·2	54·4	52·8	51·8	50·2	50·3	51·2	53·4	56·5	60·0	62·4	62·2	62·0	60·7	59·1	59·9	58·7	58·6	57·0	57·1	52·3	49·5	56·1
7	50·0	50·6	51·0	53·6	50·4	49·4	49·6	51·3	53·2	55·0	58·8	61·7	63·0	63·6	62·8	61·7	59·9	59·0	58·1	58·1	58·0	57·5	57·4	54·5	56·2
8 d	51·7	52·7	51·5	59·3	57·3	51·8	48·6	47·8	50·9	53·5	56·3	61·0	63·3	65·0	64·8	69·3	65·2	59·6	59·5	59·5	59·4	58·6	54·4	56·8	57·4
9	56·7	56·4	56·0	55·6	54·0	52·2	51·5	52·2	52·3	55·3	58·2	60·2	61·3	63·5	64·3	64·1	63·3	62·5	61·3	59·8	58·2	53·6	57·2	57·1	*57·8*
10 q	55·2	54·5	54·2	54·0	52·5	51·0	50·2	50·9	51·7	53·0	54·6	57·5	60·1	60·9	60·6	59·9	58·8	58·0	58·2	58·4	58·1	57·3	57·1	57·4	56·0
11	56·0	55·5	54·9	54·6	54·2	54·0	52·7	52·2	52·7	54·6	56·0	59·2	61·8	63·2	63·4	62·2	62·0	62·1	60·6	59·4	58·5	57·9	54·6	56·6	57·5
12	55·7	55·5	54·7	54·2	56·5	59·9	58·7	56·7	55·1	54·7	57·0	57·8	59·4	59·5	59·4	58·7	58·4	57·5	57·1	56·4	56·6	56·5	57·4	56·3	57·1
13	56·3	57·2	56·6	55·6	54·7	53·1	53·2	54·1	54·8	54·9	57·0	58·7	61·3	61·3	59·1	59·5	59·5	59·1	58·4	57·9	57·7	57·8	56·3	55·8	57·1
14	55·2	56·6	56·7	55·0	53·8	52·7	51·0	50·0	52·3	56·6	57·2	59·7	61·2	61·4	61·8	57·9	59·6	59·5	59·4	58·5	58·2	57·9	58·1	57·8	57·0
15 d	57·4	57·7	61·7	56·2	56·6	50·0	51·1	51·8	54·7	58·6	58·2	59·9	61·6	61·7	61·2	60·6	59·9	58·9	57·4	57·2	57·6	57·6	56·8	55·5	57·5
16 d	53·1	59·4	55·9	55·3	54·1	50·4	50·5	51·1	53·2	53·0	54·9	57·3	60·3	59·8	60·4	60·2	60·0	60·4	59·6	58·8	58·4	57·1	56·4	57·5	56·5
17	57·4	59·8	57·6	56·3	54·6	54·8	52·3	51·4	52·1	53·1	55·2	58·6	61·0	62·2	61·3	59·8	58·7	57·5	58·1	58·6	57·5	57·6	55·0	56·2	56·9
18	56·6	56·2	55·3	56·2	56·1	52·2	51·2	51·3	51·6	54·2	57·9	58·5	59·9	60·2	60·8	60·5	58·9	58·7	58·2	57·4	57·6	56·5	57·1	57·5	56·7
19	56·7	57·1	59·7	55·1	55·4	52·6	52·4	53·1	54·0	56·4	57·2	59·3	60·9	60·9	60·3	59·4	57·7	57·3	57·7	57·2	57·7	56·6	57·1	56·7	57·0
20	56·4	56·1	55·5	54·9	54·1	52·6	50·5	49·8	50·9	53·2	56·0	59·5	62·5	63·8	64·0	62·1	60·7	59·2	57·2	58·0	57·4	57·7	57·7	57·4	57·0
21 q	57·3	57·4	54·5	54·1	52·8	52·6	52·3	51·2	50·9	51·6	54·9	58·4	61·4	61·9	59·3	57·5	57·7	57·9	57·9	58·3	57·8	58·0	57·3	56·9	56·2
22	55·9	55·2	54·5	53·9	52·6	51·8	51·3	51·5	51·7	53·1	55·7	58·6	60·7	60·2	61·3	63·1	62·7	60·7	59·8	59·9	57·5	55·3	58·0	58·5	56·8
23 d	53·1	54·6	54·9	52·6	54·3	56·9	55·9	52·5	49·5	51·3	53·4	57·8	61·1	63·1	64·5	65·4	63·8	63·7	61·9	57·3	56·9	49·3	50·9	45·7	56·3
24 d	44·3	43·3	40·3	45·0	46·4	47·3	47·7	47·3	51·3	52·3	53·6	58·3	61·2	63·5	64·4	64·6	65·2	63·4	60·3	58·2	58·6	55·6	56·5	55·5	*54·3*
25	54·6	56·7	56·8	54·6	55·0	53·5	50·9	52·5	57·7	57·9	56·5	58·7	59·9	61·9	63·4	63·4	62·1	60·7	58·0	54·9	56·6	57·2	57·1	57·2	57·4
26 q	56·3	55·7	56·2	55·3	52·6	50·6	50·8	51·4	51·9	53·8	54·8	57·3	59·4	59·1	59·9	59·1	58·7	58·5	58·5	58·2	58·1	57·0	56·7	56·2	56·1
27	55·6	55·1	54·2	54·1	54·4	52·7	51·6	53·0	54·6	55·4	57·9	59·9	60·0	59·9	60·6	59·9	59·8	59·1	58·9	58·1	57·5	57·1	56·6	57·3	56·8
28	55·4	54·5	54·6	54·4	53·5	53·4	54·2	53·6	53·6	55·8	57·9	60·1	62·8	63·1	61·8	60·0	59·3	58·3	58·3	57·6	57·5	57·3	56·6	58·4	57·2
29	56·0	54·5	53·2	53·8	53·2	51·8	51·3	50·5	50·8	51·7	53·4	56·3	57·5	58·7	59·0	58·2	58·5	58·4	58·7	57·7	55·7	56·5	56·6	56·7	55·4
30 q	54·9	51·3	52·7	52·5	52·6	52·3	52·8	52·8	54·3	55·5	56·8	59·2	60·5	61·7	62·3	61·3	59·3	58·4	58·1	57·7	57·6	57·5	57·4	57·0	56·5
Mean	55·3	55·3	54·8	54·4	53·6	52·2	*51·5*	51·6	52·7	54·4	56·4	59·2	61·3	61·9	*62·0*	61·3	60·4	59·5	58·8	58·0	57·5	56·8	56·5	56·2	56·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

115 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — JUNE 1955

	Hour G.M.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	Mean
	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	1244	1244	1243	1241	1246	1249	1244	1243	1245	1245	1243	1240	1243	1247	1243	1240	1249	1267	1267	1258	1255	1253	1254	1252	1248
2	1248	1247	1249	1251	1253	1254	1251	1250	1249	1241	1232	1230	1237	1243	1244	1246	1252	1254	1256	1260	1259	1256	1254	1253	1249
3	1255	1253	1253	1249	1251	1253	1252	1250	1248	1248	1246	1239	1239	1239	1245	1248	1250	1250	1256	1257	1262	1256	1255	1253	1250
4	1252	1252	1251	1252	1252	1251	1249	1242	1241	1239	1236	1234	1239	1244	1250	1255	1256	1256	1262	1263	1264	1257	1254	1253	1250
5 q	1251	1252	1252	1254	1255	1256	1253	1249	1245	1243	1239	1236	1238	1241	1248	1255	1257	1261	1263	1266	1260	1256	1252	1252	1251
6	1253	1253	1253	1253	1255	1251	1250	1250	1247	1241	1239	1236	1243	1245	1248	1251	1256	1260	1263	1270	1272	1268	1263	1252	1253
7	1243	1244	1236	1229	1240	1248	1250	1250	1249	1245	1239	1236	1237	1242	1248	1251	1252	1253	1253	1251	1249	1248	1248	1237	1245
8 d	1235	1239	1233	1211	1189	1203	1220	1231	1233	1232	1233	1238	1239	1248	1263	1275	1287	1306	1291	1276	1264	1262	1244	1245	1246
9	1249	1253	1255	1256	1256	1256	1256	1252	1252	1246	1243	1244	1247	1251	1255	1256	1257	1256	1255	1255	1256	1261	1255	1251	1253
10 q	1251	1253	1254	1255	1256	1255	1254	1252	1248	1243	1237	1238	1238	1239	1242	1249	1258	1263	1262	1259	1256	1255	1253	1251	1251
11	1250	1250	1251	1251	1252	1255	1255	1255	1248	1237	1234	1231	1233	1239	1240	1247	1250	1257	1264	1265	1264	1258	1253	1244	1249
12	1242	1242	1242	1248	1250	1249	1246	1242	1243	1245	1245	1250	1254	1255	1262	1266	1264	1265	1264	1264	1262	1260	1256	1252	1253
13	1251	1251	1253	1256	1257	1261	1257	1259	1252	1249	1248	1244	1247	1254	1263	1262	1264	1268	1265	1262	1261	1258	1254	1249	1256
14	1245	1248	1250	1252	1251	1254	1252	1251	1249	1242	1243	1246	1251	1253	1259	1268	1272	1277	1279	1277	1271	1264	1256	1254	*1257*
15 d	1252	1250	1231	1223	1232	1240	1246	1248	1253	1254	1252	1249	1251	1253	1257	1257	1257	1265	1272	1267	1262	1260	1255	1242	1251
16 d	1232	1218	1206	1232	1241	1247	1249	1248	1243	1241	1245	1247	1246	1256	1256	1257	1261	1257	1252	1256	1257	1259	1256	1253	1246
17	1250	1245	1243	1240	1244	1245	1248	1255	1256	1253	1248	1241	1244	1249	1256	1258	1262	1262	1262	1261	1264	1260	1247	1246	1252
18	1250	1251	1251	1250	1244	1246	1249	1250	1246	1247	1240	1238	1236	1243	1248	1249	1252	1253	1256	1259	1262	1261	1257	1256	1250
19	1255	1253	1247	1236	1242	1244	1245	1246	1250	1249	1244	1243	1245	1248	1251	1256	1257	1259	1260	1260	1261	1257	1256	1255	1251
20	1255	1254	1254	1254	1255	1255	1251	1251	1248	1243	1235	1229	1232	1237	1243	1245	1252	1262	1263	1257	1255	1252	1251	1250	1249
21 q	1249	1243	1242	1246	1249	1248	1246	1250	1250	1244	1240	1234	1233	1240	1248	1252	1257	1259	1255	1255	1254	1251	1250	1250	1248
22	1247	1249	1251	1253	1253	1253	1251	1249	1245	1243	1234	1222	1221	1231	1238	1242	1241	1248	1255	1257	1260	1260	1251	1240	1246
23 d	1238	1244	1245	1248	1249	1242	1244	1249	1250	1245	1235	1227	1228	1230	1233	1238	1239	1240	1251	1264	1261	1251	1250	1240	1243
24 d	1227	1210	1198	1201	1214	1227	1239	1241	1241	1239	1236	1230	1233	1237	1247	1251	1260	1261	1260	1259	1252	1256	1254	1245	*1238*
25	1244	1240	1234	1244	1245	1245	1245	1248	1243	1242	1243	1241	1243	1244	1247	1255	1262	1265	1267	1266	1260	1255	1251	1251	1249
26 q	1250	1250	1251	1249	1249	1250	1251	1252	1249	1245	1243	1244	1245	1245	1243	1246	1253	1255	1260	1262	1261	1257	1247	1245	1250
27	1246	1245	1248	1250	1252	1252	1251	1249	1243	1238	1238	1236	1238	1238	1239	1245	1252	1256	1254	1253	1253	1252	1251	1250	1247
28	1248	1242	1242	1245	1248	1244	1240	1244	1241	1238	1233	1233	1238	1243	1244	1244	1244	1249	1253	1253	1252	1252	1253	1239	1244
29	1239	1244	1247	1251	1253	1256	1255	1251	1248	1246	1244	1240	1237	1234	1238	1247	1246	1249	1251	1255	1256	1253	1250	1249	1247
30 q	1244	1244	1240	1244	1248	1249	1244	1244	1248	1243	1237	1233	1233	1238	1244	1247	1252	1255	1251	1250	1251	1251	1250	1250	1245
Mean	1247	1245	1243	1244	1246	1248	1248	1248	1247	1243	1240	*1238*	1240	1243	1248	1252	1256	1260	*1261*	1261	1259	1257	1253	1249	1246

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

116 ESKDALEMUIR — JUNE 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 20	719	636	10 55	83	13 30	65·3	48·4	05 50	16·9	17 47	1271	1238	11 30	33	2,2,2,2,3,3,1,1	16	0	84·5
2	23 08	695	634	09 36	61	13 03	64·9	50·6	05 56	14·3	20 07	1260	1229	10 52	31	2,1,1,2,2,3,2,2	15	0	84·5
3	17 50	720	647	07 55	73	13 17	63·2	49·8	05 58	13·4	20 27	1263	1237	13 11	26	1,2,1,1,2,3,3,1	14	0	84·5
4	19 00	706	639	10 10	67	12 30	65·3	49·9	06 09	15·4	20 11	1267	1233	11 30	34	2,2,2,1,3,3,2,2	17	0	84·5
5 q	17 25	714	634	08 57	80	15 01	63·5	49·1	07 48	14·4	19 28	1267	1236	11 18	31	1,1,1,2,2,3,2,1	13	0	84·5
6	17 35	737	639	11 30	98	12 35	62·7	45·6	23 13	17·1	20 00	1275	1234	11 12	41	0,0,0,1,2,3,3,3	12	1	84·5
7	23 04	720	627	10 10	93	12 25	65·1	48·2	05 09	16·9	16 54	1254	1227	03 27	27	3,3,2,3,3,3,2,3	22	1	84·5
8 d	17 05	*764*	612	03 57	*152*	15 30	*72·4*	46·3	07 02	26·1	17 33	*1316*	*1182*	04 23	*134*	2,5,2,3,3,5,3,3	26	1	84·5
9	18 46	711	629	10 50	82	14 30	65·4	50·5	07 49	14·9	21 30	1262	1241	10 27	*21*	1,1,2,2,3,2,3,3	17	0	84·5
10 q	15 04	689	625	10 54	64	13 15	61·7	49·0	06 00	12·7	17 50	1265	1235	10 35	30	1,1,1,2,2,2,1,1	11	0	84·5
11	22 23	736	643	11 40	93	12 59	64·0	51·8	22 14	12·2	19 29	1267	1230	11 30	37	0,1,2,2,3,2,3,2	15	0	84·5
12	06 55	710	642	12 10	68	12 23	60·6	54·0	23 53	6·6	15 41	1267	1241	09 44	26	3,2,2,2,3,1,2,2	17	0	84·5
13	17 32	712	634	14 08	78	13 22	62·1	52·5	06 55	9·6	17 53	1272	1244	11 36	28	1,0,2,1,3,3,2,2	14	0	84·5
14	15 46	716	625	10 24	91	14 27	63·1	47·5	08 08	15·6	18 32	1279	1239	09 50	40	2,2,3,4,3,4,3,1	22	1	84·5
15 d	22 50	721	603	08 25	118	02 38	63·5	48·0	05 53	15·5	18 36	1273	1218	03 00	55	3,3,3,3,3,3,3,3	24	1	84·5
16 d	00 11	709	*600*	10 24	109	01 56	66·1	48·8	06 49	17·3	13 50	1260	1198	02 00	62	4,2,2,3,3,3,2,1	20	1	84·5
17	17 01	715	601	11 03	114	13 53	63·5	50·9	07 12	12·6	20 39	1266	1238	03 41	28	2,2,2,3,3,3,2,3	20	1	84·6
18	19 33	700	625	09 20	75	15 24	61·4	47·9	07 12	13·5	21 01	1262	1234	12 30	28	1,2,2,3,2,2,1,1	14	0	84·6
19	18 38	704	648	10 01	56	02 50	65·6	51·3	05 52	14·3	20 20	1262	1229	03 07	33	3,3,2,2,3,2,2,1	18	0	84·6
20	16 41	729	633	10 11	96	13 53	64·4	49·6	07 30	14·8	18 08	1266	1227	11 48	39	0,0,0,1,2,4,3,1	11	0	84·6
21 q	19 18	705	636	09 40	69	13 07	62·6	50·4	07 56	12·2	17 06	1261	1232	12 35	29	2,1,1,1,2,2,1,1	11	0	84·6
22	18 46	736	645	11 47	91	16 14	64·5	51·0	06 08	13·5	21 14	1263	1216	12 11	47	2,1,0,3,3,3,3,3	18	1	84·6
23 d	20 48	742	641	19 20	101	15 56	66·0	42·5	23 48	23·5	19 48	1270	1226	11 46	44	3,3,3,2,2,3,4,4	24	1	84·6
24 d	20 42	718	607	00 05	111	14 09	66·3	*37·9*	02 30	*28·4*	17 23	1262	1195	02 50	67	4,3,3,3,3,3,3,2	24	1	84·6
25	19 36	720	609	11 15	111	15 09	64·1	49·4	06 44	14·7	19 04	1271	1231	02 14	40	2,1,3,2,3,2,3,1	17	1	84·6
26 q	19 32	700	634	11 24	66	14 13	60·0	50·1	06 09	9·9	19 59	1262	1241	10 20	*21*	1,1,1,1,1,2,1,2	10	0	84·6
27	18 45	699	652	10 20	*47*	16 18	60·9	51·0	06 23	9·9	17 10	1257	1236	11 48	*21*	1,1,2,2,2,3,2,1	14	0	84·6
28	23 03	710	633	10 30	77	13 05	63·5	52·5	05 13	11·0	22 21	1255	1233	11 00	22	2,2,1,2,2,2,2,3	16	0	84·6
29	18 53	709	650	11 01	59	14 11	60·0	54·6	08 06	*5·4*	20 24	1258	1233	13 40	25	2,0,2,2,3,2,3,2	16	0	84·6
30 q	18 50	703	651	10 07	52	14 29	62·7	50·5	01 08	12·2	17 02	1255	1233	11 42	22	2,0,2,2,3,2,3,2	11	0	84·6
Mean	- -	716	631	- -	85	- -	63·8	49·3	- -	14·5	- -	1266	1229	- -	37	-	-	-	84·5

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.

117 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JULY 1955

	Hour G.M.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	Mean
	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	690	688	683	678	675	672	670	671	667	658	658	659	662	668	678	684	690	697	698	698	696	691	691	689	680
2 *d*	689	691	690	695	687	683	674	665	661	660	657	656	665	681	670	691	680	732	733	696	673	652	663	665	680
3	671	679	657	644	674	661	658	657	649	643	638	642	646	645	657	664	673	678	688	689	690	684	676	677	*664*
4 *q*	676	673	670	671	675	673	666	669	659	658	652	651	646	657	663	669	677	684	686	690	686	677	676	674	670
5 *q*	674	672	671	677	674	670	669	670	656	644	640	645	653	656	671	676	682	681	687	687	694	688	682	682	671
6	681	677	676	678	679	673	667	666	661	654	653	655	659	663	676	697	685	703	717	710	721	725	713	696	683
7	698	698	687	695	687	680	679	675	662	646	639	638	640	656	675	681	688	690	694	691	686	687	686	684	677
8	681	680	681	672	679	677	673	664	666	644	651	661	654	649	674	684	715	680	708	711	706	691	687	683	678
9	679	681	680	685	687	684	677	671	666	658	654	651	648	667	671	669	683	687	691	689	689	684	687	689	676
10	678	675	678	683	680	683	682	676	663	650	645	648	625	660	687	690	678	683	697	695	691	692	680	678	675
11 *d*	675	668	677	680	678	678	669	654	648	616	632	650	680	655	672	678	705	677	677	689	685	682	693	691	671
12 *d*	701	655	662	667	672	676	680	667	646	646	650	639	640	652	662	670	685	688	686	685	683	678	652	648	666
13	654	674	677	675	674	674	670	666	661	661	659	658	658	650	673	684	665	682	685	692	688	685	681	678	672
14	678	669	673	677	685	681	673	676	672	656	652	659	667	668	670	685	695	684	695	694	687	682	681	679	677
15 *d*	678	681	679	678	677	673	669	667	660	656	656	659	660	682	676	684	678	703	707	701	696	695	685	682	678
16	680	677	675	668	682	680	671	659	648	648	648	647	646	667	675	684	692	704	694	706	693	689	686	684	675
17	682	680	684	681	668	681	681	670	656	646	643	646	650	656	669	674	685	691	692	694	693	692	690	680	674
18	680	683	683	684	674	671	667	672	661	658	654	652	648	664	674	678	680	684	693	698	690	686	684	682	675
19 *q*	679	676	678	678	678	673	667	659	648	643	646	659	666	679	682	684	681	687	689	687	687	686	685	688	674
20	687	685	688	685	685	680	673	665	658	659	657	654	659	666	687	684	691	698	704	707	696	685	680	677	680
21 *q*	680	682	684	686	682	680	674	665	652	645	639	648	662	673	681	689	689	697	699	697	691	697	684	681	677
22	681	682	682	683	677	677	670	665	656	658	664	654	654	654	661	675	687	696	691	693	690	695	697	691	676
23	674	686	689	691	695	693	685	676	668	658	648	649	652	657	671	677	690	697	711	705	701	686	685	684	680
24	678	697	701	705	688	685	676	668	660	657	655	653	644	654	666	673	687	684	692	692	693	693	692	691	679
25	687	680	680	684	684	684	680	672	661	647	636	635	648	662	673	686	683	685	689	691	695	693	693	686	676
26	676	682	678	676	678	682	685	691	687	680	664	653	661	661	673	677	690	706	697	704	697	697	688	690	682
27	691	687	670	676	678	677	675	673	666	658	648	648	654	663	669	672	682	693	698	700	706	695	691	689	677
28 *q*	686	688	685	684	682	681	681	677	668	656	651	649	659	664	675	685	687	680	684	688	690	690	686	688	678
29	682	681	688	682	681	677	677	677	676	668	661	656	661	668	681	698	702	705	710	694	693	686	689	696	*683*
30	683	683	684	686	684	680	671	668	665	659	654	646	646	657	672	678	682	688	693	692	702	694	689	681	677
31	678	695	681	677	674	673	666	669	665	658	647	648	650	645	661	666	684	692	690	693	690	686	682	680	673
Mean	681	681	680	680	680	678	673	669	661	653	*650*	651	654	661	672	680	686	691	*696*	695	693	689	685	683	676

MAGNETIC DECLINATION (WEST)

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

118 ESKDALEMUIR (D) — 10° + — JULY 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	57·1	57·8	55·0	53·9	52·1	52·3	53·0	51·1	49·9	51·0	53·5	56·2	59·2	61·6	61·7	60·2	58·9	58·7	57·7	57·5	57·4	57·5	57·6	57·1	56·2
2 *d*	56·6	56·4	55·6	51·2	48·7	49·2	48·7	50·4	51·3	52·3	55·0	57·7	61·3	63·2	65·3	64·9	61·6	62·0	61·6	57·6	47·3	49·1	54·3	55·7	55·7
3	55·2	57·1	53·7	54·0	58·0	53·3	52·5	51·2	51·3	51·8	54·8	57·2	59·0	61·1	61·8	60·6	59·0	58·3	57·2	56·2	55·4	54·5	54·4	55·3	56·0
4 *q*	55·2	55·2	54·5	55·1	53·9	52·3	50·6	50·3	51·0	52·5	54·1	56·9	59·6	62·1	63·0	61·6	59·9	58·5	57·1	56·5	55·8	55·0	55·3	55·1	55·9
5 *q*	54·9	54·6	56·0	55·2	52·9	51·3	50·3	49·6	49·4	51·0	54·2	57·2	60·0	61·7	62·6	62·7	60·9	58·6	57·3	56·3	55·9	55·4	54·8	54·8	55·7
6	54·5	53·8	53·4	53·6	53·1	51·5	52·0	51·8	53·4	55·2	57·2	59·9	61·8	63·1	63·9	64·3	63·2	62·8	62·1	61·0	60·6	59·1	56·2	55·3	*57·6*
7	55·9	54·7	55·8	50·9	50·8	51·9	51·8	51·8	51·8	52·4	54·1	57·2	59·8	60·9	61·6	60·9	59·1	58·7	57·7	55·7	55·3	55·8	54·9	57·1	55·7
8	55·4	55·3	55·3	54·9	55·3	51·9	49·9	49·5	50·0	52·5	55·0	57·1	60·9	61·7	61·4	60·9	60·8	57·4	58·3	57·2	53·9	56·7	57·0	56·3	56·0
9	55·9	55·5	55·0	53·9	52·6	51·1	50·5	50·5	50·7	53·2	56·7	60·1	62·1	60·8	60·0	58·9	58·0	57·2	55·8	55·4	56·2	55·9	56·3	53·6	55·7
10	54·1	54·3	55·1	55·4	54·6	53·5	51·3	50·1	50·5	53·0	56·1	59·0	60·0	61·1	62·1	62·1	61·0	59·9	57·7	57·9	58·3	57·6	54·8	55·4	56·5
11 *d*	54·2	56·4	57·0	52·2	49·6	48·8	48·6	51·3	54·9	55·7	58·5	57·8	60·8	61·7	59·3	58·6	60·0	57·7	57·4	57·8	56·4	55·9	56·9	58·1	56·1
12 *d*	60·7	54·9	52·3	51·9	51·3	50·1	50·2	53·5	56·3	58·1	57·7	57·1	58·3	58·7	58·3	59·0	57·3	56·6	57·9	58·4	57·0	58·9	57·2	50·9	55·9
13	55·9	56·8	54·1	53·7	53·8	53·8	51·0	50·7	51·1	53·3	55·6	57·8	61·2	61·3	62·5	62·4	59·5	58·3	58·2	57·7	56·5	56·7	57·3	56·6	56·5
14	55·9	55·2	54·9	53·7	52·3	52·2	53·7	52·4	52·3	54·2	56·0	57·4	59·1	60·3	60·3	59·2	59·0	57·6	56·9	57·7	57·5	57·0	56·4	55·9	56·1
15 *d*	55·3	55·0	54·1	53·5	52·2	51·6	51·4	50·6	50·7	51·6	54·5	57·3	59·8	61·3	61·9	62·1	61·6	61·3	60·0	59·4	56·1	52·8	56·8	56·6	56·1
16	58·4	60·5	56·0	54·8	54·1	51·0	50·6	50·1	50·5	51·0	53·1	56·5	59·8	60·9	59·7	59·6	59·7	59·0	58·2	57·7	55·3	52·6	55·8	55·7	55·9
17	55·3	54·7	54·9	53·1	54·6	55·9	50·6	50·0	50·7	51·8	55·7	57·7	59·2	59·9	60·7	59·8	58·6	58·3	57·8	57·5	57·2	55·2	55·2	54·9	55·8
18	54·9	54·8	54·4	54·3	53·1	55·9	54·4	53·6	52·7	53·0	54·4	59·3	62·3	62·0	59·7	58·5	57·4	55·9	55·4	55·9	56·7	57·0	57·1	56·7	56·2
19 *q*	56·5	55·6	54·7	53·6	52·6	51·1	51·0	50·8	51·8	54·9	57·4	60·0	62·8	63·9	62·4	61·0	59·3	57·7	57·3	57·2	56·7	56·3	56·2	56·2	56·5
20	55·9	55·4	55·5	54·4	53·2	52·4	52·4	51·9	51·8	54·2	57·3	59·5	59·5	59·3	59·9	58·8	57·2	56·6	56·5	56·6	54·8	55·0	55·8	56·7	55·9
21 *q*	55·5	55·5	54·1	54·6	53·6	52·3	51·5	51·2	52·4	53·9	56·3	59·0	61·8	62·4	62·4	60·8	58·4	57·3	56·9	56·9	56·4	54·3	51·2	54·0	55·9
22	54·9	54·5	54·5	54·4	53·4	52·7	51·0	50·7	51·0	53·6	56·5	59·3	61·5	62·0	62·3	61·7	59·9	57·5	56·3	55·8	55·8	56·2	55·4	50·8	55·9
23	52·5	53·2	53·6	53·1	52·3	51·7	51·0	51·5	51·0	52·0	53·8	57·7	61·3	62·5	62·3	61·1	59·9	57·9	57·2	56·9	57·2	55·4	53·8	51·8	55·4
24	51·1	53·4	52·9	53·1	50·0	50·7	49·3	50·0	50·7	51·3	53·7	56·6	59·0	61·0	61·0	60·1	59·7	58·1	56·7	56·3	56·3	56·3	56·1	54·9	*54·9*
25	52·8	53·4	53·8	52·6	52·8	51·2	53·3	52·7	51·9	52·6	55·6	57·9	60·3	62·7	63·5	62·0	60·0	58·8	57·9	57·2	56·5	56·3	54·9	53·8	56·0
26 *d*	52·0	54·4	52·7	52·7	51·1	51·8	49·9	50·0	50·0	51·8	55·3	58·0	61·3	63·2	62·7	61·2	61·1	59·7	57·7	58·5	51·8	53·8	53·0	55·4	55·4
27	55·1	53·3	54·1	53·8	52·1	50·1	49·9	49·9	50·0	51·7	54·7	56·4	59·1	61·1	61·8	60·8	60·3	60·0	59·5	58·2	56·5	55·6	55·9	55·2	55·6
28 *q*	54·6	54·5	54·0	54·6	53·8	52·6	52·0	52·4	49·9	50·5	51·9	53·7	57·1	60·3	61·4	60·8	59·1	57·3	57·0	56·5	56·6	55·9	55·2	53·7	55·2
29	54·5	56·7	56·3	53·4	52·6	51·4	52·2	51·8	50·8	51·8	54·9	58·5	62·5	64·3	64·0	61·7	60·0	59·4	59·0	58·3	54·2	55·9	56·5	54·8	56·5
30	55·8	55·3	54·5	54·3	52·8	50·5	50·1	51·8	51·0	50·9	53·8	57·3	61·5	63·2	62·6	61·2	60·0	58·1	56·5	56·2	56·9	56·5	54·1	54·9	55·8
31	55·4	56·3	54·3	52·2	51·3	49·6	51·2	52·2	52·4	54·5	57·2	60·8	63·6	63·2	63·2	61·7	60·4	58·7	57·1	56·5	56·3	56·5	56·4	56·0	56·5
Mean	55·2	55·3	54·6	53·6	52·7	51·8	51·2	*51·1*	51·4	52·8	55·3	57·9	60·5	61·7	*61·8*	60·9	59·7	58·5	57·7	57·2	56·0	55·7	55·6	55·1	56·0

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

119 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — JULY 1955

	Hour G.M.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	Mean
	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	1248	1244	1244	1247	1249	1249	1246	1247	1244	1241	1232	1226	1232	1234	1234	1236	1242	1248	1247	1248	1250	1251	1250	1250	1243
2 *d*	1249	1246	1241	1237	1240	1243	1243	1240	1232	1225	1225	1225	1228	1228	1230	1233	1238	1243	1260	1263	1258	1251	1259	1257	*1241*
3	1255	1243	1238	1236	1219	1227	1233	1240	1244	1240	1238	1234	1242	1245	1249	1251	1255	1256	1256	1259	1258	1258	1256	1252	1245
4 *q*	1251	1251	1250	1249	1248	1248	1247	1248	1252	1251	1247	1243	1241	1241	1246	1251	1255	1256	1256	1257	1256	1256	1255	1254	1250
5 *q*	1252	1252	1251	1251	1252	1254	1252	1252	1250	1248	1247	1244	1244	1245	1250	1253	1256	1258	1260	1257	1256	1256	1255	1253	1252
6	1251	1251	1252	1253	1253	1252	1248	1247	1247	1245	1241	1240	1244	1245	1248	1247	1250	1255	1260	1259	1254	1253	1256	1256	1250
7	1252	1243	1228	1213	1220	1227	1234	1239	1244	1245	1241	1238	1239	1243	1245	1252	1264	1266	1262	1261	1257	1255	1253	1248	1245
8	1249	1251	1252	1253	1249	1249	1250	1250	1245	1244	1243	1234	1243	1249	1250	1254	1262	1270	1269	1273	1270	1261	1256	1255	1253
9	1255	1255	1256	1257	1259	1259	1256	1248	1244	1241	1238	1239	1244	1248	1255	1257	1258	1260	1259	1256	1256	1253	1251	1250	1252
10	1249	1250	1251	1252	1252	1254	1252	1250	1249	1244	1248	1243	1244	1243	1249	1260	1273	1279	1280	1273	1265	1260	1256	1252	1255
11 *d*	1247	1247	1233	1236	1246	1250	1250	1249	1246	1250	1245	1245	1243	1251	1259	1264	1262	1262	1259	1255	1256	1255	1251	1249	1250
12 *d*	1219	1191	1225	1243	1252	1250	1250	1252	1249	1245	1248	1255	1263	1268	1278	1291	1302	1303	1298	1290	1280	1260	1242	1242	*1258*
13	1241	1232	1244	1251	1256	1256	1256	1256	1252	1251	1250	1248	1248	1252	1253	1255	1256	1263	1262	1262	1263	1263	1258	1256	1253
14	1255	1253	1256	1257	1256	1252	1252	1251	1253	1251	1247	1237	1238	1246	1251	1253	1261	1267	1264	1262	1260	1256	1256	1254	1254
15 *d*	1253	1252	1252	1252	1254	1255	1251	1249	1245	1243	1237	1232	1235	1239	1255	1260	1261	1256	1257	1257	1262	1262	1253	1253	1251
16	1251	1227	1225	1234	1235	1242	1245	1246	1247	1244	1240	1239	1239	1243	1247	1252	1257	1259	1262	1261	1263	1262	1256	1253	1247
17	1253	1253	1251	1252	1252	1243	1242	1247	1250	1253	1246	1240	1239	1236	1241	1249	1256	1256	1255	1251	1251	1252	1251	1251	1249
18	1251	1251	1251	1251	1251	1247	1238	1233	1233	1234	1238	1239	1239	1250	1255	1262	1266	1266	1266	1265	1258	1256	1255	1254	1250
19 *q*	1253	1253	1254	1252	1253	1256	1253	1250	1249	1239	1233	1228	1228	1233	1240	1245	1255	1254	1251	1251	1251	1251	1250	1250	1247
20	1250	1250	1250	1251	1252	1254	1251	1248	1246	1239	1229	1222	1228	1234	1245	1251	1253	1257	1257	1256	1260	1256	1254	1252	1248
21 *q*	1251	1250	1248	1249	1252	1252	1252	1251	1252	1244	1238	1238	1236	1237	1243	1249	1257	1262	1263	1262	1261	1256	1250	1248	1250
22	1249	1250	1251	1251	1252	1253	1251	1249	1246	1246	1241	1236	1237	1240	1244	1244	1248	1255	1256	1256	1253	1251	1250	1250	1248
23	1249	1244	1247	1250	1254	1253	1253	1255	1253	1246	1241	1238	1237	1238	1239	1245	1251	1255	1255	1254	1254	1255	1254	1244	1249
24	1245	1244	1245	1247	1251	1251	1248	1245	1244	1243	1238	1234	1232	1232	1236	1240	1248	1252	1252	1251	1251	1249	1248	1249	1245
25	1247	1247	1244	1244	1248	1248	1245	1245	1245	1241	1240	1238	1237	1240	1241	1244	1251	1253	1251	1251	1250	1250	1250	1246	1246
26 *d*	1245	1243	1244	1246	1249	1249	1244	1241	1239	1237	1237	1231	1224	1229	1235	1243	1244	1248	1251	1255	1259	1249	1244	1244	1243
27	1240	1236	1240	1243	1248	1251	1247	1245	1245	1240	1234	1230	1234	1239	1245	1246	1249	1248	1249	1251	1250	1248	1248	1248	1244
28 *q*	1248	1248	1248	1248	1249	1250	1248	1251	1252	1248	1245	1236	1231	1236	1238	1240	1251	1256	1256	1255	1255	1253	1251	1249	1248
29	1249	1248	1244	1245	1249	1251	1251	1250	1249	1245	1244	1238	1233	1235	1237	1243	1250	1250	1249	1251	1256	1257	1251	1244	1247
30	1245	1245	1248	1249	1250	1250	1250	1249	1245	1243	1233	1232	1228	1229	1232	1238	1244	1249	1249	1249	1246	1246	1248	1248	1244
31	1246	1238	1240	1244	1249	1249	1245	1244	1245	1244	1241	1238	1240	1245	1248	1251	1255	1256	1256	1255	1254	1251	1250	1249	1247
Mean	1248	1245	1245	1247	1248	1249	1248	1247	1246	1243	1240	*1237*	1238	1241	1246	1250	1256	1259	*1259*	1258	1257	1255	1252	1250	1249

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

120 ESKDALEMUIR — JULY 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				°A.
1	18 57	702	10 56	649	53	14 08	62·1	08 25	49·5	12·6	21 10	1252	12 10	1229	23	2,1,2,2,1,1,1,0	10	0	84·7
2 *d*	17 07	*776*	20 52	639	*137*	14 02	67·1	*39·5*	20 53	*27·6*	19 22	1273	10 10	1225	48	1,3,1,2,3,5,5,4	24	1	84·7
3	16 20	703	10 08	626	77	13 59	62·3	49·5	07 55	12·8	19 55	1260	04 40	1217	43	3,3,2,2,2,3,2,1	18	1	84·7
4 *q*	19 59	694	12 35	641	53	14 08	63·2	49·8	06 54	13·4	19 08	1257	13 32	1240	*17*	1,1,2,1,1,1,1,0	8	0	84·7
5 *q*	20 56	697	10 34	638	59	15 00	63·1	48·7	08 14	14·4	18 20	1261	11 50	1243	18	1,1,1,1,1,2,1,1	9	0	84·7
6	21 18	732	11 14	650	82	15 08	63·9	50·9	05 17	13·0	18 50	1262	11 05	1239	23	1,1,1,1,1,3,2,3	13	0	84·7
7	01 17	721	12 07	628	93	14 51	62·4	48·2	03 46	14·2	17 20	1267	03 34	1210	57	3,3,2,2,3,3,2,2	20	1	84·7
8	16 42	751	09 44	634	117	16 41	62·5	48·7	08 11	13·8	20 08	1275	11 39	1233	42	0,1,2,3,2,4,3,1	16	1	84·7
9	20 20	695	12 23	640	55	12 49	62·6	49·5	06 35	13·1	17 49	1262	10 11	1237	25	1,1,1,2,2,1,1,2	11	0	84·8
10	15 58	714	12 02	613	101	15 59	64·2	49·4	07 06	14·8	18 22	1282	11 40	1241	41	1,1,2,3,4,3,2,2	18	1	84·7
11 *d*	16 36	730	*595*	09 45	135	13 24	62·4	48·1	05 42	14·3	17 10	1266	02 30	1231	35	3,2,3,4,3,4,3,2	24	1	84·8
12 *d*	04 35	725	11 13	620	105	00 34	*70·8*	49·4	23 33	21·4	17 16	*1305*	*1181*	01 03	*124*	4,2,3,3,3,3,2,4	24	1	84·9
13	15 38	705	13 14	634	71	15 26	63·1	50·4	07 33	12·7	17 44	1266	01 22	1228	38	3,2,1,1,3,3,2,1	16	0	84·8
14	16 49	699	10 50	649	*50*	14 04	61·3	50·7	04 55	10·6	17 30	1268	12 07	1234	34	2,2,2,1,3,2,1,0	13	0	84·8
15 *d*	15 24	752	14 53	630	122	15 24	65·3	48·0	21 04	17·3	21 01	1267	11 57	1230	37	1,1,1,2,4,5,3,3	20	1	84·8
16	19 29	720	12 11	634	86	01 16	62·6	48·8	21 20	13·8	20 53	1266	02 02	1222	44	3,2,1,2,2,2,3,3	18	0	84·8
17	20 03	702	10 06	637	65	14 29	60·7	49·1	07 40	11·6	17 09	1259	13 40	1234	25	1,3,2,1,1,1,2,2	13	0	84·8
18	19 24	703	12 04	641	62	12 56	63·1	51·7	04 53	11·4	16 30	1267	07 54	1232	35	2,3,2,1,1,1,2,1	13	0	84·8
19 *q*	17 45	692	09 45	641	51	13 16	64·0	50·3	05 58	13·7	05 40	1256	12 10	1227	29	1,1,1,2,1,2,0,1	9	0	84·7
20	19 04	713	12 00	650	63	14 46	60·3	51·6	08 24	*8·7*	20 42	1260	11 21	1221	39	2,0,1,2,2,2,2,1	12	0	84·6
21 *q*	21 53	719	10 25	637	82	13 19	62·7	50·0	21 49	12·7	17 50	1264	13 00	1233	31	1,1,0,1,0,2,1,3	9	0	84·6
22	22 31	702	11 29	650	52	14 10	62·7	49·5	23 57	13·2	17 55	1257	11 18	1234	23	1,1,0,2,2,2,1,3	12	0	84·6
23	19 07	724	11 10	639	85	14 46	62·4	48·4	23 59	14·0	17 40	1257	12 35	1236	21	2,1,1,2,2,1,2,3	14	0	84·6
24	03 56	713	11 45	630	83	14 10	61·8	47·2	07 04	14·6	04 16	1254	12 58	1229	25	2,3,2,3,2,2,2,2	18	1	84·6
25	20 43	702	10 51	629	73	14 20	65·1	50·7	05 35	14·4	17 25	1255	12 12	1234	21	2,1,2,2,2,2,2,2	15	0	84·6
26 *d*	21 23	721	13 03	613	108	13 41	65·4	48·0	20 49	17·4	21 00	1262	12 25	1221	41	2,2,2,3,4,3,3,3	22	1	84·6
27	20 07	713	10 40	641	72	14 27	62·4	48·8	05 44	13·6	19 44	1252	11 12	1229	23	3,1,1,2,1,2,2,2	14	0	84·6
28 *q*	23 03	698	11 36	648	*50*	14 59	61·6	49·3	07 48	12·3	18 05	1257	12 15	1228	29	1,0,1,2,2,2,0,2	10	0	84·6
29	18 29	722	12 04	650	72	14 07	64·5	50·2	08 33	14·3	20 50	1263	12 42	1232	31	2,1,2,1,1,1,3,3	14	0	84·6
30	18 11	707	12 46	635	72	13 46	63·4	49·5	06 02	13·9	05 10	1252	12 35	1228	24	0,2,1,2,2,2,2,2	13	0	84·6
31	01 24	711	13 36	637	74	13 00	64·2	49·1	06 05	15·1	17 50	1257	11 48	1238	19	3,1,2,1,2,2,1,1	13	0	84·6
Mean	– –	715	– –	635	79	– –	63·3	49·1	– –	14·2	– –	1263	– –	1229	34	–	–	0·32	84·7

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.

