

AIR MINISTRY
METEOROLOGICAL OFFICE

THE
OBSERVATORIES'
YEAR BOOK

1956

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

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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. Restrictions 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 Introductions 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 observation 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, 1956, 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.

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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 tabulation are given in the *Observatories' Year Book, 1938*. Only important changes and additions are mentioned here. Beginning with 1956 sums, in addition to means, have been given for each hour of the day and for each day in the main monthly tables of hourly values.

Atmospheric electricity

No changes were made in 1956.

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 1956 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
0.36	0.27	0.18	0.26	0.29	0.28	0.23	0.25	0.15	0.33	0.26	0.35	0.26

There were 9 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 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 judgment. The list of sudden commencements under (b) will usually be a little shorter than that given in the International Association of Terrestrial Magnetism and Electricity 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 be 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 (i.e. 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 1956 with those for 1955 it is noted that H increased by 5γ , D (west) decreased by $6' \cdot 3$ and Z increase by 36γ . The ranges between the extreme values recorded in 1956 were H 2,474 γ , D $6^{\circ}12' \cdot 9$ and Z 1,607 γ .

The K index is fully described in *Terrestrial Magnetism and Atmospheric Electricity*.* Briefly, a figure is allotted on a scale 0-9 to each three-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
Range in γ	0	10	20	40	80	140	240	400	660	1000

TABLE 1 - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1956			Mean 1932-53			1956			Mean 1932-53		
	H	D	Z	H	D	Z	H	D	Z	H	D	Z
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	195	157	187	100	102	104	88	113	113	63	90	78
February	130	110	114	124	113	123	59	79	69	78	100	92
March	293	179	210	216	149	176	133	128	127	135	132	132
April	348	211	274	204	120	163	158	151	165	128	106	122
May	359	181	209	195	111	141	162	130	126	122	98	106
June	225	112	140	150	94	109	102	80	84	94	83	82
July	177	99	105	158	96	110	80	71	63	99	85	83
August	231	128	152	178	111	135	105	92	91	111	98	101
September	194	126	159	209	133	170	88	91	96	131	118	128
October	164	121	146	188	129	164	74	87	88	118	114	123
November	272	170	215	107	101	112	123	122	130	67	89	84
December	60	81	76	89	93	96	27	58	46	56	82	72
Winter	164	129	148	105	103	109	74	93	89	66	91	82
Equinox	250	159	197	204	134	168	113	114	119	128	119	126
Summer	248	130	151	170	103	123	112	94	91	106	91	92
Year	221	139	166	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, 1956			Percentage distribution					
	H	D	Z	H		D		Z	
				1956	1932-53	1956	1932-53	1956	1932-53
γ				%	%	%	%	%	%
0 - 9	0	0	1	0.0	0.0	0.0	0.0	0.3	0.3
10 - 19	0	1	15	0.0	1.4	0.3	0.4	4.1	6.8
20 - 29	6	5	32	1.6	4.9	1.4	2.3	8.7	10.5
30 - 39	13	12	28	3.5	6.3	3.2	4.0	7.7	9.3
40 - 49	17	15	18	4.6	7.5	4.1	7.3	4.9	7.2
50 - 59	24	38	24	6.6	9.3	10.4	10.0	6.6	6.2
60 - 69	26	39	9	7.1	9.1	10.7	12.3	2.5	5.1
70 - 79	26	41	15	7.1	8.6	11.2	10.5	4.1	4.4
80 - 89	21	36	17	5.7	7.4	9.8	9.2	4.6	3.9
90 - 99	30	24	15	8.2	5.8	6.6	7.0	4.1	3.4
100 - 109	27	21	13	7.4	4.3	5.7	5.6	3.5	3.3
110 - 119	15	22	20	4.1	3.5	6.0	4.0	5.5	2.9
120 - 129	16	12	12	4.4	2.9	3.2	3.6	3.2	2.6
130 - 139	9	9	8	2.5	2.2	2.5	3.1	2.2	2.6
140 - 149	11	9	8	3.0	2.4	2.5	2.9	2.2	2.3
150 - 159	6	10	8	1.6	1.6	2.7	1.8	2.2	2.0
160 - 169	9	4	7	2.5	1.5	1.1	1.9	1.9	1.8
170 - 179	7	5	9	1.9	1.1	1.4	1.4	2.5	1.4
180 - 189	3	7	5	0.8	1.1	1.9	1.5	1.4	1.4
190 - 199	4	2	5	1.1	1.0	0.5	1.1	1.4	1.5
200 +	96	54	97	26.2	18.3	14.8	10.0	26.5	21.1
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 3 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53 WITH 1956 AS PERCENTAGE OF THIS

Year		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
	1956(%)	118	128	122	118	134	128	125	155	136
Winter	1932-53	41.1	24.4	7.87	7.7	15.1	4.65	116.6	85.0	13.84
	1956(%)	138	158	130	153	175	135	134	151	133
Equinox	1932-53	68.8	59.2	10.94	12.9	42.3	9.54	168.9	193.4	18.89
	1956(%)	99	114	124	105	141	137	109	124	137
Summer	1932-53	53.0	72.6	12.72	17.0	57.5	12.77	134.0	156.9	15.61
	1956(%)	131	121	116	142	115	120	147	209	130

"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 1956

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	1.08	0.99	1.02	1.01	1.08	1.13	1.08	1.07	1.01	1.01	0.94	0.96
d	D	1.36	1.09	1.51	1.58	2.08	1.39	1.07	1.36	1.14	1.41	1.57	1.27
q	H	0.91	0.93	1.07	1.12	1.26	1.30	1.21	1.30	1.11	1.01	0.86	0.92
d	H	2.00	3.42	4.96	2.45	3.20	2.92	1.55	3.22	2.10	3.18	4.44	1.02
q	Z	2.45	0.83	0.65	0.97	0.65	0.85	0.81	0.81	0.50	0.76	3.75	1.86
d	Z	2.22	1.43	1.54	1.06	1.26	1.67	2.77	1.86	1.52	2.02	1.82	1.92

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. 10	12	Jan. 11	21	606	245	511	
2a	Jan. 12	15	Jan. 13	03	364	373	299	
3a	Jan. 18	12	Jan. 19	03	674	315	475	
4a	Mar. 28	16	Mar. 29	10	700	349	464	
5a	Apr. 16	15	Apr. 17	07	694	268	349	
6a	May 15	09	May 17	09	2231	874	690	
7a	May 23	11	May 25	16	1323	710	833	
8a	Aug. 23	07	Aug. 26	11	2152	618	857	
9a	Oct. 20	09	Oct. 21	09	885	285	435	
10a	Nov. 10	14	Nov. 13	05	1083	723	588	
11a	Nov. 22	12	Nov. 23	03	634	269	521	

(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	
1b	Jan. 21	16.44			Yes	Yes	Yes	+23	+4	-6				Small
2b	Jan. 27	09.00	Jan. 28	07	No	No	No	+11	-13	0	789	565	385	
3b	Feb. 19	02.21			Yes	Yes	Yes	+35	-24	-12				Small
4b	Feb. 21	20.02			No	No	No	+20	-15	-6				Small
5b	Feb. 22	00.16			No	No	No	+32	-20	-12				Small
6b	Feb. 25	03.07	Feb. 26	03	Yes	Yes	Yes	+26	-24	-3	1150	392	502	
7b	Mar. 3	06.50	Mar. 4	07	Oscillatory			-56	?	+24	1110	695	700	
8b	Mar. 10	10.58	Mar. 11	05	Yes	?	?	+8	0	0	670	400	510	
9b	Mar. 21	16.19	Mar. 23	08	No	No	No	+26	-24	0	1070	549	589	
10b	Apr. 2	07.21			Yes	Yes	No	-4	+4	0				Small
11b	Apr. 21	08.53			Yes	No	Yes	+4	-18	0				See 12b
12b	Apr. 21	11.01	Apr. 23	05	Yes	Yes	Yes	+37	0	-8	1146	559	773	
13b	Apr. 25	11.33			Yes	No	Yes	+20	-7	-6				Small
14b	Apr. 26	21.11	Apr. 28	08	No	No	No	+38	-24	-90	1857	1534	1607	
15b	Apr. 28	17.27	Apr. 29	17	Yes	Yes	Yes	+42	-12	-9	863	437	538	
16b	May 13	22.22			No	No	No	+7	-5	0				Small
17b	May 20	06.38	May 21	06	Yes	Yes	Yes	-12	+16	0	346	146	317	
18b	June 23	18.06	June 25	08	No	No	No	+20	-12	-6	1197	342	542	
19b	July 8	01.02			No	No	Yes	+26	-8	-10				Small

(b) Disturbances with a S.C. *continued*

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
20b	Aug. 9	10.41	Aug. 10	06	Oscillatory			γ	γ	γ	305	136	297
21b	Aug. 10	13.10			Yes	Yes	Yes	+27	-6	-6		Small	
22b	Aug. 11	00.43			Yes	Yes	Yes	+56	-28	-24		Small	
23b	Aug. 12	02.28			No	No	No	+4	-10	-3		Small	
24b	Sept. 2	02.30	Sept. 3	21	No	No	No	+18	-20	-42	697	310	567
25b	Sept. 8	10.06	Sept. 8	22	Oscillatory			0	+30	0	1051	556	786
26b	Sept. 20	04.38			Yes	Yes	Yes	+24	-16	-2		Small	
27b	Oct. 26	13.12	Oct. 27	08	Yes	Yes	No	+24	-20	0	973	660	599
28b	Nov. 9	20.30	Nov. 10	09	No	Yes	Yes	+52	-2	-21	589	260	350
29b	Nov. 14	02.00	Nov. 16	09	No	No	No	+11	-18	?	979	446	730
30b	Dec. 24	01.47			No	No	No	+11	-2	-9		Small	
31b	Dec. 25	07.54			Yes	Yes	Yes	-9	+4	+5		Small	
32b	Dec. 30	06.32			No	Yes	No	+10	-15	0		Small	

(c) Disturbances due to Solar Flare

Serial Number	Date	Commence-ment	Max.	End	Movements (γ)			K	K'	Flare or S.F.E.
					H	D	Z			
1c	Apr. 20	09.54	09.56	09.58	-7	+4	0	2	2	S.W.F.
2c	Apr. 23	12.28	12.33	12.39	Complex			2	2	
3c	May 8	13.08	13.12	13.20	-8	-8	+2	2	2	S.F. S.W.F. S.E.A.
4c	June 16	12.50	12.53	12.57	-20	0	-3	3	3	
5c	Sept. 24	11.23	11.30	11.40	+16	+8	-4	2	1	
6c	Oct. 31	13.50	13.55	14.00	-4	-8	0	2	2	S.F. S.W.F.

All these movements with the exception of 3c must be considered doubtful S.F.E.

S.W.F. = Short wave fade-out.

S.F. = Solar Flare.

S.E.A. = Sudden enhancement of atmospherics.

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

6 LERWICK												
	JANUARY, factor 1.05				FEBRUARY, factor 1.04				MARCH, 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.
	<i>volts per metre</i>											
1	-291	-187	9	53	86	95	95	101	Z±	Z±	-561	131
2	86	89	119	83	59	92	62	83	6	99	88	96
3	66	89	-179	218	68	89	98	89	263	234	Z±	88
4	92	89	113	119	284	50	56	50	99	Z±	190	73
5	149	110	209	226	44	149	98	148	161	70	93	Z±
6	209	122	86	60	-	-	112	53	111	178	-	116
7	60	268	89	328	36	59	71	290	87	87	111	81
8	60	>805	104	206	27	98	154	148	163	-268	169	407
9	83	131	894	149	124	50	104	166	757	26	291	320
10	268	507	268	>626	65	189	89	104	262	247	294	332
11	140	229	Z±	Z±	94	124	127	145	291	-	274	250
12	69	59	107	179	89	375	68	71	125	191	287	232
13	75	137	113	Z±	348	147	53	171	116	261	290	261
14	134	101	60	235	118	-27	>443	115	145	267	299	212
15	Z±	98	298	298	112	147	Z±	236	116	145	209	145
16	250	89	244	30	121	147	139	124	125	644	>899	238
17	>566	83	402	89	118	112	126	>676	Z±	Z±	>696	217
18	>596	298	>864	Z±	176	147	138	126	101	142	93	145
19	>1103	119	60	209	68	97	88	88	116	87	87	122
20	95	-89	110	313	115	144	488	323	90	122	194	116
21	89	83	75	>1013	182	100	126	206	-582	116	116	64
22	89	89	163	104	26	100	56	176	87	204	116	Z-
23	143	104	98	113	68	118	153	135	131	145	291	437
24	624	89	Z±	119	126	-109	153	121	262	204	-	-
25	119	95	134	89	88	147	94	56	140	73	116	151
26	89	134	86	113	88	-21	62	62	175	140	204	234
27	89	252	-	134	Z-	161	234	Z-	175	292	73	184
28	-255	327	-	297	-94	132	126	-47	96	286	350	242
29	104	-3	0	>950	141	147	111	Z±	131	108	126	117
30	315	122	56	101					59	73	29	103
31	119	327	89	101					97	88	-	108
(a)	210	180	186	235	110	125	133	156	160	174	230	187
(b)	169	139	141	238	101	101	131	149	121	156	220	202
Mean	(a) 203 (b) 172				(a) 131 (b) 121				(a) 188 (b) 175			

	APRIL, factor 1.06				MAY, factor 1.11				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.
	<i>volts per metre</i>											
1	44	88	-	-	177	147	325	89	-116	87	116	87
2	-	-	-	44	>383	59	59	472	Z-	Z-	87	58
3	53	112	68	88	265	265	Z-	89	29	115	58	86
4	15	79	-	97	59	88	118	88	173	317	144	58
5	80	68	89	133	353	206	88	206	115	115	144	115
6	89	153	65	118	88	118	29	Z±	29	86	144	634
7	118	89	-59	-24	29	118	147	147	>720	288	547	490
8	59	104	89	139	59	88	59	88	230	86	-	144
9	127	95	-	74	59	206	Z-	118	158	158	221	95
10	101	577	-118	169	88	147	147	88	95	221	253	221
11	Z±	89	59	311	59	29	59	Z-	253	158	95	63
12	124	237	89	65	Z±	88	88	88	63	571	95	190
13	134	89	74	95	59	117	59	176	63	63	-32	95
14	83	74	252	104	146	88	58	58	32	63	95	127
15	89	89	149	59	58	88	29	88	64	95	64	159
16	128	128	86	98	29	88	58	146	95	159	-	95
17	39	149	535	98	263	117	117	88	64	127	159	159
18	89	68	89	149	29	58	29	117	96	191	128	319
19	0	149	134	131	87	29	87	58	96	64	64	64
20	104	104	267	128	58	87	145	233	96	192	128	160
21	98	187	386	353	116	>513	1077	320	96	128	128	128
22	148	95	53	290	146	0	116	145	96	193	128	64
23	178	198	98	169	87	-29	-116	-87	64	32	128	96
24	95	178	71	77	87	Z-	116	-116	97	64	32	64
25	59	15	-	59	29	29	29	0	32	129	97	161
26	36	89	98	74	29	29	29	-29	97	161	97	161
27	74	98	110	178	29	58	87	0	65	130	130	162
28	44	104	30	172	0	29	0	87	130	130	65	162
29	41	89	104	59	58	87	58	58	130	65	-	163
30	29	53	38	130	29	87	-87	87	98	130	-65	98
31					462	29	58	87				
(a)	81	126	137	129	107	145	121	124	119	149	134	156
(b)	85	137	114	113	82	134	111	112	95	154	122	162
Mean	(a) 118 (b) 112				(a) 124 (b) 110				(a) 139 (b) 133			

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.

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	JULY, factor 1.02				AUGUST, factor 1.02				SEPTEMBER, factor 0.99			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	294	321	-348	-240	89	119	119	119	83	111	111	139
2	321	376	349	617	89	89	148	179	83	83	83	138
3	241	509	295	80	119	89	60	119	110	137	165	137
4	80	107	323	699	89	89	60	89	110	110	164	274
5	618	431	162	134	60	89	119	119	137	164	192	164
6	-403	242	27	107	89	60	30	89	93	256	256	186
7	54	108	108	135	59	89	89	119	233	326	93	139
8	108	216	243	216	89	475	59	59	210	139	47	116
9	433	433	271	108	89	119	89	119	140	211	117	93
10	81	54	27	108	89	148	59	148	117	140	93	117
11	108	108	108	135	89	0	-475	0	-93	71	211	141
12	163	190	108	190	89	89	119	148	164	328	93	93
13	136	218	109	272	148	445	-535	-267	71	94	71	306
14	1035	163	136	109	89	119	119	89	94	0	71	118
15	190	218	54	326	89	118	89	118	48	71	71	-
16	245	408	163	272	30	237	118	178	-	-	-	-
17	218	409	-	-	118	89	148	177	-	-	95	95
18	-	-	124	124	148	118	177	177	95	166	71	71
19	93	93	62	93	118	118	89	176	119	310	119	549
20	62	-	-	124	117	147	-294	206	263	216	216	216
21	181	121	60	121	88	117	117	147	289	360	>793	>1082
22	60	362	121	60	116	116	146	146	795	844	-	362
23	60	121	241	241	116	232	145	174	339	290	217	217
24	89	148	89	119	87	116	87	116	339	242	217	581
25	417	238	60	-30	143	200	115	143	437	364	485	534
26	-	-	-	30	85	114	142	142	633	852	389	25
27	89	179	-	-	113	142	113	170	49	171	147	-195
28	-	-	-	358	84	112	112	169	196	221	-	-
29	119	148	89	-	84	168	140	168	74	98	-172	74
30	-	-	89	179	139	112	112	166	98	-49	148	124
31	148	148	89	148	111	139	139	139	-	-	-	-
(a)	217	233	140	196	99	142	109	137	201	236	182	234
(b)	207	232	124	175	99	142	57	124	171	208	176	218
Mean	(a) 197 (b) 185				(a) 122 (b) 105				(a) 213 (b) 193			

	OCTOBER, factor 1.03				NOVEMBER, factor 1.07				DECEMBER, factor 1.09			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	75	49	0	99	74	98	122	177	28	57	0	84
2	75	50	75	124	98	122	73	122	84	113	113	113
3	-25	50	75	-50	73	73	122	146	141	141	57	-
4	50	100	75	75	24	97	73	145	-	-	-	-
5	75	50	100	150	72	97	144	-97	-	-	-	-
6	100	75	125	125	72	72	120	48	-	-	-	84
7	75	101	125	50	48	71	95	333	142	113	142	113
8	101	126	75	278	212	212	260	260	85	57	85	85
9	25	126	126	75	-24	189	212	376	85	114	114	114
10	51	101	101	51	257	163	187	187	85	114	114	0
11	51	76	51	25	23	93	-	70	114	341	171	256
12	102	127	127	76	23	47	70	116	114	143	257	-
13	51	76	153	254	162	185	-253	162	-	-	-	-
14	153	76	330	254	69	92	367	46	-	-	-	171
15	280	535	485	434	114	46	69	69	57	200	171	85
16	255	102	153	459	68	23	-	46	200	143	143	171
17	153	-331	306	127	45	23	136	91	-	-	-	171
18	153	>280	153	331	0	68	158	203	115	86	458	171
19	178	102	102	102	-68	0	225	225	21	257	200	229
20	127	127	25	76	-158	203	180	225	115	57	115	143
21	127	102	-	-25	157	157	225	203	115	200	344	458
22	-25	102	127	153	157	157	179	179	229	171	-115	-57
23	127	177	127	177	134	246	157	157	29	57	486	200
24	102	76	>507	253	89	-290	179	-89	85	143	171	21
25	101	126	202	253	89	89	67	223	143	200	171	>343
26	101	101	101	126	44	-67	89	0	143	143	143	314
27	75	101	151	75	134	66	200	156	85	143	>285	171
28	250	275	175	326	307	2-	140	196	143	143	85	0
29	100	100	75	75	-84	84	168	84	114	114	29	85
30	75	75	149	99	84	84	-140	28	57	143	114	171
31	49	49	74	49	-	-	-	-	143	114	228	314
(a)	112	120	148	164	101	106	155	156	110	140	175	169
(b)	102	106	148	157	70	88	129	136	110	134	162	159
Mean	(a) 136 (b) 128				(a) 129 (b) 106				(a) 149 (b) 141			

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	156	154	170
	(b)	118	144	136	162
		(a) 154		(b) 140	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T.												Non-cyclic change†												No. of days used	Mean	
	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	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				
volts per metre																											
0a days only																											
Jan.	-1	0	-1	-9	-5	-11	-19	-9	-11	0	+1	+13	+8	+3	+7	-3	-3	-3	+21	+47	-17	+11	-3	-18	+36	2	105
Feb.	+5	-25	-43	-50	-46	-33	-23	+1	-7	-16	-18	-15	+1	+4	+6	+23	+39	+59	+53	+29	+21	+23	+9	+2	-5	5	110
Mar.	-32	-24	-40	-43	-27	-47	-24	-6	+13	-22	+8	+13	+28	+31	+26	+23	+35	+45	+33	+28	+26	+12	-21	-35	-12	11	170
Apr.	-13	-20	-48	-50	-49	-41	-5	-22	-13	-25	-28	-10	-16	-1	+11	+32	+43	+66	+64	+43	+31	+32	+8	+12	-13	6	153
May	-8	-7	-4	-1	+1	+3	-22	-21	-48	-44	-43	-40	-37	-6	+25	+29	+30	+61	+36	+37	+11	+14	+16	+18	-59	1	68
June	-14	-11	-18	-25	+10	+28	+18	-1	+4	-7	-34	-6	+8	+15	+8	+11	+15	-2	-2	-23	-16	-2	+23	+23	-3	9	129
July	+13	+54	+53	+30	+13	+49	+49	+34	+6	-5	-31	-47	-52	-58	-47	-52	-49	-32	-7	+25	+7	+28	+12	+7	-1	10	168
Aug.	-2	-7	-21	-9	-7	+11	+7	+4	-7	-12	-16	-7	-16	-9	-4	+2	+1	+1	+3	+20	+22	+23	+15	+9	-7	14	120
Sept.	+6	-5	+2	-24	-13	-11	+13	+10	-20	-30	-40	-59	-54	-35	-22	+2	+18	+20	+34	+60	+50	+56	+34	+11	+11	9	214
Oct.	-16	-25	-48	-44	-50	-25	-9	+7	+1	+8	+25	+44	+52	+34	+45	+19	+14	+30	-22	-19	-11	-12	-1	+6	+25	6	163
Nov.	-20	-15	-23	-16	-17	-21	-14	-16	-15	-32	-20	-5	0	+11	+26	+21	+17	+1	+26	+52	+51	+19	+5	-14	+20	9	117
Dec.	-57	-46	-64	-82	-86	-61	-51	-69	-58	-48	-38	-42	+12	+52	+47	+43	+111	+121	+103	+113	+124	+63	-12	-73	+93	2	229
Year	-139	-131	-255	-323	-276	-159	-80	-88	-155	-233	-234	-161	-66	+41	+128	+150	+271	+367	+342	+412	+299	+267	+85	-52	+7	84	145
Winter	-73	-86	-131	-157	-154	-126	-107	-93	-91	-96	-75	-49	+21	+70	+86	+84	+164	+178	+203	+241	+179	+116	-1	-103	+36	18	140
Equinox	-55	-74	-134	-161	-139	-124	-25	-11	-19	-69	-35	-12	+10	+29	+60	+76	+110	+161	+109	+112	+96	+88	+20	-6	+3	32	175
Summer	-11	+29	+10	-5	+17	+91	+52	+16	-45	-68	-124	-100	-97	-58	-18	-10	-3	+28	+30	+59	+24	+63	+66	+57	-17	34	121
1a and 2a days only*																											
Jan.	-11	+18	+69	-1	+10	-21	-5	-108	-16	-41	-15	-30	-17	+8	+7	+3	+22	+46	+41	+45	+47	+8	-16	-44	+17	3	116
Feb.	+5	+8	-9	-12	-7	-5	+12	+13	-31	+10	-33	-11	+4	+11	+22	-19	+33	+34	+45	-5	+26	-3	-86	-2	-3	5	98
Mar.	-59	-39	-56	-49	-11	-33	-32	-29	-9	-1	-9	+5	+31	+38	+32	+50	+46	+63	+45	+23	+14	+20	-1	-38	-49	3	138
Apr.	+11	+3	-11	-25	-25	-21	-4	+3	+11	-10	-24	-28	-45	-23	-16	0	-3	+5	+17	+33	+52	+101	+5	-5	+3	3	80
May	+1	+14	+27	+9	-19	+4	-14	-11	-2	-11	-19	-6	0	-4	-10	-2	+12	+13	+11	+8	+11	+22	-30	-5	+32	12	65
June	-17	-55	-61	-43	-31	-17	+43	+42	+29	+4	-6	+1	-9	+1	-55	-29	+52	+20	+18	+9	+65	+35	+33	-28	+2	10	136
July	+8	-34	-2	-6	-16	+27	+69	+78	+108	+92	+33	-15	-15	-48	-42	-52	-111	-88	-28	-8	+2	+20	+7	+20	-134	5	187
Aug.	-17	-2	-14	-4	-11	+4	+19	+20	+46	+24	+1	-6	-17	-19	-12	-19	-23	-8	-2	+11	+11	+16	-1	+6	+30	11	112
Sept.	-20	-2	+7	-15	-39	-7	+70	+28	+11	+11	+20	+12	-5	-30	-42	-49	-29	-29	-2	+16	+36	+34	+24	+2	+18	7	140
Oct.	-16	-18	-16	-19	-14	-26	-21	-19	+3	-5	-2	+10	+7	+5	+2	+4	+19	+16	+21	+34	+29	+6	0	0	+5	10	93
Nov.	+4	-19	-68	-19	-14	-14	-11	-10	-7	+15	+21	+11	-1	+19	-16	+7	+16	+21	+12	+23	+15	+16	0	-2	-11	9	125
Dec.	+1	-9	-2	-66	-18	-48	-46	-52	-4	+27	+42	+56	+47	0	-18	-32	-17	+34	+37	+72	+17	+7	-7	-21	-59	7	110
Year	-110	-135	-136	-250	-195	-157	+80	-45	+139	+115	+9	-1	-20	-42	-148	-138	+17	+127	+215	+261	+325	+282	-72	-117	-12	85	117
Winter	-1	-2	-10	-98	-29	-88	-50	-157	-58	+11	+15	+26	+33	+38	-5	-41	+54	+135	+135	+135	+105	+28	-109	-69	-14	24	112
Equinox	-84	-56	-76	-108	-89	-87	+13	-17	+16	-5	-15	-1	-12	-10	-24	+5	+33	+55	+81	+106	+131	+161	+28	-41	-6	23	113
Summer	-25	-77	-50	-44	-77	+18	+117	+129	+181	+109	+9	-26	-41	-70	-109	-102	-70	-63	-1	+20	+89	+93	+9	-7	-17	38	125

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*.

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	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
1	2b	9.7	1b	0.8	2c	6.1	(0a)	(...)	2b	3.3	2b	3.1
2	0a	...	0a	...	1c	2.7	(2b)	-	2b	3.5	2b	3.8
3	1b	2.2	1a	1.8	2c	3.5	1b	1.8	1b	1.4	1b	2.1
4	0a	...	1b	0.6	2c	3.4	(1b)	(0.7)	1a	0.3	2b	5.9
5	1a	0.2	0a	...	1c	2.5	1b	0.7	2b	4.0	0a	...
6	1c	1.5	(1a)	-	(0a)	...	1a	0.9	1b	2.3	1a	1.0
7	1c	2.4	1b	0.9	0a	...	2b	8.1	1a	0.9	1b	2.4
8	1c	2.3	0a	...	1b	2.6	1b	2.4	1b	2.3	(1a)	(0.1)
9	1c	1.6	1a	0.9	1b	0.7	(1b)	0.8	2b	5.1	0a	...
10	1c	2.3	1a	2.1	0a	...	1c	2.1	1b	0.5	0a	...
11	2c	6.2	0a	...	(0a)	...	1b	0.9	1b	2.6	0a	...
12	1a	2.3	1b	1.6	0a	...	1b	1.2	1b	0.8	1a	1.0
13	2c	3.9	1c	0.8	0a	...	1b	2.1	1b	0.4	2a	4.3
14	1b	0.2	1c	1.5	0a	...	1b	1.6	1b	2.3	1a	1.4
15	2c	3.7	(1b)	-	1a	0.1	1b	0.4	1a	0.4	1b	1.8
16	1c	2.7	0a	...	1c	0.8	1b	0.4	1b	1.5	(1a)	(0.4)
17	1c	2.7	1b	0.3	1c	3.0	1b	0.9	1b	0.9	1a	0.1
18	1c	1.3	0b	...	1a	0.3	1a	0.5	1a	1.9	1a	0.2
19	1c	0.9	0b	...	0a	...	1b	1.6	0a	...	1a	0.5
20	2c	4.9	1c	0.6	1a	0.2	0a	...	1a	1.1	1a	0.2
21	1c	1.4	1b	0.2	2c	8.0	0a	...	1c	1.0	0a	...
22	1b	0.3	1b	0.4	2b	3.3	0a	...	1a	1.2	0a	...
23	1b	0.6	1a	0.4	1b	0.4	0a	...	2b	16.5	0a	...
24	1c	0.7	1a	0.7	(0a)	...	0a	...	2c	11.0	0a	...
25	1b	0.6	1b	1.0	1b	1.1	(1a)	-	2a	9.4	0a	...
26	1b	0.3	2b	3.7	0a	...	1b	2.0	1a	1.7	1a	0.6
27	(1b)	-	2c	5.7	0a	...	1b	0.2	1a	0.3	2b	3.1
28	(2b)	-	2b	4.5	0a	...	2b	4.5	1a	1.3	1b	0.9
29	2c	8.4	1b	1.2	0a	...	0a	...	(0a)	...	(1b)	-
30	1a	0.2			0a	...	1a	2.2	1a	1.6	1a	2.9
31	1b	1.2			(0a)	...			1a	1.7		
Total	36	64.7	25	29.7	21	38.7	26	35.6	36	81.2	26	35.8
No. of days used	31	29	29	27	31	31	30	28	31	31	30	29
Mean	1.16	2.2	0.86	1.1	0.68	1.2	0.87	1.3	1.16	2.6	0.87	1.2

	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
1	1c	2.7	0a	hr.	1a	0.1	1b	1.2	0a	hr.	2b	hr.
2	1b	1.0	0a	...	0a	...	1a	1.3	0a	...	(1b)	-
3	1a	0.4	0a	...	0a	...	2b	3.3	0a	...	(2a)	-
4	1b	0.4	0a	...	(1a)	(0.2)	1b	2.1	1a	0.3	(1a)	-
5	1a	2.5	0a	...	0a	...	2c	3.4	1a	1.5	(1b)	-
6	2b	8.0	0a	...	1b	2.8	1a	0.1	0a	...	(0a)	...
7	0a	...	1a	0.1	1a	0.6	1a	0.1	0a	...	1a	0.1
8	1b	0.1	1a	0.3	1a	0.8	1a	0.1	0a	...	1a	0.3
9	1b	0.2	0a	...	1a	0.2	0a	...	1a	1.1	1a	2.7
10	1a	0.9	1b	0.3	0a	...	0a	...	1a	0.1	1b	1.5
11	0a	...	2b	11.7	(2c)	-	1a	0.7	(1b)	-	(1c)	-
12	0a	...	1a	0.3	1b	0.5	1a	0.9	1a	0.1	(1b)	-
13	0a	...	2c	7.8	0a	...	1a	1.5	(2a)	5.6	(2c)	-
14	0a	...	1a	2.0	1a	0.7	0a	...	2b	4.2	(2b)	-
15	1a	0.2	1a	0.4	(1a)	-	0a	...	1a	1.4	2c	3.6
16	0a	...	1a	1.8	(2a)	-	1b	0.7	(1a)	-	1a	0.3
17	(0a)	...	0a	...	(1a)	-	2c	4.1	0a	...	(1b)	(0.1)
18	(0a)	...	0a	...	1b	0.5	1c	1.1	0a	...	1c	1.4
19	(0a)	...	1a	0.6	1a	0.1	1b	1.5	1b	2.5	1c	2.5
20	(0a)	...	(1b)	-	0a	...	1a	0.8	1a	1.0	1a	0.7
21	0a	...	0a	...	0b	...	(2a)	3.4	0a	...	0a	...
22	1a	0.2	0a	...	0b	...	1a	1.8	1a	0.5	2a	6.2
23	0a	...	0a	...	0a	...	1b	2.9	1b	0.7	1c	2.1
24	0a	...	1a	0.6	0a	...	1c	1.7	2b	10.1	1c	2.1
25	(1b)	-	1b	0.4	0a	...	1c	1.1	2c	4.1	1c	1.0
26	-	-	1a	0.2	0b	...	1b	1.7	1b	3.0	1b	0.6
27	-	-	0a	...	2b	3.5	2b	3.6	1b	0.7	1c	1.4
28	-	-	1a	0.2	(2b)	-	2c	3.4	1c	1.4	1b	2.3
29	(2a)	-	1b	1.1	1b	2.1	1a	0.1	1c	1.8	1b	2.0
30	(2a)	-	1a	1.1	1a	1.9	0a	...	1a	2.5	1a	1.3
31	0a	...	0a	...	0a	...	0a	...	0a	...	0a	...
Total	17	16.6	19	28.9	22	14.0	31	42.6	25	42.6	34	35.9
No. of days used	28	25	31	30	30	25	31	31	30	28	31	23
Mean	0.61	0.7	0.61	1.0	0.73	0.6	1.00	1.4	0.83	1.5	1.10	1.6

Annual values: Character frequency 0 1 2
 No. of days used 100 208 55

Mean character figure 0.88 (363 days)

Duration: Total 466.3 hr.
 No. of days 337
 Mean 1.38 hr.

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 1956

	Hour G.M.T.																								Mean	Sum 27,000+
	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		
1	1144	1139	1140	1150	1156	1163	1165	1170	1170	1167	1164	1165	1166	1167	1173	1184	1239	1235	1211	1200	1197	1165	1143	1159	1172	1132
2	1149	1161	1172	1177	1175	1182	1184	1183	1180	1178	1177	1173	1171	1173	1177	1185	1197	1202	1206	1236	1220	1198	1173	1156	1183	1385
3	1158	1167	1164	1149	1157	1165	1170	1174	1180	1181	1181	1175	1173	1172	1175	1178	1178	1194	1204	1201	1202	1188	1134	1129	1173	1149
4	1136	1149	1162	1168	1165	1149	1157	1164	1172	1177	1175	1177	1176	1174	1178	1182	1181	1183	1211	1226	1198	1188	1182	1154	1174	1184
5	1165	1161	1154	1154	1153	1163	1168	1171	1173	1178	1180	1179	1175	1175	1176	1175	1174	1177	1192	1197	1192	1192	1188	1188	1175	1200
6	1172	1134	1146	1161	1165	1166	1168	1170	1170	1171	1173	1173	1173	1183	1195	1195	1235	1221	1204	1222	1204	1193	1187	1184	1182	1365
7	1175	1180	1180	1177	1176	1176	1174	1174	1177	1179	1182	1184	1181	1180	1181	1187	1226	1207	1195	1187	1184	1174	1157	1147	1181	1340
8 q	1149	1161	1168	1170	1170	1172	1173	1173	1175	1179	1182	1181	1179	1178	1178	1175	1174	1173	1181	1187	1178	1178	1176	1177	1174	1187
9	1177	1173	1169	1150	1132	1148	1157	1166	1168	1177	1184	1186	1187	1195	1195	1200	1197	1192	1192	1190	1178	1168	1167	1169	1176	1217
10	1172	1173	1171	1168	1163	1158	1149	1155	1163	1173	1177	1185	1181	1190	1206	1300	1345	1349	1304	1216	1187	1156	1123	1068	1193	1632
11 d	1012	908	970	1077	1103	1103	1125	1137	1157	1176	1201	1251	1241	1230	1254	1284	1313	1327	1309	1206	1210	1201	1192	1189	1174	1176
12	1181	1181	1177	1178	1178	1175	1174	1180	1182	1182	1185	1191	1190	1193	1192	1202	1230	1302	1347	1319	1191	1196	1182	1147	1202	1855
13	1103	1091	1137	1159	1160	1167	1175	1178	1178	1179	1182	1182	1181	1182	1182	1184	1183	1184	1186	1189	1187	1184	1181	1184	1171	1098
14	1186	1185	1184	1185	1181	1175	1178	1180	1181	1176	1176	1174	1175	1181	1191	1197	1192	1192	1196	1198	1185	1175	1175	1174	1183	1392
15 q	1175	1175	1178	1179	1178	1178	1177	1175	1172	1171	1174	1175	1178	1178	1182	1183	1181	1181	1181	1180	1177	1175	1178	1177	1177	1258
16 q	1177	1157	1168	1165	1172	1175	1174	1174	1174	1174	1174	1167	1165	1170	1175	1178	1177	1177	1177	1180	1177	1173	1171	1171	1173	1142
17	1171	1171	1172	1173	1174	1175	1175	1174	1174	1174	1178	1177	1176	1178	1181	1184	1192	1191	1196	1192	1191	1189	1184	1180	1165	1180
18 d	1092	1085	1119	1051	1096	1110	1134	1143	1154	1160	1166	1163	1171	1173	1177	1211	1219	1200	1208	1277	1235	1051	1078	1051	1147	524
19 d	964	1128	1158	1163	1143	1138	1160	1167	1181	1187	1191	1192	1206	1233	1296	1266	1262	1301	1325	1271	1218	1204	1185	1156	1196	1695
20 q	1147	1159	1173	1179	1178	1181	1181	1177	1178	1182	1185	1187	1185	1184	1184	1184	1185	1188	1188	1187	1184	1181	1179	1172	1179	1308
21	1161	1167	1172	1175	1175	1177	1177	1177	1180	1181	1182	1182	1180	1179	1180	1185	1191	1196	1189	1187	1198	1192	1182	1119	1179	1284
22	1001	1054	1056	1045	1032	1060	1127	1157	1168	1175	1178	1178	1174	1173	1173	1174	1176	1178	1182	1188	1192	1185	1181	1178	1141	385
23	1179	1177	1174	1170	1171	1168	1171	1175	1180	1185	1189	1190	1185	1180	1181	1178	1176	1177	1188	1214	1256	1207	1080	1153	1179	1304
24 d	1126	1130	1158	1173	1149	1060	1109	1126	1144	1167	1175	1192	1206	1233	1230	1232	1264	1335	1327	1241	1139	1144	1132	1095	1180	1317
25	1039	995	1037	1150	1165	1132	1125	1139	1167	1181	1186	1191	1192	1195	1202	1195	1191	1188	1200	1230	1229	1213	1195	1188	1164	925
26 q	1187	1167	1185	1182	1181	1178	1177	1177	1181	1181	1176	1176	1178	1181	1185	1185	1184	1181	1179	1177	1177	1177	1180	1177	1180	1320
27	1169	1164	1168	1174	1174	1171	1170	1169	1167	1161	1165	1166	1170	1175	1191	1195	1188	1202	1250	1200	1248	1235	1213	1194	1187	1479
28 d	1163	1085	1108	1105	1111	1038	1108	1142	1158	1164	1170	1184	1192	1200	1198	1200	1192	1192	1200	1228	1181	1180	1182	1180	1161	861
29	1184	1189	1192	1192	1186	1172	1172	1172	1175	1175	1172	1175	1178	1186	1212	1220	1228	1228	1192	1217	1200	1192	1192	1170	1190	1571
30	1125	1133	1158	1167	1167	1153	1156	1164	1167	1173	1177	1177	1181	1188	1201	1226	1237	1223	1217	1213	1207	1198	1170	1167	1181	1345
31	1156	1177	1170	1173	1150	1161	1167	1167	1173	1180	1182	1188	1185	1188	1197	1197	1209	1212	1216	1233	1232	1171	1172	1177	1185	1433
Mean	1139	1139	1150	1156	1156	1151	1161	1166	1171	1176	1179	1182	1183	1186	1194	1201	1210	1216	1218	1213	1199	1181	1168	1159	1177	
Sum 35,000+	295	296	640	839	836	689	977	1150	1314	1444	1538	1635	1683	1770	2001	2229	2515	2693	2749	2588	2152	1618	1210	915		Grand Total 875,776

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

12 LERWICK

JANUARY 1956

	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					
1	h. m. γ	γ h. m.	γ	h. m.	h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	158			°A.
2	00 37 494	379 22 09	115	18 01 16.1	-27.8 21 54	43.9	16 36 1264	1106 22 04	158	3, 2, 1, 2, 2, 4, 4, 4	22	1	78.0	
3	22 49 514	413 00 01	101	15 52 13.5	-11.7 20 03	25.2	19 54 1251	1127 00 01	124	3, 2, 2, 1, 2, 3, 4, 3	20	1	78.0	
4	21 57 513	431 23 10	82	16 38 14.7	-5.9 23 20	20.6	18 08 1208	1121 23 30	87	3, 2, 2, 2, 1, 2, 2, 4	18	1	78.3	
5	19 20 535	445 11 46	90	17 48 15.4	-30.4 19 13	45.8	19 08 1293	1125 00 14	168	3, 2, 2, 1, 2, 2, 5, 3	20	1	78.3	
4	19 10 501	451 03 48	50	18 22 12.3	-18.4 19 01	30.7	18 53 1216	1142 04 09	74	2, 3, 2, 1, 1, 2, 4, 2	17	1	78.0	
6	16 23 613	437 14 00	176	16 26 23.9	-13.5 20 40	37.4	16 23 1302	1125 01 30	177	3, 1, 1, 1, 3, 5, 4, 3	21	1	79.2	
7	21 30 494	445 16 11	49	15 52 18.0	-14.9 16 47	32.9	16 37 1247	1143 23 38	104	1, 1, 0, 1, 1, 4, 3, 3	14	1	79.0	
8	21 56 487	451 10 45	36	13 49 10.9	-1.3 00 05	12.2	19 14 1194	1144 00 10	50	2, 1, 1, 1, 1, 0, 2, 1	9	0	78.7	
9	05 51 495	425 11 37	70	13 26 16.9	-0.9 03 27	17.8	15 30 1206	1122 04 28	84	2, 2, 1, 2, 3, 3, 2, 2	17	0	78.0	
10	15 34 699	305 23 54	394	16 54 33.5	-22.2 18 13	55.7	16 07 1384	1020 23 54	364	0, 2, 2, 2, 3, 5, 5, 5	24	1	77.5	
11 d	18 25 659	93 00 52	566	18 01 23.1	-24.7 18 58	47.8	18 43 1352	873 01 14	479	6, 4, 3, 4, 3, 3, 6, 2	31	1	78.1	
12	19 57 746	382 20 39	364	19 07 34.6	-54.1 20 01	88.7	19 15 1371	1109 24 00	262	0, 1, 1, 3, 2, 5, 6, 4	22	1	79.2	
13	18 17 484	398 00 20	86	14 42 11.2	-5.5 00 15	16.7	19 22 1189	1072 01 10	117	4, 2, 2, 1, 1, 1, 1, 1	13	0	79.0	
14	09 58 485	440 09 23	45	13 04 10.6	-4.3 21 57	14.9	19 10 1209	1170 21 17	39	1, 2, 1, 3, 2, 2, 2, 3	16	0	79.0	
15 q	08 14 483	457 12 09	26	13 43 10.7	1.3 23 41	9.4	15 00 1184	1170 09 18	14	0, 0, 1, 1, 1, 1, 1, 1	6	0	79.0	
16 q	01 17 490	459 10 10	31	02 38 12.4	1.5 00 04	10.9	19 40 1186	1147 01 19	39	3, 1, 1, 1, 1, 1, 1, 1	10	0	78.8	
17	23 53 487	455 12 43	32	14 42 14.0	-6.9 22 57	20.9	16 49 1198	1140 24 00	58	0, 1, 1, 0, 2, 1, 1, 3	9	0	78.9	
18 d	19 27 627	-47 21 47	674	14 48 26.0	-48.8 21 53	74.8	19 25 1302	987 21 42	315	4, 4, 3, 2, 3, 3, 6, 7	32	1	78.8	

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 1956					
	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	Sum 10,000+
1	441	444	439	446	444	459	463	463	470	465	457	460	460	461	468	465	463	463	472	489	469	476	456	457	460	460	1050
2	450	454	464	452	453	464	468	455	466	466	459	451	453	459	464	474	474	474	479	483	466	466	465	465	457	462	1095
3	458	474	462	456	450	470	471	469	469	462	452	450	455	464	470	468	474	479	483	466	466	470	472	461	466	467	1176
4	463	467	468	471	472	471	470	471	467	462	465	458	453	458	462	466	471	474	476	468	469	472	472	469	467	467	1215
5	471	472	472	469	468	474	476	474	472	465	461	459	462	461	469	477	478	480	478	474	482	456	453	458	469	469	1261
6	458	464	471	470	472	477	482	475	473	468	462	454	464	468	468	471	477	476	480	478	480	478	477	475	472	472	1318
7 q	475	475	476	476	475	477	479	480	475	466	458	456	461	469	477	479	481	481	481	482	482	476	468	476	474	474	1381
8 q	474	477	477	480	482	483	482	481	476	468	465	465	466	468	471	476	481	481	482	481	481	481	481	481	478	477	1437
9 q	479	472	472	476	477	482	487	485	479	474	470	466	467	470	472	477	479	481	485	484	484	482	481	482	478	478	1463
10 q	482	481	482	482	482	485	488	487	483	475	469	468	473	477	479	479	480	488	488	477	480	478	480	480	480	480	1523
11 d	480	484	488	474	488	497	491	490	489	477	475	471	476	468	474	477	482	471	485	510	481	446	400	412	474	474	1386
12 d	357	357	435	431	433	428	457	475	466	420	429	428	448	458	464	465	467	475	479	477	480	481	478	470	448	448	758
13	466	469	469	471	472	475	474	475	466	460	451	437	442	453	460	471	471	469	472	475	478	470	472	474	466	467	1192
14 q	474	473	477	481	478	480	482	483	480	466	455	448	449	451	461	470	473	481	479	481	481	481	481	482	481	473	1347
15	481	481	481	482	484	487	486	485	480	471	456	449	449	453	468	474	481	482	480	481	477	477	481	482	475	475	1408
16	491	485	478	461	485	481	495	486	479	464	450	449	459	451	474	472	480	501	483	462	469	477	476	476	474	1384	
17	472	465	475	481	484	487	489	486	482	471	454	441	447	456	464	465	470	480	480	482	482	483	482	482	473	1360	
18	480	479	480	482	482	485	486	490	483	469	453	445	450	455	464	476	476	472	477	479	476	479	481	481	474	1380	
19	481	481	490	495	497	497	489	490	481	471	463	442	456	450	449	472	477	474	482	475	478	475	471	475	475	1401	
20	477	474	474	475	477	478	480	481	474	464	457	448	451	459	457	463	467	473	475	477	478	480	482	484	471	1305	
21	481	480	479	477	480	478	479	477	468	458	448	445	453	462	465	470	469	476	478	482	490	489	491	491	474	1366	
22	499	488	485	477	487	492	488	485	477	470	459	470	465	481	480	460	467	475	474	477	477	477	482	481	478	1473	
23	480	481	479	481	480	478	479	476	471	464	456	450	454	466	481	497	474	475	481	472	471	474	474	475	474	1369	
24	477	476	476	479	480	480	481	475	466	457	448	448	458	462	470	476	482	485	484	484	488	498	487	481	475	1398	
25 d	480	479	479	472	455	450	431	235	225	321	381	442	450	536	586	854	1078	876	605	575	492	434	422	393	506	2151	
26	373	406	427	428	425	427	430	434	429	439	430	422	458	463	448	450	453	455	466	478	484	485	455	450	443	622	
27	436	351	372	433	440	453	453	441	441	448	440	433	442	449	452	459	461	462	474	466	443	456	434	373	438	512	
28 d	436	452	401	367	459	462	473	470	459	455	440	435	444	455	462	470	474	488	488	459	465	455	448	442	452	859	
29 d	487	435	443	410	403	476	470	475	446	421	430	434	433	455	502	509	539	520	478	480	468	461	458	420	461	1053	
Mean	464	461	465	463	468	474	475	467	462	456	451	449	455	463	472	486	497	492	483	481	476	473	468	463	469		
Sum 13,000+	459	376	471	435	564	733	779	549	392	237	93	21	198	438	681	1082	1399	1267	1012	946	817	712	566	416		Grand Total 326,643	

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

14 LERWICK (D)		10° +																				FEBRUARY 1956					
	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	Sum
1	-8.8	-10.1	-8.9	-2.6	1.3	1.5	1.5	5.1	5.9	8.7	7.8	9.2	11.9	9.7	8.3	9.3	6.8	8.6	6.7	4.9	-1.4	-2.6	0.5	-0.1	3.1	73.2	
2	-1.6	-1.3	2.5	1.5	2.2	2.4	1.9	3.0	4.7	6.5	8.0	8.6	9.2	10.4	9.4	9.4	8.5	-3.5	1.1	8.5	2.7	3.8	-0.5	0.5	4.1	97.9	
3	-3.5	-1.1	-0.2	3.7	7.5	5.1	4.6	5.1	4.6	6.1	6.7	8.5	8.0	10.4	10.2	8.0	6.5	7.6	9.4	-1.3	4.6	5.6	-5.0	-4.0	4.5	107.1	
4	1.3	3.7	3.6	3.7	3.6	3.5	4.1	4.5	3.7	4.1	6.6	7.5	8.4	9.9	8.7	7.2	6.6	6.1	8.2	3.9	5.6	0.3	0.3	4.5	5.0	119.6	
5	5.1	4.6	4.8	3.7	3.8	2.5	2.9	3.4	3.6	4.1	6.3	8.4	10.9	9.5	9.1	8.0	6.6	6.5	5.7	0.3	-3.3	-4.3	-4.1	0.4	4.1	98.5	
6	-5.1	-3.1	5.7	5.3	3.8	3.9	3.8	4.1	3.8	3.9	7.3	8.4	7.7	9.5	8.9	8.1	8.0	4.7	5.8	6.4	5.6	5.3	4.9	4.6	5.1	121.3	
7 q	4.8	6.1	5.8	3.8	4.6	4.4	3.7	3.6	3.7	3.2	4.3	6.4	8.3	8.7	8.6	7.8	7.0	7.0	6.7	6.5	6.8	5.6	1.3	0.7	5.4	129.4	
8 q	1.7	3.9	5.5	5.7	5.1	4.7	4.1	3.5	3.3	3.9	5.6	8.7	9.9	11.2	10.5	9.6	9.2	8.3	7.3	6.6	6.1	5.1	5.4	4.3	6.2	149.2	
9 q	2.9	1.8	4.1	4.4	4.4	3.9	3.5	3.5	2.9	3.2	4.7	7.2	7.7	8.7	9.3	8.9	8.7	8.3	8.0	7.3	6.3	5.4	5.1	4.6	5.6	134.8	
10 q	5.2	5.8	6.3	5.8	5.7	5.3	5.1	4.0	3.5	3.2	5.5	8.3	9.2	9.4	8.9	8.0	7.1	7.3	8.5	7.8	6.7	5.3	4.1	4.6	6.3	150.6	
11 d	3.7	0.3	-1.3	-0.2	3.6	3.8	4.4	4.4	3.9	3.5	6.3	9.4	13.0	15.9	15.8	15.7	20.7	15.9	11.3	4.1	-12.8	3.5	-10.9	-8.3	5.2	125.7	
12 d	-14.6	-11.6	-0.7	2.2	3.9	12.8	18.1	6.7	6.1	5.1	8.5	9.2	9.9	10.4	8.9	7.5	6.6	7.0	7.6	5.9	5.7	4.6	3.9	2.8	5.3	126.5	
13	2.2	2.6	4.1	4.1	4.7	4.6	7.3	7.5	5.8	5.1	5.7	10.2	9.7	10.9	10.9	10.2	7.3	6.1	5.8	5.8	5.1	3.2	2.5	5.1	6.1	146.5	
14 q	5.4	5.5	6.3	3.5	3.8	3.8	3.5	2.8	2.5	1.3	2.5	5.6	8.0	9.4	9.9	9.2	7.5	6.6	6.3	6.1	5.5	5.1	4.7	4.7	5.4	129.5	
15	5.1	5.6	6.1	5.8	5.5	5.1	4.5	3.5	1.8	1.5	2.7	6.5	9.4	10.6	11.5	10.4	8.9	9.4	9.1	8.2	5.9	3.9	4.4	1.9	6.1	147.3	
16	2.5	2.9	3.7	7.5	1.3	-2.3	0.3	2.2	1.5	0.9	4.1	8.9	14.4	15.8	17.9	15.4	13.5	9.2	-1.4	2.6	-2.2	0.3	2.7	3.2	5.2	124.9	
17	5.8	8.4	5.4	6.3	5.3	4.1	3.7	3.5	1.7	1.8	4.6	7.3	9.2	10.9	11.2	9.4	8.6	8.2	8.3	7.3	6.3	5.6	4.6	4.6	6.3	152.1	
18	5.1	5.1	4.6	5.3	6.1	5.5	5.1	3.8	3.2	1.9	2.6	5.6	9.3	10.4	10.4	9.6	7.5	7.3	7.4	6.4	4.6	4.6	4.6	5.1	5.9	141.1	
19	5.1	5.2	5.6	3.8	3.9	3.4	5.5	3.8	1.5	0.5	3.6	8.7	15.3	13.3	13.7	11.5	11.1	8.5	9.0	7.3	5.1	4.7	-1.4	4.6	6.4	153.3	
20	4.7	5.1	5.5	5.1	4.6	4.5	4.1	3.2	2.2	1.6	3.6	5.7	10.7	12.9	13.5	10.8	7.8	7.2	6.5	5.7	4.8	4.7	5				

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 1956

	Hour G.M.T.																								Mean	Sum 27,000+	
	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			
1	1146	1131	1140	1139	1155	1165	1171	1174	1175	1179	1175	1177	1177	1179	1192	1203	1215	1222	1214	1196	1194	1196	1187	1177	1178	1279	
2	1165	1165	1180	1183	1185	1187	1185	1185	1185	1178	1182	1182	1185	1182	1182	1181	1187	1192	1213	1213	1201	1206	1191	1187	1178	1475	
3	1168	1182	1174	1168	1153	1153	1170	1180	1181	1181	1185	1184	1185	1184	1181	1182	1184	1188	1223	1205	1214	1191	1191	1147	1481		
4	1157	1172	1177	1177	1176	1178	1182	1184	1185	1184	1181	1185	1185	1185	1185	1189	1191	1191	1192	1201	1198	1195	1185	1185	1418		
5	1187	1185	1184	1185	1182	1181	1181	1182	1184	1184	1185	1187	1187	1186	1186	1185	1183	1182	1187	1196	1180	1180	1177	1168	1400		
6	1171	1154	1169	1179	1182	1181	1178	1181	1181	1182	1181	1184	1185	1185	1186	1189	1187	1141	1187	1186	1185	1185	1184	1184	1307		
7 q	1183	1180	1177	1175	1177	1177	1178	1180	1184	1191	1187	1185	1183	1183	1182	1181	1179	1178	1177	1177	1178	1179	1185	1194	1349		
8 q	1180	1179	1178	1177	1176	1176	1176	1178	1178	1177	1178	1177	1177	1179	1178	1180	1179	1181	1181	1179	1179	1180	1179	1178	1282		
9 q	1174	1178	1178	1177	1177	1176	1173	1173	1174	1173	1173	1172	1173	1173	1177	1178	1178	1175	1175	1177	1178	1179	1177	1176	1219		
10 q	1175	1176	1175	1173	1175	1173	1171	1170	1170	1170	1169	1167	1165	1171	1173	1175	1177	1175	1176	1191	1185	1187	1183	1180	1202		
11 d	1181	1176	1136	1171	1171	1167	1167	1167	1167	1169	1165	1165	1168	1177	1191	1195	1201	1214	1206	1226	1243	1122	1084	1101	1172	1130	
12 d	1060	1061	1065	1082	1027	1081	1095	1120	1147	1173	1177	1194	1200	1197	1191	1188	1187	1182	1178	1179	1179	1177	1177	1181	1146	498	
13	1182	1183	1184	1184	1184	1181	1178	1171	1173	1173	1177	1183	1185	1184	1188	1191	1191	1187	1187	1184	1182	1188	1182	1175	1182	1377	
14 q	1169	1168	1163	1162	1171	1173	1175	1178	1178	1177	1175	1175	1178	1176	1176	1178	1178	1179	1180	1180	1178	1175	1174	1173	1174	1187	
15	1172	1174	1174	1175	1177	1176	1177	1177	1178	1178	1179	1174	1174	1174	1174	1181	1183	1185	1187	1191	1200	1202	1195	1157	1180	1314	
16	1142	1157	1167	1153	1089	1118	1134	1153	1167	1170	1172	1170	1173	1185	1194	1229	1241	1273	1251	1227	1221	1189	1165	1155	1179	1295	
17	1147	1136	1142	1157	1169	1173	1174	1177	1179	1178	1177	1175	1171	1174	1173	1177	1181	1182	1180	1182	1181	1180	1180	1179	1177	1172	1130
18	1177	1177	1177	1177	1177	1175	1173	1172	1174	1178	1178	1176	1173	1173	1174	1180	1191	1191	1187	1185	1186	1182	1179	1177	1179	1289	
19	1175	1175	1170	1171	1171	1169	1173	1169	1176	1177	1175	1181	1181	1197	1191	1192	1189	1185	1184	1191	1187	1183	1184	1178	1180	1324	
20	1174	1177	1176	1176	1175	1176	1177	1179	1182	1185	1182	1182	1179	1188	1196	1195	1189	1185	1185	1182	1182	1180	1179	1177	1182	1358	
21	1177	1177	1177	1177	1173	1176	1176	1178	1182	1182	1182	1180	1177	1177	1177	1180	1187	1181	1178	1179	1177	1178	1177	1177	1178	1282	
22	1165	1167	1161	1161	1164	1163	1170	1173	1179	1182	1183	1173	1171	1171	1181	1189	1181	1180	1185	1185	1183	1180	1181	1180	1175	1210	
23	1181	1180	1181	1179	1177	1176	1176	1178	1181	1181	1182	1185	1186	1180	1175	1184	1194	1223	1226	1216	1211	1196	1185	1177	1177	1188	1506
24	1175	1177	1179	1178	1178	1177	1175	1179	1182	1183	1179	1182	1176	1177	1175	1175	1180	1189	1192	1190	1184	1175	1177	1178	1180	1312	
25 d	1180	1180	1179	1173	1136	1115	1114	1188	1143	1151	1184	1198	1226	1258	1301	1274	1185	1350	1392	1285	1122	1191	1206	1190	1205	1921	
26	1132	1149	1189	1196	1198	1199	1195	1190	1192	1187	1189	1191	1202	1210	1212	1210	1207	1201	1194	1197	1236	1254	1229	1210	1199	1769	
27	1173	1094	1084	1138	1160	1166	1179	1181	1192	1195	1192	1191	1187	1195	1201	1196	1199	1199	1247	1236	1200	1167	1083	1177	1253	1076	
28 d	1122	1166	1158	1070	1139	1163	1174	1179	1184	1181	1184	1184	1183	1192	1195	1212	1235	1242	1273	1221	1222	1198	1132	1086	1179	1295	
29 d	943	1020	1096	1116	1089	1132	1156	1178	1181	1187	1183	1182	1194	1188	1204	1270	1326	1289	1216	1200	1230	1222	1185	1089	1170	1076	
Mean	1156	1159	1162	1163	1161	1166	1169	1175	1177	1179	1180	1181	1182	1185	1190	1195	1197	1202	1202	1199	1194	1188	1178	1165	1179		
Sum 33,000+	533	596	690	729	663	803	901	1071	1126	1194	1216	1245	1281	1374	1504	1654	1718	1858	1860	1769	1614	1454	1172	777		Grand Total 820,802	

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

16 LERWICK

FEBRUARY 1956

	TERRESTRIAL MAGNETIC ELEMENTS									3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 + °A.						
	Horizontal force			Declination			Vertical force												
	Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range										
1	h. m.	γ	h. m.	γ	h. m.	h. m.	h. m.	γ	h. m.	γ									
1	19 34	531	403	00 47	128	12 37	12-8	-12-7	02 20	25-5	17 47	1227	1111	01 06	116	3, 2, 2, 2, 2, 2, 3, 3	19	1	77-5
2	17 25	488	439	23 07	49	12 50	12-3	-18-9	17 49	31-2	17 43	1230	1156	01 10	74	3, 2, 2, 2, 1, 4, 4, 3	21	1	77-1
3	22 40	514	442	23 54	72	14 32	11-6	-18-3	22 53	29-9	19 29	1238	1129	23 52	109	2, 3, 2, 1, 2, 1, 3, 4	18	1	76-7
4	18 12	489	444	12 26	45	13 04	12-7	-6-7	21 12	19-4	21 17	1213	1136	00 00	77	3, 1, 1, 2, 2, 1, 2, 3	15	0	77-7
5	20 36	510	446	23 30	64	12 48	11-4	-7-8	20 04	19-2	19 17	1204	1157	20 42	47	1, 1, 0, 1, 1, 1, 3, 3	11	0	77-7
6	06 30	486	448	11 26	38	14 07	10-6	-14-6	00 50	25-2	17 48	1195	1150	01 22	45	4, 1, 1, 1, 1, 2, 1, 1	12	0	78-5
7 q	20 07	485	453	11 14	32	13 09	9-6	-1-6	22 50	11-2	22 18	1201	1174	03 04	27	1, 1, 0, 1, 1, 0, 0, 2	6	0	78-8
8 q	05 30	485	462	12 15	23	13 51	12-0	1-3	00 00	10-7	23 54	1182	1175	05 23	7	1, 0, 0, 1, 1, 0, 0, 1	4	0	78-0
9 q	06 31	488	464	12 04	24	14 25	9-4	-0-2	00 54	9-6	20 55	1181	1170	00 35	11	2, 0, 0, 1, 1, 0, 0, 1	5	0	78-4
10 q	17 45	492	466	11 13	26	12 05	9-9	2-6	09 12	7-3	19 29	1194	1164	12 25	30	0, 0, 1, 1, 1, 1, 2, 1	7	0	78-0
11 d	19 45	565	340	22 06	225	16 52	22-4	-23-2	20 30	45-6	20 24	1282	1020	22 00	262	3, 3, 1, 2, 3, 3, 5, 5	25	1	78-0
12 d	08 18	494	245	00 56	249	06 24	23-5	-51-6	01 03	75-1	12 07	1204	993	04 13	211	6, 4, 4, 3, 2, 1, 1, 2	23	1	77-9
13	07 19	483	433	11 51	50	13 27	12-1	-0-2	00 26	12-3	14 56	1195	1167	07 20	28	1, 1, 2, 2, 2, 2, 1, 2	13	0	77-6
14 q	03 09	485	443	11 29	42	13 53	10-2	0-7	09 10	9-5	17 52	1181	1158	03 10	23	1, 1, 1, 2, 1, 1, 0, 1	8	0	77-6
15	23 10	494	447	12 10	47	14 18	12-1	-0-5	23 50	12-6	21 57	1206	1147	23 50	59	0, 0, 1, 2, 1, 1, 1, 3	9	0	77-4
16	17 52	518	436	03 34	82	14 40	18-9	-8-2	18 23	27-1	17 46	1307	1080	04 15	227	2, 4, 3, 3, 3, 4, 4, 3	26	1	77-5
17	07 25	493	436	11 32	57	14 21	11-8	-0-1	07 32	11-9	18 05	1184	1132	01 52	52	2, 2, 2, 2, 1, 2, 1, 0	12	0	77-3
18	07 13	493	443	11 42	50	14 18	11-0	0-7	10 09	10-3	16 43	1194	1170	07 15	24	0, 1, 1, 2, 1, 1, 1, 1	8	0	77-2
19	02 26	514	419	11 38	95	14 49	17-6	-5-8	22 21	23-4	13 31	1200	1161	02 31</					

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

17 LERWICK (H) 14,000y (0.14 C.G.S. unit) + MARCH 1956

	Hour G.M.T.		14,000y (0.14 C.G.S. unit) +											MARCH 1956												
	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	Sum
1	463	466	466	456	464	474	477	472	459	446	424	436	438	448	457	465	474	478	486	475	472	439	451	460	460	3046
2	469	461	452	444	459	429	457	466	443	449	451	432	451	462	467	469	478	493	486	480	485	469	468	472	462	3092
3 d	459	421	401	436	336	402	427	474	480	421	372	394	553	558	592	715	636	777	617	566	337	90	60	66	441	2590
4	310	360	423	427	397	387	437	452	447	433	423	427	443	456	485	484	448	446	452	457	462	461	462	467	435	2446
5	464	461	462	462	464	467	458	459	459	450	447	449	457	463	466	472	488	483	492	481	458	460	464	455	464	3141
6	456	466	446	448	454	464	455	452	455	447	436	435	451	465	466	467	464	475	472	465	462	471	472	472	459	3016
7 q	471	469	468	468	468	468	467	462	454	448	438	426	436	451	451	464	472	472	471	470	473	479	473	474	462	3093
8 q	472	471	471	471	473	474	475	471	460	448	433	429	433	443	450	461	472	475	479	482	480	480	480	479	465	3162
9 q	479	478	478	478	479	478	475	473	467	458	443	440	444	452	458	467	470	473	479	481	482	488	490	489	471	3297
10	490	492	491	490	490	488	482	486	483	472	452	446	446	456	460	472	475	480	476	492	485	370	261	189	451	2824
11	66	126	361	426	454	454	428	426	451	448	441	435	441	449	456	475	477	483	481	481	478	479	485	442	423	2143
12	466	469	473	472	474	476	480	475	465	455	433	426	444	444	455	462	476	475	487	487	479	468	471	473	466	3185
13	474	471	466	474	455	466	474	456	445	449	440	437	440	444	446	448	463	463	472	475	478	475	480	457	460	3048
14	463	469	462	468	470	473	480	480	472	446	429	448	448	466	462	445	459	454	466	474	475	471	472	470	463	3122
15	457	439	448	470	480	482	483	473	458	446	438	441	426	439	452	465	472	474	487	487	486	483	481	481	465	3148
16	483	477	478	478	479	481	484	481	465	452	446	442	447	449	450	464	472	479	482	489	491	488	479	482	471	3308
17 q	482	481	480	480	481	484	482	477	462	442	427	423	428	445	459	470	474	477	481	482	485	488	488	484	469	3262
18	485	482	483	485	488	488	489	486	470	451	442	431	430	446	473	481	488	477	478	484	486	491	488	487	475	3389
19	483	492	493	493	496	499	497	495	484	467	454	446	447	461	472	477	485	483	486	491	501	479	433	401	476	3415
20	400	419	437	460	476	477	476	475	467	461	452	448	449	453	468	474	483	490	495	500	501	498	495	491	469	3245
21 d	468	478	469	472	479	481	463	425	403	439	442	469	451	478	474	498	569	544	618	512	471	479	431	232	469	3245
22 d	180	48	48	318	334	393	423	432	432	421	431	439	464	465	476	448	467	534	504	492	481	292	205	58	366	785
23	201	275	288	251	262	377	439	459	458	448	443	438	447	443	454	457	457	462	469	474	475	472	469	468	412	1886
24 d	468	468	465	461	459	472	470	467	451	440	419	420	431	483	514	670	638	505	488	480	475	421	368	360	471	3293
25	245	384	438	455	457	448	461	456	454	450	431	439	440	455	455	477	493	522	514	476	478	478	449	419	449	2774
26	466	474	464	457	472	475	477	472	456	417	400	403	451	484	474	478	451	474	488	485	489	455	471	470	463	3103
27	471	464	446	456	459	467	472	469	457	444	430	430	443	451	462	477	493	513	516	496	485	462	374	374	459	3017
28	403	431	323	417	466	472	466	465	457	434	419	424	432	432	452	469	495	518	533	503	566	292	179	99	418	2031
29 d	-9	35	299	408	387	446	437	400	404	430	444	436	434	444	449	470	525	528	514	473	479	470	459	468	410	1830
30	468	468	467	470	470	456	471	480	466	449	438	427	436	451	471	471	466	494	524	539	506	459	357	325	460	3029
31	383	356	429	423	387	466	469	453	451	450	446	452	461	468	491	481	471	479	496	501	482	475	474	474	455	2918
Mean	404	411	428	447	447	460	465	463	456	445	434	435	447	458	468	484	489	496	496	488	475	444	422	401	453	
Sum 12,000+	536	751	1275	1874	1869	2264	2431	2369	2135	1809	1464	1468	1842	2204	2517	2993	3151	3380	3389	3130	2733	1772	1089	438		Grand Total 336,883

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

18 LERWICK (D) 10° + MARCH 1956

	Hour G.M.T.		10° +											MARCH 1956												
	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	Sum
1	-1.6	2.7	0.8	-0.2	2.7	3.1	4.0	6.8	2.5	3.1	2.4	4.4	7.3	9.4	9.8	8.8	8.8	8.3	1.6	-5.8	-0.1	-5.1	-16.6	-1.1	2.3	56.0
2	1.9	-3.9	-7.3	-3.6	3.4	1.8	8.6	1.6	-0.8	3.1	5.0	9.1	7.4	10.6	10.6	9.1	7.4	1.2	2.6	7.3	-1.5	-2.5	-0.2	2.3	3.1	73.2
3 d	-8.9	-8.4	-3.6	-13.9	-11.4	-10.4	0.7	0.0	6.2	6.0	0.6	4.5	12.4	13.6	17.2	7.4	15.1	12.7	3.8	14.6	8.4	-17.7	-50.1	-22.5	-1.0	-23.7
4	-4.1	5.0	2.6	2.6	1.2	-0.8	2.1	3.4	3.1	5.1	6.0	8.4	8.4	14.6	12.4	13.2	9.3	6.4	5.7	4.8	4.8	3.3	2.5	1.6	5.1	121.6
5	2.6	3.0	3.4	2.9	3.1	2.6	2.4	2.5	1.8	2.6	4.5	6.7	9.6	11.0	12.2	12.0	12.7	10.8	5.4	4.5	1.5	1.4	0.3	1.4	5.0	120.9
6	0.8	-3.6	-3.2	-2.2	-1.0	-4.6	-2.1	1.3	-0.3	1.6	5.5	9.1	13.4	15.6	15.4	13.6	10.0	9.1	6.4	-5.8	-1.3	3.1	3.6	3.8	3.7	88.2
7 q	4.5	4.5	4.0	3.8	3.5	2.6	2.1	0.9	0.2	0.7	3.6	6.7	9.1	12.2	10.0	8.2	6.6	3.8	2.8	4.3	4.6	4.2	2.5	2.9	4.5	108.3
8 q	3.7	3.3	3.3	3.4	3.2	2.9	2.3	1.6	0.8	1.4	3.6	6.6	9.0	10.8	9.8	9.3	8.2	7.3	7.1	6.7	5.8	5.2	5.1	5.0	5.2	125.4
9 q	5.0	4.6	4.6	4.3	3.7	3.0	2.0	1.2	0.7	2.3	4.2	6.7	8.8	9.8	8.6	7.4	6.7	6.4	6.2	6.0	6.0	6.2	6.0	5.2	5.2	125.6
10	5.1	4.9	4.3	4.2	4.2	6.3	2.3	2.0	1.4	2.3	3.3	6.9	10.3	11.7	11.1	9.5	7.3	6.2	5.5	5.0	-2.5	-5.1	-2.2	-11.3	3.9	92.7
11	-32.6	-19.2	-10.2	-4.2	-1.6	-1.5	3.1	3.8	-1.2	0.9	2.7	6.4	9.1	11.1	11.0	11.2	10.0	11.3	8.6	7.7	6.4	6.2	2.6	-9.4	1.3	32.2
12	-0.8	2.6	3.5	2.6	3.1	2.7	1.8	0.2	-1.7	0.2	1.6	5.3	11.0	11.7	13.3	12.0	11.5	8.5	8.3	8.4	4.2	3.6	4.0	5.5	5.1	122.7
13	4.8	4.2	3.4	1.6	2.3	5.3	2.3																			

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 1956				Sum								
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	26,000+	
γ		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
1		1144	1175	1182	1181	1173	1163	1163	1161	1182	1191	1201	1204	1192	1185	1184	1189	1191	1201	1226	1231	1202	1103	1111	1160	1179	2295	
2		1164	1153	1158	1156	1165	1143	1112	1128	1156	1177	1181	1189	1202	1196	1194	1198	1201	1220	1224	1223	1209	1182	1191	1184	1179	2306	
3	d	1147	1133	1136	1153	1085	1109	1085	1104	1116	1147	1196	1243	1302	1302	1331	1366	1347	1276	1140	1160	1230	1187	939	970	1175	2204	
4		1103	1150	1189	1204	1202	1169	1173	1201	1216	1219	1215	1212	1212	1216	1240	1239	1233	1215	1205	1202	1197	1197	1194	1188	1200	2791	
5		1181	1187	1191	1189	1190	1188	1191	1191	1192	1192	1194	1191	1192	1197	1203	1208	1216	1240	1254	1274	1259	1232	1214	1204	1207	2970	
6		1191	1166	1158	1162	1173	1174	1184	1188	1191	1191	1189	1188	1187	1191	1198	1206	1210	1212	1214	1248	1230	1208	1201	1195	1194	2655	
7	q	1193	1193	1192	1191	1191	1191	1191	1194	1196	1196	1196	1196	1190	1189	1195	1195	1198	1203	1205	1206	1201	1195	1191	1189	1195	2677	
8	q	1189	1188	1189	1189	1188	1189	1188	1194	1196	1196	1195	1189	1185	1182	1185	1187	1184	1184	1183	1184	1186	1188	1188	1188	1188	2514	
9	q	1188	1188	1188	1187	1187	1185	1184	1184	1180	1182	1184	1181	1180	1181	1182	1180	1181	1181	1181	1181	1182	1181	1180	1183	1183	2391	
10		1182	1181	1182	1182	1179	1171	1168	1167	1168	1167	1171	1166	1165	1166	1174	1182	1192	1196	1201	1212	1242	1199	1254	1042	1180	2309	
11		1000	1150	1080	1144	1177	1194	1175	1154	1171	1184	1195	1196	1196	1194	1195	1193	1195	1194	1190	1190	1188	1185	1155	1115	1167	2010	
12		1172	1180	1188	1190	1191	1188	1184	1184	1191	1197	1198	1195	1189	1190	1187	1188	1192	1198	1197	1206	1223	1217	1206	1198	1194	2649	
13		1192	1193	1180	1171	1169	1165	1172	1178	1180	1175	1184	1188	1189	1191	1198	1202	1204	1199	1194	1191	1189	1194	1181	1111	1183	2390	
14		1116	1151	1163	1161	1171	1181	1183	1186	1188	1193	1190	1183	1189	1209	1227	1227	1215	1214	1200	1192	1191	1195	1183	1168	1187	2476	
15		1153	1109	1111	1131	1155	1173	1178	1184	1185	1178	1177	1181	1181	1178	1186	1195	1206	1211	1198	1193	1187	1185	1184	1183	1175	2202	
16		1178	1180	1180	1183	1185	1185	1185	1186	1184	1183	1177	1173	1175	1181	1182	1183	1188	1191	1189	1189	1189	1192	1188	1180	1184	2406	
17	q	1180	1181	1183	1185	1184	1186	1188	1191	1193	1189	1185	1184	1180	1175	1177	1180	1182	1182	1184	1185	1184	1181	1180	1179	1183	2398	
18	q	1177	1177	1178	1179	1178	1180	1180	1183	1185	1182	1177	1173	1170	1164	1166	1187	1211	1210	1195	1185	1184	1181	1182	1174	1182	2358	
19		1173	1172	1172	1165	1164	1169	1173	1177	1180	1178	1174	1169	1173	1174	1184	1185	1195	1200	1208	1205	1191	1182	1184	1112	1056	1172	2130
20		1066	1079	1118	1143	1168	1184	1187	1187	1187	1185	1187	1183	1181	1181	1182	1184	1181	1178	1177	1177	1178	1180	1181	1182	1168	2036	
21	d	1173	1166	1177	1179	1177	1167	1160	1165	1157	1151	1167	1166	1179	1185	1208	1227	1271	1294	1352	1326	1263	1230	1120	1000	1194	2660	
22	d	886	1021	939	883	976	1060	1071	1112	1163	1177	1195	1204	1227	1236	1219	1208	1206	1224	1227	1229	1257	1146	983	1050	1121	899	
23		1094	1033	1081	1015	1048	1009	1085	1175	1201	1215	1224	1222	1212	1209	1204	1204	1203	1201	1194	1191	1187	1191	1192	1194	1157	1774	
24	d	1194	1195	1191	1181	1171	1173	1181	1192	1198	1199	1201	1206	1212	1218	1239	1279	1305	1295	1266	1260	1227	1118	1071	1064	1201	2836	
25		1052	1022	1118	1168	1168	1173	1174	1188	1191	1196	1199	1198	1195	1197	1196	1192	1206	1224	1226	1232	1210	1193	1131	1096	1173	2145	
26		1137	1177	1185	1172	1164	1181	1184	1188	1187	1196	1204	1188	1187	1227	1208	1227	1271	1294	1352	1326	1263	1230	1120	1000	1194	2571	
27		1176	1179	1157	1158	1175	1181	1183	1186	1188	1188	1191	1188	1182	1191	1204	1212	1239	1258	1249	1238	1236	1215	1144	1122	1193	2640	
28		1132	1148	1101	1123	1150	1155	1174	1184	1182	1187	1195	1195	1198	1210	1209	1209	1225	1263	1250	1218	1193	1119	949	922	1162	1891	
29	d	1072	1161	1025	1088	1108	1134	1154	1159	1154	1160	1178	1199	1206	1216	1225	1229	1242	1251	1235	1218	1195	1190	1182	1179	1173	2160	
30		1189	1192	1194	1194	1189	1185	1178	1185	1189	1192	1192	1187	1182	1187	1195	1204	1206	1210	1248	1284	1261	1182	1116	1109	1194	2650	
31		1140	1126	1120	1130	1101	1154	1181	1189	1185	1185	1192	1194	1208	1220	1240	1253	1245	1230	1229	1206	1202	1210	1204	1198	1189	2542	
Mean		1139	1152	1149	1153	1158	1163	1167	1176	1182	1185	1191	1191	1194	1198	1205	1211	1216	1218	1215	1215	1209	1183	1149	1134	1181		
Sum	35,000+	324	706	606	737	902	1059	1169	1145	1632	1748	1904	1931	2018	2138	2369	2536	2703	2767	2655	2649	2474	1687	632	144		Grand Total	878,935

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

20 LERWICK		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. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ										
1		18 19	500	391	21 43	109	14 30	11.3	-23.6	22 30	34.9	18 51	1250	1080	21 53	170	3, 2, 3, 3, 2, 1, 4, 4	22	1	78.6
2		18 11	501	290	05 57	111	06 26	14.6	-11.3	02 19	25.9	17 47	1232	1102	06 37	130	3, 4, 4, 3, 3, 3, 3, 3	25	2	78.2
3	d	17 43	891	-219	21 30	1110	18 21	85.7	-79.1	21 51	164.8	18 31	1421	721	18 19	700	5, 5, 5, 4, 6, 8, 7	46	1	78.2
4		14 55	509	152	00 00	357	14 03	17.8	-14.9	00 00	32.7	14 45	1253	1040	00 08	213	6, 4, 4, 2, 3, 3, 1, 1	24	1	78.0
5		18 33	500	443	11 10	57	16 10	13.9	-1.0	22 08	14.9	19 24	1284	1178	00 32	106	1, 2, 2, 1, 2, 3, 3, 2	16	1	78.0
6		13 46	487	427	10 59	60	13 04	20.8	-13.2	19 39	34.0	19 39	1267	1150	02 07	117	3, 2, 2, 1, 3, 2, 4, 1	18	1	78.0
7	q	21 48	485	423	11 45	62	13 20	12.8	-0.2	08 44	13.0	18 18	1207	1187	13 06	20	0, 0, 0, 2, 1, 1, 1, 1	6	0	77.9
8	q	19 30	483	426	11 16	57	13 50	11.1	0.3	08 55	10.8	08 30	1198	1182	13 11	16	1, 1, 1, 1, 0, 1, 0, 1	6	0	78.0
9	q	21 33	495	439	11 39	56	13 18	10.8	0.3	08 26	10.5	02 30	1190	1177	21 38	13	0, 0, 0, 1, 1, 0, 0, 1	3	0	78.5
10		20 30	536	-134	23 34	670	23 34	24.8	-43.1	23 53	67.9	22 30	1361	851	23 29	510	1, 2, 2, 2, 1, 1, 4, 7	20	1	78.4
11		22 39	541	87	00 30	628	15 00	12.9	-70.4	01 57	83.3	01 53	1222	899	00 24	323	7, 4, 4, 2, 1, 2, 1, 5	26	1	78.5
12		19 55	497	422	11 40	75	12 44	14.7	-7.3	00 00	22.0	20 12	1229	1154	00 00	75	3, 1, 2, 2, 2, 2, 2, 2	16	0	78.9
13		22 56	518	431	11 10	87	23 02	14.5	-15.4	23 45	29.9	16 39	1204	1089	23 58	115	1, 3, 2, 1, 2, 2, 1, 4	16	0	78.6
14		08 01	485	423	10 10	62	14 12	16.0	-6.5	00 00	22.5	15 02	1232	1089	00 02	143	4, 2, 2, 3, 3, 3, 1, 3	21	1	78.7
15		18 44	497	416	01 23	81	13 35	14.6												

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

21 LERWICK (B)

14,000γ (0.14 C.G.S. unit) +

APRIL 1956

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 6,000+. Rows 1-30 d and Mean/Sum rows.

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

22 LERWICK (D)

10° +

APRIL 1956

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum. Rows 1-30 d and Mean/Sum rows.

