

M.O.708

AIR MINISTRY
METEOROLOGICAL OFFICE



22685

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

LONDON: HER MAJESTY'S STATIONERY OFFICE
1961

Universal Decimal Classification

550.38(058)

551.506.1

551.510.42(058)

551.594(058)

PREFACE

The Observatories' Year Book was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the *British Meteorological and Magnetic Year Book* for the period 1908 to 1921.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939-45 war. 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 $6'3$ and Z increase by 36γ . The ranges between the extreme values recorded in 1956 were H 2,474 γ , D $6^{\circ}12'9$ 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

		All days			International quiet days			International disturbed days		
		Z	H	D	Z	H	D	Z	H	D
Year	1932-53	γ	γ	'	γ	γ	'	γ	γ	'
	1956(%)									
Winter	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
Equinox	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
Summer	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
	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.
<i>q</i>	<i>D</i>	1.08	0.99	1.02	1.01	1.08	1.13	1.08	1.07	1.01	1.01	0.94	0.96
<i>d</i>	<i>D</i>	1.36	1.09	1.51	1.58	2.08	1.39	1.07	1.36	1.14	1.41	1.57	1.27
<i>q</i>	<i>H</i>	0.91	0.93	1.07	1.12	1.26	1.30	1.21	1.30	1.11	1.01	0.86	0.92
<i>d</i>	<i>H</i>	2.00	3.42	4.96	2.45	3.20	2.92	1.55	3.22	2.10	3.18	4.44	1.02
<i>q</i>	<i>Z</i>	2.45	0.83	0.65	0.97	0.65	0.85	0.81	0.81	0.50	0.76	3.75	1.86
<i>d</i>	<i>Z</i>	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	<i>H</i>	<i>D</i>	<i>Z</i>	
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	<i>H</i>	<i>D</i>	<i>Z</i>	<i>H</i>	<i>D</i>	<i>Z</i>	<i>H</i>	<i>D</i>	<i>Z</i>
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 +14	γ +10	γ -10	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	-20	+2	2	2	
3c	May 8	13.08	13.12	13.20		-8	-8	+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	59	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	2±	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	2±
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)	(b)	(a)	(b)
	136	156	154	170
	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 0 to 1	G.M.T. 1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non- cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only																										
Jan.	-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	hr.	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	hr.	0a	...	1a	0.1	1b	1.2	0a	...	2b	3.7
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	...
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: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

9 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +																								JANUARY 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 10,000+	
	0-1	1-2																									
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	464	1114
2	479	452	449	462	471	476	480	478	475	475	471	467	459	460	469	476	449	462	471	477	466	437	432	451	464	464	1133
3	449	460	455	459	465	467	471	467	472	469	463	462	465	470	471	470	453	463	465	444	455	459	479	480	469	469	1253
4	472	463	462	479	467	471	478	475	467	460	449	466	467	467	473	478	483	470	465	465	466	478	462	470	469	473	1359
5	479	471	472	470	471	485	476	476	471	458	456	450	463	476	482	476	479	482	471	502	458	471	476	488	471	471	1293
	468	471	466	459	471	469	476	477	476	466	463	462	472	472	475	478	480	479	470	473	463	472	470	465			
6	481	466	469	469	473	476	479	481	483	480	478	476	475	470	448	466	504	470	465	458	465	454	460	467	471	471	1313
7	468	465	466	468	467	468	472	475	472	467	461	456	462	467	474	467	463	463	466	468	468	475	476	479	468	470	1233
8	463	463	466	468	470	472	475	476	472	463	453	455	459	466	473	476	480	482	472	470	476	477	477	476	470	470	1280
9	472	470	468	459	476	489	486	478	476	460	438	429	441	445	467	480	476	471	463	461	466	472	473	472	466	466	1188
10	471	471	471	475	478	475	491	479	470	453	453	454	467	478	482	556	577	525	458	445	450	411	426	382	471	471	1298
11 d	233	287	417	454	462	472	452	443	434	422	419	461	454	485	486	496	511	517	564	433	447	452	454	453	446	470	709
12	454	455	459	463	468	473	480	469	463	460	450	428	438	437	454	475	491	538	655	622	454	435	435	411	474	1367	
13	414	463	453	451	458	464	464	466	466	465	463	457	459	464	475	474	473	475	478	471	469	470	470	465	464	1127	
14	466	456	458	463	466	468	465	470	470	471	464	463	467	465	462	462	470	468	463	463	467	472	471	470	466	1180	
15 q	472	471	470	471	474	476	478	480	482	480	472	469	462	469	470	473	475	474	475	476	478	477	472	472	474	474	1368
16 q	468	479	472	478	483	480	483	478	475	469	462	467	469	466	472	471	475	475	479	475	479	477	478	475	474	474	1385
17	475	477	478	475	472	471	475	480	475	468	467	466	460	459	468	465	465	467	471	468	469	467	465	468	470	470	1271
18 d	470	424	458	459	486	492	501	499	481	473	459	471	475	487	502	482	489	484	483	560	430	175	389	417	460	1045	
19 d	378	465	463	465	453	468	476	472	445	445	442	445	449	453	523	487	492	513	481	456	446	454	452	456	462	1079	
20 q	462	459	461	463	465	465	462	466	464	460	459	457	455	459	463	467	464	465	464	466	470	469	467	472	463	1124	
21	478	468	469	471	475	474	475	476	473	466	462	459	462	466	468	469	466	465	476	478	465	470	471	450	469	1252	
22	467	428	398	374	402	447	470	475	469	463	465	460	462	466	473	476	477	478	476	478	474	476	475	475	459	1004	
23	468	466	467	470	475	483	483	478	469	463	454	447	448	453	463	472	476	487	466	467	468	427	285	450	458	985	
24 d	463	462	465	462	447	459	471	462	450	432	429	425	434	464	476	485	482	529	549	486	387	390	304	252	444	665	
25	274	270	395	449	446	458	460	467	460	459	452	449	449	452	453	460	466	472	468	460	453	457	466	466	440	561	
26 q	466	465	463	463	467	470	472	468	468	465	460	458	457	462	465	466	469	470	472	473	472	472	472	478	467	1213	
27	480	477	475	473	475	482	483	483	481	482	465	472	475	472	489	481	486	486	614	512	495	468	459	449	484	1614	
28 d	395	344	398	429	449	467	478	473	471	469	460	460	440	449	471	462	462	465	471	478	493	456	465	473	453	878	
29	463	460	455	464	469	473	471	471	465	469	476	473	473	480	460	476	469	480	500	480	498	473	475	480	473	1353	
30	478	460	467	467	476	480	476	480	476	473	467	464	453	467	464	462	467	498	463	470	468	478	482	472	471	1308	
31	470	463	462	475	471	470	474	478	466	466	459	441	460	469	453	472	467	472	467	466	467	451	467	463	465	1169	
Mean	448	447	456	461	466	472	475	474	469	464	458	457	459	465	472	476	479	482	487	477	464	451	452	455	465		
Sum 13,000+	896	851	1147	1307	1448	1640	1733	1696	1537	1371	1191	1169	1231	1415	1624	1756	1836	1945	2101	1801	1382	972	1005	1097		Grand Total 346,151	

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

10	LERWICK (D)												10° +												JANUARY 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	-3.5	-9.9	-4.5	0.3	2.4	5.7	5.1	5.7	5.6	6.6	8.2	8.9	10.3	11.1	11.4	12.4	3.7	14.2	10.5	5.8	-5.7	-22.8	-6.4	-0.9	3.1	74.2										
2	2.2	3.4	3.8	3.0	3.9	5.8	5.3	4.8	4.7	5.3	6.3	7.0	8.7	9.4	8.3	11.3	7.0	8.7	8.0	-0.7	-6.1	-0.2	1.7	-1.0	4.6	110.6										
3	2.2	0.8	3.9	1.5	3.2	5.2	6.3	7.0	6.3	7.4	6.5	7.3	9.1	10.3	8.9	10.5	13.5	9.9	8.2	6.7	4.9	3.5	5.4	-2.6	6.1	145.9										
4	-1.4	-2.9	1.7	1.9	1.5	5.4	5.3	7.0	6.6	6.4	8.6	10.1	9.6	10.9	10.6	8.0	9.3	12.4	9.2	-12.4	6.1	5.1	1.7	-4.1	4.9	116.6										
5	1.0	2.6	1.5	5.7	4.6	4.3	7.7	7.7	6.5	6.7	7.5	7.9	8.7	9.4	9.1	8.5	9.2	9.5	3.2	-3.3	7.1	4.3	3.8	4.8	5.7	138.0										
6	7.2	2.0	1.1	4.1	4.6	5.7	6.3	6.1	5.8	6.3	6.3	7.4	10.4	13.4	12.4	12.4	10.9	10.3	9.2	5.4	-5.2	-2.1	1.9	2.8	6.0	144.7										
7	5.7	5.3	4.7	4.7	5.1	5.7	5.5	5.1	4.9	5.6	6.3	7.6	10.5	11.1	12.0	14.3	-1.6	8.6	8.7	6.4	4.4	-4.5	-3.9	-1.1	5.5	131.1										
8 q	0.6	5.7	5.7	5.8	6.7	6.1	6.1	5.1	4.6	4.9	5.4	6.9	9.1	10.0	8.9	8.1	7.8	7.8	8.3	5.0	6.1	4.3	3.7	3.9	6.1	146.6										
9	6.8	4.4	3.8	1.2	5.3	6.0	4.1	4.1	4.6	5.4	5.7	9.8	13.4	14.9	12.1	9.2	5.1	7.3	5.4	2.6	3.9	1.1	5.3	5.5	6.1	147.0										
10	5.4	5.4	5.4	6.5	5.8	8.0	8.9	9.0	6.8	5.5	6.3	9.9	15.4	18.5	15.8	12.8	18.8	10.2	-7.3	5.7	3.8	-6.1	-6.4	-14.9	6.2	149.2										
11 d	-4.9	-3.9	2.9	-6.8	0.2	6.4	11.0	14.4	8.2	5.5	7.7	15.0	10.0	14.7	12.5	14.7	17.0	16.1	1.3	-3.7	2.7	3.9	4.1	3.9	6.4	152.9										
12	4.1	4.4	5.3	5.8	6.7	7.0	6.5	4.7	3.9	4.3	5.7	7.9	9.7	11.1	12.7	12.0	17.3	21.1	24.8	13.3	-8.3	-5.2	-0.9	-1.9	7.2	172.0										
13	-0.5	4.3	3.7	4.6	6.3	9.9	7.2	4.9	4.3	4.3	5.5	6.8	9.3	9.9	10.9	9.9	9.1	8.7	8.7	7.6	5.5	4.5	4.3	4.1	6.4	153.8										
14	2.9	4.3	1.5	1.8	1.3	4.0	5.5	4.5	3.2	4.3	7.0	5.7	8.6	9.3	6.6	4.7	6.0	6.6	5.8	3.8	4.6	1.0	1.8	5.6	4.6	110.4										
15 q	5.8	6.2	6.1	6.3	6.3	5.8	5.8	5.3	5.2	5.3	6.3	6.3	8.3	10.0	8.9	8.3	7.5	6.8	6.3	5.8	5.5	5.1	4.3	2.0	6.2	149.5										
16 q	4.5	5.2	8.2	5.4	5.2	5.4	5.1	4.8	3.9	4.5	5.6	5.9	8.9	10.6	8.7	8.2	7.5	7.2	6.7	5.7	5.7	5.3	5.8	5.7	6.2	149.7										
17	5.8	5.8	5.7	5.2	5.2	4.7	4.6	4.6	5.5	6.0	7.2	8.5	10.9	11.8	13.2	12.0	10.6	9.1	8.0	7.0	5.7	3.9	-0.2	0.3	6.7	161.1										
18 d	6.4	1.5	11.5	-3.1	-0.9	6.5	4.1	11.1	9.2	10.5	12.5	11.2	12.0	13.4	20.8	18.5	12.8	9.9	10.4	-5.1	-2.6	-20.6	-9.3	-3.3	5.7	137.4										
19 d	-6.9	-0.4	4.7	5.5	9.2	7.0	5.3	5.8	6.3	6.7	10.3	12.1	13.4	13.0	10.1	12.8	11.9	15.2	8.9	-5.1	-0.7	0.3	3.0	1.9	6.3	150.3										
20 q	4.8	4.6	5.3	6.2	4.9	4.3	4.4	5.3	5.2	5.3	6.1	7.4	8.0	8.5	7.3	6.3	6.3	6.1	6.3	5.8	5.4	4.8	4.1	4.8	5.7	137.5										
21	6.3	6.3	6.8	6.1	5.7	5.1	4.9	4.4	4.3	4.7	5.6	6.4	7.6	8.9	7.6	6.1	3.7	10.1	8.7	7.1	4.5	2.8	-0.4	0.3	5.6	133.6										
22	-13.3	-16.0	-9.6	-6.4	-2.9	-12.9	-1.6	1.0	2.7	3.8	4.7	7.5	9.7	11.1	10.0	8.6	8.6	9.9	8.9	7.5	7.3	5.8	5.3	5.4	2.3	55.1										
23	5.7	5.6	6.4	6.1	5.1	5.1	5.1	4.9	4.1	3.9	5.4	6.7	7.7	8.6	8.0	7.4	6.6	8.0	8.3	1.0	-11.0	-5.1	3.2	-1.9	4.4	104.9										
24 d	4.8	6.4	4.6	0.9	4.8	-0.9	3.9	9.1	10.9	9.3	8.3	8.2	13.5	9.6	14.4	15.2	13.3	7.0	8.3	-4.5	-17.0	-9.8	-14.4	-12.6	3.9	93.3										
25	-20.3	0.3	5.1	-0.1	2.7	6.1	10.6	8.4	6.7	6.1	7.2	8.7	10.2	10.2	9.2	7.7	6.7	6.8	7.7	3.7	5.7	4.4	4.6	5.4	3.2	123.8										
26 q	5.3	4.9	5.1	5.3	5.1	4.1	3.9	3.6	3.4	3.8	4.5	6.3	7.8	9.4	8.7	7.6	7.2	6.5	6.3	5.8	5.2	4.8	4.6	4.8	5.6	134.0										
27	5.3	4.7	5.8	5.1	5.3	4.3	4.4	5.1	5.4	8.8	9.9	12.4	15.3	15.4	17.9	16.9	14.7	15.2	17.2	10.9	-6.4	2.9	3.4	2.4	8.4	202.3										
28 d	4.7	8.2	-13.3	-9.0	-6.1	11.4	1.7	4.2	6.1	5.2	4.2	7.1	10.0	10.4	7.5	10.8	7.1	7.1	9.0	-4.2	-20.5	-2.2	1.6	1.9	2.6	62.9										
29	5.3	2.1	0.7	1.3	0.9	0.3	4.2	3.8	4.2	4.2	5.0	7.7	9.2	10.6	12.7	10.2	11.6	5.9	0.5	7.9	1.5	3.8	3.2	3.8	5.0	120.6										
30	4.4	-1.1	5.2	0.3	-0.3	2.2	3.0	4.2	5.2	5.4	6.3	7.7	10.4	12.8	12.8	11.4	8.9	-0.3	4.8	5.7	4.6	-7.2	-3.9	3.2	4.4	105.7										
31	-2.3	2.5	0.3	2.0	0.7	1.5	3.4	4.8	4.4	5.8	8.0	8.9	8.0	10.6	8.5	7.3	4.1	1.3	6.1	3.5	0.9	6.4	3.4	2.9	4.3	103.0										
Mean	1.7	2.3	3.2	2.5	3.5	4.7	5.3	5.8	5.4	5.7	6.8	8.3	10.1	11.3	10.9	10.5	9.1	9.1	7.6	3.3	0.6	-0.3	1.1	1.0	5.4											
Sum	54.1	72.7	99.1	77.2	108.5	145.2	163.6	180.5	168.7	177.8	210.1	257.2	313.7	348.9	338.5	324.1	282.2	283.2	236.4	100.7	17.6	-7.8	34.4	31.1		Grand Total 4017.7										

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

13

11 LERWICK (Z)		46,000γ (0.46 C.G.S. unit) +																								JANUARY 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 27,000+		
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	1172	1132	
2	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	1172	1183	1385	
3	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	1183	1385	1385	
4	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	1173	1149	1149	
5	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	1174	1184	1184	
6	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	1175	1200	1200	
7	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	1182	1365	1365	
8	1175	1180	1180	1177	1176	1176	1176	1174	1174	1177	1179	1182	1184	1181	1180	1181	1187	1226	1207	1195	1187	1184	1174	1157	1147	1181	1181	1340	1340
9	1149	1161	1168	1170	1170	1172	1173	1173	1173	1175	1179	1182	1181	1179	1178	1178	1175	1174	1173	1181	1187	1178	1178	1176	1177	1174	1174	1187	1187
10	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	1176	1176	1217	1217
11	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	1193	1193	1632	1632
12	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	1174	1174	1176	1176
13	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	1202	1202	1855	1855
14	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	1171	1171	1098	1098
15	1186	1185	1184	1185	1181	1175	1178	1180	1181	1176	1176	1174	1175	1175	1181	1191	1197	1192	1192	1196	1198	1185	1175	1175	1174	1183	1183	1392	1392
16	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	1177	1177	1258	1258
17	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	1173	1173	1142	1142
18	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	1180	1313	1313
19	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	1147	1147	524	524
20	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	1196	1196	1695	1695
21	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	1179	1179	1308	1308
22	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	1179	1179	1284	1284
23	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	1141	1141	385	385
24	1179	1177	1174	1170	1171	1168	1171	1175	1180	1185	1189	1190	1185	1180	1181	1187	1176	1177	1188	1214	1256	1207	1080	1153	1179	1179	1179	1304	1304
25	1126	1130	1158	1173	1149	1060	1109	1126	1144	1167	1175	1192	1236	1233	1230	1232	1264	1335	1327	1241	1139	1144	1132	1095	1180	1180	1180	1317	1317
26	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	1164	1164	925	925
27	1187	1187	1185	1182	1181	1178	1177	1177	1176	1177	1176	1176	1176	1181	1185	1185	1184	1181	1179	1177	1177	1177	1180	1177	1180	1180	1320	1320	
28	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	1187	1187	1479	1479
29	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	1161	1161	861	861
30	1184	1189	1192	1192	1186	1172	1172	1172	1175	1175	1175	1172	1175	1186	1212	1220	1228	1228	1192	1217	1200	1192	1192	1170	1190	1190	1190	1571	1571
31	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	1181	1181	1345	1345
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	1177	1177	1433	1433
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	γ	h. m. γ	γ h. m. γ	γ	h. m. γ	γ h. m. γ	γ						°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	78.2		
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		
6	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		
7	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		
8	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		
9	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		
10	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		
11	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	18 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	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	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	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		
19	14 41 580	485 00 18	95	17 33 21.8	-24.5 00 37	46.3	14 36 1364	827 00 17	537	6,3,3,2,5,4,4,3	30	1	78.5		
20	23 38 480	452 12 10	28	11 53 9.3	2.9 22 50	6.4	17 03 1189	1139 00 18	50	2,1,1,1,0,1,1,1	8	0	78.3		
21	00 20 496	400 23 54	96	17 32 14.0	-11.3 23 56	25.3	20 27 1201	986 23 59	215	2,0,0,0,1,3,2,5	13	0	78.2		
22	00 44 525	344 03 07	181	13 48 12.1	-22.5 01 44	34.6	20 19 1200	945 00 10	255	5,5,3,3,1,1,3,1	22	1	78.6		
23	17 27 508	107 22 30	401	22 17 31.7	-21.4 20 43	53.1	20 12 1278	967 22 15	311	1,1,1,2,2,3,4,7	21	1	78.3		
24	19 34 845	163 22 58	682	16 02 20.1	-39.5 20 12	59.6	19 34 1406	991 23 26	415	3,5,3,3,3,5,7,6	35	2	78.1		
25	17 50 476	202 01 15	274	02 26 14.7	-24.0 00 18	38.7	19 42 1240	928 02 08	312	6,3,3,1,1,1,3,2	20	1	78.0		
26	23 41 488	456 11 55	32	13 54 10.0	2.8 23 12	7.2	01 06 1188	1168 23 48	20	0,0,0,1,1,0,0,1	3	0	77.7		
27	19 04 1073	300 19 16	773	19 07 108.8	-25.3 19 45	134.1	19 23 1307	922 19 09	385	2,1,2,2,3,3,8,3	24	1	77.0		
28	19 57 516	284 01 27	232	01 11 28.4	-26.5 20 12	54.9	19 40 1244	996 05 15	248	5,5,4,3,3,3,5,3	31	1	77.7		
29	18 24 529	444 14 41	85	14 26 17.4	-12.1 18 18	29.5	20 00 1242	1153 23 44	89	2,2,2,2,3,4,4,3	22	1	78.7		
30	17 30 544	445 01 08	99	13 40 13.8	-19.7 21 48	33.5	17 20 1253	1102 00 51	151	3,2,2,1,2,4,2,4	20	1	78.0		
31	21 10 490	424 21 20	66	21 19 19.7	-7.8 24 00	27.5	19 35 1240	1137 21 39	103	3,2,2,2,3,3,4,4	22	1	78.0		
Mean	- - 560	365 - -	195	- - 20.6	-16.7 - -	37.3	- - 1255	1068 - -	187	-	-	-	0.73	78.3	

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

13 LERWICK (H)													14,000y (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	1050			
2		450	454	464	452	453	464	468	455	466	466	459	451	453	459	464	474	474	474	467	475	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	477	461	466	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	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	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	1318			
7	q	475	475	476	476	475	477	479	480	475	466	458	456	461	469	477	479	481	481	482	482	476	468	476	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	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	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	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	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	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	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	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	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	432	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	429	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	5.1	4.9	6.0	144.5
21			5.5	5.4	5.4	5.6	5.5	3.9	3.4	2.5	1.5	1.5	2.8	5.8	8.9	10.7	10.3	9.4	6.4	7.0	6.6	6.6	6.4	6.1	5.7	5.6	5.8	138.5
22			5.1	4.5	3.5	1.8	6.4	6.1	4.9	3.7	2.5	2.7	3.7	6.5	9.2	13.3	14.1	13.2	10.6	9.4	8.1	5.8	6.1	5.2	4.6	5.0	6.5	156.0
23			5.1	5.1	4.4	4.1	3.9	3.6	2.7	1.7	1.2	1.7	3.1	6.3	8.0	10.9	10.2	10.0	6.5	3.2	4.5	4.5	5.0	5.6	5.5	5.6	5.1	122.4
24			5.6	5.5	5.0	4.6	4.2	4.1	3.6	2.3	1.3	0.7	1.7	6.1	10.1	12.0	11.6	9.8	8.6	8.0	5.5	8.1	7.4	4.5	5.5	4.5	5.8	140.3
25 d			4.6	4.5	4.6	8.9	5.2	3.7	3.2	2.2	-6.4	2.7	-3.7	9.3	9.9	19.0	16.1	26.7	32.0	23.8	11.1	9.1	-12.2	-2.1	1.6	-0.4	7.2	173.4
26			-2.3	-3.2	-1.0	-0.5	-0.3	-0.7	-1.0	0.2	-1.1	0.5	5.3	7.6	11.2	10.3	9.5	9.4	7.9	7.0	7.4	8.3	6.6	6.3	0.8	-0.2	3.7	88.0
27			-2.1	-0.8	-6.5	-3.4	-0.7	1.6	-0.1	-1.5	-0.3	1.1	2.9	5.2	7.9	8.6	8.3	7.3	6.7	6.3	6.3	9.9	4.9	1.2	0.2	3.0	1.5	36.4
28 d			-2.7	2.1	1.6	6.6	-3.6	-1.3	-0.3	0.5	1.2	2.8	5.2	7.4	10.8	11.2	10.2	9.5	6.8	8.3	-4.0	0.5	3.0	-2.1	-3.9	-8.4	2.6	61.4
29 d			-10.6	-7.8	-5.8	-6.7	-8.4	-4.4	0.6	2.7	1.6	2.0	5.0	9.8	10.3	12.1	18.0	17.1	13.0	1.2	3.4	2.1	-0.5	-1.4	-0.2	5.3	2.4	58.4
Mean			1.2	1.9	2.7	3.4	3.3	3.4	3.7	3.3	2.5	3.0	4.6	7.7	9.9	11.2	11.2	10.6	9.4	7.6	6.4	5.0	2.9	3.2	1.8	2.4	5.1	
Sum			35.2	54.7	79.7	99.4	96.9	99.1	108.7	95.5	71.4	85.8	133.0	222.3	286.4	326.0	323.9	306.4	273.0	220.5	186.2	145.4	84.6	93.0	52.0	68.7		Grand Total 3547.8

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

15

15	LERWICK (Z)													46,000γ (0.46 C.G.S. unit) +													FEBRUARY 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 27,000+					
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ						
1	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	1178	1182	1182	1185	1182	1182	1181	1187	1192	1213	1213	1201	1206	1191	1187	1178	1186	1475					
3	1168	1182	1174	1168	1153	1153	1170	1180	1181	1181	1185	1184	1185	1184	1181	1182	1182	1184	1188	1223	1205	1214	1191	1147	1181	1345					
4	1157	1172	1177	1177	1176	1178	1182	1184	1185	1184	1181	1185	1185	1183	1185	1189	1191	1191	1192	1201	1198	1195	1185	1185	1184	1418					
5	1187	1185	1184	1185	1182	1181	1181	1182	1184	1185	1185	1187	1186	1186	1185	1183	1182	1182	1187	1196	1180	1180	1177	1168	1183	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	1179	1307					
7 q	1183	1180	1177	1175	1177	1177	1178	1180	1184	1191	1187	1185	1183	1182	1181	1179	1178	1177	1177	1178	1179	1185	1194	1182	1181	1349					
8 q	1180	1179	1178	1177	1176	1176	1176	1178	1177	1178	1178	1177	1179	1178	1180	1179	1181	1179	1179	1179	1180	1179	1178	1179	1178	1282					
9 q	1174	1178	1178	1177	1177	1176	1173	1173	1174	1173	1173	1172	1173	1177	1178	1178	1178	1175	1175	1177	1178	1179	1177	1176	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	1175	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	1173	1175	1178	1178	1177	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	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	1182	1181	1180	1175	1210					
23	1181	1180	1181	1179	1177	1176	1176	1178	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	1198	1199	1247	1236	1200	1167	1083	1177	1253					
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 +			
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	h. m.	γ		h. m.	γ	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, 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	39	2, 1, 2, 3, 3, 2, 2, 3	18	1	77·5			
20	23 33	488	443	11 52	45	14 10	16·8	1·2	08 59	15·6	14 35	1198	1173	00 42	25	0, 0, 1, 1, 2, 2, 1, 1	9	0	77·3			
21	20 06	500	442	11 25	58	13 38	13·7	-0·2	09 13	13·9	16 25	1191	1171	20 08	20	0, 1, 1, 1, 2, 2, 2, 1	10	0	77·4			
22	00 19	521	447	15 06	74	14 32	15·9	-2·2	09 03	18·1	15 12	1192	1154	03 10	38	3, 3, 3, 3, 3, 2, 1, 1	19	1	77·5			
23	15 27	507	446	11 44	61	13 19	11·6	1·1	09 07	10·5	17 10	1233	1169	13 22	64	1, 0, 1, 1, 2, 3, 2, 1	11	0	77·6			
24	21 20	513	443	11 30	70	13 58	12·8	-0·3	21 14	13·1	18 10	1197	1169	21 24	28	1, 0, 1, 2, 2, 2, 2, 2	12	0	77·8			
25 d	16 11	1212	62	07 47	1150	16 27	65·2	-27·9	20 36	93·1	18 03	1429	927	20 08	502	0, 4, 7, 6, 5, 7, 2, 4	40	2	77·7			
26	21 43	495	346	00 20	149	13 04	15·2	-8·9	09 33	24·1	21 02	1270	1113	00 40	157	4, 1, 1, 3, 3, 1, 4, 3	20	1	77·8			
27 d	18 38	486	282	01 58	204	23 11	29·5	-31·0	19 47	60·5	19 42	1281	1048	23 31	233	5, 3, 2, 2, 1, 1, 5, 5	24	1	78·1			
28	18 48	506	307	03 18	199	03 08	18·0	-20·4	24 00	38·4	18 37	1313	1026	24 00	287	4, 5, 2, 2, 3, 4, 5	28	1	78·3			
29 d	17 07	590	214	00 18	376	15 13	23·7	-29·5	01 03	53·2	17 10	1390	892	00 36	498	6, 4, 3, 3, 4, 5, 3, 5	33	1	78·1			
Mean	- -	528	398	- -	130	- -	16·4	-9·8	- -	26·1	- -	1231	1117	- -	114	-	-	0·48	-	78·0		

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

17 LERWICK (H)														14,000γ (0.14 C.G.S. unit) +												MARCH 1956	
	Hour 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 8,000+	
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	460	3046
2	463	466	466	456	464	474	477	472	459	446	424	436	438	448	457	465	474	478	486	475	472	439	451	460	462	462	3092
3	459	461	452	444	459	429	457	466	443	449	451	432	451	462	467	469	478	493	486	480	485	469	468	472	462	462	3092
d	469	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	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	479	465	3162	
9	q	479	478	478	478	479	478	475	473	467	456	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	478	479	482	471	3308	
17	q	482	481	480	480	481	484	482	477	462	442	427	428	445	459	470	474	477	481	482	485	488	488	484	469	3262	
18	q	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	3011	
28	403	431	323	417	466	472	466	465	457	434	419	424	432	432	452	469	495	518	533	503	456	292	179	99	418	2037	
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	1669	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.		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	4.0	3.6	2.8	4.5	6.4	8.6	11.2	10.4	9.9	7.7	6.6	6.0	5.0	4.8	3.8	3.6	-1.0	5.1	121.8
14			-1.7	1.4	1.9	4.2	2.9	1.8	1.2	-1.0	-0.5	1.6	3.6	7.9	12.7	11.9	13.8	12.5	12.1	7.1	6.3	5.0	3.6	-0.6	0.2	2.1	4.6	110.0
15			7.7	8.1	5.5	3.6	3.0	2.8	2.1	0.2	0.9	2.4	6.4	9.4	12.3	14.1	13.0	11.0	6.8	4.2	4.8	5.4	5.5	5.0	4.0	1.8	5.8	140.0
16			3.8	4.0	3.6	3.3	3.3	3.1	2.6	2.5	4.5	4.5	4.3	7.6	10.4	11.7	9.9	8.8	7.2	5.8	6.2	6.0	6.5	1.2	-1.0	4.2	5.2	124.0
17	q		4.7	4.3	4.1	4.1	3.5	2.8	1.7	0.2	-0.9	0.2	4.0	7.9	10.1	11.1	10.1	7.9	6.2	6.0	5.2	5.0	5.3	5.5	5.6	3.1	4.9	117.7
18	q		4.3	4.3	4.2	3.8	3.8	3.6	2.1	0.5	-0.1	-0.2	2.6	7.1	8.8	10.8	12.0	9.8	6.9	6.9	6.7	6.2	5.4	5.2	1.8	2.2	4.9	118.7
19			4.5	4.9	4.3	6.0	2.6	2.3	1.8	0.8	0.0	1.0	5.3	9.8	12.6	14.4	14.1	11.2	9.6	6.9	4.5	6.4	6.9	-15.2	-13.2	-11.8	3.7	89.7
20			-8.6	-5.3	0.3	7.1	4.5	1.6	0.2	-0.5	-1.0	-0.2	2.8	6.2	8.6	10.5	10.6	10.1	9.3	9.5	9.1	7.9	7.9	6.7	5.3	4.3	4.5	106.9
21	d		-5.4	-8.9	1.0	1.6	0.4	-0.1	0.8	1.4	3.1	6.3	4.4	11.0	11.9	16.7	15.4	16.9	19.4	11.9	11.4	6.4	3.8	1.4	-7.9	-16.7	4.4	106.2
22	d		-18.0	-26.8	-48.1	-32.0	-20.2	-4.1	-3.4	-5.3	-3.3	0.7	4.4	11.1	13.0	14.4	16.5	13.5	10.2	2.2	1.6	9.7	10.6	4.1	-28.4	-18.0	-4.0	-95.6
23			4.4	-27.3	-24.2	-22.8	-17.5	-15.8	-2.9	1.2	2.2	3.5	5.8	7.0	9.4	9.5	9.1	7.9	6.0	4.6	4.4	4.6	5.3	4.6	3.6	3.4	-0.6	-14.0
24	d		3.2	3.0	3.4	3.4	1.8	2.1	0.6	-1.8	-2.8	-2.6	1.1	6.9	13.7	18.1	19.3	15.2	14.2	9.8	6.8	4.9	-1.1	-6.3	-7.6	-16.0	3.7	89.3
25			1.8	-4.2	-0.9	-1.8	-1.6	-1.0	-1.2	-2.1	-0.9	0.8	2.9	6.8	9.2	12.5	10.7	11.4	10.2	8.8	6.4	4.8	4.9	2.0	-15.6	-9.5	2.3	54.4
26			-1.9	0.8	-1.6	1.1	0.1	-0.3	0.8	-0.4	-2.3	-3.0	2.0	6.9	10.2	11.3	7.7	10.6	8.0	8.0	5.8	4.2	2.3	1.8	-0.7	1.7	3.0	73.1
27			-2.8	3.9	5.1	2.2	0.1	2.7	2.0	0.2	-0.8	0.3	3.8	8.7	13.6	14.7	15.9	16.9	13.6	7.5	1.9	4.8	7.0	-1.8	-5.7	-5.2	4.8	114.2
28			-6.6	-4.5	-2.9	-11.0	-5.8	-3.3	2.0	1.2	1.9	3.1	5.1	9.6	13.7	15.0	14.6	14.6	13.7	9.3	5.6	5.1	0.1	-10.8	-24.4	-24.9	0.9	20.4
29	d		-52.2	-15.8	-17.4	-6.9	-2.0	-1.8	-2.0	1.2	7.3	2.5	4.7	7.1	10.7	11.5	10.4	9.2	6.1	3.0	-4.2	3.7	6.6	-4.0	-1.7	3.7	-0.8	-20.3
30			4.6	3.7	3.0	2.5	1.9	3.0	4.4	1.1	-1.1	0.1	1.8	5.2	8.7	11.9	13.4	11.7	8.7	8.0	5.6	8.5	5.6	-4.0	-10.5	-5.7	3.8	92.1
31			-9.7	-14.8	-6.0	-4.8	-6.6	-3.4	-3.4	-3.9	-0.1	3.0	6.6	10.5	14.3	17.1	17.8	16.2	11.3	8.4	4.1	2.2	2.5	3.1	3.1	-1.1	2.8	66.4
Mean			-2.6	-2.2	-1.9	-1.1	-0.3	0.3	1.3	0.8	0.7	1.8	3.8	7.5	10.6	12.6	12.5	11.2	9.7	7.3	5.2	5.3	4.2	0.1	-4.3	-3.2	3.3	
Sum			-81.9	-69.5	-59.1	-35.1	-9.4	9.0	41.0	24.8	22.4	55.7	119.1	233.9	328.3	390.5	386.1	347.0	300.8	226.5	162.2	163.5	129.8	4.5	-132.0	-100.0		Grand Total 2458.1

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

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

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

21 LERWICK (B)

14,000γ (0.14 C.G.S. unit) +

APRIL 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
		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	6,000+
1	γ	468	445	440	442	451	407	446	437	453	453	444	436	437	452	460	468	486	498	486	476	481	489	475	464	458	4994
2	γ	472	471	477	474	474	475	474	470	462	448	426	433	456	483	464	487	527	537	527	495	366	376	456	440	465	5170
3	γ	416	427	460	371	356	434	458	455	452	445	439	439	462	458	471	488	492	512	497	497	501	488	480	483	458	4981
4	γ	480	474	442	458	465	470	464	466	458	437	441	446	445	451	472	485	493	503	504	496	488	482	481	481	470	5282
5	γ	481	476	475	472	477	478	477	468	462	455	448	441	448	466	475	492	471	507	498	506	493	504	488	484	477	5442
6	γ	485	485	484	481	483	485	489	484	471	461	452	446	440	440	478	455	480	490	490	489	491	485	491	478	476	5413
7	γ	335	375	468	485	485	485	486	478	464	456	448	449	447	473	506	485	472	490	494	488	488	488	488	481	467	5214
8	γ	478	480	478	478	483	484	481	475	454	440	421	431	453	446	454	466	474	482	501	493	493	490	486	488	471	5309
9	γ	484	484	481	477	478	485	474	470	466	442	433	439	444	458	447	465	482	487	509	496	491	476	488	481	472	5337
10	γ	479	478	480	479	481	484	477	462	448	437	420	408	412	423	477	502	468	486	490	489	482	479	484	492	467	5217
11	γ	489	491	496	492	491	489	483	470	455	439	429	429	442	458	495	479	494	543	563	501	491	481	487	485	482	5572
12	γ	496	496	480	485	487	491	488	476	459	437	432	429	446	448	464	499	505	499	497	501	497	499	496	492	479	5499
13 q	γ	488	488	488	482	491	496	489	474	452	436	419	416	439	452	474	496	501	507	500	499	498	495	494	492	478	5466
14 q	γ	492	491	492	493	494	493	490	477	457	433	426	428	450	452	477	485	506	495	494	502	504	504	495	496	480	5526
15 q	γ	497	495	492	495	500	497	496	485	459	436	425	427	442	466	479	497	507	509	522	518	511	503	503	506	486	5667
16	γ	496	491	495	503	494	510	507	496	477	453	432	427	436	459	477	538	619	612	568	535	486	444	423	375	490	5753
17	γ	179	352	362	426	325	443	446	454	454	436	421	425	430	465	507	555	531	521	536	525	468	456	462	465	443	4644
18	γ	461	472	472	455	441	466	460	420	454	446	429	419	412	432	464	470	469	485	487	496	494	491	484	460	460	5039
19	γ	453	455	456	454	467	477	477	464	440	435	435	435	442	475	486	511	546	545	517	491	482	477	473	480	474	5373
20	γ	477	466	468	474	472	470	466	453	437	421	417	423	446	464	474	482	495	500	513	524	500	481	466	444	468	5233
21 d	γ	455	475	472	456	481	466	463	459	433	437	448	490	451	480	455	466	490	563	703	686	491	291	110	56	449	4777
22 d	γ	230	96	-3	187	11	-76	99	227	344	349	383	432	433	433	441	442	485	497	517	518	456	450	457	399	325	1807
23	γ	448	443	369	407	452	449	448	439	424	417	410	412	418	425	441	450	462	472	484	490	484	481	478	477	445	4680
24 q	γ	473	472	465	451	459	464	459	448	438	423	413	419	435	454	468	472	487	495	497	499	491	485	481	472	463	5120
25 q	γ	473	448	459	472	475	473	468	460	446	427	420	434	447	461	480	485	509	507	497	508	502	488	482	485	471	5306
26	γ	483	485	477	461	456	472	464	435	436	441	434	427	428	450	477	492	502	513	536	526	509	384	33	33	431	4354
27 d	γ	75	-302	-262	-384	-271	-34	103	-19	112	307	497	615	697	736	690	714	744	709	552	423	403	367	287	-14	281	745
28 d	γ	-20	48	-103	11	326	379	407	426	446	446	462	446	440	439	458	469	460	480	502	536	532	533	539	427	379	3089
29	γ	393	235	368	401	449	421	391	380	397	391	398	418	440	444	444	468	465	466	477	484	477	473	470	474	426	4224
30 d	γ	455	455	452	429	376	439	445	453	454	441	437	435	443	450	520	498	514	605	617	522	485	470	449	436	470	5280
Mean		419	405	403	409	417	432	443	435	435	431	431	439	449	463	479	492	505	517	519	507	485	467	446	424	452	
Sum 12,000+		571	147	80	267	509	972	1275	1042	1064	925	939	1154	1461	1893	2375	2761	3136	3515	3575	3209	2535	2010	1386	712		Grand Total 325,513

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

22 LERWICK (D)

10° +

APRIL 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	-6.0	-11.9	-10.7	-7.8	-1.4	-1.1	-1.6	-1.7	0.3	2.3	4.6	7.6	9.2	12.8	12.9	11.1	8.7	6.3	5.2	4.6	4.2	4.9	-0.9	2.1	2.2	53.7		
2	0.3	-0.7	-0.4	-0.4	-0.4	0.0	-1.1	-2.0	-3.7	-1.7	5.0	11.8	15.6	17.2	15.9	15.2	14.3	10.7	3.9	2.3	0.8	-12.4	-3.8	-6.4	3.3	80.0		
3	-7.4	-10.3	-7.9	-15.4	-10.5	-9.8	-6.6	-4.2	-1.8	1.8	4.4	8.7	14.4	14.9	14.0	12.6	11.9	9.8	10.2	8.0	7.1	6.0	5.8	1.0	2.4	56.7		
4	1.9	0.4	-2.7	4.6	1.0	-0.4	1.3	1.2	2.1	4.9	6.3	11.1	12.8	14.0	11.3	9.0	8.2	7.1	3.5	5.4	-0.7	3.9	5.0	4.7	4.8	115.9		
5	4.8	5.0	4.8	0.9	1.8	2.0	1.2	0.2	1.1	1.2	4.0	7.6	10.7	13.7	12.4	10.7	11.2	11.3	6.7	-2.1	4.5	5.9	4.1	5.0	5.4	128.7		
6	4.0	3.9	3.6	3.8	3.0	2.2	0.8	-1.4	0.4	-0.4	3.1	7.8	12.6	15.6	15.2	9.5	7.0	5.4	5.1	5.6	3.3	-2.8	-0.4	3.4	4.6	110.3		
7	5.2	-4.2	-2.6	-0.9	0.2	0.2	1.2	0.1	2.0	1.8	4.6	8.7	10.2	12.1	6.6	6.4	5.6	2.5	5.1	5.4	4.9	4.4	1.0	2.5	3.5	83.0		
8	4.8	6.9	4.4	4.9	3.8	0.8	-2.0	-2.1	0.0	1.5	6.9	9.4	12.7	12.6	10.8	8.7	6.3	4.8	3.7	1.0	2.7	3.6	4.7	4.8	4.8	115.7		
9	4.7	4.9	5.2	5.6	2.1	0.6	0.2	-1.9	-2.7	0.8	3.4	6.6	9.8	12.4	10.4	8.8	7.0	5.4	3.6	3.7	2.2	2.2	1.8	2.8	4.1	99.6		
10	3.7	3.8	3.7	3.7	2.0	0.6	1.2	2.3	4.4	3.9	5.2	9.7	12.3	12.7	13.3	9.8	6.7	4.6	4.7	3.8	3.6	3.4	3.8	4.4	5.3	127.3		
11	3.4	3.6	3.0	2.8	4.4	-0.2	-1.7	-2.7	-3.7	-2.1	1.0	5.7	9.8	11.7	12.7	9.9	8.0	9.6	8.8	3.0	2.2	1.1	3.9	3.4	4.1	97.6		
12	2.8	1.9	0.6	-0.1	0.1	-1.0	-2.3	-2.0	-2.5	-0.4	3.7	8.2	12.4	10.5	10.0	9.8	6.7	5.8	4.1	6.0	4.0	5.0	5.8	4.8	3.9	93.9		
13 q	4.5	4.4	4.9	6.9	4.4	0.6	-2.0	-3.3	-4.2	-1.8	2.8	5.7	8.7	10.2	10.4	7.9	5.6	4.0	5.5	6.3	6.7	5.9	5.6	5.4	4.4	105.1		
14 q	4.6	4.4	3.8	3.2	3.4	3.6	2.7	-3.1	-4.7	-1.9	3.7	9.2	13.5	13.6	11.7	9.3	7.1	5.8	4.8	5.7	5.4	2.0	2.5	4.9	4.8	115.2		
15 q	5.6	5.0	4.4	3.1	2.5	2.5	0.8	-2.3	-3.0	-0.7	4.6	8.8	11.1	12.4	10.7	9.2	8.5	7.9	8.6	3.9	5.7	6.6	6.0	2.2	5.2	124.1		
16	4.4	3.1	2.7	3.7	7.7	-1.4	-2.7	-3.3	-5.5	-4.7	-1.4	3.4	7.7	8.7	8.7	10.7	12.6	15.3	8.7	6.8	2.3	3.8	0.2	-12.2	3.3	79.3		
17	-2.4	-9.7	-20.7	-8.1	-7.2	-9.6	-10.3	-10.5	-9.5	-4.8	0.0	4.6	7.6	10.6	10.3	9.6	7.6	6.7	8.2	10.3	9.2	-3.3	0.1	-0.4	-0.5	-11.7		
18	-2.0	-0.2	-1.0	-2.8	2.8	2.0	-6.4	0.6	-1.3	-2.0	-0.1	3.7	4.7	6.0	8.9	6.8	4.3	4.4	3.8	4.4	5.1	3.0	0.9	-9.5	1.3	32.1		
19	-2.9	-4.9	-4.7	-6.8	-2.6	-4.2	-3.7	-4.6	-3.9	0.6	3.8	7.8	10.7	13.0	11.1	11.4	6.8	6.3	5.0	4.9	5.6	4.9	4.6	3.8	2.6	62.0		
20	3.9	1.1	2.3	0.6	-1.4	-3.4	-4.1	-4.6	-4.0	-0.9	3.0	7.8	11.8	13.5	12.1	9.2	7.5	5.6	5.4	0.6	0.7	1.0	-0.1	-4.0	2.7	63.6		
21 d	-3.1	-5.8	-4.2	-5.6	-3.8	-2.1	-5.6	-8.6	-6.7	1.2	5.7	13.4	13.0	18.1	13.3	12.4	13.9	19.3	17.8	17.6	9.7	6.3	-1.4	0.8	4.8	115.6		
22 d	-17.5	-24.9	-29.2	-35.1	-24.7	-28.9	-11.3	0.1	7.5	-2.0	3.4	12.5	16.5	16.2	13.3	7.9	7.8	4.8	6.5	4.1	7.3	3.1	-1.0	-5.7	-2.9	-69.3		
23	-3.0	-1.2	-0.1	-4.0	-2.8	-2.7	-2.8	-4.6	-4.6	-2.1	3.7	8.6	11.4	10.2	9.2	6.6	4.9	4.0	5.4	5.9	4.1	3.7	4.4	3.6	2.4	57.8		
24 q	2.1	0.9	0.2	0.1	-1.7	-3.3	-4.9	-4.7	-2.8	-0.7	2.5	6.8	10.7	12.3	10.2	6.9	5.6	4.8	4.6	4.5	3.9	2.5	5.0	4.8	2.9	70.3		
25 q	3.1	7.6	3.0	-1.4	-2.0	-1.9	-3.1	-4.6	-3.8	0.2	5.2	10.9	15.3	16.4	15.5	13.0	9.9	6.3	5.4	5.4	3.5	2.1	3.0	3.8	4.7	112.8		
26	5.0	3.8	1.7	1.5	5.4	0.8	-0.4	0.1	2.1	2.5	7.0	11.1	16.8	17.6	16.7	13.5	11.6	8.7	8.8	5.0	3.9	-11.9	-8.6	-23.9	4.1	98.8		
27 d	-25.7	-51.1	-24.9	-53.8	-81.4	-21.4	-31.1	-0.8	4.9	-4.2	-8.1	4.9	7.9	16.2	16.9	15.0	20.3	22.2	21.6	13.5	7.0	-9.5	-21.9	-23.0	-8.6	-206.5		
28 d	-25.3	-26.6	-48.6	-26.5	-21.5	-9.0	-2.6	-2.5	2.3	-2.1	0.7	4.4	7.8	7.6	7.5	8.2	7.8	8.6	9.3	12.3	7.5	5.4	-2.0	-27.9	-4.6	-109.8		
29	-18.9	0.6	-11.8	-9.0	-6.6	-10.8	-9.0	-1.2	3.9	9.7	11.3	10.4	10.6	13.3	13.5	13.3	9.8	5.5	5.0	5.0	4.4	4.6	3.6	3.0	2.5	60.2		
30 d	0.4	-0.4	-1.2	-7.0	-9.4	-0.2	-0.9	-0.1	5.6	5.3	8.2	10.6	12.6	15.0	17.4	19.2	15.2	15.9	2.1	6.7	4.6	4.9	5.9	6.6	5.5	132.8		
Mean	-1.5	-3.0	-4.1	-4.6	-4.4	-3.3	-3.6	-2.4	-1.2	0.2	3.6	8.3	11.4	13.0	12.1	10.4	8.9	8.0	6.6	5.7	4.5	2.0	1.3	-1.2	2.8			
Sum	-45.0	-90.6	-122.4	-139.3	-132.8	-99.5	-106.8	-72.2	-36.4	5.2	108.2	247.5	340.9	391.1	362.9	311.6	268.4	239.4	196.9	169.6	135.4	60.3	37.6	-35.2		Grand Total 1994.8		

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

19

23	LERWICK (Z)												46,000γ (0.46 C.G.S. unit) +												APRIL 1956											
	Hour 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 27,000+										
	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										
1	1169	1141	1127	1121	1103	1099	1129	1163	1171	1189	1191	1184	1182	1187	1195	1199	1209	1214	1213	1203	1194	1191	1198	1193	1174	1165										
2	1179	1182	1180	1184	1187	1189	1192	1194	1191	1187	1180	1173	1174	1189	1208	1217	1261	1315	1286	1237	1097	1041	1128	1150	1188	1521										
3	1129	1113	1151	1114	1056	1103	1151	1175	1181	1185	1186	1186	1180	1184	1185	1202	1208	1245	1244	1232	1214	1212	1202	1182	1176	1220										
4	1169	1165	1134	1130	1129	1151	1162	1175	1181	1191	1185	1184	1181	1182	1187	1200	1205	1214	1219	1205	1198	1185	1184	1186	1179	1305										
5	1181	1162	1148	1143	1160	1162	1167	1175	1180	1182	1180	1181	1178	1182	1202	1220	1211	1212	1226	1232	1205	1191	1191	1189	1186	1460										
6	1187	1184	1180	1182	1183	1184	1185	1186	1191	1191	1188	1183	1190	1197	1208	1221	1212	1200	1196	1191	1195	1202	1173	1168	1191	1577										
7	979	923	1087	1157	1171	1176	1176	1178	1182	1184	1181	1180	1189	1194	1232	1243	1223	1212	1204	1194	1190	1181	1173	1167	1166	976										
8	1161	1159	1171	1176	1177	1183	1187	1188	1190	1189	1194	1187	1189	1192	1192	1192	1193	1188	1188	1198	1194	1189	1184	1181	1185	1442										
9	1182	1182	1183	1182	1184	1183	1181	1182	1183	1188	1187	1182	1181	1188	1190	1186	1185	1187	1187	1201	1201	1160	1156	1173	1183	1394										
10	1182	1185	1185	1186	1187	1188	1187	1185	1181	1179	1187	1192	1192	1187	1191	1225	1222	1216	1201	1192	1189	1185	1181	1178	1191	1583										
11	1179	1182	1178	1182	1177	1178	1184	1185	1186	1185	1182	1180	1171	1169	1176	1192	1196	1195	1230	1251	1184	1170	1171	1163	1185	1446										
12	1128	1103	1126	1157	1174	1179	1181	1182	1187	1188	1184	1182	1182	1199	1192	1191	1209	1215	1208	1190	1187	1179	1175	1177	1178	1275										
13 q	1181	1181	1180	1171	1165	1175	1180	1184	1188	1187	1184	1177	1171	1175	1181	1193	1200	1201	1194	1184	1180	1178	1175	1175	1182	1360										
14 q	1176	1177	1180	1182	1184	1184	1185	1188	1185	1181	1178	1174	1173	1175	1170	1176	1184	1194	1193	1185	1184	1180	1177	1174	1181	1339										
15 q	1172	1173	1178	1180	1181	1182	1180	1182	1182	1177	1172	1170	1168	1169	1174	1180	1185	1198	1199	1223	1211	1194	1182	1166	1182	1378										
16	1171	1180	1182	1180	1169	1148	1163	1175	1187	1191	1188	1181	1178	1180	1185	1191	1247	1323	1322	1308	1248	1207	1156	1101	1198	1761										
17	1151	1046	1033	1083	1036	1115	1165	1168	1173	1184	1182	1181	1189	1191	1229	1261	1273	1250	1250	1264	1233	1151	1165	1182	1173	1155										
18	1177	1173	1185	1182	1133	1117	1148	1153	1146	1171	1179	1180	1188	1187	1194	1213	1211	1196	1190	1186	1190	1192	1170	1147	1175	1208										
19	1119	1128	1134	1142	1140	1141	1149	1163	1176	1178	1182	1195	1198	1199	1224	1242	1259	1249	1227	1209	1198	1194	1192	1188	1184	1426										
20	1185	1177	1169	1157	1174	1184	1189	1188	1187	1182	1181	1180	1174	1176	1181	1182	1184	1188	1192	1203	1201	1198	1195	1183	1184	1410										
21 d	1172	1157	1164	1134	1139	1164	1170	1175	1178	1167	1169	1171	1204	1177	1182	1177	1177	1182	1220	1092	1162	1288	1422	1211	1186	1454										
22 d	1089	1223	1082	960	926	1061	895	1052	1128	1213	1299	1269	1204	1209	1220	1238	1240	1250	1224	1220	1195	1182	1181	1134	1154	694										
23	1163	1185	1129	1129	1181	1198	1203	1206	1205	1204	1197	1189	1192	1194	1198	1199	1201	1199	1196	1194	1199	1199	1181	1167	1188	1508										
24 q	1181	1192	1198	1198	1191	1189	1190	1187	1185	1188	1189	1184	1182	1182	1189	1195	1192	1201	1202	1203	1204	1195	1179	1156	1190	1552										
25 q	1151	1143	1137	1167	1180	1185	1188	1189	1188	1184	1180	1174	1170	1174	1181	1187	1201	1216	1220	1206	1202	1196	1189	1187	1183	1395										
26	1178	1181	1184	1182	1147	1132	1146	1150	1149	1158	1169	1175	1194	1188	1196	1210	1217	1223	1240	1268	1220	1063	853	925	1156	748										
27 d	1361	975	1141	1240	876	939	1025	1093	1150	1169	1225	1280	1275	1242	1283	1280	1291	1264	1219	1167	1204	1208	1078	1065	1169	1050										
28 d	1171	1194	967	1046	1056	1161	1157	1161	1175	1195	1198	1205	1213	1222	1219	1220	1225	1217	1220	1228	1235	1229	1237	1146	1179	1297										
29	1033	1116	1070	1132	1116	1096	1160	1173	1205	1195	1192	1208	1198	1216	1219	1220	1228	1229	1218	1213	1214	1211	1205	1198	1179	1285										
30 d	1147	1137	1118	1042	1089	1076	1110	1140	1168	1192	1201	1201	1198	1192	1209	1253	1275	1305	1332	1249	1242	1198	1128	1134	1181	1336										
Mean	1160	1147	1143	1147	1132	1147	1156	1170	1179	1185	1190	1190	1189	1190	1200	1210	1217	1223	1220	1211	1199	1185	1173	1158	1180											
Sum 33,000+	1803	1419	1281	1421	971	1422	1685	2095	2359	2554	2690	2688	2678	2698	2992	3305	3524	3698	3660	3328	2970	2549	2181	1746		Grand Total 849,717										