121 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — AUGUST 1955

	Hour G.M.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	Mean
	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*	678	675	676	676	680	680	673	665	656	657	654	652	667	676	678	680	693	708	697	693	693	694	693	693	679
2	693	696	689	686	685	682	677	672	666	660	656	661	665	671	677	679	687	694	699	703	705	696	682	685	682
3	680	664	678	693	689	690	677	661	656	655	652	658	658	680	680	667	680	694	693	696	696	696	699	702	679
4 *d*	676	680	685	693	682	693	701	682	664	648	593	594	601	673	654	669	698	702	689	670	676	677	668	667	668
5 *d*	677	673	673	673	669	674	669	657	629	639	650	638	626	647	666	664	681	682	697	707	706	682	680	699	669
6 *d*	680	680	680	692	693	688	642	640	632	631	632	644	641	654	680	708	707	733	712	697	691	659	687	652	673
7 *d*	652	665	662	661	666	657	657	638	621	617	628	624	630	634	661	673	677	693	698	694	707	678	679	677	*660*
8	673	657	665	670	671	671	669	664	654	637	629	641	650	646	662	676	682	687	690	691	685	682	678	682	667
9	673	671	673	672	674	677	673	665	654	648	639	637	645	657	664	672	669	678	687	693	692	685	684	679	669
10	678	678	679	688	684	686	684	674	666	656	651	654	669	667	667	677	678	685	691	693	690	691	689	685	677
11 *q*	684	682	682	684	680	677	673	666	665	658	655	656	666	672	677	685	684	687	690	696	697	695	689	684	679
12	687	691	687	677	679	681	680	674	669	660	661	664	662	668	667	668	678	688	695	692	693	691	690	686	679
13	684	687	681	679	679	669	667	664	656	648	656	670	677	681	685	680	687	687	688	694	700	697	700	692	679
14	683	685	688	684	687	683	677	674	668	667	663	657	670	671	672	681	695	716	685	702	699	690	687	698	*683*
15	692	686	687	704	700	687	668	665	662	659	653	664	682	678	662	667	672	671	678	682	682	681	678	676	677
16	674	675	675	672	670	675	673	679	673	665	661	656	652	651	658	667	674	682	688	691	688	685	687	683	673
17	683	681	680	679	678	677	671	660	650	646	651	652	661	659	668	681	698	698	683	691	690	691	692	689	675
18	681	680	681	681	683	675	667	674	673	666	654	648	661	671	674	662	674	686	693	685	678	687	686	680	675
19	671	672	674	680	682	674	682	675	667	653	652	650	650	666	675	683	684	688	686	689	687	685	679	680	674
20	681	678	679	678	677	675	673	665	656	649	641	644	656	668	682	676	675	694	694	687	685	685	684	684	674
21	700	683	676	677	673	676	671	667	666	659	655	655	659	670	678	681	684	689	689	689	687	686	684	686	677
22 *q*	684	683	680	680	679	675	668	663	659	657	661	666	671	678	680	681	682	687	687	692	692	690	688	683	678
23 *q*	686	684	684	684	682	682	675	665	660	659	658	658	659	665	675	678	683	689	694	695	693	690	688	687	678
24	685	684	682	680	681	688	690	681	672	662	660	652	657	669	672	677	682	693	700	698	701	694	690	687	681
25 *q*	687	687	687	685	686	684	679	673	667	666	667	667	675	669	678	682	680	693	693	695	687	691	691	692	682
26	693	692	688	682	676	672	670	659	658	654	662	663	672	680	675	675	671	678	687	687	688	687	685	685	677
27	685	683	680	679	678	678	675	669	667	663	663	667	674	681	682	687	681	688	685	693	704	698	694	687	681
28 *d*	688	687	687	689	674	669	636	643	631	666	666	655	661	659	656	661	671	677	679	687	684	683	683	684	670
29	685	681	675	671	663	657	662	666	662	652	649	652	667	672	685	673	677	675	676	692	674	675	671	672	670
30	674	672	669	669	670	667	663	659	654	646	644	650	665	671	675	675	675	670	677	683	684	686	683	687	669
31	680	680	674	675	678	676	673	664	654	655	659	652	666	676	679	669	672	675	683	684	690	691	695	679	674
Mean	681	680	679	680	679	677	671	665	658	653	*651*	652	659	667	672	676	682	689	690	*692*	691	687	686	684	675

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

122 ESKDALEMUIR (D) — 10° + — AUGUST 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *q*	55·9	54·9	55·1	54·4	53·1	52·2	52·2	51·9	51·9	52·5	55·6	58·3	60·0	60·3	59·4	58·2	57·6	56·8	57·1	57·3	57·0	55·0	54·9	55·1	55·7
2	55·5	55·6	58·7	53·5	51·5	50·1	50·2	50·8	50·5	52·1	54·6	56·9	58·6	59·8	60·6	60·0	59·0	57·9	57·1	57·1	57·2	52·5	51·5	52·8	55·2
3	48·2	51·9	58·1	50·7	50·1	49·7	50·2	52·3	51·7	50·6	53·7	58·8	61·9	64·3	64·3	61·9	58·9	59·7	57·8	57·1	57·2	56·2	55·7	50·8	55·5
4 *d*	51·3	48·8	50·0	51·1	54·4	58·1	51·9	49·3	50·8	52·2	55·6	63·1	65·1	67·1	69·1	64·6	60·6	59·4	50·2	55·6	57·6	54·3	50·8	52·9	56·0
5 *d*	56·0	56·3	54·7	54·0	53·7	51·1	50·9	51·0	54·9	53·5	54·2	58·7	61·6	61·3	60·7	60·0	58·1	56·4	55·6	55·6	48·6	49·5	53·7	59·1	55·4
6 *d*	51·5	51·1	51·1	54·4	56·2	54·9	56·5	60·1	56·3	55·8	56·1	57·7	62·8	64·6	66·4	65·3	61·8	58·6	59·0	57·4	55·2	51·1	47·5	47·1	56·6
7 *d*	47·0	47·4	45·2	49·0	48·4	49·2	52·0	49·3	50·7	52·2	56·8	59·9	62·7	63·7	62·3	62·5	61·4	59·7	57·0	53·9	53·3	53·1	53·7	54·0	*54·3*
8	53·6	53·5	55·4	54·3	53·4	52·7	52·6	51·6	50·7	52·3	55·9	58·3	60·1	61·5	60·4	59·1	58·6	54·9	54·3	55·4	56·2	56·4	55·9	56·4	55·6
9	55·2	55·2	54·3	54·3	53·0	52·8	51·7	52·3	53·1	53·0	56·8	59·3	61·4	61·9	60·3	58·9	56·9	55·8	55·3	55·6	55·9	55·2	54·5	55·3	55·7
10	55·6	55·6	55·9	57·6	53·1	51·2	50·9	51·1	52·1	53·1	56·4	58·8	62·4	62·6	60·0	57·6	56·3	55·0	55·1	55·9	56·1	56·1	54·1	56·3	55·8
11 *q*	55·9	55·2	55·6	54·0	51·8	50·7	50·5	51·4	52·6	54·2	56·3	59·1	60·1	59·5	57·5	55·4	53·9	53·6	54·7	55·9	55·7	56·7	56·5	55·9	55·1
12	56·4	55·3	54·2	52·6	51·5	49·2	49·5	51·1	51·9	53·7	55·5	57·5	59·4	59·9	58·9	58·1	57·2	56·9	57·2	56·9	55·4	56·2	56·4	55·9	55·3
13	55·7	55·5	56·0	52·9	52·5	51·4	52·9	52·2	51·6	53·3	55·6	60·0	61·8	60·8	59·3	57·9	57·3	57·4	59·0	59·0	58·2	57·4	54·5	50·7	56·0
14	50·3	52·8	50·9	50·2	50·8	51·4	53·7	53·1	52·8	53·7	57·6	59·1	59·8	60·7	60·5	59·8	58·6	58·6	57·3	58·0	53·1	53·0	56·1	54·9	55·3
15	54·3	53·0	52·2	52·5	50·5	50·7	51·2	51·5	51·6	54·0	56·5	59·7	60·3	58·9	57·8	55·5	54·6	54·5	54·9	55·3	54·9	54·9	55·5	54·9	54·6
16	54·5	54·5	54·4	53·7	53·9	54·4	55·4	53·2	53·0	53·8	56·4	58·4	60·5	60·7	59·2	57·4	55·5	54·5	54·7	55·3	55·3	54·8	55·1	54·7	55·6
17	55·0	54·5	53·8	53·7	53·5	52·7	51·6	50·8	50·9	53·1	55·8	58·5	61·6	63·0	62·5	60·0	57·5	56·2	53·0	57·3	55·3	51·3	51·7	53·3	55·3
18	54·1	54·2	53·5	53·2	53·3	54·6	56·6	54·1	53·1	54·2	57·1	58·7	59·2	60·8	62·0	60·6	58·5	58·0	56·7	55·8	54·6	55·5	54·1	52·9	56·1
19	52·7	53·4	54·5	54·8	52·4	54·3	53·7	52·1	53·7	54·2	57·3	60·1	62·0	62·1	61·2	59·7	57·5	56·3	55·3	55·5	53·1	49·6	52·1	54·1	55·5
20	54·6	54·4	54·6	53·7	52·7	51·2	50·0	49·7	51·1	53·2	57·0	59·5	61·1	61·3	59·5	57·9	55·6	55·4	55·3	55·3	55·9	56·0	55·6	54·8	55·2
21	56·9	53·7	53·9	53·8	54·4	53·1	51·4	50·9	51·9	54·4	57·3	60·7	62·1	61·8	60·6	58·8	56·7	55·5	54·6	55·3	55·4	54·8	55·4	55·4	55·8
22 *q*	55·2	54·8	54·2	54·1	53·1	51·8	51·1	51·5	52·4	54·7	57·3	60·8	62·4	62·5	60·7	58·8	57·6	56·6	56·3	56·2	55·8	54·9	54·5	54·1	55·9
23 *q*	54·2	54·0	53·7	53·7	53·5	52·7	52·1	52·7	53·0	54·8	57·2	60·4	62·8	63·9	62·0	59·3	57·5	56·5	56·3	57·1	57·8	55·5	54·8	55·1	56·3
24	54·9	54·3	53·8	53·2	52·4	51·6	50·7	51·0	52·0	54·3	56·7	59·9	61·7	62·6	61·3	60·8	59·9	58·6	57·5	57·4	57·2	55·8	54·7	54·3	56·1
25 *q*	53·9	53·4	53·3	52·8	52·5	51·7	51·0	51·1	51·6	54·9	57·2	59·5	61·9	61·8	61·5	59·9	58·9	57·7	56·8	57·7	58·1	56·5	56·0	55·4	56·0
26	54·7	53·9	53·4	52·1	51·8	51·6	51·6	51·8	52·3	53·5	56·5	59·1	61·3	62·5	61·2	59·8	57·8	56·7	56·4	56·2	55·6	55·6	54·4	53·2	55·5
27	52·9	53·6	53·5	53·6	53·1	52·7	52·6	53·7	54·9	55·9	58·1	60·6	60·7	60·0	58·5	57·8	57·6	57·7	57·9	58·9	58·5	56·4	55·0	55·4	56·2
28 *d*	55·4	55·4	54·9	54·4	51·8	52·6	50·3	62·2	59·0	57·9	57·6	59·5	62·8	63·1	61·6	60·7	59·3	59·1	58·0	57·1	56·5	56·4	55·5	54·8	*57·3*
29	54·3	53·5	53·8	53·5	52·9	52·6	51·4	49·8	51·5	53·7	57·2	59·2	61·0	60·8	59·8	57·3	56·2	55·5	55·5	56·1	52·2	46·5	51·2	53·4	54·5
30	53·8	53·5	54·9	52·9	51·7	51·2	51·2	51·4	51·3	53·9	57·5	59·8	60·3	59·8	58·0	56·1	54·9	54·7	55·6	56·2	55·6	55·5	54·8	54·1	54·9
31	53·8	53·9	53·4	53·1	53·1	52·7	52·2	51·7	53·1	55·9	58·1	59·7	60·9	61·5	59·1	56·0	54·6	54·0	54·5	55·0	55·7	54·8	50·7	51·6	55·0
Mean	54·0	53·8	53·9	53·3	52·6	52·2	*51·9*	52·1	52·5	53·8	56·5	59·3	61·3	*61·8*	60·9	59·2	57·6	56·7	56·0	56·4	55·6	54·4	54·1	54·1	55·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

123 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — AUGUST 1955

	Hour G.M.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	Mean
	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	1249	1249	1249	1249	1251	1251	1251	1251	1251	1249	1244	1237	1234	1239	1248	1249	1249	1257	1266	1264	1261	1256	1253	1249	1250
2	1249	1245	1240	1240	1245	1250	1250	1251	1245	1246	1243	1237	1234	1237	1243	1248	1253	1255	1251	1250	1250	1254	1255	1244	1246
3	1239	1244	1230	1225	1238	1244	1249	1249	1244	1243	1238	1234	1238	1239	1250	1255	1256	1261	1262	1259	1255	1255	1252	1240	1246
4 d	1238	1236	1240	1247	1248	1236	1237	1240	1242	1240	1244	1244	1245	1251	1276	1297	1313	1321	1322	1296	1276	1268	1251	1244	*1261*
5 d	1244	1247	1255	1256	1262	1261	1259	1255	1252	1254	1255	1252	1251	1252	1262	1271	1271	1277	1270	1268	1268	1260	1255	1232	1258
6 d	1221	1230	1243	1246	1239	1238	1238	1229	1232	1237	1240	1244	1255	1276	1295	1309	1313	1305	1296	1289	1287	1280	1243	1239	1259
7 d	1239	1230	1228	1238	1244	1245	1237	1240	1245	1240	1238	1240	1244	1256	1268	1275	1275	1277	1278	1284	1275	1268	1264	1260	1254
8	1257	1256	1255	1257	1262	1262	1259	1262	1263	1260	1253	1248	1245	1253	1257	1263	1268	1277	1279	1270	1261	1257	1256	1254	1260
9	1245	1250	1252	1256	1261	1261	1260	1257	1255	1256	1252	1250	1251	1255	1260	1262	1265	1267	1267	1262	1262	1257	1256	1255	1257
10	1253	1253	1254	1249	1249	1252	1251	1251	1251	1251	1249	1241	1239	1245	1256	1265	1268	1271	1268	1263	1262	1260	1257	1253	1255
11 q	1254	1256	1256	1256	1260	1261	1257	1256	1253	1246	1246	1244	1247	1251	1257	1262	1263	1265	1262	1257	1256	1254	1253	1254	1255
12	1252	1250	1249	1249	1252	1252	1251	1250	1248	1235	1228	1229	1237	1240	1246	1251	1255	1256	1252	1253	1255	1253	1251	1250	1248
13	1250	1247	1244	1244	1249	1250	1244	1240	1241	1238	1234	1228	1226	1231	1245	1253	1252	1252	1251	1251	1251	1251	1251	1248	1245
14	1243	1237	1233	1242	1246	1248	1247	1246	1246	1244	1237	1233	1237	1239	1246	1254	1266	1280	1290	1283	1275	1264	1260	1257	1252
15	1261	1259	1256	1251	1250	1251	1252	1254	1252	1253	1248	1244	1243	1248	1260	1265	1263	1260	1253	1253	1253	1254	1254	1253	1254
16	1253	1253	1253	1254	1255	1248	1244	1239	1243	1246	1245	1243	1243	1245	1246	1252	1255	1254	1251	1251	1251	1252	1250	1250	1249
17	1251	1251	1251	1251	1252	1253	1254	1255	1256	1249	1241	1233	1233	1239	1248	1253	1262	1267	1267	1259	1258	1256	1247	1240	1251
18	1244	1247	1250	1251	1251	1251	1249	1250	1249	1241	1238	1238	1238	1244	1253	1259	1260	1262	1265	1266	1263	1256	1254	1249	1251
19	1247	1248	1248	1248	1250	1249	1244	1249	1249	1249	1246	1240	1239	1243	1249	1257	1257	1257	1256	1252	1253	1256	1251	1250	1249
20	1251	1252	1251	1252	1255	1256	1256	1256	1252	1244	1237	1232	1233	1241	1251	1259	1261	1256	1257	1256	1255	1252	1251	1251	1251
21	1242	1241	1245	1249	1251	1251	1254	1251	1250	1247	1242	1238	1243	1249	1257	1260	1260	1260	1260	1259	1256	1254	1252	1250	1251
22 q	1250	1251	1251	1251	1255	1255	1255	1251	1249	1244	1238	1233	1232	1240	1250	1255	1254	1252	1250	1250	1251	1251	1251	1251	1249
23 q	1250	1250	1250	1250	1251	1251	1251	1252	1246	1239	1234	1228	1228	1234	1243	1250	1253	1252	1252	1251	1251	1251	1250	1249	1247
24	1249	1249	1249	1250	1250	1250	1249	1250	1249	1245	1241	1239	1240	1241	1243	1245	1248	1250	1250	1249	1248	1247	1248	1249	1247
25 q	1250	1250	1248	1250	1249	1251	1251	1251	1247	1238	1235	1233	1232	1236	1239	1245	1248	1250	1255	1257	1259	1257	1253	1249	1247
26	1247	1244	1241	1245	1248	1251	1251	1249	1241	1236	1232	1228	1233	1238	1246	1251	1252	1251	1248	1248	1248	1248	1249	1247	1245
27	1245	1245	1246	1245	1248	1247	1248	1249	1244	1234	1233	1234	1230	1234	1241	1245	1244	1245	1246	1246	1245	1250	1248	1248	*1243*
28 d	1247	1245	1245	1244	1244	1238	1238	1225	1225	1223	1227	1234	1238	1244	1257	1260	1262	1257	1254	1253	1255	1256	1256	1255	1245
29	1253	1253	1253	1253	1254	1252	1249	1248	1244	1243	1238	1237	1233	1240	1251	1257	1254	1251	1249	1249	1260	1257	1252	1253	1249
30	1254	1255	1252	1249	1252	1256	1260	1260	1256	1249	1244	1243	1239	1245	1255	1258	1256	1251	1249	1249	1250	1251	1252	1251	1251
31	1249	1249	1251	1251	1250	1250	1251	1251	1247	1240	1239	1240	1239	1241	1248	1255	1255	1251	1250	1251	1251	1252	1244	1238	1248
Mean	1248	1247	1247	1248	1251	1251	1250	1249	1247	1244	1241	*1238*	1239	1244	1253	1259	1262	*1263*	1262	1260	1258	1256	1252	1249	1251

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

124 ESKDALEMUIR — AUGUST 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 q	17 33	714	643	11 46	71	13 31	61·1	51·1	07 53	10·0	18 40	1267	1233	12 05	34	1,0,0,2,3,3,2,1	12	0	84·6
2	20 34	713	656	10 40	57	14 20	60·9	49·8	05 36	11·1	17 20	1256	1233	12 25	23	2,2,0,0,1,1,2,2	10	0	84·7
3	23 15	724	650	02 00	74	14 31	65·1	46·6	00 21	18·5	18 02	1266	1221	02 56	45	4,2,1,2,2,3,2,3	19	1	84·8
4 d	17 05	729	*577*	12 11	152	14 18	*69·9*	41·0	22 03	28·9	18 02	1282	1232	05 57	50	2,3,3,4,4,4,4,4	28	1	84·8
5 d	20 38	743	610	11 53	133	12 53	62·6	38·9	20 32	23·7	17 20	1280	*1216*	24 00	64	2,2,3,3,3,4,4,4	25	1	84·8
6 d	17 03	*791*	612	08 47	*179*	14 03	68·5	*38·5*	22 20	*30·0*	16 50	*1317*	*1216*	00 00	*101*	3,3,3,4,3,5,3,5	29	1	84·9
7 d	20 51	727	597	09 12	130	13 16	66·1	43·7	02 33	22·4	19 21	1286	1222	02 12	64	3,3,2,3,3,3,3,4	24	1	84·9
8	18 13	706	619	10 28	87	12 55	62·7	49·4	08 19	13·3	18 06	1283	1245	12 48	38	2,1,1,3,3,2,2,2	16	0	85·0
9	20 22	710	650	10 46	60	13 02	62·5	51·2	06 39	11·3	18 19	1268	1244	00 10	24	2,1,2,2,2,2,2,1	14	0	85·0
10	22 46	698	646	10 36	52	12 41	63·5	50·6	05 59	12·9	17 50	1273	1238	12 39	35	1,2,0,1,3,2,1,2	12	0	85·0
11 q	21 32	705	653	11 10	52	12 43	60·5	49·9	06 00	10·6	17 01	1266	1243	11 57	23	1,1,1,0,1,1,2,2	9	0	85·2
12	01 05	702	655	10 57	47	13 01	60·4	48·7	06 16	11·7	20 13	1256	1227	10 41	29	2,1,2,2,2,1,1,1	12	0	85·2
13	22 47	708	644	09 08	64	12 48	62·3	49·2	24 00	13·1	15 19	1253	1225	12 30	28	1,2,1,2,2,2,2,3	15	0	85·2
14	17 21	724	649	11 04	75	14 03	61·6	48·1	20 40	13·5	18 20	1291	1232	02 09	59	3,2,1,2,2,3,3,3	19	0	85·2
15	03 25	718	646	10 32	72	12 18	60·8	49·4	03 00	11·4	15 21	1265	1243	12 30	22	3,3,2,2,3,1,1,1	16	0	85·2
16	20 03	696	643	12 56	53	13 18	61·1	52·0	07 56	9·1	17 20	1255	1238	06 59	17	0,2,3,1,2,1,1,1	11	0	85·2
17	17 24	712	643	10 39	69	13 51	63·8	48·9	21 39	14·9	18 09	1268	1233	11 50	35	1,0,1,2,2,3,2,3	14	0	85·2
18	19 13	701	636	11 12	65	14 19	62·3	50·9	23 20	11·4	20 06	1267	1236	10 57	31	1,2,3,2,2,2,3,2	17	0	85·4
19	19 07	694	643	12 37	51	12 28	62·7	48·8	21 39	13·9	15 55	1260	1238	12 00	22	1,2,1,2,2,2,2,2	14	0	85·4
20	18 05	704	624	10 42	80	13 04	61·8	48·9	07 12	12·9	16 18	1262	1231	11 36	31	1,0,0,2,2,2,2,0	9	0	85·4
21	00 30	709	651	11 04	58	12 55	62·6	50·3	07 06	12·3	15 12	1261	1238	11 38	23	3,1,1,0,1,1,1,1	9	0	85·4
22 q	21 36	697	656	09 20	41	13 35	63·1	50·9	06 15	12·2	15 30	1256	1229	12 11	27	0,1,1,1,1,1,2,1	8	0	85·4
23 q	18 51	700	655	12 06	45	13 36	64·1	52·1	06 27	12·0	17 21	1254	1227	11 51	27	1,1,0,1,1,1,1,1	7	0	85·4
24	19 51	706	647	11 46	59	13 27	62·9	50·2	07 19	12·7	18 00	1251	1236	11 13	*15*	0,1,1,3,2,2,1,1	11	0	85·4
25 q	19 00	701	661	11 28	*40*	12 40	63·5	50·9	07 12	12·6	20 40	1260	1230	12 40	30	1,1,1,1,3,2,2,1	12	0	85·4
26	20 34	698	650	08 36	48	13 36	63·1	51·2	06 02	11·9	16 29	1253	1226	11 24	27	1,1,1,3,3,3,2,2	16	0	85·4
27	20 41	710	659	09 05	51	11 59	61·1	52·4	06 27	*8·7*	21 50	1253	1229	12 32	24	0,0,1,1,2,3,3,3	13	0	85·4
28 d	03 11	694	610	08 06	84	12 56	64·1	46·9	06 35	17·2	16 48	1262	1220	07 43	42	1,3,4,3,3,1,2,2	19	1	85·6
29	21 11	713	641	10 40	72	12 38	62·2	43·8	21 38	18·4	20 55	1267	1233	12 39	34	2,2,2,2,2,2,3,3	18	0	85·4
30	16 19	695	639	10 15	56	12 49	60·5	50·3	08 00	10·2	06 40	1261	1238	12 21	23	1,1,1,2,1,3,2,2	13	0	85·4
31	22 13	707	647	11 15	60	13 00	62·1	48·9	22 18	13·2	15 49	1256	1238	23 22	18	2,1,1,2,2,2,2,3	15	0	85·4
Mean	- -	711	639	- -	72	- -	62·9	48·5	- -	14·4	- -	1266	1232	- -	34	-	-	0·19	85·2

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.

125 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — SEPTEMBER 1955

	Hour G.M.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	18-29	29-20	20-21	21-22	22-23	23-24	Mean
	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	679	682	683	684	685	685	684	673	652	652	660	666	673	667	679	682	665	676	680	694	688	666	670	674	675
2	674	666	681	699	684	691	690	677	663	653	619	617	643	662	663	662	657	664	673	680	681	679	683	675	668
3	674	669	673	679	674	680	664	647	640	641	621	631	646	672	675	674	669	668	672	675	686	679	677	685	665
4	717	672	679	679	674	676	683	668	648	618	618	638	664	676	689	661	647	670	680	684	681	692	667	679	669
5 *d*	680	664	670	674	677	643	664	656	644	613	620	631	643	666	660	662	677	679	673	699	678	680	684	679	663
6	677	676	672	677	679	678	667	657	641	642	628	640	648	650	662	658	668	689	684	683	677	678	681	689	667
7	682	665	665	665	668	673	668	662	640	620	627	640	651	659	668	662	672	675	682	686	686	682	680	679	665
8	679	677	679	680	680	678	674	674	663	647	635	647	658	666	666	681	656	662	678	685	686	686	686	685	671
9	675	680	679	672	678	677	675	666	655	644	641	645	653	656	672	677	670	675	684	687	683	683	684	680	670
10	681	678	679	681	680	677	676	663	664	651	650	647	657	670	673	672	671	675	677	679	680	679	677	678	671
11 *q*	680	680	679	675	674	677	676	677	668	664	656	653	660	659	668	674	669	677	688	689	689	688	690	684	675
12	681	688	687	685	680	694	642	681	677	664	644	629	650	648	652	651	664	671	675	681	686	686	691	685	671
13 *d*	689	673	683	669	685	679	671	643	646	651	616	635	653	663	672	651	649	657	664	669	668	677	677	678	663
14	676	673	675	674	670	665	664	655	653	642	636	635	639	657	661	664	664	673	675	679	677	677	679	680	664
15 *q*	679	678	672	672	673	677	678	676	668	658	651	655	663	668	666	670	676	681	680	683	681	677	680	684	673
16	686	687	672	666	679	681	668	670	666	647	631	634	652	669	674	664	672	673	679	680	683	683	686	687	670
17	684	673	679	670	682	701	678	668	653	650	651	659	651	652	660	670	676	681	681	673	673	666	664	675	670
18	677	681	686	681	680	679	674	668	656	641	646	643	647	647	664	675	667	669	663	674	678	677	679	679	668
19	685	681	673	670	677	680	675	668	653	640	638	632	651	668	673	663	668	669	677	680	675	677	678	682	668
20	681	671	668	680	680	682	684	681	664	646	653	657	668	675	681	683	679	681	688	695	684	692	681	680	676
21 *q*	680	678	678	679	682	683	679	674	660	646	647	651	654	658	662	666	672	678	684	682	686	688	689	690	673
22	692	679	699	672	673	677	683	681	672	664	662	659	660	665	672	674	678	682	697	697	686	679	686	687	*678*
23	685	688	685	688	692	687	684	675	651	640	643	646	660	654	653	661	668	665	671	662	663	657	679	668	668
24	692	675	666	673	678	678	675	671	661	651	651	653	659	666	669	670	678	676	678	677	683	684	681	681	672
25 *q*	678	677	680	678	678	677	679	673	667	655	649	648	651	656	660	665	673	681	686	689	689	692	684	683	673
26 *q*	681	679	686	683	682	679	677	671	668	661	657	656	660	664	668	674	683	687	691	690	691	690	688	686	677
27 *d*	681	678	686	706	702	701	693	689	671	649	651	646	635	651	667	676	664	683	669	669	684	692	673	681	675
28	677	677	675	679	693	698	687	677	660	651	651	653	653	658	653	670	676	676	665	661	653	666	680	679	669
29 *d*	664	654	684	670	678	684	688	688	673	660	660	657	657	661	679	677	653	682	656	660	668	687	656	672	669
30 *d*	645	664	668	671	676	675	670	647	642	653	614	602	624	644	647	660	665	653	666	676	662	637	655	681	*654*
Mean	680	675	678	678	680	680	676	669	658	647	*641*	643	653	661	667	668	668	674	677	681	679	679	679	*681*	67[illegible]

MAGNETIC DECLINATION (WEST)

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

126 ESKDALEMUIR (D) — 10° + — SEPTEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	52·6	54·2	53·7	53·5	53·7	52·6	51·3	51·7	53·8	56·6	56·3	58·5	61·7	62·3	62·3	60·4	57·9	57·4	55·1	49·1	50·6	52·6	53·4	53·5	55·2
2	52·6	55·2	59·0	55·8	49·5	53·1	52·9	53·7	53·7	55·6	60·2	63·2	64·3	63·5	61·7	59·2	56·7	55·3	54·7	54·9	54·0	54·6	54·1	51·7	*56·2*
3	52·2	54·5	60·3	53·6	50·5	51·1	52·0	51·9	51·4	54·9	60·7	63·6	62·4	62·1	60·8	58·5	55·9	55·1	55·0	54·7	51·5	52·5	54·5	54·7	55·6
4	50·7	52·2	52·7	55·6	53·8	50·8	50·8	50·6	51·4	54·7	60·4	62·1	63·6	63·2	63·4	60·7	56·1	54·5	54·9	55·6	54·3	47·5	51·3	50·1	55·0
5 *d*	51·4	57·2	54·5	51·4	50·9	52·9	58·3	58·5	55·0	53·3	57·0	60·7	61·5	60·2	61·3	57·2	55·4	54·0	54·4	52·8	55·1	54·7	54·3	51·5	55·6
6	52·6	53·6	53·4	56·8	56·6	54·3	53·2	52·7	53·8	56·7	57·7	59·7	60·2	59·3	58·8	57·2	55·5	55·7	54·1	48·0	51·8	54·6	54·8	55·9	55·3
7	53·5	51·2	51·8	51·1	51·0	52·3	51·1	50·4	51·8	53·7	57·0	59·5	61·9	62·6	61·1	58·6	56·2	55·7	56·0	55·9	55·6	54·9	53·6	54·1	55·0
8	54·2	54·0	54·4	54·6	53·6	52·5	52·0	51·8	51·9	52·4	55·4	59·3	63·0	63·9	62·1	59·3	57·0	56·6	56·4	56·3	55·9	55·4	54·1	51·8	55·7
9	53·1	57·2	54·7	52·3	50·9	50·8	50·7	50·1	50·2	52·1	54·9	58·5	60·3	60·6	59·5	57·9	54·9	54·8	55·4	55·9	56·0	55·6	55·5	53·0	54·8
10	53·6	53·8	55·0	53·7	53·5	54·2	53·3	53·8	54·8	56·3	58·7	59·0	59·9	59·3	58·1	56·7	55·9	56·3	55·5	55·7	55·2	55·3	54·5	54·5	55·7
11 *q*	54·4	54·5	52·3	51·8	51·2	51·7	52·7	51·9	51·7	52·2	54·4	57·2	60·1	60·3	59·8	58·5	56·8	56·0	56·0	56·0	56·2	55·7	55·6	52·5	55·0
12	50·3	52·3	52·9	50·5	53·7	53·0	54·5	59·8	53·2	52·7	55·1	57·9	61·8	61·5	59·1	56·3	52·7	52·4	54·1	55·4	55·4	55·2	54·9	58·8	55·1
13 *d*	48·4	53·4	50·1	55·8	52·0	50·0	52·3	52·7	52·7	55·0	56·5	58·3	59·6	61·2	59·2	59·5	54·6	54·0	54·9	54·2	53·0	54·6	54·8	54·9	54·7
14	54·8	54·2	53·7	53·4	53·1	52·3	52·8	54·3	56·0	55·0	57·6	58·9	61·0	62·4	60·4	57·9	56·4	56·2	56·3	55·9	54·9	53·1	54·3	54·5	55·8
15 *q*	56·0	54·7	53·9	53·1	54·0	54·1	53·3	53·0	52·7	53·9	55·4	58·4	59·5	59·3	58·6	57·7	56·7	56·1	53·5	50·9	53·4	54·1	54·5	55·0	55·1
16	55·0	52·9	51·3	53·5	53·1	51·8	53·2	52·1	51·8	53·8	55·9	59·8	62·9	63·3	62·5	60·3	57·2	56·3	55·9	55·5	55·1	54·2	51·3	49·4	55·3
17	50·2	53·1	55·8	53·7	58·4	57·9	56·8	58·6	55·3	55·7	56·3	60·2	61·2	60·4	59·9	58·5	56·3	55·2	54·6	53·2	51·7	50·9	49·4	51·6	55·6
18	53·5	54·3	55·0	53·5	50·5	50·9	52·0	52·1	52·9	54·5	57·0	59·5	62·1	60·9	61·0	60·4	57·5	56·7	55·6	54·7	54·5	54·5	54·8	54·9	55·6
19	55·4	54·3	54·8	54·4	53·1	52·1	51·9	51·6	51·2	52·1	55·3	57·8	60·6	61·9	61·3	59·0	56·1	55·7	55·7	55·2	54·5	54·0	54·4	53·2	55·2
20	47·3	52·0	54·3	55·9	53·6	52·6	52·3	52·4	52·9	56·6	57·0	58·9	60·8	61·0	60·0	58·3	57·1	56·9	56·5	56·1	55·2	55·3	52·6	53·5	55·4
21 *q*	54·4	53·9	54·1	54·8	53·9	53·5	52·6	51·4	51·3	52·1	54·0	56·7	58·5	59·1	58·5	57·1	56·2	56·0	55·9	55·2	55·0	54·4	54·8	55·3	54·9
22	56·9	50·4	48·6	45·8	50·9	52·6	52·3	51·6	51·4	52·5	54·7	57·3	59·2	60·1	59·5	58·0	57·7	56·4	56·7	56·8	56·9	55·7	54·5	54·4	54·6
23	54·5	53·6	53·3	53·5	53·2	52·3	53·6	53·9	52·4	57·2	59·7	58·5	59·5	60·5	59·9	58·2	57·9	57·3	55·9	55·8	54·9	51·2	55·1	51·8	55·6
24	53·6	50·5	51·9	52·3	52·9	52·6	51·8	50·6	51·2	53·1	55·4	58·1	59·1	59·7	58·9	57·5	56·8	55·4	52·3	56·2	56·5	56·2	55·1	54·8	54·7
25 *q*	54·4	55·4	54·1	53·5	53·1	53·2	52·8	52·3	52·5	52·7	54·4	56·2	57·7	58·5	58·4	57·4	56·6	55·5	55·9	56·0	55·9	54·3	53·8	54·1	54·9
26 *q*	53·5	53·6	54·1	53·4	53·2	53·0	52·6	51·8	51·8	52·3	54·6	56·9	57·7	58·0	57·9	58·1	57·9	57·2	57·2	56·9	56·6	56·2	55·3	54·1	55·2
27 *d*	53·6	54·4	54·5	51·8	49·2	51·2	51·7	51·9	51·3	53·5	57·2	59·1	61·1	62·0	60·9	61·3	55·4	52·6	49·5	52·8	49·0	52·9	52·7	54·0	54·3
28	52·7	54·9	53·6	53·6	56·4	54·0	60·9	58·2	57·3	55·0	56·8	56·5	58·3	59·7	58·5	57·6	56·4	55·2	49·5	43·0	50·9	52·2	51·9	50·8	54·7
29 *d*	49·5	51·3	54·2	50·9	52·1	52·2	52·6	53·0	52·2	51·4	52·0	54·0	55·9	58·1	60·8	62·0	61·0	58·7	53·4	54·9	51·5	46·0	45·9	45·5	*53·3*
30 *d*	45·4	54·1	52·7	53·1	55·3	68·3	78·2	63·1	55·9	54·2	55·0	56·8	59·9	58·9	58·0	56·8	52·1	50·3	45·4	42·9	40·6	43·3	49·8	48·5	54·1
Mean	*52·7*	53·7	53·8	53·2	52·9	53·1	53·9	53·4	52·9	*54·1*	56·4	58·7	60·5	*60·8*	60·1	58·5	56·4	55·5	54·5	53·9	53·7	53·4	53·5	53·1	55·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

127 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — SEPTEMBER 1955

	Hour G.M.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	Mean
	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	1241	1244	1246	1248	1248	1250	1254	1256	1255	1251	1241	1238	1234	1242	1253	1262	1268	1268	1269	1264	1251	1255	1256	1255	1252
2	1250	1243	1229	1207	1216	1222	1226	1236	1242	1242	1244	1244	1246	1252	1262	1271	1272	1272	1267	1263	1260	1256	1251	1249	1247
3	1247	1246	1232	1229	1238	1244	1248	1251	1249	1239	1234	1243	1249	1247	1253	1257	1257	1255	1253	1255	1256	1254	1250	1247	1247
4	1217	1221	1235	1234	1232	1243	1244	1248	1247	1248	1243	1244	1244	1247	1258	1273	1271	1268	1264	1260	1257	1246	1238	1237	1247
5 *d*	1218	1208	1211	1235	1243	1243	1225	1224	1228	1238	1243	1242	1255	1267	1268	1270	1273	1278	1272	1261	1256	1256	1254	1251	1247
6	1242	1240	1244	1244	1233	1234	1244	1250	1248	1241	1244	1248	1251	1252	1256	1262	1263	1263	1270	1272	1264	1257	1255	1243	1251
7	1232	1233	1238	1249	1251	1253	1256	1260	1257	1255	1249	1245	1245	1244	1245	1251	1255	1253	1251	1253	1254	1256	1256	1255	1250
8	1252	1253	1250	1250	1251	1253	1255	1256	1253	1247	1241	1238	1239	1242	1252	1265	1276	1273	1262	1256	1256	1256	1255	1248	1253
9	1250	1244	1234	1236	1244	1249	1251	1252	1250	1248	1244	1240	1240	1244	1248	1251	1256	1256	1254	1252	1253	1251	1251	1252	1248
10	1251	1250	1249	1249	1249	1248	1247	1248	1244	1245	1250	1247	1244	1245	1254	1258	1256	1253	1253	1253	1253	1253	1254	1252	1250
11 *q*	1250	1247	1244	1245	1247	1249	1249	1248	1250	1251	1251	1250	1248	1248	1247	1250	1254	1253	1252	1253	1253	1254	1252	1252	1250
12	1249	1244	1245	1245	1245	1244	1250	1237	1241	1245	1245	1246	1248	1260	1266	1270	1272	1267	1258	1256	1254	1254	1254	1252	1252
13 *d*	1230	1216	1209	1202	1210	1219	1230	1243	1250	1249	1249	1251	1252	1255	1273	1286	1299	1294	1282	1274	1271	1263	1260	1257	1251
14	1256	1256	1255	1255	1255	1255	1255	1251	1248	1248	1246	1247	1245	1247	1255	1263	1259	1255	1253	1255	1256	1256	1256	1255	1253
15 *q*	1251	1249	1250	1250	1250	1250	1250	1250	1250	1249	1245	1242	1243	1244	1249	1250	1251	1253	1257	1259	1255	1255	1255	1253	1250
16	1251	1243	1240	1244	1246	1248	1249	1250	1249	1248	1249	1248	1245	1250	1260	1263	1262	1259	1256	1254	1252	1255	1256	1251	1251
17	1243	1244	1240	1238	1225	1218	1223	1225	1231	1239	1238	1237	1246	1254	1256	1259	1260	1256	1256	1260	1262	1262	1259	1250	*1245*
18	1250	1247	1243	1241	1243	1245	1246	1248	1250	1250	1247	1245	1251	1256	1258	1263	1268	1271	1274	1267	1260	1256	1254	1253	1254
19	1249	1240	1243	1244	1245	1248	1249	1250	1250	1250	1249	1246	1248	1250	1258	1262	1262	1261	1257	1256	1256	1256	1255	1252	1251
20	1240	1240	1245	1243	1245	1248	1249	1250	1250	1250	1248	1245	1244	1244	1245	1249	1249	1250	1250	1250	1255	1251	1249	1250	1247
21 *q*	1249	1250	1250	1250	1250	1251	1253	1253	1251	1247	1242	1238	1240	1244	1245	1248	1249	1249	1250	1252	1253	1252	1251	1249	1249
22	1237	1242	1227	1233	1240	1244	1246	1248	1245	1240	1235	1233	1234	1236	1239	1243	1245	1247	1246	1250	1253	1259	1256	1252	1243
23	1250	1248	1250	1250	1249	1249	1248	1248	1250	1247	1245	1245	1244	1244	1248	1252	1256	1263	1270	1276	1266	1261	1235	1226	1251
24	1216	1216	1232	1240	1244	1248	1253	1256	1253	1249	1243	1238	1238	1240	1244	1248	1251	1258	1265	1260	1255	1253	1252	1252	1246
25 *q*	1252	1249	1245	1245	1247	1250	1251	1252	1252	1249	1243	1237	1234	1234	1241	1247	1250	1251	1251	1251	1250	1249	1249	1249	1247
26 *q*	1250	1250	1248	1248	1249	1250	1251	1251	1250	1245	1242	1238	1236	1238	1240	1244	1244	1245	1246	1248	1248	1249	1250	1250	1246
27 *d*	1250	1249	1240	1234	1232	1233	1234	1238	1240	1243	1238	1237	1239	1245	1251	1258	1278	1281	1287	1272	1272	1244	1250	1249	1250
28	1244	1244	1246	1243	1223	1216	1220	1228	1237	1244	1247	1248	1251	1256	1257	1260	1260	1263	1271	1273	1264	1259	1251	1243	1238
29 *d*	1240	1234	1222	1232	1237	1239	1244	1246	1249	1250	1248	1248	1246	1245	1250	1262	1285	1312	1309	1299	1290	1271	1256	1249	*1257*
30 *d*	1244	1230	1243	1250	1245	1217	1187	1204	1233	1241	1250	1268	1267	1281	1274	1279	1283	1280	1279	1268	1256	1252	1235	1221	1249
Mean	1243	1241	*1239*	1240	1241	1242	1243	1245	1247	1246	1244	1244	1245	1248	1253	1259	1263	*1264*	1263	1261	1258	1255	1252	1249	1249

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

128 ESKDALEMUIR — SEPTEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +	Minimum 10° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				
1	19 54	726	639	08 45	87	14 13	63·9	37·5 19 49	26·4	17 46	1271	1234	12 30	37	1,1,3,3,3,3,4,2	20	1	85·4
2	03 37	707	603	11 21	104	12 12	64·6	47·9 04 25	16·7	15 42	1275	1206	03 38	69	3,4,2,3,3,3,2,2	22	1	85·4
3	20 58	701	587	10 57	114	11 55	65·3	49·8 05 02	15·5	16 12	1259	1224	03 02	35	3,3,3,4,3,2,2,2	22	1	85·4
4	00 31	*753*	596	10 04	*157*	12 45	64·5	40·3 21 23	24·2	15 41	1276	1206	00 40	70	4,3,3,3,3,3,2,4	25	1	85·4
5 *d*	19 19	717	603	09 36	114	12 17	64·2	46·3 00 14	17·9	17 32	1279	1198	02 00	81	4,3,3,3,3,3,3,2	24	1	85·5
6	23 46	698	615	10 58	83	12 58	61·1	44·2 19 36	16·9	19 35	1274	1232	24 00	42	2,2,3,2,1,3,3,3	19	1	85·5
7	20 52	690	616	09 44	74	13 26	63·2	49·7 07 53	13·5	07 32	1262	1230	00 20	32	3,2,3,3,2,2,1,1	17	0	85·5
8	23 09	707	627	10 49	80	13 51	64·5	50·9 23 58	13·6	16 43	1279	1238	11 27	41	1,1,0,3,3,3,1,3	15	0	85·4
9	19 58	692	635	10 20	57	12 54	60·9	49·4 08 29	11·5	16 50	1258	1232	03 10	26	3,2,2,2,2,2,1,2	16	0	85·4
10	00 30	684	644	11 40	*40*	12 13	60·5	53·0 06 25	7·5	15 24	1260	1243	12 54	17	1,1,2,2,1,2,2,1	12	0	85·4
11 *q*	22 44	700	649	11 50	51	13 04	61·2	50·3 23 56	10·9	23 50	1255	1242	02 11	*13*	2,1,1,1,2,2,2,2	13	0	85·4
12	24 00	716	618	11 19	98	07 11	64·4	42·3 23 53	22·1	15 50	1273	1233	07 33	40	3,3,4,3,3,2,2,4	24	1	85·4
13 *d*	00 01	717	601	10 36	116	13 30	62·2	46·1 00 17	16·1	16 44	1303	1197	03 34	106	4,3,3,3,3,4,2,1	23	1	85·4
14	03 06	681	616	11 05	65	13 40	62·8	51·7 21 26	11·1	15 22	1265	1244	13 12	21	0,2,2,2,2,2,1,2	13	0	85·4
15 *q*	19 14	694	648	10 30	46	13 02	59·9	47·2 19 06	12·7	19 00	1262	1241	12 01	21	2,1,0,1,2,2,3,2	13	0	85·4
16	00 47	708	623	10 36	85	12 59	63·8	47·9 23 12	15·9	15 15	1264	1238	02 04	26	3,2,2,2,2,1,1,2	15	0	85·4
17	05 15	707	643	12 15	64	11 55	62·5	48·5 22 36	14·0	20 12	1263	1216	05 24	47	3,3,3,2,2,2,2,2	19	1	85·4
18	02 29	691	633	13 20	58	13 00	63·0	50·0 04 30	13·0	18 14	1276	1240	03 40	36	2,2,2,2,2,3,2,1	16	0	85·4
19	24 00	704	622	11 30	82	14 29	62·3	50·4 07 27	11·9	15 20	1263	1236	01 30	27	2,2,2,2,2,1,1,2	14	0	85·4
20	21 51	705	640	09 09	65	13 04	61·4	46·0 00 19	15·4	22 04	1256	1238	01 24	18	3,2,2,3,1,2,2,2	17	0	85·4
21 *q*	24 00	698	640	09 56	58	13 15	59·5	50·8 08 29	8·7	07 10	1255	1237	11 51	18	1,1,1,2,1,1,1,3	11	0	85·4
22	02 30	713	647	12 19	66	13 46	60·9	43·1 02 54	17·8	21 50	1260	1221	02 34	39	4,3,0,1,2,1,2,2	15	1	85·4
23	04 44	695	630	09 03	65	13 02	62·6	48·8 20 43	13·8	19 16	1281	1222	23 46	59	1,1,3,3,3,2,3,3	19	1	85·4
24	01 05	705	648	10 09	57	13 39	60·4	49·1 00 07	11·3	18 23	1266	1210	01 09	56	3,1,1,2,2,2,3,0	14	0	85·4
25 *q*	21 37	701	645	11 35	56	13 37	58·7	51·8 07 36	6·9	07 56	1253	1233	12 31	20	1,0,1,1,1,1,0,2	7	0	85·4
26 *q*	20 12	694	652	12 01	42	12 42	58·2	51·7 07 40	*6·5*	07 20	1251	1235	12 40	16	1,0,0,1,2,1,1,1	7	0	85·4
27 *d*	20 49	734	621	11 53	113	13 15	63·1	*37·1* 18 35	26·0	18 32	1307	1230	04 17	77	2,2,3,3,3,4,5,4	26	1	85·4
28	04 08	704	637	14 06	67	06 34	62·4	39·2 18 57	23·2	18 52	1279	1216	05 41	63	2,3,3,3,3,2,4,3	23	1	85·4
29 *d*	17 48	735	631	18 29	104	15 34	64·2	38·5 22 54	25·7	17 57	*1359*	1217	02 29	*142*	3,2,2,2,2,4,4,4	23	1	85·4
30 *d*	23 36	723	*577*	11 46	146	06 08	*81·5*	37·3 20 09	*44·2*	13 36	1287	*1180*	06 26	107	4,5,5,4,4,4,4,4	34	1	85·4
Mean	- -	707	626	- -	81	- -	62·9	46·6 - -	16·4	- -	1272	1226	- -	47	-	-	0·50	85·4

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.