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 1956										
	Hour G.M.T.		12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24											Mean	Sum 7,000+											
	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
1	455	459	448	433	432	431	435	427	416	412	429	423	450	456	452	480	505	537	519	496	487	482	479	478	459	4021
2 q	479	476	473	471	473	472	467	462	433	439	428	422	429	443	463	472	477	490	497	492	489	491	487	483	467	4208
3	476	472	482	477	473	477	476	467	458	444	435	448	456	457	470	497	506	505	516	519	516	511	502	502	481	4542
4	493	492	493	493	490	490	482	471	456	445	440	448	493	493	495	478	481	496	497	489	492	490	491	495	483	4583
5	487	489	483	485	483	480	470	474	467	451	446	443	456	460	470	482	517	533	559	519	503	497	485	477	484	4616
6	479	477	477	479	481	479	475	470	453	433	442	446	450	483	487	518	488	510	493	492	494	488	489	482	478	4465
7	492	487	476	466	474	483	482	471	457	450	450	450	453	464	475	477	490	502	512	531	515	486	483	484	480	4510
8 q	486	486	484	484	485	485	483	470	456	446	438	445	458	473	480	487	487	491	495	502	501	495	492	491	479	4500
9 q	491	487	491	492	490	494	494	479	467	456	450	447	456	466	475	480	494	503	506	508	504	500	498	493	484	4621
10 q	492	490	487	485	490	490	484	475	457	441	430	426	439	460	474	490	505	510	508	502	502	498	497	495	480	4527
11 q	495	488	483	483	487	487	480	467	453	444	436	438	446	463	473	493	492	500	505	502	500	495	497	498	479	4495
12	500	487	496	505	513	516	519	503	487	472	470	453	486	528	556	576	604	511	487	500	486	502	471	498	505	5126
13	486	478	473	452	472	479	461	386	300	362	357	405	474	460	499	506	494	495	471	474	469	471	477	466	453	3867
14	463	463	460	460	453	459	452	430	402	421	438	454	496	490	505	547	540	520	531	522	493	479	477	477	476	4432
15 d	464	403	431	416	435	422	428	412	413	397	423	448	486	566	614	705	738	701	534	502	442	252	385	449	478	4466
16 d	393	364	312	316	370	-12	-10	172	257	327	443	575	952	765	969	1233	1042	683	519	459	163	-69	-49	-89	420	3085
17 d	-360	195	232	232	270	246	252	284	319	386	379	407	459	543	514	471	462	481	494	489	471	466	468	476	360	1636
18	462	464	450	427	462	444	436	444	431	425	423	433	438	443	457	477	488	492	490	497	492	484	487	483	460	4029
19	472	471	474	475	477	470	468	468	459	433	420	434	453	448	466	464	477	485	489	495	503	489	480	471	468	4241
20	470	474	478	469	471	474	467	463	450	442	442	491	462	460	461	440	439	474	506	528	563	489	453	392	469	4258
21	355	396	406	409	409	431	438	431	442	443	444	435	444	457	464	470	480	486	507	515	502	490	492	489	451	3835
22	490	487	475	470	479	472	453	435	438	430	429	454	495	497	512	521	541	582	565	531	502	483	476	473	487	4690
23	475	477	480	482	480	479	476	464	452	441	446	441	455	479	547	580	580	548	509	500	495	476	351	121	468	4234
24 d	30	-96	-55	221	386	329	371	401	417	468	438	391	461	606	836	706	617	588	559	514	459	263	-5	-160	364	1745
25 d	-138	-89	-78	39	93	13	62	193	275	355	445	479	510	541	535	461	458	471	471	476	483	487	489	455	312	486
26	415	345	364	436	458	466	455	453	435	425	416	415	431	461	485	505	510	525	534	548	516	496	483	466	460	4043
27	461	456	452	464	464	467	454	448	436	421	416	419	429	445	464	474	495	509	515	524	523	500	487	494	467	4217
28	471	467	432	387	473	467	477	461	438	412	413	419	438	460	482	486	490	496	503	507	504	496	494	490	466	4183
29	487	487	490	493	491	482	476	460	451	443	439	444	449	482	503	505	492	545	636	627	546	445	373	427	486	4673
30	456	466	487	497	500	483	487	475	462	441	435	421	442	473	501	480	511	533	538	528	515	498	487	477	483	4593
31	479	473	466	459	473	475	473	467	460	448	440	438	439	451	462	471	482	498	513	507	502	497	504	489	474	4366
Mean	408	418	419	431	448	431	430	432	426	427	432	442	474	489	518	530	529	523	515	509	488	456	441	427	460	
Sum 12,000+	656	971	1002	1357	1887	1350	1323	1383	1197	1253	1380	1692	2685	3173	4046	4422	4382	4200	3978	3795	3132	2127	1680	1222		Grand Total 342,293

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

26 LERWICK (D)		10° +														MAY 1956										
	Hour G.M.T.		12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24											Mean	Sum											
	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
1	3.6	3.1	3.3	1.2	-1.7	-1.4	1.3	2.2	4.8	3.9	1.2	4.6	4.4	8.6	8.9	6.5	5.1	0.5	3.9	5.0	4.9	4.6	4.1	3.8	3.6	86.4
2 q	3.0	2.2	1.5	0.9	-1.6	-3.1	-5.0	-4.8	-3.7	-1.2	1.2	4.5	7.2	9.6	9.9	8.4	6.8	5.1	4.2	4.1	3.6	4.6	3.6	3.3	2.7	64.3
3	5.6	6.0	1.8	-0.2	0.5	-0.7	-3.1	-5.0	-4.5	-1.8	0.8	6.4	10.6	12.3	12.5	13.0	12.6	9.5	6.2	7.0	7.0	5.1	1.4	2.3	4.4	105.3
4	2.3	2.2	1.0	0.2	0.3	-1.9	-4.7	-4.5	-2.3	0.3	3.1	5.8	10.6	10.6	11.3	10.6	7.9	7.9	8.1	6.5	6.8	5.8	4.1	5.2	4.1	97.2
5	2.9	-1.7	0.4	-0.2	-1.6	-1.4	4.0	6.5	2.1	4.1	6.8	8.4	10.2	9.7	8.1	6.2	5.8	5.8	5.7	4.1	2.5	4.8	2.0	2.7	4.1	97.9
6	3.1	2.2	1.0	0.4	1.3	-1.0	-2.8	-3.4	-1.3	3.3	3.4	6.2	8.2	8.4	7.2	6.5	1.2	3.4	4.7	5.8	5.6	4.1	3.6	5.6	3.2	76.7
7	4.6	2.2	3.3	6.1	4.8	3.5	-1.2	-1.8	0.0	2.7	4.8	8.2	9.6	9.2	7.9	6.5	5.1	4.2	3.8	1.9	-2.9	1.9	3.0	3.2	3.8	90.6
8 q	2.3	2.5	2.2	1.9	0.2	-1.9	-3.8	-5.5	-2.9	-0.4	3.4	7.8	10.6	13.2	10.6	7.5	4.1	2.3	1.7	1.8	3.2	4.0	4.6	3.8	3.1	73.2
9 q	3.4	2.8	3.5	1.9	0.4	-1.5	-4.3	-4.4	-1.9	-0.9	3.2	7.9	11.8	11.9	10.8	8.7	6.8	5.0	3.3	3.1	3.4	4.0	4.2	3.8	3.6	86.9
10 q	3.2	3.6	2.1	1.0	-0.7	-2.9	-4.2	-6.2	-6.2	-1.7	3.3	8.0	9.9	10.0	8.3	6.7	5.6	4.2	3.3	4.1	4.6	5.0	4.4	3.9	2.9	69.3
11 q	5.2	7.8	6.0	2.3	-0.2	-2.8	-4.8	-5.0	-4.0	-0.5	3.6	7.9	9.9	9.7	8.1	6.0	4.8	3.6	3.1	3.9	5.2	5.9	6.5	6.8	3.7	89.0
12	8.0	5.0	10.0	9.3	10.6	-0.7	0.2	-1.2	-2.1	1.2	4.0	11.8	15.6	19.2	16.2	20.0	14.2	10.4	8.4	11.3						

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 1956				
	Hour G.M.T.		2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 9,000+
	0-1	1-2																								
1 d	457	404	436	478	487	444	444	454	450	412	415	465	473	479	523	595	592	561	531	504	492	486	482	481	481	2545
2	484	485	485	482	467	466	464	470	463	443	442	446	446	461	492	491	528	551	522	511	501	496	491	489	482	2576
3 q	496	492	476	489	491	487	480	470	458	447	449	447	464	479	490	508	530	529	519	514	505	503	503	492	488	2718
4	487	483	478	475	482	485	479	468	456	442	445	456	447	482	507	520	547	541	518	506	494	491	495	499	487	2683
5	494	495	494	493	489	485	477	455	445	453	451	458	463	464	486	502	518	530	540	533	528	515	510	505	491	2783
6	493	496	494	495	499	492	490	480	467	457	459	457	473	540	508	530	531	525	521	518	516	504	500	498	490	2945
7 q	501	496	491	491	489	488	482	466	460	445	447	448	457	474	498	516	522	531	515	517	527	510	503	497	490	2771
8	498	488	470	492	493	484	482	463	441	438	413	444	468	480	507	521	518	523	524	534	524	511	474	453	485	2646
9	469	479	479	486	490	478	429	413	450	448	446	450	466	484	503	493	516	512	524	552	526	507	500	493	483	2593
10	478	488	496	509	500	496	488	469	452	438	429	432	439	462	483	506	531	583	543	535	519	503	491	451	488	2721
11	460	457	453	459	445	442	430	441	422	435	445	445	467	455	500	553	548	529	542	525	507	499	484	476	476	2419
12	452	451	461	477	474	451	461	469	449	448	447	463	463	465	472	486	500	518	528	516	510	504	491	467	476	2423
13	463	459	462	470	471	475	471	466	465	453	444	448	451	450	476	494	500	506	536	536	529	517	461	417	476	2420
14	453	474	457	465	488	482	453	445	446	426	407	433	472	538	527	515	498	512	519	530	528	513	500	499	483	2580
15 d	471	430	388	444	434	458	449	427	427	426	439	434	461	484	511	526	526	564	532	519	510	500	485	418	469	2263
16	455	475	483	480	451	454	465	466	451	447	442	443	450	471	487	495	518	523	549	544	512	501	490	482	481	2534
17	486	486	487	482	480	477	475	468	461	450	445	453	471	496	510	508	541	570	539	517	521	509	490	482	492	2804
18 q	467	463	472	483	485	482	470	457	445	433	437	455	470	491	492	491	504	532	522	517	515	507	487	483	482	2560
19 q	480	480	482	486	485	488	480	473	462	451	444	450	470	480	495	520	535	533	518	518	516	509	498	490	489	2739
20 q	482	488	488	485	488	488	475	467	457	452	443	448	467	477	494	499	480	484	496	506	531	520	503	480	483	2598
21	464	458	478	490	491	475	470	457	436	423	423	430	450	473	475	500	514	523	524	527	523	511	497	490	479	2502
22	486	480	467	472	472	477	467	464	444	426	420	433	453	470	503	504	505	531	535	526	506	500	485	481	479	2507
23	483	479	480	483	482	480	471	453	437	429	427	436	469	484	490	490	513	514	554	568	517	445	221	280	462	2085
24 d	338	202	429	427	436	442	436	462	447	428	425	430	456	526	624	836	725	590	512	489	506	501	366	304	472	2337
25 d	56	40	247	165	91	151	330	412	484	476	443	426	454	469	480	504	589	567	590	541	505	496	496	481	396	463
26	477	478	480	479	470	463	449	421	438	442	442	435	444	468	498	526	536	559	536	523	516	510	492	485	482	2567
27	478	483	478	405	350	438	467	459	447	430	435	442	453	474	514	526	522	538	537	533	515	504	500	495	476	2423
28	484	484	489	486	493	484	491	464	444	450	458	471	444	461	482	506	509	517	539	526	518	513	502	501	488	2716
29	500	497	487	494	497	491	488	480	455	454	454	450	456	489	480	484	487	493	543	563	545	519	519	491	492	2816
30 d	488	488	491	488	476	440	470	479	467	445	438	439	429	470	496	581	527	510	499	529	528	505	481	471	485	2635
Mean	459	452	465	467	461	461	463	458	451	442	439	446	458	480	500	524	530	533	530	526	516	504	480	468	480	
Sum 13,000+	780	558	958	1010	846	839	883	738	526	247	154	367	746	1396	2003	2726	2910	2999	2910	2777	2490	2109	1397	1033		Grand Total 345,402

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

30 LERWICK (D)		10° +																				JUNE 1956				
	Hour G.M.T.		2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum
	0-1	1-2																								
1 d	-0.6	-8.0	-9.1	-2.3	-1.3	4.0	0.0	2.4	-0.4	2.2	6.6	6.9	8.5	11.3	9.5	9.4	6.2	7.9	4.3	8.5	8.2	6.5	5.3	5.7	3.8	91.7
2	3.5	1.6	-1.6	-2.0	-1.3	-0.7	2.3	1.3	0.2	1.3	3.5	4.0	6.9	9.1	8.1	7.6	7.7	5.9	4.1	6.5	7.5	6.8	5.8	5.0	3.9	93.1
3 q	6.6	8.3	7.5	-0.8	-4.3	-5.5	-5.3	-3.9	-1.8	1.3	3.7	6.9	9.0	10.7	10.7	8.9	6.6	3.2	5.9	6.1	6.3	6.9	6.4	1.3	3.9	94.7
4	5.0	3.4	1.3	-0.7	-3.2	-4.7	-4.5	-3.5	-3.1	1.1	3.5	6.4	8.8	10.0	8.5	8.0	6.4	4.6	5.4	6.0	5.7	5.2	5.4	5.9	3.4	80.9
5	3.2	4.3	2.0	2.8	-0.9	-4.5	-4.4	-5.1	-1.4	1.5	4.1	7.3	10.2	10.0	9.8	8.3	6.9	7.1	7.9	6.4	6.2	4.2	4.9	4.0	3.9	94.8
6	2.2	3.1	2.1	0.3	-2.6	-1.7	-2.6	-3.0	-1.0	2.6	2.4	5.7	8.2	11.1	10.5	9.4	7.2	6.3	5.1	5.3	2.2	5.1	4.2	5.5	3.7	87.6
7 q	6.3	5.3	3.3	0.2	-4.6	-4.6	-5.2	-5.7	-1.9	0.6	1.6	6.3	8.5	9.5	9.2	8.7	6.1	4.1	3.2	3.2	4.4	4.5	4.2	4.1	3.0	71.3
8	5.7	9.5	1.1	-0.6	0.2	-1.5	-2.7	0.1	1.0	-0.3	6.9	11.1	12.5	10.9	9.4	6.4	4.2	5.4	6.1	7.3	5.9	3.7	-1.7	1.0	4.2	101.6
9	5.7	3.2	2.1	1.3	-0.8	0.0	-2.4	1.2	3.7	3.5	3.8	6.3	10.2	14.4	12.4	9.1	7.5	4.3	1.7	3.8	5.4	2.4	-1.2	3.7	4.2	101.3
10	1.3	-3.0	-3.7	-6.2	-5.3	-7.6	-8.5	-8.1	-7.8	-5.6	-0.8	4.7	7.2	8.8	10.2	10.7	11.4	10.1	5.6	5.9	5.9	5.8	-1.4	-3.9	1.1	25.7
11	-0.1	9.2	6.7	0.7	-4.9	0.3	0.0	-2.2	-4.1	3.6	5.5	6.7	9.2	10.1	11.3	8.6	12.2	11.9	11.8	10.9	8.9	4.7	6.2	5.7	5.5	132.9
12	7.4	5.2	3.5	-2.2	-5.3	-2.2	1.8	-0.5	-2.0	-0.7	1.4	3.2	5.3	5.4	5.8	7.4	8.6	8.1	7.2	5.3	5.4	4.4	1.1	0.6	3.1	74.2
13	-3.7	-6.5	-4.6	-4.5	-3.3	-4.9	-5.8	-5.2	-4.0	-2.2	1.5	5.2	8.8	10.2	9.9	9.2	8.3	7.7	8.2	6.3	6.6	3.8	-2.1	-5.4	1.4	33.5
14	-1.4	0.3	4.2	-1.9	-7.7	-8.4	-3.9	-3.4	-5.8	-2.4	2.9	7.1	11.0	8.0	10.8	11.7	10.3	9.6	8.0	9.0	9.9	7.2	3.2	0.0	3.3	78.3
15 d	-1.8	0.4	9.7	3.2	-1.6	-1.6	-3.2	-4.4	-1.2	2.2	1.5	5.2	9.0	10.6	9.0	10.2	10.1	7.1	10.0	7.7	6.9	6.0	0.2	-10.0	3.5	85.2
16	-6.1	-1.2	-1.1	-1.6	0.0	1.9	-2.3	-3.8	-6.0	-6.7	-4.2	1.0	5.9	8.2	9.9	8.0	7.3	6.7	8.2	5.3	6.4	4.4	4.3	2.6	2.0	47.1
17	1.3	0.5	0.4	1.6	3.2	1.2	-3.8	-6.7	-6.5	-3.6	0.4	5.3	7.0	7.0	7.3	8.6	8.6	6.0	7.4	7.7	9.1	1.2	3.6	3.3	2.9	70.1
18 q	3.7	4.3	-0.7	-2.9	-3.7	-5.8	-6.0	-5.5	-6.0	-3.9	0.3	4.5	8.3	9.6	8.9	8.0	7.2	3.2	5.1	4.8	5.4	4.8	2.0	1.5	2.0	47.1
19 q	0.3	0.3	-1.0	-0.5	-1.6	-3.8	-5.8	-7.1	-5.4	-0.3	0.9	3.6	7.0	10.1	11.8	12.1	12.0	11.7								

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

JULY 1956

33 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +																				Mean		Sum				
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	Sum		
		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	11,000+	
1		478	477	483	475	478	478	477	459	449	441	447	436	438	458	479	514	497	517	507	518	495	501	493	485	478	480	
2		472	484	489	489	484	483	454	421	427	436	447	444	446	464	495	509	503	519	546	526	517	506	495	489	481	545	
3		493	477	480	496	488	491	471	448	451	436	420	432	426	461	501	529	495	494	501	499	501	497	494	486	478	467	
4		483	482	484	482	464	448	451	449	437	438	436	443	457	470	474	480	488	490	493	504	502	504	503	498	473	362	
5		491	488	483	491	493	494	488	469	458	443	447	423	453	458	480	488	515	514	512	525	527	517	496	492	485	645	
6		493	488	487	492	491	485	480	468	456	448	441	456	467	486	488	488	503	521	523	506	506	498	494	493	486	658	
7	q	490	489	491	492	490	482	469	459	453	455	454	459	465	480	499	517	509	520	517	517	518	513	508	503	490	749	
8		495	505	508	514	512	484	495	491	473	457	454	458	454	465	481	487	495	510	506	510	518	505	484	478	489	739	
9		473	469	480	487	481	465	470	457	452	448	452	449	457	472	489	504	511	504	515	517	514	502	488	485	481	541	
10		482	480	481	487	487	489	483	473	465	468	468	463	467	469	481	484	505	517	572	562	541	519	492	500	493	835	
11		485	462	455	453	470	481	474	454	449	436	430	441	463	481	497	535	544	537	538	527	515	504	489	488	484	608	
12		484	487	483	480	466	448	470	466	449	437	436	433	449	449	463	474	493	509	530	537	534	505	494	494	478	470	
13	d	491	475	459	469	482	478	471	463	457	447	446	442	449	467	473	533	577	581	634	577	522	455	430	376	486	654	
14		246	427	464	485	477	469	457	459	457	456	451	445	444	460	476	488	503	506	511	515	522	519	490	481	467	208	
15		479	478	477	478	480	473	472	472	462	447	439	439	445	453	470	473	499	504	533	541	512	502	498	494	480	520	
16		495	490	468	465	485	486	478	472	453	439	422	424	441	453	478	495	494	511	512	515	509	503	495	484	478	467	
17	q	481	480	481	481	476	476	473	471	458	448	439	436	448	459	463	479	496	505	514	518	511	511	489	487	478	480	
18	q	487	485	484	482	487	487	480	467	454	444	444	443	452	475	486	497	506	521	548	527	519	512	503	492	487	682	
19		492	490	484	496	504	493	481	458	455	455	454	454	461	484	504	493	529	546	533	531	521	513	503	474	492	808	
20		442	455	467	469	483	487	483	470	462	458	454	447	455	451	494	510	510	533	539	546	534	504	492	481	484	626	
21	q	481	480	481	483	486	487	477	468	458	454	451	448	455	469	484	493	499	510	520	517	510	501	499	495	484	606	
22	q	493	485	480	492	496	491	485	478	464	450	451	453	455	480	489	503	517	524	507	500	501	504	504	503	488	705	
23		505	502	493	500	502	499	497	490	478	466	467	468	475	507	534	552	548	576	552	561	549	505	442	387	502	1055	
24	d	447	479	485	488	490	480	460	411	371	404	455	459	447	449	457	472	481	498	511	517	512	509	503	502	470	287	
25	d	497	495	477	455	469	474	440	449	438	428	400	401	433	499	472	503	512	506	504	520	517	522	483	403	471	297	
26	d	141	464	491	473	428	458	469	471	401	399	436	428	458	469	512	526	562	544	566	516	505	491	457	465	464	130	
27		405	415	435	473	439	416	446	456	443	437	436	447	475	495	473	495	498	501	516	514	529	506	476	439	465	165	
28	d	461	472	460	462	484	489	484	466	448	435	432	465	471	483	467	467	488	515	529	535	544	495	460	480	479	492	
29		464	471	475	484	481	482	437	430	448	460	455	447	455	464	468	529	575	575	495	523	500	487	477	479	482	561	
30		480	477	435	465	488	487	480	457	440	435	439	436	443	488	476	484	500	506	514	518	518	510	498	490	478	464	
31		486	484	486	488	491	487	476	461	465	453	448	455	452	427	514	542	555	522	495	485	490	491	489	490	485	632	
Mean		461	477	477	481	482	478	472	461	449	444	444	444	453	469	484	501	513	521	526	523	517	504	488	477	481	481	
Sum	13,000+	1292	1792	1786	1926	1932	1827	1628	1283	931	758	751	774	1056	1545	2017	2543	2907	3136	3295	3224	3013	2611	2118	1793		Grand Total	357,938

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

JULY 1956

34 LERWICK (D)		10° +																				Mean		Sum			
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	Sum	
1		4.3	3.2	1.0	0.4	-1.0	-2.4	-4.3	-2.4	-1.4	0.3	0.4	2.4	6.0	7.3	8.3	6.7	6.2	6.4	6.5	6.2	4.1	4.1	6.2	5.0	3.1	73.5
2		3.4	1.9	-0.5	-1.6	-1.5	-4.1	-3.1	-0.7	2.4	1.2	0.1	1.4	5.4	7.5	7.2	7.7	7.5	9.3	9.9	5.5	7.1	7.9	4.6	8.6	3.6	87.1
3		6.3	3.0	0.4	-2.6	-1.4	-1.8	-1.1	1.1	1.5	1.8	3.1	4.3	7.1	6.1	7.0	7.4	5.2	4.5	5.2	6.1	6.5	5.7	4.4	4.9	3.5	84.7
4		4.2	1.6	0.8	0.0	0.7	0.2	-1.7	-2.3	-1.5	-1.3	0.7	4.3	8.6	9.1	8.3	7.2	7.2	6.9	6.3	5.0	4.5	3.1	4.0	4.5	3.3	80.4
5		3.8	3.2	1.4	0.0	-1.5	-4.1	-5.4	-5.1	-4.0	-2.0	1.6	6.5	8.6	9.3	9.3	9.0	6.2	4.4	3.8	3.7	4.0	1.2	1.8	4.8	2.5	60.5
6		4.8	5.8	1.6	0.6	-1.7	-1.1	-2.2	-1.0	-1.1	-1.2	3.6	7.3	10.2	11.1	10.9	8.4	5.5	5.0	5.5	5.5	5.4	5.5	4.5	4.0	4.0	96.9
7	q	4.0	2.9	1.6	0.7	-1.7	-4.6	-4.9	-5.0	-2.8	-1.0	0.7	4.7	8.8	10.1	9.3	8.8	7.4	5.0	6.2	7.3	6.4	9.2	9.4	8.4	3.8	90.9
8		6.4	4.9	1.3	3.5	1.4	1.2	-0.3	-4.3	-2.1	-0.3	2.6	6.0	9.8	9.4	7.7	6.3	7.2	8.7	8.1	6.3	6.9	5.0	3.7	0.5	4.2	99.9
9		-9.6	-6.9	-8.0	-2.0	-1.7	-1.7	-3.5	-0.5	-1.5	-1.5	0.2	4.3	7.5	9.3	10.2	7.5	7.1	4.6	4.3	3.4	2.9	3.5	2.8	2.5	1.4	33.2
10		0.8	0.2	-0.7	-1.6	-2.9	-4.0	-5.8	-6.3	-3.3	-1.4	0.7	5.0	9.4	11.2	10.8	10.3	11.0	8.3	10.4	11.0	7.7	2.3	0.4	-4.2	2.9	69.3
11		0.7	-2.3	-3.2	-5.4	-5.4	-8.2	-8.2	-9.4	-5.1	-2.2	1.2	3.7	4.7	5.5	6.9	7.6	6.9	6.2	7.3	8.2	5.6	6.2	1.4	3.3	1.1	26.0
12		5.0	3.3	0.7	-1.7	-2.5	-0.3	-0.8	-2.7	-2.6	0.6	2.1	6.2	11.0	13.2	13.4	11.7	9.2	8.4	8.2	5.6	1.2	4.3	4.6	5.7	4.3	103.8
13	d	5.3	-3.4	-5.1	-7.5	-4.2	-4.1	-2.3	-3.0	-0.3	0.5	1.4	6.4	11.0	13.2	13.2	12.2	11.9	10.3	12.2	5.0	6.0	6.4	0.2	-3.6	3.4	81.7
14		-0.8	-9.4	-5.3	-4.6	-4.1	-5.4	-5.1	-5.1	-4.1	-1.4	0.7	4.5	7.6	10.8	11.7	10.1	8.6	6.4	4.0	5.0	2.4	1.6	3.6	4.0	1.5	35.7
15		3.6	2.9	3.4	-1.1	-3.2	-4.0	-5.1	-5.4	-4.4	-4.1	-2.7	1.8	5.5	8.8	9.3	8.4	7.9	6.4	6.4	5.0	3.1	5.5	6.0	5.8	2.5	59.8
16		4.0	1.6	2.1	2.4	-0.5	-0.3	-4.4	-5.3	-3.4	-2.4	0.5	5.5	10.3	12.2	12.7	9.6	7.4	3.7	4.4	5.0	5.0	2.9	2.5	2.7	3.3	78.2
17	q	3.1	1.6	0.2	-0.5	0.5	-1.7	-3.6	-6.0	-6.2	-4.1	0.7	6.4	8.4	9.3	8.8	7.4	5.5	3.8	3.4	3.3	2.8					

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 1956

	Hour G.M.T.																								Mean	Sum 28,000+	
	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			
1	1182	1189	1192	1197	1194	1189	1201	1207	1211	1208	1204	1201	1194	1194	1199	1221	1232	1209	1204	1205	1220	1210	1199	1192	1202	854	
2	1170	1169	1186	1194	1194	1194	1204	1205	1191	1194	1192	1194	1191	1197	1214	1229	1230	1212	1217	1235	1220	1207	1195	1188	1201	822	
3	1174	1150	1149	1145	1165	1174	1184	1194	1191	1203	1202	1198	1204	1207	1214	1212	1214	1208	1204	1201	1198	1200	1198	1194	1191	583	
4	1191	1193	1196	1194	1185	1166	1164	1176	1186	1187	1186	1188	1185	1188	1194	1191	1192	1194	1194	1198	1201	1201	1199	1198	1189	547	
5	1195	1195	1197	1195	1195	1194	1195	1195	1194	1197	1189	1185	1179	1195	1195	1195	1188	1199	1196	1192	1197	1199	1201	1194	1194	656	
6	1185	1174	1184	1185	1187	1185	1184	1182	1181	1183	1181	1172	1177	1178	1189	1192	1197	1202	1211	1212	1204	1199	1198	1196	1189	538	
7 q	1197	1198	1199	1198	1197	1194	1194	1192	1190	1185	1177	1174	1175	1181	1188	1198	1210	1214	1217	1212	1207	1200	1197	1195	1195	689	
8	1195	1181	1176	1177	1170	1173	1155	1164	1175	1180	1179	1176	1183	1188	1188	1189	1192	1189	1188	1187	1191	1200	1201	1172	1182	369	
9	1161	1145	1148	1171	1170	1172	1168	1175	1176	1186	1188	1192	1205	1205	1202	1202	1211	1217	1208	1201	1200	1199	1194	1191	1187	487	
10	1188	1191	1190	1188	1188	1191	1189	1188	1181	1175	1181	1184	1176	1169	1175	1183	1184	1194	1189	1197	1187	1188	1185	1165	1184	426	
11	1134	1136	1116	1117	1134	1169	1190	1200	1207	1205	1200	1192	1188	1198	1194	1194	1214	1229	1223	1213	1210	1202	1185	1186	1185	436	
12	1176	1175	1188	1188	1188	1152	1147	1165	1183	1188	1192	1190	1185	1192	1189	1188	1188	1192	1194	1199	1207	1201	1194	1185	1185	446	
13 d	1143	1117	1099	1128	1164	1182	1182	1182	1181	1185	1181	1178	1167	1176	1187	1199	1225	1250	1236	1174	1182	1169	1175	1169	1176	230	
14	1127	1122	1146	1176	1197	1192	1188	1195	1200	1202	1204	1192	1197	1198	1197	1199	1205	1204	1202	1212	1206	1199	1176	1171	1180	1187	493
15	1182	1183	1182	1183	1190	1188	1198	1205	1210	1208	1201	1194	1188	1190	1193	1200	1202	1211	1208	1217	1224	1208	1198	1191	1198	754	
16	1183	1178	1174	1167	1171	1176	1185	1192	1198	1194	1192	1182	1179	1185	1185	1197	1204	1211	1206	1197	1198	1201	1197	1194	1189	546	
17 q	1194	1194	1195	1189	1182	1177	1185	1192	1199	1195	1185	1173	1173	1176	1179	1182	1188	1192	1193	1194	1197	1198	1197	1194	1188	523	
18 q	1191	1190	1191	1188	1188	1187	1184	1188	1188	1183	1174	1174	1179	1182	1189	1202	1205	1207	1205	1200	1179	1189	1186	1189	1189	538	
19	1179	1175	1158	1165	1171	1186	1188	1187	1183	1177	1165	1165	1166	1165	1178	1194	1189	1202	1217	1208	1201	1201	1182	1151	1181	353	
20	1109	1135	1156	1153	1158	1166	1170	1176	1185	1185	1179	1178	1184	1194	1191	1210	1210	1196	1205	1211	1206	1191	1181	1178	1179	307	
21 q	1181	1189	1191	1192	1189	1191	1191	1191	1188	1191	1191	1187	1188	1192	1196	1201	1306	1198	1192	1192	1195	1197	1189	1189	1191	592	
22 q	1191	1188	1181	1177	1183	1185	1187	1186	1184	1185	1183	1182	1179	1176	1179	1182	1184	1196	1206	1198	1189	1186	1187	1187	1186	461	
23	1185	1186	1189	1189	1191	1187	1185	1187	1185	1179	1176	1175	1169	1164	1166	1177	1192	1204	1233	1227	1230	1231	1145	1141	1187	493	
24 d	1153	1155	1136	1138	1136	1130	1129	1130	1129	1176	1200	1197	1197	1204	1209	1204	1204	1202	1199	1200	1197	1197	1197	1194	1176	213	
25 d	1198	1197	1179	1136	1156	1158	1169	1167	1169	1179	1204	1222	1224	1240	1248	1234	1234	1224	1210	1212	1228	1213	1189	1104	1196	694	
26 d	1008	1128	1188	1184	1141	1145	1160	1179	1203	1204	1191	1202	1196	1216	1226	1251	1300	1288	1254	1238	1212	1201	1113	1109	1189	537	
27	1081	1047	1086	1129	1150	1139	1158	1191	1201	1201	1197	1194	1199	1210	1218	1220	1218	1210	1203	1198	1203	1201	1178	1138	1174	170	
28 d	1101	1128	1156	1166	1180	1190	1194	1196	1193	1182	1195	1195	1201	1216	1231	1218	1205	1199	1216	1220	1207	1181	1128	1135	1185	433	
29	1141	1164	1181	1193	1194	1194	1204	1164	1171	1188	1191	1182	1182	1202	1230	1233	1269	1261	1237	1220	1217	1208	1202	1197	1201	825	
30	1197	1192	1161	1149	1181	1199	1202	1204	1202	1204	1205	1198	1188	1185	1197	1205	1208	1223	1232	1229	1216	1208	1204	1199	1199	788	
31	1199	1199	1197	1197	1198	1196	1192	1188	1183	1188	1187	1189	1194	1208	1202	1237	1251	1236	1223	1207	1197	1195	1191	1188	1202	842	
Mean	1164	1167	1170	1173	1177	1178	1181	1185	1188	1190	1189	1187	1187	1193	1198	1205	1211	1212	1211	1207	1204	1199	1186	1177	1189		Grand Total 884,645
Sum 36,000+	91	163	267	348	487	520	626	743	818	897	872	805	792	971	1142	1339	1541	1576	1532	1400	1319	1157	756	483			

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

36 LERWICK

JULY 1956

	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										
1	h. m.	γ	γ	h. m.	γ	h. m.	h. m.	γ	h. m.	γ	83	1,1,2,2,3,3,3,3	18	0	84.6				
2	15 41	539	421	12 08	118	14 49	10 1	-5.4	06 48	15.5	16 16	1244	1161	24 00	83	1,1,2,2,3,3,3,3	20	1	85.2
3	18 01	556	403	07 23	153	17 53	11 0	-5.3	05 58	16.3	19 28	1246	1154	00 58	92	3,1,3,2,3,3,3,2	20	1	85.6
4	15 43	536	412	12 12	124	12 35	9 1	-5.3	03 10	14.4	16 07	1220	1132	03 07	88	3,3,3,3,4,3,1,1	21	1	85.8
5	19 37	508	424	09 04	84	13 40	9 8	-3.6	06 51	13.4	20 13	1202	1161	06 33	41	1,3,2,2,1,1,2,1	13	0	85.8
6	19 44	538	414	12 00	124	11 46	9 9	-7.1	06 42	17.0	22 09	1205	1178	12 30	27	1,1,2,3,3,2,2,2	16	0	85.7
7	17 48	531	436	10 36	95	13 21	11 7	-3.4	04 22	15.1	18 29	1214	1170	01 40	44	2,1,1,2,2,3,2,0	13	0	85.6
8 q	17 28	529	448	08 47	81	21 23	10 5	-5.4	05 49	15.9	18 10	1222	1172	11 07	50	1,1,1,1,2,2,1,1	10	0	85.8
9	20 23	524	447	10 24	77	13 07	10 9	-16.0	24 00	26.9	21 53	1207	1146	23 43	61	2,3,2,1,1,2,2,4	17	0	85.5
10	18 47	521	440	11 05	81	14 24	10 4	-16.6	00 04	27.0	17 28	1218	1133	02 02	85	3,2,2,2,2,2,1,2	16	0	85.2
11	18 50	623	454	11 31	169	18 50	14 9	-10.6	23 41	25.5	19 25	1207	1145	24 00	62	1,1,2,2,1,3,4,3	17	1	85.8
12	16 38	566	427	10 37	139	15 00	9 8	-13.5	07 13	23.3	17 10	1234	1100	02 51	134	3,3,2,2,3,3,2,2	20	1	85.8
13 d	20 28	548	431	11 07	117	14 16	14 4	-5.3	08 18	19.7	20 11	1216	1144	05 38	72	2,3,3,1,2,2,3,1	17	0	86.6
14	18 25	717	236	24 00	481	18 48	17 9	-11.1	19 04	29.0	18 19	1319	1090	02 20	229	4,3,1,1,3,4,5,5	26	1	86.7
15	21 07	541	90	00 07	451	00 15	35 3	-21.9	00 46	57.2	18 45	1216	1038	00 13	178	6,2,2,2,2,2,3,3	22	1	86.0
16	18 57	550	435	10 23	115	14 27	9 9	-6.1	07 53	16.0	20 24	1227	1179	00 43	48	1,1,1,1,2,2,3,2	13	0	85.6
17	18 10	525	411	10 57	114	14 10	13 3	-6.8	07 22	20.1	17 09	1213	1165	03 51	48	3,2,2,2,3,3,2,2	19	0	85.8
18 q	19 35	522	432	11 31	90	13 30	9 4	-7.3	0										

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 1956

	Hour G.M.T.																								Mean	Sum 28,000+
	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		
1	1173	1118	1112	1162	1183	1187	1189	1187	1185	1185	1184	1181	1182	1192	1204	1205	1198	1200	1211	1212	1199	1195	1194	1188	1184	426
2	1168	1174	1182	1189	1188	1189	1193	1194	1192	1187	1177	1178	1188	1195	1193	1198	1204	1205	1204	1195	1198	1194	1180	1171	1189	536
3	1181	1188	1192	1193	1194	1194	1191	1188	1182	1178	1175	1175	1175	1191	1208	1225	1212	1199	1192	1188	1187	1189	1188	1189	1191	593
4 q	1191	1188	1188	1191	1189	1193	1192	1191	1186	1181	1174	1169	1166	1175	1186	1199	1204	1208	1207	1199	1193	1188	1187	1184	1189	529
5 q	1182	1182	1184	1191	1186	1173	1180	1182	1187	1181	1179	1178	1181	1187	1191	1193	1195	1197	1192	1188	1187	1187	1191	1192	1186	466
6	1188	1183	1187	1190	1192	1192	1187	1184	1179	1169	1160	1160	1163	1170	1174	1187	1195	1191	1192	1185	1192	1194	1192	1190	1183	396
7 q	1184	1175	1182	1181	1181	1176	1180	1181	1181	1182	1175	1165	1164	1168	1179	1188	1191	1192	1194	1195	1199	1194	1188	1188	1183	383
8	1187	1185	1173	1176	1185	1191	1192	1189	1176	1171	1164	1160	1157	1161	1180	1202	1233	1251	1256	1248	1196	1169	1174	1176	1190	552
9	1175	1171	1175	1175	1180	1188	1185	1191	1192	1185	1178	1181	1192	1204	1219	1225	1226	1313	1288	1264	1227	1233	1165	1118	1202	850
10	1119	1111	1136	1158	1159	1167	1185	1192	1198	1202	1198	1191	1189	1192	1209	1207	1206	1204	1201	1198	1192	1185	1183	1183	386	
11 d	1182	1168	1168	1175	1180	1185	1192	1186	1179	1182	1182	1177	1168	1187	1213	1222	1251	1292	1272	1249	1238	1210	1168	1184	1200	810
12	1165	1162	1156	1167	1182	1187	1180	1181	1188	1191	1198	1193	1199	1225	1266	1255	1233	1226	1234	1229	1214	1203	1199	1192	1201	825
13	1187	1186	1188	1187	1191	1194	1197	1192	1189	1187	1184	1182	1179	1181	1187	1193	1203	1204	1199	1199	1204	1194	1189	1180	1191	576
14	1164	1146	1154	1173	1181	1188	1192	1188	1188	1188	1184	1178	1175	1177	1191	1192	1197	1198	1195	1197	1198	1194	1194	1189	1184	421
15	1181	1186	1187	1187	1182	1185	1188	1188	1187	1188	1184	1180	1174	1170	1177	1178	1181	1185	1187	1189	1203	1198	1189	1191	1185	445
16	1189	1188	1188	1187	1187	1187	1190	1192	1189	1186	1181	1176	1173	1175	1187	1187	1198	1211	1199	1188	1185	1181	1182	1184	1187	490
17	1149	1127	1136	1164	1181	1175	1127	1147	1163	1173	1176	1189	1194	1187	1206	1221	1218	1204	1201	1198	1207	1210	1216	1213	1183	382
18	1204	1201	1204	1207	1207	1204	1207	1201	1198	1193	1193	1193	1190	1184	1187	1187	1188	1186	1183	1185	1185	1187	1188	1187	1194	649
19 q	1189	1191	1191	1191	1191	1191	1191	1189	1187	1188	1185	1180	1178	1175	1178	1187	1190	1190	1180	1181	1183	1181	1183	1184	1186	454
20 q	1184	1181	1181	1181	1181	1181	1178	1175	1175	1184	1175	1170	1170	1175	1177	1180	1193	1195	1193	1190	1190	1193	1193	1193	1183	388
21	1193	1190	1190	1193	1195	1195	1190	1187	1178	1170	1163	1151	1146	1155	1198	1222	1215	1226	1246	1222	1199	1213	1188	1175	1192	600
22	1163	1174	1187	1193	1198	1198	1198	1195	1182	1181	1175	1164	1161	1178	1191	1198	1203	1195	1199	1219	1218	1177	1159	1161	1166	467
23 d	1136	1141	1146	1139	1141	1157	1168	1181	1191	1187	1190	1191	1195	1242	1307	1300	1263	1263	1251	1279	1249	1129	984	819	1177	249
24 d	760	929	999	1050	1092	1115	1163	1180	1194	1205	1229	1216	1216	1240	1321	1277	1321	1323	1354	1319	1231	1181	1168	1134	1176	217
25 d	1064	1154	1177	1181	1192	1175	1196	1205	1207	1224	1225	1220	1223	1257	1278	1284	1263	1250	1252	1244	1209	1146	1135	1037	1200	798
26 d	947	933	979	1030	1118	1162	1171	1173	1182	1191	1198	1199	1199	1204	1218	1265	1279	1263	1250	1235	1216	1209	1204	1198	1168	23
27 d	1195	1190	1184	1168	1167	1164	1187	1204	1204	1206	1215	1218	1215	1209	1229	1228	1217	1219	1217	1210	1209	1200	1196	1189	1202	840
28	1134	1103	1105	1126	1151	1171	1192	1198	1201	1200	1192	1193	1185	1180	1205	1215	1232	1230	1215	1217	1198	1188	1188	1189	1184	408
29	1183	1175	1179	1180	1188	1192	1196	1202	1204	1200	1192	1189	1198	1193	1215	1231	1220	1215	1198	1200	1200	1199	1192	1173	1196	714
30	1142	1146	1161	1168	1175	1178	1187	1196	1195	1187	1191	1189	1187	1192	1198	1212	1229	1236	1218	1199	1193	1191	1192	1192	1190	554
31	1189	1184	1181	1183	1187	1187	1192	1192	1192	1191	1194	1206	1195	1215	1208	1241	1275	1352	1343	1288	1275	1240	1199	1199	1221	1308
Mean	1150	1153	1160	1169	1177	1181	1186	1188	1188	1188	1186	1184	1183	1191	1209	1216	1220	1227	1223	1217	1206	1192	1179	1166	1189	
Sum 35,000+	648	730	952	1236	1504	1621	1759	1834	1837	1827	1773	1692	1677	1936	2480	2704	2833	3023	2926	2712	2380	1959	1550	1142		Grand Total 884,735

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

40 LERWICK

AUGUST 1956

	TERRESTRIAL MAGNETIC ELEMENTS										3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house °A.					
	Horizontal force			Declination			Vertical force												
	Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range										
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	4,3,1,2,3,3,2,1	19	1	85.4				
2	17 38	530	378	01 46	152	01 31	12.2	-5.9	03 35	18.1	19 16	1216	1089	01 56	127	2,1,1,2,2,2,2,2	14	0	85.8
3	19 32	527	433	09 52	94	13 01	13.6	-7.3	06 59	20.9	17 44	1209	1158	00 33	51	1,1,2,2,3,3,1,1	14	0	85.6
4	14 28	522	427	11 22	95	13 12	14.4	-4.1	05 53	18.5	15 19	1230	1167	11 57	63	1,1,1,1,1,2,1,2	10	0	85.5
5 q	21 16	512	445	11 04	67	12 57	10.9	-7.3	07 03	18.2	17 39	1211	1165	12 33	46	1,2,1,1,1,2,2,1	11	0	85.4
6	19 32	508	458	09 30	50	13 13	11.2	-3.9	07 55	15.1	16 56	1198	1170	05 15	28	1,1,1,2,3,3,2,1	14	0	85.6
7 q	14 52	537	444	09 14	93	12 58	11.9	-4.9	06 38	16.8	20 58	1198	1159	10 50	39	1,1,1,1,1,1,2,1	9	0	85.4
8	19 32	539	435	11 06	104	12 54	11.6	-3.0	04 11	14.6	20 03	1200	1162	11 44	38	2,1,2,3,3,4,3	21	1	85.0
9	17 33	580	442	11 02	138	14 02	18.9	-10.7	06 54	29.6	19 49	1286	1154	21 29	132	2,2,2,3,4,5,4,5	27	1	85.5
10	17 41	703	398	22 54	305	14 09	18.4	-14.0	17 48	32.4	17 41	1395	1098	23 35	297	3,3,2,2,3,2,1,2	18	0	85.9
11 d	22 19	520	427	11 30	93	13 15	18.3	-6.8	06 25	25.1	14 44	1215	1100	01 51	115	3,3,3,4,4,5,5,3	30	1	85.8
12	18 07	680	388	11 05	292	15 10	23.1	-18.7	06 54	41.8	18 02	1339	1139	22 24	200	3,3,3,4,4,3,3,3	25	1	85.4
13	17 35	533	409	11 22	124	13 21	20.3	-14.5	07 01	34.8	14 44	1274	1150	02 59	124	1,1,2,2,2,2,2,2	14	0	85.7
14	20 32	516	415	11 22	101	14 10	15.0	-7.3	09 02	22.3	20 13	1206	1174	12 53	32	2,2,1,2,1,1,1,2	12	0	85.5
15	19 12	515	416	11 12	99	13 11	13.8	-8.5	06 17	22.3	20 02	1200	1140	00 51	60	1,1,1,1,3,2,2,1	12	0	86.0
16	19 57	525	424	12 13	101	14 12	9.5	-7.3	07 20	16.8	20 24	1206	1168	13 21	38	1,0,1,1,2,3,2,2	12	0	85.4
17	16 13	529	437	10 59	92	13 47	14.1	-5.4	08 08	19.5	17 23	1216	1168	24 00	4				

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 1956	
	Hour G.M.T.																								Mean	Sum 10,000+	
	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			
1	470	480	479	478	478	470	458	452	447	432	430	445	441	435	475	490	520	520	528	529	507	493	488	485	476	1430	
2	483	484	452	397	377	9	281	395	314	296	380	453	448	436	486	511	489	524	517	496	460	461	459	453	419	61	
3 d	455	447	246	222	326	332	340	368	358	373	421	441	491	584	647	556	520	512	498	493	467	455	461	456	436	469	
4	457	466	460	463	462	457	451	448	455	451	453	454	467	488	461	457	464	463	471	482	490	484	478	475	465	1157	
5	478	462	468	470	471	471	468	461	447	433	430	439	445	453	458	469	474	467	477	487	488	491	490	496	466	1193	
6	493	472	482	476	473	467	472	451	442	418	424	472	518	564	637	570	504	454	462	487	499	469	476	474	486	1656	
7	429	438	450	475	481	480	472	458	444	428	425	432	450	452	474	484	483	478	487	489	491	487	487	484	465	1158	
8 d	484	485	485	483	483	481	473	452	429	425	436	472	469	564	802	1015	544	640	552	549	463	445	454	444	522	2529	
9	441	447	456	456	453	454	446	430	431	434	425	472	479	490	491	509	519	526	522	495	488	483	474	482	471	1303	
10	458	470	472	464	463	464	460	451	439	430	428	435	441	455	477	482	478	509	510	485	481	480	474	473	466	1179	
11	472	469	471	471	460	465	469	464	460	445	437	439	431	437	461	473	469	476	480	493	489	480	477	481	465	1169	
12	479	479	479	477	476	476	475	470	461	449	434	428	433	439	455	465	466	477	497	499	494	451	392	345	458	996	
13	411	422	413	399	418	460	463	457	450	456	446	435	437	448	465	474	481	513	509	494	487	479	479	476	457	972	
14 q	475	473	474	472	474	471	465	461	451	443	436	431	435	440	450	467	470	476	481	483	484	486	486	490	466	1174	
15	489	481	480	480	482	479	476	476	472	457	442	430	433	447	463	471	475	486	490	494	495	498	508	485	475	1389	
16	482	487	488	487	490	492	489	478	463	450	434	426	429	443	479	527	529	505	491	489	499	487	480	487	480	1511	
17 q	483	481	478	477	480	479	486	478	463	449	443	421	436	447	475	477	473	475	479	493	494	486	488	488	472	1329	
18 q	487	491	483	484	485	486	483	475	462	441	425	425	431	448	457	469	475	480	486	491	492	494	495	495	473	1340	
19 q	495	496	494	493	492	491	486	477	464	448	437	439	447	460	470	475	480	486	495	500	502	502	503	502	481	1534	
20	502	503	500	482	515	528	518	495	479	461	457	452	448	451	472	535	626	544	542	529	486	472	454	430	495	1881	
21 d	448	414	407	432	454	447	454	451	449	429	424	438	448	455	467	480	498	498	492	488	489	486	477	483	459	1008	
22 d	476	442	410	417	384	431	456	461	424	412	407	431	424	438	461	548	535	497	503	476	471	474	481	478	456	937	
23	473	448	429	465	476	478	461	445	437	434	422	436	451	451	457	472	480	481	477	483	484	483	487	484	462	1094	
24	479	478	475	482	484	482	477	466	450	432	417	419	438	459	465	465	472	476	485	493	500	492	498	489	470	1273	
25	480	451	481	482	486	486	486	477	464	446	435	431	437	455	470	479	474	479	494	492	487	478	481	477	471	1308	
26	475	477	458	458	479	483	464	460	448	425	412	415	434	447	456	463	477	478	486	487	488	492	490	491	464	1143	
27	491	491	490	487	486	486	483	478	467	452	446	445	453	463	487	475	487	478	488	481	472	475	483	486	476	1430	
28	484	479	464	480	470	487	491	478	463	443	440	439	447	470	484	489	473	478	487	493	492	489	486	486	475	1392	
29 q	488	491	486	486	490	491	490	483	470	456	444	443	449	460	476	482	488	494	491	492	497	495	495	496	481	1533	
30	483	483	486	480	490	487	489	480	470	451	446	437	446	456	466	475	480	485	492	496	500	500	486	472	477	1436	
Mean	473	470	460	459	465	456	463	459	446	433	431	439	448	465	491	507	493	495	496	495	488	482	479	475	469		
Sum 12,000+	2200	2087	1796	1775	1938	1670	1882	1776	1373	999	936	1175	1436	1935	2744	3204	2803	2855	2869	2838	2636	2447	2367	2243		Grand Total 337,984	

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

42 LERWICK (D)		10° +																								SEPTEMBER 1956	
	Hour G.M.T.																								Mean	Sum	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24			
1	7.7	1.2	0.2	-0.1	-0.1	-0.4	-0.9	-1.0	-0.1	1.0	1.9	5.4	7.6	9.5	10.6	8.1	8.3	4.8	5.0	4.0	1.1	3.1	3.2	1.2	3.4	81.3	
2 d	1.2	1.0	-2.2	-0.3	-2.3	0.6	-20.0	-17.1	-24.3	-1.3	3.4	10.4	13.4	12.4	7.7	2.0	1.7	-4.0	-3.7	-0.7	4.1	3.7	3.5	1.7	-0.4	-9.1	
3 d	-2.0	0.5	-8.0	-19.8	-10.9	-1.4	5.1	-9.3	-6.8	-6.8	0.2	6.4	12.6	11.0	4.8	4.8	4.0	1.6	3.0	1.0	-3.8	-1.2	0.9	1.6	-0.4	-10.7	
4	4.0	0.8	0.1	-0.3	-0.7	0.1	0.7	-0.6	-0.7	2.5	5.1	7.6	11.0	9.9	5.3	2.8	1.4	0.6	0.1	-1.5	0.7	2.8	3.7	3.8	2.5	59.2	
5	4.7	3.5	1.9	0.9	-1.4	-4.5	-6.1	-7.4	-6.4	-2.9	2.3	6.9	10.0	9.5	6.7	4.0	0.9	-1.0	-0.8	-0.2	1.4	2.7	2.8	4.0	1.3	31.5	
6	3.8	1.6	0.9	1.6	3.8	-0.4	-4.4	-2.9	-0.2	1.4	4.6	9.6	14.6	14.2	10.7	5.8	2.9	1.7	1.8	0.0	-2.8	2.2	3.6	2.7	3.2	76.8	
7	-6.9	-4.9	-2.0	-1.5	-2.7	-3.2	-3.4	-3.0	-0.8	0.7	4.2	8.6	13.1	13.8	11.7	7.3	3.9	3.2	3.3	4.5	3.8	3.9	2.5	1.6	2.4	57.7	
8 d	1.2	0.8	0.0	-1.0	-1.5	-2.5	-3.9	-7.1	-3.7	1.1	2.8	13.4	18.6	22.8	38.5	45.1	8.1	8.8	11.4	7.5	-4.9	5.2	3.8	1.8	6.9	166.3	
9	0.7	-1.5	-2.1	-3.1	-3.8	-4.2	-8.2	-5.1	-3.0	-1.1	6.2	11.0	13.3	16.7	15.8	14.0	9.7	4.7	4.2	1.6	-0.2	2.3	0.1	-0.9	2.8	67.1	
10	-4.2	-4.2	-2.1	-3.0	-1.7	-1.2	-0.9	-1.9	-1.5	0.0	2.9	6.9	9.4	11.3	10.2	7.1	4.2	0.4	-1.0	0.8	1.8	2.7	1.0	1.0	1.6	38.0	
11	0.4	0.4	1.0	-1.5	-3.7	-5.4	-5.4	-7.2	-5.7	-2.6	4.4	8.3	11.4	11.9	10.6	6.4	2.6	0.4	-0.3	1.9	2.3	2.5	1.1	1.6	1.5	35.4	
12	1.0	0.0	-0.6	-1.5	-2.5	-3.3	-5.4	-6.5	-6.2	-3.9	-0.3	2.6	5.8	7.8	7.7	6.5	4.8	3.3	3.3	2.5	1.6	3.6	-0.2	-3.8	0.7	16.3	
13	-10.5	-6.3	-3.0	-4.0	-7.0	-4.2	-4.4	-6.6	-5.7	-31.2	-27.5	-23.4	-20.5	-20.7	-21.5	-23.8	3.7	1.8	2.1	3.7	4.4	1.7	1.6	-0.1	-8.4	-201.4	
14 q	0.8	-0.1	-1.1	-2.0	-1.3	-2.2	-3.2	-4.0	-4.5	-1.9	0.9	4.7	8.3	8.4	7.4	6.5	3.6	2.8	2.7	2.8	2.2	1.7	1.6	1.5	1.5	35.6	
15	-2.6	-5.0	-3.2	-1.2	-2.8	-2.8	-3.2	-4.9	-5.3	-4.0	-0.7	3.8	8.4	10.1	9.9	7.8	4.8	4.6	4.5	3.8	2.7	2.7	3.6	-8.7	0.9	22.3	
16	-4.2	0.8	-0.7	-1.0	-1.2	-2.0	-3.1	-4.3	-5.0	-4.0	-0.9	3.2	7.0	9.4	12.7	10.8	8.4	5.1	3.7	4.1	2.7	-4.1	0.3	1.0	1.6	38.7	
17 q	1.7	1.7	0.8	0.8	-1.1	-0.7	-3.7	-5.0	-5.5	-1.3	4.3	7.9	10.5	11.0	11.3	8.0	3.6	2.3	2.3	3.1	1.7	2.4	1.8	1.5	2.5	59.4	
18 q	1.0	-1.3	-1.8	-0.7	-1.3	-1.6	-2.7	-3.6	-4.1	-3.0	0.4	5.7	10.3	10.8	9.5	7.1	3.8	3.0	3.6	3.5	3.2	2.8	2.5	1.9	2.0	49.0	
19 q	1.6	1.2	0.6	0.1	-0.6	-1.5	-3.2	-4.7	-3.5	-1.3	2.2	6.6	9.4	9.2	7.9	5.7	4.7	4.7	4.8	4.7	4.5	4.1	3.1	2.2	2.6	62.5	
20																											

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

29

43 LERWICK (Z)

46,000γ (0.46 C.G.S. unit) +

SEPTEMBER 1956

	Hour G.M.T.																								Mean	Sum 28,000+
	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		
1	1155	1146	1179	1197	1199	1197	1195	1193	1190	1189	1201	1214	1220	1211	1204	1220	1228	1244	1227	1238	1231	1205	1201	1205	1204	889
2 d	1205	1195	1150	1103	1037	900	841	1037	1131	1181	1247	1272	1243	1256	1254	1271	1278	1284	1256	1241	1223	1213	1207	1211	1177	236
3 d	1215	1206	1108	1071	1047	1050	1070	1127	1187	1207	1241	1269	1262	1288	1302	1314	1298	1281	1254	1227	1193	1168	1175	1173	1197	733
4	1157	1171	1188	1198	1202	1197	1199	1206	1215	1215	1211	1218	1222	1233	1249	1236	1229	1220	1216	1242	1207	1203	1198	1199	1208	1001
5	1189	1163	1184	1190	1205	1210	1212	1210	1205	1199	1190	1187	1189	1195	1202	1207	1211	1209	1200	1199	1198	1195	1193	1189	1197	731
6	1168	1163	1191	1187	1168	1178	1177	1184	1179	1187	1181	1190	1228	1267	1322	1333	1301	1259	1223	1218	1205	1164	1181	1171	1209	1025
7	1137	1127	1154	1186	1204	1208	1210	1213	1215	1209	1198	1192	1191	1195	1195	1205	1215	1211	1204	1200	1198	1198	1194	1195	1194	654
8 d	1194	1195	1196	1199	1202	1204	1203	1206	1202	1189	1177	1161	1177	1207	1183	1070	1342	1325	1282	1268	1180	1188	1189	1224	1207	963
9	1223	1213	1211	1213	1214	1213	1213	1212	1202	1205	1202	1205	1219	1227	1253	1275	1282	1273	1233	1204	1204	1212	1192	1149	1279	1249
10	1132	1159	1189	1201	1206	1210	1213	1211	1206	1199	1194	1195	1199	1200	1202	1209	1210	1215	1225	1224	1217	1208	1202	1198	1201	824
11	1199	1198	1192	1195	1196	1183	1175	1183	1187	1197	1204	1207	1213	1210	1209	1218	1213	1206	1204	1201	1206	1210	1209	1202	1201	817
12	1199	1196	1196	1196	1197	1198	1200	1199	1197	1199	1197	1194	1188	1182	1180	1185	1190	1193	1194	1204	1211	1139	1079	1101	1184	414
13	1114	1108	1038	1005	1025	1130	1180	1193	1201	1201	1198	1195	1195	1198	1201	1207	1214	1220	1230	1222	1216	1213	1201	1193	1171	98
14 q	1198	1199	1198	1198	1200	1196	1201	1204	1205	1205	1202	1201	1196	1192	1195	1195	1198	1195	1195	1198	1201	1202	1202	1201	1199	772
15	1201	1202	1199	1196	1194	1198	1198	1196	1198	1200	1201	1196	1190	1189	1190	1192	1196	1195	1195	1195	1195	1196	1195	1200	1196	707
16	1201	1201	1201	1201	1200	1201	1201	1205	1206	1202	1199	1196	1193	1189	1189	1215	1253	1271	1241	1216	1210	1211	1200	1196	1208	998
17 q	1198	1201	1202	1201	1200	1201	1198	1204	1205	1204	1204	1201	1196	1196	1198	1212	1218	1208	1201	1198	1202	1202	1200	1201	1202	851
18 q	1201	1196	1200	1202	1201	1201	1202	1202	1202	1201	1199	1189	1187	1189	1195	1196	1198	1197	1195	1195	1194	1194	1195	1196	1197	727
19 q	1196	1198	1199	1199	1199	1199	1202	1202	1202	1201	1200	1192	1188	1187	1187	1192	1195	1192	1190	1187	1190	1192	1191	1191	1192	661
20	1194	1195	1189	1159	1114	1116	1133	1160	1169	1177	1173	1167	1169	1182	1195	1225	1282	1358	1307	1257	1220	1212	1161	1091	1192	605
21 d	1109	1084	1023	1044	1049	1111	1145	1173	1189	1199	1216	1219	1234	1254	1259	1243	1271	1256	1238	1236	1208	1172	1176	1173	1178	281
22 d	1174	1146	1124	1099	1079	1097	1143	1170	1194	1208	1213	1260	1241	1222	1239	1276	1309	1267	1241	1225	1222	1206	1180	1173	1196	708
23	1171	1169	1140	1173	1201	1206	1206	1204	1204	1201	1202	1213	1213	1212	1213	1226	1228	1218	1204	1201	1199	1200	1192	1185	1199	781
24	1189	1191	1195	1198	1201	1206	1211	1213	1212	1210	1204	1195	1195	1206	1213	1213	1220	1204	1204	1201	1203	1199	1181	1170	1201	827
25	1161	1130	1140	1161	1183	1196	1202	1208	1210	1208	1198	1193	1195	1194	1202	1225	1221	1211	1206	1212	1216	1206	1176	1157	1192	611
26	1174	1163	1138	1120	1128	1151	1165	1167	1182	1199	1206	1211	1219	1216	1216	1220	1218	1216	1214	1211	1207	1200	1199	1196	1189	536
27	1195	1191	1191	1195	1197	1199	1201	1204	1206	1206	1201	1202	1206	1212	1229	1227	1223	1213	1213	1230	1235	1208	1202	1195	1208	981
28	1196	1190	1165	1112	1127	1149	1173	1192	1202	1212	1210	1206	1195	1192	1202	1214	1213	1206	1201	1200	1205	1208	1210	1201	1191	581
29 q	1190	1184	1193	1196	1196	1196	1196	1198	1201	1202	1200	1192	1187	1187	1189	1198	1202	1212	1216	1215	1211	1206	1201	1200	1199	768
30	1189	1194	1154	1167	1177	1189	1190	1195	1193	1198	1196	1196	1192	1194	1195	1198	1199	1196	1194	1195	1194	1196	1188	1185	1190	564
Mean	1181	1176	1168	1165	1165	1170	1175	1189	1197	1200	1202	1204	1205	1209	1216	1221	1235	1232	1220	1215	1207	1197	1189	1184	1197	
Sum 34,000+	1424	1274	1027	962	944	1095	1258	1672	1896	2006	2056	2119	2137	2285	2467	2620	3042	2953	2600	2436	2203	1925	1670	1522		Grand Total 861,593

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

44 LERWICK

SEPTEMBER 1956

	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								
1	h. m.	γ	h. m.	γ	h. m.	h. m.	γ	h. m.	γ	h. m.	γ				°A.		
1	19 29	540	412 10 15	128	00 13	18.2	-5.4	19 59	23.6	19 55	1255	1130 01 00	125	3,1,1,3,3,3,3,1	18	1	85.0
2 d	17 17	553	144 05 26	697	05 45	24.7	-38.7	06 28	63.4	17 14	1299	756 06 07	543	4,7,7,6,4,4,4,3	39	2	85.3
3 d	14 20	692	-95 03 02	787	12 55	18.0	-49.0	02 59	67.0	15 10	1323	984 02 54	339	7,7,5,4,5,4,4,3	39	2	85.3
4	20 39	496	440 07 21	56	13 10	12.2	-3.4	07 52	15.6	14 23	1253	1149 00 44	104	3,1,2,2,3,2,2,1	16	0	85.3
5	24 00	503	426 09 36	77	13 13	10.7	-9.2	07 23	19.9	17 07	1214	1150 01 22	64	3,2,2,2,2,2,1,1	15	0	85.4
6	14 23	656	410 09 43	246	14 03	20.6	-9.8	20 10	30.4	15 02	1349	1144 21 24	205	3,3,3,4,5,5,3,3	29	1	85.7
7	16 33	504	402 00 47	102	12 46	15.4	-10.9	00 31	26.3	16 21	1220	1121 01 10	99	3,3,2,2,2,2,1,1	16	0	86.0
8 d	15 22	1463	412 10 53	1051	14 57	116.0	-16.4	20 11	132.4	16 32	1374	588 15 10	786	1,1,3,4,8,9,5,3	34	2	86.0
9	18 37	575	397 07 09	178	13 47	21.5	-12.6	07 08	34.1	16 24	1286	1134 23 57	152	2,2,3,4,4,2,4,3	24	1	86.0
10	17 54	525	421 10 07	104	13 13	13.2	-7.1	01 08	20.3	18 11	1227	1128 00 47	99	3,2,1,2,3,3,3,2	19	1	86.0
11	19 43	495	425 10 56	70	13 54	12.6	-8.6	07 49	21.2	15 35	1221	1173 06 37	48	1,1,1,2,2,2,1,2	12	0	86.0
12	20 03	508	233 23 55	275	22 06	19.7	-13.0	22 30	32.7	20 36	1220	977 22 03	243	1,1,1,1,2,1,2,6	15	1	85.6
13	17 41	527	266 00 00	261	03 16	9.6	-17.7	03 58	27.3	18 45	1232	979 03 43	253	5,5,3,3,2,3,2,2	25	1	85.4
14 q	23 40	494	429 11 19	65	13 07	10.2	-6.1	08 20	16.3	08 28	1206	1191 12 19	15	1,1,1,1,1,1,1,1	8	0	85.2
15	22 46	513	428 11 23	85	13 36	10.4	-10.1	23 20	20.5	23 16	1204	1187 13 56	17	2,1,1,2,1,1,1,3	12	0	85.3
16	16 01	541	425 12 20	116	14 48	15.2	-12.3	21 43	27.5	17 18	1277	1187 14 50	90	2,1,2,2,3,4,3,3	20	1	85.4
17 q	19 55	496	417 11 36	79	14 12	12.2	-6.2	08 07	18.4	16 38	1220	1195 14 11	25	1,1,1,2,3,2,2,1	13	0	85.7
18 q	22 01	496	420 10 56	76	12 59	11.3	-4.5	08 19	15.8	08 30	1204	1185 13 00					

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

OCTOBER 1956

Table with columns: 45 LERWICK (H), Hour G.M.T. (0-1 to 23-24), Mean, Sum 9,000+. Rows 1-31 and Mean/Sum. Values range from 466 to 500.

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

Table with columns: 46 LERWICK (D), Hour G.M.T. (0-1 to 23-24), Mean, Sum. Rows 1-31 and Mean/Sum. Values range from -34.3 to 1.4.

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 1956

	Hour G.M.T.																								Mean	Sum 28,000+	
	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			
1	1181	1177	1171	1173	1182	1185	1189	1190	1192	1199	1192	1193	1208	1211	1230	1275	1275	1246	1220	1220	1214	1202	1183	1094	1200	802	
2 d	1073	1040	1136	1179	1192	1188	1188	1182	1196	1211	1220	1211	1231	1262	1295	1271	1271	1276	1252	1218	1216	1199	1159	1104	1199	770	
3	1079	1121	1144	1170	1177	1184	1190	1196	1199	1203	1203	1208	1230	1240	1230	1230	1228	1243	1244	1268	1243	1223	1204	1144	1200	801	
4	1126	1144	1162	1186	1199	1202	1203	1206	1211	1210	1207	1199	1196	1198	1206	1214	1208	1207	1220	1255	1218	1166	1190	1199	1197	732	
5	1203	1206	1208	1206	1207	1205	1202	1199	1207	1192	1192	1203	1203	1202	1205	1207	1205	1205	1202	1217	1245	1233	1217	1201	1207	972	
6	1181	1154	1151	1176	1189	1193	1195	1197	1199	1197	1191	1185	1190	1197	1236	1249	1253	1233	1221	1224	1214	1207	1199	1191	1201	822	
7	1155	1159	1164	1179	1185	1195	1199	1202	1203	1202	1196	1193	1193	1199	1216	1226	1229	1236	1232	1243	1238	1214	1193	1198	1202	849	
8	1155	1137	1175	1191	1195	1190	1179	1191	1203	1207	1207	1202	1197	1193	1195	1197	1207	1207	1208	1206	1209	1210	1203	1196	1194	660	
9	1188	1181	1180	1179	1191	1196	1202	1205	1207	1212	1203	1197	1195	1202	1202	1203	1205	1206	1214	1219	1215	1193	1184	1192	1199	771	
10	1197	1198	1185	1196	1198	1201	1202	1207	1209	1209	1209	1203	1196	1193	1191	1196	1202	1202	1203	1202	1202	1201	1200	1198	1207	800	
11	1197	1198	1191	1185	1184	1183	1191	1197	1203	1209	1211	1205	1197	1196	1192	1191	1195	1196	1196	1197	1200	1203	1196	1193	1196	706	
12	1192	1195	1196	1196	1196	1196	1197	1202	1207	1207	1205	1202	1192	1188	1186	1192	1196	1197	1196	1196	1196	1203	1198	1193	1197	724	
13 q	1188	1184	1196	1197	1196	1195	1195	1197	1201	1204	1205	1201	1190	1183	1186	1190	1190	1189	1190	1192	1192	1193	1195	1196	1194	645	
14 q	1197	1196	1196	1190	1190	1190	1193	1197	1200	1202	1200	1192	1185	1185	1188	1191	1192	1190	1190	1194	1197	1197	1198	1198	1194	648	
15 q	1198	1197	1196	1196	1196	1194	1193	1196	1197	1200	1197	1195	1192	1189	1190	1192	1195	1191	1190	1190	1191	1191	1195	1196	1197	1194	663
16	1199	1197	1196	1193	1192	1190	1191	1196	1202	1195	1193	1195	1193	1191	1194	1194	1194	1191	1191	1191	1191	1192	1195	1196	1194	652	
17 q	1197	1197	1198	1197	1195	1192	1192	1192	1196	1192	1190	1192	1189	1186	1187	1192	1191	1190	1190	1190	1191	1190	1192	1192	1192	610	
18	1192	1196	1196	1195	1195	1188	1186	1190	1192	1191	1189	1186	1185	1184	1186	1188	1189	1189	1185	1186	1188	1189	1190	1189	544		
19	1191	1192	1193	1193	1188	1178	1179	1181	1182	1182	1179	1174	1181	1184	1186	1195	1200	1202	1195	1190	1187	1185	1189	1190	1187	496	
20 d	1191	1192	1193	1185	1182	1137	1126	1134	1151	1177	1185	1213	1249	1276	1278	1274	1291	1278	1313	1284	1254	1233	1071	1049	1204	896	
21 d	1026	1078	1021	1122	1145	1147	1190	1203	1213	1208	1219	1233	1243	1267	1282	1268	1278	1314	1298	1295	1227	1199	1185	1161	1201	822	
22	1160	1133	1128	1095	1137	1188	1199	1205	1211	1214	1212	1209	1214	1228	1244	1251	1258	1278	1279	1266	1241	1208	1193	1184	1206	935	
23	1161	1126	1117	1126	1147	1162	1178	1186	1202	1206	1203	1207	1219	1230	1250	1261	1267	1269	1257	1247	1212	1159	1151	1173	1197	716	
24	1179	1190	1195	1193	1174	1179	1193	1205	1213	1214	1211	1204	1200	1202	1202	1206	1208	1209	1205	1202	1207	1202	1200	1199	1200	792	
25 q	1200	1198	1198	1199	1199	1198	1201	1205	1205	1205	1207	1202	1199	1196	1192	1195	1197	1197	1197	1201	1202	1197	1190	1185	1199	765	
26 d	1175	1163	1168	1172	1175	1174	1165	1173	1190	1193	1192	1191	1196	1196	1213	1244	1286	1347	1367	1322	1259	1144	1257	1223	1216	1185	
27 d	1010	1069	1040	934	1056	1156	1193	1220	1231	1232	1234	1232	1248	1247	1238	1231	1234	1217	1226	1267	1243	1227	1167	1148	1179	290	
28	1164	1182	1147	1114	1123	1126	1143	1179	1204	1225	1250	1279	1243	1292	1275	1246	1230	1223	1214	1214	1226	1225	1205	1184	1205	913	
29	1186	1190	1192	1197	1202	1207	1209	1212	1217	1226	1227	1224	1222	1226	1232	1233	1243	1248	1254	1241	1216	1203	1215	1213	1218	1235	
30	1209	1203	1199	1202	1202	1203	1203	1207	1208	1207	1212	1219	1221	1231	1254	1279	1278	1269	1236	1228	1214	1211	1212	1209	1221	1316	
31	1205	1209	1209	1210	1208	1207	1206	1208	1211	1217	1214	1220	1221	1221	1219	1222	1231	1226	1215	1213	1210	1208	1202	1152	1211	1064	
Mean	1166	1168	1169	1172	1180	1185	1189	1195	1202	1205	1205	1205	1207	1213	1219	1223	1226	1228	1226	1225	1215	1200	1191	1179	1200		
Sum 36,000+	155	202	241	326	577	729	872	1060	1262	1348	1355	1369	1418	1595	1780	1903	2016	2071	2004	1977	1656	1210	928	542		Grand Total 892,596	

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

48 LERWICK

OCTOBER 1956

	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															
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ													°A.
2 d	15 13	525	399	23 31	126	13 20	15.6	-8.4	23 08	24.0	15 35	1282	994	23 59	288	2,2,1,2,3,3,2,5	20	1	86.2							
3	05 33	503	333	23 16	170	12 11	14.2	-22.3	20 56	36.5	14 26	1300	990	00 00	310	5,2,2,3,4,3,4,5	28	1	85.9							
4	17 50	560	396	00 01	164	23 37	15.6	-19.9	17 48	35.5	19 18	1278	1041	00 02	237	4,3,2,3,3,4,3,5	27	1	85.7							
5	17 58	503	429	11 56	74	14 51	10.4	-10.7	22 32	21.1	19 29	1269	1056	00 03	213	4,2,2,2,2,3,4,3	22	1	85.3							
6	18 52	508	395	08 34	113	14 26	9.5	-6.8	06 35	16.3	20 24	1252	1188	10 26	64	1,1,4,3,2,2,3,3	19	0	85.3							
7	13 47	516	415	10 58	101	13 36	17.9	-9.0	07 55	26.9	16 14	1261	1141	02 05	120	3,2,2,3,4,3,3,3	23	1	85.0							
8	18 03	536	429	10 23	107	13 32	15.3	-8.5	08 45	23.8	19 19	1247	1149	00 17	98	3,2,2,2,2,3,3,3	20	1	84.9							
9	20 30	519	427	10 18	92	13 35	11.2	-14.1	20 58	25.3	20 55	1226	1117	01 11	109	3,2,3,2,1,2,4,3	20	1	82.4							
10	21 37	510	434	11 15	76	14 15	11.8	-7.9	08 33	19.7	20 00	1224	1138	02 13	86	3,2,2,2,2,2,2,2	17	0	82.3							
11	02 13	503	434	11 19	69	14 09	8.9	-4.6	08 56	13.5	09 02	1210	1179	02 12	31	2,1,1,1,1,1,1,1	9	0	82.6							
12	22 19	501	439	10 36	62	13 04	10.0	-4.1	07 30	14.1	10 10	1212	1179	05 02	33	1,2,2,1,2,1,1,1	11	0	82.4							
13 q	21 46	507	435	11 59	72	15 15	8.9	-10.8	21 42	19.7	08 59	1208	1185	14 19	23	0,0,1,2,1,1,1,3	9	0	82.0							
14 q	23 34	502	449	11 21	53	14 09	8.2	-4.5	00 04	12.7	10 28	1205	1178	01 12	27	2,0,1,1,1,0,1,1	7	0	81.5							
15 q	21 19	500	442	11 22	58	14 03	8.5	-4.0	08 17	12.5	09 20	1203	1183	12 50	20	1,1,1,1,0,0,1,1	6	0	81.5							
16	20 04	506	443	11 52	63	14 36	7.6	-4.1	08 43	11.7	09 30	1200	1186	13 32	14	1,0,1,1,1,1,1,1	7	0	81.9							
17 q	06 03	505	446	11 54	59	14 22	7.4	-3.1	07 42	10.5	08 06	1203	1189	06 02	14	1,0,2,1,1,1,0,1	7	0	82.1							
18	23 23	503	448	11 48	55</																					

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 1956				
	Hour G.M.T.																					Mean	Sum 8,000+			
	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
1	479	456	466	457	466	477	488	487	479	465	456	457	466	477	484	479	487	479	490	493	497	492	491	493	477	3461
2	490	490	491	494	499	503	502	496	486	470	464	454	455	471	476	490	489	494	498	501	499	498	500	481	487	3691
3	506	483	482	481	481	478	481	483	469	443	420	428	435	452	458	471	479	490	487	497	485	495	494	492	474	3370
4	487	482	479	484	485	488	488	474	475	459	443	436	441	451	462	466	480	491	491	492	492	492	492	506	477	3436
5 q	494	487	488	487	485	487	487	487	479	465	461	458	460	463	471	481	490	492	493	495	497	503	490	487	483	3587
6	493	494	494	490	483	491	494	494	479	461	449	443	449	464	482	493	488	485	490	492	487	474	485	485	481	3539
7 q	490	483	483	477	481	486	486	482	474	457	446	433	436	454	464	472	477	483	490	487	493	494	490	491	475	3409
8 q	491	493	493	493	490	487	482	485	478	465	453	451	458	468	470	477	482	490	492	493	495	495	496	493	482	3570
9	491	486	491	489	491	490	487	487	478	466	459	460	461	469	482	499	493	503	498	493	507	515	529	524	489	3748
10 d	503	456	155	342	447	477	458	442	458	463	452	440	458	484	493	497	583	744	800	667	546	477	368	195	475	3405
11 d	77	142	246	303	266	278	345	370	357	370	405	409	420	437	473	462	477	495	590	631	535	312	207	261	369	868
12	378	425	445	429	438	447	462	445	419	440	450	459	501	536	527	594	705	594	487	479	465	438	415	375	473	3353
13	379	257	325	438	449	452	453	458	453	446	440	436	420	427	454	457	468	464	465	468	473	475	476	482	438	2515
14 d	466	458	393	421	409	407	457	467	453	428	450	438	464	461	449	465	511	535	487	541	289	109	161	53	407	1772
15 d	186	188	74	247	251	258	302	354	312	299	465	560	482	538	440	446	458	465	515	498	459	465	462	431	381	1155
16 d	301	141	315	344	263	458	463	460	460	414	428	450	452	454	455	460	465	473	495	497	457	478	470	471	422	2124
17	475	477	471	472	473	469	467	460	443	456	463	463	464	453	469	482	493	484	488	481	465	458	431	437	466	3194
18	371	402	441	396	451	455	454	472	472	465	451	440	445	468	476	468	468	472	472	471	479	480	481	480	455	2930
19 q	479	476	478	480	482	485	484	480	472	461	449	446	452	461	457	465	474	479	484	486	487	489	488	487	474	3381
20	484	482	482	486	488	490	492	490	487	475	459	455	458	471	472	484	471	484	494	480	476	481	482	466	479	3489
21	463	451	434	431	475	484	482	450	442	430	430	430	441	450	453	472	487	487	501	481	473	472	448	437	459	3004
22	427	454	464	471	476	487	490	487	481	461	454	456	448	469	491	510	559	601	617	523	441	276	260	280	462	3083
23	320	401	423	444	458	480	464	458	471	461	445	432	459	550	517	501	522	501	466	464	461	459	459	462	462	3078
24	460	461	468	469	475	482	479	475	467	459	457	443	449	451	464	469	489	502	531	489	477	471	464	467	472	3318
25	461	467	468	469	472	474	475	465	466	456	448	451	475	474	468	484	486	501	491	483	484	484	487	479	474	3368
26 q	478	467	462	472	475	475	473	472	471	463	457	453	461	466	471	475	479	482	489	490	493	492	491	490	475	3397
27	487	484	481	481	479	479	481	480	479	474	463	460	461	469	475	488	493	494	498	499	484	489	465	383	476	3426
28	283	438	481	474	463	473	474	468	466	465	466	468	464	466	476	481	490	495	503	491	493	491	487	482	468	3238
29	483	485	481	478	479	475	479	482	487	482	471	469	472	478	482	489	491	504	486	470	481	477	439	484	479	3504
30	493	494	477	477	480	490	488	484	479	476	473	473	475	476	483	487	486	491	494	501	498	497	486	490	485	3648
Mean	429	429	428	446	450	462	467	466	460	450	451	452	456	470	473	482	497	505	509	501	479	458	446	435	463	
Sum 12,000+	875	860	831	1376	1510	1862	2017	1994	1792	1495	1527	1551	1682	2108	2194	2464	2920	3154	3282	3033	2368	1728	1394	1044		Grand Total 333,061

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

50 LERWICK (D)		10° +																				NOVEMBER 1956				
	Hour G.M.T.																					Mean	Sum			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21			21-22	22-23	23-24
1	-14.7	-9.4	-2.1	1.8	-0.7	-2.0	-1.3	-2.0	-3.0	-1.7	0.6	2.7	5.7	9.2	10.1	7.5	5.1	2.5	3.7	3.5	2.7	1.5	-5.4	-2.5	0.5	11.8
2	-1.9	0.9	1.7	0.3	0.4	-1.1	-0.3	-1.2	-2.0	-1.3	2.8	3.7	5.6	7.2	7.7	8.4	6.2	5.6	5.3	3.5	2.2	0.4	-5.9	-3.1	1.9	45.1
3	-10.9	-2.6	-3.0	-3.5	1.2	1.8	0.6	-1.3	-3.8	-3.1	3.6	6.3	6.7	9.2	7.2	4.5	4.6	4.7	-0.9	-4.1	-1.9	0.9	1.4	-1.1	0.7	16.5
4	-2.2	-2.9	0.6	-0.3	0.5	-1.1	-2.1	-0.6	-0.2	-2.7	-0.1	3.8	6.6	7.4	7.3	4.6	2.7	3.8	4.5	0.9	0.4	0.9	0.8	-1.2	1.3	31.4
5 q	-3.9	-1.0	-0.1	0.9	0.7	-1.0	-0.9	-1.9	-3.0	-2.6	-0.1	2.9	4.7	5.4	5.2	4.9	4.2	4.6	4.7	2.8	1.4	-3.1	-4.9	-0.7	0.8	19.2
6	1.2	1.0	-0.7	-1.5	3.2	-0.3	-2.1	-2.5	-3.1	-2.6	-0.1	5.4	5.7	7.5	9.3	10.4	6.4	10.5	4.7	2.4	-3.5	-2.9	-1.3	-5.4	1.7	41.7
7 q	-3.0	-3.1	-1.6	-0.6	-1.1	-2.1	-2.4	-3.1	-3.9	-4.0	-0.6	3.5	6.5	6.5	6.4	5.4	4.4	4.3	5.5	3.6	2.7	1.7	0.4	-1.8	1.0	23.6
8 q	-1.1	0.8	1.0	0.0	-1.4	-2.0	-1.2	-1.3	-2.3	-1.9	0.8	4.4	7.1	8.3	6.3	5.1	4.6	4.6	4.0	3.8	4.4	2.7	1.5	1.0	2.1	49.2
9	0.8	-0.2	-1.6	-1.2	-1.0	-2.1	-1.4	-2.2	-3.0	-2.1	1.1	4.4	6.6	6.5	6.6	7.5	5.7	9.0	10.4	6.1	3.4	2.7	8.2	1.4	2.6	62.8
10 d	-4.0	-2.1	-3.0	-22.3	-2.9	-6.9	-2.2	3.3	-4.6	-0.2	3.5	6.6	8.9	7.5	10.5	14.9	14.2	9.5	47.0	12.2	-1.0	1.0	-16.0	-34.8	1.6	39.1
11 d	-29.2	-17.5	-14.7	-30.0	-10.8	-22.2	-5.1	6.6	3.4	-2.9	-3.2	1.2	6.6	3.9	2.9	3.0	7.1	9.1	5.6	16.6	0.3	-16.8	-12.2	-41.2	-5.8	-139.5
12	-5.0	-5.1	-0.5	-2.1	-2.2	-2.3	-2.1	-3.6	2.6	0.6	0.9	3.6	8.5	3.6	9.3	2.8	7.7	4.2	-3.2	-1.1	-3.1	-1.7	-3.9	-10.8	-0.1	-2.9
13	-18.3	-17.2	-13.6	-11.7	-2.2	-3.3	-2.4	-2.7	-3.8	-2.9	-0.2	2.9	3.8	4.4	4.8	3.5	3.2	1.8	0.4	-0.2	-1.4	0.5	-0.6	-5.9	-2.5	-61.1
14 d	-2.3	-1.0	-1.3	-9.4	-2.7	-0.9	10.2	2.7	-3.0	1.5	5.8	7.4	7.7	6.5	3.6	2.1	7.5	-0.3	3.2	8.0	8.5	-15.6	-18.4	-30.0	-0.4	-10.2
15 d	-23.4	-28.0	-18.8	-15.8	-19.8	-8.8	-1.6	-6.4	-20.7	-19.6	-5.7	-4.5	2.7	8.6	2.8	1.7	3.8	3.6	2.8	0.3	1.1	-1.5	-6.0	-6.9	-6.7	-160.1
16 d	-8.1	6.1	-19.7	-5.4	-6.7	2.1	3.6	-1.7	-3.2	1.0	0.6	1.2	1.8	2.4	1.8	1.5	1.7	3.3	-0.2	-1.2	-1.7	-4.7	-5.4	-1.9	-1.4	-32.8
17	-2.1	-0.5	-2.0	-0.8	-1.4	-2.1	-2.2	-2.3	-0.6	-2.1	-1.3	2.3	5.7	2.4	5.8	7.0	3.6	6.9	3.5	2.8	-2.5	-4.0	-7.9	-10.8	-0.1	-2.6
18	-9.3	-5.0	-5.2	-0.6	0.7	4.8	0.4	-2.1	-1.4	-1.4	-0.2	2.2	3.2	4.3	5.9	3.9	2.7	1.7	1.3	-0.7	0.0	-0.3	-0.8	-1.2	0.1	2.9
19 q	-1.1	-0.2	0.0	0.2	0.0	-0.3	-1.2	-2.0	-3.2	-3.0	-0.8	1.7	3.7	4.6	3.5	3.2	2.7	2.1	1.6	1.0	-0.8	-0.2	0.0	-0.1	0.5	11.4
20	-0.2																									

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 1956

	Hour G.M.T.																						Mean	Sum 28,000+			
	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	
1	1138	1148	1167	1180	1175	1183	1190	1197	1204	1205	1203	1203	1204	1208	1218	1222	1239	1236	1216	1205	1204	1214	1221	1185	1199	765	
2	1214	1213	1213	1212	1209	1203	1203	1203	1203	1204	1203	1203	1204	1207	1208	1213	1205	1204	1207	1208	1212	1218	1214	1212	1185	1207	971
3	1201	1189	1198	1202	1199	1189	1191	1194	1203	1208	1207	1208	1215	1215	1222	1225	1215	1213	1222	1212	1214	1209	1200	1195	1206	946	
4	1185	1186	1186	1191	1201	1203	1203	1205	1200	1202	1205	1208	1206	1207	1210	1215	1214	1207	1208	1210	1206	1203	1203	1193	1202	857	
5 q	1191	1200	1202	1205	1208	1208	1207	1206	1208	1208	1210	1207	1206	1206	1206	1205	1205	1205	1208	1205	1204	1197	1201	1203	1205	911	
6	1201	1201	1203	1205	1200	1196	1200	1203	1208	1210	1206	1208	1204	1200	1203	1212	1230	1231	1227	1220	1223	1224	1205	1194	1209	1014	
7 q	1186	1194	1199	1201	1190	1197	1201	1204	1209	1214	1214	1211	1207	1203	1207	1208	1208	1204	1206	1214	1208	1206	1208	1207	1204	906	
8 q	1203	1200	1201	1203	1204	1203	1203	1201	1204	1210	1210	1209	1206	1204	1206	1203	1202	1203	1206	1206	1208	1208	1206	1204	1205	913	
9	1203	1206	1200	1202	1203	1204	1206	1206	1207	1206	1203	1201	1200	1199	1200	1202	1218	1215	1227	1239	1225	1229	1237	1245	1212	1083	
10 d	1258	1202	1095	1001	1053	1125	1151	1170	1187	1221	1231	1256	1275	1280	1322	1314	1334	1370	1349	1378	1350	1292	1145	944	1221	1303	
11 d	1066	1202	1112	1076	1049	1066	1166	1118	1173	1203	1243	1238	1241	1255	1256	1255	1238	1258	1310	1340	1304	1106	1123	1069	1186	467	
12	1028	1178	1226	1233	1232	1228	1226	1227	1229	1190	1204	1222	1242	1303	1303	1326	1394	1259	1256	1292	1275	1224	1180	1130	1234	1607	
13	1104	1048	1062	1129	1174	1206	1215	1221	1225	1228	1232	1239	1244	1238	1235	1235	1231	1225	1225	1222	1218	1213	1211	1186	1199	766	
14 d	1191	1200	1113	1063	1041	1036	1066	1146	1200	1210	1220	1253	1253	1259	1251	1235	1239	1337	1292	1280	1189	1156	1129	1276	1193	635	
15 d	1151	1167	1100	976	929	999	1018	1152	1273	1335	1308	1358	1344	1336	1320	1277	1256	1253	1296	1304	1265	1250	1245	1218	1214	1130	
16 d	1151	997	995	1038	1042	1026	1128	1177	1196	1219	1227	1244	1246	1239	1242	1247	1252	1250	1277	1252	1199	1220	1229	1242	1181	335	
17	1242	1239	1237	1231	1227	1225	1222	1221	1221	1212	1218	1219	1227	1231	1241	1265	1309	1293	1317	1285	1250	1232	1218	1208	1241	1790	
18	1178	1149	1153	1141	1116	1135	1162	1198	1220	1232	1238	1239	1245	1256	1260	1248	1234	1229	1234	1239	1227	1212	1218	1211	1208	983	
19 q	1210	1218	1220	1220	1219	1217	1217	1217	1221	1221	1221	1222	1222	1222	1228	1228	1227	1224	1220	1218	1218	1212	1210	1211	1219	1255	1255
20	1211	1214	1215	1215	1216	1216	1212	1211	1210	1208	1209	1208	1213	1214	1227	1245	1253	1257	1301	1262	1247	1232	1219	1197	1225	1412	
21	1131	1151	1145	1113	1134	1153	1170	1190	1194	1201	1218	1241	1252	1266	1253	1262	1262	1253	1259	1254	1231	1225	1204	1178	1206	940	
22	1154	1174	1203	1215	1217	1217	1217	1213	1218	1220	1216	1218	1239	1262	1262	1282	1345	1399	1361	1337	1235	1152	1141	963	1227	1460	
23	1066	1148	1196	1221	1198	1189	1207	1211	1221	1222	1239	1265	1282	1323	1318	1295	1315	1357	1306	1264	1240	1232	1221	1202	1239	1738	
24	1200	1204	1209	1216	1217	1217	1218	1220	1224	1224	1220	1222	1220	1222	1229	1247	1239	1286	1367	1322	1273	1265	1214	1233	1238	1708	
25	1219	1210	1210	1218	1220	1218	1218	1218	1215	1224	1229	1222	1224	1276	1302	1231	1224	1255	1275	1236	1228	1224	1201	1198	1229	1495	
26 q	1156	1155	1167	1206	1216	1217	1218	1219	1222	1224	1224	1221	1220	1217	1213	1214	1214	1214	1211	1213	1216	1216	1212	1209	1206	1024	
27	1218	1217	1217	1214	1212	1214	1211	1210	1212	1211	1212	1217	1214	1214	1215	1214	1215	1214	1212	1221	1261	1292	1270	1177	1220	1284	
28	1200	1165	1218	1239	1239	1232	1221	1216	1214	1213	1215	1217	1217	1218	1220	1217	1213	1214	1217	1225	1227	1229	1230	1227	1218	1243	
29	1222	1219	1218	1217	1215	1215	1214	1214	1212	1212	1212	1214	1214	1216	1216	1214	1211	1210	1265	1256	1232	1226	1189	1202	1218	1235	
30	1229	1232	1229	1221	1223	1216	1217	1215	1213	1210	1208	1212	1214	1216	1218	1221	1220	1222	1224	1233	1238	1229	1221	1221	1221	1299	
Mean	1177	1181	1177	1173	1173	1178	1190	1200	1212	1217	1220	1227	1230	1237	1240	1239	1246	1250	1257	1251	1234	1219	1205	1185	1213		
Sum 35,000+	307	426	309	204	178	353	698	1003	1346	1507	1606	1805	1896	2102	2204	2168	2367	2492	2696	2542	2018	2557	2141	2550		Grand Total 873,475	

