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AIR MINISTRY
METEOROLOGICAL OFFICE

THE OBSERVATORIES' YEAR BOOK

1953

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

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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 abridge 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 observations is reduced. Monthly tables of individual hourly values of meteorological elements are omitted, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility is also omitted. No major changes have been made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1953, 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, Air Ministry, Victory House, Kingsway, London, W.C.2.

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.

Atmospheric electricity

No changes were made in 1953.

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 1953 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
0.22	0.23	0.24	0.17	0.25	0.35	0.20	0.32	0.17	0.35	0.29	0.30	0.26

There were 12 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 4.20. Comparing the mean values for all days of 1953 with those for 1952 it is noted that H increased by 21 γ , D (west) decreased by 7'.1 and Z increased by 19 γ . The ranges between the extreme values recorded in 1953 were H 1,545 γ , D 3°55'.7 and Z 858 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					
	1953			Mean 1932-53			1953			Mean 1932-53		
	H	D	Z	H	D	Z	H	D	Z	H	D	Z
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	105	101	115	100	102	104	76	95	88	63	90	78
February	106	105	120	124	113	123	76	99	92	78	100	92
March	221	139	163	216	149	176	159	131	124	135	132	132
April	146	95	135	204	120	163	105	89	103	128	106	122
May	182	126	139	195	111	141	131	119	106	122	98	106
June	118	80	88	150	94	109	85	75	67	94	83	82
July	130	89	120	158	96	110	94	84	92	99	85	83
August	168	103	177	178	111	135	121	97	135	111	98	101
September	234	153	207	209	133	170	168	144	158	131	118	128
October	148	117	152	188	129	164	106	110	116	118	114	123
November	70	100	107	107	101	112	50	94	82	67	89	84
December	45	68	49	89	93	96	32	64	37	56	82	72
Winter	81	93	98	105	103	109	58	88	75	66	91	82
Equinox	187	126	164	204	134	168	134	119	125	128	119	126
Summer	149	99	131	170	103	123	107	93	100	106	91	92
Year	139	106	131	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, 1953			Percentage distribution					
	H	D	Z	H		D		Z	
				1953	1942-53	1953	1942-53	1953	1942-53
γ				%	%	%	%	%	%
0 - 9	0	0	0	0.0	0.0	0.0	0.0	0.0	0.3
10 - 19	4	0	23	1.1	1.4	0.0	0.4	6.3	6.8
20 - 29	27	8	34	7.4	4.9	2.2	2.3	9.3	10.5
30 - 39	30	13	36	8.2	6.3	3.6	4.0	9.9	9.3
40 - 49	31	39	34	8.5	7.5	10.7	7.3	9.3	7.2
50 - 59	37	43	16	10.2	9.3	11.8	10.0	4.4	6.2
60 - 69	22	42	14	6.0	9.1	11.5	12.3	3.8	5.1
70 - 79	30	33	18	8.2	8.6	9.1	10.5	4.9	4.4
80 - 89	24	26	18	6.6	7.4	7.1	9.2	4.9	3.9
90 - 99	22	27	12	6.0	5.8	7.4	7.0	3.3	3.4
100 - 109	10	17	9	2.7	4.3	4.7	5.6	2.5	3.3
110 - 119	12	14	13	3.3	3.5	3.8	4.0	3.6	2.9
120 - 129	7	17	7	1.9	2.9	4.7	3.6	1.9	2.6
130 - 139	11	12	8	3.0	2.2	3.3	3.1	2.2	2.6
140 - 149	7	11	9	1.9	2.4	3.0	2.9	2.5	2.3
150 - 159	4	7	6	1.1	1.6	1.9	1.8	1.6	2.0
160 - 169	9	8	4	2.5	1.5	2.2	1.9	1.1	1.8
170 - 179	7	11	7	1.9	1.1	3.0	1.4	1.9	1.4
180 - 189	5	4	7	1.4	1.1	1.1	1.5	1.9	1.4
190 - 199	3	4	11	0.8	1.0	1.1	1.1	3.0	1.5
200 +	63	29	79	17.3	18.3	8.0	10.0	21.6	21.1
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 3 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53
WITH 1953 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	'
	1953(%)	53.3	49.4	9.36	10.3	37.4	8.68	131.1	131.6	14.22
Winter	1932-53	106	77	88	118	75	83	118	79	90
	1953(%)	41.1	24.4	7.87	7.7	15.1	4.65	116.6	85.0	13.84
Equinox	1932-53	91	61	89	113	59	100	85	41	102
	1953(%)	68.8	59.2	10.94	12.9	42.3	9.54	168.9	193.4	18.89
Summer	1932-53	108	75	89	148	76	84	128	100	83
	1953(%)	53.0	72.6	12.72	17.0	57.5	12.77	134.0	156.9	15.61
		114	88	84	87	81	84	125	80	98

"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 1953

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	1.09	1.22	1.08	1.21	1.06	1.30	1.18	1.14	1.06	0.99	1.08	1.18
d	D	1.27	1.27	1.26	1.14	1.39	1.26	1.13	1.22	1.67	1.31	1.57	1.36
q	H	0.98	1.13	1.13	1.18	1.11	1.21	1.24	1.11	1.02	1.07	1.06	1.07
d	H	1.20	3.68	4.80	2.01	2.90	1.61	1.38	2.26	4.32	5.30	0.48	0.95
q	Z	1.45	1.28	1.12	1.51	0.89	0.84	0.78	0.75	1.28	0.92	1.44	1.54
d	Z	1.95	2.49	1.69	2.13	2.07	2.13	1.97	2.32	1.97	2.22	2.41	2.38

TABLE 5 - NOTEWORTHY MAGNETIC DISTURBANCES AT LERWICK

(a) Disturbances without S.C.'s

Serial Number	From			To			Range (γ)			Notes
	Date	Hour		Date	Hour		H	D	Z	
1a	Feb.	22	18	Feb.	23	03	442	338	403	Perhaps continuation of 8b
2a	Mar.	1	20	Mar.	3	05	811	452	390	
3a	Mar.	8	14	Mar.	9	04	1022	331	417	
4a	May	15	11	May	17	05	1245	770	736	
5a	Sept.	3	17	Sept.	4	07	1058	828	694	
6a	Oct.	16	15	Oct.	17	04	742	330	535	

(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. 5	05.46	Jan. 5	24	No	No	No	γ +7	γ -12	γ ?	359	197	218
2b	May 5	21.16	-	-	No	No	No	Not very well marked					
3b	June 29	07.36	June 30	10	Oscillatory						370	175	503
4b	July 23	08.08	July 24	02	Yes	Yes	No	-12	+20	0	393	228	377
5b	Aug. 23	00.24	Aug. 24	07	No	Yes	No	+23	-6	-6	462	196	623
6b	Sept. 15	02.59	-	-	Yes	Yes	No	+10	-10	0	Small		
7b	Sept. 18	16.09	Sept. 20	07	Yes	Yes	Yes	+20	-4	+4	1347	355	649
8b	Oct. 15	08.45	Oct. 16	04	No	No	No	+5	-6	-3	715	363	550
9b	Nov. 11	13.11	-	-	Yes	Yes	No	+12	-7	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	Feb. 20	16.04	16.08	16.10	+6	-4	-3	2	2	S.E.A. S.F. S.W.F. S.F. S.W.F.
2c	Mar. 13	14.50	14.52	14.56	+8	-7	0	1	0	
3c	Oct. 14	09.50	09.57	10.03	-4	+4	0	0	0	
4c	Oct. 14	14.23	14.28	14.32	0	-3	0	1	1	

S.F. = Solar Flare S.W.F. = Fade out 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 1.13				FEBRUARY, factor 1.19				MARCH, factor 1.19			
	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	476	125	(147)	174	-	-	-	220	374	246	399	354
2	85	49	174	45	156	152	171	259	197	241	93	59
3	98	165	165	223	73	147	-	147	-	-	137	-
4	90	112	162	-90	108	113	39	113	98	162	-	206
5	-455	99	221	117	108	98	393	-255	152	108	231	226
6	108	122	122	140	148	162	(148)	157	-	-	245	98
7	145	136	149	-22	197	108	197	138	83	127	113	93
8	77	91	-409	109	99	197	158	256	83	196	152	167
9	46	96	123	264	123	336	148	148	98	142	147	147
10	96	105	124	137	148	163	257	163	161	293	-	181
11	78	124	216	414	99	420	212	183	98	98	103	225
12	102	134	125	120	124	114	188	134	108	166	362	714
13	93	93	-180	-46	49	-10	-297	198	117	112	(235)	401
14	65	93	102	-353	104	238	208	297	201	196	245	245
15	117	126	(140)	425	84	99	223	163	308	298	323	225
16	75	127	94	141	84	124	139	35	196	342	(293)	(298)
17	108	155	-	-	84	124	134	149	249	147	372	-
18	231	104	-	137	149	119	-10	114	-	210	298	93
19	71	61	71	142	99	109	168	208	103	245	161	308
20	57	76	133	105	139	0	158	213	186	171	205	293
21	52	62	143	143	-634	-49	-124	198	259	259	435	582
22	91	105	119	134	133	-415	183	173	851	377	289	386
23	-81	-709	-48	148	-529	99	198	237	-	-	293	230
24	283	154	62	-144	148	188	232	25	98	147	181	137
25	87	96	72	173	123	163	272	484	108	162	201	137
26	96	-400	169	-342	158	198	158	89	-333	118	260	490
27	20	126	-275	411	690	173	173	237	20	93	64	-78
28	-	82	213	97	182	182	222	247	-	-	481	59
29	238	97	185	194	-	-	-	-	-	-	854	899
30	34	93	10	136	-	-	-	-	143	49	246	581
31	54	-454	-	-	-	-	-	-	133	153	197	148
(a)	113	107	135	180	144	159	190	185	184	187	263	285
(b)	83	58	78	107	91	123	152	168	163	184	224	279
Mean	(a) 134		(b) 81		(a) 169		(b) 133		(a) 230		(b) 213	

	APRIL, factor 1.20				MAY, factor 1.17				JUNE, 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	1094	182	-	335	125	70	95	80	-	-	-	-
2	138	99	-10	232	82	111	117	12	94	84	56	98
3	301	168	183	262	455	251	169	420	84	70	98	47
4	133	143	198	242	198	117	210	235	112	103	112	149
5	183	134	45	149	225	125	100	150	139	79	139	139
6	69	124	546	203	100	115	140	185	97	51	111	134
7	89	149	188	198	115	130	170	210	88	115	106	129
8	65	109	144	174	165	185	195	145	97	138	180	143
9	90	214	149	194	115	134	149	154	143	87	138	51
10	120	149	214	199	109	124	129	-	464	230	179	-
11	-30	215	165	200	-	-	174	139	229	87	87	82
12	145	175	185	165	129	124	114	203	274	183	46	462
13	90	165	150	155	119	119	149	247	315	337	137	-
14	100	140	195	215	109	149	198	178	-	-	155	182
15	105	155	155	185	10	198	-	1136	190	181	276	408
16	35	-830	165	800	306	242	468	636	362	158	226	276
17	250	155	-	-	197	226	177	15	645	767	298	419
18	-	110	5	150	98	83	137	128	405	293	351	810
19	120	150	135	140	98	118	118	59	269	368	696	629
20	110	140	50	135	-	49	307	59	269	874	632	551
21	150	185	120	115	107	97	97	63	178	169	312	723
22	60	115	100	210	258	238	306	389	400	488	448	444
23	90	100	95	-250	281	757	281	131	226	244	257	213
24	150	130	110	150	280	198	87	266	106	172	323	247
25	215	110	165	170	149	58	505	-5	132	353	344	137
26	95	100	135	130	163	196	206	149	343	264	242	396
27	105	50	940	210	153	143	143	181	386	263	329	307
28	75	-215	-950	100	152	190	166	342	355	175	201	263
29	185	275	315	150	-591	156	128	71	240	197	105	258
30	-90	205	-180	-	132	151	71	94	174	161	170	174
31	-	-	-	-	113	113	141	-211	-	-	-	-
(a)	162	148	194	206	162	166	182	217	243	239	233	291
(b)	115	94	149	186	142	170	179	168	232	236	242	296
Mean	(a) 177		(b) 136		(a) 182		(b) 165		(a) 251		(b) 251	

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 1.05				AUGUST, factor 1.05				SEPTEMBER, factor 1.10			
	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	96	261	152	196	86	99	0	159	110	161	119	73
2	230	143	130	130	112	43	168	155	367	225	161	165
3	65	139	74	100	169	160	185	286	106	151	78	170
4	95	86	82	186	221	35	169	91	92	87	129	138
5	121	177	168	194	104	100	78	52	92	221	179	212
6	241	133	116	120	83	174	131	118	106	285	120	225
7	107	99	193	172	149	109	149	258	230	221	179	368
8	133	141	223	21	661	254	166	88	414	478	446	55
9	73	137	162	115	430	558	88	132	74	193	92	166
10	94	107	119	141	92	79	132	75	111	92	120	88
11	72	115	170	149	123	48	308	541	-37	124	101	97
12	102	98	225	353	348	172	-	-35	74	46	97	124
13	-55	106	182	297	340	71	66	-137	60	87	124	152
14	144	352	297	445	425	71	182	452	106	92	124	166
15	85	211	140	381	444	351	244	422	124	235	263	364
16	106	148	85	97	307	138	27	169	258	277	258	470
17	114	140	127	123	89	232	335	384	300	184	189	203
18	85	211	296	338	175	58	94	67	203	332	240	383
19	-157	178	42	266	94	67	(220)	(139)	355	452	507	461
20	186	127	135	199	-	-	269	220	502	171	-46	212
21	381	182	224	453	-252	-	139	193	244	226	-212	148
22	496	585	348	521	627	144	122	59	254	373	171	258
23	445	242	Z+	178	122	86	113	113	157	263	290	258
24	72	115	191	221	136	285	511	231	295	152	217	369
25	480	234	340	-587	77	145	-122	159	143	152	203	101
26	456	383	Z+	256	82	182	182	182	106	134	212	738
27	273	141	299	184	91	127	137	137	157	106	152	161
28	141	111	171	128	96	137	310	-100	74	166	115	147
29	120	227	-77	240	174	114	187	315	101	-180	111	115
30	215	403	Z+	180	137	252	174	224	88	-32	341	341
31	107	180	129	129	142	183	197	362				
(a)	184	191	179	217	212	154	175	207	183	203	191	231
(b)	143	174	169	190	207	154	163	183	176	182	169	231
Mean	(a) 193 (b) 169				(a) 187 (b) 177				(a) 202 (b) 189			

	OCTOBER, factor 1.09				NOVEMBER, factor 1.06				DECEMBER, factor 1.11			
	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	240	175	171	184	121	215	308	-49	65	-148	30	52
2	129	138	124	161	40	-192	134	312	105	100	87	74
3	60	106	101	129	120	147	223	133	118	87	161	174
4	106	115	101	78	111	142	133	151	118	131	393	101
5	60	106	78	74	53	84	155	177	87	140	0	118
6	92	110	147	-	Z+	133	93	4	74	(131)	210	114
7	-	-	161	276	-26	229	-	-	79	149	176	176
8	152	152	69	193	285	215	514	44	106	75	97	110
9	55	60	147	193	-	254	-	-	167	224	176	158
10	-381	-106	161	184	175	-70	-	-	141	278	-119	-146
11	64	87	353	473	-	-	144	131	102	530	323	199
12	413	275	87	229	31	17	131	140	195	155	66	89
13	110	129	184	138	122	87	361	126	267	133	120	102
14	60	87	138	170	-	48	-	122	156	134	111	134
15	92	183	197	261	-	-	-26	347	197	89	139	107
16	115	137	289	325	-	-	152	191	58	170	255	448
17	137	289	128	69	-	-	117	-	103	144	121	135
18	82	137	160	224	-	-	78	338	149	122	135	-113
19	229	-46	183	137	69	78	74	121	23	158	172	181
20	160	260	-151	114	130	251	-	139	136	150	136	567
21	150	570	251	283	121	100	78	134	164	105	77	123
22	424	383	515	-	173	225	619	355	123	260	192	182
23	237	-	105	(259)	273	255	217	156	687	298	174	183
24	-	-	182	300	143	108	247	255	60	92	987	161
25	50	-263	91	104	217	160	130	139	46	92	124	138
26	122	195	227	177	191	0	126	139	115	115	129	-
27	181	136	-81	181	87	130	156	130	501	200	246	153
28	126	203	162	271	91	126	52	143	93	-	103	172
29	126	149	211	329	91	65	209	57	117	126	159	84
30	-	-	193	99	144	-	-	204	117	131	211	235
31	112	237	202	202					165	132	141	141
(a)	144	(a) 184	176	201	133	139	194	168	149	160	182	165
(b)	110	140	143	195	130	109	215	148	153	151	176	144
Mean	(a) 176 (b) 147				(a) 159 (b) 151				(a) 164 (b) 156			

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)

168	170	191	213
145	148	172	191
(a) 185		(b) 164	

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

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	Hour G.M.T.																								Non-cyclic change†	No. of days used	Mean
	0	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			
	volts per metre																										v./m.
	0a days only*																										
Jan.	-23	-42	-54	-51	-47	-46	-34	-25	-22	-26	-19	-4	-14	-19	-10	+21	+47	+85	+61	+71	+86	+42	+26	-3	-4	9	141
Feb.	-37	-60	-59	-55	-50	-51	-40	-51	-24	-11	-39	-25	-16	-6	+19	+47	+75	+94	+88	+64	+42	+43	+44	+7	-19	10	171
Mar.	-11	-32	-50	-53	-28	-24	-21	-32	-38	-8	+4	+11	+23	+8	+1	+11	+17	+32	+55	+41	+50	+32	+14	-3	+24	12	238
Apr.	-3	-3	-22	-24	-31	-19	-11	+18	+18	+1	-7	-18	-11	-3	-4	+6	+17	+23	+37	+37	+36	-8	-12	-17	+2	6	130
May	-17	-24	-8	-23	-9	-8	-1	0	-11	-22	-11	-14	-24	+2	-5	-1	+18	+22	+37	+42	+33	+16	+7	-1	-8	7	151
June	-31	-50	-46	-49	-8	+24	+21	+8	-5	-5	-19	-25	-20	-16	+20	-12	-30	+21	+61	+75	+51	+47	+3	-16	-17	15	272
July	+3	-6	-27	-10	0	+19	+22	+25	+2	+13	+12	+6	-21	-21	-17	-2	-3	-18	-20	-19	-8	+20	+26	+24	+44	11	167
Aug.	-1	+69	+139	+80	+140	+126	+115	+67	-5	-36	-66	-71	-85	-71	-40	-45	-65	-46	-28	-7	-38	-45	-51	-38	+26	7	234
Sept.	-33	-24	-26	-21	-24	-12	+12	+9	-9	+8	-5	-19	-26	-1	-4	-41	-12	+21	+47	+50	+69	+56	-1	-16	+14	12	235
Oct.	-36	-35	-50	-55	-49	-35	-15	-12	-21	-16	-14	-17	-18	+6	+27	+9	+15	+58	+101	+105	+70	+10	-2	-26	+64	6	178
Nov.	-7	-8	-23	-52	-57	-41	-38	-30	-19	-15	-14	-20	-2	+25	+51	+90	+73	+66	+57	+16	-2	-10	-20	-20	-16	5	191
Dec.	-43	-55	-50	-43	-40	-32	-37	+1	-2	+2	-2	+6	+20	+1	+5	+32	+29	+28	+3	+6	+81	+75	+33	-17	+42	6	170
Year	-20	-23	-23	-30	-17	-8	-2	-2	-11	-10	-15	-16	-16	-8	+4	+10	+15	+32	+42	+40	+39	+23	+6	-11	+13	106	190
Winter	-27	-41	-47	-50	-49	-43	-37	-26	-17	-13	-19	-11	-3	0	+16	+47	+56	+68	+52	+39	+52	+37	+21	-8	+1	30	168
Equinox	-21	-23	-37	-38	-33	-23	-9	-4	-13	-4	-5	-11	-8	+3	+5	-4	+9	+33	+60	+58	+56	+23	0	-15	+26	36	195
Summer	-11	-3	+15	-1	+31	+40	+39	+25	-5	-13	-21	-26	-37	-27	-11	-15	-20	-5	+13	+23	+9	+					
	1a and 2a days only*																										
Jan.	-69	-64	-61	-49	-42	-50	-25	-7	-92	+10	+8	+28	+34	+54	-8	+32	+104	+94	+102	+94	-19	-3					
Feb.	-39	-54	+3	-13	+9	+45	+118	+80	-29	-27	-55	-17	+26	+27	+31	+9	-13	+79	+51	-81	-109	-3					
Mar.	-3	-41	-44	-41	-29	-10	+6	+17	+36	+23	+5	+13	+21	+10	+11	+30	+5	+45	-2	+7	-38	-3					
Apr.	-15	-10	-35	-38	-17	+13	+20	+25	+18	+5	-19	-19	+1	+1	+17	+49	+17	+29	+9	+7	+9	-4					
May	-25	-14	-1	-41	-27	-32	-8	+14	-17	-23	-13	+8	+27	-4	-16	+49	+26	+32	+24	-2	+15	+13	+7	+7	-5	10	165
June	0	-19	-8	+18	+44	+54	0	-58	-48	-40	-33	+2	-10	+3	-6	-11	-2	-17	-32	+29	+54	+45	+15	+20	+70	6	196
July	-50	-46	+7	+64	+47	+90	+94	+7	-19	+6	-9	+16	+3	-2	-53	-65	-6	+25	+78	+81	-26	-52	-121	-69	+181	6	185
Aug.	-5	-22	-7	-11	-11	-31	-42	-43	-37	-20	-19	-9	-15	-9	-1	-8	+23	+41	+43	+62	+53	+57	+19	-9	-8	14	151
Sept.	+36	+23	-7	-22	+7	-32	-42	-1	-27	+17	0	-18	+30	-22	-3	-15	+4	+30	+49	+24	+4	-13	-40	+16	-10	8	151
Oct.	+2	-3	-31	-35	-29	-24	-46	-19	-6	+9	+5	-4	-7	-7	+7	+13	+20	+23	+3	+59	+36	+10	+15	+8	-38	5	113
Nov.	+14	+21	+32	+25	+6	-4	-12	-15	-56	-51	-44	+42	-4	+28	+13	-3	-63	+3	+29	+49	-36	-8	+34	0	+76	3	115
Dec.	-46	-38	-37	-70	-45	-68	-76	-15	+33	+34	+41	+62	+45	+27	+25	+54	+54	+32	+45	-4	+12	-17	+8	-54	-68	7	145
Year	-17	-22	-16	-18	-7	-4	-1	-1	-20	-5	-11	+9	+13	+9	+1	+11	+14	+35	+33	+27	-4	-9	-5	-12	+10	71	155
Winter	-35	-34	-16	-27	-18	-19	+1	+11	-36	-9	-13	+29	+25	+34	+15	+23	+21	+52	+57	+15	-38	-23	+14	-31	-37	18	129
Equinox	+5	-8	-29	-34	-17	-13	-15	+5	+5	+13	-2	-7	+11	-5	+8	+19	+11	+32	+15	+24	-3	-21	-9	+7	+7	17	161
Summer	-20	-25	-2	+7	+13	+20	+11	-20	-30	-19	-19	+4	+1	-3	-19	-9	+10	+20	+28	+43	+24	+16	-20	-13	+59	36	174

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	1b	0.8	-	hr.	0a	...	(2c)	hr.	1a	0.2	-	hr.
2	1b	1.6	0a	...	0a	...	1b	1.9	1a	1.2	1a	0.2
3	0a	...	(1a)	...	(1a)	...	1b	0.7	1a	0.1	1b	2.2
4	2a	3.7	1b	0.7	(1b)	0.2	1b	0.9	1a	0.1	0a	...
5	2b	6.3	1c	1.6	(0b)	...	1b	1.9	(1a)	-	0a	...
6	1b	0.9	1b	0.7	1c	1.7	1b	1.1	0a	...	1a	0.1
7	1a	0.8	1a	0.1	0a	...	1b	0.3	0a	...	0a	...
8	1a	2.3	1b	0.6	1b	0.4	1b	0.4	0a	...	0a	...
9	0a	...	2c	5.0	0a	...	1b	0.2	0a	...	1a	0.1
10	0a	...	1b	2.8	(1a)	-	2b	3.1	(1a)	-	(1a)	(0.3)
11	0a	...	1b	0.8	1b	0.1	2b	4.3	(1a)	0.1	(1a)	(0.3)
12	0a	...	0a	...	0a	...	1a	0.4	2b	3.7	2b	4.1
13	1b	2.5	2b	7.5	(0a)	...	1a	0.1	1a	0.2	(0a)	...
14	2b	4.7	0a	...	0a	...	0a	...	1a	0.3	(1a)	-
15	0a	...	0a	...	0a	...	0a	...	(1b)	-	0a	...
16	0a	...	0a	...	(1a)	-	2b	5.2	1b	0.5	1b	1.1
17	(2b)	-	0a	...	(1b)	-	(1b)	-	1b	1.5	1c	0.2
18	(1b)	1.0	(1b)	0.9	(1b)	-	(1b)	-	0a	...	0a	...
19	1a	0.6	0a	...	(0a)	...	0a	...	1a	0.5	0a	...
20	(1a)	-	1b	2.8	(0a)	...	0a	...	2b	3.1	0a	...
21	1a	1.1	2c	7.5	0a	...	0a	...	1b	1.6	1a	0.1
22	0a	...	2c	4.3	0a	...	0a	...	1b	1.0	0a	...
23	2b	10.9	2b	5.9	(1b)	-	1b	2.9	2b	5.3	0a	...
24	2b	9.8	1a	1.3	0a	...	1c	0.6	0a	...	1a	0.2
25	0a	...	0a	...	1a	0.1	1b	0.3	(2c)	-	0a	...
26	2a	5.4	0a	...	(1c)	-	1b	0.6	1a	0.1	1a	0.1
27	2b	4.9	1b	0.4	2b	4.4	1b	0.3	0a	...	0a	...
28	(1b)	-	0a	...	(2c)	-	2b	13.9	1a	0.2	0a	...
29	1b	0.8			2c	-	1b	0.7	1b	2.6	0a	...
30	2b	6.1			1b	1.6	(2b)	-	1a	1.3	0a	...
31	(2b)	-			1b	0.1			1b	2.4		
Total	32	64.2	22	42.9	20	8.6	30	39.8	28	26.0	14	9.0
No. of days used	31	27	27	26	31	22	30	26	31	27	29	28
Mean	1.03	2.4	0.81	1.7	0.65	0.4	1.00	1.5	0.90	1.0	0.48	0.3

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
1	0a	hr.	1b	2.3	1a	0.6	1b	2.5	2b	hr.	2b	hr.
2	0a	...	1a	0.1	1a	2.8	0a	...	2b	6.0	1a	1.5
3	0a	...	1a	0.3	0a	...	1b	0.8	1b	1.2	1a	0.5
4	1a	0.4	2a	4.0	0a	...	1a	0.3	1b	1.7	1b	2.0
5	1a	1.2	1a	0.3	0a	...	1a	0.5	1c	1.0	1b	0.6
6	0a	...	1a	0.2	1a	0.5	1b	0.8	2c	3.9	(0a)	...
7	0a	...	1a	0.1	0a	...	(1c)	-	(2c)	-	0a	...
8	2b	3.1	0a	...	0a	...	1a	0.1	2c	3.9	1a	0.1
9	1a	2.2	0a	...	(1b)	0.6	1a	1.7	(2c)	-	0a	...
10	0a	...	1a	0.2	(1a)	0.3	2b	8.6	(1b)	-	1b	2.7
11	0a	...	1a	0.6	1b	2.6	0a	...	(1b)	-	1a	0.7
12	1b	0.7	(2c)	-	1a	0.2	1b	1.6	1c	1.9	2b	3.6
13	1a	2.0	1b	1.7	0a	...	1a	0.5	(1b)	-	0a	...
14	0a	...	0a	...	(0a)	...	1b	0.8	(1b)	-	1b	1.5
15	1b	2.1	1a	0.1	0a	...	0a	...	(2a)	-	1b	2.4
16	1a	0.2	2b	4.5	0a	...	1b	0.9	(1b)	-	0a	...
17	0a	...	1b	1.7	0a	...	1b	1.8	(1a)	-	0a	...
18	2b	3.1	1a	0.3	1b	0.6	0a	...	(2b)	-	2b	6.1
19	1b	2.8	1a	0.3	0a	...	1b	1.1	1a	1.2	1b	1.5
20	1b	1.8	(1b)	-	2b	4.2	1b	2.9	(1b)	-	0a	...
21	1a	0.6	(2b)	-	(2b)	(3.0)	1b	0.2	0a	...	1b	1.3
22	1b	0.3	0a	...	1b	1.1	(0b)	-	0a	...	1a	1.3
23	2c	3.1	0a	...	1a	0.5	(2b)	-	0a	...	1c	2.1
24	0a	...	0a	...	0a	...	(1b)	-	1b	0.7	(1c)	-
25	2b	3.7	1a	2.2	1b	2.5	2b	6.2	0a	...	1b	0.7
26	1b	0.3	1b	0.6	0a	...	0a	...	1a	1.1	(1b)	-
27	1b	1.2	1a	0.3	1a	0.2	1b	2.5	0a	...	1c	0.5
28	1b	2.4	(2c)	-	(1a)	0.4	1b	0.4	1b	2.2	(1c)	-
29	1b	2.8	1a	0.3	1a	2.6	0a	...	1a	1.4	1a	1.2
30	1c	2.4	1b	1.4	2b	3.3	(1a)	-	(1c)	-	1c	1.8
31	0a	...	0a	...			1b	1.9			1b	1.2
Total	24	36.4	29	21.5	20	26.0	27	36.1	33	33.9	27	41.4
No. of days used	31	31	31	27	30	30	31	26	30	18	31	28
Mean	0.77	1.2	0.94	0.8	0.67	0.9	0.87	1.4	1.10	1.9	0.87	1.5

Annual values: Character frequency 0 1 2
No. of days used 112 196 55

Mean character figure 0.84 (363 days)

Duration: Total 385.8 hr.
No. of days 316
Mean 1.22 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				
	Hour G.M.T.																													
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean					
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ				
1	415	417	401	404	421	424	433	434	425	412	416	409	418	428	436	427	435	423	420	420	416	424	418	442	422	422				
2	415	419	423	421	423	427	433	427	415	425	417	421	419	423	421	413	422	404	394	405	416	423	421	420	419	419				
3	412	420	416	417	420	425	427	428	431	429	427	422	423	424	421	423	424	423	426	422	424	429	424	420	423	423				
4 q	420	415	412	421	424	426	430	431	432	431	427	423	420	422	429	427	437	436	432	433	434	434	431	431	427	427				
5 d	431	432	431	431	429	427	433	400	309	313	334	426	446	418	400	398	394	476	502	442	409	420	435	407	414	414				
6	394	397	400	403	406	409	410	415	410	409	404	408	410	416	421	407	412	409	411	412	408	408	413	416	409	409				
7	414	415	413	415	417	416	415	418	420	423	417	413	405	413	413	406	404	405	422	424	423	419	420	423	416	416				
8	420	413	401	416	434	438	434	424	423	427	425	420	423	427	426	426	429	431	425	420	420	424	421	416	423	423				
9	417	419	425	427	428	431	430	426	427	427	429	429	430	429	428	423	427	433	434	432	441	428	426	428	428	428				
10 q	421	420	424	434	435	435	433	434	434	431	428	427	432	435	433	434	438	441	441	439	433	442	436	420	433	433				
11	417	423	429	435	434	431	435	438	434	427	421	423	424	429	434	432	435	434	434	433	426	428	425	429	430	430				
12	424	429	428	432	429	430	432	431	431	429	428	431	434	433	422	427	435	439	434	434	434	432	429	426	431	431				
13	427	427	430	431	434	435	435	438	435	428	422	426	438	432	426	425	431	434	436	435	425	421	423	420	430	430				
14	419	408	415	421	424	428	428	437	431	427	424	427	431	433	431	430	431	429	421	428	429	429	427	430	427	427				
15 q	426	427	427	427	430	433	433	434	433	430	429	427	434	435	431	431	434	434	434	433	432	430	424	423	430	430				
16 q	424	427	429	433	435	438	439	437	434	430	430	431	431	434	438	430	427	434	434	435	434	431	429	434	432	432				
17 q	428	431	430	432	434	436	437	437	435	438	433	428	428	430	431	431	435	437	438	437	432	429	452	429	434	434				
18	432	434	434	438	442	445	442	442	442	438	420	416	420	416	408	420	413	414	414	405	410	422	422	428	426	426				
19 d	432	428	416	371	389	429	449	431	431	412	386	400	412	420	427	403	409	420	421	417	412	413	420	391	414	414				
20	393	409	400	405	429	431	434	425	407	401	405	414	413	413	419	420	424	427	424	421	415	416	424	424	416	416				
21	421	420	420	428	435	437	438	440	440	428	427	425	417	428	430	427	429	427	423	426	422	425	420	420	427	427				
22	420	424	427	421	436	436	433	431	434	434	429	423	420	425	427	426	429	434	436	435	435	442	438	425	430	430				
23	434	422	422	423	431	433	434	435	438	435	431	427	425	428	429	432	433	434	435	433	433	432	434	432	431	431				
24	436	436	437	438	439	445	447	443	443	431	414	408	409	421	429	427	411	417	425	443	413	422	423	423	428	428				
25	423	422	423	425	428	435	438	442	442	434	412	360	379	423	431	420	414	425	421	420	414	426	413	400	420	420				
26 d	387	398	425	363	412	434	439	434	429	418	405	403	413	431	431	441	432	446	425	442	402	446	400	399	419	419				
27 d	396	360	327	402	408	417	426	421	422	416	407	407	380	411	425	469	438	439	449	392	401	408	416	413	410	410				
28 d	419	418	414	414	422	414	422	428	416	408	405	401	410	417	423	424	404	416	432	442	407	405	320	413	412	412				
29	390	354	420	412	424	420	418	421	427	421	411	421	427	416	415	430	428	423	442	441	419	421	417	420	418	418				
30	414	406	419	415	436	432	431	417	428	427	419	416	424	427	421	418	417	430	422	424	433	423	421	415	422	422				
31	377	399	410	406	401	417	434	428	424	414	404	389	412	425	433	431	430	425	424	425	425	425	430	423	417	417				
Mean	416	415	417	418	425	429	432	430	425	421	416	416	420	425	425	425	425	429	430	427	422	425	421	421	423	423				

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

10	LERWICK (D)												10° +										JANUARY									
	Hour G.M.T.																															
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean							
1	22.3	22.0	23.7	29.0	22.5	25.9	27.3	27.2	27.3	29.7	29.1	30.2	28.1	30.4	29.0	28.0	28.2	31.8	21.9	15.9	22.3	21.0	21.4	20.4	25.6							
2	23.9	25.6	26.4	26.1	27.3	27.7	27.5	28.2	30.1	31.2	27.7	28.3	29.0	27.4	30.5	20.1	28.5	22.1	8.7	18.0	25.7	20.7	21.6	22.8	25.2							
3	22.8	23.9	25.6	25.9	27.0	26.8	26.8	26.8	26.9	26.7	27.0	27.4	29.2	29.7	28.9	25.9	28.4	27.7	20.9	23.4	23.6	24.0	23.9	24.6	26.0							
4 q	25.7	27.5	27.5	24.8	25.2	25.7	25.9	25.9	26.1	26.2	26.6	27.1	27.3	27.6	28.3	28.4	28.7	30.6	31.5	29.8	27.7	26.8	26.2	25.9	27.2							
5 d	25.7	25.3	25.6	26.1	25.8	27.3	29.7	28.6	39.6	36.9	29.0	30.3	39.3	31.4	28.6	27.5	27.2	32.2	23.3	28.5	28.0	18.2	13.8	16.1	27.7							
6	22.9	22.3	22.9	24.5	25.8	25.9	26.2	26.6	27.0	27.2	27.3	29.0	28.7	28.3	29.1	26.5	33.1	29.4	29.9	26.4	27.2	26.6	26.2	24.2	26.8							
7	24.8	25.4	25.8	25.7	26.7	27.1	27.1	28.1	28.7	30.2	29.7	29.9	30.4	30.0	33.1	34.4	33.4	29.0	26.2	26.6	25.7	25.6	26.0	24.1	28.1							
8	25.2	24.9	26.4	21.4	23.8	24.9	25.6	25.7	26.6	20.7	29.4	28.6	28.4	27.2	25.9	25.9	25.9	25.9	26.1	23.6	24.5	24.9	24.2	24.3	25.4							
9	28.7	24.9	26.0	26.7	26.2	25.7	25.5	25.9	26.9	29.2	29.1	29.3	30.8	28.8	28.2	26.9	26.9	27.4	27.7	26.5	19.2	23.9	26.5	25.7	26.8							
10 q	26.2	26.4	27.4	26.8	26.5	26.3	25.9	25.9	26.5	27.6	28.5	29.1	28.8	27.8	26.3	27.2	27.7	27.6	27.9	28.1	27.7	23.6	23.0	24.3	26.8							
11	17.3	16.1	22.3	23.5	23.8	26.0	25.6	25.6	25.8	25.9	28.2	28.9	29.7	27.7	27.3	27.2	27.1	27.6	27.4	26.8	23.3	25.9	25.7	25.2	25.4							
12	25.3	23.4	21.9	22.5	23.5	24.9	23.7	24.6	25.3	26.8	28.1	28.4	28.5	29.5	28.4	26.1	25.9	27.4	27.7	27.5	27.7	27.0	26.7	26.1	26.1							
13	25.7	25.2	24.8	24.7	25.7	25.7	26.4	25.9	26.2	27.4	29.1	31.1	33.6	33.9	32.0	28.9	26.6	26.7	27.0	29.2	29.7	25.1	25.8	26.7	27.6							
14	23.5	23.7	22.9	19.1	21.7	23.7	24.3	24.6	25.6	27.4	27.9	28.7	29.2	28.3	27.6	27.5	26.8	27.1	24.7	25.6	26.4	25.3	23.9	26.6	25.5							
15 q	26.0	27.4	25.9	25.8	25.9	25.9	25.9	25.7	25.9	26.6	27.1	28.5	29.8	29.1	28.1	27.5	26.5	27.4	26.5	25.9	25.8	25.2	20.0	23.3	26.3							
16 q	24.8	26.2	26.4	25.6	25.7	25.9	25.9	26.2	25.7	25.8	26.6	27.3	29.2	28.4	29.5	30.4	30.1	28.6	27.3	26.3	25.9	25.6	25.4	24.8	26.8							
17 q	24.9	26.4	27.3	26.8	26.5	25.9	26.0	26.0	26.1	26.8	27.2	27.7	28.5	28.8	28.2	27.8	28.4	28.4	27.7	28.1	25.9	25.6	23.2	26.6	26.7							
18	25.9	27.7	27.4	27.5	25.6	25.3	25.9	26.0	26.8	29.3	28.8	29.4	31.2	34.2	31.4	35.3	31.1	24.8	27.6	21.0	20.3	22.6	23.6	25.2	27.2							
19 d	26.1	25.0	24.2	28.5	28.7	33.4	30.6	34.4	30.8	28.4	31.9	32.1	32.3	32.8	35.2	31.5	26.7	26.8	25.9	23.7	15.7	23.3	23.2	23.4	28.1							
20	29.5	24.6	25.6	26.4	23.8	24.7	26.1	27.2	29.4	32.0	31.2	30.6	29.7	29.5	28.2	27.2	26.8	26.3	26.3	24.3	22.1	23.5	23.9	24.9	26.8							
21	27.5	24.7	23.6	25.5	26.2	26.5	27.3	27.2	27.7	28.6	28.5	28.5	27.3	28.0	27.3	26.7	26.2	26.6	24.7	25.6	24.3	23.5	18.5	20.1	25.9							
22	24.4	27.3	25.9	27.5	24.3	24.7	25.7	25.9	25.8	26.4	26.4	26.4	26.6	26.6	27.5	27.5	27.4	27.0	26.8	26.1	25.7	22.1	23.8	24.6	25.9							
23	28.2	20.1	19.7	21.1	23.5	24.9	25.4	25.4	26.3	26.2	26.3	26.7	27.3	27.7	27.5	26.9	27.0	26.9	26.9	24.8	24.1	24.6	24.7	24.9	25.3							
24	25.9	26.4	26.2	26.2	26.2	25.9	25.8	26.4	27.5	28.6	28.3	29.5	31.1	30.7	32.5	34.4	37.9	32.2	31.1	26.8	21.1	21.9	23.4	24.9	28.0							
25	25.4	25.4	25.7	25.9	26.1	26.3	26.0	26.0	25.8	26.2	27.1	28.3	37.1	32.1	33.5	34.1	29.1	29.6	26.7	24.9	20.6	17.3	21.5	10.1	26.3							
26 d	19.6	16.5	15.3	18.9	17.2	20.1	23.3	24.9	26.3	27.0	30.6	33.3	29.6	30.4	31.5	29.5	19.7	12.2	18.6	18.9	22.0	19.8	11.8	10.5	22.0							
27 d	18.1	24.2	30.9	27.8	25.9	25.7	25.7	25.0	24.6	26.7	28.3	29.9	30.6	33.7	34.5	29.0	28.5	27.2	-2.5	11.1	26.2	24.1	24.7	25.9	25.2							
28 d	25.9	25.4	24.6	26.8	25.5	23.9	26.6	24.9	24.8	27.6	29.3	30.5	28.7	31.1	29.7	21.1	18.0	28.0	22.1	13.8	11.1	20.1	35.2	23.2	24.9							
29	18.3	20.3	13.3	22.1	22.7	23.5	23.7	26.1	27.6	29.5	29.8	29.2	32.5	31.6	32.7	24.9	23.5	24.9	17.8	19.5	24.4	23.1	22.5	26.1	24.6							
30	29.3	28.7	19.7	20.6	21.1	23.5	23.4	27.7	29.2	29.2	29.2	27.4	27.5	29.2	28.7	28.9	23.3	18.0	25.1	22.2	22.1	24.4	23.4	23.5	24.4							
31	28.5	23.0	21.3	20.6	26.4	20.1	23.9	24.5	25.4	27.0	28.7	30.8	31.7	27.3	27.9	26.3	25.4	25.1	24.7	22.5	24.9	24.0	22.7	23.3	25.3							
Mean	24.8	24.4	24.3	24.9	24.9	25.5	26.0	26.4	27.2	27.9	28.5	29.1	30.1	29.7	29.6	28.1	27.4	26.9	24.3	23.9	23.5	23.4	23.3	26.2								

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

	Hour G.M.T.																						Mean		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1081	1090	1079	1047	1067	1094	1093	1096	1098	1100	1100	1106	1105	1110	1112	1124	1115	1123	1135	1130	1121	1112	1095	1086	1101
2	1096	1096	1098	1100	1096	1098	1095	1100	1100	1093	1102	1104	1108	1111	1120	1154	1128	1139	1147	1142	1122	1112	1103	1099	1111
3	1093	1090	1096	1100	1098	1100	1101	1100	1099	1100	1100	1100	1100	1103	1111	1118	1112	1113	1117	1111	1107	1102	1096	1098	1103
4 q	1094	1085	1079	1088	1096	1099	1099	1098	1095	1095	1095	1095	1095	1096	1100	1101	1100	1105	1108	1110	1112	1106	1101	1100	1098
5 d	1096	1095	1096	1095	1095	1096	1083	1083	1105	1096	1112	1177	1194	1183	1154	1129	1125	1160	1220	1191	1154	1134	1069	1065	1125
6	1112	1112	1113	1111	1110	1110	1111	1108	1110	1112	1113	1113	1117	1127	1130	1187	1152	1169	1185	1177	1168	1150	1130	1115	1131
7	1098	1101	1106	1107	1106	1106	1106	1103	1105	1103	1105	1108	1115	1121	1124	1138	1158	1168	1135	1124	1118	1118	1116	1112	1117
8	1109	1108	1079	1047	1075	1083	1092	1098	1099	1100	1105	1105	1105	1105	1105	1106	1106	1107	1112	1116	1115	1112	1112	1098	1100
9	1072	1066	1093	1100	1102	1100	1101	1104	1102	1100	1100	1100	1101	1105	1107	1109	1107	1103	1106	1110	1109	1102	1108	1108	1101
10 q	1110	1106	1099	1095	1099	1099	1100	1100	1100	1102	1104	1106	1104	1104	1104	1105	1100	1100	1100	1102	1110	1105	1095	1101	1102
11	1103	1102	1098	1095	1090	1094	1096	1098	1099	1100	1102	1104	1105	1106	1106	1107	1106	1106	1107	1108	1116	1113	1113	1112	1104
12	1113	1102	1099	1092	1095	1096	1095	1095	1095	1095	1097	1096	1098	1100	1106	1108	1103	1100	1102	1103	1104	1105	1106	1108	1101
13	1107	1106	1102	1100	1095	1095	1095	1093	1094	1096	1096	1093	1095	1103	1108	1112	1111	1108	1105	1109	1154	1170	1134	1123	1109
14	1112	1098	1070	1086	1092	1095	1101	1102	1100	1103	1106	1106	1102	1104	1106	1107	1108	1112	1118	1112	1112	1118	1116	1106	1104
15 q	1107	1106	1106	1106	1101	1100	1096	1097	1095	1095	1098	1100	1100	1102	1106	1106	1105	1106	1105	1101	1100	1100	1105	1100	1102
16 q	1100	1102	1103	1104	1102	1100	1098	1096	1095	1095	1091	1089	1089	1092	1096	1106	1108	1106	1106	1103	1100	1100	1100	1095	1099
17 q	1100	1100	1100	1101	1101	1100	1099	1095	1095	1089	1092	1093	1095	1095	1098	1101	1101	1102	1102	1100	1106	1106	1069	1057	1096
18	1075	1085	1091	1091	1094	1095	1095	1092	1090	1088	1093	1092	1093	1106	1121	1122	1136	1144	1134	1136	1129	1110	1106	1100	1105
19 d	1095	1095	1089	1056	980	981	993	1024	1058	1080	1094	1096	1106	1119	1138	1149	1138	1125	1124	1145	1164	1141	1116	1066	1091
20	992	1039	1073	1077	1082	1093	1095	1100	1111	1113	1109	1106	1109	1112	1109	1108	1108	1113	1118	1118	1123	1115	1100	1095	1096
21	1085	1090	1095	1099	1095	1095	1096	1096	1096	1100	1099	1100	1099	1093	1098	1101	1102	1108	1112	1112	1112	1107	1108	1103	1100
22	1095	1085	1089	1091	1089	1092	1095	1096	1099	1099	1100	1102	1100	1098	1097	1098	1098	1096	1098	1099	1101	1097	1098	1100	1096
23	1079	1057	1076	1083	1083	1087	1091	1095	1095	1098	1100	1102	1099	1095	1095	1095	1097	1096	1098	1101	1101	1100	1099	1095	1092
24	1092	1091	1093	1093	1091	1089	1089	1092	1093	1096	1106	1109	1105	1103	1112	1134	1154	1150	1176	1221	1168	1126	1112	1112	1117
25	1108	1106	1104	1100	1099	1095	1095	1095	1096	1099	1100	1122	1106	1106	1112	1130	1154	1142	1133	1139	1159	1135	1118	1090	1114
26 d	995	1033	1035	1007	1043	1065	1071	1083	1086	1091	1100	1108	1124	1130	1151	1171	1180	1148	1148	1134	1067	1070	1027	1043	1088
27 d	1064	1068	1044	1067	1080	1096	1098	1105	1111	1106	1108	1117	1164	1163	1174	1212	1179	1183	1153	1151	1124	1112	1103	1096	1120
28 d	1095	1101	1095	1092	1092	1093	1094	1090	1099	1104	1104	1106	1109	1113	1121	1147	1190	1142	1125	1095	1105	1093	964	1043	1101
29	1073	1000	1036	1076	1072	1072	1077	1083	1086	1088	1092	1095	1106	1121	1142	1153	1148	1158	1137	1095	1101	1104	1105	1095	1096
30	1066	1065	1072	1089	1083	1088	1087	1093	1082	1084	1095	1103	1102	1106	1118	1135	1154	1148	1130	1130	1106	1102	1104	1102	1102
31	1054	1034	1053	1071	1060	1067	1083	1091	1092	1089	1094	1100	1095	1105	1108	1107	1107	1106	1107	1107	1103	1102	1099	1100	1089
Mean	1086	1084	1086	1086	1086	1089	1091	1094	1096	1097	1100	1105	1108	1111	1116	1125	1125	1125	1126	1124	1119	1112	1098	1094	1104

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

12 LERWICK

JANUARY

	TERRESTRIAL MAGNETIC ELEMENTS											3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 + °A.				
	Horizontal force			Declination			Vertical force												
	Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range										
	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ	h. m. γ	γ h. m.	γ										
1	23 13 463	388 03 20	75	03 14 35.3	7.6 19 27	27.7	18 06 1143	1043 03 23	100	3,3,2,2,2,2,3,3	20	1	79.5						
2	22 00 449	373 18 38	76	14 49 35.3	-2.0 18 07	37.3	15 20 1177	1088 09 13	89	1,1,2,3,3,4,4,3	21	1	79.3						
3	18 48 445	402 00 27	43	12 36 30.5	16.8 18 44	13.7	18 24 1124	1078 00 55	46	2,1,1,1,2,2,3,2	14	1	78.8						
4 q	18 47 446	405 02 32	41	18 10 32.5	23.8 01 13	8.7	20 00 1115	1073 02 02	42	2,2,1,1,1,2,2,1	12	0	78.7						
5 d	18 01 641	282 10 33	359	12 15 48.5	1.4 23 27	47.1	18 31 1236	1018 23 05	218	1,2,5,5,4,5,5,5	32	1	79.0						
6	13 57 431	382 00 00	49	16 30 35.9	17.3 15 38	18.6	15 23 1221	1090 24 00	131	2,1,1,2,2,4,2,3	17	1	79.3						
7	19 07 428	396 16 24	32	16 12 37.3	22.0 22 18	15.3	17 04 1177	1090 00 00	87	2,1,2,1,2,3,2,2	15	0	79.0						
8	06 00 441	388 02 24	53	09 29 30.1	19.7 03 32	10.4	20 06 1120	1033 03 10	87	3,3,2,1,1,1,2,2	15	0	79.0						
9	20 47 457	400 00 12	57	00 43 34.7	13.1 20 54	21.6	20 00 1116	1036 00 53	80	3,0,1,1,1,2,3,3	14	1	79.3						
10 q	21 50 467	415 23 44	52	11 57 29.6	17.3 21 45	12.3	21 19 1114	1087 21 55	27	1,1,0,0,1,1,1,3	8	0	79.3						
11	07 48 441	402 00 35	39	12 45 30.2	4.7 00 55	25.5	21 01 1119	1089 04 33	30	4,2,1,1,1,1,2,1	13	0	79.8						
12	17 36 443	414 14 40	29	13 27 30.3	20.5 02 22	9.8	00 00 1116	1089 03 22	27	2,1,1,1,2,2,0,1	10	0	80.0						
13	12 34 448	415 20 57	33	12 37 35.8	22.1 21 24	13.7	21 01 1203	1089 11 53	114	1,1,0,1,2,1,4,4	14	1	80.0						
14	07 30 440	397 01 55	43	12 00 30.4	18.0 03 19	12.4	22 02 1126	1067 02 13	59	3,2,2,1,1,2,1,3	15	0	80.0						
15 q	13 23 439	420 22 50	19	12 16 30.4	16.1 22 18	14.3	00 47 1109	1094 09 43	15	1,1,0,1,1,1,1,3	9	0	80.0						
16 q	23 12 442	420 16 21	22	16 06 32.2	23.5 23 50	8.7	16 48 1112	1088 12 39	24	1,0,0,1,1,2,1,1	7	0	80.4						
17 q	22 34 481	425 11 52	56	12 50 29.5	20.5 23 13	9.0	20 48 1108	1037 22 49	71	1,0,1,1,1,0,1,3	8	0	80.3						
18	07 13 446	393 19 49	53	15 31 37.5	12.9 19 52	24.6	17 20 1149	1065 00 00	84	2,1,1,2,2,3,3,2	16	1	80.3						
19 d	06 11 473	335 03 37	138	05 27 39.9	12.5 20 50	27.4	20 35 1175	959 04 34	216	2,4,4,3,3,3,3,4	26	1	80.0						
20	00 12 453	357 00 46	96	00 18															

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

13	LERWICK (H)												14,000γ (0.14 C.G.S. unit) +													FEBRUARY									
	Hour G.M.T.																																		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean										
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ										
1 q	424	425	424	425	425	429	427	428	430	434	431	429	431	432	432	430	429	428	429	434	430	436	429	429	429										
2	429	428	425	430	430	435	440	440	436	426	421	422	425	429	435	438	421	426	431	432	435	429	431	428	430										
3	427	429	430	424	433	435	439	443	438	438	429	423	424	424	428	431	431	429	435	438	432	433	442	434	432										
4	432	434	431	427	431	435	438	438	438	434	431	427	421	434	429	424	421	434	423	434	435	434	432	431	431										
5 q	432	431	432	434	434	435	436	436	435	431	425	420	420	424	429	431	431	437	434	430	437	436	437	435	432										
6 q	434	434	434	435	437	439	441	440	438	432	427	427	429	429	434	436	437	433	431	432	434	433	432	431	434										
7 q	435	435	436	438	439	440	443	442	440	432	428	424	424	427	431	435	437	438	440	442	442	439	436	435	436										
8	435	434	434	436	443	447	447	444	442	434	429	428	428	434	440	440	443	446	446	445	440	436	434	429	438										
9	423	442	435	436	431	446	450	451	442	437	434	429	420	417	425	436	426	433	439	436	431	424	419	422	433										
10	423	427	429	431	432	433	433	432	432	431	429	429	432	434	424	434	438	432	434	464	489	456	431	432	436										
11	413	390	432	434	434	432	435	431	424	423	427	426	418	425	427	429	432	434	436	438	434	431	431	430	428										
12	428	428	428	432	432	435	435	434	434	431	421	416	417	420	421	426	426	425	426	431	431	432	433	434	428										
13 q	433	434	433	433	434	435	436	435	434	435	435	434	438	442	442	442	440	440	443	442	439	440	434	430	437										
14	434	428	434	434	434	440	449	446	423	425	427	425	427	432	432	432	424	434	436	421	428	436	436	432	432										
15	434	436	426	425	435	445	445	439	442	436	429	431	436	437	432	434	432	438	438	440	445	443	442	408	435										
16	378	408	423	426	432	437	439	436	432	415	411	421	423	418	423	423	429	411	409	423	433	437	437	437	423										
17	433	434	432	429	432	446	447	444	439	425	419	428	429	432	432	433	432	436	440	437	430	430	431	431	433										
18	433	432	429	432	434	435	437	437	437	433	428	427	430	432	435	437	438	438	439	439	436	437	436	432	434										
19	430	429	424	425	430	432	439	433	432	430	427	427	419	423	432	423	434	437	433	426	433	437	438	436	430										
20	424	430	430	432	435	435	433	433	431	430	429	430	432	437	440	437	435	435	430	431	432	439	437	436	433										
21	431	440	432	426	432	426	433	442	433	428	431	431	430	429	434	438	428	433	436	446	436	439	429	450	434										
22 d	423	417	429	430	433	438	433	438	437	431	430	433	432	432	441	450	449	442	486	476	389	417	362	285	426										
23 d	291	346	360	365	382	401	421	430	393	407	426	430	422	430	409	427	421	461	469	411	428	423	422	425	408										
24 d	342	392	361	306	390	410	422	409	383	410	421	422	412	431	442	444	449	433	416	440	461	461	409	383	410										
25 d	303	300	346	409	424	414	417	403	396	393	399	422	436	434	429	433	427	419	438	430	416	424	403	369	403										
26 d	401	416	370	386	391	431	427	396	403	422	395	397	409	450	443	445	458	457	466	434	381	424	409	398	417										
27	379	366	391	421	422	420	421	413	402	399	407	401	413	424	429	433	420	436	423	429	430	431	433	395	414										
28	420	420	414	362	329	423	434	422	422	423	424	425	426	427	431	425	431	447	428	429	433	425	425	427	420										
Mean	412	417	418	419	424	433	436	433	427	426	424	424	425	430	431	434	433	435	437	436	433	434	427	419	428										

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

14 LERWICK (D)													10° +													FEBRUARY										
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1 q	23.5	24.9	24.8	23.9	22.7	22.1	23.4	24.4	25.1	27.0	28.2	28.7	28.3	27.7	27.3	26.2	25.8	25.8	25.6	25.7	25.8	20.8	21.9	24.9	25.2											
2	25.5	24.2	24.0	26.0	22.7	23.5	23.7	24.6	25.3	25.7	26.8	29.5	31.2	30.1	28.4	27.7	27.3	26.8	27.1	25.8	22.8	23.0	23.2	23.9	25.8											
3	24.4	23.6	24.3	20.6	22.1	23.9	24.2	24.6	25.0	25.5	27.3	27.8	27.8	27.7	27.8	27.5	27.2	26.7	26.4	25.9	25.8	24.7	23.7	24.9	25.4											
4	25.7	25.7	24.3	24.2	23.9	25.5	25.4	25.4	25.3	25.8	27.8	29.0	29.2	32.4	33.0	27.8	27.7	26.9	24.9	26.4	25.2	24.9	24.9	25.2	26.5											
5 q	25.6	25.5	25.7	25.8	25.9	25.7	25.3	25.1	24.9	24.7	26.1	27.7	28.6	29.2	29.8	28.1	26.8	26.8	25.8	24.1	25.5	25.4	24.9	25.1	26.2											
6 q	25.5	25.5	25.5	25.5	25.5	25.5	25.3	25.4	25.2	25.3	25.9	27.6	29.0	29.2	27.9	27.5	27.2	26.0	25.7	25.9	25.5	25.0	24.5	23.9	26.0											
7 q	24.4	25.5	26.0	25.9	25.9	25.7	25.3	25.2	24.9	25.1	26.6	27.5	29.2	29.3	28.4	27.7	27.4	27.7	27.1	26.7	25.9	25.9	25.3	24.8	26.4											
8	25.2	25.6	25.9	25.6	25.8	24.8	24.9	25.3	25.5	25.7	26.1	28.1	29.1	29.5	29.7	28.1	27.6	27.6	27.0	27.0	26.7	25.9	24.7	18.5	26.2											
9	26.7	21.1	22.8	22.8	23.9	26.6	25.3	24.9	23.9	24.2	25.7	29.4	31.5	33.5	31.2	31.9	28.2	25.6	25.9	26.3	25.3	12.7	14.9	19.5	25.2											
10	20.6	21.1	24.4	25.4	25.5	24.8	24.6	24.7	24.8	25.7	27.6	29.4	29.2	30.7	29.6	29.9	32.9	34.1	34.9	33.2	35.1	29.3	23.0	24.2	27.7											
11	21.0	23.9	16.5	20.9	24.1	24.2	24.5	24.7	26.3	25.6	27.4	29.2	29.7	28.3	27.5	26.8	25.9	25.9	25.7	26.1	24.3	20.8	24.9	24.5	24.9											
12	24.9	23.8	24.6	23.4	24.4	24.4	24.8	24.7	24.7	25.3	26.6	28.7	29.7	29.7	28.6	27.2	26.0	24.5	22.6	25.9	25.1	23.9	24.5	25.3	25.6											
13 q	25.8	25.7	25.8	24.9	24.8	24.4	24.2	24.2	24.8	25.9	27.4	28.7	29.1	28.1	27.7	28.0	28.3	28.3	27.7	27.3	26.7	18.8	18.9	23.1	25.8											
14	26.6	24.9	18.3	19.6	20.9	23.3	23.2	24.6	25.6	27.7	30.1	29.3	28.8	28.4	28.0	28.7	29.2	27.7	28.7	15.6	24.3	26.1	25.9	24.6	25.4											
15	24.1	25.3	21.0	20.0	22.1	21.6	23.4	25.1	28.5	28.4	28.1	29.4	29.7	30.6	27.7	27.6	27.7	27.8	28.0	25.7	27.4	26.3	26.2	15.3	25.7											
16	14.5	17.0	23.9	23.0	23.4	24.5	24.9	25.9	26.7	29.1	29.9	30.1	31.0	31.5	33.5	32.4	16.3	20.2	26.6	27.2	26.4	25.9	25.3	25.3	25.6											
17	24.8	24.4	24.3	25.9	25.3	23.3	24.0	25.9	26.1	29.1	30.5	30.4	29.2	28.3	27.8	27.7	27.7	27.6	26.8	27.2	25.7	23.9	24.3	23.7	26.4											
18	24.7	25.2	25.3	24.8	24.8	24.9	24.8	24.7	25.0	25.4	26.8	27.7	28.2	28.5	27.7	27.3	26.6	26.5	26.2	25.8	25.4	24.8	23.0	16.2	25.4											
19	24.8	25.7	23.1	24.3	23.8	21.8	24.3	24.7	24.9	25.1	26.6	27.5	29.5	27.6	27.7	27.0	25.8	25.8	24.9	22.4	22.7	22.7	23.7	26.8	25.1											
20	29.5	24.5	24.7	24.7	24.6	24.4	24.0	24.7	25.2	26.3	27.7	29.1	29.2	28.7	28.7	27.4	27.0	25.3	23.8	24.2	24.2	25.4	25.9	25.3	26.0											
21	27.2	35.2	22.4	20.1	18.9	21.9	26.0	23.8	25.7	25.8	26.5	27.6	28.7	27.7	28.1	29.4	29.5	27.7	28.3	25.0	23.1	20.0	21.9	16.1	25.3											
22 d	21.0	29.6	22.8	22.0	21.2	21.9	23.0	24.4	25.4	25.4	26.8	29.6	32.1	32.5	35.2	37.0	36.6	36.9	31.1	22.4	23.2	6.4	1.5	18.3	25.3											
23 d	4.1	11.4	15.5	12.3	9.4	14.9	20.6	22.1	30.6	34.4	27.7	28.2	29.6	32.8	33.1	29.7	26.8	3.5	2.1	13.2	22.1	22.6	22.7	28.1	20.7											
24 d	31.5	19.6	11.3	10.7	14.7	27.9	25.7	27.6	31.5	30.1	28.4	28.5	26.7	29.5	27.7	28.7	14.3	24.0	15.4	15.7	15.1	17.3	11.4	18.8	22.2											
25 d	20.5	30.8	28.5	25.5	17.7	21.9	28.8	31.5	28.5	29.8	28.1	26.3	30.3	25.2	24.4	27.4	24.6	18.7	5.9	11.6	14.5	15.1	22.5	34.6	23.9											
26 d	21.4	19.2	22.3	20.8	19.0	21.6	26.2	31.5	25.8	25.6	26.8	27.7	33.0	29.4	33.5	23.0	31.8	21.6	15.5	14.7	22.6	20.6	17.8	18.7	23.8											
27	23.7	26.3	27.0	23.3	22.7	22.9	22.4	23.5	25.4	27.0	30.5	29.4	28.6	30.0	30.9	25.4	26.8	28.5	25.4	25.1	26.1	19.2	15.2	21.6	25.3											
28	22.5	23.0	20.6	18.7	22.5	13.0	21.4	25.4	25.4	25.4	26.3	27.3	27.8	28.0	28.8	29.6	24.2	17.0	24.5	15.0	18.0	24.9	24.4	25.3	23.3											
Mean	23.6	24.2	23.1	22.5	22.4	23.3	24.4	25.3	25.9	26.7	27.5	28.5	29.4	29.4	29.3	28.3	26.9	25.4	24.3	23.5	24.3	22.2	21.8	23.1	25.2											

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				
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1100	1099	1096	1099	1100	1100	1100	1098	1097	1091	1089	1090	1092	1092	1095	1100	1105	1106	1106	1106	1105	1109	1105	1100	1098	1099
2	1100	1100	1097	1082	1092	1100	1097	1095	1095	1098	1099	1096	1096	1095	1100	1109	1122	1115	1110	1108	1106	1106	1102	1103	1103	1101
3	1100	1098	1082	1089	1095	1096	1095	1093	1095	1092	1090	1090	1089	1089	1095	1102	1107	1111	1106	1105	1106	1103	1092	1093	1096	1096
4	1092	1092	1095	1095	1096	1096	1096	1096	1095	1094	1090	1090	1091	1091	1106	1122	1115	1109	1123	1112	1105	1102	1100	1099	1100	1100
5 q	1097	1097	1097	1098	1098	1098	1098	1098	1098	1098	1100	1099	1097	1095	1095	1096	1100	1103	1102	1106	1111	1102	1100	1098	1099	1099
6 q	1096	1096	1095	1095	1095	1096	1096	1096	1096	1096	1097	1094	1092	1092	1095	1096	1097	1099	1106	1109	1106	1106	1103	1100	1101	1098
7 q	1096	1095	1094	1093	1093	1093	1094	1095	1096	1098	1095	1094	1094	1090	1092	1095	1095	1096	1096	1098	1098	1098	1099	1100	1099	1095
8	1097	1096	1093	1089	1088	1088	1089	1090	1090	1093	1092	1089	1092	1093	1090	1093	1092	1092	1093	1094	1097	1099	1099	1099	1099	1093
9	1084	1064	1076	1081	1084	1067	1070	1077	1083	1085	1083	1086	1092	1092	1094	1100	1126	1118	1102	1101	1108	1116	1068	1083	1089	1089
10	1091	1095	1095	1093	1093	1091	1092	1092	1093	1089	1087	1087	1089	1094	1102	1100	1106	1111	1124	1168	1214	1162	1109	1094	1107	1107
11	1087	1016	1051	1081	1091	1094	1093	1093	1095	1095	1092	1095	1102	1104	1105	1103	1100	1099	1097	1096	1104	1109	1101	1102	1092	1092
12	1103	1102	1099	1094	1095	1094	1092	1092	1091	1093	1094	1095	1097	1101	1108	1112	1113	1112	1113	1105	1104	1103	1101	1099	1101	1101
13 q	1100	1101	1101	1100	1100	1098	1095	1093	1090	1088	1088	1089	1092	1095	1097	1100	1100	1100	1096	1098	1100	1107	1098	1099	1097	1097
14	1089	1055	1071	1088	1095	1093	1089	1087	1091	1083	1081	1082	1089	1097	1100	1105	1110	1106	1110	1144	1113	1101	1097	1097	1095	1095
15	1095	1073	1072	1078	1079	1076	1079	1083	1080	1080	1080	1081	1085	1091	1102	1104	1105	1102	1102	1104	1094	1093	1091	1100	1089	1089
16	1023	1057	1077	1095	1098	1096	1094	1092	1093	1095	1092	1092	1098	1106	1110	1122	1165	1174	1154	1128	1111	1101	1098	1097	1103	1103
17	1099	1098	1100	1095	1090	1085	1085	1089	1092	1095	1088	1088	1092	1097	1103	1108	1107	1106	1106	1110	1118	1111	1104	1100	1099	1099
18	1095	1095	1096	1096	1097	1098	1096	1095	1093	1093	1090	1090	1092	1094	1095	1099	1100	1102	1104	1103	1102	1100	1097	1096	1097	1097
19	1092	1095	1099	1096	1093	1094	1092	1095	1095	1095	1093	1093	1095	1096	1100	1108	1108	1106	1109	1115	1109	1104	1097	1075	1098	1098
20	1046	1058	1081	1089	1092	1095	1095	1093	1093	1093	1091	1089	1089	1089	1090	1096	1100	1100	1107	1114	1111	1102	1099	1098	1092	1092
21	1090	995	1026	1069	1080	1082	1072	1070	1080	1088	1088	1087	1088	1092	1094	1097	1102	1103	1106	1107	1108	1112	1102	1080	1084	1084
22 d	1073	1059	1065	1082	1086	1088	1090	1092	1093	1094	1090	1085	1085	1088	1088	1090	1092	1124	1168	1178	1116	1056	1020	1024	1089	1089
23 d	903	971	1006	1000	1010	1016	1013	1037	1064	1080	1079	1092	1095	1104	1124	1151	1160	1160	1113	1110	1076	1079	1089	1043	1066	1066
24 d	951	955	962	934	967	941	988	1034	1070	1068	1086	1095	1124	1126	1125	1129	1164	1132	1142	1114	1025	1018	1026	995	1049	1049
25 d	938	868	933	1003	1039	1059	1071	1081	1118	1124	1129	1130	1129	1158	1132	1120	1122	1135	1130	1118	1118	1096	1095	990	1077	1077
26 d	978	1019	995	997	1032	1073	1077	1067	1083	1121	1123	1126	1136	1146	1146	1161	1187	1220	1168	1151	1039	1032	1047	1062	1091	1091
27	1042	1053	1063	1098	1103	1100	1096	1095	1098	1119	1112	1115	1112	1109	1121	1145	1147	1130	1136	1120	1112	1112	1025	1012	1099	1099
28	1078	1100	1102	1065	977	1003	1047	1072	1082	1093	1095	1096	1102	1106	1111	1124	1130	1136	1121	1124	1104	1100	1095	1077	1089	1089
Mean	1065	1061	1069	1074	1077	1079	1082	1085	1091	1094	1093	1094	1097	1101	1105	1111	1117	1118	1116	1116	1104	1097	1088	1079	1092	1092

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

16 LERWICK													FEBRUARY			
TERRESTRIAL MAGNETIC ELEMENTS													3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 + °A.
Horizontal force				Declination			Vertical force									
Maximum 14,000γ +	Minimum 14,000γ +	Range		Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range							
h. m. γ	γ h. m.	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 q	21 13 450	422 03 08	28	12 03 29.6	18.0 21 40	11.6	21 04 1114	1088 10 28	26	1,1,1,1,1,1,2,2	10	0	80.0			
2	15 28 449	412 16 25	37	13 10 31.9	21.2 20 24	10.7	16 27 1125	1077 03 31	48	1,2,1,1,1,2,2,1	11	0	79.3			
3	22 40 447	419 11 42	28	11 44 28.9	19.2 03 25	9.7	17 22 1112	1077 02 47	35	2,2,1,1,1,1,1,1	10	0	79.2			
4	13 38 443	413 11 47	30	14 41 34.1	22.9 04 19	11.2	18 44 1130	1089 12 15	41	1,1,0,2,2,2,2,1	11	0	79.3			
5 q	20 42 440	416 12 22	24	14 16 29.9	21.0 19 03	8.9	19 07 1116	1092 13 37	24	0,0,0,1,1,1,2,0	5	0	79.5			
6 q	06 37 441	424 10 58	17	13 49 29.8	22.8 23 23	7.0	18 08 1113	1090 12 18	23	0,0,0,1,0,1,1,1	4	0	79.5			
7 q	06 30 445	422 12 07	23	12 31 29.8	23.9 00 42	5.9	23 20 1102	1089 12 20	13	0,0,0,0,0,0,0,0	0	0	79.2			
8	14 52 457	421 23 50	36	14 50 31.7	16.4 23 43	15.3	23 51 1102	1084 04 57	18	1,1,0,1,2,1,1,2	9	0	78.9			
9	05 58 458	392 21 51	66	00 46 34.8	-5.2 21 36	40.0	21 39 1146	1055 01 00	91	3,3,2,1,2,3,1,4	19	1	78.8			
10	20 15 512	403 21 43	109	21 36 53.4	18.0 21 13	35.4	20 33 1236	1085 23 33	151	2,0,0,1,2,2,4,5	16	1	78.6			
11	21 07 448	364 01 38	84	11 53 31.6	13.1 02 17	18.5	21 37 1113	999 01 28	114	4,2,2,2,1,0,1,3	15	1	78.9			
12	06 16 438	413 12 04	25	11 59 30.5	20.2 18 09	10.3	18 16 1118	1089 07 57	29	1,1,1,1,1,2,2,1	10	0	78.0			
13 q	22 01 449	424 22 50	25	12 23 29.5	15.7 21 43	13.8	21 07 1106	1086 10 10	20	0,0,1,0,1,0,0,3	5	0	78.2			
14	07 03 455	411 09 02	44	01 00 31.6	6.7 19 37	24.9	19 33 1166	1052 01 33	114	3,1,2,2,1,1,4,1	15	1	78.2			
15	05 22 449	369 23 55	80	13 37 33.5	5.2 23 26	28.3	23 57 1122	1063 01 46	59	3,2,2,1,2,1,1,4	16	1	78.6			
16	16 40 459	347 00 26	112	16 03 34.4	-0.7 16 58	35.1	17 14 1187	996 00 17	191	4,1,2,1,2,5,3,1	19	1	79.0			
17	06 22 453	407 10 07	46	10 01 32.1	21.9 05 36	10.2	20 26 1121	1082 06 32	39	1,2,1,2,1,1,1,1	10	0	79.1			
18	22 48 445	419 23 53	26	13 19 30.0	12.6 23 11	17.4	18 04 1108	1088 10 37	20	0,0,1,1,1,1,1,3	8	0	79.0			
19	06 48 447	408 15 33	39	23 38 30.7	17.3 19 10	13.4	19 14 1119	1062 23 58	57	2,2,1,1,2,2,2,3	15	1	79.2			
20	14 34 447	421 00 43	26	00 12 33.4	21.9 18 05	11.5	19 19 1118	1038 00 37	80	3,1,1,0,1,2,1,1	10	0	79.0			
21	19 39 469	418 22 21	51	01 16 39.3	13.4 23 40	25.9	19 25 1125	978 01 36	147	4,2,2,1,1,2,2,3	17	1	79.2			
22 d	19 41 575	133 23 49	442	23 47 57.2	-11.7 24 00	68.9	19 40 1229	917 23 42	312	3,1,1,2,2,3,6,7	25	2	79.1			
23 d	18 10 505	192 00 35	313	23 58 41.2	-23.5 00 42	64.7	17 30 1189	826 00 53	363	5,3,3,4,3,5,5,4	32	1	79.3			
24 d	19 52 509	243 03 12	266	00 01 41.1	-4.6 19 47	45.7	16 12 1190	891 03 24	299	5,5,5,3,3,5,5,4	35	1	79.3			
25 d	18 25 461	187 01 18	274	01 10 44.1	0.4 18 06	43.7	13 21 1171	838 01 18	333	5,4,3,4,3,4,3,5	31	1	79.6			
26 d	18 07 632	307 21 00	325	12 39 41.5	-17.6 18 11	59.1	18 03 1289	950 00 00	339	4,4,3,3,4,4,6,5	33	1	79.6			
27	21 54 495	345 01 56	150	15 12 33.9	5.2 22 12	28.7	16 07 1157	977 23 15	180	3,1,2,3,3,3,2,5	22	1	80.0			
28	17 07 464	224 04 09	240	04 22 31.8	2.8 19 37	29.0	16 55 1143	944 04 54	199	3,5,3,1,3,3,4,2	24	1	80.0			
Mean	- - 469	363 - -	106	- - 30.5	9.9 - -	25.1	- - 1145	1025 - -	120	-	-	0.55	79.1			

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											
	Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	q	431	426	420	420	422	418	422	425	421	396	409	412	420	423	426	429	422	430	430	436	431	451	429	410	423	423
2		410	372	381	319	372	443	426	416	363	355	376	420	441	597	733	636	671	497	411	353	403	401	427	416	443	443
3		416	407	395	328	416	440	437	427	423	414	403	399	406	422	427	433	425	432	436	430	434	438	436	422	419	419
4		413	412	404	422	433	434	436	436	433	424	415	410	412	422	427	434	430	422	429	429	435	437	436	437	426	426
5		436	434	434	437	440	435	433	433	429	423	418	415	415	417	420	438	437	418	428	436	444	439	425	429	430	430
6		430	430	429	429	429	431	434	433	427	425	420	415	415	419	418	429	431	436	437	437	442	444	426	410	428	428
7		320	374	425	422	427	422	415	414	414	419	407	406	407	410	422	426	433	437	440	417	417	422	426	428	415	415
8		430	430	430	429	433	433	434	434	434	425	410	414	420	434	438	474	466	431	430	446	440	345	356	129	414	414
9	q	-168	271	399	366	390	412	413	425	433	425	423	402	422	425	444	439	437	435	432	437	464	405	425	277	385	385
10		330	235	346	337	386	408	422	430	423	419	419	420	422	422	430	448	436	440	435	434	433	425	429	419	406	406
11	d	415	424	415	424	430	428	429	426	423	420	418	420	425	427	430	433	433	437	438	437	429	429	431	431	427	427
12	d	431	438	429	429	431	430	433	433	429	424	422	418	425	429	436	444	440	440	437	438	440	436	434	433	432	432
13	d	433	434	434	434	435	435	434	434	427	420	414	410	414	422	431	436	437	441	444	446	450	448	444	449	434	434
14		433	441	444	440	442	449	447	440	434	426	418	412	414	414	427	436	443	440	436	445	437	449	451	430	435	435
15		434	434	439	438	439	445	440	438	440	418	414	412	395	418	425	427	433	425	434	436	438	440	442	444	431	431
16		450	438	425	410	435	444	442	435	431	423	419	419	416	424	433	437	429	438	443	444	437	448	438	427	433	433
17	d	433	433	430	436	441	444	441	438	429	423	410	410	417	425	426	432	436	437	436	437	438	437	438	436	432	432
18	d	436	436	436	440	440	444	446	446	438	430	423	417	420	425	431	433	440	440	444	451	456	452	450	453	439	439
19		450	433	433	444	418	429	451	450	444	434	426	425	418	434	445	451	450	437	436	436	454	423	384	392	433	433
20		392	405	431	433	431	429	429	428	422	414	405	404	414	418	424	429	437	448	440	441	429	415	418	432	424	424
21		429	411	312	357	419	432	440	434	416	417	416	392	418	430	429	447	429	457	462	455	414	431	441	435	422	422
22		380	315	407	438	436	414	426	433	431	412	403	406	417	425	431	437	441	438	428	436	441	418	416	436	419	419
23	q	433	434	399	305	390	422	401	427	427	409	396	408	403	431	440	486	485	445	463	402	393	412	423	418	419	419
24	q	404	396	377	391	359	420	429	377	407	372	378	401	413	416	460	449	457	455	473	404	320	326	381	374	402	402
25	q	362	307	385	357	385	416	413	377	369	398	409	415	427	433	450	454	456	480	464	420	433	439	435	431	413	413
26		422	422	425	409	403	425	431	422	421	417	416	405	422	431	438	436	445	442	434	444	463	447	404	377	425	425
27		436	413	408	392	346	429	422	414	405	404	396	388	415	418	440	429	437	437	437	440	455	438	432	435	419	419
28		424	418	403	424	426	429	414	416	404	397	396	396	403	411	422	452	447	455	456	453	445	440	436	433	425	425
29		389	387	433	436	427	424	430	427	418	413	409	413	418	422	427	437	440	436	447	455	455	451	446	448	429	429
30		447	434	421	423	400	416	440	437	427	420	418	418	418	415	431	433	437	441	465	449	436	447	450	447	432	432
31		440	437	441	435	433	436	440	440	433	424	414	416	415	407	420	420	429	440	449	442	434	405	426	415	429	429
Mean		397	403	413	407	417	429	431	427	422	414	410	410	416	428	441	446	447	441	441	434	433	427	427	411	424	424