129 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — OCTOBER 1955

	Hour G.M.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	Mean
	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	661	659	662	664	666	670	666	660	651	647	627	640	650	653	653	668	672	674	676	671	685	678	677	677	663
2	680	673	671	679	679	678	679	668	653	640	643	639	639	635	646	647	659	671	653	670	685	673	673	675	663
3	672	672	658	653	677	688	664	676	652	642	643	632	651	660	664	668	648	660	672	678	677	675	672	677	664
4	680	676	678	665	676	689	686	671	657	649	609	620	639	647	651	660	667	672	674	672	667	673	670	679	664
5 *d*	679	676	674	671	679	677	681	677	660	647	628	640	622	630	653	647	683	653	647	702	630	640	637	651	658
6 *d*	660	659	639	665	681	671	670	664	628	603	611	626	640	643	645	655	657	671	660	664	663	670	669	671	654
7	669	667	665	667	669	674	672	664	655	636	632	630	632	651	665	671	668	674	681	680	677	681	674	693	664
8	688	694	692	696	700	694	696	683	679	665	651	645	651	656	665	671	678	679	692	688	689	688	679	677	679
9	676	673	678	675	679	679	683	680	665	669	644	641	647	657	667	674	681	685	687	685	685	708	713	678	675
10	672	676	681	679	681	694	695	693	681	643	643	642	641	628	658	660	664	664	683	683	682	685	683	681	671
11	680	680	679	677	679	679	674	665	637	633	626	630	629	637	660	656	659	666	674	676	677	679	679	677	663
12 *q*	677	676	675	676	677	676	676	676	671	662	656	653	655	660	662	665	670	673	677	680	679	678	673	676	671
13 *q*	676	677	677	678	679	681	682	681	677	669	660	656	658	662	665	668	670	673	675	671	661	672	680	679	672
14	679	680	680	681	681	684	691	685	679	677	668	668	670	666	669	672	676	680	677	681	681	683	685	681	678
15	680	680	681	679	686	687	685	683	678	668	662	662	668	672	675	673	675	679	682	685	686	685	685	680	678
16	670	671	675	678	683	686	686	677	670	664	664	665	670	675	681	679	683	690	694	694	693	689	688	685	680
17	685	678	685	688	685	690	691	691	690	681	674	669	668	672	676	680	685	689	696	692	692	692	692	689	*685*
18 *q*	685	685	684	684	684	683	680	676	668	660	659	664	674	681	685	687	688	688	689	688	688	689	689	688	681
19 *q*	685	684	685	685	687	685	683	678	670	661	657	663	673	682	686	685	688	690	689	691	691	688	690	690	682
20	688	689	685	689	690	688	688	686	671	655	662	668	680	675	676	670	664	674	680	677	678	683	680	682	678
21	681	681	681	682	682	682	680	679	676	668	664	661	665	675	677	675	675	675	677	680	673	675	681	673	676
22	677	676	679	684	685	686	685	684	680	664	658	658	661	658	660	663	660	666	663	674	686	685	684	684	673
23	682	685	681	678	680	681	684	677	666	659	656	660	652	664	674	681	679	683	682	687	689	689	688	686	677
24 *q*	686	684	684	685	687	688	689	685	680	669	661	659	665	668	673	678	684	688	691	690	693	689	686	682	681
25 *d*	666	694	675	678	701	701	702	666	651	660	615	627	627	622	624	637	621	613	623	641	687	651	642	672	654
26 *d*	624	625	653	633	621	654	651	648	645	627	628	604	652	648	652	655	658	657	636	638	662	658	673	666	*645*
27	662	664	659	650	661	665	662	661	647	652	651	647	657	656	654	647	653	660	665	661	679	678	666	666	659
28	666	663	665	662	666	668	673	667	665	650	642	644	647	646	653	651	662	665	665	670	673	666	670	669	661
29	671	670	670	678	679	669	664	665	667	658	657	657	651	657	664	660	658	655	662	658	665	678	665	670	665
30	669	670	671	672	673	673	670	668	665	662	657	656	653	663	670	672	676	649	649	657	654	670	669	669	665
31 *d*	670	682	681	688	693	676	659	667	666	664	668	668	674	663	662	668	658	679	670	664	661	614	640	646	666
Mean	674	675	674	675	679	*681*	679	674	665	655	*648*	648	654	657	663	666	668	671	672	676	677	676	676	676	669

MAGNETIC DECLINATION (WEST)

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

130 ESKDALEMUIR (D) — 10° + — OCTOBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	52·4	52·5	52·9	53·6	53·8	53·6	53·0	52·3	52·1	52·5	53·3	55·7	58·2	59·9	59·2	58·7	57·7	56·3	55·8	54·3	53·3	53·0	53·2	53·1	54·6
2	54·5	54·5	54·9	54·8	53·7	54·1	53·6	52·5	52·8	52·3	52·8	57·0	60·3	61·2	62·2	56·3	59·0	48·1	53·6	47·8	50·4	54·5	52·7	52·8	54·4
3	54·5	55·6	55·9	58·9	56·0	54·2	54·3	53·9	54·9	55·8	57·1	58·6	59·8	60·8	61·8	59·1	53·2	54·6	56·1	55·6	54·8	54·4	53·7	53·6	*56·1*
4	53·0	52·8	52·4	54·2	57·0	55·7	54·5	52·6	50·5	52·5	56·2	59·2	61·0	61·9	60·9	58·7	57·0	55·7	54·8	54·5	52·9	52·8	52·5	51·8	55·2
5 *d*	52·4	53·5	54·1	54·1	54·2	53·3	52·3	51·0	49·7	50·7	53·0	58·2	60·4	62·0	62·7	57·0	57·1	54·9	54·8	50·0	48·9	43·2	36·8	50·1	53·1
6 *d*	52·1	53·8	59·8	59·0	53·7	54·9	53·7	51·8	50·7	52·7	55·4	57·4	59·4	61·3	61·9	60·2	55·8	54·9	57·3	55·4	53·1	52·7	53·5	53·1	55·6
7	52·1	52·5	52·9	55·1	54·4	53·5	53·1	52·2	50·9	50·8	54·2	58·1	62·2	64·3	62·8	61·6	58·7	56·6	56·8	55·8	55·3	55·3	52·1	53·1	55·6
8	54·1	55·0	54·2	54·4	54·4	53·6	53·6	53·9	53·4	52·5	54·2	57·4	60·2	60·3	60·1	58·1	56·5	56·3	57·1	56·7	56·0	55·4	53·8	52·9	55·6
9	53·9	53·1	52·3	52·8	53·1	53·1	53·1	52·3	51·1	50·6	52·9	55·6	58·1	58·9	59·3	58·2	57·6	57·7	57·0	56·2	55·3	47·3	44·6	46·3	53·8
10	48·3	53·1	53·4	52·3	53·7	52·5	53·3	52·6	51·3	51·8	55·3	56·0	61·0	58·1	59·0	58·6	56·1	49·7	53·5	54·9	54·5	54·1	53·4	53·7	54·2
11	54·2	54·1	54·0	54·5	54·7	54·1	54·3	55·0	53·4	55·2	56·6	58·5	60·0	58·8	56·8	56·3	51·5	54·1	52·6	53·5	54·3	54·3	54·3	54·2	55·0
12 *q*	54·3	54·3	54·1	54·0	53·8	53·5	53·1	52·6	50·9	50·3	51·8	54·3	56·6	57·4	57·2	56·3	55·2	54·2	54·2	53·9	54·2	54·5	54·4	54·6	54·2
13 *q*	54·8	54·0	54·2	54·5	54·4	54·1	53·6	52·3	50·5	50·4	53·0	56·3	58·1	58·2	57·7	56·2	54·9	54·8	54·1	54·2	52·2	53·0	54·2	54·3	54·3
14	53·1	54·4	54·9	54·6	54·3	54·2	55·0	55·0	55·4	54·6	56·2	58·2	59·4	59·2	57·7	56·5	55·9	55·0	54·1	55·0	54·1	53·9	52·7	53·2	55·3
15	53·5	53·6	53·7	54·7	53·9	53·5	53·7	53·3	52·3	52·3	54·0	55·8	57·9	58·2	58·1	57·7	57·9	56·3	55·9	55·2	55·3	55·2	55·0	49·6	54·9
16	46·5	50·6	52·6	53·4	54·0	53·7	54·1	53·5	52·4	51·3	53·1	55·7	57·4	58·3	58·6	57·0	56·1	55·9	55·6	55·3	54·9	55·3	52·5	53·4	54·2
17	53·5	53·0	53·6	52·6	52·5	53·0	52·9	52·6	52·1	51·9	53·3	55·5	57·3	57·8	58·0	57·1	56·2	55·9	55·9	55·4	55·3	55·2	55·1	54·9	54·6
18 *q*	54·8	54·8	54·5	54·9	55·2	55·3	54·7	54·1	53·1	52·0	53·6	56·2	57·8	58·4	58·0	56·7	56·4	56·0	55·4	54·9	54·6	54·3	54·1	53·8	55·1
19 *q*	53·7	54·1	54·0	54·3	54·3	54·1	53·8	53·0	51·8	52·1	54·7	58·1	60·0	59·9	58·5	56·6	55·5	55·6	55·2	55·1	54·8	54·4	54·2	54·1	55·1
20	53·7	53·5	53·1	53·9	53·2	52·8	53·3	52·5	53·5	55·7	57·5	59·4	61·0	61·1	60·9	60·2	58·2	56·9	55·9	54·9	53·8	53·8	53·8	53·9	55·7
21	53·8	53·7	53·8	53·9	54·2	53·7	53·7	53·9	52·9	53·3	55·4	57·7	59·2	59·3	58·9	57·4	57·0	56·7	55·7	54·8	54·5	50·0	50·4	51·5	54·8
22	52·6	52·8	53·5	53·7	53·5	53·5	53·7	52·8	52·3	53·2	55·0	57·0	60·3	62·1	63·1	60·2	59·5	57·7	56·2	54·1	54·1	54·0	53·9	53·9	55·5
23	53·1	54·2	51·4	53·1	53·9	54·1	53·6	52·5	51·8	52·2	53·9	57·8	59·0	58·6	58·8	57·9	57·0	56·3	55·6	55·7	55·2	54·5	53·9	53·8	54·9
24 *q*	53·9	53·8	54·0	54·3	54·3	54·2	53·7	53·0	52·1	51·5	53·2	56·0	58·6	58·5	57·9	57·1	56·5	56·3	56·1	55·5	55·4	55·1	54·2	52·1	54·9
25 *d*	49·7	52·5	44·0	47·9	49·4	51·3	54·5	55·7	57·2	56·8	56·6	64·3	65·3	67·1	68·8	66·3	47·3	44·6	52·5	46·3	45·4	51·8	47·8	51·4	53·9
26 *d*	54·4	46·9	48·7	50·4	54·5	52·8	53·1	51·2	50·8	50·9	54·4	55·7	57·0	60·8	57·1	57·9	49·1	41·0	39·2	41·5	51·7	51·6	54·4	54·3	*51·6*
27	52·9	53·0	54·1	55·8	54·7	54·1	53·6	53·3	53·7	55·5	57·6	58·5	59·1	59·2	57·7	54·8	50·0	50·9	53·9	52·2	52·2	49·8	52·6	53·0	54·3
28	52·8	53·4	53·4	53·5	53·6	52·9	52·8	52·9	53·3	54·5	56·9	59·0	60·1	60·3	59·8	56·5	55·3	53·8	53·6	53·6	53·5	51·6	52·5	52·5	54·7
29	53·6	53·6	53·9	54·3	51·7	51·9	52·6	52·8	53·0	52·9	54·2	57·5	57·4	57·9	58·5	57·3	57·2	55·4	50·3	51·4	51·2	51·5	50·3	53·6	53·9
30	53·5	53·6	53·9	53·5	53·6	53·3	52·9	52·8	52·2	52·0	54·4	57·9	58·5	58·5	58·1	56·7	55·7	50·0	49·0	49·1	50·3	52·6	53·5	53·7	53·7
31 *d*	53·9	56·2	54·6	54·5	54·2	53·3	53·9	55·6	54·8	53·1	55·5	57·1	60·2	62·1	63·4	64·8	61·6	58·3	58·1	54·9	41·8	40·0	44·2	49·0	54·8
Mean	53·0	53·4	53·5	54·1	53·9	53·6	53·6	53·1	52·5	52·7	54·7	57·4	59·4	*60·0*	59·8	58·2	55·9	54·2	54·4	53·5	53·0	52·5	*52·1*	52·7	54·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

131 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — OCTOBER 1955

	Hour G.M.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	Mean
	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	1225	1244	1251	1254	1255	1255	1257	1260	1261	1261	1258	1257	1256	1254	1257	1257	1256	1256	1256	1259	1262	1257	1257	1256	1255
2	1250	1248	1247	1245	1247	1249	1251	1255	1256	1260	1256	1250	1248	1250	1264	1278	1282	1292	1282	1276	1253	1252	1256	1255	1258
3	1252	1252	1247	1240	1244	1246	1249	1251	1256	1259	1256	1255	1252	1253	1259	1271	1280	1281	1268	1262	1261	1259	1260	1257	1257
4	1255	1251	1245	1247	1243	1240	1244	1251	1256	1254	1251	1250	1249	1251	1257	1262	1262	1262	1261	1262	1262	1261	1256	1252	1253
5 *d*	1245	1248	1250	1251	1250	1253	1255	1256	1256	1253	1250	1240	1245	1250	1254	1274	1285	1294	1304	1271	1245	1248	1220	1233	1255
6 *d*	1241	1248	1243	1223	1234	1242	1252	1259	1264	1267	1262	1257	1254	1254	1264	1283	1293	1291	1279	1274	1272	1266	1262	1258	1260
7	1254	1252	1253	1255	1257	1258	1260	1262	1262	1262	1256	1251	1250	1251	1256	1263	1267	1265	1262	1262	1262	1258	1261	1253	1258
8	1253	1252	1255	1252	1250	1251	1252	1256	1254	1251	1249	1245	1243	1244	1248	1253	1256	1256	1255	1254	1255	1256	1258	1257	1252
9	1256	1256	1254	1253	1253	1253	1252	1256	1261	1261	1255	1249	1245	1244	1245	1252	1256	1256	1256	1257	1260	1255	1238	1228	1252
10	1234	1242	1246	1250	1251	1249	1248	1250	1251	1255	1251	1249	1247	1253	1257	1267	1272	1272	1265	1262	1260	1257	1256	1256	1254
11	1256	1255	1255	1255	1255	1255	1255	1256	1259	1262	1260	1256	1258	1265	1280	1280	1283	1272	1267	1262	1261	1259	1259	1259	1262
12 *q*	1258	1257	1257	1256	1256	1256	1256	1256	1256	1254	1250	1243	1243	1245	1251	1253	1257	1256	1256	1256	1256	1257	1257	1257	1254
13 *q*	1257	1256	1256	1255	1256	1255	1255	1256	1257	1256	1251	1245	1246	1249	1254	1259	1261	1259	1258	1260	1263	1262	1258	1257	1256
14	1254	1252	1251	1249	1250	1250	1247	1246	1246	1245	1242	1242	1245	1249	1253	1257	1257	1256	1257	1257	1256	1257	1256	1255	1251
15	1256	1256	1255	1255	1251	1251	1251	1252	1254	1249	1245	1239	1237	1240	1245	1250	1253	1251	1250	1251	1251	1251	1252	1247	1250
16	1247	1246	1248	1248	1248	1248	1247	1252	1254	1255	1249	1245	1244	1244	1245	1249	1251	1250	1250	1250	1251	1252	1254	1255	1249
17	1254	1254	1248	1245	1246	1245	1245	1245	1244	1248	1245	1244	1240	1244	1246	1252	1255	1254	1255	1254	1252	1252	1251	1250	*1249*
18 *q*	1250	1250	1251	1250	1249	1248	1247	1247	1250	1251	1245	1242	1243	1245	1250	1251	1251	1250	1250	1250	1250	1251	1251	1252	1249
19 *q*	1252	1252	1252	1251	1250	1250	1250	1251	1252	1248	1242	1238	1238	1243	1248	1252	1251	1250	1250	1250	1249	1250	1250	1251	1249
20	1252	1252	1253	1249	1248	1248	1249	1250	1251	1251	1247	1244	1247	1252	1257	1262	1262	1262	1262	1262	1262	1257	1256	1256	1254
21	1255	1255	1254	1253	1253	1253	1253	1251	1251	1251	1247	1242	1244	1247	1250	1255	1257	1259	1260	1259	1261	1262	1257	1254	1253
22	1253	1253	1254	1253	1253	1252	1251	1254	1253	1253	1248	1247	1247	1251	1260	1267	1272	1273	1278	1273	1265	1260	1256	1255	1258
23	1250	1246	1246	1249	1251	1252	1254	1257	1259	1255	1250	1247	1249	1249	1253	1257	1258	1257	1257	1256	1256	1255	1255	1254	1253
24 *q*	1253	1252	1252	1251	1251	1251	1251	1253	1254	1252	1248	1244	1244	1245	1249	1254	1253	1252	1251	1251	1251	1252	1253	1254	1251
25 *d*	1252	1222	1220	1225	1222	1225	1227	1228	1229	1234	1244	1253	1277	1315	1300	1313	1352	1342	1328	1307	1244	1229	1249	1220	1261
26 *d*	1180	1209	1233	1229	1214	1235	1248	1260	1262	1267	1266	1275	1270	1270	1280	1276	1289	1286	1287	1268	1235	1244	1243	1235	1253
27	1247	1252	1255	1254	1249	1251	1255	1257	1262	1262	1260	1260	1262	1266	1272	1274	1280	1277	1271	1271	1264	1255	1259	1261	1261
28	1258	1260	1258	1259	1259	1260	1260	1262	1261	1261	1260	1262	1268	1273	1281	1280	1275	1271	1268	1266	1266	1267	1265	1264	*1265*
29	1262	1262	1262	1257	1253	1253	1255	1256	1256	1257	1256	1256	1262	1264	1266	1274	1270	1275	1281	1274	1269	1265	1259	1259	1263
30	1262	1262	1262	1261	1260	1259	1259	1259	1257	1256	1251	1252	1259	1259	1260	1262	1263	1275	1280	1275	1273	1268	1266	1266	1263
31 *d*	1262	1254	1238	1227	1220	1227	1233	1247	1251	1251	1249	1250	1256	1264	1275	1280	1279	1275	1276	1285	1291	1274	1260	1255	1257
Mean	1249	1250	1250	*1248*	*1248*	1249	1251	1253	1255	1255	1252	1249	1251	1254	1259	1265	*1269*	1269	1267	1264	1259	1256	1255	1253	1255

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

132 ESKDALEMUIR — OCTOBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	20 55	691	609	10 38	82	14 00	61·3	50·3	20 49	11·0	20 10	1265	1213	00 00	52	3,1,2,4,3,2,3,2	20	1	85·4
2	19 56	725	622	13 03	103	14 06	63·5	37·7	19 45	25·8	17 15	1298	1244	03 37	54	3,1,2,2,3,4,4,2	21	1	85·4
3	05 11	693	615	11 43	78	14 59	61·7	48·2	16 50	13·5	17 05	1285	1239	03 55	46	2,3,3,3,2,3,2,1	19	1	85·4
4	06 04	695	603	10 34	92	13 46	62·5	48·8	08 56	13·7	16 40	1263	1238	05 02	25	1,3,3,3,1,1,1,1	14	0	85·4
5 *d*	19 40	*822*	601	20 24	*221*	19 57	68·9	29·1	22 24	39·8	18 37	1308	1215	22 40	93	2,2,2,3,3,3,6,5	26	1	85·4
6 *d*	17 14	695	595	09 44	100	02 47	66·8	46·3	17 05	20·5	17 01	1304	1218	03 08	86	4,3,3,3,3,4,2,2	24	1	85·4
7	23 10	726	623	11 50	103	13 31	64·4	50·1	09 10	14·3	16 18	1267	1249	12 04	18	2,1,2,1,2,2,1,3	14	0	85·4
8	02 44	714	639	11 29	75	12 58	60·8	50·1	09 01	10·7	16 47	1258	1242	12 48	16	3,2,2,2,2,2,2,2	17	0	85·4
9	21 41	729	638	11 51	91	14 01	60·0	42·2	21 35	17·8	09 19	1262	1227	23 33	35	1,1,1,1,1,2,1,4	12	0	85·4
10	06 35	712	611	13 00	101	12 36	63·3	45·5	17 36	17·8	17 44	1275	1231	00 00	44	3,2,3,3,3,3,3,0	20	0	85·5
11	19 00	689	618	11 00	71	13 09	60·9	48·8	18 49	12·1	16 23	1285	1253	04 20	32	0,2,3,2,3,2,2,0	14	0	85·5
12 *q*	21 43	681	652	11 55	*29*	13 04	57·4	50·0	09 00	7·4	00 20	1259	1241	12 16	18	0,0,1,1,1,0,0,1	4	0	85·5
13 *q*	05 54	683	651	11 56	32	12 53	58·5	50·0	09 38	8·5	20 27	1265	1245	12 12	20	1,0,1,1,1,0,2,2	8	0	85·5
14	06 11	695	663	13 14	32	12 52	60·8	51·9	22 31	8·9	18 30	1259	1241	11 14	18	2,1,1,1,2,1,1,2	11	0	85·4
15	22 59	709	657	11 17	52	14 13	58·3	47·3	24 00	11·0	01 43	1256	1237	12 20	19	1,1,0,1,1,0,0,3	7	0	85·4
16	20 02	697	660	00 57	37	14 00	59·8	45·1	00 34	14·7	09 05	1257	1244	13 59	13	3,2,2,1,2,2,1,1	14	0	85·4
17	18 41	705	666	12 20	39	13 34	58·1	51·4	09 11	6·7	19 10	1256	1240	12 29	16	1,1,1,1,1,0,2,2	9	0	85·4
18 *q*	21 53	693	656	09 59	37	13 37	58·5	51·5	09 15	7·0	15 40	1253	1241	11 50	*12*	1,0,0,2,1,1,0,0	5	0	85·4
19 *q*	22 56	697	655	10 40	42	12 49	60·7	51·4	09 09	9·3	08 20	1253	1237	12 20	16	0,0,1,1,2,2,1,1	8	0	85·4
20	02 56	694	652	09 11	42	12 55	63·0	52·1	02 05	10·9	16 00	1264	1242	11 22	22	2,1,1,2,2,2,2,1	13	0	85·4
21	22 35	688	658	11 35	30	13 48	60·0	46·5	21 40	13·5	22 03	1265	1241	11 31	24	1,0,1,1,1,1,1,3	9	0	85·4
22	24 00	692	647	14 01	45	13 53	65·3	51·3	08 10	14·0	18 19	1281	1244	12 18	37	0,0,1,1,3,2,3,1	11	0	85·4
23	20 00	695	644	12 31	51	12 22	59·9	50·9	02 23	9·0	08 16	1260	1244	01 58	16	2,1,1,2,2,2,2,1	13	0	85·4
24 *q*	20 40	696	655	11 19	41	12 34	60·1	51·3	09 39	8·8	23 34	1256	1243	12 20	13	0,0,1,1,2,1,1,2	8	0	85·4
25 *d*	20 13	718	*564*	13 07	154	14 12	*75·2*	35·5	17 03	39·7	16 06	*1362*	1191	24 00	*171*	4,3,4,4,4,5,5,4	33	1	85·4
26 *d*	19 46	745	588	01 19	157	13 40	63·5	29·3	19 45	34·2	16 31	1293	*1172*	00 25	121	4,4,3,3,3,4,5,3	29	1	85·4
27	20 30	701	635	16 32	66	12 50	60·2	44·6	16 44	15·6	16 40	1283	1240	00 00	43	2,2,2,2,3,3,3,3	20	0	85·4
28	22 41	680	634	15 04	46	13 04	60·9	48·9	21 43	12·0	15 04	1284	1257	00 30	27	1,2,1,2,3,2,0,2	13	0	85·4
29	21 51	709	639	18 00	70	14 04	58·9	46·7	22 12	12·2	18 24	1285	1253	05 00	32	1,2,2,2,1,3,3,3	17	0	85·4
30	17 00	683	632	17 38	51	12 02	59·9	41·4	17 57	18·5	18 11	1284	1249	11 01	35	1,0,1,1,2,4,3,2	14	0	85·4
31 *d*	20 30	713	571	20 56	142	15 53	66·1	*24·6*	21 03	*41·5*	20 17	1316	1218	04 42	98	2,3,2,3,3,3,5,5	26	1	85·4
Mean	- -	705	631	- -	74	- -	61·9	45·8	- -	16·1	- -	1276	1235	- -	41	-	-	0·26	85·4

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.

133 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — NOVEMBER 1955

	Hour G.M.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	Mean
	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	653	652	651	653	677	681	670	660	658	651	643	637	645	655	658	664	667	662	669	667	661	670	679	670	661
2	664	667	667	671	673	670	675	671	669	662	656	647	643	656	645	661	659	658	671	680	685	683	679	679	666
3 q	678	678	678	679	678	678	677	673	668	652	644	645	653	664	675	675	674	676	677	681	681	676	674	680	671
4 d	673	668	680	700	690	669	681	661	663	661	645	637	653	662	662	664	664	669	669	669	649	636	651	643	663
5	658	661	661	662	678	680	669	671	651	647	647	651	646	654	660	661	664	667	669	666	670	667	664	668	662
6 q	676	677	673	673	675	677	680	679	671	660	651	648	650	657	661	665	670	675	678	676	679	679	672	673	670
7 q	679	677	673	673	675	677	679	681	675	664	655	651	657	662	667	673	677	680	682	685	684	684	684	683	674
8	684	687	689	687	686	693	702	698	688	683	680	674	668	669	666	662	658	675	663	683	688	685	664	658	679
9	698	662	668	672	675	670	676	677	675	671	666	657	658	662	672	672	676	677	676	679	680	682	677	680	673
10	679	673	673	675	678	681	682	682	676	666	656	649	652	663	671	677	681	676	679	679	684	683	688	685	675
11	680	677	680	679	683	685	686	684	676	667	660	661	666	668	673	678	670	681	681	680	679	690	685	684	677
12	680	681	682	681	681	686	688	684	639	639	662	662	663	662	667	672	681	657	636	657	665	672	672	674	668
13	672	671	668	666	669	671	678	673	671	664	657	654	658	662	666	671	673	673	674	677	679	677	679	681	670
14	676	675	676	679	680	681	680	679	675	666	656	658	668	676	680	672	685	686	688	684	683	681	684	683	677
15	685	686	686	688	690	692	696	679	680	678	658	640	644	651	648	645	645	652	649	618	641	664	654	668	664
16 d	661	659	658	667	663	663	681	672	661	648	648	645	643	649	654	656	647	638	643	643	632	656	662	663	655
17	662	661	666	670	692	670	672	670	664	654	645	645	652	653	656	662	671	673	673	672	668	662	667	668	665
18 d	671	670	671	668	672	684	681	683	660	664	662	663	672	668	679	686	686	620	656	604	618	650	643	642	661
19 d	646	643	649	652	658	659	658	664	664	624	571	590	613	658	834	660	575	580	619	630	648	632	623	617	640
20 d	643	651	631	619	641	642	633	613	589	591	583	578	603	620	615	615	615	624	591	603	602	602	642	633	616
21	646	640	645	639	656	654	651	649	643	635	631	632	634	640	647	651	654	656	657	659	660	664	663	662	649
22 q	660	659	659	662	664	665	666	669	663	658	651	642	633	639	649	655	660	662	664	667	668	670	671	669	659
23 q	668	668	668	672	675	675	675	671	667	660	656	660	662	665	669	669	673	675	674	672	669	671	669	666	669
24	674	677	677	677	677	680	682	679	667	667	666	656	654	661	659	661	658	657	656	665	662	666	675	665	667
25	673	688	679	673	674	681	679	682	672	666	666	665	655	652	669	667	648	671	672	677	675	671	673	676	671
26	680	678	675	677	677	679	686	682	673	664	654	654	659	664	664	668	673	679	680	679	677	674	674	676	673
27	688	677	678	680	681	683	684	680	678	668	663	656	658	669	673	672	676	676	680	681	679	668	671	680	675
28	679	677	678	683	685	686	685	683	682	671	652	646	656	665	671	670	663	677	677	683	678	658	660	662	672
29	671	675	671	672	679	684	686	681	678	672	662	654	659	663	665	669	672	670	671	672	661	662	672	676	671
30	676	677	677	677	685	681	686	683	679	675	669	663	664	669	663	667	671	674	666	677	680	676	675	676	674
Mean	671	670	670	671	676	676	677	674	666	658	651	647	651	659	668	665	663	663	665	665	666	667	668	668	666

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

134 ESKDALEMUIR (D) — 10° + — NOVEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	54·0	53·0	52·3	52·3	53·0	49·6	52·3	51·3	51·7	52·3	53·4	55·9	57·6	58·6	57·6	55·8	54·7	54·9	52·3	45·5	53·2	52·9	53·2	53·4	53·4
2	53·1	53·3	54·6	54·0	53·1	52·9	52·5	52·1	50·9	51·8	54·9	57·1	58·1	58·6	57·9	55·8	55·9	55·3	55·9	54·8	54·4	53·6	52·7	51·9	54·4
3 q	53·1	53·4	53·7	53·9	53·6	53·6	53·1	52·4	51·3	50·7	52·7	55·8	57·1	57·2	57·2	56·2	55·4	54·6	54·4	54·2	54·4	55·0	54·4	53·7	54·2
4 d	52·1	47·7	52·2	58·5	62·8	62·1	56·2	49·2	49·3	50·6	53·6	55·1	55·6	56·2	55·5	54·1	54·3	54·8	54·4	52·3	46·7	48·7	47·7	42·7	53·0
5	44·5	46·4	49·2	50·8	53·3	50·4	51·8	52·7	53·1	54·2	54·1	56·0	57·5	57·7	57·4	55·9	55·0	54·5	54·9	54·6	53·7	53·4	51·9	52·9	53·2
6 q	52·3	51·0	52·0	53·0	52·7	52·4	52·4	51·8	51·1	51·0	52·3	54·5	56·3	57·2	56·6	55·5	54·9	54·4	54·1	53·8	51·3	51·4	51·6	52·3	53·2
7 q	51·8	51·9	52·8	53·1	52·7	53·1	53·0	52·5	51·5	51·5	52·6	54·9	56·9	57·9	56·9	55·8	55·3	55·7	54·8	54·2	53·5	53·2	53·0	53·1	53·8
8	53·5	53·8	54·0	53·1	52·8	54·1	53·7	53·8	53·2	53·9	54·8	56·2	57·2	57·7	58·7	62·2	63·8	56·2	57·9	54·1	54·1	52·9	51·4	46·4	55·0
9	50·0	52·3	52·7	53·1	50·9	52·7	52·5	52·5	52·3	51·3	53·1	54·8	56·6	57·7	58·1	57·1	56·9	55·7	55·5	54·5	53·9	53·4	52·9	52·7	53·9
10	51·9	52·7	53·4	53·3	53·5	52·8	52·3	51·7	50·5	50·9	52·8	54·7	57·3	57·7	57·2	55·8	55·4	54·9	54·3	49·9	53·5	53·2	53·3	51·3	53·5
11	50·3	53·1	53·4	54·4	53·9	53·4	53·3	52·4	51·6	51·6	52·6	55·0	57·4	58·2	58·9	57·5	55·5	54·5	54·6	53·3	51·0	47·8	52·3	53·3	53·7
12	53·7	54·3	53·7	53·0	53·4	53·4	52·9	51·9	51·1	56·9	58·0	61·1	60·7	58·8	57·9	57·4	58·8	57·2	49·5	55·4	53·8	53·1	53·2	52·8	55·1
13	53·6	53·5	52·4	52·6	50·2	51·3	52·3	51·9	51·3	51·3	52·8	55·9	58·4	58·4	57·4	55·9	55·0	54·5	53·7	53·5	53·2	53·1	53·0	52·6	53·7
14	52·6	53·2	53·8	53·7	53·2	53·0	52·8	52·6	51·4	51·7	52·8	55·3	57·8	57·7	57·9	56·1	56·1	56·5	55·7	55·3	50·9	53·1	53·0	52·8	54·1
15	54·1	54·1	54·1	53·8	54·1	54·5	53·6	53·4	53·5	55·1	55·7	58·8	61·9	62·3	60·0	59·6	55·4	53·1	54·2	44·8	48·1	47·8	51·2	49·6	54·3
16 d	47·1	49·6	54·4	49·8	52·8	55·3	61·5	59·0	56·0	53·2	54·3	56·5	58·3	60·4	63·0	59·9	58·7	57·2	53·1	46·9	46·8	48·1	43·3	50·4	54·0
17	51·4	52·2	52·9	51·7	58·7	52·6	52·8	52·7	52·1	51·8	53·1	54·9	56·5	57·5	57·5	56·7	55·1	54·1	53·4	53·2	53·1	51·7	52·7	52·7	53·8
18 d	53·1	53·0	52·7	52·4	52·6	51·8	56·1	55·8	54·3	53·7	54·9	57·3	59·6	59·9	58·7	60·0	61·6	48·1	50·9	43·1	48·9	50·0	50·0	52·9	53·8
19 d	54·9	55·4	52·4	52·6	52·6	52·2	51·9	51·8	52·0	52·0	53·4	55·5	61·1	67·9	75·7	69·2	59·0	55·3	53·2	51·1	53·0	51·4	50·6	40·0	55·2
20 d	48·5	52·3	42·9	46·3	55·3	51·3	53·7	54·1	57·7	57·2	54·9	56·4	57·2	58·0	59·7	58·9	55·3	44·1	45·1	44·5	41·3	45·5	49·0	43·0	51·3
21	45·6	51·7	56·2	56·1	55·8	54·1	53·9	53·5	53·0	53·1	53·0	54·1	54·9	55·4	55·1	54·5	53·8	53·1	53·1	52·9	52·6	52·7	52·7	52·7	53·5
22 q	52·6	52·7	52·7	53·0	53·0	52·8	52·6	52·5	51·5	51·7	53·0	55·4	56·3	57·2	56·7	54·8	53·6	52·8	52·6	52·5	52·3	52·4	52·6	52·8	53·3
23 q	52·9	52·8	52·8	53·0	53·1	53·4	52·7	52·0	51·8	51·2	52·0	54·4	55·3	56·0	55·7	55·1	54·6	53·8	53·4	53·5	53·6	49·1	50·6	51·7	53·1
24	53·5	53·6	53·0	52·8	53·3	54·2	52·8	53·4	52·2	53·1	54·2	55·4	58·3	58·3	59·3	59·6	59·5	57·7	55·7	53·6	52·2	51·6	51·8	50·3	54·6
25	54·1	57·0	51·4	51·4	52·7	52·6	52·7	52·5	52·9	53·6	54·5	57·1	58·4	57·4	57·5	58·4	51·7	54·8	53·8	53·2	52·9	52·6	52·5	53·3	54·1
26	52·6	55·3	52·8	52·3	51·9	52·7	52·5	52·4	51·9	51·8	52·7	54·8	56·3	56·4	55·6	55·2	54·7	54·0	53·7	53·2	52·6	51·8	51·2	52·7	53·4
27	52·6	53·6	54·1	54·0	53·9	53·3	52·7	52·5	52·2	52·3	54·1	56·0	57·3	57·6	57·8	56·4	55·5	54·5	54·0	53·5	53·2	52·2	52·4	52·9	54·1
28	52·8	53·9	54·2	53·9	53·8	53·3	52·7	52·5	52·2	52·6	54·6	58·0	59·0	58·4	57·7	56·4	54·9	54·4	54·0	53·9	53·4	50·2	46·0	46·8	53·7
29	51·1	52·7	51·4	52·6	53·6	52·5	52·6	53·0	53·6	53·5	53·6	55·4	55·9	56·1	56·1	55·2	54·6	53·9	53·0	53·2	48·8	51·1	52·4	53·7	53·3
30	53·8	53·9	53·8	54·5	54·8	52·6	52·7	52·7	52·7	52·4	53·1	54·6	55·5	56·9	56·7	55·9	55·9	54·9	53·0	53·4	53·1	53·0	53·0	53·2	54·0
Mean	51·9	52·8	52·7	53·0	53·7	53·1	53·3	52·7	52·3	52·6	53·7	55·9	57·4	58·2	58·3	57·2	56·0	54·3	53·6	52·1	51·8	51·5	51·5	51·0	53·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

135 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — NOVEMBER 1955

	Hour G.M.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	Mean
	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	1254	1256	1262	1256	1230	1228	1241	1252	1259	1263	1262	1262	1263	1264	1267	1267	1267	1270	1275	1273	1266	1263	1260	1257	1259
2	1262	1262	1262	1262	1262	1262	1262	1264	1265	1261	1257	1256	1260	1267	1284	1285	1279	1278	1273	1270	1266	1265	1267	1263	1266
3 *q*	1262	1262	1262	1261	1261	1260	1260	1260	1261	1262	1257	1256	1255	1256	1260	1262	1264	1263	1262	1262	1260	1259	1260	1259	1260
4 *d*	1255	1243	1237	1217	1197	1193	1203	1230	1244	1249	1250	1253	1256	1259	1264	1270	1268	1267	1266	1267	1273	1269	1240	1250	*1247*
5	1250	1248	1244	1243	1238	1241	1251	1255	1260	1261	1257	1255	1260	1262	1266	1271	1271	1270	1268	1268	1267	1267	1267	1262	1258
6 *q*	1256	1256	1257	1260	1259	1261	1260	1260	1262	1265	1262	1258	1259	1258	1262	1265	1266	1265	1264	1264	1265	1262	1262	1260	1261
7 *q*	1257	1254	1255	1256	1259	1260	1260	1262	1265	1266	1264	1262	1261	1262	1264	1267	1267	1266	1264	1264	1264	1263	1262	1261	1262
8	1260	1257	1256	1256	1256	1255	1253	1255	1258	1257	1254	1256	1260	1263	1268	1280	1295	1294	1295	1285	1272	1268	1273	1271	1267
9	1234	1252	1259	1261	1260	1260	1260	1260	1261	1260	1255	1257	1259	1260	1262	1262	1263	1263	1265	1266	1266	1266	1266	1266	1260
10	1263	1262	1261	1261	1261	1262	1261	1261	1263	1262	1256	1256	1257	1259	1260	1262	1262	1263	1263	1267	1262	1262	1261	1256	1261
11	1256	1255	1255	1256	1257	1258	1257	1257	1260	1259	1260	1256	1256	1257	1261	1262	1266	1262	1261	1262	1263	1259	1254	1255	1259
12	1256	1256	1256	1256	1256	1255	1254	1256	1265	1257	1251	1248	1251	1255	1257	1259	1264	1278	1319	1291	1283	1275	1269	1265	1264
13	1263	1263	1263	1260	1259	1261	1261	1262	1263	1262	1259	1256	1256	1261	1263	1263	1266	1267	1268	1266	1266	1266	1265	1263	1263
14	1262	1262	1262	1262	1262	1261	1260	1260	1261	1260	1257	1253	1251	1256	1261	1265	1263	1262	1262	1264	1268	1267	1263	1262	1261
15	1260	1260	1259	1258	1256	1256	1254	1257	1257	1255	1256	1263	1268	1276	1282	1285	1291	1292	1289	1302	1289	1274	1257	1241	1268
16 *d*	1245	1240	1211	1203	1226	1235	1230	1236	1247	1258	1262	1265	1272	1276	1283	1283	1290	1302	1319	1324	1308	1274	1259	1262	1263
17	1263	1263	1264	1264	1237	1245	1256	1261	1262	1266	1264	1262	1262	1268	1271	1272	1268	1268	1267	1267	1267	1272	1270	1268	1264
18 *d*	1267	1267	1266	1264	1258	1246	1247	1251	1259	1233	1232	1230	1231	1233	1234	1233	1239	1331	1409	1407	1354	1313	1298	1291	1275
19 *d*	1287	1285	1282	1279	1276	1275	1274	1272	1269	1275	1282	1293	1305	1330	1555	1561	1394	1386	1332	1302	1290	1295	1290	1286	*1320*
20 *d*	1260	1193	1222	1255	1256	1257	1257	1268	1271	1285	1295	1302	1321	1332	1331	1347	1368	1367	1348	1316	1298	1286	1263	1242	1289
21	1226	1228	1234	1253	1259	1267	1272	1275	1275	1276	1278	1279	1279	1279	1279	1279	1279	1279	1278	1278	1277	1276	1275	1275	1269
22 *q*	1275	1274	1274	1274	1274	1274	1274	1273	1276	1274	1273	1276	1278	1279	1280	1279	1279	1279	1278	1276	1275	1274	1273	1273	1276
23 *q*	1272	1272	1272	1271	1271	1271	1271	1271	1272	1273	1271	1267	1267	1263	1267	1270	1271	1271	1271	1271	1273	1274	1272	1269	1271
24	1268	1267	1267	1267	1267	1267	1267	1267	1268	1266	1264	1263	1266	1268	1272	1276	1281	1286	1290	1287	1287	1281	1273	1267	1272
25	1263	1245	1249	1255	1260	1262	1265	1265	1267	1268	1267	1263	1266	1268	1268	1274	1286	1279	1275	1272	1272	1272	1272	1270	1267
26	1267	1262	1262	1262	1262	1262	1262	1262	1266	1268	1267	1267	1267	1268	1271	1270	1270	1269	1268	1268	1269	1269	1270	1266	1266
27	1256	1260	1262	1262	1263	1263	1264	1266	1268	1268	1266	1268	1268	1268	1269	1270	1271	1271	1268	1268	1268	1272	1272	1267	1266
28	1265	1263	1264	1263	1262	1263	1263	1262	1263	1264	1266	1264	1267	1268	1268	1272	1274	1271	1268	1267	1268	1275	1256	1253	1265
29	1260	1261	1261	1260	1260	1262	1262	1262	1262	1262	1262	1263	1266	1270	1271	1272	1271	1271	1271	1270	1272	1271	1268	1267	1266
30	1267	1267	1267	1266	1261	1261	1260	1260	1262	1267	1267	1267	1267	1268	1273	1274	1273	1273	1275	1272	1268	1268	1267	1266	1267
Mean	1260	1257	1257	1257	*1255*	1256	1257	1260	1263	1263	1262	1263	1265	1268	1279	1282	1279	1282	*1284*	1281	1276	1272	1267	1264	1267

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

136 ESKDALEMUIR — NOVEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	18 54	718	631	19 16	87	13 20	58·9	40·0	19 26	18·9	18 09	1277	1222	04 57	55	3,3,2,2,1,3,4,3	21	1	85·4
2	20 25	700	632	14 30	68	14 07	60·7	50·5	09 13	10·2	14 51	1291	1256	11 28	35	2,1,2,3,3,2,3,2	18	0	85·4
3 *q*	23 51	686	643	11 36	43	14 04	57·7	49·9	09 14	7·8	16 16	1265	1253	12 50	12	1,1,1,2,2,1,1,1	10	0	85·4
4 *d*	04 07	716	619	11 02	97	04 40	68·5	40·8	23 35	27·7	20 49	1276	1190	05 00	86	3,4,4,3,2,1,3,4	24	1	85·4
5	05 09	688	637	10 09	51	12 56	58·6	42·2	00 53	16·4	16 03	1271	1237	04 49	34	3,3,3,2,2,1,1,1	16	0	85·4
6 *q*	20 35	685	647	10 58	38	13 36	57·5	50·2	20 34	7·3	20 07	1266	1255	00 55	11	2,0,1,0,1,0,2,2	8	0	85·4
7 *q*	19 19	687	647	11 46	40	12 50	58·1	50·1	01 12	8·0	15 45	1267	1254	02 00	13	1,0,1,1,1,1,1,0	6	0	85·4
8	23 59	748	617	23 16	131	16 05	67·1	43·7	23 36	23·4	17 10	1299	1246	24 00	53	1,2,1,2,2,4,3,5	20	1	85·4
9	00 08	749	650	12 55	99	13 29	58·8	47·5	00 00	11·3	22 53	1267	1228	00 26	39	4,2,2,2,2,1,1,1	15	0	85·4
10	22 54	699	643	11 38	56	14 08	58·3	48·3	19 06	10·0	19 05	1268	1255	23 00	13	1,1,1,1,1,2,3,2	12	0	85·4
11	21 41	696	656	16 30	40	14 25	59·0	46·7	21 40	12·3	16 41	1267	1252	01 56	15	2,1,0,1,1,2,2,3	12	0	85·4
12	16 24	695	612	09 09	83	11 34	66·0	45·4	18 17	20·6	18 20	1327	1248	11 29	79	1,0,4,4,3,4,3,2	21	1	85·4
13	23 43	690	647	11 24	43	12 56	59·2	49·2	09 26	10·0	18 19	1270	1256	12 04	14	1,2,2,2,1,1,1,1	11	0	85·4
14	20 38	698	652	10 51	46	12 20	59·0	49·0	20 29	10·0	20 24	1271	1250	12 10	21	1,0,1,1,2,2,2,2	11	0	85·4
15	06 09	704	602	19 26	102	13 00	65·7	42·1	19 51	23·6	19 49	1310	1240	23 30	70	2,1,3,4,3,3,4,3	23	1	85·4
16 *d*	21 12	695	607	19 32	88	14 14	64·4	37·4	22 20	27·0	19 35	1332	1191	03 11	141	3,4,3,2,3,3,4,4	26	1	85·4
17	04 15	719	641	11 10	78	04 13	63·5	49·8	01 11	13·7	15 10	1273	1229	04 38	44	2,4,2,1,1,1,1,2	14	0	85·4
18 *d*	18 21	728	571	19 06	157	18 30	68·8	34·5	19 40	34·3	18 36	1253	1241	05 34	212	1,3,3,2,2,5,5,3	24	1	85·4
19 *d*	14 44	*1115*	548	16 00	*567*	14 34	*108·9*	32·0	23 30	*76·9*	14 43	*1750*	1270	08 36	*480*	2,1,2,4,8,7,5,4	33	2	85·4
20 *d*	01 06	733	*542*	17 41	191	17 40	62·0	*22·4*	19 03	39·6	17 13	1417	*1182*	01 35	235	5,3,4,2,4,6,5,4	33	1	85·4
21	21 50	666	622	00 05	44	04 08	57·7	43·7	00 19	14·0	16 12	1280	1224	00 57	56	3,2,2,1,1,0,1,0	10	0	85·4
22 *q*	22 09	671	631	12 23	40	14 00	57·8	51·0	09 37	6·8	14 28	1280	1272	10 30	*8*	0,0,1,2,2,1,1,0	7	0	85·3
23 *q*	11 37	681	653	11 03	*28*	11 37	57·1	46·8	21 46	10·3	21 48	1275	1263	13 19	12	0,1,1,2,1,0,1,2	8	0	85·3
24	06 10	686	647	12 30	39	16 10	60·3	49·1	23 06	11·2	18 32	1289	1263	11 30	26	2,0,2,2,2,2,2,2	14	0	85·3
25	00 57	712	629	16 15	83	01 00	64·7	49·4	16 24	15·3	16 33	1289	1242	01 24	47	4,1,2,1,2,3,1,2	16	1	85·3
26	00 06	701	647	10 16	54	23 58	57·5	50·0	22 10	7·5	22 36	1271	1259	01 30	12	2,1,2,2,1,1,0,3	12	0	85·3
27	00 06	705	651	11 40	54	14 14	58·6	50·9	00 38	7·7	22 00	1274	1254	00 20	20	3,0,1,2,2,1,0,2	11	0	85·3
28	22 23	696	635	22 45	61	13 04	60·0	34·7	22 50	25·3	22 09	1278	1244	22 41	34	1,0,0,2,2,2,2,4	13	0	85·3
29	06 46	688	647	11 20	41	11 53	56·5	47·5	20 25	9·0	20 40	1274	1256	00 00	18	2,1,1,2,0,2,2,2	12	0	85·3
30	04 43	692	656	14 45	36	14 10	57·2	51·5	05 10	*5·7*	18 40	1277	1259	04 43	18	0,2,1,1,2,1,2,1	10	0	85·3
Mean	- -	715	629	- -	86	- -	62·3	44·9	- -	17·4	- -	1307	1243	- -	64	-	-	0·37	85·4

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.

137 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — DECEMBER 1955

	Hour G.M.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	Mean
	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*	678	686	680	682	683	685	684	685	689	679	664	664	672	669	658	668	645	660	662	619	604	617	607	607	660
2	614	621	635	647	661	671	656	665	647	651	654	653	654	650	658	667	668	669	668	668	668	669	667	665	*656*
3	666	667	669	671	673	676	680	676	677	669	665	655	652	652	653	661	664	680	685	671	671	668	681	673	669
4	675	660	672	676	678	681	674	672	669	663	658	660	666	668	669	671	673	675	676	677	676	678	678	676	672
5	673	674	676	681	684	684	680	677	673	669	665	668	676	681	683	676	679	682	681	688	684	680	707	687	679
6 *d*	663	664	656	668	660	668	672	664	661	659	658	656	663	672	668	672	675	677	677	680	672	674	661	652	666
7	667	664	664	679	673	664	664	667	664	664	662	664	665	670	671	676	680	681	680	682	681	681	683	679	672
8	679	681	685	679	686	692	686	679	677	672	672	669	669	671	675	674	662	678	679	684	669	666	669	677	676
9	683	686	671	672	680	673	669	683	675	676	671	656	654	638	658	658	665	679	678	679	676	676	677	677	671
10	677	678	676	676	675	677	679	676	679	678	673	665	657	660	670	674	671	668	667	681	675	677	677	678	673
11	677	677	676	677	677	676	676	676	675	673	665	658	658	665	676	677	680	681	680	683	683	680	676	675	675
12	683	680	680	681	682	681	683	682	681	678	675	674	671	673	678	684	684	683	680	677	673	671	676	677	679
13 *q*	677	678	679	681	686	683	683	683	683	678	672	668	669	675	681	684	682	688	687	687	686	688	687	686	681
14 *q*	684	685	686	688	690	692	693	692	695	692	682	677	673	679	683	685	689	689	691	690	689	688	686	685	687
15	686	690	684	681	681	686	690	690	689	686	679	676	674	684	687	688	690	692	683	673	672	671	672	681	683
16	675	679	681	692	690	696	698	699	688	683	680	678	673	670	666	674	672	673	681	682	684	681	683	681	682
17	680	683	684	687	690	693	690	690	691	687	680	678	678	680	680	679	676	676	680	684	682	682	681	683	683
18 *q*	680	683	688	688	690	693	693	694	695	687	678	668	670	674	681	685	692	694	696	694	693	690	687	687	687
19	688	687	687	689	693	697	700	693	687	683	687	685	676	671	681	679	661	661	667	649	657	665	670	679	679
20	672	675	676	696	687	684	693	695	686	680	672	663	664	668	667	663	668	675	680	683	679	676	670	674	677
21	675	678	679	685	687	693	697	695	687	678	674	670	663	663	656	650	650	663	673	671	658	664	657	669	672
22	674	675	676	681	695	691	691	687	680	670	662	659	663	670	667	670	678	678	676	678	682	680	679	680	677
23 *q*	679	682	683	684	690	691	688	684	684	678	674	671	674	679	679	679	682	683	686	685	685	682	679	682	682
24	685	684	684	684	687	691	692	695	693	685	678	676	678	687	695	693	679	682	688	689	691	693	687	698	*687*
25 *d*	678	676	672	672	683	685	704	696	683	675	668	664	673	670	639	652	661	659	652	651	657	665	668	667	670
26 *d*	668	668	668	674	679	682	683	679	676	673	663	640	643	658	660	651	641	670	678	667	638	668	623	625	661
27 *d*	651	662	666	673	696	691	674	676	670	661	649	656	658	666	660	663	664	678	673	675	674	681	672	675	669
28	675	676	677	678	680	683	683	686	687	680	672	674	672	675	672	660	665	668	664	670	676	676	679	678	675
29 *q*	679	680	680	683	685	685	686	685	680	673	671	674	675	678	680	681	683	684	683	680	683	683	682	682	681
30	681	680	680	680	683	687	687	686	685	680	677	679	676	675	675	672	680	680	686	686	686	688	691	687	682
31	687	686	687	687	696	698	693	691	695	694	680	682	687	689	687	685	674	663	672	668	675	672	672	675	683
Mean	675	676	676	680	683	*685*	685	684	681	676	670	*667*	668	670	671	673	672	676	678	676	673	675	674	674	676

689 at 0-1h. January 1, 1956.