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

24 LERWICK		TERRESTRIAL MAGNETIC ELEMENTS												APRIL 1956						
		Horizontal force				Declination				Vertical force				3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +			
		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	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ
1		17 30	503	387	05 17	116	13 35	14.4	-15.1	01 45	29.5	16 53	1216	1084	04 39	132	3,4,3,1,1,3,2,2	19	1	79.1
2		17 01	567	169	21 00	398	14 14	20.2	-20.0	21 04	40.2	17 20	1322	959	20 56	363	2,1,1,3,4,4,6,6	27	1	79.2
3		17 10	525	245	03 53	280	12 36	19.3	-19.0	03 30	38.3	17 42	1265	1022	04 22	243	4,5,3,2,3,3,2,3	25	1	79.5
4		18 50	514	427	09 46	87	13 13	14.6	-4.7	20 14	19.3	18 34	1222	1110	04 06	112	3,3,3,2,2,2,3,2	20	1	79.1
5		17 29	522	435	11 50	87	13 30	14.4	-12.3	19 32	26.7	19 26	1258	1134	03 13	124	3,2,2,1,2,3,4,2	19	1	78.9
6		14 27	521	419	13 42	102	13 33	17.6	-11.5	21 09	29.1	14 57	1230	1131	24 00	99	1,1,2,2,4,3,3,4	20	1	78.3
7		14 25	520	214	01 14	306	00 01	17.3	-12.4	01 22	29.7	15 00	1250	812	01 11	438	6,3,2,2,3,3,2,1	22	1	78.4
8		18 37	508	417	11 00	91	12 33	13.5	-4.7	06 40	18.2	19 36	1203	1157	01 30	46	2,2,2,2,2,2,2,1	15	0	78.7
9		18 39	517	426	09 52	91	13 24	15.4	-6.5	08 41	21.9	20 13	1205	1147	21 52	58	0,2,2,2,3,2,2,3	16	0	79.1
10		15 17	545	397	11 49	148	14 19	14.6	0.1	05 56	14.5	15 51	1240	1173	23 58	67	1,1,2,2,4,4,1,2	17	1	79.0
11		18 16	583	422	11 19	161	14 22	15.2	-6.4	20 34	21.6	19 10	1266	1144	21 01	122	1,2,2,2,3,3,4,3	20	1	78.6
12		16 12	528	420	11 13	108	12 41	14.5	-8.5	06 58	23.0	17 56	1218	1094	01 49	124	3,3,3,2,2,3,2,1	19	1	78.4
13 q		17 40	509	406	10 53	103	13 07	11.1	-5.9	08 26	17.0	16 53	1205	1161	04 20	44	1,2,3,2,2,1,1,0	12	0	78.4
14 q		16 32	517	418	10 58	99	12 52	15.2	-5.6	08 36	20.7	17 08	1198	1166	12 10	32	1,1,2,2,2,2,1,3	14	0	78.7
15 q		18 58	532	421	10 26	111	13 26	13.4	-3.3	08 22	16.8	19 46	1239	1163	23 27	76	1,1,2,2,2,2,3,2	15	0	78.4
16		17 01	642	316	23 40	326	17 10	20.7	-19.8	23 38	40.5	17 49	1335	1071	23 33	264	1,3,3,2,2,5,4,5	25	1	78.4
17		19 39	579	-52	00 47	631	00 42	27.7	-36.1	00 55	63.8	00 52	1323	986	02 13	337	7,5,2,2,4,3,5,4	32	1	78.5
18		21 53	507	403	12 09	104	14 13	10.2	-13.3	23 32	23.5	16 07	1219	1104	05 14	115	2,3,3,2,3,2,2,3	20	1	78.5
19		16 45	572	430	10 33	142	13 43	14.5	-8.4	00 00	22.9	16 34	1264	1106	00 35	158	2,3,3,2,3,3,3,1	20	1	78.6
20		19 41	538	411	09 55	127	13 22	13.9	-7.1	07 17	21.0	19 25	1206	1152	03 10	15	5,4,2,2,2,2,2,2	17	0	79.0
21 d		18 50	827	-109	22 30	936	19 37	45.1	-46.5	23 34	91.6	22 38	1507	1013	19 28	494	3,3,3,4,4,5,7,7	36	2	79.8
22 d		19 16	562	319	04 40	881	08 02	19.1	-87.8	04 37	106.9	01 52	1377	734	04 36	643	7,7,7,4,3,4,5,4	41	2	79.5
23		19 20	496	317	02 46	179	12 34	15.2	-14.8	02 53	30.0	07 29	1210	1077	02 50	133	5,4,2,2,2,2,1,2	20	1	79.4
24 q		19 29	503	411	10 59	92	13 28	12.6	-5.4	07 22	18.0	20 19	1209	1153	23 47	56	2,1,1,1,2,2,1,2	12	0	79.4
25 q		16 53	518	418	10 19	100	13 50	17.3	-4.8	07 44	22.1	18 42	1225	1115	01 57	110	3,2,1,2,2,2,2,2	16	0	79.8
26		18 05	550	-80	22 20	630	13 30	18.6	-54.5	23 31	73.1	23 58	1473	812	22 43	661	2,3,3,3,3,3,4,8	29	1	79.6
27 d		15 57	887	-970	04 36	1857	02 24	107.1	-256.9	04 36	364.0	03 23	2097	490	04 44	1607	9,9,6,7,5,5,7,8	56	2	79.3
28 d		19 04	583	-334	02 35	917	09 02	17.2	-93.3	02 58	110.5	00 42	1397	791	02 27	606	7,7,4,3,2,3,4,6	36	2	79.0
29		02 14	574	-280	01 48	854	02 01	51.5	-52.3	00 00	103.8	01 56	1412	874	02 17	538	8,5,5,4,3,3,2,1	31	2	79.7
30 d		17 53	685	296	04 53	389	15 27	23.4	-22.3	05 00	45.7	18 21	1365	1013	03 33	352	4,5,4,3,4,5,5,4	34	1	79.5
Mean		-	564	216	-	348	-	21.5	-28.6	-	50.1	-	1305	1032	-	274	-	-	0.90	79.0

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 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 7,000+		
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		
2 q	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		
3	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		
4	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		
5	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		
6	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		
7	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		
8 q	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		
9 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		
10 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		
11 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		
12	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		
13	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		
14	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		
15 d	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		
16 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		
17 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		
18 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		
19	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		
20	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		
21	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		
22	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		
23	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		
24 d	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		
25 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		
26	-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		
27	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		
28	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		
29	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		
30	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		
31	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		
Mean	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		
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.	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		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	9.9	3.3	-0.8	2.2	7.7	186.0
13		1.1	3.1	0.3	0.1	-3.6	-2.7	-7.9	-6.6	14.1	10.1	7.5	11.5	14.7	10.6	11.5	13.2	7.0	4.0	2.1	1.2	1.8	2.1	3.3	6.8	4.4	105.3
14		0.3	2.0	1.0	-0.7	-1.6	-6.3	-8.6	-8.2	-0.4	-1.6	2.2	4.6	4.9	7.7	8.0	6.3	6.7	5.3	4.0	3.3	3.6	2.2	5.6	4.9	1.9	45.2
15	d	7.0	-3.6	3.5	-5.7	1.9	5.8	5.1	-3.1	2.2	1.2	-3.8	-1.0	5.6	6.0	8.0	14.8	19.5	15.9	8.8	4.1	2.2	2.7	-2.5	3.6	4.1	98.2
16	d	1.2	-7.5	11.3	7.0	4.9	16.9	-18.0	-15.8	-22.8	1.2	2.7	5.5	-15.8	8.9	26.1	28.4	35.8	25.4	18.4	9.2	21.6	-14.0	-6.8	-10.7	4.7	113.1
17	d	-81.0	-29.5	-25.7	-12.4	-3.1	-1.6	1.1	-1.6	-5.5	-5.7	5.0	5.1	5.6	4.6	2.9	5.0	3.3	0.4	0.2	1.5	2.7	4.0	3.8	3.0	-4.9	-117.9
18		1.4	1.0	1.0	-1.2	0.2	1.0	0.2	-2.8	-5.1	-1.0	5.0	6.9	7.5	8.2	7.3	5.8	3.3	3.3	3.9	3.8	4.2	4.4	5.3	3.4	2.9	69.0
19		2.4	3.8	1.4	-1.6	-3.7	-6.9	-7.5	-5.6	-8.8	-6.3	2.3	5.8	6.3	6.1	8.1	7.1	6.5	4.7	3.7	4.4	5.0	1.2	-0.2	1.9	1.3	30.1
20		0.7	1.0	3.0	1.9	-1.0	-3.8	-6.3	-6.0	-4.0	-5.3	-2.8	-6.7	9.4	14.9	13.0	9.8	6.1	5.3	6.8	7.5	5.2	5.1	4.9	10.1	2.9	68.8
21		0.4	-9.5	-11.1	-9.4	-3.6	2.3	2.7	-0.5	0.1	1.1	4.2	7.1	9.2	11.6	12.0	10.4	8.4	7.0	7.7	6.5	5.2	4.2	3.6	3.3	3.0	72.9
22		4.1	1.5	-1.9	-0.6	-3.1	-5.5	-4.6	-0.1	2.6	-0.6	5.3	8.2	11.0	8.2	10.6	9.8	7.9	7.8	9.3	2.3	6.0	6.6	7.8	5.0	4.1	97.6
23		3.1	1.2	0.3	-0.9	-1.5	-2.2	-2.5	-1.5	0.9	1.7	7.2	9.1	10.9	11.7	9.8	12.8	14.5	11.9	9.8	11.6	9.8	8.4	-7.1	-25.3	3.9	93.7
24	d	-22.9	-30.1	-44.9	-14.5	-0.7	-8.4	-4.8	-5.0	-2.1	-3.4	-2.6	-1.9	18.0	20.7	18.2	17.6	16.4	12.8	8.4	7.0	12.0	3.1	1.0	-33.0	-1.6	-39.1
25	d	-31.3	-22.2	-23.7	-25.7	6.0	1.5	-15.9	-3.1	2.0	-1.6	4.1	5.0	5.9	5.3	4.1	7.2	6.5	5.1	3.1	3.9	4.8	-0.8	-0.2	-1.0	-2.5	-61.0
26		-7.4	-9.5	-6.8	-6.9	-8.0	-8.8	-10.8	-8.4	-4.6	-1.2	1.2	5.0	8.7	10.7	10.2	9.4	8.2	8.0	7.8	2.1	6.7	3.3	0.4	-2.5	0.3	6.8
27		-3.7	-2.7	1.3	-3.4	-7.2	-7.6	-6.9	-5.0	-2.9	0.3	4.6	7.9	10.0	9.6	9.4	8.8	8.2	8.0	7.3	5.7	5.0	5.7	4.6	-1.8	2.3	55.2
28		-7.3	-5.3	-7.1	-5.0	-6.5	-5.7	-5.2	-3.5	-0.9	3.2	4.6	9.6	14.2	15.0	12.8	10.0	8.0	5.2	3.5	4.9	6.5	5.8	5.8	5.2	2.8	67.8
29		4.6	4.6	3.0	-0.5	-2.3	-3.8	-4.8	-3.7	-1.8	1.5	6.0	9.9	13.7	14.9	14.2	13.7	11.8	11.6	13.5	8.2	7.5	5.8	0.8	1.2	5.4	129.6
30		3.4	4.2	-0.9	-1.9	-4.5	-2.1	0.1	-0.2	-0.7	0.2	3.2	8.8	11.6	13.7	11.8	9.1	8.4	5.1	5.1	3.9	3.6	5.1	1.0	3.1	4.0	95.3
31		4.8	4.1	2.7	3.3	-3.7	-5.5	-6.0	-6.9	-6.4	-3.6	-0.8	3.0	6.0	7.8	7.8	7.8	5.8	5.0	4.9	4.9	5.0	5.4	4.1	1.2	2.1	50.7
Mean		-2.3	-1.8	-1.9	-1.7	-0.9	-1.8	-4.2	-3.9	-2.1	0.0	3.0	6.1	8.9	10.6	10.5	10.1	8.8	6.9	6.0	5.0	5.5	3.7	2.5	0.8	2.8	
Sum		-71.9	-55.5	-57.2	-53.3	-28.8	-55.0	-129.0	-120.7	-64.1	-0.8	93.9	190.9	276.0	328.6	325.6	313.6	272.3	213.7	184.7	154.6	172.2	113.4	75.9	25.0		Grand Total 2104.1

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

21

27 LERWICK (Z)

46,000γ (0.46 C.G.S. unit) +

MAY 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		27, 000+	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ		
1	1153	1179	1183	1177	1183	1184	1179	1187	1184	1194	1215	1230	1246	1249	1237	1233	1243	1261	1242	1220	1213	1205	1202	1196	1208	1995	
2 q	1192	1197	1200	1203	1203	1208	1205	1205	1203	1196	1194	1192	1191	1191	1192	1197	1199	1199	1200	1204	1204	1200	1199	1198	1199	1772	
3	1188	1174	1175	1184	1187	1181	1186	1188	1186	1180	1175	1171	1178	1185	1183	1185	1194	1206	1211	1208	1204	1197	1196	1192	1188	1514	
4	1195	1194	1194	1194	1192	1188	1191	1195	1190	1188	1188	1178	1178	1200	1220	1242	1243	1222	1205	1202	1196	1194	1196	1188	1199	1773	
5	1185	1180	1187	1190	1191	1192	1188	1175	1178	1182	1182	1187	1191	1187	1188	1192	1210	1226	1251	1238	1211	1175	1175	1192	1194	1653	
6	1194	1195	1197	1198	1192	1187	1191	1188	1188	1192	1189	1185	1184	1188	1201	1213	1238	1224	1207	1192	1190	1187	1185	1169	1195	1674	
7	1150	1170	1180	1173	1163	1167	1176	1180	1177	1171	1175	1180	1185	1181	1185	1185	1185	1190	1189	1189	1197	1194	1192	1193	1180	1327	
8 q	1192	1194	1194	1192	1191	1189	1191	1192	1189	1184	1180	1170	1168	1177	1186	1187	1190	1194	1194	1191	1186	1186	1186	1187	1187	1490	
9 q	1183	1191	1189	1187	1192	1187	1188	1189	1185	1181	1179	1175	1176	1181	1182	1184	1184	1185	1188	1188	1187	1186	1185	1187	1185	1439	
10 q	1187	1187	1190	1192	1191	1192	1191	1187	1184	1174	1168	1164	1157	1162	1172	1180	1182	1184	1182	1181	1181	1181	1181	1184	1181	1334	
11 q	1184	1181	1177	1178	1185	1187	1188	1189	1184	1174	1162	1160	1164	1173	1184	1191	1194	1194	1196	1195	1189	1184	1182	1181	1182	1376	
12	1168	1144	1150	1164	1159	1142	1140	1154	1164	1164	1157	1153	1168	1184	1245	1292	1336	1280	1235	1195	1182	1169	1151	1174	1186	1470	
13	1184	1167	1174	1134	1111	1125	1153	1177	1154	1142	1202	1230	1226	1263	1273	1287	1289	1252	1231	1217	1208	1203	1194	1161	1198	1757	
14	1150	1182	1196	1203	1204	1205	1215	1211	1196	1199	1213	1227	1244	1254	1264	1267	1260	1258	1250	1227	1210	1182	1198	1188	1217	2203	
15 d	1168	1091	1064	1023	1061	1109	1123	1169	1189	1208	1220	1256	1268	1309	1325	1313	1304	1220	1194	1191	1156	1065	1051	1113	1175	1190	
16 d	1085	1017	944	931	1046	973	1079	1040	1121	1180	1206	1229	1240	1319	1230	1136	1208	1239	1258	1236	1015	1191	1040	995	1123	-42	
17 d	1156	911	862	975	1042	1077	1054	1113	1180	1241	1253	1262	1290	1315	1339	1304	1262	1250	1239	1227	1223	1216	1208	1195	1175	1194	
18	1188	1187	1189	1161	1154	1175	1163	1173	1195	1202	1206	1204	1204	1210	1212	1218	1233	1236	1228	1215	1212	1210	1203	1198	1199	1776	
19	1207	1204	1200	1201	1202	1205	1204	1199	1199	1208	1205	1198	1192	1193	1194	1206	1206	1200	1197	1195	1194	1208	1209	1204	1201	1830	
20	1201	1196	1187	1179	1180	1187	1201	1199	1196	1192	1196	1210	1294	1242	1205	1204	1214	1222	1219	1223	1235	1178	1161	1067	1199	1788	
21	1017	1061	1041	1056	1127	1154	1160	1181	1196	1210	1205	1196	1196	1198	1200	1198	1198	1199	1191	1194	1202	1206	1201	1192	1166	979	
22	1184	1182	1187	1188	1182	1190	1189	1187	1177	1193	1191	1193	1225	1274	1264	1261	1260	1271	1254	1226	1199	1204	1200	1198	1212	2079	
23	1209	1207	1206	1206	1205	1205	1204	1204	1206	1202	1198	1194	1198	1207	1239	1300	1336	1321	1278	1229	1210	1187	1106	989	1210	2046	
24 d	885	943	1028	1044	1057	1087	1128	1147	1170	1195	1236	1271	1290	1320	1319	1294	1325	1280	1273	1250	1232	1184	999	1015	1165	972	
25 d	1243	962	1106	1006	802	831	1008	1089	1137	1207	1233	1237	1267	1315	1312	1280	1244	1231	1234	1226	1215	1215	1211	1178	1158	789	
26	1144	1126	1111	1130	1144	1169	1195	1200	1209	1207	1207	1208	1209	1206	1212	1219	1222	1218	1222	1236	1219	1214	1202	1151	1191	1580	
27	1157	1180	1174	1182	1191	1201	1209	1208	1207	1208	1199	1191	1188	1192	1197	1201	1203	1206	1209	1211	1211	1209	1204	1180	1197	1718	
28	1145	1149	1138	1079	1126	1165	1184	1189	1201	1204	1198	1193	1187	1187	1197	1215	1219	1220	1218	1212	1203	1201	1198	1199	1184	1427	
29	1198	1197	1195	1200	1205	1205	1198	1199	1197	1189	1187	1188	1188	1188	1204	1220	1232	1229	1265	1289	1250	1153	1089	1125	1200	1790	
30	1166	1158	1180	1196	1191	1186	1177	1189	1197	1199	1205	1208	1207	1215	1236	1271	1265	1281	1263	1257	1245	1227	1198	1195	1213	2112	
31	1198	1191	1182	1178	1190	1204	1202	1201	1199	1198	1197	1192	1194	1191	1192	1194	1194	1195	1196	1202	1205	1205	1198	1187	1195	1685	
Mean	1163	1145	1148	1145	1150	1157	1170	1177	1185	1192	1197	1201	1209	1221	1225	1228	1235	1229	1223	1215	1199	1191	1171	1160	1189		
Sum 35,000+	1056	497	580	504	649	857	1260	1504	1738	1964	2121	2232	2493	2856	2989	3069	3272	3093	2919	2666	2184	1916	1300	971		Grand Total 884,690	

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

28 LERWICK

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 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	h. m.	γ	h. m.	γ						°A.
1	17 46	559	396 05 12	163	14 00	11.9	-7.3 05 05	19.2	17 33	1275	1132 00 00	143	3,3,2,3,3,4,3,1	22	1	79.6
2 q	18 45	498	419 11 10	79	13 48	10.4	-6.8 06 20	17.2	06 29	1208	1187 12 02	21	0,1,1,2,2,1,0,0	7	0	82.0
3	19 20	535	426 10 37	109	13 49	14.2	-5.7 07 14	19.9	18 24	1216	1169 11 18	47	2,2,2,2,2,2,2,2	16	0	82.4
4	14 20	510	433 10 56	77	15 11	12.6	-5.3 08 10	17.9	16 23	1252	1166 12 07	86	1,1,1,3,3,3,2,2	16	0	82.6
5	17 58	578	429 11 38	149	12 20	11.8	-4.0 01 27	15.8	18 51	1267	1163 21 58	104	2,1,3,2,2,4,3,2	19	1	82.8
6	15 26	530	422 09 34	108	13 13	9.7	-4.5 07 43	14.2	16 21	1244	1154 23 59	90	1,1,2,3,3,3,2,2	17	0	83.0
7	19 58	536	443 11 07	93	12 29	10.8	-5.4 20 19	16.2	20 30	1199	1144 00 23	55	2,2,2,1,2,1,3,2	15	0	83.0
8 q	19 52	507	434 10 53	73	13 16	14.2	-7.5 07 32	21.7	07 50	1196	1167 12 19	29	1,1,2,1,2,1,1,1	10	0	83.0
9 q	18 50	509	441 11 37	68	12 55	13.0	-5.3 07 26	18.3	04 44	1194	1173 11 17	21	1,1,1,1,1,1,0,0	6	0	82.4
10 q	17 10	519	421 11 19	98	13 00	10.9	-7.4 07 52	18.3	06 08	1194	1156 12 29	38	1,1,1,2,2,1,1,1	10	0	82.5
11 q	24 00	532	434 10 35	98	23 56	10.8	-5.2 07 03	16.0	19 01	1197	1158 10 47	39	1,1,1,1,1,0,1,3	9	0	82.6
12	16 36	673	432 11 29	241	14 26	22.4	-7.4 21 55	29.8	16 10	1395	1131 05 55	264	3,4,3,3,4,5,3,3	28	1	82.4
13	17 19	556	258 08 15	298	08 46	22.4	-15.9 07 21	38.3	15 40	1295	1098 04 00	197	2,3,5,4,3,4,2,3	26	1	83.0
14	15 53	617	393 08 50	224	15 03	11.3	-10.5 06 50	21.8	15 44	1275	1131 00 00	144	3,2,3,3,3,4,3,3	24	1	82.7
15 d	17 03	841	142 21 40	699	17 48	63.6	-13.2 22 42	76.8	16 58	1356	939 21 52	417	5,4,4,4,5,6,6,6	40	2	82.6
16 d	15 17	1474	-680 21 52	2154	15 10	64.6	-93.9 21 52	158.5	21 52	1506	829 24 00	677	6,8,7,7,7,8,7,8	58	2	82.5
17 d	13 57	573	-757 00 36	1330	03 57	15.6	-143.2 00 06	158.8	00 17	1394	816 02 17	578	9,6,5,4,4,4,3,2	37	2	82.3
18	19 20	501	408 03 07	93	14 02	9.4	-5.1 08 10	14.5	17 20	1237	1146 04 20	91	3,3,3,2,2,2,2,1	18	0	82.0
19	20 33	508	410 09 57	98	14 30	9.4	-10.5 08 12	19.9	22 00	1214	1190 14 26	24	1,2,2,3,2,1,2,3	16	0	81.8
20	20 40	601	333 24 00	268	23 39	20.9	-11.5 11 19	32.4	12 19	1312	1010 24 00	302	2,1,2,4,4,3,4,5	25	1	82.0
21	19 30	523	255 00 16	268	00 00	19.4	-13.8 02 22	33.2	10 00	1212	995 00 10	217	5,4,3,2,2,2,2,1	21	1	82.3
22	18 10	654	414 11 05	240	18 16	30.2	-6.9 05 30	37.1	13 43	1288	1174 08 31	114	2,2,3,3,4,4,5,1	24	1	82.4
23	15 21	605	-3 23 24	608	15 35	18.5	-54.2 23 10	72.7	16 18	1354	901 23 57	453	1,1,1,2,4,4,4,7	24	1	82.6
24 d	14 25	931	-376 23 43	1307	22 32	58.6	-84.7 02 19	143.3	14 32	1380	761 00 39	619	6,6,5,5,7,6,5,8	48	2	82.6
25 d	13 42	567	-392 01 55	959	05 06	48.6	-110.1 02 19	158.7	00 40	1511	678 04 40	833	8,7,7,5,4,4,2,4	41	2	82.2
26	19 16	567	264 01 50	303	13 50	11.0	-19.1 01 17	30.1	19 13	1250	1085 01 47	165	5,3,2,1,3,1,3,4	22	1	82.8
27	19 58	532	411 10 10	121	12 50	10.4	-11.1 24 00	21.5	19 55	1215	1129 00 01	86	3,2,1,1,1,2,2,3	15	0	82.8
28	18 58	514	307 03 36	207	13 25	16.3	-12.7 03 42	29.0	17 28	1222	1050 03 36	172	4,5,2,1,3,1,1,0	17	1	83.0
29	19 05	705	333 22 52	372	13 13	16.4	-9.4 22 32	25.8	18 50	1333	1062 22 52	271	1,1,1,1,3,4,5,5	21	1	83.1
30	17 17	553	407 11 11	146	13 48	14.5	-6.2 03 56	20.7	17 40	1290	1150 01 30	140	3,3,2,3,3,4,3,3	24	1	83.7
31	18 39	516	434 11 37	82	15 24	8.7	-10.4 08 00	19.1	20 43	1207	1173 03 43	34	2,3,2,1,1,2,1,3	15	0	83.8
Mean	-	-	607	248	-	-	20.1	-23.0	-	-	1280	1071	-	-	0.74	82.5

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.	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 9,000+	
1 d	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	481	2545
2	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	481	481	2545
3	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	482	482	2576
4 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	488	488	2718
5	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	487	487	2683
4	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	491	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	500	498	498	498	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	490	490	2771
8	498	488	470	492	493	484	482	463	441	438	413	444	468	480	507	521	518	523	527	534	524	511	474	453	485	485	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	483	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	488	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	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	476	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	476	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	483	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	469	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	481	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	492	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	482	482	2560
19 q	480	480	482	486	485	484	480	473	462	451	444	450	470	480	495	520	535	533	518	518	516	509	498	490	489	489	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	483	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	479	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	479	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	462	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	472	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	466	481	396	396	396	493
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	482	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	476	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	488	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	492	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	485	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	480	480	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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

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

23

31 LERWICK (z)		46,000γ (0.46 C.G.S. unit) +																								JUNE 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 27,000+
1 d	γ	1147	1072	1084	1127	1162	1167	1160	1184	1191	1199	1185	1204	1229	1232	1251	1273	1305	1287	1271	1232	1214	1204	1201	1187	1199	1768
2	γ	1160	1167	1191	1194	1192	1194	1190	1196	1204	1203	1193	1188	1196	1196	1210	1232	1222	1235	1247	1228	1210	1205	1201	1199	1202	1853
3 q	γ	1193	1188	1156	1166	1185	1190	1191	1198	1198	1188	1183	1184	1182	1189	1191	1196	1206	1219	1211	1204	1200	1198	1196	1199	1192	1611
4	γ	1192	1187	1186	1188	1185	1185	1191	1192	1190	1191	1187	1191	1198	1188	1202	1211	1229	1240	1239	1213	1202	1198	1196	1191	1199	1772
5	γ	1194	1192	1193	1192	1194	1188	1187	1187	1182	1173	1180	1176	1176	1186	1181	1185	1192	1205	1206	1210	1206	1205	1198	1196	1191	1584
6	γ	1199	1198	1198	1199	1197	1191	1187	1186	1185	1185	1184	1186	1184	1180	1226	1227	1241	1238	1224	1217	1214	1209	1204	1197	1202	1856
7 q	γ	1194	1195	1197	1197	1198	1199	1193	1191	1184	1188	1189	1187	1191	1192	1192	1198	1204	1209	1215	1207	1201	1203	1196	1192	1196	1712
8	γ	1189	1173	1129	1166	1178	1181	1185	1184	1188	1188	1194	1180	1180	1184	1185	1206	1220	1214	1206	1197	1204	1198	1173	1158	1186	1460
9	γ	1157	1182	1196	1193	1189	1185	1188	1175	1156	1165	1167	1164	1171	1181	1191	1198	1198	1205	1216	1218	1223	1221	1192	1179	1188	1510
10	γ	1157	1150	1167	1169	1180	1185	1197	1197	1192	1182	1179	1175	1174	1177	1184	1192	1203	1226	1246	1223	1213	1198	1167	1130	1186	1463
11	γ	1141	1119	1087	1116	1140	1168	1165	1173	1191	1196	1195	1182	1181	1209	1216	1228	1218	1213	1204	1202	1200	1181	1180	1175	1178	1280
12	γ	1137	1117	1105	1129	1161	1164	1148	1161	1180	1185	1185	1180	1187	1192	1194	1195	1194	1188	1194	1204	1203	1196	1187	1159	1173	1145
13	γ	1121	1138	1156	1163	1161	1178	1187	1190	1189	1188	1185	1179	1182	1187	1195	1201	1206	1196	1185	1192	1195	1194	1148	1116	1176	1232
14	γ	1122	1113	1108	1115	1147	1170	1184	1179	1181	1182	1177	1165	1169	1216	1236	1232	1222	1204	1199	1195	1175	1180	1170	1147	1175	1188
15 d	γ	1111	1106	1078	1079	1106	1130	1175	1185	1194	1198	1201	1209	1214	1214	1212	1218	1223	1227	1206	1211	1204	1196	1182	1122	1175	1201
16	γ	1117	1152	1178	1188	1182	1150	1160	1174	1180	1186	1191	1193	1199	1199	1188	1184	1185	1195	1204	1213	1207	1206	1188	1169	1183	1388
17	γ	1180	1187	1188	1187	1185	1176	1181	1192	1197	1201	1201	1191	1182	1185	1200	1204	1208	1215	1216	1212	1193	1187	1175	1184	1193	1627
18 q	γ	1175	1135	1153	1175	1187	1192	1192	1193	1191	1188	1187	1177	1175	1180	1187	1195	1202	1199	1195	1193	1186	1190	1190	1190	1185	1429
19 q	γ	1187	1192	1190	1190	1187	1186	1187	1185	1185	1181	1178	1174	1167	1174	1181	1188	1197	1204	1213	1209	1201	1199	1194	1181	1189	1530
20 q	γ	1175	1185	1189	1192	1190	1189	1194	1187	1182	1180	1174	1169	1164	1173	1174	1191	1199	1198	1191	1188	1185	1189	1187	1140	1183	1385
21	γ	1130	1121	1122	1164	1188	1198	1187	1189	1196	1183	1179	1180	1173	1170	1180	1185	1197	1207	1213	1204	1198	1175	1182	1182	1179	1303
22	γ	1180	1167	1134	1140	1161	1170	1178	1178	1184	1189	1187	1180	1180	1183	1188	1211	1222	1218	1211	1208	1204	1194	1187	1187	1185	1441
23	γ	1175	1175	1191	1194	1194	1191	1192	1192	1191	1186	1182	1181	1178	1182	1186	1191	1227	1194	1192	1188	1171	1106	1049	1061	1172	1129
24 d	γ	1037	944	1043	1020	1079	1145	1153	1165	1185	1196	1196	1195	1194	1213	1270	1366	1298	1299	1256	1222	1191	1195	1112	1043	1167	1017
25 d	γ	937	1027	970	933	1092	1109	1099	1164	1201	1208	1215	1220	1219	1217	1218	1216	1254	1286	1250	1243	1225	1213	1198	1190	1163	904
26	γ	1195	1202	1204	1203	1198	1184	1183	1185	1171	1185	1186	1201	1220	1231	1247	1256	1277	1279	1257	1227	1223	1220	1197	1167	1212	2098
27	γ	1163	1183	1195	1160	1036	1072	1124	1163	1180	1187	1178	1187	1188	1199	1207	1244	1263	1249	1227	1233	1233	1219	1213	1202	1188	1505
28	γ	1208	1202	1208	1194	1199	1194	1191	1208	1210	1196	1191	1189	1198	1192	1185	1195	1206	1216	1212	1213	1183	1204	1201	1185	1199	1780
29	γ	1181	1174	1167	1182	1189	1191	1188	1189	1196	1197	1198	1211	1200	1198	1198	1196	1204	1206	1204	1230	1235	1210	1191	1192	1197	1727
30 d	γ	1182	1188	1189	1198	1184	1173	1142	1169	1189	1196	1198	1210	1233	1237	1253	1280	1293	1281	1244	1227	1218	1208	1178	1168	1210	2038
Mean	1155	1151	1152	1157	1167	1173	1176	1184	1188	1189	1187	1187	1187	1189	1195	1204	1217	1222	1225	1219	1212	1204	1197	1181	1166	1187	
Sum 34,000+	636	531	552	713	1026	1195	1279	1511	1643	1670	1625	1608	1608	1684	1856	2128	2494	2665	2755	2558	2365	2124	1897	1433	988		Grand Total 854,936

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

32 LERWICK		TERRESTRIAL MAGNETIC ELEMENTS										JUNE 1956			
		Horizontal force			Declination			Vertical force			3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +	
		Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range					
		h. m. γ	γ h. m.	γ	h. m.	h. m.		h. m. γ	γ h. m.	γ				°A.	
1 d		16 03 624	381 01 25	243	13 25	11.9	-14.5 02 18	26.4	16 55 1315	1039 01 53	276.	5,4,3,3,4,4,4,2	29	1	83.9
2		17 10 570	427 10 04	143	12 59	10.5	-4.2 03 49	14.7	18 17 1250	1151 01 16	99	3,3,2,2,3,4,3,1	21	1	83.9
3 q		16 40 544	440 11 11	104	01 59	12.4	-7.0 05 29	19.4	17 50 1222	1146 02 49	76	3,3,1,1,2,3,2,3	18	0	83.8
4		16 34 567	434 12 58	133	13 46	10.8	-6.3 05 38	17.1	17 54 1249	1182 02 13	67	1,1,1,2,3,3,3,2	16	1	83.5
5		17 14 566	438 08 30	128	12 45	12.1	-6.4 07 17	18.5	17 50 1217	1171 09 27	46	1,2,2,1,2,4,3,2	17	1	82.8
6		15 51 570	442 09 33	128	14 56	13.3	-5.9 05 50	19.2	16 43 1250	1169 13 23	81	1,2,1,2,4,3,2,1	16	1	82.4
7 q		17 41 548	439 09 30	109	13 40	10.2	-8.4 07 00	18.6	18 21 1220	1181 08 33	39	1,2,2,1,2,2,2,2	14	0	83.0
8		20 00 552	398 10 17	154	01 31	16.6	-4.6 06 08	21.2	16 42 1227	1111 02 17	116	4,2,3,3,3,3,3,3	24	1	83.0
9		19 43 568	397 07 09	171	14 02	15.7	-5.6 22 40	21.3	20 32 1227	1148 00 05	79	3,2,4,2,3,2,3,3	22	1	83.0
10		17 21 615	423 10 35	192	17 10	13.8	-11.6 06 13	25.4	17 57 1264	1122 23 10	142	3,2,2,2,2,4,3,4	22	1	82.9
11		15 29 573	404 08 30	169	16 39	14.1	-10.3 07 52	24.4	15 16 1232	1075 02 08	157	4,3,3,3,3,3,3,3	25	1	83.0
12		18 37 534	438 10 41	96	00 07	11.1	-6.3 04 55	17.4	19 32 1208	1100 02 36	108	3,3,3,2,2,2,2,3	20	0	83.1
13		18 52 551	391 23 25	160	13 58	12.1	-9.1 23 00	21.2	16 27 1210	1101 23 19	109	3,2,2,2,3,3,3,5	23	1	83.4
14		19 52 561	396 10 27	165	20 00	13.6	-10.1 06 10	23.7	14 16 1241	1100 02 54	141	3,3,3,3,4,3,3,3	25	1	85.7
15 d		17 46 609	343 02 14	266	18 10	14.9	-17.7 23 36	32.6	17 29 1240	1048 02 38	192	5,4,3,3,3,4,3,4	29	1	85.3
16		19 02 560	430 11 16	130	14 50	10.3	-12.7 00 13	23.0	19 53 1216	1095 00 01	121	4,3,3,2,3,3,3,3	24	1	85.1
17		17 27 588	442 10 03	146	16 03	10.1	-7.7 07 10	17.8	17 10 1220	1168 21 54	52	1,2,2,2,3,4,3,3	20	0	85.1
18 q		17 47 540	430 09 26	110	01 09	10.3	-7.5 07 16	17.8	17 30 1205	1115 01 30	90	3,2,1,3,2,2,2,2	17	0	85.0
19 q		17 08 547	442 10 25	105	16 27	12.5	-11.7 23 20	24.2	18 20 1215	1165 12 25	50	1,1,2,1,2,3,2,3	15	0	85.2
20 q		21 10 534	438 10 40	96	13 00	12.2	-9.0 08 03	21.2	16 33 1202	1108 23 58	94	1,1,1,2,3,3,3,3	17	0	85.4
21		21 02 539	417 09 44	122	13 53	15.2	-14.9 00 31	30.1	18 07 1217	1102 02 01	115	3,3,2,2,2,2,3,3	20	0	85.3
22		18 28 546	411 10 46	135	14 43	14.0	-8.4 03 44	22.4	16 10 1225	1130 02 39	95	3,2,1,2,3,3,3,1	18	0	85.2
23		19 05 599	-133 23 00	732	13 40	12.1	-39.4 23 00	51.5	19 52 1200	999 22 57	201	2,1,2,2,2,2,4,7	22	1	85.4
24 d		15 48 956	-99 01 00	1055	16 30	27.6	-48.1 01 10	75.7	15 39 1418	892 01 11	526	7,5,3,2,6,7,4,7	41	2	85.8
25 d		16 17 628	-241 01 07	869	03 41	25.7	-53.5 03 58	79.2	17 31 1294	876 00 50	418	7,6,6,3,2,5,4,2	35	2	85.4
26		17 37 590	412 07 36	178	17 40	11.9	-11.2 22 53	23.1	16 47 1285	1154 24 00	131	1,2,3,2,4,3,3,3	21	1	85.5
27		15 48 560	311 04 06	249	05 04	13.8	-11.2 07 01	25.0	16 18 1269	1009 04 37	260	3,5,4,3,3,3,3,2	26	1	85.2
28		18 38 561	429 12 31	132	15 11	10.1	-8.4 07 44	18.5	19 10 1224	1178 23 54	46	2,2,3,3,3,2,3,2	20	0	85.1
29		18 55 573	432 11 13	141	13 27	13.4	-7.2 19 49	20.6	19 55 1256	1160 03 07	96	2,2,3,3,3,2,3,3	21	1	84.8
30 d		15 25 604	411 12 37	193	05 50	13.8	-10.1 20 05	23.9	16 12 1308	1133 06 09	175	1,4,3,2,4,4,4,3	25	1	84.7
Mean		- - 583	357 - -	225	- - 13.5	-13.0 - -	26.5	- - 1244	1104 - -	140	-	-	0.73		84.4

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

33	LERWICK (H)												14,000γ (0.14 C.G.S. unit) +												JULY 1956	
	Hour 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 11,000+
	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	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	
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.

34 LERWICK (D)													10° +												JULY 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	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	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	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	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	2.1	3.8	3.7	2.2	52.7		
18	2.6	0.7	-1.2	-2.2	-4.6	-5.8	-5.8	-4.6	-3.6	-1.9	1.0	6.2	10.9	13.2	13.2	11.5	8.6	6.2	4.7	7.5	6.4	3.8	3.6	1.6	3.0	72.0		
19	1.6	-2.2	-5.6	-8.2	-4.9	-6.3	-7.2	-8.2	-3.4	0.4	3.7	8.1	12.0	14.6	13.4	10.8	11.2	10.4	4.6	6.5	5.5	5.4	3.8	-4.4	2.6	61.6		
20	-1.4	-4.1	-3.6	-3.6	-4.9	-8.2	-5.8	-3.4	-4.4	-1.0	2.3	6.9	12.0	12.9	13.6	7.9	6.9	7.2	5.5	3.4	2.6	4.0	3.9	2.7	2.1	51.4		
21	0.8	0.3	0.7	0.2	-0.5	-1.7	-2.4	-2.7	-2.4	0.4	3.0	6.2	10.0	10.8	8.8	6.9	5.8	4.5	4.5	4.5	3.6	3.1	3.6	2.6	2.9	70.6		
22	1.6	1.2	0.2	1.8	-4.9	-5.3	-5.5	-1.4	-1.4	0.4	2.9	8.0	11.5	11.4	9.9	9.9	10.0	7.2	4.5	5.2	5.2	3.6	3.6	3.4	3.4	80.8		
23	2.4	2.3	-0.1	-3.8	-6.0	-6.5	-6.5	-5.6	-3.6	-2.4	0.7	4.6	10.8	14.9	14.2	12.7	12.2	15.1	11.2	9.4	12.3	7.5	3.1	-3.2	4.0	95.7		
24	-2.7	-3.9	-3.4	-3.6	-4.6	-5.1	-3.4	-1.2	-4.6	2.9	11.0	9.2	10.4	11.7	10.8	9.3	8.8	8.4	7.4	6.4	6.2	4.6	3.6	3.3	3.4	81.5		
25	0.8	2.3	8.4	5.7	2.5	2.7	0.9	0.9	3.6	0.7	-1.7	0.9	9.1	8.8	11.3	7.9	5.5	6.0	5.7	5.5	4.5	4.5	1.2	-2.2	4.0	95.5		
26	-12.3	-2.4	-1.1	-1.5	2.1	-3.6	-1.2	-4.4	-5.2	4.0	5.6	8.8	11.2	10.3	8.8	8.8	5.3	5.0	7.2	7.9	8.2	6.0	-1.2	5.0	3.0	71.3		
27	-3.4	-5.3	-3.1	-2.7	2.1	3.7	1.6	1.2	1.9	1.8	5.7	5.0	6.0	8.8	9.0	7.1	6.9	6.0	6.6	6.2	5.6	4.3	1.4	-0.3	3.2	76.1		
28	-4.2	-0.2	2.5	0.3	-3.1	-5.0	-3.3	0.3	3.0	6.1	7.0	8.4	10.2	11.3	8.0	7.0	5.6	4.7	4.5	4.6	0.1	4.6	-0.5	-7.1	2.7	64.8		
29	-0.1	0.1	0.9	-1.5	-1.2	-2.8	0.7	8.6	4.8	-1.0	-0.3	3.7	6.7	8.1	4.5	4.9	3.5	2.3	4.8	7.4	5.8	4.2	4.7	6.2	3.1	75.0		
30	5.7	5.7	9.0	1.6	-2.5	-4.9	-3.0	-1.5	-0.3	1.6	2.8	7.1	11.9	10.3	8.7	6.6	5.2	3.6	3.8	4.2	4.8	4.6	6.2	5.2	4.0	96.4		
31	3.5	2.0	0.9	-1.0	-2.0	-3.2	-0.1	1.1	2.8	1.4	2.6	5.8	5.9	7.7	10.5	9.0	3.3	5.2	5.2	5.9	5.7	5.2	5.2	4.2	3.6	86.8		
Mean	1.4	0.3	-0.1	-1.3	-2.0	-3.2	-3.3	-2.8	-1.7	-0.2	2.1	5.5	9.0	10.3	10.0	8.6	7.3	6.5	6.2	5.9	5.1	4.6	3.4	2.5	3.1			
Sum	44.2	10.6	-3.8	-39.5	-63.2	-98.4	-102.4	-86.9	-52.7	-5.1	63.9	169.6	278.5	318.2	309.7	266.6	226.7	200.1	192.3	181.7	158.1	141.9	106.1	77.6		Grand Total 2293.8		

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

25

35 LERWICK (Z)		46,000y (0.46 C.G.S. unit) +																				JULY 1956				
	Hour G.M.T.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 28,000+
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
1	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	1212	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	1196	1193	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	
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		Grand Total 884,645

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

36 LERWICK		TERRESTRIAL MAGNETIC ELEMENTS												JULY 1956						
		Horizontal force			Declination			Vertical force			3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +						
		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	h. m.	γ	γ									
1		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	18	0	84.6
2		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	85.2
3		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	85.6
4		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
5		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
6		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
7	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
8		20 23	524	447	10 24	77	13 07	10-9	-16.0	24 00	26-9	21 53	1207	1146	23 03	61	2,3,2,1,1,2,2,4	17	0	85.5
9		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
10		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
11		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
12		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
13	d	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
14		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
15		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
16		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
17	q	19 35	522	432	11 31	90	13 30	9-4	-7.3	08 24	16-7	08 50	1201	1169	12 09	32	1,2,2,2,1,2,1,2	13	0	85.9
18	q	18 25	560	440	11 33	120	14 18	13-9	-6.3	06 10	20-2	19 03	1210	1173	12 03	37	1,1,1,1,2,2,3,2	13	0	86.0
19		17 46	555	446	09 32	109	14 02	17-0	-10.2	07 25	27-2	18 23	1223	1142	23 39	81	3,2,2,2,3,3,2,3	20	0	86.1
20		19 28	557	410	00 20	147	14 30	14-9	-9.7	05 52	24-6	16 00	1220	1102	00 11	118	3,2,2,1,3,3,2,2	18	0	86.0
21	q	19 50	523	446	11 53	77	13 55	11-3	-3.3	08 03	14-6	15 34	1202	1182	00 32	20	1,0,1,1,2,1,1,1	8	0	86.0
22	q	16 58	533	440	10 10	93	12 42	12-7	-6.1	05 24	18-8	18 20	1208	1173	14 01	35	1,1,1,1,2,2,1,2	11	0	85.7
23		17 42	595	283	23 39	312	18 00	19-0	-8.9	23 32	27-9	20 52	1248	1090	23 01	158	2,1,1,2,3,3,3,6	21	1	85.7
24	d	18 23	525	358	08 30	167	10 08	14-6	-6.7	05 38	21-3	14 03	1222	1124	00 55	98	3,2,4,5,3,3,2,1	23	1	85.7
25	d	21 20	551	188	24 00	363	14 16	13-6	-34.1	23 58	47-7	14 12	1260	985	23 58	275	3,2,3,3,4,3,2,6	26	1	86.0
26	d	18 00	596	43	00 30	553	12 10	14-6	-24.7	00 06	39-3	17 00	1328	959	00 26	369	7,4,4,4,4,4,4,5	36	1	86.0
27		20 11	551	371	00 50	180	14 26	11-5	-18.8	01 48	30-3	15 55	1227	1035	01 35	192	4,4,3,3,3,3,2,4	26	1	86.0
28	d	20 28	563	425	10 34	138	13 40	12-6	-15.1	23 01	27-7	14 28	1241	1092	00 22	149	3,3,3,3,3,3,4,4	26	1	85.8
29		14 12	705	379	06 54	326	07 18	14-4	-10.8	17 07	25-2	16 58	1296	1125	00 03	171	3,1,4,2,3,5,3,2	23	1	85.5
30		20 42	531	420	02 45	111	02 24	16-3	-6.0	05 24	22-3	18 23	1234	1133	03 14	101	3,3,2,2,2,2,2,2	18	0	85.8
31		16 43	578	401	13 41	177	14 44	11-5	-4.8	05 18	16-3	16 35	1260	1181	08 22	79	1,1,2,2,4,3,2,1	16	1	85.8
Mean		- -	558	381	- -	177	- -	13.4	-10.2	- -	23.6	- -	1232	1127	- -	105	-	-	0.45	85.8

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

37 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +																							AUGUST 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+
	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	485	403	447	479	483	479	471	465	456	448	446	460	469	482	472	480	502	519	514	500	499	501	496	489	477	1445
2	485	480	482	482	486	484	480	471	459	439	445	456	465	453	475	499	501	495	512	518	504	495	489	486	481	1541
3	483	486	486	489	489	484	471	460	455	457	447	438	462	478	509	471	479	487	487	491	490	488	491	491	478	1469
4 q	486	483	475	484	488	487	477	468	461	455	449	451	463	475	490	498	501	503	499	501	504	507	501	498	483	1604
5 q	494	491	491	491	487	495	486	477	465	460	465	465	468	482	491	497	498	498	497	504	506	505	499	491	488	1703
6	489	490	490	493	493	490	478	461	448	446	451	463	473	484	509	507	497	516	509	522	514	501	494	490	488	1708
7 q	490	491	489	489	487	490	486	479	468	452	440	440	451	462	477	492	506	517	523	531	519	508	507	501	487	1695
8	498	495	498	492	497	496	485	473	471	452	446	450	461	487	512	522	530	543	549	531	511	486	491	490	494	1866
9	485	479	478	489	486	480	490	489	472	454	441	446	424	452	503	498	595	647	557	511	515	488	416	418	488	1713
10	476	471	490	492	488	490	500	480	471	455	440	430	439	470	479	487	502	498	494	498	500	501	511	507	482	1569
11 d	519	520	523	530	525	514	487	486	472	460	449	417	445	474	490	531	550	620	613	523	481	483	482	478	503	2072
12	467	461	471	484	484	470	443	444	431	439	436	428	468	508	512	520	520	523	512	501	510	507	490	483	480	1512
13	482	480	476	473	473	471	465	455	439	429	424	422	433	443	461	477	501	508	511	512	509	490	484	479	471	1297
14	479	486	490	487	487	476	462	454	443	424	422	424	444	459	465	481	494	500	507	510	500	495	489	484	473	1362
15	482	482	483	484	489	487	481	474	461	440	430	428	433	459	473	481	492	503	514	520	509	490	494	490	478	1479
16	490	487	485	485	486	485	479	468	457	449	439	441	447	466	477	501	516	494	496	502	505	509	510	501	482	1575
17	499	479	472	492	487	454	475	461	445	431	422	401	408	457	471	487	508	511	502	508	504	506	504	509	475	1393
18	508	504	502	498	500	498	491	477	455	436	430	434	432	447	464	475	487	498	498	493	494	491	489	491	479	1492
19 q	490	487	487	488	490	490	487	481	466	452	450	443	442	455	472	487	498	498	497	497	498	500	500	501	481	1556
20 q	500	502	500	500	500	504	498	483	464	446	435	438	446	462	479	489	496	500	500	508	513	513	517	513	488	1706
21	509	508	508	508	506	504	498	489	477	464	467	454	461	580	525	465	517	539	523	500	501	490	460	459	496	1912
22	460	471	460	480	479	479	466	454	444	436	439	447	457	475	476	503	487	492	509	522	509	491	485	486	475	1407
23 d	492	492	497	491	501	505	498	487	454	438	427	452	475	524	526	477	501	509	535	519	504	439	325	193	469	1261
24 d	-179	402	395	376	409	388	442	434	440	407	362	412	444	519	960	1098	684	632	666	555	473	463	474	457	488	1713
25 d	426	469	467	458	458	466	461	456	437	393	373	400	469	570	550	542	544	517	538	507	480	483	447	365	470	1276
26 d	248	132	348	355	446	471	447	409	408	423	430	450	461	468	477	522	507	524	555	520	495	476	472	472	438	516
27	472	475	460	458	462	447	456	465	447	433	433	448	446	480	474	443	472	487	489	499	493	487	483	484	466	1193
28	470	467	466	462	468	482	478	471	460	446	442	429	441	469	487	499	546	508	509	494	491	485	486	486	477	1442
29	487	485	484	485	484	483	480	467	452	435	434	436	431	462	487	462	498	494	506	509	498	492	490	495	477	1436
30	482	481	479	479	480	483	482	461	444	439	429	423	433	457	468	492	509	504	497	494	494	493	494	492	475	1389
31	488	484	483	484	484	485	483	475	462	449	432	425	428	471	483	515	598	621	576	550	536	488	482	485	494	1867
Mean	456	469	476	479	483	481	477	467	454	441	435	437	449	478	503	513	517	523	522	511	502	492	482	473	480	
Sum 13,000+	1142	1523	1762	1837	1982	1917	1783	1472	1084	687	475	551	919	1830	2594	2898	3036	3205	3194	2850	2559	2251	1952	1664		Grand Total 357,169