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

52 LERWICK

NOVEMBER 1956

	TERRESTRIAL MAGNETIC ELEMENTS										3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 + °A.		
	Horizontal force			Declination			Vertical force									
	Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range							
1	h. m. γ	γ h. m.	γ	h. m.	h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	3,3,1,1,2,3,2,2	17	1	80.9
2	16 34 505	449 01 21	56	13 06 12.4	-16.4 00 01	28.8	16 49 1270	1130 00 07	140	18 39 1307	923 05 07	384	6,7,5,3,2,2,5,3	33	2	81.7
3	22 08 509	445 11 56	64	15 23 11.0	-7.9 22 31	18.9	23 02 1225	1186 24 00	39	19 32 1219	1182 00 07	37	1,1,1,2,2,2,1,3	13	0	81.4
4	00 13 556	407 10 34	149	13 37 12.0	-18.3 00 13	30.3	00 11 1248	1178 00 20	70	13 11 1248	1200 01 17	11	4,3,3,3,2,2,3,2	22	1	81.8
5	23 14 519	434 12 03	85	12 56 8.3	-6.9 01 47	15.2	15 19 1217	1180 00 47	37	15 19 1217	1180 00 47	37	3,2,2,2,2,2,2,2	17	0	81.9
4 q	21 18 507	456 11 37	51	14 13 6.0	-7.9 22 28	13.9	10 10 1210	1187 00 01	23	10 10 1210	1187 00 01	23	2,1,1,2,1,1,1,2	11	0	81.7
6	15 15 505	437 11 51	68	17 33 12.7	-10.2 23 55	22.9	17 45 1233	1183 23 48	50	17 45 1233	1183 23 48	50	1,2,2,3,2,2,3,3	18	0	81.4
7 q	00 01 498	422 11 51	76	13 57 7.5	-8.4 00 01	15.9	19 32 1219	1182 00 07	37	19 32 1219	1182 00 07	37	2,1,1,2,2,1,1,1	11	0	81.3
8 q	20 20 503	448 11 33	55	13 36 9.9	-3.2 08 44	13.1	11 33 1211	1200 01 17	11	11 33 1211	1200 01 17	11	1,1,1,2,1,1,1,0	8	0	81.7
9	22 44 564	456 10 19	108	22 54 21.4	-13.2 23 59	34.6	22 59 1268	1197 02 33	71	22 59 1268	1197 02 33	71	1,1,1,2,2,2,3,5	17	1	81.8
10 d	17 41 871	-38 02 37	909	18 37 63.2	-56.6 23 24	119.8	17 21 1412	843 23 24	569	17 21 1412	843 23 24	569	7,7,3,3,4,6,6,7	43	2	82.0
11 d	18 41 696	-212 23 44	908	19 47 30.6	-108.6 23 45	139.2	19 52 1387	900 24 00	487	19 52 1387	900 24 00	487	6,6,5,4,3,3,5,7	39	2	81.9
12	16 47 847	272 23 33	575	17 31 20.1	-30.8 00 00	50.9	16 41 1431	885 00 05	546	16 41 1431	885 00 05	546	6,3,3,3,4,7,5,5	36	2	81.5
13	22 56 500	140 01 55	360	12 56 6.4	-25.5 00 10	31.9	12 10 1245	988 01 45	257	12 10 1245	988 01 45	257	6,4,1,2,3,2,1,3	22	1	81.4
14 d	20 06 641	-338 23 30	979	20 51 54.8	-51.1 23 25	105.9	23 30 1502	971 20 37	531	23 30 1502	971 20 37	531	5,4,5,3,3,5,8,7	40	2	81.7
15 d	13 26 638	-59 02 16	697	13 23 19.5	-51.1 04 24	70.6	11 42 1377	772 04 55	605	11 42 1377	772 04 55	605	6,6,6,6,5,3,4,3	39	2	81.0
16 d	19 38 572	66 04 37	506	05 00 24.3	-36.3 19 41	60.6	19 37 1307	923 05 07	3							

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

53 LERWICK (H)		14,000y (0.14 C.G.S. unit) +																				DECEMBER 1956				
	Hour G.M.T.																				Mean	Sum 11,000+				
	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
1	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	484	610
2	485	485	484	486	488	489	485	481	477	471	464	465	470	479	481	482	489	492	496	496	494	489	490	492	484	610
3	463	470	476	482	478	478	485	490	485	475	467	468	466	471	479	490	484	486	489	493	488	491	493	493	481	540
4	482	480	481	482	482	482	485	487	486	478	470	453	452	460	470	472	486	488	492	495	483	486	484	490	479	506
5	490	483	482	489	490	489	491	487	483	476	466	463	457	461	470	477	489	484	478	486	494	493	494	489	482	561
6	484	481	482	490	490	491	488	484	480	477	471	470	465	469	473	481	489	483	485	489	489	489	489	488	482	577
7	487	486	483	481	488	497	490	484	481	476	469	470	467	473	477	470	487	488	487	485	481	464	484	487	481	542
8	482	480	481	483	486	497	507	508	499	489	480	473	470	462	476	488	488	470	478	480	484	491	487	497	485	636
9	493	486	482	485	489	492	494	477	486	472	454	456	454	456	468	477	484	487	488	486	480	477	483	483	479	489
10 d	484	484	484	486	493	493	496	493	482	470	465	460	463	465	466	474	483	487	490	490	497	476	476	460	479	497
11 q	461	468	456	438	499	496	495	485	483	479	462	447	444	471	498	506	502	500	502	493	493	496	486	467	480	527
12	465	464	464	466	471	477	478	477	474	467	459	457	455	460	472	478	483	485	485	487	486	482	481	484	473	357
13 d	484	483	484	486	487	489	489	489	489	474	467	470	471	474	481	500	504	529	528	528	502	529	488	482	492	807
14	475	471	454	460	466	474	479	474	438	457	460	456	447	460	485	489	471	482	484	481	473	473	475	461	469	245
15 q	462	476	470	476	484	480	484	487	483	468	449	452	452	461	469	470	481	485	483	485	483	476	468	466	473	350
16 q	478	484	481	483	487	488	488	488	483	477	474	466	463	464	467	477	484	486	487	486	484	486	486	485	481	532
17 q	484	484	484	480	484	488	492	488	482	471	462	458	457	468	470	479	483	489	492	492	490	484	483	484	480	528
18	489	488	489	487	493	494	495	489	486	475	471	466	466	471	474	478	483	489	494	495	496	494	492	490	485	644
19	491	492	494	496	497	502	500	495	495	483	470	466	474	483	476	472	477	487	490	490	488	494	496	496	488	704
20	494	493	493	494	497	499	500	497	492	478	468	460	460	467	478	486	494	493	484	486	489	489	484	487	486	652
21 q	484	486	489	490	493	496	501	498	492	485	474	467	464	464	473	479	481	484	486	489	487	489	489	490	485	630
22	491	489	487	491	494	496	497	499	496	488	482	475	476	482	488	493	499	500	499	497	497	492	494	497	492	799
23	497	486	489	488	486	502	496	497	499	491	481	475	474	475	474	481	492	494	491	494	499	499	498	497	490	765
24	495	493	493	493	493	497	499	499	496	490	480	469	470	474	479	487	495	498	499	499	498	494	486	483	490	759
25 d	486	485	492	489	489	496	497	496	497	493	484	483	479	480	485	492	493	497	504	491	491	499	500	497	491	795
26	494	490	488	489	489	491	494	491	494	487	482	489	467	468	483	482	494	508	510	518	521	509	483	491	492	812
27	480	463	466	466	462	467	483	477	454	468	469	459	463	467	477	484	488	487	489	492	492	494	494	494	476	435
28 d	492	490	489	487	486	486	486	487	483	474	468	464	467	473	481	489	511	541	533	536	507	501	496	479	492	806
29	475	454	482	474	474	479	484	485	484	483	487	480	467	457	461	468	476	481	492	488	499	493	486	484	479	493
30 d	485	484	474	471	472	481	480	477	478	466	455	452	460	464	469	476	480	485	489	492	495	493	500	488	478	466
31	487	490	490	487	488	491	493	484	496	482	472	454	460	471	474	481	488	488	492	501	488	487	490	488	484	622
Mean	482	482	481	482	486	489	491	488	484	477	470	465	463	468	476	482	488	492	493	494	491	491	488	486	483	
Sum 14,000+	981	940	925	935	1057	1162	1216	1135	1018	801	557	411	367	522	755	941	1124	1243	1291	1320	1228	1207	1130	1062		Grand Total 359,328

491 at 0-1h. January 1, 1957

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

54 LERWICK (D)		10° +																				DECEMBER 1956				
	Hour G.M.T.																				Mean	Sum				
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20			20-21	21-22	22-23	23-24
1	-1.2	-0.7	-0.1	-0.2	0.3	-0.2	-0.9	-1.2	-1.3	-0.9	0.4	2.4	3.6	5.5	5.6	4.7	6.1	3.4	2.5	2.5	0.8	-2.4	-0.6	-2.1	1.1	26.0
2	-8.1	-10.0	-9.6	-3.9	-3.1	-3.0	-2.1	-1.9	-1.3	-1.1	-0.6	3.1	3.4	3.7	4.4	5.0	2.8	4.5	4.5	0.8	-2.6	0.7	-0.2	-5.8	-0.9	-20.4
3	-7.9	-7.9	-5.0	-1.9	-2.3	-3.1	-1.7	-2.1	-2.3	-0.8	-0.2	2.6	3.2	4.7	5.1	2.7	3.9	4.3	5.1	3.0	-6.1	-3.9	-1.2	-0.7	-0.5	-12.5
4	-0.2	-1.2	0.6	-3.0	-2.3	0.3	-0.7	-0.7	-0.9	-1.2	0.8	3.9	3.6	5.6	5.1	3.4	5.3	3.6	1.6	2.7	-0.2	-3.6	-5.0	-3.1	0.6	14.4
5	-1.6	-3.1	-1.5	-3.2	-0.5	-1.2	-1.2	-1.6	-2.6	-2.3	-0.8	0.6	3.0	4.1	5.1	6.5	13.7	6.7	3.3	1.0	0.3	-0.7	-0.4	-0.4	1.0	23.2
6	-0.5	-0.7	0.9	1.7	-0.4	-1.6	-1.5	-1.2	-1.5	-0.7	-0.7	1.6	2.5	5.1	6.6	5.6	6.0	7.6	7.5	4.8	3.2	-8.4	-4.0	-4.3	1.1	27.6
7	-4.8	-0.4	0.8	0.6	-0.2	-0.1	-0.1	0.0	-0.3	-0.1	0.6	1.9	3.7	3.6	4.4	4.9	5.1	-3.1	1.6	0.9	-0.2	-0.7	-3.3	-3.2	0.5	11.6
8	-2.1	-2.1	-2.8	-0.5	0.6	1.6	2.2	4.6	5.1	-0.2	2.0	4.4	6.5	6.0	4.1	2.7	2.0	2.6	3.2	3.6	-4.0	-0.7	-1.4	-2.0	1.5	35.4
9	-1.4	-0.2	-0.4	0.9	1.0	1.0	0.8	0.3	-0.1	0.9	1.7	1.9	3.4	4.6	5.8	4.6	4.6	3.2	2.7	2.9	0.6	-2.1	-3.3	-7.9	1.1	25.5
10 d	-9.0	-6.2	-6.8	0.3	-9.7	-2.6	0.3	2.7	1.2	1.6	0.8	2.8	6.8	7.3	8.2	11.3	10.5	8.3	8.4	5.6	2.9	2.7	-19.1	-8.7	0.8	19.6
11 q	-4.2	-2.3	-1.3	-1.3	-1.3	-0.2	-0.2	-0.2	-1.0	-1.4	-0.7	0.8	1.7	3.4	3.6	2.2	2.0	1.6	1.4	1.5	0.9	0.7	-0.5	-0.5	0.2	4.7
12	-0.4	-0.2	0.0	-0.1	-0.2	-0.3	-0.4	-0.9	-2.1	-2.6	-1.4	1.0	3.8	5.6	5.6	5.6	10.3	15.9	12.8	10.4	1.5	-7.6	-8.8	-4.8	1.8	42.7
13 d	-3.0	-2.3	1.7	1.9	4.4	2.8	-0.2	1.2	5.6	2.5	1.2	4.8	7.0	6.4	0.3	10.3	6.3	2.8	1.0	0.8	-1.0	-1.9	-4.0	-6.0	1.8	42.6
14	-7.9	-6.2	-1.6	2.0	0.3	0.5	-0.2	-0.1	-1.3	-0.7	3.2	3.2	3.6	4.7	5.6	4.9	3.5	5.1	0.7	-1.1	2.2	-1.4	-5.5	-4.7	0.4	8.8
15 q	-2.1	-0.2	1.2	0.6	-0.4	-1.2	-0.7	-1.0	-2.0	-1.4	1.2	3.2	3.8	4.4	4.6	1.9	0.7	0.9	0.9	1.5	0.7	-0.3	-0.1	0.4	0.7	16.6
16 q	-0.2	-0.5	1.2	1.6	0.9	-0.1	-0.1	0.8	-0.5	-2.9	-1.6	1.4	2.6	3.9	3.4	1.9	0.6	0.3	0.8	1.3	1.6	1.0	-0.2	-0.9	0.7	16.3
17 q	-0.2	0.8	0.9	1.2	0.7	-0.2	-0.3	0.7	-0.1	-0.7	1.7	2.5	3.6	4.7	3.6	2.7	1.8	1.6	1.3	0.8	-0.1	-0.3	-0.2	0.7	1.1	27.2
18	0.7	0.9	1.4	1.5	1.9	0.8	-0.3	-0.3	-0.2	-1.2	-0.2	2.5	5.3	6.6	8.4	8.4	3.6	2.5	2.2	0.2	-1.2	-0.4	-1.0	-0.5	1.7	41.6
19	-0.2	-0.1	0.3	0.6	0.6	0.3	-0.4	-1.2	-1.4																	

ALL DAYS

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

57 LERWICK

	Hour G.M.T.												12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12												
HORIZONTAL FORCE																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ		
Jan.	-16.9	-18.5	-8.9	-3.7	+0.8	+7.0	+10.1	+8.8	+3.6	-1.6	-7.5	-8.2	-6.1	-0.3	+6.4	+10.8	+13.3	+16.8	+21.9	+12.2	-1.4	-14.5	-13.5	-10.6
Feb.	-5.2	-8.0	-4.9	-6.0	-1.6	+4.3	+5.8	-2.1	-7.6	-12.9	-17.8	-20.3	-14.2	-5.9	+2.4	+16.3	+27.2	+22.7	+13.9	+11.6	+7.0	+3.5	-1.5	-6.7
Mar.	-48.4	-41.5	-24.6	-5.3	-5.4	+7.3	+12.7	+10.7	+3.2	-7.3	-18.5	-18.2	-6.3	+5.4	+15.5	+30.8	+35.9	+43.3	+43.6	+35.3	+22.5	-8.5	-30.6	-51.6
Apr.	-33.1	-47.2	-49.4	-43.2	-35.1	-19.7	-9.6	-17.4	-16.6	-21.3	-20.8	-13.7	-3.4	+11.0	+27.1	+39.9	+52.4	+65.1	+67.1	+54.9	+32.4	+14.9	-5.9	-28.4
May	-51.8	-41.7	-40.6	-29.2	-12.1	-29.4	-30.3	-28.4	-34.3	-32.6	-28.5	-18.3	+13.6	+29.4	+57.6	+69.6	+68.4	+62.6	+55.3	+49.4	+28.1	-4.4	-18.8	-33.6
June	-20.4	-27.9	-14.4	-12.7	-18.2	-18.5	-16.9	-21.8	-28.8	-38.2	-41.2	-34.1	-21.5	+0.1	+20.4	+44.5	+50.6	+53.5	+50.6	+46.2	+36.6	+23.8	+0.2	-11.9
July	-20.1	-3.9	-4.1	+0.4	+0.6	-2.8	-9.2	-20.4	-31.7	-37.3	-37.5	-36.8	-27.7	-11.9	+3.3	+20.3	+32.0	+39.4	+44.5	+42.3	+35.4	+22.5	+6.6	-3.9
Aug.	-23.8	-11.6	-3.8	-1.5	+3.2	+1.2	-3.2	-13.3	-25.7	-38.6	-45.3	-43.0	-31.0	-1.7	+23.0	+32.7	+37.2	+42.7	+42.3	+31.2	+21.9	+11.9	+2.3	-7.1
Sept.	+3.8	+0.2	-9.5	-10.3	-4.8	-13.7	-6.8	-10.2	-23.6	-36.2	-38.2	-30.2	-21.6	-4.9	+22.1	+37.3	+24.0	+25.8	+26.1	+25.2	+18.5	+12.1	+9.5	+5.4
Oct.	-5.7	-6.3	-6.1	+0.5	+3.3	+11.8	+13.2	+9.0	-5.8	-19.9	-28.1	-27.1	-21.0	-11.3	-2.9	+4.8	+15.4	+21.2	+26.8	+21.7	+14.0	+7.0	-3.9	-9.6
Nov.	-33.4	-33.8	-34.9	-16.7	-12.3	-0.5	+4.7	+3.9	-2.9	-12.8	-11.7	-10.8	-6.5	+7.6	+10.5	+19.5	+34.8	+42.5	+46.8	+38.5	+16.3	-4.9	-16.1	-27.8
Dec.	+0.3	-1.1	-1.4	-1.2	+2.7	+6.1	+7.8	+5.2	+1.6	-5.5	-13.4	-18.1	-19.5	-14.5	-6.9	-1.0	+4.9	+8.7	+10.3	+11.2	+8.3	+7.5	+5.1	+2.9
Year	-21.2	-20.1	-16.9	-10.8	-6.6	-3.9	-1.8	-6.3	-14.1	-22.0	-25.7	-23.2	-13.8	+0.3	+14.9	+27.1	+33.0	+37.0	+37.4	+31.6	+20.0	+5.9	-5.5	-15.2
Winter	-13.8	-15.3	-12.5	-6.9	-2.6	+4.2	+7.1	+3.9	-1.3	-8.2	-12.6	-14.3	-11.6	-3.3	+3.1	+11.4	+20.1	+22.7	+23.2	+18.4	+7.5	-2.1	-6.5	-10.5
Equinox	-20.9	-23.7	-22.4	-14.8	-10.5	-3.6	+2.4	-2.0	-10.7	-21.2	-26.4	-22.3	-13.1	+0.1	+15.5	+28.2	+31.9	+38.9	+40.9	+34.3	+21.9	+6.4	-7.7	-21.1
Summer	-29.0	-21.3	-15.7	-10.7	-6.6	-12.4	-14.9	-21.0	-30.1	-36.7	-38.1	-33.1	-16.7	+4.0	+26.1	+41.8	+47.1	+49.5	+48.2	+42.3	+30.5	+13.5	-2.4	-14.1
DECLINATION																								
Jan.	-3.65	-3.05	-2.20	-2.91	-1.90	-0.73	-0.12	+0.42	+0.04	+0.34	+1.38	+2.90	+4.72	+5.85	+5.52	+5.05	+3.70	+3.73	+2.23	-2.15	-4.83	-5.65	-4.29	-4.40
Feb.	-3.89	-3.20	-2.35	-1.67	-1.76	-1.68	-1.34	-1.81	-2.64	-2.14	-0.51	+2.58	+4.78	+6.14	+6.07	+5.47	+4.32	+2.50	+1.32	-0.09	-2.18	-1.88	-3.31	-2.73
Mar.	-5.95	-5.54	-5.21	-4.44	-3.60	-3.01	-1.99	-2.50	-2.58	-1.51	+0.54	+4.24	+7.29	+9.29	+9.15	+7.89	+6.39	+4.01	+1.93	+1.96	+0.89	-3.15	-7.57	-6.53
Apr.	-4.27	-5.79	-6.85	-7.41	-7.20	-6.09	-6.33	-5.18	-3.98	-2.60	+0.84	+5.47	+8.59	+10.27	+9.33	+7.62	+6.18	+5.21	+3.79	+2.88	+1.74	-0.76	-1.52	-3.94
May	-5.15	-4.61	-4.67	-4.55	-3.75	-4.59	-6.99	-6.71	-4.89	-2.86	+0.21	+3.23	+6.08	+7.77	+7.68	+7.30	+5.95	+4.07	+3.14	+2.16	+2.73	+0.84	-0.38	-2.01
June	-2.73	-2.22	-3.15	-4.22	-5.19	-5.20	-5.97	-6.42	-5.99	-3.38	-0.86	+2.49	+5.36	+7.07	+7.08	+6.28	+5.44	+3.78	+3.75	+3.15	+2.86	+1.35	-1.12	-2.16
July	-1.65	-2.74	-3.21	-4.35	-5.12	-6.26	-6.38	-5.88	-4.79	-3.24	-1.02	+2.38	+5.90	+7.18	+6.90	+5.52	+4.23	+3.36	+3.12	+2.78	+2.01	+1.50	+0.34	-0.58
Aug.	-1.65	-3.50	-4.00	-3.99	-4.18	-6.09	-7.32	-7.28	-5.83	-3.12	+0.68	+4.94	+8.85	+10.55	+8.95	+5.77	+3.71	+2.27	+0.85	+1.10	+0.61	-0.16	-0.10	-1.06
Sept.	-1.77	-2.22	-3.06	-3.76	-3.67	-3.26	-4.44	-5.54	-5.65	-4.17	-0.09	+4.27	+7.69	+8.51	+7.81	+5.59	+3.00	+1.29	+0.92	+0.54	-0.47	+0.08	-0.12	-1.48
Oct.	-3.49	-3.91	-3.56	-3.31	-2.21	-1.64	-2.28	-3.53	-4.32	-2.82	+0.37	+3.42	+6.20	+7.24	+6.84	+5.48	+4.59	+2.76	+2.54	+1.57	-1.29	-2.23	-2.67	-3.75
Nov.	-6.52	-4.49	-4.30	-4.27	-2.17	-2.24	-0.83	-1.13	-2.68	-2.10	+0.56	+3.04	+5.28	+6.03	+6.16	+5.29	+5.80	+5.35	+4.91	+2.25	+0.47	-2.29	-4.07	-8.05
Dec.	-3.38	-2.79	-1.95	-1.88	-1.91	-1.65	-1.18	-0.83	-1.22	-1.70	-0.67	+1.49	+2.86	+4.11	+4.08	+3.78	+3.86	+3.16	+3.11	+1.99	-0.32	-1.83	-3.48	-3.65
Year	-3.67	-3.67	-3.71	-3.90	-3.55	-3.54	-3.76	-3.87	-3.71	-2.36	+0.12	+3.37	+6.13	+7.50	+7.13	+5.84	+4.76	+3.46	+2.63	+1.51	+0.19	-1.18	-2.36	-3.36
Winter	-4.36	-3.38	-2.70	-2.68	-1.93	-1.57	-0.87	-0.84	-1.63	-1.40	+0.19	+2.50	+4.41	+5.53	+5.46	+4.90	+4.42	+3.69	+2.89	+0.50	-1.71	-2.91	-3.79	-4.71
Equinox	-3.87	-4.37	-4.67	-4.73	-4.17	-3.50	-3.76	-4.19	-4.13	-2.77	+0.41	+4.35	+7.44	+8.83	+8.28	+6.65	+5.04	+3.32	+2.29	+1.74	+0.22	-1.51	-2.97	-3.93
Summer	-2.79	-3.27	-3.76	-4.28	-4.56	-5.53	-6.67	-6.57	-5.37	-3.15	-0.25	+3.26	+6.55	+8.14	+7.65	+6.22	+4.83	+3.37	+2.71	+2.30	+2.05	+0.88	-0.31	-1.45
VERTICAL FORCE																								
Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
Jan.	-38.6	-38.5	-27.5	-21.0	-21.1	-25.8	-16.6	-11.0	-5.7	-1.5	+1.5	+4.6	+6.2	+9.0	+16.5	+23.8	+33.1	+38.8	+40.6	+35.3	+21.4	+4.1	-9.0	-18.6
Feb.	-23.0	-20.9	-17.6	-16.2	-18.5	-13.7	-10.4	-4.4	-2.5	-0.2	+0.6	+1.5	+2.8	+6.0	+10.5	+15.7	+17.8	+22.7	+22.8	+19.6	+14.3	+8.7	-1.0	-14.6
Mar.	-41.8	-29.6	-32.8	-28.5	-23.3	-18.2	-14.6	-5.8	+0.3	+4.1	+9.1	+10.0	+12.7	+16.7	+24.1	+29.4	+34.9	+36.9	+33.3	+33.2	+27.4	+2.1	-31.9	-47.7
Apr.	-20.0	-32.9	-37.5	-32.7	-47.8	-32.8	-23.9	-10.4	-1.6	+5.0	+9.5	+9.4	+9.2	+9.7	+19.5	+30.1	+37.3	+43.1	+41.9	+30.7	+18.8	+4.9	-7.5	-22.0
May	-26.0	-44.0	-41.4	-43.8	-39.1	-32.5	-19.4	-11.6	-4.0	+3.3	+8.4	+11.9	+20.4	+32.1	+36.4	+38.9	+45.5	+39.6	+34.1	+25.9	+10.4	+1.7	-18.1	-28.7
June	-32.9	-36.4	-35.8	-30.3	-19.9	-14.2	-11.4	-3.7	+0.6	+1.6	+0.1	-0.5	+2.1	+7.8	+16.8	+29.1	+34.8	+37.8	+31.2	+24.8	+16.6	+9.2	-6.3	-21.1
July	-24.9	-22.5	-19.1	-16.6	-12.0	-10.9	-7.6	-3.7	-1.3	+1.1	+0.4	-1.8	-2.2	+3.5	+9.1	+15.5	+21.9	+23.1	+21.7	+17.4	+14.8	+9.6	-3.4	-12.1
Aug.	-39.3	-36.5	-29.5	-20.2	-11.7	-7.8	-3.4	-0.9	-0.9	-1.1	-3.0	-5.5	-6.1	+2.4	+19.8	+27.2	+31.2	+37.4	+34.2	+27.4	+16.6	+3.1	-10.2	-23.2
Sept.	-15.8	-20.9	-29.1	-31.2	-31.9	-26.9	-21.3	-7.6	-0.2	+3.6	+5.2	+7.3	+8.0	+12.8	+18.9	+24.1	+38.0	+35.1	+23.4	+17.8	+10.1	+0.9	-7.7	-12.6
Oct.	-33.4	-32.0	-30.6	-27.9	-19.8	-15.0	-10.3	-4.2	+2.3	+5.0	+5.3	+5.8	+7.3	+12.9	+19.0	+23.0	+26.6	+28.3	+26.2	+25.4	+15.0	+0.5	-8.5	-20.9
Nov.	-36.3	-32.2	-36.2	-39.6	-40.6	-34.7	-23.3	-13.0	-1.7	+3.8	+7.0	+13.7	+16.7	+23.6	+26.9	+25.8	+32.4	+36.6	+43.3	+38.3	+20.7	+5.5	-8.5	-28.2
Dec.	-4.6	-12.0	-15.7	-14.2	-12.8	-12.0	-11.5	-9.8	-6.8	-5.5	-3.9	-2.4	-0.9	+0.7	+6.0	+8.2	+8.2	+13.8	+16.6	+19.2	+19.0	+13.3	+7.5	-0.4
Year	-28.1	-29.9	-29.4	-26.9	-24.9	-20.4	-14.5	-7.2	-1.6	+1.6	+3.3	+4.5	+6.3	+11.4	+18.6	+24.2	+30.1	+32.8	+30.8	+26.3	+17.1	+5.3	-8.7	-20.8
Winter	-25.6	-25.9	-24.3	-22.7	-23.3	-21.5	-15.5	-9.5	-4.2	-0.9	+1.3	+4.3	+6.2	+9.8	+15.0	+18.4	+22.9	+28.0	+30.8	+28.1	+18.9	+7.9	-2.7	-15.5
Equinox	-27.7	-28.9	-32.5	-30.1	-30.7	-23.2	-17.5	-7.0	+0.2	+4.4	+7.3	+8.1	+9.3	+13.0	+20.4	+26.7	+34.2	+35.9	+31.2	+26.8	+17.8	+2.1	-13.9	-25.8
Summer	-30.8	-34.9	-31.5	-27.7	-20.7	-16.3	-10.5	-5.0	-1.4	+1.2	+1.5	+1.0	+3.5	+11.5	+20.5	+27.7	+33.3	+34.5	+30.3	+23.9	+14.6	+5.9	-9.5	-21.3

"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 TERRESTRIAL MAGNETIC ELEMENTS

INTERNATIONAL QUIET DAYS

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

58 LERWICK

	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
HORIZONTAL FORCE																								
Jan.	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.	-3.6	-2.3	-3.4	-1.1	+2.0	+2.9	+4.2	+3.9	+2.4	-2.3	-8.6	-8.5	-9.4	-5.3	-1.2	+0.9	+2.8	+3.5	+2.6	+2.3	+5.2	+4.7	+3.4	+4.9
Feb.	+0.6	-0.7	+0.6	+2.7	+2.5	+5.2	+7.3	+6.9	+2.4	-6.5	-12.8	-15.7	-13.0	-9.3	-4.2	-0.1	+2.5	+6.2	+6.7	+4.7	+5.4	+3.3	+2.2	+3.1
Mar.	+9.5	+7.8	+7.7	+8.0	+9.4	+10.1	+9.2	+5.4	-5.7	-19.4	-31.7	-38.6	-34.1	-21.0	-10.1	+0.2	+6.8	+6.5	+9.2	+11.4	+12.9	+16.8	+15.5	+14.2
Apr.	+8.9	+3.1	+3.5	+2.9	+8.1	+8.8	+4.7	-6.9	-25.3	-44.7	-55.1	-50.9	-33.1	-18.7	-0.1	+11.3	+26.3	+26.8	+26.3	+29.5	+25.5	+19.3	+15.3	+14.5
May	+10.7	+7.4	+5.7	+5.1	+7.1	+7.6	+3.7	-7.3	-24.7	-32.8	-41.5	-42.3	-32.3	-17.0	-4.9	+4.5	+13.1	+20.8	+24.3	+23.3	+21.3	+17.8	+16.3	+14.1
June	-1.4	-2.7	-4.8	+0.3	+1.0	-0.7	-9.2	-19.9	-30.2	-40.9	-42.6	-36.9	-21.0	-6.3	+7.2	+20.3	+27.6	+35.3	+27.4	+27.9	+32.2	+23.3	+12.2	+1.9
July	+1.2	-1.4	-1.7	+0.8	+1.8	-0.6	-8.4	-16.6	-27.7	-35.0	-37.4	-37.4	-30.2	-12.6	-0.9	+12.6	+20.2	+30.8	+36.0	+30.6	+26.7	+23.0	+15.4	+10.8
Aug.	+6.4	+5.3	+2.9	+4.8	+4.9	+7.7	+1.2	-7.9	-20.7	-32.6	-37.7	-38.1	-31.6	-18.3	-3.7	+7.0	+14.3	+17.7	+17.6	+22.7	+22.5	+21.0	+19.3	+15.3
Sept.	+11.4	+12.1	+8.8	+8.1	+10.0	+9.3	+7.8	+0.5	-12.2	-26.9	-37.2	-42.5	-34.6	-23.3	-8.6	-0.3	+3.0	+7.9	+12.2	+17.5	+19.6	+18.3	+19.2	+19.9
Oct.	+8.2	+10.1	+8.7	+9.4	+9.9	+10.1	+7.4	+5.1	-4.7	-17.0	-29.5	-35.1	-32.4	-22.9	-13.9	-5.4	+1.9	+7.1	+11.0	+13.5	+13.1	+14.8	+15.3	+15.3
Nov.	+8.6	+3.3	+2.9	+4.0	+4.7	+6.1	+4.6	+3.3	-3.1	-15.6	-24.7	-29.7	-24.4	-15.5	-11.3	-3.8	+2.5	+7.3	+11.8	+12.3	+15.1	+16.8	+13.1	+11.7
Dec.	-0.7	-0.4	-1.2	-0.7	+3.6	+6.4	+7.9	+6.0	+2.0	-6.5	-12.6	-17.8	-18.7	-13.2	-8.0	-1.1	+4.2	+7.6	+9.3	+9.2	+8.4	+5.5	+5.0	+5.8
Year	+5.0	+3.5	+2.5	+3.7	+5.4	+6.1	+3.4	-2.3	-12.3	-23.3	-30.9	-32.8	-26.2	-15.3	-5.0	+3.8	+10.4	+14.8	+16.2	+17.1	+17.3	+15.4	+12.7	+11.0
Winter	+1.2	0.0	-0.3	+1.2	+3.2	+5.1	+6.0	+5.0	+0.9	-7.7	-14.7	-17.9	-16.4	-10.8	-6.2	-1.0	+3.0	+6.1	+7.6	+7.1	+8.5	+7.6	+5.9	+6.4
Equinox	+9.5	+8.3	+7.2	+7.1	+9.3	+9.6	+7.3	+1.0	-12.0	-27.0	-38.4	-41.8	-33.5	-21.5	-8.2	+1.5	+9.5	+12.1	+14.7	+18.0	+17.8	+17.3	+16.3	+16.0
Summer	+4.2	+2.1	+0.5	+2.7	+3.7	+3.5	-3.2	-12.9	-25.8	-35.3	-39.8	-38.7	-28.8	-13.5	-0.6	+11.1	+18.8	+26.1	+26.3	+26.1	+25.7	+21.3	+15.8	+10.5
DECLINATION																								
Jan.	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.	-1.78	-0.65	+0.10	-0.18	-0.34	-0.83	-0.92	-1.16	-1.52	-1.21	-0.40	+0.58	+2.44	+3.73	+2.52	+1.72	+1.28	+0.91	+0.80	-0.36	-0.39	-1.12	-1.48	-1.74
Feb.	-1.78	-1.16	-0.18	-1.14	-1.06	-1.35	-1.80	-2.30	-2.82	-1.26	+1.46	+1.46	+2.84	+3.70	+3.66	+2.92	+2.12	+1.73	+1.58	+1.08	+0.50	-0.48	-1.66	-2.00
Mar.	-0.53	-0.76	-0.93	-1.08	-1.42	-1.99	-2.92	-4.08	-4.83	-4.08	-1.37	+2.04	+4.19	+5.98	+5.13	+3.56	+1.96	+1.11	+0.64	+0.68	+0.45	+0.30	-0.77	-1.28
Apr.	-0.41	+0.06	-1.13	-2.02	-3.08	-4.09	-5.70	-8.00	-8.09	-5.38	-0.63	+3.88	+7.47	+8.58	+7.31	+4.86	+2.94	+1.37	+1.38	+0.76	+0.65	-0.58	+0.03	-0.18
May	+0.23	+0.59	-0.13	-1.59	-3.57	-5.62	-7.61	-8.37	-6.93	-4.13	-0.25	+4.03	+6.69	+7.69	+6.35	+4.27	+2.43	+0.86	-0.07	+0.21	+0.81	+1.51	+1.47	+1.13
June	+0.69	+1.05	-0.98	-3.65	-5.91	-7.63	-8.63	-8.45	-7.18	-4.07	-1.57	+2.49	+5.63	+7.39	+7.54	+6.67	+4.79	+2.39	+2.09	+2.47	+2.66	+2.57	+1.75	-2.11
July	-0.64	-1.72	-2.75	-3.06	-5.30	-6.88	-7.42	-7.52	-6.33	-4.30	-1.40	+3.24	+6.86	+7.90	+6.95	+5.84	+4.40	+2.28	+1.60	+2.50	+1.83	+1.30	+1.74	+0.88
Aug.	-1.29	-0.74	-2.07	-3.13	-3.69	-5.58	-5.97	-5.77	-4.95	-2.34	+0.69	+4.15	+7.41	+8.02	+6.31	+3.91	+1.51	-0.06	-0.09	+0.87	+1.01	+1.20	+0.49	+0.11
Sept.	-1.34	-1.90	-2.45	-2.50	-3.02	-3.40	-4.92	-6.02	-6.37	-4.44	-0.80	+3.48	+6.96	+7.68	+7.25	+4.82	+1.98	+1.08	+1.30	+1.52	+0.95	+0.78	-0.28	-0.36
Oct.	-1.52	-1.95	-2.14	-2.15	-1.83	-2.32	-2.63	-3.87	-5.10	-5.05	-2.78	+0.43	+3.72	+5.57	+5.64	+4.39	+3.01	+2.66	+2.41	+1.73	+1.02	+0.61	+0.24	-0.09
Nov.	-3.25	-1.99	-2.50	-1.35	-1.75	-2.33	-2.35	-2.83	-3.68	-3.39	-0.97	+2.07	+4.25	+4.73	+4.10	+3.49	+2.73	+2.67	+2.63	+1.59	+1.12	-0.39	-1.45	-1.15
Dec.	-2.32	-1.33	-0.33	-0.12	-0.59	-0.95	-0.88	-0.73	-1.61	-2.22	-0.65	+1.05	+2.06	+3.29	+3.23	+1.74	+0.99	+0.73	+0.70	+0.83	+0.27	-0.54	-1.43	-1.19
Year	-1.16	-0.87	-1.29	-1.83	-2.63	-3.58	-4.31	-4.93	-4.93	-3.62	-0.95	+2.41	+5.04	+6.19	+5.50	+4.02	+2.51	+1.48	+1.25	+1.16	+0.91	+0.43	-0.11	-0.67
Winter	-2.28	-1.28	-0.73	-0.70	-0.93	-1.37	-1.49	-1.75	-2.35	-2.41	-0.82	+1.29	+2.90	+3.86	+3.38	+2.47	+1.78	+1.51	+1.43	+0.79	+0.37	-0.63	-1.51	-1.52
Equinox	-0.95	-1.14	-1.66	-1.94	-2.34	-2.95	-4.04	-5.49	-6.10	-4.74	-1.39	+2.46	+5.59	+6.95	+6.33	+4.41	+2.47	+1.55	+1.43	+1.17	+0.77	+0.28	-0.19	-0.48
Summer	-0.25	-0.21	-1.48	-2.86	-4.62	-6.43	-7.41	-7.53	-6.35	-3.71	-0.63	+3.48	+6.65	+7.75	+6.79	+5.17	+3.28	+1.37	+0.88	+1.51	+1.58	+1.65	+1.36	0.00
VERTICAL FORCE																								
Jan.	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.	-9.8	-9.0	-2.4	-1.8	-1.0	+0.1	-0.4	-1.6	-1.8	-0.2	+1.4	+0.4	+0.2	+1.4	+4.0	+4.2	+3.4	+3.3	+4.4	+5.4	+1.8	0.0	0.0	-2.0
Feb.	-0.8	-0.8	-2.8	-4.2	-1.8	-1.9	-2.8	-1.8	-0.4	+1.0	-0.2	-1.8	-1.4	-0.2	+0.6	+0.8	+1.4	+0.5	+0.4	+4.0	+3.0	+4.0	+4.2	+1.0
Mar.	-0.8	-0.7	-0.2	+0.1	-0.6	+0.1	0.0	+3.1	+3.8	+2.9	+1.2	-1.5	-5.2	-7.9	-5.2	-0.3	+5.0	+5.9	+3.4	+2.1	+1.2	-0.9	-2.0	-3.5
Apr.	-11.4	-10.3	-8.9	-4.0	-3.3	-0.5	+1.0	+2.5	+2.1	-0.2	-2.9	-7.7	-10.8	-8.5	-4.5	+2.6	+8.9	+18.5	+18.0	+16.7	+12.7	+5.0	-3.1	-11.9
May	+0.9	+3.2	+3.3	+3.6	+5.6	+5.9	+5.8	+5.6	+2.3	-5.0	-10.1	-14.6	-15.5	-10.0	-3.5	+1.0	+3.0	+4.5	+5.2	+5.0	+2.7	+0.6	-0.1	+0.6
June	-4.1	-9.9	-11.9	-4.9	+0.5	+2.4	+2.5	+1.9	-0.9	-3.9	-6.7	-10.7	-13.1	-7.3	-3.9	+4.7	+10.7	+17.6	+16.9	+11.7	+7.1	+6.1	+3.7	-8.5
July	+0.8	+1.7	+1.4	-1.2	-2.2	-3.3	-1.8	-0.2	-0.2	-2.3	-8.0	-12.0	-11.2	-8.7	-3.8	+3.0	+6.6	+10.3	+12.6	+9.2	+3.4	+3.9	+1.2	+0.8
Aug.	+0.9	-1.8	0.0	+1.9	+0.4	-2.4	-0.9	-1.6	-2.0	-1.9	-7.6	-12.8	-13.3	-9.2	-3.0	+4.3	+9.4	+11.2	+8.1	+5.4	+5.2	+3.5	+3.2	+3.0
Sept.	-1.5	-2.6	+0.3	+1.0	+0.2	+1.5	+2.2	+4.0	+4.7	+3.6	+1.1	-5.0	-8.3	-7.4	-4.3	+1.0	+3.4	+2.3	+0.6	+1.0	+1.9	+0.8	-0.3	-0.2
Oct.	+1.6	-0.1	+2.4	+1.4	+0.8	-0.7	+0.4	+3.0	+5.4	+6.1	+5.4	+2.0	-3.4	-6.7	-5.8	-2.4	-1.4	-3.1	-3.0	-1.0	+0.2	-0.1	-0.2	-0.8
Nov.	-19.2	-15.0	-10.6	-1.4	-1.0	-0.1	+0.8	+1.0	+4.4	+7.0	+7.4	+5.6	+3.8	+2.0	+3.6	+3.0	+2.2	+0.7	+1.8	+2.8	+2.4	-1.0	-0.2	0.0
Dec.	-2.9	-4.2	-3.2	-2.9	-5.0	-5.0	-6.5	-5.6	-2.8	+0.5	+2.6	+4.6	+5.9	+3.6	+4.6	+6.5	+4.2	+2.6	+0.3	+0.4	+1.0	+1.9	+1.2	-1.8
Year	-3.9	-4.1	-2.7	-1.0	-0.6	-0.3	0.0	+0.9	+1.2	+0.6	-1.4	-4.5	-6.0	-4.9	-1.8	+2.4	+4.7	+6.2	+5.7	+5.2	+3.5	+2.0	+0.6	-1.9
Winter	-8.2	-7.3	-4.7	-2.6	-2.2	-1.7	-2.2	-2.0	-0.1	+2.1	+2.8	+2.2	+2.1	+1.7	+3.2	+3.6	+2.8	+1.8	+1.7	+3.1	+2.1	+1.2	+1.3	-0.7
Equinox	-3.0	-3.4	-1.6	-0.4	-0.7	+0.1	+0.9	+3.1	+4.0	+3.1	+1.2	-3.1	-6.9	-7.6	-4.9	+0.2	+4.0	+5.9	+4.7	+4.7	+4.0	+1.2	-1.4	-4.1
Summer	-0.4	-1.7	-1.8	-0.1	+1.1	+0.7	+1.4	+1.4	-0.2	-3.3	-8.1	-12.5	-13.3	-8.8	-3.5	+3.3	+7.4	+10.9	+10.7	+7.8	+4.6	+3.5	+2.0	-1.0

"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

	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
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.	-65.4	-56.7	-12.9	+0.6	+6.3	+18.5	+22.4	+16.7	+3.1	-5.0	-11.3	-0.7	-2.8	+14.5	+38.5	+29.2	+34.1	+48.5	+56.4	+29.5	-12.5	-67.8	-40.3	-42.9
Feb.	-20.4	-27.0	-19.2	-37.6	-20.8	-5.7	-4.0	-39.4	-51.4	-49.6	-37.4	-26.4	-18.2	+6.0	+29.2	+86.6	+139.6	+97.7	+38.6	+31.8	+8.8	-13.0	-27.2	-41.0
Mar.	-118.0	-141.2	-94.8	-12.2	-32.2	+7.7	+12.8	+8.4	+2.8	-1.0	-9.6	+0.4	+35.4	+54.4	+69.8	+129.0	+135.8	+146.5	+117.0	+73.4	+17.4	-80.8	-126.6	-194.4
Apr.	-141.8	-226.4	-269.7	-241.0	-196.2	-146.0	-77.4	-71.6	-23.1	+15.2	+64.6	+102.8	+112.0	+126.8	+131.9	+137.0	+157.8	+190.0	+197.4	+156.2	+92.5	+41.4	-12.4	-120.0
May	-309.0	-231.4	-218.5	-142.0	-76.0	-187.2	-166.2	-94.4	-50.7	-0.2	+38.8	+73.2	+186.8	+217.4	+306.7	+328.4	+276.6	+198.0	+128.6	+101.2	+16.7	-107.0	-129.2	-160.6
June	-98.6	-147.8	-62.4	-60.2	-75.8	-73.7	-34.8	-13.8	-5.6	-23.2	-28.6	-21.8	-6.0	+25.0	+66.2	+147.8	+131.2	+97.7	+72.2	+55.8	+47.6	+37.0	+1.4	-29.6
July	-66.5	+3.2	+0.6	-4.5	-3.2	+2.0	-9.1	-21.8	-50.8	-51.3	-40.0	-34.8	-22.3	-0.4	+2.4	+26.3	+50.2	+55.0	+74.9	+59.2	+46.2	+20.5	-7.2	-28.6
Aug.	-172.4	-70.7	-27.6	-31.7	-5.8	-4.9	-6.6	-19.3	-31.4	-49.5	-65.4	-47.5	-14.8	+37.3	+127.0	+160.3	+83.6	+86.7	+107.8	+51.1	+13.0	-4.9	-33.6	-80.7
Sept.	+10.9	-4.0	-58.4	-68.1	-53.6	-118.4	-57.5	-33.0	-63.6	-71.3	-44.8	-11.4	-2.3	+37.0	+114.2	+163.7	+58.8	+75.8	+54.1	+42.0	+11.6	+5.9	+8.0	+4.4
Oct.	-58.6	-58.1	-52.1	-27.8	-21.5	+21.5	+30.0	+25.1	+6.3	-9.2	-12.9	-7.9	+10.2	+23.7	+27.9	+28.4	+65.3	+70.3	+96.0	+58.7	+11.1	-26.4	-93.9	-106.1
Nov.	-104.5	-134.0	-174.4	-79.7	-83.8	-35.4	-6.1	+7.6	-3.0	-16.3	+29.0	+48.4	+44.1	+63.8	+51.0	+54.9	+87.8	+131.4	+166.3	+155.8	+46.2	-42.9	-77.4	-128.8
Dec.	-2.4	-6.3	-6.8	-11.2	+2.4	+5.3	+8.2	+3.0	-1.8	-3.3	-8.2	-15.6	-23.8	-15.5	-0.6	+4.4	+5.4	+10.9	+15.2	+15.4	+14.0	+10.7	+3.2	-2.6
Year	-95.6	-91.7	-83.0	-59.6	-46.7	-43.0	-24.0	-19.4	-22.4	-22.1	-10.5	+4.9	+24.9	+49.2	+80.3	+108.0	+102.2	+100.7	+93.7	+69.2	+26.1	-18.9	-44.6	-77.6
Winter	-48.2	-56.0	-53.3	-32.0	-24.0	-4.3	+5.1	-3.0	-13.3	-18.5	-7.0	+1.4	-0.2	+17.2	+29.5	+43.8	+66.7	+72.1	+69.1	+58.1	+14.1	-28.3	-35.4	-53.8
Equinox	-76.9	-107.4	-118.7	-87.3	-75.9	-58.8	-23.0	-17.8	-19.4	-16.6	-0.7	+21.0	+38.8	+60.5	+85.9	+114.5	+104.4	+120.7	+116.1	+82.6	+33.1	-15.0	-56.2	-104.0
Summer	-161.6	-111.7	-77.0	-59.6	-40.2	-65.9	-54.2	-37.3	-34.6	-31.1	-23.8	-7.7	+35.9	+69.8	+125.6	+165.7	+135.4	+109.3	+95.9	+66.8	+30.9	-13.6	-42.1	-74.9
DECLINATION																								
Jan.	-4.16	-2.61	-2.89	-7.48	-3.53	+1.11	+0.22	+3.95	+3.17	+2.46	+3.67	+5.75	+6.80	+7.25	+8.09	+9.42	+7.45	+6.09	+2.60	-9.49	-12.59	-10.70	-7.97	-6.61
Feb.	-8.46	-7.05	-4.86	-2.39	-4.40	-1.63	+0.66	-1.25	-3.26	-1.33	-0.28	+4.47	+6.24	+9.17	+9.26	+10.75	+11.28	+6.69	+1.34	-0.21	-7.90	-4.05	-6.44	-6.35
Mar.	-16.72	-11.85	-13.40	-10.03	-6.75	-3.32	-1.13	-1.37	+1.64	+2.11	+2.58	+7.65	+11.88	+14.39	+15.30	+11.97	+12.53	+7.46	+3.41	+7.39	+5.20	-4.97	-19.60	-14.37
Apr.	-13.09	-20.62	-20.48	-24.45	-27.02	-11.18	-9.15	-1.24	+2.94	+0.79	+3.12	+10.30	+12.71	+15.76	+14.82	+13.69	+14.14	+15.30	+11.77	+11.98	+8.36	+3.19	-2.94	-8.70
May	-25.35	-18.52	-15.85	-10.20	+1.86	+2.89	-6.44	-5.66	-5.19	-1.60	+1.13	+2.60	+3.91	+9.16	+11.91	+14.66	+16.36	+11.97	+7.84	+5.20	+8.71	-0.94	-0.89	-7.56
June	-10.00	-8.64	-7.42	-5.08	-5.10	-3.15	-3.34	-4.60	-5.36	-2.30	+0.66	+3.02	+5.48	+8.26	+7.44	+7.08	+7.46	+4.55	+5.82	+4.60	+3.38	+1.52	-2.00	-2.28
July	-5.91	-4.81	-3.03	-4.61	-4.75	-6.31	-5.15	-4.77	-3.99	-0.45	+1.37	+3.45	+7.09	+7.77	+7.13	+5.75	+4.13	+3.59	+4.11	+2.59	+1.71	+1.93	-2.63	-4.21
Aug.	-3.78	-12.61	-10.46	-5.41	-4.68	-6.29	-5.08	-3.91	-2.28	+0.05	+3.42	+7.87	+11.12	+11.31	+9.58	+4.61	+4.88	+5.03	+0.92	+0.45	-0.66	-1.51	+0.10	-2.67
Sept.	-0.88	-1.43	-7.11	-9.52	-5.53	-2.59	-5.48	-7.57	-9.33	-3.80	+1.71	+7.63	+11.44	+12.05	+12.35	+12.12	+0.65	+0.17	-0.80	-0.77	-2.25	-0.16	-0.81	-0.09
Oct.	-9.23	-11.09	-10.62	-6.99	-3.21	+1.71	+1.21	-1.13	-3.86	-1.01	+3.51	+6.91	+9.21	+9.91	+8.36	+9.33	+10.89	+6.11	+7.91	+5.29	-4.28	-7.17	-8.11	-13.65
Nov.	-10.87	-5.97	-8.97	-14.05	-6.05	-4.82	+3.51	+3.43	-3.09	-1.51	+2.73	+4.91	+8.07	+8.31	+6.85	+7.17	+9.39	+7.56	+14.21	+9.71	+3.97	-4.99	-9.07	-20.43
Dec.	-4.99	-3.95	-3.32	-2.15	-3.87	-2.73	-1.89	+0.59	-0.42	-0.91	-1.67	+2.29	+4.37	+5.21	+3.76	+5.73	+5.33	+5.27	+5.37	+3.75	+0.08	-1.81	-7.47	-6.57
Year	-9.45	-9.10	-9.03	-8.53	-6.09	-3.03	-2.67	-1.96	-2.42	-0.63	+1.83	+5.57	+8.19	+9.88	+9.57	+9.36	+8.71	+6.65	+5.37	+3.37	+0.31	-2.47	-5.65	-7.79
Winter	-7.12	-4.89	-5.01	-6.52	-4.46	-2.02	+0.63	+1.68	-0.90	-0.32	+1.11	+4.35	+6.37	+7.49	+6.99	+8.27	+8.36	+6.40	+5.88	+0.94	-4.11	-5.39	-7.74	-9.99
Equinox	-9.98	-11.25	-12.90	-12.75	-10.63	-3.85	-3.64	-2.83	-2.15	-0.48	+2.73	+8.12	+11.31	+13.03	+12.71	+11.78	+9.55	+7.26	+5.57	+5.97	+1.76	-2.28	-7.87	-9.20
Summer	-11.26	-11.15	-9.19	-6.33	-3.17	-3.21	-5.00	-4.73	-4.21	-1.07	+1.65	+4.23	+6.90	+9.13	+9.01	+8.03	+8.21	+6.29	+4.67	+3.21	+3.29	+0.25	-1.35	-4.18
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.	-100.1	-104.2	-68.9	-57.6	-51.0	-81.7	-44.2	-28.4	-12.7	-0.6	+9.1	+25.0	+37.7	+42.4	+59.5	+67.2	+78.6	+99.5	+102.4	+73.2	+25.1	-15.4	-17.7	-37.2
Feb.	-77.2	-53.7	-47.5	-52.0	-61.9	-42.7	-33.2	-7.9	-9.9	-2.2	+4.3	+10.3	+19.8	+28.1	+42.1	+53.4	+52.5	+81.1	+78.6	+47.9	+24.9	+7.6	-17.5	-44.9
Mar.	-78.6	-37.8	-79.4	-76.2	-69.6	-44.3	-42.8	-26.6	-15.4	-6.2	+14.4	+30.6	+52.2	+58.4	+71.4	+88.8	+101.2	+95.1	+71.0	+65.6	+61.4	+1.2	-114.0	-120.4
Apr.	+14.4	-36.4	-79.2	-89.2	-156.4	-93.3	-102.2	-49.4	-13.8	+13.6	+44.8	+51.6	+45.2	+34.8	+49.0	+60.0	+68.0	+70.1	+69.4	+17.6	+34.0	+47.4	+35.6	-35.6
May	-51.8	-174.4	-158.4	-163.4	-157.6	-143.7	-80.8	-47.6	+0.2	+47.0	+70.4	+91.8	+111.8	+156.4	+145.8	+106.2	+109.4	+84.9	+80.4	+66.8	+9.0	+15.0	-57.4	-60.0
June	-100.0	-115.3	-109.9	-111.4	-58.1	-37.9	-37.0	-9.3	+9.3	+16.6	+16.3	+24.9	+35.0	+39.9	+58.1	+87.8	+91.9	+93.3	+62.6	+44.3	+27.7	+20.4	-8.5	-40.7
July	-63.6	-39.3	-32.6	-33.8	-28.8	-23.3	-17.4	-13.4	-9.2	+0.9	+10.0	+14.6	+12.8	+26.1	+36.0	+37.0	+49.4	+48.3	+38.8	+24.6	+21.0	+7.9	-23.8	-42.2
Aug.	-166.4	-119.1	-90.4	-69.1	-39.5	-25.4	-6.1	+0.9	+6.4	+13.7	+20.6	+16.5	+16.0	+41.9	+83.2	+85.5	+91.3	+94.0	+91.7	+81.1	+44.4	-9.1	-52.4	-109.7
Sept.	-11.6	-25.8	-70.8	-87.8	-108.2	-118.7	-110.6	-48.4	-10.4	+5.8	+27.8	+45.2	+40.4	+54.4	+56.4	+43.8	+108.6	+91.5	+63.2	+48.4	+14.2	-1.6	-5.6	-0.2
Oct.	-104.7	-91.3	-88.1	-81.3	-53.7	-39.2	-27.3	-17.3	-3.5	+4.5	+10.3	+16.3	+33.7	+49.9	+61.5	+57.9	+70.3	+86.8	+91.5	+77.5	+40.1	+0.7	-31.9	-62.7
Nov.	-35.5	-45.3	-116.0	-168.1	-176.1	-148.5	93.1	-46.3	+6.8	+38.7	+46.9	+70.9	+72.9	+74.9	+79.2	+66.7	+64.9	+94.7	+105.9	+111.9	+62.4	+5.9	-24.7	-49.1
Dec.	+0.4	-10.2	-22.0	-26.6	-26.6	-21.3	-22.6	-20.2	-16.4	-16.4	-12.6	-8.2	-2.4	+5.6	+19.6	+19.6	+14.0	+13.1	+20.8	+31.0	+28.0	+32.2	+21.4	-0.2
Year	-64.6	-71.1	-80.3	-84.7	-82.3	-68.3	-51.4	-26.2	-5.7	+9.6	+21.9	+32.5	+39.6	+51.1	+63.5	+64.5	+75.0	+79.4	+73.0	+57.5	+32.7	+9.3	-24.7	-50.2
Winter	-53.1	-53.3	-63.6	-76.1	-78.9	-73.5	-48.3	-25.7	-8.1	+4.9	+11.9	+24.5	+32.0	+37.7	+50.1	+51.7	+52.5	+72.1	+76.9	+66.0	+35.1	+7.6	-9.6	-32.9
Equinox	-45.1	-47.8	-79.4	-83.6	-97.0	-73.9	-70.7	-35.4	-10.8	+4.4	+24.3	+35.9	+42.9	+49.4	+59.6	+62.6	+87.0	+85.9	+73.8	+52.3	+37.4	+11.9	-29.0	-54.7
Summer	-95.5	-112.0	-97.8	-94.4	-71.0	-57.6	-35.3	-17.6	+1.7	+19.5	+29.3	+36.9	+43.9	+66.1	+80.8	+79.1	+85.5	+80.1	+68.4	+54.2	+25.5	+8.5	-35.5	-63.1

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1956

AVERAGE DEPARTURE

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

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

60 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	40.4	11.50	79.2	14.6	5.51	15.2	124.2	22.01	206.6
Feb.	47.5	10.03	45.8	23.0	6.52	8.4	191.0	19.74	158.3
Mar.	95.2	16.86	84.6	55.4	10.81	13.8	340.9	34.90	221.6
Apr.	116.5	17.68	90.9	84.6	16.67	30.4	467.1	42.78	226.5
May	121.4	14.76	89.5	66.6	16.06	21.4	637.4	41.71	330.8
June	94.7	13.50	74.2	77.9	16.17	30.7	295.6	18.26	208.6
July	82.0	13.56	48.0	73.4	15.42	24.6	141.4	14.08	113.0
Aug.	88.0	17.87	76.7	60.8	13.99	24.5	332.7	23.92	260.4
Sept.	75.5	14.16	69.9	62.4	14.05	13.0	282.1	21.87	227.3
Oct.	54.9	11.56	61.7	50.4	10.74	12.8	202.1	24.54	196.2
Nov.	81.7	14.21	83.9	46.5	8.41	26.6	340.7	34.64	288.0
Dec.	30.7	7.76	34.9	28.0	5.61	13.0	39.2	13.20	58.8
Year	63.1	11.40	62.7	50.1	11.12	12.2	203.6	19.33	164.1
Winter	38.5	10.24	56.7	26.4	6.27	11.8	128.1	18.35	155.8
Equinox	67.3	13.56	68.4	59.8	13.05	13.5	239.4	25.93	184.0
Summer	87.6	14.81	69.4	66.1	15.28	24.2	327.3	20.39	197.5

61 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	9.3	2.99	19.6	3.8	1.17	12.5	26.5	5.67	51.6
Feb.	9.6	2.77	11.9	5.2	1.80	1.7	36.5	4.99	37.5
Mar.	22.2	4.47	22.9	13.4	2.17	2.4	67.6	8.63	59.3
Apr.	30.4	5.16	22.4	19.6	3.27	7.3	127.1	11.57	54.6
May	36.2	4.26	25.7	16.9	3.19	4.9	156.0	8.18	91.3
June	27.2	4.05	17.7	18.1	4.18	7.1	56.8	4.94	52.3
July	20.6	3.77	11.5	17.5	3.94	4.6	28.4	4.22	27.3
Aug.	20.8	4.02	16.6	15.9	2.97	4.7	55.6	4.95	57.3
Sept.	17.5	3.31	17.1	15.5	3.15	2.5	48.9	4.84	50.0
Oct.	12.3	3.42	16.9	13.4	2.62	2.4	39.5	6.70	50.1
Nov.	18.8	3.76	24.5	10.7	2.45	4.0	73.9	7.49	75.2
Dec.	6.9	2.37	9.4	6.7	1.24	3.3	8.2	3.48	17.1
Year	17.3	3.55	17.7	12.3	2.57	2.8	54.9	5.73	50.8
Winter	10.1	2.87	16.0	6.2	1.65	2.6	31.4	4.87	43.6
Equinox	18.4	4.05	19.8	15.2	2.78	3.1	64.8	7.48	52.3
Summer	25.2	4.00	17.5	16.5	3.46	4.6	69.6	5.41	56.6

NON-CYCLIC CHANGE

62 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	-0.7	-0.02	0.0	+7.2	+1.51	+5.2	-2.3	-0.79	+19.8
Feb.	-0.4	+0.17	-1.6	+2.4	-0.18	-0.5	-14.5	-1.17	+49.4
Mar.	+1.0	-0.17	+2.2	+4.2	-0.02	-3.6	-74.0	+3.21	-37.7
Apr.	-0.9	+0.27	-1.3	+4.0	+0.04	-0.4	+62.2	+0.80	-22.3
May	+0.9	-0.15	+0.8	+3.0	+1.14	-3.8	+71.6	+3.23	+47.5
June	+0.1	+0.12	+0.3	-1.7	-2.18	-10.0	+23.2	+2.97	+25.7
July	+0.4	+0.03	+0.2	+8.0	+0.65	-1.0	-28.3	-1.06	-10.0
Aug.	-0.3	0.00	-0.1	+6.3	+0.78	+1.1	-11.5	+1.81	+8.0
Sept.	+0.1	-0.31	+0.2	+6.7	+0.24	+0.1	-6.5	+1.03	+12.2
Oct.	+0.2	-0.18	-1.2	+4.8	+1.06	-3.3	-23.1	-3.38	-9.2
Nov.	0.0	+0.32	+2.5	+2.1	+2.37	+12.9	-39.0	-3.66	-29.9
Dec.	+0.1	+0.01	-0.2	+8.6	+2.06	-2.5	-3.3	-1.36	-8.4
Year	0.0	+0.01	+0.1	+4.6	+0.62	-0.5	-3.8	+0.14	+3.8
Winter	-0.3	+0.12	+0.2	+5.1	+1.44	+3.8	-14.8	-1.75	+7.7
Equinox	+0.1	-0.10	0.0	+4.9	+0.33	-1.8	-10.3	+0.41	-14.3
Summer	+0.3	0.00	+0.3	+3.9	+0.10	-3.4	+13.7	+1.74	+17.8

"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 T

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 +						
Jan.	465	470	453	5.4	6.0	5.0	1177	1177	1171	14242	2534	72 57.2	49345
Feb.	469	476	468	5.1	5.8	4.5	1179	1177	1174	14246	2534	72 57.0	49348
Mar.	453	468	431	3.3	5.0	0.5	1181	1186	1173	14231	2523	72 58.1	49345
Apr.	452	476	381	2.8	4.4	-1.1	1180	1184	1174	14231	2521	72 58.2	49344
May	460	478	387	2.8	3.2	-0.1	1189	1187	1159	14238	2523	72 57.8	49355
June	480	487	461	3.0	2.7	2.3	1187	1189	1183	14258	2527	72 56.5	49359
July	481	485	474	3.1	3.1	3.3	1189	1190	1184	14259	2527	72 56.4	49361
Aug.	480	486	474	2.7	2.6	2.3	1189	1185	1184	14258	2526	72 56.5	49361
Sept.	469	474	458	1.5	1.9	1.2	1197	1198	1191	14249	2519	72 57.3	49365
Oct.	472	483	451	1.2	1.6	-0.1	1200	1194	1200	14251	2518	72 57.3	49368
Nov.	463	478	411	0.0	0.8	-2.5	1213	1208	1199	14243	2511	72 58.1	49379
Dec.	483	482	481	0.8	0.7	1.4	1210	1207	1213	14262	2518	72 56.7	49382
Year	469	479	444	2.6	3.1	1.4	1191	1190	1184	14247	2523	72 57.3	49359

64 LERWICK

Night commencing		Night commencing		Night commencing	
	JANUARY		FEBRUARY (contd.)		APRIL (contd.)
1 ca	☉ Cloudy. Faint glow 18h.30m., 22h.50m. Moderate rayed band 22h.50m., obscured by cloud 23h.45m.	18 a ..	Fair to fine	10 a ..	Fair
4 c ..	Cloudy to fair	19 cb ..	Fair to fine. Moonlight	11 ca ☉	Cloudy. Faint glow 22h.45m.
5 ca ..	Fair to fine	23 cb ..	Cloudy to fair. Moonlight	12 ca ..	Fair to cloudy
6 ca ☉	Fine to cloudy. Faint diffuse surface 19h. to 21h.10m.	26 cb ..	Cloudy to fair. Moonlight	14 cb ..	Cloudy then fine. Moonlight
7 ca ..	Fine then cloudy	29 c ☉	Cloudy. Faint glow 22h.50m.	15 b ..	Fine. Moonlight
8 a ..	Fine			16 cb ☉	Fair. Moderate pulsating surface 22h.40m. then rayed arc, rays and corona at 00h.45m. Faint glow 01h.05m. then homogeneous band at 01h.45m. and 02h.45m.
12 ca ☉	Fair to fine. Display commenced 17h.45m. with faint rays followed by rayed arc, homogeneous band, rays, homogeneous arc, rayed arc, diffuse surface, moderate at times. Decreased to faint glow 23h.50m. continuing till 01h.45m.		MARCH	17 b ☉	Cloudy then fine. Moonlight. Moderate homogeneous arc 00h.45m.
13 ca ..	Fair to cloudy	1 a ☉	Fair to fine. Faint diffuse surface 20h. to 20h.30m. Slight rays 20h.36m. to 20h.45m.	18 b ..	Fair to fine. Moonlight
14 a ..	Fine	2 a ☉	Fair to fine. Faint homogeneous arc first seen 20h.15m. with faint rays. Arc seen at times till 02h. when there was faint glow which existed also at 05h.	19 b ..	Cloudy to fair. Moonlight
15 ca ..	Fair to cloudy	3 a ☉	Fair. An unusually bright display commenced with moderate rayed band at 19h.05m. followed by rayed arc, rays, corona, flaming aurora, pulsating surfaces till 01h.30m. and then faded to glow by 02h. which was still visible at 05h.	21 cb ..	Cloudy. Moonlight
16 cb ..	Fair to cloudy. Moonlight			22 b ..	Fair to fine. Moonlight
17 cb ..	Cloudy. Moonlight			23 cb ..	Fair to cloudy. Moonlight
18 cb ☉	Cloudy. Moonlight. Moderate diffuse surface at 20h.20m. became bright rayed band 21h.50m. Reduced to glow 23h. and faint glow seen 03h.	5 ca ☉	Cloudy. Faint glow observed 23h.45m. to 02h.45m. then faint homogeneous arc 03h.40., and rayed arc 03h.50m. Disappeared by 04h.20m.	26 cb ☉	Fair to cloudy. Moonlight. Moderate rayed arc 22h.50m. with corona becoming glow at 23h.45m., 01h.
19 cb ☉	Fair to cloudy. Moonlight. Faint homogeneous arc observed 20h.30m.	6 ca ..	Cloudy	27 a ☉	Fair. Moderate rayed band 21h.40m., then homogeneous arc and rays at 22h.10m. Flaming aurora at 23h.45m. Rays and corona at 00h.45m. and 01h.15m. gradually fading 02h.
21 cb ☉	Fair to cloudy. Moonlight. Moderate diffuse surface observed 04h.45m.	7 a ..	Fine	28 c ☉	Cloudy. Moderate glow 00h.55m. Moderate pulsating arc at 02h.
23 cb ☉	Fair. Bright moonlight. Moderate rayed arc observed 20h.30m. becoming rays then homogeneous band 22h., followed by rays and diffuse surface. Moderate flaming aurora 22h.30m. to 22h.45m. decreasing to diffuse surface by 22h.55m.	8 ca ..	Cloudy to fair	29 a ☉	Fine. Faint diffuse surface 22h.50m. with moderate draperies
24 cb ☉	Fair. Moonlight. Bright draperies 18h.55m. to 19h.04m. becoming moderate 19h.50m. to 20h.	9 a ☉	Fine. Moderate homogeneous arc 02h. to 02h.35m.	30 ca ..	Fair to cloudy
25 b ..	Fine. Moonlight	10 a ☉	Fine. Aurora first observed as faint glow 19h.56m. becoming moderate rayed arc by 20h.25m. then fainter homogeneous arc followed by faint glow till approximately 21h.30m. when activity commenced anew with rayed homogeneous arcs followed by corona 22h.15m. and bright flaming aurora, draperies, which continued till 22h.40m. gradually decreasing to moderate homogeneous and rayed bands, then faint glow. Activity again commenced at 01h.20m. but had all disappeared by 02h.10m. A faint homogeneous arc was, however, observed at 02h.20m.		
26 cb ..	Cloudy. Moonlight				
	FEBRUARY				SEPTEMBER
2 ca ..	Fair to cloudy			1 a ..	Fair
4 a ☉	Fair to fine. Faint diffuse surface 19h. to 21h.	11 c ☉	Cloudy. Faint glow 23h.50m.	11 b ..	Fair. Moonlight
5 a ☉	Fair. Faint glow 23h.45m. to 00h.25m.	12 a ..	Fine	12 c ☉	Cloudy. Faint glow 21h.50m., then faint homogeneous band and faint flaming aurora 23h.50m. Faint homogeneous arc 00h.50m. then moderate rayed band 01h.50m. which was still present at 04h.50m.
7 ca ..	Overcast to fair	13 a ☉	Fair to fine. Faint rayed band 22h.45m.	14 b ..	Fair. Moonlight
8 ca ..	Cloudy to fine	14 a ☉	Fair to fine. Moderate homogeneous arc 00h.30m.	28 ca ☉	Cloudy to fair. Faint glow 19h.30m. to 20h.10m. then obscured by cloud
11 ca ☉	Fair to cloudy. Faint diffuse surface 20h.30m. to 20h.45m.	16 ca ..	Fair	29 ca ..	Cloudy to fair
12 ca ..	Fine to cloudy	31 ca ..	Cloudy to fair	30 a ..	Fair to fine
13 ca ☉	Fair to cloudy				
14 c ☉	Cloudy. Faint diffuse surface observed 20h.15m.				
15 ca ☉	Cloudy. Faint glow 04h.45m.				
16 a ☉	Fair to fine. Faint rays at 18h.45m. Moderate rayed arc 20h.20m. and homogeneous band at 21h. Faint glow 00h.45m., 01h.50m.				
			APRIL		OCTOBER
		3 ca ..	Fair	1 ca ☉	Cloudy to fair. Faint glow and faint rays 00h.50m.
		5 ca ..	Fair to cloudy	3 ca ☉	Cloudy to fair. Faint rayed arc 23h.50m.
		8 a ..	Fair to fine	5 ca ☉	Cloudy to fine. Faint diffuse surface 19h.15m. to 20h. became faint homogeneous arc which was seen intermittently till 00h.50m. Faint glow 01h.45m., 02h.50m.
				6 ca ☉	Cloudy to fine. Faint glow 02h.50m., 03h.50m.
				7 ca ☉	Cloudy to fair. Faint glow 00h.50m.
				9 a ☉	Cloudy to fair. Faint glow 19h.50m., 21h.15m.
				12 ca ..	Fair to cloudy
				13 ca ☉	Cloudy to fair. Faint homogeneous arc 21h.15m. to 21h.50m. Diffuse surface 22h.10m.
				17 ca ..	Fair to cloudy
				18 b ..	Cloudy to fair. Moonlight
				22 ca ..	Fair to cloudy
				23 ca ..	Fair to cloudy

64 LERWICK (contd.)

Night commencing		Night commencing		Night commencing	
	OCTOBER (contd.)		NOVEMBER (contd.)		NOVEMBER (contd.)
24 ca ..	Fair to cloudy	10 ca ☐	Fair. Faint rays 19h.54m. followed by glow then moderate rayed arc at 23h.55m. Corona at 01h.10m. followed by rayed arc till 04h.20m. then faint glow persisted	28 a-ca ☐	Fine then cloudy to fair. Faint glow observed 18h.30m. to 19h.20m.
25 ca ..	Fine to cloudy			29 c ☐	Cloudy. Faint glow 18h.50m.
26 ca ☐	Cloudy to fine. Display commenced at 19h.05m. with faint rays and progressed with homogeneous bands, arcs and rayed arcs to corona at 19h.45m., continuing with bands, arc and rays. Moderate to faint to flaming aurora at 01h. and then decreasing to faint rays by 02h.45m.	11 c-a ☐	Cloudy then fine. Display commences with faint rayed band 18h.35m. becoming moderate diffuse surface till 20h.45m., then a sequence of rayed arcs, rays, homogeneous bands, rayed bands, intensity faint to moderate, culminating at 23h.10m. in brighter draperies and moderate corona. Moderate flaming aurora at 23h.55m. Decreased to faint homogeneous band by 01h.15m.		
				1 c ☐	Cloudy. Faint rayed arc 01h.50m. Faint pulsating arc 02h.25m.
28 ca ☐	Fine to cloudy. Faint glow 22h.50m. to 03h.50m.			2 ca ☐	Cloudy to fine. Faint glow 19h.30m. to 19h.40m. and at 02h.50m.
29 a ☐	Fine. Faint glow 18h.45m. to 23h.50m. with faint rays at times			4 ca ☐	Fair. Faint glow observed 19h.50m., 21h.50m., 00h.55m.
30 ca ..	Cloudy then fine			5 a ..	Fine
				8 a ..	Fine
				9 c ☐	Cloudy. Faint glow observed 20h.45m. to 23h.50m. and at 01h.50m., 03h.45m.
				10 c ☐	Cloudy. Faint glow observed 03h.54m.
	NOVEMBER	13 c ☐	Cloudy. Faint glow 02h.50m., 03h.50m. Moderate rays 05h.05m. then moderate pulsating surface at 05h.20m., fading by 05h.30m.	11 ca ..	Cloudy to fair
		14 c ☐	Cloudy. Bright glow 04h.50m., continuing to 06h. but less intense	14 ca ..	Cloudy with fair or fine breaks
2 c ☐	Cloudy. Faint glow 22h.53m., 23h.56m.	22 c ☐	Cloudy. Faint rayed band 17h.10m. Glow seen through cloud breaks 18h.20m. to 21h.30m.	16 ca ..	Fair to cloudy
4 ca ..	Fair to cloudy			17 a-c ..	Fine then cloudy to fair
9 a ☐	Fine. Faint glow 21h.40m. became faint pulsating surface 22h.55m. then homogeneous arc 00h.55m., becoming moderate at 02h. Moderate corona 02h.30m. subsiding to faint glow by 03h.50m.	23 a ☐	Fine. Faint glow 19h.30m. to 21h.25m. with faint homogeneous arc at 19h.55m.	18 ca ..	Fair to cloudy
		25 ca ..	Fair to cloudy	20 a ..	Fine
		26 ca ..	Fair to cloudy	21 c-a ..	Cloudy then fine
		27 ca ..	Fair	23 c ☐	Mainly cloudy. Faint glow observed 22h.50m., 23h.50m.
				24 ca ..	Cloudy with fair breaks
				25 a-c ..	Fine at first but mainly cloudy
				27 c ..	Mainly cloudy

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

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 297·1°A.(75·4°F.) on 22 June and 259·6°A.(7·9°F.) on 3 February. 2 February, with 263·9°A.(15·6°F.), was the coldest day of the year and 11 June, with 290·5°A.(63·5°F.), was the hottest. There were 9 "ice days", i.e. days with a maximum temperature below 273°A., occurring on 8, 9, 25 January; 1, 2, 3, 14, 22 February and 27 December.

The total rainfall for the year 1397·1 mm.(55·04 in.), was slightly less than average. Snow fell on 51 days.

The total duration of bright sunshine, 1195·8 hr. was slightly above average.

The highest gust of wind during the year was 34·0 m./sec.(66·0 kt.) on 15 December and the highest hourly speed was 17·0 m./sec.(33·0 kt.) on 12 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, Dumfriesshire. *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	
	1956	1911-1920	1956	1911-1920	1956	1911-1920	1956	1911-1920	1956	1911-1920	1956	1911-1920	1956	1911-1920	1956	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.59	0.09	13	346	0.45	0.23	129	152	0.10	0.13	3	345	0.10	0.05	215	214
February	0.15	0.12	273	215	0.34	0.27	167	138	0.11	0.08	343	341	0.03	0.04	92	68
March	0.36	0.13	2	185	0.46	0.30	166	145	0.07	0.05	336	335	0.04	0.05	15	25
April	0.22	0.21	55	92	0.33	0.30	148	155	0.05	0.02	192	156	0.05	0.05	2	356
May	0.19	0.23	85	53	0.31	0.27	142	147	0.05	0.07	169	160	0.02	0.03	337	330
June	0.14	0.15	140	54	0.27	0.23	157	146	0.10	0.08	183	161	0.04	0.02	8	326
July	0.15	0.17	161	69	0.31	0.21	152	141	0.07	0.08	163	156	0.03	0.02	358	300
August	0.22	0.11	151	115	0.32	0.24	138	148	0.05	0.06	136	157	0.03	0.05	318	331
September	0.25	0.12	185	88	0.41	0.31	151	152	0.02	0.01	55	111	0.04	0.05	320	345
October	0.42	0.11	184	76	0.40	0.31	150	159	0.08	0.06	8	8	0.05	0.04	47	33
November	0.04	0.13	325	183	0.34	0.24	170	168	0.11	0.10	351	9	0.06	0.01	22	146
December	0.23	0.14	62	97	0.25	0.21	147	147	0.17	0.12	357	4	0.02	0.07	170	213
Arithmetic mean	0.25	0.14			0.35	0.26			0.08	0.07			0.04	0.04		
Year	0.06	0.09	81	91	0.34	0.26	151	150	0.03	0.02	1	42	0.02	0.02	356	342
Winter	0.19	0.04	14	165	0.33	0.24	151	151	0.12	0.11	354	355	0.01	0.02	188	189
Equinox	0.05	0.11	141	104	0.40	0.31	155	153	0.03	0.02	355	4	0.04	0.04	11	9
Summer	0.15	0.15	134	67	0.30	0.24	147	146	0.06	0.07	167	159	0.03	0.03	352	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. Beginning with 1956 sums, in addition to means, have been given for each hour of the day and for each day in the main monthly tables of hourly values.

Notes on the results

Comparing mean values on all days of 1956 with those for 1955, it is noted that H increased by 9γ , D (west) decreased by 6.6 and Z increased by 27γ . The changes in the deduced quantities N , W , I , and F are $+15\gamma$, -30γ , $+0.1$ and $+28\gamma$. 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 1956 were H 2482 γ , D 2°41'0 and Z 967 γ . The range of 2°41'0 in declination is equivalent to a range of about 781 γ 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 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
γ	0	8	15	30	60	105	180	300	500	750

* 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

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 a 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 disturbances. The signs given to the movements of *H*, *D* and *Z* are positive for increasing *H*, *Z* and an increase of force towards the east (that is a decreasing westerly declination).

Particulars of the same disturbances are given in both the Lerwick and the Eskdalemuir sections of the *Observatories' Year Book*, even if the disturbances 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 1956 with that for the 22-year period 1932-53. Table 69 gives the average values of the diurnal inequality ranges for the year and seasons for the period 1932-53 (not the values of the range of the representative mean diurnal inequalities for this period) along with the 1956 values expressed as a percentage of the average values. The units employed are 1γ for force and 1' for declination.

Irregular Changes in Declination. In connexion 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'	139	85	141	137	124	103	70	123	113	108	159	79	1381
15-30'	28	16	26	27	24	4	2	6	8	5	31	1	178
>30'	3	3	5	5	5	0	0	2	3	3	1	0	30

Hourly distribution

Hour ending at (G.M.T.)

Range interval	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'	79	67	69	53	60	51	56	47	44	39	71	86	51	40	37	37	49	53	61	62	72	62	70	65
15-30'	13	10	11	12	8	7	4	5	3	1	2	0	2	2	2	5	2	12	11	14	10	13	15	14
>30'	4	3	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	0	1	3	3	1	3	3

TABLE 67 - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1956			Mean 1932-53			1956			Mean 1932-53		
	H	D	Z	H	D	Z	H	D	Z	H	D	Z
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	103	113	72	78	83	47	82	108	91	76	90	75
February	86	89	54	84	89	53	68	86	68	82	97	84
March	143	127	98	126	113	85	113	122	124	124	123	135
April	213	134	131	125	103	77	169	128	166	123	112	122
May	167	113	115	116	91	71	133	108	145	114	99	113
June	137	92	73	105	84	55	109	88	92	103	91	87
July	117	82	51	110	85	56	93	79	65	108	92	89
August	121	105	82	113	93	68	96	101	104	111	101	108
September	141	112	74	117	106	81	112	107	94	115	116	129
October	95	98	67	107	102	76	75	94	85	105	111	121
November	125	120	92	73	79	47	99	115	116	72	86	75
December	63	68	33	66	74	42	50	65	42	65	80	67
Winter	94	97	63	75	81	47	75	93	80	74	88	75
Equinox	148	118	93	119	106	80	117	113	118	117	115	127
Summer	135	98	80	111	88	63	108	94	101	109	96	100
Year	126	104	79	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, 1956			Percentage distribution					
				H		D		Z	
	H	D	Z	1956	1932-53	1956	1932-53	1956	1932-53
γ				%	%	%	%	%	%
0 - 9	0	0	4	0.0	0.0	0.0	0.0	1.1	2.3
10 - 19	0	0	28	0.0	0.8	0.0	0.4	7.6	14.1
20 - 29	3	1	50	0.8	3.9	0.3	2.5	13.7	19.8
30 - 39	9	7	56	2.5	6.0	1.9	5.0	15.3	16.0
40 - 49	16	13	65	4.4	7.8	3.6	7.4	17.8	10.2
50 - 59	24	21	32	6.6	10.4	5.7	12.1	8.7	7.5
60 - 69	34	36	20	9.3	11.7	9.8	12.9	5.5	5.6
70 - 79	41	56	12	11.2	10.6	15.3	12.3	3.3	3.6
80 - 89	38	58	11	10.4	9.0	15.9	10.7	3.0	3.0
90 - 99	39	40	11	10.7	7.3	10.9	8.3	3.0	2.4
100 - 109	30	35	8	8.2	5.8	9.6	5.9	2.2	2.1
110 - 119	18	14	9	4.9	5.1	3.8	4.0	2.5	1.7
120 - 129	19	9	6	5.2	3.3	2.5	3.5	1.6	1.7
130 - 139	14	14	3	3.8	2.9	3.8	2.6	0.8	1.2
140 - 149	11	10	2	3.0	2.3	2.7	2.2	0.6	0.8
150 - 159	9	6	6	2.5	1.9	1.6	1.7	1.6	0.9
160 - 169	4	9	6	1.1	1.5	2.5	1.6	1.6	0.7
170 - 179	7	4	3	1.9	1.5	1.1	1.2	0.8	0.4
180 - 189	7	5	1	1.9	0.9	1.4	1.0	0.3	0.6
190 - 199	5	3	2	1.4	0.9	0.8	0.8	0.6	0.5
200 +	38	25	31	10.4	6.3	6.8	4.0	8.5	4.8
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 69 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53
WITH 1956 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		Z	H	D	Z	H	D	Z	H	D
Year	1932-53	28.7	37.8	8.66	13.7	34.4	8.43	82.1	53.9	11.93
	1956 (%)	120	127	125	134	130	128	131	129	123
Winter	1932-53	21.2	19.3	6.95	5.9	16.2	4.44	66.5	34.4	11.45
	1956 (%)	135	154	125	85	181	150	125	112	121
Equinox	1932-53	37.1	43.1	10.18	14.8	39.7	9.69	108.9	75.4	15.11
	1956 (%)	105	126	125	144	139	133	119	102	124
Summer	1932-53	33.9	59.7	11.84	21.9	50.4	11.76	82.4	83.7	13.11
	1956 (%)	116	117	117	141	106	120	158	124	111

"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. 10	12	Jan. 11	21	149	190	220	
2a	Jan. 12	15	Jan. 13	03	183	279	205	
3a	Jan. 18	12	Jan. 19	03	167	205	183	
4a	Mar. 28	16	Mar. 29	10	326	203	278	
5a	Apr. 16	15	Apr. 17	07	215	116	177	
6a	May 15	09	May 17	09	766	354	693	
7a	May 23	11	May 25	16	490	242	429	
8a	Aug. 23	07	Aug. 26	11	565	247	596	
9a	Oct. 20	09	Oct. 21	09	117	186	213	
10a	Nov. 10	14	Nov. 13	05	340	332	360	
11a	Nov. 22	12	Nov. 23	03	159	190	211	

(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
1b	Jan. 21	16.44			Yes	Yes	No	γ	γ	γ			
2b	Jan. 27	09.00	Jan. 28	07	No	No	No	+36	+2	-1	289	213	219
3b	Feb. 19	02.21			Yes	Yes	No	+16	-13	-1			
4b	Feb. 21	20.02			No	No	No	+60	-26	-8			
5b	Feb. 22	00.16			No	No	No	+40	-17	-4			
6b	Feb. 25	03.07	Feb. 26	03	No	No	No	+50	-20	-6			
7b	Mar. 3	06.50	Mar. 4	07	Yes	Yes	Yes	+36	-31	-3	507	342	429
8b	Mar. 10	10.58	Mar. 11	05	Oscillatory			-44	?	0	917	380	452
8b	Mar. 10	10.58	Mar. 11	05	Yes	No	No	+12	0	0	194	207	167
9b	Mar. 21	16.19	Mar. 23	08	No	No	No	+38	-26	0	280	267	332

(b) Disturbances with a S.C. (contd.)