MAGNETIC DECLINATION (WEST)

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

138 ESKDALEMUIR (D) — 10° + — DECEMBER 1955

	Hour G.M.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	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 *d*	53·9	56·7	54·1	54·5	54·0	53·6	53·2	52·8	52·5	53·1	55·2	58·0	58·8	59·3	57·8	59·8	60·2	57·4	59·0	58·3	50·8	43·8	44·1	39·9	54·2
2	39·5	40·4	40·5	40·4	45·6	49·8	55·0	58·3	57·5	56·4	56·9	56·1	57·7	56·7	56·1	54·9	54·0	53·6	53·2	52·7	52·3	52·1	51·8	52·3	51·8
3	52·5	53·0	53·2	53·6	53·5	53·3	53·1	52·7	52·7	52·7	54·1	56·4	57·6	59·3	59·0	57·7	58·2	55·6	54·8	55·2	50·5	52·4	53·4	53·0	54·5
4	53·9	51·1	54·4	54·1	54·0	53·6	53·6	54·2	53·1	52·1	53·2	55·5	55·8	55·7	55·1	55·0	54·6	53·9	53·7	53·6	53·0	52·8	52·0	52·5	53·8
5	52·7	52·8	53·6	54·0	53·7	53·3	53·4	53·0	53·0	52·9	53·6	54·8	56·1	56·8	56·6	55·8	55·9	54·9	53·7	54·5	54·5	53·7	49·2	42·4	53·5
6 *d*	46·6	47·9	47·7	50·0	47·5	48·4	48·2	51·4	51·6	51·9	53·5	54·6	56·1	55·7	55·9	55·0	54·3	54·1	53·7	53·4	53·0	43·7	45·6	47·2	*51·1*
7	48·2	51·4	50·4	48·8	51·7	50·5	51·1	51·7	51·8	53·0	53·8	55·6	55·9	55·3	55·1	54·5	54·1	53·5	53·2	53·0	52·9	52·7	52·4	52·7	52·6
8	53·2	53·1	52·6	53·1	53·4	51·5	51·9	51·6	51·6	51·8	53·4	53·6	55·5	55·9	56·6	57·1	54·3	54·7	54·2	53·4	46·6	48·3	51·4	52·3	53·0
9	51·5	55·3	51·2	52·1	53·1	53·1	53·6	55·6	54·5	52·7	53·1	54·8	57·0	56·9	57·6	55·9	54·3	55·1	54·8	54·2	53·1	52·6	52·4	52·3	54·0
10	52·3	53·5	52·8	52·9	52·8	53·0	52·7	52·6	52·6	52·4	52·8	54·8	56·2	57·4	55·8	55·5	55·6	57·1	54·5	54·3	54·1	53·4	52·9	53·0	54·0
11	53·4	53·7	53·5	53·2	53·5	53·0	52·7	52·7	52·3	51·7	51·9	53·7	55·7	56·6	56·3	56·2	54·7	55·3	55·0	53·6	53·4	52·5	50·9	49·7	53·5
12	52·4	52·8	53·3	53·6	53·1	53·0	53·1	52·8	52·6	52·5	53·1	54·1	55·4	56·6	56·8	56·3	55·6	57·1	56·1	53·5	54·8	52·5	51·0	52·4	53·9
13 *q*	53·0	53·6	53·5	53·4	53·3	53·0	52·6	52·4	52·3	51·7	52·1	53·8	54·7	55·9	55·8	55·5	54·8	55·0	54·7	53·6	53·0	52·8	52·7	52·7	53·6
14 *q*	53·0	53·4	53·6	54·0	54·0	53·7	53·3	53·2	53·0	52·8	53·0	54·3	55·6	56·3	56·1	55·3	54·9	54·5	54·3	53·9	53·7	53·2	53·1	52·9	54·0
15	52·6	51·5	52·0	53·4	53·5	53·5	53·3	53·1	53·0	52·5	53·1	54·5	56·2	57·0	56·7	56·2	55·7	55·6	54·6	52·6	54·0	52·6	50·1	47·4	53·5
16	51·8	53·6	54·6	54·9	51·9	51·9	52·7	53·0	53·1	54·6	55·6	57·7	59·1	58·8	57·5	57·2	57·7	56·2	57·0	54·4	53·3	53·0	53·3	53·5	*54·9*
17	53·5	54·0	54·8	55·1	55·1	53·9	53·5	53·0	52·9	52·5	53·2	54·9	55·2	56·3	56·3	55·8	56·1	56·3	55·2	54·2	53·5	53·1	52·7	52·9	54·3
18 *q*	53·5	54·5	54·9	53·9	53·9	53·9	53·4	53·1	53·1	52·4	52·8	53·7	55·0	55·9	55·4	55·0	54·6	54·1	54·0	53·4	53·0	52·3	51·9	52·0	53·7
19	52·3	52·4	52·9	53·0	53·3	53·3	53·4	52·7	52·5	52·5	54·5	55·6	57·3	57·9	58·3	58·7	63·3	56·2	54·4	50·1	49·2	49·1	48·9	46·9	53·7
20	47·5	48·2	52·0	53·7	50·4	53·3	55·4	54·2	53·5	54·1	54·9	54·9	55·9	58·2	61·2	59·2	56·9	54·6	54·3	53·5	53·2	52·0	50·3	50·0	53·8
21	50·1	52·4	53·4	52·9	53·1	53·5	53·5	52·7	52·1	52·4	54·5	54·9	58·0	59·4	61·8	61·6	56·4	56·2	54·1	52·6	50·9	49·1	48·1	50·5	53·9
22	52·2	53·9	54·0	54·6	54·8	53·2	52·6	52·7	52·6	52·5	52·6	53·0	54·6	56·1	55·2	55·3	54·2	54·1	54·1	53·5	53·0	52·7	52·7	52·9	53·6
23 *q*	53·1	53·1	53·4	53·9	54·3	53·5	51·8	52·5	52·0	51·4	52·3	52·9	53·8	54·4	53·7	53·3	53·1	53·0	53·1	53·4	53·2	52·3	52·4	52·6	53·0
24	53·2	53·9	54·2	54·0	53·3	53·1	53·0	52·8	52·3	52·6	53·6	55·6	56·9	57·2	56·6	57·0	57·1	55·6	55·3	54·4	53·1	52·6	52·4	46·8	54·0
25 *d*	41·5	45·6	50·2	52·2	51·3	57·3	54·3	55·0	54·1	52·7	53·6	55·0	58·3	60·3	63·1	63·0	59·0	58·6	53·6	49·8	47·2	50·9	52·2	51·8	53·8
26 *d*	51·9	52·4	52·6	53·2	52·9	52·7	52·2	51·9	51·7	52·6	54·3	55·2	58·1	59·9	59·6	63·5	60·7	54·8	53·8	53·7	47·0	34·0	43·6	44·0	52·8
27 *d*	46·0	52·3	57·7	54·1	47·8	50·8	52·6	53·1	53·1	54·0	54·8	57·1	55·3	57·3	56·7	54·9	52·7	50·8	53·7	53·4	52·5	52·6	51·7	52·8	53·2
28	53·4	53·5	53·8	53·5	53·3	53·2	52·7	52·6	52·0	52·9	54·0	54·6	55·5	57·0	56·4	54·7	54·0	55·9	52·5	51·0	52·6	52·0	51·5	52·7	53·6
29 *q*	53·4	53·7	53·6	53·7	53·7	53·4	53·0	52·7	52·1	51·8	52·9	54·4	54·9	55·4	54·5	53·8	53·7	53·6	53·2	52·6	52·2	52·0	51·9	52·2	53·3
30	52·4	53·2	54·0	54·0	53·6	53·6	53·2	52·9	52·3	52·5	53·1	54·3	54·9	56·1	57·2	55·7	55·3	54·8	54·1	53·5	52·8	52·7	52·5	51·9	53·8
31	52·9	53·3	53·6	54·3	55·1	54·7	53·5	53·2	52·7	52·7	53·2	55·4	55·2	56·4	56·1	55·4	56·9	57·6	55·9	52·8	48·4	49·9	49·1	48·0	53·6
Mean	51·2	52·3	52·8	53·0	52·7	52·9	52·9	53·1	52·8	52·7	53·6	55·0	56·2	*57·0*	57·0	56·6	55·9	55·1	54·5	53·4	52·1	50·9	50·9	*50·5*	53·5

45·2 at 0-1h. January 1, 1956.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

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

139 ESKDALEMUIR (Z) — 44,000γ (0·44 C.G.S. unit) + — DECEMBER 1955

	Hour G.M.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	Mean
	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*	1266	1260	1260	1262	1263	1263	1263	1262	1260	1260	1263	1263	1263	1273	1277	1282	1303	1309	1349	1368	1332	1313	1263	1267	*1281*
2	1262	1261	1249	1247	1241	1238	1244	1245	1253	1260	1261	1263	1270	1275	1278	1279	1277	1275	1275	1273	1272	1271	1271	1271	1263
3	1271	1271	1271	1270	1270	1268	1267	1267	1267	1262	1262	1263	1267	1273	1282	1284	1282	1276	1273	1280	1289	1283	1272	1271	1273
4	1268	1269	1267	1267	1267	1266	1267	1267	1267	1267	1267	1264	1267	1270	1270	1272	1272	1272	1271	1270	1270	1268	1268	1267	1268
5	1267	1267	1266	1266	1266	1265	1266	1266	1266	1266	1266	1263	1262	1263	1264	1268	1268	1268	1271	1268	1269	1271	1264	1262	1266
6 *d*	1262	1260	1261	1256	1257	1256	1256	1261	1263	1262	1262	1262	1266	1267	1268	1272	1272	1271	1271	1270	1273	1275	1263	1260	1264
7	1259	1260	1262	1257	1252	1259	1264	1266	1268	1264	1262	1262	1264	1266	1268	1271	1272	1271	1270	1269	1268	1268	1267	1268	1265
8	1267	1266	1263	1263	1261	1257	1256	1256	1257	1261	1258	1257	1260	1260	1264	1270	1274	1272	1271	1269	1275	1272	1270	1268	1264
9	1261	1249	1250	1258	1260	1260	1260	1260	1260	1262	1260	1262	1263	1273	1281	1282	1284	1276	1272	1272	1272	1273	1271	1268	1266
10	1268	1267	1266	1266	1265	1263	1264	1265	1263	1263	1262	1262	1265	1267	1268	1271	1270	1270	1272	1267	1268	1268	1268	1267	1266
11	1267	1266	1265	1263	1262	1262	1263	1263	1262	1267	1267	1264	1264	1264	1268	1271	1271	1268	1269	1268	1268	1270	1272	1273	1267
12	1268	1267	1266	1263	1263	1263	1263	1263	1263	1262	1262	1261	1260	1262	1267	1267	1267	1266	1267	1271	1273	1277	1276	1272	1266
13 *q*	1269	1269	1267	1267	1265	1265	1264	1263	1262	1262	1261	1260	1259	1262	1266	1267	1267	1266	1264	1264	1264	1263	1263	1263	1264
14 *q*	1263	1262	1262	1261	1261	1260	1260	1259	1256	1256	1256	1256	1255	1256	1257	1261	1261	1261	1260	1260	1260	1262	1262	1262	1260
15	1262	1259	1259	1259	1260	1259	1258	1257	1257	1259	1259	1256	1252	1255	1256	1259	1261	1262	1266	1271	1269	1270	1269	1266	1261
16	1262	1261	1260	1254	1252	1251	1251	1251	1255	1255	1255	1252	1252	1256	1263	1267	1268	1269	1267	1268	1267	1266	1264	1263	1260
17	1262	1261	1260	1259	1258	1257	1258	1257	1256	1253	1248	1246	1250	1251	1256	1259	1262	1262	1262	1262	1261	1260	1260	1258	*1257*
18 *q*	1259	1257	1255	1256	1256	1256	1256	1256	1254	1257	1256	1256	1256	1256	1261	1262	1262	1262	1261	1261	1262	1262	1262	1263	1259
19	1262	1262	1262	1262	1261	1260	1260	1261	1262	1262	1262	1258	1256	1259	1267	1272	1280	1290	1288	1295	1292	1285	1277	1266	1269
20	1262	1260	1259	1248	1252	1256	1252	1256	1260	1264	1263	1263	1266	1271	1273	1280	1285	1283	1278	1274	1273	1272	1272	1266	1266
21	1262	1259	1260	1260	1262	1262	1262	1263	1265	1265	1262	1264	1266	1272	1279	1290	1302	1294	1284	1279	1282	1277	1274	1268	1271
22	1266	1263	1264	1264	1259	1260	1262	1264	1267	1266	1262	1262	1263	1262	1267	1268	1267	1267	1267	1267	1266	1265	1264	1263	1264
23 *q*	1262	1262	1259	1259	1259	1261	1261	1263	1264	1265	1264	1264	1265	1267	1267	1268	1268	1267	1267	1267	1267	1268	1266	1263	1264
24	1261	1260	1260	1260	1261	1261	1261	1262	1262	1262	1262	1262	1262	1262	1262	1263	1267	1267	1267	1267	1267	1267	1268	1263	1263
25 *d*	1245	1238	1245	1253	1252	1247	1243	1250	1256	1258	1261	1261	1262	1267	1282	1288	1295	1302	1313	1309	1299	1284	1278	1274	1269
26 *d*	1272	1271	1269	1267	1267	1267	1267	1267	1268	1266	1266	1268	1272	1273	1277	1288	1299	1290	1278	1277	1294	1283	1272	1258	1274
27 *d*	1255	1246	1244	1229	1220	1222	1239	1250	1256	1261	1262	1265	1266	1268	1274	1276	1278	1277	1272	1272	1272	1268	1270	1268	1259
28	1268	1267	1266	1266	1265	1265	1265	1264	1266	1264	1266	1266	1267	1268	1272	1276	1275	1275	1278	1279	1272	1270	1268	1267	1269
29 *q*	1266	1266	1266	1264	1264	1263	1263	1264	1265	1263	1262	1260	1257	1262	1266	1267	1264	1263	1264	1266	1266	1265	1266	1266	1264
30	1263	1263	1262	1262	1262	1261	1261	1261	1260	1260	1260	1257	1256	1257	1263	1266	1264	1263	1263	1263	1262	1262	1262	1262	1261
31	1262	1262	1261	1261	1257	1254	1252	1253	1254	1257	1256	1254	1252	1251	1260	1267	1268	1273	1274	1282	1281	1275	1274	1272	1263
Mean	1263	1262	1261	1260	1259	*1258*	1259	1260	1261	1262	1261	1261	1261	1264	1269	1272	1274	1274	1274	*1275*	1274	1272	1268	1266	1265

1262 at 0-1h. January 1, 1956.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

140 ESKDALEMUIR — DECEMBER 1955

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 10° +		Minimum 10° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 *d*	01 40	692	*538*	20 43	154	20 40	*69·1*	37·6	21 09	31·5	19 14	*1375*	1244	22 16	*131*	2,1,1,2,3,3,5,4	21	1	85·3
2	05 28	677	607	00 30	70	07 00	59·5	36·9	03 22	22·6	15 50	1280	1236	05 28	44	3,4,3,2,1,0,0,1	14	0	85·3
3	20 40	698	639	14 56	59	13 59	60·2	43·0	20 36	17·2	20 47	1291	1260	10 52	31	1,0,1,3,2,3,4,3	17	1	85·3
4	05 26	688	647	01 50	41	11 35	56·4	49·9	01 50	6·5	16 55	1273	1263	11 32	10	2,1,1,1,0,0,0,1	6	0	85·3
5	22 32	*745*	655	23 56	90	13 40	57·1	40·5	23 04	16·6	18 25	1273	1258	22 55	15	1,1,0,1,2,1,2,4	12	0	85·3
6 *d*	21 20	718	639	20 58	79	12 13	56·3	34·2	21 10	22·1	21 07	1284	1256	03 12	28	2,2,3,2,1,0,3,4	17	1	85·3
7	04 01	696	651	00 25	45	11 40	56·3	44·4	00 33	11·9	16 34	1272	1252	04 28	20	3,3,1,1,0,0,0,1	9	0	85·3
8	24 00	695	653	16 19	42	14 35	57·6	38·7	20 50	18·9	20 49	1279	1256	06 53	23	2,2,2,1,2,2,4,3	18	0	85·3
9	05 28	696	620	13 30	76	13 12	60·6	49·9	00 35	10·7	16 01	1289	1241	01 46	48	3,2,2,2,3,3,1,1	17	0	85·3
10	19 25	698	647	12 50	51	13 21	59·0	51·0	10 04	8·0	18 24	1274	1261	11 00	13	1,1,0,2,2,2,3,1	12	0	85·3
11	17 44	688	655	12 27	33	13 10	57·1	48·5	23 50	8·6	23 34	1274	1262	08 10	12	1,1,0,2,2,1,1,2	10	0	85·3
12	16 30	687	664	20 52	23	13 54	57·9	49·4	00 00	8·5	21 53	1278	1259	12 55	19	1,1,0,1,1,1,2,2	9	0	85·0
13 *q*	17 14	693	656	00 11	37	13 56	56·3	51·3	09 36	5·0	00 01	1272	1258	11 00	14	0,0,0,1,1,2,1,0	5	0	85·1
14 *q*	08 50	696	671	12 16	25	13 49	56·5	52·6	08 31	*3·9*	16 00	1263	1254	12 43	*9*	0,0,0,2,1,0,0,0	3	0	85·0
15	17 14	693	668	21 33	25	14 04	57·2	44·6	23 10	12·6	19 34	1272	1252	12 48	20	1,0,0,1,1,1,2,3	9	0	85·0
16	07 29	701	661	14 39	40	13 00	59·9	50·5	00 00	9·4	17 16	1271	1249	05 33	22	2,2,2,2,2,2,1,1	14	0	85·0
17	05 08	695	671	11 52	24	17 14	57·1	52·0	22 14	5·1	00 00	1263	1246	11 32	17	1,1,0,2,0,1,2,1	8	0	84·8
18 *q*	16 44	699	665	11 30	34	13 43	56·0	51·9	22 29	4·1	15 39	1264	1253	08 59	11	1,0,0,1,1,1,0,0	4	0	84·6
19	07 04	701	641	19 16	60	16 32	65·3	45·6	23 13	19·7	19 33	1296	1256	12 40	40	0,0,1,1,2,3,3,2	12	0	84·6
20	03 14	702	655	15 27	47	14 58	61·7	46·5	00 00	15·2	16 32	1286	1246	03 39	40	3,3,2,2,2,3,1,2	18	0	84·6
21	06 41	700	640	15 51	60	14 46	63·4	46·4	22 01	17·0	16 31	1305	1257	01 23	48	2,2,1,1,3,3,2,2	16	0	84·6
22	04 42	700	658	12 08	42	04 01	57·9	50·8	00 02	7·1	15 00	1270	1257	04 48	13	1,2,2,1,1,1,1,1	10	0	84·4
23 *q*	04 46	693	669	11 33	24	13 15	54·9	50·7	09 10	4·2	21 30	1268	1259	04 48	*9*	1,1,0,1,1,0,1,1	6	0	84·4
24	23 54	717	668	16 48	49	16 40	58·1	44·1	23 47	14·0	16 50	1270	1255	24 00	15	0,0,1,1,2,2,1,3	10	0	84·4
25 *d*	06 14	716	626	14 31	90	14 18	64·5	37·7	19 55	26·8	19 54	1318	1236	06 02	82	4,3,3,2,3,3,4,1	23	1	84·4
26 *d*	21 23	742	555	21 50	*187*	15 35	68·0	*26·6*	21 18	*41·4*	21 00	1312	1253	23 45	59	0,1,2,3,3,4,4,6	23	1	84·4
27 *d*	04 31	713	639	10 27	74	02 53	62·6	40·5	00 07	22·1	17 00	1282	*1220*	04 35	62	4,4,2,2,2,3,1,3	21	1	84·4
28	07 50	691	651	18 54	40	14 08	57·4	47·6	19 01	9·8	19 10	1283	1262	09 13	21	1,0,1,2,1,2,3,1	11	0	84·4
29 *q*	06 01	687	670	10 17	*17*	13 41	55·4	51·4	09 02	4·0	15 30	1267	1257	11 54	10	0,0,0,0,0,0,1,0	1	0	84·4
30	21 56	693	663	15 28	30	14 42	57·3	51·6	23 20	5·7	15 30	1267	1256	13 04	11	1,0,0,0,1,2,0,1	5	0	84·4
31	09 00	706	653	20 15	53	17 35	58·9	45·3	20 25	13·6	20 21	1284	1251	13 22	33	1,1,2,2,2,3,3,2	16	0	84·4
Mean	– –	701	645	– –	55	– –	59·2	45·5	– –	13·7	– –	1282	1252	– –	30	–	–	0·19	84·9

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

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)

141 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·5	*−8·5*	−3·0	−2·6	+0·4	+2·6	+4·9	*+5·5*	+4·9	+2·5	−0·2	−2·3	−2·2	−0·8	−3·0	−2·6	+0·1	+0·7	−0·7	+0·1	+1·8	+2·9	+1·1	−0·3
Feb.	+5·0	+0·1	−3·1	−1·6	+1·8	+6·6	+6·3	*+8·7*	+6·8	+2·9	−1·7	*−6·9*	−5·0	−2·7	−2·6	−5·2	−5·3	−2·6	−3·9	−3·4	−0·9	+2·3	+2·6	+1·7
Mar.	+3·6	+2·7	+1·3	+2·1	+4·1	*+7·1*	+5·0	+0·1	−1·1	−4·5	−8·2	−13·4	*−14·6*	−8·6	−5·2	+1·6	+0·1	+1·9	+3·4	+3·4	+5·6	+5·7	+4·1	+3·9
Apr.	+2·4	+3·4	+1·8	+2·6	+3·5	+4·2	+4·1	+2·6	−2·7	−13·0	−21·9	*−23·1*	−16·7	−12·9	−7·4	+0·1	+6·1	+10·9	*+14·0*	+13·1	+9·7	+6·1	+5·2	+7·8
May	+7·1	+5·8	+2·3	+2·5	+2·4	+0·5	−2·1	−6·1	−14·1	−22·6	*−25·3*	−24·4	−19·1	−13·4	−4·3	+2·8	+7·6	+16·8	*+19·8*	+19·0	+14·6	+12·5	+7·7	+10·0
June	+7·0	+5·8	+6·2	+4·9	+8·0	+5·3	+0·4	−7·3	−16·2	−23·6	*−28·1*	−28·0	−21·6	−14·8	−9·5	−1·3	+7·1	+14·8	+18·9	*+20·2*	+17·8	+12·1	+11·7	+10·0
July	+5·6	+5·4	+5·0	+6·1	+6·8	+5·7	+2·0	−2·3	−10·4	−19·4	−24·8	*−26·6*	−26·1	−19·6	−8·8	−0·3	+6·7	+13·0	*+18·1*	+17·9	+16·6	+12·6	+9·3	+7·5
Aug.	+7·9	+6·2	+5·6	+7·4	+6·6	+5·3	−0·1	−6·5	−14·4	−19·5	−24·7	*−26·4*	−21·5	−13·5	−7·5	−2·5	+4·6	+12·9	+14·1	+15·5	*+15·7*	+12·7	+12·1	+10·0
Sept.	+12·7	+6·9	+9·3	+9·5	+11·9	+12·3	+6·9	+1·1	−9·4	−21·3	*−29·5*	−29·0	−21·7	−14·0	−7·3	−4·6	−2·6	+4·1	+7·8	+11·8	+10·9	+10·8	+10·4	*+12·8*
Oct.	+6·4	+6·7	+6·2	+6·1	+10·3	*+12·2*	+10·6	+6·4	−2·5	−12·1	−21·2	*−23·1*	−19·6	−17·0	−10·3	−6·4	−1·9	+2·2	+3·4	+7·6	+9·3	+8·9	+9·0	+8·9
Nov.	+7·1	+4·9	+4·9	+5·9	+9·9	+10·7	*+12·1*	+9·0	+1·5	−6·1	−14·8	*−19·8*	−17·4	−10·9	−1·9	−4·0	−4·7	−2·9	−0·7	+1·5	+2·4	+3·4	+4·6	+4·9
Dec.	+1·0	+1·1	+1·1	+4·5	+8·1	*+9·5*	+9·2	+8·4	+5·7	+1·0	−5·4	−9·7	*−10·4*	−8·5	−7·3	−5·9	−5·8	−0·8	+1·1	+0·2	−0·7	+1·9	+0·5	+1·3
Year	+5·4	+3·4	+3·1	+4·0	+6·1	+6·7	+4·9	+1·6	−4·3	−11·3	−17·1	*−19·4*	−16·3	−11·4	−6·3	−2·4	+1·0	+6·0	+8·0	*+8·9*	+8·6	+7·7	+6·5	+6·5
Winter	+3·0	−0·6	0·0	+1·7	+5·1	+7·3	*+8·1*	+7·9	+4·7	+0·1	−5·5	*−9·7*	−8·7	−5·7	−3·7	−4·4	−3·9	−1·3	−1·1	−0·4	+0·7	+2·6	+2·2	+1·8
Equinox	+6·3	+4·9	+4·7	+5·1	+7·5	*+8·9*	+6·6	+2·5	−4·0	−12·7	−20·2	*−22·1*	−18·1	−13·1	−7·5	−2·4	+0·4	+4·8	+7·1	*+8·9*	+8·8	+7·9	+7·1	+8·3
Summer	+6·9	+5·8	+4·8	+5·2	+6·0	+4·2	0·0	−5·5	−13·8	−21·3	−25·7	*−26·3*	−22·1	−15·3	−7·7	−0·3	+6·5	+14·4	+17·7	*+18·2*	+16·1	+12·5	+10·2	+9·3

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−7·5	−9·0	−10·2	−4·7	−3·1	−1·5	+2·3	+1·0	0·0	+1·2	+4·7	+7·7	+11·8	*+13·4*	+12·5	+8·6	+7·9	+3·7	+1·3	−1·5	−7·7	*−11·3*	−10·2	−9·3
Feb.	−7·1	−7·1	−9·0	−8·0	−6·4	−8·9	−5·5	−1·5	+0·8	+2·3	+5·5	+11·1	+15·9	*+17·9*	+15·2	+11·4	+6·5	+3·9	0·0	−6·2	−6·6	−7·3	−7·9	*−9·1*
Mar.	−5·8	−7·4	−11·2	−11·8	−10·1	−8·3	−5·9	−3·3	−3·0	−3·3	+3·0	+12·4	+20·6	*+25·8*	+25·0	+18·6	+10·3	+1·3	−2·2	−2·7	−8·2	*−15·3*	−8·3	−10·3
Apr.	−9·1	−8·3	−8·8	−12·0	−11·9	−10·9	−9·8	−10·9	*−13·4*	−11·2	−2·4	+11·3	+23·9	*+29·7*	+25·6	+21·5	+18·2	+15·0	+8·5	+1·0	−7·5	−12·1	−13·2	−13·3
May	−7·7	−9·5	−7·7	−7·6	−12·5	−16·1	−20·3	−22·8	*−24·0*	−17·8	−5·3	+8·6	+19·4	+24·5	*+25·8*	+23·1	+19·1	+17·3	+13·4	+7·2	+4·7	−0·4	−4·0	−7·3
June	−6·0	−6·0	−8·3	−10·4	−14·0	−21·1	−25·6	*−26·5*	−23·2	−16·0	−6·9	+6·6	+18·3	+22·9	*+24·2*	+22·4	+19·6	+16·3	+13·7	+10·4	+6·9	+2·5	+0·9	−0·6
July	−2·6	−2·3	−5·9	−10·4	−14·7	−19·5	−23·4	−24·3	*−24·7*	−19·3	−8·1	+4·2	+17·3	+24·4	*+27·0*	+24·4	+19·7	+15·1	+12·2	+9·7	+3·2	+1·1	−0·2	−2·7
Aug.	−6·4	−7·7	−7·3	−9·9	−13·6	−15·9	−18·1	*−18·2*	−17·9	−12·5	−0·3	+13·5	+24·0	*+28·0*	+24·5	+17·4	+11·0	+8·1	+4·7	+7·0	+3·2	−3·2	−5·1	−5·2
Sept.	−9·6	−5·6	−4·6	−7·5	−8·6	−7·5	−4·7	−8·3	*−13·0*	−9·3	+0·8	+12·1	+22·5	*+25·4*	+23·1	+16·1	+5·7	+2·8	−1·3	−3·8	−4·8	−6·4	−5·9	−7·6
Oct.	−6·7	−4·6	−4·6	−1·7	−1·5	−2·7	−3·1	−6·4	−11·1	*−11·8*	−3·8	+9·2	+19·7	+23·3	*+23·5*	+16·3	+5·9	−1·7	−0·6	−4·3	−6·2	−8·6	−10·9	−7·6
Nov.	−7·9	−4·0	−4·3	−2·9	+1·5	−1·1	−0·1	−3·4	−6·9	−7·0	−3·2	+6·6	+15·2	+19·6	*+21·7*	+16·2	+10·1	+2·1	−1·0	−8·3	−9·5	−10·5	−10·3	*−12·7*
Dec.	−11·4	−6·2	−3·6	−2·0	−2·5	−1·2	−1·2	−0·6	−2·7	−3·9	−0·6	+5·1	+11·1	+15·5	*+15·6*	+14·0	+10·5	+7·7	+4·7	−0·6	−7·3	−12·5	−12·9	*−15·0*
Year	−7·1	−6·5	−7·1	−7·4	−8·1	−9·6	−9·6	−10·5	*−11·6*	−9·1	−1·4	+9·0	+18·3	*+22·5*	+22·0	+17·5	+12·1	+7·6	+4·5	+0·6	−3·3	−7·0	−7·3	−8·4
Winter	−8·5	−6·6	−6·7	−4·4	−2·6	−3·2	−1·1	−1·1	−2·2	−1·9	+1·6	+7·6	+13·5	*+16·6*	+16·3	+12·5	+8·8	+4·3	+1·2	−4·1	−7·8	−10·4	−10·3	*−11·5*
Equinox	−7·8	−6·5	−7·3	−8·3	−8·0	−7·3	−5·9	−7·3	−10·1	−8·9	−0·6	+11·3	+21·7	*+26·1*	+24·3	+18·1	+10·0	+4·4	+1·1	−2·5	−6·7	*−10·6*	−9·6	−9·7
Summer	−5·7	−6·3	−7·3	−9·6	−13·7	−18·2	−21·8	*−22·9*	−22·5	−16·4	−5·2	+8·2	+19·7	+24·9	*+25·3*	+21·8	+17·3	+14·2	+11·0	+8·6	+4·5	0·0	−2·1	−4·0

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−2·4	*−10·0*	−7·4	−7·1	−7·0	−6·2	−5·5	−3·8	−2·1	−0·8	−0·4	−0·5	−0·6	+1·2	+3·6	+5·5	+5·1	+6·6	+7·3	*+7·6*	+7·0	+5·5	+2·3	+2·1
Feb.	−0·8	−3·1	−3·8	−5·7	−7·3	*−8·1*	−6·3	−6·2	−5·6	−5·3	−5·2	−5·8	−5·5	−3·7	+1·4	+6·1	+9·1	+9·7	+10·0	*+11·7*	+10·5	+7·2	+3·8	+2·9
Mar.	−3·0	−5·9	−8·0	−7·2	−5·9	−5·3	−5·2	−5·1	−6·7	−7·7	−9·8	*−11·3*	−9·7	−5·5	+2·5	+11·9	+13·6	*+17·0*	+16·0	+14·2	+11·7	+8·0	+2·0	−0·6
Apr.	*−13·8*	−11·1	−8·3	−4·8	−3·1	−2·4	−2·2	−1·4	−2·0	−4·3	−6·8	−9·2	−8·9	−2·9	+4·5	+8·0	+11·0	+15·3	*+19·6*	+18·6	+13·1	+3·3	−4·5	−7·7
May	−9·6	−6·9	−6·3	−5·0	−2·8	−1·7	+1·2	+2·1	+1·3	−3·1	−8·1	*−11·3*	−10·4	−4·7	+1·5	+6·9	+9·5	+10·7	*+12·4*	+12·0	+10·4	+7·2	+0·7	−6·0
June	−2·4	−3·6	−5·4	−4·9	−2·9	−1·1	−0·8	−0·6	−2·1	−5·5	−8·8	*−11·4*	−9·3	−5·5	−0·8	+2·9	+6·8	+10·6	*+11·8*	+11·6	+10·3	+7·6	+3·8	−0·3
July	−0·2	−3·8	−3·2	−2·1	−0·1	+0·6	−0·7	−1·3	−2·2	−5·1	−8·3	*−11·8*	−10·8	−7·5	−2·8	+1·7	+7·3	+10·0	*+10·4*	+9·7	+8·7	+6·0	+3·7	+1·8
Aug.	−3·1	−3·2	−3·4	−2·4	0·0	0·0	−0·8	−1·8	−3·5	−6·9	−10·1	*−12·7*	−12·0	−6·6	+2·4	+8·6	+10·9	*+12·1*	+11·4	+8·9	+7·3	+5·3	+1·5	−1·9
Sept.	−6·0	−8·7	*+9·9*	−9·0	−8·3	−7·4	−6·5	−4·2	−2·7	−3·1	−5·0	−5·6	−4·5	−1·0	+4·1	+9·8	+13·4	*+14·2*	+13·4	+11·3	+8·6	+5·6	+2·4	−0·9
Oct.	−5·9	−5·3	−5·4	−6·9	−7·7	−6·3	−4·8	−2·0	−0·7	−0·4	−3·8	−6·0	−4·8	−1·0	+3·8	+9·8	*+13·6*	+13·3	+11·7	+8·4	+3·2	+1·1	−0·9	−3·0
Nov.	−7·4	−10·5	−10·1	−9·7	*−11·5*	−10·9	−9·8	−7·0	−4·0	−3·7	−4·6	−4·5	−2·0	+1·4	+12·1	+14·8	+11·9	+15·1	*+16·6*	+13·5	+8·9	+4·8	−0·2	−3·2
Dec.	−1·9	−3·8	−4·7	−5·8	−6·7	−7·2	−6·4	−5·3	−4·4	−3·8	−4·3	−5·0	−3·9	−1·3	+3·0	+6·6	+9·0	+8·3	+8·9	*+9·7*	+8·9	+6·6	+2·9	+0·6
Year	−4·7	−6·3	−6·3	−5·9	−5·3	−4·7	−4·0	−3·1	−2·9	−4·1	−6·3	*−7·9*	−6·9	−3·1	+2·9	+7·7	+10·1	+11·9	*+12·4*	+11·4	+9·1	+5·7	+1·5	−1·4
Winter	−3·1	−6·9	−6·5	−7·1	*−8·1*	*−8·1*	−7·0	−5·6	−4·0	−3·4	−3·6	−3·9	−3·0	−0·6	+5·0	+8·3	+8·8	+9·9	*+10·7*	+10·6	+8·8	+6·0	+2·2	+0·6
Equinox	−7·2	−7·7	−7·9	−7·0	−6·3	−5·3	−4·7	−3·2	−3·0	−3·9	−6·3	*−8·0*	−7·0	−2·6	+3·7	+9·9	+12·9	+14·9	*+15·2*	+13·1	+9·1	+4·5	−0·3	−3·1
Summer	−3·8	−4·4	−4·6	−3·6	−1·5	−0·5	−0·3	−0·4	−1·6	−5·1	−8·8	*−11·8*	−10·6	−6·1	+0·1	+5·0	+8·6	+10·9	*+11·5*	+10·5	+9·2	+6·5	+2·4	−1·6

"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)

142 ESKDALEMUIR

DECLINATION (measured positive towards the west)

	Hour G.M.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
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·47	-1·49	-1·95	-0·84	-0·64	-0·41	+0·28	-0·02	-0·20	+0·15	+0·96	+1·65	+2·47	*+2·75*	+2·66	+1·84	+1·59	+0·71	+0·29	-0·31	-1·64	*-2·40*	-2·11	-1·87
Feb.	-1·63	-1·45	-1·70	-1·56	-1·36	*-2·07*	-1·35	-0·65	-0·10	+0·35	+1·19	+2·52	+3·41	*+3·74*	+3·18	+2·51	+1·52	+0·90	+0·15	-1·12	-1·30	-1·58	-1·70	-1·90
Mar.	-1·32	-1·60	-2·32	-2·47	-2·20	-1·96	-1·38	-0·68	-0·57	-0·50	+0·94	+3·03	+4·75	*+5·57*	+5·27	+3·70	+2·08	+0·20	-0·57	-0·68	-1·88	*-3·32*	-1·85	-2·24
Apr.	-1·93	-1·81	-1·86	-2·53	-2·55	-2·37	-2·14	-2·30	-2·60	-1·75	+0·37	+3·20	+5·50	*+6·52*	+5·47	+4·34	+3·45	+2·61	+1·17	-0·31	-1·90	-2·69	-2·88	*-3·01*
May	-1·84	-2·14	-1·66	-1·63	-2·63	-3·28	-4·02	*-4·37*	-4·30	-2·72	-0·09	+2·69	+4·68	*+5·49*	+5·39	+4·56	+3·56	+2·84	+1·93	+0·71	+0·39	-0·58	-1·11	-1·87
June	-1·49	-1·44	-1·93	-2·29	-3·15	-4·49	*-5·20*	-5·09	-4·06	-2·32	-0·30	+2·43	+4·54	+5·21	*+5·28*	+4·58	+3·70	+2·72	+2·03	+1·31	+0·71	+0·03	-0·27	-0·51
July	-0·74	-0·67	-1·40	-2·35	-3·25	-4·18	-4·81	*-4·84*	-4·59	-3·15	-0·67	+1·90	+4·52	+5·71	*+5·81*	+4·96	+3·72	+2·54	+1·76	+1·26	-0·01	-0·28	-0·40	-0·84
Aug.	-1·61	-1·81	-1·69	-2·31	-3·01	-3·43	*-3·66*	-3·44	-3·07	-1·76	+0·91	+3·76	+5·71	*+6·19*	+5·26	+3·63	+2·04	+1·13	+0·41	+0·81	+0·03	-1·15	-1·50	-1·44
Sept.	*-2·43*	-1·41	-1·29	-1·89	-2·21	-1·99	-1·23	-1·73	-2·26	-1·05	+1·31	+3·59	+5·40	*+5·68*	+4·96	+3·43	+1·25	+0·40	-0·57	-1·23	-1·39	-1·72	-1·59	-2·03
Oct.	-1·61	-1·19	-1·18	-0·59	-0·70	-1·02	-1·05	-1·55	-2·15	-1·92	+0·06	+2·77	+4·75	*+5·38*	+5·16	+3·56	+1·26	-0·42	-0·25	-1·17	-1·62	-2·08	*-2·56*	-1·88
Nov.	-1·88	-1·00	-1·06	-0·82	-0·09	-0·65	-0·50	-1·04	-1·46	-1·18	-0·07	+2·11	+3·75	+4·40	*+4·48*	+3·44	+2·24	+0·54	-0·18	-1·73	-2·01	-2·25	-2·27	*-2·77*
Dec.	-2·34	-1·29	-0·77	-0·58	-0·82	-0·61	-0·60	-0·45	-0·77	-0·83	+0·09	+1·41	+2·65	*+3·48*	+3·45	+3·06	+2·35	+1·59	+0·90	-0·13	-1·46	-2·60	-2·64	*-3·09*
Year	-1·68	-1·44	-1·57	-1·65	-1·88	*-2·21*	-2·14	-2·18	-2·18	-1·39	+0·39	+2·59	+4·34	*+5·01*	+4·70	+3·63	+2·40	+1·31	+0·59	-0·22	-1·01	-1·72	-1·74	-1·95
Winter	-1·83	-1·31	-1·37	-0·95	-0·73	-0·93	-0·54	-0·54	-0·63	-0·38	+0·54	+1·92	+3·07	*+3·59*	+3·44	+2·71	+1·93	+0·93	+0·29	-0·82	-1·60	-2·21	-2·18	*-2·41*
Equinox	-1·82	-1·50	-1·66	-1·87	-1·91	-1·83	-1·45	-1·57	-1·89	-1·31	+0·67	+3·15	+5·10	*+5·79*	+5·21	+3·76	+2·01	+0·70	-0·05	-0·85	-1·70	*-2·45*	-2·22	-2·29
Summer	-1·42	-1·51	-1·67	-2·15	-3·01	-3·85	-4·42	*-4·43*	-4·01	-2·49	-0·04	+2·69	+4·86	*+5·65*	+5·43	+4·43	+3·25	+2·31	+1·53	+1·02	+0·28	-0·49	-0·82	-1·17

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·13	*+0·42*	+0·15	+0·05	-0·16	-0·31	*-0·48*	-0·47	-0·37	-0·20	-0·06	+0·04	-0·02	-0·09	+0·13	+0·19	+0·02	+0·07	+0·21	+0·20	+0·15	+0·09	+0·11	+0·19
Feb.	-0·26	0·00	+0·22	+0·07	-0·22	-0·52	-0·50	*-0·70*	-0·59	-0·35	-0·09	+0·17	-0·01	-0·14	+0·01	+0·34	+0·49	+0·36	+0·50	*+0·59*	+0·40	+0·12	+0·02	+0·08
Mar.	-0·23	-0·23	-0·14	-0·16	-0·29	*-0·49*	-0·38	-0·09	-0·06	+0·15	+0·26	+0·45	*+0·46*	+0·10	+0·09	-0·05	+0·19	+0·28	+0·20	+0·16	+0·03	+0·02	-0·11	-0·14
Apr.	-0·38	-0·39	-0·21	-0·14	-0·16	-0·20	-0·20	-0·07	+0·30	+0·89	*+1·31*	+1·15	+0·58	+0·40	+0·27	-0·08	-0·36	-0·53	*-0·55*	-0·42	-0·22	-0·17	-0·29	-0·53
May	-0·60	-0·43	-0·21	-0·19	-0·07	+0·13	+0·43	+0·74	+1·26	*+1·64*	+1·53	+1·21	+0·75	+0·45	-0·01	-0·31	-0·51	-1·06	*-1·17*	-1·04	-0·76	-0·64	-0·44	-0·71
June	-0·44	-0·40	-0·43	-0·31	-0·42	-0·11	+0·28	+0·80	+1·31	+1·62	*+1·72*	+1·47	+0·95	+0·55	+0·29	-0·13	-0·56	-0·92	-1·12	*-1·17*	-1·00	-0·64	-0·69	-0·66
July	-0·34	-0·42	-0·33	-0·32	-0·26	-0·11	+0·15	+0·43	+0·94	+1·39	*+1·53*	+1·40	+1·23	+0·79	+0·17	-0·25	-0·51	-0·80	*-1·09*	-1·06	-0·92	-0·69	-0·52	-0·41
Aug.	-0·51	-0·39	-0·36	-0·42	-0·26	-0·15	+0·21	+0·61	+1·09	+1·27	*+1·38*	+1·25	+0·82	+0·37	+0·24	+0·17	-0·17	-0·65	-0·70	*-0·89*	*-0·89*	-0·67	-0·69	-0·64
Sept.	-0·86	-0·59	-0·80	-0·75	-0·88	*-0·90*	-0·55	-0·07	+0·72	+1·44	*+1·80*	+1·61	+1·03	+0·56	+0·29	+0·34	+0·43	+0·04	-0·17	-0·45	-0·44	-0·49	-0·55	-0·77
Oct.	-0·48	-0·51	-0·48	-0·55	-0·85	*-0·92*	-0·77	-0·39	+0·29	+0·93	*+1·35*	+1·25	+0·92	+0·80	+0·47	+0·46	+0·38	+0·21	+0·07	-0·23	-0·45	-0·45	-0·48	-0·56
Nov.	-0·55	-0·53	-0·52	-0·59	-0·95	-0·96	*-1·04*	-0·72	-0·11	+0·40	+0·90	*+1·11*	+0·90	+0·50	+0·14	+0·42	+0·47	+0·53	+0·47	+0·34	+0·18	+0·02	-0·18	-0·24
Dec.	+0·03	-0·09	-0·14	-0·41	-0·67	*-0·79*	-0·75	-0·67	-0·45	-0·11	+0·25	+0·45	+0·45	+0·33	+0·35	+0·37	*+0·47*	+0·16	+0·09	+0·23	+0·36	+0·19	+0·21	+0·12
Year	-0·38	-0·29	-0·27	-0·31	*-0·43*	*-0·43*	-0·30	-0·05	+0·36	+0·75	*+0·99*	+0·96	+0·67	+0·39	+0·21	+0·12	+0·03	-0·19	-0·28	-0·31	-0·30	-0·27	-0·30	-0·35
Winter	-0·16	-0·05	-0·07	-0·22	-0·50	-0·64	*-0·69*	-0·64	-0·38	-0·06	+0·25	*+0·45*	+0·33	+0·15	+0·16	+0·33	+0·36	+0·28	+0·32	+0·34	+0·27	+0·11	+0·04	+0·03
Equinox	-0·49	-0·43	-0·41	-0·40	-0·54	*-0·63*	-0·48	-0·15	+0·31	+0·85	*+1·18*	+1·11	+0·75	+0·47	+0·28	+0·17	+0·16	0·00	-0·11	-0·23	-0·27	-0·27	-0·35	-0·50
Summer	-0·47	-0·41	-0·33	-0·31	-0·26	-0·06	+0·27	+0·65	+1·15	+1·48	*+1·54*	+1·34	+0·94	+0·54	+0·18	-0·13	-0·44	-0·86	-1·02	*-1·05*	-0·89	-0·66	-0·58	-0·60

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-2·9	*-10·0*	-4·9	-3·4	-0·2	+2·3	+5·2	*+5·6*	+4·8	+2·7	+0·7	-0·8	+0·1	+1·8	-0·6	-0·9	+1·6	+1·4	-0·4	-0·2	+0·3	+0·7	-0·8	-2·1
Feb.	+3·6	-1·2	*-4·7*	-3·1	+0·6	+4·8	+5·1	*+8·2*	+6·8	+3·3	-0·6	*-4·7*	-1·9	+0·7	+0·3	-2·9	-4·0	-1·8	-3·8	-4·5	-2·1	+0·9	+1·1	-0·1
Mar.	+2·4	+1·3	-0·9	-0·2	+2·1	*+5·4*	+3·8	-0·5	-1·6	-5·1	-7·5	*-10·8*	-10·4	-3·5	-0·4	+5·1	+2·1	+2·1	+2·9	+2·8	+3·9	+2·7	+2·4	+1·9
Apr.	+0·6	+1·8	+0·1	+0·3	+1·2	+2·1	+2·2	+0·5	-5·2	-14·9	-22·0	-20·5	-11·9	-7·0	-2·4	+4·2	+9·4	+13·5	*+15·4*	+13·1	+8·1	+3·7	+2·6	+5·1
May	+5·5	+3·9	+0·8	+1·0	0·0	-2·6	-5·9	-10·3	-18·4	-25·6	*-25·8*	-22·3	-15·1	-8·5	+0·7	+7·1	+11·1	+19·8	+22·0	+20·0	+15·2	+12·2	+6·8	+8·4
June	+5·7	+4·6	+4·5	+2·8	+5·2	+1·2	-4·5	-12·2	-20·3	-26·2	*-28·9*	-26·2	-17·7	-10·2	-4·7	+3·0	+10·7	+17·6	+21·2	*+21·8*	+18·8	+12·4	+11·7	+9·7
July	+5·0	+4·9	+3·8	+4·0	+3·9	+1·9	-2·5	-6·9	-14·9	-22·7	*-25·9*	-25·3	-22·3	-14·6	-3·5	+4·3	+10·3	+15·6	*+20·1*	+19·4	+16·9	+12·6	+9·1	+6·8
Aug.	+6·5	+4·6	+4·1	+5·4	+3·9	+2·2	-3·5	-9·8	-17·5	-21·5	*-24·3*	-23·4	-16·6	-7·9	-2·7	+0·8	+6·6	+14·2	+14·7	*+16·6*	+16·0	+11·9	+10·9	+8·8
Sept.	+10·6	+5·7	+8·3	+7·9	+10·1	+10·7	+5·9	-0·5	-11·7	-22·7	*-28·8*	-26·2	-17·0	-8·8	-2·8	-1·5	-1·5	+4·6	+7·4	+10·9	+9·8	+9·4	+9·1	*+11·1*
Oct.	+5·0	+5·7	+5·2	+5·7	+9·8	*+11·5*	+9·8	+5·1	-4·6	-14·1	*-21·5*	-20·9	-15·5	-12·3	-5·7	-3·2	-0·7	+1·8	+3·2	+6·6	+7·9	+7·1	+6·8	+7·3
Nov.	+5·5	+4·1	+4·0	+5·3	+10·0	+10·3	*+11·9*	+8·2	+0·2	-7·3	-15·1	*-18·2*	-14·2	-7·0	+2·3	-0·9	-2·7	-2·4	-0·9	-0·1	+0·6	+1·4	+2·6	+2·4
Dec.	-1·2	-0·1	+0·4	+4·0	+7·5	+9·1	+8·8	+8·1	+5·1	+0·2	-5·4	*-8·6*	-8·1	-5·4	-4·2	-3·1	-3·7	+0·7	+2·0	+0·1	-2·1	-0·5	-2·0	-1·6
Year	+3·9	+2·1	+1·7	+2·5	+4·5	+4·7	+3·0	-0·4	-6·4	-12·8	-17·1	*-17·3*	-12·5	-6·9	-2·0	+1·0	+3·3	+7·3	+8·7	*+8·9*	+7·8	+6·2	+5·0	+4·8
Winter	+1·3	-1·8	-1·3	+0·7	+4·5	+6·6	+7·7	+7·5	+4·2	-0·3	-5·1	*-8·1*	-6·0	-2·5	-0·5	-1·9	-2·2	-0·5	-0·8	-1·2	-0·8	+0·6	+0·2	-0·3
Equinox	+4·7	+3·6	+3·2	+3·4	+5·8	+7·4	+5·4	+1·1	-5·8	-14·2	*-19·9*	-19·6	-13·7	-7·9	-2·8	+1·1	+2·3	+5·5	+7·2	*+8·3*	+7·4	+5·7	+5·2	+6·3
Summer	+5·7	+4·5	+3·3	+3·3	+3·3	+0·7	-4·1	-9·8	-17·8	-24·0	*-26·2*	-24·3	-17·9	-10·3	-2·7	+3·8	+9·7	+16·8	*+19·5*	*+19·5*	+16·7	+12·3	+9·6	+8·4

"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 GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL QUIET DAYS