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

38	LERWICK (D)													10° +													AUGUST 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	5.0	8.5	-2.2	-4.7	-4.8	-4.7	-4.1	-2.4	-1.5	0.6	4.6	6.2	7.1	8.6	8.1	7.1	5.1	2.9	2.3	4.0	5.6	6.2	6.0	6.5	2.9	70.0		
2	2.3	3.3	1.4	-0.4	-1.8	-4.4	-6.7	-6.0	-3.1	0.6	5.3	10.7	12.9	10.6	6.8	4.5	1.9	-0.2	1.5	5.0	5.6	3.9	2.8	3.9	2.5	60.4		
3	3.1	1.4	0.4	-0.1	-1.7	-3.4	-2.3	1.4	1.3	2.9	6.8	10.6	13.6	13.3	9.6	6.0	3.0	2.4	3.5	4.2	4.6	4.1	4.4	2.3	3.8	91.4		
4 q	0.6	2.3	-0.8	-2.5	-3.7	-5.7	-6.8	-5.9	-3.4	0.4	4.2	6.8	9.8	10.4	9.3	6.7	3.7	1.6	1.8	3.2	4.2	3.7	2.5	4.4	1.9	46.8		
5 q	3.9	4.0	2.3	1.7	2.8	-2.2	-3.1	-3.0	-2.8	0.4	2.8	6.6	9.4	10.7	9.0	6.4	3.8	2.5	2.5	3.7	4.2	4.2	4.1	2.3	2.0	3.1	74.0	
6	3.0	1.5	-0.7	-0.6	-2.3	-4.0	-4.4	-3.8	-2.1	1.2	5.2	8.4	11.4	11.6	11.2	8.5	6.4	5.5	4.3	6.2	4.4	5.3	4.0	1.8	3.4	82.0		
7 q	-0.2	1.1	0.6	-0.6	-1.9	-1.2	-0.6	-1.2	-1.5	0.9	3.5	7.4	11.0	10.7	9.0	7.1	5.2	2.5	1.6	2.1	2.0	4.2	3.9	2.6	2.8	68.2		
8	2.5	1.3	0.5	-2.9	-3.2	-5.1	-9.1	-7.6	-6.9	-3.2	3.9	8.8	14.8	17.5	17.7	14.3	5.1	8.3	6.7	1.2	1.0	-3.8	1.0	2.8	2.7	65.6		
9	2.9	0.4	-2.2	-4.6	-4.7	-3.1	-4.8	-7.6	-8.1	-4.1	0.1	5.2	13.6	14.8	14.4	11.8	12.2	1.9	2.9	4.1	7.6	1.9	-3.9	-5.8	1.9	44.9		
10	-0.9	3.3	1.8	-0.9	2.6	-2.9	-6.1	-5.7	-5.4	-2.1	1.9	7.5	13.4	17.3	15.6	12.6	9.1	4.8	3.0	3.7	4.0	4.0	5.6	3.8	3.7	90.0		
11 d	3.6	3.9	-2.8	-5.7	-8.7	-11.6	-11.6	-8.4	-2.4	-1.1	2.2	11.0	16.1	19.2	17.2	20.8	16.2	14.2	5.8	7.6	4.2	6.2	4.3	0.7	4.2	100.9		
12	-1.0	1.8	0.7	-3.9	-4.9	-7.8	-10.7	-10.4	-3.4	-1.5	4.8	10.9	16.6	19.0	15.5	12.9	11.2	8.4	6.3	7.5	4.4	3.3	3.2	2.5	3.6	85.4		
13	1.8	1.6	1.0	-0.3	-1.8	-3.3	-5.6	-5.8	-5.6	-3.8	1.1	7.4	12.2	13.5	13.2	10.4	5.9	4.5	4.0	4.0	-1.8	0.7	2.3	1.9	2.4	57.5		
14	0.7	1.6	-1.5	-1.8	-2.3	-4.8	-6.7	-6.3	-5.7	-2.2	3.5	4.0	12.3	12.6	9.9	7.4	4.9	4.2	4.2	3.3	3.8	4.7	4.4	2.0	2.2	52.2		
15	1.0	-0.2	-0.4	-0.9	-1.5	-4.4	-5.9	-6.8	-6.3	-3.7	-1.2	1.8	4.6	7.7	8.1	6.6	4.8	4.5	4.5	4.7	1.0	3.9	4.5	2.6	1.2	29.0		
16	2.5	0.8	0.4	-0.8	-2.8	-3.4	-4.0	-4.6	-3.7	-2.3	1.7	6.0	10.4	12.6	11.4	11.2	10.5	5.2	4.2	4.6	4.7	4.6	3.3	-1.7	2.9	70.8		
17	-6.8	-14.6	-11.5	-5.7	-5.8	-5.1	-6.3	-9.1	-5.8	-3.7	1.5	6.8	9.4	11.7	11.3	7.2	6.6	5.1	4.1	5.3	5.1	3.7	1.8	0.8	0.3	6.0		
18	0.8	-0.6	-1.0	-1.2	-3.1	-5.2	-5.6	-6.0	-4.1	-0.8	2.3	6.0	10.1	11.8	11.0	8.1	5.9	4.5	4.2	4.5	4.4	2.9	2.3	2.0	2.2	53.2		
19 q	1.4	1.0	0.7	-0.1	-1.5	-2.6	-3.3	-2.3	-2.2	-1.1	2.0	5.5	9.1	9.7	7.0	4.9	2.9	2.9	3.3	4.0	3.9	3.6	3.4	1.6	2.2	53.8		
20 q	1.0	1.0	0.0	-1.0	-1.0	-3.1	-2.9	-3.3	-1.7	0.8	4.1	7.6	10.9	11.7	10.4	7.6	5.1	3.3	3.5	4.5	3.9	3.5	3.5	3.1	3.0	72.5		
21	2.5	2.5	2.3	1.0	-0.2	-3.3	-5.4	-7.6	-3.1	0.8	4.0	9.7	13.5	23.4	23.2	17.7	14.5	13.1	7.7	7.1	5.3	-1.9	-2.1	-1.8	5.1	122.9		
22	-6.7	-3.2	-1.5	-2.7	-2.1	-5.4	-5.4	-4.9	-3.7	-0.1	5.0	10.5	15.1	17.2	13.1	9.4	6.2	4.1	2.7	2.5	3.0	0.8	-1.2	1.7	2.3	54.4		
23 d	4.0	0.4	-0.2	-1.9	-1.8	-3.4	-5.7	-6.5	-2.5	1.0	9.3	12.4	15.5	13.5	9.1	5.8	2.3	-2.0	1.7	2.6	2.8	-4.7	1.7	-6.8	1.9	46.6		
24 d	-11.3	-15.9	-19.6	-12.4	-4.1	-1.2	1.9	1.8	-1.1	0.6	6.8	12.3	13.5	13.2	13.6	-2.8	9.5	17.6	9.0	0.5	4.2	3.8	1.0	7.9	2.0	48.8		
25 d	9.5	1.8	1.1	2.3	-2.2	-3.0	-2.8	-1.9	-0.1	2.9	5.8	9.8	13.8	12.9	12.1	9.7	5.5	2.8	-3.4	0.4	-2.8	-4.0	2.0	-6.3	2.7	65.9		
26 d	-13.0	-41.6	-19.1	2.3	5.1	-0.6	4.5	7.1	6.4	8.5	4.7	5.5	8.4	9.4	7.6	1.2	2.6	4.2	3.2	2.8	0.0	2.8	3.2	2.8	0.7	18.0		
27	2.9	3.0	8.5	5.8	4.8	0.4	-5.6	-5.1	-2.0	0.9	3.0	6.6	9.4	10.0	8.4	6.4	3.3	1.0	-0.1	0.4	0.8	1.8	2.1	3.5	2.9	70.2		
28	8.8	0.0	-2.5	-0.9	1.7	-0.9	-5.3	-5.9	-4.8	-1.5	1.9	4.8	3.8	12.5	10.8	8.5	2.8	3.6	2.9	1.7	2.9	2.3	3.8	3.1	2.3	54.1		
29	4.4	3.3	1.9	-0.8	-0.1	-1.0	-3.0	-4.4	-5.0	-3.4	0.9	7.1	11.4	13.8	11.9	7.6	4.6	1.9	2.0	0.9	1.8	1.9	3.5	2.1	2.6	63.3		
30	-0.3	-3.2	-1.5	1.4	2.8	0.5	-3.8	-5.7	-2.7	0.4	3.5	5.7	9.6	13.5	11.4	6.8	4.0	1.8	1.8	2.9	3.9	2.8	2.3	2.6	2.5	60.5		
31	3.8	3.8	2.7	2.3	1.5	0.0	-2.5	-4.9	-4.9	-1.9	-1.5	6.4	14.8	15.5	13.4	9.5	12.9	16.0	7.6	7.6	2.9	1.9	1.8	1.4	4.6	110.1		
Mean	1.0	-0.8	-1.3	-1.3	-1.5	-3.4	-4.6	-4.6	-3.2	-0.4	3.3	7.6	11.5	13.2	11.6	8.5	6.4	4.9	3.5	3.8	3.3	2.5	2.6	1.6	2.7			
Sum	31.8	-25.7	-41.2	-40.6	-46.7	-105.9	-143.7	-142.8	-97.9	-13.6	103.7	236.0	357.5	409.9	360.3	261.9	197.7	153.1	109.3	116.8	101.6	78.2	79.7	50.0		Grand Total 1980.4		

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

27

39 LERWICK (Z)		46,000γ (0.46 C.G.S. unit) +																								AUGUST 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 28,000+	
			γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ		
1			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	1194	1191	1188	1182	1178	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	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	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	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	1186	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			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		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	h. m.	γ	h. m.	γ	h. m.	γ				°A.			
1	17 38	530	378	01 46	152	01 31	12-2	-5-9	03 35	18-1	19 16	1216	1089	01 56	127	4,3,1,2,3,3,2,1	19	1	85-4	
2	19 32	527	433	09 52	94	13 01	13-6	-7-3	06 59	20-9	17 44	1209	1158	00 33	51	2,1,1,2,2,2,2,2	14	0	85-8	
3	14 28	522	427	11 22	95	13 12	14-4	-4-1	05 53	18-5	15 19	1230	1167	11 57	63	1,1,2,2,3,3,1,1	14	0	85-6	
4 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	1,1,1,1,1,2,1,2	10	0	85-5	
5 q	19 32	508	458	09 30	50	13 13	11-2	-3-9	07 55	15-1	16 56	1198	1170	05 15	28	1,2,1,1,1,2,2,1	11	0	85-4	
6	14 52	537	444	09 14	93	12 58	11-9	-4-9	06 38	16-8	20 58	1198	1159	10 50	39	1,1,1,2,3,3,2,1	14	0	85-6	
7 q	19 32	539	435	11 06	104	12 54	11-6	-3-0	04 11	14-6	20 03	1200	1162	11 44	38	1,1,1,1,1,1,2,1	9	0	85-4	
8	17 33	580	442	11 02	138	14 02	18-9	-10-7	06 54	29-6	19 49	1286	1154	21 29	132	2,1,2,3,3,3,4,3	21	1	85-0	
9	17 41	703	398	22 54	305	14 09	18-4	-14-0	17 48	32-4	17 41	1395	1098	23 35	297	2,2,2,3,4,5,4,5	27	1	85-5	
10	22 19	520	427	11 30	93	13 15	18-3	-6-8	06 25	25-1	14 44	1215	1100	01 51	115	3,3,2,2,3,2,1,2	18	0	85-9	
11 d	18 07	680	388	11 05	292	15 10	23-1	-18-7	06 54	41-8	18 02	1339	1139	22 24	200	3,3,3,4,4,5,5,3	30	1	85-8	
12	17 35	533	409	11 22	124	13 21	20-3	-14-5	07 01	34-8	14 44	1274	1150	02 59	124	3,3,3,3,4,3,3,3	25	1	85-4	
13	20 32	516	415	11 22	101	14 10	15-0	-7-3	09 02	22-3	20 13	1206	1174	12 53	32	1,2,2,2,2,2,2,2	14	0	85-7	
14	19 12	515	416	11 12	99	13 11	13-8	-8-5	06 17	22-3	20 02	1200	1140	00 51	60	2,2,1,2,1,1,1,2	12	0	85-5	
15	19 57	525	424	12 13	101	14 12	9-5	-7-3	07 20	16-8	20 24	1206	1168	13 21	38	1,1,1,1,3,2,2,1	12	0	86-0	
16	16 13	529	437	10 59	92	13 47	14-1	-5-4	08 08	19-5	17 23	1216	1168	24 00	48	1,0,1,1,2,3,2,2	12	0	85-4	
17	16 58	523	394	11 53	129	13 58	15-4	-17-3	01 28	32-7	15 19	1223	1113	06 27	110	3,4,3,3,4,3,1,1	22	1	85-8	
18	00 57	511	430	09 57	81	14 13	12-4	-7-2	07 17	19-6	02 57	1213	1181	13 05	32	1,2,3,3,2,1,1,1	14	0	85-9	
19 q	23 36	505	439	11 50	66	13 15	10-5	-4-0	07 01	14-5	02 04	1193	1173	13 20	20	0,0,2,2,3,2,1,1	11	0	86-0	
20 q	22 17	519	434	10 35	85	14 00	12-1	-4-3	07 35	16-4	17 23	1198	1167	12 14	31	1,1,3,3,2,2,1,0	13	0	86-0	
21	13 46	609	431	11 56	178	14 44	27-6	-9-3	07 57	36-9	18 27	1254	1127	13 12	127	0,2,3,3,5,4,3,3	23	1	85-9	
22	19 12	531	433	09 30	98	13 30	20-2	-8-7	00 06	28-9	19 58	1233	1147	21 50	86	3,1,1,2,3,3,3,3	19	1	85-3	
23 d	14 08	591	133	20 30	461	12 42	16-7	-22-8	21 11	39-5	14 53	1336	788	23 43	548	3,2,3,3,5,4,4,7	31	1	85-2	
24 d	15 42	1152	-1000	00 34	2152	00 21	24-6	-134-1	00 33	158-7	14 47	1404	547	00 34	857	9,4,3,4,7,7,6,4	44	2	85-4	
25 d	15 55	669	280	23 58	389	00 06	24-5	-13-0	21 21	37-5	15 53	1325	978	23 59	347	5,5,3,3,5,5,4,5	33	1	85-5	
26 d	18 15	566	-263	01 08	829	13 04	11-9	-63-6	01 38	75-5	15 48	1289	802	01 08	487	8,5,4,3,3,3,4,2	32	2	85-7	
27	13 48	514	426	10 03	88	02 46	11-2	-8-6	06 35	19-8	14 46	1237	1151	05 00	86	3,2,2,3,4,3,2,2	21	1	85-9	
28	16 37	566	424	11 28	142	13 55	14-8	-7-8	06 50	22-6	16 52	1238	1077	00 58	161	4,3,1,2,3,4,2,2	21	1	85-9	
29	14 18	523	424	12 32	99	13 53	15-1	-7-0	08 22	22-1	15 07	1236	1153	24 00	83	1,2,2,2,4,3,2,3	19	0	85-7	
30	16 41	518	409	11 02	109	13 37	14-4	-6-6	06 57	21-0	17 12	1238	1131	00 42	107	2,2,2,2,2,2,2,1	15	0	85-4	
31	17 20	640	392	12 07	248	17 13	22-0	-5-7	07 31	27-7	17 27	1376	1177	10 19	199	1,0,2,3,4,5,4,3	22	1	85-0	
Mean	-	-	571	341	-	231	-	-	15-8	-14-5	-	-	1251	1099	-	152	-	-	0-55	85-6

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.																										Sum		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	10,000+				
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ					
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 d	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	445	451	453	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.																										
	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	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	-0.2	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	-0.8	-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	1.3	0.9	0.2	4.3	0.1	1.5	3.2	-3.2	-3.2	-2.6	0.8	7.5	11.4	12.4	11.2	8.1	19.6	8.0	4.5	-2.5	-5.0	-3.1	-2.0	-3.6	2.9	69.8	
21 d	-1.8	-4.6	-19.4	-25.3	-8.6	-1.6	1.2	1.7	-6.8	-3.9	0.6	4.5	9.3	8.7	7.5	6.4	1.7	-0.2	2.4	-2.0	-1.4	-4.6	-6.1	-1.2	-1.8	-43.5	
22 d	1.3	1.2	0.1	4.9	1.7	-2.0	-3.7	0.0	1.0	-2.0	7.6	9.5	9.4	11.4	9.3	8.4	-6.2	0.7	-11.0	-3.6	0.8	2.2	-0.1	1.7	1.8	42.6	
23	0.3	0.0	4.6	-0.7	-1.2	-1.2	-0.2	-2.1	-2.3	0.0	4.3	7.3	10.8	10.5	7.4	3.2	-1.2	1.4	3.0	2.9	3.0	2.9	3.6	2.4	2.4	58.7	
24	0.8	0.3	-0.4	0.3	0.3	-1.2	-2.1	-3.3	-3.4	-1.2	1.7	6.5	10.5	8.4	8.6	5.3	3.6	2.7	2.3	2.5	-1.2	1.2	2.8	-3.8	1.7	41.2	
25	-3.1	1.2	-2.3	-0.6	-1.2	-2.6	-3.1	-4.1	-4.7	-3.2	-0.2	3.6	6.6	8.9	8.5	6.5	5.6	4.4	4.2	3.2	-1.1	-1.4	2.7	-4.2	0.9	21.6	
26	-6.4	-6.7	-4.9	-5.2	-8.8	-3.1	1.2	4.4	1.2	2.1	5.4	7.6	9.6	9.6	8.4	6.0	4.6	3.6	2.7	1.7	2.2	2.0	2.7	1.6	1.7	41.5	
27	1.2	0.8	0.8	-0.2	-0.2	-0.2	-1.6	-3.6	-3.9	-2.3	1.2	5.8	9.6	11.0	10.4	8.2	5.6	3.8	3.7	1.4	-3.1	-3.1	0.8	0.3	1.9	46.4	
28	0.8	0.8	1.7	0.3	0.8	1.7	-2.0	-2.6	-2.3	-2.1	2.2	4.7	7.6	10.8	9.9	9.4	6.3	3.8	3.4	3.2	2.8	1.6	-1.2	-3.1	2.4	58.5	
29 q	-2.1	-1.3	-1.0	-1.0	-1.1	-1.3	-2.1	-3.1	-4.5	-5.0	-2.1	2.2	6.0	8.7	9.9	6.5	3.9	2.3	2.8	3.2	2.9	2.6	-0.7	0.8	1.1	26.5	
30	-2.6	-5.2	-6.1	-6.0	-5.0	-2.8	-3.6	-4.0	-3.9	-2.2	3.4	7.5	9.7	9.9	9.5	7.7	5.6	3.6	3.7	3.2	3.4	1.3	-2.6	-6.9	0.7	17.6	
Mean	-0.3	-0.7	-1.6	-2.3	-2.2	-1.8	-3.0	-4.1	-4.2	-2.7	1.4	5.7	9.2	10.0	9.3	7.1	4.5	2.8	2.4	2.0	1.0	1.5	1.3	0.0	1.5		
Sum	-9.1	-22.4	-48.0	-68.8	-66.0	-53.6	-89.1	-122.1	-125.8	-81.0	41.3	172.3	274.7	299.3	278.1	211.7	134.2	82.9	71.7	60.3	29.8	46.4	40.4	-0.4		Grand Total 1056.8	

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

29

SEPTEMBER 1956

43 LERWICK (Z)		46,000γ (0.46 C.G.S. unit) +																				SEPTEMBER 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 28,000+
	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	
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	1219	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	1196	1201	1204	1205	1205	1202	1201	1196	1192	1195	1195	1195	1198	1195	1198	1201	1202	1202	1201	1199	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	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	1201	1200	1192	1188	1187	1187	1192	1195	1192	1190	1187	1190	1192	1191	1191	1192	1194	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	1210	1204	1204	1204	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										
	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ									
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	1,1,2,1,2,1,1,3	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	21	2,0,1,1,1,1,0,1	7	0	85-8
19 q	22 18	505	432	10 53	73	12 42	9-9	-5-4	07 40	15-3	07 50	1204	1185	12 54	19	1,0,1,1,1,1,0,1	6	0	85-5
20	16 15	663	398	23 37	265	16 31	29-7	-11-2	20 00	40-9	17 14	1381	1065	23 40	316	1,3,3,3,4,5,4,5	28	1	86-0
21 d	16 13	528	376	02 46	152	12 11	10-8	-35-6	03 17	46-4	16 45	1286	993	02 11	293	5,5,4,3,3,3,3,3	29	1	85-7
22 d	15 38	584	326	04 41	258	15 16	14-2	-24-3	18 19	38-5	16 10	1330	1061	04 40	269	4,4,4,4,3,4,4,3	30	1	85-7
23	22 58	495	413	10 40	82	13 07	12-5	-4-5	06 52	17-0	16 46	1233	1132	02 36	101	3,3,2,2,2,2,1,2	17	0	85-7
24	20 39	520	414	11 00	106	12 31	11-3	-7-0	20 32	18-3	15 02	1216	1165	23 02	51	1,1,2,2,2,1,3,3	15	0	86-0
25	22 52	503	428	01 02	75	14 46	9-8	-9-8	23 33	18-7	16 12	1225	1102	01 49	123	3,3,1,1,2,2,2,4	18	1	85-9
26	21 14	495	408	11 19	87	13 42	11-1	-10-8	04 40	21-9	12 39	1222	1111	03 48	111	3,3,2,2,1,2,1,1	15	0	86-0
27	16 12	502	438	10 16	64	13 05	12-0	-6-8	07 58	18-8	20 24	1242	1189	02 37	53	0,1,2,2,2,2,3,2	14	0	86-0
28	15 14	503	436	11 30	67	13 35	11-6	-5-0	23 27	16-6	15 43	1220	1104	03 51	116	3,3,3,1,2,3,1,2	18	0	86-2
29 q	21 22	502	440	10 58	62	14 04	10-8	-5-3	09 07	16-1	19 58	1218	1181	01 19	37	1,0,1,1,2,2,1,1	9	0	86-1
30	21 44	504	431	11 38	73	13 05	10-6	-9-0	23 18	19-6	22 08	1205	1148	02 30	57	3,2,2,2,1,1,1,3	15	0	86-1
Mean	- -	563	369 - -	194	- -	17-5	-12-5	- -	30-0	- -	1252	1093 - -	159	-	-	-	0-57	-	85-7

OCTOBER 1956

45 LERWICK (H)

 $14,000\gamma$ (0.14 C.G.S. unit) +

	Hour 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 9,000+
1	488	490	492	485	481	488	494	490	477	459	453	455	447	465	487	517	488	474	482	483	485	487	479	425	478	2471
2 d	393	421	486	489	490	496	473	464	439	436	438	449	478	475	444	477	486	489	486	483	478	473	432	380	461	2055
3	422	446	463	459	478	481	478	470	453	442	441	458	476	439	457	458	484	531	500	486	480	479	480	445	467	2206
4	459	471	472	480	478	478	479	469	456	447	443	437	442	450	456	455	466	490	498	491	474	475	483	486	468	2235
5	485	482	479	480	481	482	481	470	410	414	433	442	440	441	449	460	474	484	499	496	496	483	484	483	468	2228
6	478	463	473	486	481	482	485	476	464	444	433	434	436	468	492	493	492	479	486	486	490	486	493	479	474	2379
7	489	485	483	481	485	485	486	474	461	443	438	441	446	471	472	479	486	500	501	486	490	504	495	488	478	2469
8	486	472	488	490	486	472	482	480	467	449	435	435	442	457	470	486	479	493	492	498	500	480	485	490	476	2414
9	491	476	469	484	488	492	491	484	471	447	443	442	447	443	466	479	485	499	496	496	499	498	497	487	478	2470
10	486	489	492	487	489	488	486	481	470	455	441	438	441	447	462	478	485	491	490	494	494	494	491	478	2463	
11	489	485	489	488	479	492	492	489	478	460	445	443	449	450	455	475	483	489	493	494	493	489	497	494	479	2490
12	492	492	492	492	492	491	489	486	476	465	454	441	441	453	468	483	487	491	491	495	502	497	490	486	481	2546
13 q	481	492	489	492	493	495	494	493	484	471	457	451	454	463	469	477	486	491	496	499	499	500	500	500	484	2626
14 q	495	493	492	495	494	491	488	484	475	461	450	444	448	458	469	477	484	489	496	499	494	497	496	496	482	2565
15 q	495	495	495	495	494	492	490	486	478	466	454	444	447	458	466	479	487	493	497	500	500	500	498	497	484	2606
16	494	496	496	498	499	499	502	490	465	456	451	448	451	456	465	473	482	491	495	498	500	499	498	497	483	2599
17 q	494	495	493	491	491	494	491	495	481	472	462	454	455	464	474	480	487	491	492	494	496	498	498	501	485	2643
18	499	494	495	492	487	494	493	489	477	464	450	444	447	459	470	480	487	493	499	503	506	506	506	506	485	2640
19	505	503	501	502	500	509	504	500	492	478	462	457	454	456	471	480	487	489	498	505	507	509	506	503	491	2778
20 d	500	499	498	493	494	489	490	480	480	427	430	425	448	484	493	517	645	579	597	468	464	449	242	508	475	2399
21 d	361	374	267	381	433	456	473	465	430	425	424	449	465	490	514	455	488	503	489	471	458	432	448	453	442	1604
22	455	454	437	423	461	473	476	473	460	446	435	433	444	448	462	473	483	472	473	474	465	458	462	465	459	2055
23	451	447	415	460	480	485	481	473	460	451	441	440	444	462	473	492	486	475	474	470	487	476	474	475	465	2172
24	479	481	480	475	476	477	480	475	464	449	437	436	444	454	461	470	477	481	486	493	492	492	493	493	473	2345
25 q	491	490	489	489	492	493	489	482	473	460	444	446	449	457	467	475	480	486	489	490	491	494	499	497	480	2512
26 d	502	502	492	492	495	501	511	506	487	471	454	450	458	483	502	507	506	565	683	653	443	309	250	158	474	2380
27 d	204	167	250	259	234	419	456	464	449	448	443	441	455	440	440	439	455	469	478	472	466	458	412	424	402	642
28	455	457	441	440	457	451	448	465	456	446	436	482	479	514	478	454	458	460	467	472	469	474	465	461	462	2085
29	462	456	470	470	473	473	475	472	465	440	426	424	439	448	451	465	483	487	473	482	473	470	476	476	464	2129
30	476	472	471	472	477	483	487	483	469	458	445	445	451	460	465	467	475	477	474	472	477	480	481	483	471	2300
31	485	482	482	482	483	482	484	486	472	451	450	447	452	454	462	466	465	474	480	486	487	486	487	495	474	2380
Mean	466	465	465	471	475	483	485	481	466	452	443	444	451	460	469	476	487	493	498	493	486	479	468	462	472	
Sum 13,000+	1442	1421	1431	1406	1721	1983	2028	1894	1439	1001	748	755	969	1267	1530	1766	2096	2275	2450	2289	2055	1832	1500	1322		Grand Total 350,836

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

 $10^0 +$

OCTOBER 1956

46 LERWICK (D)

	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	-2.4	0.1	-2.0	-3.6	0.3	-0.6	-2.6	-3.8	-3.4	-0.1	5.1	10.4	12.3	13.4	12.6	5.6	7.7	2.6	2.4	0.5	-2.7	0.5	-0.4	-0.8	2.1	51.1
2 d	-3.0	-5.5	-3.0	-0.4	-1.2	-1.2	2.8	1.2	-3.3	-0.1	6.4	8.6	11.9	11.0	7.5	8.3	4.4	-1.9	-1.6	2.6	-8.0	-1.1	-3.9	-12.2	0.8	18.3
3	-8.3	-8.4	-4.0	0.7	-0.6	-3.9	-2.8	-3.3	-1.4	1.5	3.0	6.4	6.6	6.4	6.6	3.6	1.6	-7.2	-1.9	-2.1	-0.5	1.3	1.1	2.6	-0.1	-3.0
4	-2.2	-3.3	0.3	-1.2	-2.1	-1.9	-3.9	-3.2	-3.5	-1.3	2.4	4.7	6.6	8.7	8.9	7.2	5.5	3.6	2.7	-0.3	-0.1	-1.9	-7.0	-0.5	0.8	18.2
5	1.5	0.4	-0.3	-0.2	-0.8	-1.7	-4.3	-3.1	2.4	5.3	1.8	2.7	4.8	6.6	7.7	6.4	4.8	3.6	3.7	6.5	-0.7	-1.1	0.3	0.8	2.0	47.3
6	-2.0	-3.0	-3.3	-3.9	-6.2	-1.2	-2.4	-3.8	-4.5	-3.0	1.7	7.2	9.4	12.6	10.1	8.5	4.6	4.6	3.6	0.8	-2.6	0.8	-0.1	0.8	1.2	28.7
7	-0.2	-3.0	-4.0	-3.9	-1.3	-1.6	-3.9	-4.9	-5.9	-4.2	0.6	4.4	8.3	13.2	13.0	11.3	7.6	1.0	-3.7	1.3	2.0	-1.4	-1.1	-0.2	1.0	23.4
8	-0.8	-0.5	-1.2	-2.0	-3.1	-0.8	2.1	-1.4	-3.1	-3.3	-0.2	3.7	7.4	9.1	8.7	7.6	4.6	3.6	4.4	4.3	-2.1	-6.9	-0.8	0.8	1.3	30.7
9	-0.7	0.3	1.7	-0.4	-1.4	-2.5	-1.7	-3.1	-5.4	-4.2	0.3	2.4	8.1	7.5	8.5	7.4	5.6	5.6	3.6	5.9	2.1	0.9	-2.1	-1.2	1.5	37.2
10	-2.0	-2.1	-1.6	-0.9	-0.8	-1.1	-1.2	-2.1	-4.0	-3.6	-0.6	3.4	5.6	7.4	8.2	6.8	4.8	4.3	3.4	3.5	2.1	0.4	1.6	0.7	1.3	32.2
11	-0.1	-0.2	0.5	-0.2	1.9	-0.2	-1.3	-2.5	-2.8	-2.2	-1.6	0.9	7.1	7.6	7.7	7.0	5.1	4.3	3.9	4.1	3.6	2.7	2.7	1.7	2.1	49.7
12	-0.2	0.8	0.6	0.4	0.6	-0.2	-0.5	-2.1	-4.1	-4.0	-0.7	1.2	4.7	6.7	8.1	7.6	5.7	5.1	4.6	4.1	4.1	-3.5	-1.6	-4.5	1.4	32.9
13 q	-1.8	-0.8	0.2	0.2	0.3	-0.1	-0.5	-2.1	-2.9	-3.5	-1.3	1.5	5.1	7.5	7.6	6.1	4.7	4.5	4.5	3.5	2.7	2.7	2.2	0.8	1.7	41.1
14 q	-0.1	-1.2	-1.4	-1.9	-0.7	-1.1	-1.2	-2.1	-3.6	-3.8	-1.6	2.0	5.9	8.1	8.0	6.5	4.6	4.4	4.2	3.7	2.8	2.8	2.5	2.1	1.6	38.9
15 q	1.2	0.6	0.2	0.3	-0.1	-0.5	0.0	-2.1	-4.0	-3.4	-1.3	1.5	4.9	7.3	7.5	6.5	4.6	4.6	4.5	4.0	3.7	3.0	2.7	2.4	2.0	48.1
16	1.7	0.8	-0.4	0.3	-0.2	-0.3	-1.1	-2.2	-1.5	0.8	2.7	4.4	4.9	6.5	6.4	5.2	3.7	3.4	3.4	2.8	2.5	2.0	1.7	1.2	2.0	48.1
17 q	0.3	-1.0	-2.3	-1.9	-1.2	-1.6	-2.6	-3.4	-4.2	-3.9	-1.4	2.6	5.2	7.0	7.5	6.3	5.4	4.6	3.7	2.9	2.3	1.8	1.7	1.6	1.2	29.4
18	1.4	0.9	0.8	-0.1	-0.2	0.7	-1.4	-2.4	-4.0	-3.2	-0.3	3.3	6.9	7.1	7.5	6.5	5.7	4.6	3.7	2.9	2.7	2.6	2.3	2.2	2.1	50.2
19	1.8	1.7	1.6	1.3	2.9	1.7	-0.3	-0.3	-2.0	-1.1	1.7	7.2	9.4	8.2	8.4	7.1	4.6	4.6	4.5	2.8	2.7	2.3	2.2	1.7	3.1	74.7
20 d	1.6	1.4	1.1	3.6	3.1	13.8	8.5	5.6	-1.1	1.2	3.3	7.4	8.3	9.9	9.0	6.6	18.0	9.3	8.8	-2.2	-4.4	-6.0	-12.6	-18.4	3.2	75.8
21 d	-11.2	-12.2	-15.6	-6.0	-0.8	-2.6	-2.6	-4.4	-4.9	-1.3	2.2	8.1	10.8	10.7	9.9	8.7	8.7	5.5	3.9	-0.2	-6.8	-9.8	-4.1	-2.8	-0.7	-16.8
22	3.3	-4.5	-3.1	-3.5	-0.3	-2.0	-3.0	-4.0	-4.7	-3.0	0.0	3.9	8.0	8.2	6.9	6.2	8.1	7.2	2.7	-1.2	-2.0	-4.1	-5.2	-6.4	0.3	7.5
23	-6.8	-6.2	-3.2	-6.2	-2.6	-1.1	1.5	-1.1	-3.8	-1.4	4.6	8.0	9.4	11.3	8.5	9.4	9.5	7.5	3.7	1.0	-2.0	0.6	-5.4	-3.6	1.3	31.6
24	-0.3	1.2	-0.6	-0.3	6.1	0.8	-0.6	-3.3	-4.4	-2.6	0.8	4.5	7.4	7.5	5.9	4.4	3.0	2.3	2.7	2.8	-1.7	1.9	1.6	1.4	1.7	40.5
25 q	1.0	0.9	0.8	0.8	0.8	-0.1	-0.6	-1.4	-2.6	-2.4	-0.1	2.8	5.7	6.2	5.8	4.8	4.0	3.4	3.4	2.8	1.8	1.0	0.3	0.9	1.7	40.0
26 d	0.2	-2.3	-3.2	-1.2	-1.3	-0.5	2.6	-2.1	-5.5	-3.5	-0.1	3.6	6.5	10.3	11.3	20.8	22.8	15.4	25.1	24.0	-2.2	-18.4	-11.3	-26.7	2.7	64.3
27 d	-34.3	-37.4	-32.9	-31.5	-16.4	-1.5	-5.8	-6.5	-5.0	-1.9	5.2	6.3	8.0	7.1	3.6	1.7	0.0	1.7	2.8	1.7	-0.5	-1.1	-9.2	-8.7	-6.4	-154.6
28	-4.5	1.7	1.3	-1.6	-3.8	2.2	-1.0	-1.3	1.7	1.7	4.6	5.7	8.3	5.9	6.4	1.6	0.8	0.9	1.2	1.0	-2.5	-3.5	-3.4	-7.8	0.7	15.6
29	-5.8	-2.9	0.3	-0.2	-0.2	-1.6	-2.0	-2.5	-1.5	-0.2	3.6	3.7	5.7	6.5	5.3	3.2	2.9	5.0	3.4	-0.8	-0.7	-0.2	-0.2	-0.3	0.9	20.5
30	-0.1	-1.0	-0.8	-1.0	-1.1	-1.3	-2.1	-2.2	-1.1	0.3	3.7	5.8	9.2	9.9	9.9	3.5	4.5	2.8	3.2	1.7	0.9	0.2	0.8	0.8	1.9	46.5
31	0.5	0.9	1.0	0.0	-0.6	-1.2	-1.4	-2.1	-2.1	0.5	4.6	5.1	7.4	6.5	7.0	5.0	2.1	2.3	2.8	1.8	1.3	-0.1	-0.5	-7.0	1.4	33.8
Mean	-2.3	-2.7	-2.3	-2.1	-1.0	-0.4	-1.1	-2.3	-3.1	-1.6	1.6	4.6	7.4	8.5	8.1	6.7	5.8	4.0	3.7	2.8	-0.1	-1.0	-1.5	-2.5	1.2	
Sum	-70.7	-83.8	-72.5	-65.1	-31.0	-13.2	-33.3	-72.0	-96.2	-49.9	49.1	143.4	229.8	262.1	250.0	207.4	179.7	123.2	116.3	86.2	-2.2	31.6	-45.2	-78.6		Grand Total 901.9

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

31

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			
	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	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	1186	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	1200	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	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	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	1162	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	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	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	1224	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							
	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ							°A.
1	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
2 d	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	86.2
3	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	85.9
4	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	85.7
5	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
6	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	85.3
7	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	85.0
8	20 30	519	427 10 58	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	84.9
9	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	82.4
10	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	82.3
11	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	82.6
12	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	82.4
13 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	82.0
14 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
15 q	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	81.5
16	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	81.9
17 q	23 23	503	448 11 48	55	14 35	8.5	-6.0 08 56	14.5	02 30	1199	1185 14 04	14	1,0,1,1,1,1,1,1	7	0	82.1
18	22 07	508	443 11 12	65	14 58	8.2	-4.1 08 34	12.3	02 07	1197	1183 13 44	14	1,1,1,1,1,1,1,1	8	0	82.0
19	05 31	513	451 12 29	62	12 38	11.5	-3.0 08 27	14.5	17 20	1202	1173 11 30	29	0,1,1,2,2,1,1,1	9	0	81.9
20 d	16 54	837	-48 22 38	885	16 32	26.6	-41.0 22 42	67.6	16 40	1346	911 22 43	435	0,4,3,3,3,6,6,7	32	2	81.8
21 d	14 19	547	163 02 26	384	12 36	13.3	-23.2 00 14	36.5	17 13	1332	958 02 33	374	6,5,3,4,4,3,4,3	32	1	81.2
22	16 25	490	383 03 34	107	17 40	10.9	-8.8 23 40	19.7	17 58	1288	1061 03 56	227	4,4,2,1,3,3,3,2	22	1	82.1
23	20 53	508	393 02 28	115	16 19	13.2	-12.9 01 52	26.1	17 26	1276	1096 02 50	180	4,3,2,2,3,3,4,3	24	1	82.0
24	19 49	500	432 11 22	68	04 21	9.3	-5.6 20 20	14.9	09 33	1214	1161 04 50	53	2,3,2,1,1,1,2,0	12	0	81.9
25 q	22 05	515	441 10 50	74	14 20	6.4	-4.0 08 17	10.4	10 02	1208	1179 24 00	29	0,0,1,1,0,0,1,2	5	0	81.5
26 d	18 37	772	-201 23 35	973	18 55	45.7	-111.0 23 58	156.7	23 11	1464	888 23 29	576	2,1,3,2,3,5,7,8	31	2	81.1
27 d	18 20	486	-20 04 14	506	12 12	10.8	-100.3 00 00	111.1	19 19	1278	865 00 09	413	6,7,3,2,3,3,3,2	31	1	81.0
28	13 31	556	423 03 20	133	13 20	10.8	-10.9 23 16	21.7	13 29	1316	1102 04 03	214	3,3,4,4,4,3,2,3	26	1	81.2
29	17 27	499	420 11 30	79	14 03	8.4	-10.4 20 41	18.8	18 00	1258	1182 00 00	76	2,1,1,2,2,3,3,2	16	0	81.6
30	06 47	490	437 11 22	53	14 20	14.0	-3.6 07 17	17.6	15 28	1295	1197 02 43	98	1,1,1,2,2,3,2,1	14	0	81.2
31	23 22	508	441 09 55	67	14 44	8.8	-16.0 24 00	24.8	16 32	1236	1124 23 48	112	0,0,1,2,2,1,1,3	10	0	80.9
Mean	- -	530	366 - -	164	- -	12.5	-16.2 - -	28.7	- -	1254	1108 - -	146	-	-	0.52	82.7

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 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 8,000+					
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ						
1	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.																											
	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	-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	-0.5	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	-0.2	-0.1	-0.1	-0.2	-0.3	-0.3	-1.5	-2.0	-1.0	3.4	4.1	6.8	5.9	5.7	4.7	9.5	10.3	7.5	2.9	-0.1	-2.7	-0.6	-2.7	2.0	48.8		
21	-6.5	-12.1	-9.1	-6.9	-1.3	-2.0	-0.2	-0.1	-2.5	0.6	1.6	2.4	4.5	7.0	6.2	4.6	2.3	2.8	-0.8	-7.8	-2.6	-4.0	-11.5	-24.1	-2.5	-59.5		
22	-11.9	-0.8	0.4	-0.6	0.3	1.1	2.1	1.6	-2.5	-1.1	1.8	5.2	5.1	5.6	11.9	13.7	18.3	16.1	4.6	-1.1	-7.5	-13.7	-11.9	-15.8	0.9	20.9		
23	-12.2	-10.1	-6.8	-1.2	-3.5	-2.9	3.5	3.6	-3.5	0.4	0.6	1.8	4.1	6.6	7.3	5.8	11.9	3.9	2.1	-1.4	-5.2	-2.8	-2.6	-2.0	-0.1	-2.6		
24	-1.8	0.3	0.8	0.5	-0.8	-1.4	-1.2	-1.3	-1.5	-1.2	1.3	0.3	4.4	2.9	3.6	-2.0	8.7	7.3	10.6	1.9	0.8	-2.4	-4.3	-4.8	0.9	20.7		
25	-3.6	-6.0	-6.2	-2.1	-1.4	-1.1	-1.3	0.5	1.3	-2.2	-0.2	2.6	5.3	16.2	13.2	10.6	8.2	7.5	4.4	0.9	-0.2	-1.4	-3.8	-4.0	1.5	37.2		
26 q	-3.2	-2.5	-7.9	-3.3	-3.0	-2.3	-2.1	-1.9	-2.1	-1.5	-0.2	1.8	3.2	2.8	3.0	2.8	1.7	1.7	1.3	0.7	1.8	0.9	-0.3	-0.2	-0.4	-8.8		
27	-1.1	-2.1	-1.7	-2.6	-3.9	-3.2	-3.6	-3.1	-3.2	-1.3	0.9	3.4	3.7	3.8	3.5	2.6	2.7	2.7	2.9	5.6	9.6	-6.9	-9.3	-23.1	-1.0	-23.7		
28	-19.0	-15.3	-11.5	-4.1	-4.0	-1.1	-3.0	-2.3	-2.0	-2.1	-0.3	2.7	5.1	3.5	3.9	4.5	5.1	5.0	6.2	4.5	1.7	0.9	-0.1	-0.3	-0.9	-22.0		
29	0.1	-1.1	-1.3	-1.4	-1.6	-2.4	-3.1	-3.2	-2.1	-1.3	-0.1	2.6	4.2	5.0	4.1	3.4	3.3	6.0	1.3	-3.2	1.8	1.4	-1.1	-4.2	0.3	7.1		
30	2.7	2.6	-0.9	-4.1	0.8	-1.5	-1.6	-1.6	-1.4	-1.1	0.9	2.8	4.6	6.4	5.5	6.4	4.6	5.9	3.7	4.6	2.8	0.8	0.1	-0.1	1.8	42.9		
Mean	-6.5	-4.5	-4.3	-4.3	-2.2	-2.2	-0.8	-1.1	-2.7	-2.1	0.6	3.0	5.3	6.0	6.2	5.3	5.8	5.4	4.9	2.3	0.5	-2.3	-4.1	-8.0	0.0			
Sum	-195.2	-134.3	-128.9	-127.9	-64.8	-66.9	-24.5	-33.6	-80.3	-62.8	17.1	91.4	158.8	181.1	184.9	159.0	174.4	160.7	147.7	67.8	14.1	-68.4	-121.8	-241.1		Grand Total +6.5		

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

33

51	LERWICK (Z)														46,000γ (0.46 C.G.S. unit) +														NOVEMBER 1956																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Hour G.M.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</

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 +			
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	h. m. γ	γ	h. m. γ	γ	h. m. γ							
1	16 34	505	449	01 21	56	13 06	12.4	-16.4	00 01	28.8	16 49	1270	1130	00 07	140	3,3,1,1,2,3,2,2	17	1	80.9	
2	22 08	509	445	11 56	64	15 23	11.0	-7.9	22 31	18.9	23 02	1225	1186	24 00	39	1,1,1,2,2,2,1,3	13	0	81.4	
3	00 13	556	407	10 34	149	13 37	12.0	-18.3	00 13	30.3	00 11	1248	1178	00 20	70	4,3,3,3,2,2,3,2	22	1	81.8	
4	23 14	519	434	12 03	85	12 56	8.3	-6.9	01 47	15.2	15 19	1217	1180	00 47	37	3,2,2,2,2,2,2,2	17	0	81.9	
5 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	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	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	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	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	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	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	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	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	6,4,1,2,3,2,1,3	22	1	81.4	
14 d	20 06	641	-338	23 30	697	20 51	54.8	-51.1	23 25	105.9	23 30	1502	971	20 37	531	5,4,5,3,3,5,8,4	40	2	81.7	
15 d	13 26	638	-59	02 16	979	13 23	19.5	-51.1	04 24	70.6	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	384	6,7,5,3,2,2,5,3	33	2	81.7	
17	15 52	514	422	22 28	92	17 50	11.8	-13.3	23 54	25.1	16 32	1341	1206	23 41	135	2,1,2,2,3,4,4,3	21	1	81.8	
18	23 23	487	294	00 50	193	06 18	8.2	-13.6	00 11	21.8	14 26	1263	1096	03 52	167	5,4,4,2,3,2,1,2,1	21	1	81.7	
19 q	21 44	490	444	11 11	46	13 28	5.6	-4.5	09 47	10.1	14 36	1229	1207	00 00	22	1,0,1,2,1,1,1,1	8	0	81.8	
20	18 20	509	446	12 21	63	18 02	15.0	-7.4	23 51	22.4	18 40	1333	1183	23 50	150	0,0,1,2,2,3,4,3	15	1	81.8	
21	18 51	525	406	03 13	119	13 28	9.1	-36.6	23 06	45.7	18 42	1276	1101	03 32	175	3,3,3,3,2,2,3,4	23	1	81.6	
22	18 26	645	11	21 46	634	17 08	25.2	-38.6	23 33	63.8	17 10	1415	894	22 42	521	3,2,2,2,3,5,6,7	30	2	81.4	
23	13 28	584	265	00 03	139	16 33	18.1	-15.6	00 11	33.7	17 08	1385	966	00 00	419	6,3,3,3,5,4,4,3	31	1	81.8	
24	18 17	548	434	11 50	114	18 09	18.9	-9.7	22 58	28.6	18 31	1378	1190	00 00	188	2,1,1,2,2,4,4,3	19	1	81.3	
25	13 29	551	419	13 58	132	13 27	31.5	-11.6	02 03	43.1	13 59	1356	1185	24 00	171	3,1,1,2,4,3,3,3	20	1	81.4	
26 q	22 40	497	450	02 03	47	12 24	3.6	-10.7	02 33	14.3	09 40	1225	1148	00 36	77	3,2,1,0,1,0,1,1	9	0	81.0	
27	20 25	515	303	23 31	212	20 33	22.7	-37.0	23 39	59.7	21 17	1303	1122	23 31	181	1,1,0,1,1,1,4,5	14	1	81.0	
28	02 13	514	114	00 26	400	18 44	8.6	-26.5	00 32	35.1	00 39	1296	1077	00 55	219	7,2,2,2,1,1,2,1	18	1	80.8	
29	17 40	512	407	22 02	105	21 56	11.2	-8.6	19 12	19.8	18 42	1289	1176	22 18	113	1,1,2,2,1,2,3,4	16	1	80.3	
30	21 52	509	463	02 59	46	13 36	7.6	-6.8	03 08	14.4	21 32	1247	1205	10 23	42	3,3,2,2,1,1,2,2	16	0	80.1	
Mean	- -	561	289	- -	272	- -	+17.2	-23.1	- -	40.3	- -	1303	1089	- -	215	-	-	-	0.93	81.4

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

53	LERWICK (H)												14,000γ (0.14 C.G.S. unit) +												DECEMBER 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	
			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			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
2			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
3			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
4			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
5			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
6			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
7			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
8			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
9			484	484	484	486	493	493	496	493	482	470	465	460	463	465	466	474	483	487	490	490	477	476	476	460	479		497
10 d			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
11 q			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
12			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
13 d			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
14			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
15 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
16 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
17 q			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
18			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
19			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		662
20			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
21 q			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
22			497	496	489	488	486	502	496	497	499	491	481	475	474	475	474	481	492	494	491	494	499	499	498	497	490		765
23			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
24			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
25 d			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
26			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
27			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
28 d			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
29			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
30 d			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
31			482	482	482	480	482	485	485	485	485	481	475	468	467	472	481	483	486	490	495	500	500	498	495	493	485		632
Mean			483	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			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	
14,000+																												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.		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			-1.2	-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	-2.2	-1.4	-0.2	1.5	3.0	3.6	2.7	3.4	3.4	2.5	2.4	0.6	0.3	-3.7	-8.6	0.2	5.8
20			-2.3	-1.6	0.8	-0.2	-0.7	-0.2	-0.3	-1.2	-0.5	-1.0	0.8	3.4	4.6	3.7	2.9	1.9	1.7	2.2	1.4	0.5	-0.3	-2.4	-4.2	-2.6	0.3	6.4
21 q			-1.3	-0.9	-0.1	0.9	0.7	0.5	0.5	-0.4	-0.9	-1.1	-0.3	0.9	2.2	3.6	4.5	3.6	3.4	2.8	2.7	2.6	1.8	-0.2	-2.6	-2.1	0.9	20.8
22			-1.4	-0.5	1.2	-0.7	-1.4	-1.2	-1.4	-1.6	-1.6	-1.6	-0.7	1.5	2.6	5.5	5.7	6.2	4.6	3.6	1.7	-0.2	0.0	-0.2	-1.0	-1.0	0.8	18.1
23			-1.1	-0.3	-0.1	0.3	0.3	0.5	0.3	-0.2	-0.3	-0.7	0.5	1.0	2.8	5.1	4.8	3.9	3.4	3.4	2.9	2.4	2.2	2.0	-3.6	-5.3	1.0	24.2
24			-4.2	-3.6	-5.0	-11.6	-6.9	-3.8	-0.7	0.5	-0.4	-0.7	0.6	2.6	2.6	3.6	4.6	3.7	3.2	3.7	5.6	4.1	2.7	0.7	0.3	-0.4	0.1	1.2
25 d			-2.6	-1.2	-2.1	-2.7	-2.8	-1.6	-1.4	-1.1	-2.2	-1.2	-0.7	6.2	7.5	6.0	3.4	3.6	6.5	9.4	18.0	15.6	6.4	-1.9	-4.5	-2.1	2.3	54.5
26			-2.1	-6.1	-8.0	-9.0	-5.0	-3.6	3.2	1.7	2.4	-0.7	1.7	0.8	1.8	2.9	3.6	3.6	3.4	2.7	2.2	1.1	-0.2	-0.7	-0.3	-0.2	-0.2	-4.8
27			-0.5	-0.5	-0.3	-0.9	-1.4	-2.0	-2.0	-1.4	-1.2	-0.7	1.0	2.2	4.6	5.7	6.4	6.5	10.2	0.9	9.3	7.6	2.7	0.6	-0.2	-2.4	1.8	44.2
28 d			-2.1	-2.4	-2.1	-3.1	-2.9	-3.8	-1.9	-0.1	-2.4	-1.2	0.6	1.4	3.6	7.0	8.0	6.0	5.6	7.4	1.2	-0.2	-2.3	-0.5	-1.2	-2.1	0.5	12.5
29			-4.9	0.8	0.3	-7.4	-5.2	-4.0	-1.6	-2.2	-1.4	-3.0	-1.6	0.8	1.8	4.3	3.4	1.8	1.7	2.6	3.4	0.8	-2.4	-2.1	-4.0	-1.2	-0.8	-19.3
30 d			-1.1	-0.5	-0.2	0.0	-1.2	-1.3	0.9	7.4	2.8	0.9	-3.1	3.4	4.1	6.5	6.0	4.6	4.9	5.6	5.4	4.1	1.5	-0.3	-1.4	-6.8	1.8	42.2
31			-3.3	-3.6	-1.2	0.8	0.6	-0.4	-1.0	-1.6	-1.7	-2.6	-1.9	1.2	1.5	4.3	3.6	3.4	2.5	2.2	2.3	1.4	1.5	0.9	0.8	-0.4	0.4	9.3
Mean			-2.6	-2.0	-1.2	-1.1	-1.1	-0.9	-0.4	-0.1	-0.5	-0.9	+0.1	2.3	3.6	4.9	4.8	4.5	4.6	3.9	3.9	2.8	0.4	-1.1	-2.7	-2.9	0.8	
Sum			-81.2	-63.0	-36.9	-34.8	-35.6	-27.4	-13.1	-2.3	-14.4	-29.0	2.9	69.8	112.3	151.1	150.0	140.8	143.3	121.7	120.1	85.4	13.5	-33.1	-84.4	-89.7		Grand Total 566.0

1213 at 1-0h. January 1, 1957.