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
10b	Apr. 2	07.21			Yes	Yes	No	γ	γ	γ			
11b	Apr. 21	08.53			Yes	No	No	-4	+8	0		Small	
12b	Apr. 21	11.01	Apr. 23	05	Yes	Yes	No	+10	-13	0	784	300	442
13b	Apr. 25	11.33			Yes	No	No	+48	0	-6		Small	
14b	Apr. 26	21.11	Apr. 28	08	No	No	No	+28	-8	-5	1685	494	774
15b	Apr. 28	17.27	Apr. 29	17	Yes	Yes	No	+133	-35	-24	391	215	293
16b	May 13	22.22			No	No	No	+54	-13	-6		Small	
17b	May 20	06.38	May 21	06	Yes	Yes	No	+12	-4	0	192	116	124
18b	June 23	18.06	June 25	08	No	No	No	-10	+17	0	328	178	306
19b	July 8	01.02			No	No	No	+36	-14	-4		Small	
20b	Aug. 9	10.41	Aug. 10	06	Oscillatory			+42	-9	-6	194	121	114
21b	Aug. 10	13.10			Yes	Yes	No	+12	+9	-6		Small	
22b	Aug. 11	00.43			Yes	Yes	No	+34	-13	-3		Small	
23b	Aug. 12	02.28			Yes	Yes	No	+92	-36	-12		Small	
24b	Sept. 2	02.30	Sept. 3	21	No	No	No	+12	-13	0	324	214	306
25b	Sept. 8	10.06	Sept. 8	22	Oscillatory			0	+26	0	1159	510	303
26b	Sept. 20	04.38			Yes	Yes	No	+60	-31	-12		Small	
27b	Oct. 26	13.12	Oct. 27	08	Yes	Yes	No	+24	-17	0	329	351	384
28b	Nov. 9	20.30	Nov. 10	09	No	Yes	No	+34	-22	-4	204	131	167
29b	Nov. 14	02.00	Nov. 16	09	No	No	No	+93	-5	-10	355	232	271
30b	Dec. 24	01.47			No	No	No	+16	-15	?		Small	
31b	Dec. 25	07.54			Yes	Yes	Yes	+24	-5	-4		Small	
32b	Dec. 30	06 32			No	Yes	No	-11	+4	+2		Small	

(c) Disturbances due to Solar Flare

Serial Number	Date	Commencement	Max.	End	Movement (γ)			K	K'	Flare or S.F.E.	
					H	D	Z				
1c	Apr. 20	09.54	09.56	09.59	-7	+4	0	2	2	S.W.F.	
2c	Apr. 23	12.28	12.33	12.39	Com-	-22	+1	3	3		
3c	May 8	13.10	13.13	13.20	plex.	-10	-9	0	2	2	S.F. S.W.F. S.E.A.
4c	June 16	12.50	12.53	12.56		-22	0	0	3	3	
5c	Sept. 24	11.26	11.32	11.40		+18	+9	-3	2	1	
6c	Oct. 31	13.50	13.55	14.00		-3	-9	0	2	2	S.F. S.W.F.

All these movements with the exception of 3c must be considered doubtful S.F.E.

S.W.F. - Short wave fade-out
 S.F. - Solar flare
 S.E.A. - Sudden enhancement atmospherics

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

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
	<i>millibars</i>																	
1	82.4	64.1	70.0	05.9	99.4	03.2	87.4	68.3	78.8	00.3	98.6	99.3	88.1	82.6	84.4	92.3	85.8	89.8
2	96.0	82.4	93.3	08.1	05.8	07.0	78.3	68.9	74.0	99.7	88.1	94.3	89.6	87.9	88.8	85.8	78.9	81.8
3	99.9	95.8	97.6	08.1	05.7	06.9	79.3	73.8	77.8	89.3	81.3	84.6	95.6	86.5	89.5	85.6	71.9	81.9
4	00.8	99.5	00.1	05.7	00.5	02.6	86.5	73.0	77.9	89.6	77.7	85.7	97.4	92.9	95.4	71.9	58.6	63.3
5	99.7	97.2	98.1	05.3	00.3	02.9	92.9	86.5	90.7	86.7	77.8	81.1	94.0	91.8	92.9	75.5	58.0	66.7
6	00.3	98.4	99.4	06.4	04.6	05.5	92.6	82.5	86.1	90.6	86.7	88.9	94.0	86.0	91.3	75.5	66.9	70.3
7	99.6	83.3	90.9	06.9	04.6	05.9	01.9	92.6	99.2	90.4	84.2	87.8	91.2	87.1	89.7	80.9	67.8	72.5
8	83.7	74.3	79.0	04.6	01.2	02.5	01.3	96.2	98.7	84.2	81.1	82.4	94.7	88.7	92.0	96.1	80.9	89.4
9	74.3	51.9	63.9	09.2	01.9	05.6	96.3	91.6	93.6	84.9	81.7	83.5	91.4	74.4	79.4	99.9	96.1	98.3
10	51.9	41.8	45.1	09.2	05.8	07.5	94.4	91.1	92.4	85.9	79.2	81.9	87.0	75.6	80.5	00.3	92.6	96.1
11	59.1	45.7	51.3	06.0	98.5	01.4	95.6	93.0	94.2	86.5	83.8	85.3	86.1	80.3	81.8	92.6	82.9	87.1
12	69.5	59.0	62.4	98.5	83.4	92.7	95.2	90.4	92.9	84.2	77.6	80.2	99.3	82.4	92.5	86.7	81.8	84.0
13	82.4	69.5	77.7	83.4	76.1	80.4	98.4	95.2	97.0	78.8	76.6	77.4	99.4	91.1	95.6	90.2	86.7	88.0
14	81.3	69.1	74.5	87.1	77.2	85.2	96.5	86.7	91.8	79.7	78.6	79.1	99.9	92.2	96.1	95.8	89.8	92.4
15	78.3	70.3	72.4	85.7	82.5	84.2	86.7	81.7	83.5	81.0	77.1	78.3	99.8	91.0	95.2	97.0	91.7	95.2
16	81.6	76.6	79.2	86.7	80.5	82.4	83.1	81.7	82.4	86.6	80.9	83.1	93.3	91.0	92.0	91.7	83.3	85.8
17	79.6	64.7	74.0	96.8	86.7	92.1	85.8	81.7	83.3	97.3	86.5	91.1	92.9	88.1	90.2	91.1	83.1	88.0
18	78.4	64.6	72.8	97.4	95.0	96.6	85.8	83.2	84.8	00.7	97.3	99.0	90.7	87.9	88.8	90.7	83.3	86.0
19	78.0	70.1	73.5	95.0	88.2	91.5	84.3	77.2	81.4	01.3	98.3	99.8	91.1	88.4	89.5	90.3	82.9	86.2
20	72.6	52.3	63.0	89.7	88.6	89.0	77.2	63.7	70.1	99.4	91.1	95.1	88.8	83.3	86.1	94.7	89.6	92.1
21	76.3	58.5	68.3	92.3	88.2	90.0	67.3	63.0	65.5	91.1	85.1	87.6	83.3	80.6	81.8	00.9	94.7	97.2
22	80.8	59.4	74.7	98.5	92.2	95.2	67.5	63.2	65.4	85.1	80.4	82.2	86.0	82.5	84.2	04.7	00.9	02.5
23	78.3	72.4	74.8	98.8	94.8	97.2	72.2	65.5	70.0	83.6	79.7	80.9	89.4	85.9	87.7	04.8	00.3	03.1
24	86.3	76.9	79.2	01.9	95.0	98.5	71.4	68.2	69.2	84.0	81.9	83.1	88.3	81.7	84.9	00.4	93.5	97.4
25	89.6	84.2	87.7	02.4	01.3	01.8	76.5	68.1	71.2	81.9	76.9	78.7	97.2	87.9	91.9	93.5	90.1	91.4
26	84.2	71.9	75.9	02.3	97.1	99.8	91.5	76.5	83.4	83.4	78.3	80.5	01.6	97.2	99.8	91.5	88.3	89.5
27	90.2	79.3	87.5	97.1	84.2	93.1	01.9	91.5	96.9	86.3	82.9	83.9	01.4	95.2	98.9	94.0	89.1	92.4
28	90.3	83.8	88.3	88.2	80.9	85.3	02.4	98.2	00.7	87.1	85.4	86.4	95.2	88.2	90.7	89.1	83.0	84.5
29	83.8	79.5	81.2	85.2	75.0	80.4	98.8	91.3	93.9	89.0	86.4	87.5	91.4	88.7	90.2	83.1	80.0	81.5
30	82.6	80.0	81.2				01.0	92.9	96.8	88.8	85.1	87.7	91.0	88.4	89.7	80.0	71.1	76.3
31	99.4	82.5	91.1				02.0	99.1	00.2				89.7	88.1	88.9			
Mean	83.59	72.87	78.32	98.70	92.94	96.08	88.77	81.82	85.29	88.58	83.54	85.88	92.86	86.89	89.69	90.89	83.45	87.03

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	
	<i>millibars</i>																		
1	71.1	65.6	67.0	88.3	69.1	76.5	00.3	98.3	99.2	83.8	81.4	82.7	12.1	03.5	07.5	95.0	88.2	92.3	
2	71.1	67.1	71.5	75.4	71.9	72.9	00.1	90.8	96.3	83.8	80.3	82.5	03.5	98.4	99.7	94.5	87.1	90.8	
3	84.6	71.1	81.9	82.9	75.4	80.5	90.8	80.5	85.2	80.3	76.1	77.9	99.0	97.0	97.9	96.8	94.3	95.8	
4	84.0	69.7	80.7	83.4	81.6	82.4	80.7	78.9	80.0	80.3	74.9	77.7	97.0	93.8	95.4	95.5	86.5	90.4	
5	76.9	63.3	68.6	88.8	83.3	85.6	79.5	72.5	75.5	92.0	77.0	83.4	00.7	93.9	97.2	86.5	77.3	81.5	
6	90.1	76.9	85.6	92.2	88.8	90.6	72.4	68.7	71.2	97.2	92.0	95.5	01.6	98.6	00.3	98.2	85.1	94.6	
7	89.8	86.1	87.1	95.5	91.7	93.6	80.3	71.9	75.3	96.5	93.5	94.7	98.6	83.6	92.5	99.7	97.1	98.3	
8	80.2	74.4	87.3	96.8	91.5	93.8	84.3	80.2	82.8	94.5	93.0	93.7	83.6	62.0	71.9	97.1	92.4	96.0	
9	92.0	84.5	87.7	97.5	91.7	95.2	87.2	83.6	85.2	00.7	94.1	97.3	74.3	62.1	68.6	92.4	85.0	88.3	
10	95.0	91.8	93.2	91.7	74.7	84.0	88.4	84.2	87.0	01.9	00.4	01.2	78.4	72.7	74.6	89.9	75.3	82.9	
11	97.6	94.9	96.3	74.7	66.9	70.6	88.0	79.3	83.6	01.8	96.7	00.1	85.8	78.4	87.5	79.8	75.8	78.3	
12	97.9	91.5	94.5	79.3	71.9	77.0	89.6	84.6	87.5	98.1	94.6	96.2	92.8	85.8	89.9	79.3	62.1	69.0	
13	91.5	84.1	87.0	71.9	57.6	63.0	89.1	84.8	87.4	98.5	96.7	97.8	92.6	87.3	90.9	72.9	63.5	67.9	
14	74.1	70.6	81.9	84.1	67.7	76.3	99.8	86.9	94.1	98.2	91.1	94.9	99.8	87.0	90.4	72.4	54.3	60.8	
15	83.6	80.3	81.5	84.1	78.8	81.5	00.3	98.7	99.5	91.1	85.5	88.7	03.0	96.2	99.2	59.4	49.8	54.5	
16	85.0	82.0	83.2	79.2	70.9	75.7	00.3	98.6	99.2	85.5	73.8	81.9	04.0	01.0	02.5	67.7	55.1	60.1	
17	88.4	84.9	86.5	71.4	69.7	70.7	98.6	95.3	96.8	83.4	63.7	75.4	01.0	95.4	98.2	81.4	67.7	75.9	
18	89.3	87.2	88.3	70.0	62.8	65.3	96.3	93.5	94.9	87.3	80.6	82.9	95.4	90.2	92.3	91.9	81.0	86.5	
19	88.9	87.0	88.2	78.3	67.3	73.9	94.2	90.5	92.5	89.1	75.7	84.2	90.2	80.7	84.8	96.2	91.9	94.1	
20	90.8	87.0	88.9	83.4	77.7	79.9	90.5	80.9	86.0	89.6	73.5	81.3	96.2	80.8	88.8	01.3	96.2	99.4	
21	91.2	89.9	90.6	87.3	83.4	85.4	81.7	79.6	80.3	94.5	89.5	93.0	98.3	96.2	97.6	00.7	97.5	99.4	
22	91.0	88.8	90.1	87.3	82.6	85.5	81.9	77.9	79.4	91.8	89.6	89.8	98.1	96.6	97.5	97.9	92.6	95.9	
23	90.3	83.4	83.6	82.6	64.9	75.3	87.9	81.9	85.2	88.2	82.7	85.3	05.0	97.9	01.6	92.6	88.1	89.6	
24	95.8	84.6	91.9	64.9	57.9	61.6	88.2	85.2	86.9	82.7	73.8	76.3	05.5	85.2	98.0	93.2	88.2	91.0	
25	95.4	91.0	93.3	61.2	55.0	57.2	85.2	79.3	82.2	90.4	73.8	81.1	85.2	82.3	82.5	93.0	83.4	88.4	
26	91.0	86.0	87.7	73.4	61.2	68.3	79.3	75.0	77.0	98.1	90.0	93.9	83.2	67.2	73.9	86.1	82.4	88.4	
27	87.1	76.3	82.1	74.2	70.4	72.6	78.6	61.0	71.2	99.2	97.7	97.4	71.2	64.4	68.4	86.2	75.7	82.9	
28	76.3	64.9	69.7	82.3	70.4	75.6	68.8	50.6	59.5	94.0	84.4	87.1	73.7	58.5	63.5	75.7	62.0	66.0	
29	64.9	56.3	59.4	90.1	82.3	85.9	80.5	68.6	75.0	99.2	86.5	91.9	92.8	73.7	86.1	69.6	65.4	68.1	
30	82.0	59.5	71.2	97.5	90.1	93.5	81.5	79.8	80.7	07.9	99.2	03.6	93.9	87.2	90.9	67.3	55.8	59.9	
31	89.3	82.0	86.7	99.3	97.1	98.4				12.8	07.9	11.1				77.3	58.1	70.0	
Mean	86.33	79.44	83.79	82.87	75.04	78.99	87.48	81.39	84.56	93.30	86.12	89.69	93.88	85.25	89.62	86.69	77.90	82.35	
	Annual I										89.44	82.15	85.87						

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.												Mean													
	0	1	2	3	4	5	6	7	8	9	10	11		Noon												
	millibars																									
Jan.	78.49	78.45	78.44	78.51	78.42	78.23	78.24	78.38	78.63	78.94	79.02	78.96	78.57	78.19	77.73	77.64	77.57	77.55	77.56	77.72	78.04	78.43	78.77	78.96	79.07	78.32
Feb.	96.27	96.18	96.05	95.92	95.81	95.93	96.03	96.19	96.40	96.58	96.65	96.63	96.45	96.11	95.76	95.71	95.68	95.76	95.98	96.09	96.05	96.08	95.98	95.80	95.75	96.08
Mar.	85.13	85.15	85.08	84.99	84.95	85.08	85.35	85.61	85.72	85.97	85.93	85.79	85.47	85.17	84.85	84.56	84.53	84.70	84.90	85.27	85.48	85.62	85.70	85.63	85.61	85.29
Apr.	86.51	86.30	86.17	85.99	85.84	85.85	85.98	86.11	86.15	86.12	86.09	86.00	85.94	85.73	85.60	85.33	85.20	85.26	85.33	85.61	85.90	86.04	86.08	86.12	86.04	85.88
May	90.05	89.87	89.77	89.53	89.40	89.42	89.55	89.53	89.72	89.72	89.79	89.77	89.72	89.60	89.47	89.38	89.36	89.32	89.36	89.64	89.85	90.17	90.18	90.21	90.15	89.69
June	87.50	87.41	87.09	86.94	86.82	86.90	87.04	87.18	87.14	87.07	87.08	87.16	86.94	87.05	86.93	86.82	86.72	86.60	86.77	86.94	87.13	87.27	87.28	87.13	86.92	87.03
July	83.74	83.61	83.37	83.22	83.12	83.23	83.41	83.58	83.73	83.83	83.82	83.90	83.86	83.85	83.80	83.77	83.63	83.73	83.80	84.04	84.23	84.45	84.50	84.43	84.30	83.79
Aug.	79.20	79.01	78.76	78.60	78.39	78.38	78.51	78.67	78.83	78.92	79.06	79.11	79.04	79.01	78.96	78.97	78.91	78.87	78.91	79.14	79.42	79.57	79.58	79.66	79.55	78.99
Sept.	85.05	84.85	84.56	84.36	84.03	84.02	84.24	84.45	84.61	84.83	84.90	84.94	84.73	84.61	84.45	84.40	84.33	84.27	84.37	84.57	84.77	84.90	84.78	84.65	84.46	84.56
Oct.	89.41	89.32	88.99	88.69	88.58	88.59	88.65	89.08	89.38	89.58	89.83	90.01	89.93	89.86	89.78	89.73	89.73	89.97	90.25	90.45	90.50	90.63	90.61	90.50	90.40	89.69
Nov.	90.10	89.97	89.81	89.71	89.56	89.59	89.59	89.84	90.03	90.12	90.13	90.08	89.51	89.62	89.44	89.00	88.97	89.14	89.54	89.61	89.54	89.54	89.41	89.36	89.30	89.62
Dec.	82.83	82.87	82.81	82.63	82.47	82.34	82.21	82.30	82.47	82.60	82.63	82.66	82.40	82.01	81.79	81.80	81.78	82.03	82.14	82.27	82.33	82.41	82.39	82.50	82.48	82.35
Annual	86.12	86.02	85.84	85.69	85.55	85.56	85.67	85.85	86.00	86.13	86.18	86.19	85.98	85.83	85.65	85.55	85.47	85.54	85.68	85.88	86.04	86.20	86.21	86.19	86.11	85.87

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: $h_b = 273.3$ m.

	Hour G.M.T.												Mean													
	0	1	2	3	4	5	6	7	8	9	10	11		Noon												
	millibars																									
Jan.	07.77	07.75	07.75	07.82	07.72	07.52	07.51	07.66	07.94	08.26	08.31	08.19	07.73	07.32	06.83	06.78	06.73	06.75	06.78	06.96	07.31	07.73	08.09	08.28	08.41	07.57
Feb.	26.33	26.25	26.12	25.99	25.87	25.99	26.12	26.28	26.50	26.60	26.55	26.42	26.17	25.80	25.43	25.39	25.41	25.59	25.87	26.03	26.00	26.08	25.98	25.80	25.76	26.01
Mar.	14.40	14.41	14.42	14.34	14.31	14.44	14.72	14.98	15.01	15.14	14.93	14.70	14.30	13.94	13.61	13.30	13.31	13.60	13.91	14.40	14.67	14.83	14.95	14.91	14.41	
Apr.	15.99	15.81	15.71	15.56	15.41	15.44	15.51	15.46	15.23	15.03	14.90	14.72	14.61	14.36	14.24	13.93	13.81	13.94	14.11	14.61	15.03	15.26	15.39	15.51	15.47	
May	19.04	18.89	18.81	18.60	18.49	18.49	18.53	18.42	18.38	18.28	18.29	18.22	18.13	17.95	17.78	17.69	17.68	17.67	17.81	18.20	18.55	18.99	19.07	19.16	19.14	
June	16.18	16.14	15.79	15.70	15.59	15.64	15.68	15.65	15.53	15.40	15.38	15.40	15.11	15.21	15.05	14.93	14.83	14.74	14.98	15.22	15.54	15.81	15.46	15.74	15.58	
July	12.05	11.93	11.71	11.57	11.48	11.58	11.73	11.79	11.75	11.90	11.81	11.83	11.75	11.70	11.66	11.64	11.50	11.65	11.75	11.96	12.34	12.65	12.76	12.73	12.63	
Aug.	07.66	07.49	07.25	07.09	06.89	06.89	06.98	07.03	07.05	07.05	07.13	07.11	07.03	06.96	06.93	06.95	06.88	06.88	06.99	07.33	07.70	07.94	08.01	08.12	08.04	
Sept.	13.66	13.31	12.99	12.78	12.44	12.44	12.65	12.85	12.94	13.05	13.03	13.01	12.75	12.61	12.43	12.37	12.32	12.33	12.54	12.82	13.08	13.25	13.16	13.06	12.87	
Oct.	18.38	18.32	17.97	17.67	17.56	17.56	17.63	18.08	18.34	18.43	18.58	18.69	18.54	18.47	18.39	18.36	18.41	18.75	19.08	19.34	19.42	19.58	19.60	19.53	19.43	
Nov.	19.37	19.21	19.09	19.01	19.18	18.93	18.95	19.22	19.31	19.42	19.35	19.17	18.49	18.57	18.39	17.97	18.00	18.24	18.69	18.79	18.72	18.73	18.61	18.59	18.51	
Dec.	11.86	11.89	11.81	11.62	11.47	11.32	11.19	11.27	11.45	11.58	11.59	11.58	11.29	11.89	10.66	10.69	10.70	11.00	11.11	11.23	11.31	11.41	11.39	11.12	11.50	
Annual	15.13	15.04	14.88	14.74	14.60	14.59	14.69	14.81	14.89	14.93	14.91	14.84	14.58	14.41	14.21	14.11	14.06	14.19	14.39	14.67	14.90	15.12	15.17	15.18	15.12	

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.												Mean												
	0	1	2	3	4	5	6	7	8	9	10	11		Noon											
	degrees Absolute																								
Jan.	73.70	73.49	73.44	73.47	73.44	73.55	73.67	73.61	73.47	73.45	73.77	74.27	74.79	74.91	75.03	74.73	74.44	74.13	73.97	73.79	73.65	73.48	73.35	73.42	73.36
Feb.	71.48	71.40	71.42	71.38	71.44	71.39	71.25	71.21	71.21	71.98	72.97	74.01	74.57	74.77	74.88	74.76	74.28	73.40	72.91	72.51	72.41	72.02	71.95	71.91	71.84
Mar.	75.55	75.23	74.90	74.79	74.73	74.70	74.67	74.75	75.60	76.71	78.18	79.03	79.65	80.19	80.22	80.27	79.89	78.82	77.87	76.85	76.33	76.11	75.85	75.59	75.38
Apr.	74.06	73.73	73.44	73.11	73.02	72.94	73.40	75.13	77.53	79.19	80.11	80.92	81.42	81.82	81.63	81.94	81.79	81.15	80.15	78.18	77.03	76.27	75.45	74.76	74.35
May	79.37	79.06	78.82	78.51	78.31	78.47	79.35	81.07	82.35	83.31	83.92	84.41	84.87	85.27	85.73	85.76	85.60	85.21	84.33	83.27	82.10	80.99	80.35	79.83	79.44
June	81.49	81.06	81.16	80.60	80.50	80.76	81.71	83.29	84.13	84.67	85.08	85.65	86.27	86.30	86.77	86.84	86.82	86.42	85.81	85.15	83.95	82.70	82.41	82.00	81.57
July	83.85	83.75	83.49	83.32	83.21	83.32	83.70	84.70	85.58	86.24	86.98	87.66	87.95	88.30	88.32	88.11	88.15	87.72	87.37	86.79	85.84	85.04	84.56	84.19	83.77
Aug.	81.28	81.04	80.84	80.79	80.67	80.57	80.91	82.05	83.31	84.27	84.91	85.60	85.72	86.12	85.92	85.85	85.79	85.45	84.77	83.87	82.95	82.17	81.64	81.32	81.05
Sept.	82.76	82.72	82.91	82.94	82.95	82.93	82.89	83.19	83.91	84.91	85.85	86.45	86.93	87.15	87.18	87.28	87.07	86.41	85.36	84.64	84.13	83.82	83.41	83.19	83.03
Oct.	79.32	79.12	79.06	79.07	79.03	79.13	79.12	79.01	79.42	80.52	81.55	82.28	82.86	82.89	82.87	82.69	82.12	81.25	80.81	80.35	80.07	79.86	79.45	79.06	79.12
Nov.	77.10	77.09	76.67	76.44	76.27	76.07	75.91	75.80	75.90	76.61	77.74	78.72	79.41	79.71	79.70	79.37	78.74	78.18	77.82	77.61	77.53	77.44	77.37	77.06	77.16
Dec.	77.13	77.10	77.32	77.40	77.24	77.33	77.36	77.40	77.41	77.47	77.70	78.00	78.18	78.23	78.26	78.07	77.73	77.42	77.47	77.47	77.33	77.22	77.17	77.00	77.07
Annual	78.12	77.93	77.82	77.68	77.59	77.63	77.86	78.46	79.18	79.97	80.76	81.44	81.91	82.16	82.23	82.16	81.89	81.32	80.75	80.07	79.47	78.95	78.61	78.30	78.12

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 $T(^{\circ}K.) = t(^{\circ}C.) + 273.16.$

TEMPERATURE

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 $T(^{\circ}\text{K.}) = t(^{\circ}\text{C.}) + 273.16$

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
	<i>degrees Absolute</i>																	
1	81.8	76.6	79.1	69.7	61.6	65.1	83.7	75.6	79.6	85.1	69.7	76.6	84.8	79.5	81.3	90.3	81.3	85.2
2	79.0	71.9	76.4	69.5	60.0	63.9	82.4	76.0	79.1	86.3	67.5	77.3	84.2	74.9	80.4	86.0	79.5	83.4
3	81.4	77.9	79.5	71.7	59.6	66.3	80.3	76.0	78.0	84.1	73.2	78.7	86.0	74.3	81.4	85.0	78.5	81.4
4	80.7	79.0	79.9	78.7	70.3	73.9	78.3	72.0	75.2	79.9	69.9	75.6	88.6	71.0	81.3	82.9	77.5	80.6
5	79.1	77.0	78.4	81.0	78.2	79.9	78.6	69.9	75.0	79.6	73.0	77.7	82.8	80.0	81.7	84.9	79.1	81.2
6	78.0	72.0	76.1	81.8	73.6	78.4	83.1	74.5	77.9	80.3	71.3	76.3	82.0	79.2	80.5	85.0	77.3	81.1
7	76.1	70.5	72.9	79.3	73.6	76.6	77.3	74.1	75.7	82.0	75.8	78.9	84.3	79.3	81.8	84.1	76.8	80.8
8	72.0	69.6	70.9	82.6	75.8	79.0	78.1	75.4	76.8	82.0	78.8	80.1	89.9	77.2	83.7	86.3	77.1	82.1
9	71.0	66.1	68.3	75.8	66.7	72.3	80.7	71.9	76.5	83.0	79.1	80.4	84.5	79.0	82.0	89.5	76.5	81.9
10	73.3	69.9	72.2	73.0	63.1	68.4	82.5	69.4	74.8	81.0	71.3	77.5	86.9	79.6	82.5	94.0	74.8	86.1
11	74.0	64.7	70.5	76.1	67.6	73.1	81.9	67.8	74.3	83.2	69.6	76.3	86.0	79.8	82.7	96.4	83.6	90.5
12	75.2	69.1	73.2	78.1	73.0	75.0	82.1	69.7	75.7	85.7	68.9	77.1	86.1	79.6	82.4	87.7	80.9	84.6
13	75.6	68.4	72.6	76.2	70.1	73.5	83.0	68.5	75.7	81.8	73.4	76.5	84.2	76.7	81.4	87.0	77.9	82.2
14	74.5	68.5	72.7	71.5	65.0	69.3	80.6	65.0	73.1	83.1	70.6	76.5	85.8	77.2	81.3	87.3	75.1	80.1
15	75.6	70.6	73.6	75.2	66.0	70.4	75.0	71.5	73.1	80.3	70.0	74.6	86.4	77.5	82.3	85.1	74.0	80.6
16	78.1	71.0	74.9	74.4	68.2	71.8	75.7	71.8	73.2	82.0	68.1	74.8	85.3	76.3	80.8	85.0	75.8	80.2
17	78.4	75.5	77.2	75.1	71.4	72.5	78.7	72.5	74.7	81.0	69.7	75.1	85.0	75.8	79.2	86.7	76.2	82.0
18	76.0	66.8	72.2	73.0	68.6	70.8	79.0	73.0	75.3	84.6	66.9	76.3	82.3	71.1	77.3	85.7	75.9	82.0
19	78.1	69.8	73.9	74.0	68.4	71.5	76.3	73.6	74.6	86.2	71.7	79.3	84.3	69.1	77.8	87.7	82.0	84.5
20	79.7	74.6	77.7	73.2	68.9	70.9	77.6	73.7	75.0	86.7	68.8	78.0	85.2	69.0	79.0	89.2	79.5	84.3
21	75.0	71.8	73.4	73.0	70.5	71.6	84.0	77.2	79.5	86.3	67.8	77.7	87.2	78.3	82.6	91.1	76.0	84.8
22	74.5	68.5	72.0	72.4	68.7	70.8	84.2	76.2	80.6	84.2	72.0	78.7	92.0	76.1	85.1	97.1	81.3	89.9
23	73.6	65.1	69.6	74.1	69.2	71.7	86.0	78.0	81.4	84.5	70.8	77.8	88.2	75.2	82.3	94.1	86.6	90.3
24	73.1	64.0	70.9	75.3	64.1	72.0	80.6	76.0	77.9	84.9	72.1	78.3	86.3	76.6	82.0	91.1	85.2	87.8
25	72.9	61.9	67.8	76.0	61.7	69.8	86.1	77.2	81.4	83.1	75.2	78.7	88.2	73.4	81.4	92.9	83.2	87.7
26	74.0	71.2	72.8	76.6	68.1	73.3	88.4	74.0	80.9	84.2	74.5	78.7	90.5	76.0	84.0	89.9	81.4	85.5
27	75.2	73.3	74.2	76.6	71.9	74.4	88.3	75.0	81.2	83.0	70.2	77.1	96.0	77.1	86.7	88.6	78.9	83.9
28	77.1	74.4	75.4	83.0	76.6	80.0	83.6	73.0	77.3	84.8	67.5	76.8	95.5	82.1	88.7	86.3	80.1	82.2
29	80.9	71.3	77.3	80.9	74.8	78.3	82.0	72.5	76.5	84.0	68.1	77.1	90.3	80.5	83.7	86.1	77.8	82.7
30	76.1	70.5	73.7				83.2	74.0	77.9	82.5	73.0	78.5	86.5	81.2	83.9	87.3	83.6	84.8
31	75.6	66.2	70.7				84.3	71.0	78.1				87.2	81.8	83.8			
Mean	76.3	70.6	73.9	75.8	68.8	72.6	81.5	73.1	76.9	83.3	71.3	77.4	86.9	76.9	82.1	88.3	79.1	83.8

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	<i>degrees Absolute</i>																	
1	90.2	84.2	86.0	86.7	81.2	83.7	87.2	74.3	80.8	86.4	78.5	82.4	79.7	73.9	77.0	81.3	75.9	78.2
2	88.9	83.6	85.3	88.2	78.0	83.9	85.2	79.2	82.5	84.5	78.0	81.2	82.1	70.9	77.8	83.2	81.1	82.5
3	90.0	83.8	86.1	86.7	77.0	83.2	85.2	81.8	83.3	83.7	75.5	79.6	83.4	74.5	79.8	83.8	82.1	82.9
4	89.7	84.1	85.8	87.9	75.0	81.9	88.5	80.9	84.2	80.5	74.8	77.2	83.1	73.6	79.3	82.8	81.0	82.0
5	88.2	84.0	85.6	90.3	75.6	83.2	85.2	80.9	83.8	83.5	76.4	79.7	84.1	78.3	81.0	83.2	81.0	82.1
6	89.9	83.4	86.1	89.8	78.3	83.7	89.2	83.8	86.5	81.0	75.4	78.3	83.0	77.5	80.1	83.9	78.4	81.0
7	92.0	83.4	87.0	88.3	78.0	83.6	90.7	83.7	86.0	84.2	77.6	81.4	81.6	79.3	80.3	84.0	80.1	82.3
8	90.2	84.0	87.3	90.7	77.8	85.6	90.7	83.0	85.3	86.9	81.0	83.4	84.1	76.8	80.8	81.6	80.1	80.8
9	90.0	77.0	85.2	92.6	74.6	84.4	88.6	83.0	84.8	88.3	78.0	83.4	83.2	77.8	80.6	80.9	74.0	79.1
10	89.4	73.3	82.1	89.5	81.5	86.3	89.3	81.7	84.8	85.3	74.0	79.5	82.4	73.8	79.3	81.9	76.0	79.8
11	92.3	75.2	84.7	87.8	80.9	84.9	85.6	80.3	83.5	84.5	77.8	81.2	81.8	72.0	75.9	79.1	74.1	76.8
12	89.6	80.5	84.6	87.1	82.0	83.7	87.0	80.5	82.6	85.6	80.0	82.3	81.3	73.0	76.7	82.7	74.1	77.8
13	88.6	80.7	83.9	85.4	82.0	83.4	91.1	84.5	87.4	83.9	78.8	81.9	82.0	74.9	78.9	76.9	73.4	75.0
14	88.1	83.0	85.1	88.6	82.0	84.6	88.7	77.9	84.2	87.1	75.7	81.7	82.1	74.9	77.8	81.1	76.8	78.9
15	94.1	84.5	88.6	85.2	78.8	83.1	83.2	76.9	81.1	89.0	74.5	81.4	82.5	74.6	79.6	81.3	76.1	78.9
16	94.9	84.7	88.8	84.7	81.7	83.1	87.0	75.0	81.9	85.3	81.9	83.6	81.5	71.2	77.9	78.0	73.3	75.5
17	90.0	81.9	86.1	88.3	82.9	84.7	91.1	72.8	82.1	84.5	77.6	81.7	80.8	75.6	78.3	78.6	75.1	77.1
18	92.0	85.0	87.7	84.8	82.8	83.9	88.4	81.6	84.1	85.1	77.7	81.7	79.6	76.7	78.1	78.7	75.3	77.0
19	92.0	83.0	86.8	87.1	80.5	83.9	90.0	80.6	84.7	85.0	76.8	80.8	79.1	75.9	77.8	79.2	76.8	78.1
20	86.8	82.5	84.1	88.2	80.0	83.2	89.2	82.5	86.0	87.7	81.9	84.5	80.0	73.0	76.9	79.0	74.9	78.1
21	89.4	79.2	84.6	87.8	77.3	82.7	87.2	84.8	85.9	85.1	82.5	83.9	78.5	69.0	73.7	75.8	71.9	74.1
22	92.8	78.6	85.6	88.0	80.2	83.5	93.4	86.4	89.7	84.9	83.7	84.2	75.1	67.2	71.2	78.1	74.7	76.5
23	88.4	81.5	85.4	87.4	79.9	82.8	91.6	86.9	89.2	85.0	80.0	82.6	76.3	70.1	73.4	77.3	73.8	75.6
24	91.0	84.6	88.4	86.1	80.1	82.5	93.3	84.1	88.6	81.9	74.7	79.3	82.3	67.3	74.2	74.4	71.3	73.6
25	90.2	86.9	88.4	83.1	78.2	80.7	91.1	83.1	86.2	80.0	72.4	76.1	83.0	79.7	81.3	73.1	70.1	72.2
26	89.7	83.0	87.6	87.2	77.6	82.7	88.3	77.4	85.1	80.2	69.1	75.0	83.6	77.4	81.0	73.0	70.1	71.4
27	88.0	79.0	85.1	87.3	75.9	82.0	86.3	76.5	83.4	80.2	67.9	74.4	78.3	73.9	76.3	72.3	68.7	70.7
28	88.1	83.4	85.8	82.9														

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	81.3	7.7	85.8	2.9	93.4	9.1	81.7	6.5	93.0	10.2	78.0	11.1	90.2	13.5	94.8	12.2	82.7	8.8	83.3	9.8	82.9	6.7	92.7	8.2
2	77.6	6.1	82.4	2.5	83.6	7.9	84.1	7.0	87.6	9.0	81.8	10.3	88.8	12.7	91.4	11.9	86.0	10.2	91.0	9.9	84.3	7.3	88.0	10.5
3	99.0	9.6	80.0	3.0	86.5	7.5	83.5	7.6	83.9	9.3	82.7	9.1	83.0	12.5	88.9	11.1	95.4	12.0	83.8	8.2	79.1	7.8	91.4	11.2
4	94.6	9.4	99.5	6.5	86.6	6.2	83.8	6.2	63.8	7.0	91.2	9.5	93.7	13.9	79.5	9.1	88.2	11.7	84.3	7.0	79.8	7.6	93.7	10.8
5	93.6	8.4	92.9	9.2	92.8	6.5	70.1	6.0	98.8	11.1	78.7	8.6	86.1	12.6	78.9	9.8	97.6	12.6	71.6	7.0	80.2	8.6	90.3	10.4
6	98.0	7.5	88.1	7.9	93.1	8.1	70.1	5.4	96.8	10.0	82.3	8.9	75.0	11.3	84.9	10.9	86.8	13.4	74.0	6.6	79.5	8.0	93.7	10.1
7	95.2	5.8	91.8	7.3	91.4	6.8	88.9	8.3	87.3	9.9	79.3	8.4	87.7	14.0	79.8	10.2	89.7	13.4	90.5	10.0	83.4	8.5	99.0	11.6
8	74.3	3.9	89.5	8.4	98.8	7.9	94.3	9.5	74.6	9.6	68.5	7.9	94.3	15.4	83.9	12.2	85.3	12.2	88.0	11.1	78.3	8.3	96.3	10.2
9	79.5	3.4	87.6	5.1	90.7	7.1	86.5	8.9	91.6	10.5	71.9	8.2	74.2	10.5	78.9	10.6	89.8	12.4	87.3	11.0	89.7	9.4	94.7	8.9
10	93.3	5.4	77.5	3.4	70.9	4.9	92.6	7.8	73.3	8.7	60.8	9.2	80.1	9.3	86.8	13.3	82.8	11.5	96.0	9.3	96.0	9.2	96.3	9.5
11	91.2	4.6	87.5	5.4	75.2	5.1	76.4	5.9	80.5	9.7	74.0	14.8	70.8	9.7	84.7	11.8	86.7	11.0	95.0	10.3	90.3	6.8	90.6	7.3
12	93.4	5.8	80.2	5.7	74.3	5.5	83.7	6.9	76.2	9.0	86.7	11.8	74.3	10.1	86.9	11.2	90.3	10.8	83.9	9.8	83.3	6.6	86.3	7.4
13	87.8	5.2	81.3	5.2	69.3	5.1	81.5	6.4	85.8	9.5	72.2	8.4	79.0	10.3	85.2	10.8	90.3	14.8	97.5	11.1	96.7	9.0	87.0	6.1
14	93.0	5.6	76.4	3.6	80.3	4.9	76.5	6.0	74.8	8.2	76.0	7.7	92.9	13.1	77.3	10.6	73.9	9.8	89.3	10.0	79.1	6.8	86.4	8.0
15	87.0	5.6	77.1	3.9	88.0	5.4	88.2	6.1	82.7	9.7	74.7	7.8	82.9	14.7	95.0	11.7	89.1	9.6	79.0	8.7	81.1	7.8	88.4	7.8
16	92.6	6.5	93.7	5.2	87.5	5.4	81.1	5.6	69.7	7.4	87.8	8.9	74.2	13.3	97.3	12.0	84.6	9.6	96.4	12.3	88.0	7.6	85.4	6.3
17	93.0	7.7	86.1	5.1	94.5	6.5	78.2	5.6	72.7	6.9	79.9	9.2	89.6	13.5	97.7	13.4	84.6	9.8	84.3	9.5	95.2	8.5	84.1	6.9
18	78.0	4.5	88.2	4.6	92.9	6.7	73.8	5.7	67.1	5.6	95.2	10.9	86.7	14.8	94.7	12.3	86.0	11.4	85.2	9.6	92.0	9.1	91.4	7.4
19	95.3	6.2	85.4	4.7	90.9	6.2	70.2	6.7	67.8	5.8	82.6	11.2	80.1	12.6	82.2	10.7	88.8	12.2	97.2	10.3	82.9	7.1	93.7	8.2
20	88.6	7.6	90.9	4.8	96.5	6.8	66.1	5.8	77.5	7.3	72.7	9.7	82.0	10.8	89.5	11.1	93.5	14.0	92.2	12.5	85.6	6.9	99.0	8.7
21	83.4	5.2	92.8	5.1	89.1	8.6	65.6	5.6	67.7	8.1	85.9	11.9	79.5	10.9	84.6	10.2	95.6	14.2	89.5	11.7	90.5	5.8	96.6	6.4
22	83.7	4.8	91.3	4.7	84.5	8.8	71.8	6.6	51.2	7.2	77.6	14.9	80.5	11.7	81.3	10.3	85.6	16.3	93.7	12.5	90.5	4.9	99.1	7.8
23	86.4	4.1	80.2	4.5	76.4	8.4	79.9	6.9	74.3	8.7	78.7	15.5	86.7	12.5	90.4	11.0	93.1	17.1	88.9	10.6	90.0	5.7	94.0	6.9
24	81.3	4.3	85.9	4.9	92.6	8.0	68.4	6.1	77.4	8.9	83.2	14.0	80.8	14.1	86.2	10.2	88.0	15.6	82.6	7.9	97.1	6.5	86.3	5.5
25	90.5	3.8	88.9	4.3	79.0	8.7	72.7	6.7	65.5	7.2	63.7	10.7	86.4	15.1	95.7	10.1	92.7	14.1	75.4	5.8	79.4	8.7	80.1	4.6
26	97.0	5.8	81.6	5.1	79.8	8.5	74.3	6.8	61.2	8.8	71.3	10.3	75.6	12.6	82.4	9.9	90.5	12.8	74.3	5.2	82.2	8.8	91.8	5.0
27	97.7	6.5	90.2	6.1	86.2	9.4	63.5	5.2	67.3	10.6	64.9	8.5	93.6	11.8	90.7	10.4	94.8	12.0	84.5	5.7	81.8	6.3	89.7	4.6
28	100.0	7.3	90.0	9.0	86.3	7.2	66.8	5.4	69.0	12.2	90.0	10.5	86.8	14.3	92.3	10.6	86.9	11.3	88.0	9.0	83.0	5.4	93.3	6.3
29	96.8	8.0	90.1	8.0	85.0	6.7	70.0	5.7	88.7	11.4	84.0	10.1	93.7	13.4	78.7	9.6	85.7	10.6	72.0	5.8	77.6	4.5	98.1	7.0
30	98.8	6.4	77.3	6.7	82.9	7.5	93.0	12.1	90.8	12.6	90.8	12.6	84.6	9.8	78.0	8.5	88.1	12.2	83.8	6.9	90.4	5.6	87.8	7.9
31	85.9	4.4	82.5	6.7	77.2	10.0	77.2	10.0	77.2	10.0	77.2	10.0	75.5	9.3	74.4	7.1	83.6	6.8	91.0	7.5	91.0	7.5	91.0	7.5
Mean*	89.9	6.0	86.6	5.0	85.7	7.0	77.6	6.3	77.3	9.0	78.9	10.4	83.6	12.4	86.2	10.8	88.4	12.3	86.0	9.1	85.5	7.3	91.3	7.9

*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.																								Mean*	
	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
	per cent																									
Jan.	90.7	89.7	90.4	90.3	90.1	90.2	89.5	90.0	90.3	90.8	90.1	88.7	87.8	88.8	88.9	88.8	89.3	90.2	90.5	90.9	91.0	90.8	90.4	90.2	90.4	89.9
Feb.	89.2	90.3	90.5	90.4	90.3	89.6	89.3	89.7	90.2	89.5	86.8	83.6	81.6	80.1	79.5	79.9	80.9	83.3	84.9	86.4	87.8	88.6	88.5	88.7	89.2	86.6
Mar.	91.0	91.3	91.7	91.9	91.7	91.6	91.9	91.3	90.2	86.9	81.4	78.3	75.7	73.8	73.5	73.8	75.9	80.3	84.1	87.3	89.7	90.8	90.7	91.0	91.3	85.7
Apr.	88.2	88.7	89.5	90.3	90.1	90.3	89.0	83.6	83.6	75.1	67.9	64.3	61.7	59.2	61.6	63.0	63.0	65.0	68.0	75.9	80.8	84.1	85.5	86.0	88.2	77.6
May	87.0	87.8	88.5	89.5	90.4	90.1	89.6	85.0	79.5	74.6	69.9	67.7	65.6	65.3	62.6	62.8	64.9	65.9	68.7	74.5	78.2	81.1	82.3	85.2	86.7	77.3
June	87.0	88.4	88.9	89.5	89.3	89.7	89.3	84.2	80.8	76.3	72.5	71.0	69.5	69.8	67.9	67.5	67.2	68.9	70.7	74.6	78.7	82.1	83.8	85.8	87.5	78.9
July	91.4	91.0	91.5	91.7	91.3	90.6	90.0	88.3	85.3	82.5	79.0	76.0	75.7	75.7	73.9	75.9	75.0	76.1	77.8	80.7	84.2	86.3	87.3	89.2	90.9	83.6
Aug.	92.5	93.2	93.1	93.2	93.9	94.0	94.7	93.5	90.2	86.0	78.7	74.9	75.3	75.4	76.3	75.6	78.0	78.4	82.9	85.7	89.3	90.5	91.4	92.3	92.8	86.2
Sept.	93.2	93.2	94.3	94.2	93.9	94.1	94.2	93.4	90.9	88.1	84.4	81.3	79.1	78.5	79.1	79.5	80.7	84.4	88.0	90.5	91.2	91.4	92.3	92.9	92.8	88.4
Oct.	89.7	90.3	91.2	91.2	91.7	91.6	90.1	90.4	89.7	87.3	82.5	79.0	75.3	74.4	75.1	76.0	78.8	83.3	87.3	88.7	89.2	89.8	90.3	90.7	90.1	86.0
Nov.	87.3	87.7	87.9	88.3	89.4	89.2	89.6	90.3	89.9	88.9	85.4	82.8	79.3	78.0	78.4	79.8	80.7	82.7	84.1	85.0	85.4	86.7	86.9	87.3	87.5	85.5
Dec.	91.3	91.7	91.0	90.5	92.4	92.3	92.1	92.1	92.8	93.1	92.2	90.6	90.5	90.1	89.7	89.9	90.7	90.6	91.5	92.0	90.9	91.0	91.7	91.8	91.2	91.3
Annual	89.9	90.3	90.7	90.9	91.2	91.1	90.9	89.8	87.8	84.9	80.9	78.2	76.4	75.8	75.5	76.1	77.1	79.1	81.6	84.4	86.4					

RAINFALL

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	6.9	6.5	19	0.1	0.5	...	18.5	10.3	14	...	...	...	7.6	7.9	27	0.2	1.0	...
2	...	...	...	...	...	...	5.5	3.8	28	...	...	...	...	...	...	3.2	2.3	27
3	...	...	...	...	...	...	2.5	3.6	3	1.2	2.3	3	3.4	5.0	3	4.6	4.0	8
4	0.4	0.6	...	15.0	22.0	3	5.9	3.2	7	4.1	4.2	4	...	...	...	9.4	9.9	35
5	0.2	1.0	...	1.4	1.7	3	2.3	3.1	3	...	...	...	4.8	6.4	5	14.5	10.7	43
6	...	...	...	...	...	...	7.5	7.3	3	...	...	...	9.0	3.0	18	9.7	3.8	20
7	2.0	3.0	4	...	...	...	...	...	...	0.1	0.3	...	5.3	7.6	7	1.3	2.3	11
8	...	...	...	0.9	2.0	2	4.0	13.3	2	2.4	4.3	5	4.4	4.3	4	...	...	...
9	...	...	...	0.2	0.4	(2)	0.1	0.2	...	0.5	0.7	(3)	36.7	15.3	18	...	...	...
10	5.5	9.3	-	...	...	...	...	...	...	7.4	7.9	4	4.2	2.8	13	...	...	...
11	...	...	...	1.0	3.9	3	...	...	...	...	...	...	10.0	8.2	45	2.4	0.3	39
12	...	...	...	0.7	1.0	(5)	...	...	...	...	...	...	0.2	0.4	...	1.3	2.1	3
13	0.7	0.3	...	1.4	2.8	2	...	...	...	...	...	...	2.0	1.7	7	1.7	1.1	27
14	5.8	12.1	2	1.4	3.4	(3)	...	...	...	...	...	...	0.6	0.8	(4)	10.9	1.3	48
15	5.7	4.0	4	0.1	0.2	...	0.2	0.7	...	5.2	2.3	6	0.4	1.0	(4)	0.3	0.1	...
16	4.0	2.3	9	0.5	1.8	2	0.7	2.5	...	0.3	0.3	2	0.8	0.6	(5)	2.6	8.5	(4)
17	3.0	4.5	8	...	...	...	0.7	1.1	...	...	...	...	3.2	1.1	15	0.2	1.3	...
18	0.3	0.6	...	0.4	0.9	...	...	...	...	...	...	...	0.2	0.2	...	11.2	9.1	3
19	5.6	7.8	3	1.3	1.5	3	...	...	...	...	...	...	...	...	...	0.1	0.2	...
20	14.6	10.0	44	4.4	8.0	2	1.3	2.1	4	...	...	...	...	...	...	...	...	...
21	8.2	6.2	3	4.3	5.0	2	5.1	4.6	16	...	...	...	...	...	...	...	...	...
22	0.5	0.6	(2)	0.6	1.6	2	3.4	1.2	5	...	...	...	...	...	...	0.6	0.8	8
23	...	...	...	0.2	0.3	...	4.2	3.2	24	0.1	0.2	...	...	...	...	...	...	...
24	1.1	1.5	-	...	...	...	1.7	3.8	3	...	...	...	4.9	2.7	15	0.1	0.2	...
25	...	...	...	...	...	...	0.4	0.3	3	0.2	0.5	...	...	...	...	...	...	...
26	15.7	16.1	(3)	...	...	...	2.5	1.7	(4)	0.1	0.1	...	...	...	...	0.5	1.0	(1)
27	3.7	3.7	2	2.4	1.5	4	0.3	0.3	...	...	...	...	...	...	...	1.8	3.8	2
28	7.7	10.5	2	2.5	4.3	3	...	...	...	1.2	0.5	13	...	...	...	5.3	6.6	22
29	19.8	9.9	10	13.7	5.3	57	...	...	...	...	...	...	0.7	0.4	4	0.6	1.1	1
30	6.9	8.2	2	...	...	...	...	...	...	1.2	3.0	(2)	2.6	2.4	4	6.8	5.5	58
31	0.9	1.4	(2)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	119.2	120.1	-	52.5	68.1	-	66.8	66.3	-	24.0	26.6	-	101.0	71.8	-	89.3	77.0	-

	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	21.1	6.8	66	7.4	10.7	2	...	...	...	...	...	...	...	...	...	0.6	0.5	...
2	3.2	1.7	15	9.6	8.2	57	0.1	0.3	...	1.5	4.1	(1)	...	...	...	5.6	6.9	4
3	4.9	3.1	18	2.7	4.9	2	6.4	6.6	25	15.1	5.6	43	...	...	...	0.2	0.8	...
4	14.1	8.8	45	...	...	...	...	...	...	7.6	4.7	13	...	...	...	8.2	14.9	10
5	22.3	7.6	97	...	...	...	8.4	8.5	15	...	...	...	0.1	0.1	...	29.7	13.4	38
6	0.2	0.4	1	13.0	2.2	32	6.5	8.1	19	...	...	...	...	...	...	1.1	1.3	(1)
7	11.9	5.2	33	0.3	1.4	...	5.1	6.6	17	0.2	0.8	...	...	...	...	2.6	5.6	(1)
8	5.5	4.5	24	3.9	5.0	4	...	...	...	1.2	2.2	3	6.3	3.7	8	3.3	3.2	8
9	0.9	0.8	3	...	...	...	...	...	...	0.6	1.7	...	13.9	4.7	102	9.0	8.9	18
10	1.5	1.6	2	...	...	...	...	...	...	...	...	...	13.4	5.7	34	18.6	6.4	21
11	...	...	...	21.7	8.9	37	7.7	6.2	32	...	...	...	...	...	...	4.6	5.0	(4)
12	...	...	...	6.8	6.9	15	6.8	11.5	3	...	...	...	...	...	...	11.3	5.7	27
13	...	...	...	17.8	11.2	19	2.5	2.9	27	0.3	1.2	...	2.4	4.2	5	13.4	9.8	12
14	11.9	12.6	23	1.5	2.7	(2)	...	...	...	...	...	...	2.0	1.5	3	21.7	8.1	12
15	0.7	0.9	1	7.7	9.8	13	2.4	3.3	3	...	...	...	2.2	4.1	2	15.0	5.6	47
16	...	...	...	16.6	13.8	41	...	...	...	9.0	4.3	27	0.3	0.6	...	3.2	0.8	12
17	1.5	0.4	20	19.9	6.4	88	...	...	...	18.3	6.5	26	0.2	0.8	...	2.2	2.1	7
18	5.3	5.8	43	15.8	15.6	13	...	...	...	...	...	...	0.1	0.1	...	5.5	2.3	18
19	...	...	...	0.2	0.3	...	0.3	0.6	...	19.6	12.4	29	...	...	...	3.0	2.3	7
20	...	...	...	5.9	1.2	53	1.1	2.1	4	10.8	5.2	28	...	...	...	4.2	7.5	(5)
21	...	...	...	...	...	...	2.7	4.2	5	...	...	...	...	...	...	0.2	...	...
22	...	...	...	...	...	...	1.9	0.7	23	18.2	12.4	11	...	...	...	0.7	...	...
23	15.1	8.9	23	4.7	4.2	16	5.2	4.5	34	0.6	0.5	(1)	...	...	...	5.4	12.3	2
24	...	...	...	5.7	3.0	11	...	...	...	8.6	3.9	66	4.0	6.2	5	1.0	4.2	...
25	1.8	3.6	(4)	6.5	5.6	6	...	...	...	9.1	3.3	8	3.7	3.2	22	...	...	...
26	0.6	0.5	(4)	0.3	0.9	...	2.6	1.2	22	...	...	...	7.6	10.5	24	3.0	10.0	(1)
27	...	...	...	21.7	9.4	22	9.1	6.0	28	2.7	5.3	5	10.1	5.1	22	...	...	...
28	33.5	8.9	95	38.6	17.0	18	33.3	10.5	112	5.2	3.7	8	3.4	3.9	(2)	24.7	17.1	15
29	15.0	11.6	17	...	...	...	6.3	1.9	60	0.5	0.7	1	...	...	...	0.1	...	...
30	1.9	3.8	(4)	0.3	0.5	(1)	13.3	4.1	56	1.2	2.1	2	1.5	1.9	(1)	5.3	6.7	1
31	0.4	1.4	(2)	...	...	...	...	...	...	0.2	0.4	2	...	...	...	15.6	7.8	3
Total	173.3	98.9	-	228.6	149.8	-	121.7	89.8	-	130.5	81.0	-	71.2	56.3	-	219.0	169.2	-

RAINFALL

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

80 ESKDALEMUIR: $h_p = 242.0$ m. + 0.4 m.

	Hour G.M.T.																						0-24		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22		22-23	23-24
	<i>millimetres</i>																								
Jan.	2.7	3.6	1.7	5.6	9.0	6.3	5.8	3.1	4.8	6.8	4.8	3.6	4.4	5.8	11.5	7.3	4.5	4.4	6.2	3.7	3.4	1.2	5.2	3.8	119.2
Feb.	1.5	2.4	3.1	1.8	2.4	1.7	3.3	1.4	0.9	3.6	3.3	1.6	0.7	8.2	3.4	2.4	1.2	1.1	1.7	2.5	1.5	0.7	0.8	1.3	52.5
Mar.	4.6	1.4	0.5	2.2	1.7	2.7	2.5	2.0	1.8	2.5	0.9	2.2	3.7	4.1	2.0	3.6	7.8	5.5	4.2	2.6	2.3	0.7	2.9	2.4	66.8
Apr.	...	...	...	...	0.3	0.8	0.6	1.9	1.9	5.4	1.5	1.5	0.5	0.2	1.2	1.1	1.7	1.8	1.9	0.3	0.3	0.2	0.5	0.4	24.0
May	2.5	4.0	2.4	3.1	3.7	5.3	11.7	6.0	8.6	7.3	4.3	3.9	6.0	1.6	1.8	3.6	3.3	3.0	8.1	2.8	1.7	2.4	1.0	2.9	101.0
June	5.2	2.9	1.1	2.9	4.8	3.8	2.5	4.1	4.5	4.3	8.7	5.6	3.2	2.7	3.7	1.5	0.5	12.3	1.2	3.5	3.4	2.9	1.5	2.5	89.3
July	14.4	15.8	9.7	4.8	3.7	3.9	2.9	5.1	1.6	3.2	2.9	7.9	7.8	6.1	8.3	6.5	4.7	7.7	8.9	24.3	2.4	5.0	4.2	11.5	173.3
Aug.	19.2	7.6	7.2	12.6	12.9	11.5	8.9	6.6	7.7	5.3	6.2	12.9	6.3	5.6	8.9	9.3	18.6	18.1	5.7	5.6	5.3	10.2	11.2	5.2	228.6
Sept.	4.9	6.7	7.1	12.2	9.5	3.0	1.5	4.2	3.4	5.7	7.0	10.7	6.2	11.4	3.4	4.8	3.0	4.7	3.5	2.3	1.7	1.5	1.3	2.0	121.7
Oct.	4.9	5.3	7.6	7.0	10.6	9.9	2.0	2.8	8.9	5.1	1.8	0.4	2.8	2.2	1.2	3.5	3.6	6.2	7.0	6.0	8.8	8.0	8.5	6.4	130.5
Nov.	6.5	2.6	3.2	5.4	3.7	1.8	5.2	1.5	4.5	0.9	2.3	3.7	1.0	2.0	1.0	0.9	0.2	0.5	2.0	1.2	6.1	6.9	4.0	4.1	71.2
Dec.	9.4	7.5	6.3	10.0	9.9	9.4	9.4	7.2	9.9	14.3	14.6	9.6	18.8	7.4	7.2	8.3	8.4	3.9	6.5	8.4	9.1	6.2	11.1	6.2	219.0
Annual	75.8	59.8	49.9	67.6	72.2	60.1	56.3	45.9	58.5	64.4	58.3	63.6	61.4	57.3	53.6	52.8	57.5	69.2	56.9	63.2	46.0	45.9	52.2	48.7	1397.1

RAINFALL

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

81 ESKDALEMUIR: $h_p = 242.0$ m. + 0.4 m.

	Hour G.M.T.																						0-24		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22		22-23	23-24
	<i>hours</i>																								
Jan.	3.6	4.2	3.2	4.5	4.7	5.0	4.8	4.4	6.0	6.8	5.4	6.2	6.4	6.7	8.8	6.4	5.3	4.8	5.7	3.4	3.6	3.0	3.6	3.6	120.1
Feb.	3.5	2.7	3.6	2.6	2.1	1.9	2.0	3.3	2.9	4.1	3.5	3.9	1.5	2.8	4.2	4.0	1.8	2.6	2.6	3.1	3.2	2.7	1.8	1.7	68.1
Mar.	3.1	1.9	0.6	1.3	2.5	3.2	2.2	2.9	2.1	2.7	2.0	3.1	3.2	3.1	2.5	2.5	4.6	3.2	4.1	4.0	3.9	1.8	3.2	2.6	66.3
Apr.	...	...	...	...	0.7	1.9	1.0	1.6	2.2	2.7	1.8	1.9	1.0	0.5	1.2	1.0	1.3	1.0	2.2	0.8	0.7	0.9	1.2	1.0	26.6
May	2.6	3.0	3.5	3.1	3.2	3.2	5.4	5.3	5.5	4.6	4.3	3.2	2.8	1.1	2.1	2.5	1.6	1.5	3.1	2.4	2.5	2.0	1.5	1.8	71.8
June	4.1	4.6	2.7	2.3	1.7	3.2	2.4	3.4	3.9	3.9	5.7	4.5	4.4	3.2	1.9	0.7	1.2	3.2	2.4	2.7	3.3	4.0	3.6	4.0	77.0
July	5.7	4.6	6.0	4.3	5.0	5.5	4.9	4.0	3.8	1.6	2.3	2.8	2.5	3.4	4.5	3.5	3.3	4.0	4.9	6.8	4.4	4.2	2.6	4.3	98.9
Aug.	7.9	7.2	5.3	5.1	5.7	7.1	5.5	5.7	8.0	6.3	5.5	7.3	7.5	6.6	7.0	8.3	8.2	7.3	5.2	5.3	4.4	6.0	4.2	3.2	149.8
Sept.	4.9	4.6	4.0	3.5	3.1	3.9	2.6	3.1	2.7	4.1	4.6	4.5	4.3	5.7	3.6	3.9	4.0	4.3	2.6	3.0	3.5	3.0	3.1	3.2	89.8
Oct.	3.5	4.8	3.2	3.0	3.6	3.7	2.7	3.5	4.7	2.4	2.6	0.9	1.5	1.6	1.3	2.6	2.6	5.1	4.1	4.7	5.2	4.9	5.1	3.7	81.0
Nov.	4.4	2.6	3.5	4.9	3.0	2.4	2.3	2.5	3.0	1.4	2.1	1.4	1.3	1.5	2.1	1.8	0.5	1.0	2.0	1.7	2.4	3.5	2.6	2.4	56.3
Dec.	6.2	7.7	5.0	7.7	9.1	7.3	7.6	10.1	11.6	10.6	7.3	4.5	9.1	7.9	7.1	5.5	5.6	4.0	4.7	6.8	6.3	5.5	6.4	5.6	169.2
Annual	49.5	47.9	40.6	42.3	44.4	48.3	43.4	49.8	56.4	51.2	47.1	44.2	45.5	44.1	46.3	42.7	40.0	42.0	43.6	44.7	43.4	41.5	38.9	37.1	1074.9

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" No occasions

"Partial drought" No occasions

"Dry spell" No occasions

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" 26 June-10 July

"Wet spell" 30 November-24 December

Rainfall Duration

There were 125 days on which no duration of rainfall was registered. The day with the greatest duration was 4 February when the duration was 22.0 hr., the amount falling being 15.0 mm.

Hours	0-1.0	1.1-2.0	2.1-6.0	6.1-12.0	>12.0
Number of days	57	29	86	54	15

Notable falls of the Year

The greatest amount in a 60 min. period was 12.3 mm. which was recorded between 19h. and 20h. on 28 July; on this occasion 5 mm. of rain fell in 8 min. Falls of 5 mm. in one hour or less occurred on 17 days.

Details of the greatest continuous falls are as follows

	9 May	4-5 July	27-28 August	28 September	14 December
Amount (mm.)	30.6	29.1	58.7	26.8	20.2
Duration of rainfall (hr.)	11.9	4.8	25.7	5.5	5.6

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 112 mm./hr. at 03h. 55m. on 28 September. The maximum rate exceeded the 50 mm./hr. four times on 28 September, twice on 2 August and once on 29 February, 30 June, 1, 5 and 28 July, 17 and 20 August, 29 September, 24 October, 9 November.

Brackets in Table 79 indicate that readings are estimated from the Dines Tilting-Siphon Recorder.

DURATION OF BRIGHT SUNSHINE AND PERCENTAGE OF POSSIBLE FOR EACH DAY

83 ESKDALEMUIR: h_g (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	
1	hr. 3.2	% 45	hr. 6.0	% 70	0.0	...	10.2	78	0.8	5	8.7	51	2.7	16	0.1	1	5.4	39	5.5	48	0.2	2	0.0	...	
2	5.9	83	6.9	80	0.3	3	11.3	86	1.0	7	5.8	34	2.1	12	1.7	11	1.6	12	0.0	...	2.1	23	0.0	...	
3	0.2	3	4.1	17	1.8	17	2.5	19	3.4	22	1.9	11	5.2	30	0.2	1	0.0	...	4.4	39	3.0	33	0.0	...	
4	0.0	...	0.0	...	5.0	46	1.1	8	10.8	70	1.8	11	2.0	12	11.2	77	3.3	24	4.5	40	0.5	6	0.0	...	
5	0.0	...	0.0	...	1.9	17	3.8	29	0.0	...	4.0	23	2.6	15	8.2	52	0.0	...	6.4	57	4.4	49	0.2	3	
6	0.0	...	0.6	7	3.7	34	3.5	26	0.0	...	3.6	21	8.1	47	4.9	31	4.2	31	2.6	23	4.9	55	0.3	4	
7	0.0	...	0.0	...	0.0	...	0.0	...	2.2	14	2.1	12	2.3	13	3.8	24	3.2	24	0.2	2	0.0	...	0.0	...	
8	4.2	57	4.7	52	0.0	...	0.0	...	9.2	59	3.2	19	0.0	...	7.5	48	1.2	9	0.4	4	1.7	19	0.1	1	
9	1.1	15	1.9	20	3.7	33	0.3	2	1.3	8	9.5	55	8.7	51	9.6	62	2.7	21	3.9	36	4.4	51	0.0	...	
10	0.0	...	7.9	86	8.7	77	1.4	10	9.7	61	14.3	83	7.3	43	0.0	...	3.1	24	2.4	22	0.2	2	0.0	...	
11	0.8	11	0.0	...	8.7	76	11.0	80	1.6	10	7.7	45	11.5	68	2.8	18	0.7	5	2.3	21	3.9	46	0.0	...	
12	2.4	32	0.6	6	8.7	76	6.6	48	5.3	33	0.0	...	2.8	17	1.2	8	0.0	...	0.6	6	2.6	31	0.0	...	
13	5.8	77	1.9	20	8.8	76	4.1	29	1.9	12	11.4	66	2.9	17	0.4	3	2.1	16	0.0	...	0.0	...	0.5	7	
14	0.0	...	4.7	50	7.9	68	5.1	36	4.7	29	8.7	50	0.0	...	5.8	39	9.0	70	6.1	58	6.0	84	0.0	...	
15	0.0	...	4.0	42	0.4	3	2.9	21	3.7	23	5.1	29	7.8	46	0.0	...	0.0	...	8.6	82	3.9	47	0.0	...	
16	0.6	8	0.8	8	2.0	17	8.3	59	10.2	63	0.4	2	9.6	57	0.0	...	6.3	50	0.0	...	3.3	40	0.0	...	
17	0.0	...	2.2	23	0.1	1	6.6	46	9.1	56	2.0	12	1.6	10	0.0	...	9.5	76	5.8	56	0.0	...	0.1	1	
18	6.0	78	1.4	14	0.0	...	7.8	55	5.8	36	0.0	...	1.1	7	0.0	...	3.2	26	2.1	21	0.0	...	1.2	17	
19	0.0	...	0.7	7	0.3	2	10.8	75	6.6	40	3.2	18	8.5	51	0.5	3	1.6	13	0.0	...	0.0	...	0.2	3	
20	0.0	...	1.0	10	0.0	...	12.6	87	7.7	47	4.6	26	0.3	1	2.0	14	0.1	1	2.9	29	1.1	14	0.0	...	
21	0.0	...	0.0	...	2.0	16	10.9	75	9.9	60	4.9	28	2.5	15	5.2	36	0.0	...	0.1	1	5.9	74	4.3	61	
22	2.6	33	2.6	26	6.1	50	2.0	14	13.6	82	9.2	53	8.5	52	4.9	34	4.5	37	0.0	...	2.2	28	0.0	...	
23	6.0	75	3.6	36	8.0	65	4.8	33	5.2	31	7.7	44	1.7	10	0.9	6	0.0	...	2.3	23	0.0	...	0.0	...	
24	4.8	60	7.7	75	0.0	...	3.8	26	4.0	24	1.9	11	3.4	21	3.1	22	7.7	64	2.2	22	0.0	...	0.0	...	
25	4.2	52	0.1	1	8.3	67	2.3	16	7.7	46	10.1	58	0.5	3	0.0	...	8.1	68	6.8	70	1.5	19	0.1	1	
26	0.0	...	4.8	46	8.8	70	8.0	54	9.3	56	6.4	37	10.0	62	2.5	18	0.5	4	6.7	69	0.0	...	0.0	...	
27	0.2	2	1.7	16	8.8	70	4.0	27	8.2	49	7.9	46	1.7	10	2.3	16	0.2	2	3.9	41	3.0	39	0.2	3	
28	0.0	...	0.2	2	5.9	46	7.0	47	8.4	50	1.6	9	0.0	...	0.0	...	0.0	...	1.7	18	4.3	37	0.0	...	
29	1.6	19	0.5	5	4.2	33	7.1	47	4.9	29	0.4	2	0.0	...	5.5	39	1.6	14	7.6	80	3.9	52	0.0	...	
30	0.0	...	9.2	71	0.0	...	0.0	...	0.0	...	0.3	2	0.0	...	9.8	71	0.7	6	5.0	53	0.0	...	0.0	...	
31	0.0	...	5.2	40	1.2	7	1.2	7	1.2	7	4.0	25	7.8	56	1.3	14	1.3	14	1.3	14	3.2	45	0.34	5	
Mean	1.60	21	2.43	25	4.15	35	5.33	38	5.40	33	4.95	29	3.85	23	3.29	22	2.68	21	3.11	30	2.10	25	0.34	5	
											Annual mean	3.27	27												

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

84 ESKDALEMUIR: h_g = 1.5 m.

	Hour L.A.T.												Total	Per cent. of possible						
	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
Jan.	-	-	-	-	0.1	2.6	9.1	8.1	9.5	7.4	7.0	5.3	0.5	...	-	-	-	-	49.6	21
Feb.	-	-	-	...	0.3	5.3	8.8	12.1	11.4	9.7	9.5	8.4	4.9	0.2	...	-	-	-	70.6	25
Mar.	-	-	...	0.8	8.0	12.3	13.5	14.2	15.9	16.0	14.5	14.5	11.5	5.5	1.8	...	-	-	128.5	35
Apr.	-	...	2.0	9.2	15.0	16.7	17.9	14.5	13.8	13.8	11.3	11.5	13.3	10.8	9.6	0.4	...	-	159.8	38
May	...	0.6	6.3	11.0	11.7	12.9	13.3	13.7	12.3	13.0	14.9	13.1	13.4	15.4	10.6	4.8	0.4	...	167.4	33
June	...	1.0	7.3	9.1	8.9	8.9	8.8	9.8	11.6	11.3	13.0	13.3	10.9	12.0	10.7	9.6	2.2	...	148.4	29
July	...	0.2	2.2	5.6	7.8	7.1	6.5	9.0	8.7	10.8	11.0	10.7	12.7	10.2	9.1	7.1	0.7	...	119.4	23
Aug.	-	...	0.7	5.8	8.2	10.1	9.2	8.9	8.6	8.8	7.5	8.5	9.8	8.1	6.2	1.5	...	-	101.9	22
Sept.	-	-	0.2	2.0	3.2	6.3	8.7	9.3	9.1	7.9	8.6	10.0	7.7	5.9	1.6	...	-	-	80.5	21
Oct.	-	-	-	...	2.6	8.9	12.3	14.5	13.4	12.6	10.6	11.2	8.4	1.8	...	-	-	-	96.3	30
Nov.	-	-	-	-	...	3.0	7.5	10.4	12.2	10.8	10.8	7.3	1.0	...	-	-	-	-	63.0	25
Dec.	-	-	-	-	-	0.1	0.3	1.9	2.4	2.4	2.0	1.3	...	-	-	-	-	-	10.4	5
Annual	...	1.8	18.7	43.5	65.8	94.2	115.9	126.4	128.9	124.5	120.7	115.1	94.1	69.9	49.6	23.4	3.3	...	1195.8	27

WIND

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	9.5	28	1.2	9	8.5	29	1.7	11	3.8	13	5.5	19	3.3	11	3.0	11	2.3	10	5.1	18	2.8	13	4.4	19
2	1.9	15	0.6	6	6.3	27	3.4	13	4.6	13	10.5	27	5.8	14	2.7	13	6.0	18	1.2	11	2.9	13	8.9	26
3	2.4	9	0.6	9	4.1	16	3.8	15	4.9	14	6.4	17	5.0	13	2.4	13	3.2	18	7.2	24	2.1	9	5.7	18
4	3.3	11	1.3	9	4.0	19	2.8	11	3.3	14	7.7	22	4.0	13	2.5	13	1.6	7	6.8	19	3.9	18	6.9	17
5	5.1	13	3.3	18	2.1	13	4.3	16	7.9	16	9.6	26	8.9	24	1.7	10	4.1	12	6.2	21	4.9	15	9.0	23
6	0.5	6	1.7	14	3.5	17	2.3	10	7.7	21	7.2	23	4.8	19	1.3	11	3.6	13	3.1	13	4.3	14	4.2	22
7	1.7	15	0.6	9	0.7	6	5.7	17	6.4	18	3.5	16	2.3	8	2.0	9	1.9	11	2.1	10	6.1	15	4.5	14
8	7.1	17	1.4	10	3.7	14	9.3	19	5.1	19	4.9	15	5.9	18	3.4	13	1.5	8	0.7	5	7.7	22	5.6	15
9	1.7	17	1.3	8	3.1	13	6.2	17	7.4	21	2.9	14	5.0	17	1.4	7	3.0	10	0.3	4	6.5	20	7.6	19
10	3.6	15	0.5	6	1.5	10	2.4	10	6.9	20	2.8	11	1.3	10	2.2	6	1.7	12	0.8	7	4.1	17	9.9	24
11	0.8	7	3.7	16	2.1	12	1.3	6	8.0	22	2.4	10	1.7	8	4.5	19	6.3	18	4.5	13	1.1	8	5.4	17
12	1.9	10	5.0	17	2.2	12	1.8	13	6.5	21	2.9	12	3.4	10	5.4	15	3.8	14	4.8	15	1.0	11	9.6	32
13	2.8	15	4.4	20	1.0	6	5.3	16	7.4	20	3.7	13	3.7	-	11.9	28	5.4	16	4.6	12	2.6	11	9.2	23
14	3.4	14	3.4	21	1.7	10	2.3	11	4.7	18	1.9	13	5.5	19	8.4	27	3.0	16	2.1	10	3.3	11	12.3	26
15	2.8	14	2.6	11	4.3	11	1.0	9	6.3	17	1.4	7	6.7	20	1.4	10	3.0	10	1.6	8	4.2	22	11.5	34
16	4.5	19	0.0	2	4.6	11	1.6	13	6.1	24	4.1	12	5.4	15	1.9	9	1.9	8	4.5	22	2.1	13	6.1	19
17	7.0	28	0.3	6	2.5	9	1.7	10	3.5	14	2.5	12	3.5	12	2.0	9	1.3	9	8.6	31	0.7	4	6.8	21
18	3.6	21	1.2	8	4.0	13	0.7	6	2.0	13	5.0	16	3.6	11	6.2	19	1.3	7	4.6	13	0.5	5	6.1	19
19	3.5	13	2.3	11	1.4	11	1.4	11	1.1	9	4.5	17	5.6	16	2.1	11	0.4	3	3.8	16	3.8	14	5.6	16
20	9.7	29	3.3	15			1.7	10	4.4	13	3.7	14	5.0	16	0.8	11	1.6	12	4.8	15	2.7	10	1.0	10
21	3.7	23	4.7	18			2.2	10	4.3	14	2.3	10	1.7	9	1.2	7	4.5	15	7.2	17	1.1	6	0.5	5
22	2.5	19	4.5	14			0.9	9	2.4	10	1.5	8	3.1	14	2.2	8	4.3	15	10.1	21	1.3	5	0.5	4
23	0.3	9	1.9	9			1.2	8	4.0	15	1.6	8	5.0	20	2.2	14	1.2	7	5.7	19	1.4	7	3.4	13
24	3.3	21	2.0	12			1.5	9	6.0	19	1.4	7	4.5	16	1.8	10	2.8	8	7.1	24	5.0	19	5.6	15
25	0.2	9	0.0	1			1.8	9	1.8	11	4.5	17	6.9	19	1.3	14	2.5	10	5.3	19	10.5	27	7.1	20
26	0.6	6	0.9	8			3.9	14	1.8	9	4.5	16	8.8	28	1.6	8	3.9	14	2.5	11	9.7	26	2.7	14
27	1.0	9	4.9	12			2.7	12	1.7	9	2.8	12	1.7	8	2.8	14	7.1	19	0.9	7	7.7	23	1.7	12
28	0.9	8	5.3	21			1.4	9	2.4	10	1.2	12	2.5	11	4.1	16	10.0	29	5.5	17	7.4	21	6.3	18
29	1.5	10	5.8	31			1.8	11	3.8	13	2.2	10	4.4	21	1.6	7	8.8	21	6.0	19	4.3	20	0.6	7
30	0.6	9					1.0	5	1.6	7	3.6	12	8.0	26	2.7	13	10.6	23	4.3	15	1.8	9	8.3	20
31	5.7	18							3.4	12			4.8	17	2.2	10			3.5	16			5.1	18

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.																								Mean
	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	
	metres per second																								
Jan.	2.9	2.9	3.3	3.3	3.3	3.1	3.1	3.2	3.1	3.0	3.0	3.3	3.4	3.5	3.5	3.2	3.2	3.3	3.1	3.0	3.1	3.0	2.9	2.6	3.2
Feb.	2.5	2.8	2.8	2.6	2.2	2.1	2.1	1.7	1.5	1.6	2.2	2.6	2.9	3.0	3.2	2.8	2.5	2.3	2.1	2.3	2.2	2.3	2.5	2.4	2.4
Mar.	2.4	2.5	2.2	2.3	2.2	2.2	2.2	2.4	2.8	3.6	4.2	4.5	5.0	4.9	4.9	4.8	4.6	3.9	3.3	3.2	2.9	3.0	2.7	2.8	3.3
Apr.	1.6	1.7	1.4	1.4	1.6	1.7	1.7	2.1	2.8	3.3	3.6	3.7	3.9	3.8	4.0	4.2	4.2	3.9	2.9	2.4	1.8	2.0	1.9	1.8	2.6
May	3.1	3.2	2.9	3.0	3.1	3.4	4.1	4.7	5.4	6.0	6.0	5.9	6.1	6.3	6.0	6.1	5.9	5.7	5.2	4.2	3.7	3.4	3.0	3.0	4.6
June	2.9	2.8	2.6	2.9	2.5	2.8	3.4	4.1	4.7	4.7	4.8	4.8	5.1	5.3	5.5	5.2	5.5	5.3	4.5	4.1	3.3	2.7	2.7	2.8	4.0
July	3.4	3.5	3.5	3.7	3.7	3.8	4.2	4.6	4.7	4.8	5.3	5.6	5.8	6.1	6.2	5.9	5.9	5.3	4.7	4.2	3.8	3.3	3.4	3.4	4.6
Aug.	1.9	2.2	2.3	2.2	2.1	2.4	2.4	2.8	3.4	3.8	3.8	4.0	4.1	4.2	4.5	4.2	4.0	3.4	3.0	2.3	1.9	1.8	2.0	1.9	2.9
Sept.	2.8	3.1	3.2	3.3	3.5	3.5	3.5	3.9	4.5	5.0	5.2	5.0	4.9	4.6	4.2	4.2	4.0	3.5	3.1	3.2	3.1	2.9	2.9	3.0	3.7
Oct.	3.9	4.0	4.0	3.8	4.2	4.5	4.5	4.2	4.0	4.9	5.6	5.6	5.6	5.5	5.2	4.8	4.4	4.0	4.1	3.7	3.6	3.8	3.6	3.7	4.4
Nov.	3.6	3.5	3.6	3.9	3.6	3.4	3.3	3.2	3.4	3.9	4.6	4.6	4.8	4.8	4.6	4.2	3.9	4.1	4.1	3.8	4.0	3.8	3.9	3.6	3.9
Dec.	5.7	5.8	6.0	6.1	6.0	5.9	6.4	6.4	6.5	6.3	6.4	6.4	6.3	6.0	6.0	5.7	5.5	5.4	5.6	5.5	5.1	5.0	5.5	5.7	5.9
Annual	3.0	3.1	3.1	3.1	3.1	3.2	3.3	3.5	3.8	4.2	4.4	4.5	4.7	4.7	4.6	4.5	4.3	4.1	3.7	3.4	3.1	3.0	3.0	3.0	3.7

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	
	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	3	23	145	274	302	0	350	15	1 21	29	20 18 20
Feb.	-	0	2	4	79	288	325	0	250	12	29 3	31	29 17 25
Mar.	-	0	1	6	77	219	130	312	240	15	1 14	29	1 20 59
Apr.	-	0	1	3	80	345	292	0	250	11	8 18	19	8 16 50
May	-	0	6	18	270	314	142	0	200	15	9 9	24	16 14 50
June	-	0	6	46	123	379	172	0	210	15	6 15	27	2 16 30
July	-	0	5	21	250	351	115	7	270	13	26 10	28	26 9 40
Aug.	-	0	2	24	76	373	271	0	290	15	14 6	2	

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	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.	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.	
	<i>degrees Absolute</i>																								
1	77.7	80.1	75.8	78.6	75.9	77.7	78.9	78.7	80.6	79.7	84.9	81.9	85.9	83.5	86.0	85.0	84.8	84.7	85.0	85.0	80.8	83.1	78.3	81.3	
2	77.6	80.1	75.4	78.5	76.8	77.6	79.1	78.7	80.9	79.7	85.0	81.9	86.0	83.5	86.0	84.9	84.8	84.7	84.9	84.9	80.3	83.1	78.3	81.2	
3	77.9	80.1	75.1	78.5	77.0	77.6	79.3	78.7	81.1	79.7	84.5	81.9	86.1	83.5	86.0	84.9	84.7	84.7	84.8	84.9	80.8	83.1	79.0	81.1	
4	78.3	80.0	75.3	78.5	77.1	77.7	79.1	78.8	81.2	79.9	84.1	82.1	86.3	83.5	85.9	84.9	84.8	84.7	84.2	84.9	80.9	83.0	79.7	81.0	
5	78.7	80.0	75.2	78.5	76.9	77.9	79.1	78.9	81.6	79.9	83.9	82.2	86.5	83.6	86.2	85.0	85.0	84.7	83.7	84.9	80.9	82.9	80.1	80.9	
6	78.0	79.9	75.5	78.5	76.9	77.9	78.9	78.9	81.6	79.9	83.5	82.1	86.4	83.7	86.6	85.0	85.1	84.7	83.0	84.7	81.1	82.9	80.3	81.0	
7	77.6	79.9	75.3	78.3	77.1	77.9	79.1	78.9	81.6	80.0	83.4	82.4	86.5	83.8	86.2	84.9	85.5	84.6	83.0	84.5	81.1	82.7	80.5	80.9	
8	77.1	79.9	75.6	78.3	77.2	77.9	79.2	79.2	81.5	80.1	83.6	82.3	86.6	83.9	87.0	85.3	85.5	84.6	83.2	84.5	81.0	82.7	80.6	80.9	
9	76.6	80.0	75.6	78.2	77.3	77.9	79.2	78.9	82.1	80.1	83.3	82.3	86.8	84.0	87.1	85.3	86.0	84.5	83.6	84.3	81.3	82.6	80.7	81.0	
10	76.4	80.0	75.5	78.1	77.2	78.0	79.1	79.0	82.2	80.3	83.3	82.3	86.6	84.0	87.4	84.9	85.6	84.5	84.0	84.3	81.3	82.5	80.3	81.0	
11	76.1	79.9	75.5	78.3	77.0	78.0	79.0	79.1	82.6	80.3	84.6	82.3	86.7	83.9	87.4	85.0	86.1	84.6	84.0	84.3	81.0	82.5	80.2	81.2	
12	76.1	79.9	75.3	78.2	76.8	78.0	79.3	79.1	82.6	80.4	85.3	82.3	86.8	84.0	88.0	85.0	85.6	84.7	84.0	84.1	80.7	82.5	80.0	81.2	
13	75.9	79.7	75.3	78.1	76.8	78.0	79.6	79.1	82.5	80.5	85.0	82.5	86.8	84.1	87.6	85.0	85.5	84.7	83.8	84.8	80.6	82.5	79.7	81.2	
14	75.8	79.7	75.3	78.1	76.8	78.0	79.3	79.1	82.5	80.7	84.9	82.5	86.6	84.2	86.3	85.0	85.4	85.0	83.8	84.1	80.6	82.4	79.1	81.1	
15	75.8	79.6	75.5	78.1	76.8	78.0	79.3	79.1	82.4	80.6	84.8	82.6	86.5	84.2	86.0	85.1	85.8	84.7	83.6	84.1	80.6	82.4	79.3	81.2	
16	75.8	79.6	75.4	78.0	76.6	78.1	78.8	79.1	82.4	81.0	83.9	82.6	86.9	84.2	86.1	85.1	85.2	84.7	83.7	84.1	80.2	82.3	79.2	81.4	
17	75.7	79.5	75.5	78.0	76.6	78.0	79.0	79.1	82.6	80.9	83.9	82.6	87.2	84.2	86.0	85.1	85.0	84.7	83.8	84.1	80.7	82.5	80.0	81.2	
18	75.7	79.5	75.3	78.0	76.6	78.1	79.0	79.3	82.5	80.9	83.9	82.6	87.1	84.3	86.1	85.1	85.4	84.7	83.6	84.1	80.2	82.1	78.8	81.4	
19	75.5	79.3	75.5	78.0	76.9	78.0	79.3	79.1	82.2	80.9	84.0	82.7	87.1	84.4	86.0	85.1	85.5	84.7	83.2	84.1	80.3	82.1	78.7	80.9	
20	75.4	79.3	75.3	78.0	76.9	78.0	79.7	79.1	82.3	80.9	84.2	82.7	87.3	84.5	86.1	85.1	85.7	84.7	83.4	84.1	80.2	82.1	78.8	80.8	
21	75.3	79.2	75.4	77.9	77.0	78.0	79.8	79.3	82.6	80.9	84.4	82.7	87.0	84.5	86.0	85.0	85.8	84.7	83.9	84.1	79.7	82.0	78.8	80.8	
22	75.5	79.1	75.4	77.9	77.8	78.0	80.1	79.2	83.5	81.1	85.0	82.8	86.9	84.6	86.3	85.1	85.4	84.7	83.7	83.8	78.9	81.9	78.7	80.8	
23	76.0	79.1	75.4	77.9	78.1	78.0	80.1	79.3	83.6	81.1	85.9	82.8	87.0	84.9	86.1	84.9	85.8	84.7	83.9	83.9	78.6	81.9	78.8	80.7	
24	76.0	79.1	75.4	77.9	78.4	78.1	80.0	79.4	83.5	81.1	86.3	82.9	87.3	84.7	86.0	85.0	86.6	84.7	83.6	83.8	78.2	81.9	78.6	80.7	
25	75.9	79.0	75.2	77.8	78.5	78.1	80.3	79.4	83.2	81.2	86.4	82.9	87.3	84.7	85.9	85.0	87.0	84.7	83.0	83.7	78.5	81.7	78.3	80.7	
26	76.0	79.0	75.3	77.8	78.6	78.1	80.5	79.5	83.3	81.3	86.6	83.0	87.6	84.7	85.8	85.0	87.0	84.8	82.1	83.9	79.0	81.6	77.7	80.6	
27	76.0	78.9	75.3	77.8	79.1	78.2	80.6	79.5	83.6	81.4	86.3	83.2	87.3	84.7	85.6	85.0	86.6	84.8	81.4	83.8	79.3	81.5	77.4	80.5	
28	76.0	78.9	75.4	77.8	79.2	78.4	80.4	79.7	84.4	81.4	86.0	83.2	87.8	84.8	85.8	84.9	85.9	84.9	81.4	83.7	79.0	81.5	77.3	80.4	
29	76.0	78.9	75.8	77.7	79.2	78.4	80.5	79.7	85.0	81.5	85.6	83.2	87.1	84.9	85.0	84.8	85.6	85.0	81.3	83.5	78.6	81.4	76.7	80.2	
30	75.9	78.9			78.8	78.5	80.5	79.7	85.0	81.6	85.9	83.4	87.1	84.9	85.3	85.0	85.2	84.9	81.0	83.5	78.2	81.3	77.0	80.2	
31	76.0	78.7			79.1	78.5			84.9	81.8			86.6	84.8	85.1	84.9			80.8	83.3			77.4	80.2	
Mean	76.4	79.5	75.4	78.1	77.5	78.0	79.5	79.2	82.6	80.7	84.7	82.6	86.8	84.2	86.2	85.0	85.6	84.7	83.3	84.2	80.1	82.3	78.9	80.9	
													Year	81.4	81.6										

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

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	<i>degrees Absolute</i>																							
1	72.3	59.6	74.1	66.1	79.4	80.5	83.4	75.9	71.1	78.0	70.8	73.1												
2	69.1	56.5	77.8	64.4	71.7	82.1	83.1	81.3	74.7	76.4	66.9	77.8												
3	75.6	55.9	74.0	71.6	78.9	77.2	82.8	74.0	81.1	78.0	76.2	80.1												
4	72.1	70.1	72.8	66.2	67.4	79.1	83.5	72.2	81.4	72.9	69.8	80.6												
5	77.8	74.0	66.9	74.6	80.5	78.9	83.4	72.2	78.1	72.3	73.5	74.3												
6	72.6	75.8	73.5	67.8	79.2	74.8	82.8	74.7	83.2	69.7	75.6	76.2												
7	69.4	71.5	73.0	74.0	78.2	75.0	83.0	75.1	83.8	76.5	81.0	81.0												
8	68.0	75.6	75.0	77.3	80.1	76.4	82.1	82.1	81.0	75.8	73.1	79.9												
9	62.8	69.8	75.4	78.9	75.1	73.2	81.9	71.8	79.8	76.8	79.3	79.2												
10	63.4	60.2	66.0	77.8	78.0	71.2	71.0	79.0	81.3	71.9	74.2	70.9												
11	67.7	64.0	63.8	66.7	78.5	81.0	71.9	84.0	79.2	76.1	68.5	73.3												
12	61.8	72.6	65.9	65.1	78.1	80.4	78.9	77.4	80.2	69.7	72.4	72.4												
13	68.3	72.5	68.1	74.1	73.4	77.1	77.9	81.4	82.5	74.8	72.3	73.4												
14	65.9	61.1	61.9	70.9	76.9	72.0	82.7	81.8	79.6	78.5	73.5	73.1												
15	67.8	63.0	70.8	67.2	74.1	72.0	83.7	74.7	72.6	70.8	69.4	76.8												
16	65.1	61.7	70.5	64.0	75.9	72.8	84.8	80.5	78.0	75.8	66.6	74.0												
17	73.5	71.9	72.6	65.5	71.9	77.0	79.7	82.0	69.5	79.7	72.4	73.0												
18	70.8	67.2	70.5	62.6	68.1	72.8	85.2	83.5	80.8	72.3	75.2	75.2												
19	63.3	66.5	73.1	68.0	64.4	83.0	83.9	81.3	77.9	71.9	74.5	75.4												
20	75.0	64.1	73.5	64.8	64.9	80.2	82.0	78.2	79.4	81.9	71.2	77.8												
21	69.9	69.8	75.0	64.6	78.7	73.0	82.2	75.4	83.8	81.1	68.1	71.2												
22	69.6	69.4	74.0	70.3	75.0	78.4	75.5	77.5	81.5	83.1	62.8	72.2												
23	63.6	67.2	78.8	67.7	72.2	84.8	77.1	76.5	84.6	82.5	65.2	76.4												
24	60.2	69.2	74.3	68.9	78.0	83.1	83.5	78.9	82.1	77.5	62.9	73.1												
25	57.4	59.5	76.2	70.4	70.2	82.0	86.2	77.4	80.4	72.5	78.3	66.2												
26	65.5	65.5	72.1	72.3	71.8	82.2	85.4	78.0	83.0	66.2	77.2	71.0												
27	65.6	69.7	76.7	71.0	73.9	76.4	75.8	71.9	72.1	63.6	73.1	68.0												
28	73.5	73.5	73.4	63.6	81.4	80.3	81.7	81.1	82.6	76.4	70.2	64.2												
29	75.3	79.0	71.0	64.2	80.2	76.3	84.0	76.6	79.7	70.4	70.1	73.2												
30	67.1		72.8	69.1	81.1	82.7	80.4	76.0	75.2	72.4	64.7	70.9												
31	71.0		74.0		81.8		80.1	71.5		72.6		76.9												
Mean	68.4	67.5	72.2	69.0	75.5	78.0	81.3	77.6	79.2	75.1	71.3	74.2												
								Year	74.1															

The initial 2 or 3 of the readings is omitted, i.e

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

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	JANUARY, factor 9.36				FEBRUARY, factor 9.33				MARCH, factor 9.35			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	75	Z-	80	125	85	90	145	210	40	60	-5	5
2	75	50	90	45	75	60	115	180	90	-45	-	-
3	-10	70	80	210	55	85	320	55	-	-	115	110
4	150	100	150	85	120	130	-120	180	65	60	Z±	135
5	90	160	115	210	-55	125	175	300	70	140	Z-	70
6	65	40	30	120	150	170	125	170	130	Z-	140	-45
7	40	60	Z-	130	100	130	140	95	60	55	15	5
8	110	95	145	170	105	95	80	Z-	60	65	260	185
9	120	80	100	130	90	110	155	160	25	130	120	40
10	475	300	-5	260	85	100	175	300	45	95	175	40
11	51.5	160	-	-	240	220	150	230	35	85	240	45
12	-	-	80	95	175	105	415	485	30	145	170	-20
13	Z±	120	395	320	90	115	270	Z±	35	65	160	25
14	130	350	845	45	Z±	120	300	320	65	155	125	200
15	205	470	Z±	275	280	185	320	300	5	-	150	135
16	260	110	140	Z-	110	100	195	300	115	155	100	140
17	135	95	Z-	40	95	195	90	240	35	125	Z±	125
18	100	110	130	70	100	85	Z±	125	195	55	120	120
19	60	85	170	120	110	105	185	135	30	70	170	170
20	75	Z-	Z±	105	95	195	Z-	230	85	80	120	135
21	70	90	Z±	345	120	170	Z+	120	35	110	210	120
22	51.5	115	130	155	50	175	220	330	115	240	180	Z+
23	95	170	270	415	115	205	300	525	135	170	180	625
24	205	300	725	215	295	190	345	270	115	50	70	Z-
25	125	155	160	180	115	200	160	150	155	130	105	5
26	280	-40	-215	-170	95	95	155	170	65	135	120	Z±
27	320	245	175	140	155	125	165	5	80	-110	120	180
28	Z-	160	185	190	-30	110	130	25	260	60	125	165
29	150	-60	180	310	90	110	Z±	Z-	135	120	95	60
30	130	Z-	-130	50	-	-	-	-	50	90	140	40
31	Z±	60	175	115	-	-	-	-	55	100	120	60
(a)	176	150	207	167	123	135	201	215	81	106	140	118
(b)	170	129	173	151	114	137	185	219	82	90	137	112
Mean	(a) 175		(b) 156		(a) 169		(b) 164		(a) 111		(b) 105	

	APRIL, factor 9.33				MAY, factor 10.85				JUNE, factor 10.91			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	25	135	120	55	Z-	75	70	Z-	35	190	180	60
2	20	75	120	145	80	150	100	175	45	60	Z-	120
3	120	65	Z+	75	5	40	105	135	45	75	115	Z-
4	70	120	115	35	75	110	160	120	95	0	105	-115
5	95	120	85	65	45	150	-	315	Z-	Z-	25	100
6	55	90	40	80	70	130	110	145	70	135	175	115
7	45	70	45	Z-	120	115	140	140	80	200	160	20
8	110	-5	10	50	-70	130	85	65	65	120	95	120
9	50	15	-	85	45	Z-	Z±	Z-	80	70	155	65
10	95	Z-	20	105	90	-5	150	125	45	235	140	90
11	115	110	115	120	80	Z-	100	90	55	90	125	Z+
12	40	95	140	90	80	-90	90	100	110	70	90	65
13	15	10	110	140	120	125	30	15	40	135	200	125
14	110	70	115	40	90	90	-	-	105	125	Z±	125
15	15	70	140	30	-	-	105	-10	75	125	80	245
16	70	125	Z±	50	110	75	Z-	125	85	125	55	Z-
17	50	120	85	100	60	90	95	110	20	95	80	80
18	55	105	90	15	65	120	85	40	135	55	175	110
19	20	70	90	55	25	85	60	40	125	110	120	190
20	35	145	140	60	50	140	150	120	135	125	125	140
21	30	90	140	25	60	125	110	-	100	30	60	200
22	20	45	60	20	-	50	55	40	95	140	100	30
23	25	45	110	35	20	125	55	40	45	190	Z+	100
24	30	105	50	40	20	85	90	85	60	50	90	45
25	20	110	50	70	25	85	55	45	200	125	195	195
26	40	25	250	130	35	50	60	75	95	140	115	55
27	70	125	110	95	60	115	120	115	115	175	110	-
28	45	100	85	75	75	185	135	40	65	300	90	55
29	60	120	115	55	160	160	110	90	80	205	-	-
30	50	Z-	45	15	85	75	15	40	-	-	70	55
31	-	-	-	-	210	50	65	95	-	-	-	-
(a)	53	88	97	68	73	105	93	97	82	125	116	104
(b)	49	87	103	68	66	92	89	89	86	123	127	95
Mean	(a) 77		(b) 77		(a) 92		(b) 84		(a) 107		(b) 108	

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.