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

18 LERWICK (D)		10° +												MARCH												
		Hour G.M.T.																								
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1		23.8	23.8	22.3	23.2	22.5	23.9	23.5	24.4	25.1	27.2	29.7	29.8	31.6	30.2	28.2	27.3	24.4	24.4	25.3	25.9	20.9	18.3	22.1	23.5	25.1
2	q	22.4	20.1	20.0	23.2	19.2	15.6	20.1	24.6	29.7	32.5	27.2	24.3	23.1	21.8	32.0	35.7	27.0	30.5	12.0	-0.7	10.7	15.9	24.2	22.2	22.2
3		23.2	21.6	24.4	34.4	26.6	20.1	20.6	25.0	24.4	26.3	27.6	28.2	27.5	28.8	29.9	29.7	27.7	27.7	27.9	25.7	15.4	24.9	23.3	21.9	25.5
4		20.1	23.4	23.8	19.9	21.8	23.2	23.9	23.9	23.6	23.9	25.9	28.0	28.7	28.9	29.2	28.7	27.3	22.3	22.7	25.0	25.0	25.6	24.7	24.4	24.7
5		24.6	24.5	25.4	25.4	22.7	22.9	23.9	23.5	23.9	24.0	25.7	27.7	29.1	29.7	28.6	28.3	27.8	26.1	26.2	25.9	20.1	17.4	20.2	24.7	24.9
6		25.4	24.9	24.4	24.2	23.9	23.9	23.4	23.7	23.3	24.3	25.1	26.2	27.7	29.2	28.2	28.1	27.7	27.3	29.1	28.1	27.7	26.8	21.2	21.9	25.7
7		12.9	13.6	20.4	21.7	20.2	20.9	24.4	27.7	26.9	26.8	26.4	28.2	30.0	30.1	31.4	30.1	29.7	28.2	17.3	20.5	23.9	23.5	22.2	23.0	24.2
8		23.5	22.1	19.2	16.8	19.3	22.6	22.9	22.5	22.3	24.6	26.7	28.6	28.9	32.5	33.5	36.9	34.9	34.3	30.6	28.7	7.8	3.7	3.5	-16.3	22.1
9	q	10.2	12.5	17.3	19.3	16.3	17.1	23.9	23.9	24.4	25.5	26.8	29.4	30.0	34.2	34.6	33.5	26.1	29.4	28.2	23.7	17.5	19.6	23.1	25.8	23.8
10		8.0	21.7	9.7	9.5	16.1	21.4	23.8	23.5	24.5	24.2	26.1	27.7	29.7	30.9	30.3	32.9	29.9	28.0	26.6	26.8	27.1	21.3	18.8	23.0	23.4
11	d	20.6	21.8	21.6	22.9	21.4	22.0	22.6	23.4	23.5	23.9	25.8	27.7	29.6	29.6	28.8	28.2	27.1	26.6	26.3	26.7	24.4	23.8	24.9	23.8	24.9
12	d	23.9	25.8	23.3	22.7	22.8	22.8	22.9	22.6	22.6	23.9	26.0	29.2	32.3	32.2	31.9	30.3	29.2	28.0	28.0	26.4	26.6	25.5	24.2	23.3	26.1
13	d	24.2	24.2	24.0	23.5	23.2	23.1	23.1	23.0	22.3	22.7	24.9	28.0	30.1	30.3	29.2	28.3	26.8	26.9	27.1	26.4	26.6	21.9	21.8	24.2	25.2
14		26.6	19.8	22.6	22.0	24.3	25.7	24.2	23.0	22.6	23.8	25.6	28.4	31.3	31.3	30.9	29.0	27.7	27.5	25.6	27.3	22.4	20.6	14.2	20.6	24.9
15		24.5	24.6	23.9	23.9	24.3	24.4	27.5	27.1	24.6	25.7	25.6	31.5	32.2	32.6	32.5	29.1	27.5	24.6	24.8	25.6	25.9	24.6	23.6	22.8	26.4
16		20.2	20.0	17.7	20.1	24.3	25.8	25.6	24.7	25.3	24.4	24.5	26.5	28.9	28.6	28.6	27.7	25.2	25.2	25.8	25.6	23.0	13.0	20.4	21.8	23.9
17	d	25.4	26.1	26.6	25.4	24.3	24.0	24.9	24.1	21.2	22.5	23.7	26.8	29.2	30.6	30.4	28.7	27.0	26.4	23.5	21.8	24.8	24.2	24.2	24.2	25.4
18	d	24.8	25.2	25.1	24.9	24.9	24.5	24.2	23.3	22.1	22.8	25.3	28.7	31.3	32.4	31.7	30.1	28.4	27.6	26.8	26.8	26.6	26.1	24.8	24.3	26.4
19		26.9	27.2	18.3	19.1	17.0	22.1	22.1	23.5	24.1	24.8	26.2	31.0	32.5	34.8	34.6	34.1	33.5	28.4	23.6	24.2	17.8	22.1	15.7	21.0	25.2
20		20.1	19.6	25.4	23.1	22.2	22.7	22.2	23.0	24.1	26.3	27.9	28.2	28.2	29.1	29.0	27.3	26.7	28.0	25.4	21.8	17.3	12.3	18.0	19.3	23.4
21		22.0	18.9	13.2	16.6	17.8	18.0	22.2	25.3	25.9	23.3	26.8	28.5	28.9	30.6	29.6	29.6	31.0	26.5	29.9	24.6	14.7	19.2	23.5	23.5	27.4
22		29.3	25.5	27.2	16.7	17.0	20.1	24.8	23.7	23.1	22.9	25.8	28.9	30.6	31.2	31.5	28.2	29.3	26.6	26.7	27.5	24.9	10.7	21.6	25.8	25.0
23	q	23.8	25.6	22.1	29.3	24.2	16.7	20.1	22.5	25.9	25.8	27.9	29.8	34.0	32.0	29.7	11.3	17.8	26.6	10.4	3.6	18.7	22.1	22.4	27.8	22.9
24	q	30.6	26.0	30.5	31.3	10.3	23.8	26.1	31.2	26.2	28.3	27.3	31.3	30.6	35.7	33.7	32.1	24.9	24.8	6.5	-7.3	3.1	8.4	17.0	13.8	22.8
25	q	25.3	29.7	25.9	18.5	20.4	19.7	21.3	28.7	36.3	30.1	29.3	31.2	33.3	32.5	34.8	27.2	30.9	25.6	16.3	15.3	19.9	22.5	28.1	25.7	26.2
26		27.6	25.7	23.0	24.7	26.2	22.9	25.4	23.5	22.9	24.7	26.8	28.4	28.4	30.3	26.8	24.6	23.0	23.2	22.5	20.1	17.0	14.5	13.5	21.8	23.6
27		25.5	17.3	22.1	21.5	25.5	23.8	21.1	20.5	23.7	24.8	25.9	26.9	29.3	29.9	30.4	27.3	25.6	25.9	25.7	20.3	14.5	20.8	17.8	23.9	23.7
28		24.4	23.0	25.8	23.9	19.0	20.6	24.1	22.5	21.4	23.0	26.7	29.7	33.3	34.7	31.7	29.8	29.7	22.4	20.1	18.3	23.5	21.1	24.9	24.4	24.9
29		15.8	18.5	20.4	19.6	20.2	22.9	22.8	20.1	20.5	21.4	23.5	26.8	30.0	31.0	31.0	31.5	30.4	29.1	28.5	27.5	17.4	23.3	24.9	22.7	24.2
30		17.9	19.6	24.9	24.1	20.8	26.1	22.6	21.8	22.0	21.3	23.1	26.1	29.4	31.5	33.3	33.5	31.8	29.5	16.9	17.3	13.4	18.8	23.5	24.1	23.9
31		24.7	24.2	24.1	22.5	22.9	23.7	22.3	21.6	20.2	21.2	23.1	27.6	32.8	33.3	34.3	30.1	27.8	26.4	25.8	23.1	18.6	14.5	18.3	16.6	24.2
Mean		22.5	22.5	22.4	22.4	21.3	22.2	23.3	23.9	24.1	24.7	26.0	28.3	30.1	31.0	31.0	29.4	27.7	27.0	23.5	21.4	20.1	19.7	21.0	21.7	24.5

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

17

19 LERWICK (Z)		46,000γ (0.46 C.G.S. unit) +																				MARCH				
	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	
	0-1	1-2																								
1	1075	1083	1095	1100	1103	1099	1090	1091	1095	1100	1089	1089	1090	1096	1102	1112	1118	1113	1108	1105	1113	1093	1095	1082	1097	
2 q	1036	1024	1008	987	971	1017	1039	1058	1089	1099	1139	1178	1206	1259	1245	1250	1247	1248	1148	1049	1063	1056	1057	1058	1105	
3	1059	1072	1080	1021	1013	1032	1065	1085	1093	1099	1102	1106	1112	1109	1111	1111	1112	1107	1109	1124	1118	1086	1065	1089	1087	
4	1085	1069	1018	1067	1089	1095	1096	1098	1100	1100	1100	1100	1102	1103	1108	1114	1120	1131	1124	1115	1110	1105	1103	1101	1098	
5	1101	1101	1101	1095	1093	1099	1099	1100	1100	1099	1098	1098	1100	1100	1103	1106	1118	1124	1115	1110	1108	1089	1099	1099	1102	
6	1100	1102	1105	1105	1105	1103	1104	1106	1103	1102	1101	1101	1100	1100	1105	1110	1112	1112	1114	1113	1110	1108	1126	1111	1107	
7	1045	1012	1071	1100	1105	1103	1105	1096	1098	1102	1105	1105	1105	1114	1115	1117	1118	1128	1137	1133	1130	1124	1116	1110	1104	
8	1104	1100	1093	1089	1091	1097	1100	1102	1100	1105	1106	1105	1100	1100	1108	1129	1197	1188	1162	1143	1164	1062	1052	972	1107	
9 q	1044	1001	1065	1071	1071	1085	1095	1092	1098	1105	1108	1130	1035	1129	1121	1141	1142	1142	1149	1146	1095	1084	1080	947	1095	
10	975	934	972	1024	1039	1065	1102	1116	1118	1118	1115	1117	1126	1128	1114	1127	1158	1164	1165	1135	1127	1135	1124	1115	1096	
11 d	1100	1086	1101	1089	1099	1100	1104	1108	1112	1111	1111	1109	1108	1109	1109	1111	1112	1109	1108	1111	1119	1119	1118	1115	1107	
12 d	1103	1083	1096	1105	1103	1104	1100	1103	1103	1102	1099	1099	1100	1100	1101	1105	1108	1105	1108	1109	1108	1108	1112	1112	1103	
13 d	1111	1106	1108	1106	1105	1103	1102	1102	1106	1108	1105	1100	1099	1100	1102	1103	1105	1102	1099	1099	1099	1103	1106	1102	1103	
14	1084	1080	1099	1100	1094	1086	1088	1093	1095	1095	1094	1095	1098	1102	1102	1103	1104	1108	1112	1108	1120	1100	1079	1095	1097	
15	1099	1103	1100	1103	1103	1100	1095	1086	1089	1096	1096	1098	1112	1113	1112	1114	1119	1128	1119	1110	1106	1102	1100	1095	1104	
16	1082	1083	1087	1088	1075	1083	1088	1092	1093	1096	1099	1099	1101	1102	1105	1111	1118	1112	1106	1103	1108	1096	1092	1089	1096	
17 d	1083	1089	1099	1099	1100	1100	1099	1100	1100	1099	1098	1095	1091	1092	1097	1102	1108	1108	1109	1106	1100	1100	1098	1098	1099	
18 d	1099	1098	1100	1100	1100	1100	1098	1100	1100	1098	1095	1091	1090	1095	1098	1100	1105	1105	1103	1100	1097	1098	1099	1095	1099	
19	1077	1023	1030	1046	1075	1071	1079	1089	1091	1092	1092	1093	1090	1095	1100	1130	1148	1171	1161	1137	1103	1089	1028	985	1087	
20	985	995	1053	1090	1102	1105	1108	1106	1106	1105	1103	1100	1102	1100	1101	1103	1108	1110	1127	1133	1124	1127	1087	1093	1095	
21	1100	1079	982	965	1033	1033	1052	1064	1080	1093	1096	1103	1096	1096	1096	1103	1138	1135	1172	1122	1031	1052	1075	1073	1078	
22	1015	954	970	1038	1067	1075	1078	1089	1095	1104	1108	1102	1095	1099	1106	1119	1124	1139	1138	1120	1124	1073	1084	1093	1084	
23 q	1095	1088	1062	951	993	1047	1067	1077	1083	1089	1096	1100	1103	1101	1121	1172	1182	1158	1133	1095	1086	1054	1083	1088	1089	
24 q	1069	1042	972	978	984	1052	1064	1069	1082	1111	1130	1129	1149	1137	1156	1136	1184	1167	1124	1074	991	836	894	985	1063	
25 q	1018	988	990	1000	1031	1068	1093	1096	1080	1093	1110	1124	1140	1134	1154	1171	1146	1160	1129	1121	1065	1040	1037	1077	1086	
26	1092	1100	1103	1092	1065	1070	1083	1095	1096	1099	1101	1112	1112	1124	1136	1134	1136	1145	1136	1114	1065	1018	1031	1028	1095	
27	1031	1049	1069	1069	1021	1060	1072	1085	1090	1098	1108	1119	1115	1112	1121	1134	1126	1118	1113	1118	1109	1069	1059	1064	1089	
28	1070	1048	1024	996	1042	1072	1069	1070	1085	1090	1098	1102	1111	1115	1121	1124	1142	1152	1148	1136	1071	1084	1086	1067	1088	
29	1033	1031	1067	1089	1095	1089	1087	1095	1099	1095	1091	1090	1095	1100	1103	1106	1109	1115	1116	1115	1071	1098	1059	1059	1088	
30	1077	1095	1087	1072	1075	1046	1071	1086	1093	1096	1091	1090	1095	1105	1112	1121	1133	1143	1136	1130	1129	1117	1111	1102	1101	
31	1104	1105	1098	1103	1105	1100	1100	1099	1099	1096	1098	1095	1096	1100	1105	1106	1111	1111	1112	1127	1130	1102	1083	1073	1102	
Mean	1069	1059	1061	1063	1069	1079	1087	1092	1096	1100	1103	1106	1109	1112	1116	1123	1133	1134	1127	1115	1100	1081	1079	1073	1095	

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

20 LERWICK												MARCH							
	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	γ	h. m.	γ			°A.				
1	21 03	470	389	09 16	81	12 24	32.4	11.8	21 33	20.6	20 56	1128	1053	24 00	75	2, 1, 2, 3, 2, 2, 3, 3	18	1	79.8
2 q	16 18	1075	264	03 34	811	16 22	90.9	-16.9	18 57	107.8	13 51	1347	957	04 02	390	4, 5, 4, 4, 7, 8, 6, 4	42	2	79.7
3	21 54	480	285	03 06	195	03 23	39.2	1.4	20 32	37.8	19 47	1136	1001	04 07	135	4, 5, 3, 3, 2, 2, 4, 3	26	1	79.6
4	15 50	443	385	02 12	58	01 52	30.6	17.3	01 05	13.3	18 13	1134	1008	02 12	126	4, 3, 1, 1, 2, 2, 2, 0	15	1	80.0
5	20 56	494	409	12 08	85	13 04	30.7	3.8	20 54	26.9	17 19	1129	1083	21 10	46	1, 2, 1, 1, 2, 2, 4, 4	17	1	80.0
6	23 14	450	366	23 57	84	13 20	31.7	13.6	23 51	18.1	22 32	1136	1095	23 22	41	1, 0, 1, 2, 2, 1, 1, 4	12	1	79.8
7	18 23	468	272	00 28	196	13 57	32.0	-0.6	00 57	32.6	18 40	1144	984	01 05	160	5, 2, 2, 2, 1, 1, 4, 1	18	1	79.8
8	22 43	581	-441	24 00	1022	16 05	40.0	-32.2	23 58	72.2	20 13	1221	881	23 38	340	2, 2, 2, 1, 2, 4, 5, 8	26	2	79.8
9 q	20 26	534	-441	00 00	975	23 02	46.5	-8.3	00 38	54.8	00 03	1298	883	00 58	415	8, 4, 3, 3, 3, 3, 5, 6	35	2	80.0
10	15 47	462	190	01 37	272	16 01	35.0	2.6	00 14	32.4	18 23	1183	894	01 37	289	5, 5, 3, 2, 3, 3, 3, 3	27	1	79.6
11 d	01 13	455	402	01 58	53	13 00	30.4	17.3	00 20	13.1	22 25	1121	1075	01 28	46	3, 1, 1, 1, 2, 1, 1, 2	12	0	79.6
12 d	00 58	449	414	11 07	35	12 40	33.2	21.9	23 12	11.3	23 26	1113	1076	01 32	37	2, 1, 1, 1, 1, 1, 1, 1	9	0	80.0
13 d	21 28	455	410	11 15	45	13 22	30.9	13.0	21 56	17.9	22 00	1116	1098	12 18	18	1, 0, 1, 1, 1, 1, 1, 3	9	0	79.9
14	21 45	484	407	11 46	77	12 45	33.1	8.8	22 38	24.3	20 52	1139	1056	01 00	83	3, 2, 1, 1, 1, 1, 3, 3	15	1	79.8
15	23 40	449	378	12 27	71	12 06	34.7	22.0	23 49	12.7	17 51	1131	1084	07 25	47	1, 1, 2, 2, 3, 2, 2, 1	14	1	80.0
16	21 23	484	391	03 20	93	13 22	29.9	0.1	21 17	29.8	16 51	1121	1072	04 32	49	3, 3, 1, 1, 2, 2, 2, 4	18	1	79.7
17 d	05 33	446	407	10 50	39	13 25	31.1	17.7	19 11	13.4	18 42	1112	1078	00 08	34	2, 1, 2, 0, 1, 1, 2, 0	9	0	79.8
18 d	20 56	461	415	11 41	46	13 17	32.8	21.8	08 57	11.0	17 24	1106	1089	11 29	17	1, 0, 1, 1, 1, 1, 1, 1	7	0	79.7
19	20 30	480	330	22 49	150	13 16	37.1	10.7	20 25	26.4	17 28	1183	954	23 49	229	4, 3, 2, 2, 3, 3, 4, 4	25	1	80.0
20	19 40	465	367	00 43	98	18 06	29.7	8.1	21 16	21.6	19 07	1144	945	00 52	199	4, 2, 1, 1, 1, 2, 4, 3	18	1	79.5
21	18 29	499	215	02 38	284	15 51	33.1	-9.2	19 33	42.3	18 34	1205	928	02 53	277	5, 4, 3, 3, 2, 3, 5, 3	28	1	79.5
22	21 05	501	158	01 34	343	02 01	39.1	2.1	21 45	37.0	20 56	1147	909	01 34	238	6, 3, 2, 1, 2, 2, 4, 4	24	1	80.0
23 q	16 05	536	282	03 36	254	12 22	37.4	-4.5	19 46	41.9	15 42	1196	935	03 32	261	4, 5, 3, 2, 3, 5, 4, 3	29	1	80.0
24 q	18 17	554	186	21 09	368	14 10	42.3	-25.4	19 01	67.7	18 07	1224	776	21 24	448	4, 4, 4, 4, 4, 4, 6, 6	36	2	80.1
25 q	18 05	564	263	01 35	301	14 23	41.5	-7.8	18 09	49.3	17 38	1201	958	01 14	243	5, 4, 4, 3, 3, 4, 5, 4	32	1	80.1
26	20 40	491	342	23 25	149	13 24	31.9	10.6	22 23	21.3	17 31	1154	1011	21 58	143	2, 3, 2, 3, 3, 3, 4, 4	24	1	81.5
27	20 45	477	293	04 23	184	14 36	32.3	8.3	22 06	24.0	15 18	1140	997	04 37	143	3, 5, 2, 3, 3, 2, 3, 4	25	1	81.5
28	19 51	503	384	11 17	119	12 50	36.8	2.2	19 48	34.6	17 37	1163	982	03 32	181	3, 4, 2, 2, 3, 3, 4, 2	23	1	80.6
29	22 00	479	328	01 02	151	15 35	32.4	11.8	00 27	20.6	19 13	1126	1011	00 58	115	4, 2, 2, 1, 1, 1, 3, 3	17	1	81.1
30	18 30	498	381	04 48	117	14 56	35.0	4.3	18 24	30.7	18 18	1154	1034	05 34	120	3, 3, 3, 1, 2, 2, 4, 2	20	1	81.0
31	20 35	456	359	24 00	97	14 12	36.2	10.1	21 09	26.1	20 12	1145	1028	24 00	117	1, 2, 1, 1, 3, 2, 3, 4	17	1	80.8
Mean	- -	505	284 - -	221	- -	36.4	4.4 - -	32.0	- -	1161	998 - -	163	-	-	-	-	0.97	-	80.1

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

21 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +												APRIL												
	Hour	G.M.T.																								
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1		369	428	433	432	437	440	437	432	429	404	396	405	405	417	431	436	441	444	444	446	444	442	441	441	428
2		426	408	428	439	433	425	439	436	418	399	395	403	411	421	425	431	443	436	445	438	443	436	436	424	427
3		411	413	407	431	436	431	436	432	426	417	411	412	419	423	434	433	440	450	462	469	450	451	439	330	428
4	d	86	339	307	398	428	439	437	427	419	410	400	406	410	419	455	459	440	442	456	433	421	425	430	430	405
5	q	429	417	422	431	432	431	430	424	417	408	401	404	416	428	440	445	437	440	445	441	440	440	436	426	428
6	q	426	419	424	421	428	436	433	423	409	403	396	403	413	414	424	436	444	451	454	447	445	443	444	439	428
7	q	434	433	433	433	433	433	434	429	422	414	407	404	408	422	425	440	444	447	455	452	447	442	432	432	431
8		433	432	433	434	432	440	440	436	422	414	410	406	406	411	418	426	444	456	459	459	452	455	440	433	433
9		446	440	434	426	431	445	440	430	420	415	410	407	418	422	432	444	448	466	465	466	471	467	465	469	441
10		463	456	450	451	458	454	447	448	440	423	415	401	411	420	436	432	448	447	450	454	450	451	450	443	442
11		443	442	444	436	402	424	403	410	400	393	386	405	408	421	436	436	475	448	458	454	451	454	442	438	430
12		427	429	431	442	444	445	442	430	422	410	407	385	418	413	429	437	443	447	451	448	447	448	448	447	433
13		441	441	442	439	438	444	445	438	423	396	410	415	421	417	428	430	437	462	452	451	446	441	444	447	435
14	q	442	441	434	433	436	444	443	441	432	420	412	407	403	418	427	433	441	451	454	449	448	447	449	444	435
15		444	438	432	432	440	448	452	445	432	413	400	401	404	412	424	441	444	458	461	466	465	464	461	461	439
16	d	457	455	451	388	360	445	413	395	400	422	407	401	397	425	461	502	513	462	431	451	469	495	428	434	436
17		384	325	407	437	444	441	433	416	420	422	415	400	392	391	396	429	440	457	456	456	452	444	447	445	423
18		440	427	425	430	433	424	422	403	408	413	407	409	417	426	424	438	437	452	453	447	445	444	444	451	430
19		446	428	429	384	390	433	431	423	419	412	407	425	414	418	441	473	457	436	442	444	444	448	434	389	428
20	d	385	423	396	355	411	376	377	411	380	408	404	396	408	418	429	430	427	454	451	454	441	465	442	398	414
21	d	348	400	410	399	407	427	425	393	382	402	403	400	405	416	433	456	478	499	488	451	441	443	415	440	423
22		441	410	398	403	430	442	430	415	405	392	388	392	414	447	460	486	474	470	467	466	447	430	420	381	429
23	d	402	434	427	331	425	403	417	411	396	392	385	393	407	433	447	462	449	459	473	470	442	441	424	432	423
24		441	440	436	437	436	436	433	431	426	415	408	414	414	423	434	433	449	454	481	483	473	475	470	464	442
25		458	451	447	444	449	451	447	444	432	422	417	413	410	414	433	458	452	462	476	471	455	454	436	428	443
26		445	448	431	440	440	436	425	436	433	426	415	414	412	419	431	422	451	458	455	456	451	445	473	440	438
27		423	406	426	439	440	436	430	422	413	403	411	408	418	422	415	426	447	454	461	464	452	448	446	446	431
28	q	449	449	437	436	440	440	436	429	428	424	420	414	413	422	425	435	443	455	455	455	453	451	450	448	438
29		448	446	444	447	447	448	444	441	434	425	417	407	422	441	447	438	440	451	455	453	449	445	447	447	441
30		447	442	445	438	450	444	447	440	440	436	425	413	413	425	437	445	484	480	462	459	443	431	433	435	442
Mean		418	425	425	423	430	435	432	426	418	412	406	405	411	421	433	443	450	455	457	455	449	449	442	433	431

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

22 LERWICK (D)		10° +												APRIL												
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1		30.2	24.3	20.5	20.6	22.2	20.3	19.9	20.2	19.8	22.7	27.0	31.2	33.4	31.2	31.4	29.8	27.8	24.5	23.1	24.1	23.8	24.1	25.0	24.0	25.0
2		26.9	26.0	21.9	17.9	16.9	20.2	22.2	21.2	19.9	22.0	24.2	27.9	30.4	30.7	29.3	27.6	26.7	22.7	24.0	20.4	17.9	19.8	21.8	15.4	23.1
3		14.6	23.1	25.3	18.5	19.4	20.1	22.2	19.4	20.2	21.1	24.1	27.8	31.7	33.1	32.4	30.1	28.9	29.0	27.8	16.4	23.6	19.7	18.3	8.6	23.1
4 d		17.9	8.7	13.4	9.3	18.0	18.0	19.5	20.1	19.9	21.8	24.0	28.8	32.2	36.7	32.3	33.3	33.1	30.6	27.4	13.1	15.6	20.7	28.3	24.1	22.8
5 q		23.7	24.9	25.0	23.1	22.2	22.2	22.2	22.2	22.7	23.9	26.5	30.0	30.7	31.2	30.8	27.9	25.9	25.8	25.4	22.7	23.6	19.5	20.2	20.7	24.7
6 q		18.4	17.2	14.6	16.4	15.0	18.0	20.2	21.7	23.2	23.5	25.6	27.6	30.9	32.1	32.3	30.9	29.1	27.7	27.8	25.7	26.8	26.0	24.4	23.9	24.1
7 q		23.1	23.2	23.1	22.7	22.2	22.2	21.7	21.2	21.2	22.2	24.0	26.6	29.3	31.1	29.8	28.0	26.7	26.0	25.7	26.0	25.6	24.1	24.2	24.0	24.7
8		16.8	19.4	21.9	20.2	19.3	19.3	18.5	19.2	19.8	22.5	22.4	27.3	30.0	32.2	31.2	28.3	27.5	26.9	26.7	26.9	26.5	18.9	14.6	16.0	23.1
9		23.1	17.4	17.1	18.7	21.7	21.1	20.2	19.2	19.9	21.5	24.5	27.5	30.7	32.1	31.6	31.6	31.3	29.9	29.1	28.7	29.2	27.1	26.1	23.1	25.1
10		22.6	22.2	21.9	21.4	21.2	22.6	24.5	23.3	22.5	22.5	26.6	29.5	31.3	31.7	31.7	31.2	29.1	27.5	25.8	26.0	25.9	16.3	13.5	20.8	24.7
11		23.9	23.2	22.6	22.7	28.4	29.8	33.1	31.7	25.6	24.0	23.7	26.4	27.8	28.9	29.2	28.9	28.8	20.2	26.3	26.4	26.1	25.5	22.6	20.2	26.1
12		27.9	30.5	26.4	23.1	19.9	20.4	21.0	23.1	26.4	25.6	26.4	30.6	30.2	31.6	30.4	28.6	26.4	25.1	25.1	25.2	19.3	22.7	20.7	23.1	25.4
13		22.9	29.3	25.1	19.5	19.8	19.7	19.8	21.1	24.0	28.8	26.1	24.9	29.3	30.3	26.9	28.4	27.2	20.2	24.0	15.5	21.0	25.0	24.9	24.2	24.1
14 q		25.8	25.5	23.8	23.2	23.5	23.1	21.9	20.8	20.9	21.1	22.7	26.4	28.2	29.0	29.7	28.8	27.9	26.8	25.7	23.1	23.1	23.2	23.0	22.6	24.6
15		24.1	23.6	27.9	25.7	23.2	22.6	21.2	19.8	18.7	20.2	22.1	26.3	30.2	32.8	32.4	31.6	30.4	29.5	28.4	27.5	26.4	26.4	25.4	24.0	25.9
16 d		24.0	27.1	25.5	34.6	41.2	32.2	30.2	32.4	30.0	26.9	24.0	25.3	27.8	27.8	33.6	36.4	25.1	24.3	28.4	27.1	17.6	11.7	21.2	22.2	27.4
17		22.0	20.2	18.0	20.9	19.9	18.4	17.0	18.2	20.3	21.2	24.2	27.0	30.2	31.1	30.0	28.8	27.2	26.4	26.2	26.8	26.3	23.4	21.9	21.7	23.6
18		22.2	21.2	22.7	23.5	22.5	24.0	27.5	25.5	25.9	24.0	25.2	26.0	29.7	29.8	29.2	27.4	26.9	27.8	26.7	24.0	22.4	23.1	21.3	21.3	25.0
19		21.2	20.8	21.7	25.6	26.0	22.6	23.1	21.4	20.2	22.2	24.0	27.6	28.9	30.6	34.4	33.6	31.6	31.1	28.8	26.9	24.6	18.4	16.8	6.4	24.5
20 d		21.2	24.1	16.4	18.4	22.7	26.7	32.4	26.0	26.7	25.7	26.6	26.9	28.7	32.4	28.9	29.3	29.3	28.6	22.8	22.8	21.6	19.3	11.4	15.8	24.4
21 d		25.1	21.7	19.7	23.2	20.0	18.6	22.8	23.5	25.5	24.2	24.5	26.4	28.3	30.8	30.8	25.6	28.3	27.0	16.4	24.5	24.7	28.9	24.8	24.0	24.6
22		22.7	24.8	26.4	26.0	22.2	20.2	19.3	19.5	20.8	21.9	26.1	27.7	30.9	30.7	26.9	29.8	29.1	29.8	26.6	23.6	23.1	21.2	16.4	14.5	24.2
23 d		22.2	21.1	20.4	24.8	28.5	31.6	20.2	19.3	20.3	21.9	25.5	26.9	27.8	29.3	24.1	23.5	25.0	25.8	20.2	21.4	23.8	21.7	24.0	28.7	24.1
24		26.3	22.2	22.4	21.6	22.1	21.7	21.8	22.8	22.2	23.6	24.1	26.0	28.3	28.4	27.9	27.3	26.9	26.9	29.9	29.2	27.8	26.7	25.8	24.0	25.2
25		22.1	22.2	22.3	21.8	21.6	20.3	20.2	18.9	19.7	20.7	24.5	27.7	30.5	31.3	31.3	33.1	31.4	30.5	26.4	25.9	24.7	22.6	25.3	27.8	25.1
26		23.2	22.9	23.8	22.8	22.5	20.0	21.5	21.6	22.0	22.2	23.7	25.8	28.1	29.2	31.0	31.7	31.6	30.1	27.0	25.9	25.4	23.5	17.2	15.2	24.5
27		18.0	22.5	24.1	19.2	20.1	20.2	21.1	20.2	20.7	22.4	24.0	25.0	26.6	28.4	27.8	28.2	28.2	26.5	23.5	24.7	25.8	24.8	23.8	26.6	23.9
28 q		23.6	22.7	20.8	19.3	18.2	20.5	21.6	22.7	23.8	24.6	24.3	26.2	27.9	27.7	27.8	28.2	27.7	27.3	26.0	25.6	25.0	24.6	24.2	23.8	24.3
29		23.5	23.3	22.2	21.3	20.2	20.3	19.2	21.1	21.1	20.8	22.8	25.3	29.1	33.0	33.9	30.2	28.8	26.9	25.4	24.6	24.6	24.0	24.0	23.6	24.5
30		23.9	24.7	24.0	25.0	21.0	20.9	18.4	18.5	21.5	21.8	22.9	25.8	29.4	32.7	26.0	36.6	29.1	28.4	26.2	23.9	17.0	20.1	21.0	22.2	24.6
Mean		22.8	22.7	22.0	21.7	22.1	21.9	22.1	21.9	22.2	22.9	24.6	27.1	29.6	30.9	30.5	29.8	28.4	27.0	25.8	24.1	23.6	22.4	21.7	21.1	24.5

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				
	Hour G.M.T.																								
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	989	1040	1087	1098	1100	1101	1101	1106	1103	1103	1097	1092	1100	1106	1109	1117	1125	1137	1142	1124	1114	1109	1104	1097	1100
2	1078	988	1008	1053	1075	1076	1081	1091	1099	1103	1101	1096	1097	1100	1109	1113	1126	1143	1141	1141	1116	1094	1093	1070	1091
3	1064	1053	1038	1066	1087	1097	1097	1101	1103	1101	1097	1093	1090	1096	1103	1119	1119	1117	1120	1117	1127	1125	1077	997	1092
4 d	981	942	979	1000	1048	1081	1085	1097	1109	1112	1109	1107	1110	1117	1153	1162	1168	1145	1146	1171	1109	1094	1050	1072	1089
5 q	1093	1099	1101	1104	1109	1111	1113	1113	1107	1105	1104	1099	1094	1096	1104	1122	1131	1129	1122	1125	1119	1111	1100	1086	1108
6 q	1077	1075	1067	1075	1081	1090	1099	1103	1103	1102	1102	1097	1099	1101	1104	1107	1114	1122	1130	1137	1131	1122	1104	1092	1101
7 q	1101	1101	1104	1105	1106	1107	1104	1102	1101	1101	1104	1101	1101	1102	1107	1115	1125	1126	1120	1116	1118	1115	1110	1093	1108
8	1090	1103	1109	1109	1104	1087	1090	1094	1097	1096	1096	1100	1099	1101	1107	1103	1101	1107	1110	1112	1113	1088	1060	1072	1098
9	1048	1056	1075	1084	1078	1079	1091	1097	1097	1096	1091	1085	1086	1090	1091	1094	1097	1106	1112	1107	1101	1105	1104	1097	1090
10	1100	1101	1104	1101	1091	1085	1081	1080	1085	1090	1091	1097	1099	1099	1101	1112	1114	1115	1112	1109	1112	1109	1080	1081	1098
11	1094	1101	1097	1097	1057	1039	1048	1048	1076	1096	1104	1110	1107	1110	1117	1129	1143	1187	1133	1127	1113	1104	1101	1091	1101
12	1090	1055	1072	1081	1093	1096	1097	1097	1094	1099	1099	1101	1100	1109	1109	1112	1114	1114	1107	1107	1108	1103	1087	1087	1097
13	1092	1056	1045	1073	1090	1094	1096	1091	1096	1099	1094	1096	1101	1119	1148	1136	1132	1125	1116	1115	1101	1100	1099	1096	1100
14 q	1097	1093	1100	1101	1107	1103	1103	1101	1101	1101	1101	1099	1099	1101	1105	1106	1107	1107	1107	1111	1107	1103	1097	1097	1102
15	1096	1090	1089	1078	1090	1093	1094	1094	1096	1100	1100	1093	1093	1097	1106	1110	1109	1106	1109	1112	1108	1103	1100	1100	1099
16 d	1100	1067	1019	998	945	960	1006	1021	1044	1078	1096	1099	1113	1136	1143	1204	1260	1179	1137	1122	1125	1039	1038	1064	1083
17	1035	985	1031	1075	1095	1101	1104	1107	1105	1101	1098	1101	1107	1117	1112	1113	1125	1125	1119	1115	1113	1116	1112	1104	1097
18	1106	1104	1090	1091	1090	1092	1078	1084	1079	1084	1097	1101	1101	1101	1109	1113	1114	1109	1114	1129	1125	1110	1096	1094	1100
19	1085	1086	1073	1043	986	1045	1076	1091	1101	1101	1101	1097	1129	1142	1131	1165	1188	1148	1128	1121	1121	1107	1045	991	1096
20 d	1011	1039	1017	1012	1049	1044	1032	1046	1073	1080	1090	1101	1096	1114	1161	1152	1129	1122	1148	1127	1121	1063	1025	1013	1078
21 d	945	991	1031	1025	1025	1060	1071	1091	1102	1101	1109	1114	1113	1113	1122	1132	1131	1149	1137	1140	1136	1101	1027	1043	1084
22	1071	1081	1053	1059	1067	1084	1101	1106	1107	1107	1107	1108	1108	1131	1162	1163	1175	1168	1152	1109	1096	1094	1054	1009	1103
23 d	1005	1066	1078	1007	971	983	1037	1082	1100	1109	1114	1119	1125	1125	1139	1143	1138	1136	1140	1116	1119	1109	1099	1045	1088
24	1067	1091	1105	1107	1107	1106	1108	1107	1108	1107	1106	1101	1102	1100	1102	1106	1106	1107	1101	1106	1113	1106	1106	1103	1103
25	1107	1112	1109	1109	1106	1102	1101	1101	1100	1096	1096	1094	1091	1091	1088	1088	1104	1109	1113	1126	1127	1119	1096	1048	1101
26	1060	1089	1097	1096	1102	1092	1086	1080	1083	1088	1089	1090	1096	1101	1113	1113	1112	1120	1126	1118	1113	1110	1071	1061	1096
27	1074	1045	1042	1076	1095	1099	1102	1104	1101	1101	1096	1099	1101	1102	1107	1104	1104	1115	1122	1114	1113	1112	1107	1080	1096
28 q	1068	1084	1083	1076	1090	1095	1092	1089	1083	1085	1091	1095	1098	1101	1102	1101	1104	1103	1105	1103	1101	1101	1101	1103	1094
29	1104	1104	1099	1095	1096	1095	1095	1095	1091	1093	1091	1095	1091	1093	1107	1131	1122	1114	1107	1103	1103	1101	1101	1101	1101
30	1100	1096	1074	1069	1066	1085	1090	1091	1087	1086	1090	1094	1094	1092	1101	1115	1161	1163	1143	1141	1140	1126	1119	1114	1106
Mean	1068	1066	1069	1072	1073	1079	1085	1090	1094	1097	1099	1099	1101	1107	1116	1123	1130	1128	1124	1121	1115	1103	1085	1073	1097

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

24 LERWICK		TERRESTRIAL MAGNETIC ELEMENTS										3-hr. range indices K	Sum of K indices	Magnetic character of day (0.2)	Temperature in magnet house 200 + °A.		
Horizontal force					Declination			Vertical force									
Maximum 14,000γ +	Minimum 14,000γ +	Range	Maximum 10° +	Minimum 10° +	Range	Maximum 46,000γ +	Minimum 46,000γ +	Range									
h. m. γ	γ h. m.	γ	h. m. °	° h. m.	°	h. m. γ	γ h. m.	γ	h. m. °	°							
1	17 53	451	311 00 24	140	12 34	34.7	17.3	08 10	17.4	17 47	1148	968 00 38	180	4, 1, 1, 3, 2, 2, 2, 1	16	1	81.0
2	20 43	455	376 01 30	79	00 50	36.1	11.0	23 54	25.1	19 31	1149	966 01 32	183	4, 3, 2, 1, 1, 2, 3, 3	19	1	80.8
3	19 21	499	24 24 00	475	12 53	34.1	-4.3	24 00	38.4	19 10	1137	910 23 57	227	3, 3, 1, 1, 1, 2, 4, 7	22	1	81.0
4 d	14 58	476	-163 00 10	639	13 36	40.8	-3.3	03 19	44.1	19 08	1196	902 01 30	294	8, 5, 2, 2, 3, 3, 4, 3	30	1	81.0
5 q	15 13	460	394 10 14	66	13 22	31.6	15.5	21 33	16.1	16 26	1134	1078 23 57	56	1, 0, 1, 1, 1, 3, 3, 2	12	0	80.9
6 q	18 01	458	395 10 22	63	13 44	33.0	12.8	02 47	20.2	19 55	1140	1063 02 15	77	2, 2, 2, 1, 1, 1, 2, 2	13	0	81.0
7 q	18 24	457	403 11 16	54	13 19	31.5	20.7	08 07	10.8	17 01	1130	1088 23 22	42	0, 0, 0, 0, 1, 1, 1, 2	5	0	80.8
8	21 53	472	401 12 03	71	13 57	32.7	9.2	21 47	23.5	19 52	1118	1045 22 00	73	3, 2, 1, 1, 1, 2, 1, 3	14	1	80.6
9	17 55	477	405 11 25	72	13 20	32.7	16.4	02 01	16.3	18 09	1113	1038 00 42	75	3, 2, 1, 1, 2, 2, 1, 1	13	1	80.6
10	16 06	480	385 11 25	95	14 49	33.6	6.7	22 01	26.9	21 32	1123	1075 22 58	48	1, 2, 2, 2, 3, 3, 2, 4	19	1	80.4
11	16 50	517	374 10 37	143	07 28	35.4	15.9	17 32	19.5	17 28	1205	1029 05 13	176	1, 3, 3, 3, 3, 4, 3, 2	22	1	80.6
12	21 59	473	376 11 38	97	01 00	33.6	15.8	20 33	17.8	16 48	1119	1047 01 47	72	3, 2, 3, 2, 3, 1, 3, 2	19	1	80.9
13	17 32	483	385 09 27	98	13 37	34.6	11.0	19 32	23.6	14 32	1155	1038 01 48	117	3, 3, 2, 3, 3, 3, 3, 1	21	1	80.8
14 q	18 27	456	394 12 13	62	14 51	29.8	20.1	08 41	9.7	19 45	1172	1091 01 14	81	2, 1, 1, 1, 2, 2, 2, 1	12	0	80.9
15	19 52	473	389 12 53	84	13 25	33.7	16.2	08 36	17.5	15 48	1173	1074 02 58	99	2, 2, 2, 2, 2, 2, 2, 1	15	1	80.5
16 d	21 10	597	310 04 22	287	04 43	46.8	-8.8	21 07	55.6	16 38	1304	924 04 59	380	4, 5, 3, 3, 4, 5, 5, 5	34	1	80.5
17	19 21	462	232 01 22	230	12 37	32.9	15.7	01 31	17.2	16 58	1129	953 01 27	176	5, 3, 2, 2, 3, 2, 1, 1	19	1	81.0
18	17 38	469	392 07 57	77	13 56	30.7	20.2	01 41	10.5	19 42	1135	1074 08 32	61	2, 2, 2, 2, 2, 2, 2, 2	16	1	81.2
19	15 59	488	345 03 59	143	15 49	38.8	-1.8	23 26	40.6	16 16	1196	960 23 44	236	2, 4, 3, 3, 3, 3, 2, 5	25	1	81.0
20 d	22 10	488	326 03 19	162	06 50	35.1	4.9	22 42	30.2	14 28	1172	995 24 00	177	4, 4, 3, 2, 3, 3, 3, 4	26	1	81.1
21 d	17 42	536	300 00 16	236	21 51	38.3	9.1	18 05	29.2	17 49	1175	912 00 30	263	4, 3, 3, 3, 3, 4, 4, 4	28	1	81.3
22	15 33	528	345 23 13	183	12 50	34.7	10.8	23 30	23.9	16 00	1184	995 23 13	189	3, 3, 2, 2, 3, 3, 3, 4	23	1	81.2
23 d	19 01	515	286 03 30	229	05 09	34.1	4.8	18 53	29.3	18 50	1150	958 04 09	192	4, 5, 4, 2, 3, 3, 4, 3	28	1	81.2
24	19 03	496	401 12 44	95	18 30	30.6	20.9	04 24	9.7	20 25	1117	1047 00 00	70	3, 1, 1, 1, 2, 3, 2, 2	15	1	81.2
25	19 15	483	402 12 39	81	23 19	34.4	17.2	07 07	17.2	19 33	1131	1029 23 30	102	1, 1, 1, 2, 2, 3, 3, 4	17	1	81.0
26	22 27	491	401 14 43	90	15 12	33.3	11.4	23 03	21.9	18 17	1130	1043 00 00	87	3, 2, 3, 1, 3, 3, 1, 3	19	1	81.0
27	19 21	469	396 09 20	73	13 39	30.3	16.7	00 28	13.6	18 07	1125	1029 01 53	96	3, 3, 1, 2, 3, 2, 2, 3	19	1	80.7
28 q	17 19	458	399 12 00	59	12 25	29.2	16.4	03 57	12.8	17 58	1106	1058 00 00	48	2, 2, 2, 2, 1, 1, 1, 0	11	0	81.0
29	13 57	483	398 11 22	85	14 33	36.3	17.4	06 32	18.9	15 08	1133	1089 13 38	44	1, 1, 2, 2, 3, 2, 1, 0	12	1	80.7
30	17 02	519	408 12 52	111	15 32	37.5	14.6	20 05	22.9	16 48	1194	1056 04 10	138	2, 2, 2, 2, 2, 4, 3, 1	18	1	81.2
Mean	- -	486	340 - -	146	- -	34.4	11.7	- -	22.7	- -	1153	1018 - -	135	-	-	0.83	80.9

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	
	Hour G.M.T.		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1	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
2 q	434	436	437	436	436	433	432	429	425	422	414	420			418	422	443	430	435	447	449	447	447	447	444	444	434
3 q	443	445	429	433	437	439	440	434	420	409	404	396			410	429	433	435	443	449	451	452	445	444	443	441	433
4	442	442	442	440	440	439	435	429	422	415	414	414			418	429	438	445	451	444	448	451	446	451	444	444	437
3	441	439	437	434	444	444	447	441	428	415	419	417			419	429	436	449	449	448	451	452	451	448	448	445	439
5	448	444	442	432	432	442	444	433	420	418	425	414			421	414	420	422	447	463	466	468	456	455	447	435	438
6 d	395	378	397	437	455	459	476	463	440	422	399	381			404	412	433	458	436	451	465	475	472	462	395	355	430
7	433	379	374	407	429	418	377	422	426	424	422	397			383	411	415	436	443	450	461	458	457	457	444	457	424
8 d	443	370	424	439	402	400	387	407	428	424	416	426			437	441	443	443	449	472	502	465	461	437	461	437	434
9	380	406	440	440	442	425	406	408	408	406	393	406			412	418	445	465	459	466	486	459	461	446	424	426	430
10	436	439	436	432	432	432	430	418	408	397	406	410			429	433	422	447	451	453	462	462	458	453	451	449	435
11	447	436	438	438	439	437	443	441	432	422	430	428			430	439	444	448	454	457	455	457	454	450	449	444	442
12 q	440	439	443	435	434	431	428	429	425	419	413	415			425	432	436	444	450	455	454	461	456	448	450	447	438
13 q	446	446	447	447	448	447	443	435	426	420	419	423			431	439	436	435	437	441	447	455	452	453	453	452	441
14 q	451	447	443	444	444	445	440	430	419	407	406	412			423	430	436	441	447	457	458	463	464	457	453	459	441
15 d	451	455	455	448	453	464	452	439	425	417	410	420			458	480	497	546	554	571	563	461	125	258	253	356	434
16 d	383	329	226	256	301	250	335	387	374	362	348	396			519	745	660	681	741	599	461	437	392	-2	57	-75	382
17	-41	145	204	390	440	415	415	410	413	410	408	414			423	424	428	461	437	454	470	461	469	465	433	440	391
18	433	428	420	417	413	374	393	411	420	395	380	395			406	416	418	434	447	462	462	466	473	429	380	411	420
19 d	385	391	432	417	387	400	428	411	404	399	392	390			408	404	414	437	443	450	458	466	476	422	410	423	419
20	370	429	425	415	441	440	432	419	402	416	418	417			408	412	422	425	436	461	484	483	463	434	430	428	430
21	436	424	416	427	425	415	418	427	420	410	409	406			406	417	432	442	468	476	473	476	475	450	446	442	435
22	449	440	433	391	406	432	437	440	432	421	408	407			419	415	439	456	468	484	498	496	456	438	437	440	439
23	440	440	440	437	440	438	430	424	413	402	413	420			429	427	425	441	452	479	473	462	469	464	458	453	440
24	446	443	440	441	439	435	432	428	429	429	429	432			431	427	432	439	461	468	476	470	455	450	450	450	443
25	446	443	444	443	441	436	435	433	432	427	421	416			422	425	436	441	455	470	469	469	464	465	465	465	444
26	457	454	453	450	449	446	436	428	421	408	406	412			421	432	436	436	439	445	459	475	487	484	477	475	445
27	465	466	451	443	444	419	393	377	356	355	373	389			425	433	436	448	466	450	447	454	454	453	450	450	429
28	448	445	441	429	440	437	431	429	424	412	406	410			419	426	446	454	477	457	470	469	450	443	441	439	439
29	438	439	440	439	432	428	421	426	428	416	404	415			432	431	419	433	443	447	451	451	450	447	446	436	434
30	436	441	435	434	436	434	429	426	418	413	416	420			435	439	437	436	435	442	445	459	454	455	456	440	436
31	438	440	443	442	442	438	431	427	421	414	408	420			425	443	435	472	453	458	474	468	461	444	444	446	441
Mean	418	419	420	426	430	425	425	425	418	411	407	411			424	438	442	454	462	465	467	463	447	429	424	421	432

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

26	LERWICK (D)													10° +													MAY
	Hour G.M.T.																										
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean		
1	22.2	22.6	22.9	22.7	22.7	21.7	21.1	19.7	19.3	20.4	22.9	25.0	27.5	28.7	30.1	29.5	27.6	26.6	25.6	24.1	24.0	24.0	24.0	24.0	24.1		
2 q	23.9	21.1	22.0	21.2	20.2	19.3	18.8	18.4	19.6	21.3	23.0	26.0	27.2	28.8	28.3	27.1	26.3	26.0	24.6	24.1	23.3	23.6	23.7	23.1	23.4		
3 q	23.1	23.1	22.6	22.2	21.8	21.2	20.7	19.9	19.8	21.2	22.6	26.0	29.1	30.5	30.2	28.8	28.5	26.7	25.1	25.2	21.6	21.2	23.4	23.6	24.1		
4	22.7	22.0	21.7	22.7	21.2	20.8	22.2	22.7	22.7	24.0	24.0	26.0	28.5	30.5	29.9	28.6	26.8	25.2	25.1	25.2	25.5	23.5	24.0	23.2	24.5		
5	21.6	20.2	20.2	21.6	23.5	16.4	15.6	17.5	19.8	25.6	26.3	30.2	32.8	33.6	31.4	28.8	27.6	26.9	25.1	19.4	21.1	20.2	21.2	19.7	23.6		
6 d	10.8	1.8	3.6	13.7	15.6	17.2	15.3	17.4	20.0	21.1	24.2	30.6	33.7	33.6	31.6	33.6	31.6	27.6	26.0	23.6	25.0	6.0	10.9	22.6	20.7		
7	21.4	14.5	24.1	24.1	21.0	20.2	18.4	18.7	21.5	22.9	23.3	25.0	27.8	27.9	28.5	26.6	26.7	25.7	26.1	26.0	25.0	24.6	20.9	22.6	23.5		
8 d	19.8	26.9	23.1	18.7	20.2	25.5	22.7	21.3	20.2	20.2	24.6	24.3	26.1	27.8	28.8	29.4	28.7	26.8	18.2	25.5	25.2	24.2	25.0	19.6	23.9		
9	18.4	29.8	22.7	20.8	20.2	20.9	21.7	21.6	22.9	22.0	24.2	26.4	28.4	28.8	24.8	20.7	26.4	24.9	21.2	24.6	25.0	21.5	28.0	21.5	23.6		
10	21.1	22.0	22.0	22.2	21.6	21.0	20.2	18.7	21.1	23.7	25.6	27.6	29.5	31.3	27.9	27.6	26.9	23.1	25.0	26.0	25.2	21.1	23.8	23.4	24.1		
11	25.0	26.4	25.4	22.0	18.9	18.7	18.3	19.3	22.2	24.5	24.8	27.6	29.8	28.7	27.8	26.0	24.7	24.1	24.8	25.0	25.0	23.3	24.0	24.4	24.2		
12 q	24.0	24.0	23.8	23.0	20.9	18.7	16.8	15.9	17.4	20.4	23.8	27.5	30.0	30.7	29.7	27.1	25.1	24.8	25.0	25.7	25.0	22.2	23.4	23.3	23.7		
13 q	24.0	23.5	23.1	22.2	21.1	20.2	19.7	18.4	18.6	20.6	23.7	27.5	29.3	29.1	27.6	26.5	25.4	25.4	25.5	25.1	25.0	24.9	24.9	24.4	24.0		
14 q	24.3	24.0	23.3	21.8	20.7	19.4	18.3	17.6	18.3	20.9	22.9	24.9	26.9	27.6	27.1	26.4	26.4	27.0	26.3	26.8	26.0	24.9	24.7	24.0	23.8		
15 d	23.2	23.0	23.0	25.8	26.4	19.7	20.8	17.8	19.0	20.2	24.3	27.1	31.6	34.6	43.1	39.5	42.1	38.2	34.5	28.0	41.6	14.9	-9.4	3.3	25.5		
16 d	5.8	12.6	9.3	9.6	16.0	19.2	23.8	18.7	21.3	27.0	22.6	25.9	26.9	24.0	29.9	34.5	39.4	39.9	24.7	25.4	23.9	36.1	-18.4	-31.8	19.4		
17	-47.8	-16.5	4.8	15.1	15.3	14.5	15.3	16.4	18.2	21.6	23.7	26.1	27.8	28.9	29.2	29.6	28.1	28.1	28.7	26.4	25.8	22.6	18.2	17.7	17.4		
18	18.6	15.8	18.8	21.8	22.8	23.9	27.1	22.9	22.2	22.2	24.5	27.1	27.6	30.0	28.2	29.1	28.3	27.5	23.7	23.5	23.5	18.4	18.9	18.8	23.5		
19 d	23.2	24.0	16.2	9.9	19.4	24.1	17.7	17.4	18.3	18.8	20.2	22.8	27.9	30.5	29.8	27.9	26.9	26.0	24.8	23.4	18.4	19.3	17.4	14.4	21.6		
20	11.9	18.5	21.0	20.2	20.9	20.7	19.5	18.8	20.2	22.8	23.6	26.9	28.4	29.6	28.9	28.1	26.6	25.8	22.1	16.0	18.4	19.8	21.9	25.1	22.3		
21	22.2	22.2	23.1	19.2	21.1	19.8	21.9	18.9	18.4	20.0	22.6	24.6	25.2	26.0	27.9	28.2	24.4	25.4	25.6	24.0	15.9	22.5	23.6	22.6	22.7		
22	22.2	21.0	23.0	24.1	23.1	17.8	17.1	16.2	18.8	21.0	23.0	25.4	28.8	29.5	28.5	28.4	25.3	26.7	26.0	17.6	18.3	18.3	19.6	23.0	22.6		
23	25.2	23.5	21.7	19.3	20.1	19.3	18.2	16.7	17.0	21.0	24.0	24.6	24.7	25.1	25.1	24.8	24.0	24.9	24.0	24.7	25.7	25.0	24.4	23.8	22.8		
24	22.5	23.0	22.3	21.6	20.4	18.7	17.6	18.4	19.7	22.0	24.3	28.6	31.6	31.0	29.5	26.8	26.1	25.1	26.0	22.2	23.0	24.0	24.0	23.0	23.8		
25	23.2	23.0	22.3	20.8	19.0	17.1	15.4	15.4	17.4	20.7	24.3	27.8	29.3	29.7	29.9	29.7	26.7	24.9	25.3	26.1	25.9	25.9	25.7	24.5	23.7		
26	22.7	22.0	21.7	20.2	20.0	18.8	18.2	17.1	18.9	22.2	27.4	31.2	32.1	31.3	28.9	27.8	26.6	25.4	25.2	26.2	27.6	26.5	24.9	24.0	24.5		
27	23.1	21.3	20.3	28.1	32.3	29.8	28.3	22.6	21.9	23.6	28.6	30.7	33.3	33.3	30.9	26.9	22.4	25.2	25.4	25.6	25.7	25.7	22.8	21.2	26.2		
28	21.4	22.1	20.3	22.6	18.1	15.2	13.8	14.5	15.8	20.2	25.0	29.3	31.6	32.1	31.7	30.7	28.9	25.3	23.8	22.1	25.7	25.0	23.2	23.1	23.4		
29	22.6	22.3	22.2	20.7	19.6	18.5	19.2	20.2	20.3	21.8	24.6	28.2	30.5	30.6	30.8	29.4	26.8	25.0	25.8	25.8	24.8	24.4	24.0	22.2	24.2		
30	18.4	18.2	19.3	17.8	18.7	18.7	18.0	17.8	18.3	20.0	22.4	26.0	29.0	29.8	29.8	29.1	28.8	26.8	25.0	25.0	25.0	26.0	21.9	21.6	23.0		
31	21.9	22.4	20.9	19.0	18.4	17.4	17.1	17.7	18.3	21.0	24.3	28.8	30.4	31.6	30.6	30.7	28.2	27.8	27.2	26.9	16.5	20.2	20.2	18.7	23.2		
Mean	18.8	20.0	20.3	20.5	20.7	19.8	19.3	18.5	19.6	21.8	24.0	27.0	29.1	29.9	29.6	28.6	27.7	26.7	25.2	24.4	24.1	22.6	20.1	19.8	23.3		

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	
	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		
	0-1	1-2											γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ		
1	1114	1113	1113	1114	1114	1114	1114	1114	1114	1108	1108	1106	1108	1108	1112	1126	1122	1117	1114	1111	1108	1107	1105	1105	1112		
2 q	1103	1098	1091	1097	1104	1112	1114	1112	1114	1110	1107	1107	1098	1097	1102	1108	1109	1112	1117	1118	1116	1112	1108	1108	1107		
3 q	1108	1108	1108	1109	1110	1110	1108	1108	1104	1104	1099	1097	1097	1096	1100	1107	1113	1119	1117	1114	1117	1106	1101	1097	1107		
4	1096	1099	1102	1102	1094	1096	1092	1091	1092	1097	1095	1091	1087	1089	1097	1102	1109	1113	1110	1108	1108	1110	1107	1108	1100		
5	1102	1102	1102	1102	1063	1067	1083	1091	1092	1091	1091	1101	1101	1104	1102	1109	1108	1118	1128	1144	1133	1115	1104	1080	1101		
6 d	1022	990	960	1008	1045	1053	1067	1078	1092	1097	1114	1133	1136	1136	1138	1133	1144	1137	1144	1141	1132	1052	1035	960	1081		
7	1002	987	983	1048	1075	1083	1067	1083	1100	1110	1111	1126	1126	1124	1128	1144	1138	1132	1132	1131	1131	1118	1081	1065	1093		
8 d	1070	1022	1020	1050	1061	1062	1073	1087	1092	1102	1107	1102	1102	1108	1128	1131	1144	1150	1153	1138	1122	1075	1061	1046	1092		
9	1044	1012	1073	1101	1102	1102	1102	1102	1097	1102	1112	1118	1114	1116	1128	1150	1134	1120	1119	1120	1107	1102	1049	1034	1098		
10	1073	1091	1102	1109	1108	1108	1109	1113	1110	1112	1111	1110	1114	1124	1132	1121	1122	1130	1118	1114	1111	1114	1107	1108	1111		
11	1110	1108	1103	1107	1105	1107	1104	1102	1102	1107	1104	1107	1108	1111	1115	1117	1116	1118	1115	1114	1112	1111	1111	1113	1109		
12 q	1114	1113	1111	1114	1115	1114	1116	1114	1113	1113	1110	1108	1112	1112	1113	1114	1118	1114	1113	1108	1114	1116	1109	1109	1113		
13 q	1108	1113	1114	1115	1115	1115	1115	1114	1110	1105	1103	1103	1104	1110	1116	1118	1118	1115	1112	1108	1108	1107	1107	1108	1111		
14 q	1108	1110	1114	1115	1116	1115	1115	1113	1108	1102	1101	1101	1101	1103	1107	1107	1105	1105	1110	1107	1106	1107	1102	1085	1107		
15 d	1096	1102	1108	1104	1085	1079	1091	1096	1092	1090	1090	1085	1085	1114	1168	1237	1215	1217	1191	1154	961	1027	890	906	1095		
16 d	995	979	925	884	898	961	1008	1051	1092	1104	1139	1173	1232	1279	1227	1254	1247	1202	1093	1055	1095	892	796	842	1059		
17	697	820	897	1026	1105	1123	1114	1116	1120	1115	1114	1113	1110	1114	1121	1132	1143	1126	1122	1132	1128	1119	1108	1065	1074		
18	1015	1044	1067	1089	1093	1079	1067	1088	1097	1110	1115	1111	1111	1126	1126	1120	1121	1126	1137	1128	1126	1091	1038	1055	1095		
19 d	1002	993	1035	1045	1069	1051	1073	1097	1108	1115	1133	1149	1110	1108	1116	1118	1119	1120	1120	1126	1122	1069	995	1002	1083		
20	996	1026	1078	1085	1104	1113	1117	1119	1118	1102	1104	1106	1107	1108	1110	1118	1121	1121	1144	1153	1132	1121	1102	1083	1104		
21	1093	1095	1089	1085	1102	1101	1101	1102	1108	1105	1102	1107	1113	1109	1114	1125	1132	1133	1127	1130	1126	1108	1108	1101	1109		
22	1087	1085	1095	1091	1055	1073	1085	1092	1097	1092	1092	1096	1098	1109	1105	1114	1132	1138	1142	1146	1120	1098	1114	1108	1103		
23	1091	1082	1104	1108	1109	1113	1114	1115	1114	1113	1104	1107	1113	1117	1116	1114	1118	1120	1132	1129	1117	1115	1114	1112	1112		
24	1115	1114	1114	1113	1114	1114	1112	1108	1104	1098	1095	1094	1095	1097	1102	1106	1109	1116	1121	1128	1126	1120	1115	1114	1110		
25	1114	1110	1110	1110	1108	1109	1108	1104	1102	1091	1091	1090	1091	1098	1104	1111	1114	1113	1109	1107	1107	1107	1105	1077	1104		
26	1080	1090	1100	1107	1108	1112	1113	1108	1105	1100	1090	1082	1084	1097	1107	1112	1113	1110	1107	1104	1102	1107	1107	1107	1102		
27	1113	1102	1108	1102	1053	1026	1039	1058	1092	1102	1112	1123	1108	1117	1138	1162	1167	1144	1131	1120	1116	1110	1107	1108	1107		
28	1103	1110	1108	1109	1110	1114	1114	1109	1114	1110	1103	1104	1110	1126	1130	1139	1152	1166	1149	1132	1120	1115	1114	1115	1120		
29	1117	1118	1118	1120	1120	1118	1115	1105	1104	1101	1101	1097	1102	1120	1127	1126	1126	1126	1115	1111	1108	1108	1108	1111	1113		
30	1087	1098	1108	1114	1114	1114	1113	1110	1108	1102	1100	1102	1102	1103	1108	1114	1118	1120	1121	1115	1114	1108	1097	1101	1108		
31	1104	1104	1097	1109	1114	1114	1114	1111	1108	1105	1104	1095	1091	1097	1105	1109	1124	1126	1126	1131	1128	1110	1110	1102	1110		
Mean	1067	1069	1076	1087	1090	1093	1096	1100	1104	1104	1105	1108	1109	1115	1121	1129	1131	1130	1125	1122	1112	1096	1078	1072	1102		

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

28 LERWICK													MAY			
TERRESTRIAL MAGNETIC ELEMENTS													3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
Horizontal force				Declination				Vertical force								
Maximum 14,000γ +	Minimum 14,000γ +	Range		Maximum 10° +	Minimum 10° +	Range		Maximum 46,000γ +	Minimum 46,000γ +	Range						
h. m. γ	γ h. m.	γ		h. m. γ	γ h. m.	γ		h. m. γ	γ h. m.	γ						
1	15 03	461	411 10 21	50	15 03	31.6	18.7 07 53	12.9	15 27	1132	1103 22 22	29	1,0,1,1,2,3,1,1	10	0	81.1
2 q	19 20	457	388 11 40	69	13 39	29.7	18.1 07 22	11.6	19 16	1121	1087 02 50	34	2,1,0,2,2,0,1,0	8	0	81.1
3 q	16 18	461	407 11 09	54	13 58	30.8	18.4 08 12	12.4	17 09	1121	1093 11 34	28	1,1,1,1,1,2,2,2	11	0	81.4
4	15 40	455	414 09 16	41	14 22	31.0	20.0 04 56	11.0	17 27	1114	1086 12 55	28	1,1,1,1,1,2,0,1	8	0	81.3
5	18 52	476	403 11 50	73	13 04	34.4	14.6 06 16	19.8	19 34	1151	1053 24 00	98	1,3,2,2,2,2,2,3	17	1	81.3
6 d	20 56	532	273 23 18	259	12 43	36.8	-6.0 01 58	42.8	19 13	1168	933 23 36	235	4,3,3,3,3,3,4,5	28	1	81.7
7	23 13	469	345 02 16	124	12 10	29.8	7.0 01 30	22.8	15 51	1150	949 00 00	201	4,3,4,3,3,2,1,3	23	1	81.5
8 d	18 38	528	309 01 30	219	01 30	38.4	4.8 18 29	33.6	18 24	1169	975 01 45	194	4,3,4,2,4,3,4,3	27	1	83.5
9	18 26	510	339 00 53	171	01 11	36.1	9.5 00 08	26.6	15 42	1157	992 01 19	165	4,3,3,3,2,3,3,4	25	1	83.4
10	17 51	472	389 10 48	83	13 19	32.2	16.2 21 42	16.0	14 13	1137	1051 00 00	86	3,1,1,2,3,2,1,2	15	1	83.7
11	17 04	471	414 09 11	57	12 20	30.2	17.4 06 02	12.8	17 18	1120	1101 04 21	19	2,1,2,2,2,2,1,1	13	0	83.2
12 q	19 26	467	411 10 37	56	13 40	31.4	13.7 07 34	17.7	16 21	1121	1108 19 30	13	1,1,2,0,2,1,1,1	9	0	83.1
13 q	19 41	461	415 10 26	46	13 18	29.8	18.0 08 08	11.8	14 50	1120	1102 11 48	18	0,0,1,2,2,1,1,1	8	0	83.4
14 q	20 55	466	404 10 05	62	13 53	28.3	17.2 07 53	11.1	04 16	1119	1081 23 20	38	1,0,1,1,1,1,1,2	8	0	83.5
15 d	16 53	614	-210 20 51	824	20 58	119.0	-32.5 22 54	151.5	15 28	1271	701 20 46	570	1,3,2,2,4,4,8,7	31	2	83.6
16 d	16 38	874	-371 21 27	1245	21 42	73.8	-59.9 24 00	133.7	13 10	1346	651 24 00	695	6,5,5,4,6,6,7,7	46	2	83.2
17	21 21	486	-250 01 02	736	15 08	31.5	-64.4 00 05	95.9	15 56	1151	610 00 04	541	7,5,3,1,2,3,2,4	27	2	83.4
18	20 50	486	351 22 29	135	13 31	30.8	15.3 22 04	15.5	18 38	1140	1008 00 47	132	3,3,3,2,3,2,3,4	23	1	84.0
19 d	20 36	501	335 00 20	166	13 57	31.9	6.1 22 50	25.8	11 11	1163	972 22 15	191	4,4,3,3,3,1,3,4	25	1	84.0
20	18 17	495	315 00 36	180	13 01	30.8	9.1 00 13	21.7	19 12	1164	987 00 30	177	4,3,2,3,2,3,3,3	23	1	84.0
21	20 32	498	401 12 10	97	15 00	28.7	7.4 20 29	21.3	20 23	1138	1076 03 10	62	2,2,2,1,1,3,3,2	16	1	83.7
22	19 49	519	357 03 45	162	13 10	31.6	-1.9 19 43	33.5	19 40	1190	1049 04 22	141	2,4,1,2,3,2,4,3	21	1	83.5
23	17 59	486	398 09 23	88	00 48	30.3	15.6 07 11	14.7	18 53	1138	1065 01 05	73	3,1,1,2,2,2,2,1	14	1	83.4
24	18 01	483	418 13 25	65	12 28	32.6	17.2 06 51	15.4	19 05	1132	1091 12 02	41	1,1,2,1,3,2,2,1	13	1	83.7
25	17 50	480	411 11 40	69	23 07	30.9	14.7 06 19	16.2	16 20	1118	1065 23 34	53	0,1,2,1,2,2,0,3	11	1	83.6
26	20 47	494	402 10 24	92	12 25	32.3	16.1 07 33	16.2	15 59	1114	1075 00 01	39	2,1,1,2,2,1,3,2	14	1	83.6
27	16 10	482	333 09 07	149	04 22	37.9	14.4 16 03	23.5	15 59	1205	1015 05 30	190	2,4,3,3,3,3,2,2	22	1	83.8
28	16 18	486	400 11 43	86	14 41	32.9	11.4 06 23	21.5	17 22	1170	1101 11 24	69	2,2,1,2,2,3,2,1	15	1	83.7
29	18 50	454	399 10 27	55	14 24	31.3	17.5 05 35	13.8	15 42	1133	1092 11 51	41	1,1,2,2,3,2,1,1	13	1	84.0
30	22 20	465	409 09 42	56	14 10	30.5	13.5 00 50	17.0	17 40	1124	1077 00 40	47	3,2,1,1,2,2,1,2	14	0	83.8
31	15 47	488	404 10 39	84	15 44	32.3	5.8 20 31	26.5	20 26	1143	1088 12 49	55	1,1,1,1,3,3,4,1	15	1	83.8
Mean	-	-	499	317	-	-	36.1	6.2	-	-	1153	1014	-	-	0.81	83.1

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	
	Hour G.M.T.																									Mean	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24			
1	442	440	443	450	446	443	434	427	430	424	422	421	427	435	434	450	469	476	487	473	462	459	450	450	446		
2 d	451	447	429	463	442	440	425	382	408	396	392	407	430	459	488	482	504	477	520	568	466	440	417	423	448		
3 d	271	348	399	416	392	424	422	352	411	415	407	405	406	430	411	446	476	514	504	488	465	453	450	444	423		
4 d	440	368	387	403	399	374	395	429	422	405	391	397	418	428	443	448	466	492	474	472	465	456	444	446	428		
5	445	438	432	430	415	435	428	418	428	420	418	419	424	433	433	444	465	470	491	517	481	453	447	448	443		
6	444	443	432	422	385	413	422	429	423	417	413	407	425	433	437	453	459	485	475	477	466	454	451	446	438		
7	442	440	419	444	452	452	437	410	393	404	407	414	418	423	430	431	451	458	462	461	455	453	456	451	436		
8	448	442	442	440	441	440	437	438	431	426	421	418	420	420	425	440	453	459	462	462	462	462	455	455	442		
9	451	452	452	453	453	451	446	432	418	416	422	422	433	440	444	445	445	453	469	470	466	466	460	455	446		
10	454	451	445	448	439	430	435	437	425	424	415	407	411	426	433	448	461	479	472	476	473	463	451	451	444		
11	447	441	436	440	444	440	433	423	411	401	404	407	424	430	428	435	444	459	473	473	470	467	467	447	439		
12	451	451	451	451	454	455	446	431	414	399	393	407	426	429	444	441	475	505	495	479	477	455	434	442	446		
13	437	413	436	428	430	437	431	431	421	406	403	411	425	418	430	437	453	474	485	480	467	455	452	455	438		
14	429	427	433	429	437	433	424	420	416	412	409	412	429	428	431	455	466	467	476	470	462	457	448	440	438		
15	437	440	440	437	432	433	429	428	423	417	410	413	411	418	431	443	455	459	464	468	462	451	451	447	437		
16 q	444	444	447	448	446	439	428	417	411	408	410	419	427	441	438	447	458	468	468	464	466	462	463	462	443		
17	455	455	454	453	451	445	441	439	424	418	418	411	426	440	435	451	455	466	468	462	462	455	444	444	445		
18	438	438	440	441	441	437	427	421	419	422	428	422	430	431	433	442	453	458	472	475	474	467	459	455	443		
19 q	455	451	453	455	451	443	434	425	422	422	424	430	432	435	436	447	451	456	458	460	459	459	455	452	444		
20	450	448	447	448	443	441	444	450	448	441	436	430	422	470	466	459	456	481	503	503	472	438	421	425	452		
21	441	445	440	437	434	425	416	421	424	406	409	417	414	426	435	442	461	465	491	485	463	449	458	437	439		
22	438	437	440	438	429	426	423	427	419	408	415	422	413	431	448	450	456	460	457	461	460	456	455	440	438		
23 q	440	429	432	437	437	438	435	429	427	424	423	424	424	429	441	452	458	460	466	463	460	455	445	444	441		
24	441	446	439	439	442	440	438	437	433	426	423	423	432	437	444	439	444	459	476	480	467	461	443	440	444		
25	440	440	433	442	442	448	442	431	419	414	413	419	434	445	451	449	448	462	467	468	466	454	445	446	442		
26 q	444	443	442	442	440	438	437	435	428	417	414	418	427	441	449	458	460	462	475	467	459	453	444	442	443		
27 q	442	444	444	444	440	438	440	438	434	431	423	416	418	427	444	448	445	457	459	461	469	462	454	447	443		
28	445	443	442	437	438	443	442	435	429	425	414	411	416	430	444	450	458	464	465	470	472	466	463	470	445		
29 d	466	466	464	463	462	459	455	451	434	381	368	403	432	483	422	446	547	574	523	510	476	412	423	448	457		
30 d	382	356	392	408	433	397	400	393	359	353	408	412	441	433	463	469	486	498	473	474	451	459	445	434	426		
Mean	437	434	436	439	436	435	431	425	420	413	412	415	424	435	440	448	463	474	478	478	466	455	448	446	441		

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

30	LERWICK (D)												10° +												JUNE	
	Hour G.M.T.																									
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	
1	19.4	18.0	19.0	17.5	18.9	20.0	19.1	19.7	22.3	24.0	26.6	28.9	31.1	31.4	30.3	29.7	29.8	29.1	25.5	26.1	25.9	26.1	25.1	24.6	24.5	
2 d	23.2	20.8	20.7	8.8	11.1	9.2	10.9	19.4	27.4	25.6	29.4	35.0	35.8	34.6	39.3	35.8	33.4	35.1	35.6	23.7	14.7	21.1	12.2	15.8	24.1	
3 d	27.3	22.0	15.8	15.7	18.0	18.9	24.2	24.1	26.1	23.2	22.6	21.7	24.2	27.6	26.1	29.1	29.4	28.4	19.1	23.2	23.1	23.7	23.7	24.3	23.4	
4 d	21.6	30.6	24.1	27.1	19.9	21.9	25.7	17.1	17.3	18.9	21.1	25.3	28.6	28.4	28.9	27.9	26.5	27.9	25.8	26.6	24.2	22.2	24.4	22.6	24.4	
5	22.9	22.3	22.7	21.1	25.1	18.1	21.9	18.9	18.5	19.9	21.7	23.4	24.5	26.1	25.8	26.6	27.0	25.3	26.1	16.5	21.9	24.8	22.7	23.5	22.8	
6	23.6	22.7	22.2	15.9	21.1	20.0	17.3	18.9	21.7	22.7	25.4	26.5	27.0	28.3	27.9	27.0	27.9	21.9	26.4	25.0	24.9	25.4	25.1	25.4	23.8	
7	24.1	23.5	25.6	23.7	20.8	19.3	18.0	20.3	22.8	26.0	26.3	27.9	29.3	29.7	29.3	27.0	26.1	25.1	24.6	25.0	23.7	24.3	22.6	24.1	24.5	
8	24.4	25.6	23.4	21.8	20.3	18.5	17.2	17.5	18.0	20.3	22.5	25.4	28.2	29.3	28.9	29.0	27.9	26.9	26.8	25.6	24.7	24.8	23.5	23.4	23.9	
9	23.2	23.5	23.2	22.3	19.8	18.2	17.2	17.5	18.5	20.8	22.9	28.2	28.6	28.9	29.3	29.4	28.1	26.6	26.5	26.4	26.4	25.4	24.4	24.0	24.1	
10	23.0	21.9	21.8	22.0	23.5	25.0	27.4	24.1	22.6	22.3	23.4	26.6	28.4	29.7	30.0	28.5	26.9	27.5	28.2	27.7	18.7	19.9	20.8	20.6	24.6	
11	20.6	20.8	22.5	23.7	20.8	17.0	15.4	15.0	17.3	20.8	24.5	26.9	28.6	29.6	29.4	28.3	26.8	26.1	24.1	25.5	25.5	22.5	16.1	21.3	22.9	
12	23.7	23.3	22.6	21.2	19.6	18.5	17.9	19.4	19.9	19.6	20.9	24.8	30.3	32.2	31.6	29.4	29.5	30.1	26.8	24.1	27.5	14.9	14.6	18.8	23.4	
13	20.1	22.9	18.9	12.7	18.3	17.4	15.9	18.0	18.5	21.4	22.3	26.1	29.2	29.4	27.9	27.7	27.6	27.5	24.6	21.3	22.5	24.1	23.5	19.4	22.4	
14	17.1	18.8	18.1	17.6	18.3	16.2	16.4	17.9	18.8	20.3	23.5	26.1	28.0	28.1	28.6	28.3	28.1	26.9	22.3	26.5	26.0	24.2	21.9	21.7	22.5	
15	22.0	21.9	20.1	19.4	19.4	17.2	17.9	18.5	19.2	20.4	22.0	23.9	25.4	26.7	26.1	25.8	25.6	25.8	26.1	25.2	25.5	23.2	23.3	21.7	22.6	
16 q	22.7	22.3	21.8	20.8	18.9	17.7	16.5	17.3	18.0	20.9	24.0	26.8	29.4	29.8	29.4	27.3	26.6	26.1	24.7	26.4	26.1	25.2	24.4	23.4	23.6	
17	22.1	20.9	19.8	20.2	18.4	18.0	17.1	16.5	18.2	21.6	24.0	26.1	29.2	31.8	31.3	31.4	28.3	26.5	27.0	26.1	27.0	23.7	23.3	20.9	23.7	
18	20.2	19.1	17.0	17.5	17.5	16.5	16.5	18.4	19.9	22.3	24.2	26.3	27.6	28.8	29.2	29.6	29.2	28.0	27.8	26.4	26.2	22.3	22.3	21.6	23.1	
19 q	21.3	21.2	22.3	20.3	19.0	18.1	17.2	16.6	17.6	19.5	21.8	24.6	25.3	25.7	25.8	27.0	27.4	27.4	26.1	24.6	23.8	23.7	23.6	22.3	22.6	
20	21.3	20.4	20.0	18.5	17.1	17.5	18.8	19.0	19.8	21.3	23.6	26.4	28.6	30.0	33.2	32.8	33.8	32.7	33.2	30.8	21.2	9.9	11.2	16.8	23.2	
21	21.1	21.4	19.2	17.5	17.1	17.7	20.3	22.7	21.9	25.2	25.8	26.9	28.9	28.3	27.1	27.2	27.9	27.0	25.0	21.9	22.7	25.7	19.3	21.8	23.3	
22	22.6	21.9	21.7	20.3	19.3	19.1	18.8	20.8	20.3	21.9	22.2	25.3	28.4	29.8	26.7	25.2	25.6	25.8	24.0	23.7	25.4	24.0	21.0	22.3	23.2	
23 q	23.7	22.7	22.5	18.9	17.2	16.3	16.5	17.0	17.8	19.4	22.3	25.1	27.5	27.9	27.0	26.3	26.0	25.1	25.1	24.7	25.4	23.2	21.5	20.6	22.5	
24	20.7	20.6	20.1	20.6	18.9	15.4	15.0	16.9	18.5	19.8	21.7	24.8	27.9	27.9	27.3	26.4	26.2	27.9	28.4	24.7	22.5	24.4	21.2	22.3	22.5	
25	20.8	19.9	16.8	17.0	15.8	14.9	16.0	17.5	19.1	20.7	24.1	25.5	25.6	25.7	26.7	26.3	25.5	25.7	26.4	25.7	22.3	22.0	23.7	21.9	21.9	
26 q	21.8	21.0	21.2	20.4	19.3	18.2	18.4	18.7	19.7	21.4	22.9	25.0	26.5	28.1	28.4	27.5	27.1	27.5	26.5	27.2	26.9	26.3	23.7	23.2	23.6	
27 q	20.7	20.3	19.7	19.4	19.0	18.9	18.8	18.6	19.7	22.8	25.6	28.3	28.4	29.2	30.4	29.4	27.0	26.3	25.5	24.1	24.6	23.5	24.3	20.3	23.5	
28	20.6	20.8	20.1	19.2	19.4	18.0	17.4	17.8	18.4	20.0	23.4	26.1	27.6	30.1	30.3	29.1	27.9	26.8	25.6	27.0	26.3	25.2	24.1	23.0	23.5	
29 d	20.8	20.9	19.4	18.4	18.3	18.0	17.7	18.4	17.5	14.6	30.0	33.7	34.0	30.6	37.6	35.1	37.9	22.5	32.2	26.1	26.5	19.6	16.5	18.7	24.4	
30 d	25.0	16.9	19.3	16.9	16.9	23.9	20.9	20.6	22.8	23.3	22.3	22.9	23.8	28.4	27.9	25.6	26.4	27.1	26.9	27.4	24.1	24.1	19.9	19.8	23.0	
Mean	22.1	21.6	20.7	19.2	18.9	18.1	18.3	18.8	19.9	21.4	23.8	26.3	28.2	29.1	29.3	28.5	28.1	27.1	26.4	25.2	24.2	23.0	21.5	21.7	23.4	

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				
	Hour G.M.T.																									
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1100	1097	1095	1094	1102	1108	1109	1111	1105	1098	1098	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097	1097
2 d	1110	1106	1076	1033	1059	1080	1092	1081	1054	1067	1081	1095	1102	1140	1173	1203	1158	1164	1174	1215	1159	1125	1036	1067	1110	1108
3 d	969	970	1010	1044	1059	1091	1095	1103	1108	1110	1110	1110	1118	1127	1153	1123	1124	1141	1163	1144	1133	1092	1090	1072	1094	1094
4 d	1083	1034	1029	1006	1046	1059	1056	1080	1100	1114	1126	1127	1117	1117	1113	1124	1131	1133	1146	1139	1133	1121	1107	1110	1098	1098
5	1106	1110	1098	1101	1081	1093	1102	1114	1115	1116	1116	1110	1106	1105	1102	1100	1105	1120	1126	1122	1108	1108	1108	1109	1108	1108
6	1100	1089	1070	1079	1058	1066	1092	1097	1102	1107	1107	1113	1114	1117	1121	1130	1126	1134	1132	1131	1124	1126	1121	1118	1113	1107
7	1115	1113	1105	1097	1108	1110	1114	1116	1115	1110	1108	1105	1102	1107	1113	1120	1120	1122	1121	1117	1118	1117	1113	1110	1112	1112
8	1108	1102	1102	1111	1114	1114	1111	1108	1108	1113	1111	1108	1111	1113	1113	1114	1111	1118	1115	1113	1114	1115	1116	1116	1116	1112
9	1118	1116	1116	1115	1114	1114	1113	1120	1116	1108	1107	1108	1107	1110	1115	1118	1118	1114	1110	1114	1116	1114	1115	1117	1114	1114
10	1113	1115	1117	1115	1108	1094	1078	1086	1097	1101	1107	1107	1107	1107	1108	1109	1110	1115	1122	1127	1122	1121	1113	1109	1103	1109
11	1111	1114	1112	1099	1095	1101	1106	1111	1112	1107	1098	1096	1099	1103	1111	1112	1115	1113	1115	1116	1113	1112	1095	1090	1107	1107
12	1099	1110	1113	1117	1118	1118	1116	1114	1112	1109	1108	1097	1094	1101	1099	1108	1105	1117	1153	1153	1127	1070	1085	1095	1110	1110
13	1099	1081	1025	1035	1071	1100	1111	1110	1111	1112	1107	1103	1101	1111	1111	1113	1111	1118	1134	1129	1122	1117	1107	1080	1101	1101
14	1067	1068	1075	1093	1105	1111	1113	1109	1113	1113	1109	1101	1099	1112	1113	1119	1123	1127	1129	1125	1115	1112	1100	1100	1106	1106
15	1099	1104	1109	1114	1115	1113	1111	1109	1108	1108	1106	1104	1103	1102	1103	1103	1102	1103	1106	1110	1111	1111	1108	1099	1107	1107
16 q	1103	1106	1109	1111	1113	1114	1113	1113	1109	1104	1100	1096	1097	1095	1097	1097	1106	1115	1124	1123	1115	1112	1110	1108	1108	1108
17	1106	1104	1104	1104	1106	1112	1109	1108	1108	1103	1097	1096	1095	1100	1108	1106	1126	1127	1127	1125	1115	1109	1096	1082	1107	1107
18	1089	1092	1090	1097	1105	1111	1112	1111	1111	1111	1111	1111	1106	1106	1105	1105	1109	1115	1113	1115	1111	1111	1111	1110	1107	1107
19 q	1109	1108	1105	1104	1106	1110	1109	1110	1108	1102	1097	1093	1096	1096	1097	1096	1099	1103	1108	1108	1108	1109	1109	1105	1104	1104
20	1101	1098	1104	1105	1106	1106	1098	1099	1096	1096	1095	1092	1094	1092	1117	1135	1129	1119	1120	1138	1150	1108	1062	1068	1105	1105
21	1088	1101	1106	1105	1101	1100	1094	1093	1092	1094	1095	1098	1106	1103	1101	1106	1102	1115	1122	1132	1117	1107	1087	1101	1103	1103
22	1107	1107	1107	1107	1103	1100	1099	1096	1103	1106	1102	1106	1110	1110	1114	1123	1114	1112	1119	1117	1112	1107	1096	1096	1107	1107
23 q	1101	1104	1099	1101	1107	1109	1111	1110	1110	1111	1111	1108	1108	1110	1111	1115	1111	1112	1114	1119	1114	1112	1115	1113	1110	1110
24	1110	1109	1110	1098	1086	1092	1096	1095	1095	1094	1097	1097	1094	1092	1098	1108	1108	1107	1107	1121	1125	1117	1118	1116	1104	1104
25	1109	1097	1094	1094	1099	1097	1101	1103	1100	1105	1106	1103	1099	1097	1102	1105	1106	1103	1102	1103	1109	1110	1110	1109	1103	1103
26 q	1109	1109	1109	1111	1109	1108	1107	1109	1109	1104	1100	1097	1099	1102	1102	1104	1113	1115	1111	1115	1115	1113	1113	1109	1108	1108
27 q	1107	1104	1105	1107	1109	1110	1106	1105	1103	1106	1097	1088	1087	1094	1099	1108	1115	1113	1115	1114	1109	1111	1097	1091	1104	1104
28	1097	1102	1103	1106	1103	1102	1103	1102	1099	1099	1093	1087	1089	1091	1095	1103	1108	1109	1108	1102	1100	1102	1103	1096	1100	1100
29 d	1096	1099	1103	1104	1102	1100	1100	1100	1094	1097	1097	1095	1096	1091	1145	1149	1185	1260	1180	1192	1143	1064	1051	1073	1117	1117
30 d	1031	901	956	1014	1078	1065	1075	1084	1097	1090	1093	1103	1113	1115	1121	1149	1142	1158	1162	1127	1108	1089	1090	1080	1085	1085
Mean	1095	1089	1089	1091	1096	1100	1102	1104	1104	1104	1103	1102	1102	1105	1112	1117	1118	1125	1127	1128	1120	1108	1100	1099	1106	1106