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No.	TERRESTRIAL MAGNETIC ELEMENTS										3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +				
	Horizontal force			Declination			Vertical force											
	Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range									
	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ				°A.				
1	20 06	504	461 11 33	43	13 51	7·1	-4·9	21 42	12·0	21 40	1235	1209	09 34	26	1,1,1,2,2,1,2,2	12	0	80·0
2	23 02	508	419 00 33	89	18 14	8·3	-15·1	00 28	23·4	20 32	1250	1142	02 18	108	4,3,1,2,2,3,3,3	21	1	79·7
3	19 37	503	444 12 04	59	13 48	8·3	-12·0	20 40	20·3	20 32	1241	1207	12 42	34	2,1,2,2,2,2,3,2	16	0	81·9
4	20 56	511	454 12 31	57	13 17	7·5	-13·6	22 07	21·1	18 06	1232	1136	02 42	96	3,3,1,2,2,2,3,3	19	0	80·9
5	06 03	496	463 12 16	33	16 38	17·8	-6·9	01 18	24·7	17 14	1255	1182	02 03	73	2,2,1,1,2,2,3,1	14	0	81·2
6	20 40	516	390 21 12	126	20 58	10·6	-26·1	21 18	36·7	20 20	1275	1158	21 08	117	1,1,1,1,2,2,4,5	17	1	81·0
7	06 58	513	460 17 21	53	16 20	6·6	-7·4	17 26	14·0	17 21	1250	1166	24 00	84	2,2,1,1,1,3,1,3	14	0	81·0
8	20 12	505	445 12 54	60	12 27	9·1	-8·4	20 38	17·5	20 30	1245	1165	00 12	80	2,2,2,2,1,1,3,2	16	0	81·2
9	06 20	500	454 23 20	46	14 21	7·2	-9·6	23 17	16·8	20 40	1236	1180	24 00	56	1,0,2,1,1,2,1,2	12	0	81·3
10 d	15 23	512	416 03 12	96	15 24	14·2	-26·4	22 22	40·6	22 20	1286	1091	04 08	195	3,4,2,3,3,2,2,4	23	1	81·3
11 q	19 23	495	453 12 37	42	14 09	4·5	-6·2	00 01	10·7	00 01	1233	1206	16 46	27	1,1,0,1,1,0,1,0	5	0	81·2
12	19 03	572	464 10 29	108	17 50	21·6	-13·0	21 36	34·6	19 54	1368	1204	06 24	164	0,0,1,1,2,4,4,4	16	1	81·0
13 d	14 40	507	428 08 36	79	15 18	12·3	-12·3	23 55	24·6	14 37	1290	1165	23 46	125	4,2,3,2,3,3,2,4	23	1	81·1
14	07 03	492	440 00 02	52	15 01	6·5	-13·4	00 08	19·9	19 08	1228	1171	01 10	57	3,2,1,2,1,1,3,3	16	0	81·0
15 q	06 01	490	462 12 12	28	12 48	5·8	-2·6	00 28	8·4	15 12	1229	1183	00 30	46	1,1,1,1,1,1,0,1	7	0	81·4
16 q	06 29	493	456 11 16	37	13 41	4·8	-3·4	09 43	8·2	15 28	1218	1190	06 10	28	1,1,1,1,1,1,1,0	7	0	80·9
17 q	21 17	497	464 12 24	33	13 42	5·3	-1·6	09 47	6·9	15 02	1214	1195	07 00	19	0,1,1,1,1,0,1,0	6	0	81·0
18	05 50	505	462 11 11	43	15 02	10·5	-2·0	20 19	12·5	16 12	1238	1198	05 53	40	0,1,1,2,2,2,1,1	10	0	81·2
19	06 1																	

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

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

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

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	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.	-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																								
	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.	-3.65	-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																								
	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.	-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				

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.																							
	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
Feb.	-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
Mar.	+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
Apr.	+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
May	+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
June	+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
July	-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
Aug.	+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
Sept.	+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
Oct.	+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
Nov.	+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
Dec.	+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
	-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.	-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	-2.60	-2.82	-1.26	+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
Feb.	-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
Mar.	-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
Apr.	-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
May	-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
June	+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
July	-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
Aug.	+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
Sept.	+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
Oct.	-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
Nov.	+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
Dec.	-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
	-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.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

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																								
	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.	-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	+1												

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

AVERAGE DEPARTURE

39

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										61 LERWICK									
	All days			Quiet days			Disturbed days				All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z		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	Jan.	9.3	2.99	19.6	3.8	1.17	12.5	26.5	5.67	51.6
Feb.	47.5	10.03	45.8	23.0	6.52	8.4	191.0	19.74	158.3	Feb.	9.6	2.77	11.9	5.2	1.80	1.7	36.5	4.99	37.5
Mar.	95.2	16.86	84.6	55.4	10.81	13.8	340.9	34.90	221.6	Mar.	22.2	4.47	22.9	13.4	2.17	2.4	67.6	8.63	59.3
Apr.	116.5	17.68	90.9	84.6	16.67	30.4	467.1	42.78	226.5	Apr.	30.4	5.16	22.4	19.6	3.27	7.3	127.1	11.57	54.6
May	121.4	14.76	89.5	66.6	16.06	21.4	637.4	41.71	330.8	May	36.2	4.26	25.7	16.9	3.19	4.9	156.0	8.18	91.3
June	94.7	13.50	74.2	77.9	16.17	30.7	295.6	18.26	208.6	June	27.2	4.05	17.7	18.1	4.18	7.1	56.8	4.94	52.3
July	82.0	13.56	48.0	73.4	15.42	24.6	141.4	14.08	113.0	July	20.6	3.77	11.5	17.5	3.94	4.6	28.4	4.22	27.3
Aug.	88.0	17.87	76.7	60.8	13.99	24.5	332.7	23.92	260.4	Aug.	20.8	4.02	16.6	15.9	2.97	4.7	55.6	4.95	57.3
Sept.	75.5	14.16	69.9	62.4	14.05	13.0	282.1	21.87	227.3	Sept.	17.5	3.31	17.1	15.5	3.15	2.5	48.9	4.84	50.0
Oct.	54.9	11.56	61.7	50.4	10.74	12.8	202.1	24.54	196.2	Oct.	12.3	3.42	16.9	13.4	2.62	2.4	39.5	6.70	50.1
Nov.	81.7	14.21	83.9	46.5	8.41	26.6	340.7	34.64	288.0	Nov.	18.8	3.76	24.5	10.7	2.45	4.0	73.9	7.49	75.2
Dec.	30.7	7.76	34.9	28.0	5.61	13.0	39.2	13.20	58.8	Dec.	6.9	2.37	9.4	6.7	1.24	3.3	8.2	3.48	17.1
Year	63.1	11.40	62.7	50.1	11.12	12.2	203.6	19.33	164.1	Year	17.3	3.55	17.7	12.3	2.57	2.8	54.9	5.73	50.8
Winter	38.5	10.24	56.7	26.4	6.27	11.8	128.1	18.35	155.8	Winter	10.1	2.87	16.0	6.2	1.65	2.6	31.4	4.87	43.6
Equinox	67.3	13.56	68.4	59.8	13.05	13.5	239.4	25.93	184.0	Equinox	18.4	4.05	19.8	15.2	2.78	3.1	64.8	7.48	52.3
Summer	87.6	14.81	69.4	66.1	15.28	24.2	327.3	20.39	197.5	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		
	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
Feb.	469	476	468	5.1	5.8	4.5	1179	1177	1174
Mar.	453	468	431	3.3	5.0	0.5	1181	1186	1173
Apr.	452	476	381	2.8	4.4	-1.1	1180	1184	1174
May	460	478	387	2.8	3.2	-0.1	1189	1187	1159
June	480	487	461	3.0	2.7	2.3	1187	1189	1183
July	481	485	474	3.1	3.1	3.3	1189	1190	1184
Aug.	480	486	474	2.7	2.6	2.3	1189	1185	1184
Sept.	469	474	458	1.5	1.9	1.2	1197	1198	1191
Oct.	472	483	451	1.2	1.6	-0.1	1200	1194	1200
Nov.	463	478	411	0.0	0.8	-2.5	1213	1208	1199
Dec.	483	482	481	0.8	0.7	1.4	1210	1207	1213
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			21 cb	☉ Cloudy. Moonlight
16 cb	☉ Fair to cloudy. Moonlight	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.	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	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 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.	SEPTEMBER	
26 cb	☉ Cloudy. Moonlight	11 c	☉ Cloudy. Faint glow 23h.50m.	1 a	☉ Fair
FEBRUARY		12 a	☉ Fine	11 b	☉ Fair. Moonlight
2 ca	☉ Fair to cloudy	13 a	☉ Fair to fine. Faint rayed band 22h.45m.	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.
4 a	☉ Fair to fine. Faint diffuse surface 19h. to 21h.	14 a	☉ Fair to fine. Moderate homogeneous arc 00h.30m.	14 b	☉ Fair. Moonlight
5 a	☉ Fair. Faint glow 23h.45m. to 00h.25m.	16 ca	☉ Fair	28 ca	☉ Cloudy to fair. Faint glow 19h.30m. to 20h.10m. then obscured by cloud
7 ca	☉ Overcast to fair	31 ca	☉ Cloudy to fair	29 ca	☉ Cloudy to fair
8 ca	☉ Cloudy to fine			30 a	☉ Fair to fine
11 ca	☉ Fair to cloudy. Faint diffuse surface 20h.30m. to 20h.45m.	APRIL		OCTOBER	
12 ca	☉ Fine to cloudy	3 ca	☉ Fair	1 ca	☉ Cloudy to fair. Faint glow and faint rays 00h.50m.
13 ca	☉ Fair to cloudy	5 ca	☉ Fair to cloudy	3 ca	☉ Cloudy to fair. Faint rayed arc 23h.50m.
14 c	☉ Cloudy. Faint diffuse surface observed 20h.15m.	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.
15 ca	☉ Cloudy. Faint glow 04h.45m.			6 ca	☉ Cloudy to fine. Faint glow 02h.50m., 03h.50m.
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.			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. Cloudy. Faint glow 18h.50m.
25 ca ..	Fine to cloudy			29 c ☐	
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.		DECEMBER
28 ca ☐	Fine to cloudy. Faint glow 22h.50m. to 03h.50m.			1 c ☐	Cloudy. Faint rayed arc 01h.50m. Faint pulsating arc 02h.25m.
29 a ☐	Fine. Faint glow 18h.45m. to 23h.50m. with faint rays at times			2 ca ☐	Cloudy to fine. Faint glow 19h.30m. to 19h.40m. and at 02h.50m.
30 ca ..	Cloudy then fine	13 c ☐	Cloudy. Faint glow 02h.50m., 03h.50m. Moderate rays 05h.05m. then moderate pulsating surface at 05h.20m., fading by 05h.30m.	4 ca ☐	Fair. Faint glow observed 19h.50m., 21h.50m., 00h.55m.
	NOVEMBER	14 c ☐	Cloudy. Bright glow 04h.50m., continuing to 06h. but less intense	5 a ..	Fine
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.	8 a ..	Fine
4 ca ..	Fair to cloudy	23 a ☐	Fine. Faint glow 19h.30m. to 21h.25m. with faint homogeneous arc at 19h.55m.	9 c ☐	Cloudy. Faint glow observed 20h.45m. to 23h.50m. and at 01h.50m., 03h.45m.
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.	25 ca ..	Fair to cloudy	10 c ☐	Cloudy. Faint glow observed 03h.54m.
		26 ca ..	Fair to cloudy	11 ca ..	Cloudy to fair
		27 ca ..	Fair	14 ca ..	Cloudy with fair or fine breaks
				16 ca ..	Fair to cloudy
				17 a-c ..	Fine then cloudy to fair
				18 ca ..	Fair to cloudy
				20 a ..	Fine
				21 c-a ..	Cloudy then fine
				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

GENERAL AURORAL TABLE

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

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude 55°19'N.
Longitude 3°12'W.
G.M.T. of Local Mean Noon .. 12h.13m.
Height of site above M.S.L. 235 to 250 metres

INTRODUCTION

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

Notes on the meteorological summaries

The extreme temperatures during the year were 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
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		γ	γ	'	γ	γ	'	γ	γ	'
	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	+36	+2	-1			
2b	Jan. 27	09.00	Jan. 28	07	No	No	No	+16	-13	-1	289	213	219
3b	Feb. 19	02.21			Yes	Yes	No	+60	-26	-8			
4b	Feb. 21	20.02			No	No	No	+40	-17	-4			
5b	Feb. 22	00.16			No	No	No	+50	-20	-6			
6b	Feb. 25	03.07	Feb. 26	03	Yes	Yes	Yes	+36	-31	-3	507	342	429
7b	Mar. 3	06.50	Mar. 4	07	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 -4	γ +8	γ 0		Small	
11b	Apr. 21	08.53			Yes	No	No	+10	-13	0		See 12b	
12b	Apr. 21	11.01	Apr. 23	05	Yes	Yes	No	+48	0	-6	784	300	442
13b	Apr. 25	11.33			Yes	No	No	+28	-8	-5		Small	
14b	Apr. 26	21.11	Apr. 28	08	No	No	No	+133	-35	-24	1685	494	774
15b	Apr. 28	17.27	Apr. 29	17	Yes	Yes	No	+54	-13	-6	391	215	293
16b	May 13	22.22			No	No	No	+12	-4	0		Small	
17b	May 20	06.38	May 21	06	Yes	Yes	No	-10	+17	0	192	116	124
18b	June 23	18.06	June 25	08	No	No	No	+36	-14	-4	328	178	306
19b	July 8	01.02			No	No	No	+42	-9	-6		Small	
20b	Aug. 9	10.41	Aug. 10	06	Oscillatory			+12	+9	-6	194	121	114
21b	Aug. 10	13.10			Yes	Yes	No	+34	-13	-3		Small	
22b	Aug. 11	00.43			Yes	Yes	No	+92	-36	-12		Small	
23b	Aug. 12	02.28			Yes	Yes	No	+12	-13	0		Small	
24b	Sept. 2	02.30	Sept. 3	21	No	No	No	+60	-31	-12	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	+24	-17	0		Small	
27b	Oct. 26	13.12	Oct. 27	08	Yes	Yes	No	+34	-22	-4	329	351	384
28b	Nov. 9	20.30	Nov. 10	09	No	Yes	No	+93	-5	-10	204	131	167
29b	Nov. 14	02.00	Nov. 16	09	No	No	No	+16	-15	?	355	232	271
30b	Dec. 24	01.47			No	No	No	+24	-5	-4		Small	
31b	Dec. 25	07.54			Yes	Yes	Yes	-11	+4	+2		Small	
32b	Dec. 30	06 32			No	Yes	No	+10	-13	0		Small	

(c) Disturbances due to Solar Flare

Serial Number	Date	Commence-ment	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- plex.	-22	+1	3	3	
3c	May 8	13.10	13.13	13.20	-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	S.F. S.W.F.
6c	Oct. 31	13.50	13.55	14.00	-3	-9	0	2	2	

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

51

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 ESKDALEUIR: 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
	millibars																	
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		89.44	82.15	85.87						

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

	Hour	G. M. T.																														
	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean						
														<i>milibars</i>																		
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	95.90	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	85.73	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	89.90	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	87.48	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	83.83	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	88.65	88.98	89.08	89.38	89.58	89.83	90.01	89.93	89.86	89.78	89.73	89.73	89.73	89.97	90.25	90.45	90.50	90.63	90.61	90.50	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	82.53	82.41	82.39	82.82	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.

	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										
	<i>millibars</i>																																		
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	14.81	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	14.97									
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	18.38									
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	15.45									
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	12.72	12.73	12.63	11.90									
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	07.23									
Sept.	13.66	13.31	13.29	12.98	12.78	12.44	12.44	12.65	12.85	12.94	13.05	13.03	13.01	12.61	12.43	12.37	12.32	12.33	12.54	12.82	13.08	13.25	13.16	13.06	12.87	12.81									
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	18.55									
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	18.68	18.79	18.72	18.73	18.61	18.59	18.51	18.80									
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	11.61	11.23	11.31	11.41	11.39	11.52	11.50	11.32									
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	14.71									

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.

	Hour												Noon	degrees Absolute												Mean
	G. M. T.	0	1	2	3	4	5	6	7	8	9	10		11	13	14	15	16	17	18	19	20	21	22	23		24
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	73.87
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	72.57
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	77.91	76.85	76.33	76.11	75.85	75.75	75.38	76.93
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	81.51	80.15	78.18	77.03	76.27	75.45	74.76	74.35	77.43
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	82.09
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	83.82
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	85.75
Aug.	81.28	81.40	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	81.03	83.24
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	84.63
Oct.	79.32	79.12	79.06	79.07	79.03	79.13	79.12	79.01	79.82	80.52	81.55	82.48	82.86	82.89	82.87	82.69	82.12	81.25	80.81	80.35	80.08	79.86	79.45	79.16	79.10	80.45
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	77.51
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	77.73	77.44	77.22	77.17	77.06	77.07	77.51
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	79.68

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

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 ESKDALEUIR: Louvered hut: h_t (height of thermometer bulb above ground) = 0.9 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	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
	degrees Absolute																	
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	80.4	82.0	86.3	82.1	83.8	83.4	75.9	80.3	75.0	72.5	73.8	76.7	72.1	74.5
29	87.0	83.1	85.3	87.4	79.0	82.9	85.2	80.9	83.1	78.7	74.5	76.8	75.9	70.9	73.5	76.3	72.9	75.1
30	83.1	81.3	82.1	86.3	76.8	81.3	87.1	82.5	84.8	78.8	74.8	77.1	78.8	69.0	73.1	80.3	73.7	78.4
31	87.6	79.7	83.1	84.4	74.0	79.3				81.0	74.9	76.9				78.8	74.4	77.1
Mean	89.7	82.0	85.8	87.3	79.0	83.2	88.4	81.0	84.6	83.9	76.8	80.4	80.8	73.8	77.5	79.3	75.3	77.5
								Annual		83.5	75.7	79.7						

76 ESKDALEMUIR: Louvered hut: $h_4 = 0.9$ m.

*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.

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

78 ESKDALEMUIT: $h_f = 0.9$ m.

*Mean of values, 1, 2, 23, $\frac{1}{2}(0 + 24)$.

RAINFALL

55

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

79 ESKDALEUIR: 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	...	...	...	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: $h_r = 242.0 \text{ m.} + 0.4 \text{ m.}$

	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.	2.7	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: $h_r = 242.0 \text{ m.} + 0.4 \text{ m.}$

	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.	3.6	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	0.1-1.0	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

57

83 ESKDALEMUIR: h_g (height of recorder above ground) = 1.5 m.

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible	Dura- tion	Per cent. of pos- sible
1	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
2	3.2	45	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	...
3	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	...
4	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	...
5	0.0	...	0.0	...	5.0	46	1.1	8	10.8	70	1.8	11	2.0	12	11.2	71	3.3	24	4.5	40	0.5	6	0.0	...
6	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
7	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
8	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	...
9	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
10	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	...
11	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	...
12	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	...
13	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	...
14	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
15	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	...
16	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	...
17	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	...
18	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
19	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
20	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
21	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	...
22	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
23	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	...
24	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	...
25	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	...
26	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
27	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	...
28	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
29	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	57	0.0	...
30	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	...
31	0.0	...	...	...	9.2	71	0.0	...	0.0	...	0.3	2	0.0	...	9.8	71	0.7	6	5.0	53	0.0	...	0.0	...
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 time84 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	hours	7.4	7.0	5.3	0.5	...	-	-	-	-		49.6	%
Feb.	-	-	-	...	0.3	5.3	8.8	12.1	11.4		9.7	9.5	8.4	4.9	0.2	...	-	-	-		70.6	21
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	25
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	35
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	38
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	33
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	29
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	23
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	22
Oct.	-	-	-	...	2.6	8.9	12.3	14.5	13.4		12.6	10.6	11.2	8.4	1.8	...	-	-	-		96.3	21
Nov.	-	-	-	-	...	3.0	7.5	10.4	12.2		10.8	10.8	7.3	1.0	...	-	-	-	-		63.0	30
Dec.	-	-	-	-	-	0.1	0.3	1.9	2.4		2.4	2.0	1.3	...	-	-	-	-	-		10.4	25
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	5

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
	<i>metres per second</i>																							
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	1.1	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.																								
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	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	4.9	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	28	13 13 55
Sept.	-	0	4	36	151	330	203	0	210	15	28 6	29	28 5 25
Oct.	-	0	6	29	227	322	166	0	190	16	17 5	31	17 5 45
Nov.	-	0	7	37	163	312	208	0	270	15	25 4	27	25 2 40
Dec.	-	0	12	87	325	197	135	0	200	17	12 11	34	15 20 10
Year	-	0	55	334	1966	3704	2461	319	200	17	Dec. 12 11	34	Dec. 15 20 10

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

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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.
	degrees Absolute											
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
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
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
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
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
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
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
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
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
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
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
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
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
14	75.8	79.7	75.3	78.1	76.8	78.1	79.3	79.1	82.5	80.7	84.9	82.5
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
30	75.9	78.9			78.8	78.5	80.5	79.7	85.0	81.6	85.9	83.4
31	76.0	78.7			79.1	78.5			84.9	81.8		
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
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
	degrees Absolute											
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	75.3	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	84.1	80.4	78.9	77.4	80.2	69.7	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. 275.0 degrees is printed 75.0.

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

Add 0.16° to obtain temperature in degrees Kelvin where $T(^{\circ}\text{K.}) = t(^{\circ}\text{C.}) + 273.16$.

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

90 ESKDALEMUIR												
	JANUARY, factor 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	515	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	515	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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90 ESKDALEMUIR

	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	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.																								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			
	volts per metre																										
	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	-51	-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.

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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 ESKDALEMUIR (H)		16,000γ (0.16 C.G.S. unit) +																						JANUARY 1956										Mean	Sum 15000+
Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24										
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ									
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	682	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	1089									
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	956									
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 ESKDALEMUIR (D)														10° +														JANUARY 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 1200-0+									
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	52.1	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	59.4	59.9	49.9	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	52.7	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	53.2	53.5	52.8	50.9	51.5	49.6	52.6	52.8	53.5	83.3											
10	52.7	52.8	52.2	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	53.1	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	51.9	52.0	52.3	53.4	54.9	57.0	57.8	58.4	57.2	56.3	55.8	54.5	53.7	52.7	51.6	49.0	48.9	53.5	85.2											
18 d	50.5	51.8	56.9	47.3	48.7	52.7	51.8	56.1	54.8	56.2	57.8	57.2	58.0	59.4	64.6	61.8	57.6	55.9	56.0	43.9	43.5	34.3	43.3	46.5	52.8	66.6											
19 d	44.1	49.6	52.7	53.2	56.0	54.1	52.3	52.4	53.0	53.2	56.8	58.4	60.1	60.3	57.7	58.0	55.8	58.9	55.4	45.4	48.7	49.0	50.5	49.6	53.5	85.2											
20 q	51.5	52.0	52.7	53.3	52.7	52.1	52.3	52.2	51.9	52.0	52.7	54.1	54.8	55.5	54.7	53.7	53.5	53.3	53.5	53.0	52.6	52.1	51.6	51.9	52.9	69.7											
21	52.5	52.9	53.5	53.1	52.8	52.5	52.1	51.6	51.0	51.7	52.6	53.3	54.6	56.5	54.9	53.1	51.6	56.5	55.4	54.2	51.9	50.9	48.4	48.1	52.7	65.7											
22	37.3	37.9	42.7	46.9	47.2	39.7	47.6	49.5	50.3	50.9	51.7	54.1	56.4	58.5	57.5	55.4	54.9	55.9	55.2	54.4	54.0	53.1	52.7	52.6	50.7	16.4											
23	52.8	53.1	53.6	53.1	52.7	52.4	52.0	51.7	50.9	50.9	51.9	54.1	55.5	56.0	56.0	54.9	53.6	53.9	54.7	50.0	40.7	43.9	50.0	47.6	51.9	46.0											
24 d	51.3	53.2	52.0	50.1	53.6	49.7	50.9	54.0	55.6	55.0	54.9	55.9	60.8	57.7	60.8	59.7	56.8	53.5	52.9	42.9	38.2	41.8	40.1	41.6	51.8	43.0											
25	35.5	48.7	51.9	49.1	51.5	53.1	56.1	53.5	53.2	53.2	53.5	55.2	56.8	57.3	56.6	55.4	54.2	53.6	54.1	51.8	52.9	52.1	52.0	52.5	52.7	63.8											
26 q	52.5	52.4	52.5	52.9	52.6	51.8	51.7	51.0	50.6	51.0	51.6	53.0	54.7	56.2	55.6	54.5	54.1	53.6	53.4	52.7	52.3	51.8	51.7	51.6	52.7	65.8											
27	52.0	51.5	52.7	52.7	52.7	51.8	51.7	51.8	52.2	54.7	55.8	57.3	59.5	60.8	63.4	61.5	59.8	59.3	59.4	46.5	43.0	50.2	50.8	50.1	54.2	101.2											
28 d	50.8	54.1	41.9	43.7	48.6	55.4	50.1	52.0	52.7	51.8	51.1	54.2	56.5	56.9	55.0	56.7	54.3	53.9	55.1	46.4	34.0	47.4	49.2	49.6	50.9	21.4											
29	52.1	50.4	50.0	49.9	48.6	49.3	51.5	51.0	51.7	51.1	51.9	54.5	55.6	57.3	57.9	56.9	57.4	52.7	49.9	54.1	49.7	51.3	50.9	50.3	52.4	57.9											
30	50.4	47.3	52.3	48.7	48.3	49.4	50.7	51.0	51.4	51.8	52.7	54.1	56.6	59.1	58.5	57.9	56.0	48.7	52.6	53.1	52.1	44.5	45.6	49.6	51.8	42.4											
31	45.8	50.3	48.7	49.7	48.5	49.7	50.7	51.3	51.1	52.3	53.6	55.3	55.5	57.4	54.9	54.5	51.8	50.3	53.2	51.4	49.5	52.5	50.7	49.9	51.6	38.6											
Mean	49.6	50.5	51.3	51.0	51.7	52.2	52.6	52.7	52.3	52.5	53.4	55.0	56.8	58.0	57.6	56.8	55.5	55.3	54.2	50.7	49.4	48.7	49.5	49.3	52.8												
Sum 1500-0+	38.4	67.2	91.3	81.7	102.6	117.5	129.6	134.4	122.1	127.6	156.5	206.3	261.4	298.9	286.6	261.5	219.7	215.3	180.9	71.0	30.4	8.6	34.2	27.5			Grand Total 39271.2										

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

65

95 ESKDALEMUIR (Z)		44,000γ (0.44 C.G.S. unit) +																				JANUARY 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 30000+		
	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	1262	1256	1254	1255	1256	1257	1260	1262	1262	1267	1253	1256	1255	1252	1257	1268	1290	1286	1279	1276	1284	1285	1276	1271	1266	379	
2	1262	1264	1266	1266	1266	1267	1267	1267	1266	1267	1262	1262	1261	1265	1268	1275	1279	1279	1282	1293	1291	1283	1273	1264	1271	495	
3	1262	1266	1263	1257	1258	1260	1262	1263	1267	1268	1267	1263	1261	1260	1264	1268	1268	1275	1278	1278	1279	1273	1256	1254	1265	370	
4	1253	1257	1261	1263	1262	1255	1256	1258	1260	1266	1262	1262	1262	1262	1262	1267	1270	1267	1267	1279	1290	1274	1272	1271	1263	1265	359
5	1261	1257	1256	1254	1255	1258	1258	1260	1261	1262	1261	1259	1256	1256	1262	1264	1262	1264	1272	1276	1271	1271	1271	1271	1271	1262	298
6	1264	1251	1252	1256	1257	1258	1259	1262	1261	1256	1257	1256	1254	1262	1271	1276	1290	1284	1279	1286	1281	1277	1272	1270	1266	391	
7	1265	1266	1266	1265	1264	1263	1263	1264	1265	1266	1266	1261	1259	1262	1267	1271	1288	1281	1274	1272	1271	1268	1261	1255	1267	403	
8 q	1254	1256	1257	1260	1260	1261	1261	1263	1264	1267	1267	1262	1260	1262	1266	1264	1264	1268	1271	1267	1267	1267	1267	1267	1263	319	
9	1266	1264	1263	1256	1245	1251	1255	1260	1262	1267	1267	1262	1264	1268	1271	1278	1278	1275	1275	1275	1270	1267	1264	1263	1265	366	
10	1264	1264	1262	1261	1259	1256	1252	1255	1260	1266	1267	1267	1265	1269	1282	1318	1332	1343	1338	1295	1282	1279	1266	1251	1277	653	
11 d	1218	1179	1183	1223	1233	1232	1238	1244	1256	1266	1272	1282	1294	1299	1314	1320	1328	1336	1366	1309	1293	1284	1280	1277	1272	526	
12	1272	1270	1267	1266	1264	1262	1262	1267	1270	1270	1270	1270	1270	1272	1273	1282	1287	1309	1356	1402	1316	1298	1284	1272	1285	831	
13	1253	1240	1252	1258	1258	1261	1266	1268	1268	1268	1269	1267	1266	1266	1268	1271	1269	1272	1272	1273	1273	1272	1271	1272	1266	373	
14	1273	1272	1272	1272	1270	1266	1266	1267	1269	1267	1266	1263	1260	1262	1271	1276	1276	1275	1276	1278	1273	1270	1270	1267	1270	477	
15 q	1268	1267	1267	1267	1267	1267	1266	1266	1264	1262	1263	1266	1267	1266	1267	1269	1270	1270	1268	1267	1267	1266	1267	1268	1267	402	
16 q	1267	1260	1261	1261	1262	1263	1262	1263	1263	1262	1262	1258	1253	1255	1262	1265	1266	1266	1266	1267	1267	1266	1265	1264	1263	306	
17	1263	1263	1263	1263	1263	1262	1263	1262	1262	1267	1267	1267	1267	1267	1267	1271	1274	1275	1275	1275	1274	1273	1272	1272	1266	1268	426
18 d	1238	1236	1239	1216	1228	1230	1241	1241	1249	1255	1260	1256	1261	1266	1268	1278	1282	1277	1285	1325	1326	1263	1253	1237	1259	210	
19 d	1203	1247	1259	1262	1253	1250	1257	1262	1268	1273	1275	1278	1281	1292	1319	1320	1314	1320	1332	1321	1297	1290	1279	1268	1280	720	
20 q	1262	1263	1267	1270	1271	1272	1272	1270	1268	1274	1278	1279	1277	1276	1275	1276	1274	1275	1275	1275	1275	1273	1272	1269	1272	536	
21	1263	1266	1267	1268	1268	1268	1269	1271	1272	1271	1270	1269	1268	1267	1270	1272	1278	1275	1272	1273	1277	1275	1272	1248	1270	469	
22	1213	1220	1220	1214	1207	1210	1243	1253	1261	1267	1268	1267	1262	1262	1267	1271	1270	1279	1270	1273	1273	1272	1268	1267	1253	77	
23	1267	1267	1266	1264	1264	1263	1263	1267	1272	1275	1275	1268	1267	1267	1267	1267	1266	1268	1271	1285	1313	1309	1245	1266	1271	502	
24 d	1256	1251	1259	1266	1256	1224	1235	1241	1250	1261	1266	1271	1281	1290	1294	1297	1310	1331	1344	1330	1293	1283	1272	1225	1274	586	
25	1216	1197	1207	1253	1261	1249	1246	1252	1263	1271	1274	1274	1274	1275	1281	1279	1278	1276	1280	1294	1295	1289	1280	1277	1264	341	
26 q	1274	1274	1273	1272	1269	1268	1267	1267	1267	1267	1263	1263	1266	1268	1271	1271	1271	1271	1271	1271	1271	1272	1273	1272	1270	472	
27	1268	1268	1268	1271	1269	1269	1268	1268	1267	1253	1256	1256	1257	1260	1271	1273	1268	1278	1304	1382	1344	1313	1298	1290	1280	719	
28 d	1280	1248	1255	1249	1238	1204	1233	1247	1253	1258	1267	1273	1279	1285	1286	1285	1281	1279	1280	1293	1284	1278	1280	1279	1266	394	
29	1278	1280	1279	1276	1274	1271	1267	1267	1267	1270	1268	1271	1270	1274	1288	1293	1296	1295	1286	1286	1284	1278	1277	1273	1278	668	
30	1254	1256	1262	1266	1268	1261	1262	1263	1263	1262	1266	1267	1267	1273	1282	1294	1301	1298	1290	1287	1285	1285	1274	1270	1273	556	
31	1268	1273	1271	1270	1260	1262	1262	1262	1266	1266	1267	1272	1273	1275	1280	1283	1290	1290	1289	1294	1295	1274	1275	1274	1275	591	
Mean	1257	1255	1257	1259	1258	1255	1258	1261	1263	1266	1266	1266	1266	1269	1275	1280	1283	1285	1289	1293	1285	1278	1271	1265	1269		
Sum 38,000+	967	898	957	1020	985	900	1001	1080	1164	1238	1254	1248	1256	1336	1522	1669	1768	1831	1951	2071	1841	1624	1404	1230		Grand Total 944,215	

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

96 ESKDALEMUIR		TERRESTRIAL MAGNETIC ELEMENTS												JANUARY 1956						
	Horizontal force					Declination			Vertical force					3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +			
	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.		γ	h. m.	γ		h. m.					γ		
1	00 37	702	619	16 03	83	17 15	60.8	31.0	21 32	29.8	16 37	1295	1252	10 01	43	3,2,2,2,2,4,4,4	23	1	84.4	
2	22 50	722	613	19 35	109	15 51	58.5	41.8	19 59	16.7	19 58	1300	1259	12 32	41	3,2,2,2,2,4,4,4	23	1	84.4	
3	21 59	739	641	10 06	98	16 36	58.8	44.5	23 25	14.3	19 46	1279	1252	23 39	27	3,3,2,3,1,3,2,4	21	1	84.4	
4	19 20	741	618	19 08	123	17 50	59.4	29.5	19 11	29.9	19 10	1308	1250	00 11	58	2,2,2,2,2,2,5,4	21	1	84.4	
5	19 15	699	654	18 51	45	00 13	59.6	38.2	19 01	21.4	19 00	1283	1252	04 06	31	3,3,2,2,2,2,4,2	20	1	84.4	
6	01 04	731	634	16 10	97	16 26	62.2	40.9	20 35	21.3	16 30	1301	1248	01 34	53	4,1,1,2,3,4,4,3	22	1	84.4	
7	21 31	693	618	16 20	75	15 53	62.0	39.7	16 45	22.3	16 40	1296	1253	23 44	43	1,1,0,2,2,4,3,3	16	0	84.4	
8 q	17 43	692	649	11 04	43	13 50	58.2	47.7	00 05	10.5	19 12	1273	1252	00 16	21	2,1,1,2,2,1,2,2	13	0	84.4	
9	05 52	698	630	11 36	68	13 18	63.2	48.3	21 26	14.9	15 26	1280	1244	04 27	36	2,2,2,3,3,3,2,2	19	0	84.4	
10	15 34	703	581	18 09	122	16 56	68.5	32.9	18 13	35.6	18 14	1360	1239	24 00	121	0,2,3,2,3,5,4,4	23	1	84.4	
11 d	02 39	730	593	18 29	137	11 23	65.7	29.3	18 55	36.4	18 30	1391	1171	01 47	220	5,4,3,3,3,3,5,2	28	1	84.4	
12	20 04	763	580	20 44	183	18 38	69.8	12.1	20 02	57.7	19 44	1438	1260	24 00	178	1,2,2,3,2,3,6,3	22	1	84.4	
13	01 08	720	637	00 20	83	14 33	58.6	46.6	00 26	12.0	20 00	1274	1233	01 19	41	4,2,1,1,2,1,1,1	13	0	84.4	
14	09 30	718	642	09 24	76	13 04	56.7	46.6	21 56	10.1	19 10	1281	1259	12 30	22	1,1,1,3,2,1,2,2	13	0	84.4	
15 q	08 13	693	661	12 08	32	13 41	57.3	49.5	23 42	7.8	16 12	1271	1262	08 36	9	0,0,1,2,2,1,1,2	9	0	84.4	
16 q	01 10	703	665	10 10	38	13 05	58.5	49.7	00 00	8.8	19 38	1270	1250	12 44	20	3,1,1,2,2,1,2,1	13	0	84.4	
17	23 54	710	656	12 34	54	13 06	59.0	44.8	22 59	14.2	16 05	1276	1255	24 00	21	1,1,2,1,2,1,1,3	12	0	84.4	
18 d	00 26	731	544	21 54	187	14 47	67.8	25.6	21 53	42.2	19 53	1362	1210	03 25	152	5,4,3,3,3,4,4,5	31	1	84.4	
19 d	00 09	711	609	13 40	102	13 07	64.4	35.1	00 44	29.3	14 44	1345	1179	00 19	166	5,3,3,3,4,3,4,2	27	1	84.4	
20 q	23 37	685	651	12 05	34	13 35	55.8	50.1	00 14	5.7	11 30	1279	1261	00 19	18	2,1,1,1,1,1,1,2	10	0	84.4	
21	24 00	731	660	11 38	71	17 32	58.9	37.8	24 00	21.1	16 25	1279	1215	24 00	64	3,0,0,2,1,3,3,4	16	0	84.4	
22	00 04	740	592	03 30	148	13 47	59.9	39.2	01 44	20.7	19 40	1274	1204	04 47	70	5,4,3,3,2,1,4,2	24	1	84.4	
23	17 26	710	556	22 32	154	22 24	64.7	35.1	20 41	29.6	20 25	1321	1223	22 30	98	1,2,2,2,3,3,4,5	22	1	84.4	
24 d	05 17	711	564	23 09	147	12 22	62.7	24.4	19 40	38.3	18 56	1379	1206	23 39	173	3,4,3,3,4,4,5,4	30	1	84.4	
25	02 04	691	575	00 45	116	01 57	60.0	31.4	00 19	28.6	19 39	1297	1178	02 08	119	5,3,3,1,1,1,3,2	19	1	84.4	
26 q	23 44	697	665	12 30	32	13 54	56.7	50.3	8 46	6.4	00 00	1276	1262	11 42	14	0,1,1,1,1,0,0,2	6	0	84.4	
27	19 05	814	525	19 23	289	19 10	74.8	30.9	20 03	43.9	19 07	1412	1250	09 39	162	2,1,2,3,4,4,6,3	25	1	84.4	
28 d	05 07	770	596	01 36	174	01 11	62.6	30.9	20 14	31.7	19 45	1298	1193	05 14	105	5,5,3,3,3,3,5,3	30	1	84.4	
29	18 23	722	621	14 33	101	14 18	61.6	42.2	18 16	19.4	17 45	1299	1266	07 46	33	2,2,2,2,2,4,3,4,3	22	1	84.4	
30	17 30	733	636	17 11	97	13 39	60.2	36.3	21 50	23.9	17 17	1308	1248	00 53	60	3,3,2,2,2,4,3,4	23	1	84.4	
31	21 12	711	633	11 37	78	13 51	60.5	43.3	24 00	17.2	20 36	1297	1260	04 18	37	3,3,2,3,3,3,3,4	24	1	84.4	
Mean	- -	720	617	- -	103	- -	61.5	38.3	- -	23.3	- -	1310	1237	- -	72	- -	-	0.65	-	84.4

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

97 ESKDALEMUIR (H)

16,000γ (0.16 C.G.S. unit) +

FEBRUARY 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		15000+				
	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	660	659	654	664	659	669	670	670	676	674	668	670	671	669	668	660	661	663	676	693	675	676	659	664	668	668	1028			
2	665	663	666	661	662	674	676	662	679	675	667	659	660	665	672	677	675	670	672	676	670	671	669	664	669	1050				
3	663	676	671	668	673	681	677	675	675	668	658	654	657	669	677	676	680	685	688	662	678	677	679	684	673	1151				
4	667	672	675	677	679	676	678	678	675	672	673	661	660	667	670	672	677	680	682	676	676	684	672	676	674	1175				
5	680	678	679	677	677	681	683	683	680	670	666	663	666	666	678	686	686	687	684	679	694	664	663	666	677	1236				
6	670	673	675	675	678	685	688	684	682	672	668	658	670	674	672	676	682	680	688	686	686	686	685	683	678	1276				
7 q	682	685	686	684	682	686	688	686	680	668	663	662	667	675	684	688	688	688	688	689	690	681	674	684	681	1348				
8 q	680	682	684	688	690	691	690	689	686	676	670	670	673	676	679	684	687	688	689	690	688	688	689	686	684	1413				
9 q	686	677	679	682	684	690	694	694	688	684	678	675	679	681	682	684	686	690	693	691	691	690	690	690	686	1458				
10 q	690	690	691	691	690	694	698	697	694	686	681	678	682	686	687	686	686	694	693	681	686	684	686	687	688	1518				
11 d	687	695	696	680	698	705	700	699	701	688	682	678	679	670	676	679	680	674	691	684	660	680	649	646	682	1377				
12 d	637	630	672	670	685	659	695	682	675	624	636	629	649	656	666	669	673	682	686	684	686	685	682	673	666	985				
13	669	673	673	676	678	682	686	684	677	670	658	646	650	665	668	678	677	682	678	683	684	676	679	681	674	1173				
14 q	683	683	687	688	685	687	691	692	684	673	661	653	654	660	669	677	681	686	686	688	688	687	689	688	680	1320				
15	688	686	688	690	691	694	694	693	686	675	660	654	651	661	675	681	686	688	686	686	679	679	686	696	681	1353				
16	698	690	686	686	705	689	702	694	687	674	658	654	658	651	669	658	668	670	672	655	662	683	685	684	677	1238				
17	686	686	685	689	691	693	697	694	691	679	663	650	654	664	671	672	675	686	687	689	689	689	687	687	681	1354				
18	686	685	685	687	690	693	696	700	693	678	658	648	652	661	672	678	673	676	682	686	681	689	688	687	680	1324				
19	686	685	702	701	703	705	700	699	689	678	666	634	649	644	656	674	681	680	688	677	685	683	677	683	680	1325				
20	683	680	681	681	685	685	689	689	689	681	668	657	655	657	667	674	678	681	684	685	685	689	690	676	1229					
21	687	685	685	684	686	685	685	686	676	664	654	652	659	668	674	675	672	681	685	689	699	697	698	698	680	1324				
22	710	699	694	683	698	700	694	693	685	676	665	678	677	685	681	663	678	683	679	683	685	685	690	689	686	1453				
23	688	689	686	688	687	686	687	685	677	666	660	655	664	677	684	694	662	673	678	676	679	685	683	685	679	1294				
24	686	685	685	685	688	689	689	682	669	662	655	655	667	675	683	687	690	685	692	691	697	705	696	689	683	1387				
25 d	687	687	687	692	681	674	657	508	496	558	560	623	604	642	677	750	759	645	614	649	628	629	624	618	640	349				
26	634	623	629	629	629	629	633	637	629	642	626	629	639	650	646	650	651	658	674	677	654	658	644	651	643	421				
27	655	633	636	646	654	661	658	643	645	649	645	637	645	646	653	662	665	667	670	642	645	658	657	659	651	631				
28 d	644	657	647	657	666	664	675	671	661	657	641	640	648	656	666	661	663	673	658	667	657	664	677	679	660	849				
29 d	653	657	664	636	664	673	672	677	650	631	636	629	637	657	679	646	660	674	679	678	650	657	663	681	658	803				
Mean	675	675	677	676	681	682	684	677	671	664	656	653	658	665	672	676	679	678	680	679	677	678	676	677	674					
Sum 18000+	1590	1563	1628	1615	1738	1780	1842	1626	1467	1257	1033	894	1076	1273	1491	1610	1676	1666	1719	1691	1627	1675	1609	1648		Grand Total 468,842				

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

98 ESKDALEMUIR (D)

10° +

FEBRUARY 1956

	Hour G. M. T.																								Mean	Sum 1100.0+
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	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	43.3	41.7	43.7	47.5	50.0	49.5	49.6	52.3	53.0	54.7	53.6	55.3	57.7	56.9	55.7	55.8	53.9	54.8	53.6	51.1	47.2	46.9	48.2	48.1	51.0	124.1
2	47.5	47.9	50.5	49.7	50.8	50.6	49.9	51.2	51.4	52.3	54.4	54.9	56.1	56.3	55.7	55.9	54.9	46.6	50.4	54.5	50.3	50.8	47.7	48.5	51.6	138.8
3	45.9	47.8	48.2	51.5	54.0	51.9	51.7	52.2	51.8	52.3	53.0	54.9	55.3	57.5	57.2	54.8	53.8	54.2	55.0	48.1	52.2	52.4	45.5	44.5	51.9	145.7
4	49.2	51.1	50.9	51.2	51.0	50.8	51.3	51.3	50.9	50.8	52.7	54.1	54.9	55.9	55.5	54.1	54.0	53.1	54.1	51.3	52.7	48.4	48.9	51.4	52.1	149.6
5	51.3	51.7	51.8	51.0	51.0	50.0	50.2	50.6	50.2	50.5	52.6	54.9	57.1	56.4	56.1	54.4	53.1	52.9	52.5	49.0	45.5	45.5	46.0	48.7	51.4	153.0
6	45.6	46.2	52.3	52.3	51.3	51.4	50.8	51.2	50.5	50.7	53.3	54.5	54.7	56.4	55.9	54.9	54.5	52.0	52.8	53.1	52.5	52.2	51.9	51.9	52.2	152.9
7 q	51.9	52.6	52.5	51.1	51.8	51.8	51.0	50.9	50.5	50.0	51.2	53.3	55.3	56.1	55.9	54.8	54.1	53.6	53.5	53.2	53.4	53.3	50.0	49.0	52.5	160.8
8 q	49.9	51.4	52.7	52.7	52.3	52.1	51.3	50.7	50.1	49.8	51.8	54.7	56.1	57.3	56.9	55.8	55.4	54.6	53.7	53.2	52.7	51.9	52.0	51.6	52.9	170.7
9 q	50.1	49.9	51.5	51.6	51.6	51.3	50.8	50.6	50.0	49.8	51.0	53.2	54.1	55.2	55.4	54.9	55.0	54.5	54.2	53.7	52.9	52.1	51.9	51.7	52.4	157.0
10 q	52.0	52.6	52.8	52.6	52.5	52.2	52.0	51.1	50.4	50.1	52.0	54.5	56.2	55.9	55.5	54.5	53.9	53.9	54.4	54.1	53.4	52.3	51.2	51.7	53.0	171.8
11 d	51.3	48.7	45.8	49.0	51.8	51.4	51.6	51.5	51.2	50.1	52.3	55.7	58.5	60.3	60.4	60.3	63.7	60.8	57.6	52.6	39.5	45.5	39.5	43.6	52.2	152.7
12 d	43.3	45.5	48.2	51.7	51.5	58.5	62.4	52.5	52.0	52.6	55.2	54.9	56.0	56.9	55.9	54.8	53.5	53.7	53.9	52.8	52.5	51.4	51.1	50.1	53.0	170.9
13	49.8	50.4	51.3	51.3	51.8	51.8	53.7	53.1	51.9	50.5	51.7	55.9	56.1	57.2	57.4	56.7	54.2	53.0	52.6	52.6	51.9	50.6	50.3	51.7	52.8	167.5
14 q	51.9	52.3	52.7	51.1	51.7	51.6	51.1	50.5	49.3	48.2	49.1	52.3	54.7	57.7	57.1	56.5	54.7	53.8	53.5	53.1	52.6	51.9	51.8	51.9	52.5	161.1
15	51.9	52.5	52.9	52.9	52.8	52.5	51.8	50.8	49.1	48.3	49.5	53.0	56.4	58.2	59.0	57.6	56.2	55.8	55.4	54.5	53.0	51.3	51.8	49.6	53.2	176.8
16	49.2	50.5	51.1	54.6	49.3	47.1	48.6	49.6	48.7	47.4	49.0	54.2	60.1	61.3	63.2	60.5	59.0	54.9	48.1	50.3	46.9	48.4	50.1	50.3	52.2	152.4
17	51.8	54.1	51.9	52.6	52.2	51.7	51.4	50.9	49.5	48.7	50.8	53.6	56.3	58.0	58.1	56.8	55.9	55.3	54.9	54.1	53.4	52.7	51.9	52.0	53.3	178.6
18	52.1	52.2	52.0	52.6	52.9	52.7	52.1	51.2	49.9	48.4	48.9	51.8	55.7	56.7	57.0	56.5	54.8	54.4	54.5	53.6	52.6	51.9	51.8	52.2	52.9	168.5
19	52.2	52.1	52.8	51.5	51.5	50.9	52.6	50.9	48.4	46.9	49.5	54.7	60.7	59.5	59.5	58.0	57.2	54.7	54.6	53.6	51.9	51.8	48.2	51.6	53.1	175.3
20	51.5	51.8	52.0	51.9	51.7	51.5	51.3	50.5	49.2	48.9	50.1	52.3	57.7	59.8	60.2	57.9	55.0	54.1	53.5	52.8	51.9	51.8	52.1	52.0	53.0	171.5
21	52.1	52.3	52.3	52.4	52.5	51.0	50.7	49.8	48.3	48.4	49.9	52.8	55.9	57.7	57.6	56.5	54.4	54.2	53.8	53.6	53.6	53.0	52.7	52.6	52.8	168.1
22	52.4	51.8	50.4	49.8	53.5	53.0	52.0	50.6	49.5	49.0	49.6	52.6	55.3	58.6	59.2	58.7	56.5	55.4	54.3	52.8	52.7	52.9	52.6	52.9	53.2	176.1
23	52.1	52.1	51.8	51.5	51.2	50.8	50.3	49.3	48.3	48.8	50.1	52.7	54.9	57.0	57.1	56.3	53.1	50.2	51.7	51.6	51.9	52.3	52.1	52.5	52.1	149.7
24	52.4	52.3	52.0	51.8	51.4	51.2	50.5	49.2	48.2	47.5	48.0	52.1	56.5	57.7	58.0	56.3	54.7	54.2	52.7	54.1	53.5	51.3	52.3	51.5	52.5	159.4
25 d	51.6	51.7	51.7	55.4	53.2	51.8	51.6	59.4	55.9	54.3	47.3	54.5	57.5	64.5	63.6	77.0	75.2	66.7	56.7	52.3	29.7	46.9	49.2	47.3	53.2	225.0
26	45.6	45.7	47.6	47.7	47.8	47.5	47.2	48.1	47.1	49.3	52.0	54.4	58.2	57.2	56.5	56.7	55.2	54.1	54.1	54.3	53.1	52.5	48.7	48.7	51.2	129.3
27	46.5	45.7	44.0	46.2	48.3	49.2	48.2	46.9	48.3	48.8	50.0	52.3	54.9	55.7	55.3	54.2	53.4	53.1	52.6	41.0	45.4	48.7	48.4	49.0	49.4	86.1
28 d	46.1	49.3	50.9	52.5	45.5	47.0	47.5	48.0	48.9	49.5	51.4	53.7	56.8	57.5	56.8	55.8	53.9	54.5	45.1	48.4	50.0	46.9	45.5	41.1	50.1	102.6
29 d	42.7	42.8	44.1	44.6	43.3	45.3	48.4	49.9	48.0	49.6	51.1	54.9	56.4	57.8	62.6	61.6	57.7	49.6	50.4	49.8	47.6	47.8	47.6	51.1	50.2	104.7
Mean	49.4	49.9	50.6	51.1	51.0	51.0	51.1	50.9	50.0	49.9	51.1	53.9	56.4	57.7	57.7	57.2	55.9	54.2	53.3	52.0	50.2	50.5	49.7	50.0	52.3	
Sum 1400.0+	33.2	46.7	62.4	82.3	80.2	78.1	81.6	74.8	50.5	46.2	81.1	162.7	236.1	273.2	274.3	258.6	220.9	172.7	144.2	109.2	56.5	65.4	41.0	48.8		Grand Total 36380.7

99 ESKDALEMUIR (Z)		44,000y (0.44 C.G.S. unit) +												FEBRUARY 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 30000+	
	0-1	1-2																									
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	572	
2	1266	1262	1262	1259	1263	1267	1267	1267	1266	1267	1264	1264	1264	1270	1282	1289	1293	1295	1291	1285	1284	1284	1283	1278	1274	572	
3	1274	1274	1276	1276	1276	1276	1274	1273	1267	1268	1267	1269	1270	1273	1275	1279	1282	1292	1290	1283	1287	1280	1280	1278	1277	639	
4	1275	1276	1273	1268	1260	1260	1266	1268	1268	1268	1271	1271	1273	1272	1271	1273	1274	1274	1276	1290	1282	1279	1280	1263	1272	531	
5	1262	1267	1268	1269	1269	1269	1271	1272	1272	1271	1268	1270	1271	1271	1272	1274	1278	1278	1278	1282	1280	1281	1276	1274	1273	543	
6	1274	1273	1273	1273	1273	1272	1271	1270	1271	1271	1273	1272	1269	1269	1271	1270	1272	1272	1273	1274	1279	1275	1274	1275	1272	1273	540
7	1272	1265	1266	1269	1272	1271	1270	1271	1272	1272	1267	1268	1272	1271	1272	1274	1273	1275	1274	1273	1273	1272	1272	1271	1271	507	
8	1270	1268	1267	1267	1267	1267	1268	1268	1273	1274	1270	1267	1268	1268	1268	1268	1268	1267	1267	1271	1271	1277	1273	1273	1269	460	
9	1267	1267	1267	1266	1266	1265	1266	1267	1267	1265	1262	1261	1262	1262	1263	1267	1267	1268	1268	1268	1268	1268	1268	1268	1266	389	
10	1268	1268	1267	1267	1267	1266	1264	1263	1264	1262	1261	1260	1262	1262	1262	1265	1266	1266	1266	1267	1267	1268	1267	1267	1265	362	
11	1266	1266	1264	1263	1263	1262	1262	1261	1262	1261	1255	1251	1251	1256	1260	1263	1262	1263	1265	1271	1271	1273	1272	1269	1263	312	
12	1269	1266	1255	1262	1260	1258	1257	1259	1258	1260	1254	1251	1255	1262	1268	1272	1275	1279	1278	1287	1310	1279	1255	1257	1266	386	
13	1243	1238	1229	1229	1205	1217	1220	1235	1244	1256	1257	1267	1271	1272	1276	1278	1274	1272	1268	1269	1270	1271	1271	1273	1254	105	
14	1274	1274	1273	1272	1271	1270	1267	1264	1263	1264	1262	1264	1270	1270	1275	1279	1277	1275	1274	1272	1272	1274	1273	1270	1271	499	
15	1267	1266	1262	1262	1263	1263	1263	1266	1267	1269	1265	1262	1262	1262	1264	1267	1267	1268	1268	1267	1267	1267	1267	1267	1265	368	
16	1267	1267	1267	1267	1267	1266	1266	1266	1267	1267	1266	1259	1259	1257	1260	1262	1267	1271	1270	1269	1272	1278	1280	1279	1264	1268	421
17	1257	1260	1262	1258	1234	1240	1245	1253	1260	1262	1256	1252	1252	1256	1264	1274	1289	1297	1312	1308	1297	1297	1284	1271	1265	1269	453
18	1259	1252	1255	1258	1262	1263	1263	1265	1266	1266	1266	1259	1254	1256	1262	1267	1271	1270	1270	1268	1268	1268	1268	1267	1264	325	
19	1267	1267	1267	1267	1267	1266	1264	1262	1263	1266	1263	1260	1260	1257	1257	1262	1271	1278	1275	1271	1270	1271	1270	1267	1267	1266	395
20	1267	1267	1264	1263	1262	1262	1262	1261	1262	1264	1258	1259	1259	1262	1274	1270	1276	1275	1274	1273	1277	1276	1274	1275	1270	1268	427
21	1267	1267	1267	1267	1267	1267	1267	1268	1270	1270	1267	1262	1262	1256	1266	1273	1277	1277	1276	1274	1273	1273	1271	1269	1268	1267	453
22	1267	1267	1267	1267	1266	1267	1267	1267	1267	1268	1264	1260	1260	1258	1262	1262	1267	1273	1270	1268	1268	1267	1267	1266	1264	1266	386
23	1257	1257	1256	1258	1256	1257	1261	1262	1266	1267	1267	1257	1257	1255	1257	1264	1267	1265	1266	1270	1270	1271	1271	1269	1268	1263	314
24	1267	1267	1267	1266	1266	1266	1266	1266	1267	1270	1272	1268	1263	1260	1256	1262	1274	1289	1290	1287	1284	1279	1274	1269	1268	1271	497
25	1267	1266	1267	1266	1265	1266	1266	1268	1270	1271	1266	1256	1256	1259	1259	1259	1266	1267	1272	1273	1272	1272	1268	1268	1266	1266	394
26	1269	1268	1267	1262	1247	1239	1236	1248	1239	1236	1262	1291	1297	1297	1328	1354	1405	1558	1516	1432	1417	1416	1327	1307	1297	1322	1718
27	1275	1279	1289	1290	1290	1290	1287	1285	1286	1285	1283	1281	1292	1297	1291	1291	1291	1287	1283	1285	1301	1310	1307	1297	1290	952	
28	1285	1257	1243	1262	1267	1270	1272	1275	1278	1279	1276	1272	1274	1281	1284	1284	1285	1283	1285	1306	1302	1291	1283	1250	1277	644	
29	1263	1273	1268	1232	1257	1265	1268	1269	1271	1269	1268	1267	1270	1273	1276	1290	1302	1308	1319	1299	1297	1291	1271	1252	1276	618	
30	1188	1214	1238	1247	1235	1253	1263	1267	1267	1272	1268	1267	1270	1274	1291	1321	1349	1337	1302	1290	1300	1298	1289	1252	1273	552	
Mean	1264	1264	1264	1263	1261	1263	1263	1265	1266	1267	1265	1264	1265	1269	1274	1281	1289	1288	1283	1283	1284	1279	1275	1269	1271		
Sum 36000+	669	658	646	632	583	620	639	687	716	744	686	654	699	810	933	1136	1376	1352	1219	1208	1243	1083	973	796		Grand Total 884,762	

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

100 ESKDALEMUIR														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 +		
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.	γ	h. m.	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ			
1	19 34	732	643	00 46	89	12 27	58·5	39·3	01 04	19·2	17 33	1298	1257	03 25	41	3,3,3,2,2,2,4,3	22	1	84·0
2	19 10	689	645	17 34	44	12 50	58·4	37·4	17 50	21·0	17 51	1301	1265	08 23	36	3,2,3,2,2,4,4,3	23	1	83·8
3	23 10	709	645	11 50	64	14 31	58·2	36·1	22 55	22·1	19 30	1295	1256	23 51	39	2,3,2,2,2,1,3,4	19	0	83·8
4	21 22	710	649	12 21	61	13 04	58·1	44·7	21 14	13·4	21 16	1286	1257	00 00	29	2,2,2,2,2,1,2,3	16	0	83·8
5	20 37	725	659	11 44	66	12 47	57·8	43·2	20 34	14·6	20 19	1283	1268	11 11	15	1,1,1,1,2,2,3,2	13	0	83·8
6	06 31	692	650	11 25	42	14 05	57·2	39·1	00 56	18·1	17 50	1278	1263	01 30	15	4,1,1,2,1,2,1,0	12	0	83·8
7 q	06 54	692	659	11 19	33	13 09	56·8	47·9	22 52	8·9	22 14	1278	1266	02 42	12	1,1,2,1,1,0,1,2	9	0	83·8
8 q	05 25	693	668	11 26	25	13 51	58·1	49·1	00 00	9·0	00 00	1271	1260	11 19	11	1,0,1,1,1,0,0,0	5	0	83·8
9 q	00 17	699	674	11 40	25	13 50	55·5	48·5	00 56	7·0	00 09	1270	1259	11 50	11	2,1,1,1,1,0,0,0	6	0	83·8
10 q	06 39	700	675	19 13	25	12 07	56·5	49·6	09 13	6·9	21 40	1273	1250	11 41	23	0,0,1,1,0,1,2,1	7	0	83·8
11 d	02 04	754	629	21 38	125	16 55	55·8	33·1	20 34	22·7	20 33	1317	1247	22 04	70	4,3,2,2,3,3,5,5	27	1	83·8
12 d	06 40	706	587	01 01	119	06 22	65·9	24·9	01 03	41·0	15 10	1279	1199	04 11	80	5,4,4,3,2,2,2,2	24	1	83·8
13	07 01	698	638	11 51	60	14 57	58·8	48·7	00 26	10·2	14 54	1279	1260	10 16	19	1,1,2,3,2,2,1,2	14	0	83·8
14 q	02 59	694	647	11 29	47	13 55	57·2	47·8	09 51	9·4	17 33	1270	1261	03 01	9	1,2,1,1,1,1,0,0	7	0	83·8
15	23 12	709	649	12 41	60	14 18	59·3	47·7	10 10	11·6	21 12	1282	1256	12 14	26	1,0,1,1,3,1,2,3	11	0	83·8
16	04 25	715	641	18 14	74	14 40	64·1	42·9	18 24	21·2	17 46	1321	1232	04 26	89	2,4,2,2,3,4,3,3	23	1	83·8
17	07 28	701	645	11 32	56	14 20	59·0	48·2	08 31	10·8	17 34	1272	1250	01 43	22	2,1,2,2,1,2,1,0	11	0	83·8
18	07 13	703	647	11 40	56	14 19	57·2	47·3	10 11	9·9	16 32	1279	1257	13 26	22	0,1,1,2,1,2,2,1	10	0	83·8
19	02 24	745	619	11 26	126	14 49	63·4	45·5	22 23	17·9	15 56	1279	1255	12 06	24	3,1,3,3,2,2,2,3	19	1	83·8
20	06 53	696	637	13 36	59	14 10	62·5	48·2	09 35	14·3	15 25	1278	1254	12 34	24	1,0,1,1,3,1,1,1	9	0	83·8
21	20 04	728	648	11 22	80	13 34	60·1	47·2	09 15	12·9	16 24	1276	1257	12 41	19	1,1,1,1,2,2,3,1	12	0	83·8
22	00 20	750	648	15 06	102	13 46	60·8	47·1	03 04	13·7	19 07	1273	1252	12 05	21	4,3,3,4,3,3,1,2	23	1	83·8
23	15 18	705	648	11 41	57	15 20	58·2	47·6	08 46	10·6	17 10	1294	1255	13 45	39	1,0,1,2,2,3,2,1	12	0	83·8
24	21 20	719	647	10 40	72	13 57	59·0	46·8	09 50	12·2	17 55	1275	1256	13 57	19	1,1,1,2,2,3,2,3	15	0	83·8
25 d	15 59	888	381	08 30	507	16 23	92·3	21·7	20 34	70·6	16 33	1653	1224	07 55	429	1,4,7,6,5,6,6,4	39	2	83·8
26	09 35	697	608	10 40	89	13 05	61·7	42·6	09 34	19·1	21 12	1313	1270	00 46	43	3,2,2,4,3,1,3,2	20	1	83·8
27	23 05	710	609	01 37	101	13 37	56·7	28·0	19 50	28·7	19 46	1319	1235	02 10	84	3,2,3,2,2,2,5,4	23	1	83·8
28 d	23 16	713	619	02 45	94	03 07	60·5	34·7	24 00	25·8	18 37	1332	1219	03 20	113	4,4,2,2,2,3,4,4	25	1	83·8
29 d	23 04	753	612	11 53	141	15 13	65·6	33·5	01 05	32·1	17 10	1364	1172	00 40	192	4,4,5,3,3,4,4,4	29	1	83·8
Mean	- -	718	632	- -	86	- -	60·5	42·0	- -	18·4	- -	1303	1249	- -	54	-	-	0·45	83·8