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

143 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−2·1	−3·5	−2·9	−0·8	+1·8	+3·6	+5·4	+6·3	*+6·4*	+2·5	−1·8	−4·6	*−5·5*	−3·1	−2·5	−2·3	−1·3	−0·3	−0·6	0·0	+1·8	+1·5	+1·5	+0·6
Feb.	−0·7	−2·3	−3·7	−3·3	−1·5	+1·4	+2·9	+4·8	+4·0	+1·0	−1·8	*−5·2*	−4·6	−1·6	+0·4	−1·9	−1·5	−1·4	+0·2	+1·6	+1·9	+1·2	+5·1	*+5·3*
Mar.	−0·3	−0·4	−0·9	+0·6	+2·5	+5·4	*+5·8*	+5·3	+3·2	−2·3	−7·7	−10·7	*−11·0*	−7·7	−3·1	−0·1	+0·2	+1·5	+3·9	+5·6	+2·0	+0·3	+2·7	+5·4
Apr.	+5·7	+3·5	+2·7	+1·0	+2·7	+4·5	+4·0	+2·9	−1·5	−10·4	−19·6	*−23·2*	−20·0	−16·5	−11·4	−2·3	+6·0	+7·7	+12·5	*+13·3*	+9·5	+8·9	+10·7	+9·2
May	+6·4	+5·6	+5·0	+4·0	+5·5	+5·0	−0·4	−7·4	−14·1	−20·3	*−24·8*	−23·6	−19·1	−10·5	−4·1	+2·0	+6·7	+12·0	*+14·5*	+13·1	+12·4	+10·1	+10·9	+11·3
June	+10·3	+7·8	+6·9	+7·8	+8·6	+6·0	+0·3	−9·0	−18·4	−24·1	*−28·4*	−28·1	−22·9	−15·9	−4·5	+2·7	+7·8	+14·4	*+17·3*	+17·1	+15·2	+10·6	+10·9	+7·6
July	+5·3	+4·9	+4·5	+6·3	+6·4	+4·9	+1·9	−1·3	−12·6	−21·3	*−26·9*	−24·6	−20·5	−13·9	−5·6	+1·3	+5·7	+9·6	+13·6	*+14·8*	*+14·8*	+13·8	+9·6	+9·5
Aug.	+5·5	+4·4	+4·2	+4·7	+5·2	+4·3	−1·1	−8·5	−14·0	−17·8	−20·4	*−22·3*	−16·3	−12·2	−5·3	−0·1	+4·2	+13·2	+12·7	*+14·1*	+12·3	+12·8	+11·1	+9·4
Sept.	+5·9	+4·8	+6·1	+4·8	+5·5	+6·2	+5·8	+2·8	−4·9	−14·8	−21·2	*−23·0*	−19·5	−16·6	−12·3	−6·7	−1·1	+5·5	+11·0	+12·3	+12·6	*+12·7*	+12·2	+11·9
Oct.	+4·7	+4·3	+4·1	+4·5	+5·6	+5·7	+5·4	+3·5	−1·3	−9·7	−17·1	*−19·3*	−15·4	−10·0	−6·0	−2·4	+1·7	+4·4	+6·4	*+6·6*	+5·3	+6·2	+6·5	+6·5
Nov.	+4·5	+4·1	+2·1	+3·4	+5·1	+6·0	+7·4	+7·0	+2·0	−7·5	−16·1	*−20·5*	−19·9	−14·4	−7·3	−3·0	+0·9	+4·1	+6·0	+7·3	+7·8	*+8·5*	+6·2	+6·1
Dec.	−3·3	−1·9	−0·5	+1·0	+4·4	+5·3	*+5·7*	+4·8	+4·9	−0·5	−7·0	−11·9	*−12·3*	−8·2	−4·0	−1·7	+1·5	+3·6	+4·7	+3·9	+4·2	+3·6	+1·8	+1·9
Year	+3·3	+2·6	+2·3	+2·9	+4·3	+4·9	+3·5	+1·0	−3·8	−10·5	−16·1	*−18·1*	−15·6	−10·9	−5·4	−1·2	+2·5	+6·2	+8·5	*+9·2*	+8·3	+7·5	+7·4	+7·0
Winter	−0·4	−0·9	−1·2	0·0	+2·4	+4·1	+5·3	*+5·7*	+4·3	−1·1	−6·7	−10·5	*−10·6*	−6·8	−3·3	−2·3	−0·1	+1·5	+2·5	+3·2	+3·9	+3·7	+3·7	+3·5
Equinox	+4·2	+3·1	+3·0	+2·7	+4·1	+5·4	+5·3	+3·6	−1·1	−9·3	−16·4	*−19·0*	−16·4	−12·7	−8·2	−2·8	+1·7	+4·7	+8·4	*+9·4*	+7·4	+7·1	+7·1	+8·3
Summer	+6·9	+5·7	+5·2	+5·7	+6·5	+5·0	+0·2	−6·6	−14·8	−20·9	*−25·1*	−24·7	−19·7	−13·1	−4·9	+1·5	+6·1	+12·3	+14·5	*+14·7*	+13·7	+11·8	+10·7	+9·5

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−5·3	*−5·4*	−3·4	−1·6	−1·4	−0·6	−0·9	−2·4	−3·1	−1·3	−0·5	+4·2	+7·1	*+7·6*	+5·8	+5·2	+3·1	+3·8	+3·6	+1·4	−2·7	−3·6	−5·1	−4·7
Feb.	−7·3	−4·8	−5·7	−6·0	−5·0	−4·2	−3·2	−2·5	−1·1	+1·1	+4·3	+9·2	+11·1	*+14·6*	+12·0	+4·7	+3·7	+3·2	−0·1	−2·0	−1·7	−6·2	−6·5	−7·7
Mar.	*−9·5*	−6·8	−5·3	−5·6	−6·1	−5·7	−5·2	−5·7	−8·6	−7·4	−2·7	+7·3	+15·3	*+18·3*	+15·7	+10·8	+4·6	+3·9	+2·5	+1·9	−0·5	−2·3	−1·9	−7·2
Apr.	−3·8	−4·9	−7·1	−9·9	−9·1	−9·8	−12·6	−14·7	*−17·2*	−15·0	−6·7	+6·6	+19·9	*+23·5*	+17·3	+12·2	+9·6	+7·7	+6·6	+4·5	+1·9	+0·9	+0·8	−0·8
May	−0·3	−0·9	−3·7	−5·5	−11·3	−18·1	−23·1	*−26·8*	−26·2	−21·0	−8·5	+7·8	+18·6	*+24·3*	+22·2	+18·6	+13·8	+10·2	+9·5	+6·7	+4·3	+4·4	+3·5	+1·3
June	−0·3	−6·2	−8·0	−9·7	−15·7	−21·1	−23·7	*−26·7*	−25·3	−18·7	−9·5	+4·5	+16·2	*+20·5*	+22·7	+18·8	+15·9	+14·7	+13·8	+11·3	+9·5	+6·4	+6·3	+4·2
July	−1·5	−3·0	−5·0	−5·0	−11·1	−18·5	−23·2	−25·0	*−26·9*	−20·5	−10·5	+2·6	+17·7	*+28·0*	*+31·0*	+27·5	+19·2	+11·8	+8·9	+6·9	+4·9	+0·3	−4·7	−3·7
Aug.	−2·8	−5·8	−6·3	−9·0	−13·8	−18·9	*−22·1*	−21·8	−20·0	−11·2	+0·5	+14·5	+24·7	*+26·3*	+20·7	+12·4	+7·2	+4·7	+4·6	+7·9	+7·7	+2·1	−0·2	−1·5
Sept.	−1·2	−2·0	−5·4	−7·5	−8·5	−8·3	−9·8	−14·0	*−15·9*	−14·6	−6·4	+5·7	+14·4	*+16·6*	+15·4	+12·2	+8·8	+6·7	+5·5	+2·3	+4·4	+2·1	+1·3	−1·7
Oct.	−1·2	−1·7	−2·0	−0·7	−0·5	−1·3	−3·6	−7·8	−15·3	*−18·9*	−10·5	+3·5	+14·3	*+16·6*	+14·3	+8·7	+5·1	+4·1	+2·6	+1·3	−1·3	−1·1	−1·2	−3·4
Nov.	−4·0	−4·9	−3·2	−1·0	−1·5	−1·1	−2·4	−5·0	−9·9	*−12·8*	−8·1	+3·3	+10·2	*+14·9*	+13·9	+9·1	+6·3	+4·5	+2·8	+1·9	−1·0	−4·8	−4·2	−2·8
Dec.	−2·2	+0·4	+1·3	+1·5	+2·5	+1·0	−2·4	−2·7	−4·0	*−7·5*	−5·7	−0·8	+3·9	*+8·6*	+7·1	+4·9	+3·8	+3·3	+2·6	+0·1	−1·6	−4·2	−5·1	−4·7
Year	−3·3	−3·9	−4·4	−5·0	−6·8	−8·9	−11·0	−12·9	*−14·4*	−12·3	−5·4	+5·7	+14·5	*+18·3*	+16·5	+12·1	+8·4	+6·5	+5·2	+3·7	+2·0	−0·5	−1·4	−2·7
Winter	−4·7	−3·7	−2·7	−1·8	−1·4	−1·2	−2·2	−3·1	−4·5	*−5·2*	−2·5	+4·0	+8·1	*+11·5*	+9·7	+5·9	+4·2	+3·7	+2·2	+0·4	−1·8	−4·7	−5·2	−4·9
Equinox	−3·9	−3·9	−4·9	−5·9	−6·1	−6·3	−7·8	−10·6	*−14·2*	−14·0	−6·6	+5·7	+16·0	*+18·8*	+15·7	+11·0	+7·1	+5·5	+4·3	+2·5	+1·1	−0·1	−0·3	−3·3
Summer	−1·2	−3·9	−5·8	−7·3	−13·0	−19·1	−23·0	*−25·1*	−24·6	−17·9	−7·0	+7·4	+19·3	*+24·8*	+24·1	+19·3	+14·0	+10·3	+9·3	+8·2	+6·6	+3·3	+1·3	+0·1

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2·1	*+2·5*	+2·1	+1·3	+0·5	−0·2	−0·7	−1·5	−1·9	−3·1	−2·3	−2·5	*−3·5*	−1·7	−0·1	+0·3	+1·1	+0·6	+1·3	+1·7	+1·3	+1·1	+0·9	+0·7
Feb.	−0·6	0·0	+0·8	+0·8	+0·4	−0·8	−1·6	−2·4	−2·2	−2·4	−3·0	−4·6	−4·8	−5·2	−3·2	+0·8	+3·2	+4·0	*+4·2*	+3·6	+3·6	*+4·2*	+3·4	+1·8
Mar.	+1·3	+0·2	0·0	+0·1	+0·4	0·0	−0·5	+0·4	+0·4	−0·7	−3·4	−8·0	*−9·1*	−6·6	−2·8	+0·9	+3·6	+3·4	+2·5	+2·8	+4·0	*+4·9*	+4·2	+2·0
Apr.	+3·7	+3·7	+3·8	+4·1	+2·1	+1·1	+1·5	+0·9	−1·8	−4·9	−9·9	*−14·1*	−13·5	−8·5	−2·4	+0·7	+3·5	*+4·9*	+4·7	+4·5	+4·4	+4·5	+3·5	+3·5
May	+2·8	+2·6	+2·6	+3·2	+4·2	+4·4	+4·4	+4·2	+0·4	−7·0	−13·2	*−16·8*	−15·6	−9·0	−0·6	+3·4	+4·2	*+5·4*	*+5·4*	+4·8	+3·6	+2·8	+2·2	+1·6
June	−0·1	−0·7	−1·3	+0·5	+2·3	+2·5	+0·5	+0·3	−1·1	−5·5	−9·9	*−12·1*	−11·7	−8·5	−4·1	+0·7	+6·3	*+9·5*	+9·1	+9·3	+7·3	+4·9	+1·3	+0·5
July	+1·5	+1·4	+0·8	+0·3	+1·4	+2·6	+0·9	+1·0	+1·6	−3·5	−7·4	−11·6	*−13·5*	−11·0	−6·0	−1·9	+5·4	*+7·8*	+7·7	+7·0	+6·4	+4·9	+2·8	+1·4
Aug.	+1·0	+1·6	+1·2	+1·6	+3·6	+4·3	+3·4	+2·6	−0·4	−6·4	−10·2	−14·6	*−15·0*	−9·6	−2·2	+2·6	+3·8	+5·7	*+7·4*	+6·2	+6·0	+4·2	+2·4	+0·8
Sept.	+2·0	+0·5	−1·0	−0·8	+0·2	+1·5	+2·4	+2·4	+2·2	−0·3	−3·8	−7·4	*−8·2*	−6·9	−4·0	−0·6	+1·2	+1·7	+2·8	*+4·2*	+3·4	+3·3	+3·0	+2·2
Oct.	+2·3	+1·7	+1·9	+0·9	+0·7	+0·2	+0·1	+0·9	+2·1	+0·5	−4·5	*−9·3*	−8·9	−6·3	−1·3	+2·1	+2·9	+1·6	+1·3	+1·7	+2·1	+2·7	+2·1	+2·5
Nov.	−1·5	*−2·3*	−1·8	−1·5	−1·1	−0·7	−0·9	−0·7	+1·4	+2·1	−0·5	−2·1	−1·9	*−2·3*	+0·8	+2·7	*+3·5*	+2·9	+1·9	+1·5	+1·6	+0·5	−0·1	−1·5
Dec.	+1·6	+1·1	−0·3	−0·8	−1·1	−1·1	−1·4	−1·1	−1·9	−1·6	−2·3	−2·9	*−3·8*	−1·5	+1·3	*+2·8*	+2·3	+1·7	+1·0	+1·5	+1·7	+1·8	+1·7	+1·3
Year	+1·3	+1·0	+0·7	+0·8	+1·1	+1·1	+0·7	+0·6	−0·1	−2·7	−5·9	−8·9	*−9·1*	−6·4	−2·1	+1·2	+3·4	*+4·1*	*+4·1*	*+4·1*	+3·9	+3·3	+2·3	+1·4
Winter	+0·4	+0·3	+0·2	−0·1	−0·3	−0·7	−1·1	−1·4	−1·1	−1·3	−2·0	−3·0	*−3·5*	−2·7	−0·3	+1·7	*+2·5*	+2·3	+2·1	+2·1	+2·1	+1·9	+1·5	+0·6
Equinox	+2·3	+1·5	+1·2	+1·1	+0·9	+0 7	+0·9	+1·1	+0·7	−1·3	−5·4	−9·7	*−9·9*	−7·1	−2·6	+0·8	+2·8	+2·9	+2·8	+3·3	+3·5	*+3·9*	+3·2	+2·5
Summer	+1·3	+1·2	+0·8	+1·4	+2·9	+3·5	+2·3	+2·0	+0·1	−5·6	−10·2	−13·8	*−13·9*	−9·5	−3·2	+1·2	+4·9	+7·1	*+7·4*	+6·6	+5·8	+4·2	+2·2	+1·1

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

INTERNATIONAL QUIET DAYS

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

144 ESKDALEMUIR

	Hour G.M.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
DECLINATION (measured positive towards the west)																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·99	−0·95	−0·57	−0·29	−0·35	−0·26	−0·39	−0·73	−0·87	−0·37	−0·03	+1·03	+1·65	*+1·67*	+1·27	+1·15	+0·67	+0·78	+0·75	+0·29	−0·61	−0·79	*−1·09*	−0·97
Feb.	−1·44	−0·88	−1·00	−1·08	−0·96	−0·91	−0·76	−0·70	−0·38	+0·18	+0·94	+2·06	+2·44	*+3·02*	+2·42	+1·02	+0·80	+0·71	−0·02	−0·46	−0·42	−1·30	−1·52	*−1·76*
Mar.	*−1·91*	−1·37	−1·03	−1·15	−1·33	−1·36	−1·27	−1·37	−1·87	−1·41	−0·25	+1·89	+3·53	*+4·01*	+3·31	+2·19	+0·95	+0·72	+0·35	+0·17	−0·17	−0·47	−0·49	−1·67
Apr.	−1·00	−1·13	−1·54	−2·05	−1·95	−2·16	−2·71	−3·09	*−3·42*	−2·63	−0·58	+2·25	+4·82	*+5·41*	+3·96	+2·55	+1·71	+1·26	+0·85	+0·39	+0·02	−0·17	−0·26	−0·53
May	−0·31	−0·40	−0·95	−1·27	−2·51	−3·86	−4·65	*−5·13*	−4·75	−3·46	−0·75	+2·51	+4·51	*+5·34*	+4·65	+3·69	+2·53	+1·60	+1·35	+0·85	+0·39	+0·50	+0·29	−0·17
June	−0·47	−1·56	−1·89	−2·27	−3·51	−4·50	−4·81	*−5·05*	−4·41	−2·84	−0·81	+2·01	+4·17	*+4·78*	+4·77	+3·71	+2·91	+2·42	+2·11	+1·63	+1·33	+0·88	+0·85	+0·55
July	−0·52	−0·79	−1·20	−1·25	−2·50	−3·95	−4·78	*−5·01*	−4·96	−3·31	−1·08	+1·49	+4·40	+6·21	*+6·50*	+5·51	+3·66	+2·01	+1·26	+0·81	+0·42	−0·49	−1·32	−1·11
Aug.	−0·79	−1·34	−1·43	−2·00	−3·00	−3·99	*−4·42*	−4·08	−3·51	−1·58	+0·91	+3·82	+5·63	*+5·80*	+4·41	+2·52	+1·30	+0·43	+0·44	+1·04	+1·07	−0·08	−0·47	−0·68
Sept.	−0·48	−0·60	−1·33	−1·70	−1·94	−1·92	−2·22	−2·94	*−3·03*	−2·38	−0·46	+2·06	+3·68	*+4·02*	+3·61	+2·74	+1·82	+1·14	+0·68	−0·02	+0·39	−0·08	−0·22	−0·82
Oct.	−0·42	−0·52	−0·56	−0·32	−0·32	−0·49	−0·94	−1·72	−3·04	*−3·46*	−1·46	+1·46	+3·50	*+3·76*	+3·14	+1·86	+0·98	+0·65	+0·28	0·00	−0·48	−0·46	−0·50	−0·94
Nov.	−0·99	−1·16	−0·73	−0·33	−0·51	−0·46	−0·77	−1·29	−2·09	*−2·30*	−1·01	+1·47	+2·85	*+3·58*	+3·09	+1·95	+1·23	+0·74	+0·33	+0·11	−0·51	−1·30	−1·09	−0·81
Dec.	−0·32	+0·15	+0·29	+0·26	+0·33	−0·01	−0·70	−0·73	−1·01	*−1·50*	−0·89	+0·31	+1·28	*+2·07*	+1·59	+1·06	+0·71	+0·53	+0·34	−0·13	−0·49	−1·00	−1·11	−1·03
Year	−0·80	−0·88	−0·99	−1·12	−1·55	−1·99	−2·37	−2·65	*−2·76*	−2·09	−0·46	+1·86	+3·54	*+4·14*	+3·56	+2·50	+1·61	+1·08	+0·73	+0·39	+0·08	−0·40	−0·58	−0·83
Winter	−0·93	−0·71	−0·50	−0·36	−0·37	−0·41	−0·65	−0·86	−1·09	−1·00	−0·25	+1·22	+2·05	*+2·59*	+2·09	+1·29	+0·85	+0·69	+0·35	−0·05	−0·51	−1·10	*−1·20*	−1·14
Equinox	−0·95	−0·91	−1·11	−1·31	−1·39	−1·48	−1·79	−2·28	*−2·84*	−2·47	−0·69	+1·91	+3·88	*+4·30*	+3·51	+2·33	+1·37	+0·94	+0·54	+0·13	−0·06	−0·29	−0·37	−0·99
Summer	−0·52	−1·02	−1·37	−1·70	−2·88	−4·07	−4·67	*−4·82*	−4·41	−2·80	−0·43	+2·46	+4·68	*+5·53*	+5·08	+3·86	+2·60	+1·61	+1·29	+1·08	+0·80	+0·20	−0·16	−0·35
INCLINATION																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·26	*+0·36*	+0·29	+0·11	−0·09	−0·23	−0·36	−0·42	*−0·43*	−0·22	+0·07	+0·17	+0·19	+0·07	+0·09	+0·09	+0·07	−0·01	+0·03	+0·04	−0·05	−0·03	−0·01	+0·04
Feb.	+0·13	+0·21	*+0·33*	+0·31	+0·17	−0·06	−0·19	*−0·34*	−0·30	−0·14	−0·01	+0·11	+0·04	−0·21	−0·26	+0·09	+0·13	+0·15	+0·09	+0·01	−0·01	+0·10	−0·17	−0·21
Mar.	+0·17	+0·12	+0·13	+0·03	−0·08	−0·28	*−0·33*	−0·26	−0·09	+0·23	*+0·46*	+0·41	+0·31	+0·11	−0·06	−0·11	+0·01	−0·06	−0·23	*−0·33*	−0·03	+0·13	−0·05	−0·21
Apr.	−0·24	−0·08	+0·01	+0·16	−0·01	−0·15	−0·06	+0·01	+0·27	+0·75	*+1·13*	+1·09	+0·73	+0·57	+0·47	+0·01	−0·43	−0·48	−0·79	*−0·82*	−0·54	−0·48	−0·63	−0·51
May	−0·35	−0·29	−0·22	−0·11	−0·11	+0·01	+0·43	+0·93	+1·27	*+1·43*	+1·41	+1·04	+0·63	+0·16	−0·03	−0·28	−0·51	−0·78	*−0·94*	−0·82	−0·78	−0·65	−0·71	−0·72
June	−0·67	−0·45	−0·39	−0·37	−0·31	−0·07	+0·29	+0·94	+1·50	+1·68	*+1·74*	+1·49	+1·01	+0·57	−0·09	−0·40	−0·56	−0·89	*−1·09*	−1·03	−0·94	−0·65	−0·76	−0·54
July	−0·29	−0·25	−0·21	−0·34	−0·25	−0·02	+0·20	+0·43	+1·21	+1·57	*+1·72*	+1·30	+0·79	+0·28	−0·17	−0·48	−0·48	−0·59	−0·81	*−0·89*	−0·88	−0·79	−0·50	−0·54
Aug.	−0·30	−0·17	−0·16	−0·15	−0·08	+0·07	+0·44	+0·90	*+1·16*	+1·15	+1·08	+0·92	+0·39	+0·23	+0·03	−0·09	−0·27	−0·78	−0·71	*−0·87*	−0·75	−0·76	−0·67	−0·57
Sept.	−0·33	−0·28	−0·36	−0·24	−0·25	−0·26	−0·19	+0·05	+0·58	+1·15	*+1·38*	+1·25	+0·89	+0·71	+0·52	+0·27	−0·01	−0·41	−0·72	−0·73	*−0·80*	−0·78	−0·74	−0·70
Oct.	−0·24	−0·22	−0·19	−0·27	−0·34	−0·35	−0·31	−0·11	+0·33	+0·89	*+1·15*	+0·99	+0·61	+0·29	+0·18	+0·10	−0·10	−0·30	*−0·42*	−0·41	−0·28	−0·33	−0·36	−0·32
Nov.	−0·28	−0·26	−0·14	−0·25	−0·34	−0·40	*−0·48*	−0·41	+0·03	+0·71	+1·15	*+1·25*	+1·13	+0·70	+0·32	+0·15	−0·05	−0·26	−0·38	−0·47	−0·46	*−0·48*	−0·36	−0·41
Dec.	+0·29	+0·15	+0·01	−0·11	−0·35	*−0·39*	−0·37	−0·31	−0·31	+0·09	+0·48	*+0·72*	+0·66	+0·39	+0·21	+0·12	−0·09	−0·24	−0·32	−0·22	−0·21	−0·14	−0·01	−0·03
Year	−0·14	−0·09	−0·08	−0·11	−0·17	−0·18	−0·08	+0·11	+0·43	+0·78	*+0·98*	+0·90	+0·62	+0·32	+0·09	−0·04	−0·19	−0·39	−0·52	*−0·55*	−0·47	−0·41	−0·41	−0·39
Winter	+0·10	+0·11	+0·12	+0·02	−0·15	−0·27	−0·35	*−0·37*	−0·25	+0·11	+0·43	*+0·57*	+0·51	+0·23	+0·09	+0·11	+0·01	−0·09	−0·14	−0·16	−0·18	−0·13	−0·14	−0·15
Equinox	−0·17	−0·12	−0·10	−0·07	−0·17	−0·26	−0·23	−0·07	+0·27	+0·76	*+1·02*	+0·94	+0·63	+0·42	+0·28	+0·07	−0·13	−0·31	−0·54	*−0·57*	−0·42	−0·37	−0·45	−0·44
Summer	−0·40	−0·29	−0·25	−0·25	−0·19	0·00	+0·34	+0·80	+1·29	+1·46	*+1·49*	+1·18	+0·71	+0·31	−0·07	−0·31	−0·46	−0·76	−0·89	*−0·91*	−0·84	−0·71	−0·66	−0·59
HORIZONTAL FORCE																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−3·1	*−4·4*	−3·5	−1·1	+1·5	+3·4	+5·1	*+5·7*	+5·7	+2·2	−1·9	−3·7	−4·1	−1·6	−1·3	−1·3	−0·7	+0·4	+0·1	+0·3	+1·3	+0·8	+0·5	−0·3
Feb.	−2·2	−3·2	*−4·7*	−4·4	−2·4	+0·6	+2·2	*+4·2*	+3·7	+1·2	−1·0	−3·4	−2·4	+1·2	+2·7	−1·0	−0·8	−0·8	+0·2	+1·2	+1·5	0·0	+3·8	+3·8
Mar.	−2·1	−1·7	−1·9	−0·5	+1·3	+4·2	+4·7	+4·1	+1·5	−3·7	−8·1	*−9·1*	−7·9	−4·1	−0·1	+1·9	+1·1	+2·2	+4·3	*+5·9*	+1·9	−0·1	+2·3	+3·9
Apr.	+4·9	+2·5	+1·3	−0·9	+0·9	+2·6	+1·5	+0·1	−4·7	−13·1	−20·5	*−21·5*	−15·9	−11·7	−7·9	+0·1	+7·7	+9·0	+13·5	*+13·9*	+9·7	+8·9	+10·7	+8·9
May	+6·2	+5·3	+4·2	+2·9	+3·2	+1·5	−4·8	−12·3	−18·8	−23·9	*−26·0*	−21·7	−15·2	−5·7	+0·2	+5·5	+9·2	+13·7	*+16·0*	+14·1	+13·0	+10·7	+11·4	+11·3
June	+10·0	+6·5	+5·3	+5·8	+5·5	+1·9	−4·2	−13·9	−22·9	−27·2	*−29·7*	−26·7	−19·4	−11·7	−0·1	+6·2	+10·7	+16·9	*+19·6*	+18·9	+16·7	+11·6	+11·9	+8·3
July	+4·9	+4·2	+3·5	+5·2	+4·2	+1·3	−2·6	−6·0	−17·5	−24·8	*−28·4*	−23·7	−16·8	−8·3	+0·4	+6·5	+9·2	+11·7	+15·0	*+15·8*	+15·5	+13·6	+8·5	+8·6
Aug.	+4·9	+3·2	+2·9	+2·9	+2·5	+0·6	−5·3	−12·5	−17·5	−19·6	*−19·9*	−19·1	−11·3	−7·0	−1·3	+2·3	+5·5	+13·8	+13·3	*+15·3*	+13·5	+13·0	+10·9	+8·9
Sept.	+5·6	+4·3	+5·0	+3·3	+3·8	+4·5	+3·8	+0·1	−7·8	−17·3	*−22·0*	−21·5	−16·4	−13·1	−9·2	−4·3	+0·6	+6·7	+11·8	+12·5	*+13·2*	+12·9	+12·2	+11·3
Oct.	+4·4	+3·9	+3·6	+4·3	+5·4	+5·3	+4·6	+1·9	−4·2	−13·1	*−18·8*	−18·3	−12·4	−6·7	−3·2	−0·7	+2·6	+5·1	*+6·8*	+6·7	+5·0	+5·9	+6·2	+5·7
Nov.	+3·6	+3·1	+1·5	+3·2	+4·7	+5·7	+6·8	+5·9	+0·1	−9·8	−17·3	*−19·5*	−17·6	−11·3	−4·5	−1·2	+2·1	+4·9	+6·4	*+7·5*	*+7·5*	+7·4	+5·3	+5·5
Dec.	−3·7	−1·8	−0·2	+1·3	+4·8	*+5·4*	+5·1	+4·2	+4·0	−1·9	−8·0	*−11·8*	−11·3	−6·4	−2·6	−0·7	+2·2	+4·2	+5·1	+3·8	+3·8	+2·7	+0·8	+1·0
Year	+2·6	+1·8	+1·4	+1·9	+2·9	+3·1	+1·4	−1·5	−6·5	−12·6	*−16·8*	−16·7	−12·6	−7·2	−2·2	+1·1	+4·1	+7·3	+9·3	*+9·7*	+8·5	+7·3	+7·0	+6·4
Winter	−1·3	−1·6	−1·7	−0·3	+2·1	+3·8	+4·8	*+5·0*	+3·4	−2·1	−7·1	*−9·6*	−8·9	−4·5	−1·4	−1·1	+0·7	+2·2	+2·9	+3·2	+3·5	+2·7	+2·6	+2·5
Equinox	+3·4	+2·3	+2·0	+1·5	+2·9	+4·1	+3·7	+1·5	−3·8	−11·8	−17·3	*−17·6*	−13·1	−8·9	−5·1	−0·7	+3·0	+5·7	+9·1	*+9·7*	+7·5	+6·9	+7·9	+7·5
Summer	+6·5	+4·8	+4·0	+4·2	+3·9	+1·3	−4·2	−11·2	−19·2	−23·9	*−26·0*	−22·8	−15·7	−8·2	−0·2	+5·1	+8·7	+14·0	*+16·0*	*+16·0*	+14·7	+12·2	+10·7	+9·3

"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 GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL DISTURBED DAYS

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

145 ESKDALEMUIR

NORTH COMPONENT

	Hour G.M.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
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+6·4	*−38·0*	−1·4	−5·5	−3·6	−3·5	+1·6	+1·7	+1·7	+0·7	−1·3	−1·5	−0·5	+6·3	−15·2	−16·1	+2·3	+7·4	+2·8	+11·6	+11·1	+7·6	+11·6	*+13·6*
Feb.	+13·6	+9·3	−4·8	−1·8	+4·0	+10·5	+8·6	*+15·8*	+13·3	+3·9	−12·0	*−21·4*	−16·0	−9·8	−6·9	−5·3	−7·7	+0·4	−4·1	−6·6	+3·7	+5·4	+7·4	+0·4
Mar.	+10·5	+4·3	+0·6	+11·1	+6·3	+12·2	+5·8	−6·7	−2·0	−6·1	−11·1	−16·8	*−17·5*	−9·6	−2·2	*+17·3*	+0·3	−2·8	+1·9	−2·1	−0·5	+9·4	+2·1	−4·4
Apr.	−22·5	+3·9	−3·2	+3·9	+6·7	+3·5	+2·2	−2·5	−7·1	−18·9	*−29·4*	−21·4	−7·4	−5·6	+1·9	+6·8	+21·5	+24·9	*+34·3*	+29·4	+11·1	−11·8	−20·8	+0·6
May	+5·2	+9·9	+1·8	+15·7	+2·6	−3·9	−3·9	−6·9	−23·9	*−40·6*	−29·9	−21·3	−26·1	−20·6	−10·4	+7·4	+17·1	+34·1	*+38·5*	+32·5	+22·2	+9·8	−9·7	+0·3
June	+10·0	+8·6	+13·3	−0·7	+9·2	+7·7	+2·2	−6·3	−21·2	−25·7	−30·6	*−34·2*	−25·7	−17·0	−16·7	−5·3	+5·8	+17·0	+24·5	+22·8	*+26·3*	+13·8	+13·5	+8·8
July	+6·0	+6·4	+11·4	0·0	+11·6	+8·1	+2·6	−7·8	−22·4	−26·4	−31·9	*−33·5*	−25·1	−16·6	−15·8	−3·2	+7·6	+18·1	+24·8	+22·2	*+29·8*	+14·7	+12·4	+7·3
Aug.	+11·5	+3·6	+6·0	+6·7	+5·6	+5·3	+3·2	−5·1	−13·4	−22·1	−23·4	*−27·2*	−20·5	−16·6	−12·3	−1·7	+7·9	+22·8	*+24·0*	+19·2	+12·7	+7·9	+4·1	+1·9
Sept.	+10·7	+9·0	+10·2	+14·9	+10·8	+7·4	−10·9	−17·1	−31·2	−26·6	−34·7	−39·5	*−40·4*	−19·7	−9·8	+2·2	+17·1	*+29·1*	*+29·1*	+25·1	+28·5	+11·3	+13·8	+10·8
Oct.	+5·8	+13·0	+10·5	+12·3	+20·1	*+21·0*	+17·5	+9·8	−4·0	−13·7	−25·7	*−26·1*	−18·0	−21·8	−16·1	−9·5	−0·1	+2·3	−6·4	+10·4	+10·5	−2·9	+3·1	+8·0
Nov.	+13·6	+12·6	+12·9	+15·3	+15·8	+15·0	+17·1	+10·8	0·0	−9·2	−25·5	*−26·5*	−14·6	−2·2	*+32·7*	+2·5	−13·5	−19·1	−9·3	−11·6	−11·3	−7·3	+2·1	−0·3
Dec.	+6·8	+7·6	+3·5	+8·5	+16·7	+16·9	*+18·5*	+14·5	+10·6	+4·1	−6·1	−11·9	−7·5	−3·5	−13·4	−9·8	−12·1	+1·4	+1·3	−7·5	−13·4	+3·1	−13·7	*−14·4*
Year	+6·6	+3·8	+5·3	+8·0	+9·7	+9·1	+6·7	+1·0	−6·9	−14·3	−21·8	*−23·3*	−18·4	−11·1	−6·1	−1·3	+2·7	+10·0	*+11·2*	+10·9	+9·2	+4·8	+1·4	+3·2
Winter	+10·1	−2·1	+2·5	+4·1	+8·2	+9·8	*+11·5*	+10·7	+6·5	−0·1	−11·3	*−15·5*	−9·7	−2·3	−0·7	−7·2	−7·7	−2·5	−2·3	−3·5	−2·3	+2·2	+1·8	−0·2
Equinox	+1·3	+5·8	+5·5	+10·4	*+13·4*	+11·8	+8·4	−0·3	−5·4	−14·3	*−24·8*	−24·5	−17·4	−12·6	−5·4	+2·6	+4·3	+7·6	+8·2	+12·4	+8·0	+2·0	−2·2	+5·1
Summer	+8·3	+7·9	+7·9	+9·6	+7·7	+5·5	0·0	−7·4	−21·9	−28·5	−29·5	*−30·1*	−28·0	−18·5	−12·3	+0·6	+11·3	+24·8	*+27·7*	+23·6	+21·9	+10·2	+4·8	+4·8

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−12·7	−13·3	*−25·5*	−1·8	−2·3	+0·2	+17·4	+9·0	+4·0	−0·2	+6·7	+7·5	+12·7	+21·3	*+28·1*	+10·3	+10·1	−3·6	−8·7	−12·7	−20·7	−10·3	−5·4	−10·2
Feb.	−6·7	−4·7	−7·9	−3·0	−6·0	*−17·6*	−7·3	−1·4	+1·8	+4·4	+7·4	+18·9	+24·1	*+24·4*	+15·9	+18·3	+12·2	+0·9	−8·8	−14·2	−14·7	−9·5	−9·7	−16·8
Mar.	−2·4	−1·8	−18·2	*−26·6*	−15·4	−11·3	−7·1	+1·4	+8·7	+1·6	+9·3	+18·1	+28·1	+36·6	*+41·3*	+26·8	+18·2	−0·3	−18·8	−22·4	−11·4	−26·2	−16·7	−11·4
Apr.	−27·1	−13·6	−11·0	−5·3	−12·5	−11·1	−9·1	−11·6	−11·8	−4·7	+0·1	+15·0	+25·7	*+34·7*	+30·2	+28·1	+31·1	+29·9	+19·8	+2·7	−28·8	*−29·5*	−22·0	−19·1
May	−33·2	−22·8	−15·0	−9·5	−16·6	−13·3	−17·8	−22·2	−27·4	−16·8	−0·4	+19·5	+27·3	+30·7	+37·6	*+39·9*	+35·9	+36·4	+30·5	+4·7	+2·8	−13·6	−21·5	*−35·3*
June	−20·2	−12·5	−15·0	−13·6	−11·4	−23·9	−27·5	*−32·4*	−26·3	−18·2	−11·5	+5·5	+20·2	+27·4	+29·6	*+36·5*	+32·8	+26·9	+21·2	+13·3	+13·8	−1·1	−4·3	−9·2
July	+1·1	−2·1	−6·8	−16·2	−24·5	−25·9	*−29·0*	−23·5	−18·1	−13·8	−2·8	+3·7	+18·5	+25·7	+26·0	*+26·1*	+23·6	+22·0	+19·3	+15·6	−7·9	−7·3	−0·9	−2·5
Aug.	−16·3	−18·0	*−20·8*	−13·4	−12·8	−11·6	−18·5	−10·4	−13·8	−13·0	−5·9	+11·3	+26·7	+35·4	*+37·6*	+33·1	+24·1	+18·4	+5·3	+4·3	−3·3	−13·1	−15·4	−9·7
Sept.	*−21·2*	−1·1	−3·1	−6·0	−8·3	+4·7	+22·5	+6·8	−6·5	−8·0	−0·8	+10·3	+20·5	+25·6	*+26·9*	+23·7	+5·6	−1·1	−13·5	−11·8	−20·3	−17·6	−13·0	−14·2
Oct.	−5·3	−3·6	−5·7	−0·7	+0·9	+0·6	+1·8	−1·8	−6·5	−7·4	+0·8	+18·3	+29·4	+39·5	*+41·2*	+34·9	+1·8	−14·8	−8·3	−18·7	−25·7	−29·9	*−31·3*	−9·5
Nov.	−8·8	−6·8	−10·1	−4·7	+11·7	+8·2	+15·2	+4·6	+2·0	−2·4	−1·2	+8·2	+21·4	+34·2	*+51·0*	+34·8	+18·7	−11·4	−12·3	−31·3	−32·4	−24·8	−26·0	*−37·9*
Dec.	−23·6	−8·6	−2·1	+0·5	−8·2	+0·9	−1·0	+1·9	0·0	0·0	+5·1	+12·3	+19·8	+26·4	+25·1	*+28·8*	+19·2	+10·7	+8·9	+2·0	−17·0	*−39·0*	−30·2	−31·8
Year	+16·1	+9·9	+12·9	+10·8	+11·8	+11·1	+7·1	+6·5	+4·7	+0·8	−8·7	−20·6	−28·1	−32·1	*−32·5*	−27·0	−17·0	−5·1	+1·5	+9·3	+16·6	*+18·9*	+15·7	+17·3
Winter	+15·7	+7·0	+11·5	+3·6	+4·1	+5·6	−1·4	+0·7	+0·6	−0·4	−8·4	−17·8	−21·7	−25·5	*−28·1*	−24·1	−16·8	−0·1	+4·0	+11·7	+19·9	+20·2	+17·2	*+22·4*
Equinox	+13·5	+6·8	+10·9	+12·9	+13·2	+8·3	+1·3	+1·1	+1·7	−1·0	−11·4	−23·4	−30·5	*−36·3*	−34·4	−25·4	−11·5	−0·4	+7·9	+16·3	+23·0	*+24·7*	+18·5	+14·5
Summer	+19·0	+15·8	+16·3	+15·8	+18·0	+19·4	*+21·5*	+17·7	+11·7	+3·7	−6·2	−20·5	−31·9	−34·6	*−35·0*	−31·3	−22·8	−14·8	−7·3	0·0	+6·9	+12·0	+11·5	+14·9

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−14·2	*−51·1*	−35·6	−34·4	−35·6	−27·9	−22·2	−11·0	−0·6	+8·9	+11·4	+13·2	+14·2	+17·1	+23·6	*+31·6*	+24·2	+26·5	+22·4	+17·8	+11·2	+8·3	−0·8	+3·0
Feb.	+0·8	−5·4	−8·8	*−22·2*	−20·8	−16·9	−10·0	−8·6	−7·0	−6·8	−4·8	−5·6	−3·8	+2·2	+13·2	+15·6	+17·4	*+18·7*	+17·2	+17·8	+14·4	+5·0	−2·4	+0·8
Mar.	−14·1	−21·0	*−28·7*	−25·2	−18·0	−16·7	−15·8	−16·2	−19·7	−17·2	−16·5	−15·8	−11·5	−2·4	+14·5	*+50·2*	+39·6	+44·1	+43·0	+31·8	+17·9	+9·2	−4·5	−7·0
Apr.	*−64·7*	−48·6	−30·2	−17·7	−7·4	−2·4	+0·9	+5·2	+6·4	+5·3	+7·0	+5·6	+5·7	+10·8	+19·4	+19·1	+21·0	+28·2	+39·3	*+39·4*	+26·0	−10·7	−31·6	−26·0
May	*−43·3*	−28·7	−30·8	−21·9	−15·7	−15·5	−3·9	+3·9	+6·6	+6·5	+1·3	−2·7	+1·5	+10·9	+17·0	+21·3	+23·1	+20·5	+23·9	*+26·9*	+23·8	+17·5	−7·5	−34·7
June	−8·2	−12·8	*−22·4*	−22·0	−20·0	−13·1	−5·4	−1·6	−1·0	−2·8	−4·8	−6·8	−5·6	−0·2	+6·2	+10·6	+15·8	*+20·9*	+20·2	+19·4	+14·2	+12·6	+6·8	0·0
July	−6·2	−13·0	−9·8	−6·0	−0·6	+0·7	−1·2	−2·6	−6·6	−8·8	−10·4	*−11·2*	−10·2	−5·8	+2·6	+9·4	+12·6	+13·7	*+16·2*	+15·2	+14·2	+6·6	+1·0	+0·2
Aug.	−17·5	*−17·7*	−13·1	−9·1	−7·9	−11·6	−13·5	−17·5	−16·1	−16·5	−14·5	−12·5	−8·7	+0·5	+16·3	+27·1	+31·5	+32·2	+28·7	+22·7	+16·9	+11·1	−1·5	−9·3
Sept.	−14·3	−23·4	−25·7	−20·1	−17·3	−20·6	*−26·7*	−19·7	−10·7	−6·6	−5·1	−1·5	+1·1	+7·8	+12·5	+20·3	+32·9	*+38·2*	+35·1	+24·1	+18·3	+6·4	+0·3	−5·3
Oct.	−21·3	−21·0	−20·5	−26·2	*−29·2*	−20·9	−14·2	−7·2	−4·9	−2·8	−3·1	−2·2	+3·1	+13·4	+17·3	+28·0	*+42·4*	+40·3	+37·6	+23·8	+0·1	−5·0	−10·5	−17·0
Nov.	−15·8	−33·1	−35·0	−35·1	−36·0	*−37·5*	−36·4	−27·3	−20·6	−18·7	−14·4	−10·1	−1·6	+7·3	+54·8	*+60·1*	+33·2	+51·9	+56·2	+44·5	+26·0	+8·7	−8·6	−12·5
Dec.	−9·5	−14·5	−13·6	−16·1	−17·7	*−18·5*	−15·9	−11·5	−8·8	−8·1	−6·7	−5·7	−3·7	+0·1	+6·2	+11·7	+19·9	+20·3	+27·1	*+29·7*	+24·6	+15·1	−0·3	−4·1
Year	−19·0	*−24·2*	−22·9	−21·3	−18·9	−16·7	−13·7	−9·5	−6·9	−5·6	−5·1	−4·6	−1·6	+5·1	+17·0	+25·4	+26·1	+29·6	*+30·6*	+26·1	+17·3	+7·1	−5·0	−9·3
Winter	−9·7	−26·0	−23·3	−26·9	*−27·5*	−25·2	−21·1	−14·6	−9·3	−6·2	−3·6	−2·1	+1·3	+6·7	+24·5	+29·7	+23·7	+29·3	*+30·7*	+27·5	+19·1	+9·3	−3·0	−3·2
Equinox	*−28·6*	−28·5	−26·3	−22·3	−18·0	−15·1	−13·9	−9·5	−7·2	−5·3	−4·4	−3·5	−0·4	+7·4	+15·9	+29·4	+34·0	+37·7	*+38·7*	+29·8	+15·6	0·0	−11·6	−13·8
Summer	−18·8	−18·1	*−19·0*	−14·7	−11·1	−9·9	−6·0	−4·5	−4·3	−5·4	−7·1	−8·3	−5·7	+1·3	+10·5	+17·1	+20·7	+21·8	*+22·3*	+21·1	+17·3	+11·9	−0·3	−10·9

"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)