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

32 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			3-hr. range indices K					
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	γ	h. m.	γ			°A.
1	18 51	500	419	11 36	81	13 05	31.7	16.8	03 27	14.9	18 44	1142	1089	03 05	53	1, 2, 1, 1, 1, 2, 2, 1	83.6
2 d	19 15	696	334	07 50	362	14 27	44.4	4.8	03 19	39.6	19 24	1250	995	22 32	255	3, 4, 4, 3, 4, 4, 6, 4	83.4
3 d	18 08	526	176	00 37	350	00 37	35.8	12.1	02 45	23.7	18 28	1181	881	00 40	300	6, 3, 4, 3, 3, 4, 3, 3	83.2
4 d	17 37	518	340	01 53	178	01 18	36.7	15.5	07 54	21.2	18 32	1151	988	01 43	163	4, 4, 4, 3, 3, 3, 2, 2	83.0
5	19 48	561	399	10 08	162	19 18	31.5	-2.0	19 38	33.5	19 30	1146	1067	04 49	79	2, 3, 3, 2, 2, 3, 5, 2	83.2
6	17 34	503	372	04 50	131	13 25	29.6	14.0	03 19	15.6	17 23	1144	1045	04 56	99	3, 3, 2, 2, 2, 3, 2, 1	83.4
7	19 04	467	387	08 14	80	14 21	30.7	16.8	06 12	13.9	17 57	1124	1093	03 08	31	2, 2, 3, 2, 2, 2, 1, 1	83.7
8	19 09	470	411	13 27	59	13 52	30.2	16.3	06 20	13.9	17 48	1122	1097	02 05	25	1, 1, 2, 1, 2, 1, 1, 1	84.0
9	18 43	477	413	09 42	64	15 02	29.8	16.2	06 56	13.6	07 30	1122	1104	12 20	18	1, 1, 1, 2, 2, 2, 1, 0	83.8
10	19 04	493	403	11 50	90	14 08	30.7	13.7	20 17	17.0	18 12	1131	1075	06 45	56	1, 3, 2, 2, 2, 2, 3, 2	84.2
11	22 08	491	396	09 40	95	14 08	30.4	8.7	22 03	21.7	19 16	1119	1083	23 05	36	2, 2, 1, 2, 2, 1, 1, 3	85.4
12	18 05	520	390	10 51	130	20 46	33.2	10.4	21 22	22.8	18 37	1173	1051	21 48	122	1, 1, 1, 2, 2, 3, 3, 3	86.2
13	19 38	499	396	10 58	103	13 18	30.8	11.1	03 22	19.7	19 27	1139	1020	02 53	119	4, 4, 1, 1, 2, 2, 3, 3	86.5
14	18 35	494	404	10 50	90	15 18	29.9	14.3	06 39	15.6	18 18	1133	1063	00 18	70	2, 1, 1, 1, 3, 2, 3, 1	86.2
15	18 55	484	408	10 07	76	13 41	27.3	16.1	05 35	11.2	04 13	1117	1097	00 11	20	1, 1, 1, 1, 1, 1, 2, 1	86.4
16 q	17 49	476	405	08 57	71	14 06	31.6	15.2	06 40	16.4	19 08	1127	1091	14 05	36	0, 1, 1, 2, 2, 1, 1, 1	86.7
17	15 42	481	407	11 29	74	14 09	33.9	14.7	07 45	19.2	17 08	1133	1078	22 56	55	1, 1, 2, 1, 3, 3, 1, 2	86.6
18	20 44	479	415	11 34	64	15 39	30.0	13.3	03 03	16.7	19 28	1118	1086	02 36	32	2, 2, 2, 1, 2, 1, 1, 1	86.5
19 q	17 43	466	421	09 23	45	16 33	28.1	15.9	07 22	12.2	22 48	1110	1092	11 32	18	1, 2, 1, 1, 2, 2, 1, 1	86.6
20	18 30	513	410	12 12	103	14 39	35.4	5.6	21 10	29.8	20 31	1166	1059	22 12	107	1, 1, 2, 2, 3, 3, 4, 3	86.7
21	18 53	505	397	11 15	108	12 10	29.6	14.6	19 49	15.0	19 40	1142	1079	22 36	63	2, 3, 3, 2, 2, 2, 3, 3	86.5
22	14 49	475	392	12 17	83	13 18	31.2	16.5	22 00	14.7	15 31	1128	1091	22 52	37	1, 2, 2, 2, 3, 3, 1, 2	86.7
23 q	18 32	469	422	09 28	47	12 50	28.2	15.9	05 57	12.3	19 20	1119	1097	00 00	22	1, 1, 1, 1, 1, 1, 1, 1	87.0
24	19 17	491	419	10 42	72	19 19	29.3	14.0	06 35	15.3	20 20	1131	1082	04 17	49	1, 2, 1, 1, 1, 2, 3, 2	88.0
25	19 16	472	410	10 24	62	14 41	27.5	14.3	05 44	13.2	00 22	1114	1090	01 52	24	2, 1, 1, 1, 1, 1, 2, 1	89.0
26 q	18 29	481	413	10 14	68	14 23	29.1	18.0	05 33	11.1	20 00	1117	1096	11 58	21	0, 0, 1, 0, 1, 1, 2, 1	89.5
27 q	20 20	472	409	11 55	63	14 08	31.1	18.3	07 15	12.8	16 37	1117	1083	22 58	34	1, 1, 1, 2, 1, 2, 2, 2	89.0
28	23 48	480	410	11 53	70	14 02	30.8	17.1	06 05	13.7	17 58	1112	1086	11 43	26	0, 1, 1, 1, 1, 0, 1, 2	89.0
29 d	17 12	626	330	10 04	296	11 08	42.3	5.2	22 07	37.1	17 10	1335	1017	21 57	318	1, 1, 3, 4, 5, 5, 4, 4	88.3
30 d	16 43	518	256	01 02	262	00 45	35.9	0.6	01 35	35.3	18 08	1171	832	01 15	339	6, 4, 3, 4, 3, 3, 3, 3	90.1
Mean	- -	503	385 - -	118	- -	31.9	12.8 - -	19.1	- -	1145	1057 - -	88	-	-	-	0.63	86.1

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		
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	418	426	389	392	420	424	420	431	400	357	385	407	425	427	447	448	448	459	466	463	463	457	445	438	427	
2 d	438	429	330	399	441	424	384	425	427	413	406	406	412	423	449	448	464	489	489	484	464	457	456	441	433	
3	433	433	412	438	442	446	431	424	414	411	406	394	408	417	453	452	485	467	470	475	467	450	448	444	438	
4	443	436	428	422	393	410	427	427	418	409	399	378	414	427	437	443	459	467	484	464	462	456	450	444	433	
5	438	439	430	443	441	443	403	410	425	417	412	408	409	424	432	440	456	462	463	470	463	446	438	427	435	
6	384	372	444	445	443	440	430	422	414	406	411	417	420	433	433	444	449	457	457	459	455	457	458	447	433	
7	437	444	412	386	382	403	448	440	430	426	414	404	406	421	449	444	458	474	470	456	455	452	448	454	434	
8	440	433	436	430	426	427	426	422	407	405	411	405	425	429	438	462	464	468	496	483	466	435	436	437	438	
9	441	438	430	435	437	432	426	426	419	419	417	417	424	424	430	447	448	466	480	490	477	452	433	426	439	
10	433	428	448	444	447	438	422	417	413	403	400	408	417	425	440	444	440	451	459	459	457	455	452	451	435	
11 q	451	451	442	446	447	446	444	433	416	395	391	403	419	440	448	459	466	469	467	465	462	458	448	444	442	
12	448	451	448	451	451	444	436	424	413	406	405	411	427	442	459	469	473	467	474	473	491	463	442	449	447	
13	448	444	444	455	459	459	416	405	410	403	396	411	434	445	433	441	459	471	462	461	462	454	436	437	439	
14	438	433	435	437	440	437	429	424	415	410	402	404	415	433	455	460	459	477	475	491	481	473	462	461	444	
15	457	448	430	435	430	413	431	437	411	400	403	403	413	400	427	442	451	471	467	474	462	451	444	440	435	
16 q	438	440	442	430	437	440	433	422	415	414	414	413	418	425	433	437	448	457	461	459	453	448	446	442	436	
17 q	443	444	444	448	450	448	442	427	411	417	418	418	427	429	433	438	447	459	466	470	462	458	455	452	442	
18 q	456	444	448	451	445	441	434	432	422	413	401	411	418	426	443	458	459	462	463	459	458	456	453	455	442	
19	454	456	458	444	447	444	440	435	429	418	407	411	418	426	438	444	456	463	466	469	463	459	447	441	443	
20	448	437	429	440	440	437	434	433	426	414	403	407	414	436	451	455	448	448	448	447	448	447	448	445	437	
21 q	438	444	445	442	438	431	428	427	414	404	411	415	426	431	432	435	446	454	460	459	456	452	456	439	437	
22	436	438	439	441	442	439	433	422	404	399	408	419	431	443	449	450	459	468	461	460	463	460	447	439	440	
23 d	415	408	418	375	438	443	427	419	402	383	399	407	468	479	534	633	594	534	526	483	472	431	394	423	454	
24	428	440	430	424	426	428	424	418	412	407	405	390	398	416	427	448	458	455	466	457	460	456	451	446	432	
25	439	435	434	434	432	428	423	427	420	411	409	415	425	440	446	456	458	462	474	479	466	458	452	449	441	
26	420	437	428	432	430	441	443	437	420	422	420	414	435	436	430	445	456	454	466	473	491	483	472	444	443	
27 d	409	416	451	334	403	413	397	410	366	363	356	375	425	460	463	451	484	478	506	478	458	450	452	428	426	
28	406	398	392	441	408	410	421	407	359	393	392	400	418	436	448	462	464	487	463	475	461	448	443	438	428	
29 d	398	397	429	345	398	399	410	422	408	403	395	408	429	450	454	474	463	484	491	473	465	448	446	408	429	
30	406	441	445	431	433	427	416	388	386	403	403	408	417	445	443	443	465	476	466	470	460	458	440	452	434	
31	431	421	370	392	438	444	435	414	426	419	399	423	418	421	434	449	456	451	463	463	453	449	446	443	432	
Mean	433	432	428	425	432	432	426	423	411	405	403	407	421	433	445	455	463	468	472	469	464	454	447	441	437	

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

34	LERWICK (H)												10° +										JULY				
	Hour G.M.T.																										
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean		
1 d	23.2	23.5	25.1	23.2	19.2	19.3	21.7	17.5	16.7	19.9	21.0	18.9	21.3	27.4	29.2	28.1	26.4	24.7	26.4	27.4	25.6	17.5	20.7	18.7	22.6		
2 d	19.9	21.7	30.6	29.2	20.0	22.7	26.1	27.6	22.7	20.6	19.9	24.1	27.6	28.4	28.8	30.7	30.0	27.5	29.3	25.7	24.5	24.1	22.5	21.6	25.2		
3	18.0	20.5	24.4	21.1	21.3	19.4	21.3	19.4	19.9	19.7	19.1	22.3	26.1	27.9	26.3	27.9	28.8	27.5	26.4	22.8	24.0	20.2	22.3	23.2	22.9		
4	24.8	22.7	17.5	16.5	18.0	19.4	23.8	19.4	17.5	18.3	20.5	23.2	25.4	26.6	28.2	27.9	27.0	26.4	21.1	24.7	25.1	24.5	23.3	21.8	22.7		
5	23.7	22.7	24.8	19.7	19.4	20.3	23.4	29.4	25.6	23.7	22.3	23.4	26.4	28.0	28.3	27.4	26.4	26.1	25.1	23.9	21.3	19.4	19.9	17.5	23.7		
6	20.8	19.9	14.9	17.0	18.2	17.4	16.5	17.0	18.2	19.9	21.1	23.8	26.0	26.8	27.0	27.4	26.5	26.7	26.5	26.3	26.1	25.4	21.8	18.4	22.1		
7	20.8	21.3	25.0	14.9	8.9	13.5	13.7	14.5	15.4	18.4	22.0	24.0	25.0	27.0	28.9	30.2	28.9	29.1	28.7	25.4	24.4	23.7	22.8	20.5	22.0		
8	14.6	20.3	18.8	17.2	18.5	17.9	18.5	21.3	20.3	20.3	21.3	24.0	25.1	27.5	28.6	29.8	29.8	27.0	27.7	25.4	19.9	19.4	18.5	21.3	22.2		
9	20.5	23.2	24.6	19.9	18.2	16.8	16.5	16.1	16.3	17.5	19.1	22.3	25.8	27.9	28.9	28.6	27.8	27.7	27.3	24.0	18.4	15.6	16.5	13.8	21.4		
10	20.2	24.1	20.7	18.5	16.1	16.1	19.4	19.9	18.5	19.4	21.6	24.7	27.0	28.8	28.9	27.2	26.3	26.1	25.7	24.9	24.4	24.1	23.0	22.9	22.9		
11 q	23.1	23.7	22.2	21.8	14.9	16.1	17.0	17.2	18.0	20.8	24.3	27.0	28.4	28.5	27.5	25.7	24.6	24.5	23.4	24.7	25.1	24.8	23.1	22.9	22.9		
12	20.4	20.8	19.9	19.8	18.1	15.4	16.1	17.4	18.6	22.0	25.0	27.0	29.3	32.3	32.7	31.7	30.8	28.1	28.0	27.4	16.5	10.7	16.6	21.5	22.8		
13	20.9	20.3	18.1	17.5	17.1	16.5	14.5	21.1	21.9	21.7	26.5	27.9	30.8	33.6	32.4	30.2	27.2	25.5	25.6	25.7	24.5	17.9	20.3	21.2	23.3		
14	21.3	21.3	21.0	18.6	18.2	17.5	16.9	18.1	19.1	20.8	22.8	24.6	26.1	27.9	29.9	30.7	29.9	30.1	28.4	28.1	25.0	24.1	24.5	23.0	23.7		
15	23.2	19.4	16.6	17.5	17.0	17.2	18.1	18.1	19.5	21.8	24.1	24.1	26.1	28.6	28.9	29.9	27.1	27.5	23.8	23.7	25.8	25.3	24.2	22.7	22.9		
16 q	21.6	21.9	21.3	22.9	20.6	18.1	17.6	18.4	18.6	18.1	18.5	20.5	23.2	25.0	24.9	24.1	23.3	22.3	22.3	23.2	23.7	22.3	23.2	23.7	21.6		
17 q	23.2	21.8	20.8	19.8	19.2	18.5	18.2	18.7	21.3	22.2	23.2	24.0	25.9	27.6	27.9	27.9	27.9	26.5	25.2	24.1	24.0	23.5	23.2	22.4	23.2		
18 q	23.2	25.5	22.3	17.7	17.6	16.6	17.5	17.2	17.5	19.4	22.2	23.2	26.1	29.4	29.9	29.0	27.9	27.0	26.1	25.2	25.1	24.1	23.7	24.0	23.2		
19	22.3	20.5	17.7	12.7	15.6	15.7	16.6	17.8	17.5	19.4	21.0	24.1	27.0	28.5	28.9	28.5	27.2	27.0	26.2	25.7	23.4	22.5	18.5	20.4	21.9		
20	20.8	19.5	19.9	17.5	14.2	12.7	15.7	16.5	18.2	20.0	23.7	26.9	29.8	29.6	29.7	29.1	26.1	24.1	23.8	23.7	24.0	23.6	23.1	21.6	22.2		
21 q	22.3	22.2	18.6	18.5	19.0	18.5	18.5	19.5	19.4	23.4	27.1	28.0	28.8	29.6	29.7	28.8	27.0	25.2	24.2	23.5	23.1	22.1	18.6	20.3	23.2		
22	21.3	21.3	21.0	20.3	19.5	17.6	17.3	16.6	17.5	20.3	23.6	26.1	27.0	26.3	25.8	24.8	24.5	26.1	24.6	25.9	26.7	22.5	21.0	17.5	22.2		
23 d	9.1	7.1	10.6	18.5	23.2	17.3	15.6	15.6	15.0	17.5	24.8	33.6	34.0	40.1	42.2	37.9	40.3	36.3	34.9	32.5	29.9	24.1	9.2	6.0	24.0		
24	15.5	18.7	19.7	18.6	17.5	17.3	17.1	17.9	19.0	20.3	22.3	24.2	27.6	28.7	30.8	31.2	31.6	24.9	26.6	26.0	26.1	24.8	23.9	22.4	23.0		
25	21.3	20.3	19.5	18.7	17.5	15.8	16.4	16.4	17.5	19.9	21.9	24.4	27.0	28.3	27.0	27.7	28.6	26.1	28.2	28.5	26.0	25.4	24.1	24.4	22.9		
26	22.3	14.9	18.5	17.8	21.5	20.3	20.6	22.9	22.0	22.9	22.3	25.7	26.5	27.9	31.2	28.3	29.8	30.0	28.2	24.6	24.2	24.1	23.1	22.3	23.8		
27 d	21.9	17.5	14.1	17.5	21.5	24.1	22.9	26.3	25.8	24.6	25.8	27.9	28.0	27.9	29.5	24.7	26.4	26.2	21.7	22.0	24.3	22.7	24.2	23.2	23.8		
28	24.9	25.4	25.1	13.9	20.7	19.7	17.5	20.1	22.3	23.3	24.4	24.1	23.5	24.8	25.7	25.8	26.2	26.8	24.3	21.1	21.4	17.5	11.8	15.0	21.9		
29 d	19.9	25.2	20.3	22.1	28.6	29.9	23.3	18.5	18.5	19.4	21.6	22.7	24.7	23.0	27.1	20.0	20.7	24.4	23.2	22.4	19.3	22.3	20.4	28.5	22.7		
30	20.3	21.4	15.3	13.7	17.7	18.5	19.4	25.4	24.8	25.1	23.0	25.7	26.1	26.2	27.9	27.0	23.5	25.5	23.2	23.3	23.4	21.5	17.5	12.7	22.0		
31	14.4	15.3	25.4	23.0	18.5	17.5	18.2	20.0	18.5	20.6	21.0	21.8	25.0	27.0	23.5	24.1	24.3	23.9	23.9	20.4	22.0	23.4	23.3	22.3	21.5		
Mean	20.6	20.8	20.5	18.9	18.6	18.2	18.6	19.4	19.4	20.7	22.5	24.7	26.7	28.3	28.9	28.1	27.5	26.7	25.8	24.9	23.8	22.0	20.9	20.6	22.8		

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.

37 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +												AUGUST												Mean
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		443	426	414	404	429	437	437	429	422	414	410	407	426	422	445	451	469	471	487	469	468	467	443	440	439
2		435	439	431	424	443	447	433	425	421	413	403	410	422	436	444	454	447	451	451	465	454	447	447	451	437
3		447	430	436	436	440	432	417	421	420	414	414	419	425	434	430	435	436	455	461	461	457	458	454	451	437
4		447	443	433	450	447	443	436	436	431	420	417	419	433	447	469	466	450	446	458	454	459	451	448	443	444
5		445	448	441	440	441	441	436	436	425	421	417	419	422	425	436	444	447	449	457	462	465	447	451	450	440
6		451	450	448	448	448	446	443	436	425	412	410	414	428	436	443	457	443	451	458	466	473	460	454	447	444
7		451	443	413	440	458	443	437	433	425	410	405	414	422	436	451	455	454	451	454	461	458	456	450	436	440
8		432	445	439	440	436	433	432	425	422	417	417	418	431	435	449	455	455	454	455	455	452	452	453	451	440
9		440	406	425	426	435	428	440	440	425	421	424	429	430	466	442	462	481	473	465	480	485	462	468	469	447
10		461	459	452	452	445	451	451	425	385	408	417	406	421	439	458	462	450	469	469	479	463	448	371	415	440
11		356	401	373	392	392	446	436	432	413	394	392	410	419	436	456	469	495	489	466	474	454	432	417	413	427
12 d		418	388	351	380	384	294	347	373	366	332	367	399	410	436	491	557	490	509	476	477	466	441	443	403	417
13		362	348	416	440	444	440	436	431	422	403	399	403	419	436	463	444	475	459	459	486	473	375	446	443	430
14		425	415	421	425	417	443	439	425	417	410	405	414	417	428	432	444	462	451	460	462	452	452	451	447	434
15		451	447	441	443	440	443	443	429	422	414	410	410	421	436	441	448	451	465	473	463	484	447	447	443	442
16		440	443	440	435	436	441	442	435	422	405	387	404	426	447	461	447	444	436	447	452	452	451	440	443	437
17 q		436	438	437	440	441	440	438	436	429	421	418	417	429	427	423	447	444	451	454	451	451	448	447	443	438
18		443	440	436	439	441	436	432	429	424	417	417	418	425	436	443	454	456	447	447	452	451	450	451	441	439
19 q		447	441	441	440	443	447	444	436	426	417	414	414	419	433	443	451	462	454	462	462	460	458	454	457	443
20 q		450	441	436	441	443	440	439	436	429	420	417	421	424	429	434	444	451	458	458	459	457	454	458	458	442
21 q		454	454	451	447	447	447	442	430	419	413	406	414	422	433	436	444	447	451	451	452	451	451	451	450	440
22 q		451	451	451	450	444	441	443	436	422	414	411	424	429	439	443	451	453	454	451	451	455	451	448	447	442
23 d		452	451	462	447	459	455	452	443	421	410	417	403	405	476	451	517	518	543	532	470	470	328	203	335	438
24 d		373	278	374	390	353	382	388	396	383	390	408	414	417	449	436	443	495	517	470	480	443	428	384	160	402
25		429	449	425	384	380	417	402	406	387	327	367	388	413	426	469	441	454	458	469	453	456	447	425	422	421
26		428	429	442	430	376	427	428	415	402	415	414	417	413	424	436	441	465	473	476	461	451	437	434	409	431
27 d		403	333	288	334	432	417	416	406	402	381	376	396	432	447	509	557	502	516	498	462	432	442	451	418	427
28		399	366	326	414	381	338	422	419	404	378	392	387	422	426	451	492	476	444	442	443	461	462	428	364	414
29		421	444	441	399	370	335	338	406	395	393	362	385	403	436	447	458	455	477	495	459	465	458	451	430	422
30 d		414	216	381	440	432	388	338	376	390	385	387	401	421	440	484	473	447	449	458	477	454	440	410	420	413
31		428	434	357	399	430	417	413	407	399	395	410	422	421	443	440	425	459	447	450	456	460	437	436	446	426
Mean		430	416	417	425	426	424	424	423	413	403	403	410	421	437	450	461	462	465	465	463	459	443	433	424	433

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

38	LERWICK (D)												10° +												AUGUST											
	Hour G.M.T.																								Mean											
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24												
1	22.1	25.3	26.3	25.3	18.7	16.0	15.5	15.8	16.8	18.6	22.4	25.4	27.3	27.7	27.5	27.0	27.0	18.4	18.4	24.5	20.1	20.1	22.1	22.2	22.1											
2	24.1	24.4	24.3	28.9	19.7	16.8	16.2	15.1	16.8	18.8	20.8	23.2	26.0	26.9	26.2	25.5	23.6	22.9	21.5	17.4	20.9	22.9	22.9	23.4	22.1											
3	23.5	20.1	21.0	19.1	17.8	17.5	16.5	16.5	16.5	18.5	21.6	24.7	27.0	27.5	27.7	27.0	25.0	23.7	22.3	20.3	22.7	24.1	23.4	22.9	22.0											
4	22.5	25.1	26.6	16.9	15.9	15.3	16.4	16.1	18.9	20.5	22.9	26.1	27.9	28.0	27.3	25.6	24.9	25.4	25.3	22.9	22.3	23.5	23.9	23.2	22.6											
5	22.7	21.5	18.9	18.8	18.0	17.5	17.5	18.1	18.6	21.2	22.4	24.3	26.6	27.3	27.0	25.4	24.1	23.1	23.5	20.6	15.6	20.3	21.6	21.3	21.5											
6	20.3	18.9	18.5	18.6	18.0	17.1	17.7	18.3	18.3	20.8	23.9	26.1	28.3	28.8	27.9	27.2	25.2	23.8	25.8	26.3	26.2	20.7	20.4	21.8	22.5											
7	21.9	23.7	27.8	21.0	18.5	16.4	18.5	20.4	21.9	23.2	25.3	26.1	27.5	27.9	26.7	24.5	23.9	23.2	24.1	24.3	23.2	23.4	21.9	23.2	23.3											
8	23.7	19.6	18.3	18.2	18.4	18.5	18.6	18.0	19.0	20.0	22.9	26.1	28.9	29.4	26.7	25.4	24.8	23.9	22.9	22.1	21.9	21.5	21.0	22.0	22.2											
9	24.3	21.6	13.9	14.5	19.6	17.5	20.0	16.5	18.3	21.3	24.4	28.9	30.1	31.5	31.0	29.9	30.5	30.0	27.8	28.6	11.0	21.6	22.0	22.6	23.2											
10	20.5	21.2	19.3	21.4	18.1	17.2	17.4	22.3	26.1	30.8	26.8	29.9	31.1	31.2	27.5	24.9	22.7	21.3	23.9	24.8	24.4	22.7	24.6	13.4	23.5											
11	13.2	18.8	13.9	20.1	18.2	13.9	16.1	18.2	21.3	24.1	28.1	32.2	33.6	33.0	32.4	31.1	27.2	23.7	24.0	15.6	20.6	19.9	16.3	14.9	22.1											
12 d	12.3	9.9	4.7	10.5	20.8	11.0	13.0	15.2	19.8	26.1	28.4	31.1	33.9	32.7	33.7	26.5	30.2	29.6	27.8	24.8	14.9	16.5	21.6	19.9	21.5											
13	13.3	8.9	11.1	8.7	13.0	13.7	14.0	14.5	15.8	19.0	22.3	25.6	28.6	30.8	34.0	31.7	30.6	29.2	26.5	25.5	5.6	20.0	16.4	19.7	19.9											
14	24.3	25.4	25.0	20.1	19.3	17.9	15.6	15.2	16.1	19.0	22.8	27.2	30.4	31.3	28.9	27.1	24.8	21.7	17.6	21.4	22.7	23.1	23.2	22.2	22.6											
15	22.8	21.1	20.0	17.9	15.9	16.1	15.4	14.9	17.9	21.1	23.2	27.0	28.6	28.4	27.8	26.6	25.4	24.8	24.5	24.1	17.7	19.0	21.2	23.0	21.9											
16	24.1	19.4	18.5	18.2	19.5	16.2	16.5	18.5	20.9	22.8	29.4	29.9	32.0	30.6	29.5	27.7	26.5	24.4	24.5	24.7	23.2	18.6	19.4	20.8	23.1											
17 q	23.2	23.3	20.7	19.2	17.8	17.3	17.0	18.5	19.7	21.0	22.6	25.8	29.9	29.6	27.0	26.3	25.7	24.4	23.8	23.5	22.9	22.0	21.1	21.4	22.7											
18	21.0	22.6	24.1	19.8	16.9	16.8	17.2	17.9	18.9	20.9	22.7	25.6	27.9	29.0	29.1	28.6	26.2	24.4	24.1	23.3	22.7	23.2	21.9	20.8	22.7											
19 q	19.9	18.3	18.5	18.0	15.0	16.5	17.5	18.0	18.5	20.0	22.0	24.1	26.1	28.4	27.3	24.8	23.3	22.3	22.3	23.5	23.8	23.2	22.5	20.4	21.4											
20 q	20.3	19.4	19.9	19.2	18.0	17.2	17.2	17.3	17.4	18.9	21.6	25.1	26.3	27.3	27.0	25.8	24.4	23.5	23.3	23.1	22.7	22.3	22.7	22.0	21.7											
21 q	21.8	21.6	20.3	20.3	20.5	18.3	17.3	16.8	18.1	21.2	24.5	27.7	28.2	27.7	26.3	23.0	21.0	20.9	22.0	23.2	23.1	22.6	22.3	22.2	22.1											
22 q	21.7	21.2	21.1	20.6	19.0	18.5	15.9	15.9	16.3	19.9	24.0	27.9	29.3	28.9	26.4	23.9	22.3	22.3	22.9	23.7	22.7	19.1	20.9	21.5	21.9											
23 d	20.9	15.7	10.8	2.3	8.0	11.9	13.9	15.3	16.4	20.7	26.6	32.4	38.0	37.7	35.4	32.4	30.7	30.6	22.1	19.5	13.3	21.3	18.9	22.7	21.6											
24 d	8.9	25.8	26.9	14.7	15.5	17.0	18.2	17.8	22.4	21.1	24.1	29.0	26.9	22.9	27.0	27.6	16.5	16.5	22.3	11.8	18.6	17.9	21.5	26.0	20.7											
25	17.5	20.2	21.7	20.3	23.8	18.9	18.4	21.3	19.5	19.2	24.1	27.9	28.0	30.8	21.2	24.2	21.7	17.9	17.9	19.6	21.3	19.3	18.9	25.4	21.6											
26	28.1	25.0	17.4	19.2	26.2	20.8	17.6	18.5	17.5	17.4	19.9	24.6	27.7	25.7	26.2	25.8	22.9	16.9	19.1	22.3	16.5	9.6	10.9	14.2	20.4											
27 d	13.4	20.9	15.6	16.5	16.6	18.1	19.1	21.8	23.3	26.6	25.9		26.5	29.5	28.4	23.2	21.6	15.3	16.6	16.0	22.3	22.3	22.9	25.0	21.2											
28	18.2	17.1	26.8	20.6	19.0	24.5	23.5	19.7	20.7	22.3	23.5	26.9	27.0	29.0	28.0	14.6	20.0	24.7	25.0	24.3	18.6	17.8	19.4	23.8	22.3											
29	26.9	22.3	19.2	20.3	24.2	21.7	27.6	24.7	25.2	25.2	26.2	27.6	29.0	28.8	22.8	25.7	24.5	18.1	17.3	19.4	17.1	15.7	16.3	16.1	22.6											
30 d	17.5	18.8	21.4	16.0	17.4	20.7	23.9	22.2	20.9	20.9	24.5	27.1	27.9	27.1	27.9	18.0	23.3	23.1	22.3	15.6	19.3	16.5	21.3	24.5	21.6											
31	20.5	17.8	20.7	26.6	23.8	18.8	20.1	21.9	23.0	22.8	23.5	26.1	29.3	25.2	27.1	24.0	25.9	24.8	21.7	17.6	19.5	19.8	17.7	19.5	22.4											
Mean	20.6	20.8	20.5	18.9	18.6	18.2	18.6	19.4	19.4	20.7	22.5	24.7	26.7	28.3	28.9	28.1	27.5	26.7	25.8	24.9	23.8	22.0	20.9	20.6	22.8											

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					
	Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1103	1093	1071	1049	1069	1097	1105	1113	1111	1115	1111	1104	1098	1106	1107	1114	1119	1145	1146	1139	1128	1082	1099	1106	1105	1105	
2	1103	1098	1087	1054	1059	1086	1103	1110	1108	1104	1105	1098	1099	1104	1107	1106	1116	1120	1129	1129	1121	1115	1111	1094	1103	1103	
3	1071	1076	1090	1101	1106	1109	1111	1106	1107	1105	1103	1101	1101	1106	1115	1116	1114	1112	1124	1132	1126	1118	1115	1115	1107	1107	
4	1114	1097	1060	1063	1091	1103	1105	1106	1109	1110	1107	1103	1101	1105	1109	1131	1146	1150	1134	1139	1128	1122	1120	1119	1111	1111	
5	1112	1103	1105	1110	1109	1107	1111	1112	1113	1107	1105	1104	1103	1104	1104	1105	1109	1110	1110	1119	1115	1106	1101	1101	1108	1108	
6	1104	1110	1112	1112	1113	1113	1113	1113	1110	1111	1109	1103	1099	1099	1104	1111	1131	1129	1116	1111	1111	1118	1112	1113	1112	1112	
7	1113	1111	1060	1062	1074	1095	1103	1107	1109	1113	1112	1113	1112	1111	1108	1113	1119	1130	1128	1120	1120	1116	1112	1093	1106	1106	
8	1064	1078	1099	1107	1113	1110	1109	1114	1108	1103	1099	1101	1103	1109	1113	1121	1123	1118	1115	1121	1121	1117	1111	1105	1108	1108	
9	1090	1024	1014	1059	1062	1058	1061	1081	1089	1090	1092	1092	1096	1106	1116	1109	1109	1118	1126	1123	1129	1115	1129	1123	1092	1092	
10	1123	1120	1118	1123	1109	1104	1098	1102	1106	1083	1088	1096	1101	1118	1137	1159	1162	1155	1140	1141	1144	1111	1034	1037	1113	1113	
11	980	974	962	946	970	1012	1047	1061	1074	1087	1095	1097	1098	1106	1122	1151	1181	1199	1161	1148	1124	1118	1091	1075	1078	1078	
12 d	1062	977	915	903	888	907	975	1036	1079	1107	1137	1140	1115	1095	1134	1239	1217	1220	1187	1179	1171	1131	1108	1071	1083	1083	
13	1026	1011	999	1068	1100	1122	1127	1124	1119	1123	1120	1114	1105	1107	1108	1110	1104	1124	1118	1126	1140	1045	1052	1079	1095	1095	
14	1059	1049	1042	1074	1094	1099	1115	1120	1121	1119	1115	1109	1105	1103	1109	1117	1127	1135	1138	1127	1123	1119	1115	1113	1106	1106	
15	1105	1104	1109	1112	1116	1116	1116	1117	1111	1103	1099	1098	1096	1098	1104	1106	1111	1114	1127	1139	1091	1089	1108	1111	1108	1108	
16	1074	1076	1100	1105	1102	1103	1109	1112	1115	1117	1115	1100	1104	1104	1117	1139	1141	1138	1126	1121	1119	1115	1106	1096	1111	1111	
17 q	1107	1102	1106	1106	1112	1116	1116	1116	1118	1114	1106	1100	1099	1108	1108	1110	1117	1119	1116	1116	1115	1115	1115	1114	1111	1111	
18	1112	1107	1081	1078	1100	1107	1109	1111	1112	1112	1110	1104	1102	1106	1108	1107	1110	1116	1114	1114	1117	1116	1114	1114	1108	1108	
19 q	1108	1108	1108	1104	1108	1107	1108	1110	1112	1114	1112	1108	1104	1104	1109	1113	1118	1120	1116	1111	1111	1112	1113	1108	1110	1110	
20 q	1107	1107	1109	1108	1112	1113	1114	1115	1114	1111	1106	1101	1100	1105	1109	1110	1111	1110	1108	1111	1112	1113	1111	1109	1109	1109	
21 q	1111	1109	1110	1113	1113	1112	1113	1114	1114	1109	1106	1103	1107	1109	1116	1118	1118	1115	1110	1107	1109	1110	1111	1112	1111	1111	
22 q	1112	1114	1113	1112	1115	1110	1108	1110	1111	1104	1097	1093	1097	1104	1113	1118	1123	1123	1120	1116	1115	1118	1115	1113	1111	1111	
23 d	1110	1110	1097	1089	1089	1093	1093	1095	1097	1093	1083	1096	1115	1150	1188	1206	1259	1286	1271	1189	1094	1035	843	857	1110	1110	
24 d	974	949	956	950	961	1020	1073	1098	1108	1116	1121	1121	1150	1180	1152	1146	1192	1187	1183	1150	1121	1077	1032	796	1076	1076	
25	968	1048	1085	1073	1040	1051	1081	1094	1112	1144	1126	1129	1150	1154	1178	1156	1152	1158	1159	1140	1108	1090	1090	1060	1106	1106	
26	1039	1034	1084	1100	1058	1062	1092	1106	1114	1109	1108	1110	1118	1136	1138	1135	1144	1153	1151	1159	1127	1080	1049	1046	1102	1102	
27 d	1034	985	894	947	1036	1086	1102	1110	1111	1133	1124	1134	1164	1154	1181	1214	1260	1189	1187	1147	1102	1102	1062	1001	1102	1102	
28	991	1003	976	1020	1063	1033	1065	1100	1120	1129	1135	1139	1143	1139	1141	1176	1177	1147	1138	1134	1127	1073	1048	977	1091	1091	
29	985	1051	1081	1087	1041	1032	1043	1079	1106	1110	1126	1119	1117	1132	1159	1141	1154	1170	1152	1145	1080	1078	1091	1073	1098	1098	
30 d	1027	924	920	1026	1064	1059	1055	1074	1115	1125	1123	1111	1114	1118	1142	1209	1147	1130	1129	1125	1114	1097	1052	1007	1084	1084	
31	1009	1033	989	989	1027	1071	1088	1087	1091	1105	1105	1109	1119	1164	1188	1179	1148	1149	1145	1135	1103	1113	1099	1068	1096	1096	
Mean	1068	1061	1053	1063	1071	1081	1093	1102	1108	1111	1110	1108	1111	1117	1127	1138	1144	1145	1139	1133	1118	1102	1086	1068	1102	1102	

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

40 LERWICK		TERRESTRIAL MAGNETIC ELEMENTS												AUGUST					
		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	γ h. m.	γ	h. m. γ	γ h. m.	γ				°A.					
1		18 10	516	394 03 48	122	13 09	29.5	9.3	17 59	20.2	17 52	1158	1039 03 50	119	3,3,1,2,3,3,3,3	21	1	90.2	
2		19 44	480	388 10 46	92	03 18	33.0	13.9	07 04	19.1	19 25	1136	1043 03 45	93	2,3,2,2,3,2,2	18	1	90.3	
3		19 23	472	411 09 46	61	13 45	29.2	14.8	07 01	14.4	19 05	1136	1068 01 00	68	2,1,2,1,3,2,2,1	14	1	90.3	
4		14 58	483	413 11 03	70	13 00	28.8	14.4	03 45	14.4	17 35	1155	1047 02 58	108	3,3,2,1,2,3,2,1	17	1	90.3	
5		20 40	472	412 10 43	60	13 50	27.6	10.6	20 27	17.0	19 24	1123	1097 22 58	26	1,1,1,1,1,1,3,2	11	1	90.3	
6		20 53	477	406 09 56	71	13 36	29.6	16.5	05 41	13.1	16 52	1145	1097 12 38	48	1,1,1,1,2,3,2,2	13	1	90.2	
7		19 16	469	397 09 51	72	02 18	33.2	13.9	05 07	19.3	18 22	1132	1046 02 48	86	3,3,1,2,1,2,2,2	16	1	90.1	
8		15 10	462	412 00 00	50	13 08	30.0	16.5	07 22	13.5	16 08	1127	1056 00 37	71	3,2,1,1,1,2,1,1	12	1	90.1	
9		20 27	510	396 01 25	114	13 09	32.8	3.4	20 30	29.4	20 18	1137	992 02 00	145	4,3,2,1,3,3,4,3	23	1	90.1	
10		19 06	483	310 22 27	173	09 09	33.5	9.7	23 33	23.8	16 52	1169	993 22 30	176	2,2,4,3,3,3,2,5	24	1	90.2	
11		17 07	531	248 00 44	283	12 01	34.3	4.8	00 46	29.5	17 28	1219	931 03 33	288	5,4,3,2,3,3,3,3	26	1	90.1	
12	d	15 39	631	225 05 35	406	15 08	41.7	-1.1	05 33	42.8	15 38	1305	870 04 43	435	5,5,5,4,4,5,4,4	36	1	90.2	
13		16 48	506	282 01 35	224	21 28	37.1	-8.1	20 34	45.2	20 32	1176	976 21 42	200	5,4,3,1,3,3,5,5	29	1	90.7	
14		19 00	476	397 02 02	79	01 55	35.1	14.5	07 30	20.6	18 20	1143	1029 02 22	114	3,3,1,2,2,3,2,1	17	1	90.2	
15		20 03	541	403 11 20	138	12 56	29.5	11.4	20 32	18.1	19 58	1143	1077 21 22	66	1,1,1,1,2,2,4,3	15	1	90.3	
16		14 54	469	381 10 35	88	12 16	33.6	15.3	06 34	18.3	17 10	1149	1048 00 58	101	3,1,2,3,2,3,2,2	18	1	90.3	
17	q	15 45	465	411 13 45	54	12 54	30.8	16.5	05 54	14.3	16 10	1121	1097 12 29	24	1,1,1,1,2,2,0,0	8	0	90.2	
18		16 15	465	415 10 05	50	13 47	29.9	16.1	05 03	13.8	22 28	1120	1067 02 58	53	3,2,1,1,2,2,1,1	13	0	90.5	
19	q	18 28	466	407 11 54	59	13 35	29.0	14.4	04 20	14.6	17 52	1122	1101 13 22	21	1,1,0,1,1,2,1,1	8	0	90.1	
20	q	18 45	463	416 10 36	47	13 12	27.8	16.8	06 12	11.0	07 20	1116	1099 12 26	17	1,0,1,0,1,0,0,1	4	0	90.3	
21	q	01 50	458	403 10 33	55	12 02	28.8	16.3	07 12	12.5	16 02	1121	1102 11 41	19	1,1,0,1,1,1,1,1	7	0	90.2	
22	q	17 38	459	409 10 43	50	12 58	29.7	15.1	08 00	14.6	16 55	1125	1092 11 20	22	0,1,0,1,2,2,2,2	10	0	90.2	
23	d	17 18	572	110 22 30	462	23 20	42.6	-4.1	23 59	46.7	17 28	1320	697 22 48	623	3,3,2,4,4,4,5,6	31	1	90.2	
24	d	17 07	568	-17 23 30	585	23 24	41.3	-14.6	18 21	55.9	16 36	1248	686 23 21	562	6,4,3,3,3,4,5,7	35	2	90.5	
25		14 33	509	303 09 57	206	13 20	33.4	9.1	00 00	24.3	14 12	1189	876 00 00	313	5,4,3,4,4,3,3,3	29	1	90.1	
26		21 49	505	349 04 20	156	00 51	37.5	-1.7	21 47	39.2	19 17	1172	1016 01 15	156	4,4,2,2,3,3,3,4	25	1	90.1	
27	d	15 21	602	253 02 41	349	14 07	35.1	-1.5	19 38	36.6	16 09	1247	866 02 20	381	5,5,2,3,4,5,4,4	32	1	90.4	
28		15 53	514	274 02 17	240	13 29	32.7	1.6	15 47	31.1	15 49	1209	947 23 53	262	4,4,3,3,3,4,4,5	30	1	90.1	
29		18 03	531	289 06 10	242	06 16	32.0	-1.1	17 57	33.1	17 47	1206	951 00 01	255	4,4,4,3,3,4,5,3	30	1	90.1	
30	d	19 38	509	128 01 40	381	01 51	35.5	5.1	19 30	30.4	15 28	1245	870 02 10	375	6,4,4,3,4,4,3,4	32	1	87.1	
31		20 15	489	317 02 48	172	14 32	30.8	7.4	19 19	23.4	14 57	1201	959 03 01	242	4,4,2,3,4,3,4,3	27	1	86.3	
Mean		- -	502	334 - -	168	- -	32.8	8.2 - -	- -	24.5	- -	1171	995 - -	177	-	-	-	0.84	90.0

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						
	Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1	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
2	434	428	427	433	437	434	426	429	403	401	403	409	412	425	442	473	470	476	466	451	444	430	440	431	430	432	432
3	436	380	424	436	432	418	403	401	417	409	406	403	412	425	442	473	470	476	466	451	444	430	440	431	430	432	430
4 d	424	432	436	442	440	436	429	425	413	405	399	411	418	442	449	440	449	513	502	466	469	418	55	-13	404	404	
5 d	-141	-36	0	153	381	405	399	390	370	384	404	425	466	478	483	497	515	503	487	456	446	433	364	256	355	355	
6	267	207	294	389	428	429	444	437	419	414	418	416	421	434	449	451	453	448	450	465	473	447	432	440	414	414	
7	442	440	441	437	436	440	431	381	415	433	429	422	421	410	425	434	435	439	447	445	451	447	451	452	433	433	
8	440	440	438	436	434	427	424	435	432	403	393	406	417	440	440	451	465	443	438	439	445	441	447	429	433	433	
9 q	448	430	429	427	429	437	435	436	421	392	404	414	417	427	446	445	440	442	442	449	446	448	446	447	433	433	
10	451	439	424	439	451	445	443	436	425	410	412	415	427	438	444	447	447	445	449	454	453	449	448	452	439	439	
	445	445	446	446	445	444	442	437	424	413	415	421	422	437	458	462	451	449	452	449	452	441	445	417	440	440	
11	347	373	432	449	447	445	437	423	403	407	409	416	426	438	448	446	451	454	454	455	448	448	450	451	432	432	
12	445	451	445	445	448	449	443	435	428	408	409	418	423	432	443	443	452	449	453	462	451	442	453	426	440	440	
13	434	436	434	422	442	443	440	422	405	393	403	413	424	429	435	440	441	442	446	451	447	451	440	443	432	432	
14 q	444	441	443	442	443	445	444	434	423	412	410	411	416	426	434	436	442	448	449	455	451	449	448	449	437	437	
15	448	447	447	454	451	451	454	449	432	428	424	428	430	449	469	453	461	486	505	450	444	449	449	444	450	450	
16	440	444	441	440	443	439	434	427	422	419	419	417	422	429	440	444	450	439	436	439	435	436	435	437	434	434	
17	436	436	397	412	440	446	429	420	425	420	418	424	429	426	434	435	433	438	442	454	449	441	448	444	432	432	
18	439	432	438	443	444	437	433	440	433	423	419	420	425	429	439	442	441	453	469	466	451	430	323	319	429	429	
19 d	336	230	155	245	403	431	339	317	390	391	366	425	445	475	549	652	809	554	468	453	413	345	376	379	414	414	
20 d	380	312	250	372	377	404	410	405	412	414	403	402	408	446	484	496	510	464	457	446	454	442	424	436	417	417	
21	382	421	391	383	422	441	435	400	406	412	398	404	420	429	432	424	441	449	434	444	419	421	430	439	420	420	
22	425	379	261	335	427	427	421	393	397	407	404	420	422	434	431	438	443	445	457	449	453	464	431	422	416	416	
23 d	430	429	436	441	421	404	408	418	430	407	376	382	418	461	493	468	486	441	448	416	402	402	410	382	425	425	
24	403	401	395	431	438	431	408	357	404	410	399	398	434	448	466	428	436	430	425	432	467	429	427	427	422	422	
25	426	414	421	433	434	431	429	423	402	404	410	411	414	430	429	432	433	449	434	448	426	432	436	434	426	426	
26	435	434	430	435	439	440	439	428	419	416	415	418	417	426	423	435	430	434	445	449	441	438	431	427	431	431	
27	438	411	373	459	468	423	417	430	427	417	408	397	411	420	435	444	438	434	439	440	431	434	436	434	428	428	
28 q	431	436	432	430	435	442	445	432	422	412	408	408	414	427	430	431	440	439	430	441	443	442	438	436	431	431	
29 q	437	438	438	435	441	445	445	441	436	427	419	415	419	429	445	446	449	454	452	452	450	450	449	448	440	440	
30 q	446	445	445	446	450	453	452	450	448	436	425	422	422	429	434	439	447	445	432	429	447	446	440	443	440	440	
Mean	402	394	389	413	434	435	428	418	417	411	407	413	423	436	449	453	463	455	452	449	445	436	418	409	427	427	

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

42 LERWICK (D)		10°												SEPTEMBER												
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1		19.9	21.7	21.5	18.7	17.3	15.9	18.4	17.2	20.2	22.0	24.3	27.8	25.6	25.2	26.4	22.1	20.7	21.9	17.4	20.2	22.1	19.7	21.1	22.1	21.2
2		20.2	32.9	22.6	13.2	14.8	15.9	21.2	19.7	22.1	20.5	23.4	25.5	26.7	25.6	24.0	17.8	20.5	20.5	18.6	19.3	15.1	18.8	18.9	17.5	20.6
3 d		16.7	18.3	16.1	13.6	15.8	16.7	16.1	17.8	20.6	22.6	25.6	26.6	28.0	28.0	26.7	25.7	26.6	16.2	16.6	22.5	24.0	18.7	6.2	-35.9	17.9
4 d		-68.2	-28.6	0.4	13.4	8.6	11.9	17.5	18.8	18.2	21.3	25.3	29.3	29.3	29.1	31.9	32.6	25.5	25.2	11.2	15.9	21.2	19.6	12.2	6.9	13.7
5		16.8	12.6	-2.1	1.2	5.2	17.4	17.2	16.9	18.8	18.9	21.2	25.8	27.4	28.2	27.6	27.7	26.2	24.3	23.5	18.1	9.5	9.2	15.6	20.2	17.8
6		19.8	19.4	19.3	19.3	19.5	19.4	19.2	25.7	28.0	23.8	23.2	24.7	26.1	25.9	25.4	23.9	23.2	22.7	21.8	21.4	15.3	19.2	19.7	22.3	22.0
7		19.2	19.2	19.7	19.9	20.4	23.0	25.0	19.3	21.1	24.9	28.0	30.6	28.6	27.6	26.2	25.1	25.1	16.4	22.8	22.2	21.3	18.2	17.9	22.0	22.7
8		19.7	14.2	15.5	16.4	16.9	17.5	17.5	18.3	20.9	23.2	24.0	26.5	27.2	26.4	25.5	19.3	20.9	20.7	19.1	19.7	22.1	22.5	22.1	21.8	20.7
9 q		21.1	17.5	23.7	19.0	14.6	16.3	18.3	16.6	18.3	20.2	22.9	25.7	27.0	26.5	24.2	22.3	21.6	21.8	21.4	21.6	22.2	22.1	20.2	22.0	21.1
10		21.4	21.4	20.7	20.3	19.1	18.3	16.9	17.2	19.9	22.5	25.0	28.3	29.7	28.2	26.9	24.7	22.3	21.6	22.4	22.1	21.0	17.9	15.8	14.0	21.6
11		15.6	28.9	11.1	14.5	16.2	15.6	15.5	14.1	18.7	23.1	25.9	27.9	30.8	30.8	29.0	24.5	23.1	23.1	22.8	23.1	21.5	23.1	22.4	21.1	21.8
12		18.3	17.3	16.4	18.4	18.4	17.7	17.3	17.9	18.0	20.9	25.0	28.3	29.8	28.9	28.2	26.0	24.5	23.8	23.2	23.9	21.2	18.9	20.1	16.4	21.6
13		16.4	18.1	18.1	19.3	19.0	17.9	19.2	19.3	20.5	23.4	22.5	25.9	27.6	26.9	24.4	22.5	21.8	21.8	21.5	20.9	20.2	17.3	18.8	20.6	21.0
14 q		20.2	20.2	20.2	19.3	18.6	18.4	17.1	16.7	17.8	19.7	22.6	26.0	27.0	27.2	25.6	23.4	21.6	22.2	22.5	23.0	22.5	21.9	21.6	21.2	21.5
15		21.0	20.3	20.2	19.6	17.5	17.4	17.3	17.1	17.4	19.5	22.1	25.7	26.9	30.6	35.7	29.5	30.6	30.7	30.0	15.5	18.4	22.2	21.9	20.0	22.8
16		18.7	16.9	17.2	17.5	18.4	18.6	19.0	19.3	19.6	21.2	23.4	25.4	26.2	25.9	26.0	24.7	23.2	18.8	11.8	20.5	19.2	22.4	23.8	23.6	20.9
17		21.7	19.2	22.2	22.3	17.7	19.3	21.1	25.6	24.0	22.4	23.3	25.4	26.8	27.1	23.7	23.4	22.6	22.6	22.4	9.9	16.0	20.6	17.7	21.6	21.6
18		21.0	23.9	19.8	19.5	19.9	20.5	20.7	20.6	20.1	19.9	21.9	23.4	24.9	25.8	25.2	24.5	24.2	25.2	25.5	24.4	21.9	19.2	20.6	0.4	21.4
19 d		-11.0	-10.8	-13.6	13.2	17.0	18.8	26.8	40.9	30.5	25.0	19.1	24.7	27.6	26.6	27.7	26.6	21.4	9.0	21.8	12.8	21.5	14.7	15.9	16.6	17.6
20 d		14.6	17.9	24.1	15.2	17.9	23.6	22.9	22.1	19.9	22.1	23.3	24.9	27.0	28.0	23.0	25.9	25.4	22.0	20.7	21.2	16.7	20.0	17.7	26.2	21.8
21		19.0	15.5	12.3	20.3	20.1	19.5	22.1	23.0	25.4	23.8	22.3	25.1	23.9	24.3	24.7	19.6	21.0	9.4	19.1	20.1	11.9	9.5	13.5	20.6	19.4
22		19.8	22.7	15.2	3.4	10.5	20.1	22.2	18.8	20.6	24.1	24.8	25.6	26.2	27.0	24.8	23.4	23.0	22.8	16.3	20.1	13.8	12.3	16.5	19.5	19.7
23 d		26.1	16.7	18.5	18.8	24.1	32.9	29.6	22.9	19.1	22.3	22.7	25.5	25.5	26.8	18.2	24.5	8.7	22.4	12.6	9.9	17.4	20.4	16.2	25.5	21.1
24		22.0	15.1	22.6	18.6	18.3	18.4	22.3	28.1	28.3	25.6	24.4	25.9	25.5	27.9	23.0	24.7	25.2	21.6	15.5	19.7	11.0	18.2	18.3	19.5	21.7
25		20.3	23.4	22.2	18.5	19.1	18.8	18.7	19.3	23.4	23.1	24.4	26.4	27.6	27.6	24.1	21.1	23.2	22.0	20.6	15.1	17.5	18.6	18.1	20.1	21.4
26		20.5	20.4	20.6	18.8	19.0	19.0	19.5	20.0	20.2	23.0	23.8	24.9	25.8	26.3	24.4	23.0	21.6	19.2	18.7	20.4	17.5	7.7	15.5	15.0	20.2
27		15.8	13.2	23.7	21.0	19.5	25.2	28.4	24.3	20.3	20.6	21.6	24.5	26.8	27.3	20.8	22.3	24.2	22.1	21.5	14.5	17.2	21.3	22.0	22.1	21.7
28 q		19.8	20.3	18.3	17.0	18.2	20.7	19.1	19.1	20.8	20.5	21.8	23.5	24.4	25.2	25.3	23.9	23.3	22.9	18.9	20.6	21.7	21.8	20.2	20.4	21.2
29 q		20.1	20.1	19.5	19.8	19.9	18.5	19.0	18.3	17.9	18.7	20.7	23.8	26.5	28.4	28.6	29.0	27.7	25.4	23.9	22.9	21.9	21.9	21.5	21.1	22.3
30 q		20.9	21.0	20.9	21.1	21.7	20.7	20.2	19.2	19.2	18.8	19.6	22.1	23.9	25.4	25.6	24.2	24.2	24.7	23.9	21.6	22.0	20.3	15.8	17.3	21.4
Mean		15.6	17.0	16.9	17.0	17.4	19.1	20.2	20.5	21.0	21.9	23.3	25.9	26.9	27.2	25.8	24.3	23.1	21.4	20.3	19.4	18.8	18.6	18.3	17.4	20.7

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

29

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

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

44 LERWICK														SEPTEMBER						
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	18 44	477	391	08 44	86	12 18	31.0	12.0	18 37	19.0	16 00	1179	1075	00 00	104	2, 1, 2, 2, 3, 3, 3, 2	18	1	88.9	
2	17 06	491	346	01 46	145	01 32	42.6	3.6	20 08	39.0	18 07	1206	988	01 52	218	4, 3, 2, 2, 2, 3, 4, 3	23	1	88.9	
3 d	17 55	635	-244	22 28	879	22 25	87.0	-53.1	23 58	134.1	17 48	1220	625	23 58	595	3, 2, 2, 2, 3, 5, 4, 8	29	2	89.0	
4 d	16 32	531	-423	-00 58	954	03 30	35.5	-116.7	01 02	152.2	16 06	1264	526	00 48	738	7, 8, 3, 4, 3, 5, 7	40	2	89.0	
5	20 44	498	132	01 28	366	01 01	42.0	-16.0	01 48	58.0	19 03	1143	818	00 55	325	6, 4, 2, 2, 2, 1, 4, 3	24	1	88.7	
6	20 51	472	359	07 50	113	08 18	31.6	5.4	20 37	26.2	20 34	1137	1056	23 26	81	0, 1, 4, 2, 3, 1, 3, 3	17	1	88.6	
7	16 37	474	383	10 22	91	11 18	31.3	10.4	17 21	20.9	17 12	1193	1055	24 00	138	3, 2, 3, 2, 2, 3, 2, 3	20	1	88.9	
8	00 47	459	387	09 18	72	11 37	28.1	23.4	01 35	14.7	15 39	1155	1038	00 22	117	3, 1, 2, 3, 2, 2, 2, 1	16	1	89.6	
9 q	04 58	459	407	09 45	52	02 41	27.6	13.5	04 18	14.1	17 02	1125	1081	03 11	44	3, 3, 1, 1, 1, 2, 1, 1	13	1	89.1	
10	15 37	466	403	23 45	63	12 31	30.5	8.4	24 00	22.1	18 47	1147	1012	22 51	135	2, 1, 2, 2, 2, 2, 2, 4	17	1	88.9	
11	14 18	470	228	00 46	242	01 13	38.7	3.2	02 14	35.5	20 20	1131	887	01 15	244	5, 3, 2, 2, 3, 1, 2, 1	19	1	89.2	
12	16 38	470	400	09 39	70	11 59	30.9	9.6	21 02	21.3	21 04	1140	1061	24 00	79	2, 1, 2, 2, 2, 2, 3, 3	17	1	89.0	
13	21 14	465	381	09 11	84	12 40	28.7	11.3	00 51	17.4	20 08	1126	1042	00 21	84	3, 2, 2, 3, 2, 1, 1, 3	17	1	89.0	
14 q	19 02	458	408	10 12	50	12 01	27.6	15.5	07 31	12.1	07 20	1120	1103	12 43	17	1, 0, 1, 1, 1, 1, 1, 0	6	0	89.0	
15	18 37	579	396	18 47	183	14 48	41.4	5.0	19 25	36.4	18 29	1257	1069	18 56	188	0, 2, 2, 3, 3, 3, 5, 2	20	1	89.0	
16	16 26	463	402	11 27	61	14 20	27.5	6.0	18 06	21.5	18 06	1202	1100	23 03	102	2, 2, 1, 2, 2, 3, 3, 2	17	1	89.0	
17	19 28	474	364	02 47	110	13 26	28.5	3.2	19 25	25.3	15 16	1159	1043	03 15	116	3, 3, 2, 2, 3, 2, 4, 2	21	1	89.5	
18	18 25	492	171	23 07	321	22 35	28.1	-6.8	23 19	34.9	20 12	1191	834	23 29	357	2, 1, 2, 1, 1, 2, 4, 6	19	1	89.3	
19 d	16 52	1104	-243	03 04	1347	07 33	48.1	-36.4	02 58	84.5	16 12	1384	735	01 34	649	7, 8, 5, 4, 5, 7, 6, 6	48	2	89.5	
20 d	15 57	552	124	02 26	428	23 48	34.4	4.0	18 45	30.4	16 28	1289	953	01 38	336	6, 4, 3, 2, 4, 4, 5, 4	32	1	89.4	
21	17 33	482	287	00 16	195	00 07	35.6	-2.7	17 24	38.3	17 15	1180	980	00 03	200	5, 4, 3, 3, 3, 4, 3, 3	28	1	89.2	
22	20 56	505	141	02 09	364	01 56	34.3	-6.3	20 53	40.6	20 28	1141	909	02 51	232	6, 4, 4, 3, 2, 1, 4, 4	28	1	89.5	
23 d	14 28	527	358	10 11	169	05 17	37.6	-4.6	16 24	42.2	14 30	1289	978	23 57	311	4, 4, 4, 3, 5, 4, 5, 4	33	1	89.5	
24	14 11	506	335	07 27	171	13 40	33.7	-2.8	20 13	36.5	14 04	1230	984	00 04	246	4, 3, 4, 3, 4, 3, 4, 2	27	1	89.8	
25	19 23	467	392	08 53	75	12 28	29.6	7.4	19 15	22.2	15 12	1167	1081	02 29	86	2, 2, 2, 2, 3, 3, 3, 2	19	1	89.6	
26	19 40	459	401	10 18	58	13 28	27.7	-0.8	21 27	28.5	17 07	1149	1079	21 53	70	1, 1, 1, 2, 2, 2, 2, 4	15	1	89.6	
27	03 37	477	348	02 41	129	02 41	34.3	10.6	19 19	23.7	14 34	1181	952	02 55	229	4, 4, 3, 2, 3, 2, 3, 2	23	1	89.6	
28 q	06 04	454	404	10 57	50	00 57	31.8	15.4	03 18	16.4	18 30	1152	1074	01 29	78	3, 2, 2, 1, 2, 1, 2, 1	14	1	89.2	
29 q	17 05	458	411	12 19	47	15 17	29.8	17.5	07 57	12.3	00 12	1127	1111	13 00	16	1, 1, 1, 1, 2, 1, 1, 0	8	0	89.2	
30 q	04 59	456	417	19 11	39	14 17	26.6	13.5	22 05	13.1	19 13	1199	1110	13 27	89	0, 1, 1, 1, 2, 2, 3, 2	12	1	89.2	
Mean	-	-	509	276	-	-	34.5	-1.9	-	-	-	1186	979	-	-	-	-	1.03	-	89.2

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

45 LERWICK (H)		14,000γ (0.14 C.G.S. unit) +														OCTOBER									
	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
	0-1	1-2																							
1	441	445	447	406	438	440	444	442	434	427	422	419	414	412	427	438	430	443	441	457	438	438	430	435	434
2	434	437	438	438	439	441	441	441	437	432	427	417	420	424	434	431	441	429	428	438	445	444	446	445	435
3	445	442	445	446	442	440	448	438	429	421	419	416	418	422	434	446	447	446	449	449	451	449	446	449	439
4	456	450	445	446	446	446	442	438	430	422	418	420	427	434	438	441	447	452	449	449	452	456	455	452	442
5 q	449	446	445	446	449	446	445	443	440	432	422	422	425	431	439	443	444	447	452	458	459	458	456	455	444
6 q	454	454	446	446	446	448	447	447	443	438	432	429	429	432	431	436	442	451	454	461	458	458	457	454	446
7	459	458	458	457	455	454	455	432	430	425	425	431	419	418	421	424	436	443	446	443	445	447	446	446	439
8	433	435	430	432	437	440	441	445	445	439	431	421	424	431	427	430	443	450	451	450	446	450	432	441	438
9	443	443	445	443	446	443	452	450	439	428	426	428	426	427	435	440	446	447	453	450	450	448	447	443	442
10	440	436	439	441	442	443	443	443	436	429	418	413	417	426	432	436	429	444	444	434	426	436	443	454	435
11	443	442	442	440	443	444	443	440	432	421	417	413	416	417	425	440	433	432	442	443	445	446	448	446	436
12 q	443	441	439	440	442	441	442	440	436	429	421	417	417	425	435	440	444	450	454	439	431	439	439	443	437
13 q	442	439	441	441	440	443	445	447	440	432	422	418	422	436	441	443	438	443	443	443	443	445	444	443	439
14 q	447	444	444	444	443	439	442	443	436	426	423	422	425	432	440	447	447	446	444	448	450	451	450	450	441
15 d	450	449	448	450	450	451	451	447	443	443	436	439	443	465	510	719	755	798	572	447	395	418	314	234	476
16 d	147	299	394	396	399	406	410	421	414	413	409	410	417	425	425	433	448	444	423	325	341	315	270	95	370
17	258	358	398	406	425	429	427	425	411	400	413	426	429	428	451	470	452	440	453	451	380	367	411	414	413
18 d	412	406	342	309	390	422	419	392	383	373	358	384	461	472	498	535	479	470	494	405	347	366	267	149	397
19 d	318	274	384	277	370	388	363	369	382	378	376	421	439	457	447	467	430	437	443	421	443	432	409	409	397
20 d	402	348	395	424	390	413	415	429	406	399	390	406	404	437	447	451	438	439	430	463	421	428	388	419	416
21	406	413	411	415	433	437	437	436	406	363	373	398	423	431	412	432	434	436	437	438	435	438	436	437	422
22	439	435	434	410	429	450	426	422	423	410	409	416	429	432	432	432	443	440	455	433	421	417	422	433	429
23	429	412	429	440	436	428	435	431	428	418	407	406	414	420	428	432	436	436	444	437	439	439	437	436	429
24	433	434	436	436	439	442	443	447	438	414	413	423	440	433	429	430	434	439	440	441	444	443	443	439	436
25	442	436	421	440	428	434	446	439	437	430	425	428	433	432	433	439	440	440	443	445	443	444	441	443	437
26	444	441	443	447	447	447	450	447	432	425	428	425	423	428	433	439	444	447	446	436	436	440	445	436	439
27	420	428	434	440	447	460	439	432	425	430	425	420	414	418	418	439	447	437	458	437	429	429	433	411	432
28	414	432	432	436	443	441	440	440	436	432	422	418	424	432	436	440	435	441	443	442	443	446	437	429	435
29	428	439	431	432	443	458	459	456	449	440	432	430	431	435	437	444	450	463	454	458	443	461	447	431	444
30	435	436	435	437	443	441	443	443	441	433	432	435	432	428	436	441	444	446	447	447	441	444	443	442	439
31	450	439	432	433	441	443	441	446	439	434	430	431	432	433	436	441	443	446	446	447	446	444	444	443	440
Mean	418	422	429	426	434	439	438	436	429	421	416	419	425	431	438	452	452	455	451	440	432	433	423	411	432

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

46	LERWICK (D)												10° +												OCTOBER							
	Hour G.M.T.																															
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean							
1	19.3	19.1	21.1	23.2	20.9	16.8	17.7	17.2	17.3	18.5	20.5	23.4	25.8	27.2	26.2	26.3	26.7	25.8	19.1	16.2	17.3	18.2	17.2	19.0	20.8							
2	18.6	17.9	19.2	18.9	19.5	19.3	19.9	20.0	19.6	20.0	21.3	22.0	23.8	24.7	24.7	23.3	18.1	18.6	20.2	21.1	19.6	20.6	21.0	20.6	20.5							
3	19.1	20.0	19.5	19.6	19.5	23.0	21.1	22.0	22.0	22.1	22.9	25.1	27.6	28.6	26.8	26.2	24.8	24.1	23.5	21.9	21.6	20.9	20.5	18.8	22.5							
4	16.4	18.2	18.1	18.0	19.1	19.4	19.2	19.0	18.8	19.3	20.8	22.9	25.0	25.7	24.9	23.5	22.9	22.4	22.5	22.7	15.6	18.5	19.1	19.1	20.5							
5 q	19.1	19.1	19.0	19.3	19.1	19.1	19.1	18.7	18.7	19.6	20.5	22.8	25.0	26.1	25.9	25.4	24.0	23.2	22.8	22.1	22.0	21.7	21.0	20.1	21.4							
6 q	15.2	17.1	17.1	19.2	19.8	19.7	19.6	19.0	18.2	18.2	20.2	22.2	23.7	24.7	24.6	24.1	23.2	22.6	22.4	21.8	22.3	21.9	20.9	20.6	20.8							
7	20.9	20.1	19.9	19.9	19.9	19.8	18.9	19.9	26.6	25.1	23.5	26.5	26.9	27.4	27.4	26.5	23.2	21.9	21.3	21.4	20.6	19.1	15.2	6.0	21.6							
8	13.3	13.2	13.7	17.6	17.8	18.2	18.5	19.5	18.7	19.0	20.3	21.9	23.7	26.6	28.0	24.7	23.9	23.0	22.6	22.7	20.9	4.7	9.6	17.2	19.1							
9	17.7	19.4	19.5	20.0	19.9	19.9	23.0	22.3	19.4	18.4	20.4	23.3	25.1	24.8	25.7	24.7	24.1	22.8	21.9	21.9	20.9	20.1	19.1	18.0	21.3							
10	18.1	18.1	16.1	18.5	19.0	19.8	19.4	18.8	18.1	18.1	19.7	22.0	24.4	27.2	27.3	27.5	25.2	23.8	16.1	11.1	5.6	18.8	19.0	16.9	19.5							
11	20.1	19.9	19.0	19.9	20.2	19.7	19.6	18.4	18.1	19.1	21.9	25.1	28.3	29.8	29.2	21.1	24.3	20.0	18.0	21.6	21.4	20.8	20.6	19.4	21.5							
12 q	19.5	19.6	20.3	20.1	19.3	18.9	19.3	18.7	18.2	18.5	21.1	23.2	25.5	25.9	25.3	23.5	22.3	22.1	23.6	19.1	17.9	19.6	19.7	20.0	20.9							
13 q	20.2	19.3	20.3	19.2	19.8	19.9	19.3	19.0	18.4	19.3	21.2	24.4	25.3	26.7	25.2	23.6	21.7	22.5	22.6	21.5	19.8	18.1	16.6	17.9	20.9							
14 q	19.6	20.2	20.0	20.0	19.3	19.9	20.0	18.4	18.2	18.9	20.9	23.3	25.2	25.4	24.5	23.1	22.4	22.9	23.0	22.0	21.5	20.6	20.2	19.6	21.2							
15 d	19.9	20.1	20.2	20.3	20.1	19.9	19.4	18.4	17.6	18.5	21.8	24.6	27.5	29.7	41.4	41.4	38.3	34.5	17.5	16.1	2.2	-0.5	0.0	1.7	20.4							
16 d	-0.5	14.6	20.0	12.2	17.7	19.5	18.4	18.5	16.7	17.7	20.5	22.0	23.7	25.0	23.7	22.9	9.0	13.4	10.5	10.1	2.7	-9.5	-1.5	-14.7	13.0							
17	-1.7	9.8	18.7	21.4	19.2	20.4	20.2	19.9	21.0	20.4	20.1	23.3	25.4	27.6	30.7	11.9	18.9	22.1	16.8	11.4	1.0	15.5	8.0	11.9	17.2							
18 d	7.8	9.4	11.8	16.9	19.0	17.4	19.4	26.0	33.1	26.6	25.0	24.5	23.6	24.2	28.0	8.7	20.9	23.3	15.7	12.2	-4.7	3.3	11.0	9.2	17.2							
19 d	10.7	7.2	13.0	20.6	24.5	23.8	31.0	30.3	29.2	23.5	24.3	25.3	26.9	17.8	24.6	18.4	18.0	8.5	6.1	19.0	12.4	15.2	19.3	24.5	19.8							
20 d	27.1	25.3	18.3	18.7	18.4	21.2	26.9	26.2	22.8	23.7	24.6	26.1	23.1	26.5	18.9	23.1	18.1	8.8	17.4	4.4	6.7	3.9	5.1	14.9	18.8							
21	19.7	23.7	20.1	21.3	20.3	19.4	18.9	19.6	20.6	22.3	22.8	23.7	25.0	29.0	19.6	21.6	22.3	22.0	21.0	21.1	20.3	17.8	18.5	18.8	21.2							
22	18.3	18.9	18.9	24.3	26.0	23.3	23.3	29.3	21.6	23.1	21.3	21.9	23.4	21.3	23.2	18.1	14.1	11.9	11.4	10.7	15.0	16.8	17.6	17.8	19.6							
23	13.6	19.5	19.8	15.0	19.3	20.5	21.8	18.4	19.1	19.3	23.6	24.7	25.4	25.0	20.9	21.7	20.4	17.1	16.5	20.2	20.3	19.1	18.9	19.9	20.0							
24	20.0	19.7	20.2	20.2	20.3	19.9	19.8	19.6	19.5	21.3	22.7	24.8	27.9	29.2	25.2	26.4	24.0	21.9	21.2	20.6	20.0	19.7	15.2	17.6	21.5							
25	17.3	18.1	19.0	20.2	18.8	22.0	19.7	19.9	18.9	19.5	21.1	21.6	23.8	23.1	21.3	20.8	21.2	19.9	20.4	20.6	20.2	20.5	17.5	17.7	20.1							
26	16.5	18.7	19.8	18.7	19.1	19.9	20.2	20.4	20.9	21.9	20.8	22.3	23.3	23.7	22.8	21.7	20.9	20.7	19.9	19.6	17.8	17.4	17.2	16.9	20.0							
27	21.9	23.3	15.5	18.2	17.9	17.1	20.9	22.6	22.8	21.9	23.7	25.0	25.2	25.8	25.2	23.8	25.7	21.9	20.9	23.5	15.9	14.7	9.1	16.2	20.8							
28	23.2	22.0	19.0	16.8	17.9	17.6	18.1	17.3	17.5	19.1	20.9	21.8	23.2	23.8	22.7	21.5	20.0	20.1	20.8	19.5	18.5	17.1	16.1	15.4	19.6							
29	15.4	17.2	17.2	20.4	21.6	19.5	17.7	17.2	17.7	18.1	19.9	22.4	25.2	25.2	24.1	22.4	22.3	23.7	24.1	23.3	21.8	19.0	11.0	4.8	19.6							
30	15.4	18.1	17.5	19.9	19.0	19.0	18.4	18.4	18.1	18.5	19.7	21.8	24.7	23.7	23.1	23.5	21.9	21.5	21.1	20.6	18.1	19.5	19.1	18.0	19.9							
31	14.7	11.0	17.4	17.9	17.2	18.9	21.9	19.2	17.1	18.5	20.3	22.2	23.0	22.6	21.8	21.4	20.9	20.8	20.8	20.4	19.9	19.8	19.7	19.2	19.4							
Mean	16.7	18.0	18.4	19.2	19.7	19.8	20.3	20.4	20.2	20.3	21.6	23.4	25.0	25.6	25.3	23.0	22.1	20.9	19.4	18.7	16.0	15.9	15.5	15.6	20.0							

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			
	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
	0-1	1-2																							
1	1125	1121	1108	1091	1034	1080	1102	1109	1115	1120	1121	1122	1128	1133	1130	1140	1146	1144	1157	1108	1120	1117	1115	1114	1117
2	1107	1114	1119	1119	1120	1121	1121	1121	1121	1122	1121	1123	1123	1121	1124	1133	1144	1150	1150	1138	1128	1127	1120	1118	1125
3	1119	1121	1121	1120	1118	1112	1106	1110	1114	1116	1119	1122	1122	1120	1117	1121	1127	1124	1122	1123	1121	1124	1124	1121	1119
4	1106	1112	1118	1120	1118	1118	1120	1121	1121	1121	1121	1116	1113	1114	1118	1121	1121	1121	1122	1122	1122	1114	1109	1109	1117
5 q	1109	1110	1115	1116	1116	1116	1116	1116	1115	1115	1115	1115	1115	1114	1114	1115	1115	1114	1109	1109	1109	1112	1114	1112	1114
6 q	1103	1097	1104	1109	1112	1111	1109	1109	1109	1109	1108	1106	1109	1109	1113	1115	1113	1112	1114	1112	1116	1115	1115	1116	1110
7	1115	1115	1115	1115	1115	1113	1110	1116	1099	1103	1097	1103	1114	1121	1121	1122	1122	1120	1118	1120	1116	1115	1114	1118	1114
8	1106	1104	1104	1103	1104	1103	1105	1103	1103	1103	1104	1109	1109	1116	1133	1133	1124	1121	1121	1121	1125	1067	1055	1088	1107
9	1103	1109	1110	1115	1112	1108	1103	1097	1106	1109	1112	1110	1113	1115	1115	1117	1119	1119	1115	1115	1115	1115	1112	1114	1112
10	1114	1100	1072	1097	1109	1114	1114	1114	1116	1115	1112	1109	1111	1115	1120	1127	1133	1126	1135	1138	1133	1121	1115	1097	1115
11	1104	1115	1116	1119	1118	1117	1118	1117	1120	1119	1115	1113	1119	1128	1130	1146	1141	1138	1133	1125	1121	1119	1113	1109	1121
12 q	1114	1117	1117	1114	1112	1115	1117	1120	1121	1120	1118	1116	1115	1113	1115	1119	1119	1118	1119	1138	1146	1133	1126	1121	1120
13 q	1120	1121	1114	1114	1116	1117	1117	1117	1119	1119	1119	1116	1114	1114	1117	1125	1133	1127	1128	1129	1128	1124	1117	1115	1120
14 q	1112	1114	1115	1116	1117	1120	1118	1120	1119	1116	1113	1109	1108	1110	1113	1117	1121	1122	1125	1123	1120	1120	1119	1117	1117
15 d	1115	1115	1114	1113	1114	1114	1116	1119	1118	1113	1110	1107	1104	1101	1128	1283	1328	1101	1223	1254	1153	1038	951	881	1121
16 d	911	927	1042	1068	1101	1091	1115	1136	1131	1132	1132	1133	1132	1136	1153	1183	1211	1210	1147	1106	987	983	943	800	1080
17	845	970	1047	1088	1100	1100	1111	1122	1130	1155	1145	1134	1141	1152	1165	1265	1203	1195	1207	1211	1139	1065	1045	1035	1115
18 d	1065	1073	1032	981	1004	1075	1100	1116	1109	1133	1164	1114	1231	1235	1267	1300	1276	1240	1211	1103	1037	1011	984	893	1115
19 d	929	900	869	863	953	1023	1056	1108	1147	1201	1219	1175	1205	1241	1185	1212	1226	1188	1139	1141	1130	1096	1095	1076	1099
20 d	1067	1002	972	993	1031	1066	1079	1094	1122	1148	1146	1153	1183	1191	1211	1225	1186	1173	1153	1126	1076	1039	1034	1041	1105
21	1078	1090	1106	1108	1117	1125	1128	1127	1137	1172	1180	1181	1153	1166	1187	1158	1141	1134	1128	1128	1128	1128	1128	1128	1136
22	1125	1131	1127	1111	1054	1080	1092	1098	1110	1128	1134	1141	1148	1153	1145	1153	1158	1153	1128	1128	1128	1097	1075	1069	1119
23	1085	1092	1089	1093	1103	1104	1106	1116	1122	1122	1122	1129	1140	1144	1153	1153	1145	1141	1134	1128	1127	1126	1125	1126	1122
24	1123	1128	1129	1130	1130	1130	1128	1126	1125	1127	1122	1121	1123	1159	1171	1154	1142	1136	1134	1129	1126	1123	1123	1123	1132
25	1116	1116	1117	1103	1108	1109	1110	1116	1119	1122	1122	1123	1126	1128	1131	1134	1135	1134	1131	1129	1129	1126	1115	1113	1121
26	1110	1116	1121	1122	1122	1122	1122	1122	1122	1117	1116	1116	1116	1120	1123	1125	1126	1126	1131	1139	1138	1131	1118	1113	1122
27	1100	1039	1064	1092	1107	1109	1110	1114	1122	1134	1133	1129	1133	1131	1144	1151	1157	1176	1203	1110	1145	1145	1110	1091	1123
28	1075	1039	1071	1086	1095	1110	1122	1125	1127	1127	1127	1127	1123	1122	1123	1127	1134	1134	1132	1134	1134	1122	1121	1107	1114
29	1086	1080	1098	1106	1109	1110	1113	1116	1116	1116	1117	1119	1119	1120	1119	1119	1119	1117	1127	1143	1151	1100	1056	1070	1110
30	1104	1118	1122	1122	1121	1122	1121	1122	1122	1124	1125	1123	1127	1128	1128	1126	1123	1123	1124	1128	1134	1131	1128	1123	1124
31	1094	1079	1097	1111	1116	1114	1104	1106	1116	1116	1117	1119	1122	1125	1124	1124	1122	1122	1121	1122	1123	1123	1125	1125	1115
Mean	1083	1083	1089	1092	1097	1106	1110	1115	1119	1126	1127	1124	1130	1135	1140	1153	1152	1141	1140	1132	1120	1104	1092	1080	1116