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

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

101	ESKDALEUIR (H)													16,000γ (0.16 C.G.S. unit) +																	MARCH 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		15000+									
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	927								
2	667	668	669	667	674	681	689	683	663	648	619	635	638	650	660	665	674	675	669	672	677	673	654	657	664	665	969								
3 d	674	671	660	656	674	665	686	677	649	655	654	626	645	656	663	668	675	677	677	670	681	669	665	676	666	665	969								
4	676	645	657	669	646	647	678	701	699	627	561	571	597	628	635	653	655	693	680	628	568	557	578	566	634	215									
5	619	628	632	630	608	626	638	643	636	625	616	613	633	642	649	660	643	650	657	661	669	665	666	669	641	378									
6	667	663	665	666	667	672	659	663	663	653	649	649	655	657	662	668	676	665	668	648	648	657	664	658	661	862									
7	661	674	654	654	666	664	654	657	656	649	640	642	654	664	667	667	664	674	669	655	669	675	676	678	662	883									
7 q	677	674	673	673	673	673	673	670	661	653	641	632	647	657	656	670	673	672	671	673	679	685	678	678	667	1012									
8 q	678	675	677	677	678	680	680	674	660	649	638	636	640	649	656	666	677	682	686	689	685	685	685	685	670	1087									
9 q	685	685	684	685	685	684	684	681	676	663	653	651	655	663	669	677	677	680	685	686	687	695	696	695	678	1281									
10	696	697	695	698	696	700	689	698	692	685	670	663	663	669	669	677	677	680	678	682	648	636	612	618	675	1188									
11	573	579	659	646	643	653	648	647	647	640	633	630	639	648	663	675	679	685	686	685	684	685	697	656	653	680									
12	665	673	676	675	679	682	688	680	669	652	634	628	650	654	665	671	680	676	689	684	676	668	677	679	670	1070									
13	679	677	680	683	667	680	684	667	657	657	644	643	644	647	648	655	666	669	679	681	683	680	685	688	668	1043									
14	673	673	673	676	675	678	686	685	676	647	638	654	644	654	645	643	662	662	676	680	680	675	677	680	667	1012									
15	680	677	680	682	684	686	688	677	665	658	649	646	637	653	661	671	673	677	694	692	692	688	687	686	674	1183									
16	689	684	685	684	686	689	692	688	676	662	656	651	654	655	661	676	680	682	690	692	695	680	683	687	678	1277									
17 q	686	684	682	684	686	688	689	684	668	652	637	632	640	654	669	678	680	682	684	686	690	692	691	687	675	1205									
18 q	688	686	687	688	692	692	696	693	677	661	657	645	646	660	683	678	682	676	688	692	693	697	692	692	681	1341									
19	690	700	702	704	703	706	708	706	694	679	669	657	658	667	675	677	684	680	688	697	707	683	669	654	686	1457									
20	646	655	657	677	679	677	681	683	676	667	656	654	654	660	671	679	684	692	703	708	709	705	701	697	678	1271									
21 d	682	676	673	677	688	692	673	644	645	659	656	671	652	671	666	677	703	684	685	660	664	676	677	623	670	1074									
22 d	587	556	597	650	617	652	660	637	621	612	609	617	626	634	656	646	664	697	680	674	666	635	623	583	633	199									
23	630	623	636	620	635	662	642	643	635	624	619	623	634	636	650	653	656	664	671	677	679	675	672	672	647	531									
24 d	671	671	672	673	672	679	676	667	648	636	607	604	620	662	673	733	696	652	664	663	669	668	637	635	660	848									
25	657	667	647	659	661	658	664	654	651	643	622	633	642	649	656	679	684	700	693	670	683	684	680	654	662	890									
26	670	672	672	677	676	679	681	676	654	617	603	619	650	649	647	666	655	680	677	674	683	693	682	674	664	926									
27	677	675	674	671	666	675	679	677	664	648	632	636	651	655	663	674	674	690	691	682	672	657	639	642	665	964									
28	642	654	665	659	672	674	670	668	663	637	622	626	632	633	656	675	681	687	709	688	675	614	622	604	655	728									
29 d	560	515	636	648	653	664	649	631	633	639	634	622	622	622	633	652	679	680	695	671	681	666	668	670	643	423									
30	672	671	671	675	675	668	681	683	667	647	636	630	638	642	666	668	668	687	693	692	679	679	636	636	665	960									
31	641	667	660	655	655	670	669	655	655	649	642	645	643	649	660	657	662	675	687	695	681	674	675	678	662	899									
Mean	660	659	666	669	669	674	675	671	661	648	635	635	642	651	660	669	674	678	683	678	676	670	666	660	664										
Sum 19000+	1458	1415	1650	1738	1731	1896	1934	1792	1496	1093	696	684	903	1189	1453	1754	1883	2025	2162	2007	1952	1771	1644	1457		Grand Total 493,783									

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

102 ESKDALEUIR (D)		10° +												MARCH 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 1100.0+
1		47.2	50.0	48.4	48.2	49.5	49.5	51.0	51.3	48.7	48.9	49.2	51.7	54.1	56.2	56.7	55.9	55.1	54.5	48.7	44.5	47.8	45.2	37.3	47.6	49.9	97.2
2		49.0	45.2	43.9	46.4	51.3	50.0	52.5	48.9	46.8	49.6	51.3	54.9	55.3	57.4	57.1	55.6	54.1	48.7	50.2	53.1	46.6	46.3	48.0	49.1	50.5	111.3
3	d	42.3	43.3	45.4	38.0	43.3	41.9	47.9	47.8	51.5	51.7	50.7	55.9	64.4	62.5	64.9	60.6	58.5	59.9	50.0	45.1	47.1	29.3	20.7	34.6	48.2	57.3
4		48.1	53.2	51.2	50.6	51.3	49.6	50.0	50.6	50.8	51.1	51.9	54.9	55.6	60.6	58.7	58.8	55.6	53.7	53.0	52.1	52.2	50.9	50.4	49.4	52.7	164.3
5		50.0	50.5	51.0	50.4	50.6	50.0	49.9	50.0	49.1	49.2	50.7	53.4	55.7	57.2	58.2	58.1	57.6	56.4	51.4	51.3	50.0	49.5	48.7	49.6	52.0	148.5
6		48.9	45.5	45.6	47.2	47.8	45.0	46.7	48.6	47.1	47.9	50.7	55.0	59.0	60.4	60.5	58.9	56.1	54.9	53.0	44.2	47.8	50.7	50.8	51.0	51.0	123.3
7	q	51.5	51.3	51.2	51.0	50.5	49.9	49.4	48.0	47.2	47.7	50.0	52.8	56.2	58.9	57.0	55.9	53.9	51.4	50.7	51.6	51.7	50.9	49.8	50.0	51.6	138.5
8	q	50.7	50.5	50.8	50.8	50.2	50.2	49.6	48.7	47.7	48.4	50.5	53.1	56.3	57.9	57.2	56.3	55.2	54.1	53.9	53.4	52.6	52.1	52.0	51.8	52.3	154.0
9	q	51.8	51.8	51.8	51.7	51.0	50.5	49.6	48.8	47.9	49.1	51.0	54.2	56.7	57.6	56.5	55.4	53.9	53.7	53.6	53.4	53.4	53.5	52.9	52.7	52.6	162.5
10		52.7	52.3	52.0	51.8	51.7	52.7	50.0	49.8	48.7	48.4	49.2	52.9	56.4	58.3	58.5	57.2	54.7	53.6	52.9	52.1	44.5	42.3	45.4	31.6	50.8	119.7
11		32.4	35.5	38.0	46.4	47.7	47.8	51.4	50.7	46.7	47.9	49.3	52.6	55.9	58.1	58.2	57.8	56.5	56.1	55.1	53.8	52.9	52.3	45.9	41.9	49.6	90.9
12		48.2	49.9	50.5	49.9	50.3	50.2	49.6	47.3	45.1	46.3	48.6	52.4	57.5	57.7	59.4	58.2	57.0	54.5	54.4	53.8	51.3	51.0	51.1	51.9	51.9	146.1
13		51.7	51.3	51.2	49.5	50.5	52.5	49.7	51.6	50.3	48.3	49.9	52.7	55.0	57.6	57.6	57.7	55.2	53.6	52.8	51.9	51.4	50.5	50.0	46.4	52.0	148.9
14		46.3	49.1	50.0	51.1	50.5	49.8	49.4	47.2	47.0	48.2	50.0	53.5	58.5	59.0	60.3	58.9	57.8	54.3	53.3	51.8	50.5	48.0	48.1	49.9	51.8	142.5
15		53.1	53.6	52.6	50.8	50.3	50.2	49.6	47.8	48.1	48.3	51.9	54.8	57.8	60.1	59.7	57.6	54.3	52.2	51.8	51.9	52.0	51.8	51.1	50.0	52.6	161.4
16		50.8	51.1	51.0	50.9	50.9	50.9	50.6	49.7	50.5	49.7	50.2	53.6	56.7	58.1	57.0	56.2	54.3	52.8	53.1	52.3	52.4	48.0	47.1	50.8	52.0	148.9
17	q	51.2	51.3	51.3	51.4	51.3	50.7	49.9	48.3	46.9	47.2	50.3	54.5	57.3	58.9	58.0	56.0	53.9	53.5	53.0	52.7	52.6	52.5	52.6	50.8	52.3	156.1
18	q	51.6	51.7	51.7	51.6	51.4	51.4	50.3	48.2	46.8	49.4	47.3	51.5	54.4	56.4	57.9	56.1	54.0	53.5	53.4	52.6	52.0	51.7	49.3	49.5	51.6	139.2
19		50.9	51.3	51.2	51.9	49.6	49.6	49.5	48.2	46.6	46.9	50.4	54.5	57.7	60.0	59.9	57.6	55.7	53.2	51.8	52.9	53.1	40.5	38.9	40.4	50.9	122.3
20		42.5	43.9	49.1	53.2	50.3	48.9	48.2	47.2	46.2	46.6	48.8	52.1	54.7	57.1	57.7	57.7	55.4	54.9	55.2	54.1	53.8	52.7	51.7	50.9	51.4	132.7
21	d	44.7	40.6	48.6	48.6	47.9	47.5	48.0	48.7	50.7	50.8	50.1	57.3	57.7	62.1	61.0	60.9	62.6	55.5	53.1	50.8	50.5	48.5	43.6	34.1	51.0	123.9
22	d	33.3	34.9	27.0	27.6	36.4	45.9	44.0	41.4	43.7	47.2	51.1	57.2	59.6	60.9	61.8	58.9	56.6	49.1	47.9	53.7	53.5	49.2	34.8	35.5	46.3	11.2
23		45.1	30.6	35.3	36.9	39.7	40.0	45.5	48.2	49.9	50.8	52.5	53.6	56.2	56.7	56.7	55.5	53.7	52.3	51.7	51.7	51.2	51.0	51.0	51.0	48.7	68.4
24	d	50.9	50.8	51.0	50.9	49.8	50.0	48.4	46.0	44.5	44.7	48.6	54.8	60.8	64.5	64.9	60.7	57.2	54.9	53.6	52.3	46.2	43.9	42.4	40.8	51.4	132.6
25		50.5	46.3	47.5	47.6	47.4	48.3	47.2	45.9	46.2	47.8	49.4	53.4	56.2	59.0	57.7	57.9	56.1	54.3	51.0	52.1	52.5	49.8	36.7	43.1	50.2	103.9
26		46.5	49.0	47.4	49.5	47.7	48.3	48.6	46.8	44.8	45.5	50.4	54.1	57.2	58.4	55.6	57.4	55.4	54.9	52.4	51.1	49.6	46.7	47.4	49.6	50.6	114.3
27		50.3	51.3	52.4	50.0	48.8	50.3	49.5	47.0	45.5	46.2	49.9	54.7	59.0	60.4	62.0	62.2	59.1	54.2	48.1	50.5	52.4	46.6	45.3	44.1	51.7	139.8
28		43.7	45.3	47.7	42.1	44.1	45.6	49.4	48.4	48.7	49.9	52.1	56.7	60.7	62.1	61.4	60.9	59.7	55.2	50.2	49.3	45.4	41.0	33.3	33.5	49.4	86.4
29	d	24.3	45.4	39.0	44.4	48.9	46.1	46.0	49.7	53.0	48.7	50.9	53.9	57.0	58.7	58.0	56.5	54.2	50.6	45.5	51.5	53.5	46.8	47.2	51.3	49.2	81.1
30		52.1	51.8	51.2	50.8	50.3	51.8	52.3	49.0	46.8	47.1	48.7	52.2	56.3	59.5	60.5	59.2	57.2	56.7	52.4	53.1	51.8	44.5	42.2	45.9	51.8	143.4
31		44.5	43.7	44.0	45.5	45.9	45.8	46.0	45.1	47.3	48.7	53.1	57.1	60.9	63.1	64.4	62.1	57.7	55.0	51.7	49.1	49.8	50.8	50.4	47.2	51.2	128.9
Mean		47.0	47.5	47.7	48.0	48.6	48.7	49.0	48.2	47.8	48.2	50.3	54.1	57.3	59.2	59.2	58.0	56.1	53.9	51.9	51.4	50.7	48.0	45.7	46.0	50.9	
Sum 1400.0+		56.8	72.0	79.0	86.7	106.9	110.9	119.7	94.9	80.6	93.7	158.7	276.0	376.8	435.4	435.0	398.7	338.3	272.2	208.9	193.8	173.0	89.2	16.3	26.0		Grand Total 37899.5

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

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103 ESKDALEMUIR (Z)		44,000γ (0.44 C.G.S. unit) +																								MARCH 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 29000+
	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	1263	1273	1277	1278	1275	1268	1266	1263	1273	1273	1272	1274	1278	1275	1276	1280	1285	1288	1301	1303	1293	1260	1264	1272	1276	1276	1630
2	1273	1271	1273	1270	1271	1261	1242	1247	1260	1262	1262	1263	1276	1279	1282	1285	1290	1302	1301	1296	1295	1285	1285	1283	1276	1276	1614
3 d	1270	1265	1259	1267	1230	1243	1227	1230	1233	1241	1256	1272	1326	1351	1371	1427	1418	1436	1446	1405	1323	1241	1198	1171	1296	1296	2106
4	1238	1243	1279	1286	1286	1270	1274	1287	1291	1293	1285	1285	1294	1296	1316	1317	1308	1298	1295	1291	1290	1290	1287	1285	1287	1287	1884
5	1281	1283	1283	1283	1283	1280	1283	1283	1284	1285	1282	1280	1281	1286	1289	1291	1299	1309	1316	1323	1319	1308	1301	1296	1292	1292	2008
6	1290	1281	1277	1276	1278	1279	1283	1283	1285	1284	1278	1274	1274	1279	1285	1290	1293	1296	1298	1312	1303	1293	1290	1285	1286	1286	1866
7 q	1285	1284	1283	1283	1282	1282	1283	1285	1285	1283	1279	1273	1268	1269	1277	1282	1287	1290	1291	1291	1289	1285	1284	1282	1283	1283	1782
8 q	1279	1278	1278	1279	1278	1279	1278	1283	1285	1284	1278	1268	1264	1264	1268	1273	1283	1275	1274	1276	1278	1279	1279	1278	1277	1277	1638
9 q	1277	1276	1275	1275	1274	1274	1273	1272	1271	1268	1262	1256	1256	1260	1264	1267	1269	1269	1271	1271	1271	1270	1270	1270	1269	1269	1461
10	1270	1270	1270	1268	1268	1263	1262	1261	1262	1257	1255	1248	1247	1251	1259	1267	1275	1279	1280	1288	1314	1306	1265	1229	1267	1267	1414
11	1195	1193	1225	1258	1276	1282	1273	1263	1274	1280	1282	1279	1278	1275	1277	1279	1282	1279	1278	1279	1280	1283	1278	1272	1267	1267	1420
12	1279	1278	1279	1279	1279	1278	1277	1280	1285	1286	1282	1275	1274	1274	1274	1276	1281	1283	1283	1287	1295	1295	1290	1285	1281	1281	1754
13	1284	1283	1277	1273	1269	1266	1268	1273	1273	1275	1276	1274	1275	1278	1282	1283	1287	1285	1282	1280	1281	1284	1283	1259	1277	1277	1650
14	1255	1263	1268	1267	1270	1274	1275	1279	1279	1278	1272	1266	1262	1277	1287	1288	1287	1290	1285	1283	1283	1286	1284	1276	1276	1276	1634
15	1267	1250	1248	1253	1262	1267	1271	1275	1274	1267	1257	1255	1256	1255	1262	1275	1287	1289	1283	1280	1278	1278	1278	1278	1269	1269	1445
16	1274	1274	1274	1275	1275	1274	1274	1276	1275	1274	1268	1262	1261	1266	1268	1273	1279	1280	1278	1278	1277	1277	1283	1274	1274	1274	1569
17 q	1273	1273	1276	1275	1275	1275	1278	1279	1279	1268	1261	1256	1256	1257	1262	1268	1272	1271	1270	1272	1271	1269	1269	1272	1270	1270	1477
18 q	1268	1268	1268	1270	1271	1271	1271	1272	1273	1270	1261	1255	1251	1253	1262	1278	1291	1289	1279	1276	1274	1274	1275	1272	1271	1271	1492
19	1270	1268	1267	1263	1263	1265	1267	1270	1273	1272	1261	1256	1256	1263	1274	1283	1288	1291	1288	1280	1276	1286	1267	1244	1270	1270	1491
20	1245	1245	1253	1256	1268	1278	1280	1283	1280	1273	1267	1262	1260	1263	1267	1272	1274	1274	1271	1271	1272	1272	1273	1274	1276	1268	1437
21 d	1275	1277	1274	1275	1273	1268	1267	1266	1260	1254	1258	1255	1260	1267	1280	1293	1320	1337	1363	1350	1321	1312	1275	1217	1283	1283	1797
22 d	1207	1122	1090	1125	1174	1209	1221	1244	1267	1272	1275	1275	1284	1290	1289	1287	1287	1312	1315	1312	1321	1288	1228	1203	1246	897	
23	1218	1228	1216	1193	1187	1188	1232	1272	1291	1301	1304	1298	1291	1290	1290	1290	1290	1290	1286	1286	1285	1285	1285	1285	1266	1266	1381
24 d	1285	1285	1281	1278	1273	1273	1279	1285	1290	1283	1279	1273	1269	1279	1297	1339	1370	1345	1326	1319	1315	1284	1260	1255	1293	1293	2022
25	1217	1216	1252	1270	1272	1273	1275	1285	1285	1280	1279	1272	1268	1272	1279	1283	1291	1305	1312	1306	1295	1291	1282	1264	1276	1276	1624
26	1268	1278	1280	1275	1272	1275	1279	1282	1279	1278	1272	1268	1270	1287	1299	1299	1296	1289	1298	1301	1297	1273	1264	1273	1281	1281	1752
27	1278	1279	1268	1268	1274	1275	1279	1280	1282	1276	1272	1267	1267	1271	1276	1283	1301	1316	1324	1313	1310	1312	1290	1279	1285	1285	1840
28	1278	1279	1242	1251	1264	1263	1267	1270	1270	1273	1268	1267	1268	1274	1276	1280	1297	1318	1320	1308	1308	1274	1218	1175	1272	1272	1518
29 d	1172	1102	1179	1237	1238	1252	1258	1256	1250	1257	1262	1266	1271	1279	1287	1296	1314	1326	1321	1300	1285	1287	1285	1279	1261	1261	1259
30	1279	1282	1282	1281	1279	1275	1274	1279	1280	1279	1275	1270	1268	1272	1279	1285	1285	1291	1313	1329	1325	1304	1283	1268	1285	1285	1837
31	1275	1244	1263	1263	1247	1266	1278	1279	1274	1275	1273	1273	1275	1283	1297	1308	1308	1306	1306	1299	1295	1296	1295	1294	1282	1282	1772
Mean	1261	1255	1259	1263	1264	1266	1268	1272	1275	1274	1271	1268	1271	1275	1282	1290	1297	1300	1302	1299	1294	1285	1273	1263	1276	1276	
Sum 38000+	1088	911	1016	1150	1186	1246	1314	1442	1522	1501	1413	1317	1384	1535	1751	1997	2194	2308	2354	2265	2119	1828	1469	1161			Grand Total 949,471

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

104 ESKDALEMUIR														MARCH 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.	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ						
1	20 52	721	599	10 36	122	14 30	58.0	33.2	22 31	24.8	18 53	1309	1251	00 00	58	2,3,3,3,2,2,4,4	23	1	83.8	
2	06 32	697	597	11 44	100	14 44	59.6	41.9	02 17	17.7	17 48	1308	1238	06 38	70	3,3,3,4,3,3,3,3	25	1	83.8	
3 d	18 10	1209	292	20 56	917	18 21	84.2	5.8	21 50	78.4	18 18	1620	1168	20 54	452	4,4,5,5,4,5,9,6	42	2	83.8	
4	14 57	681	596	05 48	85	14 03	63.5	42.4	00 01	21.1	14 58	1324	1200	00 00	124	4,3,3,3,3,3,2,1	22	1	83.8	
5	16 10	710	628	19 46	82	15 57	59.1	48.1	22 08	11.0	19 50	1326	1279	11 53	47	1,1,2,1,2,3,3,2	15	0	83.8	
6	13 45	696	632	10 48	64	13 04	65.8	39.2	19 33	26.6	19 38	1317	1272	11 39	45	3,2,2,1,3,3,4,2	20	1	83.8	
7 q	21 46	691	628	11 21	63	13 20	59.2	46.9	09 15	12.3	18 39	1291	1267	12 56	24	0,0,0,2,2,1,1,1	7	0	83.8	
8 q	19 30	689	633	11 16	56	13 49	58.3	47.3	08 48	11.0	08 48	1287	1262	13 02	25	1,1,1,1,1,1,1,0	7	0	83.8	
9 q	21 33	704	648	11 39	56	13 16	58.2	47.6	08 25	10.6	00 00	1277	1256	11 30	27	0,0,0,1,1,1,0,1	4	0	83.8	
10	05 34	711	515	23 44	196	13 51	59.2	16.5	23 28	42.7	20 50	1321	1154	23 39	167	1,2,2,2,2,2,4,5	20	1	83.8	
11	22 39	745	527	00 54	218	15 00	59.6	20.8	02 05	38.8	22 16	1287	1174	01 37	113	5,3,3,2,3,2,2,4	24	1	83.8	
12	16 04	700	622	11 41	78	12 45	60.8	43.2	00 00	17.6	20 23	1296	1273	12 46	23	3,1,2,2,2,3,3,2	18	0	83.8	
13	22 58	749	635	11 10	114	14 17	59.1	41.0	23 48	18.1	16 53	1288	1252	24 00	36	1,3,3,1,2,2,1,4	17	0	83.8	
14	08 01	694	627	10 00	67	14 03	61.8	42.4	00 00	19.4	16 57	1293	1251	00 10	42	3,1,2,3,3,1,2,1	18	0	83.8	
15	18 43	701	635	12 42	66	14 00	60.8	46.4	08 29	14.4	16 55	1290	1247	01 56	43	2,2,2,2,3,2,2,1	14	0	83.8	
16	20 55	702	647	11 36	55	12 50	59.8	44.0	22 08	15.8	22 00	1287	1260	12 41	27	1,0,1,2,2,1,2,3	12	0	83.8	
17 q	22 07	699	628	11 40	71	13 53	59.4	46.3	08 45	13.1	08 20	1280	1255	12 31	25	1,1,2,1,0,1,0,1	9	0	83.8	
18 q	21 25	702	637	12 04	65	14 41	59.2	44.5	09 30	14.7	16 55	1295	1251	13 06	44	1,0,1,2,3,2,1,2	12	0	83.8	
19	20 50	716	639	23 49	77	14 56	61.0	32.4	21 50	28.6	17 35	1291	1239	23 45	52	3,2,1,2,2,2,3,4	19	1	83.7	
20	20 12	715	639	00 41	76	14 46	59.5	38.9	00 00	20.6	07 06	1283	1242	00 25	41	4,2,1,1,2,3,2,2	17	0	83.7	
21 d	16 24	744	586	24 00	158	16 19	66.3	32.6	23 30	33.7	18 37	1398	1195	23 51	203	4,2,4,3,3,4,4,5	29	1	83.7	
22 d	17 37	720	464	01 32	256	14 11	63.5	17.1	03 00	46.4	21 22	1325	1066	02 28	259	6,5,3,2,3,4,4,5	32	2	83.7	
23	00 24	724	571	00 36	153	00 26	72.1	24.0	01 43	48.1	10 22	1305	1140	00 23	165	6,4,4,2,2,2,2,1	23	1	83.7	
24 d	15 24	790	583	11 15	207	14 40	66.8	35.5	20 44	31.3	16 17	1379	1250	24 00	129	1,1,3,3,4,5,4,4	25	1	83.7	
25	18 19	728	606	10 46	122	13 20	59.9	28.9	22 31	31.0	18 12	1314	1198	00 42	116	4,2,1,3,2,3,4,5	24	1	83.7	
26	21 00	744	594	10 21	150	13 16	60.1	38.7	21 36	21.4	15 53	1302	1261	00 00	41	2,2,3,3,3,3,4,4	24	1	83.6	
27	18 03	706	621	22 10	85	15 44	63.1	42.7	23 35	20.4	18 09	1325	1266	12 30	59	2,2,2,2,2,3,3,3	19	0	83.6	
28	18 56	744	580	24 00	164	13 22	63.9	26.5	24 00	37.4	17 57	1328	1170	24 00	158	4,3,2,2,3,3,4,4	25	1	83.6	
29 d	18 11	737	418	01 08	319	13 05	59.9	22.1	00 41	37.8	17 56	1335	1050	01 25	285	6,4,3,3,3,4,4,4	31	2	83.6	
30	21 20	707	626	23 23	81	13 41	60.8	39.4	22 10	21.4	19 37	1332	1266	23 26	66	0,2,3,1,2,3,3,4	18	0	83.6	
31	19 00	710	614	00 49	96	14 00	64.9	38.3	01 39	26.6	15 50	1309	1219	01 11	90	4,3,2,1,3,2,3,2	20	0	83.6	
Mean	-	-	732	589	-	-	62.2	35.9	-	26.2	-	-	1320	1222	-	98	-	-	0.61	83.7

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 0-1	G.M.T. 1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 13000+						
	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	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	662	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	659	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	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	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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

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

107 ESKDALEMUIR (Z)		44,000γ (0.44 C.G.S. unit) +																				APRIL 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 29000+
	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	1282	1272	1265	1259	1247	1241	1253	1268	1272	1271	1269	1264	1264	1267	1276	1281	1290	1294	1293	1287	1282	1282	1287	1286	1273	1552	
2	1280	1280	1278	1279	1280	1280	1282	1283	1277	1267	1259	1252	1256	1266	1278	1288	1311	1337	1338	1323	1282	1250	1271	1276	1282	1773	
3	1269	1265	1273	1259	1213	1234	1254	1264	1268	1271	1264	1258	1254	1260	1268	1282	1287	1305	1305	1300	1294	1293	1290	1284	1271	1514	
4	1276	1275	1264	1257	1254	1259	1259	1263	1261	1264	1258	1252	1252	1253	1264	1277	1284	1293	1299	1292	1287	1278	1277	1276	1270	1474	
5	1276	1268	1261	1259	1264	1264	1268	1271	1270	1265	1259	1253	1256	1260	1275	1287	1282	1290	1295	1302	1287	1280	1280	1276	1273	1548	
6	1276	1274	1271	1271	1272	1273	1276	1277	1278	1281	1271	1260	1259	1269	1282	1288	1290	1287	1284	1281	1283	1288	1277	1273	1277	1641	
7	1212	1175	1231	1260	1267	1271	1275	1275	1276	1272	1265	1258	1258	1265	1286	1294	1290	1288	1283	1279	1278	1275	1272	1269	1266	1374	
8	1265	1262	1265	1265	1267	1273	1277	1277	1275	1272	1266	1264	1261	1264	1271	1276	1281	1279	1280	1283	1282	1280	1276	1274	1272	1535	
9	1272	1272	1272	1270	1272	1276	1276	1276	1275	1270	1265	1259	1258	1261	1265	1269	1270	1272	1278	1282	1283	1271	1266	1269	1271	1499	
10	1272	1272	1272	1272	1273	1275	1275	1272	1267	1266	1265	1259	1255	1258	1269	1291	1287	1288	1282	1278	1277	1275	1274	1272	1273	1546	
11	1272	1271	1270	1271	1268	1270	1275	1276	1273	1271	1266	1258	1253	1251	1262	1269	1273	1281	1299	1309	1283	1275	1271	1269	1272	1536	
12	1256	1243	1247	1259	1264	1269	1272	1275	1271	1268	1260	1257	1257	1265	1264	1272	1286	1288	1283	1277	1276	1275	1272	1272	1268	1428	
13 q	1273	1272	1271	1265	1264	1269	1274	1276	1275	1269	1263	1254	1253	1258	1264	1275	1282	1285	1280	1272	1270	1270	1270	1270	1270	1474	
14 q	1270	1270	1270	1271	1271	1271	1275	1279	1275	1265	1257	1251	1252	1253	1259	1264	1272	1277	1276	1272	1272	1272	1271	1269	1268	1434	
15 q	1267	1267	1268	1269	1269	1270	1271	1271	1269	1259	1252	1247	1247	1255	1263	1268	1273	1278	1281	1292	1286	1278	1272	1265	1268	1437	
16	1264	1269	1270	1269	1263	1260	1267	1274	1276	1273	1267	1259	1258	1262	1268	1277	1310	1341	1348	1338	1315	1297	1284	1273	1283	1782	
17	1224	1223	1228	1242	1213	1242	1264	1267	1269	1271	1266	1264	1264	1264	1284	1309	1318	1313	1314	1317	1299	1280	1276	1279	1270	1490	
18	1276	1272	1276	1277	1254	1248	1260	1259	1258	1259	1264	1260	1260	1264	1273	1282	1282	1281	1279	1276	1278	1279	1272	1269	1269	1458	
19	1255	1254	1257	1260	1258	1256	1259	1265	1268	1265	1261	1259	1260	1268	1283	1297	1310	1313	1304	1292	1283	1282	1280	1276	1274	1565	
20	1276	1274	1271	1264	1271	1276	1277	1273	1268	1263	1256	1253	1253	1259	1267	1270	1275	1279	1282	1291	1292	1288	1288	1288	1273	1554	
21 d	1280	1275	1271	1259	1257	1264	1267	1268	1265	1253	1247	1244	1252	1247	1255	1261	1265	1276	1329	1399	1403	1279	1177	1167	1269	1460	
22 d	1232	1179	1107	1127	1092	1078	1088	1165	1214	1276	1300	1310	1297	1295	1303	1311	1320	1322	1318	1322	1300	1291	1295	1279	1243	821	
23	1281	1286	1261	1254	1275	1283	1288	1292	1288	1286	1279	1267	1265	1268	1276	1284	1287	1287	1287	1287	1288	1289	1284	1276	1280	1718	
24 q	1281	1282	1286	1284	1281	1277	1277	1276	1276	1275	1266	1258	1258	1259	1268	1275	1277	1283	1286	1287	1287	1287	1280	1270	1277	1636	
25 q	1266	1259	1256	1267	1270	1272	1276	1276	1273	1265	1259	1252	1250	1258	1268	1274	1284	1292	1293	1289	1288	1287	1284	1281	1272	1539	
26	1276	1276	1276	1274	1255	1250	1256	1253	1252	1254	1251	1247	1249	1254	1268	1282	1287	1293	1305	1315	1301	1249	1141	1097	1257	1161	
27 d	1079	981	907	912	977	1061	1156	1139	1175	1252	1337	1395	1416	1433	1430	1436	1429	1412	1356	1307	1320	1317	1286	1213	1239	726	
28 d	1181	1163	1076	1105	1199	1247	1253	1270	1282	1294	1303	1303	1298	1304	1308	1309	1306	1306	1307	1315	1316	1314	1317	1271	1264	1347	
29	1245	1182	1211	1234	1237	1238	1257	1271	1272	1270	1270	1273	1278	1284	1291	1301	1304	1306	1301	1298	1299	1297	1296	1302	1272	1517	
30 d	1292	1287	1274	1247	1249	1241	1245	1252	1258	1268	1272	1271	1269	1272	1292	1306	1317	1346	1392	1349	1324	1305	1276	1269	1286	1873	
Mean	1257	1247	1240	1242	1243	1250	1258	1263	1266	1269	1268	1265	1265	1270	1279	1289	1294	1300	1302	1300	1294	1283	1272	1264	1270		
Sum 37000+	726	400	205	261	296	488	752	903	976	1055	1037	961	962	1096	1380	1655	1829	1992	2057	2011	1815	1483	1162	910		Grand Total 914,412	

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

108		ESKDALEMUIR												APRIL 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.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ				
1	04 37	710	636	12 14	74	13 35	60.3	38.1	01 45	22.2	17 37	1296	1241	05 25	55	3,4,3,1,2,3,2,2	20	0	83.6
2	20 38	720	626	20 58	94	14 16	65.3	34.7	21 10	30.6	18 38	1340	1236	21 04	104	1,1,1,3,4,3,4,4	21	1	83.6
3	16 47	709	606	03 48	103	12 36	64.6	36.5	03 29	28.1	17 47	1310	1201	04 25	109	2,4,2,2,3,3,3,2	21	1	83.6
4	19 00	707	636	09 43	71	13 10	61.3	44.2	02 18	17.1	18 45	1299	1247	03 59	52	2,3,2,3,2,2,3,1	18	0	83.7
5	21 08	726	645	11 45	81	13 31	60.8	41.0	19 34	19.8	19 29	1305	1253	11 32	52	2,2,1,1,2,3,4,3	18	0	83.7
6	24 00	717	622	13 44	95	14 19	63.6	42.3	21 10	21.3	21 06	1292	1257	11 53	35	2,1,3,2,4,3,2,4	21	1	83.7
7	00 00	717	625	01 14	92	13 44	60.3	36.6	01 19	23.7	14 49	1296	1142	01 11	154	4,2,3,3,3,3,2,2	22	1	83.7
8	18 36	710	622	10 57	88	13 38	59.8	44.1	07 46	15.7	19 53	1286	1260	01 29	26	2,2,3,3,3,2,2,1	18	0	83.7
9	18 32	711	634	09 51	77	13 25	61.6	41.1	08 51	20.5	20 18	1283	1257	12 21	26	1,2,2,2,3,2,3,2	17	0	83.8
10	23 49	720	610	11 46	110	14 20	62.0	47.4	06 59	14.6	15 39	1295	1253	12 09	42	1,1,2,3,4,4,2,3	20	1	83.8
11	18 15	759	626	11 20	133	14 24	61.9	42.2	08 15	19.7	19 14	1313	1251	13 26	62	2,2,2,2,3,4,4,3	22	1	83.8
12	15 53	728	625	11 11	103	12 40	60.4	40.9	07 02	19.5	17 30	1288	1238	01 48	50	3,2,3,2,3,3,2,2	20	0	83.8
13 q	17 38	711	615	10 45	96	14 00	58.2	41.0	08 24	17.2	17 19	1286	1253	12 01	33	1,2,3,2,2,2,1,1	14	0	83.8
14 q	16 38	717	621	10 57	96	12 52	60.8	41.7	08 34	19.1	07 48	1280	1248	12 09	32	0,1,3,2,3,2,2,2	15	0	83.8
15 q	16 33	736	630	11 09	106	13 25	60.7	43.3	08 29	17.4	19 46	1297	1247	11 57	50	2,1,3,1,3,3,3,2	18	0	83.8
16	16 22	780	623	11 24	157	17 11	60.1	41.1	08 35	19.0	18 04	1353	1255	11 57	98	2,3,2,2,2,4,3,3	21	1	83.8
17	15 55	719	565	00 51	154	13 54	58.5	36.1	02 31	22.4	16 26	1321	1176	00 50	145	5,4,2,2,3,3,3,3	25	1	84.0
18	19 55	710	606	12 08	104	14 20	56.8	40.0	23 36	16.8	16 00	1285	1245	05 02	40	2,3,3,3,3,3,2,3	22	1	84.0
19	16 44	730	626	11 26	104	13 41	60.1	42.0	07 51	18.1	17 16	1315	1253	00 41	62	2,2,3,1,2,3,2,1	16	0	84.0
20	19 40	727	625	10 27	102	13 23	60.3	41.3	07 16	19.0	20 00	1322	1252	11 06	70	2,2,2,2,2,1,3,3	18	0	84.0
21 d	19 27	815	31	22 26	784	13 56	68.0	6.0	22 30	62.0	19 58	1471	1064	22 42	407	3,3,3,4,5,5,5,8	36	2	84.0
22 d	19 03	716	438	06 56	278	11 05	64.1	16.5	03 14	47.6	19 23	1331	1029	06 51	302	6,6,6,5,4,5,4,4	40	2	84.0
23	19 17	699	599	12 38	100	12 33	61.7	41.3	08 11	20.4	07 26	1293	1242	02 54	51	3,2,2,2,3,2,2,2	18	0	84.0
24 q	22 43	703	616	10 11	87	13 30	59.4	43.1	07 18	16.3	20 20	1288	1257	11 48	31	1,2,2,1,2,2,1,2	13	0	84.0
25 q	16 28	715	623	10 40	92	13 50	62.6	43.3	08 16	19.6	18 35	1295	1248	12 00	47	3,1,2,3,2,3,3,2	19	0	84.0
26	21 10	833	452	23 52	381	13 29	63.7	29.9	22 37	33.8	19 30	1318	1033	23 53	285	2,3,3,3,3,3,4,7	28	1	84.0
27 d	16 06	906	-779	03 10	1685	18 31	74.3	-27.5	03 55	101.8	13 10	1460	686	02 39	774	9,9,6,6,6,5,5,5	51	2	84.0
28 d	18 58	800	399	01 41	401	18 59	65.4	16.7	02 10	48.7	22 44	1319	1022	02 40	297	6,6,3,2,2,4,5,6	34	2	84.0
29	04 38	734	409	01 42	325	15 11	62.3	21.0	02 06	41.3	17 29	1308	1026	01 43	282	7,5,4,4,4,3,2,3	32	2	84.0
30 d	02 44	796	589	04 52	207	14 58	67.7	34.1	03 36	33.6	18 27	1399	1235	04 59	164	5,5,4,4,5,4,4,3	34	1	84.0
Mean	-	-	739	527	-	213	-	-	62.2	34.7	-	-	-	-	131	-	-	0.70	83.9

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

109 ESKDALEMUIR (H)												16,000γ (0.16 C.G.S. unit) +												MAY 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														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	
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	659	1822
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	2106
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	2446
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	2419
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	2437
7	683	683	681	684	691	685	683	677	668	647	654	657	665	681	681	682	689	695	699	701	702	694	698	699	682	2379
8 q	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	2561
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	2448
10 q	700	695	699	700	696	703	696	686	680	671	664	658	665	673	684	689	692	710	710	708	708	706	703	700	692	2606
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	2527
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	2485
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	2830
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	634	633	653	670	656	682	693	711	729	732	705	699	684	683	679	681	2343
24 d	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	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.

110	ESKDALEMUIR (D)												10° +												MAY 1956					
	Hour G.M.T.																													Sum
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	1100+0+				
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	45.3	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	45.1	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	68.3	60.2	58.2	55.4	54.9	48.2	53.9	40.9	49.9	44.2	52.1	149.3				
17 d	24.8	37.2	37.9	45.9	49.8	51.0	49.5	48.2	45.1	45.9	53.0	54.4	56.1	56.9	54.9	54.0	51.6	48.5	47.5	47.6	49.7	50.8	50.6	49.6	48.3	60.1				
18	49.1	48.7	49.2	48.2	47.7	48.4	46.7	43.6	44.1	46.5	51.4	52.8	55.5	55.9	55.1	53.9	51.8	51.1	50.8	50.0	50.5	51.0	51.3	50.0	50.1	102.8				
19	49.7	50.5	48.9	47.1	46.6	42.3	41.1	42.4	39.7	42.9	49.9	51.7	52.8	53.2	55.0	54.4	53.7	51.8	50.9	51.0	50.9	49.1	48.1	49.8	48.9	73.5				
20	48.9	49.0	50.1	49.0	47.1	44.9	43.2	42.0	43.3	42.9	47.1	46.9	58.1	59.3	58.7	56.2	53.9	52.4	52.0	51.4	49.2	49.2	50.4	52.7	49.9	97.9				
21	46.0	39.7	39.8	41.4	47.1	49.9	48.3	46.6	47.7	48.8	51.4	53.8	56.0	58.3	58.7	57.2	55.3	53.4	53.6	52.8	51.4	51.1	50.7	50.1	50.4	109.1				
22	50.1	48.7	46.5	48.2	45.4	43.3	43.5	46.8	48.0	46.4	50.0	54.1	57.2	55.9	57.1	55.8	54.3	53.2	52.6	47.4	50.7	52.1	52.9	51.3	50.5	111.5				
23	50.5	49.5	48.6	47.7	47.0	46.3	45.4	45.5	47.0	48.1	53.8	54.8	56.7	58.1	58.6	59.4	59.5	57.2	55.2	56.1	54.9	52.6	43.8	37.7	51.4	134.0				
24 d	34.7	34.6	34.3	37.4	46.9	45.1	46.4	43.2	45.1	44.6	48.2	52.5	66.2	68.3	65.0	58.4	59.4	54.3	51.0	49.7	54.1	48.2	51.7	31.2	49.2	80.5				
25 d	38.2	36.1	35.7	37.4	49.0	45.3	42.6	51.8	52.2	49.8	53.3	54.2	56.5	56.5	54.3	54.3	53.5	52.5	50.3	50.8	51.1	46.9	47.5	46.7	48.9	73.5				
26	43.7	45.8	45.6	42.8	40.9	39.8	38.5	39.8	43.2	45.7	48.3	52.6	56.4	58.2	58.2	57.2	55.1	53.8	52.7	47.6	50.7	49.1	47.7	45.4	48.3	58.8				
27	44.6	46.4	49.6	45.6	42.9	41.5	41.1	42.3	43.2	46.8	51.2	54.1	56.4	56.7	56.7	55.8	55.0	54.0	52.8	51.3	50.5	50.8	50.4	45.4	49.4	85.1				
28	41.9	44.0	43.7	45.6	43.3	42.1	43.1	42.8	45.2	48.1	50.0	54.5	58.7	60.6	59.5	57.0	54.9	52.4	50.6	51.2	52.1	51.7	51.7	51.3	49.8	96.0				
29	50.9	51.0	50.1	48.0	46.6	45.1	43.5	44.1	44.4	46.8	50.7	55.9	59.7	61.2	60.4	59.0	57.2	56.4	56.4	49.7	49.8	48.1	47.5	49.1	51.3	131.6				
30	50.8	51.4	47.7	47.3	45.1	49.5	46.7	45.6	45.5	45.8	49.0	54.2	57.3	60.1	58.7	56.7	55.3	51.8	51.4	49.7	49.8	51.2	48.4	50.4	50.8	119.4				
31	51.6	51.1	49.8	50.0	45.1	43.2	42.2	41.4	42.0	44.8	46.9	49.9	52.5	54.4	54.9	54.8	53.2	52.0	51.4	51.0	51.2	51.7	50.8	48.2	49.3	84.1				
Mean	47.8	47.6	47.9	47.9	47.5	47.1	44.9	44.5	45.4	47.1	50.1	53.3	56.5	58.0	57.8	56.3	54.7	52.6	51.5	50.5	50.9	50.1	49.9	48.9	50.4					
Sum 1300.0+	182.9	176.0	183.3	184.2	173.1	159.8	91.4	81.1	107.4	161.4	252.2	352.4	450.2	496.8	491.2	446.4	394.0	330.9	295.5	264.2	276.6	252.6	245.2	216.1		Grand Total 37464.9				

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

73

111 ESKDALEUIR (2)

44,000γ (0.44 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 29000+
	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	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	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	1275	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	1094
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	1286	1272	1269	1270	1279	1304	1323	1339	1344	1323	1299	1292	1286	1269	1194	1289	1937
24 d	1148	1128	1110	1144	1198	1208	1241	1255	1270	1285	1282	1290	1291	1328	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	1304	1305	1317	1310	1304	1299	1282	1286	1867
27	1280	1282	1276	1280	1284	1290	1290	1288	1287	1281	1277	1266	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 ESKDALEUIR

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	
	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ							
1	17 55	725	577	11 54	148	14 00	59.1	45.4	05 05	13.7	17 40	1333	1265	00 00	68	3, 4, 2, 3, 4, 4, 3, 1	24	1	84.0	
2 q	17 59	700	625	11 21	75	14 20	57.5	42.5	08 31	15.0	06 29	1297	1265	12 04	32	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	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	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	3, 2, 3, 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	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	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	0, 1, 2, 2, 2, 2, 2, 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	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	1, 1, 2, 1, 2, 2, 1, 0	10	0	84.2	
11 q	24 00	759	657	08 55	102	13 17	56.4	42.7	08 29	13.7	18 21	1281	1241	11 32	40	1, 1, 1, 0, 1, 0, 1, 4	9	0	84.2	
12	16 32	764	644	15 58	120	14 25	68.0	40.7	08 54	27.3	16 48	1351	1229	11 39	122	4, 4, 4, 3, 4, 5, 4, 4	32	1	84.2	
13	05 02	723	526	08 15	197	08 46	65.7	36.1	07 19	29.6	16 10	1328	1240	08 54	88	2, 3, 5, 4, 3, 3, 2, 3	25	1	84.2	
14	15 51	759	604	09 36	155	15 04	58.2	39.8	07 19	18.4	16 31	1324	1267	09 17	57	2, 2, 3, 3, 3, 4, 3, 3	23	1	84.4	
15 d	17 33	967	582	11 53	385	17 50	68.5	40.9	17 29	27.6	17 05	1426	1205	03 31	221	4, 4, 3, 3, 4, 7, 4, 4	33	2	84.4	
16 d	15 23	1058	374	06 11	684	05 55	82.0	20.9	24 00	61.1	15 17	1605	1063	22 01	542	4, 6, 6, 6, 7, 7, 5, 7	48	2	84.4	
17 d	19 00	700	292	00 47	408	12 47	58.0	9.0	00 26	49.0	14 27	1359	972	00 50	447	7, 5, 4, 4, 4, 3, 3, 2	32	2	84.4	
18	22 03	701	621	10 45	80	14 01	56.9	42.5	07 49	14.4	17 19	1311	1263	04 13	48	3, 3, 2, 2, 1, 2, 2, 2	17	0	84.4	
19	20 14	709	618	09 57	91	14 31	55.9	38.7	08 18	17.2	05 44	1294	1269	13 09	25	1, 2, 2, 3, 2, 2, 2, 3	17	0	84.4	
20	23 23	767	575	12 17	192	12 33	61.5	39.1	07 33	22.4	20 46	1332	1220	24 00	112	2, 1, 3, 4, 4, 4, 4, 4	26	1	84.4	
21	18 21	740	626	09 48	114	14 03	59.6	37.6	01 37	22.0	20 27	1289	1208	00 21	81	4, 4, 2, 2, 3, 3, 3, 1	22	1	84.4	
22	18 11	797	621	11 05	176	18 17	59.6	42.0	06 07	17.6	18 36	1340	1266	10 12	74	2, 2, 3, 3, 3, 3, 5, 1	22	1	84.4	
23	15 19	755	585	23 45	170	15 48	62.9	28.0	23 10	34.9	17 03	1347	1171	23 34	176	2, 0, 1, 3, 4, 4, 4, 5	23	1	84.4	
24 d	15 06	861	495	11 35	366	14 09	74.9	25.0	23 49	49.9	14 48	1450	1097	02 55	353	5, 5, 5, 5, 6, 6, 4, 6	42	2	84.4	
25 d	22 24	707	371	00 35	336	05 52	69.5	26.1	02 19	43.4	14 33	1368	1021	00 44	347	7, 6, 5, 5, 3, 3, 2, 3	34	2	84.4	
26	19 20	744	606	11 09	138	13 49	58.6	37.0	07 01	21.6	19 30	1321	1229	01 59	92	4, 2, 3, 2, 3, 2, 3, 3	22	1	84.4	
27	19 13	729	618	10 10	111	13 01	57.2	39.4	24 00	17.8	20 49	1296	1262	12 11	34	3, 2, 1, 2, 2, 3, 2, 3	18	0	84.4	
28	18 55	718	614	10 41	104	13 20	61.5	39.2	00 44	22.3	17 19	1295	1222	03 36	73	3, 3, 3, 1, 3, 1, 2, 1	17	0	84.4	
29	18 20	805	624	22 58	181	13 14	62.1	43.1	22 33	19.0	19 19	1358	1259	22 53	99	1, 1, 1, 1, 3, 4, 5, 4	20	1	84.4	
30	16 47	720	616	10 51	104	14 03	60.8	43.3	08 04	17.5	17 36	1331	1271	01 47	60	3, 2, 3, 3, 3, 4, 3, 3	24	1	84.4	
31	23 07	723	638	10 28	85	15 16	55.6	38.9	08 00	16.7	18 59	1286	1263	13 00	23	1, 3, 2, 2, 1, 3, 2, 3	17	0	84.4	
Mean	- -	756	589 - -	167	- -	61.2	38.1 - -	23.2	- -	1332	1217 - -	115	- -	- -	115	-	-	0 71	-	84.3

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

113		ESKDALEUIR (H)												16,000γ (0.16 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 15000+										
		0-1	1-2																																		
1	d	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										
2		693	675	683	702	690	666	655	659	649	624	638	663	656	659	693	727	707	715	708	710	701	694	691	697	681	1355										
3	q	701	693	687	688	681	678	676	672	665	653	652	656	650	663	682	687	723	726	707	712	708	704	699	697	686	1460										
4		705	707	702	693	695	693	688	674	664	663	660	658	672	684	695	710	721	721	721	719	710	708	710	699	695	1672										
5		696	695	689	685	695	692	688	681	670	657	660	664	655	687	698	717	725	723	708	709	700	699	704	708	692	1605										
6		701	703	700	701	697	693	685	665	664	672	668	676	676	674	695	708	714	724	738	732	723	717	716	710	698	1752										
7	q	700	702	700	700	704	704	699	689	678	669	676	672	687	737	695	726	714	711	709	710	714	708	705	708	701	1817										
8		708	703	697	696	691	691	689	678	670	654	658	657	662	680	702	715	719	723	707	717	726	710	708	706	694	1667										
9		707	713	688	696	703	692	687	677	672	640	630	665	684	688	714	710	708	720	723	733	715	712	691	677	694	1645										
10		684	685	687	696	700	688	642	639	673	664	664	669	679	691	699	698	719	710	712	737	710	700	704	699	690	1549										
11		700	699	703	712	706	700	685	672	660	646	645	648	656	674	691	708	734	743	728	724	712	711	709	680	694	1646										
12		681	705	699	683	663	668	648	646	626	643	654	651	665	642	687	733	732	726	739	722	711	703	689	688	683	1404										
13		687	690	695	688	681	673	682	676	651	652	651	665	662	663	675	691	704	723	727	711	708	705	698	687	685	1445										
14		686	673	676	683	684	684	679	671	668	658	655	659	659	659	674	701	705	716	745	736	731	716	684	655	686	1457										
15	d	681	695	693	691	693	690	667	658	657	642	631	657	676	703	698	691	691	712	722	731	732	715	709	711	689	1546										
16		697	664	681	694	665	678	656	637	640	637	642	629	655	674	689	714	708	734	729	716	712	704	702	678	681	1335										
17		674	682	684	682	671	682	679	676	664	661	650	648	647	674	692	702	721	721	740	729	708	696	699	693	686	1475										
18	q	690	691	691	691	692	691	684	675	666	655	653	664	682	699	702	704	731	756	725	712	724	713	697	689	695	1677										
19	q	688	693	684	684	687	682	674	662	653	650	653	672	682	696	695	695	707	723	719	715	715	707	691	691	688	1518										
20	q	687	685	687	691	692	692	686	675	668	668	667	674	685	686	698	719	729	723	714	716	716	712	708	699	695	1677										
21		689	693	693	692	694	692	679	678	668	665	662	670	688	688	703	702	681	689	703	712	732	725	711	708	692	1617										
22		682	686	688	689	690	681	674	658	640	636	637	646	664	688	688	710	713	717	715	723	724	716	701	696	686	1462										
23		695	701	696	688	683	686	673	669	649	637	633	652	667	681	706	698	702	724	731	723	706	702	692	690	687	1484										
24	d	695	686	685	690	690	687	674	659	645	642	643	649	678	690	699	700	718	716	762	759	735	708	654	661	689	1525										
25	d	670	674	698	673	663	656	657	658	638	620	618	625	654	693	750	797	783	703	691	697	721	701	674	664	682	1378										
26		624	614	656	628	576	596	629	641	656	641	620	608	629	647	665	686	707	708	743	710	697	694	696	686	657	757										
27		684	682	684	687	688	690	669	647	660	651	649	630	627	654	674	690	701	716	723	717	709	705	696	701	681	1334										
28		686	686	687	665	680	693	681	667	654	635	645	648	656	662	691	698	708	722	733	718	708	705	701	696	684	1425										
29		691	688	690	691	694	687	687	662	650	667	665	671	650	670	692	703	708	707	732	722	718	716	706	708	691	1575										
30	d	705	712	698	697	703	699	701	690	662	659	655	656	669	683	681	682	681	692	738	733	722	711	703	698	693	1630										
		690	693	691	690	688	680	694	685	669	653	641	624	614	660	671	731	684	684	703	724	725	706	698	688	683	1386										
Mean		689	689	690	688	685	683	676	667	658	651	649	654	663	678	693	708	713	718	723	721	716	707	698	692	688											
Sum 19000+		1677	1668	1692	1646	1539	1484	1267	996	749	514	475	626	886	1349	1794	2253	2398	2528	2695	2629	2473	2223	1946	1768		Grand Total 495,275										