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	JULY, factor 10·83				AUGUST, factor 10·50				SEPTEMBER, factor 10·07			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	95	370	Z ₊	205	30	335	340	310	85	150	120	135
2	Z ₊	250	135	120	65	125	Z ₊	165	100	100	30	20
3	270	180	175	65	285	125	35	40	Z ₊	210	85	45
4	45	450	170	85	65	165	100	80	50	90	210	80
5	Z ₊	190	65	70	60	120	5	20	70	-25	-30	165
6	125	120	125	165	85	95	60	50	Z ₋	220	105	-5
7	Z ₋	270	105	110	70	590	90	65	10	350	150	165
8	160	105	175	140	-100	300	175	105	85	95	40	70
9	255	165	125	165	150	120	100	70	65	115	120	120
10	140	105	Z ₋	100	90	80	20	45	50	75	105	190
11	85	245	130	40	-50	40	130	110	90	Z ₋	Z ₋	90
12	50	85	-	145	100	80	65	50	95	95	5	125
13	110	145	160	45	-250	245	50	15	230	125	125	515
14	Z ₊	350	95	70	65	25	105	220	35	115	160	30
15	510	230	90	60	85	50	80	35	30	95	115	55
16	105	70	85	135	160	165	125	145	20	25	70	15
17	60	125	-	-	145	240	25	180	5	15	85	20
18	-	-	125	190	135	Z ₋	-135	-15	0	15	85	0
19	135	125	105	95	85	180	45	120	5	15	5	-
20	120	-	100	170	-5	180	Z ₋	15	-	-	-	75
21	120	115	135	135	30	240	-	50	65	165	105	85
22	260	115	80	150	35	105	100	50	65	135	220	20
23	35	155	90	Z ₋	10	65	160	85	85	105	105	105
24	125	140	95	120	-25	155	60	65	160	260	215	330
25	65	45	110	150	105	Z ₊	Z ₊	-5	125	475	220	330
26	180	120	100	80	155	110	140	65	95	135	55	185
27	60	120	25	55	60	130	Z ₋	Z ₋	210	110	65	25
28	40	Z ₊	Z ₊	Z ₊	Z ₊	Z ₊	Z ₊	340	Z ₊	20	5	95
29	40	160	Z ₋	-490	215	305	105	50	25	35	Z ₋	95
30	145	90	-25	-70	50	160	145	145	15	10	-	-
31	-20	90	100	185	120	170	120	65	-	-	-	-
(a)	134	169	113	118	99	169	99	98	72	125	104	119
(b)	152	148	109	100	68	168	99	91	79	128	108	127
Mean	(a) 133			(b) 127	(a) 116		(b) 107	(a) 105		(b) 111		

	OCTOBER, factor 10·00				NOVEMBER, factor 10·20				DECEMBER, factor 10·50			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	-	-	-	-	130	150	155	135	90	75	150	115
2	-	-	-	155	85	210	175	150	15	-	-	25
3	85	Z ₊	Z ₊	Z ₊	175	80	155	95	-	-	20	20
4	Z ₊	Z ₊	Z ₋	265	80	35	165	160	40	40	65	25
5	105	135	185	170	80	110	145	115	Z ₋	Z ₋	30	-
6	135	160	120	160	60	105	105	130	25	40	90	55
7	80	70	-	-	100	70	85	80	155	135	150	110
8	-	-	125	30	35	50	135	Z ₋	105	130	190	135
9	80	300	90	45	100	125	155	Z ₊	90	Z ₋	Z ₋	10
10	35	135	250	65	35	Z ₋	Z ₋	40	270	35	5	Z ₋
11	135	310	150	165	20	15	85	75	80	Z ₋	120	50
12	100	40	160	130	25	35	70	-	70	Z ₋	45	165
13	60	60	0	95	-	10	370	210	55	Z ₊	Z ₋	150
14	120	85	155	25	-	45	195	30	105	Z ₋	55	110
15	30	80	160	50	-255	55	190	85	65	25	-200	155
16	-	-10	-35	Z ₋	40	100	65	20	90	115	100	150
17	Z ₋	175	150	165	95	-	100	65	25	105	15	190
18	70	160	135	170	-	-	60	-	115	135	115	180
19	75	45	235	-210	50	110	110	90	130	260	295	Z ₋
20	Z ₊	140	85	125	120	-	145	-	25	-	-	-
21	95	115	60	135	-	-	-	-	-	-	-	330
22	65	35	100	-85	-	-	25	-	20	90	130	-
23	135	240	135	105	-	-	50	15	Z ₋	250	-60	145
24	70	Z ₊	100	Z ₋	-	55	175	-	220	215	65	180
25	Z ₋	165	190	175	-	-	45	50	115	95	115	50
26	125	105	160	105	85	-	-	40	-45	5	85	-50
27	85	85	115	-5	-10	20	25	15	-	-	180	295
28	260	Z ₋	135	155	Z ₋	-	320	370	190	60	-160	-155
29	235	150	215	Z ₋	70	170	190	135	20	-	-	30
30	80	140	75	85	125	50	-95	235	-235	-220	15	30
31	80	70	60	180	-	-	-	-	Z ₋	35	260	-
(a)	102	130	133	125	74	79	139	107	93	103	104	121
(b)	89	128	130	78	125	91	111	109	68	68	57	84
Mean	(a) 123			(b) 106	(a) 100		(b) 109	(a) 105		(b) 69		

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)	97	124	128	122
	(b)	96	116	119	110
		(a) 118		(b) 110	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T.												volts per metre												Non-cyclic change†	No. of days used	Mean v./m.
	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			
0a days only*																											
Jan.	+54	+46	+11	+4	-18	-54	-50	-63	-61	-45	-15	-16	+4	-2	-7	-16	-11	+9	+37	+20	+23	+32	+50	+61	-98	5	155
Feb.	+4	-25	-43	-56	-66	-66	-52	-58	-43	-16	0	+16	+20	+9	+14	+27	+30	+52	+50	+43	+54	+65	+32	+20	+11	10	187
Mar.	-40	-90	-20	-27	-18	-29	-29	-30	-27	-2	+4	+23	+47	+63	+54	+56	+58	+16	+16	-25	-25	-18	-32	-22	-46	5	108
Apr.	-32	-32	-38	-40	-36	-27	-13	+20	+27	+29	+23	+30	+36	+29	+27	+30	+25	+16	+2	-7	-9	-13	-21	-18	-13	10	80
May	-23	-30	-32	-37	-38	-20	+7	+16	+30	+37	+30	+23	+8	+5	+3	+7	+15	+15	+17	+5	0	-17	-7	-17	+24	6	85
June	+1	-19	-1	+1	-18	-27	-26	-25	0	+11	+19	+12	+9	+27	+14	+5	-1	+12	+8	+14	+12	+12	-19	-30	-15	5	120
July	+45	+18	+42	+28	-14	-27	+10	+28	+14	-14	+4	-11	-42	-32	-23	-35	-24	-4	+20	+42	+21	-11	-21	-11	-40	2	134
Aug.	+14	+16	+33	+22	+17	-4	+4	+38	+28	+43	+17	+13	-4	-13	-14	+1	-16	-18	-25	-60	-63	-30	-31	+20	+35	2	122
Sept.	-59	-63	-80	-51	-40	-40	-47	+12	+69	+63	+32	+8	+16	+11	+23	+16	+11	+1	+59	+60	+87	+9	-33	-49	-64	3	119
Oct.	-20	-1	-35	-13	-7	-11	-5	-23	+20	+22	+18	-7	+23	+23	+25	+20	+11	+6	+5	-1	+1	-13	-17	-25	-26	5	136
Nov.	-15	-22	-24	-9	-16	-26	-22	-24	0	+20	-6	+6	+24	+21	+22	+34	+29	+30	+27	+14	-4	-11	-20	-16	+14	8	112
Dec.	-38	-41	-23	-138	-126	-96	-31	-46	+9	+214	+35	+175	-69	+126	-110	-28	+13	+29	+8	+38	+37	+15	+22	+20	-134	1	186
Year	-9	-20	-17	-26	-32	-36	-21	-13	+5	+30	+13	+23	+6	+22	+2	+10	+12	+14	+19	+12	+11	+2	-8	-6	-	-	129
Winter	+1	-11	-20	-47	-57	-61	-39	-48	-24	+43	+3	+45	-5	+39	-20	+4	+15	+30	+31	+29	+28	+25	+21	+21	-	-	160
Equinox	-38	-47	-43	-33	-25	-27	-23	-5	+22	+28	+19	+13	+31	+31	+32	+31	+26	+10	+21	+7	+13	-9	-26	-29	-	-	86
Summer	+9	-4	+11	+3	-13	-19	-1	+14	+18	+19	+17	+9	-7	-3	-5	-5	-7	+1	+5	0	-7	-11	-19	-9	-	-	140
1a and 2a days only*																											
Jan.	-30	-27	-39	-57	-54	-61	-30	-5	-13	-2	+11	+23	+21	+55	-15	+27	-15	+7	+25	+54	+55	+32	+25	-2	-5	4	93
Feb.	-11	-66	-96	-81	-82	-88	-81	-58	-29	+25	+11	+11	+22	+23	+63	+47	+34	+57	+84	+72	+84	+72	+14	-23	-35	9	149
Mar.	-20	-14	-25	-32	-34	-38	-23	-11	+2	+27	+25	+40	+38	+30	+32	+45	+15	-7	+2	+2	-15	+25	-15	-5	+21	10	101
Apr.	-16	-23	-27	-32	-32	-29	-25	-9	+4	-2	+9	+25	+32	+29	+29	+30	+11	+11	+4	-14	+13	+7	+23	-16	-10	6	63
May	-44	-6	-22	-16	0	-11	-8	-3	-26	-2	-5	+2	-4	-1	+15	+34	+33	+24	+32	+19	+13	+27	-8	-42	-61	7	104
June	+11	-23	-31	-50	-12	+12	0	+27	+14	+11	-1	-5	0	-12	+4	+7	-4	-16	-20	-1	+18	+17	+30	+19	+18	5	108
July	-31	-3	-28	-13	-28	-44	-11	+20	-6	+35	+62	+14	-10	-3	+8	+2	+14	+4	+16	-8	+21	+31	+11	-40	-54	6	105
Aug.	-54	-53	-85	-55	-27	-8	+85	+138	+124	+50	+4	-18	-25	-20	-8	-28	+20	+26	-4	-9	-14	+9	-10	-31	-25	8	139
Sept.	-20	-16	-35	-27	-29	-29	-5	+9	+17	+13	+1	+8	+21	+15	+43	+43	+20	+4	-12	-16	-7	-4	+4	-9	-11	9	76
Oct.	-46	-10	-6	-9	-10	-2	0	+33	+41	+30	+22	+1	-2	+10	+7	-4	+6	+1	+9	+15	-23	-5	-18	-57	-23	8	106
Nov.	-9	-7	+5	-9	+10	+9	-20	-39	+11	+10	+26	+49	+26	+17	+11	-34	-10	-8	-8	-11	-6	-7	-12	+1	+27	2	82
Dec.	-71	-36	-18	-27	-36	-5	+23	-8	-23	-1	+27	+63	+46	+11	+11	+55	+52	+25	+96	+73	-41	-110	-84	-50	-53	1	110
Year	-28	-24	-34	-34	-28	-25	-8	+8	+10	+16	+16	+18	+14	+15	+17	+19	+15	+11	+19	+15	+8	+8	-3	-21	-	-	103
Winter	-30	-34	-37	-43	-41	-36	-27	-27	-13	+8	+19	+37	+29	+33	+17	+24	+15	+20	+49	+47	+23	-3	-14	-19	-	-	107
Equinox	-25	-16	-23	-25	-26	-25	-13	+5	+16	+17	+14	+19	+22	+21	+28	+29	+13	+2	+1	-3	-8	+6	-1	-20	-	-	87
Summer	-29	-21	-41	-33	-17	-13	+17	+45	+27	+23	+15	-2	-10	-9	+5	+4	+16	+9	+6	0	+9	+21	+6	-23	-	-	114

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.*

ELECTRICAL CHARACTER OF EACH DAY AND APPROXIMATE DURATION OF NEGATIVE POTENTIAL GRADIENT

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	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
1	2b	hr. 4.2	0a	hr. ...	2c	hr. 10.4	0a	hr. ...	2c	hr. 6.3	1a	hr. 0.3
2	1a	0.2	0a	...	(1b)	0.9	1a	0.1	0a	...	1b	1.4
3	1a	2.7	1a	0.1	(2b)	3.1	1b	2.1	(1b)	1.5	2b	3.7
4	0a	...	2b	6.6	2b	3.5	2b	4.1	1a	0.2	2c	6.6
5	1a	0.1	1a	1.1	1b	2.7	1b	1.3	(1a)	0.6	2c	10.8
6	1a	1.9	0a	...	2c	6.5	0a	...	2b	3.2	1c	2.5
7	1b	0.1	1a	0.1	1a	1.4	2b	3.0	1a	1.0	1b	2.2
8	0a	...	1b	2.5	1a	0.2	2b	6.9	1b	2.5	1a	0.1
9	0a	...	0a	...	1a	0.6	(1a)	1.3	2c	11.7	0a	...
10	1b	1.9	0a	...	0a	...	2c	8.1	1b	2.2	0a	...
11	(1a)	0.1	2b	3.2	0a	...	0a	...	2c	3.1	1b	1.3
12	(0a)	...	1a	0.1	1a	1.7	0a	...	1a	0.5	1b	2.8
13	1b	0.5	1b	0.9	1a	0.5	1a	2.0	1b	2.9	1b	2.5
14	1b	1.2	1b	0.4	1a	0.2	1a	0.5	(1a)	0.9	1c	2.4
15	1b	1.1	0a	...	(1a)	0.8	1c	1.1	(1a)	1.2	1a	0.2
16	1b	2.5	1a	0.4	1a	0.1	1c	2.9	1b	1.2	2b	10.0
17	2c	5.6	1a	0.2	1b	0.8	1b	0.5	1b	1.3	1b	2.1
18	1a	0.1	1b	0.3	1a	0.1	1a	0.3	1b	0.2	1b	2.6
19	2b	3.0	1a	0.3	1a	0.1	0a	...	0a	...	1a	0.3
20	2c	7.8	1b	1.6	1b	1.3	0a	...	0a	...	0a	...
21	2c	3.0	1b	0.3	2b	3.8	0a	...	0a	...	0a	...
22	0a	...	1a	0.7	1b	2.4	1a	0.5	0a	...	1b	0.9
23	1b	0.4	0a	...	1b	2.5	1b	1.7	0a	...	1b	0.1
24	1b	1.3	0a	...	2b	5.6	0a	...	1a	1.1	1a	0.7
25	0a	...	0a	...	1b	0.6	1a	1.2	1b	0.3	0a	...
26	2b	9.1	0a	...	1b	0.9	1b	1.4	0a	...	1b	0.4
27	1b	2.4	1b	1.2	1b	1.6	0a	...	0a	...	1b	2.3
28	2b	4.9	1a	1.7	0a	...	1b	0.6	1a	0.2	1b	2.9
29	2c	7.9	2c	4.5	0a	...	0a	...	1a	1.4	1b	1.1
30	2b	6.7			0a	...	2b	7.7	1b	2.7	1b	1.7
31	1b	1.9			1a	0.2			1a	0.2		
Total	-	70.6	-	26.2	-	52.5	-	47.3	-	46.4	-	61.9
No. of days used	-	31	-	29	-	31	-	30	-	31	-	30
Mean	-	2.3	-	0.9	-	1.6	-	1.6	-	1.5	-	2.1

	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
1	1c	hr. 2.9	1a	hr. 0.9	1a	hr. 0.1	(0a)	hr. ...	0a	hr. ...	1b	hr. 1.4
2	1b	1.3	1c	2.0	1b	1.7	1a	0.6	0a	...	(1b)	0.2
3	1b	1.1	2b	3.1	2b	3.3	2c	6.7	0a	...	(0a)	...
4	1b	1.3	1a	0.3	1a	0.4	2c	4.6	0a	...	1b	1.4
5	1b	2.1	1b	0.9	2b	7.9	0a	...	1b	0.5	2c	9.3
6	(1a)	0.6	1b	1.8	2b	5.7	1a	0.3	0a	...	1b	0.7
7	2b	4.2	1a	0.3	2b	4.1	(0a)	...	1a	0.4	0b	...
8	1a	1.6	1a	1.3	1a	0.3	(1a)	1.4	2b	7.0	1b	1.4
9	0a	...	0a	...	1a	0.2	1a	1.5	2c	4.1	2c	7.2
10	2b	3.1	1a	0.3	0a	...	1a	0.3	2b	4.0	2b	5.9
11	(0a)	...	2c	6.3	2b	3.8	0a	...	0a	...	2c	5.1
12	(0a)	...	2b	4.8	1b	0.9	1a	2.3	(0a)	...	2c	3.4
13	1a	0.8	2c	9.7	1b	0.7	2a	3.1	(1b)	1.1	2b	4.2
14	2c	5.0	1b	3.0	1a	1.5	0a	...	(1b)	1.3	2c	5.7
15	1b	0.3	1b	1.7	1a	1.9	(0a)	...	1b	2.9	2c	5.2
16	1a	0.6	1b	1.8	0a	...	2b	10.2	0a	...	1b	0.7
17	(1a)	0.3	2c	4.6	1a	0.6	2c	6.3	(0a)	...	1b	0.5
18	(1c)	2.7	2c	11.8	1a	0.9	0a	...	(1a)	0.2	1b	1.2
19	(0a)	...	1a	0.3	(1a)	0.2	2c	7.7	1a	0.1	1c	2.6
20	(0a)	...	2b	3.2	(1a)	0.9	1b	2.0	(0a)	...	(2c)	4.6
21	(0a)	...	(1a)	0.8	1a	0.1	1a	0.1	(0a)	...	(0a)	...
22	(1a)	0.3	(0a)	...	(1a)	0.7	2b	4.3	(0a)	...	(0a)	...
23	(2b)	4.4	2b	4.1	1b	0.5	1a	0.5	(0a)	...	2c	9.1
24	0a	...	2c	5.1	1b	0.3	2c	5.8	1b	1.4	0a	...
25	1b	0.5	2c	4.6	0a	...	2c	3.8	(0a)	...	1a	0.9
26	1a	0.3	1b	0.7	1b	0.9	0a	...	(1b)	0.6	2b	10.0
27	1a	0.1	2c	8.5	1b	2.2	1a	1.5	(2b)	3.3	(1a)	1.9
28	2c	6.1	2c	14.6	2c	4.8	1b	2.1	1b	0.9	2c	7.2
29	2c	9.7	1a	1.3	1c	2.7	1b	2.3	0a	...	(1b)	2.0
30	2b	6.4	1a	0.4	(0a)	...	2b	4.4	1b	1.7	(2c)	6.4
31	1a	2.4	0a	...			1b	1.7			(2c)	6.6
Total	-	58.1	-	98.2	-	47.3	-	73.5	-	29.5	-	104.8
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	1.9	-	3.2	-	1.6	-	2.4	-	1.0	-	3.4

Annual values: Character frequency 0 1 2
No. of days used 86 196 84

Duration: Total 716.3 hr.
No. of days 366
Mean 1.96 hr.

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

93 ESKDALEMUR (H)		16,000γ (0.16 C.G.S. unit) +														JANUARY 1956					Sum					
	Hour G.M.T.											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	15000+	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11															11-12
1	689	664	660	671	677	680	685	683	681	680	674	670	664	667	673	670	637	658	675	680	659	650	641	662	669	1050
2	662	665	661	667	667	671	674	672	677	675	668	667	673	675	675	663	655	667	663	638	659	658	684	683	667	1019
3	676	667	674	685	675	676	683	677	671	662	652	670	673	673	678	681	685	670	668	668	670	688	683	679	674	1184
4	679	673	672	674	679	692	682	682	676	664	663	656	670	681	682	678	684	684	662	693	662	677	681	697	677	1243
5	673	677	675	670	676	674	683	686	682	671	669	669	679	680	680	683	686	684	670	680	671	676	675	671	677	1240
6	693	688	675	674	679	682	688	688	691	687	682	681	678	662	648	662	666	665	664	656	669	659	663	670	674	1170
7	672	669	669	671	672	673	677	679	675	669	661	658	664	668	674	665	650	666	670	671	672	679	678	683	670	1085
8 q	669	667	671	671	673	675	678	679	673	662	654	656	662	671	678	684	686	687	672	675	682	681	681	678	674	1165
9	678	674	676	671	690	692	687	681	678	662	643	634	641	647	668	677	675	671	666	665	694	679	680	678	671	1107
10	678	678	678	682	685	684	698	690	674	655	656	654	667	672	667	663	651	620	617	653	652	624	643	626	661	867
11 d	613	641	687	662	674	679	664	658	641	625	616	627	622	646	637	648	643	637	624	639	644	655	659	660	646	501
12	662	662	667	670	675	678	686	672	666	660	650	630	638	641	657	665	669	659	642	625	619	630	645	647	655	715
13	652	684	663	663	668	671	670	671	671	666	661	656	663	669	678	675	675	677	678	673	673	674	674	669	670	1074
14	669	663	662	669	671	673	670	675	673	680	669	671	672	667	663	664	671	670	664	669	675	676	676	676	670	1088
15 q	676	676	675	677	680	682	686	689	690	686	677	673	667	674	678	679	681	681	682	683	685	684	678	676	680	1315
16 q	678	686	685	685	690	688	690	686	684	677	672	678	679	677	681	677	681	682	684	681	687	684	684	682	682	1378
17	683	684	686	682	679	680	685	688	681	671	669	667	660	665	673	671	671	673	678	676	677	675	671	680	676	1225
18 d	705	651	687	692	698	705	707	716	688	681	668	681	662	691	699	665	685	684	666	626	597	578	629	643	672	1124
19 d	654	659	664	671	675	680	683	679	649	643	640	639	638	634	649	659	660	654	637	641	649	655	660	666	656	738
20 q	671	665	665	667	671	669	669	673	671	662	660	658	656	662	668	671	669	669	670	673	677	674	673	677	668	1040
21	685	675	675	678	681	681	682	682	678	670	665	662	666	673	675	671	670	673	686	684	669	678	678	700	677	1237
22	712	649	641	622	664	668	669	678	673	662	659	657	663	669	678	681	681	682	679	684	678	682	679	679	670	1086
23	672	672	673	675	681	690	691	682	673	662	652	644	647	658	667	679	681	686	671	659	633	618	631	659	665	959
24 d	683	674	669	668	672	695	684	674	662	637	630	616	611	648	656	664	646	639	645	637	609	616	600	608	648	543
25	609	630	657	650	656	681	679	671	659	654	651	649	647	650	654	664	669	673	665	650	650	663	673	673	657	777
26 q	672	671	670	670	674	677	678	675	675	673	672	669	666	669	672	673	674	676	678	679	679	678	678	679	674	1177
27	689	684	682	680	683	689	690	690	690	694	679	686	683	682	688	682	694	684	684	611	630	648	654	651	676	1227
28 d	645	636	637	650	693	710	683	676	678	671	656	648	629	640	669	667	666	669	668	656	674	654	656	670	663	901
29	667	658	660	669	673	676	679	675	669	667	673	670	672	679	649	669	660	671	690	664	685	667	669	678	670	1089
30	691	660	671	662	671	683	674	676	673	669	664	660	654	665	660	651	654	688	660	670	674	675	683	678	669	1066
31	669	665	669	682	681	676	680	682	669	670	661	641	661	669	654	674	662	677	666	660	664	675	668	670	669	1045
Mean	672	667	669	670	677	682	682	680	674	667	660	658	660	665	669	670	669	670	666	662	662	662	665	669	669	
Sum 20000+	826	667	756	780	983	1130	1134	1085	891	667	466	397	447	624	728	775	737	776	644	519	518	510	627	748		Grand Total 497,435

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

94 ESKDALEMUR (D)		10° +														JANUARY 1956					Sum					
	Hour G.M.T.											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	1200.0+	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11															11-12
1	45.2	43.2	46.3	49.8	50.9	53.2	53.0	52.9	52.5	53.1	54.4	55.9	56.8	57.7	58.5	58.6	53.1	60.0	56.7	53.7	46.4	33.2	43.5	47.3	51.5	35.9
2	50.5	51.3	52.1	51.4	52.0	53.9	53.5	53.2	53.1	52.0	53.0	54.1	55.4	56.5	55.6	57.3	54.1	55.5	55.1	49.0	46.2	49.2	49.8	47.3	52.5	61.1
3	50.1	49.5	51.7	49.6	50.9	52.6	53.4	53.6	53.4	53.2	53.0	53.5	55.6	56.6	55.5	56.4	58.0	55.4	54.4	53.5	52.6	50.9	51.4	46.7	52.9	71.5
4	47.0	46.4	50.0	50.4	50.2	51.6	52.3	53.2	53.1	53.1	55.1	57.0	57.1	57.6	57.5	55.2	55.7	57.7	55.6	42.0	54.0	52.9	50.2	44.7	52.5	59.6
5	50.1	50.9	50.1	54.0	51.8	52.1	54.5	54.5	53.6	53.3	54.5	54.9	55.7	56.3	56.1	55.3	55.4	55.5	51.2	49.0	54.2	51.9	51.2	52.1	53.3	78.2
6	53.0	49.8	49.0	51.7	52.2	52.8	53.5	53.1	52.9	53.2	53.1	54.0	56.8	59.1	59.3	58.7	56.4	56.4	55.9	53.6	46.4	48.1	50.6	51.2	53.4	80.8
7	52.7	52.8	52.6	52.3	52.5	53.0	52.9	52.7	52.2	52.8	53.5	55.4	58.2	58.6	59.5	59.9	59.9	55.6	55.7	54.1	52.4	46.8	46.5	47.8	53.3	80.4
8 q	49.7	53.5	53.4	53.6	54.2	53.8	53.5	52.7	52.0	51.7	52.3	54.1	56.3	57.7	56.2	55.1	54.6	54.4	55.0	52.6	53.3	52.3	51.4	51.6	53.5	85.0
9	53.5	51.9	52.2	51.1	53.1	53.0	51.7	51.9	51.8	52.3	52.6	56.3	60.0	61.5	58.5	55.9	52.3	53.5	52.8	50.9	51.5	49.6	52.6	52.8	53.5	83.3
10	52.7	52.8	52.7	53.7	52.7	54.3	54.1	54.5	53.0	52.8	53.4	56.8	60.9	63.7	61.3	60.3	62.1	54.7	43.1	53.0	51.2	43.0	43.3	38.9	53.3	79.0
11 d	45.4	47.5	51.3	45.1	49.2	52.8	57.3	59.9	55.4	53.8	55.5	61.8	57.6	61.3	58.0	59.1	60.1	59.0	49.5	45.9	50.9	51.9	51.7	51.7	53.8	91.7
12	51.8	52.3	52.8	53.5	54.2	54.5	53.7	52.2	51.1	51.2	52.3	54.8	57.1	58.2	59.4	57.7	61.6	64.1	64.8	47.7	44.7	45.5	48.5	47.3	53.8	91.0
13	48.5	50.3	51.4	52.3	53.8	56.0	54.1	52.4	51.4	52.1	53.1	53.9	56.4	57.8	58.5	57.2	56.3	55.7	55.5	54.8	53.5	52.3	52.0	51.8	53.8	91.1
14	51.3	52.2	50.3	50.9	51.0	52.3	53.4	52.4	51.3	51.4	53.1	52.6	54.9	56.1	54.3	53.1	53.4	53.7	53.1	51.8	52.1	50.0	50.6	52.7	52.4	58.0
15 q	53.0	53.0	53.4	53.5	53.5	53.3	52.8	52.4	52.1	51.9	53.0	52.9	54.9	56.7	56.1	55.4	54.4	54.1	53.5	52.9	52.5	52.1	51.7	50.5	53.3	79.6
16 q	52.0	51.7	54.8	52.8	52.5	52.4	52.3	51.8	50.8	51.6	52.6	52.7	55.3	56.8	55.8	55.1	54.6	54.2	53.7	53.0	52.7	52.4	52.7	52.7	53.2	77.0
17	52.8	52.9	53.1	52.3	52.4	52.2	52.1																			

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

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 15000+. Rows include data for stations 1 through 29, with a final Grand Total of 468,842.

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

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 1400.0+. Rows include data for stations 1 through 29, with a final Grand Total of 36380.7.

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

Table with columns for Hour G.M.T., 0-1 to 23-24, Mean, Sum 30000+, and Grand Total 884,762. Rows include observations from 1 to 29 and a mean row.

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

Table with columns for TERRESTRIAL MAGNETIC ELEMENTS (Horizontal force, Declination, Vertical force), 3-hr. range indices K, Sum of K indices, Magnetic character of day (0-2), and Temperature in magnet house 200+. Rows include observations from 1 to 29 and a mean row.

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.

Table with columns for station (101 ESKDALEMUIR (H)), time (Hour G.M.T.), magnetic force components (gamma), and summary statistics (Mean, Sum 15000+). Includes a Grand Total of 493,783.

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

Table with columns for station (102 ESKDALEMUIR (D)), time (Hour G.M.T.), magnetic declination components (degrees), and summary statistics (Mean, Sum 1100.0+). Includes a Grand Total of 37899.5.

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

Table with 26 columns (Hour G.M.T., 0-1 to 23-24, Mean, Sum 29000+) and 33 rows (1 to 31, plus Mean and Sum 38000+). Data represents magnetic force values for various hours and days.

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

Table with 14 columns (Horizontal force, Declination, Vertical force, 3-hr. range indices, Sum of K indices, Magnetic character of day, Temperature in magnet house) and 33 rows (1 to 31, plus Mean). Data represents daily extremes and characteristics.

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 1956		
	Hour G.M.T.												12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24												Mean	Sum 13000+		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			γ	γ
1	677	668	662	664	687	647	669	655	664	655	643	640	640	652	656	670	679	691	683	682	687	692	676	671	667	3010		
2	676	674	676	675	676	678	679	676	670	657	642	648	671	679	660	681	689	676	686	681	675	660	664	663	671	3112		
3	664	657	668	642	678	665	669	664	661	648	642	643	667	666	675	684	688	685	683	693	700	687	686	687	671	3102		
4	688	685	671	689	683	687	676	675	668	646	655	657	659	662	680	683	691	692	696	693	693	691	688	688	679	3296		
5	689	693	692	685	686	689	687	676	671	663	658	651	658	668	667	682	686	695	689	689	695	708	694	691	682	3362		
6	692	691	689	687	688	693	696	691	674	664	655	652	643	645	668	661	679	693	691	693	692	691	695	696	680	3319		
7	685	663	674	683	688	691	693	686	671	661	656	653	645	663	674	668	668	687	693	692	692	693	694	689	678	3262		
8	688	689	684	686	688	686	683	681	656	653	628	640	655	652	662	674	681	690	702	693	697	695	693	695	677	3251		
9	691	692	689	689	684	694	682	681	678	651	644	651	655	664	661	673	685	691	704	688	693	696	694	687	680	3317		
10	684	686	687	687	687	693	688	674	664	646	623	615	621	639	678	682	672	685	693	693	687	685	693	701	673	3163		
11	696	699	702	700	702	695	690	678	663	646	637	635	650	668	693	687	697	736	729	677	698	689	694	695	686	3456		
12	712	712	685	687	691	696	694	681	661	641	640	636	649	646	681	702	700	700	701	706	703	706	703	700	685	3433		
13 q	696	696	699	699	703	705	698	685	661	645	627	625	645	659	679	696	700	706	704	704	705	703	702	699	685	3441		
14 q	699	699	699	700	703	703	700	683	667	646	636	638	653	663	688	695	707	695	696	707	707	706	701	702	687	3493		
15 q	703	703	698	701	706	705	703	691	670	648	635	637	653	672	688	701	713	708	721	707	709	707	708	710	692	3597		
16	702	696	700	708	711	717	712	701	679	655	640	632	642	663	679	725	764	727	706	687	676	660	657	641	687	3480		
17	620	660	649	665	651	662	663	670	663	638	625	626	626	655	670	699	680	698	709	692	680	683	668	671	663	2923		
18	671	678	675	668	683	686	670	652	669	651	635	625	617	634	658	662	673	691	693	702	695	695	693	675	669	3051		
19	676	669	671	666	686	683	682	666	647	639	634	633	644	668	670	682	709	711	703	688	687	683	680	683	673	3160		
20	685	674	681	682	677	674	671	662	648	635	628	633	653	669	680	689	700	702	709	716	695	682	671	658	674	3174		
21 d	672	685	687	685	691	679	677	670	647	654	653	678	652	695	689	676	703	760	772	761	711	604	470	617	673	3158		
22 d	619	542	557	621	562	511	492	512	547	505	495	583	637	626	623	614	653	661	698	698	676	668	668	640	600	1408		
23	650	647	648	646	648	645	643	631	618	606	612	618	621	636	646	655	664	676	687	691	684	680	687	683	651	2622		
24 q	675	676	669	661	672	673	666	656	643	626	618	624	642	663	676	679	692	695	695	694	689	687	693	685	669	3049		
25 q	685	681	678	678	681	678	674	686	651	632	625	641	658	674	689	698	706	700	693	707	702	693	677	682	678	3269		
26	694	693	688	679	694	696	681	664	666	653	638	627	635	662	683	689	704	714	707	693	700	716	648	544	674	3168		
27 d	413	480	181	144	444	485	423	406	400	480	561	627	707	795	760	785	790	779	715	676	653	608	600	549	561	461		
28 d	504	488	524	539	574	608	634	638	637	631	636	624	620	624	642	655	652	674	693	705	708	711	703	697	630	2121		
29 d	654	611	633	673	672	626	589	583	574	595	603	609	625	631	629	651	650	662	675	679	670	669	668	672	638	2303		
30 d	676	674	693	684	628	672	677	672	659	641	631	628	641	653	695	664	682	717	716	690	673	676	683	665	670	3090		
Mean	665	662	654	656	667	662	655	645	634	629	634	646	661	672	682	692	700	701	696	691	684	675	671	668				
Sum 18000+	1936	1861	1609	1673	2024	2022	1861	1646	1347	1011	855	1029	1384	1846	2169	2462	2757	2997	3042	2877	2732	2524	2251	2136		Grand Total 480,051		

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

106 ESKDALEMUIR (D)		10° +																								APRIL 1956	
	Hour G.M.T.												12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24												Mean	Sum 10000+	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			γ
1	43.7	40.5	41.2	42.9	47.0	49.1	46.9	47.2	47.3	48.0	50.0	53.2	55.8	59.0	59.2	58.0	55.7	53.3	52.5	51.9	51.7	51.6	47.8	49.7	50.1	203.2	
2	48.2	47.7	47.7	47.9	48.0	48.6	47.8	46.3	44.3	44.5	50.8	56.7	60.8	62.7	61.1	61.1	59.5	55.9	51.3	47.7	46.0	39.2	45.5	44.6	50.6	213.9	
3	42.8	40.8	42.2	40.0	44.1	41.5	42.3	43.1	44.7	47.3	50.1	54.8	59.3	60.0	59.4	58.2	57.4	55.4	55.9	54.6	53.5	52.3	51.8	48.5	50.0	200.0	
4	48.3	47.8	45.5	50.9	47.7	46.9	48.5	49.5	49.9	51.4	53.6	58.1	59.6	60.5	58.6	56.8	55.3	53.6	51.0	51.6	47.7	51.3	51.8	51.8	52.0	247.7	
5	51.7	51.6	51.7	48.1	48.9	49.0	48.3	47.7	47.5	47.7	50.1	53.6	57.2	60.1	59.4	57.9	57.8	56.6	52.6	46.4	51.1	52.3	51.0	51.7	52.1	250.0	
6	51.2	51.1	50.7	51.0	50.7	50.1	48.9	46.7	47.8	46.7	48.9	53.7	58.5	61.4	61.5	56.7	54.5	52.1	51.7	52.1	50.0	46.9	47.8	50.9	51.7	241.6	
7	50.0	41.7	45.5	47.6	48.3	48.4	48.3	46.4	47.6	48.2	50.2	54.6	56.7	58.8	55.8	54.4	53.0	50.4	51.7	52.3	52.0	51.3	48.7	49.9	50.5	211.8	
8	52.1	52.7	51.9	52.3	51.7	48.9	46.9	46.3	47.4	47.7	52.4	55.0	58.3	58.9	57.9	56.0	53.5	51.8	50.3	48.4	49.7	50.7	51.4	51.4	51.8	243.6	
9	51.3	51.1	51.7	51.9	49.5	48.2	47.8	45.6	43.7	47.0	50.1	53.0	56.1	58.6	57.2	55.9	54.1	52.6	50.2	50.2	49.5	49.1	49.2	50.4	51.0	224.0	
10	50.9	51.0	50.9	50.9	49.8	48.7	48.7	48.6	49.7	50.0	51.8	56.1	59.3	60.1	61.0	57.1	54.7	52.6	51.9	51.0	50.9	51.0	51.4	51.8	52.5	259.9	
11	50.8	50.9	50.4	50.4	51.6	48.0	46.7	44.6	43.9	44.6	48.1	52.7	56.7	58.6	59.5	57.2	55.3	54.9	52.4	49.5	48.9	49.5	51.0	50.4	51.1	226.6	
12	49.6	47.7	47.9	48.4	48.9	48.1	46.3	45.3	45.1	46.0	50.1	54.1	58.5	57.8	57.2	56.6	53.5	52.5	50.9	52.0	50.4	51.0	51.8	51.2	50.9	220.9	
13 q	50.9	50.9	51.4	53.1	51.1	48.3	46.0	44.1	42.3	44.2	47.4	51.3	55.0	57.5	57.9	55.9	53.1	51.3	51.9	52.7	52.8	52.4	51.9	51.8	51.1	225.2	
14 q	51.4	51.4	51.0	50.9	51.1	51.3	50.0	44.5	42.6	43.8	48.8	54.4	59.5	60.3	58.5	56.9	54.2	52.7	51.9	52.3	51.7	49.5	49.7	51.5	51.7	239.9	
15 q	51.8	51.6	51.5	50.9	50.7	50.8	48.6	45.0	43.5	45.1	50.3	55.1	58.1	59.7	57.8	56.2	55.4	54.5	54.4	50.6	52.2	52.7	52.3	49.8	52.0	248.6	
16	51.1	50.8	50.7	51.3	54.5	48.0	46.7	44.2	40.9	41.8	45.6	50.2	55.3	56.8	56.2	57.2	56.9	57.3	52.8	51.8	48.6	50.2	48.2	43.3	50.4	210.4	
17	48.5	42.5	37.6	44.2	46.6	41.0	41.2	39.8	39.1	41.5	46.4	51.0	53.9	57.1	57.8	56.6	54.7	53.5	53.0	53.1	54.5	46.9	48.4	48.2	48.2	157.1	
18</																											

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

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 29000+. Rows 1-30 d. Includes a 'Mean' row and a 'Sum 37000+' row.

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

Table with columns for TERRESTRIAL MAGNETIC ELEMENTS (Horizontal force, Declination, Vertical force), 3-hr. range indices, Sum of K indices, Magnetic character of day (0-2), and Temperature in magnet house (200+). Rows 1-30 d. Includes a 'Mean' row.

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.

MAY 1956

109 ESKDALEMUIR (H)		16,000γ (0.16 C.G.S. unit) +																							MAY 1956			
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	Sum 14000+	
1	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	659	1822
2	q	671	671	664	661	652	649	657	640	631	614	612	604	625	638	640	666	683	700	705	693	689	686	683	688	671	2106	
3		686	683	676	674	676	676	671	664	657	643	631	626	631	649	667	676	683	694	696	691	689	693	689	685	671	2446	
4		688	686	687	681	681	686	680	673	666	655	649	658	659	660	674	698	705	704	709	714	715	709	704	705	685	2419	
5		695	697	696	696	697	696	684	676	671	654	647	661	690	677	671	664	675	696	698	690	698	694	695	701	684	2437	
6		693	693	686	689	685	686	683	688	674	660	655	651	667	671	675	684	694	718	714	705	697	701	687	681	685	2379	
7		683	683	681	684	691	685	683	677	668	647	654	657	665	681	681	682	689	695	699	701	692	702	694	698	699	682	2561
8		706	693	688	685	690	697	692	686	681	675	669	663	664	677	680	689	699	707	712	726	712	690	689	691	690	2448	
9	q	693	693	692	692	692	693	687	673	667	649	650	661	672	679	686	692	691	693	695	701	703	699	698	697	685	2606	
10	q	700	695	699	700	696	703	696	686	680	671	664	658	665	673	684	689	702	710	710	708	708	706	703	700	692	2527	
11	q	699	697	693	693	699	697	691	679	666	656	651	646	658	672	683	698	710	714	711	704	705	703	702	700	689	2485	
12		700	700	695	691	693	691	682	670	660	658	659	662	663	675	682	691	697	703	704	702	703	699	701	704	687	2830	
13		708	707	708	714	725	731	725	704	686	678	676	673	688	714	699	711	697	680	691	714	706	710	687	698	701	2180	
14		691	689	679	693	702	698	670	608	576	593	573	604	634	627	652	668	660	678	679	678	673	676	686	693	657	1780	
15	d	670	667	667	667	670	665	655	640	624	620	628	636	655	655	668	705	697	693	704	707	688	692	682	680	668	2035	
16	d	689	662	693	670	670	658	657	619	614	595	609	604	623	663	693	772	804	844	731	703	684	654	663	661	676	2235	
17	d	668	671	661	646	647	517	448	495	500	522	591	667	784	694	905	925	952	821	716	683	650	538	596	502	658	1799	
18		451	651	618	559	591	574	590	552	526	548	555	563	589	637	618	638	657	674	685	682	672	671	674	679	611	654	
19		667	672	660	661	678	661	662	654	633	630	624	631	633	638	650	667	673	681	687	696	692	687	691	688	663	1916	
20		676	677	679	675	677	672	672	673	659	631	631	646	660	656	670	668	678	690	691	696	703	686	681	674	672	2121	
21		674	679	689	680	677	676	669	670	658	649	631	650	597	646	667	651	646	668	694	706	721	718	684	703	671	2103	
22		670	661	668	654	638	662	660	640	636	634	638	635	646	658	665	672	681	689	713	715	700	691	695	697	667	2018	
23		701	696	684	682	689	682	662	649	654	633	635	653	670	656	682	693	711	729	732	705	699	684	683	679	681	2343	
24		679	682	685	686	684	684	678	666	654	647	657	653	662	674	705	714	702	695	690	711	699	704	667	622	679	2300	
25	d	602	595	534	634	666	609	630	640	627	647	593	554	609	684	778	736	702	727	711	707	687	648	604	546	645	1470	
26	d	480	584	532	591	620	523	466	510	513	538	583	615	630	642	651	635	658	677	670	679	685	684	690	677	606	533	
27		663	652	661	672	677	668	654	650	631	622	610	614	626	652	676	695	702	719	722	725	707	692	683	692	669	2065	
28		669	668	678	674	671	670	657	650	638	622	623	627	638	651	668	676	697	711	714	720	717	699	691	703	672	2132	
29		683	684	676	674	701	698	687	669	642	624	619	626	644	668	683	682	689	697	704	707	706	699	698	693	677	2253	
30		691	698	696	692	693	691	685	670	662	658	655	652	657	683	693	695	693	738	783	745	703	699	657	655	689	2544	
31		669	688	689	700	701	703	698	682	663	649	634	629	644	658	672	655	699	696	714	706	703	698	695	685	680	2330	
Mean		687	686	679	679	679	680	682	674	667	652	643	647	646	655	667	677	688	703	717	708	703	702	708	698	680	2327	
Sum 19000+		1702	1960	1793	1849	2008	1681	1413	1127	784	574	549	726	1194	1563	2185	2464	2714	2944	2901	2828	2619	2306	2164	1976		Grand Total 500,024	

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

MAY 1956

110 ESKDALEMUIR (D)		10° +																							MAY 1956		
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	Sum 11000+
1		50.5	50.1	50.7	49.9	47.3	48.6	49.0	49.2	50.8	50.5	49.7	52.8	54.4	56.7	56.2	54.3	52.5	48.6	50.1	51.5	51.7	51.2	50.9	50.8	51.2	128.0
2	q	50.0	49.9	49.4	49.2	47.4	46.2	44.2	44.0	44.1	45.3	47.6	51.0	54.1	56.9	57.1	55.7	54.3	52.6	51.5	51.0	50.9	51.5	50.9	50.6	50.2	105.4
3		52.2	52.2	48.9	48.2	49.1	47.2	45.0	43.6	43.6	45.5	48.1	53.5	57.2	58.9	59.3	59.4	59.0	56.2	53.1	53.5	53.5	51.8	49.2	50.0	51.6	138.2
4		49.9	49.9	49.0	48.7	48.7	46.4	44.5	44.0	44.6	47.1	49.4	52.3	57.1	57.2	57.3	56.9	55.0	54.4	54.2	53.1	53.2	52.3	51.2	52.0	51.2	128.4
5		49.4	46.3	48.2	48.0	46.9	47.3	51.0	51.3	47.7	50.5	52.3	54.8	56.9	56.2	55.2	53.9	53.1	52.7	51.0	50.1	48.2	50.5	49.9	50.8	50.9	122.2
6		50.9	50.4	49.5	49.2	49.7	47.8	46.4	45.1	46.3	49.5	50.1	53.0	54.9	55.9	55.1	52.2	50.1	50.7	51.7	52.0	51.9	51.0	50.5	51.7	50.7	115.6
7		50.6	49.5	51.0	52.7	51.6	50.0	46.1	45.2	45.9	47.9	50.9	54.1	55.9	55.5	54.6	53.0	52.1	50.8	49.9	47.7	44.2	49.0	50.1	50.9	50.4	109.2
8	q	50.0	49.9	49.8	49.6	48.4	46.5	44.2	42.6	43.7	45.7	49.5	53.7	57.3	59.6	57.0	54.3	52.1	50.0	48.7	48.7	49.7	50.5	50.9	50.5	50.1	102.9
9	q	50.2	49.9	50.6	49.5	48.3	46.8	44.4	43.7	44.6	46.1	49.6	54.0	58.7	59.8	58.4	56.0	54.0	51.8	50.0	49.6	50.0	50.5	50.8	50.8	50.8	118.1
10	q	50.4	50.8	49.7	48.9	47.8	45.6	43.6	41.5	41.5	44.8	49.3	53.8	56.8	57.0	55.9	54.2	52.4	50.8	49.5	50.3	51.0	51.3	51.1	50.9	50.0	98.9
11	q	51.7	53.2	52.2	49.7	48.2	45.7	43.4	43.1	43.5	46.3	48.2	52.5	55.8	56.2	55.0	53.4	52.3	50.8	50.0	50.4	51.4	52.1	52.4	52.6	50.4	110.1
12		53.6	50.9	55.0	55.3	56.4	46.9	46.6	45.1	43.4	46.0	49.6	56.4	61.4	64.9	64.1	64.6	59.8	55.3	53.8	56.1	54.6	49.2	46.4	48.4	53.5	183.8
13		48.1	49.2	47.7	48.0	45.0	43.3	42.2	44.9	60.4	54.5	55.0	58.3	60.5	58.2	58.0	59.1	54.1	49.8	49.2	49.2	49.1	49.3	50.2	52.3	51.6	137.6
14		48.1	49.2	48.8	47.7	46.8	43.1	41.4	41.0	46.0	45.9	49.4	52.3	53.9	56.2	57.2	54.8	52.7	52.0	49.6	48.2	49.0	48.6	51.4	51.2	49.4	84.5
15	d	52.6	47.4	50.0	45.0	49.1	52.4	50.1	45.6	48.5	47.8	46.5	49.5	54.9	56.4	57.1	60.3	58.6	54.2	49.1	47.3	47.7	49.3	45.9	49.5	50.6	114.8
16	d	49.2	43.5	55.3	53.0	51.9	69.3	47.5	45.1	37.1	54.1	52.8	54.0	44.8	57.6	68.											

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

73

111 ESKDALEMUIR (2)

44,000γ (0.44 C.G.S. unit) +

MAY 1956

	Hour G.M.T.												12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 29000+	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12															
1	1272	1280	1280	1278	1277	1276	1274	1280	1277	1280	1285	1289	1296	1302	1302	1307	1310	1329	1319	1303	1296	1292	1290	1296	1291	1990	
2 q	1294	1295	1296	1296	1297	1297	1297	1297	1296	1291	1277	1269	1265	1265	1270	1277	1283	1284	1287	1289	1291	1290	1288	1287	1286	1286	1867
3	1279	1272	1273	1279	1279	1278	1282	1279	1278	1264	1254	1252	1260	1268	1272	1278	1281	1288	1293	1291	1287	1286	1285	1281	1277	1639	
4	1280	1279	1278	1278	1278	1280	1282	1278	1273	1267	1264	1259	1261	1278	1288	1295	1298	1294	1290	1288	1284	1284	1283	1281	1280	1720	
5	1280	1277	1278	1277	1278	1278	1275	1270	1271	1264	1260	1263	1265	1270	1272	1276	1287	1298	1318	1312	1303	1279	1276	1278	1279	1705	
6	1278	1279	1280	1281	1281	1281	1281	1278	1273	1268	1265	1261	1261	1268	1281	1297	1304	1300	1288	1282	1281	1282	1279	1273	1279	1702	
7	1263	1269	1270	1267	1264	1265	1269	1266	1260	1261	1260	1259	1265	1265	1272	1274	1275	1281	1284	1286	1290	1282	1280	1279	1271	1506	
8 q	1280	1279	1278	1277	1277	1280	1282	1281	1276	1266	1258	1253	1255	1262	1270	1275	1277	1280	1281	1280	1276	1275	1275	1275	1274	1568	
9 q	1274	1274	1274	1274	1275	1276	1280	1276	1272	1266	1262	1254	1253	1258	1264	1268	1271	1276	1277	1277	1276	1275	1274	1274	1271	1500	
10 q	1275	1274	1275	1275	1275	1278	1280	1280	1273	1261	1249	1236	1235	1244	1256	1266	1270	1271	1270	1270	1269	1269	1270	1270	1266	1391	
11 q	1270	1269	1266	1269	1272	1276	1276	1274	1270	1263	1251	1242	1242	1253	1265	1271	1275	1277	1279	1276	1274	1273	1272	1271	1268	1426	
12	1266	1258	1257	1262	1261	1254	1254	1263	1265	1259	1242	1231	1240	1258	1295	1317	1345	1330	1302	1280	1272	1272	1274	1276	1272	1536	
13	1276	1270	1270	1257	1248	1248	1258	1262	1248	1247	1253	1261	1283	1303	1320	1326	1325	1319	1301	1293	1290	1288	1284	1273	1279	1703	
14	1270	1278	1284	1288	1289	1292	1294	1286	1278	1270	1273	1278	1287	1294	1305	1313	1319	1316	1317	1313	1302	1283	1274	1280	1291	1983	
15 d	1273	1249	1229	1208	1217	1232	1244	1266	1270	1277	1280	1286	1298	1322	1350	1365	1385	1374	1339	1323	1304	1253	1244	1257	1285	1845	
16 d	1251	1222	1183	1162	1196	1115	1129	1163	1209	1229	1272	1316	1430	1445	1469	1567	1545	1440	1398	1384	1280	1212	1108	1111	1285	1836	
17 d	998	1119	1126	1150	1175	1194	1184	1217	1250	1291	1296	1296	1308	1334	1354	1341	1323	1321	1316	1312	1304	1298	1295	1292	1254	1904	
18	1289	1287	1286	1272	1267	1274	1267	1272	1279	1282	1283	1281	1281	1285	1295	1302	1310	1310	1307	1301	1299	1293	1291	1288	1288	1901	
19	1290	1288	1287	1290	1293	1294	1293	1291	1287	1280	1274	1274	1271	1270	1276	1281	1286	1285	1286	1285	1285	1288	1288	1285	1284	1827	
20	1282	1281	1277	1273	1276	1281	1284	1276	1272	1264	1261	1275	1289	1289	1281	1281	1288	1298	1303	1311	1319	1296	1281	1243	1283	1781	
21	1218	1231	1224	1223	1240	1248	1255	1264	1273	1280	1272	1265	1266	1270	1273	1277	1282	1287	1282	1286	1288	1288	1286	1282	1265	1360	
22	1276	1276	1276	1276	1276	1280	1281	1274	1270	1269	1267	1274	1287	1300	1304	1311	1317	1331	1335	1322	1299	1290	1287	1286	1290	1964	
23	1288	1288	1288	1288	1288	1289	1291	1288	1286	1280	1272	1269	1270	1279	1304	1323	1339	1344	1323	1299	1292	1286	1269	1194	1289	1937	
24 d	1148	1128	1110	1144	1198	1208	1220	1241	1255	1276	1285	1290	1291	1329	1399	1416	1384	1381	1366	1343	1326	1301	1150	1142	1264	1330	
25 d	1069	1091	1063	1077	1059	1054	1096	1163	1207	1261	1292	1310	1333	1351	1362	1339	1322	1311	1310	1303	1299	1301	1300	1289	1232	562	
26	1279	1253	1241	1253	1261	1271	1282	1288	1288	1288	1288	1286	1282	1288	1294	1300	1304	1305	1317	1310	1304	1299	1282	1286	1867		
27	1280	1282	1276	1280	1284	1290	1290	1288	1287	1281	1277	1276	1265	1274	1280	1285	1286	1289	1292	1292	1294	1293	1291	1284	1284	1806	
28	1271	1267	1263	1234	1247	1262	1269	1272	1274	1271	1267	1265	1261	1263	1273	1287	1292	1295	1294	1290	1286	1284	1284	1284	1273	1555	
29	1283	1283	1282	1287	1288	1287	1286	1285	1280	1270	1263	1263	1263	1269	1281	1293	1294	1297	1316	1346	1338	1302	1269	1268	1287	1893	
30	1278	1274	1279	1284	1286	1281	1278	1281	1284	1281	1276	1274	1276	1289	1303	1308	1310	1327	1322	1316	1310	1300	1289	1285	1291	1991	
31	1284	1282	1280	1274	1281	1286	1281	1276	1270	1270	1268	1266	1263	1265	1270	1270	1273	1281	1285	1284	1285	1282	1281	1280	1277	1637	
Mean	1255	1257	1253	1253	1257	1258	1262	1267	1269	1270	1269	1270	1277	1287	1300	1309	1312	1310	1306	1302	1294	1284	1271	1266	1277		
Sum 38000+	914	954	829	833	983	1005	1114	1274	1346	1363	1338	1359	1602	1914	2307	2592	2661	2621	2487	2356	2108	1802	1415	1245		Grand Total 950,422	

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

112 ESKDALEMUIR

MAY 1956

	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							
1	h. m. γ	γ h. m.	γ	h. m.	γ h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	3, 4, 2, 3, 4, 4, 3, 1	24	1	84.0
2 q	17 55 725	577 11 54	148	14 00 59.1	45.4 05 05	13.7	17 40 1333	1265 00 00	68	17 40 1333	1265 00 00	68	1, 1, 2, 2, 2, 1, 1, 1	11	0	84.2
3	19 19 734	639 10 35	95	13 49 59.9	42.8 08 05	17.1	19 00 1295	1250 11 16	45	19 00 1295	1250 11 16	45	2, 1, 1, 2, 2, 2, 3, 2	15	0	84.2
4	23 01 712	639 10 36	73	12 53 58.3	43.3 08 06	15.0	16 30 1298	1253 11 50	45	16 30 1298	1253 11 50	45	2, 1, 1, 3, 4, 3, 3, 3	20	0	84.2
5	17 43 765	642 11 22	123	12 20 58.1	45.1 01 26	13.0	18 49 1322	1259 10 48	63	18 49 1322	1259 10 48	63	3, 2, 3, 3, 4, 3, 2	23	1	84.2
6	15 07 713	631 09 33	82	13 14 57.2	43.8 07 44	13.4	17 02 1304	1258 11 59	46	17 02 1304	1258 11 59	46	1, 2, 2, 3, 3, 4, 1, 2	18	0	84.0
7	19 13 732	657 11 06	75	12 29 56.7	42.6 20 20	14.1	20 18 1292	1258 11 22	34	20 18 1292	1258 11 22	34	2, 2, 1, 2, 2, 2, 3, 2	16	0	84.2
8 q	19 53 707	645 10 21	62	13 15 60.5	41.0 07 30	19.5	06 38 1284	1253 11 50	31	06 38 1284	1253 11 50	31	0, 1, 2, 2, 2, 2, 1, 1	12	0	84.2
9 q	17 04 718	653 11 26	65	13 08 60.1	43.0 07 40	17.1	06 26 1281	1252 12 23	29	06 26 1281	1252 12 23	29	1, 1, 1, 2, 1, 2, 1, 1	10	0	84.2
10 q	17 08 723	643 11 18	80	13 00 57.5	40.4 07 50	17.1	07 20 1281	1231 12 14	50	07 20 1281	1231 12 14	50	1, 1, 2, 1, 2, 2, 1, 0			

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

Table 113: ESKDALEMUIR (B). 16,000γ (0.16 C.G.S. unit) +. JUNE 1956. Columns: 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, Sum 15000+. Rows: 1 d, 2, 3 q, 4, 5, 6, 7 q, 8, 9, 10, 11, 12, 13, 14, 15 d, 16, 17, 18 q, 19 q, 20 q, 21, 22, 23, 24 d, 25 d, 26, 27, 28, 29, 30 d, Mean, Sum 19000+.

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

Table 114: ESKDALEMUIR (D). 10° +. JUNE 1956. Columns: 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, Sum 1100.0+. Rows: 1 d, 2, 3 q, 4, 5, 6, 7 q, 8, 9, 10, 11, 12, 13, 14, 15 d, 16, 17, 18 q, 19 q, 20 q, 21, 22, 23, 24 d, 25 d, 26, 27, 28, 29, 30 d, Mean, Sum 1300.0+.

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

115 ESKDALEMUIR (2)

44,000γ (0-44 C.G.S. unit) +

JUNE 1956

	Hour G.M.T.																								Mean	Sum 30000+
	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		
1 d	1266	1246	1243	1253	1265	1263	1265	1275	1276	1266	1255	1259	1277	1290	1302	1323	1345	1340	1328	1304	1295	1289	1286	1281	1283	792
2	1273	1270	1278	1282	1281	1277	1276	1277	1276	1269	1263	1258	1259	1265	1280	1288	1292	1305	1309	1298	1288	1286	1282	1281	1280	713
3 q	1278	1275	1265	1271	1280	1281	1281	1281	1276	1270	1267	1258	1258	1265	1270	1277	1286	1293	1290	1287	1283	1281	1281	1281	1276	635
4	1277	1277	1276	1277	1277	1279	1277	1277	1277	1271	1265	1259	1263	1265	1277	1285	1299	1304	1305	1292	1285	1282	1280	1278	1279	702
5	1280	1276	1278	1279	1282	1281	1276	1272	1265	1259	1256	1247	1248	1261	1265	1274	1277	1283	1287	1289	1289	1287	1282	1280	1274	570
6	1281	1280	1280	1281	1282	1280	1275	1274	1270	1267	1261	1258	1258	1266	1283	1282	1296	1299	1299	1298	1293	1287	1284	1280	1280	714
7 q	1278	1277	1278	1281	1284	1282	1277	1274	1272	1263	1261	1258	1259	1263	1270	1279	1286	1293	1295	1290	1286	1283	1280	1276	1277	645
8	1275	1269	1254	1266	1271	1275	1272	1269	1270	1265	1258	1253	1257	1264	1274	1286	1293	1289	1286	1281	1286	1286	1277	1271	1273	547
9	1265	1273	1277	1276	1276	1276	1277	1267	1255	1258	1257	1252	1254	1262	1269	1273	1282	1288	1293	1299	1300	1299	1286	1275	1275	589
10	1267	1263	1265	1266	1270	1277	1282	1278	1273	1266	1259	1253	1253	1261	1264	1273	1281	1301	1305	1297	1294	1285	1275	1261	1274	569
11	1261	1247	1235	1242	1248	1258	1255	1259	1261	1263	1259	1254	1253	1270	1278	1293	1292	1290	1288	1288	1286	1281	1275	1272	1267	408
12	1258	1250	1241	1248	1259	1260	1254	1259	1264	1261	1263	1265	1269	1273	1276	1280	1281	1280	1281	1288	1286	1281	1278	1270	1268	425
13	1256	1258	1263	1265	1263	1269	1269	1269	1270	1265	1259	1249	1248	1257	1265	1268	1273	1276	1276	1282	1281	1284	1267	1257	1266	389
14	1253	1248	1240	1241	1256	1264	1269	1264	1258	1254	1248	1242	1247	1272	1288	1293	1290	1285	1283	1281	1274	1276	1272	1263	1265	361
15 d	1247	1243	1219	1223	1234	1242	1258	1263	1260	1265	1265	1265	1273	1277	1286	1289	1295	1300	1293	1289	1286	1285	1272	1258	1266	392
16	1252	1259	1270	1274	1270	1258	1258	1260	1258	1258	1258	1261	1265	1270	1269	1270	1273	1281	1290	1297	1293	1290	1280	1270	1270	484
17	1271	1274	1275	1275	1274	1270	1273	1278	1284	1282	1272	1262	1259	1265	1278	1282	1288	1296	1299	1293	1285	1285	1273	1274	1278	667
18 q	1270	1254	1261	1270	1275	1277	1277	1275	1269	1260	1255	1247	1250	1258	1267	1271	1276	1287	1286	1284	1282	1277	1276	1275	1270	479
19 q	1275	1275	1275	1276	1276	1277	1281	1280	1273	1261	1253	1250	1249	1257	1263	1272	1281	1287	1289	1287	1282	1282	1280	1278	1273	559
20 q	1270	1271	1274	1275	1275	1277	1277	1271	1268	1258	1247	1247	1244	1251	1258	1268	1271	1276	1280	1276	1279	1280	1276	1265	1268	434
21	1261	1253	1249	1264	1275	1280	1277	1275	1269	1258	1252	1247	1243	1248	1258	1265	1275	1283	1288	1286	1282	1276	1275	1273	1267	412
22	1272	1266	1254	1254	1263	1267	1274	1272	1271	1266	1258	1254	1259	1267	1271	1282	1288	1294	1291	1288	1286	1281	1277	1275	1272	530
23	1272	1270	1275	1276	1277	1274	1277	1275	1271	1265	1255	1250	1252	1258	1263	1270	1270	1282	1280	1288	1284	1271	1234	1205	1266	394
24 d	1229	1166	1211	1204	1220	1243	1247	1262	1266	1263	1255	1252	1253	1272	1311	1366	1380	1369	1329	1301	1288	1288	1269	1235	1270	489
25 d	1172	1117	1146	1148	1152	1162	1215	1246	1281	1299	1296	1292	1298	1297	1297	1297	1323	1337	1335	1327	1309	1300	1293	1286	1259	225
26	1286	1287	1288	1287	1283	1276	1271	1271	1268	1269	1265	1269	1275	1284	1301	1316	1326	1333	1324	1310	1304	1303	1294	1280	1290	970
27	1274	1280	1282	1265	1208	1220	1244	1262	1268	1270	1265	1268	1271	1282	1292	1305	1315	1317	1311	1312	1304	1294	1288	1286	1278	683
28	1285	1284	1286	1282	1285	1285	1282	1286	1281	1275	1272	1266	1270	1273	1275	1284	1292	1294	1294	1296	1292	1288	1285	1277	1283	789
29	1276	1271	1269	1276	1278	1281	1279	1277	1277	1273	1275	1268	1268	1273	1277	1280	1286	1288	1289	1308	1308	1296	1284	1280	1281	737
30 d	1275	1275	1279	1280	1275	1265	1254	1265	1273	1281	1274	1275	1281	1285	1296	1318	1326	1326	1309	1307	1304	1297	1282	1274	1287	876
Mean	1265	1259	1259	1262	1264	1266	1268	1270	1270	1267	1262	1258	1260	1268	1277	1287	1295	1299	1297	1294	1290	1286	1278	1271	1274	
Sum 37000+	955	754	786	857	914	976	1049	1113	1095	1000	848	738	813	1051	1323	1609	1838	1976	1912	1823	1694	1590	1348	1117		Grand Total 917,179

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

116 ESKDALEMUIR

JUNE 1956

	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	
1 d	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	120	3,3,3,3,4,4,2,2	24	1	84.4
2	15 54	743	617	09 54	126	13 20	59.4	40.6	02 15	18.8	16 50	1351	1231	01 59	120	2,2,2,3,4,4,2,1	20	0	84.4	
3 q	16 58	752	633	12 41	119	12 55	56.8	44.8	08 24	12.0	18 16	1311	1253	11 56	58	3,2,1,2,2,3,2,3	18	0	84.4	
4	16 34	740	650	11 12	90	13 49	57.4	42.1	06 57	15.3	17 40	1296	1255	12 03	41	2,2,1,2,3,3,2,2	17	0	84.4	
5	17 25	749	646	12 57	103	13 39	57.6	42.4	05 38	15.2	18 19	1310	1258	11 31	52	2,2,1,2,3,3,2,2	18	0	84.5	
6	18 20	767	654	08 30	113	12 30	58.5	41.5	07 17	17.0	18 52	1292	1244	11 54	48	1,2,2,2,2,4,3,2	20	1	84.5	
7 q	15 49	769	652	14 31	117	13 21	59.6	42.4	05 51	17.2	18 28	1301	1258	11 31	43	1,2,2,2,5,4,2,2	18	0	84.8	
8	17 40	743	648	09 30	95	13 39	56.5	39.7	07 41	16.8	18 19	1297	1258	11 40	39	2,2,2,2,2,3,3,2	24	1	84.8	
9	19 49	752	609	10 17	143	01 30	58.7	43.6	06 08	15.1	16 40	1295	1248	02 11	47	3,2,3,4,3,3,3,3	24	1	84.8	
10	19 44	759	622	06 50	137	14 07	62.7	43.6	22 39	19.1	00 30	1301	1250	11 39	51	2,3,4,2,3,3,4,3	23	1	84.9	
11	17 13	795	635	09 34	160	17 00	58.7	37.9	06 14	20.8	17 58	1312	1252	11 41	60	3,2,2,2,3,5,3,3	25	1	85.0	
12	15 24	753	606	08 30	147	14 18	58.6	39.2	07 54	19.4	15 39	1298	1234	02 16	64	3,3,3,3,4,3,3,3	21	0	85.0	
13	18 36	734	642	10 32	92	16 16	55.7	43.3	04 45	12.4	19 30	1288	1239	02 36	49	3,2,2,2,3,3,3,3	22	1	85.2	
14	18 44	762	636	13 08	126	13 58	58.2	39.8	06 54	18.4	21 31	1287	1246	12 16	41	3,2,2,2,3,3,3,4	24	1	85.2	
15 d	19 57	783	614	10 31	169	12 42	59.7	39.6	06 10	20.1	15 47	1296	1237	02 57	59	3,2,3,3,3,3,4,3	22	1	85.2	
16	17 45	798	611	11 10	187	02 12	59.6	38.6	23 38	21.0	17 30	1303	1212	02 35	91	4,3,3,3,4,4,3,4	28	1	85.2	
17	18 11	751	626	12 18	125	14 52	56.8	39.7	08 30	17.1	19 51	1299	1248	00 04	51	3,3,3,3,3,3,3,2	23	0	85.2	
18 q	17 26	778	646	09 35	132	16 03	55.1	40.6	07 10	14.5	18 39	1299	1258	12 40	41	1,2,2,2,3,4,2,3	19	0	85.2	
19 q	17 47	736	644	09 02	92	13 11	55.2													

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

117 ESKDALEUIR (R)

16,000γ (0.16 C.G.S. unit) +

JULY 1956

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 16000+. Rows 1-31 and Mean, Sum 20000+.

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

118 ESKDALEUIR (D)

10° +

JULY 1956

Table with columns for Hour G.M.T. (0-1 to 23-24), Mean, and Sum 11000+. Rows 1-31 and Mean, Sum 1300.0+.

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

119 ESKDALEUIR (2)

44,000γ (0.44 C.G.S. unit) +

JULY 1956

	Hour G.M.T.																								Mean	Sum 30000+
	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		
1	1278	1280	1281	1283	1281	1278	1285	1285	1281	1278	1280	1271	1265	1269	1279	1291	1298	1298	1287	1290	1293	1290	1296	1281	1283	
2	1273	1270	1277	1281	1282	1286	1287	1284	1276	1275	1276	1273	1266	1273	1284	1293	1296	1293	1300	1306	1296	1288	1283	1277	1283	
3	1271	1264	1263	1261	1265	1270	1277	1280	1281	1280	1273	1266	1264	1271	1286	1297	1297	1293	1291	1287	1286	1282	1282	1281	1278	
4	1277	1277	1280	1280	1276	1268	1264	1266	1270	1269	1264	1265	1263	1270	1274	1275	1277	1276	1276	1281	1285	1282	1281	1280	1274	
5	1277	1276	1277	1279	1281	1281	1282	1281	1277	1274	1263	1253	1248	1259	1267	1271	1277	1284	1285	1282	1282	1285	1284	1279	1275	
6	1275	1269	1273	1274	1275	1275	1275	1274	1267	1263	1251	1248	1250	1261	1269	1274	1278	1284	1288	1286	1282	1281	1279	1277	1275	
7 q	1277	1275	1276	1277	1280	1281	1276	1275	1269	1270	1264	1258	1257	1262	1269	1278	1286	1293	1291	1287	1286	1282	1279	1277	1276	
8	1277	1270	1271	1270	1268	1265	1261	1263	1259	1259	1258	1254	1255	1265	1267	1270	1275	1274	1270	1274	1276	1281	1282	1274	1268	
9	1270	1261	1259	1265	1265	1262	1262	1267	1270	1276	1277	1278	1282	1282	1286	1289	1293	1296	1294	1290	1289	1287	1282	1280	1278	
10	1278	1276	1276	1276	1276	1277	1277	1274	1270	1267	1269	1267	1261	1253	1260	1269	1274	1279	1281	1288	1285	1286	1282	1276	1274	
11	1259	1258	1250	1247	1253	1268	1275	1280	1282	1280	1274	1270	1270	1281	1282	1285	1294	1299	1296	1290	1288	1282	1277	1276	1276	
12	1270	1270	1274	1276	1273	1255	1248	1256	1257	1254	1257	1253	1252	1263	1265	1266	1275	1281	1284	1288	1289	1283	1277	1274	1268	
13 d	1262	1251	1242	1249	1265	1270	1271	1272	1272	1265	1261	1253	1243	1253	1264	1277	1296	1311	1319	1307	1299	1291	1291	1287	1274	
14	1233	1257	1264	1276	1281	1282	1281	1281	1280	1282	1281	1270	1267	1273	1277	1280	1286	1288	1291	1287	1285	1277	1270	1271	1276	
15	1273	1272	1270	1275	1277	1277	1281	1283	1281	1276	1270	1261	1257	1258	1265	1270	1278	1288	1288	1299	1298	1286	1280	1276	1277	
16	1274	1271	1270	1265	1265	1269	1275	1273	1270	1268	1262	1251	1246	1255	1267	1278	1282	1291	1287	1282	1281	1282	1280	1276	1272	
17 q	1276	1276	1276	1276	1272	1271	1275	1276	1276	1272	1262	1247	1247	1253	1254	1265	1275	1280	1281	1281	1282	1281	1276	1275	1271	
18 q	1274	1274	1275	1273	1274	1276	1271	1271	1266	1262	1258	1247	1252	1264	1271	1277	1280	1282	1291	1284	1276	1277	1276	1276	1272	
19	1271	1269	1264	1265	1266	1273	1270	1265	1259	1256	1250	1243	1245	1247	1261	1268	1270	1281	1292	1288	1282	1280	1274	1269	1267	
20	1248	1253	1259	1258	1258	1263	1263	1264	1266	1262	1260	1258	1258	1265	1270	1278	1282	1284	1285	1292	1290	1281	1274	1272	1268	
21 q	1273	1273	1273	1273	1272	1275	1276	1273	1270	1269	1268	1268	1266	1268	1268	1275	1280	1282	1281	1277	1280	1278	1275	1274	1274	
22 q	1274	1273	1270	1268	1270	1272	1274	1271	1265	1261	1258	1256	1256	1256	1261	1266	1270	1280	1285	1278	1274	1274	1274	1273	1269	
23	1271	1270	1270	1272	1274	1274	1271	1274	1269	1265	1263	1258	1249	1247	1259	1269	1275	1286	1301	1300	1301	1310	1287	1266	1274	
24 d	1275	1273	1280	1279	1277	1273	1268	1266	1263	1250	1258	1263	1263	1272	1282	1285	1284	1284	1284	1285	1282	1281	1281	1280	1275	
25 d	1280	1280	1273	1254	1258	1258	1259	1255	1254	1263	1271	1275	1276	1299	1311	1312	1307	1300	1288	1290	1295	1293	1292	1274	1280	
26 d	1237	1259	1277	1277	1260	1260	1265	1272	1278	1270	1268	1269	1264	1275	1291	1303	1327	1327	1326	1309	1294	1289	1264	1254	1280	
27	1246	1230	1236	1253	1254	1248	1262	1273	1273	1267	1266	1271	1273	1280	1285	1290	1288	1286	1286	1281	1289	1284	1278	1266	1269	
28 d	1251	1254	1262	1265	1271	1277	1279	1275	1266	1258	1262	1264	1269	1277	1289	1284	1282	1281	1292	1293	1296	1278	1259	1258	1273	
29	1258	1264	1270	1276	1277	1278	1282	1265	1263	1270	1266	1261	1262	1271	1288	1298	1316	1323	1303	1294	1294	1287	1282	1281	1280	
30	1279	1277	1264	1260	1273	1281	1281	1281	1280	1278	1276	1263	1254	1266	1277	1284	1290	1295	1299	1298	1292	1286	1281	1280	1279	
31	1279	1279	1279	1281	1282	1283	1280	1275	1270	1271	1267	1264	1260	1266	1278	1299	1311	1308	1296	1285	1281	1280	1277	1276	1275	
Mean	1268	1268	1269	1270	1271	1272	1273	1273	1270	1268	1266	1261	1259	1266	1275	1281	1287	1291	1291	1289	1287	1284	1279	1275	1275	
Sum 39000+	316	301	331	364	401	426	453	450	380	310	234	98	40	252	513	721	899	1007	1018	959	908	804	645	516	Grand Total 948,346	

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

120 ESKDALEUIR

JULY 1956

	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						
1	19 18	734	628	11 20	106	14 49	57.0	42.4	06 47	14.6	16 14	1300	1263	12 15	37	2,2,3,3,3,3,3,2	21	0	85.2
2	17 56	760	620	07 21	140	17 52	55.9	42.5	06 00	13.4	19 23	1310	1265	12 26	45	3,2,3,2,3,4,3,2	22	0	85.2
3	15 43	723	625	12 13	98	12 34	54.9	42.5	05 05	12.4	16 04	1301	1257	03 02	44	3,2,3,3,4,3,1,1	20	0	85.2
4	22 18	714	641	09 04	73	13 41	56.0	43.2	06 50	12.8	20 11	1286	1262	12 33	24	1,2,2,2,2,2,2,1	14	0	85.2
5	19 43	739	637	11 04	102	14 26	56.8	41.5	06 40	15.3	21 17	1287	1247	12 16	40	1,1,2,3,3,3,2,2	17	0	85.1
6	17 47	727	651	10 37	76	13 49	57.9	43.3	06 58	14.6	18 26	1289	1246	11 09	43	2,2,1,3,2,3,2,1	16	0	85.2
7 q	15 04	730	662	08 47	68	13 34	56.3	41.3	06 48	15.0	18 04	1296	1255	12 48	41	0,1,1,1,2,3,2,1	11	0	85.2
8	01 06	749	656	10 20	93	13 07	56.7	39.2	24 00	17.5	21 49	1285	1253	11 40	32	3,3,3,2,2,2,2,4	21	0	85.2
9	18 46	720	644	11 04	76	14 01	58.2	37.9	00 04	20.3	17 20	1297	1256	02 20	41	3,3,2,2,2,2,1,2	17	0	85.4
10	18 50	829	650	11 09	179	18 50	57.8	39.1	23 42	18.7	19 29	1291	1253	13 20	38	1,1,2,2,1,3,5,3	18	1	85.5
11	16 23	756	624	10 30	132	15 01	56.0	36.0	07 14	20.0	17 07	1302	1244	02 49	58	3,2,3,2,4,3,3,2	22	0	85.5
12	20 29	750	628	10 50	122	14 14	60.5	41.5	06 54	19.0	20 10	1293	1247	06 29	46	2,2,3,2,2,3,3,1	18	0	85.5
13 d	19 10	842	624	23 21	218	15 03	61.6	40.5	02 54	21.1	18 28	1334	1240	02 40	94	3,2,1,2,3,5,5,4	25	1	85.6
14	21 06	739	605	00 40	134	14 33	58.3	37.0	01 06	21.3	18 50	1293	1207	00 30	86	4,2,1,2,3,3,3,3	21	0	85.6
15	18 55	740	644	09 50	96	14 26	56.4	42.9	06 24	13.5	19 43	1303	1255	12 55	48	2,2,1,1,2,3,3,1	15	0	85.6
16	18 10	724	632	10 51	92	14 50	59.8	41.6	07 22	18.2	17 40	1292	1244	12 25	48	2,2,2,2,3,3,2,2	18	0	85.6
17 q	21 14	719	648	10 17	71	13 17	56.0	40.7	08 24	15.3	20 56	1285	1244	11 49	41	1,2,2,2,1,2,2,2	14	0	85.6
18 q	18 25	751	655	09 38	96	14 19	59.4	41.6	06 11	17.8	18 46	1293	1244	11 50	49	1,1,1,2,2,2,3,2	14	0	85.6
19	17 46	744	658	0															

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

Table 121: ESKDALEMUIR (H) 16,000γ (0.16 C.G.S. unit) + AUGUST 1956. Columns include Hour G.M.T. (0-1 to 23-24), Mean, Sum 15000+, and Grand Total 510,545.