146 ESKDALEMUIR

	Hour G.M.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
DECLINATION (measured positive towards the west)																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−2·83	−1·20	*−5·11*	−0·14	−0·32	+0·17	+3·46	+1·76	+0·75	−0·06	+1·41	+1·58	+2·61	+4·08	*+6·29*	+2·72	+1·96	−1·03	−1·88	−3·04	−4·65	−2·38	−1·55	−2·60
Feb.	−1·90	−1·31	−1·42	−0·53	−1·37	*−3·98*	−1·81	−0·91	−0·16	+0·73	+1·98	+4·67	*+5·50*	+5·33	+3·50	+3·91	+2·77	+0·16	−1·63	−2·61	−3·12	−2·13	−2·26	−3·41
Mar.	−0·89	−0·53	−3·71	*−5·83*	−3·37	−2·76	−1·67	+0·55	+1·83	+0·57	+2·31	+4·33	+6·37	+7·79	*+8·45*	+4·75	+3·67	+0·04	−3·89	−4·45	−2·29	−5·67	−3·47	−2·13
Apr.	−4·61	−2·90	−2·11	−1·23	−2·79	−2·38	−1·93	−2·25	−2·11	−0·22	+1·17	+3·87	+5·49	*+7·24*	+6·05	+5·43	+5·45	+5·08	+2·67	−0·61	*−6·27*	−5·50	−3·65	−3·89
May	−6·93	−5·01	−3·11	−2·53	−3·47	−2·54	−3·45	−4·23	−4·61	−1·81	+1·09	+4·79	+6·55	+7·03	*+8·03*	+7·79	+6·61	+6·04	+4·67	−0·31	−0·31	−3·15	−3·97	*−7·17*
June	−4·49	−2·87	−3·55	−2·73	−2·67	−5·14	−5·65	*−6·31*	−4·49	−2·67	−1·13	+2·45	+5·09	+6·21	+6·65	*+7·61*	+6·41	+4·78	+3·33	+1·79	+1·77	−0·77	−1·41	−2·21
July	−0·09	−0·43	−1·50	−3·55	−5·27	−5·55	*−6·09*	−4·69	−3·20	−1·95	+0·35	+1·73	+4·45	*+5·77*	+5·66	+5·31	+4·47	+3·61	+3·07	+2·49	−2·12	−1·75	−0·21	−0·51
Aug.	−3·69	−4·14	*−4·75*	−3·35	−3·03	−2·76	−3·61	−1·55	−1·59	−1·62	+0·13	+3·85	+7·07	+8·02	*+8·09*	+6·69	+4·31	+2·70	+0·03	−0·01	−1·69	−3·06	−3·69	−2·35
Sept.	*−4·73*	−0·30	−1·19	−1·79	−2·49	+0·54	+4·23	+1·45	−0·97	−0·90	+1·15	+3·39	+5·21	*+5·70*	+5·65	+4·97	+1·31	−0·46	−2·87	−2·87	−4·55	−4·08	−2·89	−3·51
Oct.	−1·31	−1·23	−1·56	−0·63	−0·61	−0·69	−0·31	−0·75	−1·16	−0·97	+1·17	+4·73	+6·65	+8·85	*+8·98*	+7·43	+0·37	−3·07	−1·43	−4·19	−5·62	−5·95	*−6·47*	−2·23
Nov.	−2·32	−1·87	−2·54	−1·55	+1·76	+1·07	+2·42	+0·51	+0·40	−0·13	+0·76	+2·69	+4·90	+7·01	*+9·06*	+6·95	+4·32	−1·57	−2·12	−5·89	−6·12	−4·73	−5·34	*−7·67*
Dec.	−5·04	−2·04	−0·56	−0·22	−2·32	−0·47	−0·92	−0·18	−0·42	−0·16	+1·26	+2·96	+4·30	+5·48	+5·60	*+6·22*	+4·36	+2·11	+1·74	+0·70	−2·92	*−8·02*	−5·58	−5·88
Year	−3·24	−1·99	−2·59	−2·01	−2·16	−2·04	−1·28	−1·38	−1·31	−0·77	+0·97	+3·50	+5·35	+6·54	*+6·83*	+5·81	+3·83	+1·53	+0·14	−1·58	−3·24	*−3·93*	−3·37	−3·63
Winter	−3·02	−1·61	−2·41	−0·61	−0·56	−0·80	+0·79	+0·29	+0·14	+0·09	+1·35	+3·23	+4·33	+5·47	*+6·11*	+4·95	+3·35	−0·08	−0·97	−2·71	−4·45	−4·31	−3·68	*−4·89*
Equinox	−2·89	−1·24	−2·14	−2·37	−2·31	−1·32	+0·08	−0·25	−0·60	−0·38	+1·45	+4·08	+5·93	*+7·39*	+7·28	+5·65	+2·70	+0·40	−1·38	−3·03	−4·68	*−5·30*	−4·12	−2·94
Summer	−3·80	−3·11	−3·23	−3·04	−3·61	−4·00	*−4·70*	−4·19	−3·47	−2·01	+0·11	+3·21	+5·79	+6·76	*+7·11*	+6·85	+5·45	+4·28	+2·77	+0·99	−0·59	−2·18	−2·32	−3·06
INCLINATION																								
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·61	+1·41	−0·46	−0·47	−0·61	−0·46	*−0·87*	−0·50	−0·18	+0·17	+0·28	+0·33	+0·22	−0·26	+1·22	*+1·71*	+0·31	+0·21	+0·48	−0·16	−0·19	−0·16	−0·72	−0·69
Feb.	−0·78	−0·68	+0·20	−0·39	−0·70	−0·88	−0·72	*−1·23*	−1·07	−0·48	+0·58	+1·03	+0·65	+0·39	+0·58	+0·50	+0·78	+0·42	+0·80	*+1·05*	+0·30	−0·11	−0·42	+0·21
Mar.	−1·01	−0·78	−0·51	−1·01	−0·66	*−1·07*	−0·68	+0·02	−0·47	−0·04	+0·20	+0·49	+0·51	+0·11	−0·02	−0·25	+0·73	*+1·27*	+1·17	+1·20	+0·62	−0·06	−0·04	+0·26
Apr.	+0·23	−1·28	−0·39	−0·62	−0·46	−0·15	−0·01	+0·44	+0·77	+1·43	*+2·10*	+1·36	+0·30	+0·20	−0·03	−0·33	−1·29	−1·32	*−1·53*	−1·00	+0·28	+0·89	+0·87	−0·44
May	−0·99	−1·07	−0·68	−1·45	−0·35	+0·05	+0·39	+0·83	+2·08	*+3·04*	+2·00	+1·08	+1·40	+1·23	+0·63	−0·47	−1·01	−2·20	*−2·33*	−1·53	−0·91	−0·05	+0·73	−0·43
June	−0·60	−0·72	−1·23	−0·32	−0·95	−0·52	+0·07	+0·78	+1·70	+1·85	*+2·04*	+2·01	+1·29	+0·76	+0·88	+0·15	−0·41	−0·94	−1·38	−1·19	*−1·55*	−0·58	−0·66	−0·46
July	−0·71	−0·31	−0·36	−0·40	−0·21	−0·17	−0·02	+0·38	+0·85	*+1·39*	+1·33	+1·33	+0·71	+0·49	+0·39	−0·07	−0·50	*−1·37*	−1·24	−0·93	−0·41	−0·19	−0·02	+0·03
Aug.	−0·87	−1·03	−0·94	−1·13	−0·78	−0·82	+0·14	+0·65	+1·80	+1·46	+1·94	+2·17	*+2·21*	+0·99	+0·71	+0·21	−0·48	−1·16	−1·09	−0·97	*−1·24*	−0·24	−0·79	−0·74
Sept.	−0·81	−0·68	−1·51	−1·37	*−1·67*	−1·27	−1·48	−0·46	+0·39	+1·16	*+2·07*	+2·02	+1·53	+0·73	+0·31	+0·48	+1·04	+0·55	+0·82	−0·05	−0·02	−0·49	−0·26	−1·01
Oct.	−0·84	−1·33	−1·12	−1·44	*−2·05*	−1·90	−1·52	−1·47	+0·23	+0·93	+1·60	+1·42	+0·89	*+1·93*	+0·96	+0·87	+1·02	+1·02	+1·45	+0·14	−0·36	+0·45	−0·07	−0·83
Nov.	−1·17	−1·56	−1·58	−1·81	−2·07	−2·01	*−2·21*	−1·44	−0·53	+0·18	+1·34	+1·39	+0·65	−0·11	−1·45	+0·87	+1·47	*+2·67*	+2·15	+2·25	+1·79	+1·01	−0·02	+0·19
Dec.	−0·38	−0·74	−0·53	−0·96	−1·42	−1·58	*−1·59*	−1·26	−0·91	−0·47	+0·17	+0·49	+0·15	−0·11	+0·71	+0·57	+1·04	+0·27	+0·46	+1·20	*+1·70*	+0·66	+1·28	+1·25
Year	−0·71	−0·73	−0·76	−0·95	*−0·99*	−0·90	−0·71	−0·21	+0·39	+0·89	*+1·30*	+1·26	+0·88	+0·47	+0·41	+0·35	+0·22	−0·05	−0·02	0·00	+0·01	+0·09	−0·01	−0·22
Winter	−0·74	−0·39	−0·59	−0·90	−1·20	−1·23	*−1·35*	−1·11	−0·68	−0·15	+0·59	+0·80	+0·42	−0·02	+0·27	+0·91	+0·90	+0·89	+0·98	*+1·09*	+0·91	+0·35	+0·03	+0·24
Equinox	−0·61	−1·01	−0·89	−1·11	*−1·21*	−1·09	−0·92	−0·20	+0·23	+0·87	*+1·49*	+1·33	+0·81	+0·58	+0·30	+0·19	+0·37	+0·39	+0·48	+0·08	+0·13	+0·19	+0·12	−0·51
Summer	−0·79	−0·79	−0·80	−0·82	−0·57	−0·37	+0·14	+0·66	+1·61	*+1·93*	+1·83	+1·65	+1·41	+0·87	+0·65	−0·05	−0·60	−1·42	*−1·51*	−1·15	−1·03	−0·26	−0·19	−0·40
HORIZONTAL FORCE																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+3·9	*−39·8*	−6·2	−5·7	−4·0	−3·4	+4·9	+3·4	+2·4	+0·7	0·0	0·0	+1·9	+10·2	−9·6	−13·9	+4·2	+6·6	+1·1	+9·0	+7·0	+5·5	+10·4	*+11·4*
Feb.	+12·1	+8·2	−6·2	−2·3	+2·8	+7·0	+7·1	*+15·2*	+13·4	+4·7	−10·4	*−17·4*	−11·1	−5·0	−3·8	−1·7	−5·2	+0·6	−5·7	−9·2	+0·8	+3·5	+5·4	−2·8
Mar.	+9·9	+3·9	−2·9	+5·9	+3·3	+9·8	+4·3	−6·3	−0·3	−5·7	−9·1	*−13·1*	−11·9	−2·5	+5·7	*+22·1*	+3·7	−2·8	−1·7	−6·3	−2·7	+4·3	−1·1	−6·5
Apr.	−27·2	+1·2	−5·2	+2·8	+4·2	+1·3	+0·4	−4·6	−9·2	−19·4	*−28·8*	−18·2	−2·4	+1·0	+7·6	+12·0	+27·0	+30·1	*+37·4*	+29·4	+5·4	−17·2	−24·6	−3·0
May	−1·2	+5·4	−1·1	+13·6	−0·6	−6·4	−7·2	−11·0	−28·7	*−43·0*	−29·4	−17·2	−20·4	−14·4	−3·1	+14·8	+23·6	+40·4	*+43·6*	+32·8	+22·3	+7·2	−13·6	−6·4
June	+6·0	+6·1	+10·2	−3·3	+6·9	+3·0	−3·1	−12·3	−25·8	−28·7	−32·2	*−32·5*	−21·4	−11·5	−10·8	+1·7	+11·9	+21·8	+28·1	+24·9	*+28·4*	+13·3	+12·4	+6·9
July	+8·3	−0·2	+1·7	+3·7	+2·9	+2·8	−0·1	−6·7	−15·1	−24·0	−23·7	*−24·1*	−14·3	−9·4	−4·9	+4·5	+12·1	*+25·6*	+24·5	+19·5	+11·3	+5·2	+0·7	−0·3
Aug.	+6·5	+8·9	+9·3	+13·5	+8·7	+8·0	−7·1	−16·1	−32·7	−27·9	−34·3	*−37·1*	−36·3	−14·7	−4·7	+6·9	+18·7	*+29·2*	+26·9	+22·9	+24·7	+7·7	+11·3	+7·7
Sept.	+6·9	+1·6	+13·2	+13·1	*+18·6*	+11·4	+12·3	−0·4	−9·8	−19·7	*−32·8*	−30·8	−22·5	−8·0	0·0	+0·3	−3·4	+5·8	+0·7	+9·6	+7·0	+9·7	+4·0	+13·2
Oct.	+4·7	+12·1	+9·2	+11·9	+19·9	*+20·7*	+17·5	+9·3	−5·2	−14·9	*−25·1*	−22·1	−12·1	−13·9	−8·0	−2·7	+0·3	−0·5	−7·9	+6·7	+5·4	−8·5	−2·9	+6·1
Nov.	+11·7	+11·1	+10·8	+14·1	+17·7	+16·3	+19·7	+11·5	+0·4	−9·5	*−25·3*	−24·5	−10·3	+4·3	*+41·8*	+9·1	−9·7	−20·9	−11·5	−17·3	−17·2	−11·9	−2·9	−7·5
Dec.	+2·2	+5·8	+3·0	+8·4	+14·8	+16·8	*+18·0*	+14·6	+10·4	+4·0	−5·0	−9·4	−3·6	+1·6	−8·4	−4·2	−8·2	+3·4	+3·0	−7·0	−16·4	−4·4	−19·2	*−20·2*
Year	+3·7	+2·0	+3·0	+6·3	+7·9	+7·3	+5·6	−0·3	−8·3	−15·3	*−21·3*	−20·5	−13·7	−5·2	+0·2	+4·1	+6·3	*+11·6*	+11·5	+9·6	+6·3	+1·2	−1·7	−0·1
Winter	+7·5	−3·7	+0·3	+3·6	+7·8	+9·2	*+12·4*	+11·2	+6·7	0·0	−10·2	*−12·8*	−5·8	+2·8	+5·0	−2·7	−4·7	−2·6	−3·3	−6·1	−6·5	−1·8	−1·6	−4·8
Equinox	−1·4	+4·7	+3·6	+8·4	*+11·5*	+10·8	+8·6	−0·5	−6·1	−14·9	*−23·9*	−21·1	−12·2	−5·9	+1·3	+7·9	+6·9	+8·1	+7·1	+9·8	+3·8	−2·9	−6·1	+2·5
Summer	+4·9	+5·1	+5·0	+6·9	+4·5	+1·9	−4·4	−11·5	−25·6	*−30·9*	−29·9	−27·7	−23·1	−12·5	−5·9	+7·0	+16·6	+29·3	*+30·8*	+25·0	+21·7	+8·3	+2·7	+2·0

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

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1955

The ranges are derived from the diurnal inequalities printed in Tables 141 to 146

147 ESKDALEMUIR

	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	*W*	*Z*	*N*	*W*	*Z*	*N*	*W*	*Z*	*D*	*I*	*H*	*D*	*I*	*H*	*D*	*I*	*H*
	γ	γ	γ	γ	γ	γ	γ	γ	γ	′	′	γ	′	′	γ	′	′	γ
Jan.	14·0	24·7	17·6	11·9	13·0	6·0	51·6	53·6	82·7	5·15	0·90	15·6	2·76	0·79	10·1	11·40	2·58	51·2
Feb.	15·6	27·0	19·8	10·5	22·3	9·4	37·2	42·0	40·9	5·81	1·29	12·9	4·78	0·67	8·9	9·48	2·28	32·6
Mar.	21·7	41·1	28·3	16·8	27·8	14·0	34·8	67·9	78·9	8·89	0·95	16·2	5·92	0·79	15·0	14·28	2·34	35·2
Apr.	37·1	43·1	33·4	36·5	40·7	19·0	63·7	64·2	104·1	9·53	1·86	37·4	8·83	1·95	35·4	13·51	3·63	66·2
May	45·1	49·8	23·7	39·3	51·1	22·2	79·1	75·2	70·2	9·86	2·81	47·8	10·47	2·37	42·0	15·20	5·37	86·6
June	48·3	50·7	23·2	45·7	49·4	21·6	60·5	68·9	43·3	10·48	2·89	50·7	9·83	2·83	49·3	13·92	3·59	60·9
July	44·7	51·7	22·2	41·7	57·9	21·3	63·3	55·1	27·4	10·65	2·62	46·0	11·51	2·61	44·2	11·86	2·76	49·7
Aug.	42·1	46·2	24·8	36·4	48·4	22·4	51·2	58·4	49·9	9·85	2·27	40·9	10·22	2·03	35·2	12·84	3·45	66·3
Sept.	42·3	38·4	24·1	35·7	32·5	12·4	69·5	48·1	64·9	8·11	2·70	39·9	7·05	2·18	35·2	10·43	3·74	51·4
Oct.	35·3	35·3	21·3	25·9	35·5	12·2	47·1	72·5	71·6	7·94	2·27	33·0	7·22	1·57	25·6	15·45	3·65	45·8
Nov.	31·9	34·4	28·1	29·0	27·7	5·8	59·2	88·9	97·6	7·25	2·15	30·1	5·88	1·73	27·0	16·73	4·88	67·1
Dec.	19·9	30·6	16·9	18·0	16·1	6·6	32·9	67·8	48·2	6·57	1·26	17·7	3·57	1·11	17·2	14·24	3·29	38·2
Year	28·3	34·1	20·3	27·3	32·7	13·2	34·5	51·4	54·8	7·22	1·42	26·2	6·90	1·53	26·5	10·76	2·29	32·9
Winter	17·8	28·1	18·8	16·3	16·7	6·0	27·0	50·5	58·2	6·00	1·14	15·8	3·79	0·94	14·6	11·00	2·44	25·2
Equinox	31·0	36·7	23·2	28·4	33·0	13·8	38·2	61·0	67·3	8·24	1·81	28·2	7·14	1·59	27·3	12·69	2·70	35·4
Summer	44·5	48·2	23·3	39·8	49·9	21·3	57·8	56·5	41·3	10·08	2·59	45·7	10·35	2·40	42·0	11·81	3·44	61·7

NON-CYCLIC CHANGE

148 ESKDALEMUIR

	All days			Quiet days			Disturbed days		
	H	*D*	*Z*	*H*	*D*	*Z*	*H*	*D*	*Z*
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0·3	−0·03	−0·1	+3·9	+0·37	−2·3	−1·3	+0·87	−3·2
Feb.	−0·4	0·00	+0·6	+7·3	−0·66	+0·6	−10·5	−0·10	−1·3
Mar.	−0·2	+0·01	−0·5	+3·1	+0·26	−1·0	−13·4	+0·31	+6·1
Apr.	+0·7	−0·05	0·0	+3·8	+0·18	−0·9	+1·4	+3·29	+10·8
May	+0·5	−0·03	+0·3	+3·0	−0·18	−1·4	−8·2	−0·03	−3·3
June	+0·1	+0·06	+0·1	−1·3	+0·13	−0·7	−7·1	+0·55	+3·0
July	−0·3	−0·04	0·0	+2·4	−0·72	−1·0	+7·9	+0·29	−1·3
Aug.	0·0	−0·12	−0·6	+4·3	+0·01	+5·2	−3·4	+0·38	−0·3
Sept.	−0·3	−0·05	−0·5	+4·8	−0·38	−2·0	−3·3	+0·47	+2·5
Oct.	−0·7	+0·03	+1·0	−1·6	−0·89	−0·3	−7·8	+0·18	−2·8
Nov.	+0·9	+0·07	+0·4	+3·7	+0·21	−2·1	−11·6	−3·07	−4·2
Dec.	+0·2	−0·22	0·0	+4·3	−0·37	−1·4	−19·0	−0·34	+2·0
Year	+0·1	−0·03	+0·1	+3·1	−0·17	−0·6	−6·4	+0·23	+0·7
Winter	+0·3	−0·05	+0·2	+4·8	−0·11	−1·3	−10·6	−0·66	−1·7
Equinox	−0·1	−0·02	0·0	+2·5	−0·21	−4·1	−5·8	+1·06	+4·1
Summer	+0·1	−0·03	−0·1	+2·1	+0·19	+0·5	−2·7	+0·30	−0·5

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

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, *a*, quiet, *q*, and disturbed, *d*, days for *H*, *D* and *Z* and for all days for *N*, *W*, *I* and *F*

149 ESKDALEMUIR

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	*q*	*d*	*a*	*q*	*d*	*a*	*q*	*d*				
	16,000γ +			10° +			44,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	659	663	640	59·4	59·5	59·0	1240	1241	1238	16354	3176	69 47·0	48210
Feb.	661	665	657	58·7	58·9	58·6	1242	1242	1241	16356	3173	69 47·0	48213
Mar.	661	666	659	58·2	58·5	58·1	1246	1244	1250	16356	3171	69 47·1	48217
Apr.	664	673	651	57·4	58·1	56·3	1244	1243	1239	16360	3167	69 46·8	48215
May	668	677	657	56·9	57·3	56·0	1246	1246	1238	16364	3166	69 46·6	48219
June	674	673	670	56·7	56·3	56·4	1249	1249	1245	16370	3166	69 46·3	48223
July	676	674	675	56·0	55·9	55·9	1249	1249	1249	16373	3163	69 46·1	48224
Aug.	675	679	668	55·6	55·8	55·9	1251	1250	1255	16373	3161	69 46·3	48226
Sept.	670	674	665	55·1	55·0	54·4	1249	1248	1251	16368	3156	69 46·6	48222
Oct.	669	677	655	54·6	54·7	53·8	1255	1252	1257	16368	3155	69 46·7	48228
Nov.	666	669	647	53·8	53·5	53·5	1267	1266	1279	16365	3150	69 47·3	48237
Dec.	676	683	665	53·5	53·5	53·0	1265	1262	1269	16375	3151	69 46·6	48239
Year	668	673	659	56·3	56·4	55·9	1250	1249	1251	16365	3163	69 46·7	48223

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of a_n, b_n in the series $\Sigma(a_n \cos 15nt + b_n \sin 15nt)$, t being reckoned in hours from midnight G.M.T.

Longitude of Eskdalemuir Observatory, 3°12′W.

150 ESKDALEMUIR

	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
ALL DAYS																								
Jan.	−0·6	+1·0	−2·0	−2·8	+0·8	−1·5	0·0	−0·4	−9·8	−2·2	−0·7	+3·0	0·0	−1·1	+1·5	+0·8	−1·1	−6·7	−0·9	−2·3	+0·3	−0·5	−0·3	−0·7
Feb.	+1·6	+3·7	−1·1	−2·6	+2·5	−1·9	+0·2	+0·6	−10·8	−4·1	+2·8	+3·1	+0·2	−0·8	+0·1	+0·8	+2·6	−8·4	−2·2	−1·3	+0·7	+0·7	−0·7	−0·2
Mar.	+6·5	−0·1	−4·4	−0·6	+1·8	−1·1	−0·7	−0·5	−13·2	−6·4	+3·7	+6·2	+0·8	−2·8	+0·8	+2·7	+2·6	−10·9	−6·3	−0·9	+1·7	+0·3	−0·5	−0·5
Apr.	+10·4	−3·8	−8·7	−0·1	+2·5	−0·5	+0·5	+1·6	−13·0	−12·2	+1·5	+9·4	−1·1	−1·5	+2·5	+2·7	−0·7	−9·2	−9·1	−1·8	−1·1	+0·7	−1·4	+0·7
May	+14·0	−9·2	−8·3	+1·6	+1·1	−0·5	+1·1	+1·4	−7·3	−18·1	+2·5	+9·0	−3·7	−1·8	+0·9	+0·3	+0·9	−6·3	−7·6	−2·3	+1·1	−0·5	−2·1	+0·4
June	+16·7	−7·9	−9·5	+1·5	−0·1	−1·2	+1·2	+0·8	−5·2	−19·8	+4·3	+7·7	−2·8	−1·2	+0·3	+0·1	+3·5	−6·3	−5·5	−2·2	+1·0	−0·4	−0·4	+0·4
July	+15·5	−6·2	−10·4	+0·1	+1·1	−0·4	−0·2	+0·4	−4·9	−19·3	+4·2	+9·5	−1·8	−1·6	+0·4	+1·4	+4·4	−5·0	−5·5	−1·6	+1·2	+0·1	−0·1	−0·6
Aug.	+15·7	−6·3	−7·7	+1·3	+0·3	−1·4	+0·4	+0·3	−9·0	−14·3	+5·7	+6·8	−4·0	−2·4	+0·8	+2·1	+3·2	−6·4	−6·7	+0·4	+1·9	−0·2	−1·1	−0·6
Sept.	+16·9	−1·1	−7·8	+1·9	+1·4	−3·9	+0·6	+2·0	−10·0	−7·3	+4·3	+7·1	−2·3	−4·1	+1·0	+2·0	−0·7	−10·2	−4·2	−1·8	+1·6	+0·3	−0·5	−0·8
Oct.	+13·1	+1·6	−7·5	−0·9	+2·1	−2·8	+0·1	+0·9	−8·7	−4·9	+2·5	+8·9	−2·3	−4·6	+0·8	+2·4	−1·5	−7·3	−4·3	−0·1	+2·3	+1·8	−0·8	−0·2
Nov.	+8·7	+4·5	−5·6	+0·4	+3·1	−2·9	−0·9	+1·6	−9·4	−3·1	+0·3	+8·8	−0·5	−3·4	+0·3	+1·3	−2·5	−12·2	−3·7	−0·6	+1·0	+0·5	−1·5	+0·3
Dec.	+4·1	+5·0	−4·5	−1·8	+1·1	−0·7	+0·1	+0·3	−9·5	−4·2	−2·5	+6·1	−0·8	−0·5	+0·2	+1·7	+1·2	−7·9	−2·0	−1·1	+0·7	+0·3	−1·0	−0·2
Year	+10·2	−1·6	−6·5	−0·2	+1·5	−1·5	+0·2	+0·8	−9·2	−9·6	+2·4	+7·1	−1·5	−2·1	+0·8	+1·5	+1·0	−8·1	−4·8	−1·3	+1·0	+0·2	−0·9	−0·2
Winter	+3·4	+3·6	−3·3	−1·7	+1·9	−1·7	−0·2	+0·5	−9·9	−3·4	0·0	+5·2	−0·3	−1·5	+0·5	+1·1	0·0	−8·8	−2·2	−1·3	+0·7	+0·3	−0·8	−0·2
Equinox	+11·7	−0·8	−7·1	+0·1	+1·9	−2·1	+0·1	+1·0	−11·2	−7·7	+3·0	+7·9	−1·3	−3·3	+1·3	+2·5	−0·1	−9·4	−6·0	−1·1	+1·1	+0·7	−0·8	−0·2
Summer	+15·5	−7·4	−9·0	+1·1	+0·6	−0·9	+0·7	+0·7	−6·6	−17·9	+4·2	+8·2	−3·1	−1·7	+0·6	+1·0	+3·0	−6·0	−6·3	−1·5	+1·3	−0·3	−0·9	−0·1
QUIET DAYS																								
Year	+9·4	−1·4	−6·1	+0·1	+1·7	−1·0	0·0	+0·7	−4·2	−10·0	+2·8	+5·7	−2·5	−2·5	+0·9	+1·3	+3·7	−1·6	−3·3	−0·5	+1·5	+0·2	−0·8	−0·2
Winter	+3·8	+2·2	−4·0	−1·5	+2·1	−0·7	−0·7	+0·7	−4·3	−3·1	0·0	+3·7	−1·3	−1·4	+0·8	+1·3	+1·5	−1·9	−1·0	−0·3	+0·5	+0·2	−0·5	−0·5
Equinox	+9·9	−0·4	−6·3	−0·9	+2·3	−0·7	+0·2	+1·1	−4·2	−9·1	+2·5	+5·5	−2·5	−3·7	+1·6	+1·7	+4·1	−2·2	−2·9	−1·4	+1·9	−0·2	−1·1	−0·7
Summer	+14·5	−6·2	−7·7	+2·5	+0·7	−1·6	+0·5	+0·4	−4·0	−17·1	+6·0	+8·3	−3·5	−2·3	+0·4	+1·2	+5·6	−1·8	−5·9	−0·3	+2·0	+0·2	−0·7	+0·1
DISTURBED DAYS																								
Year	+11·1	−3·9	−9·1	+1·0	+0·9	−1·7	+0·5	+1·0	+19·8	+7·5	−4·1	−9·5	−0·2	+2·0	−0·5	−1·1	−7·4	−21·9	−8·8	−2·3	+0·8	+0·7	−1·1	−0·1
Winter	+4·5	+2·4	−3·8	−2·0	+2·7	−4·3	−0·3	+1·3	+18·4	+0·9	−1·3	−10·4	−0·5	+1·3	+0·3	−1·0	−7·4	−26·6	−4·5	−2·9	+2·1	+0·5	−1·3	+0·5
Equinox	+10·8	−3·0	−10·2	+2·4	+0·7	−2·3	−0·2	+0·8	+21·6	+4·8	−6·2	−9·6	−1·8	+3·3	−1·6	−2·2	−10·9	−22·9	−12·7	−0·7	+0·1	+2·7	+0·1	−0·3
Summer	+18·1	−11·0	−13·3	+2·7	−0·9	+1·3	+1·9	+1·0	+19·3	+16·9	−4·7	−8·6	+1·7	+1·4	0·0	0·0	−3·8	−16·5	−9·2	−3·3	+0·1	−1·3	−2·2	−0·5

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being mean local time, reckoned in hours from midnight

151 ESKDALEMUIR

	North component								West component								Vertical component							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
ALL DAYS																								
Jan.	1·2	333	3·5	222	1·7	162	0·4	189	10·0	261	3·0	354	1·1	190	1·7	76	6·8	193	2·5	207	0·6	163	0·7	214
Feb.	4·0	27	2·8	210	3·1	137	0·7	31	11·5	253	4·1	48	0·9	177	0·8	21	8·8	166	2·6	246	1·0	55	0·7	268
Mar.	6·5	94	4·4	268	2·1	132	0·8	245	14·7	247	7·2	37	2·9	173	2·8	30	11·2	170	6·4	269	1·7	90	0·7	237
Apr.	11·1	113	8·7	276	2·6	112	1·7	29	17·8	230	9·5	15	1·9	227	3·7	56	9·2	188	9·3	265	1·3	312	1·6	310
May	16·7	127	8·4	287	1·2	123	1·8	51	19·5	205	9·3	22	4·1	253	0·9	80	6·4	175	7·9	259	1·2	127	2·1	294
June	18·5	119	9·6	285	1·2	197	1·5	69	20·5	198	8·8	35	3·1	257	0·3	73	7·2	154	6·0	255	1·1	121	0·6	330
July	16·7	115	10·4	277	1·2	120	0·5	351	19·9	197	10·3	30	2·4	237	1·4	29	6·7	142	5·7	260	1·6	96	0·6	206
Aug.	16·9	115	7·9	286	1·4	177	0·4	67	16·9	215	8·9	47	4·7	249	2·2	34	7·2	157	6·7	280	1·9	106	1·3	253
Sept.	16·9	97	8·0	290	4·1	170	2·1	30	12·4	237	8·3	38	4·7	219	2·2	39	10·2	187	4·5	253	1·6	90	0·9	226
Oct.	13·3	86	7·6	269	3·5	154	0·9	22	10·0	244	9·3	22	5·1	217	2·6	31	7·5	195	4·3	275	2·9	62	0·8	267
Nov.	9·8	66	5·6	280	4·2	143	1·8	343	9·9	255	8·8	8	3·4	198	1·3	27	12·5	195	3·7	268	1·1	75	1·5	294
Dec.	6·4	43	4·9	255	1·3	131	0·3	26	10·4	249	6·6	345	1·0	246	1·7	18	8·0	175	2·3	248	0·7	76	1·0	273
Year	10·3	102	6·5	275	2·1	146	0·8	28	13·3	227	7·5	25	2·6	225	1·7	41	8·2	176	5·0	261	1·1	86	0·9	271
Winter	4·9	47	3·7	250	2·5	143	0·6	354	10·4	254	5·2	6	1·5	200	1·3	37	8·8	183	2·5	246	0·7	79	0·9	268
Equinox	11·8	97	7·1	277	2·8	147	1·0	21	13·6	239	8·5	27	3·5	211	2·8	41	9·4	184	6·1	265	1·3	66	0·8	269
Summer	17·1	119	9·1	283	1·1	156	1·0	55	19·1	203	9·2	33	3·5	250	1·2	42	6·7	157	6·5	263	1·3	111	0·9	277
QUIET DAYS																								
Year	9·5	102	6·1	277	1·9	131	0·7	11	10·8	206	6·4	33	3·5	234	1·6	47	4·1	117	3·3	267	1·5	93	0·8	266
Winter	4·4	63	4·3	256	2·2	117	0·9	328	5·3	237	3·7	6	1·9	233	1·5	43	2·4	146	1·1	262	0·5	83	0·7	234
Equinox	9·9	96	6·4	268	2·4	118	1·1	21	10·0	208	6·1	31	4·5	223	2·3	57	4·7	121	3·2	250	1·9	106	1·3	252
Summer	15·8	116	8·1	295	1·7	167	0·7	62	17·6	196	10·3	42	4·2	247	1·3	31	5·9	111	5·9	273	2·0	94	0·7	294
DISTURBED DAYS																								
Year	11·7	112	9·2	283	1·9	163	1·1	38	21·2	72	10·3	210	2·0	4	1·1	216	23·2	202	9·1	262	1·0	60	1·1	280
Winter	5·1	65	4·3	248	5·1	157	1·3	360	18·5	91	10·5	193	1·5	348	1·1	178	27·6	199	5·4	243	2·1	85	1·4	305
Equinox	11·2	109	10·5	290	2·4	172	0·8	357	22·1	81	11·4	219	3·8	341	2·7	229	25·4	209	12·7	273	2·7	11	0·3	175
Summer	21·2	124	13·6	288	1·6	335	2·2	75	25·6	52	9·8	215	2·3	61	0·0	47	16·9	196	9·8	257	1·3	183	2·2	270

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

KEW

KEW OBSERVATORY

Latitude	51°28′N.
Longitude	0°19′W.
G.M.T. of Local Mean Noon	12h. 1m.

	Height of instruments above M.S.L.	above ground
	m.	*m.*
Barometer	10.4	..
Thermometer bulbs	..	3.0
Rain-gauge site	5.5	..
Tilting siphon rain recorder rim		0.53
Sunshine recorder	..	13.3
Pressure-tube anemograph	28	23

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

Meteorology

Notes on the instruments

Pressure: The photographic barograph is mounted in the galvanometer room of the underground seismograph house. It was transferred there on 15 May 1939 from the position in the north room of the basement of the main Observatory building which it had occupied since the inception of the record in 1862.

Temperature: As from January 1943, Kew adopted the practice followed by the other Observatories for the tabulation of hourly readings of temperature from the curves of the photo-thermograph, that is, by adjusting the glass scale, so that the readings at the control hours on the trace are made to show general agreement with the corresponding eye readings of the standard control thermometers, and then reading off the temperature equivalent from the curves at the requisite times. This supersedes method (a) set out on page 3 of the General Introduction to the *Observatories' Year Book* 1938.

Rainfall: On and after 1 October 1944, the hourly readings are from a Meteorological Office tilting-siphon recorder, M.O.80., instead of from the old Beckley self-registering rain-gauge No. 1 which had been continuously in operation at Kew Observatory since 1871. The new instrument, whose funnel also has a collecting area of approximately 100 square inches, is set up 8·5 metres south-south-west of the standard chech gauge with the rim at exactly the same height above ground level as was the old Beckley gauge, that is, 0·53 metres. From 1 January 1945 onwards the hourly readings are adjusted to give totals in agreement with the check gauge read daily at 9h. and 21h. Prior to 1 August 1944 the check gauge was read at 7h. and 18h.; from 1 August to 31 December 1944 at 6h. and 18h. A special instrument, known as the rainfall chronograph, which in effect is a sensitive drop-counting gauge, is used to help in determining the duration of rainfall of 0·1 mm. per hour or more. This gauge stands on the lawn about 6·5 metres west-north-west of the tilting-siphon recorder. The Jardi rate-of-rainfall recorder has proved to be unreliable at rates below 6 mm. per hour and such values are omitted from Table 162.

Sunshine: Details of the change of sunshine recorders are given in the Introduction for 1950.

Solar radiation: The factors by which the printed values 1939 to 1945 should be multiplied are given in the Introduction for the years in question.* Details of the change of pyrheliographs are given in the Introduction for 1951.

Identification numbers of instruments in use in 1955

Thermometer No. 788 graduated in degrees Fahrenheit, which had been in use as a control thermometer for the photographic thermograph up to 1915 and again from 1934 onwards, was broken when its brass mounting disintegrated on 10 December. It was replaced by thermometer No. 173971, graduated in degrees Absolute, which was previously in use as a control thermometer from 1916 to 1933. Thermometer No. 738 continued in use as the control for the wet bulb. Rain Measure No. 1999 continued in use as the measuring glass for the control rain-gauge. There were no changes in the instruments used to measure earth temperatures and minimum on the grass.

Thermometer corrections 1955.

	No. 788 N.P.L. 1933		*No. 738 N.P.L. 1933*		*M.O. 20430 N.P.L. 1948*		*M.O. 20428 N.P.L. 1949*		*M.O. 18003 N.P.L. 1929*		*M.O. 173971 N.P.L. 1915*	
	°F		°F		°F		°F		°F		°A	
	2	+0·1	2	+0·2	22	−0·1	22	0·0	2	−0·2	260	+0·1
	12	+0·1	12	+0·1	32	−0·1	32	0·0	22	−0·1	273	0·0
	32	0·0	32	0·0	42	−0·1	42	0·0	32	0·0	280	0·0
Certified	52	−0·1	52	−0·1	52	−0·1	52	0·0	52	0·0	290	−0·1
	72	0·0	72	−0·1	62	−0·1	62	−0·1	72	0·0	300	−0·1
	92	0·0	92	−0·1	72	−0·1	72	−0·1	••	••	310	0·0
Applied		0·0		0·0		−0·1		0·0		0·0		0·0

Notes on the meteorological summaries

The mean temperature for the year, 283·2°A. (50·4°F.), was again above the average of 282·8°A. (49·6°F.) for the period 1871-1915. February and March were very cold months with mean temperatures 3·4°F. and 3·2°F. below their respective normals. August and December were exceptionally warm with mean temperatures 4·2°F. and 4·3°F. above average whilst April, July and November were also warm, each with a mean temperature nearly 3°F. in excess of normal. There were 12 days, 7 in July and 5 in August, on which the maximum temperature in the north-wall screen exceeded 300°A. (80·6°F.). The highest reading was 303·1°A. (86·2°F.) at 15h.30m. on 17 July and at 15h.00m. on 22 August. No "ice days" occurred in 1955. The lowest temperature in the north-wall screen was 267·6°A. (22·3°F.) registered at 07h.30m. on 28 February, whilst the lowest reading of the grass minimum thermometer was 256·3°A. (1·9°F.) on 20 February, the lowest for at least 15 years.

1955, with a total rainfall of only 460 mm., 24 per cent below the average for the standard period 1881-1915, was the driest year since 1921. May, with more than twice its normal rainfall was the wettest month of that name since 1932, but apart from January, June, September and October, each of which had normal amounts of rainfall, all the other months were exceptionally dry.

*STAGG, J.M.: Solar radiation at Kew Observatory, *Geophys. Mem., London*, 11, No.86, 1950.

April with only 8 mm., 22 per cent of average, was the driest since 1912, whilst July with 10 mm., 18 per cent of average, was the driest since 1921. The heaviest fall in one day was 27 mm. on 19 October.

The sunshine for the year, 1660 hours, was 191 hours more than the normal total for the period 1906-1935. June, with a deficit of 31 hours, was the only dull month. March, April, May and July were exceptionally sunny. Indeed March, with 45 per cent more sunshine than average was the sunniest month of that name since 1938. September and October were also sunny months.

The highest wind speed recorded in a gust was 29 m./sec. (64 m.p.h.) at 12h.05m. on 23 March. The highest on record is 33m./sec. (73 m.p.h.) on 16 March 1947.

Diurnal variation of pressure and temperature; harmonic analysis:- Notes on the tables will be found in the *Observatories' Year Book, 1938*

TABLE 152 – DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.42	0.02	65	315	0.35	0.31	155	151	0.18	0.17	349	346	0.05	0.07	230	202
February	0.20	0.05	273	73	0.30	0.36	132	146	0.08	0.12	21	340	0.05	0.03	127	108
March	0.34	0.11	73	38	0.41	0.40	142	149	0.05	0.07	3	332	0.05	0.04	11	25
April	0.41	0.28	355	31	0.41	0.40	149	151	0.03	0.03	151	185	0.05	0.04	328	353
May	0.36	0.32	33	27	0.31	0.35	146	148	0.09	0.09	157	161	0.02	0.02	302	319
June	0.28	0.30	50	17	0.30	0.32	140	143	0.08	0.09	143	160	0.03	0.01	11	260
July	0.60	0.26	3	16	0.36	0.31	137	140	0.11	0.10	156	153	0.03	0.01	295	281
August	0.49	0.21	14	20	0.39	0.34	140	144	0.06	0.06	171	155	0.05	0.04	330	309
September	0.28	0.12	31	6	0.42	0.40	152	152	0.01	0.01	87	350	0.04	0.04	336	332
October	0.19	0.06	1	76	0.38	0.38	160	160	0.07	0.09	339	359	0.03	0.01	2	22
November	0.25	0.03	84	124	0.31	0.34	165	160	0.14	0.13	359	358	0.02	0.03	182	183
December	0.23	0.08	68	137	0.31	0.31	162	152	0.17	0.15	350	353	0.07	0.07	192	205
Arithmetic mean	0.34	0.15			0.35	0.35			0.09	0.09			0.04	0.03		
Year	0.27	0.14	30	29	0.35	0.35	148	150	0.03	0.03	18	359	0.01	0.01	312	280
Winter	0.18	0.03	61	111	0.31	0.33	154	152	0.14	0.14	356	350	0.04	0.05	184	208
Equinox	0.26	0.14	25	32	0.40	0.39	151	153	0.02	0.04	2	345	0.04	0.03	348	359
Summer	0.41	0.27	20	20	0.34	0.33	141	144	0.08	0.08	153	157	0.03	0.02	326	305

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

TABLE 153 – DIURNAL VARIATION OF TEMPERATURE FOURIER COEFFICIENTS

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926	1955	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.65	0.99	210	221	0.29	0.43	55	35	0.09	0.17	217	208	0.01	0.01	83	3
February	1.28	1.53	217	221	0.57	0.57	34	34	0.07	0.12	222	211	0.05	0.06	189	169
March	2.40	2.45	218	222	0.50	0.63	26	40	0.10	0.07	0	334	0.12	0.11	205	197
April	3.48	3.21	219	226	0.48	0.48	26	51	0.22	0.22	25	24	0.09	0.07	207	218
May	2.84	3.72	231	227	0.15	0.15	46	74	0.32	0.31	15	35	0.03	0.04	91	20
June	3.07	3.72	224	226	0.11	0.02	40	84	0.23	0.26	29	35	0.09	0.10	70	33
July	4.36	3.68	218	225	0.22	0.06	329	50	0.21	0.29	18	31	0.09	0.07	24	28
August	3.84	3.54	220	226	0.35	0.34	17	52	0.24	0.30	35	28	0.04	0.03	213	218
September	3.16	3.22	227	228	0.60	0.71	50	49	0.23	0.14	17	24	0.15	0.16	214	213
October	2.52	2.32	225	229	0.77	0.76	42	50	0.01	0.10	183	248	0.07	0.12	206	200
November	1.44	1.39	222	226	0.45	0.57	55	44	0.19	0.18	239	232	0.03	0.02	333	141
December	1.00	0.90	212	226	0.46	0.40	40	41	0.17	0.16	212	215	0.04	0.04	25	38
Arithmetic mean	2.50	2.56			0.41	0.43			0.17	0.19			0.07	0.07		
Year	2.50	2.56	221	226	0.39	0.42	36	45	0.09	0.08	11	17	0.02	0.02	195	195
Winter	1.09	1.20	216	223	0.43	0.49	44	39	0.13	0.15	224	217	0.00	0.01	15	121
Equinox	2.89	2.80	222	226	0.58	0.64	37	47	0.13	0.09	17	4	0.11	0.11	209	207
Summer	3.52	3.67	222	226	0.18	0.14	13	59	0.25	0.29	24	32	0.04	0.04	57	27

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

Atmospheric electricity

The difficulties mentioned in the Introductions to the 1949 and 1953 *Observatories' Year Books* continued to be experienced and, as in 1954, the only satisfactory observations were those of potential gradient, made in the underground laboratory by the Wilson method, which appear in Table 174. In view of the instrumental difficulties and the absence of check observations*, there must be some doubt about the accuracy of these measurements, but it is thought unlikely that they are in error by more than 10 per cent. No observations are available after June. No data are published in Tables 175-177 for 1955 since the records obtained from the electrograph were unreliable.

Atmospheric pollution

From 1 January 1950 the method of tabulation was revised to eliminate the need for interpolation between shade numbers.

The Owens pollution recorder was transferred, on 27 July 1953, from the site in the Clinical House, which it had occupied since the inception of the record in 1921, to a new site in the large Calibration Hut. The new location is some 25 m. south-west of its former position and the air sampled is drawn into the instrument from a point outside, whose height is about 2 m. above that of the adjacent ground. The recorder was out of action from 19 February to the end of March. It was badly damaged by being frozen up which necessitated a complete overhaul. Similar trouble was experienced in December when the instrument was again out of action from 19 December to the end of the year.

During 1955, for 302 days on which the record of the Owens pollution recorder was available, the highest estimate of pollution was 1·7 $mg.m^{-3}$, this value occurring at 24h. on 19 January, and at 01h. and 02h. on 20 January. There were 13 days on which the pollution reached 0·95 $mg.m^{-3}$. The number of hours credited with at least 0·95 $mg.m^{-3}$ was 45.

*SCRASE F.J.; Observations of atmospheric electricity at Kew Observatory. *Geophys. Mem. London* **7**, No. 60, 1934.

Seismology

The Seismological diary and table of microseisms, which were printed in the *Observatories' Year Book* from 1922 to 1939 are now omitted. The distribution of the *Kew Monthly Bulletin* which ceased in May 1940 was resumed in January 1947. Seismological data for 1955 are also published in the *International Seismological Summary*.

Changes in instruments or procedures from those printed in the Introduction for 1938 are given in the Introductions for the years 1938, 1947, 1949 and 1950. The three Galitzin seismographs were not re-standardised during 1955. The total number of shocks measured during the year was 353. The phases of 122 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed.

No British earthquake was recorded during 1955.