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

114 ESKDALEUIR (D)														10° +														JUNE 1956																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Hour G.M.T.																																				Sum																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	1100.0+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1 d	46.8	44.4	43.2	46.2	47.4	51.9	48.2	49.4	46.6	49.7	53.6	55.1	56.9	58.7	57.4	56.5	53.2	54.0	50.8	53.5	53.4	52.3	51.8	51.8	51.4	132.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
2	49.0	48.2	46.8	46.5	47.1	47.2	48.6	47.9	46.2	47.3	49.6	50.4	54.2	55.7	55.4	54.4	53.9	51.9	50.5	52.3	52.8	52.5	51.9	51.3	50.5	111.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
3 q	52.4	53.4	52.7	47.1	45.0	43.3	43.1	43.6	45.1	47.4	50.6	53.7	56.0	57.0	56.5	54.9	52.4	49.5	51.3	51.8	52.2	52.2	51.9	48.7	50.5	111.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
4	51.2	50.0	49.2	47.9	46.0	43.8	43.5	43.8	44.2	47.7	49.4	53.2	56.3	57.0	55.8	54.6	52.9	51.2	51.2	51.6	51.8	51.5	51.8	52.2	50.3	107.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
5	50.1	51.0	49.2	49.9	47.3	43.7	43.1	42.8	44.6	47.7	50.1	54.1	56.8	56.4	55.8	54.3	53.2	52.7	53.2	51.6	51.4	50.2	51.2	50.6	50.5	111.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
6	49.3	50.1	49.5	48.3	46.1	46.0	44.6	44.2	46.0	48.0	48.9	51.5	54.6	57.8	57.2	55.6	53.6	52.5	51.4	50.6	48.9	50.9	50.7	51.5	50.3	107.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
7 q	52.1	51.0	50.4	48.2	44.5	44.0	42.4	41.6	44.8	46.0	47.9	52.4	54.9	55.7	55.6	55.1	52.7	51.0	49.5	49.2	49.8	50.3	50.4	50.4	49.6	89.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
8	51.8	54.5	48.2	47.7	47.8	46.5	45.1	46.6	47.5	47.7	52.7	55.7	57.2	56.7	55.2	52.4	51.2	50.9	51.8	52.8	51.4	49.4	45.8	47.8	50.6	114.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
9	52.0	50.4	49.8	49.4	47.3	47.1	46.4	48.2	49.2	49.2	49.6	51.3	55.9	60.5	59.2	55.9	54.1	51.2	49.2	49.3	50.1	48.4	45.9	49.9	50.8	119.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
10	48.3	45.5	45.6	43.4	43.8	41.6	40.1	39.3	39.8	42.2	46.6	51.0	53.3	55.4	56.7	56.8	57.2	54.9	51.9	51.0	51.0	51.2	46.5	44.2	48.2	57.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
11	48.5	54.1	50.9	47.5	45.3	47.7	46.5	44.7	44.7	50.5	52.6	53.4	55.8	56.2	57.4	55.0	56.8	55.7	55.6	53.8	52.8	49.4	51.3	51.2	51.6	137.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
12	53.4	51.3	49.2	45.8	44.0	46.9	48.2	46.5	46.0	47.4	49.1	50.6	52.6	52.9	53.6	55.0	55.0	53.9	52.4	51.1	51.3	50.3	47.9	47.4	50.1	101.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
13	45.3	43.7	44.6	43.0	45.8	44.0	42.3	42.5	43.2	45.1	48.1	51.4	54.4	55.7	56.5	56.2	55.0	53.4	53.1	51.2	51.3	48.5	45.0	44.3	48.6	65.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
14	46.5	46.3	49.7	46.6	42.6	40.9	44.6	44.9	42.4	45.1	49.4	53.1	57.6	56.9	57.4	57.6	56.3	55.1	53.6	52.8	52.8	51.4	49.1	47.5	50.0	100.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
15 d	46.0	48.3	55.6	49.4	47.2	46.1	45.0	44.1	46.4	49.1	49.1	52.8	55.5	56.4	56.5	56.4	56.6	53.6	54.2	53.1	52.2	51.0	47.7	42.7	50.6	115.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
16	43.8	46.9	47.3	47.0	48.7	49.2	44.7	43.3	41.5	41.5	44.6	48.5	52.9	55.0	56.4	55.2	54.5	53.3	52.8	50.4	51.3	50.0	50.2	49.9	49.1	78.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
17	48.7	47.9	48.1	49.2	50.2	47.7	43.8	41.8	42.0	44.6	47.8	51.9	53.1	54.1	53.7	54.1	54.0	51.5	52.3	52.8	53.1	47.0	49.6	49.8	49.5	88.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
18 q	50.7	51.1	47.5	45.9	44.9	43.1	42.5	42.1	41.5	43.3	48.2	51.9	53.9	55.0	54.9	53.9	53.1	50.6	50.5	50.2	50.8	50.3	49.1	48.9	49.8	73.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
19 q	48.0	48.3	47.7	47.9	46.7	44.9	43.0	41.6	42.5	46.0	47.8	51.0	53.4	56.0	57.8	57.8	57.5	56.7	53.5	53.3	52.3	51.7	50.4	43.6	50.0	99.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
20 q	47.8	48.5	47.9	47.8	46.6	43.8	41.6	41.5	40.8	43.2	46.3	51.1	55.4	56.6	56.8	55.6	52.7	51.0	50.1	50.3	49.3	49.6	50.7	48.1	48.9	73.1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
21	41.5	44.4	44.5	46.0	45.5	42.5	43.8	43.6	43.8	45.1	48.7	54.0	58.5	60.7	60.0	58.1	55.5	54.2	52.0	50.3	50.1	47.4	47.9	48.5	49.4	86.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
22	49.2	49.9	46.7	43.0	44.9	42.8	41.8	42.6	42.1	43.8	46.9	51.8	55.4	57.1	58.7	56.9	55.6	52.4	52.4	51.8	50.8	48.3	49.5	49.9	49.3	84.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
23	49.3	47.4	48.1	47.7	45.6	44.3	43.3	43.2	44.0	45.8	46.6	53.0	56.7	57.6	57.6	56.0	54.8	52.8	52.9	51.4	49.4	46.0	42.5	40.4	49.1	78.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
24 d	43.0	41.0	41.8	39.2	41.1	44.4	45.6	43.3	44.1	48.3	53.3	56.7	58.2	62.7	63.1	58.8	57.8	55.0	56.6	55.0	54.4	45.9	42.9	49.0	50.1	101.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
25 d	40.8	53.7	41.2	54.1	54.4	53.9	48.2	46.3	41.4	40.9	44.7	48.3	51.5	52.8	52.8	53.7	52.1	50.1	50.5	49.6	50.1	48.6	48.2	48.7	49.0	76.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
26	49.3	49.0	49.6	49.6	50.0	51.2	48.4	48.3	46.9	48.3	47.4	49.4	51.0	55.1	57.1	55.7	54.1	53.7	51.3	49.6	50.0	49.6	44.8	46.7	50.3	106.1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
27	48.3	47.8	48.2	55.4	55.6	51.4	41.9	39.9	42.5	46.8	49.3	51.9	54.7	55.9	57.1	57.2	54.2	52.3	52.1	50.5	51.7	50.4	50.3	47.6	50.5	113.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
28	49.2	48.2	47.7	47.3	46.7	46.1	44.2	40.9	43.8	45.6	47.4	50.0	52.0	54.6	55.4	55.1	55.0	54.6	53.1	52.7	52.0	51.6	50.0	49.4	49.7	92.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
29	49.5	51.3	49.9	47.2	46.9	47.8	47.4	46.9	47.7	49.3	47.8	52.2	54.9	57.6	57.6	56.4	54.6	53.6	52.8	47.2	48.3	49.6	49.5	48.2	50.6	114.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
30 d	48.7	49.0	47.4	48.1	48.6	55.3	47.4	43.3	43.9	45.8	49.6	51.8	53.3	56.4	58.1	55.8	55.4	53.3	53.7	49.2	47.3	49.9	49.6	50.1	50.5	111.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Mean	48.3	48.9	47.9	47.5	46.8	46.3	44.6	43.8	44.2	46.3	48.9	52.1	54.9	56.5	56.8	55.7	54.5	52.9	52.2	51.3	51.1	49.9	48.8	48.3	49.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

75

115 ESKDALEUIR (Z)

44,000γ (0.44 C.G.S. unit) +

JUNE 1956

	Hour G.M.T.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	Sum 30000+
	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 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	1275	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	1262	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	1277	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	1278	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	1264	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	1298	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	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 ESKDALEUIR

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							
	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ				
1 d	15 54 743	617 09 54	126	13 20 59.4	40.6 02 15	18.8	16 50 1351	1231 01 59	120	18 16 1311	1253 11 56	58	3,3,3,3,4,4,2,2	24	1	84.4
2	16 58 752	633 12 41	119	12 55 56.8	44.8 08 24	12.0	18 16 1311	1253 11 56	58	18 16 1311	1253 11 56	58	2,2,2,3,4,4,2,1	20	0	84.4
3 q	16 34 740	650 11 12	90	13 49 57.4	42.1 06 57	15.3	17 40 1296	1255 12 03	41	17 40 1296	1255 12 03	41	3,2,1,2,2,3,2,3	18	0	84.4
4	17 25 749	646 12 57	103	13 39 57.6	42.4 05 38	15.2	18 19 1310	1258 11 31	52	18 19 1310	1258 11 31	52	2,2,1,2,3,3,2,2	17	0	84.4
5	18 20 767	654 08 30	113	12 30 58.5	41.5 07 17	17.0	18 52 1292	1244 11 54	48	18 52 1292	1244 11 54	48	1,2,2,2,2,4,3,2	18	0	84.5
6	15 49 769	652 14 31	117	13 21 59.6	42.4 05 51	17.2	18 28 1301	1258 11 31	43	18 28 1301	1258 11 31	43	1,2,2,2,5,4,2,2	20	1	84.5
7 q	17 40 743	648 09 30	95	13 39 56.5	39.7 07 41	16.8	18 19 1297	1258 11 40	39	18 19 1297	1258 11 40	39	2,2,2,2,2,3,3,2	18	0	84.8
8	19 49 752	609 10 17	143	01 30 58.7	43.6 06 08	15.1	16 40 1295	1248 02 11	47	16 40 1295	1248 02 11	47	3,2,3,4,3,3,3,3	24	1	84.8
9	19 44 759	622 06 50	137	14 07 62.7	43.6 22 39	19.1	00 30 1301	1250 11 39	51	00 30 1301	1250 11 39	51	2,3,4,2,3,3,4,3	24	1	84.8
10	17 13 795	635 09 34	160	17 00 58.7	37.9 06 14	20.8	17 58 1312	1252 11 41	60	17 58 1312	1252 11 41	60	3,2,2,2,3,5,3,3	23	1	84.9
11	15 24 753	606 08 30	147	14 18 58.6	39.2 07 54	19.4	15 39 1298	1234 02 16	64	15 39 1298	1234 02 16	64	3,3,3,3,4,3,3,3	25	1	85.0
12	18 36 734	642 10 32	92	16 16 55.7	43.3 04 45	12.4	19 30 1288	1239 02 36	49	19 30 1288	1239 02 36	49	3,3,2,2,2,3,3,3	21	0	85.0
13	18 44 762	636 13 08	126	13 58 58.2	39.8 06 54	18.4	21 31 1287	1246 12 16	41	21 31 1287	1246 12 16	41	3,2,2,2,3,3,3,4	22	1	85.2
14	19 57 783	614 10 31	169	12 42 59.7	39.6 06 10	20.1	15 47 1296	1237 02 57	59	15 47 1296	1237 02 57	59	3,2,3,3,3,3,4,3	24	1	85.2
15 d	17 45 798	611 11 10	187	02 12 59.6	38.6 23 38	21.0	17 30 1303	1212 02 35	91	17 30 1303	1212 02 35	91	4,3,3,3,4,4,3,4	28	1	85.2
16	18 11 751	626 12 18	125	14 52 56.8	39.7 08 30	17.1	19 51 1299	1248 00 04	51	19 51 1299	1248 00 04	51	3,3,3,3,3,3,3,2	23	1	85.2
17	17 26 778	646 09 35	132	16 03 55.1	40.6 07 10	14.5	18 39 1299	1258 12 40	41	18 39 1299	1258 12 40	41	1,2,2,2,3,4,2,3	19	0	85.2
18 q	17 47 736	644 09 02	92	13 11 55.2	40.8 08 56	14.4	17 40 1288	1247 11 31	41	17 40 1288	1247 11 31	41	3,1,1,3,2,3,2,2	17	0	85.2
19 q	17 08 736	662 08 24	74	14 37 58.2	40.0 08 01	18.2	18 56 1290	1247 12 10	43	18 56 1290	1247 12 10	43	1,1,2,1,2,3,2,4	16	0	85.2
20 q	21 00 738	656 10 40	82	13 04 58.4	39.2 08 04	19.2	18 32 1281	1244 12 31	37	18 32 1281	1244 12 31	37	2,1,2,2,3,3,3,3	19	0	85.2
21	21 03 744	629 09 13	115	13 55 61.2	37.9 00 33	23.3	18 39 1290	1242 12 54	48	18 39 1290	1242 12 54	48	3,2,3,3,2,2,3,3	20	0	85.2
22	18 29 746	626 10 45	120	14 40 60.4	40.9 06 03	19.5	17 30 1294	1253 02 59	41	17 30 1294	1253 02 59	41	3,2,2,3,3,3,3,1	20	0	85.2
23	19 07 795	548 23 01	247	13 42 58.6	37.9 23 34	21.0	19 50 1293	1138 23 05	155	19 50 1293	1138 23 05	155	3,1,2,2,2,2,3,4,5	22	1	85.2
24 d	16 12 859	605 24 00	254	15 01 65.0	31.0 21 57	34.0	15 55 1399	1132 01 12	267	15 55 1399	1132 01 12	267	4,4,3,2,5,6,4,5	33	1	85.3
25 d	18 29 767	531 05 20	236	05 25 67.6	33.8 02 15	33.8	17 56 1343	1093 01 18	250	17 56 1343	1093 01 18	250	5,5,5,3,3,4,4,2	31	1	85.3
26	17 35 754	609 12 43	145	14 45 58.2	39.7 22 53	18.5	17 51 1335	1263 10 53	72	17 51 1335	1263 10 53	72	1,2,3,3,4,4,3,3	23	0	85.3
27	18 44 752	620 09 53	132	03 44 63.0	37.8 07 02	25.2	17 28 1320	1201 04 49	119	17 28 1320	1201 04 49	119	2,4,3,3,3,4,3,2	24	1	85.2
28	18 34 756	637 12 28	119	14 22 56.0	39.9 07 43	16.1	19 02 1299	1265 11 34	34	19 02 1299	1265 11 34	34	1,2,3,2,3,3,3,1	18	0	85.2
29	18 56 762	629 10 59	133	13 43 58.6	41.9 19 50	16.7	19 55 1318	1266 11 25	52	19 55 1318	1266 11 25	52	2,2,3,3,3,3,3,3	22	0	85.2
30 d	15 20 763	596 12 37	167	14 16 60.0	40.3 20 07	19.7	16 09 1329	1251 06 07	78	16 09 1329	1251 06 07	78	1,4,3,3,4,5,4,3	27	1	85.2
Mean	- - 761	625 - -	137	- - 59.0	40.0 - -	19.0	- - 1307	1234 - -	73	- -	- -	73	-	-	0.50	85.0

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

117 ESKDALEMUIR (H)

16,000γ (0.16 C.G.S. unit) +

JULY 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 16000+
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	400
2	687	687	689	685	694	692	683	665	655	651	651	642	650	662	675	695	691	718	710	714	693	707	702	702	683	400
3	692	692	694	696	695	689	664	637	652	653	657	654	656	667	687	697	701	726	733	715	716	711	703	706	687	493
4	709	701	700	707	701	705	677	660	662	647	632	642	640	671	694	716	696	699	707	706	707	702	702	697	687	480
5	694	690	692	695	685	674	670	661	650	657	655	655	655	675	684	693	694	694	701	706	704	708	709	706	684	417
6	701	696	693	697	700	702	694	680	667	656	659	647	669	668	690	698	720	710	714	724	724	718	701	701	693	629
7	702	702	692	701	698	694	688	680	668	656	658	676	680	693	692	693	704	719	715	702	709	702	701	701	693	626
7 q	700	698	698	699	696	690	678	666	665	666	667	671	680	689	706	719	705	712	713	717	717	717	715	710	696	694
8	704	723	716	723	721	705	709	696	676	662	664	671	666	670	689	694	701	713	714	714	720	707	692	700	698	750
9	689	687	689	694	695	682	685	668	660	654	657	655	659	672	690	702	706	701	713	716	711	700	693	691	686	469
10	688	687	689	692	693	697	693	685	678	676	664	661	676	682	691	694	711	715	767	754	739	725	698	710	699	765
11	701	683	689	685	694	686	676	656	647	634	629	640	660	677	702	734	729	725	727	725	710	709	700	696	688	514
12	701	695	691	690	685	682	693	679	660	642	635	635	657	655	671	686	702	715	731	730	729	706	700	705	686	475
13 d	719	700	686	680	687	685	685	675	668	656	654	652	661	671	677	721	747	744	783	762	719	691	659	640	693	622
14	631	668	677	679	678	678	666	662	656	652	644	650	646	659	674	686	698	702	706	713	719	720	694	687	677	245
15	687	686	688	686	689	682	678	672	661	650	650	653	657	659	673	679	697	700	727	723	701	705	704	702	684	409
16	702	697	682	686	694	700	686	680	661	648	640	646	658	660	687	692	695	708	710	717	710	703	700	689	685	451
17 q	689	688	689	689	691	685	680	672	659	652	653	661	663	668	673	685	699	706	713	715	709	709	693	695	685	436
18 q	695	693	689	693	694	695	687	674	661	656	664	668	669	680	688	693	704	718	738	746	743	712	708	698	694	666
19	703	702	700	704	710	698	687	667	666	667	672	674	678	702	702	698	732	734	716	729	719	715	715	693	699	783
20	685	674	680	686	691	692	689	679	667	661	661	651	654	652	687	701	707	732	729	732	716	702	698	691	688	517
21 q	687	684	686	689	692	690	681	673	670	660	655	656	659	673	690	701	706	713	721	718	707	703	704	701	688	519
22 q	700	698	693	699	699	697	689	684	674	664	660	660	668	690	694	708	723	720	703	705	707	710	710	711	694	666
23	714	713	704	707	708	706	705	695	686	676	674	675	688	719	743	751	743	762	728	746	734	693	695	704	711	1069
24 d	686	689	688	694	698	695	664	622	590	636	654	656	645	644	651	670	685	701	715	719	716	710	705	707	677	240
25 d	700	702	704	697	695	700	663	675	659	642	595	603	636	662	660	705	707	708	708	713	704	722	695	680	681	335
26 d	641	671	695	682	685	683	685	680	610	616	648	637	662	659	688	697	695	705	719	706	709	701	706	697	678	277
27	672	673	678	685	672	660	659	654	649	647	647	650	673	685	670	687	698	705	719	714	718	708	695	677	679	295
28 d	690	688	681	679	693	693	689	675	661	653	633	669	667	664	657	674	694	715	715	723	730	703	689	696	685	431
29	675	678	682	688	689	689	649	670	664	666	663	661	663	656	653	710	722	729	695	715	698	695	691	692	683	393
30	691	692	680	687	694	693	692	668	651	643	646	649	657	673	680	686	695	697	706	710	719	715	704	699	684	427
31	695	694	696	695	700	697	689	676	677	666	659	660	653	633	712	721	724	707	696	698	702	702	701	701	690	554
Mean	691	691	691	693	694	691	682	671	659	654	652	654	662	671	685	699	707	715	719	720	715	707	699	696	688	
Sum 20000+	1430	1431	1410	1469	1516	1416	1133	786	430	265	200	280	515	790	1230	1686	1931	2153	2292	2327	2159	1931	1682	1585		Grand Total 512,047

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

118 ESKDALEMUIR (D)

10° +

JULY 1956

	Hour G.M.T.																								Mean	Sum 1100.0+
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	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	50.1	49.8	48.6	48.3	46.8	45.0	43.4	44.7	45.1	46.6	46.8	49.6	52.1	54.3	55.3	54.4	53.5	53.2	52.3	52.0	50.5	50.0	51.4	50.6	49.8	94.4
2	49.9	48.7	47.3	46.7	46.4	44.1	44.6	47.0	48.4	47.6	47.2	48.7	52.0	53.5	54.1	54.5	54.2	54.7	54.3	50.7	51.3	52.3	50.5	53.1	50.1	101.8
3	51.4	49.0	48.2	45.4	46.2	45.1	45.3	47.0	46.6	48.0	49.7	51.2	53.4	52.4	53.0	53.3	52.0	51.3	51.3	51.7	51.6	51.4	50.4	50.5	49.8	95.4
4	50.0	48.4	48.3	47.8	48.4	47.2	44.7	44.3	45.4	44.9	45.9	49.9	54.1	55.4	54.9	53.9	53.3	52.5	51.5	50.5	50.5	49.4	50.0	50.4	49.7	91.6
5	49.7	49.6	48.6	47.8	46.4	44.4	42.6	42.6	43.2	45.0	47.6	51.0	54.9	56.2	56.0	55.2	52.7	51.0	50.4	49.5	49.3	47.4	48.2	50.5	49.2	79.8
6	50.3	50.9	48.9	47.9	45.6	46.1	44.2	44.3	44.1	45.3	49.3	52.7	56.0	57.3	56.8	54.0	51.4	51.3	51.4	51.2	51.3	51.0	50.7	50.3	50.1	102.3
7 q	50.3	49.9	48.9	48.3	46.2	43.2	41.7	41.9	43.8	45.4	47.7	51.4	54.5	55.9	56.0	55.1	53.3	51.5	51.8	51.7	51.4	53.0	53.7	53.2	50.0	99.8
8	52.0	51.4	48.1	49.6	47.4	47.8	45.1	41.6	42.9	45.8	49.0	51.6	55.6	55.9	54.6	53.2	53.5	54.6	54.1	52.2	51.6	49.7	49.5	47.5	50.2	104.3
9	41.9	42.0	42.0	46.1	46.0	46.4	44.2	46.6	45.4	45.1	47.4	51.0	54.2	56.4	56.9	55.0	54.1	52.0	50.3	49.0	48.3	48.8	48.7	48.7	48.6	66.5
10	47.9	47.7	46.9	46.6	45.2	43.9	42.1	40.6	42.6	44.3	46.9	50.5	54.6	56.2	56.7	56.3	56.6	53.9	55.5	53.7	51.3	47.8	46.9	43.6	49.1	78.3
11	46.1	44.8	44.1	43.8	43.6	40.8	40.0	38.9	42.3	44.2	47.5	50.7	53.0	53.8	54.3	54.5	53.4	52.4	52.2	52.5	51.0	51.3	48.1	49.5	48.0	52.8
12	50.4	49.4	48.1	46.2	46.3	47.4	44.9	42.9	43.8	46.1	47.1	51.3	56.4	58.9	59.7	57.9	55.7	54.4	53.4	50.8	47.5	49.6	50.5	51.3	50.4	110.0
13 d	49.5	43.8	43.3	42.3	44.6	44.2	44.8	43.8	45.6	46.4	48.3	52.2	56.8	59.3	60.0	59.0	57.7	55.1	53.5	46.6	48.8	50.2	46.4	45.3	49.5	87.5
14	47.8	41.5	43.7	43.7	44.6	43.4	42.9	42.0	42.8	45.3	47.0	49.9	53.8	57.6	57.3	56.2	54.6	52.3	49.9	49.9	47.6	46.4	49.0	49.7	48.3	58.9
15	49.4	49.1	49.6	46.5	45.3	44.4	43.4	43.3	43.8	44.0	44.8	48.5	51.6	54.8	55.9	55.4	54.5	52.5	51.9	49.5	49.2	50.6	51.3	51.3	49.2	80.6
16	50.0	48.1	49.0	49.8	46.8	46.4	43.4	42.6	43.2	44.4	46.9	51.2	56.0	58.3	59.1	56.3	54.0	51.0	50.6	50.5	50.5	48.9	48.6	49.3	49.8	94.9
17 q	49.6	48.5	47.7	47.2	48.3	45.5	43.3	42.0	42.0	44.0	48.6	52.6	54.8	55.8	55.3	54.4	52.7	50.7	49.5	49.2	49.0	48.0	49.8	50.0	49.1	78.9
18 q	49.2	47.8	47.5	46.4	44.1	42.4	42.2	42.9	44.0	45.7	48.3	51.7	56.4	58.7	58.6	56.7	54.1	51.9	49.7	51.3	50.5	49.2	46.6	48.2	49.5	87.1
19	48.3	46.0	42.7	41.7	43.7	41.4	40.6	39.5	43.9	47.8	50.2	54.2	57.9	60.0	58.6	56.6	54.4	54.6	50.5	56.2	55.4	51.3	50.3	43.9	49.7	91.7
20	44.6	44.1	45.1	44.7	43.6	40.8	42.0	43.8	43.1	46.4	49.4	51.9	56.3	57.5	58.7	54.8	52.6	52.2	50.2	48.4	47.5	48.9	49.2	48.9	48.5	64.8
21 q	47.9	47.7	48.3	47.9	46.9	45.6	44.6	44.2	44.7	48.6	50.9	54.0	57.3	58.0	56.0	54.4	52.3	50.6	50.4	49.8	49.2	49.3	49.6	49.0	49.9	97.2
22 q	48.5	48.3	47.2	45.5	44.1	43.2	43.1	43.2	44.7	46.6	48.7	53.0	57.3	57.6	56.3	55.6	55.1	52.8	50.7	51.4	51.0	49.7	49.7	49.6	49.7	92.9
23	48.9	48.7	47.0	44.7	43.5	42.5	42.0	42.5	42.8	43.6	46.5	51.0	56.4	60.0	59.1	57.2	56.2	57.7	53.8	52.9	54.4	50.9	45.5	44.8	49.7	92.6
24 d	44.6	44.6	45.1	44.2	43.4	42.0	42.8	44.9	43.6	49.6	53.7	54.1	57.0	58.2	57.8	56.3	55.0	54.2	53.1	52.1	51.4	50.6	49.8	49.4	49.9	97.5
25 d	47.8	48.8	50.4	52.5	48.7	47.8	47.8	47.0	48.5	47.6	48.2	50.5	56.4	57.1	56.5	53.5	51.5	51.4	50.6	51.0	49.8	49.6	47.9	45.6	50.4	110.1
26 d	40.7	45.6	46.9	46.9	49.4	44.3	45.7	42.9	43.6	51.4	52.3	54.6	56.3	55.5	54.6	55.4	52.3	51.4	50.1	52.2	52.2	50.6	46.0	48.7	49.6	89.6
27	44.5	43.7	45.9	45.6	49.7	50.3	47.8	47.4	47.4	47.4	50.7	51.2	51.9	54.4	54.6	52.9	52.6	51.7	51.6	51.0	50.0	50.0	47.4	47.7	49.5	87.4
28 d	44.2	46.5	49.2	48.0	45.1	43.0	43.4	46.1	48.6	51.2	54.1	54.9	55.5	57.2	54.7	53.6	51.8	50.7	49.9	50.0	45.9	49.2	45.9	43.1	49.2	81.8
29	47.1	47.7	48.7	46.5	46.4	45.1	47.9	52.7	49.6	45.1	46.0	49.5	53.2	54.5	52.2	52.1	50.6	46.9	49.5	49.9	50.3	49.9	50.4	50.7	49.3	82.5
30	50.1	50.2	53.3	48.2	45.2	43.3	43.2	44.6	46.9	48.6	49.6	53.2	57.5	56.7	56.0	53.8	51.8	50.5	50.0	49.8	49.7	49.8	51.0	50.7	50.2	103.7
31	49.6	48.9	48.1	46.9	46.0	44.3	46.1	46.8	48.2	46.5	48.5	52.1	52.6	54.2	56.8	55.0	50.3	50.7	51.0	51.5	51.3	50.7	50.2	49.7	49.8	96.0
Mean	48.1	47.5	47.4	46.6	45.9	44.6	43.9	44.0	44.9	46.4	48.5	51.6	55.0	56.5	56.3	55.1	53.5	52.3	51.5	50.9	50.3	49.9	49.2	48.9	49.5	
Sum 1300.0+	192.3	171.2	170.3	143.7	123.7	81.3	60.2	64.6	90.6	138.5	204.8	299.9	405.9	451.6	446.4	406.5	359.8	321.7	295.0	278.7	259.3	245.5	226.2	214.8		Grand Total 36852.7

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

77

119 ESKDALEUIR (2)

44,000γ (0.44 C.G.S. unit) +

JULY 1956

	Hour G. M. T.																									Sum	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	30000+	
	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	1278	1280	1281	1283	1281	1278	1285	1285	1281	1278	1280	1271	1265	1269	1279	1291	1298	1298	1287	1290	1293	1290	1286	1281	1283	788	
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	795	
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	668	
4	1277	1277	1280	1280	1276	1268	1264	1266	1266	1270	1269	1264	1265	1263	1270	1274	1275	1277	1276	1276	1281	1285	1282	1281	1280	1274	576
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	604	
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	528	
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	625	
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	438	
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	662	
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	577	
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	616	
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	440	
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	571	
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	620	
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	639	
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	520	
17 q	1276	1276	1276	1276	1272	1271	1275	1276	1276	1272	1263	1247	1247	1253	1254	1265	1275	1280	1281	1281	1282	1281	1276	1275	1271	506	
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	527	
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	408	
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	443	
21 q	1273	1273	1273	1273	1272	1275	1276	1273	1270	1269	1268	1268	1266	1268	1275	1280	1280	1282	1281	1277	1280	1278	1275	1274	1274	579	
22 q	1274	1273	1270	1268	1270	1272	1274	1271	1265	1261	1258	1256	1256	1254	1261	1266	1270	1280	1285	1278	1274	1274	1274	1273	1269	457	
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	581	
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	588	
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	717	
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	715	
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	465	
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	542	
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	729	
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	695	
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	1280	727	
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	γ h. m.	γ	h. m.	h. m.		h. m. γ	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	2,2,3,3,3,3,2	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	1,1,1,1,2,2,2,3,2	14	0	85.6
19	17 46	744	658 09 27	86	14 20	61.4	37.4 23 56	24.0	18 30	1294	1242 11 28	52	3,2,2,2,3,3,3,4	22	0	85.6
20	00 02	746	639 13 26	107	14 30	59.6	39.5 05 51	20.1	20 11	1295	1247 00 19	48	2,2,2,2,3,3,3,2	21	0	85.6
21 q	19 50	724	652 10 53	72	13 57	58.6	43.6 08 03	15.0	17 30	1283	1265 12 10	18	1,0,1,1,2,1,2,1	9	0	85.5
22 q	16 55	738	654 10 09	84	12 43	58.0	42.5 06 41	15.5	18 29	1286	1253 13 30	33	1,1,1,1,2,3,1,2	12	0	85.5
23	17 44	778	659 10 53	119	13 44	60.4	40.6 22 55	19.8	21 32	1312	1244 13 01	68	2,2,1,2,4,3,3,3	20	1	85.5
24 d	18 24	730	579 08 29	151	14 30	59.5	40.6 05 39	18.9	15 18	1287	1244 09 47	43	3,2,4,4,4,4,2,2	25	1	85.5
25 d	21 22	745	572 10 52	173	14 00	58.2	44.7 07 08	13.5	15 03	1317	1252 03 49	65	2,3,3,4,3,3,3,4	25	1	85.5
26 d	22 50	770	586 08 53	184	12 03	57.9	34.6 22 43	23.3	17 09	1337	1231 00 39	106	5,3,5,4,4,5,4,5	35	1	85.5
27	19 58	742	633 11 36	109	14 25	56.8	39.2 01 47	17.6	15 53	1293	1225 01 29	68	3,3,3,2,4,2,3,5	23	0	85.6
28 d	20 45	761	623 10 30	138	13 40	58.0	37.9 23 01	20.1	20 33	1299	1248 01 16	51	3,2,3,3,3,4,4,4	26	1	85.4
29	17 12	820	609 06 51	211	07 11	57.7	40.9 17 05	16.8	17 09	1334	1253 00 01	81	3,1,4,2,3,5,3,2	23	1	85.4
30	20 44	735	634 09 04	101	12 31	58.0	41.5 06 24	16.5	18 10	1300	1251 12 18	49	3,2,3,2,2,2,3,2	19	0	85.4
31	16 44	742	612 13 30	130	14 33	57.6	43.3 05 20	14.3	16 51	1312	1259 12 36	53	1,1,2,2,4,2,3,1	16	0	85.4
Mean	- -	749	632 - -	117	- -	57.3	40.3 - -	17.0	- -	1299	1248 - -	51	-	-	0.26	85.4

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

121 ESKDALEMUIR (H)		16,000γ (0-16 C.G.S. unit) +														AUGUST 1956										Mean	Sum 15000+
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		
1	γ	704	675	676	688	690	688	681	677	668	660	657	669	677	682	676	687	705	710	706	701	709	710	706	703	688	1505
2	γ	702	692	689	690	695	692	689	680	670	656	671	672	676	666	687	701	700	694	715	720	709	703	706	699	691	1574
3	γ	693	695	694	696	697	692	685	670	666	669	663	659	673	677	695	670	684	696	700	701	700	697	702	699	686	1473
4 q	γ	694	695	685	693	696	696	685	681	676	669	668	676	685	692	700	700	703	700	700	704	710	713	710	709	693	1640
5 q	γ	706	702	699	701	704	704	694	684	675	675	677	675	680	692	698	705	702	701	701	711	712	711	706	701	697	1716
6	γ	700	699	699	700	701	698	689	675	664	665	671	684	692	696	713	709	700	719	710	727	717	705	700	695	697	1728
7 q	γ	697	700	697	700	699	697	692	687	675	663	659	667	673	681	691	701	711	719	722	729	720	714	715	709	697	1718
8	γ	708	706	711	701	705	702	691	683	678	662	661	670	683	701	714	719	714	717	715	704	709	694	695	697	697	1740
9	γ	695	692	692	695	691	691	694	688	671	658	650	644	630	649	684	695	765	752	695	693	716	678	658	673	685	1449
10	γ	701	703	696	704	707	714	705	682	667	646	637	633	638	663	675	690	705	705	701	704	705	709	722	717	689	1529
11 d	γ	731	738	733	739	730	719	692	703	680	664	652	643	659	669	685	720	724	751	755	700	683	691	693	682	701	1836
12	γ	680	681	689	699	690	672	654	646	638	638	632	642	667	679	679	698	708	714	699	697	711	714	697	690	680	1314
13	γ	689	687	684	683	681	678	673	670	655	644	641	635	642	652	668	684	701	707	712	716	712	700	694	692	679	1300
14	γ	696	704	695	692	693	683	672	667	657	644	640	645	661	668	671	692	699	704	711	709	702	702	697	696	683	1400
15	γ	692	690	692	694	700	698	692	687	671	651	640	644	655	677	684	695	701	707	717	724	709	699	707	701	689	1527
16	γ	701	697	696	696	695	692	686	675	667	661	658	660	664	682	684	710	715	698	707	714	716	722	722	715	693	1633
17	γ	716	701	685	697	697	680	696	672	660	647	630	610	622	669	668	688	708	712	711	716	709	705	703	704	684	1406
18	γ	698	694	691	691	691	687	681	668	656	643	640	643	648	659	675	688	700	707	706	703	703	701	699	702	682	1374
19 q	γ	700	697	698	699	701	699	696	688	679	666	663	662	673	686	696	703	707	705	705	705	706	709	709	710	694	1662
20 q	γ	703	703	701	699	700	699	694	680	669	657	655	665	673	687	696	701	699	697	701	707	707	708	709	705	692	1615
21	γ	706	708	707	707	704	703	695	684	679	679	684	683	699	774	712	671	721	732	707	706	710	696	673	674	701	1814
22	γ	681	677	683	686	688	689	673	665	658	652	658	673	686	689	690	695	692	701	711	709	707	709	696	701	686	1469
23 d	γ	716	704	708	704	711	712	701	688	656	638	638	656	673	689	663	664	683	692	714	685	694	686	656	618	681	1349
24 d	γ	588	690	667	646	668	637	660	643	646	609	562	617	633	673	732	852	693	728	696	675	675	673	688	701	669	1052
25 d	γ	684	680	675	673	670	679	666	658	638	594	582	598	646	700	693	679	694	690	703	686	688	698	679	655	667	1008
26 d	γ	624	601	656	669	675	688	667	637	633	635	634	648	660	662	663	671	678	701	714	702	693	681	680	681	665	953
27	γ	682	684	684	682	690	666	662	669	655	635	628	639	648	674	659	648	675	687	688	700	696	695	692	695	672	1133
28	γ	712	696	691	680	684	691	682	673	663	652	648	637	652	678	671	690	721	700	710	696	703	696	694	695	684	1415
29	γ	700	699	694	692	693	695	690	675	661	645	645	643	636	667	664	661	696	696	713	709	703	698	700	706	683	1381
30	γ	700	692	686	688	692	694	686	667	658	653	635	638	647	659	671	683	695	692	700	701	703	701	701	700	681	1342
31	γ	699	696	694	694	694	696	692	681	673	661	634	632	645	660	692	688	751	716	700	718	700	688	692	694	687	1490
Mean	γ	693	693	692	693	695	691	684	674	663	651	646	650	661	679	685	695	705	708	708	705	704	700	697	694	686	
Sum 20000+	γ	1498	1478	1447	1478	1532	1431	1215	903	562	191	13	162	496	1052	1249	1558	1850	1950	1945	1872	1837	1706	1601	1519		Grand Total 510,545

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

122	ESKDALEMUIR (D)												10° +												AUGUST 1956													Sum
	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	1100+0+												
	0-1	1-2																																				
1	50.9	54.3	45.4	43.9	43.7	42.9	43.3	44.1	45.0	47.2	51.0	52.8	54.2	55.6	55.6	53.6	51.0	49.2	48.5	49.6	50.5	51.1	51.2	51.5	49.4	86.1												
2	47.7	49.6	48.2	47.0	45.9	43.5	41.7	41.6	43.8	46.8	51.6	56.5	58.9	56.4	53.5	51.3	48.7	46.7	47.2	49.9	50.4	49.5	49.3	49.4	49.0	75.1												
3	49.1	48.3	47.8	47.4	46.2	44.4	44.8	47.6	47.6	48.8	52.7	56.6	59.6	59.5	56.8	53.7	50.6	49.6	49.6	50.2	50.4	50.2	50.4	48.8	50.4	110.7												
4 q	47.7	48.5	46.9	46.1	44.9	42.7	41.5	41.9	43.8	47.4	50.4	53.0	55.7	55.9	55.2	53.0	50.3	48.1	48.1	48.8	49.9	49.6	48.8	50.0	48.7	68.2												
5 q	49.6	49.7	48.6	48.6	50.0	45.5	44.5	44.1	44.8	47.4	49.8	52.8	55.5	57.0	56.0	53.5	50.3	48.8	48.3	49.6	50.2	49.9	49.1	48.7	49.7	92.3												
6	49.6	48.1	47.0	46.9	46.1	44.0	43.0	42.8	43.5	46.3	50.6	55.1	57.0	57.5	56.8	53.9	51.9	51.7	50.2	51.1	49.2	50.2	49.9	48.2	49.6	90.6												
7 q	46.6	47.4	47.3	46.7	45.9	45.9	46.0	45.5	45.5	47.8	49.8	53.5	57.0	57.5	56.2	54.1	51.5	48.2	47.4	47.7	47.7	49.4	49.6	48.9	49.3	83.1												
8	48.8	47.4	46.9	44.9	45.2	43.5	39.7	40.4	40.1	42.7	49.4	55.0	60.3	63.0	63.5	60.1	55.7	53.2	50.3	47.4	45.9	43.6	47.6	48.5	49.3	83.1												
9	48.6	47.2	46.2	44.3	44.3	45.5	42.4	40.2	38.9	42.9	47.2	52.8	59.4	60.5	59.1	57.0	56.4	47.9	47.4	49.8	51.7	46.2	45.0	45.7	48.6	66.6												
10	46.3	49.2	48.4	47.0	49.6	43.4	41.0	40.7	41.0	43.5	48.2	53.6	59.7	63.9	62.3	59.6	55.8	50.9	49.3	50.0	50.5	50.0	51.2	49.2	50.2	104.3												
11 d	49.5	49.2	44.8	41.8	40.0	37.8	37.4	40.8	43.1	43.5	48.5	55.4	59.6	62.8	62.1	63.9	60.0	57.3	48.1	49.4	48.5	49.5	48.2	47.4	49.5	88.6												
12	46.5	49.2	47.4	43.9	43.5	41.2	38.0	38.1	42.9	44.4	51.2	56.2	61.4	64.2	61.3	58.1	56.6	54.2	52.2	50.5	49.9	49.1	49.0	49.0	49.9	98.0												
13	48.5	48.4	47.9	47.0	46.0	44.2	42.2	41.0	41.7	43.8	47.8	53.7	58.2	59.8	59.0	57.0	52.8	51.0	49.8	49.6	45.6	47.4	48.4	48.5	49.1	79.3												
14	47.7	47.7	45.6	45.8	45.4	43.0	41.0	41.0	41.3	45.1	50.1	55.4	58.2	57.8	56.4	53.9	51.5	50.7	49.9	48.8	49.6	50.3	50.1	48.4	48.9	74.7												
15	47.7	47.4	47.3	46.8	45.8	43.5	42.0	41.5	41.3	42.8	44.2	47.9	50.6	54.5	54.7	53.2	51.0	50.6	50.0	50.3	47.1	49.9	50.0	48.9	47.9	49.0												
16	48.8	47.4	47.4	46.4	45.0	44.0	43.5	42.8	43.2	44.5	48.2	52.4	56.1	58.5	57.4	56.9	55.5	51.5	50.5	50.4	50.3	50.1	49.2	45.7	49.4	85.7												
17	40.5	37.0	38.5	42.2	42.4	42.1	41.0	38.9	40.3	43.1	47.5	53.9	55.5	57.6	57.5	54.6	53.5	51.2	50.1	50.8	50.6	50.0	48.6	48.1	47.3	35.5												
18	47.4	46.7	46.1	46.3	45.3	43.1	42.0	41.2	42.6	45.8	48.6	52.8	56.2	57.8	57.4	54.1	51.8	50.5	49.9	50.5	50.5	49.2	48.7	48.6	48.9	73.1												
19 q	48.1	47.8	47.7	47.0	46.2	45.2	44.6	43.9	44.1	45.3	47.9	52.2	56.4	56.4	54.1	51.1	48.8	48.1	48.7	49.9	49.9	49.5	49.3	47.9	48.8	70.1												
20 q	47.8	47.4	46.6	46.1	45.7	44.0	43.9	43.2	44.7	47.0	50.0	53.2	56.1	57.4	55.8	53.5	51.1	49.5	49.5	50.2	49.8	49.2	49.4	49.2	49.2	80.3												
21	48.6	48.3	48.2	47.2	46.7	43.4	41.6	39.9	42.5	46.3	50.6	55.4	57.3	56.2	64.8	61.9	58.6	56.9	52.6	52.6	50.7	45.0	44.8	45.4	50.6	115.5												
22	42.1	44.5	45.8	44.8	45.5	42.0	41.9	41.9	43.1	46.1	51.0	56.0	59.9	61.9	59.3	55.3	52.7	50.6	49.1	47.9	48.6	46.3	45.8	47.9	48.7	70.0												
23 d	49.1	47.5	46.4	46.6	45.5	44.0	41.9	41.0	43.5	45.9	52.7	57.4	60.7	61.5	58.3	54.2	49.7	45.3	46.4	47.6	47.7	43.0	45.8	39.4	48.3	60.1												
24 d	53.7	37.3	36.2	43.7	45.3	48.6	48.5	48.0	44.8	47.0	53.0	58.4	60.3	61.4	64.0	52.0	52.2	57.5	51.3	43.4	49.4	49.8	47.9	51.5	50.2	105.2												
25 d	51.6	48.7	48.0	49.7	46.5	44.5	44.6	44.8	45.5	48.9	52.2	56.1	59.4	60.0	58.6	56.5	51.2	48.5	43.6	45.9	45.2	43.5	48.0	44.1	49.4	85.6												
26 d	44.4	33.3	38.6	52.2	51.2	46.6	50.8	52.5	52.4	52.5	50.2	51.6	54.8	56.2	55.6	49.8	50.0	50.1	47.0	46.6	46.8	48.9	49.5	49.3	49.2	80.9												
27	49.3	49.2	53.4	50.9	50.7	47.5	42.6	42.3	43.8	45.7	48.8	53.4	55.8	56.0	54.4	53.0	50.5	48.1	46.9	47.0	47.0	47.9	48.4	49.3	49.2	81.9												
28	52.2	46.2	44.5	46.6	49.1	46.6	43.4	42.3	43.0	44.9	48.1	51.1	54.5	58.9	57.8	55.8	50.1	49.7	48.8	48.0	48.6	48.7	49.5	49.3	49.1	77.7												
29	50.0	49.0	48.2	46.2	47.4	46.6	44.7	42.8	42.0	43.4	47.2	53.9	57.3	60.4	58.8	55.0	52.4	49.2	48.3	46.8	47.6	48.2	49.3	48.1	49.3	82.8												
30	46.4	44.8	46.3	48.2	49.1	47.2	43.7	42.2	44.6	46.2	49.9	52.1	56.0	59.7	58.2	54.4	51.4	48.7	48.1	48.7	49.7	49.0	48.7	48.7	49.3	82.0												
31	49.3	49.5	49.1	48.5	48.2	46.9	44.5	42.4	42.1	44.4	46.4	54.1	59.4	61.1	58.9	56.0	56.8	58.3	52.2	52.0	47.7	48.4	48.3	48.2	50.5	112.7												
Mean	48.2	47.0	46.3	46.4	46.2	44.3	43.0	42.6	43.4	45.7	49.5	54.0	57.5	59.3	58.1	55.2	52.6	50.7	49.0	49.1	48.9	48.5	48.7	48.1	49.3													
Sum 1300+0+	194.1	156.2	136.7	139.7	132.3	73.3	31.7	21.4	46.5	117.4	234.8	374.3	481.0	536.9	499.4	410.0	330.4	271.8	219.3	221.0	217.2	202.6	209.0	191.8		Grand Total 36648.8												

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

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123 ESKDALEMUIR (Z)

44,000γ (0.44 C.G.S. unit) +

AUGUST 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 30000+
	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	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	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	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	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	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	1268	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	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	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	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	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	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	1282	759
12	1276	1271	1269	1272	1277	1277	1271	1270	1266	1263	1259	1258	1263	1281	1300	1305	1303	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	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	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	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	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	1276	1266	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	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	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	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	1270	483
22	1276	1276	1276	1276	1279	1279	1278	1274	1266	1258	1254	1247	1243	1249	1262	1278	1280	1276	1277	1290	1290	1277	1270	1267	1271	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	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	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	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	1268	433
27	1285	1281	1276	1270	1268	1267	1276	1282	1281	1281	1280	1280	1277	1279	1293	1293	1294	1297	1294	1292	1289	1284	1281	1279	1282	1279	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	1276	617
29	1275	1273	1273	1274	1276	1278	1281	1283	1282	1274	1263	1261	1265	1270	1286	1293	1296	1296	1289	1290	1287	1285	1280	1274	1279	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	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	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	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 ESKDALEMUIR

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 16,000γ +	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.	γ	h. m.	γ	h. m.	γ									
1	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	
2	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	
3	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	
4 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	
5 q	19 32	714	673	08 39	41	13 30	57.2	43.4	07 55	13.8	17 18	1280	1255	12 40	25	1,2,1,1,1,2,2,1	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	1,1,0,1,1,1,2,1	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	1,1,1,2,3,3,2,2	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	27	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	05 50	1280	1253	12 05	27	1,1,1,1,2,2,1,1	10	0	85.6	
19 q	23 39	716	660	11 46	56	13 10	57.7	43.6	07 50	14.1	07 45	1280	1248	12 41	32	0,0,0,1,2,2,1,2	8	0	85.6	
20 q	22 14	711	653	10 05	58	13 27	57.6	42.6	07 32	15.0	07 10	1276	1239	11 47	37	1,0,0,1,1,1,2,1,1	8	0	85.6	
21	13 08	809	639	15 05	170	14 43	56.2	38.4	07 34	17.8	18 23	1297	1228	13 06	69	1,1,2,3,5,5,3,3	23	1	85.6	
22	15 13	732	647	09 29	85	13 29	65.0	40.6	07 42	24.4	19 58	1296	1241	12 26	55	2,1,1,2,4,3,3,3	19	0	85.7	
23 d	14 08	736	600	23 23	136	13 26	63.2	29.3	21 13	33.9	14 43	1324	1165	24 00	159	3,2,3,3,5,3,3,5	27	1	85.7	
24 d	15 40	941	376	00 36	565	00 23	72.1	33.8	02 12	38.3	16 00	1555	959	00 38	596	7,4,3,4,5,6,5,4	38	2	85.8	
25 d	16 00	746	563	10 04	201	14 24	64.0	36.8	20 50	27.2	15 59	1356	1224	24 00	132	4,3,3,3,5,5,4,4	31	1	86.0	
26 d	18 01	740	537	01 24	203	13 06	57.8	21.1	01 39	36.7	18 57	1335	1086	01 10	249	5,3,4,3,3,4,4,2	28	1	85.8	
27	19 34	707	622	10 34	85	13 41	56.9	40.5	06 35	16.4	17 05	1298	1261	04 58	37	2,3,2,2,3,3,2,2	19	0	85.8	
28	16 27	737	630	11 28	107	13 57	60.8	41.3	06 50	19.5	16 43	1310	1242	02 21	68	3,3,2,3,3,3,2,2	21	0	85.8	
29	23 52	720	628	12 32	92	13 53	61.8	40.4	08 21	21.4	17 02	1299	1260	11 18	39	2,1,2,2,4,3,2,2	18	0	85.8	
30	00 00	714	616	11 00	98	13 36	61.3	41.5	07 07	19.8	17 29	1308	1258	11 27	50	2,1,2,3,2,2,2,1	15	0	85.8	
31	16 42	773	596	10 54	177	13 13	65.9	41.5	08 11	24.4	18 15	1368	1263	10 28	105	1,0,1,4,4,4,3,3	20	1	85.8	
Mean	-	-	744	623	-	-	60.8	39.1	-	21.7	-	-	1310	1228	-	82	-	-	0.39	85.6

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

125 ESKDALEMUIR (H)

16,000γ (0.16 C.G.S. unit) +

SEPTEMBER 1956

	Hour	G.M.T.																									Sum
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	15000+	
	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	706	693	681	682	686	680	675	669	667	647	637	651	647	649	680	682	707	701	719	709	704	700	694	689	681	1355	
2 d	691	697	684	677	693	569	628	594	519	526	549	591	635	621	650	660	650	669	689	677	666	666	669	662	639	332	
3 d	663	670	611	599	638	635	626	597	564	561	579	591	637	670	720	672	667	673	680	686	678	671	671	673	643	432	
4	678	675	665	668	669	667	660	647	650	649	650	650	665	676	673	659	665	665	671	680	690	688	684	684	668	1028	
5	691	680	678	679	675	676	672	664	653	643	639	647	658	665	667	676	679	675	683	690	693	697	699	706	674	1185	
6	711	684	690	692	692	686	686	663	652	628	643	667	680	701	712	692	672	663	679	690	713	684	684	691	681	1355	
7	667	667	667	680	685	684	675	659	639	630	631	641	661	668	690	690	688	687	695	699	699	697	696	693	675	1188	
8 d	692	694	695	692	692	689	681	662	641	640	647	684	673	729	973	957	616	686	666	661	658	653	651	643	695	1675	
9	645	656	658	659	658	660	654	644	645	635	632	662	666	678	671	673	674	692	712	701	694	682	685	701	668	1037	
10	683	674	674	673	666	667	664	658	648	637	637	637	640	656	679	681	681	705	705	685	687	686	685	681	670	1089	
11	682	680	684	678	673	680	686	674	668	647	638	635	631	649	667	673	677	687	688	697	693	688	686	688	673	1149	
12	687	686	686	684	685	687	686	683	675	659	643	639	643	652	671	677	678	685	701	700	696	708	668	670	677	1249	
13	680	690	700	688	671	667	665	661	655	648	648	645	649	660	669	670	681	700	694	692	691	683	689	684	674	1180	
14 q	680	679	679	677	681	675	672	667	660	653	645	641	644	648	662	679	679	686	688	690	689	693	692	697	673	1156	
15	692	685	685	690	688	685	686	686	675	659	645	642	649	661	673	681	686	696	697	700	701	705	716	689	682	1372	
16	686	693	694	695	697	698	694	683	673	661	651	644	643	658	692	711	704	684	692	697	703	692	692	696	685	1433	
17 q	694	692	690	690	692	689	694	679	666	654	648	638	653	659	681	680	676	683	689	701	700	696	699	699	681	1342	
18 q	699	701	692	694	695	697	692	682	669	653	638	643	649	663	672	682	686	692	696	701	702	705	705	705	684	1413	
19 q	706	707	705	705	703	702	696	685	671	658	655	660	668	679	685	688	693	700	707	710	712	713	714	714	693	1636	
20	714	715	715	719	744	749	733	708	695	679	682	683	674	670	681	709	743	661	690	689	682	682	692	688	700	1797	
21 d	686	680	681	677	684	674	684	675	658	636	624	639	631	631	654	677	675	693	690	685	694	702	688	692	671	1110	
22 d	694	687	680	694	661	670	679	676	635	616	608	608	632	646	655	679	668	673	692	674	679	684	694	688	665	972	
23	685	672	672	676	681	687	674	659	652	647	627	633	650	655	663	672	680	688	689	693	694	692	699	696	672	1136	
24	688	688	685	692	694	691	685	674	658	640	631	636	650	665	670	677	683	687	693	699	705	698	709	698	679	1296	
25	693	687	691	689	689	690	688	677	659	648	642	640	644	664	673	677	680	691	700	696	693	685	704	689	679	1289	
26	685	689	691	696	694	696	684	683	659	627	617	617	630	644	654	664	680	683	689	695	697	700	699	698	674	1171	
27	699	698	697	692	692	693	692	686	674	658	653	646	655	661	680	679	686	687	692	681	696	680	692	693	682	1362	
28	691	689	691	707	691	700	697	684	668	648	648	644	659	678	687	688	681	687	695	701	697	695	693	693	684	1412	
29 q	695	697	691	692	696	699	698	691	678	664	654	655	664	676	688	687	691	692	692	697	704	704	700	702	688	1507	
30	695	697	697	692	692	691	696	689	680	662	656	649	659	668	678	682	687	693	701	703	707	706	699	679	686	1458	
Mean	689	687	684	684	685	681	680	669	653	640	637	642	651	663	686	689	680	685	693	693	694	691	692	689	677		
Sum 19000+	1658	1602	1509	1528	1557	1433	1402	1059	606	213	97	258	539	900	1570	1674	1413	1564	1774	1779	1817	1735	1748	1681		Grand Total 487,116	