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

Table 122: ESKDALEMUIR (D) 10° + AUGUST 1956. Columns include Hour G.M.T. (0-1 to 23-24), Mean, Sum 1100.0+, and Grand Total 36648.8.

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

123 ESKDALEUIR (Z)

44,000y (0.44 C.G.S. unit) +

AUGUST 1956

	Hour G.M.T.																								Mean	Sum 30000+	
	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			
1	1270	1249	1249	1267	1277	1280	1281	1276	1271	1262	1261	1257	1256	1263	1271	1281	1282	1287	1287	1285	1280	1276	1276	1274	1272	518	
2	1267	1266	1270	1274	1275	1276	1279	1277	1271	1265	1253	1251	1255	1265	1271	1281	1285	1286	1282	1281	1281	1278	1272	1269	1272	530	
3	1270	1273	1276	1276	1278	1278	1276	1276	1272	1262	1254	1248	1249	1263	1277	1285	1287	1285	1278	1275	1274	1274	1274	1275	1272	535	
4 q	1276	1273	1274	1275	1276	1278	1276	1271	1268	1263	1255	1247	1247	1255	1266	1275	1281	1285	1284	1277	1275	1274	1274	1270	1271	495	
5 q	1270	1269	1269	1270	1269	1268	1270	1270	1269	1264	1259	1258	1255	1258	1266	1270	1276	1278	1274	1270	1270	1271	1274	1274	1274	1268	441
6	1271	1270	1270	1270	1271	1272	1269	1264	1257	1249	1242	1242	1241	1247	1257	1271	1274	1273	1273	1271	1276	1276	1276	1276	1265	358	
7 q	1274	1269	1270	1269	1268	1265	1265	1266	1264	1262	1251	1238	1237	1248	1258	1269	1273	1276	1276	1277	1279	1276	1272	1271	1266	373	
8	1270	1270	1264	1265	1269	1272	1275	1273	1265	1258	1248	1242	1237	1248	1273	1281	1296	1309	1313	1314	1297	1278	1275	1274	1274	566	
9	1271	1270	1270	1271	1274	1276	1280	1287	1285	1271	1260	1248	1254	1268	1283	1288	1304	1343	1338	1312	1294	1301	1285	1267	1283	800	
10	1259	1250	1257	1263	1261	1266	1274	1278	1282	1284	1280	1270	1265	1270	1281	1286	1290	1292	1286	1280	1277	1276	1271	1272	1274	570	
11 d	1272	1263	1265	1266	1270	1272	1277	1265	1263	1265	1258	1256	1247	1263	1283	1290	1308	1332	1347	1328	1310	1296	1282	1281	1282	759	
12	1276	1271	1269	1272	1277	1277	1271	1270	1266	1263	1259	1258	1263	1281	1300	1305	1301	1304	1298	1292	1285	1282	1278	1280	1280	721	
13	1275	1275	1275	1275	1276	1279	1279	1270	1265	1262	1254	1248	1247	1253	1262	1272	1281	1282	1281	1281	1281	1277	1276	1273	1271	499	
14	1269	1259	1262	1267	1271	1276	1276	1269	1264	1254	1248	1243	1244	1257	1263	1271	1277	1281	1279	1281	1280	1276	1275	1273	1267	415	
15	1269	1270	1272	1271	1270	1273	1273	1272	1270	1266	1259	1253	1249	1253	1260	1267	1271	1275	1276	1276	1281	1277	1274	1275	1269	452	
16	1273	1273	1274	1273	1274	1276	1275	1275	1272	1269	1261	1254	1251	1254	1262	1268	1276	1282	1279	1276	1275	1271	1273	1275	1270	491	
17	1265	1255	1256	1263	1271	1271	1250	1253	1254	1254	1249	1256	1259	1263	1273	1278	1281	1282	1280	1276	1276	1276	1276	1266	393		
18	1274	1274	1274	1275	1276	1279	1278	1276	1271	1264	1259	1255	1253	1255	1263	1266	1270	1271	1271	1270	1272	1274	1275	1274	1270	469	
19 q	1275	1276	1276	1275	1275	1276	1278	1279	1277	1269	1263	1258	1250	1256	1263	1271	1274	1270	1268	1268	1270	1270	1270	1271	1270	478	
20 q	1273	1271	1270	1270	1271	1274	1274	1274	1270	1265	1252	1241	1243	1249	1258	1266	1271	1273	1267	1266	1268	1270	1270	1271	1266	377	
21	1272	1271	1271	1273	1275	1277	1276	1275	1267	1254	1243	1231	1230	1247	1271	1274	1279	1287	1294	1283	1281	1287	1284	1281	1270	483	
22	1276	1276	1276	1277	1279	1279	1278	1274	1266	1258	1254	1247	1243	1249	1262	1278	1280	1276	1277	1290	1290	1277	1270	1267	1271	499	
23 d	1255	1256	1257	1252	1251	1258	1266	1275	1276	1270	1265	1261	1261	1283	1319	1320	1321	1317	1312	1321	1312	1273	1219	1168	1274	568	
24 d	1066	1162	1194	1206	1223	1229	1252	1264	1277	1276	1273	1268	1270	1292	1330	1484	1446	1396	1404	1381	1317	1290	1284	1265	1285	849	
25 d	1246	1269	1277	1278	1282	1276	1283	1288	1285	1283	1281	1282	1288	1312	1334	1330	1339	1321	1331	1320	1303	1276	1268	1242	1291	994	
26 d	1200	1134	1189	1196	1240	1259	1263	1261	1261	1263	1270	1276	1277	1282	1291	1317	1324	1321	1327	1317	1300	1293	1287	1285	1268	433	
27	1285	1281	1276	1270	1268	1267	1276	1282	1281	1281	1280	1280	1277	1279	1293	1293	1294	1297	1292	1289	1284	1281	1279	1282	779		
28	1255	1246	1246	1248	1258	1267	1279	1285	1285	1277	1272	1268	1264	1266	1287	1292	1307	1304	1297	1294	1284	1280	1278	1278	1276	617	
29	1275	1273	1273	1274	1276	1278	1281	1283	1282	1274	1263	1261	1265	1270	1286	1292	1296	1296	1289	1290	1287	1285	1280	1274	1279	704	
30	1261	1261	1265	1266	1269	1271	1278	1280	1271	1265	1261	1258	1258	1267	1279	1292	1303	1305	1294	1285	1281	1279	1278	1278	1275	605	
31	1276	1274	1273	1274	1276	1277	1282	1285	1278	1271	1266	1266	1262	1278	1281	1301	1320	1351	1356	1331	1324	1310	1293	1288	1291	993	
Mean	1261	1260	1263	1265	1269	1272	1274	1274	1271	1266	1260	1255	1255	1264	1278	1291	1296	1298	1297	1293	1286	1280	1275	1270	1274		
Sum 38000+	1086	1049	1159	1221	1346	1422	1490	1493	1405	1243	1053	921	897	1194	1623	2015	2169	2234	2218	2066	1876	1686	1524	1374		Grand Total 947,764	

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

124 ESKDALEUIR

AUGUST 1956

	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 16,000y +	Minimum 16,000y +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 44,000y +	Minimum 44,000y +	Range										
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ				°A.				
2	17 33	724	653	10 24	71	13 18	56.4	42.3	05 39	14.1	19 01	1289	1241	01 56	48	3,2,1,2,3,3,2,1	17	0	85.4
3	19 30	729	653	09 30	76	12 33	59.1	41.3	07 22	17.8	17 00	1289	1249	11 18	40	2,1,1,2,2,2,2,2	14	0	85.4
4 q	19 00	710	648	11 09	62	12 08	60.1	43.7	05 39	16.4	16 58	1286	1245	12 00	41	1,1,2,2,3,3,1,1	14	0	85.4
5 q	21 16	720	666	09 49	54	12 56	56.0	40.8	07 00	15.2	17 32	1285	1246	12 05	39	1,1,1,1,1,2,2,2	11	0	85.4
6	14 55	739	661	08 44	78	13 14	57.9	42.4	06 38	15.5	16 17	1275	1239	12 24	36	1,1,1,2,3,3,2,1	14	0	85.4
7 q	19 28	737	656	10 15	81	13 10	57.7	44.7	04 09	13.0	20 19	1280	1237	12 19	43	1,1,0,1,1,2,1	8	0	85.4
8	17 33	768	656	10 59	112	14 01	64.8	38.2	06 54	26.6	18 45	1316	1235	12 34	81	2,1,2,2,2,4,4,3	20	1	85.4
9	17 54	801	607	12 49	194	14 03	62.6	37.7	17 50	24.9	17 47	1360	1246	11 20	114	2,2,2,3,4,5,5,3	26	1	85.4
10	22 20	734	659	08 50	75	13 43	64.8	40.4	07 06	24.4	17 06	1291	1246	01 48	45	3,3,2,3,3,2,2,3	21	0	85.4
11 d	00 50	802	601	11 04	201	15 02	66.5	31.8	06 53	34.7	17 59	1358	1245	12 19	113	5,3,4,4,4,4,4,3	31	1	85.4
12	21 03	748	621	11 19	127	13 22	65.5	35.3	07 10	30.2	15 14	1305	1257	11 30	48	3,3,3,3,3,3,3,4	25	1	85.4
13	20 37	720	624	11 23	96	14 09	61.1	40.2	07 37	20.9	17 05	1283	1246	12 08	37	1,1,1,2,3,2,2,2	14	0	85.6
14	18 37	718	633	11 10	85	13 11	58.8	39.8	06 16	19.0	20 01	1282	1241	12 00	41	2,2,1,1,2,1,1,2	12	0	85.6
15	19 24	727	637	10 19	90	14 13	56.2	40.8	08 40	15.4	20 31	1282	1219	12 21	63	1,1,1,2,3,2,2,2	14	0	85.6
16	16 09	735	655	10 58	80	13 47	59.4	42.1	08 09	17.3	17 19	1285	1250	12 31	35	1,1,0,1,2,3,2,2	12	0	85.6
17	00 54	731	605	11 13	126	13 54	61.4	35.8	01 22	25.6	18 00	1283	1246	06 20	37	3,4,3,3,4,3,2,1	23	1	85.6
18	17 15	710	635	10 49	75	14 03	58.8	40.6	07 15	18.2									

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

Table with columns for station (125 ESKDALEMUIR (H)), time (Hour G.M.T.), magnetic force values (gamma), and sum (15000+). Includes a mean row and a grand total row.

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

Table with columns for station (126 ESKDALEMUIR (D)), time (Hour G.M.T.), magnetic declination values (degrees), and sum (1100.0+). Includes a mean row and a grand total row.

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

127 ESKDALEMUR (Z)		44,000γ (0.44 C.G.S. unit) +											SEPTEMBER 1956													
	Hour G.M.T.	Horizontal force											Vertical force												Mean	Sum 30000+
		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
1	1270	1265	1276	1281	1284	1286	1286	1285	1280	1273	1272	1271	1274	1276	1282	1293	1299	1304	1301	1305	1303	1290	1288	1288	1285	832
2 d	1286	1281	1269	1237	1205	1111	1099	1178	1216	1235	1266	1295	1305	1304	1321	1336	1337	1349	1335	1324	1304	1299	1297	1296	1270	485
3 d	1296	1292	1238	1181	1199	1200	1205	1235	1259	1270	1282	1293	1305	1339	1376	1366	1351	1341	1323	1315	1300	1288	1284	1280	1284	818
4	1271	1276	1281	1285	1286	1284	1288	1295	1297	1288	1285	1281	1291	1305	1315	1309	1305	1299	1294	1294	1293	1290	1290	1288	1291	990
5	1285	1276	1281	1282	1288	1293	1296	1296	1290	1282	1274	1269	1271	1276	1283	1287	1289	1286	1281	1283	1284	1282	1282	1281	1283	797
6	1273	1270	1278	1276	1267	1270	1275	1278	1276	1269	1259	1269	1290	1310	1349	1355	1339	1313	1294	1294	1293	1279	1281	1278	1289	935
7	1269	1263	1267	1278	1287	1291	1294	1293	1291	1281	1271	1270	1269	1272	1278	1281	1293	1292	1286	1285	1285	1286	1285	1283	1281	750
8 d	1283	1283	1284	1284	1284	1285	1286	1285	1280	1270	1259	1250	1254	1278	1361	1472	1405	1391	1376	1356	1336	1305	1307	1308	1312	1482
9	1307	1304	1303	1302	1299	1300	1298	1292	1278	1282	1288	1288	1287	1287	1285	1282	1278	1277	1283	1294	1298	1298	1299	1316	1293	1025
10	1326	1323	1308	1298	1298	1288	1287	1285	1294	1276	1271	1273	1275	1275	1281	1288	1289	1299	1305	1302	1297	1293	1290	1288	1292	1002
11	1288	1288	1286	1288	1286	1279	1275	1275	1276	1276	1275	1273	1272	1275	1284	1293	1294	1293	1290	1288	1287	1290	1289	1286	1284	806
12	1286	1284	1284	1285	1284	1284	1285	1284	1283	1278	1274	1270	1264	1259	1264	1270	1274	1278	1282	1286	1292	1273	1252	1254	1276	629
13	1255	1254	1223	1204	1207	1246	1269	1279	1285	1282	1276	1265	1267	1273	1278	1287	1290	1297	1303	1296	1292	1292	1287	1283	1270	490
14 q	1284	1285	1284	1284	1283	1285	1287	1287	1283	1280	1274	1266	1260	1263	1267	1274	1279	1278	1278	1280	1281	1281	1281	1281	1279	685
15	1282	1281	1280	1278	1276	1277	1278	1281	1282	1281	1276	1263	1254	1259	1266	1273	1276	1277	1277	1280	1280	1280	1280	1280	1286	623
16	1285	1282	1281	1281	1280	1281	1285	1286	1281	1281	1274	1267	1264	1264	1270	1295	1313	1320	1305	1295	1293	1295	1287	1283	1285	848
17 q	1282	1283	1285	1284	1283	1285	1290	1296	1294	1287	1280	1271	1265	1265	1275	1286	1292	1288	1284	1285	1288	1288	1287	1286	1284	809
18 q	1286	1285	1285	1283	1282	1283	1285	1286	1286	1282	1276	1266	1265	1272	1277	1282	1281	1278	1280	1280	1280	1280	1280	1281	1280	721
19 q	1281	1281	1281	1281	1281	1281	1286	1287	1286	1276	1266	1258	1254	1259	1267	1274	1272	1270	1271	1275	1276	1276	1278	1279	1275	596
20	1280	1278	1276	1262	1242	1238	1244	1258	1263	1266	1258	1243	1246	1261	1273	1298	1331	1348	1332	1274	1312	1303	1282	1255	1278	673
21 d	1254	1249	1230	1228	1220	1235	1246	1259	1268	1271	1277	1279	1286	1301	1305	1305	1319	1313	1304	1304	1293	1282	1282	1278	1275	588
22 d	1277	1265	1252	1238	1231	1233	1254	1265	1269	1274	1274	1284	1285	1288	1299	1332	1353	1328	1321	1304	1296	1290	1281	1276	1282	769
23	1276	1273	1259	1270	1280	1284	1285	1283	1277	1273	1270	1274	1280	1285	1288	1298	1303	1295	1285	1285	1283	1284	1282	1281	1281	753
24	1281	1281	1281	1281	1282	1285	1288	1289	1286	1280	1271	1260	1264	1275	1281	1282	1283	1282	1281	1282	1284	1282	1275	1271	1279	707
25	1269	1254	1257	1264	1270	1276	1283	1289	1290	1283	1275	1270	1267	1269	1278	1292	1291	1286	1286	1288	1292	1292	1280	1273	1278	674
26	1276	1275	1263	1254	1254	1258	1264	1265	1274	1274	1268	1263	1270	1277	1284	1292	1293	1290	1289	1287	1285	1281	1281	1281	1275	598
27	1280	1280	1279	1280	1281	1283	1283	1285	1284	1281	1273	1272	1276	1282	1292	1293	1292	1293	1290	1297	1302	1293	1286	1282	1285	843
28	1282	1281	1270	1251	1250	1255	1267	1276	1281	1281	1275	1270	1267	1270	1281	1290	1289	1286	1282	1282	1284	1286	1287	1284	1276	626
29 q	1278	1274	1276	1278	1277	1277	1277	1278	1277	1277	1273	1265	1259	1258	1262	1274	1281	1286	1287	1287	1285	1282	1282	1280	1276	630
30	1278	1270	1265	1265	1269	1273	1274	1276	1276	1271	1263	1263	1264	1266	1268	1274	1266	1278	1276	1276	1276	1278	1276	1278	1272	519
Mean	1281	1278	1273	1268	1267	1267	1271	1277	1279	1276	1273	1270	1272	1278	1290	1301	1302	1301	1296	1294	1292	1287	1284	1282	1281	
Sum 38000+	426	336	182	43	8	5	119	306	362	280	175	101	150	343	690	1033	1062	1015	881	832	754	618	518	464		Grand Total 922,703

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

128 ESKDALEMUR	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			
1	h. m.	γ	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	γ	h. m.	γ	γ	3,1,2,3,3,3,3,2	20	0	85.7			
2 d	18 56	733	618	10 14	115	00 16	58.5	42.5	22 00	16.0	19 56	1309	1263	00 50	46	17 29	1328	1075	06 07	253	4,6,6,5,4,3,4,3	35	2	85.8
3 d	02 33	747	432	08 59	315	05 05	64.8	20.7	06 51	44.1	17 29	1328	1143	06 07	253	14 23	1381	1143	03 03	238	6,6,4,4,5,3,2,2	32	2	85.8
4	14 24	756	470	03 03	286	12 57	63.1	32.8	07 25	30.3	14 23	1315	1170	00 44	45	14 29	1315	1240	00 44	45	2,2,2,2,3,1,2,1	15	0	85.8
5	20 38	695	635	11 12	60	13 10	58.1	43.8	07 52	14.3	07 19	1297	1266	12 04	31	07 19	1297	1266	12 04	31	3,3,2,2,2,2,1,2	17	0	85.8
6	24 00	718	636	10 28	82	13 13	57.2	38.4	07 24	18.8	07 19	1297	1266	12 04	31	07 19	1297	1266	12 04	31	3,3,3,4,4,3,3,3	16	1	85.8
7	13 53	754	622	09 18	132	14 04	63.5	39.6	20 11	23.9	01 57	1360	1258	10 45	102	01 57	1360	1258	10 45	102	3,1,3,3,2,3,1,1	27	0	85.9
8 d	16 32	709	626	10 09	83	12 51	61.4	40.9	00 28	20.5	01 17	1296	1262	01 17	34	01 17	1296	1262	01 17	34	1,1,3,4,9,9,5,3	35	2	85.8
9	14 53	1703	544	16 41	1159	15 04	133.5	28.5	20 13	105.0	15 35	1537	1248	11 48	303	15 35	1537	1248	11 48	303	3,2,4,2,3,2,3,2	21	1	85.8
10	18 40	751	603	07 07	148	13 48	64.6	36.8	07 09	27.8	24 00	1321	1276	17 10	45	24 00	1321	1276	17 10	45	2,1,1,2,3,3,1	16	0	85.8
11	18 26	715	627	11 00	88	13 15	59.1	41.0	01 10	18.1	00 57	1328	1271	10 40	57	00 57	1328	1271	10 40	57	1,2,2,2,2,2,2,2	15	0	85.8
12	19 10	700	623	10 51	77	13 56	58.0	39.7	07 50	18.3	16 42	1296	1271	12 22	25	16 42	1296	1271	12 22	25	1,1,1,2,2,2,3,4	16	0	85.8
13	21 47	747	635	10 56	112	14 08	55.4	41.2	22 38	14.2	20 46	1294	1226	23 55	68	20 46	1294	1226	23 55	68	4,4,2,2,3,2,2	21	1	85.8
14 q	02 21	717	639	09 59	78	13 12	55.2	36.5	03 50	18.7	17 52	1304	1195	03 42	109	17 52	1304	1195	03 42	109	1,1,1,1,1,2,1,1	9	0	85.8
15	23 26	701	640	11 20	61	13 08	56.1	41.4	08 20	14.7														

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

Table with columns for station (129 ESKDALEUIR (H)), hour (0-1 to 23-24), and magnetic force values. Includes a 'Sum 15000+' column and a 'Grand Total 504,990' at the bottom.

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

Table with columns for station (130 ESKDALEUIR (D)), hour (0-1 to 23-24), and magnetic declination values. Includes a 'Sum 1000+0' column and a 'Grand Total 35791.8' at the bottom.

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

131 ESSEDALEMUIR (Z)

44,000γ (0.44 C.G.S. unit) +

OCTOBER 1956

Hour	G.M.T.																								Mean	Sum 30000+	
	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			
1	1271	1269	1265	1265	1266	1269	1271	1275	1275	1272	1265	1262	1270	1274	1290	1315	1315	1303	1293	1292	1291	1285	1280	1255	1279	688	
2 d	1237	1221	1250	1265	1271	1272	1273	1274	1278	1281	1282	1281	1289	1304	1310	1312	1318	1321	1311	1296	1301	1290	1278	1255	1282	770	
3	1243	1254	1258	1264	1269	1274	1279	1284	1282	1282	1277	1278	1290	1293	1292	1293	1295	1308	1311	1316	1304	1294	1288	1271	1283	799	
4	1261	1262	1263	1271	1278	1281	1282	1286	1286	1283	1273	1262	1261	1262	1269	1275	1280	1282	1289	1304	1296	1278	1285	1283	1277	652	
5	1282	1283	1283	1282	1281	1281	1281	1276	1276	1274	1271	1273	1273	1270	1275	1277	1281	1281	1281	1287	1302	1298	1291	1284	1281	740	
6	1278	1267	1263	1270	1273	1274	1274	1276	1276	1269	1259	1253	1253	1263	1282	1301	1308	1294	1290	1291	1288	1285	1282	1278	1277	647	
7	1266	1267	1268	1270	1270	1275	1276	1280	1280	1276	1269	1265	1267	1273	1284	1290	1293	1299	1300	1299	1298	1292	1282	1283	1280	722	
8	1269	1258	1269	1274	1275	1271	1266	1274	1277	1278	1274	1266	1267	1269	1270	1277	1282	1284	1284	1281	1287	1289	1282	1280	1280	603	
9	1275	1274	1263	1270	1275	1277	1278	1283	1284	1281	1275	1270	1267	1270	1274	1278	1282	1282	1285	1286	1285	1280	1276	1277	1277	647	
10	1279	1281	1275	1277	1278	1279	1278	1282	1286	1284	1276	1270	1266	1266	1269	1276	1281	1281	1281	1279	1280	1281	1280	1280	1278	665	
11	1280	1280	1276	1273	1271	1271	1275	1277	1281	1280	1276	1271	1263	1263	1267	1269	1274	1276	1276	1277	1277	1279	1275	1275	1274	582	
12	1275	1276	1276	1276	1276	1276	1276	1280	1281	1281	1276	1270	1261	1261	1265	1275	1280	1280	1278	1277	1277	1281	1280	1278	1275	612	
13 q	1275	1274	1277	1278	1277	1277	1276	1280	1281	1284	1280	1272	1265	1265	1270	1270	1273	1274	1274	1275	1275	1275	1275	1275	1275	597	
14 q	1276	1277	1276	1275	1274	1274	1275	1280	1281	1280	1275	1264	1259	1261	1267	1274	1275	1274	1274	1275	1277	1277	1277	1277	1277	574	
15 q	1276	1276	1275	1274	1275	1274	1274	1277	1279	1277	1273	1264	1264	1264	1266	1271	1274	1274	1273	1272	1274	1275	1275	1275	1273	551	
16	1275	1275	1275	1274	1272	1271	1273	1277	1277	1277	1273	1271	1267	1268	1270	1273	1274	1273	1272	1273	1273	1271	1274	1274	1273	544	
17 q	1274	1274	1274	1274	1273	1272	1271	1274	1274	1273	1266	1264	1257	1258	1263	1269	1269	1270	1271	1272	1272	1272	1274	1273	1270	470	
18	1272	1273	1272	1271	1271	1268	1270	1274	1274	1268	1263	1254	1253	1254	1259	1265	1265	1267	1268	1268	1269	1270	1270	1270	1267	408	
19	1270	1270	1270	1270	1266	1263	1264	1265	1265	1264	1253	1245	1251	1255	1262	1270	1274	1274	1271	1271	1270	1270	1270	1271	1266	374	
20 d	1271	1271	1271	1266	1257	1241	1236	1244	1255	1263	1261	1266	1284	1307	1316	1326	1332	1358	1359	1349	1343	1324	1263	1244	1288	907	
21 d	1235	1240	1208	1238	1253	1254	1274	1282	1286	1283	1285	1289	1297	1311	1330	1315	1319	1334	1332	1317	1306	1296	1285	1274	1285	843	
22	1269	1259	1254	1239	1253	1271	1280	1287	1293	1293	1286	1280	1282	1294	1304	1308	1310	1314	1317	1315	1308	1298	1290	1286	1287	890	
23	1276	1263	1250	1248	1254	1261	1265	1272	1278	1278	1270	1270	1277	1290	1303	1313	1316	1315	1310	1306	1294	1274	1270	1275	1280	728	
24	1275	1277	1280	1280	1269	1270	1283	1288	1286	1275	1269	1269	1270	1275	1280	1284	1287	1285	1282	1281	1283	1281	1281	1280	1279	697	
25 q	1280	1280	1280	1279	1278	1278	1278	1281	1281	1277	1275	1268	1266	1268	1270	1275	1276	1277	1275	1277	1280	1280	1276	1273	1276	628	
26 d	1267	1262	1264	1264	1270	1264	1258	1265	1275	1274	1264	1259	1262	1268	1286	1298	1304	1334	1355	1391	1395	1333	1263	1129	1283	804	
27 d	1199	1207	1215	1190	1177	1251	1281	1293	1294	1297	1296	1289	1299	1300	1301	1301	1298	1296	1300	1316	1313	1306	1294	1280	1275	593	
28	1278	1279	1266	1251	1252	1251	1254	1269	1277	1285	1288	1307	1313	1327	1320	1306	1301	1296	1293	1293	1299	1299	1294	1286	1287	884	
29	1282	1281	1281	1281	1284	1287	1288	1293	1294	1294	1290	1290	1290	1292	1297	1302	1308	1308	1309	1309	1299	1299	1292	1292	1290	1293	1033
30	1288	1285	1282	1282	1282	1283	1285	1288	1287	1284	1280	1283	1282	1289	1303	1309	1305	1304	1301	1299	1294	1292	1291	1287	1290	965	
31	1287	1285	1285	1286	1285	1284	1285	1287	1287	1284	1280	1281	1282	1286	1287	1289	1297	1294	1288	1288	1287	1288	1280	1270	1286	857	
Mean	1269	1268	1267	1267	1268	1271	1273	1278	1280	1279	1274	1271	1273	1277	1284	1289	1292	1294	1294	1295	1293	1287	1285	1271	1279		
Sum 39000+	341	300	265	277	305	394	469	618	687	651	502	399	447	600	801	956	1046	1112	1103	1132	1097	906	678	388		Grand Total 951,474	

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

132 ESSEDALEMUIR

OCTOBER 1956

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 + °A.								
	Horizontal force				Declination				Vertical force															
	Maximum 16,000γ +		Minimum 16,000γ +		Range		Maximum 10° +		Minimum 10° +		Range						Maximum 44,000γ +		Minimum 44,000γ +		Range			
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	2, 2, 2, 3, 3, 3, 2, 4	21	0	85.8			
2 d	23 49	750	642	12 40	108	13 20	60.9	42.0	23 05	18.9	15 46	1318	1223	24 00	95	19 29	1323	1211	01 31	112	4, 2, 3, 3, 4, 3, 4, 4	27	1	85.8
3	00 00	718	610	14 24	108	13 14	59.7	33.0	20 58	26.7	17 49	1323	1211	01 31	112	19 21	1321	1233	00 12	88	3, 3, 3, 3, 4, 4, 3	26	1	85.8
4	17 54	738	630	13 29	108	23 39	56.6	32.5	17 46	24.1	19 21	1321	1233	00 12	88	19 24	1307	1247	00 00	60	3, 1, 2, 2, 2, 3, 2, 3	18	0	85.8
5	20 55	702	633	10 16	69	14 53	57.3	40.2	22 34	17.1	19 24	1307	1247	00 00	60	18 32	1311	1267	12 06	38	1, 1, 4, 3, 2, 2, 3, 2	18	0	85.8
6	24 00	719	621	11 42	98	13 36	63.1	38.8	07 56	24.3	16 29	1310	1249	12 03	61	20 05	1304	1266	12 06	38	3, 2, 3, 3, 4, 3, 3, 3	24	1	85.8
7	18 04	734	630	10 22	104	13 29	60.8	38.9	08 36	21.9	18 18	1304	1265	01 20	39	20 59	1293	1254	01 13	39	2, 2, 3, 2, 2, 3, 3, 2	19	0	85.8
8	00 26	728	626	10 58	102	13 36	57.7	38.4	21 01	19.3	20 59	1293	1254	01 13	39	14 09	1287	1260	02 15	27	3, 2, 3, 2, 2, 2, 4, 3	21	1	85.8
9	21 35	725	638	11 14	87	14 09	58.1	40.2	08 35	17.9	19 59	1287	1260	02 15	27	01 52	710	637	11 16	73	2, 2, 2, 2, 3, 3, 2, 3	19	0	85.8
10	01 52	710	637	11 16	73	14 08	55.9	42.7	09 12	13.2	08 40	1285	1265	13 00	21	22 18	1212	640	10 36	72	2, 1, 1, 1, 2, 2, 1, 1, 2	13	0	85.6
11	22 18	712	640	10 36	72	15 16	55.1	40.6	21 43	14.5	21 50	1282	1260	13 03	22	20 18	713	641	11 44	72	0, 0, 1, 2, 2, 1, 2, 3	11	0	85.6
12	20 18	712	641	11 44	72	14 10	54.3	42.3	09 28	12.0	09 43	1285	1262	13 01	23	20 49	711	654	11 20	57	2, 0, 1, 1, 1, 1, 0, 1	7	0	85.7
13 q	20 49	711	654	11 20	57	14 06	55.0	42.7	09 10	12.3	08 04	1281	1258	12 20	23	21 20	709	654	11 21	55	1, 1, 1, 1, 0, 1, 1, 0	6	0	85.

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

133 ESKDALEUIR (H)

16,000γ (0.16 C.G.S. unit) +

NOVEMBER 1956

Table with 26 rows (1-30) and 25 columns (1-25) for hourly magnetic force data. Includes a 'Mean' row and a 'Sum 19000+' row. Grand Total: 482,830.

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

134 ESKDALEUIR (D)

10° +

NOVEMBER 1956

Table with 26 rows (1-30) and 25 columns (1-25) for hourly magnetic declination data. Includes a 'Mean' row and a 'Sum 1200.0+' row. Grand Total: 33940.8.

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 1956

Table with 25 columns for hours (0-1 to 23-24), Mean, and Sum (16000+). Rows 1-31 show hourly data for 1956, and a final row shows the sum for 20000+ hours.

701 at 0-1h. January 1, 1957

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

138 ESKDALEMUIR (D)

10° +

DECEMBER 1956

Table with 25 columns for hours (0-1 to 23-24), Mean, and Sum (1100.0+). Rows 1-31 show hourly data for 1956, and a final row shows the sum for 1300.0+ hours.

46.4 at 0-1h. January 1, 1957.

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 1956

	Hour G.M.T.																								Mean	Sum 30000+
	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		
1	1293	1293	1292	1292	1288	1288	1288	1288	1287	1287	1286	1286	1288	1293	1293	1292	1292	1292	1292	1296	1300	1299	1295	1291	988	
2	1293	1272	1274	1275	1281	1284	1285	1285	1285	1286	1287	1288	1286	1292	1293	1299	1298	1297	1300	1305	1301	1299	1297	1289	947	
3	1295	1296	1293	1292	1291	1289	1287	1287	1286	1282	1275	1276	1282	1282	1292	1296	1293	1292	1292	1293	1301	1295	1293	1291	1290	
4	1289	1285	1269	1270	1277	1280	1281	1282	1282	1281	1275	1272	1278	1273	1282	1285	1288	1288	1292	1291	1290	1288	1286	1285	1282	
5	1286	1284	1280	1283	1284	1285	1285	1283	1283	1283	1276	1271	1275	1281	1284	1290	1293	1303	1302	1297	1295	1292	1288	1288	1286	
6	1288	1288	1284	1276	1277	1279	1281	1283	1285	1282	1281	1279	1281	1281	1288	1299	1301	1299	1302	1308	1307	1292	1294	1293	1289	
7	1293	1291	1289	1289	1288	1286	1282	1281	1280	1280	1276	1275	1276	1279	1281	1282	1291	1303	1297	1294	1292	1285	1282	1276	1285	
8	1271	1275	1277	1281	1280	1281	1278	1279	1276	1281	1280	1281	1282	1282	1288	1291	1293	1293	1293	1294	1301	1299	1293	1292	1285	
9	1289	1288	1287	1286	1282	1282	1281	1282	1282	1278	1275	1275	1276	1280	1284	1284	1288	1289	1287	1289	1297	1297	1290	1287	1285	
10 d	1282	1279	1275	1248	1247	1253	1254	1262	1264	1266	1265	1271	1276	1282	1294	1305	1304	1303	1302	1298	1301	1320	1307	1282	761	
11 q	1299	1295	1294	1293	1293	1290	1289	1289	1288	1287	1286	1287	1288	1282	1286	1288	1287	1286	1286	1287	1288	1288	1288	1287	1289	
12	1286	1284	1283	1282	1284	1284	1283	1284	1285	1288	1286	1284	1282	1281	1282	1290	1290	1304	1331	1349	1354	1354	1340	1327	1300	
13 d	1314	1305	1286	1282	1283	1284	1284	1285	1287	1285	1282	1282	1290	1299	1320	1317	1307	1300	1295	1297	1304	1304	1297	1285	1295	
14	1284	1280	1276	1275	1276	1281	1281	1282	1285	1284	1281	1280	1280	1281	1285	1288	1289	1290	1293	1294	1294	1295	1293	1286	1285	
15 q	1280	1280	1280	1281	1281	1282	1282	1282	1286	1289	1289	1291	1293	1293	1296	1297	1294	1292	1289	1288	1288	1288	1287	1287	1287	
16 q	1287	1286	1282	1281	1280	1280	1279	1280	1284	1286	1283	1282	1281	1282	1287	1290	1290	1287	1286	1286	1284	1286	1287	1287	1284	
17 q	1286	1282	1282	1281	1281	1281	1280	1280	1280	1281	1281	1284	1284	1281	1284	1287	1285	1284	1283	1283	1282	1282	1282	1282	1282	
18	1282	1281	1281	1281	1280	1279	1278	1279	1280	1280	1276	1275	1274	1277	1286	1290	1294	1295	1293	1292	1290	1287	1286	1284	1283	
19	1284	1283	1282	1281	1281	1281	1280	1280	1281	1281	1281	1281	1281	1280	1282	1283	1284	1285	1288	1288	1288	1287	1287	1282	1283	
20	1274	1275	1277	1281	1281	1280	1279	1278	1279	1281	1280	1278	1281	1281	1288	1289	1292	1290	1288	1287	1287	1286	1284	1282	1282	
21 q	1281	1277	1278	1279	1279	1278	1278	1277	1275	1275	1274	1272	1271	1275	1280	1281	1281	1281	1282	1282	1282	1285	1283	1277	1278	
22	1276	1275	1276	1276	1277	1274	1275	1279	1281	1280	1277	1275	1278	1283	1284	1285	1287	1287	1286	1287	1283	1282	1281	1281	1280	
23	1281	1280	1280	1280	1281	1280	1280	1280	1278	1274	1270	1275	1275	1272	1275	1281	1281	1282	1282	1283	1285	1288	1293	1293	1280	
24	1289	1286	1280	1280	1280	1280	1277	1277	1278	1276	1275	1270	1273	1274	1277	1281	1282	1281	1283	1290	1288	1285	1284	1284	1280	
25 d	1285	1283	1284	1282	1282	1281	1281	1281	1281	1278	1273	1267	1274	1278	1288	1285	1285	1290	1297	1312	1316	1333	1312	1299	1289	
26	1294	1271	1269	1275	1273	1259	1257	1263	1273	1273	1275	1275	1283	1278	1284	1284	1284	1284	1282	1283	1285	1285	1286	1284	1277	
27	1285	1282	1282	1282	1283	1283	1282	1281	1282	1285	1281	1282	1282	1284	1288	1297	1299	1331	1324	1331	1342	1324	1317	1310	1297	
28 d	1301	1291	1284	1289	1292	1291	1288	1284	1281	1280	1280	1283	1285	1288	1301	1299	1293	1301	1304	1300	1295	1292	1291	1288	1291	
29	1286	1273	1258	1270	1277	1277	1278	1281	1282	1284	1277	1274	1278	1281	1290	1294	1293	1289	1288	1289	1289	1288	1287	1286	1282	
30 d	1286	1282	1281	1283	1284	1282	1279	1272	1275	1275	1275	1274	1275	1280	1283	1292	1293	1290	1289	1294	1297	1298	1297	1292	1285	
31	1292	1291	1288	1286	1285	1285	1284	1284	1283	1282	1277	1276	1275	1280	1281	1284	1285	1282	1284	1285	1284	1284	1286	1287	1284	
Mean	1287	1284	1281	1280	1281	1281	1280	1280	1281	1281	1278	1278	1280	1281	1287	1290	1291	1293	1293	1295	1296	1295	1293	1290	1286	
Sum 39000+	911	793	703	692	709	696	676	691	713	701	626	620	689	724	905	1000	1017	1069	1089	1147	1188	1151	1092	981	Grand Total 956,583	

1287 at 0-1h. January 1, 1957

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

140 ESKDALEMUIR

DECEMBER 1956

	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										
1	19 55	717	663	11 37	54	13 50	53.0	42.8	09 29	10.2	21 46	1301	1285	09 30	17	1,1,1,2,2,2,3,2	14	0	85.0
2	01 08	731	646	00 28	85	18 14	52.8	37.0	01 57	15.8	20 29	1308	1271	01 30	37	4,2,2,2,2,3,3,3	21	1	85.0
3	19 38	711	658	12 00	53	13 45	54.8	39.8	20 39	15.9	20 36	1304	1275	11 00	29	2,1,2,2,2,2,3,2	16	0	85.0
4	20 54	723	663	12 00	60	14 07	54.1	38.7	22 04	15.4	20 30	1293	1263	02 50	30	2,2,2,2,2,2,3,3	18	0	85.0
5	01 54	706	665	17 00	41	16 36	58.5	41.5	01 15	17.0	18 03	1304	1270	10 50	34	2,2,2,1,2,3,1,1	14	0	85.0
6	20 43	744	641	21 15	103	21 00	55.1	33.8	21 22	21.3	20 20	1317	1277	02 00	40	0,2,1,1,2,3,4,4	17	1	85.0
7	06 56	726	660	17 20	66	14 31	52.1	42.2	17 26	9.9	17 22	1303	1270	24 00	33	2,2,2,2,2,3,2,3	18	0	85.0
8	08 26	717	647	12 50	70	12 25	54.6	41.8	20 39	12.8	20 50	1304	1270	00 00	34	2,1,2,2,2,1,3,1	14	0	85.0
9	06 07	713	665	11 10	48	14 17	52.4	40.1	23 06	12.3	21 07	1297	1273	11 04	24	1,1,2,2,2,2,2,3	15	0	84.8
10 d	03 41	720	630	12 00	90	15 49	57.2	30.1	22 47	27.1	22 10	1327	1237	04 07	90	2,4,2,4,3,2,2,4	23	1	84.8
11 q	19 19	708	653	12 40	55	15 49	51.4	42.0	00 00	9.4	00 00	1300	1281	13 40	19	1,1,0,1,1,1,2,1	8	0	84.8
12	15 53	712	617	20 06	95	17 50	61.8	35.5	21 47	26.3	21 34	1360	1278	13 21	82	0,0,1,1,2,3,4,3	14	0	84.7
13 d	02 06	702	624	14 24	78	15 19	54.8	38.3	23 45	16.5	14 44	1326	1281	03 23	45	3,2,3,2,3,3,3,3	22	1	84.7
14	04 20	706	649	10 55	57	13 34	53.3	37.9	00 10	15.4	19 06	1297	1273	03 31	24	3,2,2,2,1,2,3,2	17	0	84.6
15 q	07 19	701	663	13 11	38	14 10	51.9	44.2	09 15	7.7	15 40	1297	1280	02 59	17	1,1,0,1,1,1,1,0	6	0	84.6

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

	Hour G.M.T.												12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12												
NORTH COMPONENT																								
Jan.	+6.1	+0.3	+2.2	+3.3	+9.1	+13.3	+13.1	+11.5	+5.6	-1.6	-8.9	-12.4	-12.5	-8.1	-4.5	-2.1	-2.2	-0.8	-4.0	-4.7	-3.4	-3.1	-0.1	+3.9
Feb.	+4.5	+3.1	+4.6	+3.8	+8.0	+9.4	+11.5	+4.4	-0.2	-7.3	-15.9	-21.5	-19.3	-13.9	-6.4	-1.9	+1.5	+2.5	+5.4	+5.5	+5.0	+6.2	+4.9	+5.9
Mar.	-0.1	-2.0	+5.4	+7.9	+7.0	+12.2	+13.1	+9.3	+0.5	-12.7	-27.2	-31.0	-27.1	-19.7	-11.2	-0.7	+5.1	+11.5	+17.7	+13.2	+12.3	+8.8	+6.9	+0.8
Apr.	+0.6	-0.8	-8.6	-6.5	+3.8	+4.2	-0.4	-7.6	-17.5	-29.3	-37.5	-35.9	-27.1	-13.3	-2.2	+8.8	+20.1	+29.3	+32.4	+27.9	+23.9	+18.4	+10.1	+7.3
May	-1.9	+6.4	+1.0	+2.6	+8.1	-1.8	-8.4	-17.1	-28.7	-37.1	-40.5	-37.7	-25.9	-15.6	+4.4	+14.5	+24.0	+33.2	+32.8	+31.3	+24.5	+15.2	+10.9	+5.7
June	+2.7	+1.9	+3.7	+2.5	-0.4	-1.7	-7.3	-15.4	-23.7	-33.4	-37.0	-35.1	-29.1	-15.4	-1.0	+14.9	+20.8	+26.5	+32.6	+31.2	+26.4	+19.2	+11.1	+5.8
July	+4.3	+4.8	+4.3	+6.9	+9.1	+7.0	-1.2	-12.4	-24.4	-31.1	-35.0	-35.3	-30.9	-23.7	-9.5	+6.1	+15.3	+23.3	+28.6	+30.1	+25.4	+18.6	+11.3	+8.6
Aug.	+8.1	+8.6	+8.1	+9.0	+11.0	+9.5	+4.0	-5.7	-17.3	-31.1	-40.1	-39.5	-32.0	-16.1	-8.8	+3.7	+15.2	+20.2	+21.5	+19.1	+18.1	+14.5	+10.9	+8.9
Sept.	+13.3	+11.9	+9.1	+10.3	+11.0	+6.8	+7.2	-2.7	-17.3	-32.3	-39.3	-38.3	-32.0	-21.0	+1.5	+7.8	+1.4	+8.1	+15.5	+16.1	+18.0	+15.0	+15.5	+14.1
Oct.	+13.1	+11.3	+11.1	+12.2	+12.4	+16.2	+16.0	+11.0	-4.1	-18.6	-30.0	-33.3	-31.5	-25.9	-17.3	-8.9	-0.4	+5.7	+8.7	+9.0	+11.4	+11.3	+10.5	+10.1
Nov.	+2.2	-3.8	+0.8	+5.1	+9.5	+10.3	+11.4	+7.2	-2.3	-13.1	-19.5	-26.5	-25.3	-16.8	-10.8	-0.8	+7.1	+8.3	+7.8	+11.8	+11.1	+10.0	+9.3	+6.9
Dec.	+4.6	+5.4	+4.9	+4.5	+7.5	+10.3	+11.9	+9.0	+5.3	-1.4	-11.1	-18.5	-21.1	-18.5	-14.2	-7.5	-0.9	+2.4	+3.5	+3.9	+3.7	+4.3	+5.6	+6.5
Year	+4.8	+3.9	+3.9	+5.1	+8.1	+8.0	+5.9	-0.7	-10.4	-20.8	-28.5	-30.4	-26.1	-17.3	-6.6	+2.8	+8.9	+14.2	+16.9	+16.2	+14.7	+11.5	+8.9	+7.0
Winter	+4.4	+1.2	+3.1	+4.2	+8.6	+10.8	+11.9	+8.0	+2.2	-5.9	-13.8	-19.7	-19.5	-14.3	-8.9	-3.1	+1.4	+3.1	+3.2	+4.1	+4.1	+4.3	+4.9	+5.8
Equinox	+6.7	+5.1	+4.3	+5.9	+8.5	+9.9	+8.9	+2.5	-9.6	-23.2	-33.6	-34.6	-29.4	-20.0	-7.3	+1.8	+6.5	+13.6	+18.5	+16.6	+16.4	+13.3	+10.8	+8.0
Summer	+3.4	+5.5	+4.2	+5.3	+6.9	+3.2	-3.2	-12.7	-23.5	-33.2	-38.1	-36.9	-29.5	-17.7	-3.7	+9.7	+18.8	+25.9	+28.9	+28.0	+23.6	+16.9	+11.1	+7.3
WEST COMPONENT																								
Jan.	-14.4	-11.0	-7.7	-8.1	-3.6	-0.4	+1.4	+1.9	-1.1	-1.7	+1.5	+8.8	+17.5	+24.4	+23.1	+19.5	+12.9	+12.4	+6.3	-11.3	-17.5	-21.0	-16.2	-16.6
Feb.	-13.3	-11.2	-7.3	-5.0	-4.6	-4.7	-3.7	-6.2	-11.2	-13.3	-9.0	+3.9	+16.7	+24.1	+25.7	+23.9	+18.1	+10.1	+5.8	-0.1	-9.2	-7.4	-11.8	-10.3
Mar.	-19.5	-17.5	-14.9	-13.2	-10.1	-8.5	-7.0	-11.6	-15.6	-16.1	-8.5	+9.5	+26.3	+37.0	+38.6	+34.8	+26.3	+17.1	+8.1	+4.9	+1.4	-12.6	-24.6	-24.2
Apr.	-15.5	-20.6	-24.6	-24.7	-15.7	-18.4	-23.4	-22.9	-24.3	-23.2	-7.1	+15.4	+31.5	+41.7	+41.3	+35.5	+29.1	+23.2	+14.9	+9.6	+4.8	+4.1	-8.7	-14.0
May	-12.8	-12.3	-12.2	-11.7	-12.5	-16.5	-28.6	-31.9	-30.0	-22.9	-9.2	+7.3	+25.2	+34.5	+37.5	+32.3	+25.8	+17.5	+11.8	+6.5	+7.2	+1.6	-0.4	-6.1
June	-7.3	-4.8	-9.2	-11.7	-15.6	-18.3	-27.5	-33.4	-33.1	-24.5	-12.4	+4.0	+18.9	+29.6	+33.6	+31.3	+26.5	+19.6	+17.5	+12.8	+11.0	+3.2	-3.5	-6.8
July	-6.1	-9.3	-9.6	-13.3	-16.1	-23.3	-28.2	-29.6	-27.8	-21.4	-11.6	+3.5	+21.3	+29.9	+31.8	+28.5	+22.8	+18.1	+15.0	+12.7	+8.6	+5.1	+0.7	-1.7
Aug.	-3.7	-9.7	-12.9	-12.2	-13.0	-22.7	-30.4	-33.9	-32.1	-23.5	-6.4	+16.0	+34.4	+46.3	+41.8	+29.9	+19.4	+11.0	+2.9	+2.7	+1.9	-1.1	-0.8	-3.9
Sept.	-5.9	-8.0	-10.5	-12.3	-11.9	-11.2	-18.9	-27.8	-32.7	-23.6	-7.2	+15.9	+32.5	+39.9	+40.7	+26.2	+12.8	+5.4	+3.4	+1.5	-1.9	-0.2	-0.8	-5.3
Oct.	-11.3	-11.3	-9.7	-7.8	-4.6	-5.6	-7.7	-15.5	-23.4	-20.9	-9.6	+7.4	+22.5	+28.9	+28.5	+24.1	+19.7	+11.8	+9.9	+5.7	-4.6	-6.9	-8.3	-11.2
Nov.	-24.0	-16.6	-13.1	-13.0	-4.2	-5.7	-1.5	-4.5	-12.3	-14.7	-5.2	+6.9	+19.1	+24.5	+25.1	+21.7	+22.9	+21.2	+16.3	+8.4	-1.3	-8.5	-16.2	-28.1
Dec.	-11.9	-9.9	-6.6	-5.5	-5.3	-4.5	-3.5	-2.9	-5.7	-10.6	-7.9	+1.2	+8.6	+15.5	+16.9	+16.3	+15.2	+12.7	+12.3	+8.0	-0.5	-6.7	-12.1	-13.0
Year	-12.1	-11.9	-11.5	-11.5	-9.8	-11.7	-15.0	-18.2	-20.8	-18.1	-7.7	+8.3	+22.9	+31.4	+32.1	+27.0	+21.0	+15.0	+10.3	+5.1	+0.2	-4.9	-8.6	-11.8
Winter	-15.9	-12.2	-8.4	-7.9	-4.4	-3.8	-1.8	-2.9	-7.5	-10.1	-5.2	+5.2	+15.5	+22.1	+22.7	+20.3	+17.2	+14.1	+10.2	+1.2	-6.5	-10.9	-14.1	-17.0
Equinox	-13.1	-14.4	-15.0	-14.5	-10.6	-10.9	-14.3	-19.5	-24.0	-20.9	-8.2	+12.0	+28.2	+36.9	+37.3	+30.1	+22.0	+14.4	+9.1	+5.4	-0.1	-6.0	-10.6	-13.7
Summer	-7.5	-9.0	-11.0	-12.2	-14.3	-20.2	-28.7	-32.2	-30.8	-23.1	-9.9	+7.7	+25.0	+35.1	+36.2	+30.5	+23.6	+16.6	+11.8	+8.7	+7.1	+2.2	-1.0	-4.6
VERTICAL COMPONENT																								
Jan.	-12.1	-14.3	-12.4	-10.4	-11.5	-14.3	-11.0	-8.5	-5.7	-3.4	-2.8	-3.1	-2.8	-0.2	+5.8	+10.5	+13.7	+15.8	+19.6	+23.5	+16.1	+9.1	+2.0	-3.6
Feb.	-6.8	-7.1	-7.5	-8.0	-9.7	-8.5	-7.8	-6.1	-5.1	-4.2	-6.2	-7.3	-5.7	-1.9	+2.4	+9.4	+17.6	+16.7	+12.2	+11.8	+13.0	+7.5	+3.7	-2.4
Mar.	-15.3	-20.9	-17.6	-13.3	-12.1	-10.2	-7.9	-3.9	-1.3	-2.0	-4.8	-7.8	-5.7	-0.9	+6.1	+14.0	+20.5	+24.1	+25.5	+22.7	+18.0	+8.7	-3.0	-12.9
Apr.	-12.5	-23.4	-29.8	-28.0	-26.8	-20.4	-11.7	-6.6	-4.1	-1.5	-2.1	-4.7	-4.6	-0.1	+9.3	+18.5	+24.2	+29.7	+31.9	+30.4	+23.8	+12.7	+2.1	-6.3
May	-22.2	-20.8	-25.0	-24.7	-19.9	-19.3	-15.7	-10.5	-8.3	-7.6	-8.5	-7.8	0.0	+10.1	+22.7	+32.0	+34.2	+32.9	+28.6	+24.4	+16.3	+6.5	-6.0	-11.4
June	-8.6	-15.4	-14.4	-11.9	-10.1	-8.0	-5.5	-3.5	-4.1	-7.1	-12.3	-15.9	-13.5	-5.4	+3.5	+13.1	+20.8	+25.3	+23.2	+20.3	+15.9	+12.4	+4.5	-3.3
July	-6.3	-6.9	-6.0	-4.8	-3.7	-2.9	-1.9	-2.1	-4.4	-6.5	-9.1	-13.4	-15.3	-8.4	-0.1	+6.6	+12.5	+15.8	+16.2	+14.4	+12.7	+9.3	+4.3	0.0
Aug.	-13.1	-14.2	-10.7	-8.7	-4.7	-2.2	+0.1	+0.1	-2.8	-8.0	-14.1	-18.3	-19.2	-9.6	+4.3	+16.9	+22.0	+24.0	+23.5	+18.6	+12.4	+6.4	+1.1	-3.8
Sept.	-0.6	-3.6	-8.9	-13.4	-14.6	-14.8	-10.9	-4.6	-2.9	-5.5	-9.0	-11.6	-9.8	-3.4	+8.1	+19.6	+20.6	+18.9	+14.5	+12.9	+10.2	+5.8	+2.4	+0.6
Oct.	-9.7	-11.2	-12.3	-11.8	-11.0	-8.1	-5.6	-0.9	+1.3	+0.3	-4.6	-7.9	-6.4	-1.4	+5.0	+10.0	+13.0	+15.0	+14.7	+15.8	+14.6	+8.4	+1.1	-8.3
Nov.	-11.5	-16.1	-19.3	-18.6	-20.2	-18.6	-14.2	-9.3	-3.8	-3.4	-4.0	-1.1	+2.8	+9.1	+13.4	+14.7	+15.8	+19.3	+25.5	+22.9	+14.3	+7.2	+2.5	-7.4
Dec.	+1.7	-2.1	-5.0	-5.4	-4.8	-5.2	-5.9	-5.3	-4.6	-5.1	-7.4	-7.7	-5.4	-4.4	+1.6	+4.6	+5.1	+6.8	+7.5	+9.3	+10.7	+9.5	+7.5	+4.0
Year	-9.7	-13.0	-14.1	-13.3	-12.3	-11.0	-8.3	-5.1	-3.8	-4.5	-7.1	-8.9	-7.1	-1.4	+6.8	+14.2	+18.3	+20.4	+20.2	+18.9	+14.8	+8.6	+1.9	-4.6
Winter	-7.2	-9.9	-11.1	-10.6	-11.5	-11.7	-9.7	-7.3	-4.8	-4.0	-5.1	-4.8	-2.8	+0.7	+5.8	+9.8	+13.1	+14.7	+16.2	+16.9	+13.5	+8.3	+3.9	-2.3
Equinox	-9.5	-14.8	-17.1	-16.6	-15.9	-13.4	-9.3	-4.0	-1.7	-2.2	-5.1	-8.0	-6.6	-1.5	+7.1	+15.5	+19.6	+21.9	+21.7	+20.5	+16.7	+8.9	+0.7	-6.7
Summer	-12.5	-14.8	-14.0	-12.5	-9.6	-8.1	-5.7	-4.0	-4.9	-7.3	-11.0	-13.9	-12.0	-3.3	+7.6	+17.1	+22.4	+24.5	+22.9	+19.4	+14.3	+8.7	+1.0	-4.6

"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)

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	Hour G.M.T.											12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11													11-12
	DECLINATION (measured positive towards the west)																							
Jan.	-3.16	-2.23	-1.45	-1.77	-1.08	-0.60	-0.22	-0.06	-0.45	-0.29	+0.66	+2.26	+4.03	+5.25	+4.85	+4.03	+2.69	+2.55	+1.43	-2.10	-3.41	-4.13	-3.29	-3.51
Feb.	-2.86	-2.39	-1.65	-1.17	-1.24	-1.31	-1.19	-1.42	-2.26	-2.41	-1.21	+1.62	+4.14	+5.42	+5.45	+4.91	+3.61	+1.95	+0.97	-0.24	-2.06	-1.75	-2.59	-2.32
Mar.	-3.95	-3.46	-3.23	-2.98	-2.33	-2.19	-1.92	-2.72	-3.18	-2.76	-0.66	+3.12	+6.38	+8.27	+8.25	+7.08	+5.13	+3.01	+0.96	+0.47	-0.20	-2.90	-5.25	-4.94
Apr.	-3.16	-4.15	-4.66	-4.75	-3.32	-3.89	-4.73	-4.35	-4.24	-3.56	+0.01	+4.51	+7.43	+8.97	+8.46	+6.85	+5.12	+3.57	+1.77	+0.87	+0.05	-1.54	-2.15	-3.11
May	-2.51	-2.75	-2.51	-2.47	-2.84	-3.27	-5.47	-5.82	-4.96	-3.21	-0.29	+2.94	+6.11	+7.60	+7.42	+5.99	+4.29	+2.25	+1.12	+0.10	+0.50	-0.27	-0.51	-1.45
June	-1.59	-1.05	-2.00	-2.46	-3.15	-3.64	-5.30	-6.18	-5.77	-3.66	-1.08	+2.18	+4.96	+6.60	+6.84	+5.76	+4.56	+2.95	+2.27	+1.39	+1.20	-0.09	-1.14	-1.60
July	-1.39	-2.07	-2.11	-2.96	-3.60	-4.98	-5.65	-5.51	-4.68	-3.13	-0.99	+2.07	+5.50	+6.97	+6.80	+5.52	+4.01	+2.77	+1.92	+1.40	+0.76	+0.32	-0.30	-0.67
Aug.	-1.06	-2.29	-2.91	-2.81	-3.06	-4.96	-6.30	-6.63	-5.82	-3.54	+0.25	+4.76	+8.19	+9.99	+8.79	+5.90	+3.33	+1.44	-0.25	-0.49	-0.32	-0.79	-0.58	-1.14
Sept.	-1.72	-2.08	-2.48	-2.88	-2.84	-2.53	-4.10	-5.52	-5.95	-3.52	+0.06	+4.69	+7.82	+8.88	+8.17	+4.99	+2.54	+0.77	+0.08	-0.31	-1.07	-0.62	-0.76	-1.62
Oct.	-2.79	-2.73	-2.39	-2.05	-1.41	-1.76	-2.17	-3.55	-4.58	-3.51	-0.79	+2.78	+5.76	+6.84	+6.44	+5.22	+4.00	+2.17	+1.66	+0.81	-1.37	-1.84	-2.09	-2.65
Nov.	-4.94	-3.21	-2.67	-2.83	-1.21	-1.54	-0.75	-1.18	-2.40	-2.47	-0.30	+2.41	+4.84	+5.60	+5.50	+4.41	+4.37	+3.98	+3.00	+1.25	-0.17	-2.11	-3.63	-5.95
Dec.	-2.59	-2.22	-1.53	-1.29	-1.36	-1.31	-1.17	-0.92	-1.35	-2.09	-1.18	+0.96	+2.55	+3.86	+3.96	+3.58	+3.10	+2.47	+2.36	+1.47	-0.23	-1.53	-2.66	-2.88
Year	-2.64	-2.55	-2.47	-2.53	-2.29	-2.67	-3.25	-3.65	-3.80	-2.85	-0.46	+2.86	+5.64	+7.02	+6.74	+5.35	+3.90	+2.49	+1.44	+0.41	-0.53	-1.44	-2.08	-2.65
Winter	-3.39	-2.51	-1.83	-1.77	-1.22	-1.19	-0.83	-0.89	-1.61	-1.81	-0.51	+1.81	+3.89	+5.03	+4.94	+4.23	+3.44	+2.74	+1.94	+0.09	-1.47	-2.38	-3.04	-3.67
Equinox	-2.91	-3.11	-3.19	-3.17	-2.47	-2.59	-3.23	-4.03	-4.49	-3.34	-0.35	+3.77	+6.85	+8.24	+7.83	+6.03	+4.20	+2.38	+1.12	+0.46	-0.65	-1.73	-2.56	-3.08
Summer	-1.64	-2.04	-2.38	-2.67	-3.16	-4.21	-5.68	-6.03	-5.31	-3.39	-0.53	+2.99	+6.19	+7.79	+7.46	+5.79	+4.05	+2.35	+1.27	+0.67	+0.53	-0.21	-0.63	-1.21
	INCLINATION																							
Jan.	-0.51	-0.23	-0.37	-0.37	-0.84	-1.22	-1.15	-0.99	-0.49	+0.04	+0.49	+0.63	+0.53	+0.22	+0.14	+0.15	+0.32	+0.28	+0.66	+1.03	+0.84	+0.69	+0.25	-0.14
Feb.	-0.29	-0.23	+0.40	-0.38	-0.71	-0.77	-0.90	-0.36	+0.03	+0.54	+1.00	+1.19	+0.92	+0.54	+0.16	+0.06	+0.11	+0.12	-0.13	-0.07	+0.11	-0.13	-0.08	-0.32
Mar.	-0.12	-0.17	-0.60	-0.68	-0.63	-0.95	-0.97	-0.56	+0.13	+0.99	+1.77	+1.73	+1.31	+0.81	+0.40	-0.04	-0.16	-0.38	-0.64	-0.37	-0.38	-0.21	-0.22	-0.06
Apr.	-0.15	-0.26	+0.14	+0.05	-0.01	+0.03	+0.63	+1.36	+2.18	+2.50	+2.05	+1.27	+0.35	-0.15	-0.57	-1.09	-1.49	-1.53	-1.21	-1.05	-0.85	-0.50	-0.46	
May	-0.26	-0.78	-0.53	-0.63	-0.87	-0.15	+0.52	+1.27	+2.06	+2.54	+2.57	+2.20	+1.39	+0.84	-0.21	-0.57	-1.06	-1.59	-1.60	-1.54	-1.30	-0.86	-0.86	-0.58
June	-0.30	-0.45	-0.48	-0.31	-0.03	+0.14	+0.69	+1.34	+1.87	+2.32	+2.28	+1.86	+1.34	+0.51	-0.27	-1.05	-1.19	-1.36	-1.79	-1.71	-1.48	-1.00	-0.58	-0.37
July	-0.36	-0.37	-0.31	-0.41	-0.49	-0.24	+0.39	+1.13	+1.84	+2.15	+2.22	+1.94	+1.39	+0.97	+0.23	-0.59	-0.98	-1.37	-1.67	-1.78	-1.47	-1.05	-0.64	-0.54
Aug.	-0.81	-0.79	-0.63	-0.66	-0.68	-0.39	+0.12	+0.80	+1.47	+2.14	+2.37	+1.95	+1.20	+0.24	+0.16	-0.20	-0.70	-0.87	-0.87	-0.83	-0.91	-0.78	-0.68	-0.63
Sept.	-0.82	-0.77	-0.69	-0.85	-0.94	-0.67	-0.50	+0.41	+1.47	+2.28	+2.45	+2.03	+1.45	+0.80	-0.41	-0.36	+0.25	-0.13	-0.71	-0.76	-0.91	-0.84	-0.95	-0.85
Oct.	-0.95	-0.88	-0.91	-0.99	-1.03	-1.20	-1.09	-0.55	+0.59	+1.49	+1.98	+1.90	+1.62	+1.30	+0.91	+0.53	+0.09	-0.15	-0.33	-0.29	-0.33	-0.45	-0.56	-0.73
Nov.	-0.13	+0.06	-0.36	-0.63	-1.07	-1.07	-1.08	-0.64	+0.21	+0.96	+1.25	+1.63	+1.49	+1.02	+0.72	+0.14	-0.37	+0.33	-0.09	-0.32	-0.40	-0.37	-0.35	-0.28
Dec.	-0.11	-0.28	-0.36	-0.36	-0.55	-0.75	-0.88	-0.68	-0.39	+0.10	+0.65	+1.01	+1.14	+0.91	+0.76	+0.40	-0.01	-0.15	-0.20	-0.13	+0.03	+0.03	-0.03	-0.17
Year	-0.40	-0.43	-0.46	-0.52	-0.71	-0.65	-0.41	+0.15	+0.85	+1.48	+1.80	+1.67	+1.26	+0.71	+0.20	-0.17	-0.40	-0.62	-0.74	-0.67	-0.61	-0.48	-0.43	-0.43
Winter	-0.26	-0.17	-0.37	-0.43	-0.79	-0.95	-1.00	-0.67	-0.16	+0.42	+0.85	+1.11	+1.02	+0.68	+0.44	+0.19	+0.01	-0.02	+0.06	+0.13	+0.15	+0.06	-0.05	-0.22
Equinox	-0.51	-0.52	-0.51	-0.61	-0.82	-0.85	-0.64	-0.02	+0.89	+1.73	+2.18	+1.92	+1.42	+0.81	+0.19	-0.11	-0.22	-0.54	-0.80	-0.65	-0.67	-0.58	-0.56	-0.52
Summer	-0.43	-0.61	-0.48	-0.50	-0.51	-0.16	+0.43	+1.14	+1.81	+2.29	+2.36	+1.91	+1.33	+0.64	-0.02	-0.60	-0.98	-1.30	-1.48	-1.47	-1.29	-0.92	-0.69	-0.53
	HORIZONTAL FORCE																							
Jan.	+3.2	-1.9	+0.9	+1.7	+8.3	+13.0	+13.1	+11.6	+5.3	-1.9	-8.4	-10.5	-9.0	-3.3	0.0	+1.6	+0.3	+1.6	-2.7	-6.7	-6.7	-7.0	-3.2	+0.7
Feb.	+1.9	+0.9	+3.2	+2.8	+7.0	+8.4	+10.6	+3.2	-2.3	-9.7	-17.3	-20.4	-15.8	-9.1	-1.5	+2.6	+4.9	+4.4	+6.4	+5.4	+3.2	+4.7	+2.6	+3.9
Mar.	-3.8	-5.2	+2.5	+5.3	+5.0	+10.4	+11.6	+7.0	-2.4	-15.5	-28.3	-28.7	-21.7	-12.4	-3.8	+5.8	+9.9	+14.5	+18.9	+13.9	+12.3	+6.3	+2.2	-3.8
Apr.	-2.3	-4.7	-13.1	-11.0	+0.8	+0.7	-4.8	-11.8	-21.8	-33.1	-38.2	-32.4	-20.7	-5.2	+5.6	+15.3	+25.2	+33.2	+34.6	+29.2	+24.4	+17.3	+8.3	+4.5
May	+4.3	+4.0	-1.3	+0.4	+5.6	-4.9	-13.6	-22.8	-33.8	-40.7	-41.5	-35.7	-20.7	-8.8	+11.4	+20.3	+28.4	+35.9	+34.4	+32.0	+25.4	+15.2	+10.6	+4.5
June	+1.3	+1.0	+1.9	+0.3	-3.3	-5.1	-12.3	-21.4	-29.5	-37.4	-38.7	-33.7	-25.0	-9.6	+5.3	+20.5	+25.4	+29.7	+35.3	+33.1	+28.0	+19.5	+10.3	+4.4
July	+3.1	+3.0	+2.4	+4.3	+5.9	+2.5	-6.5	-17.7	-29.2	-34.6	-36.6	-34.0	-26.4	-17.7	-3.4	+11.3	+19.3	+26.3	+30.9	+32.0	+26.6	+19.2	+11.2	+8.1
Aug.	+7.3	+6.6	+5.5	+6.6	+8.4	+5.1	-1.8	-11.9	-23.0	-34.9	-40.6	-35.8	-25.0	-7.1	-0.8	+9.2	+18.6	+21.9	+21.7	+19.3	+18.1	+14.0	+10.6	+8.0
Sept.	+12.0	+10.2	+7.0	+7.8	+8.6	+4.6	+3.5	-7.9	-23.1	-36.1	-40.0	-34.6	-25.3	-13.2	+9.1	+12.6	+3.8	+9.0	+15.9	+16.1	+17.3	+14.7	+15.1	+12.9
Oct.	+10.7	+9.0	+9.1	+10.5	+11.3	+14.9	+14.3	+7.9	-8.4	-22.2	-31.3	-31.3	-26.7	-20.0	-11.7	-4.2	+3.3	+7.8	+10.4	+9.9	+10.3	+9.8	+8.8	+7.8
Nov.	-2.3	-6.8	-1.7	+2.6	+8.6	+9.1	+10.9	+6.2	-4.6	-15.6	-20.1	-24.8	-21.3	-11.9	-5.9	+3.3	+11.3	+12.1	+10.7	+13.2	+11.2	+8.2	+6.1	+1.5
Dec.	+2.3	+3.4	+3.6	+3.4	+6.4	+9.3	+11.0	+8.3	+4.1	-3.4	-12.4	-18.0	-19.1	-15.3	-10.8	-4.3	+2.0	+4.7	+5.8	+5.3	+3.5	+3.0	+3.2	+4.0
Year	+2.4	+1.6	+1.7	+2.9	+6.1	+5.7	+3.0	-4.1	-14.1	-23.8	-29.5	-28.3	-21.4	-11.1	-0.5	+7.8	+12.7	+16.8	+18.5	+16.9	+14.5	+10.4	+7.1	+4.7
Winter	+1.3	-1.1	+1.5	+2.6	+7.6	+9.9	+11.4	+7.3	+0.6	-7.7	-14.5	-18.4	-16.3	-9.9	-4.5	+0.8	+4.6	+5.7	+5.1	+4.3	+2.8	+2.2	+2.2	+2.5
Equinox	+4.1	+2.3	+1.4	+3.1	+6.4	+7.7	+6.1	-1.2	-13.9	-26.7	-34.5	-31.7	-23.6	-12.7	-0.2	+7.4	+10.5	+16.1	+19.9	+17.3	+16.1	+12.0	+8.6	+5.3
Summer	+1.9	+3.7	+2.1	+2.9	+4.1	-0.6	-8.5	-18.5	-28.9	-36.9	-39.3	-34.8	-24.3	-10.8	+3.1	+15.3	+22.9	+28.5	+30.6	+29.1	+24.5	+17.0	+10.7	+6.3

"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 QUIET DAYS

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

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	Hour G.M.T.												12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12														
NORTH COMPONENT																										
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			
Jan.	-1.1	-2.1	-2.6	-1.6	+2.0	+2.9	+5.1	+5.7	+4.5	-2.2	-7.8	-8.8	-11.3	-8.2	-2.6	-0.2	+1.5	+2.5	+0.9	+2.8	+6.7	+5.3	+4.3	+4.1		
Feb.	+1.8	+0.5	+1.8	+3.5	+3.0	+6.4	+9.6	+9.4	+4.9	-3.4	-11.4	-16.8	-15.0	-11.5	-6.7	-2.4	0.0	+3.9	+4.8	+3.2	+4.4	+2.5	+3.0	+4.5		
Mar.	+8.9	+7.0	+6.9	+7.6	+9.3	+10.2	+11.9	+9.3	-1.4	-14.3	-26.6	-35.6	-32.0	-22.8	-12.3	-4.1	+1.4	+2.9	+7.5	+10.0	+11.9	+16.1	+14.4	+13.8		
Apr.	+9.9	+9.0	+7.1	+6.6	+12.5	+13.2	+10.2	+4.7	-15.9	-36.3	-51.3	-51.0	-37.7	-23.1	-4.7	+6.8	+18.3	+17.3	+18.5	+21.0	+19.8	+17.5	+14.1	+13.4		
May	+10.5	+8.2	+6.1	+6.0	+8.3	+10.8	+6.5	+6.5	-3.6	-12.3	-24.5	-31.9	-36.1	-32.1	-21.9	-10.1	+0.4	+9.1	+16.9	+18.5	+16.4	+16.2	+14.2	+12.7	+11.5	
June	+1.9	+2.3	0.0	+0.3	+2.6	+2.3	-3.1	-12.3	-21.8	-28.4	-31.0	-28.5	-19.5	-12.0	-0.5	+9.7	+14.4	+20.4	+18.3	+21.2	+25.2	+17.9	+11.6	+9.0		
July	+3.1	+1.8	+1.1	+4.6	+6.2	+4.9	-2.4	-11.2	-20.0	-28.1	-30.4	-30.4	-29.1	-18.2	-7.5	+4.4	+12.1	+20.1	+24.9	+27.2	+24.1	+18.2	+13.5	+10.9		
Aug.	+6.3	+5.6	+2.9	+5.7	+7.7	+8.5	+2.2	-5.5	-15.3	-26.1	-30.1	-28.6	-23.9	-13.9	-4.2	+3.7	+8.5	+10.3	+11.7	+16.2	+15.7	+15.7	+14.8	+12.1		
Sept.	+12.0	+12.8	+9.5	+9.7	+11.7	+10.9	+10.2	+2.2	-8.9	-22.7	-34.0	-38.7	-33.8	-25.4	-12.4	-4.9	-0.8	+5.9	+9.5	+14.6	+16.9	+17.7	+18.2	+19.7		
Oct.	+8.9	+9.5	+8.6	+9.5	+10.4	+10.8	+9.8	+7.5	-0.7	-14.2	-27.2	-34.0	-30.6	-22.2	-14.0	-9.0	-1.6	+5.1	+8.8	+10.6	+11.5	+13.4	+14.2	+15.1		
Nov.	+13.9	+7.4	+6.3	+4.7	+7.6	+8.5	+7.8	+6.4	+0.4	-12.4	-26.8	-36.8	-32.8	-22.3	-15.2	-6.3	+0.7	+6.7	+9.4	+11.7	+15.1	+18.4	+14.5	+13.1		
Dec.	+2.1	+1.6	+0.9	+1.8	+6.3	+8.7	+10.2	+8.5	+4.0	-6.3	-14.9	-20.5	-22.1	-17.9	-11.3	-5.0	+1.9	+6.8	+7.7	+8.3	+8.5	+6.6	+6.6	+7.6		
Year	+6.7	+5.3	+4.1	+4.9	+7.3	+8.2	+6.5	+1.8	-6.9	-18.3	-27.0	-30.5	-26.6	-18.3	-8.4	-0.6	+5.3	+9.9	+11.7	+13.6	+14.7	+13.6	+11.9	+11.3		
Winter	+4.2	+1.8	+1.6	+1.9	+4.7	+6.6	+8.2	+7.5	+3.4	-6.2	-15.2	-20.7	-20.3	-15.0	-8.9	-3.5	+1.1	+5.0	+5.7	+6.5	+8.7	+8.2	+7.1	+7.3		
Equinox	+9.9	+9.6	+8.0	+8.4	+11.0	+11.3	+10.5	+5.9	-6.8	-21.8	-34.8	-39.9	-33.5	-23.4	-10.9	-2.8	+4.3	+7.7	+11.1	+14.0	+15.0	+16.1	+15.3	+15.5		
Summer	+5.5	+4.5	+2.5	+4.1	+6.2	+6.6	+0.8	-8.1	-17.3	-26.8	-30.8	-30.9	-26.2	-16.5	-5.6	+4.5	+11.0	+16.9	+18.3	+20.2	+20.3	+16.6	+13.2	+10.9		
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			
Jan.	-7.1	-3.5	+0.6	+0.1	+0.2	-1.8	-2.1	-4.4	-7.3	-7.9	-5.0	-0.6	+8.0	+15.4	+12.5	+7.5	+5.7	+4.3	+3.5	-0.9	-1.0	-4.0	-5.7	-6.5		
Feb.	-7.2	-4.5	-0.8	-3.6	-2.9	-3.1	-5.3	-7.7	-12.0	-16.0	-10.4	+1.3	+10.0	+16.4	+16.0	+12.5	+9.6	+7.7	+6.8	+4.5	+2.5	-1.4	-5.9	-6.5		
Mar.	-1.8	-2.5	-2.2	-2.4	-4.2	-5.6	-9.2	-16.4	-23.9	-25.6	-16.3	-1.3	+14.1	+24.5	+23.5	+18.2	+10.6	+6.3	+5.5	+5.1	+4.2	+3.3	-1.0	-2.9		
Apr.	-1.2	+0.7	-2.4	-4.4	-7.5	-11.6	-20.7	-34.6	-42.9	-37.2	-18.9	+5.3	+27.1	+37.0	+35.0	+26.6	+18.9	+9.7	+7.9	+5.6	+4.5	+0.2	+1.1	+1.7		
May	+2.8	+3.8	+1.4	-3.3	-0.7	-18.3	-30.1	-36.8	-36.1	-27.7	-13.3	+6.5	+24.7	+33.4	+29.6	+22.0	+15.2	+7.7	+1.8	+1.7	+4.6	+7.1	+7.0	+6.1		
June	+3.5	+4.9	-1.6	-10.8	-19.4	-27.9	-35.5	-39.4	-36.9	-27.1	-12.9	+6.7	+21.7	+29.8	+33.3	+31.0	+23.1	+14.8	+10.5	+10.9	+11.3	+9.7	+6.8	-6.3		
July	-2.0	-5.6	-8.3	-11.8	-17.1	-27.0	-32.9	-35.7	-32.5	-23.1	-9.7	+8.6	+26.2	+33.9	+32.2	+28.6	+21.5	+13.0	+8.7	+10.4	+7.5	+4.5	+6.8	+3.9		
Aug.	-4.5	-3.7	-7.9	-9.8	-11.3	-20.4	-24.3	-27.7	-25.4	-15.5	-3.5	+13.4	+30.2	+35.5	+30.5	+20.1	+7.9	-0.9	-1.3	+3.7	+4.9	+5.0	+3.4	+1.4		
Sept.	-4.3	-6.5	-8.8	-9.2	-10.4	-11.5	-18.0	-27.4	-32.9	-27.2	-12.8	+8.9	+26.9	+32.8	+32.3	+22.4	+10.5	+5.6	+6.8	+8.8	+5.9	+5.6	+1.6	+1.1		
Oct.	-4.1	-5.3	-6.5	-6.1	-5.3	-7.1	-9.6	-15.8	-24.9	-28.2	-22.6	-5.4	+12.1	+22.7	+24.4	+19.6	+14.8	+12.3	+11.3	+8.6	+5.9	+4.7	+2.6	+1.9		
Nov.	-12.5	-8.0	-8.4	-3.8	-5.5	-8.1	-8.3	-11.0	-19.1	-22.8	-13.4	+1.9	+15.7	+19.6	+17.9	+16.7	+13.2	+12.6	+12.1	+8.8	+7.1	+1.3	-3.5	-2.7		
Dec.	-8.3	-5.2	-1.0	+0.2	+0.8	-2.3	-2.1	-2.8	-7.6	-13.7	-8.6	-1.6	+5.6	+12.9	+12.7	+10.1	+5.9	+4.4	+4.2	+4.6	+2.8	-1.5	-4.1	-3.6		
Year	-3.6	-2.7	-3.5	-5.1	-7.3	-11.3	-15.4	-20.3	-23.7	-21.5	-11.9	+3.0	+17.1	+24.4	+23.4	+18.4	+12.3	+7.7	+6.2	+5.8	+5.0	+2.8	+0.9	-0.9		
Winter	-8.2	-4.9	-2.3	-1.7	-2.1	-3.5	-4.1	-6.0	-10.8	-14.3	-8.9	0.0	+8.9	+14.9	+13.8	+10.9	+8.1	+6.9	+6.3	+4.1	+2.8	-1.2	-4.4	-4.5		
Equinox	-2.6	-3.0	-4.6	-5.1	-6.3	-8.3	-13.4	-22.1	-29.3	-28.0	-17.0	+1.3	+18.5	+27.2	+26.9	+20.3	+12.9	+8.0	+7.4	+6.8	+5.0	+3.4	+1.2	+0.6		
Summer	0.0	-0.1	-4.1	-8.9	-14.3	-23.4	-30.6	-34.9	-32.7	-23.3	-9.8	+8.7	+25.6	+33.1	+31.3	+25.4	+16.9	+8.7	+4.9	+6.7	+7.1	+6.6	+6.0	+1.3		
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			
Jan.	-1.9	-3.0	-1.9	-1.0	-1.2	-0.7	-1.4	-1.6	-2.1	-0.4	+0.3	-1.2	-2.5	-1.4	+1.7	+2.2	+2.0	+1.9	+2.4	+3.2	+1.9	+1.8	+1.9	+1.0		
Feb.	+1.9	+1.2	-0.3	-0.8	-0.6	-1.1	-1.2	-0.8	+0.9	+0.4	-3.1	-5.6	-4.7	-3.6	-1.5	+0.2	+0.4	+0.9	+1.0	+2.2	+3.1	+3.6	+4.5	+3.0		
Mar.	+2.6	+2.1	+2.2	+2.7	+2.2	+2.5	+2.8	+4.5	+4.8	+0.9	-5.6	-12.1	-14.8	-13.1	-7.2	-0.1	+6.6	+5.1	+3.2	+3.5	+2.8	+1.7	+1.6	+1.1		
Apr.	+0.4	-1.0	-0.8	+0.2	0.0	+0.8	+3.6	+4.6	+2.6	-4.4	-11.6	-18.6	-19.0	-14.4	-6.6	+0.2	+6.6	+12.0	+12.2	+11.4	+9.6	+7.8	+4.4	0.0		
May	+5.6	+5.3	+4.9	+5.2	+6.3	+8.5	+10.0	+8.5	+3.5	-6.4	-15.1	-22.9	-23.0	-15.5	-6.5	-0.4	+2.5	+5.3	+6.2	+5.9	+4.1	+3.0	+2.7	+2.3		
June	+1.2	-2.5	-2.3	+1.6	+5.1	+5.9	+5.6	+3.3	-1.3	-10.6	-16.3	-20.9	-21.0	-14.1	-7.3	+0.4	+7.1	+14.3	+15.0	+11.9	+9.5	+7.6	+5.7	+2.1		
July	+2.3	+1.8	+1.5	+1.0	+1.1	+2.6	+1.9	+0.8	-3.3	-5.6	-10.3	-17.2	-16.9	-12.2	-6.5	+0.8	+5.7	+11.0	+13.3	+9.0	+7.1	+6.0	+3.5	+2.6		
Aug.	+5.5	+3.6	+3.8	+3.7	+3.8	+4.2	+4.5	+4.0	+1.6	-3.5	-12.0	-19.6	-21.7	-14.8	-5.8	+2.1	+7.0	+8.4	+5.7	+3.6	+4.4	+4.1	+4.0	+3.4		
Sept.	+3.5	+3.0	+3.5	+3.3	+2.5	+3.6	+6.3	+8.1	+6.5	+1.8	-4.9	-13.5	-18.1	-15.2	-9.1	-0.7	+2.3	+1.4	+1.3	+2.7	+3.3	+2.8	+2.9	+2.7		
Oct.	+2.7	+2.7	+3.1	+2.5	+1.9	+1.5	+1.3	+4.9	+5.5	+3.3	-0.1	-8.1	-11.3	-10.3	-6.3	-1.7	-0.1	+0.3	-0.1	+0.7	+2.1	+2.5	+1.9	+1.1		
Nov.	-3.4	-3.9	-2.4	-0.1	-0.4	-0.1	-0.6	+0.3	+3.2	+1.3	-1.2	-3.3	-2.4	-0.7	+1.8	-1.7	+2.0	+1.1	+1.0	+1.5	+1.2	+1.1	+1.2	+1.1		
Dec.	+2.4	-0.3	-1.0	-1.3	-1.4	-2.1	-2.6	-2.7	+1.6	-0.7	-1.6	-1.1	-0.8	-1.7	+2.4	+4.3	+3.2	+1.7	+0.8	+0.9	+0.8	+1.5	+1.2	-0.3		
Year	+1.9	+0.7	+0.9	+1.4	+1.6	+2.1	+2.6	+2.8	+1.7	-2.0	-6.8	-12.0	-13.0	-9.7	-4.2	+0.7	+3.8	+5.3	+5.2	+4.7	+4.2	+3.6	+3.0	+1.7		
Winter	-0.3	-1.5	-1.4	-0.8	-0.9	-1.3	-1.2	-1.2	+0.1	+0.1	-1.4	-2.8	-2.6	-1.9	+1.1	+2.1	+1.9	+1.4	+1.3	+1.9	+1.7	+2.0	+2.2	+1.2		
Equinox	+2.3	+1.5	+2.0	+2.2	+1.7	+2.1	+3.5	+5.5	+4.9	+0.4	-5.5	-13.1	-15.8	-13.3	-7.3	-0.6	+3.9	+4.7	+4.1	+4.6	+4.5	+3.7	+2.7	+1.2		
Summer	+3.7	+2.1	+2.0	+2.9	+4.1	+5.3	+5.5	+4.1	+0.1	-6.5	-13.4	-20.1	-20.7	-14.1	-6.5	+0.7	+5.6	+9.7	+10.1	+7.6	+6.3	+5.2	+4.0	+2.6		

"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)