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

48		LERWICK										OCTOBER								
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	γ	h. m.	γ				°A.		
1	19 07	495	364	03 40	131	03 48	35.3	6.6	19 06	28.7	18 39	1169	1021	04 16	148	2,4,2,1,2,2,3,2	18	1	89.3	
2	16 47	452	413	11 13	39	13 07	25.1	13.5	20 07	11.6	17 47	1161	1103	00 47	58	1,1,1,1,1,2,2,1	10	0	89.4	
3	17 47	456	409	12 08	47	13 07	29.9	16.8	24 00	13.1	16 43	1130	1102	06 10	28	0,2,1,1,1,2,1,1	9	0	89.2	
4	20 42	468	412	11 08	56	13 38	26.3	8.9	20 40	17.4	20 27	1129	1099	00 13	30	2,1,1,1,1,1,3,2	12	0	89.0	
5 q	23 57	462	420	10 53	42	13 12	26.3	18.1	03 33	8.2	06 20	1119	1103	24 00	16	1,1,1,1,0,0,1,1	6	0	88.6	
6 q	00 16	465	423	11 07	42	13 40	25.5	12.5	00 29	13.0	15 50	1118	1094	01 38	24	2,1,1,1,2,1,1,1	10	0	86.1	
7	00 06	466	410	12 43	56	08 14	32.2	2.0	23 20	30.2	23 33	1127	1091	08 32	36	1,0,3,2,3,1,1,3	14	1	85.9	
8	21 16	514	376	21 40	138	14 20	29.2	-5.2	21 22	34.4	14 58	1140	1011	22 01	129	1,2,2,2,2,2,1,4	16	1	86.1	
9	07 10	464	418	11 51	46	12 29	26.4	16.3	00 14	10.1	16 10	1121	1090	07 11	31	2,2,2,1,2,1,1,2	13	1	85.9	
10	23 38	465	412	11 20	53	15 38	28.9	-2.5	20 15	31.4	18 45	1143	1065	02 20	78	3,2,1,1,2,2,4,3	18	1	86.2	
11	15 26	457	406	11 35	51	13 37	31.3	10.5	18 01	20.8	15 44	1150	1097	00 00	53	1,1,1,1,2,3,3,1	13	1	86.2	
12 q	18 38	456	413	11 35	43	13 52	26.5	15.2	20 12	11.3	20 06	1151	1111	00 00	40	0,0,1,1,1,0,2,1	6	0	86.5	
13 q	22 00	459	411	11 43	48	13 46	27.4	14.4	21 58	13.0	16 43	1136	1111	03 03	25	0,1,1,1,1,2,2,2	10	0	86.4	
14 q	21 35	452	421	09 59	31	13 12	26.0	17.8	08 22	8.2	18 53	1126	1107	12 31	19	1,1,1,0,1,1,1,0	6	0	85.1	
15 d	17 54	865	150	23 29	715	15 56	56.5	-30.0	21 08	86.5	16 27	1374	824	23 33	550	0,0,1,1,4,7,7,6	26	2	85.2	
16 d	17 47	501	-241	23 46	742	19 52	28.8	-49.6	23 54	78.4	16 07	1252	717	23 43	535	6,3,3,2,2,4,6,7	33	2	85.5	
17	19 11	520	108	00 03	412	15 08	38.6	-32.8	00 00	71.4	15 37	1301	775	00 03	526	6,2,2,3,3,5,5,4	30	1	85.7	
18 d	18 40	677	27	23 34	650	08 12	36.0	-20.7	20 27	56.7	15 08	1355	817	23 26	538	5,5,4,3,5,5,6,6	39	2	86.1	
19 d	15 39	498	171	01 33	327	06 32	36.9	-11.2	18 12	48.1	13 15	1272	837	03 00	435	6,5,4,4,4,5,4,3	35	2	85.2	
20 d	19 33	500	318	01 35	182	01 08	35.3	-6.4	20 58	41.7	15 54	1251	954	02 46	297	4,4,3,3,4,5,4,4	31	1	86.4	
21	13 20	449	347	09 22	102	13 23	33.9	12.8	00 00	21.1	14 08	1198	1059	00 00	139	3,2,3,4,3,3,1,1	20	1	86.2	
22	17 55	479	395	03 43	84	04 00	36.2	-3.0	17 44	39.2	16 04	1173	1044	00 20	129	1,3,3,3,2,4,3,3	22	1	86.2	
23	18 10	455	398	11 37	57	12 38	26.1	8.8	18 01	17.3	14 55	1160	1066	00 00	94	2,3,2,2,2,3,3,1	18	1	86.3	
24	15 04	451	409	09 26	42	13 52	34.5	13.1	22 46	21.4	14 06	1189	1111	24 00	78	1,0,1,2,3,2,0,2	11	1	86.5	
25	06 30	451	416	02 26	35	12 38	25.5	15.8	23 04	9.7	15 51	1136	1098	03 55	38	2,2,2,2,2,1,1,2	14	1	86.4	
26	06 54	457	420	12 17	37	13 22	23.9	15.3	21 59	8.6	19 16	1145	1107	00 13	38	2,1,1,2,1,0,2,2	11	0	86.2	
27	19 06	520	394	00 53	126	19 10	35.1	3.0	22 30	32.1	18 46	1242	1032	01 30	210	4,2,3,2,2,3,5,3	24	1	86.1	
28	20 51	475	403	00 41	71	00 56	28.6	13.6	21 42	15.0	20 48	1141	1028	01 17	113	3,3,1,1,0,2,3,3	16	1	86.3	
29	21 22	523	391	20 55	132	21 31	31.3	-0.5	23 13	31.8	20 56	1170	1025	22 43	145	2,2,1,1,2,2,4,4	18	1	86.0	
30	19 06	456	425	13 12	31	12 31	25.8	8.2	00 00	17.6	20 38	1139	1085	00 00	54	3,1,1,1,2,1,2,1	12	0	86.0	
31	00 38	459	426	13 17	33	12 51	23.6	7.7	01 24	15.9	13 19	1126	1064	01 04	62	3,2,2,1,2,1,0,1	12	0	86.1	
Mean	-	-	492	344	-	-	30.7	2.9	-	27.9	-	-	1179	1027	-	-	-	-	0.77	86.5

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												
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	
1	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	441	442	442	443	443	445	443	441	441	439	428	428	436	441	446	443	441	444	439	433	436	439	443	440	440	
3		440	441	444	447	447	450	447	446	444	436	428	428	432	433	439	441	439	443	446	450	450	447	444	443	442	
4		443	443	444	446	447	450	450	449	443	439	435	428	437	437	432	430	442	447	446	448	447	446	444	443	442	
5		440	439	439	448	451	451	450	447	443	436	429	432	436	440	444	444	446	450	451	450	449	444	440	429	443	
6		433	428	422	430	446	448	458	443	428	420	421	433	445	453	454	439	425	419	428	433	436	435	434	435	435	
7		434	438	436	439	445	449	450	441	434	435	435	439	442	441	439	441	446	449	451	448	447	444	443	443	442	
8		442	440	442	441	445	446	446	443	436	431	427	431	435	438	440	444	448	451	447	449	440	437	443	446	441	
9	q	445	444	444	445	447	447	449	447	435	428	426	424	433	437	441	442	440	444	448	452	453	453	449	461	443	
10	q	441	439	443	443	447	446	451	449	449	444	441	439	441	444	446	446	450	451	452	451	449	445	449	446	446	
11		445	445	445	446	448	448	448	447	442	437	434	436	439	442	444	447	449	451	453	452	452	452	452	451	446	
12		449	449	449	450	452	453	452	451	449	442	439	438	441	448	445	452	453	452	448	433	434	437	443	443	446	
13	d	432	435	434	435	440	445	451	452	448	435	431	428	433	454	429	440	442	443	443	463	447	460	434	437	441	
14	d	431	417	432	436	445	435	414	427	424	424	411	413	400	407	432	441	430	437	431	433	431	441	419	427	427	
15	d	432	426	424	428	443	443	421	427	417	410	409	412	395	426	436	439	434	421	427	402	374	416	442	425	422	
16	d	428	429	432	438	437	435	434	407	394	409	418	405	411	438	456	442	431	424	428	409	434	425	429	431	426	
17		432	418	370	392	456	430	431	420	421	417	420	427	434	431	439	427	413	424	413	431	430	443	385	417	422	
18		434	418	409	438	445	449	439	439	438	435	434	430	435	423	437	444	432	420	424	428	444	448	442	427	434	
19		425	420	427	408	418	445	448	442	441	425	406	403	426	433	432	425	428	424	431	432	431	436	427	439	428	
20	d	426	433	426	392	442	451	428	435	429	432	418	436	438	418	430	440	436	433	433	433	446	431	426	427	431	
21		432	431	416	433	442	432	439	440	413	424	424	428	428	432	437	419	423	438	453	440	417	418	408	418	429	
22		404	430	434	436	441	446	438	429	422	418	409	416	421	426	437	437	440	443	437	431	423	426	431	431	429	
23		434	430	435	437	439	442	442	441	437	433	431	433	433	438	441	440	443	445	445	429	432	437	437	448	438	
24		437	439	440	440	442	443	459	455	434	424	417	435	444	445	445	454	447	459	457	448	510	396	404	400	441	
25		409	423	441	441	441	435	443	449	451	441	426	424	428	433	437	445	439	434	437	442	441	437	435	445	437	
26		434	435	438	438	431	447	451	450	448	444	445	441	434	437	444	448	449	452	449	442	434	448	445	420	442	
27		433	432	431	438	441	446	445	447	448	446	443	440	442	445	446	445	448	449	447	446	443	445	441	440	443	
28	q	440	440	443	443	443	446	446	434	446	446	439	434	434	448	450	450	445	441	441	442	446	446	447	452	443	
29	q	443	439	442	442	444	448	452	453	452	448	444	441	445	447	448	449	450	452	453	453	453	447	442	440	447	
30	q	440	437	434	438	445	445	451	449	445	440	434	441	445	444	445	448	449	452	451	452	451	450	448	448	445	
Mean		442	445	442	445	447	449	450	447	446	448	448	448	452	450	449	452	455	457	459	456	452	448	448	448	449	
Mean		435	434	433	436	443	445	444	442	437	433	428	430	433	438	441	442	440	442	442	440	441	439	436	437	438	

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

50 LERWICK (D)													10° +													NOVEMBER												
	Hour G.M.T.		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1		19.0	19.4	19.5	19.1	19.5	19.2	19.2	19.1	18.6	20.4	21.8	22.2		23.5	24.0	24.6	23.8	22.9	23.0	9.7	15.3	15.3	17.6	18.6	18.7	19.7											
2	q	19.9	20.4	19.9	19.7	19.9	19.8	20.4	19.6	18.4	19.2	20.9	23.0		23.7	23.4	22.5	21.9	19.2	21.9	21.7	20.7	20.0	19.6	19.1	19.1	20.6											
3		19.3	19.8	19.0	19.8	20.3	19.7	19.7	18.7	18.4	19.1	21.4	22.6		23.7	24.5	25.3	25.3	22.8	21.0	18.7	21.0	19.9	18.8	17.0	14.9	20.4											
4		14.7	17.1	20.9	19.4	18.5	19.1	19.4	18.9	18.6	19.3	20.3	22.2		23.7	22.9	22.2	21.7	21.2	21.1	21.2	21.0	20.4	20.3	14.4	13.6	19.7											
5		13.2	12.2	13.5	10.5	11.6	18.3	23.2	22.0	21.7	21.0	23.4	24.9		29.1	28.0	35.2	35.4	30.9	23.4	19.6	21.6	20.6	19.9	19.5	19.4	21.6											
6		19.3	21.2	19.7	18.9	18.7	18.9	19.4	19.2	19.1	20.2	20.7	24.1		24.8	26.0	24.1	25.2	25.6	23.4	21.2	20.8	20.1	19.8	19.4	19.4	21.2											
7		18.7	19.2	19.5	18.6	19.7	19.1	18.0	18.6	18.9	20.6	21.5	24.7		24.1	23.6	22.3	21.7	21.7	22.2	22.2	22.3	18.3	18.8	19.4	19.8	20.6											
8		20.4	20.2	20.3	20.3	19.9	19.8	19.2	18.5	18.6	20.1	21.6	22.9		24.3	24.7	25.1	26.6	25.2	22.0	21.1	20.3	19.6	19.5	18.5	14.2	21.0											
9	q	13.4	18.3	19.3	19.3	18.7	19.2	19.2	18.6	18.1	18.8	20.1	21.7		22.3	22.5	21.8	21.1	20.9	20.9	20.9	20.9	20.5	19.6	19.3	17.6	19.7											
10	q	18.5	19.0	19.1	19.7	19.4	19.1	19.3	18.9	18.7	19.1	20.4	22.2		23.3	23.2	22.6	22.5	22.2	21.7	21.4	20.5	19.6	19.4	19.1	18.8	20.3											
11		19.2	19.4	20.0	20.2	20.2	20.1	19.8	19.4	19.4	20.2	22.0	23.6		24.3	25.7	26.2	24.1	23.8	23.4	21.7	16.4	15.7	15.5	18.4	18.0	20.7											
12		17.5	11.4	14.8	18.2	18.4	18.7	19.0	19.6	20.3	23.0	24.3	24.6		28.4	29.4	27.3	28.3	23.7	23.6	28.0	20.9	12.0	-3.2	13.7	21.7	20.1											
13	d	22.5	22.1	21.3	16.4	17.9	19.4	25.7	26.4	22.2	18.1	22.3	19.5		21.6	29.1	25.6	22.0	12.0	8.1	12.3	7.9	3.7	10.5	13.5	15.4	18.1											
14	d	20.8	20.2	20.8	27.4	21.8	18.0	22.5	24.7	24.4	21.6	20.6	21.9		22.8	21.7	22.4	21.7	20.1	-3.4	0.5	8.6	7.1	12.1	8.1	16.9	17.6											
15	d	19.2	20.9	20.5	19.9	24.2	23.5	32.6	28.4	29.1	25.6	23.4	21.9		22.5	23.2	15.5	18.1	15.8	21.8	-10.1	-2.0	10.0	17.0	17.6	19.2	19.1											
16	d	19.2	24.4	25.9	26.4	15.9	17.8	22.4	26.4	20.8	20.2	20.4	20.1		20.6	19.6	20.8	20.1	13.9	10.3	4.3	19.9	18.0	14.0	23.0	15.6	19.2											
17		18.7	19.7	24.8	18.9	18.6	19.3	19.4	19.3	19.4	19.9	21.4	24.1		24.6	22.5	20.2	18.3	19.1	9.0	12.3	18.3	14.9	16.5	15.1	13.9	18.7											
18		18.8	24.3	21.2	18.3	24.0	17.9	19.0	18.2	18.9	18.7	21.2	18.3		21.8	22.3	18.3	11.0	13.1	16.8	16.8	17.7	17.1	13.9	17.0	18.0	18.4											
19	d	23.3	16.8	13.9	18.7	25.4	25.6	27.3	24.5	20.9	19.8	20.8	21.4		26.7	21.6	25.4	21.6	22.5	19.4	18.2	18.7	-2.9	6.4	13.9	18.4	19.5											
20		19.9	18.7	18.7	22.5	16.3	19.4	18.5	20.4	18.4	19.7	20.3	21.0		21.1	18.7	18.8	16.7	18.5	20.6	8.1	13.5	12.7	11.2	8.6	11.1	17.2											
21		21.8	21.9	20.4	20.1	19.9	19.7	19.2	21.1	21.1	20.0	20.6	20.4		22.3	19.9	22.3	21.6	20.4	20.1	17.5	9.1	7.6	12.9	15.4	17.6	18.9											
22		17.9	18.7	19.9	19.7	19.2	19.7	19.7	19.9	18.7	19.1	19.1	21.5		22.7	21.4	22.0	21.1	20.6	20.3	20.4	17.7	17.5	18.4	17.7	16.3	19.5											
23		16.2	19.5	19.7	20.6	20.8	20.1	20.6	22.9	23.5	23.0	24.8	29.3		24.9	25.9	25.1	22.7	21.1	22.9	23.7	19.5	22.3	7.4	8.1	5.7	20.4											
24		19.7	20.9	16.3	17.5	18.1	19.7	24.0	18.9	19.0	19.1	19.9	20.6		20.4	21.3	21.9	22.3	24.4	23.3	22.1	19.6	18.9	17.6	17.8	16.0	20.0											
25		17.4	17.4	17.9	18.4	18.2	17.5	16.2	17.7	19.9	19.7	21.1	22.3		24.3	23.0	23.0	20.9	19.5	21.6	20.6	18.3	16.8	10.5	9.1	21.6	18.9											
26		15.1	9.3	16.0	16.4	17.3	16.9	18.8	19.6	19.0	19.0	21.1	22.1		22.5	22.5	21.9	22.3	22.1	21.3	22.3	20.0	19.2	17.4	18.5	18.7	19.1											
27		18.9	19.0	20.3	17.5	17.6	18.2	18.7	18.9	19.2	20.6	21.1	21.6		21.6	22.7	21.8	21.6	20.3	17.7	19.7	19.9	18.4	16.9	16.7	17.2	19.4											
28	q	17.5	16.8	18.1	18.9	17.9	18.7	18.9	18.7	18.9	19.5	19.9	20.9		21.8	22.3	21.8	20.9	20.3	20.1	19.9	19.7	19.6	18.4	14.9	13.9	19.1											
29		16.2	17.0	15.7	15.4	17.7	18.7	18.7	19.4	20.4	20.6	20.1	21.6		22.6	22.0	21.2	20.3	19.9	19.9	19.9	19.9	19.7	19.5	19.2	19.7	19.4											
30	q	18.5	17.9	18.1	19.0	18.7	19.5	19.5	19.7	19.7	20.9	21.8	22.0		21.9	21.3	20.8	21.0	21.1	21.3	21.1	21.5	21.2	18.3	19.4	19.6	20.2											
Mean		18.5	18.8	19.2	19.2	19.1	19.3	20.6	20.5	20.1	20.2	21.3	22.3		23.4	23.3	22.9	22.1	20.8	19.3	17.2	17.7	16.1	15.5	16.3	17.0	19.6											

51 LERWICK (Z)													46,000γ (0.46 C.G.S. unit) +													NOVEMBER					
	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						
	0-1	1-2																													
1	1123	1123	1122	1121	1120	1118	1119	1120	1123	1120	1124	1124	1122	1122	1123	1124	1127	1130	1149	1136	1132	1129	1125	1125	1125						
2 q	1123	1124	1121	1120	1117	1114	1115	1115	1117	1118	1120	1120	1121	1121	1122	1123	1124	1128	1126	1123	1121	1120	1122	1122	1123	1121					
3	1122	1121	1120	1120	1117	1117	1116	1119	1120	1131	1124	1121	1121	1121	1121	1121	1118	1127	1128	1121	1121	1122	1123	1113	1121						
4	1101	1107	1110	1110	1113	1113	1114	1114	1115	1116	1117	1117	1117	1117	1117	1118	1117	1115	1114	1114	1114	1116	1118	1116	1114						
5	1102	1087	1091	1097	1094	1089	1080	1092	1104	1114	1120	1131	1156	1175	1179	1205	1248	1234	1184	1149	1133	1128	1126	1124	1135						
6	1123	1111	1110	1117	1118	1116	1114	1116	1117	1114	1114	1113	1117	1126	1134	1132	1127	1125	1123	1121	1120	1120	1119	1118	1119						
7	1121	1122	1123	1122	1119	1116	1117	1117	1120	1120	1121	1121	1121	1126	1128	1126	1123	1121	1124	1125	1137	1132	1123	1119	1123						
8	1118	1118	1119	1119	1118	1120	1118	1118	1120	1118	1118	1121	1123	1124	1126	1127	1131	1131	1126	1121	1118	1116	1116	1090	1120						
9 q	1095	1108	1115	1118	1118	1118	1116	1116	1113	1113	1111	1111	1112	1114	1118	1119	1119	1119	1119	1119	1119	1120	1115	1113	1115						
10 q	1113	1114	1118	1118	1119	1118	1118	1117	1116	1114	1113	1111	1109	1111	1113	1115	1116	1117	1118	1119	1118	1117	1115	1114	1115						
11	1113	1113	1114	1114	1115	1115	1115	1114	1113	1112	1109	1108	1110	1112	1113	1115	1117	1120	1130	1150	1146	1135	1121	1111	1118						
12	1078	1048	1076	1099	1110	1113	1113	1112	1113	1119	1117	1119	1119	1123	1132	1145	1153	1141	1149	1204	1198	1131	1101	1106	1122						
13 d	1112	1098	1034	1028	1048	1067	1074	1088	1116	1131	1137	1164	1189	1205	1148	1152	1164	1157	1174	1172	1095	1058	1061	1101	1116						
14 d	1117	1116	1092	1048	1030	1076	1099	1110	1116	1128	1141	1146	1178	1197	1152	1141	1148	1178	1169	1157	1087	1082	1075	1105	1120						
15 d	1116	1119	1122	1121	1112	1103	1086	1113	1123	1122	1143	1184	1201	1221	1221	1227	1189	1159	1179	1152	1124	1125	1123	1117	1146						
16 d	1104	1098	1056	985	1047	1081	1095	1106	1126	1140	1141	1140	1146	1145	1135	1141	1159	1177	1193	1140	1140	1132	1080	1054	1115						
17	1089	1095	1069	1081	1105	1109	1117	1121	1121	1124	1124	1128	1130	1149	1152	1152	1161	1174	1170	1148	1130	1082	1063	1099	1121						
18	1114	1099	1072	1079	1078	1094	1111	1121	1124	1128	1144	1159	1153	1147	1159	1174	1165	1133	1127	1126	1127	1121	1115	1095	1124						
19 d	1056	1055	1077	1059	1046	1054	1072	1083	1099	1128	1127	1134	1142	1205	1193	1157	1160	1158	1145	1142	1113	1098	1110	1110	1113						
20	1101	1108	1072	1054	1082	1103	1111	1116	1129	1131	1130	1130	1135	1146	1147	1169	1164	1141	1139	1129	1121	1024	1078	1072	1114						
21	1080	1083	1112	1123	1125	1121	1122	1123	1124	1126	1135	1141	1145	1148	1138	1137	1134	1134	1139	1141	1145	1136	1124	1121	1127						
22	1117	1120	1126	1130	1131	1130	1128	1127	1128	1126	1125	1124	1128	1133	1135	1137	1134	1133	1132	1142	1140	1132	1128	1119	1129						
23	1121	1123	1126	1127	1123	1124	1118	1112	1120	1121	1120	1117	1140	1135	1130	1128	1130	1127	1134	1161	1072	1048	1092	1081	1118						
24	989	1041	1094	1105	1105	1098	1097	1105	1111	1115	1119	1122	1124	1124	1127	1131	1137	1145	1144	1139	1133	1132	1130	1119	1112						
25	1114	1114	1121	1124	1124	1099	1112	1116	1117	1118	1117	1119	1124	1125	1128	1134	1137	1132	1132	1141	1148	1139	1121	1095	1123						
26	1079	1101	1100	1111	1121	1123	1124	1124	1124	1124	1123	1123	1121	1121	1126	1128	1126	1129	1132	1135	1135	1136	1132	1129	1122						
27	1127	1127	1120	1115	1119	1120	1121	1128	1127	1127	1128	1125	1128	1125	1125	1128	1133	1141	1141	1142	1141	1137	1130	1112	1128						
28 q	1109	1115	1119	1121	1121	1121	1121	1121	1122	1123	1122	1121	1121	1120	1121	1121	1121	1120	1121	1121	1122	1126	1132	1123	1121						
29	1125	1123	1114	1111	1114	1117	1118	1121	1120	1121	1124	1123	1123	1124	1126	1124	1124	1123	1123	1121	1123	1123	1123	1121	1121						
30 q	1123	1120	1122	1121	1119	1118	1118	1119	1119	1116	1116	1116	1117	1118	1118	1118	1117	1117	1118	1121	1128	1133	1130	1127	1120						
Mean	1104	1105	1103	1101	1104	1107	1110	1114	1119	1122	1124	1128	1133	1139	1137	1139	1141	1139	1140	1138	1127	1115	1112	1109	1121						

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

52 LERWICK													NOVEMBER						
	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	γ	h. m.	γ				°A.			
1	14 22	449	421	11 00	28	14 37	25.1	6.1	18 37	19.0	18 33	1157	1117	06 03	40	0, 1, 1, 1, 1, 1, 3, 2	10	0	86.0
2 q	21 17	455	425	10 45	30	12 29	23.8	17.3	08 02	6.5	16 37	1132	1113	07 15	19	1, 0, 1, 1, 0, 1, 1, 1	6	0	86.0
3	23 12	454	427	14 25	27	15 12	27.6	13.4	23 13	14.2	17 56	1133	1098	24 00	35	1, 1, 1, 2, 1, 3, 2, 2	13	0	86.3
4	04 07	459	425	23 40	34	12 23	25.0	12.4	22 36	12.6	23 08	1122	1097	00 04	25	2, 1, 1, 1, 1, 0, 0, 2	8	0	85.9
5	13 28	462	412	16 35	50	16 10	39.1	8.1	03 58	31.0	16 38	1265	1077	06 50	188	2, 3, 2, 2, 3, 3, 3, 0	18	1	85.7
6	18 25	454	428	13 42	26	13 52	27.0	18.4	08 58	8.6	13 59	1136	1104	01 57	32	2, 1, 1, 2, 2, 1, 0, 1	10	0	85.2
7	17 26	455	423	10 38	32	12 11	25.5	14.8	20 47	10.7	20 44	1149	1112	05 02	37	0, 1, 1, 1, 1, 1, 2, 2	9	0	85.3
8	23 12	478	420	11 36	58	15 55	27.3	10.3	24 00	17.0	17 22	1133	1078	23 29	55	1, 0, 1, 1, 1, 2, 1, 3	10	0	85.5
9 q	22 44	457	436	00 50	21	13 18	22.8	9.7	00 08	13.1	03 18	1121	1081	00 00	40	3, 1, 1, 0, 0, 0, 0, 1	6	0	85.2
10 q	22 24	455	431	10 46	24	12 37	23.9	17.9	00 20	6.0	19 50	1120	1107	12 00	13	0, 0, 0, 0, 0, 0, 1, 1	2	0	83.0
11	17 18	456	425	19 30	31	14 05	28.2	13.3	21 38	14.9	19 55	1159	1103	24 00	56	0, 0, 0, 0, 1, 0, 3, 3	7	1	83.0
12	21 22	492	421	00 40	71	13 24	31.1	-9.4	21 20	40.5	19 19	1224	1036	01 12	188	3, 2, 0, 1, 3, 2, 4, 5	20	1	83.0
13 d	21 12	476	365	13 01	111	13 31	32.8	-13.2	19 51	46.0	13 21	1238	1017	02 54	221	4, 3, 3, 3, 4, 4, 4, 5	30	1	83.0
14 d	21 59	478	306	20 20	172	03 46	40.7	-17.2	17 39	57.9	13 04	1238	1009	04 07	229	3, 4, 2, 2, 4, 5, 5, 4	29	1	82.8
15 d	15 17	481	379	08 12	102	06 29	38.0	-33.7	18 49	71.7	15 47	1280	1076	06 38	204	1, 3, 3, 4, 4, 5, 5, 2	27	1	82.8
16 d	04 37	470	307	03 00	163	02 48	36.1	-8.8	18 12	44.9	17 55	1233	920	03 09	313	5, 5, 3, 2, 3, 4, 4, 4	30	1	83.0
17	21 53	480	399	02 20	81	02 10	29.1	1.9	17 53	27.2	17 18	1181	1051	22 01	130	3, 3, 1, 2, 2, 4, 4, 3	22	1	83.6
18	06 44	454	382	03 52	72	04 24	26.4	9.2	21 13	17.2	15 42	1178	1062	02 43	116	3, 3, 2, 3, 2, 3, 1, 3	20	1	83.3
19 d	20 29	494	366	03 10	128	13 03	30.9	-22.6	20 10	53.5	14 07	1233	1027	00 49	206	3, 4, 3, 3, 4, 3, 5, 4	29	1	83.3
20	18 48	488	379	21 05	109	03 21	28.6	-2.9	18 40	31.5	15 30	1175	979	21 10	196	3, 3, 3, 3, 2, 2, 4, 4	24	1	83.1
21	19 07	455	389	00 34	66	00 46	26.3	2.2	20 10	24.1	13 01	1158	1060	01 11	98	3, 1, 2, 2, 2, 1, 3, 3	17	1	84.0
22	23 44	457	422	12 55	35	12 26	23.5	14.7	23 37	8.8	20 00	1146	1112	23 47	34	1, 0, 1, 1, 1, 0, 2, 2	8	0	83.9
23	20 23	692	358	21 21	334	20 23	45.6	-3.6	21 28	49.2	20 14	1224	928	20 44	296	1, 1, 2, 3, 3, 3, 6, 5	24	1	83.9
24	23 34	462	364	00 13	98	06 21	27.6	13.2	23 51	14.4	17 48	1147	972	00 39	175	4, 2, 3, 2, 1, 2, 2, 2	18	1	84.0
25	21 47	459	410	23 12	49	12 18	25.9	4.4	21 28	21.5	20 01	1151	1062	23 55	89	1, 3, 2, 1, 2, 1, 2, 4	16	1	84.4
26	17 44	452	424	02 06	28	12 42	23.3	5.5	01 25	17.8	21 00	1141	1064	00 00	77	3, 1, 1, 1, 0, 0, 1, 2	9	0	84.0
27	23 22	458	425	12 22	33	13 49	23.9	14.2	22 51	9.7	19 50	1146	1105	23 50	41	2, 1, 2, 1, 2, 2, 1, 2	13	0	84.0
28 q	18 35	455	433	23 40	23	13 25	22.5	12.2	23 35	10.3	22 20	1134	1105	00 27	29	1, 1, 1, 0, 0, 0, 0, 2	5	0	83.8
29	06 36	455	428	10 25	27	12 43	23.0	12.7	02 57	10.3	00 19	1127	1106	02 56	21	2, 2, 1, 1, 0, 0, 0, 1	7	0	83.4
30 q	18 54	460	439	00 55	21	09 50	22.2	16.6	21 25	5.6	21 25	1135	1114	17 03	21	1, 0, 1, 1, 1, 1, 1, 1	7	0	83.8
Mean	- -	472	402 - -	70	- -	28.4	4.6 - -	23.9	- -	1171	1063 - -	107	-	-	-	-	0.50	-	84.1

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				
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean		
1	q	447	445	447	447	450	455	457	455	455	454	453	451	452	451	450	452	455	457	457	458	455	453	453	452	453		
2	q	452	448	451	450	452	453	451	453	454	454	450	451	452	451	452	455	455	452	451	450	447	449	449	447	451		
3		446	445	442	442	445	451	455	454	453	452	448	438	436	439	436	444	442	444	442	443	444	447	445	435	445		
4		448	429	441	443	447	447	449	452	453	451	449	448	450	453	454	454	457	459	446	450	452	448	445	458	449		
5		447	444	442	439	445	453	452	451	449	449	447	447	448	451	450	449	447	448	450	454	453	453	453	450	449		
6		448	446	448	447	452	454	455	456	455	458	457	458	453	446	440	446	447	452	454	451	449	445	444	441	450		
7		442	438	445	447	448	456	452	452	452	448	442	440	446	449	449	449	451	452	449	449	449	449	457	446	448		
8		447	445	443	441	443	447	452	453	452	450	448	449	449	451	455	449	447	451	450	449	453	445	445	465	449		
9		445	440	442	445	446	449	449	449	447	443	442	444	445	445	446	449	446	438	438	446	442	441	448	445	445		
10		444	443	443	444	446	447	446	446	443	438	431	436	441	442	443	443	449	454	456	457	454	453	453	435	445		
11	d	441	435	437	441	445	454	464	467	460	449	426	423	432	413	426	436	431	429	422	427	388	399	417	413	432		
12	d	396	422	430	424	439	434	426	440	435	437	437	430	417	426	432	424	440	444	432	420	425	434	429	402	428		
13	d	428	435	435	441	442	447	449	445	437	432	429	433	429	429	431	442	445	449	439	431	451	427	436	438	437		
14		439	441	438	442	442	449	449	450	444	436	434	438	438	441	444	445	442	437	438	435	439	438	439	445	441		
15		441	441	441	442	445	450	453	451	448	451	448	445	441	440	444	448	449	448	448	430	426	431	427	433	443		
16		437	434	439	441	448	450	452	452	446	437	441	445	446	448	447	448	448	444	445	448	450	446	456	445	446		
17		444	441	445	446	449	457	460	459	457	452	451	448	446	447	447	448	441	448	450	451	444	435	446	441	448		
18		442	445	448	446	448	449	452	452	453	452	450	450	451	451	444	441	446	450	450	448	447	444	449	446	448		
19		445	442	443	444	446	451	452	455	456	453	452	449	445	445	447	447	446	438	432	437	440	450	441	443	446		
20		439	440	443	446	444	447	452	451	450	450	448	446	448	447	443	444	443	442	441	444	445	447	445	440	445		
21		446	439	440	442	445	448	447	448	446	445	444	445	446	449	447	448	447	447	446	446	446	443	435	453	445		
22	d	443	446	449	449	451	445	456	462	465	461	458	453	455	453	451	441	437	444	440	430	434	430	439	440	447		
23	q	440	441	442	441	443	445	446	446	445	445	446	446	447	446	442	443	452	450	436	433	443	447	446	442	444		
24		434	440	435	443	441	450	462	455	448	445	439	438	442	443	443	444	446	448	443	445	443	441	442	444	444		
25		447	441	442	443	445	449	447	458	459	455	451	448	449	450	443	447	445	444	445	446	447	442	443	433	447		
26		438	440	440	441	443	443	444	444	445	447	454	458	462	459	454	452	450	450	450	447	446	440	432	439	447		
27		441	438	440	445	446	446	445	443	446	450	450	452	455	451	448	450	444	450	455	450	459	481	456	432	449		
28		437	437	442	443	445	448	448	448	450	450	451	454	453	447	444	447	449	446	450	440	447	444	448	445	446		
29	d	443	440	440	440	445	447	449	447	447	443	445	449	456	450	451	453	458	443	453	453	451	449	463	430	448		
30	q	437	441	444	445	443	445	449	453	450	449	447	444	447	450	456	454	453	451	441	441	443	446	444	445	447		
31	q	445	446	445	443	445	446	453	453	452	452	444	443	446	449	449	451	453	453	453	452	448	444	444	441	448		
Mean		441	440	420	430	446	449	451	452	450	448	445	445	446	445	445	447	447	447	445	444	444	443	444	441	445		

444 at 0-1h. January 1, 1954.

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

54	LERWICK (D)													10° +													DECEMBER									
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1 q	19.4	19.4	19.8	19.9	19.7	18.7	18.7	19.2	19.7	19.9	20.6	21.3	21.7	22.0	21.8	21.4	21.1	20.5	20.6	20.4	19.8	19.2	16.8	18.3	20.0											
2 q	18.5	19.7	19.9	19.5	19.3	19.5	19.2	19.7	20.5	21.1	21.6	22.4	23.1	22.1	21.3	20.7	21.7	22.0	21.1	20.0	19.3	19.3	19.2	19.2	20.4											
3	19.2	19.2	21.2	20.3	18.7	18.7	17.9	18.5	19.2	20.4	20.6	22.3	24.3	25.4	24.9	24.8	23.5	21.6	19.9	20.5	18.8	17.5	17.7	16.9	20.5											
4	5.7	14.9	16.9	18.7	17.4	17.7	19.4	19.7	19.9	20.5	21.7	21.5	22.4	22.5	21.5	21.7	21.6	23.1	18.7	20.6	19.7	18.7	18.2	15.8	19.1											
5	17.7	15.8	16.8	16.9	17.4	17.7	18.7	19.1	19.3	20.2	20.0	20.7	21.5	21.8	21.6	21.0	20.6	18.9	18.7	19.4	19.4	19.3	18.8	18.4	19.2											
6	18.1	17.7	19.4	19.6	19.5	19.3	18.8	19.1	19.6	19.9	21.6	24.0	23.6	24.7	25.3	26.3	23.3	20.9	20.5	19.8	18.7	15.2	13.0	16.9	20.2											
7	18.7	17.4	22.1	16.0	17.6	17.8	18.7	19.4	19.0	19.7	21.2	21.6	22.3	22.6	21.6	20.7	20.6	20.5	19.9	19.7	19.0	18.7	17.8	16.4	19.5											
8	19.0	18.8	18.5	18.3	19.0	19.3	18.4	18.7	19.2	19.7	20.6	21.1	21.7	22.3	23.2	24.4	23.5	23.1	21.7	19.7	18.6	17.5	15.8	9.9	19.7											
9	7.5	16.8	19.8	19.7	19.7	19.6	19.6	19.7	19.6	19.4	20.1	20.7	22.5	22.6	22.1	21.4	22.7	22.1	20.6	17.7	3.9	17.4	16.7	17.0	18.7											
10	17.7	19.7	19.8	19.2	18.9	18.8	18.7	19.5	19.9	20.6	21.0	22.5	22.3	22.5	22.3	21.1	20.1	20.6	20.2	19.6	19.2	17.8	13.9	15.5	19.6											
11 d	15.0	16.6	17.3	17.4	19.4	19.1	21.6	23.0	22.5	22.1	22.5	25.4	25.3	29.6	26.4	26.5	25.1	20.7	14.9	12.0	6.9	5.7	10.0	13.4	19.1											
12 d	24.6	19.5	17.4	22.1	21.1	22.9	25.4	21.1	21.5	18.1	18.9	21.6	22.5	24.5	24.9	18.6	19.8	12.9	5.5	8.0	11.8	17.8	17.8	23.9	19.3											
13 d	17.0	18.2	18.7	18.2	19.8	21.4	22.2	21.3	19.7	19.7	19.2	20.8	23.0	24.2	22.5	21.8	20.6	19.9	20.6	12.2	15.8	14.9	16.5	17.7	19.4											
14	18.6	19.1	19.5	20.4	19.8	19.7	19.0	19.4	19.4	20.6	21.6	22.1	22.5	21.1	20.1	19.4	20.0	18.7	18.9	15.1	12.3	17.3	17.3	17.5	19.1											
15	18.8	19.2	19.4	19.4	19.7	20.1	19.2	20.4	20.5	20.7	20.8	21.8	20.9	20.9	20.3	20.1	20.2	20.0	19.5	14.6	7.9	9.8	11.1	15.8	18.4											
16	18.8	21.8	21.2	19.1	19.2	19.6	19.5	19.8	19.7	20.5	21.3	21.6	21.6	22.3	21.6	20.4	19.8	20.1	19.8	19.8	19.2	17.2	15.4	16.6	19.8											
17	16.2	19.0	19.9	19.6	19.7	19.9	20.6	20.6	20.5	20.2	20.2	20.6	21.1	21.1	20.9	20.6	18.7	18.5	19.3	20.1	19.7	13.9	8.8	16.9	19.0											
18	18.5	22.4	19.4	20.1	19.7	19.9	19.9	19.8	19.9	20.8	21.0	21.0	21.8	23.0	23.3	23.0	23.1	18.8	18.1	20.6	18.7	17.4	15.9	18.7	20.2											
19	18.3	19.8	19.9	19.4	19.8	19.7	19.7	19.9	19.9	20.2	20.9	22.3	22.8	22.3	21.3	20.7	20.9	19.9	20.8	18.6	16.4	14.9	15.7	17.7	19.7											
20	19.2	18.8	19.4	18.7	18.0	19.3	19.2	19.5	19.1	19.2	20.1	21.8	22.3	22.9	22.3	21.8	23.7	22.3	18.3	17.7	17.1	19.5	18.7	18.0	19.9											
21	20.1	19.2	18.1	19.2	18.7	19.5	19.7	19.6	19.3	19.7	20.3	21.3	21.6	21.5	20.6	20.3	20.6	20.1	19.7	19.2	18.7	18.8	13.0	17.4	19.4											
22 d	16.8	19.2	19.4	18.9	19.2	21.0	21.5	20.1	20.1	20.5	20.4	20.5	22.0	23.0	22.9	22.8	19.2	21.3	20.7	10.4	11.5	16.3	16.8	16.8	19.2											
23 q	17.9	18.1	18.7	19.6	19.2	20.0	19.2	18.7	19.1	19.7	20.4	20.4	20.9	21.4	21.0	20.2	20.6	22.3	15.4	20.8	19.9	18.2	16.7	15.7	19.3											
24	17.5	16.0	17.3	18.1	17.1	16.7	17.7	18.7	18.4	19.6	19.7	19.9	20.7	20.4	20.3	19.7	19.7	19.9	18.9	17.8	18.5	18.9	18.1	18.9	18.7											
25	20.4	18.2	18.5	17.4	18.9	18.4	18.9	19.5	19.9	20.8	21.9	21.6	22.1	22.6	21.4	20.4	21.6	18.5	20.3	18.1	17.8	19.2	10.3	18.7	19.4											
26	18.5	19.3	19.5	19.4	19.0	18.8	18.9	19.0	19.6	20.0	21.3	22.0	21.4	20.1	19.6	20.3	20.8	20.4	19.8	17.3	15.6	12.9	11.2	17.5	18.8											
27	20.3	18.9	18.5	18.1	18.6	18.6	18.9	19.6	19.9	20.7	20.8	20.7	20.3	19.2	19.6	20.0	20.7	20.5	21.5	22.2	18.6	19.2	18.3	14.8	19.5											
28	19.3	17.1	14.2	14.8	18.0	18.6	18.6	19.8	20.1	21.6	22.4	21.3	22.2	22.4	19.8	20.2	20.5	19.8	20.6	14.2	15.8	18.6	18.6	17.7	19.0											
29 d	21.1	17.9	17.7	17.6	17.6	18.5	17.8	18.3	18.6	19.8	21.6	22.4	22.7	20.5	19.8	22.2	22.6	21.6	20.5	20.4	19.6	17.0	4.4	11.0	18.8											
30 q	17.8	18.7	18.7	18.0	18.5	19.8	19.7	19.3	18.8	18.9	21.7	21.5	20.5	20.5	19.8	19.7	19.9	20.0	20.1	18.9	19.2	18.6	18.8	17.7	19.4											
31 q	17.7	17.7	18.1	18.1	17.5	17.5	17.3	19.6	19.9	20.6	20.4	20.0	20.1	19.8	19.6	19.1	19.2	19.5	19.2	18.9	19.3	18.2	17.7	17.8	18.9											
Mean	17.9	18.5	18.9	18.8	18.9	19.2	19.4	19.7	19.7	20.2	20.9	21.6	22.1	22.3	21.7	21.3	21.2	20.3	19.2	17.9	16.7	16.9	15.5	16.9	19.4											

55 LERWICK (Z)		46,000γ (0.46 C.G.S. unit) +																				DECEMBER						
	Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean	
			γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
1	q		1126	1124	1123	1122	1119	1117	1117	1117	1117	1117	1117	1118	1119	1121	1123	1123	1122	1120	1120	1119	1119	1122	1123	1126	1123	1121
2	q		1117	1118	1117	1118	1119	1117	1119	1118	1119	1117	1118	1118	1120	1122	1123	1123	1125	1126	1126	1128	1130	1127	1124	1126	1121	1121
3			1126	1124	1121	1112	1116	1117	1116	1117	1116	1116	1116	1119	1123	1125	1129	1128	1134	1137	1140	1139	1135	1129	1126	1127	1125	1125
4			1073	1082	1108	1117	1118	1117	1116	1116	1116	1117	1117	1121	1122	1123	1123	1123	1123	1123	1140	1133	1126	1126	1127	1119	1118	
5			1113	1107	1092	1103	1112	1117	1117	1117	1117	1117	1118	1121	1123	1123	1126	1126	1128	1128	1124	1121	1120	1121	1121	1123	1118	
6			1122	1123	1123	1124	1122	1120	1118	1116	1116	1112	1112	1112	1120	1124	1132	1134	1137	1134	1132	1131	1130	1140	1133	1133	1125	
7			1128	1127	1099	1104	1114	1116	1117	1117	1119	1117	1119	1120	1120	1122	1126	1127	1127	1126	1126	1124	1124	1123	1116	1116	1120	
8			1117	1121	1123	1124	1121	1121	1120	1117	1115	1115	1117	1117	1117	1119	1122	1127	1128	1128	1130	1137	1132	1137	1136	1122	1123	
9			1117	1117	1120	1122	1123	1123	1122	1122	1121	1121	1120	1120	1121	1122	1124	1126	1128	1135	1142	1135	1128	1124	1122	1123	1124	
10			1122	1122	1124	1126	1124	1124	1124	1123	1121	1120	1124	1121	1120	1123	1126	1131	1131	1128	1127	1126	1126	1124	1122	1121	1124	
11	d		1110	1117	1119	1119	1117	1114	1113	1113	1114	1116	1121	1122	1122	1182	1182	1150	1158	1199	1220	1212	1102	1079	1080	1067	1131	
12	d		1076	1077	1102	1112	1099	1090	1099	1112	1131	1130	1129	1129	1133	1133	1140	1162	1147	1155	1160	1164	1158	1141	1122	1062	1123	
13	d		1054	1095	1113	1116	1117	1114	1113	1119	1123	1127	1130	1129	1129	1130	1130	1128	1127	1128	1139	1161	1114	1135	1135	1132	1122	
14			1127	1123	1123	1120	1119	1119	1122	1123	1126	1128	1129	1126	1125	1126	1127	1127	1129	1134	1132	1136	1134	1130	1127	1119	1126	
15			1117	1120	1121	1121	1120	1119	1119	1120	1121	1121	1124	1127	1128	1128	1128	1126	1124	1126	1127	1143	1147	1124	1121	1122	1125	
16			1119	1111	1107	1114	1116	1117	1117	1118	1123	1125	1124	1124	1124	1126	1127	1126	1125	1128	1128	1127	1126	1131	1119	1113	1121	
17			1118	1122	1119	1119	1117	1114	1113	1114	1116	1119	1120	1123	1124	1126	1128	1125	1127	1123	1120	1120	1124	1135	1123	1119	1121	
18			1118	1100	1110	1117	1117	1117	1116	1117	1116	1117	1118	1117	1119	1123	1128	1128	1126	1134	1131	1127	1128	1130	1125	1116	1121	
19			1114	1120	1123	1123	1123	1119	1117	1115	1116	1117	1118	1117	1120	1123	1126	1126	1126	1135	1145	1151	1150	1146	1145	1136	1127	
20			1131	1129	1127	1120	1120	1117	1117	1117	1119	1119	1119	1119	1123	1126	1130	1130	1133	1137	1144	1142	1141	1131	1126	1128	1127	
21			1117	1114	1119	1121	1122	1122	1121	1120	1119	1119	1119	1119	1116	1118	1123	1123	1123	1124	1124	1124	1123	1125	1133	1102	1120	
22	d		1116	1119	1120	1121	1119	1118	1113	1112	1112	1113	1116	1120	1121	1123	1128	1134	1143	1140	1145	1161	1147	1141	1131	1129	1127	
23	q		1128	1128	1126	1127	1126	1126	1124	1123	1123	1122	1120	1120	1121	1123	1128	1128	1124	1126	1142	1147	1138	1131	1129	1130	1127	
24			1125	1124	1130	1127	1128	1130	1126	1127	1128	1126	1127	1128	1126	1126	1126	1128	1128	1129	1134	1133	1132	1134	1133	1128	1128	
25			1119	1120	1126	1126	1125	1124	1124	1119	1119	1119	1121	1121	1121	1121	1125	1127	1133	1141	1135	1135	1135	1140	1148	1141	1128	
26			1132	1130	1129	1128	1129	1129	1126	1126	1125	1123	1119	1118	1116	1119	1121	1124	1126	1127	1128	1130	1132	1133	1130	1132	1126	
27			1130	1132	1135	1129	1127	1126	1124	1123	1123	1121	1123	1123	1122	1123	1123	1124	1128	1128	1126	1134	1140	1094	1088	1119	1124	
28			1135	1135	1134	1127	1126	1124	1123	1124	1123	1123	1124	1125	1124	1123	1128	1129	1128	1134	1130	1143	1138	1134	1131	1130	1129	
29	d		1117	1117	1124	1126	1126	1124	1124	1125	1126	1127	1124	1123	1120	1123	1123	1123	1118	1130	1129	1128	1128	1130	1126	1129	1125	
30	q		1124	1123	1123	1119	1119	1119	1119	1119	1120	1123	1121	1123	1121	1123	1123	1124	1124	1124	1132	1135	1134	1134	1131	1128	1124	
31	q		1126	1123	1123	1120	1119	1117	1118	1117	1120	1119	1123	1123	1124	1125	1126	1125	1125	1124	1124	1125	1126	1130	1131	1132	1124	
Mean			1116	1117	1119	1120	1120	1119	1119	1119	1120	1120	1121	1121	1122	1126	1128	1129	1129	1133	1135	1138	1131	1129	1125	1121	1124	

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

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

57 LERWICK

	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.	-7.0	-8.1	-6.2	-5.0	+2.3	+6.3	+9.2	+6.7	+2.0	-2.0	-7.5	-6.9	-3.6	+1.5	+2.3	+1.9	+1.4	+5.8	+6.8	+4.3	-1.4	+1.9	-2.1	-2.6
Feb.	-16.2	-11.2	-9.8	-9.1	-3.9	+4.8	+7.8	+4.9	-0.4	-1.9	-3.9	-3.4	-2.7	+2.2	+3.7	+6.0	+5.0	+7.7	+9.1	+8.3	+5.1	+6.6	-0.3	-8.4
Mar.	-26.5	-21.3	-11.4	-17.3	-7.3	+5.5	+6.7	+3.4	-2.2	-9.7	-13.7	-13.6	-7.6	+4.0	+17.3	+22.0	+23.5	+17.5	+17.2	+10.5	+9.5	+3.1	+2.9	-12.5
Apr.	-13.6	-6.2	-6.3	-8.6	-1.1	+3.9	+0.9	-5.1	-13.2	-19.7	-25.2	-26.1	-20.5	-10.9	+1.2	+11.6	+18.9	+23.4	+25.8	+23.6	+17.8	+17.3	+10.8	+1.3
May	-14.2	-12.9	-12.0	-6.0	-1.8	-6.6	-7.2	-7.7	-14.2	-21.7	-24.8	-21.3	-8.1	+5.7	+9.5	+22.0	+29.9	+33.3	+35.2	+30.6	+14.7	-2.9	-8.4	-11.1
June	-4.1	-7.0	-5.0	-1.6	-4.9	-6.0	-9.6	-16.7	-21.1	-28.5	-29.4	-26.3	-17.4	-6.1	-1.5	+7.0	+21.5	+32.7	+36.5	+36.8	+24.6	+13.8	+7.3	+5.0
July	-4.4	-4.7	-9.4	-12.4	-4.6	-4.9	-10.8	-14.2	-25.7	-31.7	-33.8	-30.3	-15.9	-4.5	+7.7	+18.5	+25.6	+30.9	+34.8	+32.1	+26.6	+17.1	+9.6	+4.4
Aug.	-3.1	-17.3	-16.4	-8.4	-7.2	-9.6	-9.3	-10.4	-20.5	-30.6	-29.7	-23.0	-11.7	+4.1	+17.0	+27.7	+29.2	+31.8	+31.6	+29.8	+25.9	+9.8	-0.5	-9.2
Sept.	-25.4	-33.3	-38.2	-14.1	+7.2	+7.6	+0.9	-8.7	-10.2	-16.2	-19.5	-14.1	-4.1	+8.8	+21.9	+26.3	+36.2	+27.7	+25.1	+21.6	+17.9	+9.3	-8.7	-18.0
Oct.	-14.2	-9.8	-3.0	-6.6	+2.1	+6.5	+5.8	+3.7	-3.1	-11.5	-16.0	-12.8	-6.7	-0.7	+5.5	+20.1	+20.1	+23.4	+18.8	+7.6	-0.3	+1.3	-8.7	-21.5
Nov.	-3.2	-3.8	-4.6	-2.1	+5.4	+6.8	+6.3	+3.6	-1.3	-5.1	-9.6	-8.3	-4.7	-0.4	+3.4	+3.8	+2.5	+3.6	+4.4	+2.3	+3.2	+1.2	-2.1	-1.3
Dec.	-4.6	-5.1	-3.4	-2.5	+0.2	+3.4	+5.2	+6.2	+4.6	+2.6	+0.1	-0.4	+0.5	+0.1	-0.1	+1.1	+1.7	+1.7	-0.2	-1.5	-1.6	-2.1	-1.2	-4.7
Year	-11.3	-11.7	-10.5	-7.8	-1.1	+1.5	+0.5	-2.9	-8.8	-14.7	-17.7	-15.5	-8.5	+0.3	+7.3	+14.0	+18.0	+20.0	+20.4	+17.2	+11.8	+6.4	-0.1	-6.5
Winter	-7.7	-7.1	-6.0	-4.7	+1.0	+5.3	+7.1	+5.3	+1.2	-1.6	-5.2	-4.7	-2.6	+0.9	+2.3	+3.2	+2.7	+4.7	+5.0	+3.3	+1.3	+1.9	-1.4	-4.3
Equinox	-19.9	-17.7	-14.7	-11.7	+0.2	+5.9	+3.6	-1.7	-7.2	-14.3	-18.6	-16.7	-9.7	+0.3	+11.5	+20.0	+24.7	+23.0	+21.7	+15.8	+11.2	+7.7	-0.9	-12.7
Summer	-6.5	-10.5	-10.7	-7.1	-4.6	-6.8	-9.2	-12.3	-20.4	-28.1	-29.4	-25.2	-13.3	-0.2	+8.2	+18.8	+26.5	+32.2	+34.5	+32.3	+22.9	+9.5	+2.0	-2.7
DECLINATION																								
Jan.	-1.37	-1.78	-1.89	-1.31	-1.22	-0.68	-0.19	+0.26	+1.09	+1.74	+2.30	+2.95	+3.90	+3.49	+3.43	+1.89	+1.27	+0.69	-1.82	-2.24	-2.25	-2.63	-2.78	-2.85
Feb.	-1.66	-1.00	-2.17	-2.70	-2.78	-1.98	-0.80	+0.09	+0.70	+1.43	+2.29	+3.32	+4.21	+4.21	+4.04	+3.09	+1.68	+0.18	-0.95	-1.75	-0.93	-2.99	-3.40	-2.13
Mar.	-1.94	-1.99	-2.06	-2.08	-3.12	-2.31	-1.14	-0.56	-0.36	+0.21	+1.58	+3.88	+5.62	+6.52	+6.51	+4.91	+3.26	+2.54	-1.01	-3.09	-4.42	-4.74	-3.47	-2.74
Apr.	-1.78	-1.88	-2.51	-2.85	-2.50	-2.61	-2.40	-2.69	-2.36	-1.63	+0.09	+2.61	+5.07	+6.38	+5.96	+5.27	+3.88	+2.45	+1.21	-0.40	-0.91	-2.12	-2.81	-3.47
May	-4.47	-3.25	-2.90	-2.79	-2.58	-3.44	-3.94	-4.72	-3.66	-1.49	+0.78	+3.70	+5.88	+6.59	+6.31	+5.38	+4.43	+3.48	+1.95	+1.10	+0.87	-0.69	-3.11	-3.43
June	-1.33	-1.76	-2.67	-4.17	-4.49	-5.27	-5.10	-4.62	-3.45	-2.02	+0.38	+2.97	+4.81	+5.69	+5.88	+5.12	+4.73	+3.70	+3.04	+1.79	+0.82	-0.41	-1.92	-1.72
July	-2.15	-2.02	-2.33	-3.89	-4.23	-4.61	-4.21	-3.38	-3.38	-2.11	-0.31	+1.87	+3.87	+5.50	+6.12	+5.35	+4.72	+3.88	+3.02	+2.13	+0.99	-0.75	-1.86	-2.22
Aug.	-1.53	-1.55	-2.25	-3.58	-3.61	-4.75	-4.31	-3.92	-2.70	-0.72	+1.97	+4.99	+6.87	+7.02	+6.00	+3.81	+2.69	+1.03	+0.65	-0.28	-2.11	-1.69	-1.35	-0.68
Sept.	-5.14	-3.75	-3.81	-3.68	-3.27	-1.58	-0.54	-0.24	+0.28	+1.20	+2.56	+5.14	+6.17	+6.44	+5.05	+3.55	+2.38	+0.72	-0.44	-1.28	-1.88	-2.10	-2.46	-3.32
Oct.	-3.37	-2.04	-1.67	-0.79	-0.37	-0.27	+0.31	+0.36	+0.12	+0.23	+1.53	+3.39	+4.99	+5.58	+5.22	+2.96	+2.02	+0.87	-0.62	-1.31	-4.06	-4.13	-4.50	-4.45
Nov.	-1.13	-0.84	-0.44	-0.43	-0.47	-0.26	+0.96	+0.93	+0.47	+0.58	+1.67	+2.70	+3.77	+3.69	+3.32	+2.44	+1.22	-0.32	-2.39	-1.96	-3.48	-4.14	-3.28	-2.61
Dec.	-1.53	-0.87	-0.52	-0.64	-0.50	-0.19	+0.04	+0.27	+0.36	+0.77	+1.46	+2.17	+2.66	+2.92	+2.34	+1.94	+1.76	+0.90	-0.22	-1.52	-2.72	-2.46	-3.95	-2.47
Year	-2.28	-1.89	-2.10	-2.41	-2.43	-2.33	-1.78	-1.52	-1.07	-0.15	+1.36	+3.31	+4.82	+5.34	+5.01	+3.81	+2.84	+1.68	+0.20	-0.73	-1.67	-2.40	-2.91	-2.67
Winter	-1.42	-1.12	-1.25	-1.27	-1.24	-0.78	0.00	+0.39	+0.65	+1.13	+1.93	+2.79	+3.63	+3.58	+3.28	+2.34	+1.48	+0.36	-1.35	-1.87	-2.35	-3.05	-3.35	-2.51
Equinox	-3.06	-2.41	-2.51	-2.35	-2.31	-1.69	-0.94	-0.78	-0.58	0.00	+1.44	+3.75	+5.46	+6.23	+5.69	+4.17	+2.89	+1.65	-0.21	-1.52	-2.82	-3.27	-3.31	-3.49
Summer	-2.37	-2.15	-2.54	-3.61	-3.73	-4.52	-4.39	-4.16	-3.30	-1.59	+0.71	+3.38	+5.36	+6.20	+6.08	+4.91	+4.14	+3.02	+2.17	+1.19	+0.14	-0.89	-2.06	-2.01
VERTICAL FORCE																								
Jan.	-17.3	-19.2	-17.7	-17.5	-17.6	-14.0	-12.5	-9.9	-7.3	-6.5	-3.1	+1.5	+4.4	+7.4	+12.3	+21.7	+22.0	+21.8	+22.2	+20.1	+15.6	+8.7	-5.9	-9.2
Feb.	-26.8	-31.4	-23.7	-18.2	-15.1	-13.2	-10.5	-6.8	-1.5	+1.8	+1.0	+1.7	+4.9	+8.8	+12.3	+18.4	+25.0	+26.1	+24.2	+23.7	+11.9	+5.3	-4.7	-13.2
Mar.	-25.8	-36.5	-33.7	-32.7	-25.9	-15.8	-8.5	-3.4	+0.7	+4.7	+7.5	+10.3	+13.6	+16.7	+20.6	+28.2	+37.2	+38.9	+31.9	+19.7	+4.6	-13.8	-16.6	-21.9
Apr.	-29.1	-30.3	-27.5	-24.6	-23.2	-17.4	-11.4	-6.4	-2.3	+0.7	+2.0	+2.4	+4.6	+10.1	+19.0	+26.6	+33.2	+31.6	+27.3	+24.0	+18.7	+6.6	-11.3	-23.3
May	-34.5	-32.6	-25.7	-14.8	-11.7	-9.0	-5.6	-1.2	+2.3	+2.1	+3.6	+6.3	+7.1	+13.8	+19.0	+27.4	+29.7	+28.2	+23.9	+20.2	+10.3	-5.6	-23.7	-29.5
June	-10.5	-16.8	-17.3	-15.1	-9.6	-5.5	-4.1	-2.2	-2.1	-2.0	-2.8	-4.1	-3.6	-0.3	+6.3	+11.2	+12.5	+19.3	+21.5	+22.0	+13.9	+2.6	-6.0	-7.3
July	-27.6	-35.9	-30.5	-30.5	-22.2	-14.0	-6.7	-2.0	+2.0	+2.7	+3.7	+4.0	+5.5	+8.0	+12.1	+19.0	+23.9	+25.6	+27.4	+24.3	+18.3	+7.7	-5.1	-9.7
Aug.	-34.8	-41.5	-49.1	-39.4	-31.0	-21.2	-9.9	-0.6	+5.5	+8.2	+7.3	+5.8	+8.4	+15.2	+24.8	+35.9	+41.4	+42.5	+37.1	+30.4	+15.9	-0.2	-16.3	-34.4
Sept.	-51.9	-49.7	-45.4	-36.3	-19.9	-11.6	-7.2	-1.4	+2.0	+6.1	+10.4	+11.4	+16.1	+21.2	+32.5	+39.4	+42.2	+39.9	+36.1	+25.6	+11.5	-6.1	-22.8	-42.1
Oct.	-32.7	-32.8	-27.0	-23.9	-19.2	-10.7	-6.1	-0.9	+2.9	+9.5	+10.4	+7.4	+14.2	+19.1	+23.7	+36.9	+35.4	+24.4	+23.9	+15.4	+3.3	-12.6	-24.5	-36.1
Nov.	-17.1	-16.3	-18.3	-20.7	-17.0	-13.8	-11.3	-7.2	-2.6	+0.6	+2.8	+6.5	+11.8	+18.1	+15.7	+17.7	+19.6	+18.2	+18.7	+16.4	+5.5	-6.2	-8.9	-12.2
Dec.	-7.5	-6.6	-4.6	-4.0	-4.1	-5.0	-5.6	-5.3	-4.1	-4.0	-3.1	-2.6	-2.0	+1.6	+4.1	+4.4	+5.0	+8.6	+11.4	+13.7	+7.2	+4.4	+1.3	-3.2
Year	-26.3	-29.1	-26.7	-23.1	-18.0	-12.6	-8.3	-3.9	-0.4	+2.0	+3.3	+4.2	+7.1	+11.6	+16.9	+23.9	+27.3	+27.1	+25.5	+21.3	+11.4	-0.8	-12.0	-20.2
Winter	-17.2	-18.4	-16.1	-15.1	-13.5	-11.5	-10.0	-7.3	-3.9	-2.0	-0.6	+1.8	+4.8	+9.0	+11.1	+15.5	+17.9	+18.7	+19.1	+18.5	+10.1	+3.1	-4.5	-9.5
Equinox	-34.9	-37.3	-33.4	-29.4	-22.1	-13.9	-8.3	-3.0	+0.8	+5.3	+7.6	+7.9	+12.1	+16.8	+23.9	+32.8	+37.0	+33.7	+29.8	+21.2	+9.5	-6.5	-18.8	-30.9
Summer	-26.9	-31.7	-30.7	-24.9	-18.6	-12.4	-6.6	-1.5	+1.9	+2.7	+2.9	+3.0	+4.3	+9.2	+15.5	+23.4	+26.9	+28.9	+27.5	+24.2	+14.6	+1.1	-12.8	-20.2

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

INTERNATIONAL QUIET DAYS

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

58 LERWICK

	Hour G.M.T.																							
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
HORIZONTAL FORCE																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-7.5	-7.3	-6.9	-1.9	+0.3	+2.4	+3.1	+3.3	+2.3	+0.7	-1.9	-4.1	-2.3	-0.1	+1.1	-0.7	+2.9	+5.2	+4.5	+4.1	+1.7	+1.9	+3.1	-3.9
Feb.	-1.9	-1.6	-1.6	-0.5	+0.4	+2.2	+3.1	+2.8	+2.0	-0.7	-4.2	-6.6	-5.1	-2.6	+0.2	+1.3	+1.4	+1.8	+1.9	+2.6	+3.0	+3.3	+0.2	-1.4
Mar.	-3.1	+0.2	-3.9	-0.1	+2.7	+3.4	+3.9	+2.7	-3.5	-9.4	-15.3	-17.7	-12.5	-7.2	-1.9	+2.9	+4.5	+6.2	+7.1	+9.1	+9.9	+7.6	+6.7	+7.7
Apr.	+3.8	-0.4	-2.3	-1.4	+1.6	+4.6	+3.0	-3.0	-10.7	-18.4	-25.0	-25.8	-21.6	-11.4	-4.1	+5.6	+9.6	+16.6	+20.4	+16.6	+14.3	+12.4	+10.0	+5.6
May	+6.5	+5.9	+2.8	+1.9	+2.7	+2.3	-0.7	-6.5	-15.6	-23.9	-26.7	-25.9	-16.5	-6.1	-2.2	+2.1	+7.7	+11.3	+13.7	+18.5	+14.6	+12.7	+10.7	+10.7
June	+2.3	-0.5	+1.0	+2.5	+0.1	-3.5	-7.9	-13.9	-18.2	-22.3	-23.9	-21.3	-17.1	-8.1	-1.0	+7.7	+11.7	+17.9	+22.5	+20.3	+20.0	+15.5	+9.5	+6.7
July	+5.5	+4.8	+4.4	+3.7	+3.6	+1.4	-3.5	-11.6	-24.2	-31.1	-32.8	-27.8	-18.1	-9.6	-2.0	+5.7	+13.4	+20.4	+23.7	+22.6	+18.4	+14.7	+11.8	+6.6
Aug.	+6.7	+4.2	+2.3	+2.8	+2.8	+2.1	+0.4	-6.0	-15.9	-23.8	-27.7	-22.8	-16.3	-8.6	-5.1	+6.6	+10.6	+12.7	+14.4	+14.2	+13.9	+11.6	+10.7	+10.2
Sept.	+4.2	+2.2	-1.2	+0.8	+6.4	+8.3	+8.2	+1.0	-6.8	-18.2	-22.8	-23.4	-18.0	-7.8	-0.2	+2.2	+7.4	+8.5	+4.8	+8.6	+11.2	+9.6	+7.0	+8.0
Oct.	+5.7	+3.6	+1.7	+2.2	+2.8	+2.1	+3.0	+2.8	-2.3	-9.8	-17.3	-19.6	-17.7	-10.0	-4.1	+0.6	+1.8	+6.1	+8.2	+8.6	+6.9	+9.0	+7.9	+7.8
Nov.	-3.8	-4.2	-2.9	-1.4	+0.6	+2.2	+3.6	+2.4	+0.5	-3.4	-7.0	-7.6	-4.2	-2.8	-0.9	+1.0	+2.6	+4.8	+6.6	+6.4	+5.1	+1.8	+1.0	-0.4
Dec.	-4.2	-4.3	-2.6	-3.2	-1.8	+0.3	+2.8	+3.6	+2.8	+2.3	-0.4	-1.4	+0.4	+0.9	+1.4	+2.6	+5.2	+4.1	-0.8	-1.6	-1.2	-0.7	-1.2	-3.0
Year	+1.2	+0.2	-0.8	+0.5	+1.9	+2.3	+1.6	-1.9	-7.5	-13.2	-17.1	-17.0	-12.4	-6.1	-1.6	+3.1	+6.6	+9.6	+10.6	+10.8	+9.8	+8.3	+6.5	+4.5
Winter	-4.3	-4.3	-3.5	-1.7	-0.1	+1.8	+3.1	+3.0	+1.9	-0.3	-3.4	-4.9	-2.8	-1.1	+0.5	+1.0	+3.0	+4.0	+3.1	+2.9	+2.1	+1.6	+0.8	-2.2
Equinox	+2.7	+1.4	-1.4	+0.4	+3.4	+4.6	+4.5	+0.9	-5.8	-13.9	-20.1	-21.6	-17.5	-9.1	-2.6	+2.8	+5.8	+9.3	+10.1	+10.7	+10.6	+9.7	+7.9	+7.3
Summer	+5.3	+3.6	+2.6	+2.7	+2.3	+0.6	-2.9	-9.5	-18.5	-25.3	-27.8	-24.5	-17.0	-8.1	-2.6	+5.5	+10.9	+15.6	+18.6	+18.9	+16.7	+13.6	+10.7	+8.5
DECLINATION																								
Jan.	-1.25	0.00	+0.12	-0.81	-0.82	-0.84	-0.85	-0.84	-0.72	-0.17	+0.42	+1.16	+1.95	+1.56	+1.30	+1.49	+1.50	+1.74	+1.41	+0.86	-0.18	-1.41	-3.22	-2.40
Feb.	-0.96	-0.49	-0.35	-0.72	-0.95	-1.23	-1.22	-1.05	-0.93	-0.32	+0.93	+2.13	+2.92	+2.79	+2.31	+1.58	+1.19	+1.01	+0.46	+0.03	-0.03	-2.74	-2.81	-1.55
Mar.	-1.82	-0.98	-1.48	-1.72	-2.28	-2.31	-2.06	-2.32	-3.26	-2.44	-0.46	+2.48	+4.90	+5.42	+4.80	+3.52	+2.10	+1.51	+0.74	+0.02	+0.20	-1.30	-1.62	-1.64
Apr.	-1.58	-1.80	-3.03	-3.56	-4.28	-3.30	-2.98	-2.78	-2.11	-1.46	+0.12	+2.36	+4.90	+5.72	+5.59	+4.26	+2.96	+2.22	+1.62	+0.12	+0.33	-1.02	-1.30	-1.50
May	+0.08	-0.64	-0.81	-1.70	-2.84	-4.02	-4.92	-5.74	-5.03	-2.90	-0.58	+2.60	+4.72	+5.56	+4.81	+3.40	+2.56	+2.20	+1.52	+1.60	+0.41	-0.42	+0.24	-0.10
June	-1.13	-1.66	-1.67	-3.21	-4.49	-5.32	-5.69	-5.53	-4.61	-2.36	+0.15	+2.79	+4.25	+4.98	+5.03	+4.33	+3.65	+3.32	+2.41	+2.23	+2.19	+1.22	+0.33	-1.21
July	-0.15	+0.20	-1.79	-2.68	-4.56	-5.27	-5.06	-4.62	-3.87	-2.04	+0.23	+1.72	+3.65	+5.20	+5.15	+4.28	+3.32	+2.27	+1.42	+1.32	+1.37	+0.54	-0.47	-0.16
Aug.	-0.59	-1.21	-1.88	-2.51	-3.91	-4.41	-4.99	-4.67	-3.98	-1.77	+0.97	+4.15	+5.99	+6.41	+4.82	+2.79	+1.37	+0.71	+0.89	+1.43	+1.06	-0.13	-0.07	-0.47
Sept.	-1.08	-1.69	-0.98	-2.27	-2.91	-2.58	-2.77	-3.53	-2.70	-1.93	+0.02	+2.71	+4.26	+5.03	+4.36	+3.05	+2.17	+1.90	+0.61	+0.43	+0.56	+0.09	-1.64	-1.11
Oct.	-2.31	-1.97	-1.70	-1.47	-1.57	-1.53	-1.57	-2.27	-2.70	-2.13	-0.25	+2.15	+3.91	+4.73	+4.06	+2.91	+1.69	+1.63	+1.85	+0.27	-0.34	-0.65	-1.35	-1.39
Nov.	-2.41	-1.50	-1.07	-0.65	-1.05	-0.72	-0.51	-0.87	-1.21	-0.48	+0.65	+1.99	+2.63	+2.56	+1.93	+1.51	+0.77	+1.20	+1.03	+0.69	+0.21	-0.92	-1.61	-2.17
Dec.	-1.33	-0.87	-0.55	-0.57	-0.75	-0.69	-0.77	-0.29	+0.01	+0.45	+1.35	+1.53	+1.67	+1.57	+1.11	+0.63	+0.91	+1.27	-0.31	+0.21	-0.09	-0.89	-1.75	-1.85
Year	-1.21	-1.05	-1.27	-1.82	-2.53	-2.69	-2.78	-2.88	-2.59	-1.46	+0.30	+2.36	+3.81	+4.29	+3.77	+2.81	+2.02	+1.75	+1.14	+0.77	+0.47	-0.64	-1.27	-1.30
Winter	-1.49	-0.71	-0.46	-0.69	-0.89	-0.87	-0.84	-0.76	-0.71	-0.13	+0.84	+1.70	+2.29	+2.12	+1.66	+1.30	+1.09	+1.31	+0.65	+0.45	-0.02	-1.49	-2.35	-1.99
Equinox	-1.70	-1.61	-1.80	-2.25	-2.76	-2.43	-2.35	-2.73	-2.69	-1.99	-0.14	+2.55	+4.49	+5.23	+4.70	+3.43	+2.23	+1.81	+1.21	+0.21	+0.19	-0.72	-1.48	-1.41
Summer	-0.45	-0.83	-1.54	-2.53	-3.95	-4.75	-5.17	-5.14	-4.39	-2.27	+0.19	+2.81	+4.65	+5.54	+4.95	+3.70	+2.73	+2.13	+1.56	+1.65	+1.26	+0.30	+0.01	-0.49
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.	+2.8	+0.5	-1.9	-0.6	+0.5	+0.3	-1.0	-2.1	-3.3	-4.2	-3.3	-2.7	-2.8	-1.5	+1.5	+4.4	+3.5	+4.9	+4.8	+3.9	+6.3	+4.0	+5.3	-8.7
Feb.	-0.1	-0.2	-1.3	-0.8	-0.6	-0.7	-1.2	-1.8	-2.5	-3.0	-4.9	-5.4	-5.7	-3.4	-1.1	+1.6	+3.0	+4.1	+5.2	+5.8	+5.1	+5.0	+1.7	+1.2
Mar.	-3.1	-9.8	-1.5	-2.4	-0.8	-0.9	-1.6	+0.4	+1.9	+1.4	-0.7	-3.4	-4.7	-3.0	-0.9	+2.0	+5.4	+3.5	+3.2	+2.8	+2.3	+3.4	+4.3	+2.2
Apr.	-15.5	-12.3	-11.7	-10.5	-4.1	-1.5	-0.5	-1.1	-3.7	-3.9	-2.3	-4.5	-4.5	-2.5	+1.7	+7.5	+13.5	+14.7	+14.1	+15.7	+12.5	+7.7	-0.3	-8.5
May	-0.6	-0.5	-1.2	+1.1	+3.2	+4.3	+4.8	+3.3	+1.0	-2.1	-4.8	-5.7	-6.4	-5.3	-1.2	+1.9	+3.8	+4.1	+5.0	+2.1	+3.4	+0.7	-3.4	-7.5
June	-1.0	-0.5	-1.4	-	+2.0	+3.5	+2.4	+2.6	+1.0	-1.3	-5.8	-10.4	-9.4	-7.3	-5.6	-2.8	+2.0	+4.9	+7.6	+9.0	+5.4	+4.7	+2.0	-1.6
July	-0.1	-6.5	-8.3	-7.3	-0.9	+2.5	+3.7	+4.5	+3.5	-1.3	-6.5	-9.1	-9.1	-5.5	-5.3	+0.7	+6.9	+8.5	+8.7	+8.1	+6.7	+6.7	+1.5	-2.1
Aug.	-1.7	-2.7	-1.6	-2.1	+1.3	+0.9	+1.1	+2.3	+3.0	-0.3	-5.3	-9.7	-9.3	-4.7	+0.2	+3.1	+6.7	+6.7	+3.3	+1.5	+1.6	+2.9	+2.3	+0.5
Sept.	-3.4	-8.9	-7.2	-8.7	-6.5	-5.4	-4.3	-0.5	-0.6	-0.7	-2.4	-2.9	-5.6	-6.5	-2.4	+2.9	+4.9	+8.8	+16.9	+16.7	+8.4	+4.1	+3.6	-0.3
Oct.	-4.6	-4.3	-3.2	-2.3	-1.6	-0.3	-0.8	+0.3	+0.4	-0.3	-1.6	-3.7	-4.0	-4.1	-1.8	+2.1	+4.0	+2.5	+2.8	+6.1	+7.6	+4.7	+2.0	+0.1
Nov.	-5.9	-2.3	+0.4	+1.1	+0.3	-0.7	-0.9	-0.9	-1.2	-1.7	-2.1	-2.7	-2.5	-1.5	0.0	+0.9	+1.7	+1.3	+1.3	+1.7	+2.9	+5.0	+4.3	+1.5
Dec.	+0.7	-0.3	-1.2	-2.3	-3.1	-4.3	-4.1	-4.7	-3.9	-3.9	-3.5	-2.9	-2.1	-0.3	+1.0	+0.9	+0.1	+0.5	+5.1	+7.3	+6.4	+5.5	+4.7	+4.3
Year	-2.7	-4.0	-3.3	-2.9	-0.9	-0.2	-0.2	+0.2	-0.2	-1.8	-3.6	-5.3	-5.5	-3.8	-1.2	+2.1	+4.6	+5.4	+6.5	+6.7	+5.7	+4.5	+1.5	-1.6
Winter	-0.6	-0.6	-1.0	-0.7	-0.7	-1.3	-1.8	-2.4	-2.7	-3.2	-3.5	-3.4	-3.3	-1.7	+0.3	+1.9	+2.1	+2.7	+4.1	+4.7	+5.2	+4.9	+1.3	-0.4
Equinox	-6.7	-8.8	-5.9	-6.0	-3.3	-2.0	-1.8	-0.2	-0.5	-0.9	-1.7	-3.6	-4.7	-4.0	-0.9	+3.6	+6.9	+7.4	+9.3	+10.3	+7.7	+5.0	+2.4	-1.6
Summer	-0.9	-2.5	-3.1	-2.1	+1.4	+2.8	+3.0	+3.2	+2.1	-1.3	-5.6	-8.7	-8.5	-5.7	-3.0	+0.7	+4.9	+6.1	+6.1	+5.2	+4.3	+3.7	+0.6	-2.7

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; "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	γ
Jan.	-1.0	-6.8	-11.4	-17.8	-2.0	+10.1	+19.8	+8.8	-12.6	-20.6	-26.6	-6.6	-1.8	+5.4	+7.2	+13.0	+1.4	+25.3	+31.8	+13.0	-7.8	+4.4	-15.8	-9.4	-9.4
Feb.	-61.1	-39.0	-39.9	-33.9	-9.1	+5.6	+10.9	+2.1	-10.7	-0.6	+1.1	+7.7	+9.1	+22.2	+19.7	+26.7	+27.7	+29.2	+41.9	+25.1	+1.9	+16.6	-12.1	-41.1	-41.1
Mar.	-124.1	-56.4	-24.1	-64.7	-33.1	+10.3	+4.1	-7.9	-12.6	-20.5	-15.9	-3.1	+8.9	+48.1	+93.0	+80.5	+88.9	+50.1	+36.3	-9.1	-9.8	-15.7	+5.9	-29.1	-29.1
Apr.	-84.7	-10.0	-22.1	-46.1	-14.1	-2.2	-6.5	-12.9	-24.9	-13.4	-20.5	-21.1	-14.9	+2.0	+24.7	+41.5	+41.1	+43.0	+39.5	+31.5	+22.5	+33.6	+7.5	+6.5	+6.5
May	-8.2	-35.0	-32.9	-20.2	-20.0	-25.0	-4.0	+1.8	-5.5	-14.8	-26.6	-17.0	+25.6	+76.8	+69.7	+93.4	+105.0	+89.0	+70.2	+41.2	-34.5	-104.2	-104.4	-120.4	-120.4
June	-34.3	-39.3	-22.0	-5.7	-10.7	-17.5	-16.9	-34.9	-29.4	-46.3	-43.1	-31.5	-10.9	+10.3	+9.2	+21.9	+59.5	+74.7	+62.5	+66.1	+28.4	+7.7	-0.5	+2.7	+2.7
July	-18.4	-18.8	-30.6	-65.0	-14.0	-13.5	-26.4	-12.6	-33.4	-50.2	-45.8	-33.4	-2.2	+13.8	+35.4	+56.8	+56.6	+54.7	+61.6	+42.2	+30.4	+14.6	+4.6	-6.4	-6.4
Aug.	-7.5	-86.3	-48.3	-21.3	-7.5	-32.3	-31.3	-20.7	-27.1	-39.9	-28.5	-16.9	-2.5	+30.1	+54.7	+89.9	+70.9	+87.3	+67.3	+53.7	+33.5	-3.7	-41.3	-72.3	-72.3
Sept.	-117.4	-129.7	-147.8	-72.6	+1.2	+12.9	-6.2	-12.2	-0.2	-2.9	-13.6	+5.8	+27.8	+57.3	+88.4	+107.4	+150.6	+91.9	+69.2	+44.2	+33.6	+4.9	-77.4	-115.2	-115.2
Oct.	-65.5	-56.1	-18.7	-40.1	-11.5	+4.8	+0.3	+0.3	-5.7	-10.1	-17.5	+0.7	+21.5	+39.9	+54.1	+109.7	+98.7	+106.4	+61.1	+0.9	-21.9	-19.5	-81.7	-150.1	-150.1
Nov.	+4.4	-0.9	-8.6	-8.2	+19.2	+13.3	+0.2	-2.2	-8.4	-7.1	-10.2	-6.8	-9.8	-1.5	+13.2	+12.4	+3.4	+2.3	+1.0	-3.8	-2.4	+5.7	-5.2	0.0	0.0
Dec.	-8.3	-3.0	-0.3	+0.4	+5.8	+6.9	+10.2	+13.6	+10.3	+5.8	+0.5	-1.0	-0.7	-4.4	-0.3	+0.6	+3.6	+3.3	-1.4	-6.4	-8.7	-10.8	-1.7	-14.0	-14.0
Year	-43.8	-40.1	-33.9	-32.9	-8.0	-2.2	-3.8	-6.4	-13.3	-18.4	-20.6	-10.3	+4.2	+25.0	+39.1	+54.5	+58.9	+54.8	+45.1	+24.9	+5.4	-5.5	-26.8	-45.7	-45.7
Winter	-16.5	-12.4	-15.1	-14.9	+3.5	+9.0	+10.3	+5.6	-5.3	-5.6	-8.8	-1.7	-0.8	+5.4	+9.9	+13.2	+9.0	+15.0	+18.3	+7.0	-4.3	+4.0	-8.7	-16.1	-16.1
Equinox	-97.9	-63.1	-53.2	-55.9	-14.4	+6.5	-2.1	-8.2	-10.9	-11.7	-16.9	-4.4	+10.8	+36.8	+65.1	+84.8	+94.8	+72.9	+51.5	+16.9	+6.1	+0.8	-36.4	-72.0	-72.0
Summer	-17.1	-44.9	-33.5	-28.1	-13.1	-22.1	-19.7	-16.6	-23.9	-37.8	-36.0	-24.7	+2.5	+32.7	+42.3	+65.5	+73.0	+76.4	+65.4	+50.8	+14.5	-21.4	-35.4	-49.1	-49.1
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	γ
Jan.	-2.50	-2.30	-1.47	+0.04	-0.96	+0.50	+1.60	+1.98	+3.63	+3.74	+4.24	+5.64	+6.52	+6.30	+6.31	+2.14	-1.56	-0.30	-8.10	-6.38	-4.99	-4.48	-3.84	-5.76	-5.76
Feb.	-3.45	-1.04	-3.07	-4.90	-6.76	-1.51	+1.70	+4.26	+5.21	+5.90	+4.41	+4.90	+7.19	+6.72	+7.63	+6.00	+3.66	-2.21	-9.16	-7.64	-3.65	-6.76	-7.97	+0.54	+0.54
Mar.	-1.12	-0.81	-0.43	+0.74	-5.51	-5.01	+1.28	+2.59	+4.91	+4.86	+4.11	+5.61	+6.62	+7.65	+9.37	+4.38	+1.75	+3.79	-8.90	-16.67	-9.61	-5.88	-0.63	-0.53	-0.53
Apr.	-2.55	-4.09	-5.54	-2.57	+1.45	+0.79	+0.39	-0.37	-0.14	-0.53	+0.29	+2.23	+4.33	+6.77	+5.32	+4.99	+3.53	+2.63	-1.59	-2.85	-3.96	-4.17	-2.69	-1.67	-1.67
May	-5.66	-4.57	-7.19	-6.68	-2.71	-1.09	-2.16	-3.71	-2.47	-0.76	+0.95	+3.91	+7.02	+7.87	+10.41	+10.76	+11.51	+9.47	+3.42	+2.95	+4.59	-2.12	-17.13	-16.61	-16.61
June	-0.27	-1.62	-4.00	-6.47	-7.02	-5.48	-3.97	-3.94	-1.64	-2.73	+1.22	+3.86	+5.43	+6.06	+8.10	+6.85	+6.86	+4.34	+4.07	+1.54	-1.34	-1.71	-4.52	-3.62	-3.62
July	-4.87	-4.67	-3.53	-1.57	-1.17	-1.01	-1.75	-2.57	-3.93	-3.27	-1.05	+1.77	+3.45	+5.69	+7.69	+4.61	+5.09	+4.15	+3.43	+2.33	+1.05	-1.53	-4.27	-4.07	-4.07
Aug.	-6.70	-3.09	-5.42	-9.31	-5.65	-5.56	-3.69	-2.83	-1.04	+1.11	+4.74	+7.79	+9.34	+8.67	+9.18	+4.23	+3.15	+1.72	+0.91	-3.77	-3.62	-2.41	-0.06	-2.31	-2.31
Sept.	-22.78	-15.73	-9.32	-3.58	-1.74	+2.35	+4.16	+6.08	+3.24	+4.23	+4.78	+7.78	+9.06	+9.27	+7.08	+8.64	+3.10	+0.53	-1.84	-1.96	+1.74	+0.25	-4.78	-10.56	-10.56
Oct.	-4.83	-2.51	-1.18	-0.09	+2.11	+2.53	+5.19	+6.05	+6.04	+4.17	+5.41	+6.67	+7.13	+6.81	+9.48	+5.07	+3.03	-0.13	-4.39	-5.47	-13.98	-15.35	-11.05	-10.71	-10.71
Nov.	+2.29	+2.18	+1.77	+3.05	+2.33	+2.16	+7.39	+7.37	+4.77	+2.36	+2.79	+2.25	+4.13	+4.34	+3.23	+1.99	-1.85	-7.46	-13.67	-8.09	-11.53	-6.70	-3.49	-1.61	-1.61
Dec.	-0.26	-0.88	-1.05	-0.32	+0.26	+1.42	+2.54	+1.60	+1.33	+0.88	+1.36	+2.98	+3.94	+5.20	+4.15	+3.22	+2.30	+0.12	-2.72	-6.56	-6.03	-4.82	-6.06	-2.60	-2.60
Year	-4.39	-3.26	-3.37	-2.64	-2.11	-0.83	+0.84	+1.38	+1.66	+1.66	+2.77	+4.62	+6.18	+6.78	+7.33	+5.24	+3.38	+1.39	-3.21	-4.38	-4.28	-4.64	-5.54	-4.57	-4.57
Winter	-0.98	-0.51	-0.95	-0.53	-1.28	+0.64	+3.31	+3.80	+3.73	+3.22	+3.20	+3.94	+5.45	+5.64	+5.33	+3.34	+0.64	-2.44	-8.41	-7.19	-6.55	-5.69	-5.34	-2.36	-2.36
Equinox	-7.82	-5.79	-4.12	-1.37	-0.92	+0.17	+2.11	+3.59	+3.51	+3.19	+3.65	+5.57	+6.79	+7.63	+7.81	+5.77	+2.85	+1.71	-4.18	-6.74	-6.45	-6.29	-4.79	-5.87	-5.87
Summer	-4.37	-3.49	-5.03	-6.01	-4.14	-3.29	-2.89	-3.26	-2.27	-1.41	+1.47	+4.33	+6.31	+7.07	+8.85	+6.61	+6.65	+4.92	+2.96	+0.76	+0.17	-1.94	-6.49	-5.50	-5.50
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	γ
Jan.	-35.8	-26.5	-33.0	-41.4	-46.8	-38.7	-37.0	-27.8	-13.0	-9.5	-1.2	+16.0	+34.6	+36.7	+42.8	+56.8	+57.6	+46.7	+49.2	+38.4	+18.0	+5.1	-49.0	-42.2	-42.2
Feb.	-105.5	-99.7	-82.0	-70.9	-47.3	-38.7	-26.3	-11.9	+11.4	+23.3	+27.3	+31.5	+39.7	+50.3	+48.8	+56.1	+70.9	+80.1	+70.1	+60.1	+0.6	-17.9	-18.7	-51.3	-51.3
Mar.	-35.2	-59.0	-68.2	-90.2	-77.6	-33.7	-16.0	-9.2	-1.2	+11.8	+29.0	+44.6	+59.0	+64.4	+71.8	+86.4	+92.6	+87.5	+49.0	+9.4	-27.6	-73.6	-57.4	-56.6	-56.6
Apr.	-75.9	-63.4	-59.5	-75.9	-76.7	-58.8	-38.1	-16.9	+1.3	+11.6	+19.3	+23.7	+27.1	+36.6	+59.3	+74.3	+80.9	+61.8	+57.3	+50.9	+37.7	-3.2	-36.5	-36.9	-36.9
May	-45.1	-64.9	-72.6	-63.9	-50.5	-40.9	-19.7	-0.3	+13.0	+19.5	+34.5	+46.3	+50.9	+66.9	+73.2	+92.5	+91.7	+83.1	+58.1	+40.7	+4.2	-59.1	-126.7	-130.9	-130.9
June	-43.2	-78.9	-66.2	-60.8	-32.2	-21.9	-17.4	-11.4	-10.4	-5.3	+0.4	+5.0	+8.2	+17.1	+40.0	+48.6	+47.0	+70.3	+64.0	+62.4	+34.2	-2.7	-26.2	-20.6	-20.6
July	-45.0	-59.3	-67.8	-88.0	-78.8	-47.9	-29.4	-12.8	+2.6	+11.1	+17.8	+23.0	+29.2	+33.9	+42.2	+61.2	+66.0	+50.7	+54.6	+44.0	+30.2	+11.3	-26.4	-22.4	-22.4
Aug.	-49.5	-101.9	-134.6	-107.9	-83.3	-57.9	-31.3	-8.3	+11.0	+23.9	+26.7	+29.5	+40.7	+48.5	+68.4	+111.9	+124.1	+111.5	+100.5	+67.1	+29.4	-2.5	-71.5	-144.5	-144.5
Sept.	-164.2	-132.1	-114.4	-102.9	-53.1	-32.6	-18.3	-6.7	+11.8	+26.9	+47.0	+50.5	+63.8	+73.1	+115.4	+125.7	+141.9	+113.4	+81.1	+42.7	+4.2	-40.7	-81.2	-151.3	-151.3
Oct.	-86.5	-100.4	-98.1	-100.3	-63.3	-30.0	-10.7	+10.7	+21.5	+41.6	+50.3	+32.5	+67.1	+77.0	+84.9	+136.7	+141.5	+78.6	+70.7	+42.1	-27.3	-70.5	-102.5	-165.6	-165.6
Nov.	-21.0	-24.9	-45.8	-73.9	-65.5	-45.8	-36.9	-22.1	-6.0	+7.7	+15.8	+31.5	+49.2	+72.5	+47.8	+41.5	+41.9	+43.8	+49.9	+30.5	-10.2	-23.1	-32.2	-24.7	-24.7
Dec.	-31.1	-20.6	-10.1	-6.9	-10.1	-13.6	-13.3	-9.5	-4.5	-3.0	-1.7	-1.1	-0.7	+12.6	+14.9	+13.7	+12.9	+24.8	+32.9	+39.6	+4.1	-0.5	-6.9	-21.9	-21.9
Year	-61.5	-69.3	-71.0	-73.6	-57.1	-38.4	-24.5	-10.5	+3.1	+13.3	+22.1	+27.7	+39.1	+49.1											