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

126 ESKDALEMUIR (D)

10° +

SEPTEMBER 1956

	Hour G.M.T.																								Mean	Sum 1100.0+
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	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	52.6	47.4	47.4	47.2	47.5	47.0	46.5	45.1	45.5	46.8	48.5	52.2	54.7	55.6	56.1	53.8	53.6	50.5	50.1	48.2	47.7	49.1	48.9	47.7	49.6	89.7
2 d	48.2	47.8	45.9	50.9	50.8	55.4	30.6	31.3	29.8	52.3	53.9	59.4	58.9	57.7	53.9	50.6	48.6	43.6	42.9	44.7	49.6	49.6	49.4	49.2	48.1	55.0
3 d	47.3	48.1	44.8	38.3	42.4	46.7	51.0	40.3	43.4	43.6	51.0	55.4	58.9	58.7	52.3	51.8	50.4	48.1	48.2	46.0	43.3	45.2	47.0	47.4	47.9	49.6
4	49.5	47.2	47.0	47.0	47.0	47.6	47.7	45.9	45.6	48.4	51.4	54.9	56.9	56.4	52.6	50.5	48.1	47.1	46.7	45.7	46.9	48.3	48.6	49.2	49.0	76.2
5	50.0	48.7	48.2	47.7	46.0	43.8	41.6	40.1	40.2	43.2	48.2	53.2	56.4	56.6	54.1	51.5	48.5	46.3	46.6	47.0	47.9	48.6	48.7	49.7	48.0	52.8
6	48.6	47.4	47.8	48.3	48.7	47.1	42.7	43.3	44.1	46.5	50.6	56.0	60.0	60.9	57.3	52.2	48.9	48.4	48.3	46.1	43.8	46.6	48.6	48.1	49.2	80.3
7	42.8	44.5	46.5	46.4	45.5	44.3	43.4	43.4	45.0	46.9	50.6	55.0	58.8	60.2	58.0	53.6	50.6	49.7	49.6	50.2	49.3	49.6	48.6	47.8	49.2	80.3
8 d	47.6	47.4	47.0	46.3	45.9	44.9	43.2	39.8	42.5	46.0	48.7	58.5	61.8	67.4	78.6	53.6	53.2	53.9	52.8	50.8	40.3	50.2	49.7	48.2	50.8	118.3
9	47.7	46.3	45.5	44.8	44.6	43.8	40.3	43.0	43.8	45.1	51.0	57.0	59.0	61.2	60.3	58.8	54.9	49.8	47.8	46.5	45.6	48.0	46.0	44.9	49.0	75.7
10	42.9	43.1	44.8	44.4	45.4	45.4	45.7	45.0	44.2	46.1	48.8	53.0	56.1	57.6	56.6	53.3	50.7	46.8	45.4	47.3	48.5	48.7	47.9	47.8	48.1	55.5
11	47.4	47.4	47.4	45.9	43.8	42.8	42.5	41.0	41.3	44.7	49.8	54.1	56.8	57.6	57.4	54.1	50.3	47.7	47.0	48.2	48.3	48.7	48.1	48.4	48.4	60.7
12	48.0	47.0	46.4	45.9	45.1	44.8	43.2	41.9	41.6	43.4	46.5	49.7	52.6	54.9	55.0	53.8	52.3	50.4	49.7	48.7	47.8	48.2	45.1	44.8	47.8	46.8
13	40.4	42.3	43.7	42.5	41.5	43.6	42.9	41.3	42.0	43.7	47.2	50.7	54.4	54.6	54.3	51.8	51.0	48.3	48.6	49.8	50.2	48.5	48.1	46.9	47.0	27.9
14 q	47.6	46.9	46.0	45.3	45.6	45.1	44.5	43.1	42.6	44.9	47.7	51.3	54.2	54.9	54.1	53.2	50.7	49.4	49.1	49.4	49.1	48.8	48.4	48.3	48.3	60.2
15	45.6	43.8	45.0	45.6	44.9	45.1	44.7	43.4	42.4	42.9	45.7	49.9	54.9	57.2	57.0	54.7	52.1	51.0	50.6	50.5	49.7	49.2	49.4	41.7	48.2	57.0
16	44.5	47.6	46.9	46.3	46.3	45.9	44.8	42.8	41.9	42.2	45.5	49.3	53.8	56.1	59.0	56.9	53.7	51.0	50.1	50.4	49.0	43.8	47.4	47.4	48.4	62.6
17 q	48.2	48.3	47.4	47.2	45.9	46.8	44.2	42.8	42.2	45.4	50.0	54.2	57.8	58.4	58.5	54.7	50.8	49.1	48.8	49.0	47.9	48.7	48.3	48.1	49.3	82.7
18 q	47.7	45.9	45.6	46.5	46.3	45.9	44.9	43.5	42.4	43.3	46.9	52.7	57.3	57.7	56.1	54.3	51.2	49.7	50.2	49.9	49.6	49.3	48.9	48.5	48.9	74.3
19 q	48.2	48.1	47.6	47.0	46.5	45.9	44.2	42.5	42.8	45.1	48.5	53.1	55.8	55.9	54.8	52.7	51.4	51.0	51.2	50.7	50.5	50.0	49.3	48.5	49.2	81.3
20	47.9	47.7	47.0	50.0	45.9	46.1	47.4	43.5	42.5	43.2	46.9	53.6	56.9	59.0	58.0	55.6	60.4	53.6	50.3	44.2	42.1	44.6	45.4	44.9	49.0	76.7
21 d	46.4	43.7	35.6	30.7	40.2	46.9	48.2	46.5	39.7	43.6	46.3	50.5	55.7	55.8	54.8	53.1	48.9	46.9	48.2	45.2	45.6	42.9	43.4	45.9	46.0	4.7
22 d	47.7	48.9	48.6	50.6	50.4	46.1	43.8	45.6	46.4	48.9	52.8	57.1	56.8	58.3	56.8	54.1	44.0	47.4	38.1	44.8	48.2	49.0	46.8	47.9	49.1	79.1
23	46.8	48.0	51.2	46.9	46.3	46.4	46.8	44.6	44.2	45.8	50.0	54.3	57.4	57.1	54.2	50.6	47.0	48.4	49.5	49.3	49.2	49.2	49.3	48.2	49.2	80.7
24	47.5	47.0	46.9	47.4	47.2	46.4	45.1	43.6	42.8	44.7	47.6	52.4	56.8	55.4	55.0	52.2	50.5	49.3	48.9	48.6	46.0	47.8	48.7	44.3	48.4	62.1
25	44.7	48.2	45.1	45.2	46.0	45.3	44.5	43.0	42.4	43.7	46.6	50.8	53.9	55.8	55.5	53.2	52.1	50.7	50.5	49.6	46.3	45.6	47.4	43.1	47.9	48.9
26	42.5	42.3	43.7	43.7	40.3	44.8	47.8	49.3	45.6	46.4	49.3	52.8	55.9	56.4	55.6	53.2	51.5	50.6	49.6	48.7	49.0	48.6	48.8	47.8	48.5	64.2
27	47.7	47.4	47.4	46.9	47.0	47.1	46.0	43.6	42.1	43.2	46.8	51.5	56.0	57.0	56.5	54.4	51.7	50.4	50.2	47.8	45.0	45.0	47.8	47.3	48.6	65.8
28	47.5	47.2	47.6	45.9	48.1	48.0	45.1	44.5	44.1	44.1	47.6	50.7	54.2	57.0	57.8	56.8	52.8	50.7	50.0	49.5	49.2	48.6	46.8	44.9	49.1	78.7
29 q	45.5	45.6	46.5	46.6	46.8	46.4	45.8	43.8	42.3	42.0	44.4	49.0	52.5	55.0	55.4	52.5	50.5	49.2	49.5	50.9	49.4	49.2	47.0	47.7	48.1	53.5
30	45.8	42.9	41.5	42.4	43.4	45.1	44.4	43.3	42.7	44.7	49.6	53.7	56.3	56.6	56.1	54.5	52.2	50.6	50.4	49.5	49.4	48.2	45.8	43.3	48.0	52.4
Mean	46.8	46.5	46.1	45.7	45.7	46.0	44.5	43.0	42.6	45.0	48.6	53.2	56.4	57.4	56.7	53.4	51.1	49.3	48.6	48.2	47.5	47.9	47.8	46.9	48.5	
Sum 1200.0+	204.8	194.1	182.0	169.8	171.3	180.5	133.5	90.8	78.1	150.8	258.4	396.9	491.1	523.0	501.7	406.1	332.6	279.6	258.9	246.9	224.4	237.8	233.6	207.9		Grand Total 34953.7

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

81

127 ESKDALEMUIR (Z)		44,000γ (0.44 C.G.S. unit) +												SEPTEMBER 1956												Mean	Sum 30000+		
		Hour G.M.T.																											
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24				
		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			
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	1291	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	1286	1276	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	1280	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	1324	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	1282	1283	1285	1284	1281	1273	1272	1276	1282	1292	1293	1297	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	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		ESKDALEMUIR										TERRESTRIAL MAGNETIC ELEMENTS										SEPTEMBER 1956			
		Horizontal force						Declination						Vertical force						3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +		
		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.	γ	h. m.		γ	h. m.	γ	γ		h. m.	γ							
1		18 56	733	618	10 14	115	00 16	58.5	42.5	22 00	16.0	19 56	1309	1263	00 50	46	3,1,2,3,3,3,3,2	20	0	85.7					
2 d		02 33	747	432	08 59	315	05 05	64.8	20.7	06 51	44.1	17 29	1328	1075	06 07	253	4,6,6,5,4,3,4,3	35	2	85.8					
3 d		14 24	756	470	03 03	286	12 57	63.1	32.8	07 25	30.3	14 23	1381	1143	03 03	238	6,6,4,4,5,3,2,2	32	2	85.8					
4		20 38	695	635	11 12	60	13 10	58.1	43.8	07 52	14.3	14 29	1315	1270	00 44	45	2,2,2,2,3,1,2,1	15	0	85.8					
5		24 00	718	636	10 28	82	13 13	57.2	38.4	07 24	18.8	07 19	1297	1266	12 04	31	3,3,2,2,2,2,1,2	17	0	85.8					
6		13 53	754	622	09 18	132	14 04	63.5	39.6	20 11	23.9	14 58	1360	1258	10 45	102	3,3,3,4,4,3,3,3	26	1	85.8					
7		16 32	709	626	10 09	83	12 51	61.4	40.9	00 28	20.5	01 17	1296	1262	01 17	34	3,1,3,3,2,3,1,1	17	0	85.9					
8 d		14 53	1703	544	16 41	1159	15 04	133.5	28.5	20 13	105.0	15 35	1551	1248	11 48	303	1,1,3,4,9,9,5,3	35	2	85.8					
9		18 40	751	603	07 07	148	13 48	64.6	36.8	07 09	27.8	24 00	1321	1276	17 10	45	3,2,4,2,3,2,3,2	21	1	85.8					
10		18 26	715	627	11 00	88	13 15	59.1	41.0	01 10	18.1	00 57	1328	1271	10 40	57	2,1,1,2,3,3,3,1	16	0	85.8					
11		19 10	700	623	10 51	77	13 56	58.0	39.7	07 50	18.3	16 42	1296	1271	12 22	25	1,2,2,2,2,2,2,2	15	0	85.8					
12		21 47	747	635	10 56	112	14 08	55.4	41.2	22 38	14.2	17 46	1294	1226	23 55	68	1,1,1,2,2,2,3,4	16	0	85.8					
13		02 21	717	639	09 59	78	13 12	55.2	36.5	03 50	18.7	20 52	1304	1195	03 42	109	4,4,2,3,3,2,2,1	21	1	85.8					
14 q		23 26	701	640	11 20	61	13 08	56.1	41.4	08 20	14.7	07 24	1288	1260	12 52	28	1,1,1,1,1,2,1,1	9	0	85.8					
15		22 21	722	637	11 21	85	13 55	57.7	40.8	23 16	16.9	23 29	1287	1254	12 21	33	3,2,1,1,2,1,1,3	14	0	85.8					
16		16 01	723	638	12 20	85	14 50	61.2	39.4	21 43	21.8	17 20	1322	1263	12 42	59	2,1,1,1,3,3,2,3	16	0	85.8					
17 q		20 56	705	637	11 34	68	14 10	59.6	41.6	08 24	18.0	07 37	1296	1264	12 40	32	1,1,2,1,2,2,2,1	12	0	85.8					
18 q		23 29	707	634	10 30	73	12 50	58.2	42.0	08 44	16.2	00 00	1287	1264	12 11	23	1,0,1,1,1,0,0,0	4	0	85.8					
19 q		22 16	718	651	10 51	67	13 01	56.5	41.9	07 40	14.6	07 50	1288	1255	12 14	33	1,0,1,1,1,0,1,1	6	0	85.8					
20		16 15	816	624	17 14	192	14 56	65.8	37.4	20 02	28.4	17 19	1356	1235	05 05	121	1,3,3,4,5,6,4,3	29	1	85.7					
21 d		21 20	718	607	10 28	111	13 24	57.7	25.0	02 59	32.7	16 54	1321	1215	04 24	106	5,5,4,4,3,3,3,3	30	1	85.6					
22 d		18 21	723	587	11 48	136	13 52	60.1	31.4	18 19	28.7	16 16	1359	1222	04 43	137	2,4,4,3,4,4,4,3	28	1	85.9					
23		23 00	710	615	10 51	95	13 05	58.6	42.1	07 34	16.5	16 54	1304	1255	02 40	49	3,4,2,3,2,2,1,2	17	0	85.9					
24		20 40	720	627	10 18	93	12 31	57.6	41.8	08 11	15.8	07 11	1290	1258	11 32	32	1,1,2,2,2,1,2,3	14	0	85.6					
25		22 53	733	638	10 50	95	13 14	56.5	41.5	23 38	15.0	15 40	1295	1246	01 49	49	3,1,2,1,2,2,2,3	16	0	85.6					
26		02 12	706	609	10 19	97	13 34	57.7	39.7	04 30	18.0	16 53	1293	1251	03 41	42	2,3,3,2,1,2,1,1	15	0	85.6					
27		18 11	703	641	11 12	62	13 07	57.8	40.7	07 58	17.1	20 24	1303	1270	10 50	33	0,0,2,2,2,2,3,2	13	0	85.6					
28		03 14	716	642	11 16	74	13 35	57.7	43.3	08 11	14.4	15 38	1292	1247	03 50	45	2,3,2,2,2,3,2,2	18	0	85.7					
29 q		21 22	711	651	10 38	60	14 05	56.5	41.9	08 27	14.6	19 54	1289	1258	13 10	31	1,1,1,1,2,1,2,2	11	0	85.8					
30		20 26	710	662	11 37	48	13 05	57.0	39.8	03 00	17.2	22 04	1281	1262	11 19	19	2,2,2,1,1,1,1,3	13	0	85.8					
Mean		- -	756	615 - -	141	- -	- -	61.5	38.5 - -	23.0	- -	- -	1318	1243 - -	74	-	-	-	-	0.40	85.8				

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

129	ESKDALEMUIR (H)													16,000γ (0.16 C.G.S. unit) +													OCTOBER 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		15000+										
	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	696	700	700	693	691	698	702	698	683	664	665	659	652	668	673	685	666	676	692	686	693	698	696	706	685	1440										
2 d	666	689	692	691	693	702	687	673	642	637	636	654	658	642	622	657	667	665	681	687	672	683	672	667	668	1035										
3	683	675	676	672	684	683	679	675	657	648	646	652	657	638	656	659	684	704	679	666	681	685	689	696	672	1124										
4	685	688	685	683	681	684	683	667	652	648	647	647	654	664	665	664	678	695	691	678	689	695	687	691	675	1201										
5	691	688	687	688	689	690	691	680	628	634	640	646	646	648	658	671	683	691	706	695	683	683	689	695	675	1200										
6	698	691	687	691	687	690	695	685	669	652	641	649	646	673	678	678	683	683	691	691	697	694	700	700	681	1349										
7	703	698	693	690	693	693	692	682	668	653	644	648	654	671	668	680	687	698	698	687	688	707	699	694	683	1388										
8	710	693	693	695	690	687	694	687	670	651	640	638	651	666	677	690	683	693	697	704	693	683	689	697	682	1371										
9	698	698	688	691	693	696	697	689	674	652	653	652	655	651	671	685	689	700	699	698	705	708	703	692	685	1437										
10	690	696	696	692	694	694	693	686	674	669	646	642	650	647	677	687	689	696	696	700	702	700	700	696	684	1412										
11	696	692	699	699	693	701	700	696	682	663	649	649	657	661	668	685	693	699	702	703	701	698	705	704	687	1495										
12	699	699	700	699	699	698	697	693	683	670	655	647	653	669	683	693	696	697	700	704	709	703	701	695	689	1542										
13 q	692	697	696	699	700	702	704	701	690	675	663	658	666	678	686	691	693	702	705	707	709	709	708	708	693	1639										
14 q	702	702	700	701	702	699	695	692	682	669	660	659	667	674	684	687	693	699	706	706	703	706	704	705	692	1597										
15 q	704	703	704	704	703	703	701	696	688	674	664	658	661	672	678	680	695	703	706	708	708	709	708	707	693	1637										
16	704	704	703	706	706	708	710	697	675	671	664	662	666	670	678	686	693	700	704	707	708	708	707	706	693	1643										
17 q	703	703	699	699	700	702	701	704	692	683	671	664	672	682	688	691	697	700	700	702	704	705	707	710	695	1679										
18	707	704	705	699	696	706	700	696	687	672	660	661	662	673	684	691	699	703	709	713	713	715	713	714	695	1682										
19	713	710	708	710	714	719	711	710	701	685	677	673	663	670	681	687	690	696	706	713	714	717	713	710	700	1791										
20 d	707	706	704	709	712	726	707	700	682	644	639	629	633	622	649	670	698	677	647	634	642	640	643	639	669	1059										
21 d	658	640	637	651	670	680	676	665	635	634	618	626	635	641	659	642	662	649	651	662	666	651	668	678	652	654										
22	687	683	678	671	672	676	681	674	657	638	631	629	636	631	645	661	667	659	662	667	665	667	672	673	662	882										
23	672	678	666	691	698	693	691	678	658	651	644	640	642	654	659	672	670	668	672	672	695	698	687	678	672	1127										
24	687	685	686	686	695	688	687	678	663	647	636	637	650	660	670	677	683	687	694	700	698	700	700	699	679	1293										
25 q	698	696	696	697	700	700	697	688	680	662	646	648	654	665	677	684	687	692	696	696	697	700	704	705	686	1465										
26 d	709	710	699	700	701	710	727	711	691	673	659	655	663	687	691	680	687	690	698	680	638	582	561	499	671	1101										
27 d	600	580	619	624	608	640	652	658	640	632	625	629	627	630	638	643	659	670	668	651	660	664	649	657	638	323										
28	666	671	682	685	678	678	671	673	657	637	618	629	633	648	650	651	660	665	675	678	668	675	675	674	662	897										
29	674	670	678	680	678	679	681	675	666	637	624	626	641	649	649	661	671	673	671	680	683	679	684	684	666	993										
30	684	680	680	679	684	689	693	688	679	670	657	651	655	657	650	651	675	673	676	680	685	688	689	690	675	1203										
31	691	690	689	689	689	689	691	691	678	657	656	651	655	659	668	669	668	678	688	691	694	693	694	713	680	1331										
Mean	689	688	688	689	690	694	693	687	670	657	647	647	652	659	667	675	682	687	689	689	689	689	688	687	679											
Sum 20000+	1373	1319	1325	1364	1393	1503	1486	1286	783	352	74	68	214	420	680	908	1145	1218	1366	1346	1363	1343	1316	1282		Grand Total 504,990										

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

130		ESKDALEMUIR (D)												10° +												OCTOBER 1956													
		Hour G.M.T.																																				Sum	
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	1000.0+												
1		45.3	46.5	44.6	44.2	47.7	46.7	44.6	43.3	42.8	45.3	49.9	55.5	57.3	59.1	58.1	52.9	53.4	50.0	49.1	47.3	45.1	47.7	46.7	45.6	48.7	168.7												
2	d	45.8	44.4	45.0	47.8	46.6	46.2	49.5	47.5	44.6	47.3	51.2	54.0	58.1	57.8	55.3	55.0	51.0	46.0	46.2	48.6	40.2	46.0	44.6	41.3	48.3	160.0												
3		41.5	42.1	44.6	48.7	46.8	44.1	44.6	43.8	44.7	46.9	48.4	52.3	53.2	52.3	52.5	50.4	48.9	41.5	44.0	45.4	47.1	48.4	47.9	49.4	47.1	129.5												
4		44.1	44.1	47.4	46.4	46.0	45.9	44.2	43.8	43.4	46.0	49.0	51.9	54.4	55.7	56.3	54.5	52.6	50.8	49.1	46.9	47.3	45.8	42.2	46.8	48.1	154.6												
5		48.2	47.8	47.3	47.4	46.6	45.9	43.3	43.4	48.5	49.2	47.3	49.6	51.7	53.6	54.6	54.0	51.8	50.5	50.0	51.3	46.4	46.8	47.4	47.7	48.8	170.3												
6		45.4	45.4	44.9	43.4	42.0	45.9	44.7	43.3	42.0	43.3	47.3	53.2	55.4	58.6	56.3	54.9	51.7	51.2	50.1	48.2	45.7	48.2	46.7	47.7	48.1	155.5												
7		46.4	43.8	43.1	45.4	46.3	45.6	43.8	42.7	41.1	42.1	46.4	50.6	54.7	58.9	58.5	57.2	53.6	49.5	44.4	48.7	48.9	46.1	46.1	47.0	48.0	150.9												
8		47.2	46.3	46.4	46.5	45.7	46.9	47.8	45.1	43.2	42.5	45.6	50.3	53.8	55.7	55.5	54.2	51.5	50.2	49.9	50.0	45.4	42.2	46.9	47.5	48.2	156.3												
9		46.4	47.7	48.2	46.8	46.0	45.1	45.9	44.2	42.3	42.9	46.9	48.8	54.2	54.1	55.3	54.1	52.1	51.6	50.2	51.3	48.8	47.4	45.5	46.3	48.4	162.1												
10		45.6	45.6	45.5	46.4	46.5	46.4	46.1	45.0	43.3	43.5	46.1	50.0	52.6	54.4	54.8	53.8	51.4	50.6	49.6	49.7	48.7	47.9	48.3	47.5	48.3	159.3												
11		46.9	47.0	47.3	46.9	48.7	46.8	46.8	44.5	43.7	44.1	44.3	47.5	52.7	53.7	54.1	53.5	51.7	50.5	50.4	50.0	49.7	49.2	48.7	48.1	48.6	166.8												
12		46.9	47.8	47.5	47.4	47.4	46.9	46.5	45.2	43.0	42.9	45.1	47.9	51.8	53.5	54.6	54.1	52.2	51.2	50.7	50.2	50.2	45.1	46.3	43.8	48.3	158.2												
13	q	45.7	46.5	47.2	47.3	47.3	47.1	46.7	45.2	43.6	42.7	44.5	47.7	51.0	53.6	53.7	52.4	51.2	50.6	50.4	49.7	49.2	49.0	48.4	47.8	48.3	158.5												
14	q	47.0	46.2	46.0	45.4	46.2	46.0	46.0	45.0	43.4	43.1	45.0	49.1	52.6	54.6	54.6	52.9	51.4	50.6	50.2	49.8	49.0	49.0	48.6	48.3	48.3	160.0												
15	q	47.8	47.3	47.0	47.1	46.8	46.4	46.0	44.6	43.3	43.2	45.3	47.9	51.3	53.4	53.6	53.1	51.3	50.6	50.4	49.9	49.0	49.1	48.7	48.5	48.4	162.2												
16		48.2	47.6	46.5	46.4	46.8	46.6	45.8	44.4	44.7	46.1	47.4	50.0	50.9	52.5	52.8	52.1	50.5	49.7	49.5	49.2	48.7	48.4	48.1	47.7	48.4	160.6												
17	q	47.1	46.4	45.2	45.6	45.8	45.4	44.6	43.8	42.7	42.7	42.8	48.2	51.7	53.3	53.6	52.5	51.6	50.7	50.0	49.2	48.6	48.3	48.2	48.0	47.7	146.0												
18		47.8	47.5	47.4	46.9	47.0	46.8	45.6	44.4	42.7	43.0	45.5	49.7	53.0	54.6	54.3	53.0	51.7	51.0	50.2	49.3	48.8	48.8	48.5	48.6	48.6	166.1												
19		48.3	48.3	48.1	47.8	49.1	47.4	46.1	45.8	43.7	44.5	47.4	52.5	54.9	54.9	55.3	53.8	51.5	51.1	50.5	49.3	48.9	48.7	48.5	48.1	49.4	184.5												
20	d	47.8	47.9	47.7	49.6	49.2	44.7	51.6	50.0	45.0	48.3	48.6	53.3	56.4	57.3	55.9	53.9	61.2	50.5	50.7	43.7	42.1	41.7	36.7	33.9	48.7	167.7												
21	d	36.4	39.1	40.8	46.0	48.3	46.4	44.9	42.4	42.5	45.5	48.2	54.4	57.2	56.4	55.0	54.3	52.9	50.3	48.6	47.1	42.1	40.3	44.4	45.1	47.0	128.6												
22		48.4	43.4	45.5	46.2	46.9	45.6	44.6	43.4	41.8	43.0	46.8	50.7	55.0	55.1	54.5	53.2	54.1	53.1	49.5	46.4	46.0	43.9	43.4	42.8	47.6	143.3												
23		42.0	42.1	47.4	44.0	44.8	46.0	47.6	45.1	40.0	44.7	49.8	53.9	56.3	58.0	54.9	55.4	54.4	52.6	50.0	48.2	45.7	46.1	43.2	44.2	48.3	159.4												
24		46.1	47.4	46.3	46.7	51.0	47.5	46.3	43.8	42.4	43.8	47.1	51.1	54.3	54.6	53.2	51.8	50.2	49.2	49.4	49.2	46.0	48.4	48.0	47.9	48.4	161.7												
25	q	47.7	47.6	47.6	47.7	47.7	47.0	46.3	45.1	43.2	43.7	46.0	49.3	52.7	53.5	53.1	51.8	50.9	50.1	49.9	49.2	48.6	47.9	47.2	47.6	48.4	161.4												
26	d	47.3	45.2	45.2	46.9	46.5	47.5	48.7	44.9	41.6	41.8	45.2	49.5	53.5	57.2	56.6	63.1	64.1	58.9	64.5	58.2	37.7	30.8	39.6	32.5	48.6	167.0												
27	d	25.7	28.4	29.0	31.9	44.1	47.8	42.9	42.0	42.3	44.2	49.5	51.5	53.6	52.7	50.6	49.0	47.7	48.3	48.2	48.1	46.8	46.5	41.1	41.5	43.9	53.4												
28		44.1	47.6	46.8	44.5	44.0	47.5	45.9	45.2	46.4	48.3	50.9	52.6	54.0	52.3	52.3	48.8	47.9	48.3	48.2	47.9	45.4	45.2	45.2	42.0	47.6	141.6												
29		43.7	45.4	47.5	47.3	47.0	46.0	45.4	44.4	44.3	45.6	49.5	50.8	52.8	53.4	51.9	50.6	50.0	50.1	49.8	46.9	46.1	47.0	47.1	47.0	47.9	149.6												
30		46.9	46.4	46.4	46.3	46.4	46.2	45.3	44.8	45.4	45.9	49.2	51.8	55.1	55.3	55.8	51.3	51.5	49.7	49.6	48.7	47.9	47.2	47.8	47.7	48.7	168.6												
31		47.2	47.9	47.7	47.1	46.5	46.1	45.9	45.1	44.5	46.5	50.7	51.8	53.9	53.3	53.2	51.7	49.4	49.4	49.6	48.8	47.9	47.3	46.5	41.4	48.3	159.4												
Mean		45.3	45.4	45.7	46.1	46.7	46.3	45.9	44.6	43.5	44.6	47.3	50.9	53.9	54.9	54.5	53.3	52.1	50.3	49.8	48.9	46.7	46.3	46.0	45.5	48.1													
Sum 1300.0+		104.9	106.7	117.1	128.0	147.7	136.4	124.0	81.5	49.1	82.6	166.9	277.4	370.1	403.4	390.8	353.3	315.4	258.4	242.9	216.4	148.6	134.4	126.5	109.3		Grand Total 35791.8												

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

83

131	ESKDALEMUIR (Z)												44,000γ (0.44 C.G.S. unit) +												OCTOBER 1956																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

132 ESKDALEMUIR												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 16,000γ +	Minimum 16,000γ +	Range		Maximum 10° +	Minimum 10° +	Range		Maximum 44,000γ +	Minimum 44,000γ +	Range													
1	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ											
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	2,2,2,3,3,3,2,4	21	0	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	4,2,3,3,4,3,4,4	27	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	3,3,3,3,3,4,3,3	26	1	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	3,1,2,2,2,3,2,3	18	0	85-8				
6	18 32	711	617	08 21	94	14 26	56.5	42.0	06 37	14.5	20 35	1304	1266	12 06	38	1,1,4,3,2,2,3,2	18	0	85-8				
7	24 00	719	621	11 42	98	13 36	63.1	38.8	07 56	24.3	16 29	1310	1249	12 03	61	3,2,3,3,4,3,3,3	24	1	85-8				
8	18 04	734	630	10 22	104	13 29	60.8	38.9	08 56	21.9	18 18	1304	1265	01 20	39	2,2,3,2,2,3,3,2	19	0	85-8				
9	00 26	728	626	10 58	102	13 36	57.7	38.4	21 01	19.3	20 59	1293	1254	01 13	39	3,2,3,2,2,2,4,3	21	1	85-8				
10	21 35	725	638	11 14	87	14 09	58.1	40.2	08 35	17.9	19 59	1287	1260	02 15	27	2,2,2,2,3,3,2,3	19	0	85-8				
11	01 52	710	637	11 16	73	14 08	55.9	42.7	09 12	13.2	08 40	1285	1265	13 00	21	2,1,1,1,2,2,1,1	11	0	85-8				
12	22 18	712	640	10 36	72	14 00	55.4	43.0	10 37	12.4	01 30	1280	1260	12 57	20	2,2,1,2,2,1,1,2	13	0	85-6				
13 q	20 18	713	641	11 44	72	15 16	55.1	40.6	21 43	14.5	21 50	1282	1260	13 03	22	0,0,1,2,2,1,2,3	11	0	85-6				
14 q	20 49	711	654	11 20	57	14 10	54.3	42.3	09 28	12.0	09 43	1285	1262	13 01	23	2,0,1,1,1,1,0,1	7	0	85-7				
15 q	21 20	709	654	11 21	55	14 06	55.0	42.7	09 10	12.3	08 04	1281	1258	12 20	23	1,1,1,1,0,1,1,0	6	0	85-7				
16	20 01	715	654	11 51	61	14 36	53.9	42.8	09 10	11.1	08 29	1280	1263	13 19	17	0,0,0,0,1,1,1,1	4	0	85-7				
17 q	21 00	715	660	11 16	55	14 21	53.7	43.5	08 09	10.2	08 06	1280	1266	12 20	14	1,1,2,1,1,1,1,1	9	0	85-6				
18	23 00	713	658	11 46	55	14 31	54.3	40.7	08 56	13.6	02 06	1275	1258	12 29	17	1,0,1,2,1,1,0,1	7	0	85-5				
19	23 09	716	655	10 16	61	13 53	54.9	42.0	08 56	12.9	08 09	1275	1252	12 42	23	1,1,1,1,0,1,0,1	6	0	85-5				
20 d	04 56	723	657	12 49	66	12 36	56.9	42.8	08 57	14.1	16 55	1275	1243	11 39	32	1,2,1,2,1,1,1,1	10	0	85-5				
21 d	05 57	740	599	22 40	141	16 34	66.4	28.0	22 48	38.4	17 09	1404	1208	22 57	196	0,3,4,3,3,4,4,5	26	1	85-5				
22	04 40	700	603	10 23	97	12 34	59.2	31.8	00 11	27.4	18 35	1338	1191	02 33	147	4,4,3,3,3,3,3,3	26	1	85-5				
23	00 38	705	618	13 55	87	13 40	56.5	41.2	08 34	15.3	18 22	1318	1225	03 53	93	3,3,2,0,3,2,3,2	18	0	85-5				
24	20 55	719	634	11 20	85	13 40	59.2	38.4	01 52	20.8	16 41	1317	1241	03 01	76	3,2,3,2,2,2,3,4	21	0	85-5				
25 q	19 47	708	630	11 07	78	13 12	55.5	41.6	08 44	13.9	08 40	1288	1264	04 47	24	1,3,2,1,1,1,2,1	12	0	85-5				
26 d	22 06	719	640	10 50	79	13 50	53.6	42.6	08 18	11.0	07 39	1282	1266	12 25	16	0,1,1,1,0,0,1,2	6	0	85-5				
27 d	18 38	740	411	23 03	329	18 40	72.7	1.4	24 00	71.3	20 44	1458	1074	23 41	384	2,2,3,2,3,3,3,6	27	1	85-5				
28	00 10	740	509	00 39	231	13 13	56.0	0.4	00 01	55.6	19 26	1319	1137	04 15	182	6,5,3,2,3,3,3,3	28	1	85-4				
29	02 59	695	609	10 16	86	13 20	56.0	40.6	04 09	15.4	13 40	1337	1247	03 59	90	3,3,3,3,3,2,2,2	21	0	85-4				
30	20 50	709	617	10 36	92	14 01	55.0	40.8	20 44	14.2	19 14	1312	1278	02 08	34	2,1,1,2,2,2,3,2	15	0	85-4				
31	06 57	696	633	15 24	63	14 19	59.5	43.8	07 13	15.7	15 26	1315	1279	10 25	36	1,1,2,2,3,3,1,1	14	0	85-4				
Mean	23 24	735	646	09 51	89	12 50	55.7	35.5	24 00	20.2	16 32	1299	1264	23 50	35	1,0,1,2,2,2,1,3	12	0	85-2				
Mean	-	-	718	623	-	95	-	57.6	37.3	-	20.3	-	1308	1241	-	67	-	-	0.26	85-6			

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

133 ESKDALEMUIR (H)													16,000γ (0.16 C.G.S. unit) +													NOVEMBER 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+							
	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	γ							
1	689	671	679	672	683	684	693	690	681	669	663	662			671	679	680	679	674	685	697	700	705	695	693	695	683	2389							
2	694	697	697	702	705	710	707	704	697	678	663	660			668	683	687	692	694	700	705	703	704	700	692	694	2647								
3	709	690	688	688	694	687	692	690	674	644	638	641			644	657	661	674	686	695	689	703	688	700	703	699	681	2334							
4	697	695	694	692	692	697	694	684	687	664	643	637			645	655	667	671	688	698	698	699	699	699	698	712	684	2405							
5 q	699	694	695	695	693	694	695	695	685	672	661	654			661	667	678	690	695	701	698	702	704	709	695	694	689	2526							
6	699	701	700	697	698	699	701	699	684	665	656	646			656	672	687	691	686	686	696	698	692	682	695	696	687	2482							
7 q	698	687	690	686	694	692	692	689	679	661	647	631			641	661	670	679	684	691	696	694	702	702	697	697	682	2360							
8 q	696	701	700	700	699	696	693	694	686	669	653	651			656	669	676	685	692	698	699	701	703	705	705	701	689	2528							
9	699	694	699	698	699	696	695	695	686	673	663	662			671	677	690	699	692	705	700	697	718	712	728	709	694	2657							
10 d	688	680	639	656	688	684	670	667	658	659	644	617			625	633	625	652	686	696	683	647	658	657	658	608	657	1778							
11 d	544	526	607	616	639	584	609	612	579	569	566	584			599	608	641	640	663	665	679	677	681	629	605	620	614	742							
12	639	629	631	629	639	650	664	649	637	656	649	651			645	653	660	682	677	656	615	629	645	653	649	651	647	1538							
13	639	608	633	660	654	651	654	657	653	641	633	625			618	629	651	655	668	669	670	675	680	684	685	691	653	1683							
14 d	674	670	665	670	684	668	705	686	653	644	651	623			639	643	647	665	692	664	674	685	610	593	597	515	651	1617							
15 d	582	542	565	611	618	586	609	595	497	491	605	610			616	666	622	641	660	666	660	656	657	664	658	649	614	726							
16 d	631	597	646	650	619	700	677	663	659	618	627	633			635	644	647	651	659	668	669	688	670	677	668	667	653	1663							
17	673	677	674	678	678	674	673	665	657	666	665	668			661	658	660	666	662	664	660	667	656	661	643	649	665	1955							
18	637	664	666	665	691	679	669	673	666	654	642	637			639	656	668	668	674	676	676	675	686	688	687	688	668	2024							
19 q	687	682	685	688	690	693	692	686	677	667	657	650			655	664	663	672	682	687	690	694	694	698	695	694	681	2342							
20	692	690	690	694	698	698	701	699	699	686	671	664			666	673	666	676	674	686	677	686	680	686	692	688	685	2432							
21	692	668	671	680	705	698	691	668	657	646	641	630			626	631	643	655	676	676	682	672	676	677	663	656	666	1980							
22	657	670	671	676	685	694	699	696	690	669	663	661			636	653	666	678	684	660	656	665	654	626	637	644	666	1990							
23	601	631	637	652	673	686	676	671	673	667	635	614			623	664	661	662	666	648	655	661	666	665	670	675	655	1732							
24	671	673	676	678	683	689	686	682	671	662	658	647			654	653	658	666	682	666	652	672	675	669	669	671	669	2063							
25	671	674	675	675	678	682	682	677	675	660	653	657			669	635	652	689	691	681	686	691	692	692	699	686	676	2222							
26 q	698	687	675	672	678	681	680	679	679	670	660	657			662	670	677	680	685	690	696	697	700	699	698	698	682	2368							
27	692	690	686	686	685	685	688	688	686	680	671	667			670	676	682	692	696	700	706	700	678	655	658	645	682	2362							
28	617	641	660	664	658	676	680	675	672	672	673	674			671	670	682	686	698	701	708	695	697	694	692	689	677	2245							
29	691	692	687	684	685	682	685	688	694	690	682	677			678	682	688	695	698	706	667	679	685	691	673	690	686	2469							
30	692	694	686	682	690	696	694	689	688	688	683	682			679	679	686	687	694	697	700	704	699	697	690	695	690	2571							
Mean	668	664	669	673	679	680	681	677	666	655	651	646			649	659	665	674	682	683	681	684	682	679	677	672	671								
Sum 19000+	1048	915	1067	1196	1375	1391	1446	1305	979	650	516	372			479	760	941	1218	1458	1481	1439	1514	1453	1363	1300	1164		Grand Total 482,830							

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

134	ESKDALEMUIR (D)													10° +													NOVEMBER													1956
	Hour	G.M.T.																																						Sum
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	1000.0+														
1	35.9	40.8	46.1	49.5	46.4	45.6	45.4	44.5	43.6	43.7	46.4	49.5	52.6	55.0	55.4	53.6	51.0	49.5	50.3	49.6	49.1	47.9	43.6	44.9	47.5	139.9														
2	45.9	47.8	48.5	47.5	47.6	46.7	46.4	45.8	44.2	43.6	47.5	49.6	52.2	53.6	54.0	53.9	51.0	51.4	51.0	49.6	48.5	47.0	42.9	44.2	48.3	160.4														
3	37.9	44.8	44.9	43.2	47.8	49.1	46.8	44.6	42.8	43.4	49.2	51.9	53.2	55.4	53.3	51.5	51.3	50.6	46.6	45.0	46.1	47.4	47.4	46.1	47.5	140.3														
4	44.7	44.8	47.4	46.9	47.5	46.1	45.0	46.1	44.8	42.3	44.5	50.0	53.2	54.4	54.6	51.6	50.0	50.4	50.3	47.8	47.4	47.3	47.1	44.9	47.9	149.1														
5 q	43.8	46.5	47.8	47.6	47.3	46.0	46.0	45.3	43.8	43.5	46.5	50.0	51.8	52.3	52.6	51.8	50.7	51.0	50.7	49.2	48.2	44.8	43.6	46.4	47.8	147.2														
6	47.7	47.5	46.3	45.9	48.9	46.7	45.4	44.6	43.4	43.8	45.6	50.8	52.4	54.1	55.3	55.1	52.3	54.6	50.5	48.7	44.6	44.9	45.6	42.4	48.2	157.1														
7 q	44.1	44.1	45.4	46.6	46.0	45.3	44.9	44.3	42.8	42.0	45.0	49.6	53.7	53.6	53.2	52.3	51.0	50.6	51.2	50.0	49.1	48.1	47.2	45.8	47.8	145.9														
8 q	46.1	47.4	47.4	46.9	45.5	45.2	46.0	45.6	43.8	43.6	46.1	50.5	53.6	54.6	52.9	51.8	50.8	50.4	50.1	50.0	50.0	48.6	47.8	47.4	48.4	162.1														
9	46.9	46.8	45.4	45.8	46.3	45.3	45.8	44.6	43.8	44.1	46.9	50.5	53.2	53.3	53.5	53.4	51.4	53.5	54.3	51.8	49.7	48.7	51.0	45.5	48.8	171.5														
10 d	43.8	46.0	44.6	34.8	44.8	41.0	45.4	50.3	43.1	46.9	49.2	53.1	55.8	55.0	56.7	58.1	57.5	55.6	68.9	50.4	45.4	47.3	35.1	20.5	47.9	149.3														
11 d	27.1	36.6	40.6	28.7	43.1	37.6	49.2	52.1	54.5	44.5	44.6	48.6	53.0	51.8	51.1	50.0	52.6	54.0	52.6	56.7	44.0	33.7	36.5	22.6	44.4	65.8														
12	42.3	42.8	46.9	45.3	45.7	45.4	45.6	43.8	49.6	45.4	46.5	50.0	53.9	50.7	54.4	47.2	53.4	49.3	42.0	45.5	45.6	45.4	44.1	39.2	46.7	120.0														
13	34.8	39.2	38.4	39.6	45.6	45.2	45.6	44.7	43.7	43.8	46.9	49.9	50.8	51.8	51.6	50.8	49.9	48.7	47.8	47.2	46.1	47.3	47.7	42.0	45.8	99.1														
14 d	44.7	46.3	47.8	41.9	46.7	47.4	52.9	49.1	45.2	49.6	51.0	52.8	54.7	53.7	50.8	49.1	51.9	46.8	50.4	51.1	47.4	34.7	31.6	28.6	46.9	126.2														
15 d	31.9	30.0	36.1	32.0	35.7	45.6	49.0	46.4	35.8	38.4	46.9	47.2	49.7	54.0	48.9	48.5	50.0	49.9	48.8	47.3	47.4	45.3	42.0	41.1	43.7	48.9														
16 d	44.2	51.4	39.2	44.4	48.6	45.8	48.6	45.0	44.7	49.4	47.8	48.3	48.5	49.2	49.1	48.6	48.4	49.3	47.3	46.1	45.5	43.8	42.8	45.2	46.7	121.2														
17	45.5	45.9	45.6	46.4	46.1	45.3	45.1	45.0	46.4	43.7	45.1	48.3	52.1	49.5	51.8	52.4	49.4	51.9	49.7	48.2	44.2	43.7	40.8	38.8	46.7	120.9														
18	42.2	42.8	43.6	48.6	47.0	49.9	47.8	45.2	45.5	45.1	46.5	48.7	50.0	51.1	51.8	50.4	49.5	48.7	48.0	46.9	46.9	46.5	46.3	46.0	47.3	135.0														
19 q	46.0	46.9	47.0	47.3	47.0	46.4	45.9	44.8	42.9	43.3	45.4	48.4	50.8	51.4	50.4	50.4	49.5	48.9	48.2	47.8	46.6	46.6	46.4	46.5	47.3	134.8														
20	46.4	46.5	47.0	47.0	47.0	46.7	46.6	46.2	45.2	45.0	44.9	48.0	53.1	52.3	52.3	51.8	54.0	55.1	52.2	49.4	46.9	45.6	46.4	45.1	48.5	163.4														
21	39.3	38.4	41.0	42.4	45.1	44.1	45.6	46.6	44.6	47.2	47.8	48.8	51.4	52.9	52.3	51.8	49.1	48.9	46.5	41.5	45.3	43.5	36.6	32.5	45.1	83.2														
22	40.3	45.8	46.9	46.9	47.4	48.1	48.1	47.6	44.8	44.7	47.3	50.5	51.7	53.6	56.7	56.8	59.1	58.2	47.3	44.7	39.9	35.0	35.6	32.5	47.1	129.5														
23	37.8	40.4	43.9	47.3	45.1	45.0	49.8	49.8	44.6	46.8	46.9	49.3	51.1	52.8	53.1	51.0	55.3	49.3	48.1	46.0	43.4	45.0	45.0	45.3	47.2	132.1														
24	45.3	47.2	47.4	47.3	46.4	45.8	45.8	45.6	44.7	45.1	47.4	47.1	51.0	49.8	50.9	46.6	53.2	52.9	55.0	48.8	47.8	45.3	43.3	43.7	47.6	143.4														
25	44.0	43.2	42.7	45.7	46.4	46.4	45.9	47.6	47.7	45.1	47.2	48.7	52.9	60.3	58.2	55.8	53.3	53.4	50.4	48.2	46.9	45.6	43.9	43.9	48.5	163.4														
26 q	42.4	43.3	40.4	44.6	44.9	45.0	45.1	45.4	45.1	44.7	46.4	48.3	50.0	50.0	49.7	49.6	49.0	48.3	48.0	47.4	48.1	47.4	46.4	46.4	46.5	115.9														
27	45.8	45.1	45.5	44.8	43.9	44.3	44.1	44.5	44.1	45.5	47.0	49.8	50.8	51.2	50.5	49.7	49.4	49.2	49.1	51.3	53.3	42.1	38.9	31.4	46.3	111.3														
28	33.0	34.8	38.3	44.1	44.3	46.5	44.6	45.2	45.5	45.6	46.1	48.7	50.8	50.4	50.7	50.6	51.0	50.7	51.4	49.8	48.1	47.4	46.7	46.7	46.3	111.0														
29	47.1	46.1	45.7	45.6	45.6	44.8	44.3	44.2	45.2	45.1	46.3	48.4	50.6	51.9	51.5	50.4	49.6	51.2	47.4	45.5	48.5	48.1	46.1	43.4	47.2	132.6														
30	49.2	48.7	46.4	44.7	48.1	45.9	45.5	45.4	45.6	45.3	47.2	49.1	50.7	52.4	51.8	51.9	50.8	51.3	50.0	50.1	49.1	47.4	46.9	46.8	48.3	160.3														
Mean	42.2	43.9	44.5	44.3	45.9	45.6	46.4	46.0	44.7	44.7	46.8	49.5	52.0	52.7	52.6	51.5	51.5	51.1	50.1	48.4	47.0	45.0	43.5	41.2	47.1															
Sum																																								
1200.0+	66.1	117.9	134.2	129.3	177.8	168.1	191.8	178.9	142.3	140.1	205.2	286.4	359.3	382.1	379.1	346.5	345.4	333.6	304.1	251.6	209.1	150.8	105.3	35.8		Grand Total														
																												3394.8												

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

85

135	ESKDALEMUIR (Z)												44,000γ (0.44 C.G.S. unit) +												NOVEMBER 1956																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

136		ESKDALEMUIR											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 +				
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.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ			
1	20 34	709	649	16 48	60	13 07	57.7	34.4	00 07	23.3	16 49	1304	1261	01 09	43	3,3,2,1,3,3,2,3	20	0	85.2	
2	21 25	718	646	10 44	72	14 44	56.9	41.4	22 33	15.5	23 50	1293	1266	12 18	27	2,1,2,3,3,3,2,3	19	0	85.2	
3	00 24	735	617	10 24	118	13 35	58.2	33.8	00 14	24.4	00 14	1294	1265	11 07	29	4,3,3,3,3,2,3,2	23	1	85.2	
4	23 16	725	633	11 24	92	13 30	55.1	40.6	09 07	14.5	15 43	1289	1272	02 57	17	3,2,2,2,1,3,2,2	17	0	85.2	
5 q	21 50	713	649	11 36	64	14 14	53.2	41.8	22 28	11.4	08 40	1285	1275	09 58	10	2,1,1,1,1,1,1,2	10	0	85.3	
6	24 00	705	633	11 46	72	14 20	56.4	39.6	23 56	16.8	21 00	1297	1271	11 39	26	1,2,2,2,2,3,3,3	18	0	85.3	
7 q	00 04	708	617	11 45	91	13 57	54.6	40.2	00 00	14.4	19 34	1286	1270	12 31	16	2,2,1,3,2,1,2,2	15	0	85.3	
8 q	20 19	712	646	11 33	66	13 35	56.2	42.7	08 45	13.5	19 55	1283	1275	11 20	8	2,1,1,2,2,2,1,1	12	0	85.3	
9	20 34	796	655	11 01	141	22 58	57.3	36.9	23 54	20.4	24 00	1308	1270	12 30	38	1,1,1,1,1,3,5,4	17	1	85.2	
10 d	18 11	737	556	23 40	181	18 36	76.6	13.9	23 52	62.7	18 40	1475	1189	23 30	286	5,4,4,3,3,4,5,5	33	1	85.2	
11 d	23 58	746	453	01 13	293	19 42	63.8	8.2	23 46	55.6	19 59	1378	1115	01 11	263	6,5,5,3,4,3,5,6	37	2	85.2	
12	17 30	793	581	23 40	212	14 14	60.5	30.2	23 53	30.3	16 55	1422	1163	00 06	259	5,3,3,3,5,6,4,5	34	1	84.9	
13	23 00	706	580	01 40	126	12 57	52.9	31.0	00 00	21.9	16 02	1312	1179	02 01	133	4,3,2,2,3,2,1,3	20	0	84.8	
14 d	06 26	732	377	23 36	355	20 53	65.2	17.3	23 45	47.9	20 27	1406	1166	23 35	240	3,3,4,2,2,4,6,6	31	1	84.9	
15 d	13 24	718	412	08 11	306	13 20	61.1	19.5	00 00	41.6	12 15	1397	1135	04 53	262	5,5,6,6,5,4,3,3	37	2	84.8	
16	19 43	784	554	01 34	230	04 40	59.5	31.0	19 41	28.5	19 41	1331	1169	01 27	162	5,5,4,3,3,2,5,3	30	1	84.7	
17	19 55	697	636	22 36	61	17 53	54.7	37.9	23 03	16.8	18 44	1345	1292	12 11	53	2,1,2,2,3,3,3,2	18	0	84.7	
18	05 11	703	621	00 48	82	06 13	54.0	37.4	00 06	16.6	14 59	1316	1250	03 50	66	4,3,3,2,2,1,2,1	18	0	84.9	
19 q	21 43	700	648	11 11	52	13 26	52.6	42.2	09 47	10.4	08 28	1299	1288	11 43	11	1,0,1,1,2,2,1,1	9	0	84.9	
20	06 49	708	653	12 20	55	18 00	57.4	41.9	23 53	15.5	18 45	1329	1272	10 50	57	0,0,2,3,3,3,3,2	16	0	84.9	
21	00 26	725	610	12 50	115	13 26	55.0	23.9	23 05	31.1	15 56	1326	1251	03 28	75	4,3,3,3,2,3,3,4	25	1	85.0	
22	22 42	726	603	24 00	123	16 47	61.7	22.6	22 47	39.1	18 48	1421	1210	23 57	211	3,2,2,2,4,3,4,5	25	1	85.0	
23	05 36	694	567	00 09	127	13 16	57.8	36.4	00 50	21.4	14 00	1362	1211	00 00	151	4,3,3,4,4,3,3,2	26	1	85.0	
24	05 10	695	638	13 05	57	18 11	60.2	40.0	23 03	20.2	18 55	1357	1284	10 36	73	1,2,1,2,2,3,4,4,3	20	0	85.0	
25	13 26	712	524	13 47	188	13 27	73.2	39.6	02 03	33.6	13 59	1339	1287	12 11	52	2,1,2,2,6,3,3,2	21	1	85.0	
26 q	00 13	710	653	11 45	57	13 17	50.5	39.1	02 03	11.4	08 49	1298	1271	02 07	27	3,1,1,0,0,0,1,1	7	0	85.0	
27	19 03	716	612	23 50	104	20 36	60.3	25.5	23 40	34.8	22 00	1338	1286	11 11	52	1,1,1,1,0,1,4,5	14	1	85.0	
28	18 21	719	561	00 31	158	18 44	52.8	30.7	00 00	22.1	00 00	1319	1265	00 33	54	5,3,2,2,2,2,2,2	20	0	85.0	
29	17 24	716	649	18 40	67	21 57	55.9	41.5	19 12	14.4	18 41	1316	1283	11 39	33	2,1,2,2,2,2,3,4	18	0	85.0	
30	21 52	714	673	03 01	41	13 34	53.7	43.1	03 05	10.6	21 32	1305	1283	10 24	22	3,3,3,2,2,2,2,3	20	0	85.0	
Mean	-	-	722	597	-	-	58.2	33.5	-	24.7	-	-	1334	1243	-	92	-	-	0.50	85.0