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	Hour G.M.T.												12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24													
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12																									
DECLINATION (measured positive towards the west)																																					
Jan.	-1.40	-0.63	+0.22	+0.08	-0.04	-0.47	-0.62	-1.12	-1.66	-1.51	-0.70	+0.22	+2.06	+3.43	+2.64	+1.52	+1.10	+0.77	+0.68	+0.30	-0.46	-1.01	-1.32	-1.48													
Feb.	-1.52	-0.92	-0.23	-0.86	-0.70	-0.88	-1.44	-1.92	-2.61	-3.10	-1.66	+0.92	+2.60	+3.76	+3.49	+2.62	+1.94	+1.40	+1.18	+0.78	+0.33	-0.38	-1.30	-1.50													
Mar.	-0.72	-0.77	-0.72	-0.79	-1.21	-1.54	-2.33	-3.69	-4.78	-4.63	-2.26	+1.13	+4.10	+5.85	+5.24	+3.85	+2.09	+1.16	+0.83	+0.65	+0.38	+0.05	-0.76	-1.13													
Apr.	-0.63	-0.20	-0.75	-1.14	-2.01	-2.86	-4.59	-7.18	-8.05	-6.12	-1.85	+3.04	+6.95	+8.38	+7.27	+5.12	+3.11	+1.30	+0.89	+0.32	+0.15	-0.64	-0.33	-0.18													
May	+0.16	+0.45	+0.04	-0.91	-2.28	-4.13	-6.34	-7.31	-6.82	-4.65	-1.46	+2.71	+6.24	+7.61	+6.38	+4.43	+2.72	+0.91	-0.36	-0.29	+0.30	+0.89	+0.92	+0.79													
June	+0.63	+0.90	-0.33	-2.19	-4.03	-5.74	-7.05	-7.49	-6.63	-4.38	-1.41	+2.45	+5.15	+6.50	+6.75	+5.89	+4.11	+2.20	+1.41	+1.39	+1.31	+1.26	+0.93	-1.63													
July	-0.53	-1.20	-1.71	-2.57	-3.71	-5.66	-6.57	-6.79	-5.79	-3.58	-0.79	+2.91	+6.43	+7.56	+6.81	+5.61	+3.87	+1.86	+0.79	+1.05	+0.59	+0.20	+0.85	+0.37													
Aug.	-1.15	-0.96	-1.70	-2.21	-2.58	-4.46	-5.01	-5.40	-4.54	-2.13	+0.46	+3.82	+7.03	+7.72	+6.34	+3.93	+1.28	-0.58	-0.71	+0.12	+0.38	+0.41	+0.12	-0.18													
Sept.	-1.32	-1.81	-2.15	-2.24	-2.55	-2.75	-4.04	-5.63	-6.31	-4.62	-1.27	+3.29	+6.76	+7.61	+7.01	+4.72	+2.15	+0.91	+1.00	+1.21	+0.53	+0.44	-0.39	-0.55													
Oct.	-1.18	-1.43	-1.64	-1.61	-1.47	-1.86	-2.31	-3.49	-5.00	-5.75	-3.52	+0.21	+3.62	+5.45	+5.48	+4.31	+3.05	+2.28	+1.95	+1.33	+0.76	+0.43	-0.02	-0.19													
Nov.	-3.07	-1.91	-1.95	-0.95	-1.41	-1.96	-1.97	-2.47	-3.87	-4.73	-1.67	+1.81	+4.43	+4.83	+4.21	+3.63	+2.65	+2.30	+2.09	+1.33	+0.85	-0.45	-1.27	-1.05													
Dec.	-1.76	-1.11	-0.24	-0.03	-0.41	-0.80	-0.81	-0.89	-1.70	-2.53	-1.16	+0.47	+1.98	+3.29	+3.00	+2.23	+1.11	+0.62	+0.55	+0.61	+0.24	-0.55	-1.08	-1.03													
Year	-1.04	-0.80	-0.93	-1.29	-1.87	-2.76	-3.59	-4.45	-4.81	-3.88	-1.44	+1.91	+4.78	+6.00	+5.39	+3.99	+2.43	+1.26	+0.86	+0.68	+0.46	+0.05	-0.30	-0.65													
Winter	-1.94	-1.14	-0.55	-0.44	-0.64	-1.03	-1.21	-1.60	-2.46	-2.82	-1.30	+0.85	+2.77	+3.83	+3.33	+2.50	+1.70	+1.27	+1.13	+0.61	+0.24	-0.60	-1.24	-1.27													
Equinox	-0.96	-1.05	-1.31	-1.45	-1.81	-2.25	-3.32	-5.00	-6.03	-5.13	-2.23	+1.92	+5.36	+6.82	+6.25	+4.50	+2.60	+1.41	+1.14	+0.88	+0.45	+0.07	-0.37	-0.51													
Summer	-0.22	-0.20	-0.93	-1.97	-3.15	-5.00	-6.24	-6.75	-5.95	-3.69	-0.80	+2.97	+6.21	+7.35	+6.57	+4.97	+2.99	+1.10	+0.28	+0.57	+0.65	+0.69	+0.71	-0.16													
INCLINATION																																					
Jan.	+0.11	+0.11	+0.11	+0.08	-0.16	-0.18	-0.34	-0.36	-0.25	+0.24	+0.58	+0.56	+0.58	+0.31	+0.05	-0.03	-0.13	-0.17	-0.05	-0.09	-0.38	-0.26	-0.17	-0.16													
Feb.	+0.02	+0.05	-0.11	-0.21	-0.18	-0.41	-0.59	-0.54	-0.15	+0.44	+0.81	+0.95	+0.74	+0.46	+0.20	+0.01	-0.11	-0.33	-0.38	-0.21	-0.25	-0.06	-0.01	-0.14													
Mar.	-0.50	-0.38	-0.37	-0.40	-0.51	-0.54	-0.60	-0.29	+0.51	+1.28	+1.81	+2.06	+1.56	+0.87	+0.34	+0.04	-0.07	+0.14	-0.48	-0.64	-0.77	-1.05	-0.90	-0.84													
Apr.	-0.63	-0.63	-0.45	-0.38	-0.73	-0.70	-0.32	+0.24	+1.65	+2.74	+3.32	+2.82	+1.66	+0.70	-0.29	-0.78	-1.27	-0.96	-1.02	-1.17	-1.12	-0.96	-0.83	-0.90													
May	-0.59	-0.46	-0.29	-0.23	-0.27	-0.27	+0.20	+0.90	+1.34	+1.80	+1.89	+1.72	+1.23	+0.63	+0.13	-0.73	-1.07	-1.08	-0.95	-1.02	-0.95	-0.86	-0.77	-0.77													
June	-0.14	-0.27	-0.04	+0.15	+0.20	+0.35	+0.79	+1.38	+1.86	+1.94	+1.80	+1.27	+0.49	+0.07	-0.56	-1.01	-1.06	-1.17	-0.96	-1.24	-1.56	-1.11	-0.71	-0.46													
July	-0.12	0.00	+0.07	-0.13	-0.17	+0.08	+0.61	+1.20	+1.64	+1.99	+1.87	+1.47	+1.17	+0.47	-0.07	-0.63	-0.92	-1.21	-1.42	-1.70	-1.50	-1.10	-0.88	-0.70													
Aug.	-0.23	-0.23	0.00	-0.16	-0.27	-0.20	+0.27	+0.81	+1.36	+1.82	+1.72	+1.23	+0.65	+0.10	-0.25	-0.44	-0.48	-0.45	-0.61	-1.02	-0.99	-0.99	-0.92	-0.73													
Sept.	-0.65	-0.69	-0.43	-0.44	-0.58	-0.49	-0.29	+0.40	+1.15	+1.87	+2.27	+2.10	+1.44	+0.88	+0.18	+0.02	-0.02	-0.42	-0.68	-1.00	-1.10	-1.16	-1.15	-1.24													
Oct.	-0.47	-0.49	-0.41	-0.49	-0.57	-0.58	-0.49	-0.17	+0.50	+1.36	+2.07	+2.10	+1.58	+0.92	+0.46	+0.31	-0.08	-0.48	-0.72	-0.79	-0.78	-0.87	-0.91	-0.99													
Nov.	-0.84	-0.48	-0.37	-0.26	-0.44	-0.46	-0.42	-0.27	+0.29	+1.13	+1.89	+2.31	+1.90	+1.20	+0.82	+0.25	-0.17	-0.57	-0.74	-0.85	-1.05	-1.19	-0.88	-0.80													
Dec.	+0.03	-0.05	-0.07	-0.15	-0.43	-0.59	-0.71	-0.59	-0.21	+0.57	+1.05	+1.34	+1.36	+0.97	+0.64	+0.31	-0.12	-0.46	-0.54	-0.58	-0.57	-0.38	-0.35	-0.46													
Year	-0.33	-0.30	-0.20	-0.22	-0.34	-0.33	-0.16	+0.22	+0.81	+1.43	+1.76	+1.66	+1.20	+0.64	+0.14	-0.19	-0.42	-0.62	-0.72	-0.85	-0.93	-0.84	-0.71	-0.69													
Winter	-0.17	-0.09	-0.11	-0.12	-0.30	-0.42	-0.52	-0.44	-0.08	+0.60	+1.08	+1.29	+1.15	+0.74	+0.43	+0.13	-0.13	-0.39	-0.43	-0.43	-0.57	-0.47	-0.35	-0.39													
Equinox	-0.56	-0.55	-0.41	-0.43	-0.59	-0.58	-0.42	+0.04	+0.96	+1.82	+2.37	+2.27	+1.56	+0.84	+0.17	-0.10	-0.36	-0.50	-0.73	-0.90	-0.94	-1.01	-0.95	-0.99													
Summer	-0.27	-0.24	-0.07	-0.09	-0.13	-0.01	+0.47	+1.07	+1.55	+1.89	+1.81	+1.42	+0.89	+0.32	-0.19	-0.60	-0.80	-0.98	-1.01	-1.22	-1.27	-1.04	-0.84	-0.66													
HORIZONTAL FORCE																																					
Jan.	-2.4	-2.7	-2.4	-1.6	+2.0	+2.5	+4.6	+4.8	+3.0	-3.7	-8.6	-8.8	-9.6	-5.1	-0.2	+1.2	+2.6	+3.3	+1.6	+2.6	+6.4	+4.5	+3.2	+2.8													
Feb.	+0.4	-0.4	+1.6	+2.8	+2.4	+5.7	+8.4	+7.8	+2.6	-6.4	-13.2	-16.2	-12.8	-8.2	-3.6	0.0	+1.8	+5.3	+6.0	+4.0	+4.8	+2.2	+1.8	+3.2													
Mar.	+8.4	+6.4	+6.3	+7.0	+8.4	+9.0	+10.0	+6.0	-5.9	-18.8	-29.2	-35.2	-28.8	-17.8	-7.7	-0.6	+3.4	+4.0	+8.4	+10.8	+12.5	+16.4	+14.0	+13.0													
Apr.	+9.5	+9.0	+6.5	+5.7	+10.9	+10.8	+6.1	-1.9	-23.7	-42.6	-53.9	-49.1	-31.9	-15.8	+1.9	+11.7	+21.5	+18.8	+19.7	+21.7	+20.3	+17.2	+14.1	+13.5													
May	+10.9	+8.8	+6.2	+5.3	+6.4	+7.2	+0.7	-10.4	-18.8	-29.3	-33.8	-34.2	-26.9	-15.2	-4.4	+4.5	+11.8	+18.0	+18.5	+16.4	+16.8	+15.3	+13.8	+12.4													
June	+2.5	+3.2	-0.3	-1.7	-1.1	-3.0	-9.7	-19.5	-28.3	-33.0	-32.9	-26.7	-15.1	-6.2	+5.7	+15.3	+18.5	+22.8	+19.9	+22.9	+26.9	+19.4	+12.7	+7.7													
July	+2.7	+0.7	-0.5	+2.3	+2.9	-0.2	-8.5	-17.7	-25.7	-31.9	-31.7	-28.3	-23.7	-11.5	-1.3	+9.7	+15.9	+22.2	+26.1	+28.7	+25.1	+18.7	+14.5	+11.5													
Aug.	+5.4	+4.8	+1.4	+3.8	+5.4	+4.5	-2.4	-10.6	-19.8	-28.6	-30.2	-25.6	-17.8	-7.0	+1.6	+7.4	+9.8	+9.9	+11.2	+16.6	+16.4	+16.4	+15.2	+12.2													
Sept.	+11.0	+11.4	+7.7	+7.8	+9.6	+8.6	+6.6	-3.0	-14.9	-27.4	-35.8	-36.4	-28.2	-18.8	-6.1	-0.6	+1.2	+6.8	+10.6	+16.0	+17.7	+18.4	+18.2	+19.6													
Oct.	+8.0	+8.4	+7.2	+8.2	+9.2	+9.3	+7.8	+4.4	-5.4	-19.2	-31.0	-34.4	-27.8	-17.6	-9.2	-5.2	+1.2	+7.3	+10.8	+12.0	+12.4	+14.0	+14.4	+15.2													
Nov.	+11.3	+5.8	+4.6	+3.9	+6.4	+6.8	+6.1	+4.2	-3.2	-16.5	-28.8	-35.8	-29.3	-18.2	-11.6	-3.1	+3.2	+9.0	+11.5	+13.2	+16.2	+18.3	+13.6	+12.4													
Dec.	+0.5	+0.6	+0.7	+1.8	+6.0	+8.1	+9.6	+7.8	+2.5	-8.8	-16.3	-20.4	-20.7	-15.2	-8.7	-3.0	+3.0	+7.5	+8.4	+9.0	+8.9	+6.2	+5.7	+6.8													
Year	+5.7	+4.7	+3.3	+3.8	+5.7	+5.8	+3.3	-2.3	-11.5	-22.2	-28.8	-29.3	-22.7	-13.1	-3.6	+3.1	+7.7	+11.2	+12.7	+14.5	+15.4	+13.9	+11.8	+10.9													
Winter	+2.5	+0.8	+1.1	+1.5	+4.2	+5.8	+7.2	+6.1	+1.2	-8.9	-16.7	-20.3	-18.1	-11.7	-6.0	-1.2	+2.7	+6.3	+6.9	+7.2	+9.1	+7.8	+6.1	+6.3													
Equinox	+9.2	+8.8	+6.9	+7.2	+9.5	+9.4	+7.6	+1.4	-12.5	-27.0	-37.5	-38.8	-29.2	-17.5	-5.3	+1.3	+6.8	+9.2	+12.4	+15.1	+15.7	+16.5	+15.2	+15.3													
Summer	+5.4	+4.4	+1.7	+2.4	+3.4	+2.1	-5.0	-14.5	-23.1	-30.7	-32.1	-28.7	-20.9	-10.0	+0.4	+9.2	+14.0	+18.2	+18.9	+21.1	+21.3	+17.5	+14.1	+10.9													

"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

	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
NORTH 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.	+7.0	-3.3	+13.3	+16.0	+26.5	+36.0	+27.1	+21.4	+5.2	-6.6	-16.9	-18.7	-25.4	-10.9	-0.9	-2.1	-0.7	-3.5	-9.6	-9.6	-13.1	-17.7	-10.5	-2.8
Feb.	+5.0	+7.9	+15.3	+6.9	+19.9	+14.7	+17.9	-13.9	-23.4	-28.4	-29.1	-23.6	-22.1	-11.7	+4.3	+10.4	+17.3	+3.7	+3.6	+11.7	+2.5	+5.6	+2.8	+3.0
Mar.	-3.4	-29.1	+5.4	+21.8	+12.5	+21.3	+21.0	+10.1	+1.7	-12.6	-34.9	-36.5	-33.9	-15.9	-7.2	+14.4	+23.0	+28.3	+31.5	+9.7	+0.7	+2.3	-2.6	-22.9
Apr.	-40.9	-41.9	-84.8	-76.5	-37.8	-30.9	-40.6	-47.0	-50.1	-44.0	-34.9	-7.6	+14.7	+40.2	+37.9	+41.8	+59.1	+81.5	+86.2	+74.0	+55.3	+28.6	+3.1	+14.7
May	-51.0	+2.8	-24.4	-15.1	+0.1	-65.5	-77.1	-71.8	-77.8	-66.6	-52.8	-40.6	+2.4	+16.0	+79.1	+93.3	+107.6	+104.7	+61.7	+51.8	+34.5	+8.3	+6.8	-20.5
June	+2.9	-9.8	+9.1	+3.2	-17.7	-21.1	-15.2	-15.9	-20.5	-37.8	-43.9	-48.5	-38.8	-16.5	+10.0	+47.8	+35.9	+28.9	+34.7	+32.4	+32.8	+23.3	+17.3	+7.4
July	+8.5	+10.9	+9.9	+6.5	+12.1	+13.4	-0.8	-12.4	-40.8	-40.7	-46.4	-41.6	-34.0	-29.1	-22.1	+5.4	+19.1	+28.8	+43.1	+40.7	+32.5	+22.2	+10.3	+4.5
Aug.	-8.2	+11.4	+16.9	+11.8	+17.3	+14.7	+4.9	-7.1	-22.4	-46.2	-63.7	-49.4	-30.8	-8.2	+1.0	+34.4	+14.5	+32.9	+40.9	+15.2	+11.5	+11.1	+3.9	-6.4
Sept.	+22.9	+23.7	+11.0	+9.6	+12.9	-14.6	+1.5	-14.5	-50.9	-64.2	-62.2	-46.5	-29.9	-13.3	+56.6	+61.2	-7.9	+16.3	+22.5	+15.5	+14.8	+13.3	+12.7	+9.3
Oct.	+14.3	+10.9	+15.5	+17.6	+17.0	+31.9	+29.4	+23.0	+2.0	-13.7	-25.1	-25.6	-23.9	-23.3	-14.6	-8.3	+7.2	+7.0	+5.2	+1.3	+0.9	-9.7	-15.3	-23.5
Nov.	-6.8	-30.6	-9.3	+11.5	+13.6	+8.8	+13.2	+4.4	-27.1	-40.6	-20.5	-27.5	-20.4	-5.1	-6.2	+7.4	+28.1	+28.8	+27.8	+28.4	+17.1	+10.7	+7.0	-12.4
Dec.	+3.1	+2.9	+4.1	+6.1	+11.3	+12.5	+15.7	+9.6	+6.5	+4.5	-2.3	-17.0	-27.4	-25.2	-17.2	-10.1	-2.9	+1.8	+5.3	+4.7	+7.6	-1.3	+3.4	+4.2
Year	-3.9	-3.7	-1.5	+1.7	+7.3	+1.8	-0.2	-9.5	-24.9	-33.1	-36.1	-31.9	-22.4	-8.6	+10.0	+24.6	+25.0	+29.9	+29.5	+23.0	+16.4	+7.1	+3.2	-3.8
Winter	+2.1	-5.8	+5.9	+10.1	+17.9	+17.9	+18.5	+5.3	-9.8	-17.8	-17.2	-21.7	-23.9	-13.2	-5.0	+1.4	+10.4	+7.6	+6.7	+8.8	+3.5	-0.7	+0.7	-2.0
Equinox	-1.8	-9.2	-13.2	-6.8	+1.2	+1.9	+2.8	-7.1	-24.3	-33.7	-39.2	-29.0	-18.3	-3.1	+18.1	+27.3	+20.3	+33.3	+36.4	+25.1	+17.9	+7.4	-0.5	-5.6
Summer	-11.9	+3.8	+2.9	+1.6	+3.0	-14.6	-22.1	-26.8	-40.4	-47.9	-51.7	-45.0	-25.3	-9.5	+16.9	+45.2	+44.2	+48.8	+45.2	+35.0	+27.8	+14.7	+9.5	-3.7
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.	-19.1	-7.2	-5.3	-20.1	-1.6	+8.8	+4.8	+15.5	+9.6	+5.8	+9.9	+20.7	+24.9	+30.2	+32.7	+31.6	+21.3	+17.5	+4.1	-39.7	-49.4	-41.4	-29.7	-24.1
Feb.	-24.4	-20.9	-16.7	-6.0	-11.3	-3.8	+4.3	-2.0	-9.1	-10.0	-8.9	+8.3	+20.0	+33.6	+39.0	+50.2	+46.1	+25.0	+3.7	-2.4	-40.3	-20.8	-26.9	-26.5
Mar.	-50.6	-36.2	-33.6	-31.9	-27.0	-10.4	-7.6	-10.4	-2.3	-5.3	-1.5	+25.6	+46.2	+58.8	+62.3	+53.6	+46.8	+29.1	+10.0	+9.1	+4.8	-28.4	-47.3	-53.5
Apr.	-53.1	-64.1	-80.7	-97.7	-53.3	-29.8	-34.4	-6.4	+1.8	-8.2	+13.0	+45.2	+52.9	+64.0	+62.3	+56.8	+58.1	+59.2	+37.6	+33.5	+15.6	-9.1	-27.8	-41.6
May	-58.5	-49.0	-40.0	-23.0	-2.3	+8.1	-27.6	-28.7	-35.6	-19.5	-5.5	+7.5	+29.4	+48.9	+64.5	+55.4	+52.3	+35.6	+15.5	+4.5	+13.9	-12.4	-2.1	-31.4
June	-25.3	-16.8	-20.3	-13.7	-16.0	-4.0	-19.8	-27.9	-32.6	-24.8	-9.6	+3.7	+16.1	+31.8	+37.8	+38.4	+30.2	+19.8	+20.7	+14.9	+12.1	+0.7	-7.9	-7.7
July	-19.9	-17.0	-8.1	-13.3	-14.9	-24.5	-24.0	-26.0	-26.3	-10.2	-1.0	+9.5	+26.5	+32.7	+30.4	+29.9	+23.1	+19.5	+16.7	+11.1	+5.7	+5.8	-10.5	-15.5
Aug.	+0.1	-28.2	-29.1	-11.2	-14.7	-22.1	-22.3	-20.7	-21.5	-17.6	-2.4	+22.4	+41.7	+53.0	+51.5	+36.0	+19.0	+18.2	-2.3	-10.7	-6.8	-9.7	-6.5	-16.1
Sept.	-0.3	-1.5	-17.7	-23.0	-9.6	-4.7	-24.5	-40.7	-49.3	-19.7	-1.2	+29.6	+43.8	+52.7	+64.5	+32.6	+1.6	+1.1	-7.3	-7.3	-11.9	-2.5	-3.1	-1.5
Oct.	-30.3	-29.1	-25.5	-10.8	+1.4	+2.4	+6.6	+5.2	-19.9	-11.9	+1.3	+20.9	+37.2	+39.8	+33.6	+36.7	+41.2	+18.6	+22.3	+9.3	-27.2	-32.7	-32.6	-46.2
Nov.	-38.7	-24.9	-22.7	-44.9	-8.0	-10.4	+17.7	+13.9	-10.4	-8.6	+5.8	+14.8	+27.7	+32.6	+25.4	+25.7	+35.6	+31.0	+43.0	+27.0	+3.3	-32.4	-39.7	-72.9
Dec.	-18.5	-13.6	-12.1	-6.1	-12.0	-10.0	-6.9	+1.4	-1.0	-7.3	-10.2	+5.4	+13.6	+20.7	+16.6	+21.6	+19.2	+19.8	+19.3	+14.3	+1.9	-7.9	-25.3	-22.8
Year	-28.2	-25.7	-26.0	-24.7	-14.1	-8.3	-11.1	-11.4	-16.4	-11.5	-0.9	+17.8	+31.7	+41.6	+43.4	+39.1	+32.9	+24.5	+15.3	+5.3	-6.5	-15.1	-21.6	-30.0
Winter	-25.2	-16.6	-14.2	-19.3	-8.2	-3.9	+5.0	+7.2	-2.7	-5.0	-0.8	+12.3	+21.5	+29.3	+28.4	+32.3	+30.6	+23.3	+17.6	-0.2	-21.1	-23.2	-30.4	-36.6
Equinox	-33.6	-32.7	-39.4	-39.4	-22.1	-10.6	-15.0	-15.7	-17.4	-11.3	+2.9	+30.3	+45.1	+53.9	+55.7	+45.0	+37.0	+27.0	+15.7	+11.1	-4.7	-18.2	-27.7	-35.7
Summer	-26.0	-27.8	-24.4	-15.4	-12.0	-10.5	-23.4	-25.9	-29.0	-18.0	-4.6	+10.8	+28.5	+41.7	+46.1	+39.9	+31.2	+23.3	+12.7	+4.9	+6.3	-3.9	-6.7	-17.7
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.	-31.3	-38.1	-31.3	-27.1	-28.7	-42.3	-29.5	-23.3	-15.1	-7.7	-2.3	+1.7	+8.9	+16.1	+25.9	+29.7	+32.7	+38.3	+51.1	+45.3	+28.3	+9.3	+2.5	-13.1
Feb.	-31.7	-26.4	-26.7	-31.8	-37.4	-31.7	-29.4	-22.6	-22.3	-19.6	-16.3	-9.6	-5.5	+3.6	+14.9	+35.0	+73.4	+64.3	+41.6	+34.2	+40.5	+15.0	+0.5	-12.0
Mar.	-33.9	-65.4	-59.1	-39.3	-38.1	-26.6	-25.3	-19.5	-15.7	-14.2	-9.7	-7.5	+6.3	+17.6	+29.1	+52.7	+66.1	+75.6	+78.5	+61.5	+37.3	+6.8	-26.5	-50.7
Apr.	-47.4	-83.3	-133.2	-130.2	-105.4	-82.1	-58.4	-41.4	-21.4	+8.3	+31.6	+44.4	+46.2	+49.9	+57.4	+64.4	+67.2	+72.1	+80.2	+78.2	+72.4	+40.9	+10.0	-20.4
May	-116.1	-102.1	-121.7	-115.7	-94.9	-103.2	-89.3	-53.9	-25.7	+2.9	+21.1	+35.7	+68.1	+92.1	+122.9	+141.7	+127.9	+101.6	+81.9	+69.1	+38.7	+9.1	-44.5	-45.7
June	-35.3	-63.7	-53.6	-51.5	-43.9	-38.0	-25.3	-10.9	-2.1	+1.7	-4.1	-4.5	+3.3	+11.1	+25.2	+45.5	+60.7	+61.3	+45.7	+32.5	+23.2	+20.7	+8.3	-6.3
July	-15.1	-12.7	-9.3	-11.3	-9.9	-8.6	-7.7	-8.1	-9.5	-14.9	-12.1	-11.3	-13.1	-0.9	+11.3	+16.1	+23.1	+24.4	+25.7	+20.7	+17.1	+10.3	+1.3	-5.5
Aug.	-72.2	-63.3	-43.6	-40.4	-26.8	-21.3	-11.8	-9.4	-7.6	-8.7	-10.6	-11.4	-11.4	+6.3	+31.4	+68.2	+67.6	+57.3	+64.2	+53.4	+28.4	+5.5	-12.0	-31.8
Sept.	-5.3	-10.5	-30.0	-50.9	-56.7	-71.7	-66.5	-40.1	-26.2	-20.5	-12.9	-4.3	+2.5	+17.5	+47.8	+77.7	+68.5	+59.9	+47.3	+36.1	+21.2	+8.3	+5.7	+3.1
Oct.	-40.9	-42.4	-41.1	-38.0	-37.0	-26.3	-18.2	-11.0	-5.1	-3.0	-5.1	-5.8	+3.5	+15.4	+25.9	+27.8	+31.6	+45.9	+48.8	+51.2	+48.9	+27.2	-6.1	-46.2
Nov.	-15.2	-45.7	-72.2	-76.3	-84.4	-75.9	-53.2	-30.7	-8.2	+3.9	+12.2	+29.7	+38.4	+43.9	+44.6	+37.9	+34.8	+47.1	+69.8	+73.5	+42.6	+9.9	+2.2	-28.7
Dec.	+5.5	-0.1	-6.1	-11.3	-10.5	-9.8	-10.9	-11.3	-10.5	-11.3	-13.1	-12.7	-8.1	-2.7	+9.1	+11.5	+8.3	+8.8	+9.5	+12.9	+13.9	+17.5	+15.3	+6.1
Year	-36.6	-46.1	-52.3	-52.0	-47.8	-44.8	-35.5	-23.5	-14.1	-6.9	-1.8	+3.7	+11.6	+22.5	+37.1	+50.7	+55.2	+54.7	+53.7	+47.4	+34.4	+15.0	-3.6	-20.9
Winter	-18.2	-27.6	-34.1	-36.6	-40.3	-39.9	-30.7	-22.0	-14.0	-8.7	-4.9	+2.3	+8.4	+15.2	+23.6	+28.5	+37.5	+39.6	+43.0	+41.5	+31.3	+12.9	+5.1	-11.9
Equinox	-31.9	-50.4	-65.9	-64.6	-59.4	-51.7	-42.1	-28.0	-17.1	-7.3	+1.0	+6.7	+14.6	+25.1	+40.1	+55.7	+58.3	+63.4	+63.7	+56.7	+44.9	+20.8	-4.2	-28.5
Summer	-59.7	-60.5	-57.1	-54.7	-43.9	-42.8	-33.5	-20.6	-11.2	-4.7	-1.4	+2.1	+11.7	+27.1	+47.7	+67.9	+69.8	+61.1	+54.4	+43.9	+26.9	+11.4	-11.5	-22.3

"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)

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.	-4.14	-1.33	-1.60	-4.69	+1.35	+0.38	-0.09	+2.31	+1.74	+1.43	+2.66	+4.93	+6.04	+6.55	+6.66	+6.49	+4.35	+3.68	+1.21	-7.67	-9.50	-7.69	-5.60	-4.77
Feb.	-5.13	+4.54	-3.99	-1.49	-3.07	-1.34	+0.17	+0.13	-0.93	-0.92	-0.67	+2.61	+4.91	+7.26	+7.73	+9.77	+8.67	+4.92	+0.61	-0.95	-8.27	-4.44	-5.55	-5.49
Mar.	+10.12	+6.21	-7.02	-7.32	-5.96	-2.93	-2.36	-2.50	-0.54	-0.59	+1.06	+6.60	+10.68	+12.53	+12.90	+10.30	+8.60	+4.79	+0.80	+1.46	+0.94	-5.67	-9.48	-9.96
Apr.	-9.20	-11.39	-13.10	-15.67	-9.36	-4.85	-5.42	+0.51	+2.30	+0.03	+3.98	+9.47	+10.18	+11.47	+11.18	+9.93	+9.52	+8.87	+4.30	+3.95	+1.02	-2.95	-5.76	-9.01
May	-9.92	-10.06	-7.17	-4.08	-0.48	+4.20	-2.60	-3.04	-4.21	-1.38	+0.94	+3.10	+5.88	+9.32	+10.03	+7.62	+6.44	+3.16	+0.74	-1.10	+1.49	-2.60	-0.70	-5.58
June	-5.24	-3.03	-4.46	-2.91	-2.56	+0.01	-3.42	-5.03	-5.82	-3.55	-0.24	+2.63	+4.78	+7.09	+7.28	+5.93	+4.72	+2.89	+2.86	+1.77	+1.18	-0.77	-2.26	-1.85
July	-4.36	-3.86	-2.02	-2.94	-3.48	-5.47	-4.82	-4.78	-3.74	-0.48	+1.60	+3.54	+6.68	+7.74	+7.00	+5.84	+3.94	+2.83	+1.72	+0.66	-0.10	+0.32	-2.52	-3.30
Aug.	+0.33	+6.14	-6.54	-2.73	-3.64	-5.04	-4.69	-3.92	-3.48	-1.77	+1.98	+6.44	+9.63	+11.04	+10.38	+5.95	+3.28	+2.40	-2.05	-2.76	-1.82	-2.39	-1.46	-3.00
Sept.	-0.95	-1.21	-4.01	-5.03	-2.45	-0.38	-5.03	-7.69	-8.03	-1.51	+2.15	+7.79	+10.03	+11.19	+10.89	+4.25	+0.63	-0.40	-2.35	-2.09	-2.99	-1.01	-1.13	-0.67
Oct.	-6.70	-6.31	-5.76	-2.87	-0.37	-0.78	+0.21	-1.95	-4.10	-1.89	+1.24	+5.23	+8.46	+8.97	+7.38	+7.75	+8.07	+3.50	+4.33	+1.83	-5.52	-6.25	-6.02	-8.45
Nov.	-7.59	-3.87	-4.26	-9.57	-2.15	-2.45	+3.09	+2.65	-1.06	-0.17	+1.97	+4.07	+6.41	+6.81	+5.40	+4.93	+6.15	+5.19	+7.67	+4.39	+0.02	-4.97	-8.33	-14.33
Dec.	-3.87	-2.86	-2.61	-1.48	-2.86	-2.51	-2.00	-0.08	-0.45	-1.66	-1.97	+1.74	+3.81	+5.16	+4.03	+4.76	+4.00	+3.93	+3.70	+2.72	+0.09	-1.56	-5.25	-4.78
Year	-5.57	-5.07	-5.21	-5.07	-3.14	-1.76	-2.25	-1.95	-2.36	-1.04	+1.23	+4.85	+7.29	+8.76	+8.41	+6.96	+5.70	+3.81	+1.96	+0.18	-1.95	-3.33	-4.51	-5.93
Winter	-5.18	-3.15	-3.11	-4.31	-2.36	-1.48	+0.29	+1.25	-0.17	-0.33	+0.50	+3.34	+5.29	+6.45	+5.95	+6.49	+5.79	+4.43	+3.30	-0.38	-4.41	-4.67	-6.18	-7.34
Equinox	-6.74	+6.28	-7.47	-7.72	-4.53	-2.23	-3.15	-2.91	-2.59	+0.99	+2.11	+7.25	+9.84	+11.04	+10.59	+8.06	+6.71	+4.19	+1.77	-1.29	-1.64	-3.97	-5.60	-7.02
Summer	-4.80	-5.77	-5.05	-3.17	-2.54	-1.57	-3.88	-4.19	-4.31	-1.79	+1.07	+3.93	+6.74	+8.80	+8.67	+6.33	+4.59	+2.82	+0.82	-0.36	+0.19	-1.36	-1.73	-3.43
INCLINATION																								
Jan.	-0.99	-0.63	-1.58	-1.47	-2.43	-3.52	-2.57	-2.17	-0.83	+0.17	+0.93	+1.01	+1.58	+0.73	+0.29	+0.47	+0.59	+0.96	+1.85	+2.25	+2.18	+1.92	+1.13	+0.16
Feb.	-0.80	-0.91	-1.45	-1.16	-2.09	-1.70	-1.96	+0.38	+1.10	+1.51	+1.62	+1.21	+1.06	+0.44	-0.40	-0.45	+0.10	+1.04	+0.75	+0.11	+1.34	+0.26	+0.17	-0.16
Mar.	+0.02	+0.76	-1.39	-2.00	-1.42	-1.92	-1.91	-1.01	-0.47	+0.55	+2.08	+1.89	+1.80	+0.74	+0.41	-0.32	-0.47	-0.37	-0.26	+0.76	+0.81	+0.67	+0.11	+0.93
Apr.	+2.19	+1.51	+3.31	+2.98	+0.57	+0.39	+1.67	+2.15	+2.75	+3.20	+2.90	+1.03	-0.49	-2.22	-1.86	-1.88	-2.96	-4.33	-4.17	-3.36	-2.05	-0.76	+0.39	-0.94
May	+1.23	-2.08	-0.89	-1.57	-2.31	+1.66	+3.21	+3.75	+4.91	+4.69	+4.06	+3.45	+1.15	+0.60	-2.99	-3.34	-4.58	-4.83	-2.23	-1.76	-1.49	+0.23	-1.52	+0.62
June	-0.74	-0.71	-1.66	-1.31	+0.29	+0.50	+0.62	+1.12	+1.71	+2.84	+2.90	+3.03	+2.43	+0.95	-0.51	-2.51	-1.25	-0.64	-1.42	-1.51	-1.74	-1.03	-0.83	-0.54
July	-0.68	-0.81	-0.78	-0.54	-0.85	-0.79	+0.17	+0.94	+2.77	+2.43	+2.76	+2.33	+1.57	+1.48	+1.35	-0.33	-0.97	-1.54	-2.41	-2.30	-1.78	-1.28	-0.52	-0.23
Aug.	-1.24	-1.85	-1.82	-1.63	-1.61	-1.21	-0.33	+0.50	+1.55	+3.04	+3.95	+2.68	+1.22	+0.03	+0.06	-1.03	+0.47	-0.98	-1.08	+0.45	+0.03	-0.47	-0.47	-0.16
Sept.	-1.63	-1.80	-1.24	-1.59	-2.12	-0.75	-1.43	+0.48	+3.32	+3.97	+3.78	+2.58	+1.47	+0.65	-3.36	-2.52	+2.19	+0.39	-0.22	-0.04	-0.30	-0.64	-0.66	-0.52
Oct.	-1.56	-1.39	-1.71	-1.96	-2.05	-2.77	-2.46	-1.72	-0.01	+0.98	+1.51	+1.27	+1.19	+1.41	+1.17	+0.77	-0.21	+0.43	+0.58	+1.06	+1.48	+1.72	+1.27	+0.99
Nov.	+0.56	+1.20	-0.08	-2.07	-2.87	-2.31	-2.40	-1.22	+1.71	+2.87	+1.58	+2.36	+1.94	+1.01	+1.19	+0.12	-1.44	-1.12	-0.64	-0.39	-0.12	-0.18	+0.09	+1.03
Dec.	+0.16	-0.02	-0.27	-0.61	-0.85	-0.94	-1.21	-0.93	-0.67	-0.49	-0.04	+0.74	+1.43	+1.34	+1.15	+0.68	+0.16	-0.15	-0.36	-0.17	-0.18	+0.61	+0.47	+0.16
Year	-0.29	-0.57	-0.87	-1.08	-1.48	-1.11	-0.72	+0.19	+1.49	+2.15	+2.34	+1.96	+1.36	+0.59	-0.29	-0.86	-0.70	-0.93	-0.81	-0.41	-0.15	+0.09	-0.03	+0.11
Winter	-0.27	-0.09	-1.05	-1.33	-2.07	-2.12	-2.04	-0.99	+0.33	+1.02	+1.02	+1.33	+1.51	+0.88	+0.56	+0.21	-0.14	+0.18	+0.40	+0.45	+0.81	+0.65	+0.46	+0.29
Equinox	-0.24	-0.23	-0.26	-0.65	-1.26	-1.27	-1.03	-0.03	+1.40	+2.17	+2.57	+1.69	+0.99	+0.14	-0.91	-0.99	-0.37	-0.97	-1.02	-0.40	-0.01	+0.25	+0.28	+0.11
Summer	-0.36	-1.39	-1.29	-1.26	-1.13	+0.04	+0.92	+1.58	+2.74	+3.26	+3.43	+2.87	+1.59	+0.77	-0.52	-1.80	-1.58	-2.00	-1.79	-1.28	-1.25	-0.64	-0.83	-0.08
HORIZONTAL FORCE																								
Jan.	+3.3	+4.6	+12.1	+11.9	+25.7	+37.0	+27.5	+23.9	+6.9	-5.4	-14.7	-14.5	-20.3	-5.0	+5.3	+3.9	+3.3	-0.2	-8.7	-16.9	-22.1	-25.2	-15.9	-7.3
Feb.	+0.3	+3.8	+11.9	+5.6	+17.4	+13.7	+18.4	-14.0	-24.7	-29.8	-30.3	-21.6	-17.9	-5.2	+11.5	+19.6	+25.6	+8.3	+4.2	+11.0	-5.1	+1.6	-2.3	-2.0
Mar.	-12.8	-35.4	-1.0	+15.4	+7.2	+18.9	+19.2	+8.0	+1.2	-13.4	-34.6	-31.0	-24.6	-4.6	+4.6	+24.2	+31.4	+33.3	+32.8	+11.2	+1.6	-7.6	-11.4	-32.6
Apr.	-50.2	-53.2	-98.5	-92.4	-47.2	-36.0	-46.4	-47.4	-48.9	-44.8	-31.8	+1.0	+24.4	+51.6	+48.9	+51.8	+69.0	+91.2	+91.8	+79.0	+57.3	+26.4	-2.2	+6.6
May	-61.1	-6.5	-31.5	-19.1	-0.3	-62.8	-80.9	-75.9	-83.1	-69.1	-52.9	-38.5	+7.9	+24.9	+89.9	+102.1	+115.5	+109.6	+63.5	+51.7	+36.5	+0.1	+6.3	-26.1
June	-1.9	-12.8	+5.1	+0.6	-20.4	-21.5	-18.6	-20.8	-26.3	-41.8	-44.9	-47.0	-35.1	-10.2	+16.9	+54.2	+41.0	+32.1	+38.0	+34.6	+34.5	+23.0	+15.5	+5.8
July	+4.6	+7.5	+8.2	+3.9	+9.1	+8.6	-5.3	-17.1	-45.0	-41.9	-45.8	-39.1	-28.4	-22.5	-16.0	+10.9	+23.1	+32.0	+45.5	+42.1	+33.0	+22.9	+8.2	+1.5
Aug.	-8.0	+5.9	+11.2	+9.5	+14.2	+10.3	+0.6	-10.9	-26.0	-48.7	-63.0	-44.3	-22.4	+1.9	+10.6	+40.5	+17.8	+35.7	+39.8	+12.9	+10.0	+9.1	+2.6	-9.3
Sept.	+22.5	+23.0	+7.5	+5.1	+10.9	-15.2	-3.1	-21.9	-59.3	-66.8	-61.3	-40.1	-21.1	-3.2	+67.7	+66.3	-7.5	+16.2	+20.7	+13.9	+12.3	+12.6	+11.9	+8.9
Oct.	+8.3	+5.2	+10.4	+15.3	+17.0	+31.8	+30.1	+21.6	-1.8	-15.7	-24.4	-21.2	-16.5	-15.4	-8.0	-1.3	+14.8	+10.4	+9.3	+3.0	-4.2	-15.7	-21.2	-31.8
Nov.	-13.9	-34.7	-13.4	+2.9	+11.9	+6.7	+16.3	+6.9	-28.6	-41.5	-19.1	-24.3	-14.9	+1.1	-1.4	+12.1	+34.3	+34.1	+35.3	+32.9	+17.4	+6.3	-0.5	-25.9
Dec.	-0.4	+0.3	+1.8	+4.9	+8.9	+10.4	+14.1	+9.7	+6.2	+3.1	-4.2	-15.7	-24.4	-20.9	-13.8	-5.9	+0.7	+5.4	+8.9	+7.3	+7.8	-2.7	-1.4	-0.1
Year	-9.1	-8.5	-6.3	-3.0	+4.5	+0.2	-2.3	-11.5	-27.5	-34.7	-35.6	-28.0	-16.1	-0.6	+18.0	+31.5	+30.7	+34.0	+31.8	+23.6	+14.9	+4.2	-0.9	-9.4
Winter	-2.7	-8.8	+3.1	+6.3	+16.0	+16.9	+19.1	+6.6	-10.1	-18.4	-17.1	-19.0	-19.4	-7.5	+0.4	+7.4	+16.0	+11.9	+9.9	+8.6	-0.5	-5.0	-5.0	-8.8
Equinox	-8.1	-15.1	-20.4	-14.1	-3.0	-0.1	-0.1	-9.9	-27.2	-35.2	-38.0	-22.8	-9.5	+7.1	+28.3	+35.3	+26.9	+37.8	+38.7	+26.8	+16.7	+3.9	-5.7	-12.2
Summer	-16.6	-1.5	-1.7	-1.3	+0.7	-16.3	-26.1	-31.2	-45.1	-50.4	-51.7	-42.2	-19.5	-1.5	+25.3	+51.9	+49.3	+52.3	+46.7	+35.3	+28.5	+13.7	+8.1	-7.0

"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 1956

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

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	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
Jan.	25.8	45.4	37.8	18.0	23.3	6.2	61.4	82.1	93.4	9.38	2.25	23.6	5.09	0.96	16.0	16.16	5.77	62.2
Feb.	33.0	39.0	27.3	26.4	32.4	10.1	49.0	90.5	110.8	8.31	2.09	31.0	6.86	1.54	24.6	18.04	3.71	55.9
Mar.	48.7	63.2	46.4	51.7	50.1	21.4	68.0	115.8	143.9	13.52	2.74	47.6	10.63	3.11	51.6	23.02	4.08	68.7
Apr.	69.9	66.4	61.7	72.3	79.9	31.2	171.0	155.7	213.4	13.72	4.03	72.8	16.43	4.59	75.6	27.14	7.64	190.3
May	73.7	69.4	59.2	54.6	70.2	33.0	185.4	123.0	263.4	13.41	4.17	77.4	14.92	2.97	52.7	20.09	9.74	198.6
June	69.6	67.0	41.2	56.2	72.7	36.0	96.3	71.0	125.0	13.02	4.11	74.0	14.24	3.50	59.9	13.10	4.77	101.2
July	65.4	61.4	31.5	57.6	69.6	30.5	89.5	59.0	40.8	12.62	4.00	68.6	14.35	3.69	60.6	13.21	5.18	91.3
Aug.	61.6	80.2	43.2	46.3	63.2	30.1	104.6	82.1	140.4	16.62	3.28	62.5	13.12	2.84	46.8	17.58	5.90	103.5
Sept.	57.3	73.4	35.4	58.4	65.7	26.2	125.4	113.8	149.4	14.83	3.40	57.3	13.92	3.51	56.0	19.22	7.33	134.5
Oct.	49.5	52.3	28.1	49.1	52.6	16.8	57.5	87.4	97.4	11.42	3.18	46.2	10.63	3.09	49.6	17.42	4.49	63.6
Nov.	38.3	53.2	45.7	55.2	42.4	7.1	69.4	115.9	157.9	11.55	2.71	38.0	8.96	3.50	54.1	22.00	5.74	76.8
Dec.	33.0	29.9	18.4	32.3	26.6	7.0	43.1	46.9	30.6	6.84	2.02	30.1	5.82	2.07	30.3	10.41	2.64	38.5
Year	47.3	52.9	34.5	45.2	48.1	18.3	66.0	73.4	107.5	10.82	2.54	48.0	10.81	2.69	44.7	14.69	3.82	69.6
Winter	31.6	39.7	28.6	29.4	29.2	5.0	42.4	68.9	83.3	8.70	2.11	29.8	6.65	1.86	29.4	13.83	3.63	38.5
Equinox	53.1	61.3	39.0	56.0	56.5	21.3	75.6	95.1	129.6	12.73	3.03	54.4	12.85	3.38	55.3	18.76	3.84	76.7
Summer	67.0	68.4	39.3	51.2	68.0	30.8	100.5	75.1	130.3	13.82	3.84	69.9	14.10	3.16	53.4	14.57	5.43	104.0

NON-CYCLIC CHANGE

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	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	-0.5	0.00	+0.1	+6.5	+0.93	+0.7	-4.9	-0.01	+1.2
Feb.	+0.3	+0.09	-0.4	+2.1	-0.06	-0.6	-11.1	-1.01	+4.6
Mar.	+0.1	-0.12	+1.0	+4.5	+0.13	-3.5	-20.6	+1.13	-17.1
Apr.	-0.3	+0.20	-0.6	+3.4	+0.12	-1.6	+34.2	-0.11	+27.9
May	+0.9	-0.13	+0.1	+2.7	+0.73	-4.7	+9.3	+1.29	+25.4
June	-0.3	+0.09	+0.1	+0.3	-1.61	-2.6	-2.3	+1.67	+14.3
July	+0.5	+0.04	-0.1	+8.3	+0.39	-0.6	-17.0	-0.56	-5.8
Aug.	-0.1	-0.03	+0.2	+4.2	+0.58	-2.1	-14.0	-0.32	+6.1
Sept.	-0.4	-0.20	-0.1	+7.2	+0.33	-1.4	-12.7	+0.49	+6.9
Oct.	+0.4	-0.18	-0.2	+4.9	+0.75	-2.6	-16.5	-2.03	+2.5
Nov.	-0.3	+0.26	+0.9	+0.5	+2.00	+1.5	-16.3	-2.04	-13.1
Dec.	+0.3	-0.01	-0.2	+8.3	+1.32	-4.5	+0.5	-0.70	-3.6
Year	+0.1	0.00	+0.1	+4.4	+0.47	-1.8	-5.9	-0.18	+4.1
Winter	-0.1	+0.09	+0.1	+4.3	+1.05	-0.7	-7.9	-0.94	-2.7
Equinox	-0.1	-0.07	0.0	+5.0	+0.33	-2.3	-3.9	-0.13	+5.1
Summer	+0.3	-0.01	+0.1	+3.9	+0.02	-2.5	-6.0	+0.52	+10.0

"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 T

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	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 +							
Jan.	669	676	658	52.8	53.1	52.6	1269	1267	1270	16369	3146	69	47.1	48240
Feb.	674	684	661	52.3	52.7	52.1	1271	1266	1278	16374	3145	69	46.9	48244
Mar.	664	674	648	50.9	52.1	49.2	1276	1274	1276	16366	3136	69	47.6	48245
Apr.	667	682	627	50.3	51.3	48.2	1270	1271	1260	16369	3134	69	47.4	48241
May	672	685	639	50.4	50.3	49.8	1277	1273	1264	16375	3135	69	47.1	48249
June	688	693	677	49.9	49.6	50.3	1274	1273	1273	16391	3136	69	46.0	48252
July	688	691	683	49.5	49.6	49.7	1275	1272	1276	16391	3134	69	46.0	48252
Aug.	686	695	677	49.3	49.1	49.3	1274	1268	1280	16389	3133	69	46.1	48251
Sept.	677	684	663	48.5	48.8	48.4	1282	1279	1285	16381	3127	69	46.9	48255
Oct.	679	692	660	48.1	48.2	47.3	1279	1274	1283	16383	3126	69	46.7	48253
Nov.	671	684	638	47.1	47.5	45.9	1290	1285	1283	16376	3120	69	47.5	48261
Dec.	691	691	687	47.3	47.3	47.7	1286	1284	1288	16396	3124	69	46.1	48264
Year	677	686	660	49.7	50.0	49.2	1277	1274	1276	16380	3133	69	46.8	48251

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, $3^{\circ}12'W$.

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	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.	+4.2	+5.9	-5.0	+0.2	+3.9	-2.3	+0.8	+0.2	-15.4	-3.6	-2.0	+8.7	+1.4	-1.3	+2.2	+1.5	-1.6	-14.5	-4.8	-3.7	-1.5	+1.1	-1.6	-0.2
Feb.	+9.6	+1.3	-7.5	-0.3	+3.0	-1.8	-0.4	+0.4	-10.4	-9.3	-1.8	+9.9	-0.2	-4.3	+0.6	+1.5	+0.5	-11.4	-4.6	-1.5	+1.3	+0.7	-1.3	-1.2
Mar.	+12.7	-1.5	-14.3	-1.3	+2.8	-1.5	-1.0	+1.4	-17.7	-16.2	-3.1	+12.2	-2.6	-5.2	0.0	+3.9	-4.1	-15.5	-9.8	-4.2	-0.2	+1.3	-1.7	-0.2
Apr.	+15.3	-16.8	-15.6	+0.7	+2.4	-3.2	+1.8	+1.0	-16.4	-24.7	+2.0	+10.6	-3.1	-6.1	+2.5	+1.6	-5.4	-23.3	-7.8	-8.4	+2.2	+1.2	0.0	+0.3
May	+17.7	-19.3	-15.1	+6.7	+0.1	-1.3	0.0	+0.4	-9.1	-23.5	+4.0	+12.1	-4.2	-5.4	-0.3	-0.8	-8.9	-24.7	-9.1	+0.1	+2.4	-0.3	-2.0	+0.1
June	+17.7	-18.7	-13.8	+3.6	+0.7	-1.0	-1.1	+0.9	-5.8	-24.5	+2.7	+12.1	-3.9	-2.9	0.0	+1.2	+1.5	-15.2	-10.0	-3.4	+2.7	-0.1	-1.0	-1.0
July	+20.4	-13.2	-14.8	+2.4	-0.7	-0.8	+0.6	-0.5	-5.9	-23.7	+4.3	+9.7	-2.9	-3.4	-0.3	+1.1	+4.0	-9.0	-7.8	-2.3	+1.5	+0.3	-1.1	-1.0
Aug.	+20.1	-9.0	-14.1	+4.6	+2.4	-2.4	+0.3	+1.1	-11.1	-22.1	+10.3	+13.8	-4.9	-6.5	+0.9	+0.9	+1.7	-12.5	-13.0	-1.4	+3.6	-0.1	-1.4	-1.3
Sept.	+21.4	-6.5	-10.6	+4.4	+3.3	-5.1	-1.3	+2.4	-10.2	-18.0	+8.3	+12.7	-5.1	-8.3	+2.3	+1.5	+0.6	-13.9	-4.3	-0.3	+5.5	+1.6	-2.0	+0.2
Oct.	+19.4	+3.0	-11.6	-0.3	+3.7	-2.0	+0.6	+1.7	-9.7	-14.2	-0.4	+11.3	-3.3	-5.4	+2.7	+1.4	-1.9	-10.9	-6.2	-4.2	+1.2	+0.3	-2.4	+0.5
Nov.	+11.8	-1.5	-11.1	-1.9	+3.0	-3.0	-0.4	-1.0	-14.2	-12.9	-6.9	+7.7	-3.7	-2.7	+1.3	+2.7	-5.5	-18.1	-3.6	-3.5	-0.1	+0.6	-0.7	+1.8
Dec.	+9.6	+4.3	-7.1	-2.9	+3.5	+0.4	0.0	-0.2	-7.6	-9.1	-4.6	+5.6	-1.0	-1.3	+0.3	+2.7	+3.8	-7.3	-1.6	-1.9	+0.9	-0.9	-0.8	-0.3
Year	+15.0	-6.0	-11.7	+1.3	+2.3	-2.0	0.0	+0.7	-11.1	-16.8	+1.1	+10.6	-2.8	-4.4	+1.0	+1.6	-1.3	-14.7	-6.9	-2.9	+1.6	+0.5	-1.3	-0.2
Winter	+8.8	+2.6	-7.7	-1.2	+3.3	-1.6	0.0	-0.1	-11.9	-8.7	-3.8	+8.0	-0.9	-2.4	+1.1	+2.2	-0.7	-12.9	-3.7	-2.7	+0.2	+0.4	-1.1	0.0
Equinox	+17.2	-5.5	-13.0	+0.9	+3.1	-3.0	0.0	+1.6	-13.5	-18.3	+1.7	+11.7	-3.5	-6.2	+1.9	+2.1	-2.7	-15.9	-7.0	-4.3	+2.1	+1.1	-1.5	+0.2
Summer	+19.0	-15.0	-14.4	+4.3	+0.6	-1.4	0.0	+0.5	-8.0	-23.4	+5.3	+11.9	-3.9	-4.5	+0.1	+0.6	-0.4	-15.3	-10.0	-1.8	+2.5	-0.1	-1.4	-0.8
	QUIET DAYS																							
Year	+15.9	-2.7	-9.9	+0.3	+3.2	-2.3	-0.5	+0.9	-2.8	-13.4	+3.7	+9.7	-3.3	-4.4	+0.5	+2.0	+4.8	-1.5	-4.7	-1.5	+2.3	+0.4	-0.9	-0.5
Winter	+9.6	+1.3	-7.3	-2.2	+3.6	-1.0	-0.7	+0.7	-3.1	-5.6	-1.3	+6.5	-2.2	-2.5	+0.3	+2.4	+0.7	-1.7	-0.7	-0.6	+0.7	-0.3	-0.7	-0.6
Equinox	+20.6	-0.7	-11.8	+0.8	+4.7	-3.3	-0.9	+1.7	-1.9	-14.9	+3.1	+11.5	-3.7	-6.6	+1.7	+2.5	+5.3	-0.3	-5.3	-2.6	+3.0	+1.3	-1.6	-0.7
Summer	+17.2	-8.8	-10.8	+2.4	+1.2	-2.5	+0.3	+0.2	-3.8	-20.9	+9.9	+11.7	-4.4	-4.2	-0.5	+0.9	+8.3	-2.4	-8.2	-1.1	+3.3	+0.1	-0.6	-0.2
	DISTURBED DAYS																							
Year	+10.6	-18.6	-16.2	+7.3	+1.5	-3.6	-0.1	0.0	-24.3	-20.3	-3.5	+10.7	-2.1	-5.1	+2.2	+1.4	-19.8	-45.8	-9.9	-5.4	+1.3	+1.3	-2.0	+0.1
Winter	+9.1	-0.9	-13.0	+2.7	+0.9	-3.9	+1.3	-1.9	-23.0	-11.6	-8.6	+9.4	+1.6	-0.7	+2.9	+3.3	-9.8	-37.7	-4.6	-6.1	-0.2	+1.9	-0.8	+1.6
Equinox	+7.3	-20.8	-16.7	+6.2	+2.1	-5.6	+2.0	+2.8	-32.6	-25.6	-1.7	+10.4	-3.5	-6.9	+4.0	+3.1	-22.3	-53.6	-9.9	-8.6	+1.0	+2.1	-0.9	+1.6
Summer	+15.5	-34.0	-18.8	+13.1	+1.5	-1.4	-3.7	-1.0	-17.5	-24.7	-0.3	+11.8	-4.6	-8.0	-0.3	-2.2	-27.4	-46.2	-15.1	-1.6	+3.2	-0.4	-4.2	-2.8

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

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	North component								West component								Vertical component							
	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4
	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$	γ	$^{\circ}$
	ALL DAYS																							
Jan.	7.2	39	5.0	279	4.5	130	0.8	91	15.8	260	9.0	353	1.9	142	2.6	68	14.6	190	6.1	238	1.9	315	1.6	275
Feb.	9.7	85	7.5	274	3.5	130	0.6	327	13.9	231	10.1	356	4.3	193	1.6	35	11.4	181	4.8	258	1.5	69	1.8	240
Mar.	12.8	100	14.4	271	3.2	128	1.7	337	24.0	231	12.6	352	5.8	216	3.9	12	16.0	198	10.7	253	1.3	1	1.7	276
Apr.	22.7	141	15.6	279	4.0	153	2.0	73	29.6	217	10.8	17	6.8	216	3.0	70	23.9	196	11.4	229	2.5	71	0.3	19
May	26.1	141	16.5	300	1.3	185	0.4	9	25.2	205	12.7	25	6.8	227	0.8	214	26.2	203	9.1	277	2.5	106	2.0	286
June	25.7	140	14.3	291	1.2	157	1.4	321	25.1	197	12.3	19	4.8	243	1.2	11	15.3	177	10.5	258	2.7	102	1.4	240
July	24.3	126	15.0	286	1.1	229	0.7	139	24.4	197	10.6	30	4.4	230	1.2	360	9.8	159	8.1	260	1.5	90	1.5	240
Aug.	22.0	117	14.9	294	3.4	145	1.1	31	24.7	210	17.2	43	8.1	226	1.3	57	12.6	176	13.1	270	3.6	101	1.9	240
Sept.	22.4	110	11.5	299	6.1	157	2.7	344	20.7	213	15.2	39	9.7	221	2.7	69	13.9	181	4.3	272	5.7	83	2.0	288
Oct.	19.6	85	11.6	275	4.2	128	1.8	32	17.2	218	11.3	5	6.4	221	3.1	75	11.1	193	7.4	243	1.2	87	2.5	295
Nov.	11.9	101	11.2	267	4.3	145	1.0	213	19.2	231	10.3	324	4.6	243	3.0	39	18.9	200	5.0	233	0.6	2	2.0	351
Dec.	10.5	69	7.7	254	3.5	93	0.2	193	11.9	223	7.3	327	1.6	226	2.7	20	8.2	155	2.5	227	1.3	142	0.9	262
Year	16.1	115	11.8	283	3.1	141	0.7	14	20.2	217	10.6	12	5.2	222	1.9	45	14.8	188	7.5	254	1.7	83	1.3	273
Winter	9.1	77	7.8	267	3.7	126	0.1	193	14.8	237	8.9	341	2.6	210	2.4	40	12.9	186	4.5	240	0.4	33	1.1	284
Equinox	18.0	111	13.1	280	4.3	144	1.6	13	22.7	220	11.9	15	7.1	219	2.8	54	16.1	193	8.2	245	2.4	72	1.5	289
Summer	24.2	131	15.1	293	1.5	166	0.5	11	24.8	202	13.1	30	6.0	231	0.6	21	15.4	185	10.2	266	2.5	102	1.6	252
	QUIET DAYS																							
Year	16.1	103	9.9	278	3.9	135	1.0	347	13.7	195	10.4	27	5.5	227	2.0	28	5.0	111	4.9	259	2.4	90	1.1	255
Winter	9.7	85	7.6	259	3.7	115	1.0	329	6.4	212	6.7	355	3.4	230	2.5	21	1.9	161	0.9	234	0.8	120	0.9	242
Equinox	20.6	95	11.8	280	5.8	134	2.0	344	15.0	191	12.0	22	7.6	219	3.0	47	5.3	97	5.9	250	3.3	77	1.7	259
Summer	19.4	120	11.1	289	2.8	163	0.4	62	21.3	193	15.3	47	6.1	236	1.0	344	8.7	109	8.3	268	3.3	97	0.7	262
	DISTURBED DAYS																							
Year	21.4	153	17.8	301	3.9	167	0.1	258	31.7	233	11.2	348	5.6	212	2.7	70	49.9	207	11.3	248	1.8	55	2.0	287
Winter	9.1	99	13.3	288	4.0	176	2.3	158	25.7	246	12.7	324	1.8	124	4.4	55	38.9	198	7.6	224	1.9	3	1.8	347
Equinox	22.0	164	17.9	297	6.0	169	3.4	49	41.4	235	10.5	357	7.7	216	5.0	65	58.0	206	13.1	236	2.3	34	1.9	343
Summer	37.3	159	22.9	311	2.0	144	3.9	267	30.3	219	11.8	5	9.3	219	2.2	201	53.7	214	15.2	270	3.2	106	5.0	249

KEW

KEW OBSERVATORY

Latitude 51°28'N.
Longitude 0°19'N.
G.M.T. of Local Mean Noon .. 12h. 1m.

	<i>Height of instruments</i>	
	<i>above M.S.L.</i>	<i>above ground</i>
	<i>m.</i>	<i>m.</i>
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* 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, i.e. 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 check gauge with the rim exactly the same height above ground level as was the old Beckley gauge, i.e. 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./hr. This gauge stands on the lawn about 6.5 metres west-north-west of the tilting-siphon recorder.

The calibration of the Jardi rate of rainfall recorder was checked on 24 January. It was found to be satisfactory except at rates below 10 mm./hr. and such values are therefore 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 pyrliographs are given in the Introduction for 1951. The Gorczyński pyrliograph, in use prior to January 1951, fitted with a new clockwork heliostat and arranged to record on a Cambridge Thread Recorder, instead of on the original millivoltmeter, was reinstated in March 1956. Data therefrom are published in Tables 166 and 168. In all cases the records were standardised by reference to observations made with Angstrom pyrliometers Nos. 24 and 100B.

Identification numbers of instruments in use in 1956

Thermometer No. 173971, graduated in degrees absolute, was used as the control for the dry bulb whilst Thermometer No. 738, graduated in degrees fahrenheit, continued in use as the control for the wet bulb. Rain measure No. 1999 was broken during the year and replaced by No. 2017. There were no other changes in the instruments during 1956.

Thermometer corrections 1956

	No. 173971 N.P.L. 1915	No. 738 N.P.L. 1938	M.O. 20430 N.P.L. 1948	M.O. 20428 N.P.L. 1949	M.O. 18003 N.P.L. 1929
	°A.	°F.	°F.	°F.	°F.
Certified	260 +0.1	2 +0.2	22 -0.1	22 0.0	2 -0.2
	273 0.0	12 +0.1	32 -0.1	32 0.0	22 -0.2
	280 0.0	32 0.0	42 -0.1	42 0.0	32 0.0
	290 -0.1	52 -0.1	52 -0.1	52 0.0	52 0.0
	300 -0.1	72 -0.1	62 -0.1	62 -0.1	72 0.0
	310 0.0	92 -0.2	72 -0.1	72 -0.1	.. ..
Applied	0.0	0.0	-0.1	0.0	0.0

Notes on the meteorological summaries

Despite an intensely cold February, with a mean temperature 8.0°F. below the average for the period 1871-1915, the mean temperature for the year 1956, 282.8°A. (49.6°F.) was identical with the average for that period. June, July and August were also cold months, the latter with a mean temperature 3.1°F. below average, was the coldest August since 1912. March, May, September and December were warm months. There were 2 days, both in July, when the maximum temperature in the north-wall screen exceeded 300°A. (80.6°F.) The highest reading was 300.6°A. (81.7°F.) at 15h. 20 m. on 27 July. There were ten "ice days" i.e. a day on which the maximum temperature in the north-wall screen was 273.0°A. (32.0°F.) or less. These all occurred in February. The lowest temperature in the north-wall screen was 264.7°A. (17.1°F.) registered at 05h. 40m. on 2 February, whilst the lowest reading of the grass minimum thermometer was 258.5°A. (5.9°F.) on 4 February.

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

The rainfall for the year, 619 mm., was but 2 per cent above the average for the standard period 1881-1915. The very dry months February, May and November, with only 13, 14, and 18 per cent respectively of the average, were offset by three wet months January, July and August with 210, 275 and 163 per cent respectively of the normal. February 1956 was the driest since 1932, there has been only one drier May, i.e. in 1896 and only one drier November, i.e. in 1945, since records began in 1866. July 1956, on the contrary was the wettest month of that name since 1866. The heaviest rainfall in one day was 60 mm. on 9 July, this is the maximum amount ever recorded in one day at Kew Observatory. Intense rate of rainfall during a thunderstorm at 4h. 20m. on 9 July forced the pen of the Jardi recorder off the chart. The highest instantaneous rate of rainfall, obtained by the aid of the record of the "minute by minute" gauge, was estimated to exceed 170 mm./hr. Rates of this intensity have occurred only twice previously, i.e. in 1937 on 13 August and in 1946 on 26 July.

The sunshine for the year, 1433 hours, was 36 hours less than the normal amount for the period 1906-1935. The totals for each of the months June to September were all below average whilst December with a total of only 9 hours, 24 per cent of the normal, was easily the dullest December, except that of 1890 which had 0.3h. ever experienced since records began in 1880. March and May were exceptionally sunny, the latter being the sunniest month of May since 1922.

The highest wind speed recorded in a gust was 30 m./sec. (68 m.p.h.) at 14h. 30m. on 29 July. The highest on record is 33 m./sec. (73 m.p.h.) on 16 March, 1947.

TABLE 152 - DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS

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	
	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.12	0.02	179	315	0.29	0.31	154	151	0.16	0.17	355	346	0.12	0.07	223	202
February	0.05	0.05	28	73	0.35	0.36	156	146	0.11	0.12	326	340	0.02	0.03	71	108
March	0.24	0.11	349	38	0.46	0.40	155	149	0.06	0.07	328	332	0.06	0.04	15	25
April	0.41	0.28	25	31	0.44	0.40	150	151	0.02	0.03	157	185	0.05	0.04	360	353
May	0.70	0.32	13	27	0.43	0.35	146	148	0.10	0.09	162	161	0.01	0.02	208	319
June	0.25	0.30	26	17	0.25	0.32	143	143	0.09	0.09	141	160	0.03	0.01	258	260
July	0.29	0.26	104	16	0.31	0.31	146	140	0.10	0.10	138	153	0.01	0.01	25	281
August	0.08	0.21	100	20	0.34	0.34	141	144	0.04	0.06	160	155	0.03	0.04	320	309
September	0.11	0.12	289	6	0.43	0.40	151	152	0.02	0.01	12	350	0.05	0.04	316	332
October	0.23	0.06	15	76	0.43	0.38	158	160	0.08	0.09	357	359	0.02	0.01	40	22
November	0.09	0.03	162	124	0.36	0.34	159	160	0.10	0.13	352	358	0.02	0.03	187	183
December	0.39	0.08	55	137	0.31	0.31	145	152	0.14	0.15	346	353	0.06	0.07	175	205
Arithmetic mean	0.25	0.15			0.37	0.35			0.09	0.09			0.04	0.03		
Year	0.17	0.14	32	29	0.37	0.35	151	150	0.03	0.03	4	359	0.01	0.01	282	280
Winter	0.10	0.03	80	111	0.33	0.33	154	152	0.13	0.14	346	350	0.04	0.05	200	208
Equinox	0.22	0.14	6	32	0.44	0.39	153	153	0.03	0.04	349	345	0.04	0.03	360	359
Summer	0.26	0.27	38	20	0.33	0.33	144	144	0.08	0.08	148	157	0.01	0.02	295	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 $\sum c_n \sin(15nt + \alpha_n)$, 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	
	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926	1956	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.82	0.99	223	221	0.32	0.43	45	35	0.15	0.17	214	208	0.03	0.01	117	3
February	1.50	1.53	214	221	0.41	0.57	48	34	0.13	0.12	230	211	0.05	0.06	169	169
March	2.61	2.45	221	222	0.77	0.63	36	40	0.09	0.07	28	334	0.12	0.11	204	197
April	3.27	3.21	223	226	0.41	0.48	57	51	0.16	0.22	17	24	0.07	0.07	180	218
May	4.23	3.72	223	227	0.06	0.15	57	74	0.29	0.31	34	35	0.09	0.04	42	20
June	2.69	3.72	221	226	0.03	0.02	330	84	0.14	0.26	3	35	0.09	0.10	41	33
July	2.82	3.68	219	225	0.04	0.06	341	50	0.18	0.29	31	31	0.06	0.07	34	28
August	2.45	3.54	227	226	0.31	0.34	37	52	0.17	0.30	53	28	0.02	0.03	266	218
September	2.21	3.22	228	228	0.53	0.71	44	49	0.10	0.14	13	24	0.10	0.16	198	213
October	2.14	2.32	226	229	0.66	0.76	33	50	0.11	0.10	258	248	0.16	0.12	226	200
November	1.26	1.39	225	226	0.49	0.57	45	44	0.16	0.18	217	232	0.02	0.02	142	141
December	0.74	0.90	225	226	0.22	0.40	38	41	0.09	0.16	204	215	0.03	0.04	280	38
Arithmetic mean	2.23	2.56			0.35	0.43			0.15	0.19			0.07	0.07		
Year	2.22	2.56	223	226	0.35	0.42	41	45	0.04	0.08	9	17	0.02	0.02	190	195
Winter	1.07	1.20	221	223	0.36	0.49	45	39	0.13	0.15	217	217	0.02	0.01	170	121
Equinox	2.55	2.80	224	226	0.59	0.64	40	47	0.08	0.09	1	4	0.11	0.11	207	207
Summer	3.05	3.67	222	226	0.10	0.14	31	59	0.19	0.29	32	32	0.06	0.04	36	27

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

Atmospheric electricity

As mentioned in the Introductions for the past few years, instrumental defects had prevented satisfactory records from being obtained. In 1956 the necessary repairs, adjustments and recalibrations were made to the various instruments.

Potential gradient (Tables 175 to 177)

The Kelvin electrograph which had been in use for many years was accidentally broken in August 1955. It was replaced by a Dolezalek quadrant electrometer (No. C.136931) made by the Cambridge Instruments Ltd. After adjustment, this instrument was found to have satisfactory insulation and stability of zero and of scale factor. The radioactive collector system remained unchanged. The factor by which the potential recorded by the electrometer has to be multiplied in order to obtain the potential gradient in the open was derived, from January to 30 April by observations made by the stretched wire method* in the paddock and from May onwards by observations made with the Wilson apparatus in the underground Laboratory. The mean factor for the year was 4.85 m^{-1} , giving an equivalent height for the collector of 20.6 cm.

In 1956 there were 171, 140 and 38 days of electrical character 0, 1 and 2 respectively. The extreme hourly values of potential gradient in Table 176 are 1165 v./m. at 9h. on 10 March and minus 880 v./m. at 03h. on 26 January. During the following months, when there were not 10 "quiet" calendar days, other spells of 24h. were used as follows:-

*SCRASE, F. J. Observation of Atmospheric Electricity at Kew Observatory. *Geophys. Mem.*, London, 7, No. 60, 1934.

1956	Calendar days	Other spells	Total
January	5	5	10
April	5	5	10
November	9	1	10
December	7	2	9

Air-earth current (Table 174)

In the early part of the year the Lindemann electrometers used in measurements with the Wilson apparatus were repaired and the remainder of the apparatus was thoroughly cleaned and checked. A new test plate, with the same dimensions as the old one (20.8 cm. diameter) was used. The capacity of the measuring system was re-determined in 1958 and found to be 6.13×10^{-11} farads; this value was used in calculating the value in Table 174. Satisfactory observations of potential gradient were obtained with this apparatus from May onwards but the observations of air-earth current were not considered accurate until the end of June. The mean value of the air-earth current measurements for the second half of 1956, allowing equal weight for each month, was 156×10^{-18} amp. cm.^{-2} and the corresponding mean conductivity was 56×10^{-18} ohm. $^{-1}$ cm.^{-1} . These values are both some fifty per cent higher than the corresponding means for the period 1909-42 and are easily the highest yet obtained. Careful checks of the apparatus have not revealed any defects which could explain this large increase.

The *Observatories' Year Book* 1938 should be consulted for an explanation of the figures in the foregoing paragraphs.

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 Owens atmospheric pollution recorder was put back into operation on 3 January but was completely frozen up again with consequential loss of record 1-9 February. This instrument did not function properly 1-11 December because of a defect in the paper clamping mechanism.

During 1956 for 332 days on which the record of the Owens pollution recorder was available, the highest estimate of pollution exceeded 2.3 mg./m^3 , this value occurring at 21h. and 22h. on 4 January. There were 14 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 68 of which 38 hours occurred in January.

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 1956 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 1956. The total number of shocks measured during the year was 407. The phases of 106 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed.

Two British earthquakes were recorded during 1956. One, on 10 January, near Ashby de la Zouch, Leicestershire and the other, on 4 May, was felt along the coast of Suffolk.

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

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	18*6	00*0	05*4	31*3	21*7	27*8	25*8	11*6	20*9	26*7	23*9	24*9	19*1	15*4	16*6	23*1	18*9	21*5
2	27*4	00*8	18*0	37*0	31*0	34*7	14*0	09*2	11*4	27*7	20*5	25*0	21*0	19*1	20*2	22*6	17*9	20*0
3	32*0	27*3	29*7	39*4	36*7	38*2	14*2	07*6	12*1	20*5	11*9	15*2	24*0	20*3	21*3	18*8	05*7	15*2
4	34*0	31*8	32*7	39*0	35*2	37*8	16*9	03*6	11*1	17*1	10*3	15*1	26*6	23*9	25*6	05*7	97*3	00*8
5	32*1	28*6	30*1	35*2	33*4	34*1	25*5	16*9	23*3	12*8	03*9	06*9	27*6	24*0	25*8	10*6	02*5	07*3
6	28*7	26*3	27*2	34*8	32*3	33*4	25*5	16*8	20*7	22*4	12*8	17*3	25*8	22*1	24*3	10*2	04*9	06*9
7	26*3	11*8	20*5	36*8	33*4	35*4	33*9	19*6	28*1	23*3	22*1	22*6	26*1	23*5	24*8	06*5	02*9	04*2
8	11*8	93*8	02*4	33*6	24*5	28*3	34*0	30*3	32*4	22*3	19*3	20*5	26*0	24*7	25*3	19*6	06*5	13*9
9	93*8	84*6	91*1	33*0	24*6	28*6	30*3	22*7	25*9	21*2	17*1	19*1	24*7	11*6	17*3	24*2	19*4	21*2
10	84*6	72*9	76*4	33*0	25*9	29*8	24*9	22*2	23*1	17*6	12*1	14*3	20*5	13*2	15*6	23*8	15*4	19*0
11	94*1	74*0	86*1	26*5	21*3	24*3	26*5	24*8	25*6	13*4	11*7	12*4	20*6	15*8	18*5	15*4	09*2	11*7
12	04*4	91*2	95*1	21*3	06*0	15*2	26*0	23*3	24*9	12*0	03*5	07*5	29*4	18*5	23*9	18*1	09*3	12*6
13	12*5	04*4	10*5	06*9	01*8	05*2	26*6	24*0	25*5	03*5	96*9	99*6	30*9	27*5	29*3	21*0	18*1	19*9
14	10*7	96*2	02*7	13*0	06*8	10*4	24*0	13*8	19*1	03*4	97*5	00*3	30*2	26*9	28*1	23*0	20*7	21*5
15	11*5	96*7	05*9	12*8	11*4	12*2	13*8	08*9	10*5	09*0	03*4	05*8	31*1	26*1	28*8	25*1	22*0	23*9
16	16*4	11*5	15*0	13*4	11*3	12*1	10*8	09*2	10*0	14*0	09*0	11*1	26*2	21*8	24*1	22*0	04*7	13*1
17	15*3	03*8	11*6	20*9	13*4	17*1	12*3	10*0	11*3	22*7	14*0	17*4	23*3	17*7	20*3	19*2	03*1	09*1
18	12*4	98*6	04*6	21*1	18*1	19*5	11*9	06*5	08*7	27*6	22*7	25*4	18*0	14*7	16*4	21*8	17*4	19*7
19	12*6	09*3	11*0	18*4	13*8	16*7	07*2	99*5	03*9	28*6	26*8	27*7	19*3	17*9	18*5	20*9	16*8	17*9
20	10*8	00*4	06*4	13*8	11*1	12*2	99*5	91*3	94*3	28*5	21*3	24*8	19*4	15*3	17*5	23*3	20*8	21*9
21	12*2	99*4	06*5	15*3	11*9	13*7	94*8	90*9	92*4	21*5	13*9	17*0	15*3	09*3	11*9	27*0	23*1	24*8
22	11*6	98*9	07*3	20*4	15*2	17*0	01*2	94*6	97*1	13*9	07*2	09*9	14*4	09*4	11*0	30*5	27*0	28*9
23	08*0	95*4	00*9	22*6	20*4	21*6	01*3	92*1	97*4	09*9	07*5	08*4	19*5	14*4	17*4	30*6	27*2	29*2
24	16*9	08*0	12*2	25*5	21*1	23*2	97*8	91*6	94*3	10*7	08*8	09*8	19*3	12*8	16*0	27*2	22*0	23*9
25	21*0	16*7	19*1	28*1	25*2	26*8	07*6	97*8	02*7	08*8	04*2	06*2	22*5	15*9	17*8	22*4	17*2	19*8
26	16*7	04*5	08*2	28*0	26*7	27*4	17*4	07*5	11*6	06*1	03*3	04*5	28*9	22*5	26*1	20*7	18*2	19*2
27	23*2	09*5	17*6	28*3	26*4	27*2	23*7	17*3	20*6	09*5	06*1	07*5	28*9	18*9	24*7	21*6	19*9	20*7
28	23*0	18*0	20*6	26*4	20*7	22*8	23*6	17*3	21*5	14*9	09*4	11*6	18*9	13*2	15*0	20*0	12*2	14*9
29	18*0	09*4	13*3	23*4	15*0	19*7	17*4	13*1	15*2	17*2	14*5	15*3	17*7	12*2	14*7	13*3	11*9	12*7
30	14*1	04*5	10*2				24*0	17*3	21*0	18*9	17*1	17*8	19*1	15*5	17*4	13*0	01*9	08*7
31	21*7	03*7	10*6				24*2	21*6	23*0				19*0	16*0	17*0			
Mean	15*37	04*26	09*96	25*49	20*56	23*19	17*31	10*74	14*17	16*86	11*76	14*03	23*01	18*07	20*37	20*04	13*80	16*80

	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	01*9	99*0	99*9	21*5	00*0	10*5	21*6	16*2	18*7	17*5	07*4	13*5	31*5	25*7	29*1	28*6	23*8	26*0
2	11*3	00*2	04*4	06*3	00*4	04*5	16*4	14*5	15*5	12*3	06*7	09*5	25*7	20*2	21*7	29*0	26*0	27*4
3	16*2	11*3	14*6	10*2	04*3	07*1	14*8	09*3	12*0	16*1	12*3	14*1	23*6	20*9	22*6	30*1	28*1	29*2
4	16*7	11*4	15*1	11*3	10*0	10*7	10*9	05*2	09*2	17*0	10*4	14*2	25*2	23*4	24*3	30*1	24*1	26*7
5	11*9	06*3	08*5	14*3	10*3	11*8	05*2	99*9	02*7	16*6	09*8	11*7	31*4	23*7	26*5	24*1	17*4	20*2
6	21*3	11*9	18*5	17*6	14*0	15*5	04*8	01*0	02*3	25*4	16*6	22*0	33*9	31*4	32*7	30*0	19*6	25*9
7	20*7	16*9	18*6	27*3	17*5	22*6	12*7	04*4	08*1	25*4	22*8	23*8	32*6	20*0	27*3	31*5	29*3	30*4
8	20*4	16*2	18*8	27*5	23*6	25*7	13*6	08*0	11*6	23*3	21*0	22*0	20*0	02*9	10*8	31*0	27*5	30*0
9	18*6	13*3	15*7	24*7	15*5	21*8	10*5	06*2	08*0	27*9	21*1	24*0	10*9	01*5	04*9	27*5	21*5	23*8
10	21*7	18*4	19*8	15*6	04*4	09*2	17*9	09*9	13*6	30*3	27*9	29*2	11*7	08*1	09*9	24*6	18*7	22*2
11	24*2	21*7	23*1	08*9	97*8	02*6	20*1	17*5	18*5	31*6	29*2	30*2	11*9	08*9	10*4	18*7	10*5	13*4
12	24*1	15*4	19*7	12*9	08*9	11*3	23*2	19*7	21*4	30*0	28*4	29*3	19*7	11*8	15*5	11*9	05*5	09*3
13	15*4	07*0	10*4	09*0	00*2	03*8	20*3	18*8	19*5	31*1	28*5	29*7	23*2	19*6	21*8	13*6	07*4	10*7
14	07*0	04*0	04*9	15*9	07*0	11*1	24*2	19*8	22*5	28*6	21*5	25*2	27*7	18*9	22*3	13*5	98*1	05*1
15	07*0	04*6	05*6	16*0	12*2	14*5	25*2	21*0	23*0	21*5	15*2	17*7	31*3	27*6	29*3	00*6	95*3	98*0
16	10*6	06*5	07*9	12*2	05*1	08*9	24*8	20*8	22*8	15*8	12*8	14*4	33*5	31*3	32*3	08*8	94*6	98*8
17	15*3	10*3	13*1	05*1	00*2	03*0	24*5	22*1	23*3	17*9	10*6	14*0	31*4	23*2	27*1	17*0	08*8	12*0
18	15*1	09*6	12*4	00*2	91*2	93*7	23*2	22*0	22*6	20*0	09*6	13*7	23*2	18*6	20*5	25*5	17*0	21*1
19	09*6	05*2	07*0	09*1	95*0	03*1	22*7	19*4	21*1	22*8	14*3	19*9	18*6	08*3	13*3	29*2	25*4	27*3
20	13*4	03*5	07*7	13*0	08*7	09*9	19*7	14*0	16*4	23*3	10*1	14*6	22*5	07*6	13*8	31*5	29*1	30*5
21	20*3	13*4	16*9	15*3	12*5	14*0	14*0	07*5	11*0	28*6	23*3	27*0	27*2	22*5	25*7	31*3	28*5	29*7
22	21*2	19*0	20*2	12*5	10*6	11*1	09*6	06*2	07*2	28*8	25*2	27*1	26*8	23*2	24*6	28*7	24*5	26*5
23	20*6	19*3	19*7	11*2	99*2	06*7	12*7	09*6	11*6	25*3	19*8	21*9	29*6	23*7	26*5	24*5	17*1	20*5
24	26*4	19*6	22*6	99*2	87*1	94*4	12*4	08*7	10*5	19*8	12*1	15*1	33*2	29*0	31*4	21*2	16*8	18*8
25	26*9	24*3	25*7	94*3	86*5	89*8	10*0	07*5	08*6	18*3	10*9	13*6	29*0	17*9	21*4	21*7	09*1	17*1
26	25*3	16*8	21*0	03*9	94*3	00*5	09*5	06*2	07*7	22*7	18*3	20*9	18*5	06*9	13*7	13*0	08*3	10*4
27	16*9	02*8	09*0	03*9	98*8	00*8	12*6	02*3	09*0	24*3	21*5	23*2	08*4	02*2	06*7	15*3	07*0	13*0
28	03*3	95*5	99*0	11*2	03*9	06*3	08*7	97*5	02*2	24*0	14*8	20*4	02*2	96*3	98*1	07*0	97*4	00*0
29	03*5	80*5	91*7	16*8	11*2	13*9	18*1	08*7	13*4	17*5	13*8	14*8	19*9	01*4	11*8	02*0	93*2	99*0
30	15*9	03*5	10*1	21*8	16*6	18*9	19*1	16*8	17*9	27*7	17*5	23*3	24*7	19*9	23*1	98*5	87*5	91*2
31	21*8	15*9	19*4	22*9	20*5	21*7				31*9	27*5	30*0				05*0	98*5	02*3
Mean	16*27	09*78	12*96	12*63	05*40	09*01	16*10	11*36	13*73	23*33	17*45	20*33	23*63	16*55	19*97	20*16	13*41	16*66

Annual 19.15 12.71 15.89

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.

Table with 25 columns (Hour G.M.T. 0-24) and 12 rows (Jan-Dec, Annual). Values are in millibars. Includes a 'Mean' column on the right.

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.

Table with 25 columns (Hour G.M.T. 0-24) and 12 rows (Jan-Dec, Annual). Values are in millibars. Includes a 'Mean' column on the right.

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: $h_s = 3.0$ m.

Table with 25 columns (Hour G.M.T. 0-24) and 12 rows (Jan-Dec, Annual). Values are in degrees Absolute. Includes a 'Mean' column on the right.