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE
MONTHS, YEAR AND SEASONS OF 1953

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

AVERAGE DEPARTURE

39

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

60 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	17.3	6.75	41.4	12.7	5.17	13.6	58.4	14.62	106.6
Feb.	25.3	7.61	57.5	9.9	5.73	11.5	103.0	16.79	185.6
Mar.	50.0	11.26	75.4	27.6	8.68	15.2	217.1	26.04	182.8
Apr.	51.9	9.85	63.5	46.2	10.00	31.2	127.7	12.31	157.6
May	60.0	11.31	64.2	45.2	11.30	12.5	225.4	28.64	223.4
June	66.2	11.15	39.3	46.4	10.72	19.4	121.0	15.12	149.2
July	68.6	10.73	63.3	56.5	10.47	17.8	111.8	12.56	154.0
Aug.	62.4	11.77	91.6	42.1	11.40	16.4	176.2	18.65	268.6
Sept.	74.4	11.58	94.1	34.6	8.56	25.8	298.4	32.05	306.1
Oct.	44.9	10.08	73.0	28.6	7.43	12.2	259.8	24.83	307.1
Nov.	16.4	7.91	40.3	14.2	5.04	10.9	29.4	21.06	146.4
Dec.	11.3	6.87	21.2	9.5	3.52	12.0	27.6	11.76	70.7
Year	38.1	8.25	56.4	27.9	7.17	12.2	104.6	12.87	154.3
Winter	14.8	6.98	37.5	8.9	4.64	8.7	34.8	14.05	98.8
Equinox	44.6	9.72	74.3	32.3	7.99	19.1	192.7	15.63	216.8
Summer	63.9	10.72	60.6	46.7	10.71	14.8	125.5	15.34	167.5

61 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	4.4	1.92	13.1	3.1	1.13	3.1	11.7	3.55	33.5
Feb.	6.0	2.10	13.8	2.2	1.28	2.7	20.6	4.84	47.5
Mar.	11.9	2.92	19.5	6.2	2.14	2.7	35.5	4.70	50.5
Apr.	13.0	2.74	17.2	10.3	2.56	7.3	24.5	2.73	45.1
May	15.1	3.37	16.2	10.3	2.47	3.2	47.7	6.07	56.2
June	15.4	3.24	9.1	11.5	3.07	3.9	28.6	4.03	33.1
July	17.3	3.12	15.3	13.4	2.56	5.2	30.9	3.27	39.8
Aug.	17.2	2.92	23.2	10.5	2.55	3.1	40.6	4.43	66.1
Sept.	17.5	2.79	24.5	8.2	2.10	5.5	57.9	6.02	74.8
Oct.	9.6	2.30	18.9	6.7	1.93	2.7	40.8	5.81	71.3
Nov.	3.9	1.81	12.6	3.2	1.26	1.9	6.3	4.53	36.0
Dec.	2.3	1.47	5.1	2.2	0.89	3.0	5.1	2.61	13.0
Year	9.8	2.36	15.1	6.5	1.96	3.1	26.0	3.60	46.2
Winter	3.8	1.80	10.8	2.4	1.12	2.3	9.2	3.52	31.6
Equinox	12.1	2.61	19.9	7.7	2.17	4.4	37.3	4.53	59.3
Summer	15.6	3.11	15.5	11.3	2.62	3.7	35.3	4.17	48.2

NON-CYCLIC CHANGE

62 LERWICK

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
Jan.	+0.1	-0.12	+1.2	+1.5	-1.21	-9.1	-12.1	+0.08	-9.5
Feb.	+0.2	+0.04	-0.9	+1.5	+0.14	-1.3	-9.6	+0.53	-4.9
Mar.	+1.2	-0.04	-1.5	+9.1	+1.12	-2.9	+64.2	+4.31	-11.4
Apr.	+1.4	-0.04	+2.8	+0.6	-1.32	+7.7	+54.0	+6.49	+29.6
May	+0.3	-0.10	-0.4	+2.4	-0.22	-6.1	-115.4	-13.34	-88.6
June	-0.6	+0.08	-0.6	+2.5	-0.57	-0.5	-9.4	-0.31	-3.2
July	+0.5	+0.02	+0.6	+1.3	-0.30	-3.3	-2.2	+0.93	-2.4
Aug.	-0.1	-0.08	-1.0	+1.8	+0.01	+2.4	-36.7	+3.41	-67.1
Sept.	+0.1	-0.05	+1.6	+2.8	-0.34	+0.8	-23.6	+4.72	-9.0
Oct.	0.0	+0.03	0.0	+2.3	+0.39	+2.2	-54.8	-4.10	-56.8
Nov.	+0.2	+0.01	+0.1	-0.6	+0.64	+7.5	-2.3	-1.29	-1.5
Dec.	-0.2	-0.06	+0.1	+1.2	+0.44	+0.6	-3.6	-0.37	+7.3
Year	+0.3	-0.03	+0.2	+2.2	-0.10	-0.2	-12.6	+0.09	-18.1
Winter	+0.1	-0.03	+0.1	+0.9	0.0	-0.6	-6.9	-0.26	-2.1
Equinox	+0.7	-0.03	+0.7	+3.7	-0.04	+1.9	+10.0	+2.85	-11.9
Summer	0.0	-0.02	-0.3	+2.0	-0.27	-1.9	-40.9	-2.33	-40.3

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

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS
For all, a, quiet, q, and disturbed, d, days for H, D and Z and for all days for N, W, I and T

63 LERWICK

	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	14,000γ +			11° +			46,000γ +						
Jan.	423	431	414	26.2	26.8	25.6	1104	1099	1105	14185	2613	72 58.5	49262
Feb.	428	433	413	25.2	25.9	23.2	1092	1098	1074	14190	2610	72 58.0	49253
Mar.	424	433	412	24.5	25.6	23.6	1095	1102	1088	14187	2606	72 58.3	49255
Apr.	431	432	420	24.6	24.5	24.6	1097	1103	1084	14194	2607	72 57.8	49258
May	432	438	420	23.3	23.8	22.2	1102	1109	1082	14196	2602	72 58.1	49263
June	441	443	436	23.4	23.2	23.9	1106	1107	1101	14204	2604	72 57.4	49270
July	437	440	434	22.8	22.8	23.7	1102	1105	1098	14201	2601	72 57.6	49265
Aug.	433	441	419	22.0	22.0	21.3	1102	1111	1091	14198	2597	72 57.8	49264
Sept.	427	438	403	20.7	21.5	18.4	1111	1118	1093	14193	2591	72 58.4	49270
Oct.	432	441	411	20.0	21.0	17.8	1116	1116	1104	14198	2589	72 58.2	49277
Nov.	438	446	425	19.6	20.0	18.7	1121	1119	1122	14204	2588	72 57.9	49284
Dec.	445	448	439	19.4	19.6	19.2	1124	1126	1126	14212	2589	72 57.5	49288
Year	433	439	421	22.6	23.1	21.9	1106	1109	1097	14197	2600	72 57.9	49267

64 LERWICK

[illegible]

64 LERWICK (contd.)

Night commencing		Night commencing		Night commencing	
SEPTEMBER (contd.)		OCTOBER (contd.)		NOVEMBER (contd.)	
16 b-a	Φ	24 c-b	..	16 b	..
17 c	..	25 b	..	17 c	..
19 cb	Φ	26 b	..	18 c	..
		27 cb	..	22 c	..
		28 a-b	Φ	25 a-b	..
		29 ca	Φ	26 c-a	..
25 b	..	30 ca	..	27 ca	..
27 cb	..	31 ca	..	28 ca	..
28 b-c	..			30 ca	..
OCTOBER		NOVEMBER		DECEMBER	
1 ca	..	2 c	..	4 a	..
3 ca	Φ	3 ca	Φ	5 c-a	..
5 ca	..	4 ca	..	7 c	..
6 c-a	..	5 ca	..	9 c	..
8 ca	..	7 c	Φ	10 ca	..
11 ca	..	8 ca	..	15 a	..
13 a	..	9 c	..	16 b	..
14 a	..	10 ca	..	17 cb	..
15 c	Φ	11 ca	..	19 b	..
17 cb	Φ	12 b	Φ	20 cb	..
18 cb	Φ			21 b	..
		13 b	..	22 cb	..
		14 b	Φ	23 cb	..
				24 c	..
				25 a	..
				26 ca	..
				27 ca	..
				28 a	..
				30 a	..
				31 ca	..

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 Φ. The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol ..; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora.

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

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

65 OTHER SCOTTISH STATIONS

For brevity, stations which figure frequently in the above table are represented by their initials:-

B. - Benbecula
G. - Grimsetter
S. - Stornoway
T. - Tiree

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 rain-gauge in September 1940.

Notes on the meteorological summaries

The extreme temperatures during the year were 299·3°A. (79·3°F.) on 12 August and 263·1°A. (14·4°F.) on 8 February. 4 January and 8 February, with a mean temperature of 269·0°A. (24·8°F.), were the coldest days of the year and 25 June, with 291·2°A. (64·7°F.), was the hottest. There were no ice days, i.e. days with maximum temperature below 273°A.

The total rainfall for the year, 1413·5 mm. (55·65 in.) was slightly below average. Snow fell on 12 days.

The total duration of bright sunshine, 1129·7 hours, was also below average.

The highest gust of wind during the year was 32·5 m./sec. (⁶³~~32~~ knots) on 31 January. The highest hourly speed was 16·3 m./sec. (³²~~63~~ knots) on 11 April.

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 1911-20 by Dr. A. Crichton Mitchell*.

*MITCHELL, A. CRICHTON: On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfrieshire. *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	
	1953	1911-1920	1953	1911-1920	1953	1911-1920	1953	1911-1920	1953	1911-1920	1953	1911-1920	1953	1911-1920	1953	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.10	0.09	295	346	0.19	0.23	182	152	0.15	0.13	3	345	0.02	0.05	182	214
February	0.39	0.12	202	-215	0.28	0.27	159	138	0.10	0.08	347	341	0.04	0.04	60	68
March	0.10	0.13	113	185	0.39	0.30	144	145	0.07	0.05	34	335	0.05	0.05	68	25
April	0.03	0.21	103	92	0.34	0.30	159	155	0.04	0.02	200	156	0.04	0.05	15	356
May	0.19	0.23	48	53	0.27	0.27	158	147	0.10	0.07	139	160	0.05	0.03	22	330
June	0.15	0.15	77	54	0.25	0.23	145	146	0.08	0.08	162	161	0.01	0.02	183	326
July	0.19	0.17	176	69	0.23	0.21	146	141	0.07	0.08	159	156	0.02	0.02	325	300
August	0.09	0.11	3	115	0.21	0.24	151	148	0.04	0.06	147	157	0.03	0.05	349	331
September	0.14	0.12	171	88	0.33	0.31	163	152	0.01	0.01	119	111	0.07	0.05	344	345
October	0.24	0.11	227	76	0.35	0.31	163	159	0.07	0.06	343	8	0.05	0.04	14	33
November	0.23	0.13	230	183	0.21	0.24	146	168	0.01	0.10	305	9	0.03	0.01	69	146
December	0.16	0.14	346	97	0.30	0.21	167	147	0.15	0.12	12	4	0.04	0.07	217	213
Arithmetic mean	0.17	0.14			0.28	0.26			0.07	0.07			0.06	0.04		
Year	0.05	0.09	198	91	0.28	0.26	157	150	0.03	0.02	8	42	0.02	0.02	22	342
Winter	0.13	0.04	239	165	0.24	0.24	163	151	0.13	0.11	3	355	0.01	0.02	132	189
Equinox	0.09	0.11	187	104	0.35	0.31	157	153	0.02	0.02	306	4	0.05	0.04	14	9
Summer	0.08	0.15	80	67	0.24	0.24	150	146	0.07	0.07	158	159	0.01	0.03	359	324

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

Terrestrial Magnetism

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

Notes on the results

Comparing mean values on all days of 1953 with those for 1952, it is noted that H increased by 24γ , $D(\text{West})$ decreased by $7'0$ and Z increased by 4γ . The changes in the deduced quantities N , W , I , and T are $+30\gamma$, -29γ , $-1'5$ and $+11\gamma$. 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 1953 were H 426γ D $1^\circ 11' \cdot 7$ and Z 623γ . The range of $1^\circ 11' \cdot 7$ in declination is equivalent to a range of about 347γ 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 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 magnetograms and then increased, if necessary, by inspection of the D and Z curves so that the most disturbed component determines the final figure. The scale of ranges in γ

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

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

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

Beginning with 1947 some changes have been made in the tables accompanying these notes. The month by month commentary on the autographic records has been omitted, and a change has been made in the table formerly headed "Principal Magnetic Disturbances". It is intended that all the disturbances, which would have been included in the previous type of table, will still be included, with, however, additional disturbances of the form of sudden commencements and those which can be recognised as being solar flare effects. The table is thus divided into three parts:

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

The time given of commencement and ending of disturbances in (a) must depend on an arbitrary 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 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 Eskdalemuir sections of the *Observatories' Year Book*, even if the disturbance at one of the stations is relatively small. In Table 67 the values of mean absolute daily range for the months and seasons are brought together. For convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian. Table 68 gives the frequency distribution of absolute daily ranges and compares the percentage distribution for 1953 with that for the 22-year period 1932-1953. Table 69 gives the average values of the diurnal inequality ranges for the year and seasons for the period 1932-1953 (not the values of the range of the representative mean diurnal inequalities for this period) along with the 1953 values expressed as a percentage of the average values. The units employed are 1 γ for force and 1' for declination.

TABLE 67 - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1953			Mean 1932-53			1953			Mean 1932-53		
	H	D	Z	H	D	Z	H	D	Z	H	D	Z
January	76	81	44	78	83	47	85	96	77	76	90	75
February	69	79	50	84	89	53	78	94	88	82	97	84
March	113	106	75	126	113	85	127	126	132	124	123	135
April	95	83	55	125	103	77	107	99	96	123	112	122
May	99	90	62	116	91	71	111	107	109	114	99	113
June	92	73	45	105	84	55	103	87	79	103	91	87
July	102	79	54	110	85	56	115	94	95	108	92	89
August	106	91	76	113	93	68	119	108	133	111	101	108
September	114	110	91	117	106	81	128	131	160	115	116	129
October	88	89	71	107	102	76	99	106	125	105	111	121
November	69	79	41	73	79	47	78	94	72	72	86	75
December	47	52	21	66	74	42	53	62	37	65	80	67
Winter	65	73	39	75	81	47	73	87	68	74	88	75
Equinox	103	97	73	119	106	80	115	115	128	117	115	127
Summer	100	83	59	111	88	63	112	99	104	109	96	100
Year	89	84	57	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, 1953			Percentage distribution					
				H		D		Z	
	H	D	Z	1953	1932-53	1953	1932-53	1953	1932-53
γ				%	%	%	%	%	%
0 - 9	0	0	5	0.0	0.0	0.0	0.0	1.4	2.3
10 - 19	3	2	73	0.8	0.8	0.5	0.4	20.0	14.1
20 - 29	22	8	64	6.0	3.9	2.2	2.5	17.5	19.8
30 - 39	29	36	50	7.9	6.0	9.9	5.0	13.7	16.0
40 - 49	36	34	34	9.9	7.8	9.3	7.4	9.3	10.2
50 - 59	36	60	23	9.9	10.4	16.4	12.1	6.3	7.5
60 - 69	36	39	24	9.9	11.7	10.7	12.9	6.6	5.6
70 - 79	30	35	18	8.2	10.6	9.6	12.3	4.9	3.6
80 - 89	30	31	11	8.2	9.0	8.5	10.7	3.0	3.0
90 - 99	25	28	10	6.8	7.3	7.7	8.3	2.7	2.4
100 - 109	15	19	10	4.1	5.8	5.2	5.9	2.7	2.1
110 - 119	23	9	3	6.3	5.1	2.5	4.0	0.8	1.7
120 - 129	11	10	10	3.0	3.3	2.7	3.5	2.7	1.7
130 - 139	16	8	6	4.4	2.9	2.2	2.6	1.6	1.2
140 - 149	7	7	1	1.9	2.3	1.9	2.2	0.3	0.8
150 - 159	5	9	2	1.4	1.9	2.5	1.7	0.5	0.9
160 - 169	8	7	2	2.2	1.5	1.9	1.6	0.5	0.7
170 - 179	13	4	1	3.6	1.5	1.1	1.2	0.3	0.4
180 - 189	3	4	3	0.8	0.9	1.1	1.0	0.8	0.6
190 - 199	0	3	3	0.0	0.9	0.8	0.8	0.8	0.5
200 +	17	12	12	4.7	6.3	3.3	4.0	3.3	4.8
Days omitted	0	0	0	..	..	..	..	..	..

TABLE 69 - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-53
WITH 1953 AS PERCENTAGE

		All days			International quiet days			International disturbed days		
		Z	H	D	Z	H	D	Z	H	D
Year		γ	γ	γ	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
	1953(%)	100	89	96	111	80	86	108	109	122
Winter	1932-53	21.2	19.3	6.95	5.9	16.2	4.44	66.5	34.4	11.45
	1953(%)	86	79	88	144	68	96	83	121	102
Equinox	1932-53	37.1	43.1	10.18	14.8	39.7	9.69	108.9	75.4	15.11
	1953(%)	96	77	88	114	78	82	110	75	115
Summer	1932-53	33.9	59.7	11.84	21.9	50.4	11.76	82.4	83.7	13.11
	1953(%)	88	86	81	93	81	80	113	93	112

"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	Feb. 22	18	Feb. 23	03	130	139	123	Perhaps continuation of 8b
2a	Mar. 1	20	Mar. 3	05	295	245	292	
3a	Mar. 8	14	Mar. 9	04	264	201	277	
4a	May 15	11	May 17	05	303	294	341	
5a	Sept. 3	17	Sept. 4	07	342	279	280	
6a	Oct. 16	15	Oct. 17	04	290	162	184	

(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. 5	05.46	Jan. 5	24	No	No	No	γ	γ	γ	167	159	138
2b	May 5	21.16	-	-	No	No	No	+14	-13	0	Not very well marked		
3b	June 29	07.36	June 30	10	Oscillatory			-20	+22	0	212	160	160
4b	July 23	08.08	July 24	02	Yes	Yes	No	+32	-7	-6	180	186	162
5b	Aug. 23	00.24	Aug. 24	07	No	Yes	No	+8	-4	0	175	171	211
6b	Sept. 15	02.59	-	-	Yes	Yes	No	+22	-5	0	Small		
7b	Sept. 18	16.09	Sept. 20	07	Yes	Yes	No	+7	-7	-2	254	297	471
8b	Oct. 15	08.45	Oct. 16	04	No	No	No	+12	-9	-3	306	315	467
9b	Nov. 11	13.11	-	-	Yes	Yes	No	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	Feb. 20	16.03	16.07	16.10	+10	-4	0	3	3	
2c	Mar. 13	14.49	14.51	14.56	+8	-7	0	1	0	S.E.A.
3c	Oct. 14	09.50	09.57	10.03	-6	+5	0	1	1	S.F. S.W.F.
4c	Oct. 14	14.23	14.28	14.32	0	-3	0	1	1	S.F. S.W.F.

S.F. = Solar Flare. S.W.F. = Fade out. S.E.A. = Sudden enhancement of atmospherics.

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 1953

Range interval	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
5' to 15'	95	89	163	98	87	74	100	113	137	112	91	35	1194
15' to 30'	13	21	19	6	14	4	5	19	25	21	15	1	163
>30'	1	1	3	0	2	0	0	0	1	2	1	0	11

Hourly distribution, 1953

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' to 15'	87	80	70	63	52	34	37	30	26	24	22	22	26	26	36	40	37	40	60	80	84	86	69	63
15' to 30'	14	5	9	2	1	0	0	0	0	0	0	0	0	0	2	7	10	18	19	18	22	15	10	11
>30'	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	1	1	2	0	0

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 ESKDALEMUIR: h_b (height of barometer cistern above M.S.L.) = 237.3 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	<i>millibars</i>																	
1	87.3	69.6	79.3	00.9	84.7	94.3	07.5	05.1	06.1	74.6	69.3	73.3	99.9	83.7	91.2	79.5	76.2	77.8
2	87.7	84.9	86.1	06.8	00.9	03.9	07.6	04.5	05.8	69.3	62.3	64.0	03.6	99.9	02.2	80.6	79.2	79.7
3	96.8	85.1	90.3	09.7	06.1	08.1	08.7	06.3	07.4	74.3	63.0	69.3	04.0	02.6	03.4	80.1	78.0	79.2
4	99.3	95.9	98.1	06.1	93.6	97.2	09.3	06.1	07.1	76.1	72.7	74.4	04.1	01.9	03.1	85.1	79.4	82.3
5	95.9	79.1	87.3	94.6	87.1	90.5	10.1	07.0	08.6	76.1	70.4	72.6	02.7	97.3	99.9	92.9	84.9	88.9
6	86.4	78.7	82.2	87.6	84.3	85.7	07.0	02.2	04.3	79.4	69.4	72.9	98.3	92.1	94.7	94.8	92.9	93.7
7	93.1	86.3	91.5	89.4	86.8	88.3	09.0	03.1	06.3	85.1	79.4	83.6	94.6	92.0	93.3	94.7	92.2	93.4
8	92.4	85.6	89.2	87.6	82.8	75.1	10.4	08.1	09.0	84.4	81.7	82.8	94.5	92.5	93.6	93.6	91.8	92.8
9	88.2	85.4	87.1	63.1	53.0	60.0	13.4	09.2	12.2	90.1	83.1	85.9	93.7	89.3	91.4	92.2	87.9	89.7
10	92.6	88.2	90.8	61.1	47.8	52.1	12.9	06.8	09.7	92.2	88.1	90.6	90.5	86.8	88.7	89.4	86.9	88.1
11	94.6	91.8	92.9	84.0	61.1	73.3	10.6	08.3	09.3	88.1	74.5	78.2	87.5	85.8	86.4	89.0	86.5	87.6
12	97.2	94.2	96.0	00.1	84.0	92.8	10.1	08.7	09.3	76.8	74.6	75.7	87.2	84.8	86.0	87.0	83.9	85.1
13	98.6	95.9	97.1	01.4	88.5	97.6	10.0	08.8	09.1	84.3	76.8	80.9	84.8	77.7	80.7	86.2	83.4	84.9
14	95.9	89.2	93.4	95.4	86.2	90.7	09.0	05.0	07.1	96.4	83.1	90.3	77.7	69.2	73.4	85.6	77.6	80.9
15	91.1	87.3	89.4	96.7	95.2	95.8	05.0	92.8	98.6	95.9	88.4	92.4	69.4	67.4	68.2	77.6	74.7	75.9
16	93.4	91.0	92.4	95.3	91.3	93.2	95.9	91.4	93.1	89.1	77.7	82.5	72.4	67.3	69.1	75.2	74.1	74.6
17	96.9	90.0	92.3	91.3	87.6	88.8	00.3	95.9	98.2	96.7	79.5	88.7	86.0	72.4	78.2	77.2	74.5	75.7
18	05.9	96.9	02.6	89.0	81.9	85.1	00.9	98.4	99.6	98.6	96.7	97.5	90.9	86.0	89.7	79.8	76.9	78.8
19	06.8	04.6	05.6	84.1	81.1	82.3	00.0	98.4	99.1	98.2	96.6	97.3	90.1	84.6	86.4	79.7	75.5	77.5
20	04.6	02.3	03.1	84.3	77.9	80.0	02.2	99.3	00.6	98.2	95.1	96.9	90.3	85.5	88.6	79.0	75.9	77.4
21	02.4	97.3	99.8	91.2	77.8	85.5	02.6	00.6	01.6	96.2	93.1	94.7	89.2	84.8	86.3	80.4	78.0	79.0
22	97.3	90.5	94.0	91.3	86.3	89.2	92.3	00.0	01.1	94.6	90.4	92.7	84.8	80.9	83.3	90.7	80.3	85.6
23	90.5	84.9	87.5	86.3	81.0	83.4	06.4	01.8	03.9	91.3	86.1	88.9	91.1	78.5	84.1	93.3	90.3	91.4
24	84.9	75.4	80.0	86.6	84.1	85.6	06.9	05.7	06.3	88.9	86.2	87.6	96.0	91.1	94.5	94.1	92.1	93.1
25	91.7	81.7	86.6	96.8	85.5	91.4	06.5	95.4	02.0	87.8	85.0	86.6	95.2	89.0	92.6	93.4	91.2	92.1
26	91.4	79.3	87.5	03.5	96.5	00.0	95.4	84.1	89.7	85.8	77.4	81.0	96.6	90.7	94.6	94.6	91.1	92.4
27	79.3	74.8	77.0	10.2	93.2	97.5	92.8	77.7	88.4	77.4	61.3	70.5	98.1	89.3	91.7	97.8	94.0	95.8
28	83.6	77.6	81.2	10.3	07.5	08.9	77.7	67.3	69.6	61.3	58.7	59.4	01.7	95.3	99.7	97.7	95.7	96.9
29	90.5	83.4	87.9				72.0	67.7	69.5	71.0	60.6	66.8	95.3	82.8	89.4	96.1	92.1	94.2
30	89.6	61.0	78.0				71.8	66.5	68.4	83.7	66.1	73.8	84.3	80.8	82.5	92.7	90.0	91.4
31	84.6	60.8	70.1				75.4	71.8	74.3				84.4	78.9	82.3			
Mean	93.24	85.44	89.55	93.03	84.42	88.80	01.60	96.90	99.20	85.40	78.24	81.72	91.58	85.84	88.69	87.67	84.24	85.85

	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	91.2	88.3	89.7	88.9	86.5	87.7	84.2	75.2	82.0	93.2	86.5	90.0	60.4	44.5	53.4	89.1	85.5	87.4
2	90.8	89.0	89.7	92.5	88.6	90.2	75.2	66.9	70.2	94.4	90.5	92.8	69.3	43.7	55.8	85.7	74.4	80.2
3	93.5	90.2	91.6	94.4	92.3	93.8	90.8	70.0	81.4	96.7	89.7	92.6	75.1	65.0	71.6	74.4	65.3	70.5
4	93.3	90.5	92.9	92.6	86.1	88.4	96.2	90.4	93.0	03.8	96.7	00.2	86.2	65.0	76.5	94.2	69.9	83.6
5	90.9	78.1	85.8	93.9	89.9	91.6	00.6	96.2	98.1	06.9	03.5	05.3	90.6	84.9	86.1	97.9	94.2	96.5
6	81.7	77.9	80.1	96.7	93.8	95.5	05.9	00.6	03.9	03.7	00.3	01.6	94.6	83.6	91.0	97.7	95.8	96.8
7	79.1	71.8	74.3	96.3	93.2	94.6	05.8	01.3	04.0	00.8	99.0	99.7	83.6	73.3	78.0	96.8	89.0	92.7
8	76.0	73.4	74.8	94.0	91.0	93.0	01.3	91.7	96.7	00.9	97.8	99.4	83.4	80.6	82.0	89.5	87.5	88.3
9	86.3	75.1	80.4	91.0	88.0	89.1	91.7	84.8	87.7	97.8	90.5	94.1	87.0	80.2	82.6	91.1	89.4	90.1
10	90.0	86.0	88.9	93.7	88.1	90.6	91.5	84.2	89.0	90.5	85.9	87.7	89.5	86.7	88.3	94.0	88.8	90.9
11	89.5	72.5	82.8	93.6	87.3	91.2	90.4	83.2	86.1	85.9	80.7	83.8	88.8	82.1	84.7	95.9	93.3	94.6
12	72.5	64.1	66.6	87.3	80.3	83.5	94.5	85.5	90.1	80.7	77.3	78.5	82.9	76.7	80.2	93.3	89.5	90.5
13	66.9	62.2	64.1	87.7	83.6	85.5	94.8	89.1	92.7	85.3	77.7	80.5	91.5	81.2	89.0	89.8	80.8	85.7
14	74.1	66.8	70.1	88.2	85.0	87.3	89.1	78.8	83.7	92.5	85.3	89.7	90.9	87.8	89.5	80.8	76.7	78.6
15	80.7	74.0	77.1	85.0	82.8	83.8	78.9	77.0	78.0	92.1	87.5	90.3	94.8	89.0	91.4	93.4	80.2	87.5
16	80.7	75.4	78.0	88.4	83.6	86.3	81.4	76.2	78.7	89.9	86.7	88.1	04.3	94.2	99.0	97.8	93.1	96.0
17	75.4	74.0	74.7	88.1	79.1	82.8	81.4	77.5	79.4	01.7	89.9	96.0	04.8	98.9	02.9	97.3	90.7	94.2
18	84.5	75.2	79.5	86.5	79.8	83.0	79.0	78.1	78.3	04.0	01.3	03.0	99.1	93.2	96.6	90.7	83.2	87.0
19	89.8	84.5	87.8	87.1	80.6	85.3	78.6	62.7	72.4	03.2	99.9	01.5	96.6	95.2	95.8	95.9	86.1	92.2
20	87.8	81.5	84.1	80.6	71.6	74.4	65.9	59.7	62.9	99.9	95.4	96.9	98.4	96.2	97.6	96.8	92.0	95.0
21	81.6	71.3	76.9	71.6	68.1	69.4	61.8	42.8	50.0	95.5	91.7	93.6	97.8	95.2	96.2	92.7	85.2	89.1
22	71.3	69.5	70.4	80.0	68.0	73.4	62.9	45.8	57.1	91.8	82.8	88.3	95.4	91.5	93.3	91.3	86.5	88.2
23	84.7	70.9	78.1	80.9	74.2	78.2	72.1	62.3	66.1	82.8	74.2	78.2	91.5	86.3	88.8	87.8	74.2	83.0
24	85.1	81.7	83.1	76.4	71.7	73.2	81.8	72.1	77.4	81.4	76.7	79.9	90.0	85.8	88.5	79.0	73.1	77.3
25	81.7	75.6	78.8	83.0	76.4	80.8	86.0	81.7	83.5	82.9	74.8	78.8	92.2	87.7	90.3	91.9	76.2	83.2
26	75.8	72.1	73.3	87.9	81.6	84.5	87.1	83.5	85.7	82.1	58.2	72.4	87.7	72.8	77.6	91.7	78.2	85.2
27	73.4	69.1	70.8	91.9	87.9	90.2	83.6	77.1	79.7	69.1	54.2	63.2	79.9	77.1	74.3	93.2	87.1	91.5
28	79.1	73.2	76.8	90.0	87.7	89.0	87.5	76.7	82.8	83.2	68.8	76.4	84.9	79.9	82.9	95.5	91.2	92.8
29	81.0	78.4	79.3	88.7	78.5	82.8	86.3	81.7	84.1	86.5	79.5	83.6	83.2	76.4	80.5	98.3	95.4	97.0
30	84.4	80.7	82.7	79.9	75.4	78.0	86.5	80.1	82.9	79.6	73.1	75.7	88.1	75.0	81.2	02.3	95.5	98.1
31	86.9	83.0	84.3	87.8	78.1	84.6				76.3	60.4	70.0				06.5	02.1	04.1
Mean	82.57	76.65	79.58	87.89	82.54	85.24	85.76	77.76	81.93	91.45	84.40	88.12	88.75	80.99	84.85	92.65	85.49	89.28
									Annual	90.17	83.61	86.92						

PRESSURE AT STATION LEVEL

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

72 ESKDALEMUIR: $h_b = 237.3$ m.

	Hour G.M.T.																												
	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24		Mean		
	millibars																												
Jan.	89.21	89.15	89.30	89.30	89.25	89.18	89.28	89.48	89.77	89.81	89.86	89.81	89.73	89.48	89.26	89.37	89.51	89.53	89.95	89.73	89.75	89.76	89.72	89.72	89.69		89.55		
Feb.	88.40	88.25	88.11	88.00	87.84	87.87	88.07	88.23	88.53	88.83	88.97	89.10	89.12	89.08	88.82	88.92	88.94	89.14	89.41	89.52	89.54	89.43	89.40	89.29	89.21		88.80		
Mar.	00.02	99.88	99.66	99.33	99.21	99.14	99.20	99.27	99.38	99.41	99.62	99.58	99.45	99.21	98.89	98.65	98.55	98.54	98.74	99.01	99.07	99.14	99.17	99.12	98.95		99.20		
Apr.	81.76	81.59	81.42	81.32	81.21	81.36	81.56	81.71	81.87	81.89	81.91	81.96	81.84	81.73	81.62	81.47	81.43	81.44	81.56	81.83	82.16	82.19	82.20	82.14	82.08		81.72		
May	89.04	88.93	88.71	88.61	88.59	88.63	88.80	88.90	88.99	88.93	88.78	88.77	88.71	88.52	88.40	88.34	88.24	88.25	88.35	88.48	88.67	88.97	88.98	89.02	88.90		88.69		
June	85.98	85.85	85.70	85.50	85.54	85.62	85.73	85.82	85.81	85.87	85.93	85.88	85.87	85.72	85.71	85.58	85.57	85.67	85.84	86.05	86.32	86.43	86.49	86.37			85.85		
July	79.85	79.69	79.43	79.28	79.17	79.22	79.35	79.47	79.53	79.60	79.60	79.71	79.65	79.65	79.63	79.59	79.47	79.48	79.53	79.65	79.70	79.90	79.92	79.83	79.70		79.58		
Aug.	85.40	85.34	85.25	85.16	85.11	85.08	85.22	85.42	85.51	85.45	85.45	85.39	85.39	85.21	85.14	85.03	85.02	84.93	84.92	85.09	85.23	85.36	85.36	85.37	85.31		85.24		
Sept.	82.01	81.91	81.71	81.54	81.45	81.43	81.65	81.81	82.08	82.17	82.07	82.02	82.05	81.90	81.84	81.72	81.72	81.75	81.90	82.15	82.33	82.41	82.37	82.19	82.09		81.93		
Oct.	88.42	88.37	88.13	87.93	87.82	87.82	87.88	88.25	88.44	88.53	88.57	88.61	88.45	88.27	88.05	87.86	87.79	87.85	88.06	88.11	88.15	88.13	87.97	87.77	87.58		88.12		
Nov.	84.40	84.38	84.27	84.17	84.10	84.19	84.21	84.44	84.78	84.95	85.11	85.28	85.16	85.09	84.98	84.91	84.95	85.12	85.19	85.27	85.27	85.28	85.23	85.22	85.32		84.85		
Dec.	89.06	88.98	88.97	89.00	88.93	88.96	88.98	89.25	89.51	89.79	89.80	89.72	89.37	89.15	88.91	88.91	89.03	89.20	89.27	89.43	89.50	89.58	89.51	89.68	89.66		89.28		
Annual	86.99	86.89	86.75	86.62	86.55	86.57	86.69	86.86	87.04	87.12	87.16	87.18	87.09	86.94	86.79	86.72	86.70	86.75	86.89	87.03	87.13	87.22	87.21	87.17	87.09		86.92		

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

PRESSURE REDUCED TO MEAN SEA LEVEL

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

73 ESKDALEMUIR: $h_b = 237.3$ m.

	Hour G.M.T.																															
	0	1	2	3	4	5	6	7	8	9	10	11	Noon		13	14	15	16	17	18	19	20	21	22	23	24			Mean			
	millibars																															
Jan.	18.55	18.51	18.68	18.69	18.68	18.63	18.74	18.94	19.24	19.26	19.26	19.23	18.78	18.70	18.45	18.59	18.78	18.84	19.29	19.08	19.12	19.13	19.07	19.07	19.06	18.90						
Feb.	17.80	17.66	17.51	17.36	17.21	17.25	17.44	17.60	17.90	18.19	18.26	18.30	18.27	18.30	18.00	18.07	18.12	18.41	18.76	18.91	18.95	18.86	18.83	18.73	18.64	18.12						
Mar.	29.89	29.75	29.56	29.23	29.14	29.10	29.15	29.19	29.21	29.07	29.07	28.91	28.63	28.30	27.93	27.68	27.59	27.69	28.10	28.57	28.72	28.85	28.94	28.91	28.76	28.77						
Apr.	11.05	10.89	10.73	10.72	10.52	10.69	10.85	10.87	10.87	10.75	10.70	10.69	10.51	10.35	10.20	10.04	10.05	10.11	10.31	10.74	11.21	11.32	11.42	11.40	11.39	10.71						
May	17.86	17.77	17.57	17.49	17.48	17.51	17.61	17.59	17.57	17.41	17.15	17.06	16.97	16.70	16.55	16.48	16.40	16.44	16.62	16.88	17.21	17.63	17.69	17.78	17.69	17.22						
June	14.46	14.36	14.23	14.11	14.11	14.18	14.17	14.11	13.98	13.95	13.96	13.84	13.77	13.62	13.61	13.61	13.48	13.49	13.66	13.88	14.21	14.61	14.81	14.93	14.85	14.05						
July	08.06	07.93	07.69	07.55	07.44	07.77	07.54	07.57	07.54	07.52	07.47	07.54	07.46	07.43	07.38	07.31	07.21	07.27	07.39	07.58	07.72	08.00	08.08	08.04	07.93	07.60						
Aug.	13.79	13.76	13.70	13.61	13.59	13.55	13.61	13.68	13.67	13.49	13.42	13.30	13.25	13.06	12.98	12.85	12.87	12.84	12.89	13.15	13.38	13.61	13.65	13.70	13.67	13.39						
Sept.	10.33	10.20	10.07	09.91	09.81	09.79	10.03	10.15	10.33	10.31	10.11	10.00	10.01	09.83	09.74	09.64	09.66	09.75	09.99	10.34	10.56	10.67	10.66	10.48	10.42	10.10						
Oct.	17.37	17.30	17.06	16.86	16.74	16.77	16.84	17.23	17.37	17.34	17.26	17.20	16.99	16.77	16.53	16.34	16.33	16.53	16.83	16.94	17.03	17.07	16.92	17.03	16.83	16.91						
Nov.	13.29	13.26	13.16	13.03	12.95	13.07	13.07	13.31	13.65	13.80	13.91	14.04	13.88	13.77	13.66	13.61	13.69	13.90	13.99	14.10	14.12	14.15	14.11	14.13	14.24	13.67						
Dec.	18.22	18.15	18.16	18.19	18.14	18.15	18.17	18.42	18.68	18.95	18.93	18.79	18.38	18.13	17.88	17.91	18.08	18.28	18.38	18.56	18.65	18.74	18.68	18.87	18.85	18.41						
Annual	15.91	15.82	15.70	15.58	15.51	15.53	15.63	15.74	15.85	15.85	15.81	15.76	15.61	15.43	15.26	15.19	15.20	15.27	15.53	15.74	15.92	16.07	16.08	16.08	16.01	15.67						

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

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

TEMPERATURE

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

74 ESKDALEMUIR: Louvered hut: $h_t = 0.9$ m.

	Hour G.M.T.																								Mean	
	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23		24
	degrees												Absolute													
Jan.	75.98	75.87	75.68	75.57	75.20	74.97	74.96	75.00	74.97	75.13	75.63	76.37	76.87	77.11	77.29	77.10	76.70	76.33	76.21	75.93	75.84	75.85	75.91	75.92	75.86	75.93
Feb.	75.23	75.08	75.21	75.26	75.35	75.33	75.40	75.39	75.52	75.73	76.38	77.21	77.75	77.99	77.96	77.67	77.36	77.63	75.93	75.66	75.45	75.24	75.20	75.14	75.20	76.04
Mar.	74.29	74.18	73.81	73.77	73.43	73.16	73.27	73.51	74.34	75.79	77.75	78.95	80.22	81.09	81.43	81.47	81.31	80.31	78.40	76.74	75.87	75.36	74.86	74.55	74.37	76.58
Apr.	74.47	74.31	74.23	74.22	74.09	74.01	74.41	75.64	77.16	78.43	79.15	79.69	80.22	80.67	80.96	81.04	80.55	80.11	79.39	77.95	76.79	76.07	75.26	74.81	74.39	77.23
May	80.58	80.39	80.15	79.95	79.92	79.94	80.62	81.73	82.91	83.78	84.75	85.58	85.84	86.57	86.88	86.97	86.79	86.42	85.63	84.45	83.08	82.07	81.63	81.13	80.85	83.25
June	82.86	82.55	82.32	81.99	81.90	82.04	83.15	84.57	85.80	86.67	87.12	87.84	88.45	88.41	88.43	88.34	88.35	88.10	87.44	87.05	85.84	84.71	83.91	83.41	83.02	85.47
July	83.60	83.31	83.11	82.97	82.93	83.15	83.72	84.69	85.55	86.39	86.88	87.31	87.55	87.73	88.09	88.40	88.08	87.68	87.05	86.37	85.50	84.75	84.21	83.70	83.43	85.53
Aug.	83.54	83.21	82.91	82.83	82.66	82.69	83.38	84.63	85.65	86.87	87.55	88.19	88.62	88.74	88.81	88.92	88.55	88.05	87.42	86.58	85.77	84.77	84.44	84.08	83.81	85.79
Sept.	83.23	83.02	82.88	82.69	82.69	82.68	82.60	83.02	83.93	84.97	85.96	86.51	86.64	87.04	87.30	87.07	86.85	86.29	85.33	84.58	84.23	83.95	83.69	83.59	83.20	84.61
Oct.	79.26	79.35	79.32	79.29	79.27	79.07	79.01	78.85	79.44	80.54	81.65	82.56	83.12	83.35	83.59	83.45	82.90	81.60	80.80	80.21	79.87	79.28	79.04	78.88	79.00	80.57
Nov.	78.64	78.73	78.69	78.92	78.82	78.74	78.86	78.89	78.96	79.18	79.73	80.10	80.46	80.76	80.81	80.56	80.22	79.92	79.71	79.48	79.24	79.14	78.96	78.77	78.62	79.43
Dec.	77.56	77.36	77.25	77.20	77.06	77.19	77.17	77.44	77.55	77.70	78.00	78.50	78.93	79.15	79.23	78.95	78.49	78.26	78.00	77.95	77.73	77.59	77.63	77.38	77.37	77.88
Annual	79.13	78.97	78.82	78.74	78.63	78.60	78.90	79.47	80.17	80.96	81.74	82.43	82.92	83.15	83.43	83.36	83.05	82.79	81.81	81.11	80.46	79.93	79.59	79.31	79.12	80.73

TEMPERATURE

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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	76.2	71.3	74.6	76.7	72.3	74.4	84.3	68.7	74.9	79.7	73.7	76.3	85.1	69.9	78.7	85.5	78.0	81.3
2	73.3	67.0	70.3	77.3	72.4	74.6	76.1	66.8	72.0	81.9	73.4	77.3	89.1	74.0	82.7	83.5	77.9	79.9
3	74.0	65.9	71.3	78.0	66.0	72.9	77.8	69.9	74.0	79.3	69.2	74.1	91.9	81.0	86.0	82.0	77.6	79.3
4	74.4	65.6	69.0	80.7	65.8	74.2	79.3	72.9	74.9	79.3	69.0	73.5	93.8	78.1	86.4	81.9	78.1	80.3
5	74.6	71.8	73.4	77.2	72.4	74.9	78.1	65.9	72.3	78.2	72.0	74.4	95.1	80.4	87.1	85.3	75.0	81.1
6	75.3	71.3	73.7	76.1	69.5	73.5	78.5	64.0	72.2	79.0	70.0	76.0	92.0	78.0	84.0	90.7	72.0	82.7
7	75.6	72.8	74.4	75.0	64.6	70.6	81.7	70.0	76.3	82.0	68.0	75.5	87.9	77.6	82.0	90.0	78.9	85.5
8	75.2	67.2	71.9	74.7	63.1	69.0	85.4	67.7	76.2	82.0	75.5	78.0	88.6	76.5	81.5	90.7	80.5	85.8
9	77.2	74.2	75.2	75.0	68.8	72.9	86.4	74.9	79.6	81.1	69.1	75.5	90.9	72.2	82.3	93.0	79.4	86.7
10	77.0	72.8	75.1	74.7	69.5	72.5	82.3	74.5	78.2	81.8	66.4	75.3	84.8	77.7	80.3	89.0	80.0	85.3
11	79.5	77.0	78.7	73.2	70.6	71.7	84.0	74.9	79.3	80.4	75.2	77.9	84.8	77.8	80.4	93.3	79.2	87.1
12	79.6	77.8	78.8	74.0	71.2	72.9	82.4	75.1	79.7	82.7	73.4	77.3	82.4	77.4	79.5	92.9	79.2	86.4
13	78.2	75.3	76.7	75.4	70.3	73.1	80.6	76.4	78.2	81.3	73.5	76.5	86.4	76.2	80.0	90.7	80.9	85.8
14	78.8	74.0	76.2	77.4	73.0	75.3	83.1	71.5	77.6	81.0	71.0	75.9	81.6	76.5	79.3	86.0	83.0	84.3
15	82.1	78.8	80.5	75.2	72.7	74.1	81.4	71.4	74.9	77.9	68.0	73.8	88.7	81.4	84.0	86.8	82.7	84.3
16	80.5	76.9	78.4	80.3	74.6	77.3	83.3	67.9	75.0	82.4	72.3	77.9	86.1	81.8	83.2	87.1	81.2	84.4
17	78.7	75.4	77.7	84.1	80.1	81.6	84.3	74.0	78.2	81.0	78.2	79.2	87.0	81.0	82.9	85.3	81.2	83.1
18	79.0	70.5	74.8	80.6	78.5	79.4	82.9	71.5	76.1	81.6	72.2	78.2	89.1	78.7	84.4	88.0	81.5	84.0
19	76.3	74.0	75.7	82.2	74.3	77.5	79.7	74.9	76.4	85.0	72.0	78.7	81.7	79.8	80.1	88.9	78.1	84.0
20	77.0	74.9	75.5	82.4	76.0	79.5	84.0	71.3	76.6	88.1	74.2	80.5	86.9	79.5	82.2	88.0	77.9	83.2
21	78.0	70.9	75.5	83.6	76.3	81.0	88.5	69.4	77.9	90.0	73.0	81.5	90.0	82.2	85.3	88.1	84.0	85.9
22	77.6	76.0	76.9	83.7	79.0	81.0	88.2	70.3	77.9	88.7	71.6	80.7	89.1	82.2	84.8	95.7	86.9	90.9
23	78.4	77.0	77.7	82.3	79.1	80.1	87.5	69.6	77.8	90.1	71.1	81.4	87.1	83.5	84.5	95.6	84.2	90.1
24	78.1	74.0	76.8	80.1	79.0	79.5	88.6	70.5	78.6	84.9	73.5	79.2	92.1	83.9	86.9	97.2	86.6	91.1
25	77.6	68.0	72.9	80.4	79.0	79.7	87.0	72.8	78.5	83.0	69.9	76.4	95.0	82.0	88.6	98.3	84.7	91.2
26	78.6	67.2	74.0	79.3	78.6	78.9	80.0	72.7	77.1	81.1	70.7	76.1	88.7	81.0	84.3	96.7	85.8	89.5
27	83.5	78.2	81.3	84.4	76.5	79.1	78.7	70.5	75.0	79.9	74.2	76.2	89.0	81.0	84.7	90.7	85.6	87.8
28	83.3	81.0	82.0	84.3	71.4	78.1	83.0	76.0	79.5	80.3	74.8	77.5	90.3	77.5	84.0	92.2	83.9	86.9
29	82.5	80.0	81.4				80.6	75.7	77.5	82.4	75.6	78.4	88.7	80.7	84.1	94.8	83.1	88.2
30	80.2	77.9	78.9				79.3	74.5	76.1	83.1	71.5	77.7	87.2	78.8	83.0	94.9	82.1	87.8
31	77.9	71.9	74.5				79.3	73.4	75.6				88.4	78.7	83.1			
Mean	78.0	73.4	75.9	78.9	73.0	76.0	82.5	71.6	76.6	82.3	72.1	77.2	88.4	78.9	83.3	90.1	81.0	85.5

	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	97.1	82.6	90.6	90.5	76.8	84.5	88.2	87.1	87.7	87.9	80.7	87.2	82.1	78.3	80.2	82.6	77.5	80.0
2	94.1	83.0	88.4	91.0	76.7	84.8	88.4	82.2	85.0	87.3	85.6	86.4	80.1	73.1	77.9	84.7	81.9	82.9
3	91.4	81.4	86.3	93.1	75.2	85.1	87.1	80.8	83.9	85.8	76.8	82.6	80.7	71.5	76.1	84.4	79.0	83.5
4	92.2	81.0	87.2	91.3	84.7	87.7	87.3	78.6	83.7	86.0	72.9	78.3	81.3	74.3	78.5	79.1	71.8	77.0
5	90.1	84.3	86.9	89.6	84.0	86.1	90.1	82.3	85.8	85.1	73.0	78.5	78.2	72.1	75.5	78.3	71.3	75.0
6	90.1	84.3	86.9	90.9	84.7	87.6	89.9	86.1	87.8	87.8	75.8	82.8	82.2	72.5	78.2	81.1	76.7	79.6
7	90.1	81.4	85.5	93.3	84.3	89.2	93.8	81.4	87.9	87.1	81.7	83.4	83.0	78.9	81.1	80.8	78.6	80.0
8	87.4	82.0	84.1	97.5	83.3	89.9	94.3	80.3	86.7	83.7	80.4	82.1	81.1	76.2	78.6	79.6	76.5	78.1
9	90.6	82.6	85.2	91.1	84.1	87.5	87.0	82.0	84.5	85.2	80.8	83.2	79.8	72.7	76.6	81.1	78.5	79.9
10	88.6	77.9	84.6	91.1	80.7	85.6	89.0	80.2	83.9	84.6	82.7	83.6	80.4	71.8	78.3	81.7	78.6	80.9
11	88.3	75.8	83.2	92.5	81.0	87.0	88.4	81.4	85.3	86.0	73.6	81.5	82.3	79.9	81.1	81.8	78.8	80.1
12	88.2	84.0	86.2	99.3	80.6	89.8	90.3	79.0	84.8	85.9	74.0	80.6	83.6	79.8	82.0	81.7	77.8	80.7
13	88.7	84.6	85.7	89.4	79.7	86.7	89.2	76.3	82.9	83.0	77.6	80.4	80.8	74.1	78.4	81.3	77.7	79.7
14	86.9	83.1	84.6	89.4	79.5	86.0	88.6	79.7	84.3	80.8	73.4	77.2	80.3	77.6	79.4	82.6	78.8	81.6
15	86.7	79.8	84.0	89.2	83.7	86.6	87.8	83.1	85.2	81.0	74.0	77.4	84.7	79.9	83.2	79.0	72.1	74.9
16	89.7	75.7	83.5	89.5	81.3	85.0	90.4	83.7	86.6	81.3	76.4	78.9	84.1	72.9	80.4	76.4	72.5	74.1
17	91.1	82.9	86.3	87.8	82.9	85.6	88.0	81.4	85.1	86.0	73.5	79.9	80.0	71.6	74.6	78.5	72.8	75.8
18	90.2	82.0	85.3	88.6	79.9	83.9	88.4	80.5	83.8	87.8	71.9	77.8	81.0	73.7	79.3	79.2	77.5	78.3
19	90.5	83.0	85.9	87.4	78.0	83.6	86.6	80.9	84.3	84.5	72.3	76.9	83.5	80.7	82.2	78.7	69.6	75.0
20	88.5	82.9	85.7	89.2	83.7	85.4	86.1	83.3	84.5	83.5	73.8	80.1	82.2	80.8	81.2	77.7	69.0	73.9
21	89.6	85.1	86.4	89.0	81.5	84.3	86.3	82.8	84.0	85.3	81.4	82.8	81.2	79.7	80.3	80.8	73.4	78.1
22	88.4	83.4	85.2	90.2	82.7	85.3	87.0	82.0	84.3	85.1	81.8	83.3	80.1	75.7	79.0	82.4	74.0	78.9
23	89.5	81.8	85.4	86.7	80.0	84.1	87.5	77.3	82.2	84.8	74.0	81.8	82.9	76.4	79.8	81.6	76.7	79.9
24	86.7	81.3	84.8	89.0	84.1	85.7	87.5	75.7	82.1	83.3	71.8	78.2	82.1	78.0	80.5	81.3	74.7	75.8
25	87.9	84.5	85.8	89.0	83.0	85.8	86.3	74.8	82.1	84.1	74.7	79.6	80.6	77.0	78.9	77.8	70.7	75.1
26	86.5	82.9	84.3	89.9	82.2	85.8	86.6	84.2	85.1	83.7	77.0	81.0	82.7	77.8	81.1	81.1	71.3	77.0
27	87.0	82.3	84.0	88.7	80.8	85.1	85.4	80.7	83.9	83.3	76.5	80.1	82.0	79.6	80.9	78.2	74.6	76.9
28	88.0	81.3	84.6	89.0	78.2	84.7	85.7	79.3	82.1	83.0	74.0	77.8	81.3	78.4	79.7	79.5	75.8	78.0
29	89.7	79.1	84.6	88.2	75.0	82.3	86.1	80.8	83.4	82.6	75.0	77.7	81.6	79.4	80.5	77.7	69.6	73.7
30	90.7	78.6	85.3	88.6	82.6	84.6	87.5	82.2	85.9	80.8	73.5	78.1	80.9	77.9	79.0	79.2	72.7	76.7
31	91.0	78.0	84.8	87.9	82.2	84.3				80.7	75.1	78.2				77.8	70.2	73.2
Mean	89.5	81.7	85.5	90.3	81.2	85.8	88.2	81.0	84.6	84.4	76.3	80.6	81.6	76.4	79.4	80.3	74.9	77.9
									Annual	84.6	76.8	80.7						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

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

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

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.	Rel. Vap.	hum. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	86.2	5.9	64.0	4.3	86.0	6.0	84.1	6.5	72.7	6.8	71.4	7.8	80.0	16.1	82.5	11.2	98.3	16.4	99.0	16.0	94.8	9.6	95.0	9.5
2	85.3	4.3	75.7	5.2	96.4	5.5	84.7	7.0	63.9	8.9	78.8	7.8	88.6	15.5	82.2	11.4	88.4	12.4	98.8	15.2	93.5	8.1	99.1	12.1
3	83.0	4.5	86.1	5.2	96.1	6.3	85.5	5.7	74.8	11.2	81.4	7.8	84.7	12.9	80.8	11.4	79.3	10.3	84.0	10.0	95.5	7.3	98.6	12.5
4	87.3	4.0	83.5	5.6	94.0	6.6	85.5	5.4	76.4	11.8	92.6	9.5	77.0	12.5	86.3	14.4	83.4	10.7	84.8	7.6	82.9	7.5	92.7	7.5
5	95.1	6.0	72.5	5.1	90.7	5.3	93.1	6.3	70.7	11.4	73.3	7.9	93.7	14.9	81.8	12.3	90.0	13.3	89.4	8.1	95.8	7.0	92.4	6.5
6	84.2	5.4	85.0	5.4	92.0	5.3	86.0	6.5	75.1	9.9	74.7	9.0	77.2	12.3	86.4	14.4	97.5	16.4	84.4	10.2	92.3	8.2	96.7	9.4
7	80.9	5.5	78.7	4.0	73.7	5.7	83.2	6.1	73.1	8.4	74.2	10.8	87.2	12.6	91.2	16.8	91.1	15.4	92.6	11.7	86.8	9.4	98.2	9.8
8	92.7	5.2	96.8	4.4	85.0	6.5	90.7	7.9	75.0	8.3	81.9	12.1	89.7	11.8	80.6	15.5	89.7	14.1	94.8	11.0	87.2	7.9	97.4	8.6
9	91.8	6.6	93.1	5.6	82.7	8.1	76.8	5.6	73.4	8.6	76.5	12.0	84.5	12.0	93.0	15.4	82.1	11.1	90.3	11.2	94.4	7.5	99.7	9.9
10	93.8	6.7	91.3	5.4	81.4	7.2	70.7	5.1	77.7	7.9	83.9	12.0	86.3	11.8	80.6	11.8	75.0	9.8	85.2	10.9	94.6	8.4	98.4	10.5
11	93.8	8.6	85.1	4.7	76.7	7.3	86.7	7.5	81.3	8.4	72.0	11.6	85.9	10.7	85.0	13.6	85.6	12.2	85.0	9.4	95.1	10.3	93.4	9.4
12	96.1	8.9	72.4	4.4	84.3	8.3	81.5	6.8	80.4	7.8	83.9	12.9	92.5	14.0	83.5	16.0	75.0	10.4	94.3	9.8	95.0	10.9	93.5	9.8
13	96.6	7.7	81.1	5.0	80.6	7.1	82.2	6.5	77.4	7.7	82.8	12.2	94.5	13.9	89.2	14.0	88.1	10.7	88.1	9.1	93.9	8.4	93.1	9.1
14	95.1	7.3	92.1	6.6	76.8	6.5	71.3	5.4	93.2	8.9	94.7	12.7	91.1	12.4	89.7	13.4	84.3	11.3	78.7	6.5	98.1	9.4	94.6	10.5
15	94.6	9.8	96.3	6.4	80.3	5.6	90.4	5.8	84.5	11.1	92.7	12.4	79.0	10.4	92.5	14.3	91.3	13.0	86.7	7.3	98.8	12.3	97.2	6.8
16	93.0	8.3	97.5	8.1	77.5	5.5	90.8	7.5	91.1	11.3	91.1	12.3	93.4	11.8	87.2	12.2	90.2	14.1	94.2	8.8	93.9	9.7	93.2	6.2
17	94.0	8.0	94.8	10.6	69.4	6.1	94.0	8.9	86.6	10.6	94.7	11.7	86.2	13.2	95.3	13.9	94.0	13.3	87.3	8.7	96.2	6.6	95.8	7.2
18	86.1	6.0	92.0	8.9	79.7	6.1	88.7	7.5	73.2	9.9	85.4	11.2	83.0	11.9	84.1	10.9	92.5	12.0	91.4	7.9	95.5	9.1	96.6	8.6
19	94.5	7.0	94.6	8.0	84.7	6.6	76.4	7.0	94.6	9.5	89.4	11.7	85.7	12.7	89.5	12.4	94.5	12.7	93.0	7.5	94.2	11.0	80.8	5.7
20	90.7	6.6	96.7	9.4	83.0	6.6	73.5	7.6	83.4	9.7	90.1	11.2	98.2	14.5	93.0	13.4	95.8	13.0	96.5	9.7	91.3	9.9	96.1	6.3
21	90.6	6.6	84.3	9.0	75.4	6.5	62.3	6.9	84.8	12.1	92.7	13.8	89.7	13.8	88.3	11.8	92.7	12.2	93.6	11.3	88.2	9.0	89.7	7.9
22	97.8	7.9	83.3	8.9	73.3	6.3	65.3	6.9	88.7	12.3	75.8	15.5	90.1	12.8	85.0	12.2	90.8	12.2	93.1	11.7	93.3	8.7	96.3	8.9
23	96.5	8.3	97.8	9.9	77.1	6.6	72.3	8.0	98.5	13.4	83.7	16.3	83.7	12.0	91.3	12.1	88.3	10.3	91.5	10.4	87.0	8.6	94.5	9.4
24	94.0	7.5	96.7	9.4	84.0	7.6	71.1	6.7	93.9	14.9	81.7	16.9	97.5	13.5	91.3	13.4	93.2	10.8	92.0	8.1	97.8	10.1	87.0	6.5
25	79.4	4.8	98.5	9.7	83.1	7.5	68.7	5.4	89.0	15.8	80.7	16.9	93.8	13.9	80.0	11.8	95.7	11.0	91.1	8.9	95.3	8.9	83.5	5.9
26	89.9	5.9	98.0	9.1	73.7	6.0	83.8	6.4	83.7	11.2	89.3	16.8	94.0	12.6	79.7	11.8	97.2	13.7	90.3	9.7	97.8	10.6	91.7	7.5
27	93.0	10.2	88.9	8.4	78.0	5.5	91.0	7.0	75.4	10.4	90.8	15.3	90.5	11.9	89.9	12.7	96.9	11.0	90.6	9.1	99.8	10.6	85.7	6.9
28	85.7	9.9	89.3	7.8	86.0	8.3	94.7	8.0	78.7	10.3	90.9	14.4	85.5	11.7	80.9	11.1	83.2	9.5	94.1	8.1	93.1	9.1	84.3	7.4
29	94.6	10.4			73.7	6.2	83.0	7.4	77.9	10.3	88.6	15.3	86.0	11.7	89.9	10.5	87.5	10.5	93.5	8.0	96.9	10.1	92.5	5.9
30	96.7	9.0			87.5	6.7	79.4	6.8	70.7	8.7	87.6	14.8	79.2	11.3	87.7	12.0	97.0	12.9	94.5	8.3	90.0	8.4	90.8	7.2
31	72.4	4.9			86.5	6.4			72.2	8.9			80.7	11.2	94.5	12.6			96.6	8.5			87.7	5.5
Mean*	90.5	7.0	88.1	6.9	82.2	6.5	81.6	6.7	80.4	10.2	84.2	12.4	87.4	12.7	86.9	12.9	89.6	12.2	90.9	9.6	93.6	9.1	93.1	8.2

* Mean of the column.

RELATIVE HUMIDITY

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

77 ESKDALEMUIR: $h_t = 0.9$ m.

	Hour G.M.T.																									Mean*
	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	
	per cent.																									
Jan.	89.9	90.3	90.2	90.7	91.3	92.2	92.0	91.3	91.6	91.0	91.8	91.0	90.9	90.0	89.4	88.8	89.2	90.0	90.2	90.3	90.1	89.6	89.8	90.1	89.1	90.5
Feb.	90.2	90.6	90.2	90.1	90.5	91.1	91.0	90.1	89.7	89.6	88.6	86.3	84.6	83.1	82.0	81.9	82.3	84.0	87.0	88.9	89.7	90.2	90.6	91.1	91.3	88.1
Mar.	89.1	90.2	90.7	90.4	90.6	91.1	91.5	92.1	91.1	89.7	84.0	75.9	71.3	66.7	64.8	65.9	66.4	70.3	76.7	81.2	83.9	85.4	86.3	88.3	89.2	82.2
Apr.	89.8	90.2	89.8	89.9	90.3	90.4	90.5	88.8	84.8	78.5	75.5	73.9	73.0	69.6	68.6	68.6	70.8	73.2	75.9	80.2	83.7	85.8	87.3	89.0	89.5	81.6
May	89.8	89.4	90.6	90.8	91.0	91.2	90.7	87.5	82.7	77.7	75.2	72.4	71.2	69.2	68.5	68.0	68.3	69.5	71.6	75.2	80.5	84.5	86.0	88.1	89.3	80.4
June	91.2	91.4	91.8	91.8	91.9	91.6	90.1	87.6	83.7	80.1	78.4	76.9	75.4	75.4	75.6	75.3	76.0	78.0	81.1	82.1	85.0	88.5	90.6	91.3	92.0	84.2
July	93.6	94.0	94.3	94.2	94.4	94.2	93.9	92.2	88.9	86.1	83.9	82.9	82.6	81.3	79.7	77.3	77.5	78.8	81.3	84.3	87.7	90.3	91.7	92.6	93.5	87.4
Aug.	92.5	93.2	93.9	94.7	94.9	95.5	95.1	93.5	90.2	85.6	81.6	78.8	77.7	77.3	77.6	76.5	77.9	79.9	82.7	82.1	87.7	89.7	91.3	92.0	92.6	86.7
Sept.	93.1	93.5	93.5	93.9	94.4	94.2	94.2	94.2	92.9	90.5	87.0	84.6	84.4	81.6	80.8	81.7	83.1	85.4	88.1	90.3	91.3	92.5	92.7	92.8	93.1	89.6
Oct.	94.5	94.7	94.8	95.0	95.1	95.3	95.3	95.1	94.6	93.2	90.3	87.8	84.5	82.8	81.4	82.0	84.7	88.0	89.7	91.5	92.1	93.1	93.3	93.9	94.5	90.9
Nov.	95.3	95.4	95.8	95.7	95.4	95.9	95.1	95.2	94.6	95.2	94.0	92.4	91.5	90.3	89.5	89.9	91.1	92.0	93.3	93.2	93.6	93.9	94.3	94.7	95.2	93.6
Dec.	93.1	93.1	93.9	93.3	94.2	94.1	94.7	94.4	94.8	94.3	93.5	93.0	91.8	90.7	90.1	91.0	92.4	92.9	93.3	93.1	93.4	93.2	93.2	93.0	93.1	93.1
Annual	91.9	92.2	92.5	92.6	92.9	93.1	92.9	91.9	90.0	87.6	85.3	83.0	81.6	79.8	79.0	78.9	79.9	81.8	84.2	86.3	88.2	89.7	90.6	91.4	91.9	87.4

VAPOUR PRESSURE

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

78 ESKDALEMUIR: $h_t = 0.9$ m.

	Hour G.M.T.																											
	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean		
	millibars																											
Jan.	6.8	6.8	6.7	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.8	7.1	7.3	7.4	7.4	7.3	7.1	7.0	6.9	6.8	6.7	6.7	6.7	6.8	6.7	6.8		
Feb.	6.5	6.4	6.5	6.5	6.5	6.6	6.6	6.5	6.6	6.7	6.9	7.1	7.3	7.2	7.1	7.0	6.9	6.7	6.6	6.6	6.5	6.5	6.5	6.5	6.5	6.7		
Mar.	6.0	6.0	5.9	5.9	5.7	5.6	5.7	5.8	6.1	6.7	7.2	7.1	7.2	7.2	7.2	7.3	7.3	7.2	6.9	6.5	6.3	6.2	6.0	6.0	6.0	6.5		
Apr.	6.1	6.1	6.0	6.0	6.0	5.9	6.1	6.6	7.0	7.1	7.1	7.2	7.3	7.3	7.3	7.4	7.4	7.4	7.3	7.0	6.7	6.5	6.3	6.2	6.1	6.7		
May	9.4	9.2	9.2	9.1	9.1	9.1	9.5	10.0	10.1	10.1	10.4	10.5	10.6	10.7	10.8	10.9	10.7	10.7	10.5	10.2	9.9	9.7	9.6	9.5	9.5	10.0		
June	11.1	10.9	10.7	10.5	10.5	10.5	11.2	11.9	12.4	12.5	12.6	13.0	13.2	13.2	13.2	13.1	13.3	13.4	13.3	13.2	12.6	12.2	11.8	11.5	11.3	12.2		
July	12.0	11.8	11.7	11.5	11.5	11.7	12.1	12.6	12.9	13.2	13.3	13.5	13.7	13.6	13.7	13.5	13.3	13.2	13.0	12.9	12.7	12.5	12.2	11.9	11.8	12.7		
Aug.	11.8	11.6	11.5	11.5	11.4	11.4	12.0	12.8	13.2	13.6	13.5	13.6	13.8	13.8	13.9	13.8	13.8	13.7	13.6	12.8	12.8	12.4	12.3	12.1	12.0	12.8		
Sept.	11.6	11.5	11.4	11.3	11.4	11.3	11.3	11.6	12.1	12.7	13.0	13.1	13.2	13.1	13.2	13.1	13.2	13.0	12.6	12.3	12.1	12.1	11.9	11.8	11.6	12.3		
Oct.	9.0	9.1	9.1	9.1	9.1	9.0	8.9	8.8	9.1	9.7	10.1	10.5	10.5	10.4	10.4	10.4	10.3	9.8	9.5	9.3	9.1	8.9	8.8	8.7	8.8	9.5		
Nov.	8.7	8.7	8.8	8.9	8.8	8.8	8.8	8.8	8.8	9.0	9.2	9.2	9.4	9.5	9.5	9.4	9.3	9.2	9.2	9.0	8.9	8.9	8.8	8.7	8.7	9.0		
Dec.	7.9	7.8	7.8	7.7	7.7	7.8	7.8	7.9	8.0	8.1	8.2	8.4	8.5	8.6	8.6	8.5	8.4	8.3	8.1	8.1	8.0	7.9	7.9	7.8	7.8	8.1		
Annual	8.7	8.6	8.5	8.5	8.5	8.5	8.6	8.9	9.1	9.4	9.6	9.8	10.0	9.9	10.0	9.9	9.9	9.9	9.5	9.3	9.1	8.9	8.8	8.7	8.7	9.2		

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.

79 ESKDALEMUIR: h_r (height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 242.0 m. + 0.4 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	13.3	5.7	7	...	...	...	...	...	...	1.2	1.7	2	...	...	...	0.9	0.2	27
2	...	...	...	...	...	...	...	...	...	22.9	10.4	35	...	...	...	1.1	4.1	...
3	...	...	...	...	...	...	...	...	...	0.6	0.4	...	...	...	...	1.4	3.5	...
4	...	...	...	0.6	0.2	3	...	...	...	3.2	0.7	...	...	...	...	0.8	4.0	...
5	7.7	10.7	...	...	...	...	...	...	...	3.7	3.4	...	...	...	...	0.1	0.5	...
6	0.2	0.2	...	0.6	2.1	...	0.7	2.5	...	2.3	1.6	4	...	...	...	...	...	...
7	0.3	0.2	...	...	...	...	...	...	...	0.2	0.3	...	...	...	...	...	...	...
8	0.6	1.4	...	10.0	11.2	...	...	...	...	1.5	1.3	11	...	...	...	...	...	...
9	...	...	...	0.2	0.3	...	...	...	...	...	...	...	...	...	...	...	...	...
10	0.3	1.6	...	0.4	0.4	...	...	...	...	...	...	...	...	...	...	0.9	2.6	...
11	5.3	15.7	...	1.9	3.7	...	...	...	...	28.9	13.9	4	...	...	...	...	...	...
12	5.5	12.0	...	0.5	0.7	...	...	...	...	4.0	3.3	8	...	...	...	0.2	0.2	...
13	2.7	6.0	...	5.6	6.7	...	...	...	...	1.7	1.3	8	...	...	...	...	...	...
14	2.3	3.3	...	0.3	0.4	...	...	...	...	0.7	1.0	...	3.1	4.0	10	8.3	7.6	17
15	0.9	1.8	...	...	...	...	...	...	...	5.5	6.6	3	1.7	1.4	2	0.9	2.7	...
16	0.5	2.7	...	2.9	5.3	...	...	...	...	4.4	6.0	16	3.7	5.5	4	4.8	3.9	6
17	2.5	7.4	...	1.4	1.0	...	...	...	...	2.0	2.6	...	2.3	2.2	8	2.1	4.4	...
18	...	...	...	1.3	1.9	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	13.1	15.2	5	0.2	0.5	...
20	...	...	...	3.9	5.7	...	...	...	...	...	...	...	1.3	4.6	6	6.4	8.8	7
21	...	...	...	2.7	2.5	7	...	...	...	...	...	...	6.3	8.7	6	5.4	6.4	23
22	1.0	1.7	...	1.5	2.2	7	...	...	...	...	...	...	5.6	3.6	48	...	...	...
23	2.0	7.3	...	6.6	8.2	18	...	...	...	...	...	...	4.4	8.3	1	...	...	...
24	4.4	5.3	...	1.7	1.5	...	...	...	...	...	...	...	0.4	2.0	...	...	...	...
25	...	...	...	7.4	10.2	...	...	...	...	...	...	...	26.3	2.4	175	0.1	0.1	...
26	4.7	4.4	...	2.3	7.4	...	5.4	1.9	6	1.0	3.3	...	4.5	3.8	3	105.8	5.5	165
27	5.3	6.8	...	...	...	...	1.2	1.0	...	19.8	12.0	7	0.2	0.1	...	0.4	0.3	5
28	0.2	0.2	...	...	...	...	4.5	5.7	3	2.7	6.6	...	...	...	...	...	...	...
29	0.8	0.8	...	...	...	...	3.0	2.0	7	4.1	7.1	7	0.8	0.9	3	...	...	...
30	16.6	7.3	9	...	...	...	6.0	5.5	5	2.1	3.3	1	...	...	...	...	...	...
31	...	...	...	...	...	...	1.6	1.3	...	...	...	...	...	...	...	...	...	...
Total	77.1	102.5	-	51.8	71.6	-	22.4	19.9	-	112.5	86.8	-	73.7	62.7	-	139.8	55.3	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	1.4	0.5	27	21.1	18.1	41	3.5	9.0	2	12.1	12.4	36	0.8	4.4	6
2	...	...	...	0.9	0.8	14	19.0	8.1	65	2.4	5.0	...	5.7	5.7	14	14.3	18.2	31
3	...	...	...	...	...	...	0.7	0.7	5	0.2	0.5	...	4.8	5.1	7	25.5	19.3	28
4	...	...	...	0.6	1.3	18	...	...	...	...	...	...	2.0	1.7	9	0.2	1.9	...
5	16.8	9.5	16	...	...	...	0.3	0.6	...	...	...	...	2.8	3.3	6	...	...	...
6	0.7	1.0	...	...	...	...	...	...	...	...	...	...	1.0	2.9	12	...	...	...
7	12.7	7.9	64	...	...	...	...	...	...	0.2	1.5	...	21.8	8.0	18	...	...	...
8	7.4	3.5	67	...	...	...	...	...	...	...	...	...	1.2	4.2	6	0.2	0.3	...
9	8.8	6.9	9	0.6	1.1	1	...	...	...	0.2	0.2	...	4.8	3.4	23	6.6	5.5	27
10	3.6	2.8	13	...	...	...	...	...	...	...	...	...	0.6	0.6	1	6.7	8.0	13
11	1.5	2.4	...	...	...	...	...	...	...	...	...	...	13.3	17.2	12	...	...	...
12	11.7	6.7	21	0.7	0.7	14	...	...	...	...	...	...	31.7	19.7	25	4.5	8.1	1
13	15.2	15.8	5	3.6	1.9	16	...	...	...	4.3	6.1	1	1.8	2.3	23	1.1	1.7	1
14	9.7	9.5	4	...	...	...	...	...	...	0.2	0.2	...	10.5	9.5	4	5.3	7.6	10
15	0.8	1.2	4	10.6	7.6	38	0.9	1.4	3	...	...	...	24.5	12.8	10	...	...	...
16	15.5	6.7	123	3.4	0.8	50	...	...	...	8.8	11.2	27	7.6	7.7	1	...	...	...
17	13.8	6.1	38	23.7	13.3	61	5.4	1.7	35	1.0	1.0	1	...	...	...	...	...	...
18	1.6	2.2	...	1.5	0.7	17	0.1	0.1	...	...	...	...	...	...	...	5.0	4.3	6
19	3.2	4.9	4	1.7	3.7	8	6.0	6.5	6	...	...	...	3.1	4.8	5	...	...	...
20	21.4	18.2	14	3.7	3.1	25	17.2	8.4	36	0.8	2.9	1	...	...	...	0.6	0.6	4
21	3.4	5.0	12	6.5	1.8	50	14.1	9.1	18	0.1	0.3	...	...	...	...	3.7	2.4	15
22	11.9	6.1	98	3.3	2.2	13	10.5	4.5	48	...	...	...	...	...	...	3.9	8.6	6
23	2.1	1.8	7	1.3	2.4	4	...	...	...	6.0	5.2	42	0.2	0.1	...	8.0	5.1	38
24	33.9	17.1	...	11.9	3.7	102	1.0	0.5	17	0.5	0.8	...	4.6	4.6	11	4.7	2.1	24
25	10.3	9.0	...	...	...	...	1.0	1.4	5	8.5	5.4	16	4.8	1.5	26	3.7	4.3	11
26	16.3	5.7	...	...	...	...	4.4	10.7	2	3.3	3.0	7	26.7	19.5	27	13.5	8.3	32
27	12.5	5.7	...	0.9	1.2	7	22.9	22.0	5	18.7	8.6	57	34.3	20.1	35	0.3	0.5	...
28	6.7	1.8	...	7.7	3.1	42	1.6	4.2	13	2.4	0.8	17	1.7	1.8	17	0.4	0.8	3
29	0.7	0.6	...	4.9	5.8	10	8.5	5.6	18	...	...	...	3.0	7.8	6	0.9	1.2	...
30	0.5	0.3	...	13.1	4.4	142	22.2	20.4	13	9.1	8.7	13	5.2	6.1	15	1.3	4.2	...
31	...	...	...	9.0	10.7	13	...	...	...	14.4	5.5	72	...	...	...	...	...	...
Total	242.7	158.4	-	111.0	70.8	-	156.9	124.0	-	84.6	75.9	-	229.8	182.8	-	111.2	117.4	-

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.	3.3	6.3	3.4	2.2	4.5	5.2	3.8	3.3	2.9	3.9	2.1	3.1	1.9	2.4	1.6	0.8	0.8	2.0	2.7	2.8	4.4	4.4	5.1	4.2	77.1
Feb.	2.0	0.5	0.7	2.3	4.3	2.7	1.7	1.0	2.4	2.9	2.2	1.3	1.8	2.7	2.3	1.9	2.1	2.9	3.9	1.4	2.6	1.7	2.6	1.9	51.8
Mar.	0.7	0.8	0.8	1.7	0.2	0.1	2.6	3.5	0.1	0.0	0.7	1.2	2.1	0.6	1.8	2.1	0.1	0.7	1.1	0.4	0.2	0.0	0.1	0.8	22.4
Apr.	3.8	4.2	6.0	1.7	2.8	1.4	0.8	3.2	3.8	1.3	2.0	5.5	8.0	7.2	9.2	6.0	7.1	7.3	7.6	5.3	7.9	4.4	3.2	2.8	112.5
May	0.4	2.3	3.2	1.6	2.6	7.6	3.0	2.3	3.0	2.6	0.3	11.6	12.4	1.6	2.1	2.1	1.6	1.1	3.8	2.3	2.6	1.6	1.0	1.0	73.7
June	2.6	0.4	0.9	0.2	0.1	0.4	0.2	0.5	0.0	0.5	0.6	0.4	9.7	80.3	15.2	6.1	5.2	5.4	4.4	0.7	1.2	3.1	0.7	1.0	139.8
July	4.3	7.2	10.3	7.7	14.5	9.3	5.7	8.7	11.8	10.6	9.3	12.8	8.9	13.7	10.7	15.5	8.5	13.8	13.9	13.8	11.1	9.6	5.1	5.9	242.7
Aug.	2.0	3.4	3.9	11.2	3.8	0.4	4.4	5.4	2.4	2.2	2.6	4.4	4.0	2.1	5.4	13.0	12.3	5.7	9.9	3.7	2.1	4.6	1.0	1.1	111.0
Sept.	13.9	13.0	11.7	10.0	2.0	3.9	3.1	7.6	7.4	7.1	3.4	3.8	4.6	5.1	6.8	6.5	12.7	6.5	4.3	9.4	3.3	1.8	3.5	5.5	156.9
Oct.	5.1	6.0	6.0	9.7	2.6	3.8	4.8	4.9	3.8	1.7	1.8	1.4	0.8	0.4	1.3	3.6	2.0	1.1	1.4	1.1	5.3	8.9	3.9	3.2	84.6
Nov.	10.4	8.3	6.7	16.5	10.9	9.4	13.6	13.7	19.7	14.9	10.9	10.8	10.6	11.1	7.5	6.1	5.6	6.3	6.1	4.3	4.5	5.4	9.5	7.0	229.8
Dec.	5.7	5.2	3.9	3.1	3.0	4.0	8.2	5.8	2.9	4.9	2.6	1.9	2.2	4.2	4.8	7.2	6.8	5.4	3.0	9.6	6.9	5.6	2.9	1.4	111.2
Annual	54.2	57.6	57.5	67.9	51.3	48.2	51.9	59.9	60.2	52.6	38.5	58.2	67.0	131.4	68.7	70.9	64.8	58.2	62.1	54.8	52.1	51.1	38.6	35.8	1413.5

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.	4.5	2.3	4.7	5.2	7.9	7.9	5.7	6.1	5.8	5.7	4.3	5.2	3.6	4.4	3.1	1.7	1.5	2.5	2.4	1.7	3.1	3.5	4.8	4.9	102.5
Feb.	1.9	0.6	1.6	2.6	5.0	4.2	3.4	2.7	3.2	4.4	4.0	2.5	3.2	2.2	2.5	2.7	2.8	3.7	3.4	2.9	3.1	3.2	3.0	2.8	71.6
Mar.	1.0	1.0	1.3	1.5	0.3	0.2	1.2	1.2	0.1	0.0	0.7	1.4	1.6	1.1	0.8	0.9	0.2	0.5	2.0	1.2	1.0	0.0	0.2	0.5	19.9
Apr.	5.2	4.3	4.6	2.5	2.9	1.4	1.3	3.1	5.4	1.7	2.5	4.6	5.3	4.4	4.9	3.5	2.7	3.5	3.0	3.6	3.1	3.4	4.3	5.6	86.8
May	1.1	4.0	4.8	4.0	4.0	4.2	4.0	4.0	5.1	2.4	0.8	1.1	1.5	1.5	2.0	1.1	2.4	2.3	2.7	2.1	3.7	2.1	0.9	0.9	62.7
June	1.9	1.3	2.6	1.1	0.1	1.0	1.0	1.2	0.0	0.6	0.6	1.4	2.7	2.0	2.9	4.2	6.1	7.2	3.7	2.8	1.4	2.4	2.6	4.5	55.3
July	6.5	6.5	6.8	6.2	8.9	9.3	6.8	7.1	6.0	4.4	6.8	6.2	4.2	6.9	5.9	6.0	5.2	5.6	8.2	6.4	7.5	6.3	7.0	7.7	158.4
Aug.	2.1	2.1	2.8	3.8	2.9	0.9	3.0	1.0	2.1	1.2	1.6	1.9	2.9	1.6	2.9	5.7	6.1	5.1	4.8	4.6	4.1	5.0	1.2	1.4	70.8
Sept.	6.3	8.1	7.8	6.7	3.6	4.0	4.0	3.6	4.0	3.6	3.0	2.8	4.0	4.6	5.7	5.3	5.9	6.2	5.7	5.5	6.5	4.0	6.0	7.1	124.0
Oct.	5.7	3.6	3.7	3.2	4.1	4.4	4.7	6.4	4.3	2.0	2.8	3.6	1.5	0.7	2.1	2.4	3.2	1.3	1.7	1.1	2.4	4.3	3.4	3.3	75.9
Nov.	8.4	8.5	8.5	10.2	7.1	9.5	9.9	10.2	10.4	12.3	8.5	7.3	4.9	5.1	3.9	6.2	5.5	7.9	7.1	6.4	5.9	4.7	6.9	7.5	182.8
Dec.	3.4	5.7	4.9	5.9	6.1	4.6	5.7	6.8	4.3	4.3	5.8	4.1	3.3	3.1	6.2	6.9	6.9	5.2	3.6	5.2	4.7	4.1	3.8	2.8	117.4
Annual	48.0	48.0	54.1	52.9	52.9	51.6	50.7	53.4	50.7	42.6	41.4	42.1	38.7	37.6	42.9	46.6	48.5	51.0	48.3	43.5	46.5	43.0	44.1	49.0	1128.1

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": March 7-25

"Partial drought": No occasions

"Dry spell": February 27-March 25

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": July 5-30; October 30-November 16

"Wet spell": No occasions

Rainfall Duration

There were 136 days on which no duration of rainfall was registered. The day with the greatest duration was September 27, when the duration was 22.0 hr., the amount falling being 22.9 mm.