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

	Hour		G. M. T.																						DECEMBER 1930												Sum
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	16000+											
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											
2	691	691	690	694	698	699	695	690	687	681	673	671	680	689	684	689	697	700	703	706	697	694	699	701	692	599											
3	686	699	690	690	684	685	693	699	694	682	673	672	674	678	686	693	683	692	692	697	686	695	697	697	688	517											
4	689	686	688	687	688	690	695	697	697	690	682	667	669	671	673	676	694	694	699	703	687	697	692	698	688	509											
5	697	696	711	698	697	697	699	695	691	682	674	675	670	672	678	687	692	690	688	695	703	702	703	697	691	589											
6	696	698	694	698	698	698	696	692	690	689	684	679	676	677	680	683	687	684	691	697	696	698	698	698	691	577											
7	697	695	697	699	702	706	699	692	691	689	680	681	677	682	678	667	688	694	690	685	694	677	688	694	689	542											
8	686	686	687	690	697	707	718	714	707	702	690	682	683	675	686	697	687	675	688	690	694	705	700	711	694	657											
9	703	694	692	696	700	704	705	697	701	677	662	663	661	665	676	684	692	694	693	692	683	687	692	692	688	505											
10 d	692	693	694	699	705	705	708	703	691	683	676	670	673	674	675	683	691	697	701	698	684	686	691	677	690	549											
11 q	679	684	677	702	719	710	709	702	703	697	677	656	652	667	682	684	692	697	698	698	700	688	668	667	688	508											
12	672	671	671	674	682	686	687	688	684	675	665	660	657	666	679	686	692	694	693	695	695	691	690	694	681	347											
13	694	694	694	694	697	698	699	698	698	682	674	676	679	683	688	699	700	694	673	655	644	656	654	663	683	386											
13 d	673	675	683	684	684	687	690	683	657	668	667	658	647	653	659	677	676	691	692	687	671	679	683	682	675	206											
14	677	684	686	692	697	688	697	697	690	675	658	659	660	670	676	675	690	690	688	694	689	683	681	686	683	382											
15 q	692	694	694	694	698	698	699	698	690	683	679	669	666	665	671	679	689	692	694	694	694	695	695	694	688	516											
16 q	694	694	695	693	697	699	702	698	690	674	664	664	666	678	680	684	690	697	700	701	700	695	692	693	689	540											
17	697	698	698	699	703	704	705	699	696	683	674	674	676	679	684	686	690	699	703	705	706	705	702	702	694	667											
18	701	702	705	707	711	714	709	704	704	690	674	675	686	688	677	679	686	693	699	699	700	702	705	705	696	715											
19	703	703	703	704	706	708	710	708	701	688	675	667	669	678	686	694	703	701	692	697	699	699	695	703	695	692											
20	703	698	700	703	707	709	712	709	704	697	687	679	675	670	674	684	687	692	697	699	697	699	700	702	695	684											
21 q	703	702	701	705	706	709	711	712	708	697	692	687	687	692	698	706	710	711	708	706	705	701	705	707	703	869											
22	707	705	702	699	701	712	706	706	708	697	690	682	678	676	681	690	700	705	700	707	709	707	707	706	699	781											
23	703	703	703	703	704	707	710	710	706	705	691	675	677	685	689	697	706	707	708	707	706	699	692	691	699	784											
24	691	694	705	694	698	702	705	706	709	707	697	692	689	693	694	700	703	709	710	698	700	709	709	705	701	819											
25 d	700	699	695	697	698	700	702	698	702	696	694	696	669	671	683	687	698	704	697	693	707	666	686	697	693	635											
26	692	700	684	677	684	709	706	692	665	674	673	663	666	669	677	691	694	694	697	700	699	702	702	702	688	512											
27	699	699	698	695	695	695	694	696	692	683	673	670	673	679	682	690	701	703	699	673	666	690	683	679	688	507											
28 d	682	677	690	679	680	687	695	697	692	690	694	687	674	658	660	674	682	676	695	690	706	699	694	695	686	453											
29	694	708	707	678	680	690	690	686	684	673	665	662	663	668	669	678	685	692	696	699	704	699	706	698	686	474											
30 d	699	702	699	698	699	703	710	704	712	700	682	660	671	682	682	684	691	694	698	704	690	690	697	694	694	645											
31	690	691	690	691	692	695	695	695	696	693	688	679	677	682	689	691	696	701	706	710	709	708	706	703	695	673											
Mean	693	694	694	694	697	700	702	699	695	687	678	673	672	675	680	686	693	695	696	696	694	694	694	695	691												
Sum 20000+	1482	1515	1523	1513	1607	1701	1751	1665	1540	1302	1027	850	820	935	1076	1274	1472	1556	1588	1574	1520	1503	1512	1533		Grand Total	513,839										

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

	Hour G.M.T.																										Mean	Sum 1100+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	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	46.1	46.5	47.2	46.9	47.2	46.5	45.9	45.7	45.2	45.2	46.3	48.5	50.0	51.5	51.2	51.2	51.4	49.6	49.0	48.6	47.5	45.1	46.7	44.7	47.7	43.7		
2	41.3	38.4	40.6	44.2	44.5	44.7	45.1	45.4	45.3	45.1	45.5	48.5	49.4	50.4	51.0	51.6	48.8	50.3	50.5	47.8	45.4	46.7	46.4	42.7	46.2	9.6		
3	41.4	41.5	43.8	45.6	45.3	44.6	45.6	45.1	44.6	45.1	45.5	48.1	49.2	51.1	51.9	50.0	50.1	50.2	50.7	49.2	42.3	43.8	45.4	45.8	46.5	15.9		
4	46.0	45.6	46.4	44.1	44.9	46.8	45.8	46.0	45.6	45.1	46.9	50.5	50.5	52.2	52.0	50.5	50.6	49.5	48.3	48.8	46.8	43.8	44.7	44.4	47.3	35.8		
5	45.6	44.8	45.5	44.8	46.7	46.4	46.1	45.4	44.6	44.1	45.3	46.8	49.6	50.7	51.8	51.9	56.5	52.4	49.6	47.8	46.9	46.3	46.3	46.4	47.6	42.3		
6	46.4	46.3	47.6	48.5	46.8	45.3	45.6	45.7	45.1	45.5	45.8	47.9	49.2	51.3	52.5	51.8	52.3	52.8	52.7	51.0	48.4	41.4	44.2	42.8	47.8	46.9		
7	45.1	46.9	47.4	47.2	47.1	48.9	47.0	46.7	45.8	45.6	46.0	47.7	49.6	50.0	51.1	51.3	50.4	44.8	48.3	47.8	47.0	45.5	43.8	44.1	47.3	35.1		
8	44.5	44.7	44.6	46.1	46.9	48.0	48.2	50.1	50.0	46.4	48.3	50.5	52.2	51.8	51.0	49.8	48.7	48.3	48.7	49.2	43.6	46.6	45.6	45.2	47.9	49.0		
9	45.5	46.2	46.3	47.7	47.4	47.4	47.0	46.5	46.2	46.7	47.8	48.2	49.9	50.5	51.6	51.0	51.0	49.3	48.7	49.0	46.9	45.5	43.7	40.6	47.5	40.6		
10 d	40.2	42.4	42.3	46.9	38.9	43.8	45.5	49.0	47.0	46.5	46.4	48.8	53.2	54.1	54.1	55.5	54.0	52.3	52.1	50.4	48.3	47.9	33.4	40.7	47.2	33.7		
11 q	43.4	44.9	45.9	45.8	46.1	46.5	46.8	46.3	45.6	45.1	46.0	47.2	48.9	50.5	50.2	49.2	48.5	48.2	47.9	48.0	47.7	47.4	46.6	46.4	47.1	29.1		
12	46.4	46.5	46.6	46.9	46.6	46.5	46.4	46.3	45.1	44.7	45.7	48.2	50.0	51.5	51.8	51.4	54.0	58.6	55.4	52.9	48.1	40.1	37.5	41.6	47.9	48.8		
13 d	43.9	45.4	48.1	48.3	50.6	48.0	46.1	47.2	51.9	47.6	47.2	50.1	52.8	52.6	48.6	53.7	51.1	48.8	47.7	47.4	46.1	45.4	44.0	42.4	48.1	55.0		
14	40.9	42.4	46.0	48.2	46.4	46.8	46.4	46.3	44.7	45.1	49.2	49.2	50.3	51.8	52.2	51.2	49.9	50.6	48.0	46.9	48.5	46.0	43.4	43.8	47.3	34.2		
15 q	45.2	46.4	47.4	46.9	46.1	45.6	45.9	45.6	44.7	45.0	47.0	48.5	50.0	50.8	50.8	49.2	47.6	47.3	47.7	47.8	47.3	46.4	46.6	46.9	47.2	32.7		
16 q	46.7	46.4	47.7	48.0	47.2	46.3	46.2	46.9	45.5	43.6	45.1	47.7	49.3	50.3	49.3	49.1	47.4	47.1	47.2	47.6	47.9	47.4	46.9	46.5	47.2	33.3		
17 q	46.8	47.6	47.5	47.9	47.5	46.8	46.5	46.9	46.4	45.1	47.0	48.2	50.0	51.4	50.4	49.8	49.0	48.2	47.8	47.4	46.7	46.2	46.5	46.9	47.7	44.5		
18	47.0	47.4	47.8	48.1	47.3	47.1	46.2	46.1	45.8	44.6	45.7	48.3	50.6	51.7	53.8	52.8	50.0	48.9	48.0	46.6	46.0	45.9	45.8	46.2	47.8	47.7		
19	46.4	46.6	47.0	47.2	47.1	47.0	46.1	45.6	45.0	43.8	44.7	46.4	48.6	50.0	50.6	49.7	49.4	49.0	48.6	48.1	47.0	46.7	44.2	40.9	46.9	25.7		
20	44.6	45.6	47.3	47.0	46.6	47.0	46.3	45.6	45.9	45.5	46.5	48.6	50.0	50.3	50.0	49.4	48.7	48.4	48.0	47.3	46.4	45.1	43.9	44.7	47.0	28.7		
21 q	45.6	45.6	46.8	47.7	47.5	47.3	47.0	46.3	45.8	45.0	45.6	47.2	48.2	49.9	50.8	50.3	49.5	48.8	48.6	48.7	48.1	46.3	44.5	44.6	47.3	35.7		
22	45.3	46.0	47.4	46.2	46.4	45.6	45.7	45.5	45.2	44.4	45.2	47.3	48.5	50.4	50.8	51.2	50.4	49.8	48.0	47.1	46.9	46.5	45.8	45.7	47.1	31.5		
23	45.7	46.4	46.8	47.1	47.0	47.1	47.0	46.5	46.1	45.7	46.4	47.5	49.2	51.2	51.5	50.3	49.5	49.5	49.2	48.9	48.7	47.9	44.4	43.7	47.6	42.9		
24	43.4	43.9	42.4	38.5	42.1	44.2	46.4	47.5	46.4	45.7	46.1	47.8	48.5	49.5	50.8	50.3	49.0	49.8	51.0	49.9	48.5	46.8	46.2	45.6	46.7	20.3		
25 d	44.3	45.3	44.8	44.4	44.0	44.7	45.0	45.3	44.1	44.4	45.1	51.3	51.8	52.6	50.0	50.0	51.4	53.6	59.2	57.8	51.0	45.0	43.8	44.8	48.1	53.7		
26	44.6	41.0	40.1	40.0	43.7	43.1	47.0	46.6	48.3	46.3	47.7	47.4	48.5	49.8	50.5	50.6	49.8	48.9	48.5	47.9	46.8	46.1	46.4	46.0	46.5	15.6		
27	45.9	45.7	46.2	45.8	45.1	44.8	44.7	44.9	45.2	45.1	46.7	48.3	51.0	51.8	52.3	52.0	54.0	47.4	54.4	50.9	48.0	46.4	45.7	44.6	47.8	46.9		
28 d	44.9	44.7	44.2	44.8	44.6	43.9	44.9	45.6	45.1	45.6	46.5	47.9	49.9	52.7	54.3	51.9	51.4	52.4	47.5	46.7	45.3	46.0	45.9	44.8	47.1	31.5		
29	42.8	46.0	45.1	41.5	43.2	43.2	44.8	44.7	45.0	43.7	45.0	47.5	49.2	51.4	50.4	49.3	48.6	48.5	49.0	47.0	45.3	45.3	43.7	45.9	46.1	6.1		
30 d	45.9	46.4	46.1	46.7	46.1	45.6	47.0	51.0	48.2	46.1	43.5	49.1	49.9	52.3	51.7	51.2	50.6	51.1	50.5	49.8	48.3	46.4	45.2	41.9	47.9	50.6		
31	44.2	44.0	45.9	47.4	47.2	46.3	45.9	45.2	45.1	44.1	43.9	47.1	47.5	49.9	50.0	50.1	48.8	48.6	48.6	47.7	47.5	46.9	46.6	46.0	46.9	24.5		
Mean	44.7	45.1	45.8	46.0	45.9	46.0	46.1	46.4	45.9	45.2	46.1	48.3	49.9	51.2	51.3	50.9	50.4	49.8	49.7	48.8	47.1	45.8	44.6	44.4	47.3			
Sum 1300+0	86.0	97.5	118.8	126.4	124.1	125.8	130.1	137.7	124.5	101.5	129.6	196.3	245.5	286.0	289.0	277.3	262.4	243.0	239.4	212.0	159.2	118.8	83.8	76.9		Grand Total 35191.6		

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

87

139 ESKDALEUIR (Z)

44,000γ (0.44 C.G.S. unit) +

DECEMBER 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 30000+
	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	1293	1293	1292	1292	1288	1288	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	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	1276	1282	1282	1292	1296	1293	1293	1292	1293	1301	1295	1293	1291	1290	952
4	1289	1285	1269	1270	1277	1280	1281	1282	1282	1281	1275	1272	1272	1278	1273	1282	1285	1288	1288	1292	1291	1290	1288	1286	1285	1282	769
5	1286	1284	1280	1283	1284	1285	1285	1283	1283	1276	1271	1271	1271	1275	1281	1284	1290	1293	1303	1302	1297	1295	1292	1288	1288	1286	859
6	1288	1288	1284	1276	1277	1279	1281	1283	1285	1282	1281	1279	1279	1281	1281	1288	1299	1301	1299	1302	1308	1307	1292	1294	1293	1289	928
7	1293	1291	1289	1289	1288	1286	1282	1281	1280	1280	1276	1275	1275	1276	1279	1281	1282	1291	1303	1297	1294	1292	1285	1282	1276	1285	848
8	1271	1275	1277	1281	1280	1281	1278	1279	1276	1281	1280	1281	1281	1282	1282	1288	1291	1293	1293	1293	1294	1301	1299	1293	1292	1285	841
9	1289	1288	1287	1286	1282	1282	1281	1282	1282	1278	1275	1275	1275	1276	1280	1284	1284	1288	1289	1287	1289	1297	1297	1290	1287	1285	835
10 d	1282	1279	1275	1248	1247	1253	1254	1262	1264	1266	1265	1271	1271	1276	1282	1294	1305	1304	1303	1303	1302	1298	1301	1320	1307	1282	761
11 q	1299	1295	1294	1293	1293	1290	1289	1289	1288	1287	1286	1287	1287	1288	1282	1286	1288	1287	1286	1286	1287	1288	1288	1288	1287	1289	931
12	1286	1284	1283	1282	1284	1284	1283	1284	1285	1288	1286	1284	1284	1282	1281	1282	1290	1290	1304	1331	1349	1354	1354	1340	1327	1300	1197
13 d	1314	1305	1286	1282	1283	1284	1284	1285	1287	1285	1282	1282	1282	1290	1299	1320	1317	1307	1300	1295	1297	1304	1304	1297	1285	1295	1074
14	1284	1280	1276	1275	1276	1281	1281	1282	1285	1284	1281	1280	1280	1280	1281	1285	1288	1289	1290	1293	1294	1294	1295	1293	1286	1285	833
15 q	1280	1280	1280	1281	1281	1282	1282	1282	1286	1289	1289	1291	1291	1293	1293	1296	1297	1294	1292	1289	1288	1288	1288	1287	1287	1287	895
16 q	1287	1286	1282	1281	1280	1280	1279	1280	1284	1286	1283	1282	1282	1281	1282	1287	1290	1290	1287	1286	1286	1284	1286	1287	1287	1284	823
17 q	1286	1282	1282	1281	1281	1281	1280	1280	1280	1281	1281	1284	1284	1281	1281	1284	1287	1285	1284	1283	1283	1283	1282	1282	1282	1282	779
18	1282	1281	1281	1281	1280	1279	1278	1279	1280	1280	1276	1275	1275	1274	1277	1286	1290	1294	1295	1293	1292	1290	1287	1286	1284	1283	800
19	1284	1283	1282	1281	1281	1281	1280	1280	1281	1281	1281	1281	1281	1281	1281	1282	1283	1284	1285	1288	1288	1288	1287	1287	1282	1283	791
20	1274	1275	1277	1281	1281	1280	1279	1278	1279	1281	1280	1278	1278	1281	1281	1288	1289	1292	1290	1288	1287	1287	1286	1284	1282	1282	778
21 q	1281	1277	1278	1279	1279	1278	1278	1277	1275	1275	1274	1272	1272	1271	1275	1280	1281	1281	1281	1281	1282	1282	1285	1283	1277	1278	682
22	1276	1275	1276	1276	1277	1274	1275	1279	1281	1280	1277	1275	1275	1276	1283	1284	1285	1287	1287	1286	1287	1283	1282	1281	1281	1280	725
23	1281	1280	1280	1280	1281	1280	1280	1280	1278	1274	1270	1275	1275	1275	1272	1275	1281	1281	1282	1282	1283	1285	1288	1293	1293	1280	729
24	1289	1286	1280	1280	1280	1277	1277	1278	1276	1275	1271	1270	1270	1273	1274	1277	1281	1282	1281	1283	1290	1288	1285	1284	1284	1280	721
25 d	1285	1283	1284	1282	1282	1281	1281	1281	1281	1278	1273	1267	1267	1274	1278	1288	1285	1285	1290	1297	1312	1316	1333	1312	1299	1289	927
26	1294	1271	1269	1275	1273	1259	1257	1263	1273	1273	1275	1275	1275	1283	1278	1284	1284	1284	1281	1282	1283	1285	1285	1286	1284	1277	656
27	1285	1282	1282	1282	1283	1283	1282	1281	1282	1285	1281	1282	1282	1282	1284	1288	1297	1299	1331	1324	1331	1342	1324	1317	1310	1297	1119
28 d	1301	1291	1284	1289	1292	1291	1288	1284	1281	1280	1280	1283	1283	1285	1288	1301	1299	1293	1301	1304	1300	1295	1292	1291	1288	1291	981
29	1286	1273	1288	1270	1277	1277	1278	1281	1282	1280	1277	1274	1274	1278	1281	1290	1294	1293	1289	1288	1289	1289	1288	1287	1286	1282	769
30 d	1286	1282	1281	1283	1284	1282	1279	1272	1275	1275	1275	1274	1274	1275	1280	1283	1292	1293	1290	1289	1294	1297	1298	1297	1292	1285	828
31	1292	1291	1288	1286	1286	1285	1284	1284	1283	1282	1277	1276	1276	1281	1280	1281	1284	1285	1282	1284	1285	1284	1284	1286	1287	1284	817
Mean	1287	1284	1281	1280	1281	1281	1280	1280	1281	1281	1278	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	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 ESKDALEUIR

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.	°	h. m. γ	γ h. m.	γ							°A.
1	19 55 717	663 11 37	54	13 50 53.0	42.8 09 29	10.2	21 46 1301	1285 09 30	16	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			
16 q	06 26 705	660 11 07	45	13 40 51.4	42.9 09 33	8.5	16 07 1292	1278 06 30	14	1,1,1,1,1,1,1,0	7	0	84.6			
17 q	06 42 708	670 12 16	38	13 40 51.7	44.5 09 43	7.2	16 15 1287	1280 10 01	7	0,1,1,1,1,1,0,0	5	0	84.7			
18	05 56 718	670 11 40	48	14 54 55.0	44.4 07 03	10.6	16 50 1297	1273 12 31	24	0,1,1,2,3,1,1,0	9	0	84.6			
19	23 35 714	662 11 40	52	13 58 51.3	37.2 23 45	14.1	22 44 1289	1277 06 20	12	0,0,1,2,1,2,1,3	10	0	84.8			
20	00 29 709	666 13 11	43	12 55 50.8	41.5 01 01	9.3	16 30 1293	1270 00 44	23	2,1,1,2,1,1,1,1	10	0	85.2			
21 q	17 22 714	683 11 04	31	14 40 51.0	43.8 22 45	7.2	22 04 1285	1269 12 07	16	1,1,1,2,2,1,1,0,1	8	0	85.2			
22	05 24 716	668 13 12	48	13 55 53.6	43.8 10 04	9.8	19 10 1289	1273 05 30	16	1,2,1,2,3,2,2,0	13	0	85.3			
23	06 56 712	670 11 53	42	14 34 51.8	42.1 23 50	9.7	22 37 1295	1270 10 10	25	0,0,0,2,1,1,1,2	7	0	85.3			
24	02 46 722	684 12 05	38	14 57 51.7	37.2 03 13	14.5	00 00 1293	1270 10 50	23	3,3,2,2,2,1,2,1	16	0	85.3			
25 d	20 50 716	596 21 31	120	19 02 61.8	33.0 21 40	28.8	21 35 1351	1262 11 46	89	2,0,2,4,3,3,3,5	22	1	85.3			
26	05 44 715	652 08 33	63	08 47 51.1	37.7 03 44	13.4	00 11 1297	1256 06 04	41	3,3,3,3,2,1,1,0	16	0	85.3			
27	17 33 733	637 19 57	96	18 34 58.6	42.1 20 00	16.5	19 59 1352	1281 10 30	71	0,0,1,2,1,3,4,3	14	0	85.3			
28 d	06 18 726	643 13 50	83	14 34 57.4	40.6 01 22	16.8	18 18 1308	1277 10 04	31	3,2,3,3,3,2,3,2	21	1	85.3			
29	02 26 738	652 11 44	86	14 03 53.1	40.0 03 46	13.1	15 35 1295	1252 02 28	43	3,2,2,2,2,2,3,2	19	0	85.3			
30 d	06 53 721	644 11 29	77	07 09 54.5	40.0 23 07	14.5	21 34 1301	1269 11 11	32	1,1,3,4,2,2,3,3	19	0	85.3			
31	19 10 714	668 12 48	46	13 50 51.5	43.2 01 07	8.3	00 05 1293	1275 11 32	18	1,1,0,2,2,1,1,1	9	0	85.3			
Mean	- - 717	654 - -	63	- - 54.0	40.0 - -	14.0	- - 1305	1271 - -	33	-	-	0.19	85.0			

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

ALL DAYS

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

141 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.	+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																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-14.4	-11.0	-6.7	-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																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-12.1	-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</					

ALL DAYS

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

142 ESKDALEUIR

	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.	-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	-5.81	-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	-0.19	-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	-0.71	-0.55	+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	-1.54	-1.30	-0.86	-0.86	-0.58	-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)

143 ESKDALEUIR

	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.	-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	-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	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	-9.7	-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	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	+1.6	+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.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	0-1																							
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	-5.15	-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	-4.13	-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	-0.31	-0.73	-1.07	-1.08	-0.95	-1.02	-0.95	-0.86	-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	-1.52	-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.	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Feb.	-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
Mar.	+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
Apr.	+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
May	+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
June	+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
July	+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
Aug.	+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
Sept.	+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
Oct.	+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
Nov.	+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
Dec.	+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
Year	+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
Winter	+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
Equinox	+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
Summer	+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
Year	+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																								
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	+2.3	+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																								
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	-91.7	-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	+47.2	+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																								
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 ESKDALEUIR

	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	-1.95	-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.

	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	47.7	10.63	3.11	51.6	23.02	4.08	68.7
Apr.	69.9	66.6	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

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	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
	γ	'	γ	γ	+	γ	γ	'	γ
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	+10.1

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

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	16,000γ +			10° +			44,000γ +						
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	°	γ
Jan.	669	676	658	52·8	53·1	52·6	1269	1267	1270	16369	3146	69	47·1
Feb.	674	684	661	52·3	52·7	52·1	1271	1266	1278	16374	3145	69	46·9
Mar.	664	674	648	50·9	52·1	49·2	1276	1274	1276	16366	3136	69	47·6
Apr.	667	682	627	50·3	51·3	48·2	1270	1271	1260	16369	3134	69	47·4
May	672	685	639	50·4	50·3	49·8	1277	1273	1264	16375	3135	69	47·1
June	688	693	677	49·9	49·6	50·3	1274	1273	1273	16391	3136	69	46·0
July	688	691	683	49·5	49·6	49·7	1275	1272	1276	16391	3134	69	46·0
Aug.	686	695	677	49·3	49·1	49·3	1274	1268	1280	16389	3133	69	46·1
Sept.	677	684	663	48·5	48·8	48·4	1282	1279	1285	16381	3127	69	46·9
Oct.	679	692	660	48·1	48·2	47·3	1279	1274	1283	16383	3126	69	46·7
Nov.	671	684	638	47·1	47·5	45·9	1290	1285	1283	16376	3120	69	47·5
Dec.	691	691	687	47·3	47·3	47·7	1286	1284	1288	16396	3124	69	46·1
Year	677	686	660	49·7	50·0	49·2	1277	1274	1276	16380	3133	69	46·8

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 Górczynski 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 millivolt-meter, 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 duller 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
	$^{\circ}\text{A.}$	$^{\circ}\text{A.}$	$^{\circ}$	$^{\circ}$	$^{\circ}\text{A.}$	$^{\circ}\text{A.}$	$^{\circ}$	$^{\circ}$	$^{\circ}\text{A.}$	$^{\circ}\text{A.}$	$^{\circ}$	$^{\circ}$	$^{\circ}\text{A.}$	$^{\circ}\text{A.}$	$^{\circ}$	$^{\circ}$
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

105

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	09.7	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

PRESSURE AT STATION LEVEL

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

155 KEW OBSERVATORY: $h_b = 10.4$ m.

	Hour G.M.T.																								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
	<i>millibars</i>																									
Jan.	10.01	09.85	09.83	09.81	09.73	09.52	09.39	09.69	09.97	10.27	10.48	10.38	09.99	09.77	09.67	09.75	09.91	10.01	10.05	10.17	10.25	10.33	10.30	10.19	10.11	09.97
Feb.	23.31	23.21	23.13	22.97	22.92	22.97	22.99	23.12	23.38	23.51	23.62	23.60	23.38	23.14	22.85	22.71	22.74	22.84	23.14	23.35	23.42	23.48	23.45	23.41	23.35	23.19
Mar.	14.28	14.22	14.10	13.90	13.83	13.96	14.15	14.41	14.67	14.83	14.74	14.65	14.53	14.18	13.79	13.57	13.45	13.57	13.83	14.07	14.32	14.40	14.40	14.34	14.32	14.18
Apr.	14.58	14.44	14.27	14.11	13.99	14.09	14.28	14.73	14.53	14.56	14.52	14.29	14.05	13.84	13.51	13.23	13.16	13.15	13.29	13.64	14.02	14.19	14.28	14.34	14.34	14.03
May	20.77	20.67	20.57	20.48	20.53	20.75	20.88	21.29	21.06	21.00	20.93	20.72	20.42	20.09	19.80	19.51	19.37	19.27	19.36	19.59	20.02	20.51	20.69	20.80	20.83	20.37
June	17.36	17.23	17.12	16.97	16.91	17.00	17.07	17.15	17.23	17.13	17.07	16.94	16.77	16.60	16.53	16.42	16.30	16.17	16.19	16.30	16.47	16.80	16.88	16.90	16.79	16.80
July	13.20	12.96	12.71	12.51	12.47	12.53	12.72	12.85	12.88	12.87	12.85	12.81	12.78	12.79	12.77	12.74	12.69	12.77	12.90	13.11	13.38	13.76	13.89	13.90	13.83	12.96
Aug.	09.30	09.20	08.97	08.73	08.66	08.73	08.79	08.97	09.12	09.21	09.27	09.17	09.13	09.04	08.88	08.73	08.72	08.65	08.70	08.95	09.27	09.38	09.47	09.37	09.30	09.01
Sept.	13.87	13.76	13.54	13.39	13.29	13.34	13.57	13.82	14.05	14.28	14.29	14.22	13.98	13.77	13.63	13.43	13.26	13.30	13.39	13.64	13.91	13.96	13.94	13.89	13.74	13.73
Oct.	20.33	20.27	20.13	20.00	20.97	20.05	20.14	20.46	20.70	20.81	20.81	20.72	20.43	20.14	19.91	19.73	19.67	19.89	20.22	20.38	20.54	20.71	20.83	20.77	20.78	20.33
Nov.	20.26	20.02	19.92	19.77	19.68	19.63	19.66	19.89	20.14	20.31	20.39	20.30	20.08	19.84	19.67	19.52	19.63	19.78	19.99	20.10	20.18	20.26	20.18	20.16	20.02	19.97
Dec.	17.47	17.35	17.28	17.17	16.98	16.83	16.78	16.71	16.85	16.97	17.09	16.89	16.59	16.15	15.89	15.85	15.87	16.08	16.24	16.38	16.53	16.69	16.75	16.84	16.83	16.66
Annual	16.19	16.05	15.92	15.77	15.70	15.74	15.83	16.01	16.17	16.27	16.30	16.18	15.97	15.74	15.53	15.39	15.36	15.41	15.57	15.76	15.98	16.16	16.25	16.20	16.15	15.89

The initial 9 or 10 of the value is omitted, i.e. 1001.42 is printed 01.42.

PRESSURE REDUCED TO MEAN SEA LEVEL

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

156 KEW OBSERVATORY: $h_b = 10.4$ m.

	Hour G.M.T.																								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	
	<i>millibars</i>																									
Jan.	11.30	11.15	11.13	11.11	11.02	10.81	10.68	10.98	11.27	11.57	11.77	11.67	11.28	11.06	10.96	11.04	11.20	11.30	11.34	11.46	11.54	11.62	11.60	11.49	11.41	11.26
Feb.	24.64	24.55	24.47	24.31	24.26	24.31	24.33	24.46	24.72	24.85	24.95	24.93	24.71	24.46	24.17	24.03	24.06	24.17	24.47	24.68	24.75	24.81	24.78	24.74	24.68	24.52
Mar.	15.57	15.52	15.40	15.20	15.13	15.26	15.45	15.71	15.97	16.12	16.03	15.93	15.81	15.46	15.06	14.84	14.72	14.85	15.11	15.35	15.61	15.69	15.69	15.63	15.61	15.47
Apr.	15.87	15.74	15.57	15.41	15.29	15.39	15.58	16.03	15.82	15.85	15.80	15.57	15.32	15.11	14.78	14.50	14.43	14.42	14.56	14.92	15.30	15.48	15.57	15.63	15.63	15.32
May	22.05	21.95	21.85	21.77	21.82	22.04	22.16	22.57	22.33	22.27	22.19	21.98	21.67	21.34	21.05	20.76	20.62	20.52	20.61	20.84	21.28	21.78	21.96	22.08	22.11	21.64
June	18.63	18.50	18.39	18.24	18.18	18.27	18.28	18.42	18.50	18.40	18.33	18.19	18.02	17.85	17.78	17.67	17.55	17.41	17.44	17.55	17.72	18.06	18.14	18.16	18.05	18.06
July	14.53	14.21	13.97	13.77	13.72	13.79	13.97	14.10	14.13	14.12	14.09	14.05	14.02	14.02	14.00	13.97	13.91	14.00	14.13	14.35	14.62	15.00	15.14	15.15	15.08	14.20
Aug.	10.55	10.45	10.23	09.99	09.92	09.99	10.05	10.23	10.37	10.46	10.51	10.41	10.37	10.28	10.12	09.97	09.97	09.89	09.94	10.20	10.52	10.63	10.72	10.52	10.55	10.26
Sept.	15.13	15.02	14.80	14.65	14.55	14.60	14.83	15.08	15.31	15.54	15.54	15.46	15.22	15.01	14.87	14.67	14.50	14.54	14.64	14.89	15.16	15.21	15.20	15.14	15.00	15.14
Oct.	21.61	21.56	21.42	21.29	22.26	21.34	21.43	21.75	21.99	22.09	22.09	21.99	21.70	21.41	21.19	20.99	20.94	21.16	21.50	21.66	21.82	21.99	22.12	22.06	22.07	21.60
Nov.	21.56	21.32	21.22	21.07	20.98	20.93	20.96	21.19	21.44	21.61	21.69	21.59	21.37	21.13	20.96	20.81	20.92	21.07	21.29	21.39	21.47	21.56	21.48	21.46	21.32	21.27
Dec.	18.76	18.64	18.57	18.47	18.28	18.13	18.08	18.01	18.15	18.26	18.38	18.18	17.88	17.43	17.17	17.13	17.17	17.37	17.53	17.67	17.82	17.98	18.04	18.13	18.13	17.95
Annual	17.47	17.33	17.21	17.05	16.69	17.03	17.11	17.29	17.45	17.55	17.58	17.45	17.24	17.01	16.80	16.66	16.63	16.68	16.84	17.03	17.26	17.43	17.53	17.48	17.43	17.17

The initial 9 or 10 of the value is omitted, i.e. 1001.42 is printed 01.42.

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

TEMPERATURE

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

157 KEW OBSERVATORY: North-wall screen: $h_t = 3.0$ m.

	Hour G.M.T.																									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	
	degrees Absolute																									
Jan.	77.34	77.32	77.20	76.98	77.03	77.09	77.11	76.98	77.01	77.18	77.61	78.15	78.58	78.61	78.77	78.75	78.44	78.07	77.88	77.60	77.51	77.54	77.42	77.21	77.07	77.63
Feb.	72.51	72.12	72.09	71.96	71.82	71.65	71.75	71.69	71.89	72.44	73.01	73.88	74.39	74.67	74.94	74.88	74.65	74.33	74.02	73.70	73.40	73.30	73.03	72.81	72.54	73.11
Mar.	78.63	78.44	78.19	77.89	77.65	77.51	77.40	77.43	78.15	79.19	80.29	81.08	81.93	82.42	82.98	83.06	82.92	82.24	81.38	80.54	79.75	79.47	79.00	78.72	78.57	79.84
Apr.	78.46	77.95	77.77	77.44	77.27	77.14	77.50	78.14	79.14	80.13	81.33	82.27	82.94	83.45	83.77	83.86	83.68	83.40	82.79	81.80	80.86	80.30	79.64	79.24	78.63	80.43
May	83.60	82.98	82.55	82.15	81.95	81.96	83.06	83.93	85.15	86.31	87.35	88.32	89.03	89.83	90.27	90.36	90.56	90.27	89.84	88.72	87.32	86.21	85.13	84.46	83.75	86.32
June	85.44	85.05	84.78	84.49	84.41	84.61	85.04	85.53	86.31	87.00	87.61	88.41	88.87	89.41	89.63	89.64	89.81	89.62	89.50	88.87	88.09	87.23	86.38	85.92	85.53	87.15
July	88.17	87.69	87.37	87.12	86.87	86.93	87.51	88.08	88.80	89.53	90.21	90.85	91.38	91.89	92.39	92.34	92.65	92.40	92.22	91.51	90.56	89.77	89.06	88.47	88.05	89.74
Aug.	86.23	85.87	85.63	85.52	85.34	85.28	85.59	86.18	86.92	87.68	88.20	88.85	89.44	89.95	90.15	90.30	90.24	89.80	89.24	88.44	87.67	87.16	86.67	86.35	86.12	87.61
Sept.	87.00	86.81	86.67	86.49	86.38	86.29	86.33	86.50	87.24	88.16	88.95	89.75	90.15	90.63	90.83	90.78	90.65	90.26	89.46	88.73	88.15	87.83	87.42	87.23	87.05	88.28
Oct.	82.00	81.81	81.89	81.88	81.76	81.54	81.54	81.34	81.94	82.79	83.65	84.49	85.14	85.58	85.90	85.95	85.64	84.98	84.07	83.52	83.06	82.88	82.30	82.00	81.75	83.22
Nov.	79.17	78.99	78.85	78.78	78.77	78.68	78.71	78.61	78.70	79.21	79.84	80.46	80.99	81.41	81.50	81.40	81.01	80.49	80.11	79.88	79.71	79.52	79.36	79.22	79.15	79.72
Dec.	79.39	79.36	79.29	79.27	79.30	79.20	79.31	79.35	79.37	79.62	79.91	80.30	80.49	80.76	80.94	80.84	80.66	80.37	80.23	80.08	79.96	79.93	79.71	79.61	79.48	79.89
Annual	81.50	81.24	81.06	80.87	80.75	80.70	80.94	81.19	81.76	82.48	83.23	83.94	84.49	84.93	85.21	85.23	85.12	84.35	84.27	83.65	83.05	82.63	82.13	81.81	81.51	82.79

TEMPERATURE

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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
	degrees Absolute																	
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	87.6	91.7	85.2	88.3	86.4	79.6	83.2	82.1	77.0	79.7	81.6	77.7	79.5
								Annual		86.2	79.4	82.8						

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.

	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	80.9	8.4	59.2	2.4	77.7	8.2	69.7	6.7	75.4	10.6	66.0	11.8	80.5	14.5	87.8	14.2	79.5	11.0	97.5	14.5	74.7	7.3	94.2	9.1
2	76.7	7.1	65.4	2.7	80.2	11.3	71.7	7.0	71.6	9.8	70.6	12.0	81.7	14.4	72.5	13.4	86.8	14.8	87.3	13.4	88.5	10.2	88.6	9.1
3	88.0	6.7	69.1	3.6	92.8	11.5	66.6	7.3	79.8	11.3	68.0	10.7	83.5	14.5	80.3	13.7	85.0	13.1	82.2	11.3	84.6	10.3	89.6	10.6
4	93.5	6.5	76.0	4.3	66.7	7.6	60.0	5.9	79.9	12.1	79.3	12.1	81.9	15.0	84.2	12.5	90.5	13.5	77.0	9.1	79.2	9.3	85.6	10.4
5	97.9	6.3	85.8	7.8	66.1	6.2	76.2	7.7	76.0	12.2	57.7	8.9	80.5	15.8	80.5	12.5	91.5	17.0	75.0	8.4	79.4	9.2	82.6	10.4
6	95.7	6.9	88.6	8.6	86.1	8.1	62.8	5.1	67.5	12.0	69.8	10.2	64.3	12.9	85.7	13.3	90.0	15.2	66.4	7.3	89.0	9.0	81.5	10.4
7	94.2	6.8	81.3	6.8	75.3	6.8	68.6	6.5	64.7	10.6	75.5	10.4	77.0	16.9	77.1	13.4	80.1	13.3	77.5	8.8	86.5	8.4	93.1	9.6
8	75.6	5.2	89.5	8.3	69.6	5.7	74.3	8.2	74.6	12.4	80.1	9.9	74.9	18.6	73.4	13.6	79.0	13.1	93.9	12.4	76.9	9.1	94.9	10.4
9	83.4	5.4	68.5	4.1	63.6	4.8	62.2	7.4	77.1	11.6	78.4	10.2	79.7	16.6	77.0	16.4	91.7	15.2	91.1	12.6	85.5	10.9	93.3	10.2
10	89.2	7.3	72.3	3.8	58.5	4.5	60.9	8.8	61.3	9.4	87.4	11.5	68.0	12.3	87.1	17.4	93.1	16.3	85.9	10.5	91.7	10.7	89.8	10.2
11	79.3	7.6	68.9	3.3	78.2	5.6	76.4	9.0	80.8	12.0	88.8	15.1	64.3	11.9	78.3	14.8	87.3	14.8	80.4	10.9	87.7	9.3	88.6	11.0
12	92.2	8.4	79.3	5.2	77.3	5.6	83.5	9.1	60.7	8.5	72.2	13.9	67.3	11.0	73.3	12.6	75.0	12.2	89.6	10.4	84.9	8.7	86.9	10.8
13	88.7	6.6	66.3	4.4	72.5	5.1	93.6	11.9	65.3	9.5	64.2	9.6	90.3	14.1	78.2	13.9	85.3	17.9	90.6	10.8	93.3	8.5	72.4	7.3
14	89.5	8.5	68.0	3.6	69.0	5.2	88.3	8.1	66.0	9.9	64.8	9.1	93.0	15.0	63.0	10.6	76.7	14.4	92.3	11.0	84.9	8.2	83.3	9.4
15	75.2	6.9	61.9	3.8	74.3	5.2	66.1	6.2	58.7	9.3	62.5	8.9	86.4	15.6	76.3	13.1	83.5	14.2	92.5	12.2	82.9	7.7	84.7	10.7
16	88.5	7.5	74.2	4.7	74.3	5.6	68.0	6.4	64.0	10.9	87.6	11.7	80.9	15.5	84.7	14.6	76.6	12.9	93.1	14.6	80.2	8.6	84.8	11.4
17	93.6	7.6	75.7	4.7	70.9	7.3	78.6	7.1	57.4	8.3	87.7	12.5	80.5	15.3	85.5	16.0	72.9	11.4	87.5	12.8	85.7	8.5	86.0	10.4
18	68.2	5.6	71.1	4.0	68.8	7.5	65.2	5.9	55.9	6.7	73.9	10.9	80.5	15.6	86.5	16.0	75.9	12.5	95.6	13.9	82.3	8.1	90.1	10.5
19	76.7	6.4	79.2	3.9	77.7	7.3	61.4	5.7	59.9	6.9	78.5	14.3	83.8	16.1	83.1	14.6	84.3	14.8	90.8	12.2	83.5	8.2	97.0	8.4
20	77.9	8.6	80.0	3.9	80.3	9.0	66.9	6.6	55.0	7.2	65.2	10.7	91.3	15.5	74.9	12.4	88.8	15.3	84.4	13.5	83.1	8.2	95.6	7.8
21	79.3	7.6	71.6	3.6	78.8	8.9	71.2	6.9	52.2	7.6	73.8	12.7	83.3	14.3	75.6	12.0	86.9	16.4	85.2	11.8	83.3	6.8	94.4	6.9
22	70.8	6.5	71.5	3.8	77.9	8.7	66.9	6.7	52.3	8.9	72.4	13.1	83.3	14.8	80.4	12.8	82.4	17.7	80.0	11.7	88.4	5.6	91.1	5.9
23	89.1	7.8	71.3	3.7	60.5	7.9	54.4	5.7	47.1	8.9	75.2	14.1	72.7	14.7	87.4	14.0	80.7	18.1	82.3	12.4	81.7	5.3	92.4	7.1
24	77.3	5.7	72.7	3.8	72.2	9.2	71.1	7.6	68.7	10.7	77.2	13.9	76.4	14.8	77.3	12.3	84.0	18.0	80.3	11.3	79.0	5.5	84.5	6.2
25	79.3	5.5	71.3	4.0	76.3	9.2	68.5	8.0	60.2	8.2	65.1	12.2	73.1	18.0	83.7	12.2	90.5	16.9	74.7	7.6	86.2	9.3	74.6	4.9
26	90.0	9.7	76.8	5.1	69.0	9.1	73.7	7.9	63.8	8.7	53.7	10.7	69.5	16.7	80.9	12.7	88.5	15.1	66.9	5.8	79.7	10.4	91.7	6.2
27	85.3	8.8	78.9	5.3	71.6	9.5	66.1	6.6	52.2	7.4	59.3	11.2	69.7	17.1	88.5	13.7	88.4	13.9	75.9	7.4	66.4	7.8	87.4	5.8
28	92.5	9.6	84.5	7.9	67.0	6.9	62.5	6.4	60.1	12.0	70.0	12.5	86.6	17.1	75.9	11.9	84.8	15.4	85.4	8.5	75.4	6.7	94.3	9.2
29	95.3	11.0	81.6	8.9	75.0	8.5	61.4	6.5	84.2	13.4	83.0	14.3	86.4	13.9	84.4	11.8	79.8	13.2	70.0	7.5	63.2	4.9	90.1	9.3
30	94.7	9.5			75.2	7.6	69.3	8.0	71.6	12.9	72.6	13.6	63.3	10.2	85.6	11.8	86.8	13.9	71.6	6.7	66.6	4.8	87.2	9.5
31	78.0	5.1			71.0	6.8			61.6	12.2			63.4	10.5	71.4	9.9			70.8	6.8			90.4	9.2
Mean*	85.1	7.3	74.5	4.8	73.4	7.4	69.5	7.2	62.3	10.1	72.7	11.8	77.9	14.9	80.0	13.4	84.2	14.7	83.0	10.6	81.8	8.2	88.4	9.0

*Mean of the column.

RELATIVE HUMIDITY

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

160 KEW OBSERVATORY: $h_t = 3.0$ m.

	Hour G. M. T.																									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	Mean*
	per cent.																									
Jan.	87.5	87.8	88.2	89.2	89.7	89.5	89.5	89.3	88.5	87.3	86.1	84.2	82.5	81.6	79.5	78.5	79.5	80.4	81.7	83.5	83.9	83.5	85.0	85.5	86.5	85.1
Feb.	78.0	78.6	78.2	77.8	77.9	78.3	78.8	80.1	80.2	79.5	76.5	72.1	69.1	68.3	65.9	66.0	67.2	69.2	71.0	72.5	74.1	75.0	76.2	77.0	78.3	74.5
Mar.	79.7	80.7	82.0	82.9	84.0	84.9	84.6	85.2	81.0	76.1	71.0	66.7	63.0	60.1	57.7	57.7	58.1	61.7	66.2	70.4	74.3	74.7	78.3	79.9	80.1	73.4
Apr.	80.8	83.9	84.8	86.0	86.6	86.7	83.9	82.3	76.7	71.7	64.8	59.2	55.8	52.7	52.1	51.7	52.8	53.3	55.4	61.4	66.6	69.1	74.3	76.3	80.9	69.5
May	77.3	80.1	82.7	84.5	86.3	86.7	81.0	76.8	71.6	65.4	60.2	55.5	52.3	49.4	48.3	48.9	47.7	47.3	48.2	53.7	58.7	63.6	69.0	73.0	76.7	62.3
June	81.7	83.5	84.9	86.0	85.9	84.3	81.1	78.3	74.0	71.1	67.8	65.1	63.7	61.9	61.0	62.2	61.2	62.4	63.0	65.9	68.7	73.5	77.9	80.0	82.1	72.7
July	87.4	89.2	90.8	91.1	91.4	90.9	87.2	84.3	81.0	77.8	75.4	72.5	69.2	67.3	64.5	65.5	65.1	65.6	66.7	69.4	73.8	77.2	81.3	85.4	87.5	77.9
Aug.	88.7	90.2	91.2	91.7	92.6	93.2	90.0	87.2	83.4	79.7	76.1	72.7	69.9	65.7	64.7	66.5	65.1	67.0	70.7	75.7	81.0	83.1	86.9	87.4	88.7	80.0
Sept.	90.1	91.4	91.9	92.6	92.9	92.7	91.9	91.8	88.9	84.7	79.9	76.1	75.8	74.0	72.6	72.4	72.9	75.1	79.0	82.8	85.3	86.9	89.1	90.0	90.8	84.2
Oct.	89.5	90.0	89.8	89.2	89.5	90.9	89.3	90.7	88.0	84.9	81.3	77.2	73.8	72.0	71.2	70.9	71.3	74.7	79.4	83.3	84.9	85.3	87.5	88.4	88.7	83.0
Nov.	84.8	85.9	86.8	87.4	86.5	86.3	86.4	86.1	86.2	84.4	82.5	79.3	75.9	73.2	71.8	71.9	73.8	77.7	80.1	81.5	82.4	83.1	84.0	84.8	85.2	81.8
Dec.	88.3	88.8	89.5	90.0	89.9	90.6	90.2	90.5	90.7	89.2	89.0	87.3	86.3	86.1	85.9	86.2	86.5	87.5	87.8	88.1	88.1	88.5	88.3	88.7	88.5	88.4
Annual	84.5	85.8	86.8	87.4	87.8	88.0	86.2	85.3	82.5	79.3	75.9	72.4	69.8	67.7	66.3	66.5	66.8	68.5	70.1	74.0	76.9	78.7	81.5	83.1	84.5	78.0

VAPOUR PRESSURE

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

161 KEW OBSERVATORY: $h_t = 3.0$ m.

	Hour G.M.T.																								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		
	millibars																										
Jan.	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.4	7.5	7.4	7.3	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.2
Feb.	4.6	4.5	4.5	4.4	4.4	4.3	4.4	4.5	4.5	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6	
Mar.	7.3	7.3	7.2	7.2	7.2	7.2	7.1	7.1	7.1	7.2	7.3	7.2	7.2	7.1	7.1	7.1	7.1	7.2	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.2	
Apr.	7.3	7.3	7.3	7.2	7.2	7.1	7.1	7.2	7.2	7.2	7.1	6.9	6.8	6.7	6.7	6.7	6.8	6.7	6.7	7.0	7.1	7.1	7.3	7.3	7.4	7.0	
May	9.9	9.8	9.9	9.8	9.9	9.9	10.0	10.0	10.1	10.0	9.8	9.7	9.5	9.4	9.5	9.7	9.6	9.3	9.3	9.6	9.6	9.7	9.8	9.9	9.9	9.7	
June	11.8	11.7	11.7	11.7	11.6	11.5	11.4	11.4	11.3	11.4	11.3	11.4	11.5	11.6	11.6	11.8	11.7	11.8	11.8	11.9	11.8	11.9	12.0	11.9	11.9	11.7	
July	15.1	14.9	14.9	14.7	14.5	14.5	14.4	14.4	14.5	14.6	14.8	14.8	14.6	14.7	14.5	14.7	14.9	14.8	14.8	14.8	14.8	14.8	14.8	15.0	15.0	14.7	
Aug.	13.5	13.4	13.3	13.3	13.3	13.3	13.1	13.2	13.3	13.3	13.2	13.1	13.1	12.7	12.7	13.1	12.8	12.8	13.1	13.3	13.5	13.4	13.6	13.4	13.4	13.2	
Sept.	14.4	14.4	14.4	14.3	14.3	14.2	14.1	14.2	14.4	14.6	14.5	14.5	14.8	14.9	14.8	14.7	14.7	14.8	14.8	14.8	14.7	14.7	14.6	14.6	14.6	14.6	
Oct.	10.3	10.2	10.2	10.2	10.1	10.1	9.9	10.0	10.1	10.3	10.4	10.5	10.4	10.5	10.6	10.6	10.4	10.5	10.5	10.6	10.5	10.4	10.3	10.1	10.0	10.3	
Nov.	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.8	7.9	8.0	8.2	8.2	8.1	8.1	8.0	7.9	7.9	8.0	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0	
Dec.	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.7	8.7	8.9	8.7	8.9	8.9	9.1	9.2	9.2	9.1	9.0	8.9	8.8	8.8	8.8	8.7	8.7	8.6	8.8	
Annual	9.4	9.4	9.3	9.3	9.3	9.2	9.2	9.3	9.3	9.4	9.5	9.5	9.5	9.5	9.4	9.5	9.4	9.2	9.4	9.5	9.5	9.4	9.4	9.4	9.4	9.4	

RAINFALL

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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	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	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	...	...	...	...	...	...	9.4	16.3	...	...	...	...	...	...	...	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	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	Max. rate	Amount	Dura- tion	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: $h_p = 5.5 \text{ m.} + 0.53 \text{ m.}$

	Hour G.M.T.																								
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	<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: $h_p = 5.5 \text{ m.} + 0.53 \text{ m.}$

	Hour G.M.T.																								
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	<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	2.5	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

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166 KEW OBSERVATORY: h_s (height of recorder above ground) = 13.3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation
	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 pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation	Total for day	Per cent. of pos- sible	Solar rad- iation
	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										3.91		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	19		
Feb.	-	-	-	...	0.4	4.3	6.2	10.6	10.5	10.5	8.3	7.0	4.7	1.4	...	-	-	-	63.9	22		
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	39		
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	35		
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	54		
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	30		
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	35		
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	37		
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	29		
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	34		
Nov.	-	-	-	-	...	2.6	6.2	7.1	9.3	11.3	9.3	6.9	4.8	0.1	-	-	-	-	57.6	22		
Dec.	-	-	-	-	...	...	0.9	1.2	2.0	1.4	1.2	1.9	0.5	...	-	-	-	-	9.1	4
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	32		

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			
	joules per square centimetre																				
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

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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	22
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	1.5	10	5.9	16	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.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
		metres per second																								
Jan.	4.0	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	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	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	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	4.3	3.8	3.4	2.9	2.7	2.6	3.7	3.7	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	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	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	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	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	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	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	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	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	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	Veer from N.	Speed	Hour ended	Speed	Date
Jan.	-	hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h.m.
Feb.	-	0	4	12	193	393	146	0	240	12	21 23	25	10 22 20
Mar.	-	0	0	0	214	367	115	0	070	10	9 16	21	29 17 40
Apr.	-	0	1	3	185	489	67	0	100	11	28 13	21	4 05 50
May	-	0	0	0	161	425	134	0	030	10	5 20	19	5 18 40
June	-	0	0	0	118	501	125	0	080	10	27 17	19	10 12 35
July	-	0	0	0	147	499	74	0	200	9	6 14	21	8 14 25
Aug.	-	0	2	10	175	427	132	0	220	15	29 13	30	29 14 30
Sept.	-	0	2	8	233	404	99	0	220	13	18 13	24	18 12 25
Oct.	-	0	1	5	194	431	90	0	220	12	28 06	22	28 06 15
Nov.	-	0	1	1	189	398	156	0	340	11	29 21	22	25 13 05
Dec.	-	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 30cm. 122cm.	FEBRUARY 30cm. 122cm.	MARCH 30cm. 122cm.	APRIL 30cm. 122cm.	MAY 30cm. 122cm.	JUNE 30cm. 122cm.	JULY 30cm. 122cm.	AUGUST 30cm. 122cm.	SEPTEMBER 30cm. 122cm.	OCTOBER 30cm. 122cm.	NOVEMBER 30cm. 122cm.	DECEMBER 30cm. 122cm.
	<i>degrees Absolute</i>											
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	82.6 82.6	86.2 85.3	91.2 86.9	89.2 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 88.1	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	85.7 83.4	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 79.4	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
	<i>degrees Absolute</i>											
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	76.7	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	67.9	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 $T(^{\circ}\text{K.}) = t(^{\circ}\text{C.}) + 273.16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

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

F = Potential gradient, unit 1 v./cm. $\lambda+$ = Conductivity due to positive ions, unit 10^{-10} ohm. $^{-1}$ cm. $^{-1}$
 i = Air-earth current, unit 10^{-10} amp.cm. $^{-2}$

174 KEW OBSERVATORY																		
	JANUARY*			FEBRUARY*			MARCH*			APRIL*			MAY			JUNE		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	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	$\lambda+$	i	F	$\gamma+$	i	F	$\gamma+$	i	F	$\gamma+$	i	F	$\gamma+$	i	F	$\gamma+$	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

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	hr. 3.1	0	hr. ...	1	hr. 0.6	2	hr. 3.9	1	hr. 1.1	0	hr. ...
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	hr. 0.2	2	hr. 3.8	1	hr. 0.6	-	hr. ...	0	hr. ...	1	hr. 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.

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	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.
					volts per metre							
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.
					volts per metre							
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.					(a)	246	360	292	346
					(b)	231	346	287	336
					Annual means	(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†

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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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
	milligrams per cubic metre																										
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	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	0.12	0.13	0.12	0.15	0.19	0.24	0.24	0.22	0.19	0.17	0.15	28	
Apr.	0.15	0.13	0.13	0.12	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	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	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	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	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	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	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	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	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	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	118	