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

154 KEW OBSERVATORY: h_b(height of barometer cistern above M.S.L.) = 10·4 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*30·5*	27·4	*29·5*	93·7	87·8	91·0	27·0	23·4	25·1	24·9	21·6	23·6	13·8	98·9	05·6	20·4	14·4	16·9
2	30·2	25·1	28·3	96·0	86·8	93·5	29·9	26·4	28·6	24·7	15·6	19·3	07·7	97·4	01·3	15·6	13·5	14·3
3	25·1	15·4	20·4	87·4	81·0	*84·5*	29·1	26·5	27·9	17·5	14·7	16·1	07·8	97·2	03·7	15·4	06·9	12·2
4	16·7	12·6	14·6	93·7	80·9	87·4	*31·4*	28·1	*29·9*	16·5	15·2	15·9	01·6	96·0	98·2	11·8	02·3	06·1
5	17·2	12·3	15·2	00·5	*80·5*	90·6	28·7	11·2	19·2	16·4	15·0	15·6	10·7	01·4	05·7	13·3	11·8	12·5
6	12·3	08·3	09·9	19·0	00·5	11·5	12·8	08·6	10·7	19·1	13·5	15·5	10·8	97·5	05·6	12·9	02·4	08·2
7	12·0	10·4	11·1	18·6	01·3	06·8	12·2	05·5	08·2	21·8	19·1	20·3	24·2	10·8	19·7	02·4	99·7	00·8
8	12·5	10·8	11·8	08·2	03·6	06·5	06·8	00·9	03·4	21·3	19·6	20·5	24·0	13·9	19·6	02·3	99·5	*00·4*
9	12·0	05·4	08·9	09·4	04·4	07·7	22·4	06·8	15·2	23·6	20·6	22·5	13·9	07·8	09·8	13·3	02·2	06·8
10	05·4	86·2	94·6	17·1	08·0	12·8	27·5	22·4	25·9	23·6	18·7	20·5	15·8	06·2	09·1	21·4	13·3	17·9
11	02·5	85·8	94·5	17·2	07·7	14·3	27·3	24·1	25·7	28·4	20·9	24·1	22·0	15·8	19·7	21·4	13·4	18·8
12	03·5	94·9	98·2	09·6	05·5	06·8	25·4	23·3	24·7	30·9	28·3	29·9	22·0	07·7	16·8	13·4	*97·7*	02·6
13	07·5	86·3	00·0	19·8	09·6	15·9	26·7	24·2	25·4	32·1	30·1	31·0	07·7	99·7	01·7	20·1	06·2	15·2
14	12·2	86·2	98·7	19·2	05·6	10·7	28·4	26·4	27·5	30·8	29·2	30·2	03·6	01·5	02·4	20·3	18·7	19·4
15	12·2	90·9	01·5	11·4	07·3	10·2	28·2	25·1	26·9	30·0	27·9	29·2	07·9	03·5	06·7	21·7	18·6	20·0
16	01·3	*74·7*	*85·8*	10·7	95·7	02·2	25·1	15·2	20·2	32·9	29·4	30·8	07·5	98·7	05·8	21·8	19·4	20·7
17	03·8	94·3	99·7	95·7	85·5	89·5	20·8	14·7	18·5	36·1	32·9	*34·4*	98·7	*87·3*	*91·7*	22·3	20·1	21·1
18	10·2	96·3	03·9	90·2	85·5	88·1	20·7	12·5	17·9	*36·2*	31·2	33·8	15·6	97·7	08·5	22·0	14·9	18·7
19	10·4	08·8	09·6	98·5	88·8	92·6	12·5	08·2	10·7	31·4	24·8	28·5	23·2	15·6	19·6	14·9	05·9	08·8
20	11·8	10·2	11·0	05·0	98·5	03·2	12·2	97·3	06·0	24·8	19·8	22·3	23·4	20·8	22·2	17·1	07·6	11·9
21	10·4	97·1	03·7	07·0	02·0	03·4	00·6	*92·3*	*94·6*	23·7	19·5	21·7	28·9	20·9	24·1	24·9	17·1	21·7
22	14·2	96·3	02·2	10·9	07·0	09·4	09·1	00·6	04·4	23·7	19·2	21·6	*30·1*	28·5	*29·3*	*25·4*	23·3	*24·6*
23	27·5	14·2	22·9	09·3	02·0	05·0	08·9	98·5	03·8	19·2	13·7	15·8	28·8	21·9	25·0	23·4	18·2	20·9
24	27·5	23·5	25·6	02·0	99·2	00·2	11·1	98·2	03·9	25·2	15·6	21·4	22·2	18·3	20·5	19·4	17·1	17·8
25	23·5	14·7	19·4	07·6	00·0	03·7	11·0	98·9	04·3	25·2	13·7	20·7	18·3	12·9	15·0	22·2	19·3	20·9
26	14·7	10·6	11·8	13·1	07·6	10·0	03·1	97·4	99·5	13·7	10·2	*11·2*	13·5	08·4	11·1	23·4	21·5	22·4
27	10·6	04·1	06·5	26·0	13·1	19·3	22·3	03·1	14·5	13·0	11·0	12·2	12·6	06·8	10·1	22·0	19·8	20·8
28	06·0	03·4	04·5	*28·2*	26·0	*27·3*	23·8	21·8	22·8	13·8	10·6	12·1	20·9	10·9	14·5	19·9	12·8	16·5
29	05·8	02·4	03·6				29·2	23·2	25·4	13·6	*10·0*	11·8	29·5	20·9	25·4	12·8	07·8	09·8
30	02·8	00·5	01·8				29·2	25·6	27·7	16·3	12·9	14·8	29·8	25·8	28·0	15·5	11·5	14·2
31	00·5	93·1	96·0				25·6	20·3	22·6				26·3	20·4	23·5			
Mean	12·67	03·30	07·91	08·04	99·34	03·72	20·29	13·25	16·81	23·68	19·48	21·58	16·86	08·75	12·90	17·76	11·90	14·76

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	15·4	08·0	11·7	19·7	16·2	18·2	15·0	11·7	13·3	*28·8*	23·6	*26·8*	16·5	12·2	14·7	16·2	07·3	10·1
2	15·1	10·8	13·9	18·8	16·4	17·8	11·7	06·3	08·4	23·6	13·2	17·9	12·2	03·6	06·8	21·7	16·1	19·7
3	13·3	*05·9*	*08·7*	21·9	17·1	19·0	14·5	09·2	12·7	13·2	10·9	11·8	03·9	95·0	00·3	26·5	17·3	20·4
4	16·5	08·4	11·9	*23·7*	21·8	22·6	15·8	13·3	14·4	13·5	09·5	12·4	01·6	93·8	96·7	*34·8*	26·2	*31·4*
5	23·5	16·5	20·5	22·7	19·0	20·9	13·3	07·6	10·0	12·4	99·5	07·5	06·5	01·6	04·0	*34·8*	26·5	30·9
6	27·4	23·5	24·9	19·2	16·0	17·4	17·9	12·3	15·8	13·5	98·4	05·4	10·0	06·5	08·7	26·5	22·1	24·5
7	*29·3*	27·3	*28·3*	17·7	15·3	16·5	18·5	15·4	17·1	18·7	13·5	17·2	08·5	04·2	06·3	22·1	17·2	18·9
8	*29·3*	24·4	26·6	18·0	16·1	17·1	16·0	09·9	12·8	24·0	16·6	19·9	08·3	99·7	04·0	25·9	20·3	23·4
9	24·9	20·5	22·7	20·7	17·5	18·5	15·3	08·9	11·5	25·9	23·4	24·8	99·7	*91·6*	*95·2*	21·1	97·9	09·9
10	20·6	16·1	18·2	22·6	20·7	21·6	17·7	15·3	16·7	23·4	17·8	20·0	04·7	98·1	02·8	00·2	94·3	96·5
11	16·4	13·7	15·3	22·5	14·4	18·5	17·5	14·6	15·6	18·2	16·6	17·4	08·3	01·4	03·7	10·1	00·2	06·5
12	16·6	15·1	16·0	14·4	11·3	12·8	18·3	15·2	17·1	22·0	17·8	19·6	18·4	08·3	13·8	12·1	09·7	10·9
13	17·6	15·6	16·6	13·8	12·8	13·3	15·2	02·4	06·8	25·6	22·0	24·1	22·4	18·4	20·3	10·4	97·7	04·1
14	19·2	16·2	17·3	16·0	13·2	14·5	03·1	*00·6*	*01·8*	26·0	20·1	23·8	27·7	22·3	24·7	97·7	80·3	85·3
15	23·0	19·2	21·1	20·6	16·0	18·0	09·5	01·2	04·2	23·9	16·3	18·9	35·7	27·7	31·7	82·0	*73·9*	*78·4*
16	23·3	20·4	22·0	21·4	17·1	19·8	15·4	09·5	12·1	23·8	06·4	16·7	*36·5*	35·2	*35·9*	91·1	80·8	87·1
17	20·9	16·1	18·3	17·1	12·8	14·3	21·9	15·4	19·6	06·4	04·3	05·4	35·5	33·2	34·2	02·3	90·3	93·5
18	17·4	15·5	16·5	18·5	15·4	17·2	24·2	21·5	23·0	08·7	00·8	06·5	35·7	33·2	33·9	13·1	02·3	09·4
19	21·5	17·0	19·3	21·0	17·9	18·8	24·1	21·3	22·8	00·8	*89·9*	92·4	36·3	35·4	35·9	13·2	03·6	10·0
20	22·0	20·1	21·1	22·7	20·6	21·6	21·5	17·4	19·0	93·9	91·2	*92·3*	35·8	31·0	33·0	03·6	91·7	95·7
21	22·0	20·4	21·4	23·3	21·3	22·3	17·8	14·6	16·5	05·7	93·8	98·2	33·3	32·1	32·9	11·6	93·0	02·5
22	23·2	21·7	22·5	23·1	21·1	22·1	14·6	09·3	11·1	15·9	05·7	10·7	33·3	30·5	32·4	12·7	02·5	08·5
23	24·1	20·8	22·7	23·3	21·9	*22·7*	17·6	09·0	12·9	21·3	15·9	18·6	30·5	24·2	26·5	05·3	99·2	02·5
24	22·4	19·2	21·1	23·0	20·0	21·8	20·8	17·6	19·6	26·7	21·3	24·1	25·9	18·6	21·5	12·0	01·0	04·7
25	20·1	16·6	18·3	20·9	15·7	18·2	21·2	18·8	19·6	27·6	21·2	25·4	30·5	25·9	29·1	21·6	12·0	18·7
26	18·2	13·6	15·9	15·5	12·7	14·3	26·5	21·2	23·5	21·2	12·7	16·1	29·3	27·1	27·8	16·6	07·5	11·9
27	14·6	11·4	13·2	17·9	13·9	15·3	27·1	25·8	26·4	15·2	11·7	13·8	27·9	25·5	27·0	17·1	12·9	14·8
28	18·9	13·6	15·5	18·6	17·4	18·1	27·3	24·9	25·8	20·0	11·3	15·0	25·5	18·8	22·0	13·3	06·1	09·0
29	21·5	18·6	20·4	19·1	17·9	18·5	*28·7*	26·4	*27·5*	20·0	14·2	17·7	19·5	16·9	18·3	09·0	87·8	03·6
30	21·5	19·4	20·7	18·6	14·8	16·8	28·1	25·0	26·3	16·1	12·4	13·9	19·3	10·5	16·1	13·1	86·8	00·0
31	21·6	18·3	20·2	15·1	*11·1*	*12·8*				16·9	15·7	16·3				19·2	13·0	16·0
Mean	20·69	16·90	18·80	19·72	16·63	18·11	18·54	14·05	16·13	17·84	11·22	14·53	21·31	16·08	18·67	13·45	03·15	08·35
									Annual	17·62	11·22	14·41						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

155 KEW OBSERVATORY: h_b = 10·4 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*08·91*	08·81	08·76	08·65	08·35	08·07	08·01	08·08	08·23	08·34	08·29	08·13	07·70	07·27	06·99	*06·94*	07·05	07·22	07·45	07·63	07·79	07·92	07·90	07·91	07·82	07·91
Feb.	03·19	03·07	03·07	02·89	*02·87*	03·03	03·13	03·36	03·72	03·95	04·09	04·30	04·15	03·94	03·79	03·74	03·74	03·82	03·92	03·93	03·95	04·09	04·24	04·38	*04·39*	03·72
Mar.	*17·51*	17·35	17·17	16·86	16·65	16·63	16·64	16·82	16·95	17·02	17·01	16·95	16·72	16·50	16·33	16·18	*16·04*	16·18	16·48	16·78	17·00	17·20	17·24	17·34	17·34	16·81
Apr.	21·88	21·81	21·69	21·60	21·54	21·63	21·87	22·08	22·22	*22·30*	22·24	22·00	21·78	21·55	21·25	20·98	20·80	*20·74*	20·80	21·05	21·42	21·54	21·61	21·65	21·62	21·58
May	13·21	13·07	12·95	12·88	12·77	12·88	13·08	13·19	13·24	13·19	13·12	12·94	12·83	12·71	12·54	12·40	12·39	*12·30*	12·37	12·57	12·91	13·27	13·38	*13·45*	13·43	12·90
June	*15·28*	15·16	14·97	14·75	14·71	14·77	14·85	14·95	15·02	14·99	14·89	14·75	14·72	14·58	14·46	14·35	*14·17*	14·18	14·31	14·49	14·70	14·97	15·11	15·18	15·11	14·76
July	19·00	18·97	18·89	18·83	18·86	18·99	19·17	19·36	*19·45*	19·39	19·30	19·17	18·95	18·72	18·47	18·22	17·97	*17·85*	*17·85*	18·06	18·38	18·82	19·02	19·14	19·14	18·80
Aug.	18·57	18·49	18·40	18·30	18·17	18·30	18·43	18·56	18·67	*18·69*	18·55	18·41	18·20	18·00	17·72	17·45	17·23	*17·13*	17·22	17·50	17·95	18·12	18·28	18·39	18·39	18·11
Sept.	16·26	16·16	16·02	15·89	15·77	15·89	16·07	16·31	16·43	16·57	16·50	16·38	16·18	15·94	15·76	15·59	*15·52*	15·61	15·75	16·10	16·45	16·63	*16·73*	16·72	*16·73*	16·13
Oct.	14·79	14·79	14·65	14·50	14·46	14·52	14·57	14·82	15·04	*15·09*	15·04	14·93	14·72	14·41	14·11	13·95	*13·87*	13·97	14·27	14·35	14·50	14·63	14·58	14·51	14·42	14·53
Nov.	*19·09*	18·99	18·91	18·77	18·56	18·55	18·53	18·61	18·84	18·92	18·93	18·84	18·49	18·25	*18·04*	18·07	18·21	18·42	18·69	18·83	18·85	18·98	19·01	18·93	18·89	18·67
Dec.	08·52	08·34	08·36	08·35	08·15	08·12	08·16	08·20	08·37	08·61	08·80	08·62	08·23	07·93	*07·70*	07·74	07·96	08·15	08·36	08·50	08·65	08·77	08·77	*08·83*	08·78	08·35
Annual	14·74	14·64	14·54	14·41	14·29	14·34	14·43	14·58	14·73	*14·81*	14·78	14·67	14·44	14·20	13·97	13·85	*13·79*	13·84	14·00	14·19	14·43	14·63	14·70	14·75	14·72	14·41

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

156 KEW OBSERVATORY: h_b = 10·4 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*10·21*	10·11	10·06	09·95	09·65	09·37	09·31	09·38	09·53	09·64	09·59	09·42	08·99	08·56	08·28	*08·23*	08·34	08·51	08·74	08·92	09·08	09·21	09·19	09·20	09·11	09·20
Feb.	04·49	04·37	04·37	04·19	*04·17*	04·33	04·43	04·66	05·02	05·25	05·38	05·59	05·44	05·23	05·08	05·03	05·03	05·11	05·21	05·22	05·25	05·39	05·54	05·68	*05·69*	05·01
Mar.	*18·83*	18·66	18·48	18·17	17·96	17·94	17·95	18·13	18·26	18·33	18·32	18·25	18·02	17·80	17·62	17·47	*17·33*	17·47	17·77	18·08	18·31	18·51	18·55	18·65	18·65	18·12
Apr.	23·17	23·10	22·99	22·90	22·84	22·93	23·17	23·37	23·51	*23·58*	23·52	23·28	23·05	22·82	22·51	22·24	22·06	*22·00*	22·07	22·33	22·70	22·82	22·90	22·94	22·91	22·86
May	14·49	14·35	14·23	14·16	14·05	14·16	14·36	14·47	14·51	14·46	14·38	14·20	14·09	13·97	13·80	13·65	13·65	*13·56*	13·63	13·83	14·18	14·53	14·66	*14·73*	14·71	14·18
June	*16·54*	16·42	16·23	16·02	15·98	16·04	16·11	16·21	16·28	16·24	16·14	15·99	15·96	15·82	15·70	15·59	*15·41*	15·42	15·55	15·73	15·95	16·22	16·37	16·44	16·37	16·01
July	20·25	20·23	20·15	20·09	20·12	20·25	20·43	20·61	*20·70*	20·63	20·54	20·41	20·18	19·95	19·70	19·44	19·19	*19·07*	*19·07*	19·29	19·61	20·07	20·27	20·39	20·39	20·05
Aug.	19·83	19·74	19·65	19·57	19·43	19·56	19·69	19·81	19·92	*19·93*	19·79	19·65	19·43	19·23	18·95	18·67	18·45	*18·35*	18·44	18·73	19·19	19·36	19·52	19·64	19·64	19·35
Sept.	17·53	17·42	17·29	17·16	17·04	17·16	17·34	17·58	17·69	17·83	17·75	17·63	17·43	17·18	17·00	16·83	*16·76*	16·85	17·00	17·35	17·70	17·89	*17·99*	17·98	*17·99*	17·38
Oct.	16·07	16·07	15·93	15·78	15·74	15·80	15·85	16·10	16·32	*16·37*	16·31	16·20	15·99	15·67	15·37	15·21	*15·13*	15·23	15·54	15·62	15·77	15·91	15·86	15·79	15·70	15·81
Nov.	*20·39*	20·28	20·20	20·06	19·85	19·84	19·82	19·90	20·13	20·21	20·22	20·13	19·77	19·53	*19·32*	19·35	19·49	19·70	19·97	20·11	20·14	20·27	20·30	20·22	20·18	19·96
Dec.	09·80	09·62	09·65	09·63	09·43	09·41	09·45	09·49	09·65	09·90	10·08	09·90	09·51	09·20	*08·97*	09·01	09·23	09·43	09·63	09·78	09·93	10·05	10·05	*10·11*	10·06	09·63
Annual	16·02	15·92	15·82	15·69	15·57	15·62	15·71	15·86	16·01	*16·09*	16·05	15·94	15·71	15·46	15·23	15·11	*15·05*	15·10	15·26	15·46	15·70	15·90	15·98	16·03	16·00	15·68

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

157 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	76·36	76·18	76·05	76·08	75·96	75·80	75·82	*75·75*	75·92	76·16	76·36	76·79	77·21	*77·44*	*77·44*	77·39	77·18	76·99	76·91	76·78	76·67	76·70	76·65	76·62	76·51	76·55
Feb.	75·31	75·20	75·08	74·96	74·82	74·69	74·47	*74·37*	74·53	74·99	75·57	76·21	76·77	77·11	77·37	*77·41*	77·12	76·62	76·26	75·78	75·53	75·29	75·11	75·13	74·97	75·65
Mar.	75·64	75·39	75·20	74·96	74·95	74·77	*74·75*	*74·75*	75·38	76·38	77·22	77·90	78·60	79·16	79·45	79·83	*79·86*	79·38	78·75	78·01	77·42	76·96	76·47	76·00	75·85	76·97
Apr.	80·89	80·45	80·12	79·95	79·79	*79·48*	79·59	80·28	81·29	82·36	83·30	84·41	85·25	85·83	86·45	86·72	*86·77*	86·50	85·70	84·54	83·51	82·81	82·05	81·50	81·10	82·90
May	81·71	81·44	81·24	81·13	80·96	*80·93*	81·53	82·14	83·07	84·01	84·89	85·62	85·75	86·01	86·31	*86·48*	86·19	86·15	85·66	84·87	83·79	82·86	82·21	81·86	81·65	83·62
June	86·08	85·69	85·40	85·06	*84·88*	85·08	85·69	86·38	87·21	88·00	88·94	89·70	90·26	90·65	90·96	*91·23*	91·14	90·98	90·63	89·88	88·69	87·86	87·24	86·71	86·29	88·10
July	88·66	88·13	87·62	87·30	*87·11*	87·18	87·95	88·62	89·71	90·81	91·76	92·92	93·82	94·71	95·34	95·72	*95·83*	95·56	95·12	94·27	92·77	91·42	90·23	89·30	88·62	91·33
Aug.	89·30	88·90	88·50	88·23	*87·91*	87·92	88·34	89·00	90·00	91·17	92·25	93·12	94·00	94·75	95·41	95·76	*95·81*	95·49	94·77	93·74	92·40	91·50	90·74	90·01	89·43	91·63
Sept.	85·94	85·70	85·48	85·21	84·88	*84·77*	84·84	85·29	86·43	87·72	88·84	89·68	90·23	90·84	90·90	*91·14*	91·02	90·37	89·52	88·43	87·59	87·04	86·51	86·04	85·66	87·68
Oct.	81·58	81·43	81·10	80·86	80·64	*80·54*	80·56	80·55	81·30	82·18	83·18	84·17	84·91	85·54	*85·83*	85·78	85·45	84·78	85·81	83·08	82·53	82·12	81·77	81·43	81·28	82·70
Nov.	80·33	80·16	79·97	79·90	79·78	79·86	*79·71*	79·77	80·08	80·56	81·28	82·01	82·47	82·90	*83·11*	82·84	82·35	81·99	81·80	81·60	81·41	81·26	80·92	80·62	80·49	81·11
Dec.	79·64	79·65	79·52	79·37	79·16	79·12	79·11	*78·91*	79·03	79·22	79·73	80·29	80·90	81·35	*81·48*	81·38	80·96	80·68	80·46	80·24	80·00	80·05	79·92	79·78	79·58	80·00
Annual	81·82	81·56	81·31	81·12	80·94	*80·88*	81·07	81·36	82·04	82·84	83·65	84·45	85·06	85·57	85·88	*86·02*	85·86	85·51	85·00	84·32	83·57	83·03	82·53	82·12	81·82	83·23

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

158 KEW OBSERVATORY: North-wall screen: ^{h}t(height of thermometer bulb above ground) = 3·0 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	77·0	74·8	76·2	83·7	80·0	81·7	79·3	*69·2*	73·9	84·6	75·4	*79·3*	86·2	80·5	83·7	93·3	81·6	86·2
2	76·7	74·9	75·7	82·3	77·1	79·8	79·1	70·4	74·5	85·3	*72·7*	79·4	87·1	82·2	84·4	94·3	82·1	88·5
3	76·5	74·6	75·4	82·4	78·2	80·0	81·3	72·3	76·2	84·7	78·4	82·0	85·9	80·1	83·2	92·3	86·8	88·6
4	75·1	72·5	73·7	81·6	77·3	79·4	80·3	71·9	76·6	87·3	80·8	83·2	87·3	82·6	84·4	89·5	83·6	86·7
5	75·9	74·0	74·8	79·1	75·3	77·6	78·4	73·5	76·1	87·8	80·1	83·7	88·5	82·4	85·2	94·1	80·1	88·2
6	77·0	75·2	76·1	79·4	75·3	77·3	76·3	73·0	74·6	87·1	76·1	82·3	87·7	81·7	83·9	*96·0*	84·4	90·1
7	76·8	74·4	75·2	*84·7*	75·3	80·5	74·8	72·7	*73·5*	87·0	77·5	82·3	89·1	80·7	84·5	91·3	86·5	88·6
8	75·3	74·1	*74·7*	84·5	79·9	*82·4*	75·7	72·5	73·8	88·2	82·6	84·5	89·5	81·6	85·3	89·5	85·0	87·0
9	76·3	73·0	74·6	82·1	74·7	79·5	76·3	72·5	74·2	87·7	81·6	84·1	88·8	83·7	85·8	86·5	80·5	84·1
10	84·3	75·4	80·0	79·0	74·2	76·2	77·9	72·4	75·1	88·0	81·1	84·6	88·3	79·5	84·3	86·9	*77·8*	*82·7*
11	*84·4*	72·9	76·4	76·9	71·9	74·4	77·9	73·4	75·2	91·3	83·5	87·0	86·5	77·9	82·0	87·5	79·5	84·3
12	74·4	69·9	*72·3*	76·3	71·4	74·1	77·1	72·7	74·3	88·4	82·7	85·9	87·9	78·9	83·2	88·8	82·1	85·0
13	74·2	70·1	72·6	75·8	72·9	74·1	78·6	72·3	74·9	90·8	80·9	86·3	90·1	79·6	84·8	91·0	83·3	86·6
14	74·8	69·7	73·1	76·9	71·7	74·7	82·8	74·2	78·8	86·2	78·2	82·1	84·9	78·5	81·4	90·7	82·5	87·2
15	79·6	*68·3*	74·2	76·9	72·7	74·6	82·9	77·6	80·4	84·3	77·3	79·8	84·8	77·2	80·9	*96·0*	87·9	*91·6*
16	82·4	72·2	78·0	77·8	71·0	73·6	84·0	78·1	81·1	86·1	75·1	80·1	85·8	79·6	81·8	95·3	85·7	90·1
17	76·2	70·4	73·1	75·3	69·2	72·4	79·8	74·4	77·2	86·5	75·3	80·8	86·5	*74·7*	81·7	91·3	82·6	87·3
18	76·6	70·8	73·7	74·0	70·5	72·7	80·4	71·4	76·3	85·7	77·3	80·2	83·2	76·3	*79·7*	89·2	81·8	85·4
19	77·0	69·3	72·6	74·2	71·2	72·7	78·9	72·6	75·8	87·0	76·4	81·1	83·3	77·1	80·1	88·6	82·4	86·3
20	76·3	69·3	73·4	75·3	68·1	*72·1*	79·6	69·7	75·1	90·2	74·0	81·9	84·4	76·6	80·3	93·3	86·2	89·0
21	81·7	76·0	79·7	73·9	72·0	73·1	82·1	71·3	76·7	84·1	76·9	80·5	83·1	76·4	80·1	94·1	85·8	89·7
22	81·7	78·5	80·0	74·0	72·1	73·0	78·2	71·6	76·0	88·0	75·4	81·6	87·3	77·2	82·7	94·1	84·9	89·4
23	79·4	76·0	77·8	75·7	73·0	74·3	85·2	77·1	81·7	87·8	77·9	83·5	90·7	78·9	85·3	92·6	88·2	90·1
24	79·5	75·4	77·3	75·4	73·6	74·4	85·7	79·7	83·2	86·0	77·1	81·8	90·0	82·7	*87·0*	94·3	87·9	90·3
25	80·0	77·4	78·7	75·3	73·3	74·6	*90·3*	80·0	*84·3*	86·5	74·1	80·8	88·9	81·0	84·3	95·4	87·4	90·7
26	79·4	76·3	78·2	73·8	72·4	73·2	85·4	79·2	83·4	90·4	80·4	84·9	87·8	80·9	84·8	94·8	85·8	90·5
27	81·6	77·2	79·3	75·1	72·0	73·1	81·0	75·7	78·7	87·7	82·0	84·9	90·8	83·2	85·9	92·9	86·4	90·3
28	82·2	74·0	79·8	78·4	*67·6*	72·8	79·7	73·9	76·8	86·5	84·0	85·0	85·7	82·5	84·2	93·5	83·8	88·9
29	83·3	81·1	82·2				79·9	72·6	76·1	*92·8*	83·2	*87·5*	91·0	80·7	85·7	93·2	86·6	89·3
30	84·2	80·4	*82·3*				77·7	72·4	74·7	90·0	82·3	85·9	*93·2*	80·2	86·5	94·7	86·3	90·0
31	83·7	80·7	82·0				83·0	70·2	77·1				91·1	80·7	85·0			
Mean	78·8	74·2	76·5	77·9	73·4	75·7	80·3	73·6	77·0	87·5	78·7	82·9	87·6	79·9	83·6	92·2	84·2	88·1

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	91·3	85·8	88·4	99·1	85·1	92·3	96·1	87·0	91·5	90·1	79·6	85·1	81·9	*71·4*	75·6	81·7	77·5	79·4
2	91·8	*83·1*	87·7	99·3	86·4	93·1	*98·2*	88·6	*92·8*	89·8	81·4	85·5	82·5	72·5	78·0	82·0	74·6	78·7
3	90·3	85·1	*87·3*	93·2	86·6	90·4	94·9	86·2	90·5	86·5	79·8	83·5	86·2	81·7	84·2	85·2	80·7	83·2
4	92·9	83·6	88·1	95·2	85·1	90·2	94·5	87·3	90·8	88·1	78·0	83·7	87·7	80·1	85·5	81·6	73·4	78·8
5	92·5	83·8	88·2	96·6	86·8	91·3	93·1	87·2	90·0	86·8	81·3	84·4	88·4	81·7	85·4	83·6	73·3	79·2
6	95·1	83·6	89·7	95·3	86·5	90·7	92·3	84·2	88·3	87·3	83·2	84·8	*89·3*	80·1	85·4	84·8	83·3	84·0
7	97·6	83·5	91·8	91·9	82·3	87·8	95·4	81·8	88·9	86·2	81·3	83·9	88·3	83·7	*86·3*	85·6	82·8	84·0
8	96·5	87·1	92·1	93·3	*80·7*	*87·4*	94·8	85·0	90·0	*92·6*	82·0	*87·2*	87·3	82·1	84·7	82·8	75·9	78·8
9	98·3	85·7	91·0	91·6	82·2	88·2	93·1	85·3	88·8	91·7	80·3	85·4	86·2	84·0	85·1	84·2	77·2	82·4
10	97·7	85·6	91·6	94·1	86·0	89·7	91·0	84·1	86·9	92·1	81·2	86·3	86·3	82·7	84·8	84·4	80·1	81·9
11	99·7	85·3	91·7	95·8	86·8	91·1	90·6	84·6	88·3	87·6	79·5	83·1	87·1	83·0	85·1	80·2	76·4	77·9
12	00·3	89·2	94·9	98·3	88·1	93·4	89·1	84·0	86·5	89·0	80·7	84·2	86·0	80·6	83·0	77·8	72·7	75·7
13	00·6	89·8	95·1	90·4	87·7	88·5	91·0	82·2	85·9	91·0	81·7	86·0	84·0	80·0	82·0	82·6	73·6	77·9
14	01·2	90·2	94·9	93·2	87·8	89·6	87·6	81·2	*83·7*	88·5	82·7	85·8	83·2	80·0	81·6	84·6	82·4	83·2
15	00·2	90·1	94·5	97·7	85·1	91·4	89·2	81·2	84·8	88·2	77·0	84·5	83·1	76·5	80·0	83·4	80·4	82·3
16	01·1	87·8	94·9	97·7	86·6	91·7	88·3	82·0	85·2	82·0	73·8	78·4	81·0	74·3	78·2	84·3	80·1	81·9
17	*03·1*	87·4	*95·7*	97·3	90·2	93·0	91·0	81·7	85·8	81·8	75·6	78·8	82·7	77·9	80·3	81·2	77·5	79·5
18	94·2	89·2	91·8	96·3	90·0	92·3	91·2	81·2	85·7	83·4	72·8	78·4	81·0	73·3	78·5	78·3	73·1	75·9
19	94·2	86·7	89·8	97·7	90·8	93·4	92·7	*78·0*	85·2	85·8	80·9	83·7	81·6	77·6	79·9	76·6	*69·0*	*73·7*
20	94·3	85·9	89·8	00·8	87·7	94·1	95·2	81·7	87·5	84·5	82·7	83·9	83·0	78·5	81·0	81·4	75·9	78·8
21	93·7	87·1	89·9	02·1	90·2	95·5	92·3	82·2	88·2	84·2	80·9	82·3	82·4	80·0	80·8	81·0	73·3	77·0
22	97·4	86·9	90·9	*03·1*	90·8	*96·4*	92·8	88·3	90·7	84·1	79·1	81·8	82·4	78·7	80·9	81·0	69·7	76·3
23	00·4	83·7	92·5	01·9	89·5	96·0	92·1	84·3	88·1	85·1	81·1	83·3	83·4	78·4	81·1	83·5	79·6	81·4
24	95·3	86·3	89·6	00·8	89·5	94·1	92·0	82·8	87·4	85·9	80·6	82·8	82·9	76·0	79·4	82·4	79·6	81·1
25	97·6	85·4	90·7	98·8	87·5	93·4	93·1	84·7	89·4	88·6	80·8	84·0	79·7	74·5	76·6	83·1	76·6	79·8
26	95·2	85·3	89·9	97·5	86·4	91·4	90·1	83·1	86·1	88·0	79·4	84·3	80·5	76·0	77·9	85·6	80·0	83·1
27	98·6	86·0	91·7	96·0	89·5	92·1	88·4	80·5	85·2	82·0	76·5	78·9	80·7	77·0	79·5	86·3	79·8	82·8
28	97·8	88·1	92·3	92·4	88·2	90·3	89·1	81·7	85·6	81·2	74·9	77·9	81·6	78·3	80·1	*86·9*	82·6	*85·2*
29	93·3	88·0	90·4	92·4	85·3	89·4	91·3	78·6	85·3	81·8	73·3	77·7	79·5	74·8	77·2	83·2	79·1	81·1
30	97·4	89·1	92·1	97·0	84·2	90·5	90·7	82·7	87·2	80·8	74·0	78·0	78·3	71·8	*75·1*	79·2	74·6	77·4
31	98·7	85·9	92·0	98·0	86·6	92·0				81·1	*71·7*	*76·2*				81·0	75·0	77·6
Mean	96·7	86·5	91·3	96·6	87·0	91·6	92·0	83·4	87·7	86·3	79·0	82·7	83·6	78·2	81·1	82·6	77·1	80·0
									Annual	86·9	79·6	83·2						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentage from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

159 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	71·6	5·5	81·9	*9·2*	73·4	4·8	69·8	6·7	88·7	11·4	71·7	10·9	*83·0*	14·5	67·5	15·1	*67·6*	14·4	78·6	11·1	84·8	*6·3*	*95·2*	9·2
2	70·3	5·2	84·9	8·4	75·2	5·1	77·6	7·5	69·7	9·4	64·7	11·4	*61·9*	*10·4*	71·2	16·8	75·0	17·3	80·5	11·7	82·5	7·2	93·9	8·6
3	*69·1*	5·0	84·5	8·5	71·2	5·5	84·8	9·7	80·5	10·0	61·7	10·9	80·4	13·1	81·5	16·2	71·8	14·4	92·6	11·8	92·3	12·3	86·5	10·8
4	86·1	5·5	86·6	8·3	65·1	5·1	80·0	10·0	71·5	9·6	77·7	12·2	66·2	11·4	76·3	15·0	69·5	14·2	77·5	10·0	*96·2*	*13·9*	88·5	8·2
5	93·4	6·5	85·6	7·3	69·4	5·3	82·7	10·6	65·4	9·3	66·5	11·5	69·8	12·1	64·0	13·5	81·7	15·8	82·0	11·1	92·3	13·3	92·0	8·7
6	89·8	6·9	73·4	6·1	78·5	5·4	82·7	9·7	81·7	10·7	69·7	13·6	68·3	13·0	72·5	14·7	75·1	13·1	*60·5*	8·4	93·1	13·4	80·6	10·6
7	80·2	5·7	86·7	9·0	80·5	5·1	86·3	10·1	61·3	8·3	82·0	14·5	67·8	14·7	65·5	11·0	74·8	13·5	73·5	9·6	89·1	13·6	82·4	10·8
8	74·9	5·2	71·6	8·4	75·8	4·9	79·2	10·7	66·0	9·4	83·9	13·4	69·0	15·3	62·6	*10·3*	77·8	15·1	90·2	*14·6*	91·7	12·6	78·7	7·3
9	78·5	5·4	79·3	7·7	74·6	5·0	64·1	8·5	77·7	11·5	77·0	10·2	68·2	19·1	67·8	11·7	82·7	14·8	86·3	12·4	87·7	12·4	85·5	10·1
10	90·4	9·1	75·6	5·8	63·7	4·5	79·9	10·9	77·0	10·3	66·5	*8·0*	63·7	13·7	68·1	13·0	72·0	11·4	79·9	12·2	86·0	11·9	*69·2*	7·9
11	82·4	6·4	70·3	4·8	74·2	5·3	69·7	11·1	57·5	*6·6*	75·8	10·1	79·9	17·2	79·1	16·4	87·0	15·1	*95·3*	11·8	81·3	11·5	82·8	7·2
12	83·3	4·8	75·9	5·0	61·3	*4·1*	77·3	11·5	60·4	7·5	83·7	11·7	65·9	17·3	62·9	15·1	77·0	11·9	91·7	12·2	87·5	10·7	69·6	*5·2*
13	86·2	5·1	79·3	5·2	64·6	4·5	61·8	9·4	79·1	10·9	65·6	10·2	74·1	19·7	86·8	15·3	82·1	12·2	91·9	13·8	85·4	9·8	91·8	7·9
14	84·0	5·2	86·0	5·9	69·0	6·4	63·6	7·4	72·2	8·0	82·3	13·3	76·9	*20·2*	*87·8*	16·6	72·7	*9·4*	91·3	13·5	72·0	8·0	93·2	*11·6*
15	93·5	6·2	74·4	5·1	70·6	7·3	65·6	6·5	68·0	7·2	75·7	16·2	74·6	19·1	73·9	15·6	68·8	9·5	74·1	10·1	75·5	7·6	91·4	10·7
16	89·2	7·8	85·5	5·5	62·5	6·7	61·0	*6·2*	73·1	8·3	74·5	14·5	70·2	18·4	74·8	16·1	86·3	12·3	63·7	*5·7*	83·0	7·3	89·1	10·2
17	72·8	*4·5*	72·5	4·2	*52·8*	4·4	64·9	6·9	*89·4*	10·1	68·0	11·1	62·2	17·2	72·6	17·0	74·8	11·1	77·2	7·1	77·3	7·9	92·7	9·0
18	77·3	5·0	84·3	5·0	59·0	4·6	73·7	7·4	70·0	6·9	68·8	9·9	78·6	17·1	83·7	18·7	76·2	11·2	76·5	6·9	78·0	7·1	79·0	5·9
19	87·0	5·2	84·3	5·0	62·3	4·7	58·0	6·3	68·0	6·9	*90·0*	13·8	66·7	12·8	76·9	18·4	79·6	11·3	90·1	11·6	76·3	7·6	89·3	5·7
20	86·1	5·4	75·1	4·3	64·5	4·6	66·0	7·5	82·4	8·4	81·0	14·7	65·9	12·6	78·3	*19·6*	80·3	13·3	92·9	12·1	79·2	8·5	88·6	8·2
21	98·0	9·6	85·4	5·3	60·1	4·8	71·8	7·4	75·0	7·6	70·3	13·4	70·3	13·5	70·6	19·3	*91·8*	15·9	82·1	9·6	80·1	8·5	83·4	6·8
22	*98·2*	9·8	77·7	4·7	85·9	6·5	60·2	6·7	67·0	8·1	78·5	14·6	66·0	13·5	67·0	19·3	90·7	*18·4*	82·7	9·4	86·6	9·2	94·3	7·3
23	93·0	8·0	85·3	5·7	84·4	9·5	60·3	7·7	73·1	10·5	84·8	*16·5*	71·2	16·1	67·7	19·0	85·7	14·7	93·0	11·7	74·1	8·0	82·5	9·1
24	91·5	7·6	*89·5*	6·1	80·1	10·0	*55·8*	6·3	74·1	11·8	81·0	16·0	82·0	15·5	75·9	19·0	85·9	14·1	83·2	10·1	79·0	7·6	88·3	9·5
25	92·3	8·5	87·3	6·0	86·6	*11·6*	61·3	6·5	77·7	10·4	72·1	14·6	70·8	14·3	*60·1*	14·4	79·2	14·8	79·8	10·5	83·8	6·6	85·9	8·5
26	89·3	7·9	71·7	4·4	*89·3*	11·3	61·5	8·6	79·8	11·0	*60·5*	12·1	73·0	14·1	72·1	15·3	69·9	10·5	80·7	10·8	83·0	7·2	87·7	10·8
27	87·2	8·3	*67·2*	*4·1*	70·7	6·5	76·9	10·7	85·4	*12·7*	68·4	13·5	70·4	15·2	75·9	16·8	70·5	10·0	76·5	7·1	77·6	7·5	83·6	10·1
28	95·1	9·4	78·6	4·7	59·5	4·8	*87·7*	12·3	88·3	11·7	78·4	14·2	66·6	14·9	83·2	16·4	73·0	10·7	72·3	6·3	77·4	7·8	77·2	11·0
29	90·0	*10·5*			61·6	4·7	78·5	*13·0*	61·8	9·1	82·1	15·2	72·8	14·5	84·8	15·8	81·3	11·6	77·0	6·6	78·8	6·5	71·9	7·8
30	88·3	10·4			59·4	*4·1*	74·9	11·1	*57·2*	8·9	68·6	13·3	72·6	16·1	82·0	16·4	83·4	13·5	83·6	7·3	95·5	6·8	77·8	6·5
31	84·6	9·7			59·8	4·9			76·7	10·8			68·4	15·0	73·5	16·1			81·3	6·3			80·3	6·8
Mean*	85·6	6·9	80·0	6·1	69·9	5·9	71·3	8·8	73·4	9·5	74·4	12·9	70·9	15·1	73·8	15·9	78·1	13·2	81·9	10·1	83·6	9·3	84·9	8·6

*Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

160 KEW OBSERVATORY: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	87·2	87·2	88·2	*88·8*	88·4	88·0	88·0	88·7	87·7	87·4	85·9	84·9	82·5	80·5	*79·6*	80·2	81·2	83·3	84·3	85·3	85·9	86·5	87·1	87·5	87·5	85·6
Feb.	84·9	85·4	85·8	86·3	86·4	86·1	85·9	*86·9*	85·8	83·1	80·5	76·4	72·1	69·6	*67·5*	68·4	70·1	74·2	78·1	79·5	79·8	81·2	82·7	83·7	84·9	80·0
Mar.	79·8	80·2	81·5	*82·5*	82·0	82·1	81·8	81·9	78·4	72·3	67·2	62·8	59·6	56·2	55·5	53·2	*53·2*	54·8	58·6	62·5	67·2	71·5	74·7	77·6	79·2	69·9
Apr.	80·6	83·1	85·3	85·6	85·4	*86·6*	84·8	83·3	78·4	73·8	69·6	64·3	60·4	57·2	53·1	52·8	*52·7*	53·9	57·8	63·2	68·8	72·3	77·2	79·8	81·2	71·3
May	84·5	85·1	85·9	86·5	*87·4*	87·1	85·2	81·0	74·8	67·8	62·6	*58·5*	60·4	60·2	59·7	61·2	62·1	62·2	65·2	67·6	74·2	77·5	81·7	83·7	84·4	73·4
June	85·1	86·7	87·5	*89·1*	89·0	88·3	84·8	81·5	78·3	74·5	70·6	66·3	64·2	62·6	61·4	*60·4*	60·7	*60·4*	60·6	65·4	70·6	67·3	79·1	82·2	84·3	74·4
July	84·6	86·4	88·3	*89·4*	89·2	88·3	84·3	80·9	75·4	70·0	65·9	61·2	58·0	54·6	53·0	*52·2*	52·6	53·3	55·9	60·1	66·0	72·2	77·2	81·8	85·1	70·9
Aug.	83·8	86·3	88·1	89·8	91·1	*91·3*	90·5	88·1	82·6	76·8	71·0	66·3	62·7	58·8	55·6	55·0	*54·3*	55·4	58·8	62·9	70·2	73·8	76·9	80·4	83·4	73·8
Sept.	87·7	88·8	89·5	90·2	91·5	*92·2*	90·5	89·1	84·5	78·0	71·8	66·3	63·6	61·4	62·0	*60·4*	61·0	65·0	69·7	76·2	80·5	82·6	85·5	87·2	88·0	78·1
Oct.	88·5	88·0	89·1	89·7	90·3	90·5	89·9	*91·2*	88·7	85·3	80·9	75·6	71·1	67·2	*65·6*	67·0	69·5	72·8	78·5	81·2	83·6	84·9	87·5	88·5	89·0	81·9
Nov.	87·5	88·6	88·4	88·4	88·4	*88·8*	87·9	88·1	87·8	85·4	83·1	79·8	77·4	74·4	*73·6*	75·2	78·7	81·7	82·6	83·2	83·0	83·3	84·5	86·2	87·4	83·6
Dec.	86·8	85·5	85·3	86·5	87·4	87·9	87·9	*88·1*	87·8	87·1	85·9	84·2	82·0	79·5	*78·8*	79·0	81·5	83·2	84·3	85·6	86·2	85·9	86·0	86·0	86·7	84·9
Mean	85·1	85·9	86·9	87·7	88·0	*88·1*	86·8	85·7	82·5	78·4	74·6	70·5	67·8	65·2	63·8	*63·7*	64·8	66·6	69·5	72·7	76·3	79·0	81·7	83·6	85·1	77·3

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T. computed from corresponding mean values of temperature and relative humidity

161 KEW OBSERVATORY: h_t = 3·0 m.

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	6·8	6·7	*7·8*	6·8	6·7	*6·6*	6·6	6·6	6·6	6·7	6·7	6·8	6·8	6·8	6·7	6·7	6·7	6·8	6·8	6·8	6·8	6·9	6·9	6·9	6·9	6·8
Feb.	6·1	*6·1*	6·1	6·1	6·0	5·9	5·8	5·9	5·9	5·9	5·9	5·9	5·8	5·7	*5·6*	5·7	5·7	5·9	6·0	5·9	5·9	5·8	5·9	6·0	6·0	5·9
Mar.	5·9	5·8	5·8	5·8	5·8	5·7	5·7	5·7	5·7	5·6	5·6	5·4	5·4	5·3	5·4	5·3	5·3	*5·3*	5·4	5·5	5·6	5·8	5·9	*5·9*	5·9	5·6
Apr.	8·6	8·6	8·6	8·5	8·4	8·4	8·2	8·5	8·6	8·7	8·7	8·7	8·6	8·5	*8·2*	8·3	8·3	8·3	8·5	8·6	8·7	8·8	8·9	*8·9*	8·8	8·6
May	9·5	9·4	9·4	9·4	9·4	9·3	9·5	9·4	9·2	8·9	8·7	*8·5*	8·9	9·0	9·1	9·5	9·4	9·4	9·6	9·4	*9·6*	9·4	9·5	9·5	9·5	9·3
June	12·8	12·7	12·6	12·5	12·4	12·5	12·5	12·5	12·7	12·7	12·8	12·6	12·7	12·6	12·6	12·6	12·6	12·4	*12·2*	12·6	12·6	12·8	12·8	*12·9*	12·9	12·6
July	15·1	14·9	14·7	14·6	14·4	14·3	14·3	14·4	14·4	14·3	14·3	14·2	14·3	*14·2*	14·3	14·4	14·6	14·5	14·9	15·2	15·2	*15·3*	15·2	15·2	15·1	14·6
Aug.	15·5	15·6	15·5	15·5	15·4	15·5	15·8	*16·0*	16·0	16·0	15·8	15·6	15·6	15·3	15·1	15·2	*15·1*	15·1	15·3	15·4	15·8	15·7	15·6	15·6	15·6	15·5
Sept.	13·1	13·0	13·0	12·8	12·7	12·7	12·6	12·7	13·0	13·1	12·9	12·6	*12·5*	12·6	12·7	12·6	12·6	12·9	13·1	13·4	*13·4*	13·2	13·2	13·1	12·9	12·9
Oct.	9·9	9·7	9·6	9·5	9·5	9·4	*9·4*	9·5	9·7	9·9	10·1	10·0	9·9	9·8	9·7	9·9	10·0	10·1	*10·2*	10·0	9·9	9·8	9·9	9·8	9·7	9·8
Nov.	9·0	9·0	8·8	8·8	8·7	8·8	*8·6*	8·7	8·8	8·9	9·1	9·2	9·2	9·1	9·1	9·1	9·3	*9·4*	9·4	9·3	9·2	9·1	9·0	9·0	9·1	9·0
Dec.	8·5	8·3	8·3	8·3	8·3	8·3	8·3	*8·2*	8·2	8·3	8·4	8·6	8·7	8·7	8·7	*8·7*	8·7	8·7	8·7	8·6	8·6	8·6	8·5	8·4	8·5	
Annual	9·7	9·6	9·5	9·5	9·4	9·4	*9·4*	*9·4*	9·5	9·5	9·6	9·5	9·5	9·5	9·5	9·6	9·6	9·7	*9·7*	*9·7*	9·7	9·7	9·7	9·6	9·6	9·6

*Mean of values, 1,2,.....23,½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

162 KEW OBSERVATORY: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 5·5 m. + 0·53 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	7·4	5·9	12	...	...	...
2	...	...	...	...	...	...	...	...	...	1·7	2·4	8	0·1	0·3	7	...	...	...
3	...	...	...	2·4	2·0	7	...	...	...	...	...	...	0·8	1·5	9	1·0	1·4	...
4	9·4	6·9	...	*11·2*	*9·8*	*28*	...	...	...	0·5	0·9	...	1·1	0·6	16	*14·4*	4·7	*32*
5	0·1	0·1	...	0·1	0·5	...	2·9	2·7	6	...	...	...	0·1	0·2	9	...	...	...
6	2·8	5·0	...	...	...	...	1·7	1·0	6	1·0	0·2	24	1·4	2·8	10	3·0	1·7	9
7	...	...	...	4·3	4·6	7	0·3	0·2	...	*2·9*	*5·2*	6	...	...	...	4·0	1·9	31
8	...	...	...	...	...	...	0·3	0·4	6	0·7	0·9	8	...	...	...	7·2	3·3	15
9	...	...	...	1·5	0·9	11	...	...	...	...	...	...	2·2	1·6	...	3·4	2·7	26
10	1·9	1·3	7	...	...	...	...	...	...	...	...	...	1·6	1·2	30	...	...	...
11	*9·8*	7·5	*16*	...	...	...	0·1	0·2	...	...	...	...	...	...	...	...	...	...
12	...	...	...	0·6	1·0	...	...	...	...	...	...	...	...	...	...	10·7	*8·1*	26
13	5·5	*8·7*	...	...	...	...	...	...	...	...	...	...	4·5	4·3	14	...	...	...
14	5·0	5·2	...	1·3	2·0	8	...	...	...	...	...	...	1·1	0·6	*49*	...	...	...
15	0·4	1·0	...	...	...	...	...	...	...	...	...	...	4·0	0·4	38	...	...	...
16	8·4	7·6	10	1·1	1·5	...	...	...	...	...	...	...	8·8	7·7	10	...	...	...
17	0·2	0·2	...	0·4	0·5	...	...	...	...	...	...	...	17·7	*12·2*	13	...	...	...
18	...	...	...	1·7	2·1	...	...	...	...	...	...	...	2·6	1·8	28	...	...	...
19	...	...	...	0·6	0·6	...	0·1	0·3	...	...	...	...	0·4	0·3	6	3·8	3·6	9
20	...	...	...	0·4	0·6	...	...	...	...	...	...	...	5·9	2·0	44	2·6	2·3	8
21	3·4	3·0	13	0·2	0·3	...	...	...	...	...	...	...	0·4	0·3	9	...	...	...
22	1·2	1·7	...	...	...	...	0·6	1·7	...	...	...	...	...	...	...	...	...	...
23	0·1	...	...	...	...	...	3·7	1·9	*22*	...	...	...	...	...	...	...	...	...
24	...	...	...	3·4	6·8	...	5·1	2·4	16	...	...	...	...	...	...	...	...	...
25	...	...	...	0·3	0·5	...	*5·7*	*5·5*	17	...	...	...	...	...	...	...	...	...
26	0·4	1 3	...	...	...	...	2·5	3·0	...	0·3	0·5	...	7·5	2·0	20	...	...	...
27	0·1	0·1	...	...	...	...	...	...	...	0·1	0·1	...	*18·0*	8·1	20	...	...	...
28	0·1	...	...	...	...	...	...	...	...	0·3	1·1	...	8·8	5·3	10	0·1	0·1	...
29	...	...	...				...	...	...	0·6	1·3	...	...	...	...	5·1	4·1	15
30	...	...	...				...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...				...	...	...				...	...	...			
Total	48·8	49·6	-	29·5	33·7	-	23·0	19·3	-	8·1	12·6	-	94·4	59·1	-	55·3	33·9	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	...
2	...	...	...	...	...	...	0·2	0·4	...	...	...	...	2·4	3·0	16	...	...	...
3	2·5	*1·4*	37	2·2	1·7	8	...	...	...	1·7	1·7	7	2·1	1·9	10	0·1	0·1	...
4	...	...	...	...	...	...	...	...	...	1·9	1·6	11	*11·4*	*3·8*	20	...	...	...
5	...	...	...	...	...	...	2·7	1·9	21	10·3	2·8	23	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	0·6	0·6	7	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	2·0	2·0	28	...	...	...
8	...	...	...	...	...	...	...	...	...	0·1	0·2	...	1·6	0·6	*36*	...	...	...
9	...	...	...	...	...	...	*13·9*	1·7	*99*	...	...	...	1·2	1·2	8	1·1	0·7	9
10	...	...	...	...	...	...	...	...	...	...	...	...	0·6	0·6	7	...	...	...
11	1·8	0·4	17	3·9	0·8	*70*	0·1	0·2	...	...	...	...	0·2	0·3	...	10·0	*13·5*	6
12	...	...	...	...	...	...	0·3	0·9	...	0·1	...	...	...	...	...	...	...	...
13	...	...	...	*9·6*	*6·0*	11	6·2	3·9	76	...	...	...	...	...	...	1·7	1·3	12
14	*5·4*	0·4	*41*	2·2	1·3	22	1·2	1·3	10	...	...	...	...	...	...	*10·7*	8·6	16
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·4	2·6	26
16	...	...	...	...	...	...	0·5	1·1	...	...	...	...	...	...	...	0·3	0·1	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·7	2·1	7
18	0·2	0·5	...	0·1	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...
19	0·2	0·2	6	...	...	...	...	...	...	*27·5*	*12·9*	*36*	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	6·7	5·6	8	0·1	0·1	...	0·1	0·1	...
21	...	...	...	...	...	...	...	...	...	5·2	8·1	8	0·1	0·1	...	...	...	...
22	...	...	...	...	...	...	8·0	4·3	22	1·1	1·5	7	...	...	...	2·2	2·1	12
23	...	...	...	...	...	...	11·7	*5·8*	16	1·8	1·7	11	...	...	...	0·4	0·3	8
24	...	...	...	...	...	...	...	...	...	...	...	...	0·8	0·3	...	1·4	1·6	6
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	3·1	5·1	7	...	...	...	1·8	1·7	*42*
27	...	...	...	...	...	...	...	...	...	0·2	0·3	...	...	...	...	0·5	0·7	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·6	0·2	26
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5·2	5·5	7
30	...	...	...	...	...	...	0·2	0·8	...	0·4	0·6	6	...	...	...	1·7	3·3	...
31	...	...	...	...	...	...				...	...	...				...	...	...
Total	10·1	2 9	-	18·0	9·9	-	45·0	22·3	-	60·1	42·1	-	23·1	14·5	-	45·0	44·6	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

163 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m.