Hours	0.1-1.0	1.1-2.0	2.1-6.0	6.1-12.0	>12.0
Number of days	48	33	78	52	18

Notable Falls of the Year

The greatest amount in a 60-min. period was 79.9 mm. which was recorded between 13h. and 14h. on June 26: on this occasion 5 mm. of rain fell in 2 min. Falls of 5 mm. in 1 hr. or less occurred on 11 days.

(The total fall for June 26 was 105.8 and duration 5.5 hrs. This occurred during a thunderstorm when extensive flooding of the Esk valley resulted).

Details of the greatest continuous falls are as follows

	June 26	July 24-25	November 11-12
Amount (mm.)	98.2	42.6	37.3
Duration of rainfall (hr.)	4.6	23.7	26.8

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 175 mm./hr. at 12h.10m. on May 25. The maximum rate exceeded 50 mm./hr. 5 times on June 26, twice on each of May 25, July 7, 8, 16, 22, September 2 and once on each of August 17, October 27 and October 31.

DURATION OF BRIGHT SUNSHINE AND PERCENTAGE OF POSSIBLE FOR EACH DAY

57

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

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	
1	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	
2	...	...	4.2	49	7.7	72	5.0	38	5.6	37	12.6	74	13.8	80	9.3	58	...	...	...	...	...	...	...	...
3	...	...	5.1	59	0.7	7	6.4	49	11.4	75	2.2	13	9.6	55	7.5	47	3.7	27	...	...	0.6	7	...	...
4	1.7	24	5.9	67	...	...	5.0	38	1.2	8	1.2	7	2.6	17	8.2	52	2.9	21	3.2	28	0.6	7	...	...
5	6.1	85	5.8	66	3.9	36	2.0	15	2.7	17	...	...	7.4	43	4.8	30	1.4	10	5.1	45	5.7	63	...	...
6	...	...	4.1	46	2.7	25	0.5	4	6.4	41	8.3	49	0.2	1	1.8	11	...	...	3.9	35	0.3	3	2.5	34
7	5.0	70	4.1	46	0.4	4	1.9	14	9.5	61	6.4	41	5.7	33	0.8	5	...	...	4.6	41	0.6	7	...	...
8	3.4	47	6.6	73	2.3	21	5.3	39	8.2	52	3.7	22	7.2	42	0.6	4	4.8	36	1.7	15	...	...	...	...
9	...	...	...	...	6.8	61	1.3	10	7.9	50	2.4	14	2.1	12	10.2	66	8.4	63	...	...	...	...	...	...
10	0.2	3	0.6	7	3.1	28	1.6	12	13.0	83	8.0	47	4.9	29	...	...	0.5	4	0.2	2	2.6	30	...	...
11	...	...	...	...	2.6	23	8.5	62	3.4	22	...	...	2.0	12	9.0	59	7.9	60	...	...	1.3	15	...	...
12	...	...	1.1	12	3.6	32	...	...	3.6	23	14.6	85	1.3	8	7.2	47	4.0	31	4.2	39	...	...	1.3	18
13	...	...	3.2	34	...	...	6.4	46	...	...	4.0	23	0.4	2	6.0	39	7.6	59	0.2	2	...	...	...	...
14	1.1	15	...	...	...	...	4.9	35	4.7	29	2.2	13	...	...	0.5	3	6.7	52	0.1	1	0.4	5	...	...
15	0.5	7	...	...	3.3	28	9.0	64	...	...	...	...	0.2	1	1.7	11	4.3	34	5.8	55	...	...	...	...
16	...	...	...	...	9.0	77	...	...	4.6	29	...	...	1.6	10	1.1	7	...	...	1.6	15	...	...	...	...
17	1.7	22	...	...	5.7	48	0.5	4	1.1	7	...	...	0.6	4	6.1	41	0.5	4	...	...	2.1	25	5.2	74
18	...	...	1.2	12	3.4	29	...	...	3.6	22	...	...	6.1	36	...	...	0.1	1	8.4	81	3.0	37	...	...
19	5.8	75	...	...	8.2	69	0.5	4	7.2	44	2.0	12	4.8	29	6.7	45	1.5	12	7.6	74	0.6	7	...	...
20	...	...	1.4	14	...	...	2.4	17	...	...	2.5	14	4.2	25	0.6	4	0.3	2	7.5	73	...	...	5.7	81
21	0.9	11	...	...	5.3	44	11.3	78	4.3	26	1.7	10	...	...	1.6	10	0.3	2	...	...	...	...	...	...
22	...	...	5.0	50	8.1	69	12.6	87	6.1	37	...	...	2.9	17	5.5	38	1.0	8	0.8	8	...	...	2.8	40
23	...	...	4.8	47	8.1	66	12.9	89	6.0	37	11.8	68	3.0	18	5.6	39	3.1	25	...	...	...	...	1.0	14
24	...	...	...	...	5.5	45	10.8	74	...	...	7.5	43	5.6	34	0.3	2	5.1	42	...	...	5.2	66	...	...
25	...	...	...	...	8.0	65	7.0	50	2.3	14	10.9	63	...	...	2.8	19	0.3	2	0.6	6	...	...	1.5	21
26	7.2	88	...	...	7.1	65	9.6	65	3.7	22	7.6	44	1.7	10	6.3	44	0.1	1	4.4	45	3.0	39	5.3	76
27	...	...	...	...	6.1	49	0.1	1	3.4	20	5.3	31	3.7	23	8.8	62	...	...	0.1	1	...	...	...	...
28	...	...	5.2	50	2.5	20	...	...	9.5	57	2.4	14	2.1	13	1.2	8	...	...	5.5	57	...	...	0.4	6
29	...	...	6.7	63	3.0	24	...	...	5.6	33	6.0	35	3.6	22	8.2	58	6.3	54	5.4	57	2.3	30	2.4	34
30	...	...	...	...	3.5	27	7.3	48	6.5	39	9.6	55	3.8	24	0.7	5	4.0	34	3.8	40	...	...	4.6	65
31	...	...	...	...	0.2	2	9.2	61	8.8	52	9.0	52	6.6	41	4.5	32	...	...	0.8	9	0.3	4	...	...
Mean	1.20	16	2.32	24	4.06	34	4.73	34	5.14	32	4.73	27	3.65	22	4.13	28	2.49	20	2.44	23	0.95	11	1.22	17	
Annual mean													3.10	25											

DURATION OF BRIGHT SUNSHINE
Monthly and annual totals between exact hours, local apparent time84 ESKDALEMUIR: h_s = 1.5 m.

	Hour L.A.T.		5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	3-4	4-5	hours																	
Jan.	-	-	-	-	...	1.2	4.9	6.5	6.3	6.3	6.6	4.5	1.0	...	-	-	-	-	37.3	16
Feb.	-	-	-	3.0	7.0	9.8	10.9	11.9	10.3	7.1	4.2	0.8	...	-	-	-	65.0	24
Mar.	-	-	0.5	2.9	8.6	12.6	14.0	15.6	17.6	17.3	16.3	14.7	5.9	...	-	-	126.0	34
Apr.	-	...	2.8	6.4	9.1	12.6	13.5	13.2	12.7	14.0	14.5	13.5	11.0	10.9	7.2	0.6	...	-	142.0	34
May	...	0.7	3.3	7.8	8.8	12.7	12.5	13.7	13.0	13.7	13.8	14.4	12.8	13.5	12.5	5.8	0.4	...	159.4	32
June	...	1.0	6.9	9.1	10.7	11.2	11.0	12.7	11.5	9.9	9.5	9.4	9.4	10.1	7.9	9.4	2.2	...	141.9	27
July	...	0.1	3.5	5.5	7.1	9.1	7.8	9.0	9.4	9.1	10.0	12.1	10.2	8.6	7.5	4.0	0.3	...	113.3	22
Aug.	-	...	0.8	6.2	8.9	11.3	11.9	11.2	10.7	10.4	13.0	12.4	11.6	10.6	6.6	2.4	...	-	128.0	28
Sept.	-	-	3.1	5.4	8.3	8.7	6.4	8.9	10.1	10.2	7.5	5.0	1.2	...	-	-	74.8	20
Oct.	-	-	-	...	1.9	5.7	8.9	9.6	8.9	9.2	9.7	9.7	9.0	2.9	...	-	-	-	75.5	23
Nov.	-	-	-	-	...	0.3	4.1	3.9	4.2	4.0	6.3	4.5	1.3	...	-	-	-	-	28.6	11
Dec.	-	-	-	-	-	...	2.9	8.1	8.0	7.6	6.6	4.7	...	-	-	-	-	-	37.9	17
Annual	...	1.8	17.3	35.0	50.1	75.4	101.4	119.0	116.0	120.6	128.0	119.8	94.3	77.1	48.8	22.2	2.9	...	1129.7	25

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	6.3	24	7.1	24	0.8	7	7.0	17	1.1	11	6.6	19	0.7	5	1.8	15	7.7	19	8.9	20	5.6	16	6.6	21
2	0.6	6	4.3	15	0.8	6	5.9	23	1.3	8	5.9	17	2.1	10	1.1	13	6.2	21	4.4	18	2.8	15	8.2	22
3	2.5	10	2.3	12	1.2	7	3.4	13	0.8	7	5.4	19	1.0	8	1.3	9	3.1	21	1.5	10	1.9	11	5.6	22
4	0.4	5	4.3	24	3.0	9	1.8	19	0.5	6	1.3	10	2.3	11	6.1	23	0.3	6	0.3	5	4.6	21	0.3	6
5	3.4	16	2.9	14	0.7	5	2.6	11	1.4	9	1.3	9	3.9	15	4.4	19	1.1	9	0.5	6	0.8	6	0.6	3
6	3.8	15	2.3	13	1.7	13	3.2	13	2.1	10	0.3	6	3.4	14	2.0	12	0.9	6	1.4	15	5.6	19	0.8	6
7	2.3	15	2.1	11	0.7	9	3.4	15	2.4	8	0.3	5	5.3	18	1.2	7	0.5	4	0.3	7	9.4	24	1.6	9
8	1.5	10	1.8	11	0.6	9	4.8	14	1.0	6	0.3	8	5.0	15	0.6	5	1.7	13	0.7	7	5.1	18	0.2	4
9	0.3	6	2.2	16	1.2	8	4.2	15	2.0	9	0.7	6	1.8	12	2.2	9	2.6	17	5.0	15	1.1	8	1.4	8
10	0.2	5	5.3	19	3.9	17	3.2	13	2.0	8	0.2	4	0.9	8	2.9	16	2.7	16	6.2	17	5.5	16	3.4	11
11	3.5	12	6.7	21	2.1	13	7.9	31	2.3	10	2.3	11	2.3	13	2.9	13	5.6	25	2.8	16	9.4	23	1.7	11
12	6.3	17	7.1	26	0.2	6	2.3	12	3.0	9	0.9	9	2.7	8	1.8	15	3.1	24	0.2	4	7.0	20	3.4	13
13	2.9	11	1.7	10	1.2	7	3.2	18	3.7	12	1.3	10	2.6	12	0.7	6	0.6	7	4.1	16	1.5	8	1.5	8
14	3.7	12	1.6	13	1.3	8	5.8	21	4.8	16	0.6	5	4.4	15	4.1	17	3.6	14	3.1	14	0.3	3	2.7	11
15	3.8	15	0.8	7	2.3	11	2.8	13	7.6	21	1.0	6	4.2	14	2.8	11	2.1	11	0.9	9	5.6	16	0.4	5
16	2.6	12	2.7	11	1.0	7	3.1	16	11.2	25	0.2	4	1.7	9	2.5	13	3.5	16	0.0	2	3.9	15	1.5	7
17	5.9	17	3.7	17	2.5	11	4.7	19	7.9	20	2.5	11	1.3	9	5.9	16	1.0	6	0.5	8	0.1	11	1.0	8
18	1.4	12	5.0	15	2.7	11	2.2	14	1.5	9	3.5	13	2.2	13	3.1	14	1.5	9	0.1	4	3.5	11	0.9	15
19	1.3	13	1.0	7	2.7	9	0.5	5	4.3	23	3.2	13	4.5	14	2.4	12	3.8	17	0.2	6	4.6	15	1.5	14
20	2.4	11	6.5	23	0.3	4	0.8	7	2.1	11	4.5	17	4.3	17	1.9	11	5.4	18	2.6	11	4.3	15	0.5	6
21	1.5	9	7.3	24	0.5	5	2.0	12	2.9	12	2.0	9	6.4	17	2.5	10	6.2	19	1.7	8	3.6	12	4.5	22
22	3.2	10	7.7	21	0.9	9	1.8	9	4.6	16	2.6	10	5.9	17	2.8	15	4.2	14	0.0	1	1.2	6	2.5	12
23	4.3	10	8.7	23	1.5	9	2.5	11	4.5	15	2.5	12	3.6	15	2.5	11	0.8	7	2.7	17	1.7	10	7.2	23
24	4.9	17	9.3	20	1.5	10	2.7	14	1.1	7	3.5	14	5.7	19	3.8	13	0.8	8	1.9	13	2.9	11	6.7	22
25	1.2	10	9.2	22	2.5	13	0.8	8	2.3	18	0.5	9	5.0	14	3.2	19	2.4	10	0.7	9	4.1	15	4.5	21
26	4.3	20	6.0	18	5.6	20	1.0	9	3.9	17	1.5	23	6.9	21	4.2	16	4.8	14	5.6	23	7.8	23	3.7	25
27	10.4	27	0.5	6	4.7	15	5.7	19	2.6	15	2.2	9	3.7	12	2.7	11	2.9	13	4.2	23	0.8	9	2.0	15
28	9.9	27	1.4	10	9.7	23	2.1	15	1.8	13	2.6	11	3.0	12	2.3	15	3.1	14	1.5	13	3.6	15	2.8	15
29	5.1	20			8.5	28	4.9	22	5.2	21	2.1	9	3.2	12	1.3	11	6.1	20	1.2	10	6.6	19	0.6	6
30	7.6	20			3.5	14	2.9	21	4.6	21	1.7	8	1.4	10	5.5	21	9.6	22	2.7	12	6.1	19	1.1	7
31	10.7	33			4.9	17			2.4	19			0.1	3	2.2	16			3.7	17			0.2	5

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.	3.9	3.7	3.5	3.4	3.1	3.3	3.7	3.6	3.6	3.7	3.9	4.3	4.3	4.5	4.3	4.1	4.1	4.1	3.8	3.6	3.8	3.9	3.6	3.7	3.8
Feb.	4.1	4.4	4.6	4.9	4.9	5.0	4.6	4.4	4.5	4.5	5.0	5.1	5.0	4.7	4.7	4.5	4.2	3.9	3.4	3.1	3.4	3.6	3.6	3.9	4.3
Mar.	1.4	1.7	1.7	1.8	1.9	1.9	1.9	1.8	2.0	2.5	3.3	3.5	3.7	3.9	4.1	3.9	3.5	3.1	2.5	1.5	1.7	1.4	1.5	1.6	2.4
Apr.	2.2	2.0	2.1	2.4	2.5	2.3	2.7	3.3	4.1	4.6	4.8	4.5	4.9	4.8	4.9	4.9	4.7	4.1	3.5	2.4	2.2	2.0	1.7	1.9	3.3
May	2.1	2.1	2.0	2.1	2.1	2.5	2.8	3.0	3.7	4.1	4.1	4.3	4.1	4.1	4.0	4.3	4.1	3.9	3.6	3.0	2.6	2.5	2.2	2.4	3.2
June	1.4	1.4	1.4	1.5	1.3	1.4	1.8	2.1	2.5	2.5	2.6	2.8	2.9	3.1	2.8	2.9	3.0	2.5	2.4	2.0	1.8	1.5	1.5	1.4	2.1
July	2.1	2.1	1.9	1.7	1.9	2.2	2.4	3.0	3.3	3.7	4.1	4.5	4.7	4.7	4.8	4.9	4.8	4.3	3.8	3.2	3.0	2.7	2.5	2.2	3.3
Aug.	1.4	1.4	1.3	1.4	1.4	1.6	1.9	2.4	3.1	4.1	4.2	4.2	4.3	4.3	4.7	4.4	3.8	3.5	2.9	2.4	2.2	1.8	1.6	1.6	2.7
Sept.	3.0	2.9	2.7	2.7	2.8	2.8	2.5	3.0	3.3	3.7	3.9	4.0	3.9	4.0	4.0	3.9	3.6	3.2	2.9	3.2	3.2	3.1	3.2	3.0	3.3
Oct.	2.0	2.0	2.0	1.9	1.9	1.7	1.6	1.7	2.1	2.7	2.8	3.0	3.2	3.4	3.4	3.2	2.6	2.2	1.9	1.7	2.0	1.7	1.6	1.6	2.2
Nov.	3.3	3.3	3.4	3.5	4.0	4.2	4.1	4.2	4.4	4.7	4.9	4.9	4.8	4.7	4.3	4.1	4.0	3.9	3.8	3.5	3.6	3.7	4.0	3.5	4.0
Dec.	2.8	2.4	2.6	2.4	2.5	2.5	2.6	2.5	2.7	2.6	2.7	2.9	3.2	2.9	2.8	2.6	2.4	2.3	2.2	2.2	2.2	2.5	2.5	2.6	2.6
Annual	2.5	2.4	2.4	2.5	2.5	2.6	2.7	2.9	3.3	3.6	3.9	4.0	4.1	4.1	4.1	4.0	3.7	3.4	3.1	2.7	2.6	2.5	2.5	2.4	3.1

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	6	27	166	317	234	0	340	16	31 15	33	31 09 25
Feb.	-	0	7	36	197	263	176	0	220	15	25 03	26	12 11 40
Mar.	-	0	2	11	92	282	359	0	240	14	28 05	28	29 12 20
Apr.	-	0	3	11	160	295	254	0	200	16	11 10	31	11 08 45
May	-	0	3	20	97	374	253	0	210	15	16 12	25	16 11 15
June	-	0	0	0	81	284	355	0	350	9	1 16	23	26 13 45
July	-	0	1	2	120	405	217	0	210	12	26 16	21	26 15 55
Aug.	-	0	0	0	94	380	270	0	200	10	14 15	23	4 16 15
Sept.	-	0	4	10	147	300	263	0	220	13	30 11	25	11 22 50
Oct.	-	0	3	8	88	235	413	0	150	13	27 01	23	27 00 45
Nov.	-	0	6	25	204	277	214	0	220	15	6 22	24	7 08 35
Dec.	-	0	4	12	107	261	364	0	200	13	23 18	25	26 16 55
Year	-	0	39	162	1553	3673	3372	0	200	16	Apr. 11 10	33	Jan. 31 09 25

88 ESKDALEUIR

	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.
	<i>degrees Absolute</i>											
1	75.7 78.3	77.4 78.3	78.6 78.1	78.7 78.9	80.2 79.6	85.0 82.2	88.8 84.0	87.2 85.2	86.8 85.8	85.3 85.1	81.8 83.7	80.9 82.1
2	75.8 78.2	76.8 78.3	78.1 78.2	78.8 79.0	80.4 79.7	84.7 82.3	89.2 84.3	87.2 85.2	86.9 85.8	85.6 85.1	81.7 83.5	80.9 82.1
3	75.7 78.2	76.4 78.2	77.7 78.3	78.9 79.0	81.2 79.7	84.4 82.3	89.3 84.3	87.2 85.2	86.7 85.8	85.5 85.0	81.5 83.5	81.2 82.1
4	75.4 78.2	76.4 78.2	77.7 78.3	78.7 79.0	82.0 79.8	84.0 82.4	88.8 84.6	88.5 85.2	86.4 85.8	85.5 85.1	81.4 83.4	81.7 82.0
5	75.4 78.2	76.0 78.4	77.7 78.3	78.2 78.9	82.5 79.8	83.7 82.5	88.8 84.7	87.8 85.2	86.4 85.6	85.0 85.1	81.2 83.3	81.2 82.1
6	75.3 78.2	76.0 78.2	77.6 78.3	77.8 78.9	82.6 80.0	84.0 82.4	88.4 84.8	87.8 85.3	86.6 85.6	84.7 85.1	80.8 83.2	80.8 82.0
7	75.3 78.1	75.9 78.2	77.0 78.4	77.8 78.9	82.6 80.2	84.2 82.3	88.4 84.9	88.8 85.3	86.9 85.6	84.7 85.1	81.0 83.4	80.8 82.1
8	75.2 78.1	75.5 78.1	77.0 78.4	78.0 79.0	82.6 80.1	84.9 82.3	88.1 85.0	88.2 85.4	87.0 85.6	84.9 85.0	81.1 83.0	80.7 82.0
9	75.3 78.1	75.6 78.1	77.3 78.4	78.2 78.9	83.6 80.3	85.1 82.5	87.6 85.0	88.9 85.4	87.2 85.3	84.9 85.0	81.0 83.0	80.7 82.0
10	75.3 78.1	75.5 78.0	77.5 78.3	78.2 78.9	83.8 80.4	84.8 82.3	87.8 84.9	88.7 85.5	87.2 85.5	84.8 85.0	80.9 82.9	80.8 82.0
11	75.2 77.8	75.4 78.0	77.8 78.3	78.6 78.9	83.4 80.5	85.4 82.5	87.8 84.7	88.6 85.6	86.7 85.5	84.8 84.9	81.0 83.0	80.9 82.0
12	75.2 77.8	75.4 78.0	78.1 78.4	78.6 78.9	83.4 80.7	85.8 82.4	87.4 85.1	88.5 85.6	86.4 85.6	84.4 84.9	81.4 83.1	81.0 81.7
13	75.2 77.8	75.3 77.9	78.3 78.4	78.9 78.8	82.8 80.7	86.0 82.7	87.6 85.1	88.8 85.6	86.4 85.6	84.4 84.9	81.2 82.9	80.7 81.5
14	75.4 77.9	75.3 77.8	78.3 78.3	78.9 78.9	82.6 80.9	86.1 82.9	87.5 85.1	88.4 85.7	86.4 85.6	84.0 84.8	81.2 82.9	80.7 81.5
15	75.6 77.9	75.1 77.6	78.1 78.3	78.9 79.0	82.4 81.0	85.8 82.9	87.0 85.1	88.1 85.8	86.4 85.6	83.5 84.8	81.4 82.5	80.6 81.5
16	75.4 77.9	75.2 77.6	78.0 78.5	78.7 79.0	82.6 81.1	85.7 83.0	86.9 85.0	88.0 85.6	86.4 85.6	83.5 84.8	81.6 82.5	80.4 81.5
17	76.9 77.9	75.3 77.6	78.1 78.5	78.7 79.0	82.8 81.1	85.5 83.0	86.7 85.1	88.0 85.9	86.3 85.5	83.2 84.8	81.6 82.5	79.6 81.4
18	76.9 77.9	76.1 77.7	78.0 78.5	78.8 79.0	83.0 81.1	85.4 83.2	87.2 85.2	87.7 85.8	86.5 85.5	82.8 84.9	81.0 82.5	79.3 81.3
19	76.6 78.0	76.5 77.6	78.1 78.5	78.9 78.9	83.3 81.1	85.5 83.1	87.5 85.1	87.4 85.7	86.2 85.4	83.4 84.8	81.1 82.5	79.5 81.6
20	76.6 77.9	77.0 77.6	78.1 78.6	79.3 79.0	83.0 81.1	85.3 83.2	87.6 85.1	87.4 85.7	86.2 85.3	83.2 84.9	81.1 82.5	79.0 81.6
21	76.3 78.0	77.4 77.7	78.1 78.6	80.0 78.9	83.1 81.1	85.4 83.3	87.6 85.1	87.4 85.9	86.0 85.3	82.8 84.9	81.3 82.5	79.0 81.6
22	76.4 78.0	77.9 77.8	78.3 78.5	80.5 79.0	83.6 81.2	85.6 83.5	87.6 85.1	87.5 85.8	85.8 85.3	83.0 84.1	81.4 82.5	79.4 81.6
23	76.5 78.0	78.1 77.7	78.3 78.6	80.8 79.1	84.2 81.3	86.4 83.7	87.6 85.1	87.5 85.6	85.8 85.3	83.2 84.3	81.2 82.5	79.2 81.5
24	76.6 78.0	78.3 77.7	78.4 78.6	81.5 79.4	84.1 81.3	87.2 83.5	87.3 85.1	87.5 85.4	85.8 85.3	82.8 83.9	81.2 82.4	79.5 81.3
25	76.8 78.0	78.3 77.8	78.9 78.6	81.0 79.3	84.8 81.6	87.8 83.6	87.2 85.1	87.4 85.9	85.8 85.3	82.8 84.0	81.2 82.4	79.1 81.2
26	76.5 78.0	78.6 77.9	79.1 78.7	80.7 79.3	85.0 81.6	88.2 83.4	87.2 85.1	87.4 85.3	85.8 85.3	82.8 83.9	81.2 82.4	78.8 81.1
27	76.4 78.0	78.8 78.0	78.9 78.7	80.4 79.4	84.8 81.3	87.6 83.7	87.2 85.2	87.4 85.3	85.5 85.2	82.8 83.9	81.2 82.3	78.7 81.1
28	76.8 78.0	78.7 78.0	78.7 78.8	80.0 79.5	84.9 82.0	87.6 83.7	87.2 85.2	87.4 85.4	85.5 85.2	82.7 83.9	81.2 82.4	78.7 81.1
29	76.9 78.0		78.6 78.8	79.9 79.5	84.7 81.8	87.8 83.9	87.0 85.2	87.1 85.7	85.3 85.2	82.5 83.8	81.2 82.2	78.5 81.1
30	77.4 78.0		78.7 78.9	80.1 79.6	85.2 81.8	88.2 84.0	87.0 85.2	87.0 85.8	85.2 85.1	82.2 83.8	81.2 82.1	78.2 81.0
31	77.8 78.1		78.6 78.9		85.0 81.9		87.2 85.2	87.0 85.8		81.9 83.7		78.2 80.9
Mean	76.1 78.0	76.6 77.9	78.1 78.5	79.2 79.1	83.2 80.8	85.8 83.0	87.7 85.0	87.8 85.5	86.3 85.5	83.8 84.6	81.2 82.8	80.0 81.6
Year							82.2 81.9					

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

89 ESKDALEUIR

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	<i>degrees Absolute</i>											
1	73.5	70.8	66.3	72.0	67.3	76.1	81.2	73.9	84.2	86.5	76.0	75.2
2	64.7	70.4	63.2	74.5	71.1	75.5	79.2	74.0	83.2	86.0	76.2	80.9
3	63.2	70.4	69.1	69.4	80.7	76.2	81.7	75.2	80.6	82.9	68.3	83.1
4	62.0	63.6	72.2	66.4	75.5	75.3	77.6	83.1	74.2	69.8	75.0	77.1
5	63.0	69.0	71.0	67.5	77.2	75.5	83.8	81.3	(80.6)	69.3	70.0	67.7
6	68.2	69.9	61.4	72.0	79.9	68.9	83.1	82.9	86.0	72.5	68.3	73.8
7	72.6	65.1	69.7	65.0	76.6	76.4	84.2	86.1	83.7	79.8	79.3	78.1
8	64.1	61.4	64.6	73.7	75.3	76.7	80.2	80.2	72.0	80.7	77.2	73.1
9	73.4	68.8	71.2	73.7	69.7	76.4	80.6	82.7	82.3	77.4	74.7	77.7
10	73.0	65.6	71.4	62.7	77.0	80.3	82.0	78.0	77.2	83.1	68.0	78.0
11	74.5	69.9	71.3	73.4	75.9	76.2	72.1	77.6	79.1	80.7	79.0	76.0
12	77.3	69.7	72.4	74.3	75.7	76.4	83.8	77.7	81.0	69.9	80.8	78.6
13	76.4	68.5	74.6	71.2	75.5	79.8	84.0	86.0	73.9	79.9	71.0	74.8
14	72.5	72.2	74.9	72.0	75.4	82.8	83.9	76.0	76.5	72.5	74.0	78.4
15	76.9	70.5	67.8	64.8	79.4	82.2	81.2	85.8	78.1	69.0	79.5	72.4
16	75.1	73.3	64.9	70.1	82.1	83.0	73.2	78.9	81.9	74.0	81.8	69.1
17	77.1	73.3	69.1	76.0	80.9	80.0	81.1	80.0	80.1	72.5	62.4	69.6
18	68.1	77.7	69.0	77.8	76.0	80.8	80.6	77.0	79.4	68.3	70.0	77.1
19	68.7	72.0	69.6	71.0	79.7	80.3	82.4	76.0	77.3	69.8	79.4	73.4
20	74.2	72.0	72.1	71.3	79.1	74.8	82.4	83.1	81.9	70.0	79.4	66.7
21	67.1	79.5	65.9	61.8	80.2	83.0	84.9	80.6	81.4	71.0	79.3	76.1
22	74.2	72.8	66.7	70.8	80.1	85.5	83.2	81.7	82.6	79.7	78.8	72.0
23	76.0	77.6	67.8	60.8	83.1	81.0	82.5	77.6	75.5	81.1	72.7	74.2
24	75.8	78.5	68.9	74.8	83.6	86.0	79.1	84.1	76.0	68.4	79.2	73.2
25	66.8	79.0	70.3	67.4	84.5	85.8	84.3	81.4	72.4	75.8	76.4	73.2
26	64.1	78.0	71.1	65.7	78.1	86.0	82.0	82.0	83.8	71.0	75.1	69.0
27	76.3	74.8	66.8	72.6	78.8	85.6	80.9	78.0	83.5	76.0	78.5	72.7
28	80.3	73.5	73.1	73.8	73.5	84.2	80.0	80.4	76.8	71.2	76.3	75.3
29	80.0		73.4	75.2	81.4	83.1	74.9	72.3	78.7	71.3	78.0	66.0
30	77.1		73.1	71.0	78.0	81.1	78.0	80.2	79.7	72.8	77.1	74.3
31	71.9		72.2		76.0		74.3	80.7		69.7		66.0
Mean	71.9	71.8	69.5	70.4	77.7	79.8	80.7	79.8	79.4	74.9	75.4	74.0
Year							75.5					

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 7h. 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.

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	JANUARY, factor 4.67				FEBRUARY, factor 4.48				MARCH, factor 4.46			
	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	Z+	35	195	165	160	150	155	275	95	185	500	125
2	180	75	65	115	125	125	140	200	65	70	410	100
3	90	130	180	205	130	170	200	370	235	335	Z+	300
4	150	120	135	370	225	205	190	300	540	395	340	335
5	265	Z-	Z-	-60	295	285	285	310	420	410	185	250
6	320	435	390	115	340	Z+	225	365	240	310	370	30
7	Z+	205	Z+	Z+	215	200	205	205	90	120	170	180
8	195	-	340	400	70	145	260	90	170	Z+	255	15
9	150	30	135	285	200	140	315	170	35	115	175	355
10	125	55	75	40	260	185	Z+	145	160	115	165	190
11	230	305	145	325	45	Z±	Z-	Z-	175	125	200	435
12	305	185	235	35	Z±	315	75	235	185	115	130	235
13	Z-	100	125	185	205	165	90	-	160	180	235	485
14	180	Z+	330	185	-	-	70	70	220	165	170	175
15	150	125	260	335	90	-	190	-	210	Z+	425	315
16	180	270	240	165	-	-	-	-	380	235	375	490
17	265	280	220	335	-	-	240	190	215	265	210	455
18	110	130	320	280	70	145	70	30	200	365	305	320
19	125	130	250	235	195	100	120	345	200	190	145	290
20	130	265	270	435	215	20	105	130	105	285	290	370
21	280	260	390	160	65	70	105	315	295	265	225	225
22	215	55	200	115	45	65	110	160	230	235	170	495
23	160	260	195	75	55	45	150	115	200	260	285	225
24	170	180	95	410	115	350	115	65	265	395	405	400
25	Z+	280	275	325	45	75	380	145	Z+	Z+	305	405
26	160	350	95	240	30	105	155	175	225	Z-	155	295
27	85	5	85	130	325	275	185	180	215	135	125	125
28	80	80	110	120	80	145	295	295	95	-55	Z-	125
29	120	65	180	170					Z-	Z±	Z±	205
30	260	180	200	Z-					185	160	Z-	220
31	105	145	130	160					75	155	Z±	310
(a)	177	169	202	218	150	158	177	203	203	223	259	274
(b)	169	171	191	211	140	148	186	204	213	224	253	286
Mean	(a) 191		(b) 185		(a) 172		(b) 169		(a) 240		(b) 244	

	APRIL, factor 4.61				MAY, factor 5.03				JUNE, factor 5.02			
	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	105	Z+	155	135	95	115	60	50	70	165	210	160
2	Z±	Z-	220	Z-	50	55	120	170	Z-	90	90	Z-
3	Z+	495	285	330	90	170	65	40	-10	110	-70	-135
4	75	150	Z+	235	45	110	95	60	110	100	60	15
5	490	Z±	350	290	75	90	85	80	45	205	125	100
6	165	145	155	205	105	120	155	55	35	165	95	140
7	345	195	255	185	50	90	180	105	135	130	110	135
8	225	255	Z+	Z-	75	100	170	135	40	105	85	55
9	120	145	190	290	155	165	130	180	135	125	95	180
10	95	240	285	195	80	95	120	195	30	Z+	80	90
11	290	105	Z-	-30	45	75	150	115	155	150	120	175
12	0	155	150	10	55	90	100	125	105	215	65	-10
13	10	-30	70	170	100	100	185	115	105	195	80	110
14	115	Z+	135	125	135	45	155	Z±	75	140	Z±	255
15	155	135	Z-	20	325	240	Z±	185	225	190	60	140
16	20	-25	40	0	85	Z+	45	140	130	55	175	195
17	45	5	225	315	Z-	Z-	120	170	30	100	215	205
18	160	100	150	130	45	215	135	240	45	235	210	230
19	95	145	75	175	-110	Z±	55	-45	135	145	245	240
20	55	130	135	140	30	225	225	95	40	35	120	200
21	135	215	190	90	-10	Z-	185	85	130	90	65	110
22	275	190	240	140	135	Z-	185	10	165	265	190	225
23	90	170	270	80	215	375	Z+	175	160	225	190	205
24	125	135	150	215	140	120	265	150	175	405	170	305
25	315	155	100	205	150	295	Z±	285	105	145	Z±	65
26	55	25	115	90	220	185	150	170	45	100	Z±	210
27	110	85	Z-	Z±	200	210	Z-	305	180	345	170	230
28	125	135	125	210	155	140	260	230	255	240	145	190
29	Z-	100	115	-15	120	185	250	-20	130	345	175	240
30	95	150	110	130	60	90	110	205	365	235	170	250
31					100	115	130	115				
(a)	144	157	172	164	112	147	144	142	120	174	135	172
(b)	122	125	159	157	90	126	150	124	124	183	131	156
Mean	(a) 159		(b) 141		(a) 136		(b) 123		(a) 150		(b) 149	

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 4.62				AUGUST, factor 4.60				SEPTEMBER, factor 4.75			
	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	255	125	150	190	135	195	60	205	Z-	290	140	415
2	200	290	290	350	140	130	90	15	Z-	280	Z-	185
3	230	45	75	140	20	255	130	135	135	140	180	230
4	155	145	175	145	145	145	60	145	140	115	90	115
5	115	195	55	Z-	115	85	100	180	25	15	40	-10
6	145	165	130	105	55	70	55	140	-	145	135	215
7	35	100	165	120	100	180	185	335	175	70	170	165
8	65	40	110	310	150	375	200	90	330	330	185	15
9	Z-	215	Z+	Z±	50	Z-	180	110	85	45	35	20
10	330	255	Z-	300	100	225	-	-	5	155	160	205
11	130	175	145	285	80	125	145	95	10	45	75	45
12	Z±	Z+	110	345	20	Z±	125	45	90	65	145	25
13	140	Z-	-130	-160	95	40	-25	295	-	-	-	-
14	Z-	140	70	135	70	125	130	115	-	-	140	25
15	175	205	160	175	110	Z-	165	170	-5	50	-75	130
16	150	80	375	Z±	-	-	130	170	15	45	200	140
17	15	295	210	Z±	20	Z-	-	-10	10	10	135	Z±
18	90	Z+	175	130	35	180	Z+	180	15	195	-	-
19	95	160	135	245	235	165	170	125	-	-	-	-
20	50	-10	-150	270	95	320	Z±	115	-	-	-	-
21	275	400	200	Z-	225	165	-	-	-	-	Z±	40
22	175	Z-	Z-	-	-	-	-	160	85	220	105	145
23	200	75	105	200	100	95	-	-	285	275	165	120
24	135	Z-	-85	270	-	-	Z-	-	40	Z-	-105	70
25	-15	295	265	90	200	225	230	185	50	170	25	370
26	Z±	195	85	260	100	150	175	210	180	110	105	180
27	Z+	Z-	Z±	260	260	200	155	195	165	240	85	Z-
28	120	160	Z±	190	Z-	150	210	270	Z-	185	Z-	235
29	110	220	115	110	175	190	190	125	65	190	Z-	250
30	45	160	155	255	355	300	215	Z-	70	Z-	-50	125
31	90	190	100	95	165	195	-	-				
(a)	141	180	155	207	124	179	148	159	99	147	122	151
(b)	123	149	127	192	130	166	128	162	107	123	107	126
Mean	(a) 171		(b) 148		(a) 153		(b) 147		(a) 130		(b) 116	

	OCTOBER, factor 4.61				NOVEMBER, factor 4.31				DECEMBER, factor 4.32			
	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	135	170	60	160	Z-	Z-	5	285	175	110	25	85
2	265	210	65	155	25	Z-	315	195	Z-	-5	Z±	Z-
3	170	115	200	115	140	220	210	Z-	Z-	Z-	Z+	-35
4	30	10	90	180	15	125	160	105	40	90	145	425
5	60	85	120	250	55	125	35	95	225	155	85	70
6	155	120	250	265	25	125	200	50	185	90	60	430
7	0	160	150	80	Z-	Z-	-	170	360	250	170	405
8	20	65	20	15	90	85	85	105	195	365	250	280
9	-	-	130	70	170	Z-	155	255	Z-	180	285	Z-
10	30	50	90	55	240	120	105	155	Z±	50	155	475
11	10	35	260	345	Z-	75	60	Z-	255	5	205	215
12	295	Z+	255	30	85	Z-	Z-	180	85	35	Z-	225
13	30	Z-	-35	265	105	210	130	100	100	-5	Z-	85
14	195	240	200	260	80	170	140	0	20	185	175	65
15	50	110	135	115	Z-	Z-	-	-	35	340	Z+	280
16	75	85	85	105	-	-	195	300	160	390	430	465
17	275	235	180	145	120	130	155	230	410	Z+	160	200
18	55	145	120	90	160	170	135	340	210	115	Z-	230
19	55	75	50	420	-90	105	220	190	245	175	-	245
20	Z+	280	-	-	105	115	220	250	170	60	145	385
21	-	-	280	245	125	130	160	195	260	60	175	180
22	125	160	155	140	155	275	285	165	315	180	225	Z+
23	20	Z±	Z-	170	200	255	315	220	110	90	140	Z-
24	195	195	225	235	45	Z-	245	215	-10	125	150	-
25	Z+	155	125	175	Z+	105	200	160	-	160	335	245
26	85	230	300	75	30	Z-	Z-	190	130	35	Z-	150
27	Z-	95	180	275	-90	125	Z-	Z-	70	105	255	125
28	Z±	180	250	315	65	245	170	65	115	155	190	275
29	140	300	235	285	30	55	160	155	225	220	300	435
30	220	Z-	160	Z±	35	Z-	75	105	480	90	405	435
31	Z-	355	110	Z-					190	125	150	350
(a)	112	154	160	180	95	149	165	172	191	136	201	270
(b)	106	140	149	175	93	153	167	151	195	153	198	289
Mean	(a) 151		(b) 143		(a) 145		(b) 141		(a) 197		(b) 209	

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)

139	164	170	193
134	155	162	186
(a) 167		(b) 159	

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

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	Hour G.M.T.																								Non-cyclic change†	No. of days used	Mean	
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	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																									v./m.		
	0a days only*																											
Jan.	-9	-6	-35	-21	-40	-57	-62	-61	-55	-60	-50	-10	+12	+15	+27	+86	+79	+57	+39	+35	+31	+45	+45	-7	+28	8		194
Feb.	+4	+6	+1	-20	+23	-7	+15	-11	-12	-16	+27	-4	-22	-35	-22	-27	-3	+7	+12	+36	+10	+4	+24	+7	-12	5		218
Mar.	-1	-23	-43	-43	-44	-34	-17	-16	-10	-13	-10	0	+12	-5	+3	-3	-7	+32	+24	+36	+67	+41	+41	+7	-20	13	233	
Apr.	-2	-7	-20	-30	-46	-32	-7	+10	-3	-4	-5	+11	+4	+16	+13	+2	+8	+22	+21	+16	+11	-10	+33	+19	-1	10	166	
May	-16	-32	-29	-20	-20	+1	+13	+7	+1	-3	+3	+14	+10	+18	+7	+11	+11	+5	-4	+20	+15	+17	-5	-18	+13	11	108	
June	-38	-42	-27	-23	+8	+61	+52	+61	+36	+19	-19	-33	-7	-12	-14	-26	-16	-16	-6	+23	+32	+6	+2	-14	-4	13	178	
July	+16	+10	-13	+14	+50	+61	+54	+11	-18	-38	-31	-28	-30	-54	-38	-30	-8	-20	-38	-36	+25	+72	+43	+34	+31	4	206	
Aug.	-22	-31	-50	-57	-65	-8	+21	+6	+8	+15	+13	+5	+9	+13	-2	+27	+23	+21	+29	+7	+19	+17	+17	-10	-10	6	142	
Sept.	-2	+14	+6	-10	-6	-36	-43	-17	+7	+13	+13	+8	-2	-2	+6	+4	+25	+13	-9	+6	+17	+2	+5	-8	-30	5	120	
Oct.	+1	-23	-38	-46	-45	-48	-31	-9	-13	-10	+2	-4	+2	-8	+2	+14	+17	+21	+23	+45	+36	+42	+59	+20	+3	5	127	
Nov.	-7	-18	-62	-40	-22	-8	-22	-25	-29	-28	-2	-13	+5	-15	+2	+22	+30	+32	+48	+49	+51	+40	+31	-25	-15	5	191	
Dec.	+32	-26	-62	-43	-26	+19	+15	-35	-50	-22	-5	+4	-15	-55	-37	-48	-30	-22	-37	+78	+113	+110	+92	+51	+6	4	299	
Year	-4	-15	-31	-28	-19	-7	-1	-7	-11	-12	-5	-4	-2	-10	-4	+3	+11	+13	+9	+26	+35	+32	+32	+5	-	-	182	
Winter	+5	-11	-39	-31	-16	-13	-13	-33	-37	-31	-7	-6	-5	-23	-7	+8	+19	+19	+15	+49	+51	+50	+48	+7	-	-	225	
Equinox	-11	-10	-24	-32	-35	-37	-25	-8	-5	-3	0	+4	+4	0	+6	+4	+11	+22	+15	+26	+30	+19	+35	+9	-	-	161	
Summer	-15	-24	-30	-21	-7	+29	+35	+21	+7	-2	-9	-10	-5	-9	-12	-5	+3	-3	-5	+3	+23	+28	+19	-2	-	-	159	
	1a and 2a days only*																											
Jan.	+7	0	-2	+20	+1	-2	-15	+32	+21	-6	-18	-69	-36	-15	+2	-39	-19	+25	+93	+40	-50	-7	+29	-1	+82	2	165	
Feb.	-59	-49	-52	-67	-31	+4	+3	+5	+35	+49	+50	+42	+10	+21	+15	+1	+4	+33	+50	+13	-14	+16	-34	-49	+28	5	131	
Mar.	-61	-67	-53	+7	-72	-96	-97	-13	+22	+67	+66	+80	+89	+83	+80	+67	+22	-4	-17	-31	+1	-12	-2	-63	+2	2	193	
Apr.	-1	-12	-31	-55	-75	-67	-69	-59	-47	-42	-17	+47	+41	+66	+54	+30	-4	+51	+48	+40	+40	+27	+39	+4	-47	1	67	
May	-47	-35	-35	-38	-35	-16	-6	+3	+1	+18	+18	+5	+16	+35	+58	+34	+21	+24	+45	+18	-12	-16	-34	-27	-3	8	124	
June	-2	+14	-3	-7	+21	-1	+33	+22	+54	+22	+25	-4	+4	-17	-24	-22	-9	-33	+6	-3	-15	-59	-8	0	+21	9	114	
July	+12	+15	+11	-6	+31	+25	+4	+2	+11	+8	-21	-70	-23	-46	-18	+10	+2	-7	+24	-2	+4	+4	+8	+22	-32	4	135	
Aug.	-20	-14	-20	-26	-23	+47	+31	-9	-2	-6	-5	-2	-19	-11	+6	-9	+4	-9	-24	+41	+54	+59	-11	-28	-63	4	161	
Sept.	-33	-28	-33	-24	-16	+17	+26	+25	-11	-28	+28	+1	+1	+6	-12	+24	+36	+32	+34	-10	+2	+4	-13	-25	-24	6	136	
Oct.	-11	-20	-36	-16	-34	-47	-33	-29	-2	+24	+5	+27	-8	-18	+3	-10	+18	+41	+25	+29	+29	+35	+6	+15	+37	5	131	
Nov.	-107	-55	-46	-20	+11	+51	+92	+57	+32	+79	+37	+18	+26	+17	+34	+23	+28	+25	+34	+3	-65	-76	-83	-120	+49	4	157	
Dec.	+31	+8	-3	-6	-50	-43	-57	-81	-73	-52	-20	+11	-9	-35	-32	-21	-20	+71	+120	+97	+67	+31	+38	+37	-61	4	154	
Year	-24	-20	-25	-20	-23	-11	-7	-4	+3	+11	+12	+6	+8	+7	+14	+7	+7	+21	+37	+20	+3	+1	-5	-20	-	-	139	
Winter	-32	-24	-26	-18	-17	+3	+6	+3	+4	+17	+12	-2	-2	-3	+5	-9	-2	+39	+74	+38	-15	-9	-13	-33	-	-	152	
Equinox	-27	-32	-38	-22	-49	-48	-43	-19	-9	+5	+21	+39	+31	+34	+31	+28	+18	+30	+23	+7	+18	+13	+7	-17	-	-	132	
Summer	-14	-5	-12	-19	-1	+14	+15	+5	+16	+11	+4	-18	-5	-10	+5	+3	+5	-6	+13	+13	+8	-3	-11	-8	-	-	133	

Winter: January, February, November, December

Equinox: March, April, September, October

Summer: May to August

* For explanation of 0a, 1a, 2a days see p.90, *Observatories' Year Book*, 1938.† See p.10, *Observatories' Year Book*, 1938.

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

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
1	2c	hr.	0a	hr.	0a	hr.	1b	hr.	0a	hr.	1b	hr.
2	0a	5.9	0a	...	1b	0.3	2c	9.0	0a	...	2c	9.7
3	0a	...	0b	...	0b	...	1b	0.8	0a	...	2c	9.7
4	0b	...	1b	0.5	0b	...	1b	1.2	0a	...	1a	2.7
5	1b	2.8	0a	...	0a	...	1b	0.7	0a	...	1a	0.3
6	1c	1.1	1b	0.2	1a	0.1	1c	2.7	1a	0.1	0a	...
7	1c	0.1	0a	...	0a	...	1b	0.8	1a	0.1	0a	...
8	1a	0.2	1c	0.5	1b	0.1	1c	2.4	0a	...	1a	0.3
9	0a	...	0b	...	1a	0.2	0a	...	1a	0.3	0a	...
10	0a	...	1b	1.9	1b	0.1	0a	...	0a	...	1b	0.7
11	1c	0.6	2c	6.4	0a	...	2c	11.1	1a	0.1	0a	...
12	1b	2.9	2c	4.2	0a	...	1b	1.2	1a	0.3	1a	1.2
13	2b	3.6	(2c)	5.8	0a	...	1c	2.5	0a	...	1a	0.1
14	1b	1.3	(1b)	0.6	0a	...	1c	0.2	2c	3.0	1b	2.1
15	1b	0.7	(1b)	0.8	0b	...	2b	4.0	1b	2.0	1a	0.1
16	1a	0.2	(0a)	...	0b	...	(2b)	3.7	1c	2.8	1b	1.6
17	1b	0.3	(0a)	...	0a	...	(1b)	0.5	1c	2.0	0a	...
18	0a	...	1a	1.0	0a	...	0a	...	0a	...	0a	...
19	0a	...	1b	0.2	0a	...	0a	...	2c	9.8	(0a)	...
20	0a	...	1b	1.3	0a	...	0a	...	1a	0.2	1a	0.4
21	0a	...	1b	0.5	0a	...	0a	...	2b	5.2	1a	0.1
22	1b	1.3	1a	0.1	1b	0.4	0a	...	1b	0.8	0a	...
23	2c	3.3	1b	2.6	0a	...	0a	...	1b	0.1	0a	...
24	2c	6.5	1a	0.3	0b	...	0a	...	0b	...	0a	...
25	0a	...	2b	4.3	(0c)	...	0a	...	1c	0.9	1c	2.5
26	1b	2.2	1a	1.3	1b	2.4	1a	0.4	1b	2.2	2c	3.3
27	2b	4.2	0a	...	1b	2.0	2c	10.9	1b	0.8	0a	...
28	1a	0.1	1a	0.1	2c	4.2	2b	3.0	1a	0.7	0a	...
29	0a	...			2c	3.1	2c	8.7	1a	1.1	1a	0.1
30	2c	7.6			2c	5.1	1b	0.5	0a	...	0a	...
31	1b	1.2			1c	1.9			0a	...		
Total	-	46.1	-	32.4	-	19.9	-	65.0	-	32.5	-	35.6
No. of days used	-	31	-	28	-	31	-	30	-	31	-	30
Mean	-	1.5	-	1.2	-	0.6	-	2.2	-	1.0	-	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	0a	hr.	1b	hr.	2c	hr.	0a	hr.	2c	hr.	1a	hr.
2	0a	...	1b	1.1	2c	3.6	0b	...	2c	10.6	2c	1.7
3	1a	0.9	0a	...	1b	5.7	1a	...	2c	5.0	2c	7.9
4	0a	...	1b	1.0	0a	0.2	1a	0.1	1b	2.6	2c	12.8
5	2b	4.0	0a	...	0a	...	0a	...	1b	1.3	1a	0.9
6	1a	0.1	0a	...	1a	1.9	0a	...	2b	5.7	1a	0.1
7	2c	4.2	0a	...	1a	0.6	0a	...	1a	0.3	1b	0.3
8	2b	3.4	1a	0.2	0a	...	1a	0.3	2c	7.5	0a	...
9	2c	7.4	0b	...	1a	0.2	1a	2.0	2b	3.3	1b	0.3
10	2c	3.9	1b	0.8	0a	...	2a	3.1	2c	6.0	2c	4.4
11	0a	...	0a	...	0a	...	0a	...	1b	0.8	2c	5.1
12	1c	2.0	0a	...	1a	0.3	0a	...	2c	11.2	1a	1.0
13	2c	11.5	1b	0.9	1a	0.1	1b	0.1	2c	12.9	2c	4.9
14	2b	6.7	2b	3.9	0a	...	2c	8.2	1b	2.2	2b	3.7
15	1a	0.1	1a	0.2	1a	0.7	1b	0.7	1a	0.7	2c	8.4
16	2c	3.1	1b	2.3	2b	4.6	1a	0.1	2c	10.8	1b	0.4
17	2c	4.1	1b	1.3	1a	0.9	1b	0.7	(1a)	0.1	0a	...
18	1c	2.8	2c	6.7	1b	1.6	1b	0.1	0a	...	0a	...
19	1b	1.0	1b	0.4	(0b)	0.1	0a	...	0a	...	2c	3.7
20	2b	3.4	1a	0.8	(2a)	3.7	1a	0.1	1b	2.3	0a	...
21	1b	0.5	1c	2.7	(1b)	1.9	(1a)	1.7	0a	...	1b	0.6
22	2b	4.7	(1b)	2.0	2c	6.0	(0a)	...	0a	...	1b	2.7
23	1b	1.3	(2b)	3.5	2b	3.6	1a	0.1	0a	...	1b	0.2
24	2c	9.8	1a	2.4	0a	...	1c	1.9	1a	0.1	1c	2.6
25	1b	2.5	2c	4.7	2b	3.3	1b	0.7	1b	2.8	(1b)	2.0
26	2c	5.0	0a	...	1a	0.3	1b	2.7	1b	1.4	(2c)	3.5
27	2c	5.9	0a	...	1a	0.2	1b	2.1	2c	13.0	2b	5.1
28	1c	2.7	1a	0.1	2c	4.6	2b	6.5	2c	12.1	1b	0.9
29	1b	1.5	1b	2.9	2b	3.9	1b	0.5	1a	0.6	1b	0.9
30	1b	1.0	1b	1.7	2c	3.0	1b	0.2	1a	0.3	0a	...
31	1a	0.6	1c	2.9	2c	8.9	2c	7.8	2b	3.4	1b	1.4
Total	-	94.1	-	49.0	-	59.9	-	49.7	-	117.0	-	75.5
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	3.0	-	1.6	-	2.0	-	1.6	-	3.9	-	2.4

Annual values: Character frequency 0 1 2
No. of days used 113 169 83

Duration: Total 676.7
No. of days 365
Mean 1.85 hr.

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

93 ESKDALEUIR (R)

16,000γ (0.16 C.G.S. unit) +

JANUARY

	Hour G. M. T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
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	604	608	608	617	612	613	624	625	614	608	608	597	609	618	625	615	626	612	607	607	605	612	612	627	613
3	607	612	616	614	619	625	627	618	612	619	608	613	608	614	602	597	609	586	588	579	607	612	611	612	609
4	608	612	608	608	614	616	617	619	621	616	616	615	614	612	608	613	616	614	616	614	616	620	616	612	614
5	614	616	612	615	617	619	624	625	627	624	619	618	616	618	621	619	631	629	625	626	627	626	623	625	621
6	624	625	624	625	624	623	634	600	535	524	527	557	579	580	585	591	587	569	556	573	583	590	613	585	588
7	576	583	586	593	597	601	600	608	601	599	593	600	597	600	603	572	597	587	584	587	583	597	604	608	594
8	607	605	604	608	609	610	610	612	614	617	612	610	597	602	601	592	587	591	615	616	615	612	612	612	607
9	613	607	610	621	628	630	626	618	616	618	617	614	620	622	620	619	621	624	616	614	616	617	612	613	618
10	625	612	616	620	621	625	624	620	620	625	627	627	628	623	619	616	621	627	628	624	633	624	619	619	623
11	616	616	623	628	628	629	627	627	627	621	617	618	624	629	627	627	634	636	638	634	626	635	632	617	627
12	608	615	623	628	628	625	629	633	628	619	612	614	616	623	628	626	628	626	627	627	620	621	618	621	623
13	618	624	621	626	623	625	627	625	625	625	625	628	634	629	616	623	631	633	629	628	628	626	624	620	626
14	622	623	624	624	627	629	630	632	628	621	618	626	636	627	619	617	623	627	628	625	594	593	613	612	622
15	609	613	615	613	617	620	620	628	623	617	617	620	627	630	628	625	624	622	615	622	623	619	621	623	620
16	619	622	622	622	626	629	628	628	628	625	623	623	631	631	628	626	628	627	628	628	628	623	620	620	626
17	619	623	624	628	630	632	635	632	631	628	631	632	634	635	634	624	623	628	630	630	629	627	626	628	629
18	624	626	627	630	631	632	634	634	633	636	631	625	626	627	630	628	632	633	635	633	626	625	655	626	631
19	626	628	631	638	637	635	638	640	641	633	619	615	615	606	603	609	599	606	607	596	609	618	618	624	620
20	627	624	618	597	639	663	654	640	634	606	583	595	601	605	601	591	604	611	610	593	589	601	611	601	612
21	634	606	595	607	622	623	626	619	603	596	605	611	607	606	614	614	617	621	617	614	613	614	619	623	614
22	622	615	615	624	631	622	635	638	639	627	627	631	617	628	628	624	624	622	619	622	620	625	615	618	625
23	619	625	623	623	632	632	630	627	630	627	622	615	615	620	623	622	623	627	631	628	629	633	628	619	625
24	640	622	616	618	626	624	626	628	631	627	622	618	618	624	624	625	625	627	628	627	629	627	627	626	625
25	632	631	632	633	635	635	642	638	639	622	603	597	606	616	619	606	599	605	598	589	603	620	619	619	618
26	618	616	618	620	624	632	635	639	636	627	602	549	584	622	620	601	597	614	613	595	596	616	609	601	612
27	625	595	628	595	609	627	632	626	623	613	599	594	599	611	607	598	605	622	599	605	601	639	607	594	611
28	596	579	579	613	607	610	618	611	615	611	603	588	557	588	592	608	603	591	615	567	597	603	612	611	599
29	614	612	614	612	618	609	619	621	611	604	601	595	602	609	612	596	579	605	621	626	599	602	608	604	608
30	599	600	616	604	624	618	612	616	623	617	608	616	617	599	598	607	610	597	624	629	613	612	611	619	612
31	625	610	612	606	628	626	623	614	627	621	610	608	617	616	607	604	600	618	617	610	626	617	613	613	615
Mean	616	613	615	617	623	624	627	625	621	616	610	609	612	616	615	611	614	615	615	613	613	617	618	615	616

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

94 ESKDALEUIR (D)

11° +

JANUARY

	Hour G.M.T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
1	11.6	11.3	12.4	16.3	11.7	14.6	15.2	15.0	15.1	17.0	16.9	18.1	16.5	17.9	16.7	16.0	15.9	18.3	11.7	7.7	11.6	10.5	10.7	9.7	14.1
2	12.6	14.0	14.7	14.3	15.3	15.6	15.3	15.8	17.4	17.5	15.2	16.8	16.9	16.0	17.6	10.9	16.4	12.2	2.5	9.0	14.2	10.5	11.1	11.5	13.9
3	11.5	12.6	14.2	14.3	15.1	14.9	15.0	15.0	14.9	14.8	15.1	15.6	17.5	17.4	16.7	15.0	16.0	15.8	11.3	12.5	12.5	12.4	12.4	13.1	14.4
4 q	13.6	15.1	15.5	13.4	14.0	14.2	14.4	14.2	14.3	14.3	14.6	15.1	15.7	15.8	16.4	16.3	16.4	17.8	18.1	17.2	15.8	14.8	14.3	14.1	15.2
5 d	14.1	13.6	14.1	14.3	14.2	15.5	16.9	16.9	28.9	26.7	20.2	20.4	25.8	18.5	16.3	15.5	14.8	18.8	11.5	15.8	15.7	9.6	2.7	6.3	16.1
6	12.4	11.8	12.1	13.3	14.4	14.4	14.5	14.7	14.8	15.4	15.6	17.2	16.7	16.1	16.4	14.7	19.2	17.1	16.9	14.6	14.8	14.9	14.4	12.9	15.0
7	12.9	13.6	14.1	14.2	14.9	15.2	15.2	15.8	16.3	17.3	17.1	18.1	17.8	17.4	19.0	19.9	19.8	17.1	14.2	14.5	13.9	13.8	13.1	14.2	15.8
8	13.4	13.5	15.1	10.9	12.6	13.4	13.6	13.7	14.3	15.0	16.7	16.5	16.6	15.7	14.2	14.0	14.2	14.1	14.1	12.5	13.3	13.4	12.9	13.0	14.0
9	15.6	13.3	14.5	15.0	14.6	14.1	13.5	13.8	14.7	16.3	16.5	16.9	18.2	16.1	15.6	14.8	14.9	15.0	15.2	14.4	9.8	12.5	14.3	13.5	14.7
10 q	14.3	14.8	15.1	14.5	14.3	14.1	14.1	14.1	14.3	15.0	15.9	16.9	16.9	15.9	14.2	14.5	15.4	15.2	15.4	15.4	15.2	12.5	11.4	13.1	14.7
11	8.2	7.8	11.6	12.0	12.4	14.0	13.8	13.5	13.3	14.4	16.0	16.9	17.9	16.4	15.1	14.7	14.6	15.0	15.0	14.7	12.5	14.3	13.9	13.3	13.8
12	13.7	11.9	11.3	11.1	11.9	13.2	12.3	12.9	13.2	14.5	15.9	16.5	16.5	16.8	15.4	14.0	14.1	14.5	15.0	14.9	15.1	14.7	14.3	13.6	14.1
13	13.9	13.4	13.2	12.9	13.7	13.8	14.2	13.8	13.9	14.9	16.4	18.4	20.3	20.1	17.8	16.0	14.7	14.4	14.6	16.0	16.1	14.2	14.4	14.6	15.2
14	12.4	13.3	11.4	9.4	11.3	12.0	12.7	12.6	12.9	15.0	15.3	16.5	17.3	16.5	15.3	14.9	14.7	14.7	13.3	13.6	14.3	13.4	12.9	14.4	13.8
15 q	14.1	15.2	13.9	13.8	14.1	14.1	13.7	13.5	13.7	14.4	14.7	16.1	17.8	17.1	15.7	15.2	14.5	15.1	14.3	13.8	13.4	13.2	9.9	12.1	14.3
16 q	13.3	14.3	14.7	13.9	14.1	14.1	14.0	13.7	13.4	13.6	14.4	15.2	17.0	16.3	17.0	17.3	17.4	16.3	15.1	14.1	13.7	13.6	13.4	12.9	14.7
17 q	13.4	14.3	15.2	14.7	14.5	14.1	14.2	14.1	14.1	14.4	14.5	15.0	16.0	16.5	15.8	16.0	16.1	16.0	15.5	15.6	14.1	13.8	10.6	11.9	14.6
18	14.1	15.3	15.3	15.7	13.9	13.6	14.0	13.9	14.5	16.0	16.4	17.1	18.7	20.9	19.0	21.0	17.8	14.1	15.5	10.4	10.5	11.6	12.4	13.5	15.2
19 d	14.1	13.3	12.9	17.9	16.5	17.7	15.6	19.7	16.9	16.0	19.2	18.9	19.1	19.7	21.2	18.7	15.2	14.8	14.3	12.9	7.0	12.3	11.8	11.6	15.7
20	15.5	13.4	15.2	15.1	12.5	13.3	14.1	14.8	16.9	19.1	18.1	18.3	17.5	17.3	16.1	15.3	15.1	14.7	14.5	13.1	11.6	12.4	12.3	13.4	15.0
21	14.7	13.2	12.5	14.2	14.5	14.7	15.1	15.0	15.1	16.1	16.1	16.1	15.1	15.9	15.3	14.9	14.3	14.4	13.3	13.8	12.9	12.2	8.8	10.7	14.1
22	13.2	14.7	13.9	15.5	13.1	13.5	14.2	14.3	13.9	14.3	14.4	14.9	15.1	15.2	15.8	15.5	15.5	15.2	15.1	14.3	13.9	11.0	12.4	13.2	14.3
23	14.7	9.2	9.7	11.3	12.8	13.3	13.8	13.7	14.4	14.2	14.4	14.9	15.6	16.2	15.4	15.1	15.3	15.0	15.0	13.5	12.9	13.4	13.3	13.4	13.8
24	14.1	14.4	14.4	14.6	14.3	14.1	13.9	14.2	14.6	15.5	16.0	17.7	18.8	18.7	19.6	20.5	23.2	19.1	18.7	14.6	10.7	11.3	12.4	13.5	15.8
25	13.6	13.8	14.2	14.2	14.3	14.6	14.3	14.2	13.6	14.4	15.3	18.1	23.6	19.3	20.2	20.3	17.4	16.7	14.8	13.2	10.0	8.4	10.8	4.1	14.7
26	6.7	6.9	5.7	10.1	8.3	10.3	12.0	13.2	13.9	15.1	18.2	20.5	17.9	18.9	18.8	17.2	10.1	4.7	9.1	6.8	10.8	7.5	2.3	4.2	11.2
27 d	8.3	14.7	20.7	15.8	14.4	14.7	13.7	12.9	12.8	14.8	16.3	17.9	19.6	21.9	21.5	17.8	15.5	14.4	-6.0	5.0	14.8	13.2	13.1	14.2	14.3
28 d	13.7	13.8	13.0	14.7	13.7	13.0	14.9	13.2	13.1	15.2	16.6	17.8	17.3	19.1	17.7	11.4	9.3	16.2	11.5	4.3	3.8	10.1	20.5	12.4	13.6
29 d	8.8	11.5	4.5	11.5	11.8	12.2	12.1	14.1	14.8	16.1	16.2	16.8	19.3	18.7	20.0	14.4	12.3	13.5	8.3	8.6	12.8	12.1	11.7	13.4	13.1
30	15.6	15.6	9.7	10.2	10.3	11.9	11.9	15.7	16.1	15.8	15.9	15.6	15.8	17.1	16.5	16.4	13.1	8.6	13.4	11.5	11.1	12.9	12.2	12.6	13.6
31	16.5	12.2	10.5	10.1	14.5	10.6	12.4	12.5	13.1	14.8	16.7	18.8	19.2	16.0	15.9	14.8	13.9	13.6	13.2	11.6	13.2	12.3	11.6	12.3	13.8
Mean	13.1	13.1	13.1	13.5	13.5	13.8	14.0	14.3	14.9	15.7	16.1	17.1	17.9	17.5	17.0	15.9	15.4	14.9	13.1	12.6	12.7	12.3	12.0	12.1	14.4

95 ESKDALEMUIR (Z)		44,000γ (0.44 C.G.S. unit) +																				JANUARY			
	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
	0-1	1-2																							
1	1221	1225	1220	1207	1214	1221	1221	1222	1225	1226	1226	1230	1230	1235	1234	1238	1236	1237	1243	1243	1239	1237	1231	1226	1229
2	1229	1228	1227	1228	1226	1226	1225	1225	1225	1224	1229	1229	1231	1235	1242	1256	1243	1248	1256	1251	1241	1237	1235	1231	1234
3	1231	1230	1230	1231	1227	1227	1228	1227	1226	1229	1229	1226	1226	1231	1237	1242	1237	1237	1238	1234	1232	1231	1230	1230	1231
4 q	1227	1225	1220	1223	1226	1226	1226	1225	1223	1223	1224	1223	1220	1220	1226	1229	1229	1229	1230	1230	1231	1230	1230	1229	1226
5 d	1228	1226	1226	1225	1225	1225	1217	1215	1216	1217	1227	1252	1273	1274	1265	1255	1250	1274	1316	1278	1261	1259	1237	1230	1245
6	1238	1242	1242	1240	1239	1238	1237	1233	1234	1232	1236	1236	1242	1249	1253	1275	1261	1263	1269	1267	1265	1255	1247	1242	1247
7	1237	1237	1237	1237	1236	1234	1231	1231	1229	1228	1229	1229	1233	1241	1243	1249	1257	1261	1253	1246	1242	1238	1238	1237	1239
8	1236	1235	1223	1214	1220	1223	1225	1226	1226	1227	1227	1230	1229	1231	1232	1233	1234	1235	1237	1237	1237	1235	1236	1231	1230
9	1219	1217	1225	1229	1230	1230	1230	1230	1229	1225	1222	1224	1226	1232	1235	1235	1233	1232	1231	1233	1234	1231	1231	1232	1229
10 q	1232	1230	1226	1225	1226	1227	1229	1229	1228	1229	1229	1226	1227	1231	1233	1231	1229	1228	1229	1228	1231	1231	1226	1226	1229
11	1231	1230	1226	1225	1222	1223	1224	1224	1225	1225	1225	1226	1227	1230	1231	1231	1231	1231	1231	1231	1234	1233	1233	1233	1228
12	1233	1230	1227	1224	1224	1224	1223	1223	1223	1221	1220	1221	1221	1224	1228	1227	1226	1226	1226	1227	1227	1228	1230	1230	1226
13	1229	1227	1226	1225	1222	1221	1220	1219	1221	1222	1221	1219	1219	1223	1226	1230	1231	1231	1231	1232	1249	1260	1246	1239	1229
14	1234	1227	1219	1222	1223	1224	1225	1225	1226	1227	1229	1227	1226	1228	1231	1231	1231	1231	1234	1232	1233	1237	1235	1231	1229
15 q	1231	1229	1229	1228	1226	1226	1226	1224	1223	1221	1221	1221	1221	1225	1226	1224	1224	1224	1223	1223	1223	1224	1227	1225	1225
16 q	1225	1223	1224	1223	1223	1221	1220	1220	1219	1219	1214	1210	1209	1215	1222	1225	1225	1225	1225	1224	1222	1222	1223	1222	1221
17 q	1223	1221	1220	1220	1220	1219	1218	1215	1214	1214	1215	1217	1214	1215	1218	1217	1219	1220	1220	1221	1223	1224	1214	1206	1218
18	1210	1214	1216	1215	1216	1217	1216	1214	1212	1213	1215	1216	1219	1226	1230	1231	1241	1243	1240	1242	1239	1230	1226	1225	1224
19 d	1222	1222	1220	1206	1173	1167	1170	1179	1191	1203	1209	1214	1221	1227	1237	1238	1238	1236	1235	1243	1253	1245	1235	1220	1217
20	1190	1201	1212	1214	1216	1219	1220	1221	1223	1225	1226	1225	1226	1228	1230	1229	1229	1228	1230	1230	1231	1230	1225	1221	1222
21	1215	1216	1220	1220	1220	1218	1218	1217	1217	1220	1220	1220	1220	1220	1222	1224	1225	1226	1229	1229	1229	1225	1226	1226	1222
22	1220	1215	1217	1218	1218	1219	1219	1220	1220	1220	1221	1221	1221	1221	1222	1221	1221	1221	1222	1222	1223	1222	1221	1221	1220
23	1214	1206	1211	1213	1213	1215	1218	1219	1218	1221	1221	1221	1219	1218	1220	1221	1222	1221	1222	1223	1223	1222	1222	1220	1218
24	1218	1217	1217	1218	1216	1216	1215	1217	1215	1218	1221	1224	1221	1221	1227	1238	1242	1245	1256	1273	1259	1241	1232	1229	1229
25	1226	1226	1225	1223	1222	1220	1219	1219	1220	1219	1221	1230	1223	1225	1230	1242	1250	1245	1243	1246	1254	1245	1238	1232	1231
26 d	1195	1206	1202	1186	1199	1207	1209	1214	1214	1217	1217	1220	1229	1236	1246	1257	1266	1254	1250	1253	1228	1225	1208	1211	1223
27 d	1216	1214	1197	1209	1214	1222	1224	1227	1226	1221	1220	1229	1243	1249	1259	1281	1271	1268	1266	1258	1240	1237	1233	1230	1236
28 d	1226	1229	1226	1223	1223	1222	1221	1220	1223	1225	1224	1225	1229	1229	1235	1253	1268	1249	1241	1231	1232	1227	1190	1207	1228
29	1220	1193	1203	1214	1214	1212	1214	1214	1214	1214	1215	1218	1225	1231	1242	1249	1250	1249	1246	1228	1226	1229	1230	1226	1224
30	1214	1213	1216	1221	1221	1218	1217	1217	1213	1214	1217	1222	1223	1224	1232	1239	1251	1250	1239	1238	1231	1226	1228	1227	1225
31	1211	1203	1208	1214	1207	1207	1214	1215	1213	1213	1214	1216	1215	1225	1230	1231	1232	1230	1230	1229	1226	1226	1225	1225	1219
Mean	1223	1221	1221	1220	1219	1220	1220	1220	1220	1221	1222	1224	1226	1230	1234	1238	1239	1239	1240	1238	1236	1234	1229	1227	1227

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

96 ESKDALEMUIR		TERRESTRIAL MAGNETIC ELEMENTS												JANUARY						
		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 11° +	Minimum 11° +	Range	Maximum 44,000γ +	Minimum 44,000γ +	Range										
		h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ				°A.			
1		23 14	648	586	17 56	62	03 15	20.6	2.4	19 28	18.2	18 26	1246	1205	03 40	41	2,3,2,2,3,3,3,3	21	1	83.3
2		22 01	635	554	15 04	81	14 50	20.6	-4.8	18 08	25.4	15 21	1264	1222	09 14	42	2,1,3,3,4,4,4,3	24	1	83.2
3		18 50	635	585	15 04	50	12 34	18.7	8.4	18 45	10.3	15 36	1243	1223	12 00	20	2,1,1,1,2,3,3,2	15	1	83.2
4	q	18 47	640	604	02 31	36	17 54	19.1	12.3	01 13	6.8	20 01	1231	1219	13 11	12	2,0,0,1,1,2,2,2	10	0	83.2
5	d	23 02	653	486	10 31	167	08 51	31.4	-1.4	23 28	32.8	18 03	1348	1210	08 53	138	1,2,5,5,4,5,4,5	31	1	83.2
6		07 35	614	515	15 21	99	16 28	21.4	9.8	15 39	11.6	15 36	1287	1231	09 40	56	3,1,2,3,2,4,2,3	20	1	83.2
7		19 09	621	576	17 00	45	16 12	22.2	11.1	00 00	11.1	17 04	1264	1226	10 19	38	2,1,1,1,2,2,2,1	12	0	83.2
8		06 01	635	592	02 24	43	10 29	17.0	9.4	03 29	7.6	20 06	1239	1209	03 13	30	3,2,2,1,1,0,2,2	13	0	83.2
9		00 38	665	605	00 10	60	12 15	19.0	5.7	20 55	13.3	15 37	1235	1207	00 57	28	4,0,1,1,2,2,3,3	16	1	83.1
10	q	21 47	655	608	23 45	47	11 56	17.7	8.9	21 46	8.8	14 50	1234	1224	03 01	10	1,1,0,1,2,1,1,3	10	0	83.1
11		07 45	636	595	00 35	41	12 45	18.6	-0.9	00 56	19.5	21 01	1237	1222	04 37	15	4,2,1,0,1,1,1,2	12	0	82.9
12		17 37	638	607	14 40	31	13 20	17.5	9.8	03 33	7.7	00 30	1233	1219	10 09	14	2,1,0,0,3,2,1,0	9	0	83.0
13		12 35	646	568	21 03	78	12 33	22.9	12.6	05 10	10.3	21 23	1264	1216	11 49	48	1,1,0,2,3,1,4,3	15	1	83.0
14		12 37	634	604	01 09	30	12 00	18.3	8.6	03 20	9.7	22 05	1238	1217	02 26	21	3,2,1,1,1,2,2,2	14	0	83.0
15	q	13 21	636	615	22 10	21	12 16	18.3	8.1	22 20	10.2	00 40	1232	1220	09 12	12	1,0,0,1,1,1,0,2	6	0	82.9
16	q	13 56	640	615	16 22	25	16 06	18.7	12.3	23 52	6.4	16 46	1226	1207	12 26	19	1,0,0,1,1,2,0,1	6	0	82.9
17	q	22 39	687	620	00 10	67	12 49	16.9	8.4	22 34	8.5	22 02	1225	1205	22 50	20	1,1,0,2,1,0,1,4	10	1	82.9
18		07 08	646	582	19 47	64	13 34	23.0	5.2	19 52	17.8	19 56	1247	1208	00 00	39	1,2,1,2,3,3,3,2	17	1	82.9
19	d	06 04	684	571	10 30	113	14 17	24.1	5.3	20 31	18.8	20 31	1254	1160	05 40	94	2,4,4,3,3,2,3,3	24	1	82.9
20		00 16	704	584	02 58	120	09 35	20.1	9.2	20 00	10.9	20 07	1235	1179	00 32	56	5,3,3,3,1,0,2,2	19	1	82.9
21		07 53	645	603	12 11	42	11 30	17.2	6.4	22 51	10.8	18 35	1231	1214	00 20	17	2,1,2,2,3,2,2,2	16	0	82.9
22		21 10	641	609	11 57	32	01 01	17.6	9.6	21 45	8.0	14 26	1224	1214	01 13	10	2,2,1,2,1,1,1,2	12	0	82.9
23		00 38	672	607	01 31	65	00 36	19.3	7.4	01 44	11.9	20 12	1226	1202	01 11	24	4,1,1,1,1,0,1,0	9	0	82.9
24		08 22	651	571	19 41	80	16 15	26.7	9.6	20 14	17.1	19 22	1277	1214	09 00	63	1,0,2,3,2,3,3,2	16	1	82.9
25		24 00	663	531	11 39	132	12 15	28.5	-4.3	23 48	32.8	19 54	1256	1217	10 15	39	0,1,2,4,4,3,3,4	21	1	82.8
26	d	19 38	722	546	15 54	176	14 05	26.7	-17.1	19 35	43.8	16 36	1274	1180	03 22	94	5,4,3,3,4,5,6,5	35	2	82.9
27	d	18 26	669	506	12 06	163	14 39	26.1	-15.6	18 40	41.7	15 33	1294	1190	02 19	104	4,2,2,4,4,4,5,2	27	1	82.9
28	d	19 25	656	541	16 19	115	22 15	29.5	0.9	20 08	30.4	16 20	1280	1173	22 32	107	2,2,3,2,3,4,4,4	24	1	82.9
29		18 54	718	570	01 22	148	12 06	22.0	-6.9	18 50	28.9	15 32	1254	1183	01 39	71	4,3,2,2,3,3,5,2	24	1	82.9
30		17 02	645	573	16 36	72	16 22	19.5	1.7	17 51	17.8	16 50	1262	1211	08 20	51	3,3,3,2,3,4,3,1	22	1	82.9
31		04 34	639	581	11 04	58	12 27	20.5	9.1	05 34	11.4	16 12	1233	1197	01 05	36	3,3,2,3,2,1,2,2	18	1	82.9
Mean		- -	654	578	- -	76	- -	21.3	4.5	- -	16.8	- -	1251	1207	- -	44	-	-	0.65	83.0