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 $T(^{\circ}K.) = t(^{\circ}C.) + 273.16$

TEMPERATURE

Maximum, minimum and daily mean values in degrees Absolute for each day 9h. 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 $T(^{\circ}\text{K.}) = t(^{\circ}\text{C.}) + 273^{\circ}16$

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
	<i>degrees Absolute</i>																	
1	84.7	76.2	80.5	68.7	65.3	67.2	84.2	77.6	80.7	82.7	77.0	79.5	89.1	82.0	85.0	94.1	84.5	88.7
2	81.5	75.2	78.9	69.6	64.7	67.6	87.6	83.0	85.0	84.6	75.3	79.6	90.2	79.2	84.7	91.9	85.1	87.9
3	78.2	73.4	76.0	73.6	68.0	71.0	84.0	82.3	83.1	86.3	76.5	81.4	88.4	82.3	85.1	90.6	83.3	86.8
4	78.1	71.3	74.8	75.3	66.3	71.8	84.7	78.4	81.8	82.0	77.6	79.7	90.7	83.4	86.2	87.6	83.6	86.3
5	75.3	71.7	73.7	82.9	74.8	78.5	82.9	76.0	79.0	83.1	75.3	80.2	93.0	82.6	87.1	91.2	82.9	86.4
6	76.9	73.2	75.3	81.4	76.7	79.6	82.4	75.1	79.0	80.5	74.0	77.0	95.9	81.3	88.7	89.3	81.9	85.6
7	76.8	73.7	75.4	78.8	74.8	77.4	80.6	76.6	78.5	82.5	73.9	79.1	92.7	83.0	87.4	87.4	82.1	84.8
8	76.1	72.7	74.6	80.9	76.5	78.9	80.5	72.7	77.1	84.7	77.5	81.5	92.9	82.4	87.6	85.1	81.6	83.1
9	74.7	72.6	73.7	77.8	68.7	72.6	81.4	70.7	76.0	88.1	78.4	82.6	89.1	82.9	86.1	89.9	80.1	83.8
10	79.4	74.0	77.1	72.6	69.4	70.8	82.7	72.5	76.3	91.1	79.2	85.5	90.7	82.6	86.4	87.5	81.9	84.1
11	82.0	77.9	79.4	70.8	68.3	69.7	79.0	73.4	75.3	85.8	79.1	82.4	91.0	81.7	85.8	92.1	83.3	88.0
12	79.5	76.3	78.6	76.7	69.8	73.9	80.2	72.1	75.3	86.5	78.4	81.2	88.6	81.2	84.9	93.2	85.0	89.9
13	78.5	72.3	75.8	77.1	71.0	74.3	76.4	73.2	74.9	85.4	81.1	83.5	92.4	78.9	85.6	90.7	81.8	85.9
14	80.8	75.2	79.3	73.2	68.9	71.2	79.8	72.6	76.0	81.1	77.1	78.7	90.3	82.0	86.0	89.8	81.5	85.0
15	80.3	77.1	78.7	76.4	70.2	73.2	76.7	72.7	75.0	83.4	75.5	79.0	93.4	78.7	86.8	90.2	80.0	85.3
16	80.5	73.0	77.5	76.3	70.2	73.6	82.3	71.0	76.0	84.0	72.5	79.0	93.7	83.3	88.0	85.7	83.0	84.3
17	78.4	75.7	76.9	74.5	71.5	73.2	86.3	77.0	80.3	81.5	75.9	78.5	89.0	80.7	85.4	86.9	83.4	85.3
18	79.1	73.5	77.1	74.3	70.6	72.0	87.6	76.9	81.3	83.0	75.1	78.5	86.3	78.0	82.7	90.1	80.5	85.8
19	81.4	73.2	77.3	72.5	68.1	70.2	84.8	75.2	79.0	84.2	74.1	78.8	87.0	75.9	82.0	92.3	86.0	89.0
20	82.9	79.8	81.5	72.6	66.8	69.9	85.7	79.1	81.7	87.0	73.4	79.8	89.3	79.2	84.0	91.2	83.8	87.4
21	83.3	76.1	79.3	72.2	67.5	70.5	85.8	77.5	81.8	84.9	73.6	79.5	92.6	76.7	85.6	91.9	83.8	88.1
22	83.4	75.3	78.8	72.7	69.0	71.1	85.0	78.0	81.6	85.6	76.5	79.9	93.3	81.7	87.9	91.0	86.0	88.9
23	83.9	74.0	78.1	72.9	68.8	70.7	88.6	78.0	84.0	87.1	73.6	80.7	96.3	81.5	89.6	92.0	86.8	89.3
24	78.9	73.5	75.5	71.9	69.7	70.7	85.9	82.2	83.6	85.1	76.1	81.0	92.9	82.4	86.6	91.9	83.8	88.8
25	76.8	71.5	74.7	75.3	68.9	71.9	86.4	79.6	82.8	86.4	79.4	82.2	89.4	80.2	84.5	96.8	81.6	89.5
26	85.1	76.3	81.0	76.8	69.8	74.1	89.5	77.7	84.1	85.1	77.4	81.0	88.6	80.2	84.5	95.8	84.9	90.5
27	83.0	78.9	80.5	75.3	73.0	74.3	88.9	79.1	84.1	82.0	77.9	79.9	90.6	79.2	85.2	93.4	86.1	89.6
28	82.5	79.0	80.5	85.0	73.2	79.0	83.8	77.0	80.5	85.3	76.2	80.3	97.6	83.7	90.5	93.8	85.0	88.8
29	84.9	79.7	82.1	83.8	78.8	81.3	86.6	78.8	81.9	85.4	74.6	80.8	90.1	83.8	86.9	91.1	86.0	88.2
30	81.8	78.6	80.0				82.1	77.6	80.1	86.8	75.8	82.0	95.6	81.8	88.9	95.0	85.4	89.5
31	80.1	67.9	73.9				82.5	77.1	79.3				95.5	83.7	90.3			
Mean	80.3	74.8	77.6	75.6	70.3	73.1	83.7	76.5	79.8	84.7	76.3	80.4	91.5	81.2	86.3	91.0	83.5	87.1

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	<i>degrees Absolute</i>																	
1	91.1	85.9	88.9	90.3	85.2	87.2	87.0	82.3	84.8	87.6	82.8	85.9	82.3	76.3	79.7	81.1	76.5	79.4
2	92.2	84.8	88.5	91.8	87.0	89.3	90.8	83.8	88.0	88.2	83.2	86.4	83.1	80.2	82.0	82.7	78.0	80.4
3	90.5	86.7	88.3	92.1	85.4	88.0	89.7	83.6	86.4	87.8	81.5	84.7	84.0	81.9	82.9	85.0	79.3	82.4
4	92.9	86.8	89.1	87.8	84.5	85.9	90.0	83.0	85.9	85.3	79.2	82.5	83.8	81.6	82.3	83.8	81.7	82.9
5	92.6	88.5	90.2	91.6	81.5	86.5	92.3	86.2	89.3	85.7	77.5	81.6	84.8	78.0	82.1	84.7	82.0	83.4
6	95.2	86.5	90.5	90.3	83.3	86.6	90.4	86.4	87.8	84.6	78.4	81.3	83.9	76.6	80.2	85.3	80.1	83.6
7	96.7	88.4	92.0	93.0	84.4	88.3	89.3	85.9	87.6	85.3	77.9	81.8	85.3	73.1	79.6	82.7	76.7	80.4
8	99.8	88.9	94.0	94.9	83.4	89.3	92.3	83.2	87.5	85.8	82.4	84.1	86.5	78.4	82.4	82.6	80.1	81.4
9	93.1	89.1	91.1	94.7	87.6	91.5	88.5	86.4	87.6	87.3	81.6	84.8	85.9	81.1	83.6	81.9	80.4	81.3
10	92.7	85.7	88.9	92.4	88.8	90.5	91.0	86.5	88.4	86.1	78.9	83.0	85.8	77.9	82.3	83.2	80.5	81.9
11	94.9	83.3	89.3	93.2	86.2	89.6	90.2	85.4	87.9	88.6	79.3	84.5	83.3	78.5	80.8	83.8	82.4	83.2
12	91.0	83.4	87.3	92.3	84.9	88.1	90.2	83.5	87.3	87.1	78.7	82.2	82.6	78.8	80.4	86.1	80.1	83.2
13	88.2	84.9	86.6	93.2	85.4	88.6	96.3	88.0	91.3	88.8	78.0	82.5	81.7	76.3	78.7	82.2	78.9	80.1
14	88.6	85.3	87.1	92.1	83.8	87.8	92.9	86.5	89.5	88.9	78.2	82.6	81.8	76.2	79.4	83.7	79.4	81.7
15	93.2	85.0	88.9	91.8	84.6	88.1	90.5	84.7	88.0	89.4	78.0	84.1	81.9	75.0	78.9	85.0	81.5	83.4
16	95.2	85.0	89.8	90.7	86.4	88.2	90.1	84.6	87.8	90.0	81.3	86.7	82.8	80.0	81.0	85.7	82.6	84.4
17	93.9	86.8	89.7	92.5	87.3	89.4	89.4	84.2	86.6	87.6	80.6	85.6	80.4	79.0	79.8	84.4	81.1	82.8
18	94.9	84.2	90.0	91.3	87.7	89.3	90.5	85.0	87.5	89.3	82.0	85.6	81.9	78.5	79.8	82.9	73.8	80.9
19	93.4	87.2	89.9	91.3	85.9	88.5	94.6	84.0	88.4	87.1	78.9	84.4	81.3	78.9	79.8	79.7	73.9	77.8
20	89.7	86.4	87.9	92.5	83.2	87.6	94.0	83.8	88.2	88.8	83.7	87.0	81.1	78.4	79.8	78.7	75.0	77.1
21	90.3	85.0	88.1	93.2	81.2	86.9	92.6	87.6	89.6	87.8	80.0	84.8	78.4	73.5	77.0	77.6	72.9	75.5
22	94.2	82.2	88.6	90.5	82.5	86.9	96.5	87.3	91.6	87.9	84.2	85.7	76.4	70.6	73.4	76.0	72.5	73.9
23	95.3	86.2	90.7	90.8	84.9	87.0	97.0	88.7	92.3	89.2	83.3	86.1	76.0	69.0	73.7	77.6	74.8	76.1
24	97.1	88.4	92.9	90.8	83.8	86.9	96.5	88.3	91.6	88.1	81.4	85.1	75.9	73.3	74.9	77.1	73.6	75.5
25	99.7	87.5	93.8	88.9	83.0	85.6	93.3	84.3	89.4	82.4	77.1	80.2	85.0	74.3	81.1	74.7	72.1	73.9
26	00.4	87.2	93.4	90.0	84.0	86.7	92.2	84.2	88.0	81.8	74.0	78.0	84.9	82.3	83.9	76.5	73.6	74.5
27	00.6	86.9	93.8	89.2	84.0	86.5	89.0	82.4	86.7	83.8	76.5	79.6	85.2	80.0	82.4	76.7	71.5	74.1
28	92.6	88.7	90.3	91.1	83.6	86.7	90.5	87.0	89.0	83.9	75.2	79.9	80.7	75.1	78.3	81.2	76.7	79.6
29	89.9	85.2	87.6	89.9	80.0	85.0	91.1	85.3	87.5	82.1	79.6	80.9	78.4	74.2	76.2	82.1	78.6	80.5
30	90.9	83.9	87.1	87.1	82.9	84.7	91.1	83.3	87.0	81.3	76.5	79.0	77.1	72.5	75.2	82.8	79.8	81.2
31	90.7	84.3	87.5	88.8	82.7	84.8				82.3	77.1	79.4				81.4	79.2	80.2
Mean	93.6	86.1	89.7	91.3	84.5													

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

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

Table with 13 columns for months (JANUARY to DECEMBER) and 2 columns for Rel. hum. and Vap. press. Each month has 2 sub-columns for % mb. and hum. press. Rows represent days 1-31.

*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.

Table showing hourly relative humidity (0-24) and monthly/annual means. Includes a 'per cent.' label and a 'Mean*' column.

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.

Table showing hourly vapour pressure (0-24) and monthly/annual means. Includes a 'millibars' label and a 'Mean*' column.

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

RAINFALL

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	5.4	3.0	44	...	...	...	...	...	...	...	...	...	1.3	0.5	10	...	...	...
2	2.9	3.0	19	...	...	...	...	...	...	...	...	...	...	...	...	0.1	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.0	3.8	...
4	...	...	...	...	...	...	...	...	...	2.9	1.5	15	0.5	1.1	...	2.6	4.0	...
5	...	...	...	...	...	...	...	...	...	...	...	...	1.5	2.5	...	...	...	...
6	...	...	...	0.2	0.2	...	0.3	0.4	10	...	...	...	...	...	...	0.7	0.4	...
7	0.7	1.5	...	...	...	...	...	...	...	0.1	0.1	...	...	...	...	7.7	2.8	30
8	0.2	0.3	...	0.4	0.6	...	...	...	...	...	...	...	...	...	...	10.7	4.0	35
9	2.0	5.4	...	0.7	0.4	...	...	...	...	...	...	...	1.5	1.6	...	3.5	7.7	...
10	15.7	9.0	20	0.4	0.4	...	...	...	...	0.1	0.3	...	...	...	...	0.3	0.4	...
11	0.1	0.2	...	...	...	...	...	...	...	0.1	0.3	...	0.4	0.3	10	1.2	0.7	10
12	2.8	2.3	11	1.3	2.2	...	...	...	...	7.4	7.5	...	...	...	...	4.7	2.1	30
13	0.1	...	...	0.4	0.7	...	...	...	...	8.0	10.1	11	...	...	...	1.6	0.4	26
14	7.3	4.9	29	...	...	...	...	...	...	3.0	7.0	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	0.5	1.5	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.5	9.2	10
17	0.1	...	...	0.2	0.5	...	...	...	...	0.9	0.9	...	...	...	...	0.7	1.4	...
18	...	...	...	0.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	0.2	0.4	...	0.9	0.6	...	...	...	...	...	...	...	...	...	...	...	...	...
20	0.5	0.6	...	0.1	...	...	2.6	2.9	...	...	...	...	...	...	...	...	...	...
21	0.2	0.3	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	0.6	...
22	3.6	3.8	35	...	...	...	0.7	0.7	...	...	...	...	...	...	...	...	...	...
23	14.6	10.7	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	0.8	1.3	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	0.2	0.2	...	...	...	...
26	7.5	5.4	12	...	...	...	2.1	1.6	...	2.0	2.7	...	...	...	...	...	...	...
27	...	...	...	...	...	...	0.3	0.5	...	...	...	...	...	...	...	...	...	...
28	4.2	4.1	...	...	...	...	...	...	...	...	...	...	...	...	...	2.7	1.2	32
29	6.5	4.8	12	0.4	0.2	14	1.2	1.7	...	...	...	...	1.5	0.9	10	0.6	0.5	...
30	10.7	11.2	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	8.5	8.5	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	93.8	79.4	-	5.2	5.8	-	19.5	25.6	-	24.1	34.0	-	5.7	4.8	-	46.9	39.2	-

	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	2.1	1.6	10	11.7	5.3	...	0.7	1.2	...	35.1	9.7	60	...	...	...	0.7	0.4	...
2	12.8	1.9	83	...	...	...	13.0	2.6	60	6.7	1.5	62	0.1	0.1	...	...	...	...
3	...	...	...	4.3	1.6	53	1.0	1.0	16	...	...	...	0.4	0.7	...	0.1	...	...
4	1.8	1.3	...	0.1	0.2	...	6.1	5.7	10	0.4	0.2	13	...	...	...	...	...	...
5	0.1	0.1	...	0.5	0.2	...	4.9	2.8	16	...	...	...	...	...	...	...	...	...
6	...	...	...	9.1	3.1	50	7.0	2.3	61	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	0.1	0.1	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	1.0	1.2	...	...	...	...	0.4	1.2	...
9	60.4	4.7	>170	...	...	...	10.2	4.5	12	...	...	...	1.0	1.1	...	0.5	0.9	...
10	...	...	...	3.6	2.4	...	0.3	0.2	...	...	...	...	2.0	1.3	13	...	...	...
11	...	...	...	0.1	0.2	...	1.3	1.5	24	...	...	...	...	...	...	8.3	5.4	19
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	0.3	20
13	1.2	3.8	...	3.8	2.3	15	...	...	...	...	...	...	...	...	...	...	0.1	...
14	6.7	5.8	...	...	...	...	...	...	...	...	...	...	5.4	2.6	14	4.3	2.8	63
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.2	4.1	...
16	...	...	...	1.3	2.0	...	...	...	...	...	...	...	...	...	...	6.8	4.4	28
17	...	...	...	1.4	0.5	28	...	...	...	0.6	0.4	...	...	...	...	1.9	4.4	...
18	0.5	0.3	...	9.3	3.1	42	...	...	...	4.5	4.3	...	...	...	...	...	...	...
19	16.5	3.2	72	4.7	1.4	48	...	...	...	...	...	...	...	...	...	0.1	0.1	...
20	26.7	8.0	47	...	...	...	...	...	...	0.2	0.2	...	...	...	...	...	...	...
21	...	...	...	...	...	...	0.7	0.5	...	...	...	...	...	...	...	...	...	...
22	...	...	...	0.1	...	...	0.2	0.2	...	...	...	...	...	...	...	...	...	...
23	...	...	...	7.5	1.8	119	...	...	...	...	...	...	...	...	...	8.0	10.5	...
24	...	...	...	2.5	2.2	...	...	...	...	1.6	0.5	32	...	...	...	4.9	3.1	...
25	...	...	...	8.2	2.7	25	...	...	...	1.8	0.5	18	0.8	1.5	...	0.7	1.8	...
26	...	...	...	5.4	0.3	63	0.2	0.2	...	...	...	...	...	...	...	1.5	3.0	...
27	...	...	...	15.7	3.9	77	0.8	0.7	...	...	...	...	0.1	0.1	...	...	...	...
28	12.4	1.9	35	0.3	0.1	11	4.5	4.2	18	1.6	0.8	26	0.2	0.1	...	8.7	8.1	...
29	9.4	5.4	13	1.6	1.3	15	...	...	...	...	...	...	...	...	...	1.8	0.5	...
30	0.1	0.2	...	0.5	1.1	...	...	...	...	0.3	0.2	13	...	...	...	5.8	4.3	...
31	...	...	...	1.7	0.9	14	...	...	...	...	...	...	...	...	...	5.8	6.7	...
Total	150.7	38.2	-	93.4	36.6	-	51.0	27.7	-	53.8	19.5	-	10.0	7.5	-	65.0	62.1	-

RAINFALL

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

163 KEW OBSERVATORY: $h_r = 5.5 \text{ m.} + 0.53 \text{ m.}$

	Hour G.M.T.																						0-24		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22		22-23	23-24
	<i>millimetres</i>																								
Jan.	2.1	3.8	6.9	4.8	7.3	6.0	4.1	5.3	2.3	3.7	3.7	5.4	10.7	4.6	1.0	0.5	1.3	4.5	3.8	1.8	1.5	3.1	4.4	1.2	93.8
Feb.	...	0.4	...	...	0.3	...	0.6	0.3	0.2	0.4	0.1	...	0.3	0.2	...	0.2	0.8	0.2	0.6	...	0.2	0.2	0.1	0.1	5.2
Mar.	0.2	0.1	0.2	...	2.1	1.7	0.6	0.5	0.8	0.6	0.6	0.5	0.9	0.8	1.0	0.4	0.3	1.2	2.2	1.4	0.7	1.0	1.6	0.1	19.5
Apr.	1.4	0.5	0.3	0.6	0.2	...	...	0.5	1.1	0.5	0.6	0.8	0.3	0.9	1.0	2.0	2.5	0.9	2.8	1.8	1.8	1.0	1.1	1.5	24.1
May	...	...	...	...	...	...	...	...	...	...	...	...	...	2.1	0.7	0.4	0.3	0.9	0.5	0.3	0.5	...	...	...	5.7
June	3.8	3.5	0.8	0.8	0.4	0.3	1.7	1.2	7.0	3.9	5.4	3.0	0.6	1.1	1.3	0.3	0.4	0.4	1.7	0.3	1.7	3.7	1.2	2.4	46.9
July	13.2	9.0	9.1	9.8	29.3	17.4	8.0	1.4	0.3	5.7	10.1	0.4	3.4	5.6	5.0	2.9	11.4	1.3	0.6	1.5	0.1	0.1	0.7	4.4	150.7
Aug.	1.7	0.4	1.4	3.1	0.9	1.1	0.8	3.4	6.3	3.0	7.2	5.3	3.2	16.1	7.6	3.3	0.8	2.6	4.8	10.5	7.0	0.3	1.4	1.2	93.4
Sept.	1.4	4.1	8.1	5.9	1.5	0.4	0.3	0.5	2.2	0.4	1.6	5.2	2.4	3.7	2.0	1.5	0.7	...	0.8	1.9	2.4	2.6	0.9	0.5	51.0
Oct.	0.1	...	0.8	1.2	0.7	0.5	1.7	1.1	1.8	8.4	10.6	0.8	8.4	2.4	2.3	1.0	1.9	1.3	0.5	0.2	3.0	4.7	0.4	...	53.8
Nov.	...	...	0.1	0.6	0.3	0.2	0.2	...	1.2	3.6	1.5	0.1	...	0.5	0.4	0.1	0.2	0.9	...	...	...	0.1	...	...	10.0
Dec.	3.5	2.3	2.9	2.4	3.3	0.4	0.9	1.4	2.9	4.3	3.1	4.4	4.1	5.5	1.4	2.2	3.7	1.1	1.6	1.1	1.7	2.7	3.7	4.4	65.0
Annual	27.4	24.1	30.6	29.2	46.3	28.0	18.9	15.5	26.1	34.5	44.5	25.9	34.3	43.5	23.7	14.8	24.3	15.3	19.9	20.8	20.6	19.4	15.6	15.8	619.1

RAINFALL

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

164 KEW OBSERVATORY: $h_r = 5.5 \text{ m.} + 0.53 \text{ m.}$

	Hour G.M.T.																						0-24		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22		22-23	23-24
	<i>hours</i>																								
Jan.	3.9	4.6	5.3	5.8	6.1	5.0	3.6	3.4	3.1	4.1	3.3	3.3	4.3	3.6	1.7	1.5	1.6	2.9	2.3	0.9	1.0	2.6	2.9	2.6	79.4
Feb.	...	0.3	...	...	0.6	...	0.5	0.6	0.8	0.3	...	...	0.2	0.1	...	0.5	0.6	0.1	0.4	...	0.4	0.2	...	0.2	5.8
Mar.	0.3	0.2	0.3	...	1.1	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.1	1.2	0.9	1.0	1.8	2.9	2.4	1.0	0.7	1.5	0.2	25.6
Apr.	2.5	1.1	0.9	1.4	...	...	...	1.0	1.8	1.5	1.5	1.6	0.7	1.1	2.0	2.1	2.8	1.6	2.3	1.6	1.0	1.3	2.0	2.2	34.0
May	...	...	...	...	...	...	...	...	...	...	...	...	...	0.9	0.5	0.4	0.2	1.0	0.6	0.7	0.5	...	...	...	4.8
June	2.7	2.8	2.0	1.7	1.0	1.2	2.0	1.3	3.6	2.8	2.1	2.6	1.2	1.4	1.0	0.5	0.6	0.5	0.4	0.5	1.1	2.1	2.1	2.0	39.2
July	2.3	1.3	1.1	2.6	1.4	1.1	1.4	1.8	0.7	1.2	3.0	0.8	1.6	2.4	3.6	2.9	2.6	1.4	0.8	1.4	0.5	0.1	0.8	1.4	38.2
Aug.	1.6	0.6	1.0	1.7	1.2	1.2	0.9	1.4	1.8	2.9	2.6	2.4	1.2	3.4	1.8	1.1	0.5	1.6	2.2	1.6	1.2	0.2	1.3	1.2	36.6
Sept.	1.3	1.7	1.7	2.5	0.8	0.4	0.1	1.0	1.0	1.0	1.0	1.7	0.8	0.5	1.3	1.2	0.6	...	1.4	1.3	2.3	1.8	1.1	1.2	27.7
Oct.	0.1	...	0.4	1.0	1.0	0.4	1.0	1.4	0.8	1.0	1.6	0.6	1.1	1.4	1.0	1.6	1.3	1.4	0.2	0.2	0.8	0.9	0.3	...	19.5
Nov.	...	...	...	1.0	0.7	0.2	0.4	...	1.2	1.3	1.0	0.2	...	0.2	0.3	0.1	0.3	0.5	...	...	...	0.1	...	...	7.5
Dec.	2.1	2.8	3.4	2.6	2.4	0.2	1.5	2.3	2.4	3.4	3.0	2.6	4.1	4.2	2.2	3.3	2.9	1.4	1.5	1.3	2.2	2.8	3.8	3.7	62.1
Annual	16.8	15.4	16.1	20.3	16.3	11.4	12.4	15.2	18.2	20.5	20.1	16.8	16.5	20.3	16.6	16.1	15.0	14.2	15.0	11.9	12.0	12.7	15.9	14.7	380.4

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": none in 1956
- "Partial drought": 1 February-2 March; 15 April-2 June
- "Dry spell": 13 February-2 March; 5-19 March; 10-28 May; 12-27 September

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 spells": 23 August-6 September
- "Wet spells": None in 1956

Rainfall duration

Hours	0.1-1.0	1.1-2.0	2.1-6.0	6.1-12.0	>12.0
Number of days	64	29	47	14	1

Continuous or Heavy Falls

The fall of the longest duration occurred on 30-31 January when 11 mm. fell in 9 hours 18 minutes

Heavy falls in short periods

On 9 July, 21 mm. fell in 15 minutes, i.e. a noteworthy fall as defined by *British Rainfall* 1935, p.274. 5 mm. of this total fell in less than 6 minutes

Rate of Rainfall (Jardi Recorder)

The highest instantaneous rate of rainfall recorded by this instrument was >170 mm./hr. on 9 July at 04h. 20m.* The maximum rate exceeded 100 mm./hr. on 9 July and 23 August. The maximum rate exceeded 50 mm./hr. on 2, 9 and 19 July; 3 and 23 August; 2 and 6 September; 1 and 2 October; and 15 December.

*See note in Introduction

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_g (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	1.6	20	60	4.6	51	210	...	...	40	0.4	3	10	3.8	26	400	4.0	25	530
2	4.2	54	420	5.8	64	670	3.2	29	200	6.2	48	1080	8.3	56	1630	5.1	31	430
3	...	...	...	3.7	40	180	...	...	...	4.8	37	640	0.9	6	40	7.7	47	950
4	3.0	38	200	2.1	23	250	8.9	81	2010	6.5	50	730	6.6	44	840	1.3	8	120
5	...	...	...	0.7	8	60	8.5	77	1250	0.8	6	40	9.6	64	1110	11.5	70	1870
6	...	...	...	...	...	...	0.2	2	10	5.2	39	640	12.7	84	2100	4.6	28	610
7	...	...	...	2.0	21	130	1.2	11	110	0.3	2	30	8.2	54	1140	3.5	21	470
8	...	...	10	...	...	...	8.5	75	1590	0.3	2	10	4.7	32	410	1.5	9	120
9	...	...	...	1.6	17	70	8.9	78	1930	9.5	71	2190	3.4	22	590	2.7	16	410
10	1.6	20	110	2.9	30	180	9.6	84	1660	4.0	30	330	10.2	67	1350	...	...	...
11	4.4	54	350	1.7	18	60	4.7	41	490	3.4	25	410	0.9	6	60	0.2	1	20
12	...	...	...	1.9	20	120	8.3	72	1170	2.1	15	220	5.8	38	680	4.8	29	320
13	5.8	71	590	4.4	45	380	...	...	...	...	...	...	12.0	78	2180	9.5	58	1590
14	...	...	...	6.4	65	590	6.4	55	740	...	...	...	2.9	19	230	11.6	70	2200
15	4.2	51	340	1.7	17	180	1.4	12	120	4.9	36	510	13.9	89	2750	10.3	62	1430
16	4.6	56	450	1.4	14	280	7.0	59	810	7.7	56	1220	6.6	42	820	...	...	...
17	0.6	7	40	2.6	26	180	3.8	32	430	3.7	27	360	6.4	41	510	...	...	...
18	5.9	71	660	1.8	18	150	5.4	45	610	10.2	73	1440	6.7	43	510	3.9	23	480
19	2.3	27	260	2.8	28	160	6.1	51	590	7.7	55	780	9.8	62	1440	0.7	4	50
20	0.9	11	70	0.8	8	60	2.6	21	250	10.3	73	1570	9.7	61	1290	5.4	33	410
21	2.0	24	180	0.4	4	80	2.4	20	230	12.2	86	1770	13.8	87	2660	7.5	45	1240
22	0.1	1	10	...	...	...	4.1	34	560	5.4	38	490	12.6	79	1800	1.8	11	120
23	0.2	2	10	5.4	52	570	9.8	80	2170	12.7	89	2580	13.0	82	1880	2.7	16	140
24	5.4	63	670	...	...	...	0.1	1	10	1.7	12	160	10.5	66	2130	1.6	10	110
25	3.1	36	310	8.5	81	900	6.2	50	600	1.6	11	110	8.0	50	1450	10.0	60	1390
26	...	...	...	...	...	10	7.8	63	1570	1.3	9	100	11.1	69	1410	11.9	72	2530
27	...	...	...	...	...	...	6.1	49	620	...	...	...	12.8	80	3290	13.1	79	2060
28	...	...	...	0.7	7	70	9.0	71	960	9.2	63	680	10.7	66	1750	3.5	21	450
29	0.1	1	...	...	...	10	1.3	10	70	7.6	52	1150	2.7	17	200	0.3	2	30
30	...	...	...	...	...	...	0.1	1	40	6.1	41	540	8.4	52	1350	5.8	35	570
31	...	...	...	...	...	...	1.6	12	170	...	...	...	10.6	65	1510	...	...	...
Mean	1.61	...	150	2.20	...	190	4.62	...	680	4.86	...	660	8.30	...	1270	4.88	...	690

	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	3.9	24	490	...	...	10	0.1	1	...	...	...	...	5.1	53	450	...	...	...
2	9.3	56	1430	2.6	17	300	1.1	8	80	1.3	11	90	...	...	...	...	...	...
3	1.4	9	120	2.5	16	260	4.8	36	590	7.2	63	1320	...	...	...	...	...	...
4	4.0	24	540	0.6	4	40	2.7	20	320	3.7	33	530	...	...	...	...	...	10
5	3.7	23	340	7.4	49	1150	0.3	2	20	6.0	53	750	2.9	31	280	...	...	...
6	12.8	78	2500	2.9	19	250	2.7	20	260	8.5	75	1380	3.6	39	300	1.5	19	120
7	6.0	37	1070	8.3	55	1220	1.6	12	170	0.3	3	40	7.4	80	1300	...	...	10
8	11.9	73	2020	12.4	83	2750	7.6	58	1570	...	...	...	7.6	82	1560	...	...	...
9	0.1	1	...	1.7	11	160	...	...	...	...	...	...	1.3	14	130	...	...	...
10	5.3	33	660	...	...	20	1.6	12	120	1.4	13	140	1.3	14	120	...	...	...
11	10.3	63	2020	6.9	47	1090	1.2	9	70	4.5	41	370	3.5	39	350	0.7	9	50
12	5.9	36	810	8.7	59	1720	5.9	46	920	4.4	41	510	3.6	40	330	0.2	3	10
13	...	...	...	4.9	33	620	6.9	54	960	6.9	64	1170	0.3	3	30	2.8	36	390
14	...	...	...	13.4	92	2500	5.4	43	590	5.8	54	630	0.1	1	10	...	...	...
15	0.6	4	...	4.4	30	620	0.8	6	50	6.4	60	750	2.0	23	170	...	...	...
16	6.8	42	1430	0.4	3	40	0.4	3	20	1.7	16	250	0.1	1	...	...	...	...
17	1.9	12	180	1.8	12	140	6.4	51	540	0.3	3	40	...	...	...	...	...	...
18	4.3	27	480	3.9	27	210	4.1	33	460	...	...	...	...	...	...	...	...	...
19	0.3	2	20	2.2	15	210	7.1	57	770	...	...	10	2.0	23	140	...	...	...
20	...	...	...	11.5	81	2170	4.7	38	580	0.5	5	20	...	...	50	...	...	...
21	...	...	...	10.4	73	2090	0.5	4	40	4.5	44	500	...	...	...	...	...	...
22	5.1	32	530	...	...	...	8.6	71	1300	6.1	60	1000	...	...	100	...	...	...
23	11.4	72	1600	1.8	13	210	2.7	22	320	3.9	38	540	...	...	...	...	...	...
24	5.2	33	370	10.4	74	1780	6.7	56	760	3.7	37	480	0.1	1	20	0.4	5	30
25	14.5	92	3510	8.3	59	1510	1.0	8	120	6.9	69	930	0.2	2	...	...	...	...
26	14.2	91	3570	9.6	69	1200	6.2	52	950	8.7	87	1640	0.8	10	110	...	...	...
27	11.4	73	2160	3.1	22	390	2.2	19	450	7.1	72	1000	2.8	34	310	...	...	70
28	0.9	6	50	11.7	85	2050	0.3	3	30	0.7	7	90	4.4	53	500	...	...	...
29	1.9	12	120	7.4	54	1260	8.2	70	1420	7.2	73	1120	6.4	78	820	3.5	45	390
30	11.8	76	1670	...	...	20	9.4	81	1390	2.1	22	170	2.1	26	230	...	...	...
31	7.7	50	1190	5.3	39	640	...	...	...	2.1	22	140	...	...	...	...	...	...
Mean	5.57	...	930	5.31	...	860	3.71	...	500	3.61	...	500	1.92	...	240	0.29	...	30
									Annual Mean			560						

DURATION OF BRIGHT SUNSHINE
Monthly and annual totals between exact hours, local apparent time

167 KEW OBSERVATORY: h_g (height of recorder above ground) = 13.3 m.

	Hour L.A.T.																Total	per cent. of possible		
	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
	<i>hours</i>																			
Jan.	-	-	-	-	...	1.6	6.2	9.1	8.5	9.2	7.6	5.4	2.4	...	-	-	-	-	50.0	%
Feb.	-	-	-	...	0.4	4.3	6.2	10.6	10.5	10.5	8.3	7.0	4.7	1.4	...	-	-	-	63.9	19
Mar.	-	-	...	0.8	7.2	13.1	14.1	16.7	18.1	16.6	17.2	16.3	14.1	8.3	0.7	...	-	-	143.2	22
Apr.	-	...	1.7	7.6	9.2	11.1	13.6	14.7	16.2	13.0	13.1	12.7	10.4	11.4	9.4	1.7	...	-	145.8	39
May	...	0.2	8.6	17.9	16.0	18.0	20.6	22.0	19.5	20.5	21.5	19.3	19.9	19.2	18.4	14.3	1.4	...	257.3	35
June	...	1.9	8.6	10.7	10.6	12.6	12.2	11.4	13.1	10.9	9.9	9.7	9.9	8.8	7.5	6.3	2.4	...	146.5	54
July	...	1.1	7.3	10.2	12.2	12.2	11.9	12.7	12.4	14.3	14.7	13.7	15.3	12.7	12.2	7.4	2.3	...	172.6	30
Aug.	-	...	3.3	11.0	12.3	12.5	11.3	13.6	13.9	15.4	15.8	13.5	13.2	12.5	10.5	5.7	...	-	164.5	35
Sept.	-	-	...	0.2	5.2	8.6	10.9	12.4	13.2	13.4	12.9	11.8	11.2	9.1	2.3	...	-	-	111.2	37
Oct.	-	-	-	0.3	5.0	8.5	11.0	11.6	14.6	14.0	14.6	14.0	12.5	5.8	...	-	-	-	111.9	29
Nov.	-	-	-	-	...	2.6	6.2	7.1	9.3	11.3	9.3	6.9	4.8	0.1	-	-	-	-	57.6	34
Dec.	-	-	-	-	...	...	0.9	1.2	2.0	1.4	1.2	1.9	0.5	...	-	-	-	-	9.1	22
Annual	...	3.2	29.5	58.7	78.1	105.1	125.1	143.1	151.3	150.5	146.1	132.2	118.9	89.3	61.0	35.4	6.1	...	1433.6	4

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_g = 13.3 m.

	Hour L.A.T.																Total		
	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
	<i>joules per square centimetre</i>																		
Jan.	-	-	-	-	10	220	620	980	950	900	570	360	130	...	-	-	-	-	4740
Feb.	-	-	-	...	150	520	670	820	870	800	710	560	330	120	...	-	-	-	5550
Mar.	-	-	...	190	1220	1910	2200	2390	2680	2750	2610	2220	1640	1050	150	...	-	-	21010
Apr.	-	...	320	950	1170	1470	1890	2250	2280	1810	1880	1820	1420	1400	930	200	-	-	19790
May	...	190	1210	2490	2640	3210	3670	3920	3270	3450	3430	2920	2880	2340	2450	1250	190	...	39510
June	...	420	1110	1510	1800	1850	1810	1850	2040	1470	1470	1500	1180	990	940	510	200	...	20650
July	...	250	1010	1600	2200	2390	2160	2180	2280	2520	2560	2210	2370	2070	1880	980	220	...	28880
Aug.	-	30	530	1580	2380	2480	2050	2530	2350	2500	2160	2250	2120	1800	1380	540	10	-	26690
Sept.	-	-	10	240	920	1240	1560	1560	1860	2080	1800	1370	1040	970	210	10	-	-	14870
Oct.	-	-	-	140	790	1400	1950	1810	1980	1820	2100	1720	1390	510	...	-	-	-	15610
Nov.	-	-	-	-	30	330	830	980	1290	1430	1110	850	450	10	-	-	-	-	7310
Dec.	-	-	-	-	...	40	90	160	190	180	220	170	30	...	-	-	-	-	1080
Annual	...	890	4190	8700	13310	17060	19500	21430	22040	21710	20620	17950	14980	11260	7940	3490	620	...	205690

WIND

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	6.2	24	5.4	15	6.1	19	5.6	16	3.3	11	2.7	8	5.1	18	6.2	20	7.8	18	1.7	17	7.0	19	2.4	9
2	5.7	22	2.8	9	6.9	19	1.9	8	2.9	13	5.4	16	3.9	16	5.9	15	3.8	14	2.5	14	5.8	16	4.1	11
3	1.4	4	1.3	7	3.9	17	4.3	15	3.3	11	4.3	14	4.7	15	3.9	13	3.9	15	4.2	14	5.4	16	3.6	10
4	0.6	3	1.4	9	6.2	21	4.3	15	4.0	12	7.2	18	6.1	19	2.9	9	3.4	15	4.7	18	3.9	12	4.5	12
5	0.2	2	3.5	14	2.9	12	5.9	19	2.9	12	6.0	18	9.1	23	1.8	11	4.7	14	5.1	17	3.0	11	6.9	18
6	3.3	8	3.6	12	4.1	15	3.8	13	3.4	14	5.5	18	4.8	14	2.5	10	5.2	16	4.9	15	1.7	8	3.5	11
7	2.2	7	1.1	5	2.8	8	3.7	11	4.3	12	4.4	18	5.6	16	2.3	8	6.4	18	2.8	13	3.0	15	1.9	8
8	5.2	19	3.0	13	2.3	9	4.9	13	3.7	11	5.2	21	2.6	10	3.3	14	2.7	8	0.7	6	5.6	16	1.5	7
9	4.8	17	7.7	17	2.5	10	5.0	17	6.7	18	4.1	14	2.6	14	3.0	15	4.8	15	1.8	6	5.4	16	4.2	13
10	6.1	25	7.0	18	4.1	11	4.1	14	5.5	19	4.1	14	2.4	10	3.7	17	2.7	9	2.1	6	4.0	15	4.7	18
11	6.5	23	7.1	17	4.1	13	4.7	10	4.3	15	2.4	8	1.8	9	5.7	21	4.4	14	1.7	7	2.2	8	5.9	17
12	2.5	8	3.7	17	3.3	9	3.9	10	4.5	18	3.8	14	5.2	14	5.3	15	3.8	13	2.0	9	4.3	13	6.4	21
13	1.5	6	5.0	17	4.1	11	2.3	8	2.6	13	3.1	14	4.2	10	6.1	17	3.6	11	1.7	7	2.3	7	7.9	23
14	5.4	20	2.9	13	3.9	10	6.3	15	3.4	11	2.8	15	1.2	7	5.9	16	3.1	12	1.3	8	4.9	17	7.9	23
15	5.2	19	4.1	14	2.3	6	3.8	12	2.5	11	1.9	9	1.2	6	4.7	14	6.2	17	3.8	10	2.8	9	9.6	21
16	2.3	7	1.4	5	3.2	10	2.7	12	3.8	12	4.1	13	1.8	10	5.8	15	5.5	12	3.6	16	2.0	9	9.7	27
17	2.6	8	3.5	12	2.0	8	1.9	11	2.6	12	5.0	18	2.7	12	6.1	16	4.6	11	5.0	20	1.9	7	5.3	17
18	4.1	17	5.0	16	4.2	12	3.7	12	3.3	17	3.4	12	2.5	10	8.8	24	4.0	11	2.2	12	1.8	6	2.4	9
19	4.5	14	4.9	16	4.8	12	3.0	11	2.7	11	3.7	11	3.7	12	5.1	17	1.8	7	3.3	13	4.2	9	0.2	3
20	7.9	21	3.0	13	5.2	16	1.5	8	2.5	11	3.2	13	6.1	19	3.4	12	2.4	11	5.4	17	6.4	13	1.3	5
21	6.1	24	4.0	15	4.5	17	3.1	10	3.4	12	2.8	11	3.0	10	1.9	8	3.4	9	2.7	9	3.9	11	1.2	5
22	4.6	23	6.7	16	5.5	20	3.2	10	3.5	13	4.3	13	1.9	09	2.8	10	3.5	14	4.7	12	2.0	8	1.9	7
23	4.9	21	5.2	16	5.4	15	1.9	9	2.0	10	4.8	13	3.5	11	3.3	15	2.9	8	4.3	13	2.8	11	1.6	10
24	3.8	17	5.7	15	4.8	13	1.5	8	4.3	15	3.6	11	4.5	14	5.1	15	3.9	12	5.7	18	3.4	9	4.3	12
25	2.0	9	5.4	13	4.5	14	1.9	9	4.4	13	2.4	12	2.9	12	5.2	16	1.9	10	5.1	22	6.0	15	6.7	19
26	5.2	17	3.1	10	3.1	13	4.2	15	4.4	12	3.6	13	2.7	11	5.7	18	2.1	12	3.6	11	6.6	18	3.0	14
27	2.9	11	2.4	11	3.5	12	6.5	14	6.9	17	3.2	12	2.7	9	3.5	15	5.9	18	5.1	17	6.7	21	2.9	10
28	1.8	7	4.6	14	7.3	20	6.2	16	4.4	15	3.6	15	4.9	15	4.8	15	8.6	22	3.2	14	6.8	20	6.6	19
29	3.0	11	5.9	21	3.6	13	3.0	11	1.4	6	2.9	11	9.3	30	5.9	16	7.3	22	7.3	22	7.0	19	4.9	15
30	1.7	6			4.6	15	2.3	10	0.9	7	3.6	15	7.4	19	2.0	9	3.5	12	7.8	22	3.0	9	8.4	20
31	8.2	21			7.2	17			3.5	14			4.4	14	5.9	15			7.9	19			4.3	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.																								Mean
	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	
	metres per second																								
Jan.	4.0	3.9	3.7	3.7	3.8	3.7	3.9	3.9	3.8	3.8	4.1	4.2	4.3	4.3	4.2	4.1	3.9	4.0	4.0	3.8	3.9	3.9	4.0	3.8	3.9
Feb.	3.8	3.9	4.0	3.8	3.5	3.4	3.4	3.4	3.6	3.9	4.6	4.7	5.0	4.8	5.0	4.8	4.7	4.3	4.4	4.4	4.1	4.1	3.9	3.9	4.1
Mar.	3.7	3.6	3.3	3.1	3.0	3.2	3.3	3.7	4.1	4.8	5.2	5.5	5.4	5.5	5.6	5.6	5.4	4.9	4.3	4.1	4.1	3.9	3.8	3.8	4.3
Apr.	2.6	2.6	2.6	2.6	2.8	2.8	3.0	3.4	4.0	4.1	4.4	4.7	4.8	4.8	4.9	5.0	5.0	5.0	4.3	3.8	3.4	2.9	2.7	2.6	3.7
May	2.1	2.3	2.2	2.3	2.1	2.4	2.7	3.2	3.7	4.2	4.6	4.7	4.6	4.7	4.7	4.9	4.9	5.0	4.6	4.1	3.6	3.1	2.7	2.3	3.6
June	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.5	3.8	4.2	4.6	4.8	5.1	5.2	5.5	5.3	5.3	4.8	4.6	4.3	3.7	3.5	3.1	2.8	3.9
July	2.8	2.9	3.0	3.1	3.2	3.3	3.6	4.1	4.3	4.5	4.9	5.1	5.3	5.4	5.3	5.0	4.8	4.6	4.3	3.9	3.6	3.4	3.2	3.0	4.0
Aug.	3.2	3.1	3.1	3.0	3.0	3.3	3.8	4.2	4.7	5.3	5.5	5.4	5.7	5.7	5.6	5.6	5.4	5.2	4.7	4.0	3.6	3.4	3.5	3.6	4.3
Sept.	3.6	3.5	3.5	3.4	3.5	3.3	3.5	3.7	3.9	4.6	5.0	5.1	5.2	5.4	5.3	5.2	5.0	4.8	4.3	4.2	3.9	3.7	3.5	3.7	4.2
Oct.	2.9	3.2	3.2	3.2	3.0	3.0	3.2	3.4	3.8	4.4	4.9	5.1	5.2	5.1	4.9	4.7	4.1	3.9	3.6	3.5	3.4	3.4	3.1	3.2	3.8
Nov.	4.0	3.9	3.6	3.7	3.5	3.7	3.8	3.7	3.7	4.2	4.8	5.3	5.4	5.5	5.2	5.0	4.3	4.3	4.1	4.2	3.7	3.7	3.8	3.8	4.2
Dec.	4.2	4.3	4.3	4.3	4.1	4.0	4.2	4.3	4.4	4.4	4.8	5.1	4.8	4.9	5.0	4.9	4.7	4.7	4.6	4.6	4.4	4.5	4.4	4.3	4.5
Annual	3.3	3.3	3.3	3.3	3.2	3.3	3.5	3.7	4.0	4.4	4.8	5.0	5.1	5.1	5.1	5.0	4.8	4.6	4.3	4.1	3.8	3.6	3.5	3.4	4.1

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

171 KEW OBSERVATORY: h_a = 5m. + 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	Year 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	12	193	393	146	0	240	12	21 23	25	10 22 20
Feb.	-	0	0	0	214	367	115	0	070	10	9 16	21	29 17 40
Mar.	-	0	1	3	185	489	67	0	100	11	28 13	21	4 05 50
Apr.	-	0	0	0	161	425	134	0	030	10	5 20	19	5 18 40
May	-	0	0	0	118	501	125	0	080	10	27 17	19	10 12 35
June	-	0	0	0	147	499	74	0	200	9	6 14	21	8 14 25
July	-	0	2	10	175	427	132	0	220	15	29 13	30	29 14 30
Aug.	-	0	2	8	233	404	99	0	220	13	18 13	24	18 12 25
Sept.	-	0	1	5	194	431	90	0	220	12	28 06	22	28 06 15
Oct.	-	0	1	1	189	398	156	0	340	11	29 21	22	25 13 05
Nov.	-	0	0	0	218	410	92	0	020	11	1 12	21	27 03 40
Dec.	-	0	4	16	241	366	121	0	210	12	15 18	23	14 11 10
Year	-	0	15	55	2268	5110	1351	0	220	15	July 29 13	30	July 29 14 30

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM.(1ft.) AND 122 CM.(4ft.) AT 9h., G.M.T.

172 KEW OBSERVATORY

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		
	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	30cm.	122cm.	
	degrees Absolute																								
1	77.8	81.1	76.4	79.6	73.8	77.5	80.2	80.1	82.4	81.2	88.4	84.8	89.2	86.5	89.1	88.4	86.8	87.6	87.3	87.7	80.3	84.6	77.3	81.5	
2	78.7	80.9	75.1	79.6	76.4	77.5	80.2	79.8	82.9	81.3	88.2	84.9	88.7	86.5	88.8	88.3	86.9	87.6	87.3	87.6	80.9	84.3	77.9	81.3	
3	77.6	80.9	74.6	79.6	78.3	77.5	80.3	80.2	83.7	81.4	87.9	85.1	88.9	86.5	88.9	88.2	86.9	87.4	86.8	87.5	81.6	84.1	78.3	81.3	
4	77.1	80.8	74.2	79.4	79.2	77.8	80.3	80.3	83.9	81.6	87.9	85.1	88.8	86.6	88.7	88.1	86.9	87.3	86.3	87.5	82.0	84.1	79.3	81.3	
5	76.4	80.6	74.1	79.3	78.3	77.9	80.4	80.3	84.4	81.7	87.1	85.3	89.2	86.6	88.2	88.1	87.6	87.3	85.1	87.4	81.9	84.0	80.0	81.2	
6	76.6	80.6	74.2	79.2	77.6	78.2	80.1	80.2	85.1	82.0	87.1	85.3	89.3	86.7	88.7	87.9	88.1	87.3	84.6	87.2	81.4	83.9	80.5	81.2	
7	76.7	80.4	74.1	79.1	77.7	78.3	79.1	80.4	85.8	82.2	86.4	85.3	89.8	86.7	88.4	87.9	88.0	87.3	84.0	87.1	80.7	83.9	80.1	81.3	
8	76.7	80.4	75.3	79.2	77.5	78.5	79.2	80.4	85.7	82.3	86.2	85.2	90.8	86.8	89.0	87.9	87.4	87.3	84.4	86.8	80.8	84.0	80.2	81.4	
9	76.2	80.3	76.0	78.9	77.0	78.6	79.8	80.3	86.3	82.6	86.2	85.3	91.2	86.9	90.2	87.8	88.2	87.4	84.9	86.7	81.2	83.7	80.3	81.4	
10	75.9	80.2	75.1	78.6	76.5	78.7	80.6	80.3	85.5	82.8	85.6	85.2	90.4	87.1	90.3	87.9	88.1	87.3	84.4	86.5	81.1	83.7	80.5	81.4	
11	76.4	80.1	74.6	78.7	76.1	78.7	81.6	80.3	85.1	82.9	85.8	85.2	89.9	87.3	90.6	87.9	88.2	87.2	84.8	86.4	81.4	83.6	80.9	81.5	
12	76.9	80.0	74.3	78.8	75.8	78.7	81.6	80.5	84.8	83.0	87.3	85.2	90.2	87.4	89.5	88.1	87.9	87.3	84.6	86.2	81.2	83.5	81.0	81.6	
13	76.2	79.9	74.3	78.6	75.8	78.6	81.8	80.6	84.4	83.1	87.3	85.2	89.7	87.4	89.6	88.0	88.7	87.4	84.0	86.2	80.7	83.4	80.6	81.6	
14	75.9	79.8	74.1	78.6	75.6	78.6	82.1	80.7	85.3	83.2	87.3	85.2	89.1	87.5	89.1	88.1	89.4	87.4	84.2	86.2	80.9	83.4	79.8	81.7	
15	77.2	79.8	74.1	78.5	76.0	78.6	80.6	80.8	85.1	83.2	87.3	85.3	88.9	87.4	88.8	88.1	89.2	87.4	84.3	86.1	79.5	83.2	80.2	81.7	
16	76.5	79.7	74.0	78.4	75.6	78.6	80.1	80.9	86.1	83.3	87.4	85.3	89.3	87.6	89.2	88.1	88.8	87.6	84.7	85.9	80.1	83.1	81.3	81.7	
17	76.2	79.6	74.0	78.3	76.3	78.5	80.4	80.9	86.0	83.4	86.9	85.3	90.3	87.6	89.1	88.1	88.2	87.6	85.6	85.8	80.3	83.0	81.2	81.7	
18	76.4	79.6	73.9	78.3	77.3	78.6	80.1	80.9	86.3	83.8	86.3	85.3	90.3	87.6	89.4	88.0	88.1	87.6	84.9	85.8	80.2	83.0	81.2	81.7	
19	75.7	79.5	74.0	78.3	77.7	78.6	79.8	80.9	85.1	83.4	87.4	85.4	90.3	87.6	89.2	87.9	87.9	87.6	84.8	85.8	79.9	82.9	80.2	81.7	
20	76.6	79.5	73.8	78.2	77.9	78.7	79.6	80.9	85.0	83.9	87.3	85.5	89.7	87.7	88.8	88.1	88.1	87.6	85.4	85.8	79.9	82.8	80.0	81.7	
21	77.1	79.4	73.7	78.1	79.1	78.9	80.3	80.9	85.3	83.7	87.7	85.6	89.3	87.5	88.9	88.1	88.7	87.5	85.0	86.0	79.6	82.7	79.3	81.7	
22	77.8	79.5	73.7	78.0	79.1	78.7	80.7	80.9	86.0	83.7	88.6	85.6	88.7	87.7	88.9	88.0	88.8	87.5	85.2	85.8	78.1	82.6	78.7	81.7	
23	77.8	79.5	73.6	77.9	79.2	78.9	80.3	80.9	86.3	83.8	88.7	85.7	89.7	87.8	88.6	88.0	89.4	87.6	85.2	85.9	77.0	82.5	78.1	81.6	
24	77.1	79.5	73.6	77.8	80.2	79.2	81.2	80.9	87.3	83.8	88.8	85.7	90.4	87.7	88.2	87.9	89.5	87.6	85.2	85.8	77.1	82.3	78.0	81.4	
25	75.9	79.5	73.4	77.8	80.2	79.3	81.3	80.9	87.1	83.9	88.3	85.8	90.6	87.8	88.3	87.9	89.4	87.7	84.9	85.7	76.9	82.0	77.1	81.3	
26	75.9	79.5	73.4	77.8	80.2	79.3	81.6	81.0	86.7	84.2	88.8	85.9	91.5	87.9	87.8	87.8	88.8	87.7	82.6	85.5	78.7	81.9	77.8	81.2	
27	77.4	79.6	73.4	77.7	81.2	79.5	81.2	81.1	86.4	84.3	89.7	86.1	91.9	87.9	88.0	87.8	88.7	87.8	81.7	85.6	79.7	81.8	76.5	81.0	
28	77.9	79.6	73.5	77.6	80.9	79.7	80.6	81.2	87.2	84.3	89.6	86.1	92.3	88.2	87.6	87.8	88.7	87.8	81.1	85.4	79.4	81.7	76.6	80.9	
29	78.6	79.4	73.7	77.5	80.6	79.9	80.8	81.2	88.0	84.4	89.1	86.3	91.2	88.3	87.6	87.8	88.0	87.8	81.7	85.1	78.4	81.7	77.7	80.6	
30	78.6	79.4			80.9	80.1	81.0	81.2	86.9	84.6	88.8	86.3	89.4	88.4	87.8	87.8	87.6	87.8	81.4	84.9	77.1	81.6	78.6	80.6	
31	78.7	79.5			80.3	80.1			88.0	84.7			89.2	88.4	87.2	87.7			80.8	84.7			78.7	80.6	
Mean	77.0	79.9	74.2	78.5	78.0	78.7	80.6	80.7	85.6	83.1	87.6	85.5	89.9	87.4	88.8	88.0	88.2	87.5	84.4	86.2	79.9	83.1	79.3	81.4	
												Year	82.8	83.4											

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 21h. TO 09h., G.M.T.

173 KEW OBSERVATORY

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER												
		degrees Absolute																						
1	70.7	64.6	73.7	75.4	79.1	77.3	84.0	80.9	81.0	76.3	72.9	73.9												
2	77.5	61.4	81.3	70.6	73.0	80.6	79.3	87.0	84.2	82.4	78.1	72.2												
3	65.0	67.8	79.6	68.6	78.2	77.4	83.9	84.6	78.1	76.5	81.4	73.0												
4	66.5	58.5	76.9	74.1	79.4	82.6	84.1	83.7	78.4	75.2	79.6	79.1												
5	67.4	73.1	67.8	73.3	77.0	79.1	87.5	76.4	85.2	72.5	77.6	80.8												
6	73.3	72.9	68.3	69.0	76.0	77.5	82.9	79.1	84.7	75.1	71.4	80.1												
7	73.6	70.7	72.3	65.7	77.5	80.6	87.3	80.7	84.7	71.9	70.3	72.3												
8	71.1	70.9	69.0	71.8	77.6	80.7	84.1	78.1	78.5	80.8	71.3	79.6												
9	71.3	72.3	64.3	73.3	83.5	79.3	85.4	83.7	83.1	81.9	79.7	73.7												
10	69.1	66.8	63.1	71.9	79.0	80.8	84.3	87.4	No value	73.1	70.8	78.4												
11	73.2	65.3	66.9	78.4	75.4	83.6	77.3	85.0	82.9	75.8	77.7	80.9												
12	73.6	67.4	62.9	74.9	74.7	87.6	77.3	80.6	79.2	74.0	71.8	75.3												
13	64.3	71.5	67.2	79.7	70.9	76.9	84.5	85.1	85.3	73.0	72.4	74.9												
14	70.0	64.2	68.6	77.6	76.3	77.2	85.3	79.5	85.6	74.4	70.6	75.2												
15	77.2	66.8	70.2	75.4	70.9	73.6	81.9	79.7	82.1	74.1	67.5	78.2												
16	66.6	62.4	63.2	66.1	78.7	80.2	79.7	85.6	85.8	75.1	67.7	83.8												
17	69.1	68.2	73.5	69.3	72.5	84.7	83.7	85.8	81.4	84.2	78.4	82.2												
18	74.1	68.8	69.9	69.8	70.3	74.4	78.7	86.3	84.7	75.8	77.4	78.4												
19	64.5	66.7	73.1	67.3	67.5	85.2	87.4	86.4	79.0	72.9	71.7	70.5												
20	77.4	59.9	74.8	66.5	71.4	77.3	85.8	77.9	79.3	84.6	75.2	76.7												
21	68.9	62.3	75.8	67.3	68.2	77.9	86.3	75.8	86.3	73.0	70.9	69.6												
22	75.9	70.2	70.7	72.2	72.7	84.7	77.9	78.1	83.6	82.5	62.6	71.3												
23	74.1	67.2	71.4	65.1	72.3	86.4	82.5	84.1	84.1	79.4	61.9	73.0												
24	67.2	66.5	78.5	70.2	77.2	83.2	86.4	80.3	84.8	80.3	69.2	73.2												
25	63.2	66.7	74.2	77.1	76.8	74.6	81.4	79.2	83.7	75.3	67.2	66.2												
26	74.1	62.7	72.5	71.5	75.3	77.6	81.9	80.8	79.5	69.2	77.8	72.6												
27	75.1	72.5	80.0	76.8	75.1	82.0	80.7	80.8	75.8	71.9	78.1	72.2												
28	77.9	71.2	74.8	74.2	81.4	80.9	87.4	80.2	86.4	68.9	74.2	67.3												
29	72.6	73.1	76.9	68.9	79.6	84.5	86.7	74.5	82.0	76.8	71.8	73.4												
30	71.5		75.7	67.9	76.3	80.4	80.7	81.7	77.2	76.3	65.1	79.1												
31	74.1		75.8		76.3		81.2	81.3		73.7		75.7												
Mean	71.3	67.3	72.0	71.7	75.5	80.3	83.1	81.6	82.3	76.0	73.0	75.3												
												Year	75.8											

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 temperature 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. λ+ = Conductivity due to positive ions, unit 10⁻³ ohm.⁻¹ cm.⁻¹
i = Air-earth current, unit 10⁻¹ amp.cm.⁻²

174 KEW OBSERVATORY

	JANUARY*			FEBRUARY*			MARCH*			APRIL*			MAY			JUNE		
	F	λ+	i	F	λ+	i	F	λ+	i	F	λ+	i	F	λ+	i	F	λ+	i
1	...	...	...	6.91	-	-	5.15	-	-	...	...	...	...	...	...	1.71	-	-
2	3.46	-	-	6.03	-	-	2.98	-	-	...	...	...	1.72	-	-	...	...	...
3	...	...	...	5.36	-	-	...	...	...	1.60	-	-	1.83	-	-	...	...	...
4	...	...	...	...	...	...	...	...	...	1.96	-	-	2.42	-	-	...	...	...
5	...	...	...	...	...	...	2.87	-	-	...	...	...	...	...	...	1.53	-	-
6	...	...	...	2.40	-	-	...	...	...	2.54	-	-	...	...	...	...	...	...
7	...	...	...	4.09	-	-	3.88	-	-	...	...	...	2.10	-	-	...	...	...
8	...	...	...	...	...	...	1.65	-	-	...	...	...	2.28	-	-	...	...	...
9	...	...	...	...	...	...	2.85	-	-	1.98	-	-	2.05	-	-	...	...	...
10	6.69	-	-	...	...	...	...	...	...	2.30	-	-	1.94	-	-	...	...	...
11	4.01	-	-	...	...	...	...	...	...	3.61	-	-	1.83	-	-	2.32	-	-
12	...	...	...	...	...	...	5.57	-	-	...	...	...	...	...	...	2.04	-	-
13	6.27	-	-	...	...	...	6.74	-	-	...	...	...	...	...	...	1.45	-	-
14	...	...	...	5.32	-	-	4.36	-	-	...	...	...	1.86	-	-	1.38	-	-
15	...	...	...	...	...	...	8.36	-	-	...	...	...	1.70	-	-	1.64	-	-
16	...	...	...	7.57	-	-	2.41	-	-	3.14	-	-	1.61	-	-	...	...	...
17	6.40	-	-	2.66	-	-	...	...	...	3.18	-	-	2.22	-	-	...	...	...
18	3.36	-	-	...	...	...	...	...	...	3.60	-	-	...	...	...	2.16	-	-
19	...	...	...	...	...	...	...	...	...	5.42	-	-	...	...	...	2.07	-	-
20	2.79	-	-	...	...	...	1.89	-	-	2.91	-	-	...	...	...	2.18	-	-
21	...	...	...	7.17	-	-	3.03	-	-	...	...	...	...	...	...	1.69	-	-
22	...	...	...	3.73	-	-	...	...	...	...	...	...	3.44	-	-	1.20	-	-
23	...	...	...	6.48	-	-	3.43	-	-	2.95	-	-	1.39	-	-	...	...	...
24	6.68	-	-	...	...	...	...	...	...	8.13	-	-	...	...	...	...	...	...
25	3.07	-	-	...	...	...	...	...	...	1.24	-	-	2.50	-	-	1.94	-	-
26	2.86	-	-	...	...	...	3.25	-	-	...	...	...	...	...	...	1.58	-	-
27	2.33	-	-	3.29	-	-	4.92	-	-	5.51	-	-	...	...	...	1.85	59	110
28	...	...	...	...	...	...	4.39	-	-	...	...	...	1.63	-	-	1.98	69	136
29	...	...	...	0.86	-	-	2.13	-	-	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	1.39	-	-	2.04	-	-	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	1.68	-	-	...	...	...
Mean	4.36	-	-	4.76	-	-	3.88	-	-	3.22	-	-	2.01	-	-	1.80	-	-
No. of days used	11			13			18			16			18			16		

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	F	λ+	i	F	γ+	i	F	γ+	i	F	γ+	i	F	γ+	i	F	γ+	i
1	...	...	...	...	...	...	...	...	...	...	...	...	6.92	39	267	...	...	...
2	...	...	...	1.69	25	43	...	...	...	3.19	61	193	...	...	...	...	...	...
3	...	...	...	2.10	49	103	...	...	...	2.29	74	169	...	...	...	...	...	...
4	1.74	-	-	...	...	...	1.61	64	103	2.66	65	174	...	...	...	3.90	32	124
5	...	...	...	...	...	...	...	...	...	2.41	47	112	3.50	41	145	3.12	30	94
6	1.67	28	46	...	...	...	...	...	...	...	...	...	3.74	43	160	3.99	33	132
7	...	...	...	1.47	65	96	...	...	...	...	...	...	3.04	54	163	4.54	16	72
8	...	...	...	2.52	81	203	...	...	...	...	...	...	4.60	46	210	...	...	...
9	1.65	-	-	2.18	50	109	...	...	...	5.58	20	113	...	...	...	...	...	...
10	2.59	39	102	...	...	...	...	...	...	4.22	55	232	...	...	...	4.40	27	118
11	3.01	42	126	...	...	...	2.05	66	136	...	...	...	...	...	...	...	...	...
12	3.82	51	194	...	...	...	1.95	54	106	2.81	47	133	...	...	...	...	...	...
13	...	...	...	1.97	56	111	2.47	136	336	...	...	...	5.03	37	186	...	...	...
14	...	...	...	1.69	75	126	2.94	62	183	...	...	...	...	...	...	...	...	...
15	...	...	...	1.69	77	130	...	...	...	3.72	40	149	...	...	...	...	...	...
16	1.15	111	128	...	...	...	...	...	...	2.79	91	255	...	...	...	...	...	...
17	1.85	122	226	...	...	...	4.02	46	185	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.63	27	97
19	4.08	82	333	...	...	...	1.99	69	137	3.29	133	436	...	...	...	...	...	...
20	...	...	...	1.67	62	103	2.01	93	186	...	...	...	...	...	...	...	...	...
21	...	...	...	1.66	72	119	2.09	110	229	...	...	...	5.36	24	130	...	...	...
22	...	...	...	...	...	...	...	...	...	3.09	93	287	...	...	...	...	...	...
23	1.81	53	96	...	...	...	...	...	...	3.18	53	168	...	...	...	...	...	...
24	1.84	55	102	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	2.37	81	193	...	...	...	2.12	118	251	3.25	-	-	...	...	...	...	...	...
26	2.89	67	192	...	...	...	2.29	116	266	3.73	47	176	3.12	22	69	...	...	...
27	1.48	51	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	2.15	54	115	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	2.66	78	208	...	...	...	2.72	45	122	...	...	...	...	...	...
30	1.36	40	55	...	...	...	...	...	...	...	...	...	6.32	26	166	...	...	...
31	1.87	74	139	4.27	58	249	...	...	...	...	...	...	...	...	...	...	...	...
Mean	2.20	64	143	2.13	62	132	2.32	85	193	3.26	62	194	4.62	37	166	3.93	27	106
No. of days used	16	14	14	13	13	13	11	11	11	15	14	14	9	9	9	6	6	6

*See note in Introduction

Year: Mean 3.08
No. of days used 162

ELECTRICAL CHARACTER OF EACH DAY AND APPROXIMATE DURATION OF NEGATIVE POTENTIAL GRADIENT

175 KEW OBSERVATORY

	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
1	2	3-1	0	...	1	0-6	2	3-9	1	1-1	0	...
2	2	7-3	0	...	1	0-2	0	...	0	...	0	...
3	0	...	0	...	1	0-5	1	0-2	0	...	1	1-1
4	1	0-2	1	0-1	1	0-9	1	1-8	0	...	0	...
5	1	0-9	1	1-9	0	...	1	2-6	0	...	0	...
6	0	...	1	2-1	1	0-6	0	...	0	...	1	0-3
7	2	8-0	1	0-7	1	0-7	1	0-4	0	...	1	2-2
8	1	2-3	2	3-8	0	...	1	0-4	0	...	2	7-0
9	2	8-5	1	1-3	0	...	0	...	1	0-4	-	-
10	2	8-6	1	2-9	0	...	1	0-1	0	...	1	1-1
11	1	0-4	1	1-2	0	...	1	1-4	0	...	1	0-6
12	1	1-4	-	-	1	0-7	2	3-2	0	...	1	0-2
13	0	...	-	-	1	0-8	2	4-9	0	...	1	1-3
14	2	4-7	0	...	0	...	1	0-3	0	...	1	1-0
15	1	0-6	0	...	1	0-7	2	4-7	0	...	0	...
16	0	...	1	0-3	0	...	1	0-2	0	...	2	9-2
17	0	...	1	0-5	0	...	-	-	0	...	1	0-1
18	1	0-3	0	...	0	...	-	-	1	0-7	0	...
19	1	0-5	-	-	0	...	0	...	1	0-1	0	...
20	1	1-5	-	-	2	4-1	1	0-7	0	...	0	...
21	1	0-4	0	...	0	...	0	...	0	...	0	...
22	2	4-2	0	...	2	3-7	0	...	1	1-8	0	...
23	2	8-9	0	...	1	0-4	1	0-1	0	...	0	...
24	1	0-1	0	...	1	2-9	1	2-6	1	1-3	0	...
25	1	0-4	0	...	-	-	2	3-8	1	1-1	0	...
26	2	9-5	2	3-7	-	-	1	2-3	0	...	0	...
27	1	1-5	0	...	1	2-6	0	...	0	...	0	...
28	1	2-4	1	1-0	0	...	0	...	1	0-8	1	0-7
29	1	1-6	1	0-9	1	1-7	0	...	1	0-7	0	...
30	2	10-5	-	-	2	11-3	0	...	0	...	0	...
31	2	6-0	-	-	2	15-2	-	-	0	...	-	-
Total	-	93-8	-	20-4	-	47-6	-	33-6	-	8-0	-	24-8
No. of days used	-	31	-	25	-	29	-	28	-	31	-	29
Mean	-	3-0	-	0-8	-	1-6	-	1-2	-	0-2	-	0-9

	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
1	1	0-2	2	3-8	1	0-6	-	hr.	0	hr.	1	1-4
2	1	0-9	0	...	1	0-3	-	-	2	8-9	0	...
3	0	...	1	1-0	1	0-4	-	-	1	2-0	0	...
4	1	0-1	1	0-2	1	0-2	0	...	0	...	0	...
5	0	...	1	0-9	0	...	1	1-1	1	1-2	1	1-3
6	0	...	1	1-8	1	0-7	0	...	1	1-1	1	0-2
7	0	...	0	...	0	...	0	...	1	0-6	0	...
8	0	...	0	...	0	...	0	...	1	1-2	0	...
9	1	2-8	0	...	1	0-5	0	...	1	1-4	0	...
10	0	...	1	2-6	0	...	1	0-2	1	1-1	0	...
11	0	...	0	...	0	...	0	...	0	...	2	3-9
12	0	...	0	...	0	...	0	...	1	0-6	0	...
13	0	...	1	1-0	0	...	0	...	1	1-0	1	0-5
14	1	0-4	0	...	0	...	1	0-4	2	3-4	1	2-7
15	0	...	0	...	0	...	0	...	0	...	2	4-1
16	0	...	1	0-7	0	...	0	...	0	...	2	4-2
17	0	...	0	...	0	...	0	...	0	...	1	2-9
18	1	1-5	1	0-9	0	...	0	...	0	...	0	...
19	1	2-3	1	0-2	0	...	0	...	0	...	2	4-1
20	1	0-7	1	0-1	0	...	0	...	1	0-1	1	0-8
21	0	...	0	...	0	...	0	...	0	...	2	5-6
22	0	...	0	...	1	...	0	...	1	0-1	0	...
23	0	...	1	1-6	0	...	0	...	0	...	2	3-2
24	0	...	1	2-8	0	...	1	0-7	0	...	2	4-4
25	0	...	2	3-2	0	...	1	1-1	1	0-1	0	...
26	0	...	1	1-2	-	-	0	...	0	...	1	1-1
27	1	0-2	1	1-6	-	-	0	...	0	...	1	0-1
28	1	1-1	1	0-4	-	-	1	0-4	1	0-4	2	15-2
29	1	2-9	1	2-5	-	-	1	1-5	0	...	1	0-4
30	1	0-4	1	1-9	-	-	1	1-3	0	...	2	7-1
31	0	...	1	1-2	-	-	1	0-2	-	-	2	6-1
Total	-	13-5	-	29-6	-	2-8	-	6-9	-	23-2	-	69-3
No. of days used	-	31	-	31	-	25	-	28	-	30	-	31
Mean	-	0-4	-	0-9	-	0-1	-	0-2	-	0-8	-	2-2

Annual values: Character 0 1 2
No. of days 171 140 38

Duration: Total 373-5 hr.
No. of days 349
Mean 1-07 hr.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)
 Kelvin electrograph standardized by Wilson readings, underground laboratory
 Mean values for periods of sixty minutes between exact hours, G.M.T.

176 KEW OBSERVATORY

	JANUARY, factor 4.90				FEBRUARY, factor 4.83				MARCH, factor 5.63			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	495	120	175	175	425	860	750	910	415	450	490	-10
2	-520	75	355	550	250	895	635	1015	120	245	150	10
3	80	430	870	605	590	460	570	830	45	30	55	170
4	630	145	695	615	500	590	925	650	30	300	255	365
5	375	245	495	430	30	185	265	345	300	695	395	675
6	285	275	640	660	145	250	210	675	490	480	75	375
7	420	-175	770	340	300	690	450	290	395	330	300	405
8	65	210	330	300	25	330	465	195	290	280	150	120
9	-85	25	285	1105	170	265	355	305	320	375	310	910
10	Z±	175	675	440	290	305	445	715	705	1165	265	395
11	285	705	455	815	-205	590	505	920	280	555	555	730
12	350	350	145	465	545	-	-	-	460	875	640	395
13	540	440	740	970	-	-	450	260	280	685	715	555
14	410	-570	355	440	260	1160	410	580	255	845	430	555
15	75	185	505	1125	565	565	345	545	545	580	600	130
16	440	505	740	670	250	870	650	115	340	580	265	740
17	450	475	430	615	320	900	290	645	320	280	195	320
18	285	130	340	675	315	290	345	620	255	225	245	330
19	520	650	430	505	155	235	65	-	300	545	535	460
20	200	320	275	10	-	-	360	Z±	10	505	170	65
21	300	675	275	155	450	1020	815	590	255	490	255	385
22	00	275	440	455	245	615	580	615	195	255	45	120
23	Z±	-250	65	725	290	840	590	610	225	300	395	225
24	530	540	510	565	450	600	525	590	355	75	385	405
25	355	595	355	785	750	785	720	730	310	205	280	-
26	-880	-115	255	465	645	-20	395	475	-	-	300	Z±
27	300	805	330	75	260	345	320	440	55	265	310	430
28	210	185	440	660	130	225	110	75	265	555	-	490
29	740	285	300	670	20	215	75	430	65	235	235	355
30	670	925	Z±	Z±	-	-	-	-	65	-125	-35	20
31	Z±	190	300	725	-	-	-	-	-100	-90	0	170
(a)	360	368	433	560	322	563	451	545	274	443	310	368
(b)	254	289	442	552	299	553	470	556	260	408	299	350
Mean	(a) 430 (b) 384				(a) 470 (b) 469				(a) 349 (b) 329			

	APRIL, factor 4.32				MAY, factor 4.22				JUNE, factor 3.94			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	140	-25	230	460	215	375	-255	245	175	240	210	210
2	265	345	140	355	195	460	140	370	190	200	145	225
3	115	105	130	295	280	155	165	205	175	250	90	15
4	15	205	180	280	90	260	230	425	200	255	225	305
5	00	280	200	245	270	395	170	220	190	255	135	185
6	290	395	240	505	255	255	105	165	175	215	25	240
7	175	230	75	330	150	270	205	230	80	65	Z±	Z±
8	230	175	115	175	215	280	255	285	135	Z±	-580	10
9	240	270	180	455	260	255	170	240	-	-	335	170
10	370	445	280	520	190	360	170	370	80	160	Z±	175
11	280	395	405	215	240	260	245	320	230	265	270	225
12	50	245	190	-365	255	280	150	155	210	225	240	230
13	225	180	15	370	125	255	105	170	210	330	135	185
14	610	410	295	215	125	295	195	305	130	215	175	185
15	-255	150	280	390	130	385	170	180	55	305	145	190
16	430	370	305	645	190	295	170	195	215	-50	95	40
17	175	685	Z±	-	170	310	190	280	170	170	120	175
18	-	-	405	435	195	245	215	355	240	415	185	190
19	625	675	460	340	35	270	140	90	210	185	190	295
20	315	750	315	165	100	180	90	165	310	290	225	310
21	265	470	365	330	90	140	65	220	255	390	240	225
22	175	340	395	330	15	630	280	165	255	360	250	370
23	395	635	270	205	125	425	140	150	225	310	265	290
24	180	650	790	-95	130	285	150	10	265	270	265	310
25	-100	620	130	290	165	425	215	240	305	335	230	265
26	100	355	Z±	420	130	345	245	155	190	360	150	225
27	190	530	545	560	255	345	320	425	160	280	185	200
28	370	455	255	455	370	310	240	180	130	330	200	170
29	265	270	180	165	165	125	410	375	30	150	230	255
30	75	445	140	190	305	400	285	230	230	270	145	190
31	-	-	-	-	285	345	180	125	-	-	-	-
(a)	243	396	268	346	185	310	194	234	187	263	189	209
(b)	220	371	263	297	185	310	179	234	197	262	183	219
Mean	(a) 313 (b) 288				(a) 231 (b) 227				(a) 212 (b) 215			

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, Paddock site)
 Kelvin electrograph standardized by Wilson readings, underground laboratory
 Mean values for periods of sixty minutes between exact hours, G.M.T.

176 KEW OBSERVATORY

	JULY, factor 4.63				AUGUST, factor 5.29				SEPTEMBER, factor 5.77			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	170	120	185	320	210	335	115	160	230	490	230	265
2	215	160	Z ₂	260	160	160	195	325	135	230	220	275
3	235	245	205	225	80	140	160	115	240	275	220	300
4	195	270	180	225	105	115	160	130	240	265	240	195
5	205	185	225	245	115	175	105	210	220	205	195	205
6	260	320	180	325	115	Z ₂	220	140	240	240	150	330
7	205	225	245	270	220	195	130	210	205	300	240	345
8	260	270	235	245	265	430	255	115	250	330	230	265
9	Z ₂	245	260	215	160	195	150	255	160	Z ₂	185	195
10	205	325	225	130	140	00	Z ₂	175	195	195	240	205
11	140	460	250	215	160	185	220	360	185	205	240	230
12	150	460	385	245	195	255	140	230	205	310	250	285
13	65	355	325	205	Z ₂	160	175	370	-	-	-	-
14	160	225	105	235	300	315	185	475	195	285	285	300
15	215	185	205	225	290	360	175	185	275	285	250	230
16	225	225	205	215	115	160	25	70	220	205	240	365
17	215	215	195	250	115	175	160	255	285	400	310	330
18	205	300	Z ₂	205	45	150	185	210	205	320	275	240
19	-	-	-	-	140	150	130	300	70	195	220	230
20	Z ₂	105	205	195	210	300	185	230	185	220	160	320
21	205	250	225	225	195	395	185	210	220	220	170	185
22	195	245	180	205	220	265	325	230	170	185	205	220
23	195	235	180	280	115	185	160	Z ₂	185	205	205	195
24	185	195	185	215	175	360	Z ₂	230	185	160	160	150
25	205	245	215	300	220	455	160	590	45	70	150	135
26	235	300	205	215	245	195	245	300	90	105	-	-
27	85	215	110	185	160	255	70	315	-	-	-	-
28	180	105	110	205	210	280	625	490	-	-	-	-
29	95	110	30	205	315	430	185	115	-	-	-	-
30	130	215	130	260	210	255	395	290	-	-	-	-
31	140	260	160	345	195	570	440	640	-	-	-	-
(a)	185	242	198	236	180	253	202	264	193	246	220	250
(b)	183	248	195	239	187	265	204	270	199	252	221	252
Mean	(a) 215		(b) 216		(a) 225		(b) 231		(a) 227		(b) 231	

	OCTOBER, factor 5.34				NOVEMBER, factor 4.63				DECEMBER, factor 4.70			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	<i>volts per metre</i>											
1	-	-	-	-	630	610	675	350	210	880	405	420
2	-	-	-	-	45	85	65	-20	465	565	465	605
3	-	-	-	-	130	175	400	270	440	475	300	560
4	195	475	280	725	120	470	305	370	310	365	375	410
5	300	670	Z ₂	400	165	455	350	95	175	110	310	295
6	280	605	300	290	10	435	370	325	255	485	375	385
7	390	410	290	400	390	295	305	100	430	25	310	75
8	240	325	160	195	215	285	465	30	90	395	310	190
9	-	-	-	-	155	-50	100	760	130	135	185	320
10	240	465	280	290	435	470	Z ₂	545	385	385	420	475
11	290	420	240	270	360	360	360	305	145	-	405	355
12	690	510	250	280	45	270	400	405	-	-	200	565
13	290	800	280	250	100	335	470	835	365	465	385	695
14	475	-	-	-	490	435	305	400	420	330	-85	395
15	-	-	-	-	405	565	285	275	220	375	200	120
16	215	175	160	205	325	545	470	445	65	245	Z ₂	350
17	175	150	260	315	150	240	400	380	220	55	190	620
18	205	215	95	195	240	155	480	400	365	575	440	295
19	240	475	300	195	240	350	380	130	585	1045	80	45
20	120	205	195	365	155	390	455	-	25	90	65	65
21	270	455	280	445	-	305	490	425	25	130	10	10
22	215	345	365	485	-	-	230	-	685	640	605	870
23	365	455	345	465	-	-	250	130	365	355	595	65
24	325	365	335	595	-	85	455	305	Z ₂	375	560	840
25	225	625	380	615	65	-	-	-	265	295	300	135
26	510	960	455	585	-	-	335	325	-260	200	560	220
27	300	335	465	410	150	435	435	535	130	440	650	485
28	345	530	560	85	120	455	370	445	-175	-615	-375	275
29	215	595	315	225	240	520	465	575	510	640	240	65
30	130	540	185	495	445	1015	575	1205	450	20	165	420
31	240	780	670	930	-	-	-	-	455	285	565	-865
(a)	288	475	310	388	233	390	380	399	303	371	345	354
(b)	280	467	310	388	235	384	383	391	279	339	298	283
Mean	(a) 365		(b) 361		(a) 351		(b) 348		(a) 343		(b) 300	

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)	246	360	292	346
	(b)	231	346	287	336
		(a) 311		(b) 300	

POTENTIAL GRADIENT (reduced to level surface:) DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

177 KEW OBSERVATORY Selected quiet days

	Hour G.M.T.																							Non-cyclic change†	Mean	
	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
	<i>volts per metre</i>																									
Jan.	-59	-101	-130	-131	-157	-163	-120	-67	-9	+39	+107	+110	+97	+81	+6	-13	-30	+19	+45	+91	+137	+135	+111	+2	...	514
Feb.	-121	-172	-153	-146	-180	-214	-135	+14	+153	+214	+194	+145	+52	+16	-29	-16	+33	+20	+106	+104	+80	+42	+14	-20	+6	551
Mar.	+42	-15	-76	-126	-90	-62	-13	+46	+106	+124	+165	+8	-37	-46	-62	-72	-113	-96	-54	+7	+122	+100	+73	+69	+45	386
Apr.	+22	+25	-24	-71	-75	-66	-30	+38	+87	+57	+30	-13	-43	-42	-51	-51	-27	-2	-26	-8	+69	+83	+64	+53	...	260
May	0	-21	-28	-29	-10	+2	+34	+78	+68	+50	+14	-16	-30	-31	-38	-39	-38	-34	-14	0	+34	+18	+18	-12	-13	202
June	+5	-5	+2	+7	0	+16	+28	+51	+33	+18	-10	-25	-25	-39	-36	-34	-31	-22	-12	-12	+18	+33	+28	+10	+3	231
July	+5	+2	-5	-9	-6	+9	+17	+9	+4	+4	-5	-14	-13	-9	-9	-9	-16	-10	-5	+4	+15	+19	+15	+6	-4	220
Aug.	-23	-35	-22	-34	-17	+10	+58	+67	+49	+22	+8	-11	-22	-27	-37	-48	-60	-9	-7	+20	+49	+43	+18	+5	-14	218
Sept.	-21	-19	-31	-29	-26	-25	-16	-4	+2	+10	+3	+7	+6	-2	-6	+1	+13	+23	+28	+30	+29	+20	+14	-7	+10	218
Oct.	-9	-20	-33	-47	-19	-25	-21	+13	+47	+8	-16	-37	-31	-30	-28	-6	+26	+31	+42	+49	+46	+31	+19	+12	-2	269
Nov.	-84	-92	-101	-104	-76	-80	-51	-22	+36	+59	+59	+47	+46	+60	+44	+48	+81	+72	+66	+24	+15	+20	-18	-50	...	359
Dec.	-56	-65	-74	-85	-94	-79	-38	-9	+37	+61	+27	+59	-9	-13	-6	+38	+47	+56	+54	+73	+48	+14	+26	-12	...	366
Year	-25	-43	-56	-67	-62	-56	-24	+18	+51	+55	+48	+22	-1	-7	-21	-17	-10	+4	+19	+32	+55	+46	+32	+7	...	316
Winter	-80	-107	-115	-117	-127	-134	-86	-21	+54	+93	+97	+90	+47	+36	+4	+14	+33	+42	+68	+73	+70	+53	+33	-20	...	447
Equinox	+9	-7	-41	-68	-53	-45	-20	+23	+61	+50	+46	-9	-26	-30	-37	-32	-25	-11	-3	+19	+67	+59	+43	+32	...	283
Summer	-3	-15	-13	-16	-8	+9	+34	+51	+39	+23	+2	-17	-23	-27	-30	-33	-36	-19	-9	+3	+29	+28	+20	+8	...	218

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

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

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

178 KEW OBSERVATORY Complete days only

	Hour G.M.T.																							Mean	No. of days used		
	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	
	<i>milligram per cubic metre</i>																										
Jan.	0.22	0.21	0.19	0.15	0.12	0.13	0.14	0.18	0.25	0.26	0.27	0.26	0.27	0.25	0.27	0.31	0.28	0.34	0.42	0.43	0.43	0.37	0.31	0.27	0.26	0.26	28
Feb.	0.11	0.09	0.07	0.07	0.07	0.09	0.13	0.15	0.18	0.18	0.18	0.15	0.15	0.15	0.14	0.15	0.16	0.16	0.16	0.19	0.17	0.17	0.16	0.14	0.14	0.14	21
Mar.	0.14	0.11	0.10	0.10	0.09	0.12	0.13	0.18	0.21	0.16	0.15	0.11	0.11	0.12	0.13	0.12	0.15	0.19	0.24	0.24	0.22	0.19	0.17	0.15	0.15	0.15	28
Apr.	0.15	0.13	0.13	0.12	0.11	0.11	0.11	0.14	0.13	0.13	0.13	0.11	0.11	0.09	0.09	0.09	0.10	0.11	0.11	0.19	0.21	0.23	0.20	0.18	0.13	0.13	26
May	0.02	0.01	0.02	0.01	0.01	0.02	0.02	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.04	0.02	0.01	0.00	0.01	0.01	28
June	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.01	28
July	0.01	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	0.01	0.00	0.00	0.00	0.00	31
Aug.	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.01	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	31
Sept.	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	30
Oct.	0.12	0.11	0.09	0.07	0.06	0.06	0.07	0.06	0.05	0.07	0.06	0.06	0.02	0.02	0.02	0.03	0.06	0.13	0.15	0.20	0.21	0.20	0.17	0.13	0.09	31	
Nov.	0.09	0.07	0.05	0.05	0.03	0.04	0.05	0.07	0.11	0.12	0.11	0.09	0.07	0.07	0.07	0.08	0.13	0.23	0.28	0.30	0.24	0.20	0.19	0.12	0.12	30	
Dec.	0.09	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.08	0.09	0.17	0.15	0.19	0.19	0.16	0.16	0.22	0.25	0.27	0.22	0.21	0.16	0.11	0.10	0.13	21	
Year	0.08	0.07	0.06	0.06	0.05	0.06	0.06	0.08	0.09	0.09	0.09	0.08	0.08	0.07	0.07	0.08	0.09	0.12	0.13	0.15	0.15	0.13	0.11	0.10	0.09	333	
Winter	0.13	0.11	0.09	0.08	0.07	0.08	0.09	0.11	0.15	0.16	0.18	0.16	0.17	0.17	0.16	0.17	0.20	0.25	0.28	0.29	0.26	0.23	0.19	0.16	0.16	100	
Spring	0.15	0.12	0.11	0.11	0.10	0.11	0.12	0.16	0.17	0.15	0.14	0.11	0.11	0.11	0.11	0.11	0.13	0.15	0.21	0.23	0.23	0.19	0.17	0.14	0.14	54	
Autumn	0.07	0.06	0.05	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.03	0.03	0.01	0.01	0.01	0.01	0.03	0.07	0.08	0.11	0.11	0.11	0.09	0.07	0.05	61	
Summer	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	118