	Hour G.M.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	0-24
	millimetres																								
Jan.	0·7	1·1	1·7	4·1	*4·5*	1·6	1·7	1·1	2·9	3·8	3·2	3·9	3·9	2·6	2·7	2·7	1·1	1·1	1·3	1·2	0·5	0·4	0·7	0·3	48·8
Feb.	1·5	1·2	0·8	1·4	1·7	0·6	1·6	1·3	1·4	0·9	0·7	···	0·2	0·1	0·1	0·9	1·0	1·7	3·0	2·4	*3·3*	1·6	1·8	0·3	29·5
Mar.	0·1	1·3	3·1	1·1	0·1	*3·2*	0·8	0·2	1·9	0·6	1·9	0·5	0·2	···	···	0·1	···	0·1	0·4	1·5	0·9	0·5	1·8	2·7	23·0
Apr.	0·4	0·3	···	···	0·2	0·1	0·4	0·2	···	···	···	···	···	···	0·1	0·4	0·8	0·7	1·6	0·3	*1·7*	0·5	0·3	0·1	8·1
May	7·2	5·3	4·9	5·0	4·0	7·2	7·1	2·7	0·7	1·4	0·2	1·4	4·5	2·7	2·7	2·0	4·5	4·3	3·2	1·7	2·4	4·3	6·9	*8·1*	94·4
June	3·7	2·7	2·1	8·0	4·5	*8·5*	3·8	1·5	1·8	3·9	···	0·5	0·8	0·8	0·6	1·5	0·3	···	2·0	2·3	0·7	0·2	2·5	2·6	55·3
July	···	···	···	0·2	···	···	···	···	···	···	···	···	···	···	···	*5·4*	2·0	0·4	1·6	0·5	···	···	···	···	10·1
Aug.	2·0	0·2	···	···	1·5	1·4	···	···	0·9	2·4	···	···	···	···	0·7	1·2	*2·6*	1·1	0·5	···	···	1·3	0·2	2·0	18·0
Sept.	0·1	0·1	1·4	5·4	2·5	1·0	2·5	1·6	0·4	0·7	0·7	0·3	3·3	*9·1*	0·9	3·6	1·0	1·9	1·6	4·3	1·9	0·5	0·2	···	45·0
Oct.	0·2	···	1·2	0·2	0·1	0·5	2·2	3·6	4·0	4·9	2·5	2·4	2·6	2·4	5·9	2·8	1·1	3·1	*7·8*	5·1	2·4	2·4	1·8	0·9	60·1
Nov.	0·7	1·7	2·4	0·3	*4·4*	3·0	1·0	···	0·1	0·4	1·1	1·1	1·4	0·5	0·1	0·6	···	0·5	0·4	0·6	1·0	0·3	1·1	0·4	23·1
Dec.	1·0	0·4	1·2	1·4	1·6	0·6	1·0	0·8	1·7	2·8	*5·6*	2·4	1·2	3·2	2·0	2·9	2·5	3·0	1·3	1·8	1·5	1·2	1·7	2·2	45·0
Annual	17·6	14·3	18·8	27·1	25·1	*27·6*	22·2	13·0	15·8	21·8	15·9	12·5	18·1	21·4	15·8	24·1	16·9	17·9	24·7	21·7	16·3	13·2	19·0	19·6	460·4

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

164 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m.

	Hour G.M.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	0-24
	hours																								
Jan.	1·1	1·2	1·8	2·0	2·0	1·4	1·7	2·3	3·0	*3·9*	2·7	3·4	2·9	3·2	2·5	*3·9*	1·5	2·0	0·8	1·6	1·0	1·0	1·6	1·1	49·6
Feb.	1·9	2·3	1·1	2·3	*3·3*	1·7	1·0	1·4	2·9	1·3	1·3	···	0·2	0·1	0·1	0·8	1·6	2·7	1·9	1·0	1·3	1·5	1·6	0·4	33·7
Mar.	···	0·9	1·9	0·9	0·3	1·2	1·0	0·3	1·4	0·7	1·6	0·6	0·8	···	···	0·1	···	0·1	0·6	1·0	1·3	1·2	1·4	2·0	19·3
Apr.	1·0	0·4	···	···	0·4	0·1	0·4	0·4	···	···	···	···	···	···	0·2	0·5	0·7	1·1	1·3	1·2	*2·1*	1·4	0·9	0·5	12·6
May	3·2	2·4	2·8	3·1	3·6	*4·5*	3·1	2·2	0·6	0·9	0·3	1·0	1·5	1·8	1·8	1·2	1·8	3·2	2·9	2·1	3·7	3·7	4·0	3·7	59·1
June	*3·2*	2·9	2·6	*3·2*	2·7	2·9	2·6	1·3	1·3	1·4	0·1	0·2	0·6	0·7	0·2	0·7	0·1	···	0·8	1·4	0·5	0·2	1·6	2·7	33·9
July	···	···	···	0·2	···	···	···	···	···	···	···	···	···	···	···	0·4	*0·9*	0·5	0·4	0·5	···	···	···	···	2·9
Aug.	0·7	0·6	···	···	*1·1*	*1·1*	···	···	0·3	0·1	···	···	···	···	0·7	1·0	1·0	1·0	0·6	···	···	1·0	0·1	0·6	9·9
Sept.	0·2	0·3	0·5	1·8	*1·9*	1·6	1·4	1·0	1·1	0·9	0·8	0·8	1·4	0·7	0·5	0·2	1·3	1·4	1·0	1·5	1·0	0·6	0·4	···	22·3
Oct.	0·3	0·3	1·7	0·3	0·2	1·0	0·9	1·0	2·4	*3·5*	3·3	2·4	1·2	1·8	1·8	1·0	1·3	2·8	3·3	2·8	2·2	2·5	2·9	1·2	42·1
Nov.	0·7	0·5	*1·4*	0·6	0·9	1·0	1·0	···	0·1	0·5	0·7	1·2	0·6	0·7	0·2	0·2	···	0·9	0·9	0·5	0·7	0·5	0·5	0·2	14·5
Dec.	1·4	1·0	1·2	2·1	2·1	0·7	0·9	0·9	2·0	2·5	*3·5*	1·5	1·5	2·7	2·2	1·4	2·0	2·9	2·7	2·7	2·0	1·1	1·1	1·5	44·6
Annual	13·7	12·8	15·0	16·5	18·5	18·2	14·0	10·8	15·1	15·7	14·3	11·1	10·7	11·7	10·2	11·4	12·2	*18·6*	17·2	16·3	15·8	14·7	16·1	13·9	344·5

NOTES ON RAINFALL

165 KEW OBSERVATORY

Dry Periods

The following definitions are adopted by the British Rainfall Organization.
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more.
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more.

"Absolute drought": April 9-25; August 15-September 1
"Partial drought": November 8-December 10.
"Dry spell": March 7-22; April 8-30; July 15-August 2; August 15-September 4; November 10-December 8

Wet Periods

The following definitions are adopted by the British Rainfall Organization.
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more.
A "wet spell" is a period of at least 15 consecutive days go each of which is credited 1·0 mm. of rain or more.
There were no "rain spells" or "wet spells" in 1955.

Rainfall Duration

Hours	0·1-1·0	1·1-2·0	2·1-6·0	6·1-12·0	>12·0
Number of days	50	37	33	12	3

Continuous or Heavy Falls

The fall of the longest duration occurred on 11 December when 10 mm. fell in 12hr. 24min.

Heavy Falls in short periods

None occurred in 1955.

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 99 mm./hr. on 9 September. The maximum rate exceeded 50 mm./hr. on 11 August, 9 and 13 September.

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

166 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²
1	···	···	···	2·9	32	370	7·3	68	1250	3·1	24	360	0·1	1	20	8·9	55	1550
2	···	···	···	3·2	35	370	7·0	64	1030	7·2	56	800	5·4	37	360	5·1	31	680
3	···	···	···	2·2	24	320	8·0	73	990	0·6	5	70	6·5	44	890	0·1	1	40
4	···	···	···	5·0	54	620	8·0	73	1380	0·7	5	100	9·3	62	1020	10·4	64	1940
5	···	···	···	0·9	1	90	2·6	23	330	3·1	24	380	8·2	55	900	*13·3*	*81*	*2700*
6	···	···	···	6·9	*74*	1080	2·0	18	130	2·7	21	300	1·4	9	130	9·9	61	1780
7	···	···	···	1·0	11	110	1·5	13	140	3·8	29	620	11·8	78	2220	6·5	40	1000
8	···	···	···	2·2	23	260	0·7	6	40	3·9	29	620	10·4	69	2010	2·5	15	280
9	2·5	31	190	0·3	3	10	4·1	36	280	10·4	78	1840	6·6	44	800	2·6	16	270
10	···	···	···	4·9	51	620	9·5	*83*	1330	···	···	···	6·1	40	780	6·9	42	970
11	0·6	7	60	7·0	73	1080	2·4	21	190	9·7	72	1890	10·3	67	2260	3·5	21	400
12	1·4	17	130	6·1	63	870	6·2	54	950	0·1	1	20	11·6	76	2130	3·3	20	480
13	···	···	···	4·3	44	440	6·7	58	670	6·1	45	1150	3·3	21	150	4·9	30	360
14	5·0	61	630	···	···	···	7·7	66	1300	11·3	83	2130	8·6	56	1830	0·5	3	30
15	···	···	···	6·9	70	1130	···	···	···	6·6	48	1050	12·3	79	1830	5·0	30	700
16	···	···	···	1·8	18	220	3·9	33	370	11·0	80	2390	6·2	40	790	4·6	28	490
17	5·0	60	730	6·9	69	1440	9·5	80	1800	12·0	*87*	2370	1·1	7	60	11·3	58	1750
18	*6·8*	*81*	*860*	1·3	13	140	7·7	65	1220	7·8	56	1480	10·8	69	2060	9·3	56	1730
19	5·5	65	730	0·1	1	10	8·6	72	1420	11·2	80	2310	11·4	73	1890	0·1	1	10
20	···	···	20	4·9	48	560	7·9	66	990	8·8	63	1670	6·9	44	970	1·5	9	180
21	···	···	···	···	···	···	9·0	74	1530	0·4	3	30	8·9	56	1120	7·5	45	820
22	···	···	···	···	···	···	···	···	30	9·9	70	1480	7·2	45	1120	8·7	52	880
23	···	···	···	···	···	···	2·0	16	120	4·1	29	440	8·5	54	1480	0·6	4	30
24	···	···	···	···	···	···	2·5	20	440	*12·4*	*87*	2320	5·0	31	380	7·1	43	490
25	···	···	···	···	···	···	1·2	10	100	11·4	79	*2640*	6·8	43	780	6·8	41	740
26	···	···	···	···	···	···	0·2	2	···	6·7	46	1020	5·6	35	660	10·6	64	1760
27	2·6	30	260	2·0	19	300	1·3	10	50	1·6	11	160	4·3	27	500	3·1	19	480
28	0·1	1	···	*7·4*	69	*1500*	7·0	56	760	···	···	···	···	···	···	5·9	36	1200
29	0·5	6	50				*10·4*	82	*1810*	6·2	42	570	9·0	56	1500	4·1	25	420
30	3·5	39	390				6·0	47	590	8·8	60	1150	*14·9*	*92*	*3610*	7·7	47	1070
31	1·2	13	60				6·3	49	840				10·4	64	1930			
Mean	1·12		130	2·79		410	5·07		710	6·05		1050	7·38		1170	5·74		840

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²	hr.	%	J./cm.²
1	0·3	2	40	11·6	75	1720	6·8	50	960	7·3	63	1300	3·6	37	330	···	···	···
2	12·5	76	2430	5·2	34	870	6·4	47	860	2·4	21	200	0·7	7	120	2·1	26	170
3	1·4	9	140	2·3	15	300	7·4	55	870	0·3	3	50	···	···	···	···	···	···
4	12·4	75	1830	3·3	22	270	3·4	25	420	8·1	71	1620	1·5	16	140	3·6	45	300
5	10·3	63	1420	11·7	77	2340	1·2	9	90	4·6	40	910	2·8	30	150	1·8	22	210
6	12·3	75	1900	1·8	12	140	9·2	69	1350	2·9	26	250	1·0	11	60	···	···	···
7	9·0	55	1970	6·1	40	630	8·7	66	1140	2·0	18	300	1·8	19	140	···	···	···
8	13·6	83	2320	11·2	75	1730	8·2	62	1180	0·9	8	60	1·5	16	90	···	···	30
9	9·9	61	2040	2·2	15	260	7·4	57	1320	5·8	52	940	1·8	20	90	···	···	···
10	10·9	67	2030	5·1	34	470	5·0	38	680	7·8	71	1580	4·1	45	330	4·8	54	360
11	4·6	28	690	3·9	26	280	0·1	1	10	2·6	24	230	···	···	···	···	···	···
12	*14·2*	*87*	*2800*	12·0	81	1630	1·7	13	200	3·8	35	450	0·5	6	60	5·2	66	500
13	7·7	47	1060	···	···	···	4·9	38	850	5·8	53	620	···	···	···	···	···	···
14	7·6	47	1050	0·7	5	40	7·6	60	1060	···	···	···	2·1	24	160	0·2	3	10
15	9·4	58	1080	12·5	85	2210	8·3	65	1250	···	···	···	*5·5*	*62*	*480*	···	···	···
16	11·6	72	1250	*12·8*	*88*	*2460*	···	···	10	*8·8*	*82*	*1650*	···	···	···	3·7	48	300
17	11·3	70	1800	7·1	49	950	9·2	73	1680	2·5	24	280	···	···	···	···	···	10
18	0·1	6	10	2·6	18	230	2·9	23	330	7·6	72	1610	2·6	30	190	0·9	12	80
19	7·4	46	880	6·9	48	980	9·1	73	1450	···	···	···	0·1	1	···	···	···	10
20	3·0	19	330	8·0	56	1120	9·6	78	1620	···	···	···	0·8	9	90	···	···	···
21	1·1	7	80	11·1	78	1250	1·9	15	230	···	···	···	0·8	9	60	1·6	20	90
22	10·3	65	1540	10·4	73	1330	1·5	12	100	0·1	1	···	···	···	···	···	···	···
23	10·7	68	1880	4·2	30	440	6·1	50	870	···	···	···	4·3	51	350	4·0	52	420
24	3·4	22	630	5·9	42	690	6·6	55	1180	4·1	40	390	0·9	11	60	···	···	30
25	8·0	51	1110	10·0	71	1990	5·4	45	730	8·3	*82*	1360	3·5	42	340	5·6	72	480
26	4·2	27	540	5·2	37	770	7·1	59	1290	1·5	15	220	···	···	···	0·1	1	10
27	11·0	70	1710	5·3	38	550	5·5	46	820	5·9	59	710	···	···	···	···	···	···
28	10·5	67	1650	0·2	1	10	4·8	41	550	6·0	61	1240	···	···	···	1·0	13	60
29	0·1	1	20	1·0	7	90	*10·0*	*85*	*2270*	6·4	65	1120	2·7	3	240	3·0	38	280
30	2·8	18	270	8·4	61	1000	0·4	3	30	0·1	1	10	···	···	···	2·1	27	150
31	12·1	78	1390	8·6	63	1150				5·7	59	710				*5·9*	*75*	*570*
Mean	7·86		1220	6·36		900	5·55		850	3·59		570	1·42		120	1·47		130
								Annual Mean		4·53		680						

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

167 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m.

	Hour L.A.T. 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	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	1·3	2·7	5·1	6·2	*6·7*	5·9	4·9	1·9	···	–	–	–	–	34·7	13
Feb.	–	–	–	···	···	6·7	*12·8*	12·6	11·1	10·4	9·9	9·7	4·5	0·5	···	–	–	–	78·2	28
Mar.	–	–	···	0·9	8·1	13·5	15·5	17·2	18·3	18·9	15·5	*19·5*	18·2	9·9	1·7	···	–	–	157·2	43
Apr.	–	···	1·1	6·9	11·9	12·8	15·5	17·7	*18·5*	16·8	17·0	17·6	17·1	17·3	10·5	0·9	···	–	181·6	44
May	···	1·4	8·8	15·0	16·4	19·8	20·2	*22·8*	19·9	19·1	17·7	16·1	15·2	13·6	12·4	9·0	1·5	···	228·9	48
June	···	1·0	5·1	9·2	10·6	12·8	14·4	14·7	*15·8*	15·7	14·3	12·8	12·3	10·6	10·6	8·9	3·5	···	172·3	35
July	···	1·9	6·1	10·8	13·4	15·6	16·7	20·7	21·8	*22·3*	20·4	20·6	20·3	19·4	16·5	13·6	3·6	···	243·7	49
Aug.	–	···	0·8	6·5	11·9	15·0	15·7	18·5	19·3	19·5	18·7	*20·0*	18·0	15·0	12·6	5·8	···	–	197·3	44
Sept.	–	–	0·1	3·2	11·6	15·1	17·0	*17·8*	17·7	*17·8*	16·5	17·3	15·0	12·3	4·9	0·1	–	–	166·4	44
Oct.	–	–	–	···	4·3	8·7	12·3	12·9	13·5	*15·1*	14·6	13·8	10·0	5·9	0·2	–	–	–	111·3	33
Nov.	–	–	–	–	···	2·1	3·4	5·8	7·0	6·6	*8·1*	*8·1*	1·5	···	–	–	–	–	42·6	16
Dec.	–	–	–	–	···	0·6	5·4	6·0	8·6	*10·5*	7·7	6·5	0·3	···	–	–	–	–	45·6	19
Annual	···	4·3	22·0	52·5	88·2	124·0	151·6	171·8	177·7	*179·4*	166·3	166·9	134·3	104·5	69·4	38·3	8·6	···	1659·8	37

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM

Monthly and annual totals between exact hours, local apparent time

168 KEW OBSERVATORY: h_s = 13·3 m.

	Hour L.A.T. 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	Total
	joules per square centimetre																		
Jan.	–	–	–	–	···	170	440	620	770	800	680	460	170	···	–	–	–	–	4110
Feb.	–	–	–	···	240	1030	1720	2010	1810	1690	1340	1140	520	60	···	–	–	–	11560
Mar.	–	–	10	440	1330	1810	2230	2500	2570	2600	2300	2780	2230	990	300	···	–	–	22090
Apr.	–	···	350	1170	1850	2120	2870	3040	3430	3250	3360	2970	3100	2550	1330	200	···	–	31590
May	···	230	1390	2430	2570	3200	3290	3760	3290	3230	3280	2440	2100	2060	1780	980	170	···	36200
June	···	300	680	1250	1640	1950	2130	2120	2240	2250	1970	2180	1760	1700	1670	980	400	···	25220
July	···	370	950	1550	2240	2780	2910	3290	3700	3910	3320	3040	2980	2670	2190	1530	460	···	37890
Aug.	···	20	310	890	1530	2040	2340	3010	3260	3050	2870	2570	2380	1730	1250	580	30	···	27860
Sept.	–	···	70	780	1880	2330	2790	2970	2550	2670	2630	2630	2060	1480	540	20	···	–	25400
Oct.	–	–	···	140	920	1700	2200	2320	2200	2460	2260	1850	1110	620	46	···	–	–	17820
Nov.	–	–	–	···	30	190	270	490	590	480	570	610	230	20	···	–	–	–	3480
Dec.	–	–	–	–	···	130	430	590	850	930	660	450	30	···	–	–	–	–	4070
Annual	···	920	3760	8650	14230	19450	23620	26720	27260	27320	25240	23120	18670	13880	9100	4290	1060	···	247290

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

169 KEW OBSERVATORY: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 5 m. + 23 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	6·9	17	5·6	*20*	2·4	8	1·4	5	4·5	17	4·9	14	3·4	13	1·8	9	3·4	12	1·1	6	0·9	6	*0·7*	4
2	7·3	17	4·2	13	3·8	10	3·5	14	6·7	17	5·3	11	3·7	13	0·9	9	*5·5*	19	1·3	7	4·4	14	1·9	11
3	*11·2*	24	5·4	18	3·2	9	4·7	16	6·7	19	5·2	14	4·5	16	1·6	9	2·7	9	0·5	4	4·8	14	4·3	16
4	8·3	24	4·0	15	3·6	14	5·4	15	*8·7*	22	5·1	17	3·8	16	*0·8*	6	3·3	11	2·6	10	3·1	15	1·7	6
5	5·0	14	3·8	16	6·4	21	3·3	9	7·7	21	3·4	12	2·1	11	2·0	8	4·1	15	5·3	17	2·8	10	2·8	12
6	6·2	14	3·3	15	7·9	21	2·2	11	5·5	22	5·8	18	1·9	9	2·7	10	1·9	9	*8·5*	*26*	2·6	11	5·0	16
7	4·3	9	5·8	19	6·6	15	3·6	12	3·7	12	4·1	15	2·7	11	2·8	13	1·4	6	3·1	14	4·4	15	5·1	16
8	2·6	10	6·5	19	4·7	14	4·4	13	6·0	19	2·4	10	5·2	16	2·5	10	2·4	10	2·3	10	3·3	11	1·1	11
9	1·1	8	4·5	12	7·3	20	4·4	13	5·8	18	6·5	17	6·0	*17*	1·2	7	3·5	15	1·0	6	*6·1*	18	5·0	17
10	8·2	20	3·6	11	7·1	17	4·5	14	5·3	16	2·7	11	5·2	15	4·7	13	2·0	8	1·8	9	5·9	19	6·0	19
11	4·0	15	2·8	9	6·7	17	5·0	17	3·3	10	3·9	15	2·1	13	4·5	12	4·0	15	*0·2*	5	*6·1*	*21*	4·7	14
12	1·4	9	4·9	17	*8·2*	17	2·0	8	5·0	16	*7·0*	*19*	1·9	8	*5·6*	*16*	2·5	7	0·9	5	1·6	8	5·4	15
13	3·2	11	5·3	15	5·2	13	2·5	10	6·9	19	3·4	15	*0·9*	7	4·5	14	4·5	*21*	1·1	5	4·8	14	4·1	11
14	3·1	14	3·2	11	3·6	12	3·2	11	4·7	20	4·7	17	1·2	13	1·5	8	4·7	18	2·1	9	4·7	14	5·4	16
15	2·7	11	4·1	14	*1·3*	7	3·7	9	4·7	19	2·7	9	2·0	8	1·9	9	4·1	16	4·2	17	3·3	11	2·3	11
16	6·1	*26*	2·9	11	4·3	14	4·2	13	4·5	16	2·8	10	*0·9*	8	2·8	9	2·7	11	2·7	11	1·9	9	3·8	12
17	3·4	14	4·4	13	5·4	17	4·7	12	6·2	*24*	6·3	11	1·5	8	5·2	14	2·9	10	2·7	11	2·9	10	2·1	11
18	3·4	11	*1·8*	9	3·6	13	4·7	12	5·9	20	6·2	14	4·8	14	4·4	13	1·7	9	2·6	11	2·8	9	1·8	9
19	*0·6*	5	5·8	18	4·3	18	4·1	11	4·2	16	3·3	11	*6·3*	15	3·6	11	1·6	8	7·1	20	2·8	9	1·9	7
20	2·5	10	3·1	12	2·6	14	1·6	8	2·1	16	3·4	9	3·9	12	1·3	7	1·8	8	2·9	13	3·2	14	4·0	12
21	2·3	11	*7·3*	19	2·1	10	3·3	10	2·4	17	2·7	11	2·2	9	3·6	9	2·4	11	6·8	23	4·0	11	3·3	11
22	3·3	15	5·0	11	2·3	8	2·1	10	2·3	9	3·6	12	1·6	7	3·5	9	4·2	15	7·1	21	1·3	6	2·6	13
23	4·6	16	6·2	13	8·1	*29*	2·6	11	2·1	9	6·0	17	1·1	10	2·6	8	*0·9*	5	1·9	8	3·3	11	5·1	15
24	2·8	9	7·3	16	7·6	26	4·8	13	3·1	9	4·4	13	3·3	11	2·7	9	3·6	13	2·1	10	4·7	17	4·0	14
25	3·5	13	7·3	15	1·9	9	2·8	11	4·5	12	1·4	6	5·6	15	4·2	13	3·6	11	3·0	9	1·9	9	3·5	16
26	4·1	12	5·3	13	7·2	20	2·3	11	5·8	13	1·8	8	5·1	13	2·5	9	3·1	10	4·5	14	1·7	5	6·8	20
27	2·5	10	3·9	10	6·2	13	5·3	17	*1·2*	7	*0·7*	9	4·3	13	3·4	12	3·3	14	2·7	9	1·7	6	6·4	21
28	2·8	11	2·8	10	6·2	14	*5·4*	14	1·8	6	3·6	13	5·0	12	3·7	11	3·0	11	3·7	14	1·9	7	*9·2*	*24*
29	5·2	16			5·9	16	3·5	11	3·2	11	5·1	12	2·5	10	1·9	7	1·9	7	1·9	8	3·0	10	5·6	19
30	5·4	15			6·8	16	2·9	12	2·8	9	2·0	8	2·3	8	1·6	8	3·0	11	1·7	7	*0·7*	3	4·4	15
31	6·0	17			3·1	11			3·2	9			1·0	8	2·0	7			1·2	6			3·0	13

WIND

Monthly and annual means of mean wind speed between exact hours G.M.T.

170 KEW OBSERVATORY: h_a = 5 m. + 23 m.

	Hour G.M.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	Mean
	metres per second																								
Jan.	3·9	3·8	3·8	3·7	3·8	4·0	4·1	4·5	4·4	4·7	4·7	4·8	4·9	*5·0*	4·9	4·6	4·4	4·4	4·3	4·1	4·5	4·2	4·1	4·0	4·3
Feb.	4·0	4·2	4·2	4·2	4·4	4·1	4·1	4·2	4·5	5·0	5·4	5·5	*5·8*	5·6	5·6	5·2	5·1	4·5	4·3	4·6	4·5	4·5	4·2	4·1	4·7
Mar.	3·9	3·8	3·7	3·9	4·0	4·3	4·4	4·4	5·1	5·7	6·1	6·5	*6·6*	6·2	6·3	6·4	6·2	5·8	5·2	4·8	4·5	4·4	4·2	3·9	5·0
Apr.	2·8	2·5	2·4	2·3	2·2	2·4	2·9	3·4	4·0	4·3	4·3	4·6	4·4	4·8	*5·0*	4·8	4·9	4·7	4·2	3·6	3·5	3·2	2·8	2·7	3·6
May	3·8	3·5	3·5	3·5	3·3	3·3	3·8	4·2	4·8	5·3	5·7	6·0	5·9	5·7	5·7	5·9	5·3	5·1	4·7	4·2	3·9	3·9	3·8	3·8	4·5
June	3·1	3·1	2·8	2·9	3·1	3·5	3·6	4·2	4·4	4·7	4·9	5·1	4·9	5·0	*5·1*	4·9	4·8	4·7	4·3	4·0	3·5	3·5	3·3	3·0	4·0
July	2·0	1·9	2·0	2·3	2·2	2·3	2·7	3·0	3·4	3·7	4·1	4·0	4·1	4·1	*4·2*	4·1	4·1	4·1	4·0	3·5	2·9	2·7	2·3	2·1	3·2
Aug.	1·7	1·6	1·7	1·9	1·8	1·9	2·0	2·3	2·6	3·2	3·6	3·9	3·9	*3·9*	3·9	3·8	3·9	3·8	3·7	3·1	2·8	2·7	2·5	2·2	2·8
Sept.	2·1	2·0	2·1	2·0	1·9	2·1	2·2	2·5	3·1	3·7	4·2	4·5	*4·7*	4·5	4·3	4·2	4·0	3·3	2·7	2·8	2·5	2·3	2·1	2·1	3·0
Oct.	2·7	2·5	2·5	2·5	2·4	2·5	2·2	2·2	2·4	2·9	3·4	3·8	*3·9*	3·9	3·9	3·7	3·6	3·2	3·0	2·8	2·7	2·6	2·5	2·5	2·9
Nov.	2·9	2·7	2·7	2·5	2·7	2·5	2·4	2·6	2·9	3·1	3·5	3·8	3·9	4·0	*4·2*	3·9	3·5	3·4	3·4	3·5	3·3	3·4	3·2	3·0	3·2
Dec.	3·8	3·7	3·6	3·6	3·7	3·7	3·6	3·6	3·7	3·9	4·2	4·7	*4·8*	4·6	4·1	4·3	4·1	3·9	3·9	3·9	3·8	3·8	4·0	3·8	4·0
Annual	3·1	2·9	2·9	2·9	3·0	3·1	3·2	3·4	3·8	4·2	4·5	4·8	*4·8*	4·8	4·8	4·7	4·5	4·2	4·0	3·7	3·5	3·4	3·3	3·1	3·8

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

171 KEW OBSERVATORY: h_a = 5 m. + 23 m.

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	-	0	4	29	201	380	134	0	70	14	4 06	26	16 15 25
Feb.	-	0	1	1	243	369	59	0	80	11	21 08	20	1 20 50
Mar.	-	0	3	15	329	320	80	0	200	15	23 12	29	23 12 05
Apr.	-	0	0	0	141	455	124	0	210	8	27 16	17	11 14 10
May	-	0	2	3	253	389	99	0	220	12	4 13	24	17 22 30
June	-	0	0	0	214	380	126	0	250	10	12 12	19	12 17 15
July	-	0	0	0	128	403	213	0	70	10	9 14	17	9 13 15
Aug.	-	0	0	0	61	480	203	0	50	8	12 11	16	12 10 50
Sept.	-	0	0	0	73	491	156	0	230	10	2 11	21	13 12 55
Oct.	-	0	1	1	103	386	254	0	280	11	6 13	26	6 11 40
Nov.	-	0	0	0	98	461	161	0	200	9	11 12	21	11 04 45
Dec.	-	0	0	0	196	410	138	0	200	11	28 11	24	28 15 05
Year	-	0	11	49	2040	4924	1747	0	200	15	Mar. 23 12	29	Mar. 23 12 05

172 KEW OBSERVATORY

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	79·1	80·9	79·2	79·0	74·3	78·2	77·3	79·1	84·7	82·0	86·8	83·9	90·1	86·9	91·7	88·7	91·3	89·3	85·7	87·4	78·8	84·3	78·2	82·2
2	78·3	81·3	78·8	79·1	74·3	78·1	77·6	79·1	84·0	82·2	87·3	84·1	89·4	87·0	92·1	88·8	91·9	89·3	86·3	87·4	78·2	84·1	78·4	82·0
3	77·7	81·3	78·7	79·2	74·2	78·1	78·8	79·1	83·8	82·3	87·4	84·3	89·1	86·9	92·4	88·8	91·3	89·3	85·8	87·3	79·6	83·8	79·3	82·1
4	77·1	81·2	78·4	79·3	74·4	77·9	79·7	79·1	84·0	82·4	87·1	84·3	88·9	87·1	91·2	88·9	91·2	89·3	85·1	87·2	81·6	83·6	79·2	81·9
5	76·8	81·1	78·4	79·4	74·5	77·9	80·6	79·2	84·0	82·5	87·0	84·5	88·9	87·0	91·4	89·0	90·8	89·3	85·3	87·1	81·9	83·6	78·1	81·9
6	76·6	80·9	77·7	79·5	74·9	77·9	80·7	79·3	84·0	82·5	88·1	84·6	89·2	87·1	91·7	88·9	89·9	89·3	85·2	86·9	82·3	83·5	79·5	81·8
7	76·8	80·8	77·3	79·4	74·6	77·8	80·7	79·6	83·8	82·6	88·5	84·7	89·7	87·1	90·7	88·9	89·4	89·3	84·5	86·7	82·8	83·6	80·4	81·8
8	76·6	80·7	78·6	79·4	74·6	77·8	81·6	79·7	84·1	83·7	88·3	84·8	90·6	87·0	89·6	88·7	89·7	89·3	85·2	86·8	82·7	83·6	80·2	81·8
9	76·3	80·6	78·5	79·4	74·8	77·8	82·2	80·1	83·9	82·9	88·1	85·0	90·3	87·1	90·0	89·0	90·5	89·1	85·2	86·6	82·8	83·6	79·6	81·8
10	76·4	80·6	78·2	79·3	74·6	77·8	82·4	80·0	84·8	82·9	86·4	85·1	90·6	87·3	89·9	88·8	89·3	89·1	85·4	86·6	82·9	83·7	80·2	81·8
11	78·0	80·3	77·1	79·5	74·7	77·8	82·6	80·2	84·7	82·9	86·1	85·2	90·6	87·3	90·1	88·7	88·9	89·1	85·1	86·6	83·3	83·7	79·8	81·8
12	76·4	79·6	76·3	79·4	74·6	77·8	83·2	80·4	84·8	83·1	86·2	85·1	91·5	87·3	90·7	88·9	88·8	89·0	84·9	86·6	82·7	83·8	78·8	81·8
13	75·8	79·5	76·1	79·4	74·6	77·7	83·3	80·6	85·2	83·1	86·3	85·1	92·6	87·4	90·4	88·7	88·0	88·8	85·0	86·5	82·1	83·9	77·7	81·8
14	75·2	79·2	75·7	79·3	74·9	77·7	83·1	80·8	84·9	83·1	86·7	85·1	93·1	87·6	89·8	88·5	87·3	88·7	85·3	86·3	82·1	83·8	79·1	81·7
15	74·7	79·2	75·7	79·2	76·4	77·7	82·7	80·9	84·2	83·2	87·6	85·1	92·8	87·8	89·8	88·6	86·6	88·6	85·7	86·8	81·6	83·8	79·9	81·6
16	74·7	79·0	75·3	79·2	77·1	77·7	82·1	81·1	84·1	83·3	88·7	85·2	93·2	88·0	90·7	88·6	86·6	88·4	83·7	86·2	80·1	83·7	79·8	81·5
17	74·8	78·8	74·9	79·1	77·5	77·8	82·1	81·2	83·9	83·2	88·9	85·2	93·1	88·2	91·4	88·6	86·3	88·3	82·9	86·1	80·3	83·7	79·5	81·5
18	74·5	78·7	74·8	79·0	76·7	78·0	82·3	81·3	83·0	83·2	88·4	85·4	93·3	88·3	91·4	88·6	86·6	88·1	81·6	85·8	79·9	83·4	79·2	81·5
19	74·3	78·7	74·6	78·9	76·8	78·1	82·4	81·3	82·9	83·3	88·3	85·5	91·9	88·4	91·8	88·6	86·2	87·5	82·3	85·9	79·9	83·3	77·5	81·3
20	74·1	78·5	74·5	78·7	76·2	78·2	82·1	81·3	82·7	83·4	88·3	85·7	91·3	88·6	92·0	88·8	86·3	87·9	82·7	85·7	80·1	83·3	77·1	81·4
21	74·1	78·4	74·4	78·7	75·9	78·2	82·3	81·3	83·2	83·1	88·7	85·7	91·0	88·6	92·5	88·9	86·8	88·1	83·4	85·6	80·6	83·1	77·9	81·3
22	74·6	78·4	74·5	78·5	76·2	78·2	81·5	81·4	82·7	83·1	88·9	85·9	90·7	88·6	92·7	88·9	88·2	87·9	82·7	85·3	80·6	83·1	76·8	81·2
23	75·8	78·3	74·5	78·4	76·8	78·2	82·1	81·4	83·5	83·1	89·7	85·8	91·0	88·6	92·9	89·2	88·1	87·6	82·9	85·3	80·4	82·9	77·9	81·0
24	76·2	78·3	74·8	78·4	78·5	78·2	82·4	81·4	85·7	83·1	89·8	86·0	91·6	88·4	92·4	89·2	87·9	87·5	83·1	85·2	80·2	82·9	78·2	80·9
25	76·3	78·3	75·1	78·4	79·0	78·3	82·3	81·4	85·4	83·2	90·2	86·2	90·7	88·3	92·4	89·3	88·6	87·7	82·9	85·2	79·2	82·9	78·2	80·9
26	76·7	78·3	74·9	78·3	80·3	78·5	82·8	81·7	85·4	83·3	90·5	86·3	90·7	88·5	91·8	89·3	87·6	87·7	83·3	85·1	78·6	82·8	79·0	80·9
27	77·1	78·4	74·6	78·2	80·3	78·6	83·5	81·6	85·4	83·3	90·9	86·5	90·8	88·6	92·0	89·3	87·1	87·7	82·9	85·1	78·5	82·7	79·2	81·3
28	76·8	78·5	74·4	78·2	78·9	78·8	83·7	81·7	86·2	83·5	90·3	86·6	91·8	88·8	91·7	89·4	86·7	87·7	81·7	85·1	79·1	82·8	80·4	80·8
29	78·0	78·7			77·9	79·0	84·1	81·9	85·6	83·6	90·1	86·7	91·6	88·6	91·3	89·4	85·7	87·6	80·4	84·8	78·9	82·4	80·3	80·8
30	78·9	78·7			77·5	79·1	84·7	81·9	85·8	83·8	90·2	86·8	91·7	88·6	90·3	89·4	86·8	87·5	80·4	84·8	77·9	82·2	79·6	80·9
31	78·9	78·9			76·7	79·1			86·7	83·9			91·6	88·7	91·1	89·4			79·3	84·6			78·1	81·0
Mean	76·4	79·5	76·3	79·0	76·2	78·1	81·9	80·6	84·4	83·1	88·3	85·3	91·1	87·9	91·3	88·9	88·3	88·5	83·7	86·1	80·7	83·4	78·9	81·5
											Year		83·2	83·5										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 21h. TO 9h., G.M.T.

173 KEW OBSERVATORY

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	71·4	74·8	*61·8*	66·8	74·6	79·2	82·5	78·8	80·3	72·5	68·4	72·5
2	74·3	70·2	62·1	*65·1*	79·6	79·3	78·7	81·4	89·1	78·8	67·6	70·9
3	74·6	75·2	65·7	74·1	75·8	85·7	83·6	87·8	81·6	74·1	79·2	75·6
4	72·1	72·6	62·7	78·7	79·8	83·6	79·1	80·9	81·2	70·9	84·7	70·1
5	72·6	72·3	67·9	80·0	80·3	73·4	*77·1*	82·3	81·3	77·4	75·3	68·6
6	74·4	67·6	70·8	70·1	79·7	79·2	77·5	81·9	78·1	80·3	75·4	82·3
7	74·7	70·1	70·8	70·7	76·8	85·8	78·7	79·1	77·4	77·7	77·4	81·8
8	73·5	78·1	68·6	82·2	75·8	82·3	81·9	*72·5*	79·7	83·4	75·2	68·5
9	71·9	75·0	70·3	77·9	83·1	82·8	85·1	75·5	84·8	74·6	78·1	71·3
10	67·1	70·2	69·6	78·1	80·1	74·1	83·8	84·1	79·8	77·8	79·2	76·8
11	74·8	64·8	71·2	80·1	77·3	*73·1*	83·0	83·2	79·6	74·2	83·6	76·2
12	62·4	65·9	70·8	76·2	74·1	81·2	85·8	87·5	78·1	78·2	75·2	71·9
13	64·1	69·2	69·9	79·4	81·2	81·9	85·2	85·4	77·5	80·3	74·5	70·5
14	71·9	67·1	69·7	70·1	74·2	76·4	85·9	87·2	78·3	77·2	79·8	80·7
15	–	69·1	74·1	70·6	71·9	87·9	87·9	80·8	76·2	81·9	75·0	73·5
16	73·8	63·8	73·9	70·2	75·4	80·2	83·3	81·2	77·9	66·4	67·9	72·8
17	64·1	62·2	72·1	70·6	78·7	83·0	82·1	83·2	75·8	72·1	72·8	71·9
18	64·7	69·3	63·5	76·8	73·2	79·6	88·6	87·5	76·7	*64·8*	68·9	73·0
19	*61·8*	61·3	69·8	74·8	72·4	80·3	86·3	89·3	74·9	76·9	72·3	64·1
20	62·9	*56·3*	61·9	66·2	*69·1*	85·8	82·8	83·1	74·6	82·5	75·2	73·0
21	74·3	71·5	*61·8*	68·7	70·8	79·1	82·5	85·0	77·4	79·9	79·1	75·4
22	78·1	70·6	63·4	66·4	–	81·1	83·6	85·2	89·6	77·7	77·4	*63·6*
23	77·1	72·4	76·3	69·1	72·3	87·4	77·4	84·1	84·2	79·2	72·1	78·6
24	74·7	72·9	80·2	74·9	84·2	86·8	81·7	82·7	78·5	76·4	73·0	74·8
25	70·1	73·8	74·8	65·8	79·0	86·2	83·6	80·5	85·5	76·2	68·0	69·0
26	75·3	72·3	79·1	76·3	79·1	80·4	83·2	79·6	76·8	79·4	71·6	76·3
27	74·7	71·1	77·7	77·7	82·6	86·0	83·0	83·2	74·5	72·4	68·6	75·5
28	68·2	60·4	70·3	82·2	81·9	78·4	85·5	82·7	80·8	70·6	76·8	83·8
29	77·6		66·3	79·5	80·3	85·7	85·5	87·9	*72·9*	66·9	69·1	76·9
30	80·7		69·1	78·6	71·9	81·3	88·0	79·9	80·2	72·2	*66·6*	74·7
31	74·5		64·4		75·2		79·6	80·7		65·5		67·1
Mean	71·7*	69·3	69·4	73·9	77·0*	81·6	83·0	82·7	79·4	75·4	74·3	73·6
						Year	76·0					

*Mean for 30 days.

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0

The minimum "on the grass" refers to the interval from 21h. on the previous day to 9h. on the day to which it is entered.

Add 0·16° to obtain remperature in degrees Kelvin where $T(°K) = t(°C.) + 273·16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

Mean value for periods of twenty minutes about 14h. 30m.

F = Potential gradient, unit 1 v./cm.

174 KEW OBSERVATORY

	JANUARY *F*	FEBRUARY *F*	MARCH *F*	APRIL *F*	MAY *F*	JUNE *F*	JULY *F*	AUGUST *F*	SEPTEMBER *F*	OCTOBER *F*	NOVEMBER *F*	DECEMBER *F*
1	–	–	–	–	–	–						
2	–	2·59	–	–	–	–						
3	–	–	–	–	–	–						
4	–	–	–	–	–	–						
5	–	–	–	–	–	–						
6	–	–	–	–	–	1·56						
7	–	–	–	–	–	–						
8	–	–	–	–	–	–						
9	–	–	–	–	–	–						
10	–	–	–	–	–	–						
11	7·10	–	–	–	–	–						
12	–	–	–	–	1·51	–						
13	–	–	–	–	–	3·16						
14	–	–	–	–	–	–						
15	–	–	–	–	–	–						
16	–	–	2·35	–	–	3·23						
17	–	–	–	–	–	–			No observations available*			
18	–	–	–	–	–	–						
19	–	–	–	4·20	–	–						
20	–	–	–	5·78	–	–						
21	–	–	–	6·00	–	–						
22	–	–	–	–	–	–						
23	–	–	–	–	–	–						
24	–	–	2·64	–	3·28	–						
25	–	–	–	–	3·70	–						
26	–	–	–	1·78	–	–						
27	–	–	–	–	–	–						
28	–	–	–	–	–	–						
29	–		–	–	–	–						
30	–		–	–	–	–						
31	–		–		–							
Mean	–	–	2·49	4·44	2·83	2·65						
No. of days used	1	1	2	4	3	3						

*See note in introduction

TABLES 175-177. No data are available. See note in Introduction.

178 KEW OBSERVATORY Complete days only

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean	No. of days used
	milligrams per cubic metre																									
Jan.	0·17	0·13	0·11	0·11	0·08	*0·07*	0·08	0·11	0·15	0·18	0·17	0·20	0·18	0·17	0·16	0·17	0·19	0·21	0·24	*0·25*	0·24	*0·25*	0·22	0·20	0·17	30
Feb.	0·11	0·08	0·05	0·04	*0·03*	0·04	0·04	0·07	0·09	0·10	0·07	0·07	0·09	0·07	0·08	0·09	0·08	0·14	0·19	*0·22*	0·21	0·19	0·17	0·15	0·10	20
Mar.	*Instrument out of order due to freeze up																									
Apr.	0·09	0·08	0·06	0·06	0·07	0·07	0·09	0·08	0·09	0·07	0·06	0·06	0·05	0·05	*0·03*	0·04	0·06	0·08	0·15	0·16	*0·18*	0·17	0·16	0·14	0·09	30
May	0·03	0·02	0·03	0·03	0·03	0·03	0·05	0·04	0·04	*0·01*	0·02	0·02	*0·01*	*0·01*	*0·01*	0·02	0·02	0·03	0·05	0·06	0·06	0·06	*0·07*	0·05	0·03	29
June	0·04	0·04	0·04	0·05	0·06	0·06	*0·07*	*0·07*	0·04	0·03	0·03	0·02	0·02	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	0·02	0·02	0·03	0·04	0·04	0·04	0·03	28
July	*0·00*	*0·00*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	*0·00*	30
Aug.	0·06	0·05	0·05	0·05	0·05	0·05	0·07	*0·09*	0·07	0·06	0·05	0·03	0·02	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	0·02	0·03	0·05	0·05	0·05	0·04	30
Sept.	0·03	0·02	0·03	0·02	0·03	0·03	0·04	*0·05*	*0·05*	0·03	0·03	0·02	0·01	*0·00*	*0·00*	*0·00*	0·02	0·01	0·03	0·04	0·03	0·04	0·03	0·03	0·03	29
Oct.	0·08	0·07	0·07	0·07	0·06	0·06	0·06	0·06	0·07	0·07	0·07	0·07	0·06	*0·05*	0·07	0·09	0·10	0·17	0·20	*0·23*	*0·23*	0·21	0·18	0·15	0·11	26
Nov.	0·16	0·16	0·15	0·15	*0·14*	*0·14*	0·16	0·19	0·22	0·24	0·23	0·23	0·21	0·21	0·27	0·32	0·37	0·40	*0·43*	0·37	0·36	0·30	0·26	0·25	*0·25*	28
Dec.	0·13	0·11	*0·07*	*0·07*	*0·07*	*0·07*	0·08	0·11	0·14	0·18	0·24	0·20	0·19	0·16	0·19	0·23	0·24	0·25	0·31	*0·32*	*0·32*	0·30	0·26	0·20	0·19	18
Year	0·08	0·07	*0·06*	*0·06*	*0·06*	*0·06*	0·07	0·08	0·09	0·09	0·09	0·08	0·08	0·07	0·08	0·09	0·10	0·12	*0·15*	*0·15*	*0·15*	*0·15*	0·13	0·11	0·09	298
Winter	0·14	0·12	0·09	0·09	*0·08*	*0·08*	0·09	0·12	0·15	0·17	0·18	0·17	0·17	0·15	0·17	0·20	0·22	0·25	*0·29*	*0·29*	0·28	0·26	0·23	0·20	0·18	96
Spring	*Instrument out of action in March*																									
Autumn	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·06	0·05	0·05	0·05	*0·03*	*0·03*	*0·03*	0·05	0·06	0·09	0·11	*0·13*	*0·13*	*0·13*	0·11	0·09	0·07	55
Summer	0·03	0·03	0·03	0·03	0·04	0·04	*0·05*	*0·05*	0·04	0·03	0·03	0·02	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	*0·01*	0·02	0·03	0·03	0·04	0·04	0·03	0·03	117

*See note in introduction