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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Hour G.M.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

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

98 ESKDALEMUIR (D)		11° +											FEBRUARY													
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
1 q	12.5	13.4	13.2	12.8	12.0	11.6	12.4	12.8	13.2	14.7	15.9	16.8	16.4	16.1	15.4	14.6	14.2	14.1	14.0	14.0	13.7	10.3	11.1	13.3	13.7	13.7
2	13.7	12.6	12.9	13.6	11.9	12.4	12.6	13.2	13.4	13.7	14.7	17.2	18.8	18.4	16.8	15.8	15.4	14.9	15.1	14.0	12.1	12.0	11.8	12.5	14.1	14.1
3	12.8	12.2	12.6	10.3	11.6	12.9	12.9	13.1	13.4	13.7	15.0	15.8	15.9	16.0	16.0	15.4	15.4	14.8	14.7	14.2	14.0	13.1	11.9	13.1	13.8	13.8
4	13.7	13.6	12.9	13.1	12.9	13.9	14.0	14.0	13.8	13.7	15.6	16.5	17.3	19.8	19.7	16.4	16.0	15.1	13.5	14.5	13.7	13.3	13.3	13.5	14.7	14.7
5 q	13.6	13.7	13.9	14.2	14.2	14.1	13.6	13.3	13.3	13.3	14.1	15.2	16.5	17.3	17.1	16.0	15.0	15.0	13.9	13.1	13.8	13.7	13.3	13.4	14.4	14.4
6 q	13.6	13.7	13.8	13.9	14.0	14.0	13.6	13.5	13.3	13.1	13.4	15.2	16.2	16.8	15.8	15.3	15.1	14.2	14.4	14.5	14.0	13.4	13.3	13.0	14.2	14.2
7 q	13.2	13.7	14.3	14.3	14.3	14.1	13.9	13.4	13.2	13.1	14.2	15.2	16.9	17.3	16.5	15.9	15.2	15.4	15.1	14.6	14.2	14.0	13.5	13.3	14.5	14.5
8	13.7	13.8	14.3	14.1	13.6	13.2	13.4	13.6	13.7	13.4	13.5	15.4	16.9	18.0	17.7	16.2	15.5	15.2	14.9	14.8	14.5	14.1	13.1	9.2	14.4	14.4
9	14.4	10.4	11.9	12.1	13.4	14.7	13.2	12.9	12.4	12.1	13.0	15.9	18.5	20.7	18.7	18.7	15.5	14.0	14.0	14.3	13.3	4.7	6.7	9.2	13.5	13.5
10	10.1	10.5	13.1	13.7	13.7	13.3	13.1	13.1	13.1	13.1	13.5	15.2	17.1	18.0	16.9	17.2	19.1	19.8	20.4	19.8	19.5	16.0	11.7	11.9	15.3	15.3
11	10.6	11.7	7.0	10.3	12.9	12.9	12.9	12.6	13.8	14.0	15.0	16.5	17.0	16.5	15.8	15.1	14.3	14.1	13.7	14.1	12.9	10.7	13.3	12.9	13.4	13.4
12	13.4	12.5	13.1	12.2	12.9	12.9	13.0	13.1	13.0	12.9	13.7	16.0	17.4	17.7	16.7	15.4	14.4	13.2	11.8	13.9	13.3	12.5	12.9	13.3	13.8	13.8
13 q	13.6	13.8	13.7	13.3	13.0	12.7	12.4	12.4	12.8	13.7	15.1	16.5	17.0	16.5	15.8	15.8	15.9	15.9	15.2	14.9	14.7	9.2	9.5	12.0	14.0	14.0
14	13.8	12.5	8.5	9.5	10.2	12.1	11.9	12.3	13.6	15.4	16.7	16.2	16.5	16.6	16.1	16.5	16.5	15.7	16.1	7.9	13.0	14.0	13.7	12.9	13.7	13.7
15	12.4	12.4	10.1	10.1	11.5	10.5	11.6	13.3	15.2	15.1	15.1	16.5	17.4	18.1	15.5	15.1	15.3	15.5	15.6	14.0	15.0	13.8	13.9	7.6	13.8	13.8
16	5.6	8.8	12.9	12.2	12.3	12.9	13.2	13.7	14.5	16.9	17.0	17.7	18.3	19.3	19.9	18.7	2.5	15.5	15.3	15.0	14.1	13.8	13.4	13.1	14.0	14.0
17	13.1	12.1	13.3	14.0	13.3	12.0	12.6	13.6	13.7	16.1	17.1	17.1	16.7	16.4	16.0	15.5	15.5	15.4	14.8	14.7	13.9	12.6	12.6	12.2	14.3	14.3
18	13.0	13.3	13.4	13.3	13.3	13.4	13.3	13.2	13.3	13.2	14.4	15.6	16.6	16.5	16.0	15.2	14.7	14.6	14.3	13.9	13.4	13.0	11.5	7.9	13.8	13.8
19	13.1	13.7	12.1	13.3	12.4	11.3	12.6	13.1	13.0	13.2	13.9	15.2	17.0	16.0	16.0	15.3	14.2	13.9	13.3	11.6	11.9	11.6	12.0	13.9	13.4	13.4
20	15.7	12.4	12.9	13.1	13.0	12.8	12.5	12.7	12.9	13.8	15.0	16.5	17.0	16.7	16.2	14.9	14.8	13.3	12.8	13.3	13.3	13.4	13.7	13.3	14.0	14.0
21	14.6	16.2	9.3	9.8	9.1	11.7	13.3	11.4	13.3	13.7	14.7	15.8	16.7	15.9	15.9	16.8	16.5	15.6	15.9	13.6	11.9	9.9	10.8	6.6	13.3	13.3
22 d	11.1	16.4	11.2	11.0	10.6	11.1	12.0	13.1	13.2	12.9	14.2	16.6	19.1	19.6	21.5	22.3	21.8	22.1	17.7	9.1	9.5	-0.9	-4.5	8.8	10.4	10.4
23 d	3.3	3.0	6.4	4.7	3.3	6.2	9.3	10.6	16.8	20.0	14.7	16.1	17.3	20.0	19.5	17.3	15.3	-2.9	-4.4	4.2	10.9	11.7	11.6	14.2	12.6	12.6
24 d	17.5	8.9	4.7	4.1	6.7	14.9	12.3	14.2	19.1	16.9	16.4	16.6	16.0	17.9	15.7	16.1	6.3	12.0	6.7	6.8	2.6	4.4	1.6	9.3	11.2	11.2
25 d	11.3	15.6	16.6	13.3	8.2	11.6	16.2	16.6	15.3	17.1	16.4	15.3	18.0	14.6	13.3	15.3	13.1	8.8	0.0	3.4	5.2	5.9	11.7	19.0	12.6	12.6
26 d	11.1	8.0	10.7	9.7	9.8	10.8	13.6	16.8	13.0	13.3	14.9	16.5	19.6	18.2	18.3	12.3	17.9	10.6	4.3	6.3	10.5	9.5	7.2	8.8	12.2	12.2
27	13.2	15.0	15.2	12.1	11.5	11.5	10.6	11.1	12.5	14.7	17.3	16.5	16.8	17.6	18.3	14.9	14.7	15.9	13.7	13.0	13.7	8.7	4.3	9.7	13.4	13.4
28	11.3	11.8	10.4	10.6	13.7	3.9	9.6	12.8	12.8	13.4	14.2	15.0	15.6	15.8	16.4	16.6	13.1	8.4	12.9	6.7	8.6	12.8	12.7	13.0	12.2	12.2
Mean	12.5	12.3	11.9	11.7	11.8	12.1	12.7	13.2	13.7	14.3	15.0	16.2	17.2	17.4	16.9	16.1	14.8	13.9	12.9	12.3	12.5	11.1	10.8	11.8	13.5	13.5

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

67

99 ESKDALEUIR (Z)		44,000γ (0.44 C.G.S. unit) +												FEBRUARY												
Hour G.M.T.																										Mean
0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12																										
	γ γ																									

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

100		ESKDALEUIR												FEBRUARY						
		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 11° +	Minimum 11° +	Range	Maximum 44,000γ +	Minimum 44,000γ +	Range										
		h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ				°A.			
1	q	21 14	642	614	22 23	28	12 03	17.2	8.8	21 37	8.4	21 00	1230	1215	11 00	15	1,1,1,0,1,1,1,2	8	0	82.9
2		15 28	638	598	16 20	40	13 09	19.7	11.1	23 12	8.6	16 19	1237	1215	12 07	22	1,2,1,1,1,3,1,1	11	0	82.8
3		01 59	643	614	11 10	29	12 17	16.5	9.7	03 24	6.8	17 20	1231	1212	13 30	19	2,2,1,2,1,1,1,2	12	0	82.8
4		13 35	638	602	14 27	36	13 34	21.1	11.9	04 20	9.2	18 43	1236	1209	12 48	27	1,1,0,2,3,2,2,0	11	0	82.8
5	q	20 41	638	610	11 57	28	14 05	17.8	11.2	19 05	6.6	19 06	1229	1214	12 11	15	0,0,0,1,1,1,2,0	5	0	82.8
6	q	07 30	637	618	18 00	19	13 49	17.8	12.5	18 03	5.3	18 08	1230	1214	11 43	16	0,0,0,1,1,2,1,0	5	0	82.8
7	q	19 46	638	618	12 59	20	13 16	17.4	12.5	00 44	4.9	15 40	1222	1214	12 42	8	0,0,1,0,0,0,0,0	1	0	82.8
8		14 51	653	617	11 24	36	14 51	19.3	7.9	23 40	11.4	23 50	1226	1209	12 50	17	0,0,0,1,2,2,1,3	9	0	82.8
9		21 45	656	584	21 29	72	13 30	21.4	7.3	21 39	28.7	20 39	1248	1206	05 45	42	3,3,1,2,2,3,2,4	20	1	82.8
10		21 32	706	598	20 59	108	21 39	26.7	8.8	00 54	17.9	21 00	1278	1209	11 19	69	2,0,0,1,3,2,3,4	15	1	82.8
11		01 04	649	606	08 06	43	11 54	18.3	5.2	02 16	13.1	21 32	1231	1193	01 39	38	3,2,2,2,1,0,2,2	14	1	82.7
12		06 17	633	607	17 36	26	13 40	18.3	10.6	18 05	7.7	18 12	1232	1214	11 12	18	1,1,1,2,1,2,2,0	10	0	82.7
13	q	22 05	641	619	22 49	22	12 23	17.2	7.3	21 45	9.9	21 45	1229	1214	02 03	15	0,0,0,0,0,0,0,2	2	0	82.7
14		00 56	657	581	19 25	76	14 05	17.5	1.7	19 40	15.8	19 37	1247	1201	11 12	46	3,1,3,2,1,2,4,1	17	1	82.7
15		01 33	647	574	23 51	73	13 32	21.1	2.5	23 27	18.6	23 54	1233	1203	11 17	30	2,2,2,2,2,1,2,4	17	1	82.7
16		00 06	661	568	16 06	93	14 12	20.8	3.5	16 35	24.3	16 39	1270	1197	00 24	73	4,2,2,1,2,5,3,2	21	1	82.7
17		06 22	650	609	09 54	41	10 00	18.7	10.9	01 55	7.8	20 20	1230	1210	10 49	20	2,2,2,2,1,2,2,1	14	0	82.7
18		22 58	642	618	11 00	24	13 16	17.5	5.0	23 13	12.5	18 02	1225	1211	11 20	14	0,0,2,1,1,2,1,5	10	0	82.7
19		23 31	653	595	15 34	58	12 01	18.3	8.3	19 11	10.0	19 09	1231	1207	24 00	24	2,2,2,2,2,3,2,3	18	1	82.7
20		00 06	648	618	19 18	27	00 11	18.3	11.0	18 00	7.3	20 04	1229	1198	00 38	31	2,0,1,0,1,2,2,0	8	0	82.7
21		01 10	684	614	16 23	70	01 07	19.9	5.5	23 42	14.4	21 11	1231	1180	01 45	51	4,3,2,1,1,2,3,3	19	1	82.7
22	d	15 41	682	548	21 04	134	15 41	25.9	8.7	22 33	34.6	19 46	1274	1151	23 54	123	3,1,2,2,2,4,4,5	23	1	82.7
23	d	00 15	673	543	00 41	130	23 56	23.4	16.7	17 42	40.1	17 40	1272	1151	00 23	121	5,3,4,4,3,5,5,4	33	1	82.7
24	d	19 51	711	537	08 16	174	08 34	23.3	5.8	19 44	29.1	16 13	1269	1139	03 20	130	5,4,4,3,4,5,5,5	35	1	82.7
25	d	23 20	659	537	08 09	122	01 10	22.9	3.0	18 13	25.9	13 21	1252	1127	01 18	125	4,3,4,4,4,4,4,4	31	1	82.7
26	d	18 39	683	546	21 03	137	12 25	25.0	13.0	18 11	38.0	18 09	1314	1174	03 10	140	4,3,4,3,4,4,5,5	32	1	82.7
27		21 57	706	549	09 19	157	15 08	20.1	3.0	22 14	23.1	16 02	1254	1188	23 17	66	3,2,3,4,2,3,3,5	25	1	82.7
28		19 44	651	532	04 08	119	04 17	20.5	0.9	19 38	21.4	17 10	1247	1164	04 47	83	3,5,2,1,2,3,4,2	22	1	82.7
Mean		- -	658	588	- -	69	- -	20.1	3.6	- -	16.5	- -	1244	1194	- -	50	-	-	0.54	82.7

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

101 ESKDALEMUIR (H)												16,000γ (0.16 C.G.S. unit) +												MARCH													
	Hour G.M.T.																																				Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24													
	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	625	622	613	614	616	615	619	621	615	597	615	614	619	618	619	619	612	622	623	630	620	640	622	620	619												
2 d	631	607	610	598	620	638	623	612	565	558	557	560	564	595	635	646	646	579	634	560	589	594	625	623	599												
3	622	614	614	608	638	642	626	623	618	604	594	592	600	615	619	623	618	626	627	619	630	641	629	613	619												
4	612	622	630	616	626	628	623	630	625	619	609	605	608	615	618	623	622	613	625	626	633	633	631	632	622												
5	632	630	632	636	637	630	632	632	628	621	614	611	612	613	618	631	625	612	626	633	635	632	620	625	626												
6	626	626	624	624	626	628	633	630	624	620	614	610	612	616	614	623	625	630	633	633	639	640	617	612	624												
7	587	600	614	612	621	615	614	614	615	611	602	602	602	605	612	617	622	622	621	608	610	614	621	623	612												
8	624	624	625	623	623	626	628	629	630	615	602	606	617	626	625	634	610	606	618	633	607	583	603	547	615												
9 d	487	588	607	595	602	602	608	616	619	606	605	572	594	604	620	613	618	615	611	619	663	594	616	589	603												
10	590	577	578	576	601	606	608	615	610	606	607	605	600	608	623	625	611	614	615	626	623	613	619	614	607												
11 q	614	623	616	623	621	620	621	616	613	612	612	614	621	622	624	625	626	627	631	627	622	622	624	623	621												
12 q	627	638	620	621	623	624	628	625	623	619	618	617	623	626	631	635	633	634	630	632	634	631	627	625	627												
13 q	627	628	627	628	629	629	630	629	621	614	609	609	614	619	627	633	633	635	638	640	644	639	643	645	629												
14	642	633	635	635	640	646	642	636	633	625	619	614	614	612	625	631	637	632	630	639	623	642	639	625	631												
15	628	630	634	632	634	642	642	638	638	610	612	606	589	615	620	622	623	615	627	632	634	635	636	637	626												
16	643	633	623	614	633	639	638	631	629	617	614	614	610	619	630	630	621	632	636	636	631	634	630	622	627												
17 q	631	628	627	633	637	640	639	634	624	619	605	606	610	618	623	626	631	631	630	632	632	632	632	631	627												
18 q	631	631	632	637	637	640	642	642	634	625	618	614	618	623	629	631	636	636	640	646	650	646	643	647	635												
19	657	652	632	641	613	630	644	645	638	627	620	612	614	625	634	626	623	612	618	625	647	624	615	625	629												
20	620	614	623	621	621	619	620	623	618	610	603	602	610	613	618	623	628	638	625	628	614	606	615	627	618												
21	623	622	623	622	621	634	635	632	612	610	608	584	614	626	624	633	611	634	614	646	625	627	629	638	623												
22	630	598	634	633	624	610	621	627	625	602	598	604	617	622	620	624	627	618	619	631	626	626	612	627	620												
23 d	626	635	619	614	621	615	601	606	609	606	593	605	603	624	625	625	639	613	639	598	595	618	618	621	615												
24 d	624	625	634	619	586	617	637	584	613	558	572	585	586	604	618	626	608	623	631	606	572	640	606	582	607												
25 d	602	591	626	590	601	612	607	584	584	595	597	596	593	615	609	621	633	633	630	610	638	650	627	623	611												
26	622	618	620	618	619	626	630	619	620	615	612	594	614	616	620	621	627	620	622	636	671	653	604	606	622												
27	632	619	615	604	606	625	620	610	604	595	585	583	614	616	619	614	626	627	627	626	643	644	630	630	617												
28	624	630	630	637	617	619	618	613	604	594	597	595	595	603	614	638	618	631	626	637	646	627	631	635	620												
29	614	612	626	626	622	623	627	621	614	610	610	612	614	619	623	631	631	627	637	647	647	639	659	643	626												
30	642	631	628	631	607	633	635	633	623	617	618	615	614	610	623	623	626	626	649	631	626	632	641	640	627												
31	635	633	638	629	627	633	634	637	631	621	611	612	611	606	615	619	624	632	638	625	624	604	624	624	624												
Mean	620	621	623	620	621	626	627	623	618	608	605	602	607	615	622	626	625	623	625	626	629	628	625	622	620												

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

102	ESKDALEMUIR (D)												11° +												MARCH											
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1	11.5	11.5	11.2	11.7	11.4	12.4	12.0	12.2	12.4	14.2	15.9	16.8	18.7	18.1	16.3	15.3	13.2	13.2	13.3	13.6	10.5	7.7	10.5	12.0	13.1											
2 d	10.8	9.6	8.9	13.3	10.6	5.5	9.2	12.2	18.3	20.3	17.0	15.0	15.6	15.6	17.0	20.0	6.4	11.8	-3.8	-6.7	3.7	6.7	12.5	11.1	10.9											
3	11.6	10.6	13.9	22.9	13.4	9.3	9.8	12.5	12.4	14.2	14.8	15.4	15.5	16.9	17.8	17.6	15.8	15.7	15.5	13.7	8.6	12.0	10.6	10.7	13.8											
4	10.0	11.9	11.4	9.8	11.1	12.0	12.3	11.9	11.5	11.7	13.5	15.6	17.1	17.4	17.4	17.0	15.6	11.9	11.9	13.3	13.1	13.5	13.0	12.6	13.2											
5	12.8	12.9	12.5	13.3	11.5	11.5	12.5	12.0	11.9	11.7	13.1	15.4	17.3	17.6	16.8	16.4	15.3	14.3	14.3	13.9	9.7	7.5	10.2	12.9	13.2											
6	13.2	13.0	12.5	12.5	12.3	12.4	12.2	11.8	11.6	12.2	12.5	13.8	15.9	17.3	16.3	16.3	15.8	15.3	16.5	15.6	15.1	14.7	11.4	10.8	13.8											
7	4.8	4.3	9.8	10.8	10.1	10.4	13.1	14.7	14.2	13.7	14.1	15.8	17.4	17.8	18.6	17.3	16.6	15.9	7.7	10.1	12.7	12.4	11.3	11.8	12.7											
8	11.8	10.8	8.8	7.6	9.1	11.5	11.7	11.4	10.7	12.0	14.0	16.0	17.0	19.6	20.0	22.6	20.6	20.6	18.1	15.9	0.2	-1.4	-4.5	-11.4	11.4											
9 d	7.3	6.2	7.9	10.1	6.5	7.5	13.1	12.1	12.5	12.9	13.9	16.6	18.1	20.8	20.8	20.1	14.1	15.7	15.5	12.0	6.7	8.4	10.5	11.9	12.5											
10	2.8	8.9	4.2	5.1	7.8	10.9	12.2	11.9	12.7	12.6	13.7	15.5	17.4	18.4	18.2	19.2	16.4	15.5	14.2	14.5	14.5	11.3	9.2	11.5	12.4											
11 q	10.3	10.1	10.7	11.2	10.4	10.7	11.3	11.9	11.9	12.1	13.7	15.8	17.6	17.6	16.9	16.4	14.7	14.1	14.0	14.1	12.9	12.6	12.9	12.3	13.2											
12 q	12.2	12.7	11.7	11.5	11.4	11.4	11.2	10.8	10.7	11.4	13.5	16.5	19.2	19.6	19.0	17.6	16.3	15.5	15.3	14.1	14.1	13.4	12.6	11.8	13.9											
13 q	12.4	12.4	12.5	11.8	11.6	11.6	11.6	11.4	10.4	10.6	12.5	15.4	17.6	18.3	17.7	16.7	15.1	14.7	14.9	14.3	14.3	11.5	12.0	12.5	13.5											
14	13.9	9.2	11.4	11.2	12.9	12.9	11.8	10.8	10.2	11.1	12.1	14.8	17.7	18.7	18.8	17.3	15.6	15.2	13.6	14.6	10.8	9.3	5.1	11.3	12.9											
15	12.9	13.0	12.4	12.3	12.7	12.7	15.0	13.7	11.6	12.3	13.4	18.7	20.0	20.5	20.1	17.4	15.4	13.5	13.2	13.6	13.7	12.9	12.0	11.1	14.3											
16	9.0	9.0	8.4	11.1	12.9	13.4	13.3	12.4	12.7	11.7	12.2	14.2	16.5	17.0	16.7	15.6	13.5	13.3	13.7	13.4	11.6	4.9	9.3	10.2	12.3											
17 q	13.2	13.7	14.7	13.7	12.7	12.6	13.3	12.0	9.7	9.9	10.9	14.0	16.7	18.1	18.3	17.1	15.2	14.4	12.4	10.7	12.7	12.4	12.4	12.4	13.5											
18 q	12.6	12.9	12.9	13.0	13.2	12.9	12.7	11.9	10.5	10.3	12.6	15.9	18.7	19.8	19.5	18.1	16.5	15.3	14.6	14.7	14.3	13.6	12.9	12.5	14.2											
19	13.6	12.5	7.4	7.5	7.8	11.1	10.9	11.8	11.6	12.0	13.7	18.0	19.1	21.1	20.7	20.8	19.4	16.1	13.3	12.4	7.2	9.9	4.4	7.6	12.9											
20	8.7	8.9	12.9	11.7	11.2	11.4	11.5	10.9	11.0	11.4	13.6	15.3	16.0	16.8	16.4	15.5	15.0	15.6	13.8	10.5	7.4	3.9	7.1	8.6	11.9											
21	11.3	8.4	6.4	5.5	7.9	7.5	5.9	7.5	8.4	11.4	14.2	15.4	16.4	17.4	16.9	17.9	15.0	16.5	11.9	3.4	8.3	11.4	11.8	14.8	11.3											
22	15.7	17.3	14.1	6.3	7.3	9.7	12.9	11.7	11.1	11.5	14.2	16.5	17.9	18.2	18.2	16.1	16.4	14.7	14.7	14.9	13.0	1.5	11.4	13.7	13.3											
23 d	11.7	13.1	12.3	18.8	13.3	6.7	10.4	10.7	12.8	12.8	15.4	18.0	20.3	19.2	17.5	4.0	8.8	14.2	1.7	-4.5	8.5	10.0	11.2	15.5	11.8											
24 d	16.9	13.3	16.0	9.5	4.6	12.6	13.9	17.3	14.1	15.8	16.7	20.0	20.2	23.3	21.0	18.7	14.1	12.3	-3.9	-11.5	-4.7	2.3	4.3	4.7	11.3											
25 d	13.5	17.6	12.4	8.7	10.8	9.3	10.6	16.9	21.5	16.7	16.6	18.4	20.5	19.2	21.0	15.2	17.4	13.0	2.9	5.2	8.2	10.5	13.6	13.3	13.9											
26	15.1	13.7	11.7	13.1	14.5	11.3	12.9	11.6	10.6	11.6	13.8	16.0	17.3	18.0	15.7	13.7	12.1	12.2	11.3	9.7	5.6	3.0	4.6	12.2	12.1											
27	12.7	7.7	11.9	12.8	15.6	11.9	9.6	9.2	11.2	12.4	13.9	16.1	18.1	18.1	18.3	16.7	14.1	14.0	13.4	9.8	5.7	8.7	8.3	11.6	12.6											
28	12.4	11.5	13.5	11.5	8.3	9.7	11.6	10.7	9.7	11.2	15.2	17.9	21.4	22.1	19.1	17.6	16.8	12.2	9.4	7.1	10.1	10.1	12.2	11.9	13.1											
29	7.4	9.6	9.6	8.8	9.7	11.5	10.7	8.8	8.8	9.1	11.4	14.7	17.4	18.5	18.8	19.1	17.8	16.7	16.0	14.1	7.1	11.9	13.4	11.0	12.6											
30	7.8	9.3	13.6	11.8	11.9	13.5	11.0	10.1	9.4	9.0	10.9	13.7	16.8	18.9	20.5	20.0	19.8	17.3	7.8	7.0	4.6	8.7	11.8	12.2	12.6											
31	12.6	12.4	11.9	11.1	11.3	11.9	10.9	9.8	8.8	9.3	11.6	15.4	19.9	20.6	21.5	18.2	16.1	14.7	13.6	10.6	7.5	4.6	7.6	7.7	12.5											
Mean	11.4	11.2	11.3	11.3	10.8	11.0	11.7	11.8	11.8	12.2	13.7	16.0	17.9	18.7	18.5	17.1	15.3	14.7	11.6	10.1	9.3	9.0	9.9	10.7	12.8											

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

69

103 ESKDALEMUIR (Z)

44,000γ (0.44 C.G.S. unit) +

MARCH

	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1216	1219	1221	1224	1225	1222	1217	1218	1217	1218	1208	1203	1205	1211	1219	1228	1231	1229	1226	1225	1230	1225	1224	1220	1220	1220
2 d	1205	1201	1191	1178	1168	1183	1189	1195	1206	1210	1230	1246	1264	1302	1382	1351	1388	1339	1314	1259	1237	1228	1217	1217	1246	1246
3	1216	1219	1218	1186	1185	1190	1203	1210	1214	1218	1219	1222	1225	1225	1225	1227	1229	1227	1226	1231	1233	1221	1214	1222	1217	1217
4	1224	1218	1197	1209	1216	1218	1219	1219	1223	1220	1215	1214	1214	1219	1225	1231	1235	1238	1235	1230	1226	1225	1225	1225	1222	1222
5	1224	1224	1223	1219	1219	1220	1219	1221	1221	1219	1216	1214	1215	1219	1225	1227	1234	1234	1230	1226	1227	1224	1224	1222	1223	1223
6	1223	1224	1225	1224	1225	1223	1222	1223	1223	1223	1221	1218	1215	1219	1220	1225	1229	1230	1227	1227	1225	1225	1236	1236	1225	1225
7	1217	1202	1215	1225	1226	1225	1219	1219	1219	1223	1221	1219	1219	1226	1231	1235	1236	1240	1248	1243	1239	1236	1235	1231	1227	1227
8	1227	1225	1223	1221	1220	1221	1221	1223	1223	1224	1223	1221	1219	1220	1226	1242	1269	1262	1254	1247	1266	1244	1237	1181	1231	1231
9 d	1059	1152	1209	1210	1214	1220	1219	1221	1224	1226	1226	1235	1237	1238	1238	1247	1251	1248	1249	1249	1236	1230	1234	1189	1219	1219
10	1190	1167	1180	1194	1201	1207	1221	1229	1231	1233	1228	1227	1231	1234	1231	1242	1253	1259	1258	1244	1239	1243	1241	1237	1226	1226
11 q	1235	1229	1230	1224	1226	1226	1227	1230	1231	1230	1226	1224	1222	1223	1225	1227	1231	1232	1230	1231	1234	1235	1235	1234	1229	1229
12 q	1230	1219	1223	1225	1226	1225	1224	1225	1225	1225	1219	1214	1212	1214	1217	1223	1225	1225	1224	1229	1227	1229	1230	1231	1224	1224
13 q	1229	1226	1225	1225	1225	1224	1224	1225	1228	1229	1221	1214	1213	1214	1219	1223	1223	1223	1221	1221	1222	1226	1226	1225	1223	1223
14	1218	1219	1222	1221	1218	1212	1212	1214	1214	1218	1213	1207	1208	1214	1218	1220	1223	1225	1226	1225	1232	1230	1221	1223	1219	1219
15	1222	1223	1222	1222	1221	1219	1217	1213	1214	1214	1213	1209	1216	1220	1223	1227	1231	1236	1231	1228	1225	1225	1225	1225	1222	1222
16	1220	1219	1219	1217	1211	1211	1213	1217	1218	1220	1217	1214	1215	1219	1222	1227	1230	1227	1225	1223	1225	1225	1221	1221	1220	1220
17 q	1218	1218	1220	1220	1221	1221	1219	1219	1223	1219	1217	1213	1211	1213	1217	1220	1225	1225	1226	1225	1222	1223	1223	1223	1223	1220
18 q	1223	1222	1222	1222	1222	1220	1219	1219	1220	1217	1213	1209	1209	1214	1218	1222	1225	1223	1221	1219	1218	1219	1220	1219	1219	1219
19	1213	1194	1194	1198	1209	1206	1208	1211	1212	1213	1213	1211	1212	1215	1222	1237	1248	1254	1250	1243	1233	1223	1211	1196	1218	1218
20	1188	1186	1202	1218	1223	1225	1225	1219	1217	1214	1214	1213	1216	1219	1222	1226	1229	1230	1235	1242	1242	1248	1233	1230	1222	1222
21	1230	1224	1183	1165	1191	1190	1197	1200	1207	1212	1210	1212	1214	1214	1218	1226	1240	1242	1262	1252	1211	1209	1217	1216	1214	1214
22	1193	1169	1168	1194	1206	1207	1209	1214	1215	1219	1217	1214	1210	1213	1219	1230	1236	1242	1240	1233	1236	1227	1221	1221	1215	1215
23 d	1223	1219	1213	1167	1175	1197	1203	1206	1206	1207	1208	1209	1208	1215	1227	1264	1276	1259	1255	1240	1226	1218	1219	1218	1215	1215
24 d	1210	1202	1177	1174	1176	1197	1202	1203	1209	1219	1227	1226	1236	1231	1246	1243	1265	1264	1266	1242	1213	1153	1160	1185	1214	1214
25 d	1193	1174	1177	1180	1191	1207	1215	1214	1207	1214	1219	1220	1231	1235	1246	1256	1252	1265	1268	1250	1224	1210	1202	1215	1219	1219
26	1220	1222	1225	1220	1209	1209	1213	1219	1219	1215	1213	1216	1220	1229	1241	1242	1247	1250	1244	1236	1219	1197	1201	1199	1222	1222
27	1199	1206	1208	1209	1186	1202	1208	1213	1213	1211	1208	1213	1217	1220	1232	1237	1236	1234	1231	1234	1233	1219	1213	1209	1216	1216
28	1213	1206	1193	1180	1195	1207	1204	1206	1212	1213	1211	1209	1215	1221	1230	1237	1247	1252	1254	1247	1221	1223	1221	1217	1218	1218
29	1208	1199	1210	1219	1219	1217	1215	1220	1219	1215	1211	1210	1213	1217	1220	1225	1227	1230	1231	1232	1221	1225	1213	1210	1218	1218
30	1217	1219	1216	1210	1211	1197	1207	1213	1215	1214	1209	1206	1203	1213	1221	1227	1234	1235	1243	1243	1243	1237	1231	1227	1220	1220
31	1226	1225	1223	1224	1221	1220	1220	1221	1222	1219	1216	1213	1214	1214	1219	1225	1228	1229	1230	1238	1242	1236	1228	1221	1224	1224
Mean	1211	1209	1209	1207	1209	1212	1214	1216	1218	1219	1217	1216	1218	1223	1231	1236	1243	1242	1241	1236	1230	1224	1221	1218	1222	1222

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

104 ESKDALEMUIR

MARCH

	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 11° +	Minimum 11° +	Range		Maximum 44,000γ +	Minimum 44,000γ +	Range								
	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ					°A.			
1	21 04	662	582	09 16	80	12 23	19.1	4.1	21 33	15.0	20 56	1235	1203	12 14	32	1,1,2,3,2,2,3,3	17	1	82.7
2 d	16 15	808	513	18 42	295	16 22	25.9	-24.1	19 00	50.0	16 21	1454	1162	04 44	292	3,4,4,4,5,6,5,4	35	2	82.7
3	21 58	690	577	10 44	113	03 13	26.5	-0.2	20 31	26.7	19 50	1236	1180	03 30	56	4,4,3,3,2,2,4,4	26	1	82.7
4	01 51	659	599	00 29	60	14 06	18.7	7.7	00 56	11.0	18 10	1240	1193	02 33	47	4,2,1,2,2,2,2,1	16	1	82.7
5	20 57	674	604	17 14	70	13 23	18.3	-0.7	20 55	19.0	17 02	1235	1214	11 41	21	0,2,1,1,2,3,4,4	17	1	82.7
6	21 35	644	584	24 00	60	13 19	19.6	5.9	23 50	13.7	23 50	1240	1215	12 30	25	0,0,1,2,2,2,1,3	11	1	82.7
7	18 23	637	567	00 26	70	13 55	19.1	-4.2	00 58	23.3	18 42	1252	1199	01 12	53	4,2,3,2,2,1,4,2	20	1	82.7
8	22 49	668	411	24 00	257	16 05	24.5	-17.0	23 40	41.5	20 23	1276	1092	24 00	184	2,2,2,2,2,4,5,6	25	2	82.8
9 d	20 26	737	404	00 02	333	14 57	22.5	-4.8	20 21	27.3	19 07	1254	999	00 20	255	6,2,3,3,4,3,5,5	31	1	82.7
10	15 48	638	550	00 06	88	16 00	20.0	-1.1	00 19	21.1	18 06	1263	1155	01 41	108	4,3,3,2,2,3,2,3	22	1	82.7
11 q	01 17	647	600	02 02	47	12 57	18.1	7.4	01 12	10.7	22 21	1236	1221	12 50	15	3,1,1,2,2,1,2,2	14	1	82.8
12 q	00 58	651	614	11 06	37	12 40	20.3	10.3	08 35	10.0	00 02	1231	1210	12 27	21	3,1,1,1,1,1,1,1	10	0	82.8
13 q	23 55	652	606	10 47	46	13 32	18.7	6.9	21 57	11.8	22 05	1231	1210	12 15	21	1,0,0,1,1,1,0,3	7	0	82.8
14	21 49	671	606	13 32	65	13 38	19.6	1.0	22 40	18.6	20 54	1240	1206	11 20	34	3,2,1,2,2,2,3,3	18	1	82.8
15	08 18	648	573	12 10	75	12 06	22.0	9.7	08 46	12.3	17 50	1236	1207	11 14	29	1,1,3,3,3,2,1,1	15	1	82.8
16	21 23	671	597	03 18	74	13 21	17.9	-2.5	21 17	20.4	16 42	1231	1210	04 47	21	2,3,2,2,2,2,2,4	19	1	82.8
17 q	05 34	643	601	10 50	42	14 00	18.8	8.3	19 12	10.5	18 35	1228	1210	12 36	18	2,1,2,1,0,1,2,0	9	0	82.8
18 q	20 57	654	611	11 02	43	13 12	20.1	9.7	09 26	10.4	16 50	1225	1209	12 06	16	1,0,1,0,1,1,1,1	6	0	82.8
19	20 33	677	582	23 09	95	13 15	23.3	2.3	22 34	21.0	17 36	1257	1185	23 52	72	3,3,1,3,3,3,4,4	24	1	82.8
20	19 43	654	594	21 15	60	13 23	17.1	0.4	21 20	16.7	21 32	1252	1176	00 58	76	3,2,1,2,1,2,4,3	18	1	82.9
21	19 43	724	566	11 34	158	15 28	19.3	-10.9	19 25	30.2	19 30	1280	1150	02 50	130	4,3,3,3,2,4,5,3	27	1	82.9
22	21 10	697	535	01 34	162	02 01	21.4	-3.1	21 48	24.5	18 01	1245	1151	01 54	94	5,3,2,2,3,2,3,5	25	1	82.9
23 d	16 05	678	559	19 39	119	12 17	23.2	-10.4	19 44	33.6	16 28	1283	1157	03 50	126	3,4,4,3,3,5,5,3	30	1	82.9
24 d	18 25	780	496	18 40	284	14 07	27.5	-23.7	19 01	51.2	18 12	1292	1138	21 51	154	3,4,4,4,4,5,6,5	35	2	82.9
25 d	18 13	731	560	03 56	171	14 22	24.9	-10.1	18 08	35.0	18 07	1282	1170	01 36	112	4,4,4,3,4,4,5,4	32	1	83.0
26	20 41	706	577	11 28	129	12 39	19.8	0.4	21 14	19.4	17 19	1254	1193	21 47	61	2,2,2,3,4,3,4,4	24	1	83.0
27	21 27	668	556	11 21	112	04 13	20.5	1.8	20 35	18.7	15 15	1238	1178	04 36	60	3,3,3,3,3,3,3,4	25	1	82.9
28	19 53	710	581	13 00	129	12 48	23.8	-3.0	19 49	26.8	18 38	1254	1176	03 30	78	3,3,2,3,3,4,5,3	26	1	83.0
29	22 02	679	594	01 04	85	15 34	19.9	4.5	00 28	15.4	19 11	1236	1196	01 09	40	3,2,2,2,1,2,3,3	18	1	83.0
30	18 36	678	582	04 39	96	14 55	21.5	1.1	18 25	20.4	18 22	1247	1192	05 30	55	3,3,2,2,2,2,4,3	21	1	83.0
31	18 38	645	595	21 27	50	14 20	23.3	2.2	21 10	21.1	20 08	1243	1213	11 42	30	1,1,1,1,2,2,3,3	14	1	83.0
Mean	- -	680	567 - -	113	- -	21.1	-1.0 - -	22.1	- -	1255	1180 - -	75	-	-	-	-	0.97	-	82.8

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											
	Hour G.M.T.																								Mean											
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ											
1	631	626	623	626	632	632	628	624	622	597	597	600	595	616	625	630	630	627	631	636	637	635	634	637	624											
2	646	642	638	631	623	623	631	628	611	593	592	598	605	616	616	624	625	621	631	624	641	632	634	623	623											
3	614	623	626	626	629	626	634	626	623	614	608	612	619	621	627	621	633	641	650	657	633	638	645	614	627											
4 d	568	618	612	624	626	627	633	615	609	600	596	600	602	605	623	624	615	632	635	612	614	624	646	623	616											
5 q	626	619	622	626	627	626	624	621	618	610	606	608	619	629	636	631	630	631	637	631	636	635	632	627	625											
6 q	623	618	617	621	623	630	631	625	613	605	598	605	610	613	621	631	635	639	640	634	635	636	641	636	624											
7 q	629	627	626	627	629	631	634	633	625	613	604	600	605	616	618	630	633	640	648	644	640	636	631	632	627											
8	627	623	626	628	630	638	635	631	618	614	610	599	604	607	615	628	640	646	648	648	646	656	637	627	628											
9	652	633	627	622	631	638	634	628	619	614	611	611	617	621	633	640	644	657	654	662	665	658	657	659	637											
10	654	648	643	646	654	651	649	648	635	618	611	594	605	618	628	625	635	638	638	644	640	638	647	638	635											
11	636	638	640	635	631	640	625	627	602	596	581	603	608	616	622	621	648	607	650	641	646	650	639	632	626											
12	640	643	634	638	636	639	636	627	624	606	603	585	616	613	624	631	635	638	643	640	640	643	642	642	630											
13	637	658	642	630	632	637	638	636	622	598	612	612	612	599	606	622	623	650	641	641	640	637	640	641	629											
14 q	641	639	630	630	631	640	639	639	628	613	605	601	600	614	625	633	640	645	645	640	642	639	643	637	631											
15	639	635	629	633	634	648	651	645	629	605	597	599	600	607	621	637	643	653	652	658	658	658	653	652	635											
16 d	649	662	658	629	627	662	630	622	611	613	595	590	576	597	622	620	598	639	629	643	640	693	629	632	628											
17	624	604	621	629	634	633	625	611	618	621	612	590	584	583	598	625	630	647	646	647	646	636	641	637	623											
18	633	625	630	630	633	628	630	613	614	609	600	606	613	623	620	633	635	649	644	636	638	638	638	644	628											
19	641	626	633	615	627	637	630	624	619	610	605	618	584	605	625	628	614	631	635	639	638	642	650	607	624											
20 d	605	631	620	599	622	611	611	620	591	614	603	586	601	597	597	609	617	640	634	641	632	670	661	609	618											
21 d	625	619	624	630	622	622	625	595	585	600	596	594	599	608	620	637	655	653	665	630	630	649	643	635	623											
22	630	620	624	621	634	633	622	612	603	593	589	592	607	617	624	645	633	639	648	653	641	629	633	615	623											
23 d	629	626	630	609	659	629	613	605	588	584	580	583	601	617	620	637	630	640	643	658	631	634	627	646	622											
24	638	629	629	629	629	630	626	625	620	612	606	611	609	622	630	629	641	646	674	672	662	669	664	658	636											
25	651	642	638	637	643	644	641	637	629	618	615	614	615	621	637	656	645	652	662	654	645	645	644	651	639											
26	641	641	629	635	634	635	630	642	637	627	617	612	609	610	618	619	643	645	641	645	643	639	666	633	633											
27	623	624	632	626	630	629	622	617	613	602	609	601	610	613	612	626	639	642	648	652	643	639	641	651	627											
28 q	645	645	636	634	630	632	631	628	630	622	617	608	609	617	623	633	640	647	647	647	645	644	643	641	633											
29	642	642	641	642	640	642	640	639	637	627	617	603	619	637	634	627	638	645	648	645	641	637	641	641	636											
30	641	642	645	645	643	637	645	636	647	639	622	608	607	621	630	633	650	648	644	639	629	625	626	628	635											
Mean	633	632	631	628	633	634	631	626	618	610	604	601	605	613	622	629	634	641	645	644	641	643	642	635	628											

MAGNETIC DECLINATION (WEST)

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

106 ESKDALEMUIR (D)													11° +													APRIL									
	Hour G.M.T.																																		
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean										
1	16.8	12.1	9.9	9.8	10.8	9.6	9.1	8.8	7.8	10.4	15.0	18.3	21.0	19.6	19.5	17.6	15.7	13.1	11.9	12.5	12.2	12.4	12.9	11.9	13.3										
2	14.3	12.9	9.7	7.5	7.3	10.3	10.4	8.9	8.1	9.9	11.9	15.2	17.9	19.0	17.9	16.0	14.8	12.1	12.4	9.3	7.6	9.1	10.3	5.7	11.6										
3	6.4	11.9	13.3	8.7	8.9	9.6	10.6	8.4	8.9	9.3	11.7	15.6	19.3	20.1	19.8	17.9	16.5	16.2	15.2	7.6	12.1	9.0	7.2	4.1	12.0										
4 d	11.2	2.1	6.1	3.1	7.5	7.5	8.2	8.4	8.4	10.3	12.6	17.1	19.9	23.4	20.1	20.3	19.8	17.4	14.2	3.1	5.2	9.6	14.2	11.9	11.7										
5 q	12.0	13.7	13.2	11.7	11.0	10.7	10.9	10.7	10.8	11.5	14.9	17.9	19.0	18.8	18.4	15.9	14.4	13.9	13.3	11.3	11.8	9.4	9.6	9.5	13.1										
6 q	7.5	7.1	5.4	7.1	5.9	7.9	9.0	9.7	10.4	10.7	13.2	15.3	18.7	19.6	19.5	18.3	16.5	15.0	14.6	13.4	14.0	13.5	12.3	11.6	12.3										
7 q	11.6	11.3	11.5	11.3	11.1	10.8	10.5	9.6	8.9	9.9	12.0	14.7	16.8	18.7	17.8	16.5	14.8	13.9	13.1	13.3	13.4	12.6	12.3	12.0	12.9										
8	7.5	9.3	10.7	9.5	8.7	8.3	7.5	7.3	7.5	10.1	12.6	14.5	17.3	19.4	18.5	16.0	15.2	14.8	14.2	14.2	14.1	9.2	4.9	6.6	11.6										
9	10.3	7.0	7.1	8.4	10.6	9.7	9.3	8.1	8.2	9.7	12.0	14.8	18.1	19.4	19.0	18.3	18.0	17.0	16.1	16.0	16.0	14.7	13.7	11.6	13.0										
10	11.1	10.7	10.3	10.2	10.1	11.0	12.1	10.4	9.4	9.8	13.7	16.1	17.9	18.9	19.1	18.3	16.8	15.1	13.3	13.6	13.5	7.3	5.8	9.4	12.7										
11	12.0	12.2	11.2	11.8	16.6	16.9	19.3	17.5	13.0	11.9	12.0	15.5	15.5	16.6	17.0	16.6	14.7	9.4	13.5	13.6	13.7	13.1	11.3	9.3	13.9										
12	14.7	16.3	14.0	10.8	8.9	9.3	9.5	10.9	12.7	12.4	14.1	17.1	18.3	19.2	18.3	15.8	14.7	9.3	12.9	12.8	9.0	11.2	9.7	11.2	13.0										
13	11.9	15.1	12.2	8.6	9.3	9.1	8.5	8.7	10.7	14.7	12.9	13.0	17.3	19.1	16.4	16.5	15.5	9.9	11.7	6.0	10.1	12.9	12.7	12.0	12.3										
14 q	13.3	12.9	12.0	11.9	12.4	11.8	10.2	9.0	8.3	8.8	10.8	13.7	15.5	17.3	17.3	16.6	15.5	14.2	12.9	11.2	11.5	11.3	11.1	11.2	12.5										
15	12.9	11.5	15.4	13.6	11.8	11.4	9.6	8.2	6.6	8.0	9.9	13.6	17.5	19.1	19.7	19.0	17.9	16.7	15.8	14.9	14.1	13.7	12.8	12.1	13.6										
16 d	11.9	13.3	12.4	20.5	25.0	15.8	16.2	18.8	16.3	13.3	11.5	13.0	15.5	17.3	21.4	22.8	14.2	13.7	15.6	14.5	6.3	1.6	9.9	10.2	14.6										
17	11.3	12.1	8.5	9.9	8.8	7.6	6.7	7.6	9.0	9.0	11.5	14.6	17.6	18.6	17.7	16.9	15.6	14.5	14.1	13.9	13.8	11.9	10.8	10.5	12.2										
18	10.5	10.0	11.7	12.3	11.5	13.0	14.3	13.2	12.9	10.7	12.5	14.4	17.2	17.7	16.8	15.6	14.8	15.2	13.8	12.1	11.4	10.9	10.1	10.0	13.0										
19	9.5	10.4	10.4	15.5	13.8	10.6	10.9	9.5	8.8	10.1	11.7	15.5	17.1	18.9	21.1	20.2	18.5	17.8	15.6	14.3	12.8	8.3	4.8	0.7	12.8										
20 d	10.6	12.0	6.9	10.6	11.0	15.4	17.7	12.5	13.8	13.3	13.8	14.3	16.1	19.6	17.8	17.3	16.9	15.9	12.0	11.5	10.3	6.3	1.7	5.6	12.6										
21 d	13.1	10.3	8.8	11.4	8.8	8.3	10.7	11.3	13.3	11.6	12.8	14.7	16.3	18.7	18.4	14.8	15.9	13.5	5.8	12.3	12.7	14.6	12.9	12.1	12.6										
22	10.8	13.9	14.6	14.5	11.2	8.6	8.3	8.1	8.8	10.3	13.4	15.1	17.5	19.3	16.0	17.7	16.6	16.8	13.5	11.3	10.8	9.7	7.1	6.7	12.5										
23 d	10.7	9.7	9.7	15.2	14.5	16.5	8.3	8.0	8.6	10.2	12.9	14.9	16.0	17.6	14.6	12.5	13.1	13.3	8.8	9.1	11.4	10.4	12.1	14.9	12.2										
24	13.1	10.6	11.2	10.6	10.7	10.4	10.6	10.7	10.0	10.6	11.9	14.5	16.1	16.1	16.1	15.1	14.4	14.7	16.5	15.9	14.8	13.7	13.1	11.8	13.1										
25	10.7	10.7	10.7	10.5	10.3	9.3	8.6	7.7	7.9	8.7	12.9	15.7	18.5	18.6	18.6	17.7	18.2	17.3	14.0	13.0	12.5	11.2	12.2	14.7	12.9										
26	11.3	11.4	12.6	11.3	11.1	8.6	10.1	9.6	9.2	9.6	10.9	13.3	15.8	16.8	18.2	19.0	18.7	17.0	14.5	13.3	12.7	11.6	5.4	4.5	12.3										
27	7.4	11.1	11.7	8.4	9.2	8.8	9.3	8.8	8.4	9.6	11.2	12.2	13.9	16.0	15.8	15.9	15.8	14.2	11.9	12.0	12.9	12.4	11.9	12.9	11.7										
28 q	11.1	10.5	9.3	8.1	8.0	9.4	9.4	10.1	10.6	11.5	11.7	13.7	15.6	15.5	15.5	15.5	15.5	15.1	13.6	12.9	12.7	12.3	12.1	11.8	12.1										
29	11.7	11.2	10.1	9.7	9.3	9.3	8.3	9.3	8.3	7.9	10.3	12.5	16.6	20.5	21.1	18.3	16.7	14.9	13.0	12.3	12.1	11.9	12.0	11.5	12.5										
30	11.5	12.1	10.8	12.0	9.2	9.8	7.9	7.8	9.3	8.9	10.2	12.9	16.1	19.7	22.4	22.6	17.5	15.2	13.6	11.4	6.6	9.0	9.8	10.8	12.4										
Mean	11.3	11.2	10.7	10.8	10.8	10.5	10.4	9.9	9.8	10.4	12.3	14.8	17.2	18.6	18.3	17.4	16.1	14.6	13.4	12.1	11.7	10.8	10.2	10.0	12.6										

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

71

107 ESKDALEMUIR (Z)

44,000γ (0.44 C.G.S. unit) +

APRIL

	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1188	1201	1218	1221	1221	1221	1221	1224	1224	1220	1210	1202	1209	1217	1221	1229	1235	1241	1242	1235	1231	1229	1226	1225	1219	1221
2	1215	1186	1189	1202	1209	1209	1211	1217	1218	1218	1215	1211	1209	1215	1224	1229	1236	1243	1244	1244	1234	1225	1225	1219	1219	1219
3	1214	1208	1199	1208	1214	1218	1219	1221	1221	1220	1215	1207	1205	1210	1220	1231	1231	1231	1233	1236	1235	1239	1226	1204	1219	1219
4 d	1153	1170	1173	1181	1199	1212	1213	1217	1219	1219	1214	1210	1214	1219	1238	1248	1252	1246	1249	1264	1244	1231	1210	1217	1217	1217
5 q	1223	1223	1223	1226	1226	1226	1226	1222	1214	1211	1209	1207	1209	1214	1223	1236	1238	1238	1236	1235	1231	1230	1225	1220	1224	1224
6 q	1217	1218	1215	1216	1216	1219	1219	1219	1219	1214	1210	1207	1211	1217	1219	1226	1233	1236	1239	1242	1238	1234	1226	1221	1222	1222
7 q	1225	1225	1226	1226	1226	1226	1225	1223	1222	1223	1219	1214	1211	1211	1216	1218	1222	1227	1230	1230	1230	1225	1214	1215	1220	1220
8	1225	1226	1226	1227	1225	1218	1218	1218	1218	1214	1209	1208	1201	1207	1210	1216	1217	1225	1226	1224	1221	1223	1223	1221	1214	1214
9	1206	1207	1213	1214	1210	1212	1217	1216	1217	1212	1205	1201	1210	1212	1217	1221	1227	1228	1230	1230	1230	1232	1222	1218	1218	1218
10	1220	1220	1220	1219	1214	1212	1210	1209	1209	1209	1205	1207	1216	1219	1228	1234	1246	1264	1246	1239	1232	1228	1226	1225	1222	1222
11	1220	1223	1220	1220	1202	1195	1195	1194	1206	1214	1217	1218	1208	1214	1221	1225	1229	1230	1227	1226	1229	1226	1223	1219	1219	1219
12	1219	1206	1210	1213	1218	1219	1220	1218	1214	1217	1213	1209	1211	1222	1240	1235	1236	1237	1233	1234	1225	1223	1223	1222	1220	1220
13	1220	1205	1199	1208	1215	1218	1218	1216	1215	1211	1209	1209	1213	1217	1219	1219	1220	1223	1225	1226	1225	1225	1225	1221	1221	1221
14 q	1222	1221	1221	1223	1223	1222	1221	1221	1219	1220	1218	1214	1206	1212	1219	1221	1220	1223	1225	1225	1225	1223	1221	1223	1217	1217
15	1220	1219	1214	1209	1213	1214	1213	1212	1211	1214	1214	1206	1221	1232	1243	1266	1296	1268	1243	1235	1243	1212	1205	1213	1214	1214
16 d	1223	1210	1190	1174	1149	1154	1170	1174	1189	1207	1214	1215	1215	1220	1220	1225	1233	1235	1234	1231	1227	1230	1228	1226	1219	1219
17	1202	1181	1197	1211	1219	1221	1223	1222	1221	1219	1214	1211	1211	1217	1226	1230	1228	1226	1230	1236	1234	1231	1225	1222	1221	1221
18	1225	1226	1219	1219	1219	1218	1209	1209	1207	1208	1209	1210	1223	1229	1232	1252	1260	1247	1241	1242	1235	1232	1213	1193	1220	1220
19	1218	1218	1212	1198	1177	1194	1205	1212	1214	1215	1214	1212	1208	1217	1240	1242	1236	1238	1247	1240	1239	1217	1198	1193	1210	1210
20 d	1191	1198	1191	1186	1197	1192	1183	1189	1197	1197	1202	1209	1215	1219	1229	1235	1239	1254	1259	1248	1242	1227	1201	1202	1214	1214
21 d	1167	1180	1193	1190	1187	1201	1202	1207	1208	1208	1214	1215	1215	1228	1246	1254	1261	1259	1254	1236	1229	1226	1214	1196	1224	1224
22	1211	1213	1202	1202	1208	1215	1220	1221	1218	1215	1213	1215	1220	1226	1240	1245	1242	1243	1248	1239	1234	1231	1225	1205	1215	1215
23 d	1189	1206	1211	1183	1163	1165	1187	1203	1211	1214	1214	1219	1208	1210	1215	1219	1221	1224	1222	1225	1227	1225	1225	1223	1220	1220
24	1208	1217	1221	1224	1225	1224	1224	1223	1221	1217	1212	1209	1203	1202	1203	1207	1215	1219	1228	1235	1235	1233	1224	1207	1219	1219
25	1224	1225	1225	1225	1224	1223	1223	1223	1225	1215	1209	1207	1208	1213	1221	1220	1222	1230	1234	1232	1230	1230	1219	1213	1217	1217
26	1209	1215	1217	1218	1219	1215	1209	1205	1206	1204	1203	1205	1214	1214	1215	1214	1220	1229	1232	1231	1228	1228	1226	1215	1217	1217
27	1213	1203	1199	1210	1218	1220	1219	1220	1214	1213	1210	1212	1215	1217	1217	1218	1221	1223	1223	1223	1222	1222	1222	1222	1217	1217
28 q	1210	1214	1214	1211	1217	1217	1217	1214	1215	1213	1213	1213	1208	1209	1218	1225	1225	1226	1226	1225	1223	1223	1223	1223	1218	1218
29	1223	1223	1221	1218	1218	1217	1214	1215	1211	1210	1208	1209	1211	1211	1214	1220	1243	1254	1248	1247	1249	1238	1235	1231	1222	1222
30	1222	1219	1210	1205	1205	1209	1210	1214	1209	1209	1211	1212	1211	1211	1214	1220	1243	1254	1248	1247	1249	1238	1235	1231	1222	1222
Mean	1211	1210	1210	1210	1209	1211	1212	1213	1214	1213	1211	1210	1211	1216	1224	1230	1235	1237	1236	1235	1232	1228	1221	1216	1219	1219

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

108 ESKDALEMUIR

APRIL

	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 11° +	Minimum 11° +	Range	Maximum 44,000γ +	Minimum 44,000γ +	Range										
	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ				°A.				
1	00 40	650	581	11 12	69	12 33	21.8	6.2	08 09	15.6	18 05	1246	1179	00 40	67	3, 1, 2, 3, 3, 2, 1, 2	17	1	83.0	
2	00 47	673	586	10 17	87	13 21	19.5	3.1	23 52	16.4	19 31	1247	1182	01 28	65	3, 2, 2, 2, 2, 2, 3, 3	19	1	83.0	
3	19 24	687	579	24 00	108	12 52	20.9	0.8	19 17	20.1	19 15	1242	1174	24 00	68	3, 2, 1, 1, 1, 2, 4, 4	18	1	83.0	
4 d	22 36	673	531	00 12	142	13 57	25.5	-4.9	03 18	30.4	19 12	1272	1137	00 13	135	5, 4, 2, 2, 3, 3, 4, 4	27	1	83.1	
5 q	15 04	646	598	10 12	48	13 05	20.1	6.3	21 32	13.8	17 21	1242	1206	11 27	36	2, 0, 1, 2, 2, 3, 2, 2	14	0	83.1	
6 q	22 56	648	596	10 06	52	13 44	20.5	4.5	05 33	16.0	19 30	1243	1205	11 44	38	2, 2, 2, 2, 1, 1, 1, 2	13	0	83.1	
7 q	18 50	649	598	11 15	51	13 16	20.0	8.8	08 32	11.2	17 10	1238	1214	11 26	24	0, 0, 0, 1, 2, 1, 1, 2	7	0	83.1	
8	21 52	672	597	12 01	75	13 55	20.0	3.3	22 15	16.7	19 26	1231	1208	12 55	23	2, 1, 2, 1, 2, 2, 2, 3	15	1	83.0	
9	20 41	673	606	11 24	67	13 12	20.0	6.8	02 04	13.2	18 11	1229	1199	12 02	30	3, 2, 1, 1, 2, 2, 2, 1	14	1	83.0	
10	15 59	671	578	11 23	93	14 47	21.0	0.3	22 00	20.7	21 39	1236	1202	10 53	34	2, 2, 2, 3, 3, 3, 2, 3	20	1	83.1	
11	16 31	684	566	17 13	118	07 25	20.0	7.6	17 30	12.4	17 31	1268	1191	05 10	77	1, 3, 3, 3, 3, 5, 3, 2	23	1	83.1	
12	22 03	668	571	11 36	97	12 45	21.4	7.1	20 31	14.3	17 30	1231	1203	01 40	28	3, 2, 2, 3, 3, 2, 2, 3	20	1	83.1	
13	01 33	681	562	13 47	119	13 30	22.3	3.4	19 31	18.9	14 37	1243	1194	02 17	49	3, 2, 3, 3, 4, 3, 3, 1	22	1	83.1	
14 q	22 11	651	589	12 10	62	13 41	17.9	7.9	08 41	10.0	19 45	1228	1212	11 46	16	2, 2, 2, 1, 2, 2, 1, 2	14	0	83.1	
15	20 32	666	582	09 48	84	13 22	20.9	4.5	08 34	16.4	20 12	1226	1205	12 04	21	3, 2, 2, 3, 3, 2, 2, 2	19	1	83.1	
16 d	21 07	777	556	16 27	221	04 39	28.6	-13.0	21 06	41.6	16 39	1314	1141	04 58	173	3, 4, 3, 3, 3, 4, 5, 5	30	1	83.1	
17	19 20	653	569	12 09	84	12 35	20.1	6.0	06 50	14.1	17 04	1236	1169	01 28	67	3, 2, 2, 3, 3, 2, 1, 2	18	1	83.1	
18	17 38	668	590	10 20	78	13 56	18.5	9.1	21 37	9.4	20 00	1236	1205	08 40	31	2, 1, 3, 2, 2, 3, 2, 2	17	1	83.1	
19	22 34	664	558	12 49	106	15 47	23.6	-6.0	23 26	29.6	16 27	1265	1168	04 20	97	2, 4, 2, 2, 4, 3, 2, 4	23	1	83.1	
20 d	22 14	694	570	14 16	124	13 28	20.9	-2.2	22 39	23.1	18 15	1251	1179	06 59	72	4, 3, 3, 3, 4, 4, 3, 4	28	1	83.1	
21 d	18 12	709	569	08 21	140	14 17	19.2	-0.5	17 55	19.7	17 51	1266	1160	00 33	106	3, 3, 4, 3, 3, 4, 4, 4	28	1	83.1	
22	15 29	689	580	10 46	109	13 07	22.1	3.6	23 34	18.5	17 05	1265	1194	23 27	71	2, 3, 2, 3, 4, 4, 4, 3	25	1	83.2	
23 d	19 03	705	570	09 56	135	14 07	18.6	-0.7	18 55	19.3	18 50	1252	1159	05 12	93	3, 4, 3, 2, 3, 3, 4, 3	25	1	83.2	
24	18 06	694	594	12 43	100	18 05	17.6	9.7	05 42	7.9	20 23	1230	1202	00 00	28	2, 0, 1, 2, 2, 3, 3, 2	15	1	83.2	
25	23 12	684	605	10 40	79	15 03	20.4	6.6	07 08	13.8	19 31	1237	1202	23 42	35	2, 1, 1, 2, 3, 3, 3, 3	18	1	83.2	
26	22 29	689	591	13 14	98	14 16	19.9	1.9	23 06	18.0	18 42	1234	1202	10 45	32	2, 2, 3, 2, 4, 3, 2, 4	22	1	83.2	
27	23 33	662	593	17 03	69	13 37	17.8	6.2	00 00	11.6	19 02	1235	1195	02 32	40	3, 2, 2, 2, 3, 2, 2, 2	18	1	83.3	
28 q	17 09	653	590	11 54	63	12 23	16.5	6.5	03 53	10.0	17 55	1225	1208	00 14	17	2, 2, 2, 3, 2, 2, 1, 0	14	0	83.3	
29	14 33	674	594	11 21	80	13 55	23.3	6.6	06 32	16.7	15 38	1229	1208	12 35	21	1, 1, 2, 3, 4, 3, 2, 1	17	1	83.3	
30	17 03	691	601	12 47	90	15 24	23.4	5.1	20 14	18.3	16 52	1257	1201	03 55	56	2, 2, 2, 3, 3, 4, 3, 2	21	1	-	
Mean	-	-	677	582	-	95	-	-	20.7	3.5	-	-	1245	1190	-	55	-	-	0.83	83.1

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		
	Hour G.M.T.																								Mean	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24		
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	628	629	630	629	628	625	624	621	619	617	607	613	612	619	637	619	632	641	645	640	640	641	639	639	639	628
3	639	640	633	629	631	630	630	625	615	604	600	593	611	629	630	631	638	643	642	643	639	639	638	635	629	
4	637	637	637	637	636	636	633	629	623	613	613	613	615	628	631	642	645	640	641	646	639	646	641	641	633	
5	638	634	633	635	642	642	645	641	632	618	622	624	625	630	635	645	644	644	647	648	647	645	645	643	638	
6	645	641	637	634	645	639	641	632	623	623	625	610	616	612	625	624	647	649	651	651	647	652	650	645	636	
7	632	634	645	645	657	660	677	658	638	616	579	565	586	599	618	632	621	639	647	652	655	656	615	625	631	
8	641	625	616	615	630	619	592	620	621	615	613	581	576	601	605	615	626	637	643	647	645	651	649	651	622	
9	641	625	628	636	613	611	592	613	627	622	611	624	632	634	621	628	627	644	671	647	651	650	660	645	631	
10	607	631	631	630	638	620	608	611	613	603	592	603	610	615	626	637	644	656	668	647	651	641	649	637	628	
11	628	630	627	626	628	627	623	615	609	600	606	609	622	617	616	640	639	639	653	653	648	643	645	643	629	
12	642	636	636	633	632	628	633	633	627	618	628	629	628	638	640	644	648	648	646	648	647	646	643	639	637	
13	636	636	638	630	629	625	622	623	620	614	611	612	618	626	630	637	642	650	648	653	646	642	644	641	632	
14	641	640	640	641	642	639	636	628	623	617	615	619	625	629	628	628	632	635	643	648	645	646	647	646	635	
15	647	642	638	637	640	638	632	624	615	607	606	607	615	625	630	636	644	650	648	658	657	649	650	655	635	
16	645	648	650	652	663	659	646	628	625	618	611	623	644	642	644	638	680	684	685	644	608	592	632	611	641	
17	602	590	564	625	592	545	576	583	568	557	519	537	580	671	676	665	700	665	628	647	608	572	534	522	597	
18	533	580	578	612	606	599	600	589	592	593	591	594	605	608	611	625	618	645	655	644	646	645	621	644	610	
19	645	617	614	610	617	592	603	604	608	583	574	589	598	598	610	625	636	648	644	653	654	626	617	624	616	
20	644	632	633	610	604	623	622	605	598	592	568	577	602	602	608	626	633	640	645	650	652	649	633	639	620	
21	614	625	619	618	628	628	621	610	599	618	612	605	602	604	611	615	624	646	650	654	644	629	626	636	622	
22	629	623	622	620	619	612	617	620	612	606	608	601	600	610	619	624	648	655	659	657	655	638	638	637	626	
23	644	634	629	605	627	631	633	629	629	619	606	601	611	604	635	642	647	663	669	661	644	628	627	635	631	
24	642	633	628	628	630	628	623	616	604	599	609	612	618	617	617	634	641	661	652	649	659	656	650	650	631	
25	636	638	634	635	633	628	625	625	627	631	632	633	628	628	629	634	649	656	657	650	643	642	643	641	637	
26	640	637	639	636	636	630	628	628	629	625	621	612	617	618	627	634	648	660	659	661	657	659	662	666	639	
27	654	647	645	642	644	639	629	624	615	608	612	620	627	630	629	626	632	640	657	668	681	677	671	669	641	
28	660	661	645	649	667	644	615	576	563	568	573	588	611	615	617	617	637	632	641	645	644	646	640	641	625	
29	639	638	634	629	630	629	625	623	613	607	605	604	604	610	627	633	650	634	652	657	642	636	633	631	629	
30	632	632	633	632	627	622	615	620	616	608	604	613	619	610	610	625	636	638	648	648	643	640	640	631	627	
31	637	632	628	628	631	630	625	620	617	616	614	613	627	633	632	629	628	633	639	649	646	650	650	635	631	
Mean	633	632	629	630	632	626	623	619	614	608	603	605	613	621	626	633	641	647	651	651	646	641	638	637	629	

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

110	ESKDALEMUIR (D)												11° +												MAY	
	Hour G.M.T.																								Mean	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24		
1	10.7	11.2	11.5	11.4	11.5	10.3	9.8	8.3	7.5	8.6	10.7	13.2	15.4	16.5	18.0	17.1	15.4	14.3	12.9	12.2	11.8	12.0	11.6	11.8	12.2	
2 q	11.4	9.1	10.1	10.2	9.3	8.9	8.3	7.5	7.9	9.4	11.1	13.7	15.5	16.9	16.7	15.8	14.7	14.2	12.5	11.9	11.4	11.5	11.6	11.4	11.7	
3 q	11.4	11.5	10.9	10.7	10.4	9.8	8.8	8.0	7.4	8.7	10.2	13.5	16.8	18.3	17.8	16.8	16.3	14.7	12.9	12.8	10.0	9.9	11.3	11.4	12.1	
4	9.5	10.2	10.1	11.1	9.6	9.1	9.7	9.8	9.8	11.1	11.2	13.5	15.9	17.6	17.7	16.1	14.5	12.9	12.7	12.9	12.9	11.5	11.9	11.5	12.2	
5	10.0	8.9	8.8	10.2	10.5	5.7	5.5	6.5	8.0	12.1	13.3	16.7	20.1	20.8	18.7	16.5	16.1	14.8	12.8	8.6	9.3	9.3	9.6	7.6	11.7	
6 d	1.6	-3.6	-0.4	3.7	5.7	5.1	3.2	4.3	7.3	9.9	13.1	17.2	19.9	20.1	18.2	20.1	18.1	14.9	14.0	11.1	12.1	-2.9	2.9	11.3	9.5	
7	9.0	7.2	12.9	13.2	9.6	9.2	9.3	8.0	9.7	10.1	10.6	12.6	16.0	16.2	16.8	15.6	14.9	13.7	13.4	13.3	12.5	11.9	8.9	10.1	11.9	
8 d	8.4	16.0	11.0	7.9	10.9	13.4	11.4	10.1	8.2	8.4	11.8	12.4	14.3	16.0	16.8	16.9	16.6	15.0	8.7	12.8	12.3	11.6	12.0	8.9	12.2	
9	11.1	15.7	10.8	9.7	9.1	9.6	10.4	9.2	9.8	9.9	12.4	15.6	16.3	16.7	14.1	11.0	14.0	12.3	9.0	12.0	12.2	10.3	14.4	9.8	11.9	
10	10.1	10.6	10.6	11.5	10.6	9.8	7.9	7.0	8.6	11.5	13.7	15.8	18.0	18.9	16.4	15.1	14.7	11.7	11.9	13.1	12.3	10.1	11.8	11.7	12.2	
11	12.9	14.2	12.9	11.1	8.7	8.2	7.4	7.9	9.5	11.7	12.0	15.4	17.1	16.3	15.3	13.7	12.3	11.9	12.0	12.4	12.7	11.6	12.3	12.4	12.2	
12 q	11.8	11.9	11.8	11.6	10.0	8.0	6.2	5.0	5.8	8.6	11.4	15.1	17.8	18.7	17.4	15.2	13.5	12.5	12.7	12.6	12.4	10.9	11.5	11.5	11.8	
13 q	11.9	11.6	11.5	11.0	10.0	8.8	8.1	7.0	6.7	8.3	11.6	15.0	16.9	17.2	15.6	14.4	13.4	13.3	13.3	12.8	12.7	12.4	12.5	12.1	12.0	
14 q	11.9	11.8	11.6	10.8	9.8	8.3	7.1	6.2	6.6	8.3	10.5	12.9	15.2	15.9	15.3	14.2	13.8	14.2	13.8	14.0	13.3	12.4	12.0	11.4	11.7	
15 d	11.3	11.3	11.4	13.3	13.2	7.6	8.0	6.1	7.0	7.7	11.6	14.7	19.5	22.0	28.7	25.2	25.5	20.5	15.5	9.5	13.8	10.9	-10.6	-2.2	12.6	
16 d	-0.4	5.6	6.7	6.9	7.5	13.8	13.0	7.6	11.1	14.7	12.9	17.3	20.1	16.0	19.3	19.8	18.8	17.8	6.1	11.6	11.0	12.8	-13.8	-18.7	9.9	
17	-19.6	-10.0	1.4	6.3	4.7	4.5	4.4	5.3	6.6	9.9	11.9	14.1	15.9	16.5	16.9	16.5	15.3	15.5	15.0	13.4	11.9	10.1	6.9	6.3	8.3	
18	6.2	5.4	7.9	10.1	11.2	12.9	14.5	10.2	10.1	10.5	12.6	14.6	15.6	17.8	16.2	16.8	16.0	14.9	12.0	11.5	10.4	6.1	7.8	7.4	11.6	
19 d	10.8	10.8	5.9	2.5	9.9	11.7	5.9	6.1	7.1	7.5	10.1	11.7	15.0	17.0	17.2	15.6	14.6	13.6	12.5	11.1	6.8	7.2	6.8	3.9	10.1	
20	3.6	7.5	9.8	9.3	9.7	9.1	8.3	7.7	9.3	10.2	11.1	14.3	16.3	17.2	17.3	16.6	15.1	13.5	9.8	5.6	6.1	8.2	10.0	12.1	10.7	
21	10.4	10.6	11.6	8.8	10.1	9.4	10.3	7.2	6.6	7.9	9.9	12.4	13.4	14.2	16.0	16.1	13.4	13.1	13.0	11.4	5.6	10.5	11.1	10.5	11.0	
22	9.7	9.3	11.4	13.3	11.6	7.2	6.7	5.7	7.1	8.5	10.1	13.1	16.5	17.1	16.5	16.0	13.6	14.0	12.2	5.6	6.2	6.7	8.6	10.9	10.7	
23	11.7	10.9	10.3	8.7	8.7	8.0	7.0	6.2	6.7	10.2	11.9	12.7	13.2	14.0	13.6	13.1	12.3	12.5	11.6	12.1	12.7	12.4	11.7	11.4	11.0	
24	10.6	10.9	10.5	9.9	9.0	7.3	6.3	7.0	7.6	9.5	12.0	15.9	18.3	18.0	16.6	14.8	13.6	12.6	12.9	9.9	11.0	11.9	11.6	10.9	11.6	
25	11.4	11.1	10.7	9.3	7.8	5.8	4.3	4.3	5.8	8.3	12.0	13.9	15.5	16.7	17.3	17.0	14.6	12.9	12.6	13.1	13.2	13.1	12.9	11.0	11.4	
26	10.0	10.1	10.3	9.6	9.1	7.5	7.0	5.7	7.1	10.2	14.2	17.0	18.6	18.2	16.8	15.5	14.7	13.4	13.2	14.0	14.3	13.7	12.4	11.8	12.3	
27	11.3	9.5	9.6	15.5	17.5	14.9	14.7	11.1	12.0	14.0	18.0	18.9	20.4	20.8	18.7	14.5	11.5	12.9	12.9	12.8	12.7	12.8	10.5	9.4	14.0	
28	9.8	10.3	9.7	11.9	7.5	4.7	3.5	3.8	4.9	7.9	12.0	16.3	18.9	19.9	19.1	17.8	16.0	13.0	11.5	9.3	12.5	12.4	11.5	11.4	11.5	
29	11.1	11.0	11.1	9.9	8.8	7.8	8.1	8.2	8.0	9.2	12.9	16.2	18.6	18.7	18.0	16.7	15.0	13.4	13.3	12.9	12.2	12.0	11.6	10.4	12.3	
30	7.7	7.9	9.0	8.0	8.3	7.6	6.9	6.8	7.0	7.9	10.2	13.7	16.6	17.0	16.9	17.0	16.7	14.9	13.2	12.6	12.4	12.8	9.7	10.2	11.3	
31	10.3	10.7	9.2	8.8	7.9	7.0	6.5	6.6	6.8	8.9	12.1	15.5	17.0	18.4	17.7	17.8	15.8	14.8	14.5	13.9	6.6	8.8	9.0	8.1	11.4	
Mean	8.6	9.3	9.7	9.9	9.6	8.7	8.0	7.1	7.9	9.7	11.9	14.7	16.9	17.6	17.3	16.3	15.2	14.0	12.4	11.7	11.2	10.5	9.1	9.0	11.5	

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

73

111 ESKDALEUIR (Z)												44,000γ (0.44 C.G.S. unit) +												MAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Hour G.M.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

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

112 ESKDALEUIR												MAY												Mean
	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 11° +	Minimum 11° +	Range	Maximum 44,000γ +	Minimum 44,000γ +																

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

113	ESKDALEMUIR (H)												16,000γ (0.16 C.G.S. unit) +												JUNE					
	Hour G.M.T.																													
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean					
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ				
1	636	633	640	641	636	636	625	619	620	623	621	620	624	630	631	644	655	659	666	654	650	650	641	645	637					
2 d	646	645	646	669	639	633	624	603	635	593	589	602	621	614	636	625	659	652	676	655	633	621	632	624	632					
3 d	624	624	625	623	599	620	624	556	610	606	596	596	594	603	589	636	657	671	661	661	646	650	646	646	623					
4 d	636	628	618	640	610	593	620	624	613	596	577	587	608	621	635	630	644	660	650	652	651	644	642	639	626					
5	639	634	635	627	633	627	629	611	624	610	610	612	615	624	628	642	656	652	673	690	663	641	640	641	636					
6	643	642	638	617	613	619	616	628	623	614	610	600	617	624	626	635	648	661	655	659	652	643	645	641	632					
7	636	635	626	640	644	644	628	605	598	609	608	610	618	622	624	623	641	644	652	651	648	646	649	647	631					
8	643	641	637	633	634	633	632	633	625	616	616	615	612	613	619	635	648	649	654	655	652	652	648	648	635					
9	644	646	647	646	645	643	636	620	615	615	616	614	627	634	638	639	640	648	662	659	657	658	653	649	640					
10	648	645	641	646	640	639	647	635	623	621	611	603	611	624	635	644	652	663	663	665	662	654	648	647	640					
11	641	638	638	644	645	636	627	619	605	604	610	609	624	629	628	635	642	655	665	666	663	657	665	644	637					
12	646	646	647	648	650	651	643	627	613	598	600	616	633	630	649	643	677	692	666	659	669	658	623	634	642					
13	636	633	656	632	627	629	623	624	612	601	603	612	623	613	629	634	649	659	669	664	652	645	650	659	635					
14	634	633	634	629	634	630	619	616	611	609	610	615	624	621	631	644	657	657	665	661	656	651	645	640	634					
15	636	636	635	634	633	630	628	627	623	616	609	609	607	615	631	643	654	658	661	658	657	649	646	644	635					
16 q	640	641	642	644	644	638	628	619	610	609	611	618	624	639	636	649	650	658	659	657	660	658	660	660	640					
17	655	654	652	652	648	644	642	638	625	623	620	612	623	634	628	652	644	659	659	658	659	654	650	645	643					
18	639	637	639	636	637	633	625	620	619	619	620	612	623	626	635	643	649	652	667	668	669	661	655	652	639					
19 q	651	648	652	652	648	641	632	624	625	626	625	630	632	639	638	651	653	655	655	658	656	655	653	650	644					
20	649	645	644	644	641	643	648	653	650	643	636	629	628	656	646	643	652	676	692	684	653	644	632	629	648					
21	636	640	636	635	635	628	618	629	630	612	615	617	610	620	633	637	657	651	677	665	655	646	654	633	636					
22	636	636	638	638	632	630	628	631	620	611	620	619	614	631	644	639	652	652	644	652	653	650	653	639	636					
23 q	639	629	633	632	632	632	627	623	622	617	616	615	620	622	635	643	650	652	655	652	653	647	640	640	634					
24	638	642	638	644	644	636	633	634	632	627	619	625	636	638	641	634	641	654	670	663	655	654	639	638	641					
25	639	642	631	640	639	642	634	627	618	611	611	618	634	640	645	644	644	657	663	663	658	644	642	642	639					
26 q	642	641	641	640	640	638	636	631	626	619	620	621	629	641	650	652	653	656	668	659	653	648	640	642	641					
27 q	641	644	642	642	638	636	637	637	633	627	627	628	626	628	642	644	639	652	652	656	663	654	657	644	641					
28	644	642	641	633	643	644	639	636	628	623	618	616	622	636	644	651	656	661	661	669	669	662	661	671	645					
29 d	665	665	664	663	664	661	654	654	639	585	584	610	634	674	606	648	683	685	681	661	669	640	631	643	648					
30 d	647	650	640	613	629	617	611	600	575	572	607	606	630	626	644	639	665	661	651	674	648	654	645	633	631					
Mean	642	641	640	639	637	634	630	623	620	612	611	613	621	629	633	641	652	659	663	662	656	650	646	644	637					

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

114 ESKDALEMUIR (D)													11° +													JUNE	
	Hour G.M.T.																										
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean		
1	8.2	7.5	7.9	7.0	8.1	8.8	7.7	8.4	10.0	11.1	13.4	16.1	18.0	18.0	17.0	16.9	17.1	16.4	13.5	12.9	13.0	13.1	12.5	12.3	12.3		
2 d	11.3	9.7	8.7	1.3	1.7	0.5	2.5	7.7	13.1	13.3	16.3	20.1	20.9	21.0	25.2	22.4	19.2	20.5	20.1	8.5	4.1	8.8	2.8	6.9	11.8		
3 d	17.0	11.7	7.2	6.6	9.7	8.4	12.1	13.6	13.8	11.1	10.6	10.6	13.1	16.2	15.3	16.5	16.7	15.8	8.8	10.0	10.5	10.7	11.1	11.1	12.0		
4 d	10.2	17.3	13.3	13.3	10.4	11.7	13.6	5.7	6.1	7.7	9.6	13.0	15.9	16.3	16.7	16.4	15.2	15.1	13.2	13.8	11.7	9.8	11.8	10.7	12.4		
5	10.7	11.0	10.8	10.3	13.3	7.3	10.1	7.7	7.7	8.5	10.5	11.7	12.3	13.4	13.9	14.2	14.5	13.4	13.7	5.6	8.9	11.5	10.7	11.5	11.0		
6	10.7	10.6	9.0	7.0	12.3	8.9	6.4	7.5	8.8	10.5	12.4	13.7	14.9	15.6	15.8	15.2	15.2	10.4	13.2	12.1	12.0	12.5	12.5	12.7	11.7		
7	11.7	11.7	13.7	11.9	9.6	8.0	7.1	8.7	11.0	12.7	13.0	15.1	16.4	17.4	16.9	15.3	14.2	13.2	12.4	12.4	11.5	11.9	10.7	11.9	12.4		
8	12.2	13.2	11.2	10.6	9.6	7.4	6.3	6.6	7.0	8.1	10.3	13.5	16.2	16.8	16.5	17.1	15.7	15.0	13.7	12.4	12.0	12.1	11.5	11.5	11.9		
9	11.4	11.6	11.4	10.6	8.9	7.3	6.0	6.5	6.5	8.1	10.8	15.5	16.5	16.6	17.2	16.7	15.3	14.3	13.6	13.4	13.3	12.3	11.6	11.6	11.9		
10	10.9	10.2	10.4	10.6	11.4	12.9	13.7	10.3	9.7	9.2	11.5	14.3	16.2	17.9	17.7	16.3	14.9	15.2	15.3	14.0	7.5	8.2	9.3	8.9	12.4		
11	9.5	9.7	11.7	11.6	9.0	6.1	4.4	4.5	5.9	8.3	11.5	14.3	16.2	16.7	16.3	15.1	13.7	12.9	11.1	12.3	12.3	9.9	5.0	9.7	10.7		
12	11.5	11.5	11.0	10.1	8.7	7.3	6.8	7.5	7.5	7.5	9.0	12.4	17.1	19.0	18.7	17.0	16.5	16.6	13.5	11.2	13.1	4.4	4.7	7.8	11.3		
13	9.0	11.9	7.3	3.8	8.0	6.5	4.6	6.4	6.5	9.5	9.7	13.1	16.5	17.2	15.9	15.2	15.1	14.7	12.2	9.3	10.2	11.6	11.3	7.9	10.5		
14	6.6	8.4	8.0	8.1	8.2	5.9	5.5	6.5	7.1	8.5	11.4	14.1	16.3	16.8	16.6	16.0	15.5	14.2	10.6	13.4	12.9	11.6	9.8	9.8	10.9		
15	10.0	10.2	8.8	8.8	8.6	6.2	6.6	7.3	7.1	8.0	9.7	11.5	12.9	14.5	13.8	13.3	13.0	13.0	13.4	12.6	12.6	11.0	10.9	10.1	10.6		
16 q	10.9	10.6	10.3	9.8	8.1	6.6	5.7	6.1	6.9	8.7	11.5	14.7	16.2	16.8	16.5	15.0	14.1	13.9	12.5	13.5	13.3	12.6	12.2	11.4	11.6		
17	10.4	9.6	8.8	9.1	7.4	6.5	5.7	5.7	7.1	9.2	11.0	13.0	16.0	18.8	18.0	18.3	16.2	14.0	13.8	13.1	13.3	10.6	10.7	8.8	11.5		
18	8.7	8.1	6.6	7.0	6.9	5.7	5.5	7.3	8.1	10.7	12.9	14.3	15.2	16.5	16.4	17.0	16.5	15.5	15.1	13.3	12.9	10.3	10.5	9.8	11.3		
19 q	9.7	9.9	10.7	8.8	7.8	6.5	5.7	5.4	6.2	6.8	8.8	11.6	13.2	13.3	13.6	14.3	14.7	14.7	13.7	12.4	11.5	11.5	11.2	10.5	10.5		
20	9.5	9.0	9.1	8.1	6.8	7.0	7.1	7.3	7.5	8.9	11.1	14.3	15.8	18.3	20.1	19.2	20.2	18.8	18.5	15.7	9.2	1.5	2.1	6.4	11.3		
21	9.7	9.6	8.2	7.3	6.7	6.8	8.3	10.3	9.3	12.4	12.9	13.7	15.0	15.4	14.6	14.2	15.0	13.9	12.4	9.8	10.3	12.1	7.2	10.2	11.1		
22	10.7	10.5	10.3	9.3	8.3	7.7	7.1	8.4	8.1	9.4	10.6	14.3	15.6	17.1	14.6	13.5	13.4	12.9	11.6	11.6	12.2	11.4	9.1	10.5	11.2		
23 q	11.4	11.1	10.7	8.3	7.0	6.3	6.4	6.6	6.3	8.0	10.3	12.7	15.1	15.8	15.1	14.7	13.8	12.4	12.3	12.0	12.2	10.5	9.6	9.3	10.7		
24	9.4	9.3	9.0	8.9	8.3	5.0	5.0	6.4	7.0	8.0	10.6	13.5	15.6	15.9	15.5	14.3	14.3	15.5	15.2	11.3	10.3	11.5	9.9	10.5	10.8		
25	9.3	8.5	6.7	6.5	5.7	4.6	5.2	6.0	6.5	8.5	11.4	12.3	12.9	13.8	15.1	13.6	12.7	12.9	13.3	12.9	10.9	10.1	10.6	10.4	10.0		
26 q	10.2	10.0	9.9	9.6	8.3	11.4	11.6	12.0	12.7	9.0	10.3	11.7	13.6	15.2	14.9	13.9	13.8	14.4	13.4	13.6	13.1	12.5	11.1	11.0	12.0		
27 q	9.2	8.8	8.8	8.3	7.9	7.9	7.7	7.3	8.0	10.4	12.8	15.3	16.9	17.3	17.9	17.1	15.1	14.5	12.9	11.4	11.5	10.9	11.1	8.6	11.6		
28	8.9	9.4	9.0	9.3	8.3	6.5	6.1	6.4	6.3	8.4	10.7	12.9	15.6	17.9	17.9	16.6	15.4	14.0	12.6	12.9	13.2	11.8	11.5	10.6	11.3		
29 d	9.2	9.3	8.4	12.3	11.9	11.5	11.2	11.8	11.1	5.5	17.9	18.9	17.8	19.2	23.8	22.5	23.1	11.1	16.9	12.6	13.0	5.7	5.3	7.4	13.2		
30 d	13.2	6.0	7.8	7.3	6.7	12.1	10.3	8.5	10.4	11.7	8.9	10.7	12.4	16.4	17.2	14.5	14.4	15.0	14.3	13.1	11.1	10.0	8.0	8.3	11.2		
Mean	10.4	10.2	9.5	8.6	8.5	7.5	7.4	7.7	8.3	9.3	11.4	13.8	15.5	16.7	16.8	16.1	15.5	14.5	13.6	12.1	11.5	10.4	9.5	9.9	11.4		

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				
	Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1225	1225	1221	1220	1223	1225	1224	1223	1219	1217	1213	1209	1211	1214	1219	1226	1231	1236	1243	1244	1236	1232	1231	1228	1225	1225
2 d	1228	1227	1217	1202	1206	1213	1213	1199	1191	1197	1205	1207	1210	1227	1244	1259	1260	1258	1264	1302	1276	1256	1225	1225	1225	1230
3 d	1181	1179	1190	1203	1202	1213	1217	1219	1219	1225	1222	1220	1225	1231	1237	1231	1236	1251	1264	1258	1250	1231	1225	1217	1223	1223
4 d	1219	1198	1193	1185	1197	1197	1194	1208	1218	1221	1226	1230	1225	1223	1225	1231	1239	1243	1248	1247	1243	1241	1230	1229	1221	1221
5	1227	1227	1224	1225	1215	1221	1221	1227	1227	1226	1225	1217	1219	1221	1219	1219	1226	1234	1240	1247	1237	1233	1229	1226	1226	1226
6	1225	1219	1210	1214	1204	1205	1214	1214	1214	1214	1210	1213	1219	1224	1228	1236	1235	1242	1242	1244	1240	1236	1231	1230	1223	1223
7	1229	1227	1225	1222	1229	1230	1231	1229	1226	1225	1225	1219	1214	1219	1222	1226	1230	1236	1237	1231	1231	1231	1230	1226	1227	1227
8	1225	1223	1225	1229	1229	1231	1230	1227	1228	1226	1222	1217	1219	1222	1223	1225	1229	1232	1230	1228	1230	1231	1230	1229	1227	1227
9	1229	1227	1227	1228	1228	1227	1230	1231	1224	1221	1221	1216	1219	1224	1226	1229	1230	1226	1227	1230	1230	1229	1229	1229	1229	1226
10	1227	1227	1226	1226	1220	1214	1208	1213	1214	1216	1218	1214	1211	1213	1217	1221	1226	1232	1231	1231	1236	1231	1229	1225	1222	1222
11	1226	1227	1225	1218	1216	1218	1219	1222	1215	1209	1202	1202	1203	1209	1217	1219	1223	1224	1226	1225	1227	1229	1223	1217	1218	1218
12	1218	1222	1225	1225	1225	1225	1225	1220	1215	1213	1207	1199	1199	1208	1212	1218	1219	1232	1250	1253	1240	1233	1223	1223	1222	1222
13	1223	1217	1196	1194	1206	1219	1225	1225	1224	1222	1217	1211	1211	1217	1219	1223	1225	1230	1240	1242	1240	1233	1227	1219	1221	1221
14	1213	1211	1213	1218	1224	1226	1225	1223	1223	1221	1215	1210	1211	1220	1225	1231	1235	1234	1237	1236	1231	1230	1225	1225	1223	1223
15	1225	1225	1227	1229	1228	1227	1223	1223	1225	1222	1218	1216	1217	1215	1217	1219	1219	1220	1222	1226	1226	1227	1226	1223	1223	1223
16 q	1223	1225	1225	1227	1229	1229	1224	1219	1218	1214	1208	1206	1213	1214	1213	1217	1225	1231	1236	1231	1230	1228	1225	1225	1222	1222
17	1225	1223	1223	1222	1225	1225	1219	1219	1219	1219	1214	1213	1207	1205	1214	1221	1221	1235	1236	1238	1235	1229	1229	1224	1216	1222
18	1218	1219	1219	1223	1225	1227	1225	1222	1220	1223	1225	1219	1219	1219	1218	1216	1219	1222	1229	1230	1231	1229	1230	1228	1227	1223
19 q	1225	1225	1222	1224	1225	1225	1224	1222	1219	1214	1212	1211	1210	1210	1213	1213	1216	1220	1224	1224	1225	1223	1224	1223	1220	1220
20	1220	1219	1222	1224	1225	1225	1219	1218	1214	1213	1205	1202	1204	1212	1223	1230	1226	1227	1231	1244	1249	1239	1219	1214	1222	1222
21	1219	1223	1225	1225	1225	1223	1215	1213	1209	1209	1205	1206	1214	1214	1216	1222	1224	1231	1238	1247	1240	1231	1222	1223	1222	1222
22	1225	1225	1225	1225	1222	1221	1217	1217	1219	1214	1213	1214	1213	1218	1226	1233	1230	1230	1234	1233	1231	1230	1225	1223	1223	1223
23 q	1224	1223	1221	1224	1225	1226	1226	1227	1225	1225	1219	1218	1218	1218	1220	1225	1230	1231	1231	1235	1236	1233	1232	1231	1230	1226
24	1227	1226	1225	1220	1216	1219	1218	1219	1218	1216	1214	1209	1211	1213	1216	1223	1224	1225	1226	1238	1240	1233	1231	1230	1222	1222
25	1227	1221	1219	1219	1222	1223	1225	1220	1217	1219	1219	1215	1214	1218	1217	1218	1219	1222	1223	1225	1226	1228	1226	1225	1221	1221
26 q	1225	1224	1223	1225	1225	1225	1223	1224	1220	1213	1209	1208	1213	1218	1217	1223	1229	1226	1230	1230	1229	1230	1230	1226	1223	1223
27 q	1225	1223	1222	1222	1225	1223	1222	1225	1223	1221	1214	1197	1199	1208	1216	1220	1226	1227	1230	1229	1227	1229	1222	1220	1221	1221
28	1221	1222	1223	1225	1221	1221	1221	1221	1219	1217	1210	1205	1202	1206	1211	1218	1225	1226	1226	1223	1222	1223	1223	1221	1219	1219
29 d	1221	1220	1222	1223	1220	1219	1219	1219	1207	1207	1203	1207	1207	1214	1226	1235	1253	1292	1271	1278	1254	1230	1219	1219	1229	1229
30 d	1206	1157	1162	1180	1206	1201	1206	1208	1208	1205	1215	1219	1224	1222	1230	1243	1248	1258	1259	1247	1236	1230	1225	1221	1217	1217
Mean	1222	1219	1217	1218	1220	1221	1220	1220	1218	1217	1214	1211	1213	1217	1221	1226	1230	1235	1238	1240	1236	1231	1226	1224	1223	1223

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

116 ESKDALEUIR											JUNE								
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 11° +		Minimum 11° +		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					°A.	
1	18 52	676	616	07 43	60	13 10	18.5	6.4	03 11	12.1	18 44	1246	1209	11 55	37	2,2,2,1,2,2,2,1	14	0	83.4
2 d	18 20	712	547	07 51	165	14 26	30.2	4.0	03 33	34.2	19 25	1319	1185	08 59	134	2,4,5,4,4,4,5,4	32	1	83.4
3 d	16 49	703	535	07 20	168	00 35	20.2	4.0	02 52	16.2	18 28	1269	1150	00 44	119	4,3,4,3,4,4,3,3	28	1	83.4
4 d	17 27	692	553	10 59	139	01 13	22.4	4.7	07 53	17.7	18 29	1251	1178	03 21	73	4,4,3,3,3,4,2,2	25	1	83.4
5	19 49	758	592	10 08	166	19 15	15.6	7.3	19 38	22.9	19 34	1254	1208	04 41	46	1,3,3,3,2,3,5,2	22	1	-
6	17 34	680	591	11 04	89	13 24	16.8	4.3	06 55	12.5	19 38	1245	1196	04 54	49	2,3,3,3,3,3,3,2	22	1	-
7	19 04	658	587	08 14	71	13 40	18.4	6.3	06 13	12.1	17 55	1239	1213	12 40	26	2,2,3,2,2,2,2,2	17	1	-
8	19 06	663	602	13 27	61	15 32	17.4	5.3	06 20	12.1	17 30	1234	1216	11 39	18	1,1,2,1,2,2,2,1	12	0	-
9	18 42	669	610	11 35	59	14 57	17.4	5.4	07 05	12.0	07 22	1233	1215	11 08	18	1,1,2,2,2,2,2,1	13	0	83.7
10	19 04	692	598	11 17	94	14 06	18.6	4.6	20 16	14.0	20 29	1237	1208	06 40	29	2,3,2,3,3,3,3,2	21	1	83.7
11	22 18	685	599	08 51	86	14 06	17.4	1.3	22 04	16.1	21 31	1229	1198	10 56	31	2,2,2,2,3,2,2,3	18	1	83.7
12	16 53	712	596	09 33	116	14 29	19.9	1.7	21 24	18.2	18 43	1256	1198	12 10	58	1,1,2,3,3,4,4,4	22	1	83.6
13	19 00	685	595	09 42	90	13 17	18.4	2.5	02 56	15.9	19 30	1244	1192	03 08	52	3,3,2,2,3,3,3,3	22	1	83.5
14	18 34	684	603	10 48	81	13 22	17.3	4.1	06 33	13.2	18 45	1239	1207	12 08	32	2,2,2,2,3,3,3,2	19	1	83.5
15	18 55	685	604	12 28	81	13 40	15.2	5.6	05 37	9.6	04 06	1230	1214	13 40	16	1,1,2,1,2,2,3,2	14	1	83.5
16 q	17 48	665	607	08 53	58	13 57	18.0	4.6	06 40	13.4	18 23	1236	1205	11 08	31	1,1,1,2,3,2,1,2	13	0	83.5
17	15 34	684	604	14 42	80	14 09	20.5	4.3	07 45	16.2	18 35	1239	1202	12 01	37	1,2,2,2,4,4,2,2	19	1	83.5
18	20 44	678	608	11 32	70	15 38	17.2	3.7	06 25	13.5	19 22	1232	1216	14 40	16	2,2,2,2,1,1,2,2	14	0	83.5
19 q	17 44	665	621	07 26	44	16 34	15.4	4.6	07 00	10.8	05 13	1226	1208	13 42	18	1,2,2,1,2,2,2,1	13	0	83.4
20	18 30	703	613	12 11	90	14 39	21.9	0.6	21 11	22.5	20 24	1252	1201	11 19	51	1,1,2,3,3,3,4,3	20	1	83.4
21	18 54	692	599	11 13	93	13 34	15.9	4.7	19 50	11.2	19 49	1248	1203	10 54	45	2,2,3,3,2,3,3,3	21	1	83.4
22	14 50	669	589	12 16	80	13 18	18.4	5.9	23 02	12.5	18 44	1236	1210	10 28	26	1,2,2,2,3,3,3,3	19	1	83.4
23 q	18 07	659	613	11 24	46	12 49	16.0	5.7	05 59	10.3	19 30	1236	1217	11 52	19	2,1,1,1,1,1,0,2	9	0	83.4
24	19 19	679	616	10 41	63	13 10	16.3	4.0	06 23	12.3	20 09	1243	1206	11 49	37	2,2,2,2,2,2,3,3	18	1	83.4
25	19 14	667	606	10 22	61	14 40	15.5	4.3	05 45	11.2	21 00	1230	1214	12 24	16	2,1,1,1,2,2,2,1	12	0	83.4
26 q	18 41	671	617	10 04	54	13 45	15.4	6.7	05 32	8.7	19 22	1231	1208	11 30	23	1,0,1,2,1,2,2,1	10	0	83.4
27 q	20 19	669	619	12 37	50	14 08	18.4	7.0	07 47	11.4	18 20	1231	1193	11 45	38	1,1,2,2,2,2,2,2	14	0	83.4
28	23 49	680	614	11 05	66	13 56	18.3	5.7	06 00	12.6	18 30	1226	1201	12 25	25	0,2,1,1,1,0,2,3	10	0	83.4
29 d	16 30	745	534	14 50	211	14 32	27.4	5.6	21 49	33.0	17 26	1305	1198	10 34	107	2,1,3,4,6,5,4,4	29	1	83.4
30 d	01 15	708	533	08 46	175	00 43	20.5	1.0	01 51	21.5	18 04	1267	1145	01 20	122	5,3,4,4,4,4,4,3	31	1	83.4
Mean	- -	686	594	- -	92	- -	18.6	3.3	- -	15.3	- -	1245	1200	- -	45	-	-	0.63	83.5

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

117 ESKDALEUIR (H)													16,000γ (0.16 C.G.S. unit) +													JULY	
	Hour G.M.T.																									Mean	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24			
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		
2 d	630	640	625	625	632	631	628	637	604	564	593	590	605	627	644	642	641	651	653	657	656	658	644	640	630		
3	640	642	624	647	644	632	604	637	626	604	598	592	605	610	631	644	644	672	674	672	652	652	672	638	636		
4	636	633	629	639	644	639	631	623	619	612	603	595	605	615	640	644	659	653	654	658	659	641	643	646	634		
5	661	646	631	623	610	619	631	622	610	607	599	569	619	626	631	644	651	648	661	652	656	651	650	643	632		
	641	639	636	637	642	644	609	631	631	619	606	601	603	621	627	636	650	650	652	660	652	643	639	634	633		
6	627	628	643	642	638	635	629	621	618	616	623	623	627	632	632	637	644	648	649	655	652	654	657	653	637		
7	640	643	636	629	619	633	648	631	626	617	608	603	605	618	638	638	657	671	663	646	650	650	646	661	637		
8	656	634	630	629	625	629	627	619	608	607	611	608	627	628	636	652	655	652	677	662	645	633	636	636	634		
9	641	641	635	633	633	629	619	621	619	625	623	623	626	623	632	650	659	665	673	670	665	652	638	631	639		
10	640	648	646	642	642	634	619	611	603	601	599	610	619	625	633	634	633	645	652	652	651	650	648	648	633		
11 q	650	653	644	652	642	641	638	625	611	593	592	602	623	638	647	654	655	659	660	660	659	654	646	646	639		
12	646	646	646	650	649	642	632	622	613	609	615	619	631	642	655	663	668	661	674	667	677	663	637	650	645		
13	648	649	640	649	657	653	610	610	610	597	595	610	623	630	622	632	647	655	656	661	656	645	635	634	634		
14	636	634	636	634	637	636	629	625	621	612	604	612	625	639	661	661	656	682	669	686	672	667	661	659	644		
15	661	656	637	638	636	618	634	639	614	606	608	607	612	596	626	633	640	656	650	664	655	649	643	640	634		
16 q	638	641	642	634	640	639	634	626	621	618	614	616	621	626	635	635	643	650	654	653	650	645	646	642	636		
17 q	641	641	642	645	647	646	640	627	619	626	626	620	621	626	632	640	646	655	661	662	657	655	654	653	641		
18 q	659	655	655	648	645	640	636	631	621	616	614	623	627	632	646	653	657	663	661	658	658	656	652	657	644		
19	656	666	659	640	646	646	640	636	631	619	607	610	621	629	639	648	651	658	663	664	657	654	647	643	643		
20	648	640	638	641	638	636	638	635	624	614	612	615	621	639	648	654	642	644	646	647	648	647	647	646	638		
21 q	642	646	640	640	637	636	634	631	618	613	619	619	626	626	630	636	646	651	656	652	652	648	654	641	637		
22	637	637	638	638	641	638	631	625	607	605	617	624	632	641	651	647	653	658	653	659	664	656	653	651	640		
23 d	636	631	634	621	661	646	625	619	609	585	588	607	644	628	648	692	671	669	671	655	637	625	638	614	636		
24	627	632	621	619	624	625	620	611	608	606	602	587	601	619	629	646	643	636	659	652	657	653	651	644	628		
25	637	634	633	633	633	628	627	625	619	609	610	616	628	636	646	649	642	642	655	663	649	653	653	652	636		
26	662	648	643	635	633	640	639	631	611	616	615	610	619	616	608	631	639	642	655	660	683	676	661	653	639		
27 d	670	651	650	592	654	637	611	625	570	570	562	572	609	639	636	638	665	655	667	666	648	642	650	643	630		
28	633	641	634	641	623	618	619	606	562	601	596	595	612	629	637	650	654	661	638	655	649	644	654	636	629		
29 d	620	639	648	603	634	625	616	618	602	594	581	599	611	625	630	627	638	668	656	647	665	645	638	646	628		
30	632	642	638	628	633	632	611	599	588	602	599	604	614	638	630	634	647	649	647	653	650	657	642	651	630		
31	636	623	611	625	638	640	631	613	621	613	588	610	608	603	619	646	649	647	650	649	643	643	644	641	629		
Mean	643	642	637	634	638	635	627	624	612	606	604	606	618	627	636	645	650	655	658	659	656	650	648	644	636		

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

118 ESKDALEUIR (D)													11° +													JULY					
	Hour G.M.T.																														
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean						
1 d	11.9	11.7	13.2	12.0	8.2	8.8	10.0	6.6	6.3	8.8	10.2	9.0	12.2	14.8	15.9	15.2	13.8	12.9	13.7	13.7	12.4	6.8	9.2	7.4	11.0						
2 d	8.3	10.7	17.6	15.1	8.3	11.0	15.3	14.4	9.4	8.0	8.1	12.1	15.5	16.8	17.7	18.3	16.9	15.0	15.4	11.9	10.9	10.6	9.5	9.6	12.8						
3	6.9	9.0	12.8	9.7	10.1	8.2	9.7	7.3	8.0	7.0	7.1	10.2	13.8	15.4	14.7	15.1	15.7	14.7	13.7	10.8	10.6	8.7	10.4	10.6	10.8						
4	11.1	8.9	6.7	6.5	8.6	10.0	11.5	7.7	7.0	7.0	9.3	12.0	14.2	15.1	16.5	16.0	15.0	14.0	9.8	11.9	12.0	11.7	10.6	9.7	10.9						
5	11.4	10.6	12.5	8.5	8.3	8.9	12.9	15.2	12.2	10.2	10.2	11.4	14.1	15.5	16.0	15.3	14.5	13.5	12.0	11.0	9.2	7.2	8.0	6.6	11.5						
6	9.7	8.5	4.8	6.2	7.1	6.1	5.3	5.6	6.5	8.2	9.7	11.6	13.3	14.5	14.7	14.3	13.6	13.7	13.7	13.3	12.9	12.5	9.6	7.0	10.1						
7	8.6	9.8	11.9	5.6	1.3	4.3	2.2	3.2	4.5	7.5	10.0	11.6	13.3	15.6	17.0	17.2	15.9	15.7	15.2	12.6	12.0	11.2	10.2	7.7	10.2						
8	3.8	7.5	7.5	6.7	8.0	6.8	7.1	8.4	8.5	7.7	9.0	11.0	12.9	14.7	15.9	16.5	16.5	13.9	14.0	11.6	7.1	7.5	7.4	9.5	10.0						
9	8.4	10.5	11.9	8.9	7.4	5.7	5.2	4.9	5.0	6.2	8.0	10.8	13.8	15.5	16.1	16.0	15.1	14.7	14.2	10.7	7.3	4.7	5.2	4.3	9.6						
10	9.1	10.8	8.5	7.7	6.0	4.9	7.5	7.5	6.3	7.3	9.8	12.0	14.7	16.1	16.7	15.3	14.5	13.8	13.2	12.2	11.7	11.5	10.7	10.7	10.8						
11 q	10.9	11.2	10.8	9.7	5.4	6.0	6.2	5.7	5.7	8.8	11.1	14.5	16.0	16.5	15.4	14.4	13.3	12.4	11.4	12.1	12.3	11.9	11.0	11.1	11.0						
12	9.7	9.9	9.1	9.2	9.3	5.0	5.3	6.2	7.6	10.1	12.7	14.9	17.4	19.8	20.1	18.6	17.2	15.0	15.1	14.2	6.8	2.1	5.8	9.8	11.3						
13	10.0	9.3	8.1	7.6	7.1	4.8	3.9	9.0	10.1	10.5	13.6	15.2	17.9	20.1	19.2	18.3	14.5	13.7	13.4	13.1	11.6	7.2	9.3	10.2	11.6						
14	9.8	10.0	9.9	8.1	7.9	6.8	6.0	6.9	7.2	9.7	11.6	13.0	14.6	15.6	17.5	18.3	17.6	17.3	15.5	15.5	12.9	11.9	12.0	11.8	12.0						
15	10.4	7.8	6.6	8.0	7.2	8.5	7.4	6.3	7.4	9.7	11.4	11.1	13.5	15.7	17.1	17.6	15.0	15.3	11.8	11.1	12.4	12.4	11.6	10.7	11.1						
16 q	10.2	10.5	10.2	11.9	9.8	7.3	7.0	7.1	6.7	6.2	6.9	9.0	12.0	13.3	13.3	13.1	12.3	11.3	10.7	10.8	11.5	10.8	11.4	11.6	10.2						
17 q	11.2	10.4	9.9	9.3	8.9	7.8	7.3	7.9	9.8	9.6	9.9	11.5	13.7	15.4	16.0	16.5	15.9	14.3	12.8	12.0	11.6	11.6	11.4	10.7	11.5						
18 q	10.9	12.8	10.4	7.1	7.3	6.2	7.0	6.6	6.7	7.6	9.1	10.7	13.6	16.4	17.5	17.3	16.0	14.7	13.7	13.1	12.8	11.8	11.4	11.3	11.3						
19	10.1	8.3	6.2	3.7	5.5	5.6	6.0	5.5	6.6	8.4	10.1	12.9	15.4	16.9	17.3	16.6	15.2	14.9	13.6	13.0	11.3	10.6	7.7	9.6	10.5						
20	9.6	9.0	9.1	6.8	4.4	3.1	5.9	5.7	6.6	8.3	11.1	13.9	16.4	16.5	16.5	16.3	14.0	12.3	11.5	11.5	11.5	11.4	11.1	10.2	10.5						
21 q	11.1	9.8	7.9	7.9	8.1	7.2	7.0	7.1	7.5	11.5	13.4	14.4	15.9	16.8	16.5	15.8	14.5	13.1	11.6	11.2	10.8	9.9	7.3	9.0	11.1						
22	9.8	9.7	9.7	9.2	8.7	6.7	6.1	5.5	6.1	8.3	11.0	13.0	13.9	14.1	13.5	12.4	12.5	13.5	12.2	13.2	13.2	10.8	9.6	6.3	10.4						
23 d	0.6	-0.4	2.4	10.4	9.9	4.9	4.3	3.8	3.2	6.9	12.9	14.8	20.1	26.4	28.2	22.3	23.0	19.9	18.0	15.9	13.8	12.2	0.9	-0.2	11.6						
24	6.5	7.4	8.7	7.9	7.0	6.4	5.9	6.2	7.2	8.2	9.8	11.9	14.4	15.8	17.5	18.3	18.1	13.3	14.1	13.3	13.3	12.1	11.5	10.6	11.1						
25	9.8	9.1	8.7	8.1	7.0	5.3	6.1	5.3	5.9	7.5	9.7	13.0	14.8	15.4	15.1	15.1	15.8	14.2	15.3	15.3	13.0	12.5	11.6	11.7	11.1						
26	8.8	3.1	7.0	7.0	11.0	8.7	9.3	10.4	9.3	10.3	10.6	12.4	15.0	16.2	18.3	16.0	17.1	16.5	14.8	12.5	11.2	10.4	10.7	10.6	11.5						
27 d	9.5	7.5	4.6	11.5	10.4	10.9	11.1	12.9	13.5	12.5	14.2	15.8	15.9	15.6	17.1	12.5	13.1	13.6	9.7	9.4	11.1	10.1	11.7	10.9	11.9						
28	12.3	11.8	13.0	4.0	9.7	8.0	7.2	8.3	10.3	10.6	11.5	12.0	12.4	13.3	13.6	13.7	13.7	13.6	12.2	9.8	9.1	6.4	2.6	4.8	10.2						
29 d	10.5	12.8	9.2	12.9	15.2	15.9	10.2	7.0	6.5	8.1	10.9	12.0	14.0	13.0	15.7	11.0	10.5	11.8	10.4	9.8	7.2	9.6	9.2	15.1	11.2						
30	9.0	9.1	5.7	5.7	8.3	7.5	8.7	12.7	11.9	11.9	11.2	13.4	14.2	15.3	15.5	15.0	11.9	12.9	11.1	10.3	10.6	7.9	6.6	3.0	10.4						
31	4.3	5.5	14.3	11.6	7.4	6.9	7.1	8.5	7.4	9.6	10.0	11.1	13.7	14.9	13.9	13.4	12.9	12.4	11.9	9.0	9.7	11.1	10.9	10.1	10.3						
Mean	9.2	9.1	9.3	8.5	8.0	7.2	7.5	7.6	7.6	8.8	10.5	12.5	14.6	16.0	16.7	15.9	15.0	14.1	13.1	12.1	11.1	9.9	9.2	9.1	10.9						

119 ESKDALEMUIR (Z)												44,000γ (0.44 C.G.S. unit) +												JULY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Hour G.M.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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

	Hour G.M.T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
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	638	635	631	628	629	631	630	625	618	610	610	612	623	617	640	642	655	645	663	653	658	665	636	637	635
3	635	640	640	643	640	638	627	617	621	612	601	615	624	632	638	646	636	640	636	654	647	643	644	651	634
4	653	630	631	631	634	629	615	621	617	615	617	621	621	625	621	628	631	650	646	649	650	654	650	647	633
5	644	650	650	641	638	637	634	631	625	615	616	622	631	640	655	639	637	631	650	646	655	646	645	639	638
6	644	647	635	635	638	637	633	631	621	624	618	621	625	625	634	640	640	643	651	655	660	644	650	648	637
7	649	646	644	644	645	641	638	629	618	603	607	615	631	636	643	650	630	646	655	665	669	654	648	645	640
8	648	647	643	648	654	637	634	625	618	608	605	613	623	638	651	650	646	642	648	655	650	651	647	647	639
9	644	643	636	636	632	634	632	621	621	618	618	619	629	634	646	647	646	647	648	647	646	648	652	651	637
10	652	637	640	626	648	634	647	636	629	621	623	631	632	652	635	658	676	663	657	664	663	651	655	656	645
	642	648	650	650	646	652	648	623	590	580	581	570	581	589	601	599	589	653	655	662	649	651	634	637	624
11	621	639	621	650	631	649	636	628	607	587	583	604	614	628	643	641	651	642	644	657	642	627	623	620	629
12	629	635	628	649	653	570	582	581	558	533	546	579	607	636	650	650	640	639	649	644	647	634	642	630	617
13	615	615	642	636	634	625	625	620	620	591	588	597	617	635	657	647	672	656	661	671	650	627	640	637	632
14	643	631	638	630	617	643	633	619	613	607	598	605	618	629	630	640	651	637	646	655	648	648	650	644	632
15	654	644	641	638	637	642	640	625	618	619	616	613	622	634	638	645	647	657	656	650	674	641	638	642	639
16	655	634	634	634	640	639	638	631	617	600	592	617	629	647	648	631	634	634	646	648	650	648	642	641	635
17	637	640	638	638	637	636	636	633	626	622	625	626	634	624	627	645	642	646	651	650	648	646	642	639	637
18	640	645	647	639	637	634	630	627	620	614	617	622	629	634	641	652	651	643	646	649	648	648	649	642	638
19	646	641	640	642	638	643	641	634	623	614	612	610	625	635	642	647	650	649	659	658	657	654	652	651	640
20	646	636	636	638	638	637	634	629	624	618	621	627	629	627	632	642	646	654	658	657	654	657	657	656	640
21	653	654	650	646	646	646	638	624	615	611	610	621	627	626	637	640	645	648	649	653	650	649	649	649	639
22	649	648	648	647	642	642	638	631	619	617	617	631	635	642	640	647	645	647	646	653	652	647	647	646	641
23	653	649	661	648	655	652	650	641	623	612	621	597	607	643	614	650	635	637	642	649	654	633	669	642	639
24	622	630	647	641	603	598	597	593	583	582	592	601	582	612	620	629	632	667	636	660	639	638	637	577	617
25	635	641	629	609	622	629	605	608	578	620	573	579	596	604	623	629	634	640	645	646	655	646	629	638	617
26	644	637	634	631	615	632	623	611	598	611	610	613	602	606	628	636	648	656	651	642	644	653	641	625	629
27	621	618	614	610	634	616	613	608	595	576	581	586	609	622	651	681	614	678	642	651	624	638	669	648	625
28	630	603	611	632	608	596	629	610	593	566	582	575	606	612	631	635	651	638	637	638	654	667	646	623	620
29	644	642	640	612	615	577	589	615	606	600	556	590	603	614	621	640	632	640	671	644	678	646	641	635	623
30	634	577	635	638	623	608	567	583	581	573	579	597	613	625	644	607	635	637	648	661	642	636	633	648	618
31	633	639	616	632	635	610	611	610	602	591	607	614	600	605	602	609	642	634	638	650	655	634	637	649	623
Mean	640	636	637	636	634	629	626	620	610	599	601	608	617	627	635	640	641	646	649	653	652	646	645	640	632

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

122 ESKDALEMUIR (D)

11° +

AUGUST

	Hour G.M.T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
1	10.0	12.3	13.2	12.1	7.3	5.4	5.2	5.1	5.1	7.3	10.5	13.2	15.7	15.4	15.6	15.0	14.4	8.5	7.9	11.4	7.7	7.3	9.8	10.2	10.2
2	11.7	12.1	12.3	14.9	8.1	5.5	5.1	4.5	5.5	7.6	9.3	11.4	14.1	14.9	14.1	13.1	11.7	11.1	10.1	6.4	8.7	10.7	10.6	10.3	10.2
3	10.2	8.7	9.3	8.5	7.4	6.7	5.8	5.4	5.1	6.8	9.8	12.0	13.4	15.3	15.4	14.5	12.2	11.3	10.0	9.0	11.0	11.6	11.1	10.8	10.1
4	10.4	12.0	12.4	5.9	5.7	5.0	5.4	5.3	7.2	8.2	11.0	14.3	15.9	15.9	15.2	13.5	12.7	12.4	12.4	10.8	10.1	11.2	11.3	10.7	10.6
5	10.3	9.2	7.6	7.7	7.1	5.8	6.1	6.5	6.8	9.0	9.4	11.6	14.2	14.9	14.9	13.4	11.7	11.0	11.1	9.0	4.8	8.7	9.7	9.5	9.6
6	8.7	7.9	7.7	7.7	7.1	5.9	6.6	6.7	6.3	8.2	11.5	14.4	16.2	16.2	15.7	15.1	12.7	11.7	13.0	13.4	13.2	9.2	8.6	9.8	10.6
7	9.8	11.1	14.4	9.0	6.2	4.9	7.2	8.2	9.1	11.1	13.3	14.0	15.3	15.8	13.9	11.6	11.3	11.1	11.6	11.6	10.6	10.5	9.5	10.7	10.9
8	11.3	8.0	7.7	7.8	7.9	7.4	6.7	6.1	6.4	8.1	10.6	13.8	17.0	17.0	15.0	13.8	12.6	10.9	10.3	10.1	9.8	9.4	9.0	9.6	10.3
9	10.8	9.9	3.9	5.6	8.4	5.8	6.9	4.2	5.9	8.9	12.1	15.6	16.4	18.0	17.3	16.1	16.2	15.7	14.8	15.3	2.8	9.4	10.5	10.8	10.9
10	9.8	9.9	8.6	10.0	8.2	6.8	6.0	8.7	13.2	15.3	13.0	16.7	18.5	18.4	15.8	13.8	11.2	9.6	10.8	11.6	10.5	9.1	12.4	3.7	11.3
11	5.7	6.5	5.5	7.3	6.9	2.5	3.8	5.0	7.2	10.5	15.7	19.4	20.1	18.8	18.3	17.5	14.4	12.0	10.4	4.4	7.4	7.5	5.5	4.5	9.9
12 d	3.2	0.0	-2.2	2.5	6.8	5.5	4.6	4.3	7.4	14.8	17.2	19.0	20.7	19.2	21.1	16.6	16.9	16.2	14.5	11.3	3.8	6.2	9.4	7.7	10.3
13	3.8	1.4	-0.2	-0.3	2.5	3.2	3.5	3.6	4.6	7.2	10.6	13.3	15.7	17.4	20.0	17.8	16.6	16.0	13.4	12.0	-1.9	9.0	5.8	7.8	8.5
14	10.9	12.8	11.2	8.6	9.5	7.1	4.8	4.0	4.7	7.3	10.8	14.4	17.1	18.4	16.7	15.2	13.1	9.9	6.9	9.4	10.4	10.5	10.4	9.8	10.6
15	10.0	9.1	8.3	6.9	6.0	5.8	5.1	4.3	6.1	8.5	10.5	14.2	15.4	15.6	14.9	14.1	13.1	12.0	11.3	10.9	4.3	7.4	9.5	10.8	9.8
16	10.8	7.7	7.3	7.4	8.0	5.3	5.7	7.2	8.9	10.9	16.7	16.9	18.5	17.6	17.5	16.0	14.2	12.3	11.9	12.0	10.7	7.7	8.1	8.8	11.2
17 q	10.8	10.6	8.6	7.6	6.9	6.4	6.6	7.5	7.7	8.6	10.4	13.4	17.3	17.3	15.2	14.6	13.6	12.1	11.3	10.9	10.6	9.9	9.4	9.6	10.7
18	9.2	10.1	11.0	7.6	6.3	5.8	5.9	6.5	7.3	8.8	10.8	13.2	15.6	16.9	16.5	15.5	13.1	12.1	11.9	11.1	10.6	10.8	9.9	9.2	10.7
19 q	8.1	7.5	7.2	6.9	5.4	5.8	6.2	6.4	6.6	7.7	9.7	11.9	14.2	15.8	14.7	12.7	11.5	9.8	10.3	11.2	11.1	10.6	10.1	8.1	9.6
20 q	8.2	7.9	8.4	7.5	6.7	6.2	5.9	5.9	5.8	7.0	9.8	12.9	14.1	14.8	14.7	13.7	12.4	11.3	11.0	11.0	10.8	10.4	10.8	9.9	9.9
21 q	9.7	9.5	8.5	8.9	9.0	6.8	5.6	5.0	5.9	8.8	11.8	15.0	15.7	15.5	14.2	11.6	9.4	9.0	9.8	10.9	11.1	10.6	10.3	10.2	10.1
22 q	9.9	9.7	9.4	9.0	7.9	7.1	4.8	4.1	4.8	7.3	11.4	15.2	16.2	15.6	13.8	11.4	10.1	10.3	10.4	11.4	10.8	8.2	9.5	9.7	9.9
23 d	9.1	5.3	0.5	-3.6	-0.2	2.1	2.9	4.1	4.8	9.1	14.7	19.6	23.4	24.2	21.7	18.5	17.4	15.8	7.7	6.7	-0.1	8.8	6.7	5.1	9.3
24 d	3.5	17.8	12.9	3.5	6.0	6.3	7.2	5.6	9.6	9.2	12.7	17.0	16.4	13.9	15.7	15.1	6.7	6.0	9.5	0.8	6.3	6.4	10.3	14.4	9.7
25	7.0	8.0	10.5	11.1	12.5	7.2	6.5	8.6	7.3	8.7	13.4	16.3	17.7	19.4	12.6	12.6	9.9	7.0	6.2	7.5	8.5	7.2	8.1	12.4	10.3
26	14.3	11.8	6.8	8.7	14.6	8.6	6.1	6.4	5.7	5.9	8.6	13.1	16.1	14.9	15.0	13.8	11.3	6.2	7.1	9.8	4.5	0.4	1.1	3.7	8.9
27 d	4.4	10.9	9.8	8.9	6.5	7.1	7.9	9.5	8.3	11.4	14.6	14.5	17.1	18.8	17.4	12.0	10.6	4.4	3.7	3.4	9.6	9.6	9.4	11.0	10.0
28	5.9	9.6	14.8	8.9	10.0	13.9	10.3	7.3	8.7	9.7	11.7	14.6	15.8	16.8	16.0	7.1	9.6	12.2	12.3	11.6	7.4	5.8	8.0	11.1	10.8
29	12.7	9.4	7.8	10.2	12.4	13.3	16.2	11.6	11.8	11.5	13.6	14.5	16.2	16.2	12.5	13.9	12.7	7.7	6.4	7.6	2.7	4.8	5.8	5.4	10.7
30 d	6.9	13.5	14.4	5.7	7.0	9.9	14.6	10.2	9.3	9.5	12.6	14.3	15.7	15.4	16.2	8.5	11.6	11.1	10.3	4.1	7.4	5.5	9.9	10.9	10.6
31	8.0	6.9	11.2	13.2	10.0	8.1	7.8	8.9	9.6	10.8	10.4	13.0	16.6	15.2	16.1	12.6	12.9	11.9	9.1	6.0	7.0	8.3	6.6	7.5	10.3
Mean	8.9	9.3	8.7	7.6	7.5	6.5	6.5	6.3	7.2	9.1	11.9	14.6	16.5	16.8	15.9	13.9	12.5	10.9	10.2	9.4	7.8	8.5	8.9	9.1	10.2

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

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123 ESKDALEUIR (Z)

44,000γ (0.44 C.G.S. unit) +

AUGUST

	Hour G.M.T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
1	1217	1213	1204	1193	1202	1212	1214	1218	1219	1219	1213	1203	1203	1210	1215	1219	1225	1239	1242	1236	1234	1214	1214	1219	1217
2	1215	1214	1211	1197	1200	1209	1214	1218	1213	1208	1208	1202	1205	1209	1218	1219	1225	1226	1230	1231	1226	1221	1219	1213	1215
3	1203	1205	1209	1214	1219	1219	1219	1214	1214	1209	1206	1203	1204	1208	1215	1219	1219	1223	1228	1231	1226	1221	1220	1219	1215
4	1219	1214	1198	1200	1211	1215	1216	1218	1215	1213	1209	1207	1206	1211	1220	1233	1236	1236	1231	1232	1230	1226	1225	1225	1219
5	1221	1218	1218	1219	1220	1220	1221	1221	1222	1214	1210	1208	1208	1209	1214	1218	1219	1220	1221	1227	1229	1222	1219	1218	1218
6	1217	1219	1219	1219	1219	1221	1220	1220	1219	1215	1210	1206	1203	1208	1214	1220	1227	1226	1219	1219	1219	1224	1223	1221	1218
7	1219	1218	1198	1197	1202	1209	1213	1217	1218	1218	1215	1215	1213	1213	1213	1217	1221	1226	1227	1225	1225	1223	1222	1214	1216
8	1202	1205	1211	1215	1219	1219	1219	1221	1219	1210	1207	1202	1206	1210	1218	1225	1225	1221	1219	1220	1223	1223	1221	1219	1216
9	1211	1188	1182	1195	1195	1192	1187	1196	1199	1202	1202	1197	1198	1209	1216	1218	1218	1219	1219	1219	1227	1221	1220	1221	1206
10	1222	1220	1219	1219	1216	1212	1212	1214	1212	1201	1202	1201	1207	1221	1232	1242	1244	1244	1237	1236	1238	1230	1198	1203	1220
11	1180	1173	1165	1149	1151	1168	1181	1186	1193	1198	1198	1197	1202	1208	1222	1238	1256	1267	1252	1248	1235	1231	1221	1214	1206
12 d	1209	1178	1144	1130	1113	1121	1141	1171	1188	1196	1211	1219	1214	1214	1231	1278	1275	1281	1264	1259	1256	1240	1226	1218	1207
13	1205	1201	1186	1207	1217	1223	1226	1226	1226	1224	1219	1214	1210	1210	1214	1215	1217	1225	1222	1230	1243	1210	1206	1211	1216
14	1203	1197	1193	1203	1209	1215	1225	1225	1225	1220	1218	1214	1208	1209	1218	1225	1230	1234	1235	1228	1225	1223	1221	1220	1218
15	1218	1218	1219	1220	1222	1221	1221	1219	1217	1208	1203	1199	1205	1211	1213	1216	1219	1225	1231	1237	1222	1214	1219	1219	1217
16	1207	1206	1214	1218	1215	1215	1218	1218	1216	1213	1211	1206	1206	1208	1223	1235	1234	1234	1229	1226	1225	1225	1221	1217	1218
17 q	1219	1214	1218	1218	1220	1222	1222	1220	1219	1214	1207	1198	1198	1206	1211	1218	1223	1225	1223	1222	1220	1220	1220	1219	1217
18	1219	1218	1207	1205	1214	1215	1214	1215	1216	1214	1211	1207	1203	1206	1214	1214	1219	1221	1219	1219	1220	1219	1219	1219	1214
19 q	1219	1218	1218	1215	1219	1218	1219	1219	1219	1215	1209	1208	1208	1209	1216	1222	1226	1225	1219	1217	1215	1217	1218	1215	1217
20 q	1214	1214	1215	1216	1219	1219	1220	1219	1218	1214	1206	1201	1198	1204	1212	1217	1219	1218	1215	1215	1216	1217	1215	1214	1214
21 q	1214	1214	1214	1215	1215	1218	1219	1220	1218	1210	1205	1202	1205	1208	1213	1219	1221	1219	1214	1213	1214	1215	1215	1215	1214
22 q	1215	1215	1215	1214	1218	1218	1219	1219	1216	1208	1199	1197	1201	1208	1217	1222	1226	1225	1220	1218	1219	1223	1220	1219	1215
23 d	1216	1218	1214	1209	1207	1206	1206	1205	1202	1196	1187	1194	1202	1221	1243	1262	1280	1299	1303	1273	1250	1214	1145	1124	1220
24 d	1169	1142	1150	1149	1150	1174	1195	1207	1209	1216	1218	1215	1226	1242	1236	1236	1262	1269	1258	1250	1231	1216	1198	1101	1205
25	1165	1193	1203	1201	1185	1189	1202	1206	1213	1222	1214	1215	1226	1233	1253	1248	1247	1248	1249	1237	1223	1215	1214	1203	1217
26	1191	1187	1206	1213	1193	1196	1209	1214	1215	1214	1209	1209	1214	1226	1229	1230	1235	1243	1243	1243	1234	1221	1203	1201	1216
27 d	1195	1171	1130	1140	1179	1198	1206	1209	1213	1218	1210	1213	1225	1235	1262	1286	1295	1276	1279	1257	1225	1222	1207	1186	1218
28	1180	1178	1159	1175	1193	1177	1193	1209	1215	1218	1215	1218	1225	1228	1234	1260	1258	1242	1233	1230	1230	1210	1201	1177	1211
29	1169	1192	1205	1206	1186	1180	1180	1197	1204	1208	1213	1210	1215	1226	1238	1237	1246	1254	1249	1242	1221	1210	1214	1211	1213
30 d	1197	1153	1144	1185	1197	1193	1190	1199	1213	1219	1218	1211	1211	1219	1238	1270	1243	1236	1234	1238	1227	1222	1204	1187	1210
31	1183	1190	1170	1165	1181	1198	1203	1202	1202	1205	1207	1207	1213	1235	1247	1246	1240	1242	1240	1235	1221	1221	1218	1203	1211
Mean	1204	1200	1195	1197	1200	1204	1208	1212	1213	1212	1209	1206	1209	1215	1225	1233	1237	1238	1236	1233	1227	1220	1213	1205	1215

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

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AUGUST

	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 11° +		Minimum 11° +		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				°A.		
1	21 01	703	598	13 16	105	12 52	17.3	2.8	18 00	14.5	18 07	1256	1202	03 47	54	2,3,2,2,3,3,3,4	22	1	83.8
2	15 47	674	589	10 34	85	03 18	18.0	3.1	07 04	14.9	19 25	1249	1207	03 39	42	2,3,3,3,2,3,3,2	21	1	83.8
3	21 10	666	610	13 58	56	13 44	17.5	4.0	08 08	13.5	19 26	1248	1216	00 53	32	3,2,2,2,3,3,2,2	19	1	83.8
4	14 50	667	611	09 53	56	13 00	16.6	4.4	05 26	12.2	17 16	1254	1209	02 55	45	2,2,2,2,2,3,2,2	17	1	83.8
5	20 39	670	611	10 44	59	14 17	15.6	1.4	20 26	14.2	20 30	1245	1222	12 10	23	2,1,2,2,2,2,3,2	16	1	83.8
6	20 53	676	599	09 50	77	12 32	17.1	5.5	05 42	11.6	16 50	1247	1219	12 40	28	1,0,1,2,2,4,2,2	14	1	83.8
7	19 16	666	594	08 42	72	02 23	17.5	3.1	05 07	14.4	18 13	1246	1207	02 49	39	3,2,1,2,2,2,2,2	16	1	83.8
8	22 29	660	612	11 31	48	13 03	17.6	4.9	07 22	12.7	16 01	1246	1215	00 37	31	3,2,2,2,1,2,2,2	16	1	83.3
9	20 32	686	616	10 28	70	13 08	19.8	-2.2	20 30	22.0	20 41	1247	1197	01 56	50	3,3,2,2,4,3,4,2	23	1	83.8
10	21 35	676	569	08 09	107	12 50	19.0	1.6	23 35	17.4	17 00	1267	1207	22 33	60	2,2,4,3,2,3,3,4	23	1	84.1
11	17 07	697	581	10 33	116	12 01	20.6	0.4	19 17	20.2	17 26	1289	1163	03 30	126	4,3,2,2,3,4,3,2	23	1	84.1
12 d	15 48	714	511	09 28	203	15 06	26.6	-3.2	02 30	29.8	15 41	1324	1128	04 45	196	4,5,4,4,4,5,4,3	33	1	84.1
13	16 45	700	585	10 09	115	15 03	22.0	-10.2	20 37	32.2	20 36	1271	1201	02 26	70	4,3,2,1,4,4,5,5	28	1	84.3
14	19 00	674	593	11 07	81	13 20	19.2	3.5	07 30	15.7	18 14	1258	1209	02 18	49	3,3,2,2,2,3,3,2	20	1	84.5
15	20 04	722	605	11 18	117	12 55	16.2	1.3	20 30	14.9	19 32	1258	1218	11 32	40	2,1,2,2,2,2,4,3	18	1	84.4
16	18 57	665	585	10 05	80	12 17	20.0	4.8	07 08	15.2	17 08	1258	1219	00 53	39	3,1,2,3,3,3,3,2	20	1	84.4
17 q	15 44	663	608	13 44	55	12 57	18.3	6.0	05 43	12.3	17 37	1246	1218	11 54	28	2,1,2,1,3,3,1,1	14	0	84.4
18	16 15	662	611	10 05	51	13 47	17.6	5.4	05 17	12.2	17 35	1244	1223	02 59	21	2,2,1,2,2,3,2,2	16	0	84.4
19 q	18 04	663	606	11 25	57	13 51	16.4	4.9	04 20	11.5	16 31	1249	1229	13 05	20	1,1,1,2,2,2,1,1	11	0	84.4
20 q	23 27	665	617	10 01	48	13 10	15.2	5.7	08 36	9.5	06 47	1244	1221	12 02	23	2,1,1,2,2,2,1,1,2	12	0	84.4
21 q	01 49	657	608	10 32	49	12 02	16.2	4.6	07 12	11.6	16 25	1244	1224	11 49	20	1,1,1,2,2,2,2,1,0	10	0	84.4
22 q	19 49	655	613	09 54	42	12 10	16.5	3.4	08 00	13.1	16 50	1251	1221	11 20	30	0,1,1,2,2,2,2,1,1	10	0	84.4
23 d	22 46	735	560	11 36	175	13 51	25.7	-9.5	20 26	35.2	17 32	1334	1123	22 51	211	4,3,2,4,4,5,4,5	31	1	84.4
24 d	19 27	733	533	23 42	200	23 00	23.4	-15.8	19 24	39.2	16 44	1307	1091	23 31	216	5,4,3,3,4,6,5,5	35	2	84.4
25	19 46	680	504	09 46	176	13 18	20.9	1.6	00 00	19.3	14 45	1285	1152	00 00	133	4,3,4,4,4,3,3,3	28	1	84.4
26	21 53	718	592	12 47	126	12 33	17.4	-6.6	21 47	24.0	19 00	1274	1208	04 53	66	4,3,2,2,2,3,4,5,5	26	1	84.6
27 d	19 41	729	556	11 23	173	14 31	21.8	-7.8	19 39	29.6	16 16	1331	1151	02 19	180	4,4,3,4,4,5,5,4	33	1	84.6
28	21 04	712	541	09 35	171	13 26	19.4	-2.0	15 45	21.4	15 47	1301	1179	02 26	122	4,4,3,4,3,4,4,4	30	1	84.6
29	20 30	749	538	10 22	211	06 17	20.4	-11.3	20 28	31.7	17 49	1289	1184	00 00	105	3,4,4,4,4,3,4,5,3	30	1	84.6
30 d	19 36	693	533	15 07	160	01 49	23.4	-1.6	19 30	25.0	15 21	1306	1147	02 01	159	5,4,4,4,4,4,5,4,4	34	1	84.6
31	20 16	691	561	12 51	130	14 32	18.5	0.7	19 18	17.8	14 59	1278	1183	03 02	95	4,3,2,3,4,4,4,4,3	27	1	84.6
Mean	-	-	688	582	-	-	19.1	0.1	-	-	19.0	-	-	1269	1193	-	-	0.84	84.2

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

125	ESKDALEUIR (H)												16,000 γ (0.16 C.G.S. unit) +												SEPTEMBER											
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1	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	632	627	624	627	634	627	623	624	598	596	602	602	601	621	627	608	621	637	648	646	641	641	645	640	625	625										
3	636	639	642	627	623	614	608	600	614	606	601	601	610	621	631	645	637	640	636	633	649	625	647	636	626	626										
d	622	628	633	636	633	628	622	621	610	603	603	616	621	634	635	621	642	678	692	642	655	623	569	561	626	626										
4	503	539	563	565	617	609	598	587	558	567	593	591	616	629	625	624	634	635	634	650	628	634	605	580	599	626										
5	629	581	582	608	619	625	634	625	611	603	609	611	620	629	638	642	645	638	640	647	663	639	627	634	625	625										
6	636	634	636	632	633	633	623	586	627	629	621	614	610	607	623	627	628	632	638	636	643	643	647	658	629	629										
7	635	635	633	632	632	628	629	628	629	600	596	609	618	635	638	644	642	623	634	635	638	635	645	643	630	630										
8	657	632	626	625	625	630	630	629	613	587	602	610	618	627	636	628	630	634	633	642	642	645	642	644	629	629										
9	q	648	635	634	642	643	638	639	628	619	607	609	614	627	636	641	642	640	639	643	647	646	643	645	650	636	636									
10	642	642	642	642	640	639	639	635	624	615	614	623	627	646	657	654	641	641	642	646	649	642	669	628	639	639										
11	621	663	629	638	640	638	630	616	601	610	608	619	633	642	645	644	647	648	648	649	645	644	646	649	636	636										
12	642	646	640	641	644	644	640	634	627	608	615	624	627	634	644	640	648	646	650	657	642	640	656	635	639	639										
13	638	630	632	625	640	638	640	619	608	600	612	619	625	627	635	638	641	640	644	646	644	651	637	641	632	632										
14	q	641	638	639	638	641	644	641	631	619	610	609	610	619	629	634	635	642	646	648	651	648	646	646	645	635	635									
15	645	644	644	654	650	651	653	648	632	632	625	625	634	645	658	641	659	676	638	628	628	642	640	637	643	643										
16	634	640	636	636	642	638	633	628	624	623	625	621	625	631	638	640	636	616	625	627	627	636	638	637	631	631										
17	636	634	619	633	638	644	626	625	627	619	617	622	621	613	613	622	627	636	638	650	649	641	645	643	631	631										
18	638	639	637	641	642	636	634	642	634	625	619	622	625	630	637	641	642	655	662	640	632	644	622	635	636	636										
19	d	627	596	554	608	632	627	578	566	609	593	530	596	623	629	640	657	662	594	610	631	616	609	616	608	608										
20	d	610	598	587	613	609	618	614	602	602	604	592	590	610	621	623	611	621	629	641	661	644	629	670	616	616										
21	610	623	602	621	631	638	634	592	604	601	581	594	598	614	616	608	623	629	624	638	619	625	629	636	616	616										
22	631	627	616	608	652	647	637	594	597	606	598	613	619	630	625	632	636	635	647	639	642	666	626	636	627	627										
23	d	650	622	630	637	635	642	629	622	625	598	578	603	634	620	647	635	628	615	618	615	629	624	626	622	622										
24	625	612	615	629	634	627	608	567	617	610	589	587	596	610	625	623	632	612	617	627	669	626	626	625	617	617										
25	628	628	632	629	629	628	625	615	600	605	607	609	614	628	618	627	634	640	627	642	617	633	635	633	624	624										
26	634	634	632	634	636	638	637	623	615	613	613	618	617	621	617	627	624	632	639	648	639	641	632	631	629	629										
27	q	643	627	637	677	666	629	629	637	623	614	600	600	610	615	627	623	627	633	640	630	634	636	636	628	628										
28	640	647	634	629	635	644	642	631	623	610	606	605	612	623	624	629	635	634	627	640	642	641	635	635	630	630										
29	q	635	635	636	636	642	642	642	640	636	626	619	616	625	633	646	650	652	653	652	650	648	647	647	646	640	640									
30	q	643	642	642	645	650	653	652	650	649	636	625	621	624	632	634	636	642	634	615	622	651	647	640	642	639	639									
Mean	630	627	624	630	636	635	629	618	616	609	603	609	616	627	631	633	637	639	637	640	641	639	635	634	628	628										

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

126	ESKDALEUIR (D)												11° +												SEPTEMBER									
	Hour G.M.T.																								Mean									
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean									
1	8.1	9.8	9.5	8.1	6.8	5.4	7.2	5.7	7.9	9.4	12.5	15.8	15.1	14.4	14.6	11.1	9.8	10.2	6.2	8.1	9.8	8.1	9.2	9.8	9.7									
2	8.7	17.7	9.0	4.0	4.9	5.1	8.5	7.8	9.8	9.1	12.1	14.3	14.8	14.4	13.0	7.7	9.1	8.5	6.7	7.1	3.8	7.8	7.3	7.0	9.1									
3 d	6.5	7.8	6.3	4.4	5.7	5.8	5.4	6.5	8.2	10.8	13.4	15.2	15.9	15.6	14.4	13.4	14.4	5.6	3.2	9.2	11.6	6.9	-1.0	-16.6	7.9									
4 d	-25.2	-13.7	2.2	12.8	1.7	2.2	6.3	6.5	7.2	10.9	14.2	17.6	18.1	17.6	18.8	18.4	12.7	10.7	1.5	5.1	9.1	6.9	1.3	0.6	6.8									
5	8.5	2.8	-5.1	-4.3	-1.8	5.8	5.0	5.0	6.1	7.1	9.3	13.0	14.9	15.9	15.2	14.6	13.5	12.1	10.9	7.1	0.7	0.2	5.8	8.7	7.1									
6	8.6	8.2	8.0	8.0	8.3	8.0	7.3	13.0	13.0	10.0	10.8	12.6	14.2	13.8	13.1	12.2	11.5	10.7	9.9	9.5	6.0	8.0	8.2	9.0	10.1									
7	7.6	7.8	8.5	8.5	9.2	10.6	11.7	6.7	9.0	11.6	15.5	17.3	16.2	16.2	14.1	13.0	12.4	6.0	10.8	10.2	9.3	7.2	6.7	10.0	10.7									
8	6.7	3.9	5.4	6.6	7.1	6.8	6.6	6.5	7.7	10.3	11.3	14.3	15.7	15.0	14.1	9.4	9.4	9.2	8.0	8.6	9.8	10.3	10.2	9.8	9.3									
9 q	8.7	6.7	11.9	7.4	4.6	5.4	6.0	4.9	6.0	7.2	10.8	14.0	15.7	15.2	12.9	10.8	9.5	9.7	9.7	9.8	10.1	10.1	8.6	9.6	9.4									
10	9.7	9.8	9.2	9.0	7.9	7.2	5.7	5.5	7.0	9.9	13.2	16.4	17.4	16.4	15.1	13.1	10.8	9.9	10.6	10.4	9.4	7.2	4.1	3.3	9.9									
11	7.2	14.9	2.9	4.9	5.8	5.2	4.8	3.2	7.2	10.8	13.0	15.2	17.8	18.3	16.4	12.7	11.0	10.8	10.5	10.8	9.5	10.8	10.4	9.0	10.1									
12	7.2	6.5	5.8	7.6	7.6	6.8	6.2	6.3	6.0	8.7	12.4	15.6	16.4	16.5	15.8	13.6	12.4	11.7	11.3	11.1	9.9	8.4	8.1	6.1	9.9									
13	5.6	7.4	7.5	8.8	7.9	6.8	7.2	7.1	8.5	9.1	10.4	13.7	15.4	14.9	12.9	10.8	10.0	9.8	9.7	9.1	8.7	6.6	8.0	8.9	9.4									
14 q	8.5	8.7	8.6	8.1	7.6	7.4	6.1	5.1	5.8	7.3	10.5	14.2	15.7	15.7	14.2	11.6	9.6	10.2	10.4	10.6	10.3	9.7	9.5	9.2	9.8									
15	9.0	8.6	8.4	8.0	6.4	6.4	6.1	5.0	5.4	7.7	9.4	12.7	15.0	17.6	21.0	16.6	17.0	16.2	13.2	4.6	6.9	10.1	9.9	8.6	10.4									
16	7.4	5.9	6.4	6.7	7.0	7.0	7.0	7.1	7.6	9.0	11.3	12.5	13.6	14.3	14.4	12.8	11.3	7.6	3.2	8.5	8.0	10.0	11.3	10.7	9.2									
17	9.5	8.2	11.5	10.7	6.8	7.3	9.0	12.0	10.4	9.8	11.2	13.3	14.3	14.7	12.7	11.6	10.6	10.6	10.3	1.6	5.6	8.8	6.9	9.0	9.8									
18	9.0	11.1	8.2	8.0	8.2	9.0	9.0	8.0	7.7	8.0	9.9	11.8	13.0	13.6	13.3	12.2	11.8	12.6	12.3	11.2	10.4	7.6	9.4	-6.3	9.5									
19 d	-13.1	-10.3	-1.8	8.6	6.1	6.8	14.8	25.5	15.4	11.5	9.2	14.5	15.9	15.2	15.7	12.9	3.9	-5.2	8.2	2.2	7.8	4.9	4.5	5.3	7.4									
20 d	4.8	8.2	15.4	7.2	7.9	11.6	10.8	10.2	8.6	9.9	11.3	13.6	16.1	17.0	12.8	14.4	12.2	10.2	9.4	8.1	4.8	7.5	6.6	10.8	10.4									
21	8.4	4.7	4.3	10.3	8.5	7.3	9.2	10.4	12.2	11.1	10.8	14.4	13.7	13.1	12.5	8.9	9.5	1.5	8.0	8.0	2.7	0.8	4.2	8.9	8.5									
22	8.0	11.4	10.5	-0.1	0.8	7.0	8.0	7.1	9.0	10.6	11.9	13.5	14.9	14.8	13.0	11.6	11.0	10.7	6.8	8.3	3.9	2.1	5.7	8.1	8.7									
23 d	12.1	6.5	8.0	8.1	11.8	17.9	15.1	10.8	6.6	9.2	11.2	14.1	15.1	15.5	9.0	11.9	1.3	10.1	1.5	0.1	5.3	7.2	5.3	11.6	9.4									
24	10.0	5.8	12.4	7.9	7.6	7.3	10.0	15.2	13.3	13.5	13.4	15.2	14.5	16.4	12.2	12.8	12.1	9.4	5.4	7.7	1.3	6.0	6.7	8.1	10.2									
25	8.7	11.4	10.0	7.5	7.9	7.6	7.2	7.2	10.0	10.2	11.8	14.0	15.3	15.5	12.6	10.4	11.3	9.8	8.3	5.0	6.6	7.4	7.1	8.5	9.7									
26	8.9	8.6	9.0	7.7	8.0	8.0	8.0	7.6	8.2	10.1	11.2	12.7	13.7	14.4	12.6	11.4	10.0	8.6	8.0	9.1	6.5	-0.5	5.0	4.9	8.8									
27	4.5	4.7	12.8	8.1	6.7	12.9	14.8	10.6	7.3	8.2	9.6	12.9	15.3	15.6	11.2	11.1	12.2	10.5	9.9	4.8	6.8	9.8	10.1	10.3	10.0									
28 q	12.0	10.8	7.3	6.7	7.5	8.9	7.0	7.4	8.4	8.1	10.0	12.0	13.1	13.5	13.4	12.4	11.6	11.2	8.3	9.2	9.5	9.5	8.4	8.8	9.8									
29 a	8.8	8.5	8.0	8.5	8.3	7.5	7.8	7.2	6.5	6.8	8.6	11.3	14.1	15.1	15.2	15.4	14.2	12.6	11.5	10.8	9.8	9.5	9.3	10.2	9.8									
30 q	9.1	9.1	9.0	9.3	9.7	9.0	8.5	7.6	6.8	6.0	7.0	9.5	11.5	13.2	13.4	12.2	11.8	12.0	11.7	10.5	10.3	8.4	5.4	7.1	9.5									
Mean	6.5	7.1	7.6	7.2	6.8	7.7	8.2	8.3	8.4	9.4	11.2	13.9	15.1	15.3	14.0	12.4	10.9	9.5	8.5	7.9	7.5	7.3	7.1	6.9	9.4									

SEPTEMBER

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

SEPTEMBER

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

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

130	ESKDALEMUIR (D)												11° +												OCTOBER											
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1	8.1	8.0	8.8	12.9	8.2	6.0	6.7	6.1	5.7	6.0	8.3	11.4	13.5	15.2	13.9	13.7	13.9	12.9	8.0	5.2	7.1	7.2	6.5	7.9	9.2											
2	7.4	7.2	8.2	7.7	8.3	8.2	8.6	8.3	7.8	8.0	9.2	10.1	12.2	12.7	12.9	11.7	8.0	8.0	9.4	9.9	8.5	9.4	9.3	9.0	9.2											
3	8.2	8.8	8.5	8.4	8.8	11.0	9.0	9.5	9.5	9.6	10.9	13.3	15.6	16.2	15.3	14.5	13.0	12.3	11.6	10.5	10.2	9.5	9.0	8.1	10.9											
4	6.1	7.2	7.2	7.2	8.2	8.3	8.1	7.4	7.0	7.2	8.6	11.2	13.0	13.5	13.1	12.2	11.3	10.6	10.5	10.8	6.2	7.7	7.9	8.0	9.1											
5 a	7.9	8.0	8.2	8.3	8.4	8.4	8.1	7.6	7.0	7.4	8.4	10.9	13.2	14.3	14.4	13.6	12.6	11.6	11.0	10.4	10.2	9.8	9.4	8.7	9.9											
6	5.2	6.5	6.9	8.5	8.7	8.5	8.5	7.7	7.1	6.9	8.1	10.2	12.1	13.2	13.4	13.1	11.6	10.8	10.2	9.9	10.1	9.9	9.3	9.0	9.4											
7 a	9.3	8.6	8.5	8.5	8.4	8.0	7.4	9.3	12.2	11.1	9.7	13.2	14.1	14.9	15.1	14.4	11.6	10.1	9.4	9.4	8.7	8.0	4.3	-0.7	9.7											
8	3.5	3.6	4.2	6.7	6.8	7.2	7.4	7.7	6.9	6.8	7.7	9.3	11.6	14.1	15.0	13.1	12.1	10.9	10.5	10.6	9.2	-2.5	0.6	6.5	7.9											
9	7.0	8.1	8.0	8.8	8.2	8.6	10.8	8.9	7.2	6.5	8.2	11.2	13.2	13.1	13.8	13.1	12.1	10.8	10.1	9.8	9.1	8.6	7.7	7.2	9.6											
10	7.2	7.8	5.6	7.4	8.0	8.4	8.3	7.7	6.5	6.5	7.7	10.3	12.7	15.0	15.5	15.4	13.1	11.7	6.7	3.0	-0.5	8.0	7.6	6.4	8.6											
11	8.5	8.6	8.0	8.8	9.1	8.7	8.4	7.2	6.7	6.9	9.5	13.4	16.1	17.5	17.3	11.6	12.5	9.6	7.6	9.8	9.6	9.0	8.6	7.8	10.0											
12 a	8.2	8.2	8.8	8.3	7.7	8.0	8.1	7.2	6.3	6.9	8.7	11.6	14.2	14.8	14.1	12.2	10.8	10.4	11.2	8.4	7.6	8.5	8.5	8.6	9.5											
13 a	8.6	8.0	8.5	8.2	8.7	8.7	8.4	8.0	7.0	7.3	9.2	12.6	14.5	15.4	13.9	12.0	10.4	10.9	10.9	9.9	9.0	7.6	6.4	7.1	9.6											
14 a	8.2	8.9	8.7	8.9	8.2	9.0	8.8	7.2	6.4	6.7	9.3	11.7	13.7	13.8	13.2	11.6	10.8	10.9	10.9	10.4	9.9	9.3	8.9	8.5	9.7											
15 d	8.5	8.7	9.0	9.0	8.9	9.0	8.2	7.2	6.3	6.9	9.5	12.4	15.0	16.9	25.2	28.5	24.1	22.9	-1.8	5.9	-2.9	-6.4	-6.0	-10.6	8.9											
16 d	0.8	6.5	9.4	4.9	8.4	9.4	8.1	7.6	5.7	5.9	8.9	10.8	12.6	13.4	12.2	10.7	2.2	3.5	0.4	0.6	-3.7	-11.4	-4.9	-7.0	4.8											
17	-4.4	3.8	8.5	11.0	8.9	9.5	9.3	9.0	9.8	9.9	9.8	11.8	14.2	15.6	17.9	6.9	9.4	10.9	6.9	0.5	-4.5	6.4	1.2	2.7	7.7											
1																																				

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														
	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														
	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	γ														
2	1223	1221	1215	1206	1184	1201	1209	1214	1218	1220	1219	1217	1220	1222	1225	1231	1235	1237	1242	1225	1225	1225	1225	1221	1221	1220														
3	1219	1220	1221	1220	1220	1220	1221	1223	1224	1221	1219	1217	1214	1213	1218	1225	1233	1237	1237	1231	1226	1225	1221	1221	1221	1223														
4	1220	1220	1220	1219	1219	1215	1214	1215	1217	1219	1218	1220	1219	1214	1214	1219	1225	1222	1223	1223	1224	1225	1225	1225	1225	1220														
5 q	1220	1219	1220	1220	1220	1219	1221	1223	1222	1221	1214	1209	1210	1213	1215	1219	1222	1221	1220	1221	1225	1220	1216	1215	1215	1219														
6 q	1214	1215	1215	1215	1215	1216	1218	1219	1218	1214	1213	1210	1209	1209	1213	1217	1218	1218	1217	1217	1218	1218	1219	1219	1219	1216														
7	1218	1214	1214	1215	1216	1215	1215	1215	1215	1214	1208	1206	1207	1207	1209	1214	1215	1215	1215	1216	1218	1218	1220	1220	1220	1214														
8	1218	1217	1217	1215	1214	1214	1214	1218	1208	1208	1203	1206	1212	1215	1218	1219	1224	1222	1221	1221	1221	1223	1226	1226	1230	1217														
9	1222	1219	1218	1214	1214	1213	1214	1210	1211	1210	1210	1212	1213	1215	1221	1222	1223	1221	1221	1221	1225	1216	1205	1209	1216															
10	1214	1215	1215	1216	1214	1211	1207	1209	1213	1213	1214	1210	1209	1210	1214	1219	1220	1220	1219	1219	1219	1220	1221	1221	1215	1215														
11	1220	1216	1204	1209	1214	1215	1216	1219	1220	1219	1215	1209	1207	1210	1218	1225	1227	1224	1229	1233	1235	1226	1224	1217	1219	1219														
12	1215	1219	1220	1219	1218	1218	1217	1218	1218	1215	1210	1206	1212	1219	1221	1235	1233	1231	1230	1225	1221	1221	1220	1218	1220	1220														
13 q	1219	1220	1219	1218	1217	1218	1219	1220	1220	1221	1219	1215	1212	1213	1216	1220	1221	1220	1220	1228	1233	1228	1226	1224	1220	1220														
14 q	1221	1222	1219	1217	1218	1218	1218	1219	1220	1220	1218	1215	1210	1213	1215	1220	1226	1230	1225	1225	1225	1224	1222	1221	1220	1220														
15 d	1219	1219	1219	1219	1219	1219	1219	1220	1218	1215	1210	1207	1206	1209	1216	1221	1222	1221	1221	1221	1220	1219	1219	1219	1219	1217														
16 d	1219	1218	1218	1217	1216	1216	1218	1220	1219	1214	1209	1204	1203	1206	1226	1308	1354	1437	1392	1298	1273	1231	1189	1159	1244	1216														
17	1128	1134	1183	1198	1213	1213	1221	1229	1230	1229	1225	1226	1230	1233	1245	1260	1278	1273	1248	1246	1206	1209	1188	1129	1216															
18 d	1128	1163	1187	1204	1213	1214	1218	1225	1226	1234	1231	1227	1231	1237	1249	1289	1272	1263	1268	1279	1261	1222	1213	1205	1227															
19 d	1210	1210	1192	1167	1170	1201	1213	1217	1213	1225	1231	1238	1265	1281	1295	1340	1319	1296	1294	1249	1228	1209	1197	1142	1233															
20 d	1147	1131	1115	1099	1135	1169	1185	1206	1226	1249	1257	1250	1265	1289	1266	1280	1280	1268	1248	1239	1238	1226	1223	1213	1217															
21	1206	1179	1166	1167	1180	1193	1200	1210	1225	1236	1231	1233	1247	1257	1272	1276	1262	1258	1245	1238	1219	1203	1199	1198	1221															
22	1207	1209	1216	1216	1221	1225	1227	1228	1233	1243	1246	1248	1241	1248	1257	1247	1237	1232	1231	1231	1231	1232	1232	1231	1232															
23	1231	1231	1228	1220	1194	1202	1207	1211	1220	1227	1231	1232	1237	1242	1239	1245	1249	1243	1233	1231	1231	1222	1213	1210	1226															
24	1214	1213	1209	1213	1213	1214	1220	1221	1220	1218	1223	1223	1232	1236	1243	1245	1239	1238	1233	1230	1230	1230	1231	1231	1225															
25	1230	1230	1229	1228	1226	1226	1226	1226	1226	1225	1216	1217	1222	1238	1247	1241	1235	1232	1231	1230	1228	1227	1231	1230	1229															
26	1226	1226	1225	1216	1218	1215	1215	1219	1221	1221	1221	1221	1224	1226	1231	1234	1232	1231	1229	1227	1227	1227	1225	1225	1224															
27	1223	1225	1225	1225	1225	1223	1222	1222	1223	1221	1221	1219	1219	1223	1226	1227	1226	1226	1228	1231	1231	1230	1226	1225	1225															
28	1219	1196	1203	1211	1217	1218	1217	1216	1219	1225	1221	1224	1227	1231	1237	1243	1245	1251	1260	1233	1241	1239	1231	1219	1227															
29	1208	1193	1203	1209	1210	1217	1221	1224	1225	1222	1221	1221	1221	1224	1227	1231	1232	1231	1231	1230	1230	1226	1225	1221	1221															
30	1214	1209	1214	1214	1215	1215	1218	1219	1219	1218	1215	1214	1215	1218	1220	1224	1224	1223	1226	1235	1237	1221	1209	1211	1219															
31	1217	1222	1225	1224	1224	1224	1224	1224	1224	1223	1221	1220	1222	1225	1226	1227	1226	1226	1226	1227	1231	1230	1228	1227	1225															
Mean	1218	1211	1214	1220	1221	1221	1215	1215	1219	1219	1218	1219	1221	1224	1226	1227	1226	1225	1225	1225	1225	1226	1226	1225	1221	1221														

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

132 ESKDALEMUIR													OCTOBER												
	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 11° +	Minimum 11° +	Range		Maximum 44,000γ +	Minimum 44,000γ +	Range														
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ			°A.									
2	19 07	693	608	03 29	85	03 40	20.4	-0.2	19 05	20.6	18 39	1244	1180	04 20	64	2,4,2,2,3,2,4,2	84.6								
3	22 23	651	610	17 46	41	13 07	13.4	5.2	20 04	8.2	17 46	1241	1213	13 00	28	1,0,2,2,2,3,3,2	84.6								
4	23 56	656	602	12 07	54	13 07	17.5	6.6	24 00	10.9	16 36	1226	1211	06 02	15	1,2,2,2,2,2,1,2	84.8								
5 q	21 58	661	609	11 07	52	13 39	14.0	2.3	20 40	11.7	20 29	1225	1207	11 54	18	2,1,0,2,2,2,3,2	84.8								
6 q	24 00	660	620	10 55	40	14 52	14.7	7.0	08 25	7.7	23 34	1220	1209	13 00	11	1,1,2,1,2,1,2,1	84.6								
7	19 41	662	627	13 53	35	13 41	13.9	3.4	00 28	10.5	23 29	1221	1206	11 19	15	2,1,2,2,3,1,2,2	84.6								
8	00 04	673	602	12 42	71	08 12	17.3	-3.5	23 14	20.8	23 32	1234	1203	10 17	31	2,1,3,3,3,2,1,3	84.6								
9	21 20	693	612	11 45	81	14 20	15.7	-11.0	21 22	26.7	21 00	1230	1198	22 05	32	1,2,3,3,3,2,2,4	84.6								
10	06 52	672	610	11 50	62	14 07	14.2	6.0	09 43	8.2	16 00	1221	1203	07 01	18	2,2,3,2,2,2,2,2	84.7								
11	23 37	667	612	11 19	55	14 25	16.3	-6.5	20 16	22.8	20 16	1238	1202	02 20	36	2,1,1,1,1,2,2,4,3	84.7								
12 q	22 20	653	600	12 53	53	13 29	18.4	3.0	18 06	15.4	15 41	1238	1206	11 51	32	1,1,1,2,3,3,3,2	84.8								
13 q	18 38	653	609	11 02	44	13 51	15.2	5.9	08 40	9.3	20 05	1235	1211	12 38	24	1,0,0,1,1,1,3,2	84.8								
14 q	22 02	655	604	11 35	51	13 40	16.1	5.1	22 00	11.0	16 14	1230	1209	11 11	21	1,1,0,2,1,2,2,2	84.8								
15 d	21 03	649	618	09 56	31	13 13	14.1	6.2	08 23	7.9	16 07	1224	1206	11 50	18	1,1,1									

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

133	ESKDALEUIR (H)												16,000γ (0·16 C.G.S. unit) +												NOVEMBER											
	Hour G.M.T.																																			
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ											
1	638	638	638	639	640	643	639	638	635	634	621	624	633	639	642	637	636	638	628	629	631	635	642	637	636											
2 a	638	639	642	644	646	648	646	644	644	633	625	626	628	631	636	638	635	641	644	648	648	645	642	640	640											
3	640	642	642	644	647	647	648	647	641	635	632	630	636	636	631	629	639	642	645	647	644	643	640	645	641											
4	637	634	639	645	646	647	646	644	641	632	624	631	636	640	642	641	642	645	647	646	645	641	633	627	640											
5	633	629	622	630	640	648	661	641	629	619	615	618	619	616	616	608	593	598	618	631	634	632	632	631	626											
6	631	640	634	634	641	645	646	638	633	636	635	640	641	634	635	638	641	645	646	644	642	640	638	638	639											
7	638	637	639	639	644	642	641	640	630	623	619	624	627	632	635	640	646	648	643	643	633	636	640	642	637											
8	642	640	640	642	644	644	646	643	631	623	619	617	627	632	636	636	636	640	646	648	649	651	646	661	639											
9 a	633	635	639	641	643	643	649	647	647	643	637	636	638	641	643	643	646	648	648	647	645	641	645	642	643											
10 a	642	642	642	644	646	646	647	645	643	636	633	633	635	639	641	644	646	648	649	648	648	648	648	647	643											
11	645	645	647	648	651	653	652	651	648	641	636	636	639	646	645	652	651	649	640	623	627	632	642	640	643											
12	644	641	631	631	636	643	649	652	646	637	630	623	629	643	623	628	635	640	634	624	607	647	634	632	635											
13 d	634	635	664	647	646	627	622	627	621	616	603	594	572	584	628	630	616	632	606	612	644	651	622	621	623											
14 d	627	628	640	653	652	638	623	631	621	606	602	602	563	612	629	632	620	602	609	591	608	626	639	618	620											
15 d	625	627	629	635	642	636	649	608	602	612	609	579	578	585	604	586	622	615	602	607	628	621	629	632	615											
16 d	631	630	616	635	656	626	627	623	618	612	614	615	622	624	633	616	603	591	597	630	624	635	625	630	622											
17	633	628	626	635	638	643	634	635	638	632	631	625	629	623	633	635	616	603	616	626	642	663	642	618	631											
18	625	631	636	616	630	637	639	634	634	626	601	602	629	635	628	622	628	624	635	633	631	639	635	647	629											
19 d	653	638	629	618	664	657	642	639	631	634	611	628	620	580	611	631	620	624	626	627	637	626	619	628	629											
20	632	632	639	647	639	628	635	635	606	620	624	625	622	624	626	603	615	624	643	631	623	648	604	618	627											
21	620	631	630	631	637	643	633	628	622	616	602	609	612	628	635	635	636	638	631	626	618	622	630	631	627											
22	633	627	632	634	636	639	639	639	634	631	628	631	630	635	637	636	641	643	642	624	631	635	634	643	635											
23	634	637	639	639	642	642	659	659	639	630	622	632	637	640	639	649	640	655	651	626	678	595	599	613	637											
24	647	626	636	638	639	638	647	643	647	636	624	619	624	629	631	637	641	628	633	639	638	632	631	639	635											
25	633	630	634	636	635	651	647	647	650	643	642	633	627	633	638	642	643	647	644	634	631	640	635	635	639											
26	631	622	631	632	634	640	640	643	642	638	635	633	636	638	637	638	643	645	642	640	638	639	637	635	637											
27	635	635	643	639	639	641	641	630	643	642	636	630	630	645	646	644	639	635	637	637	640	640	641	651	639											
28 a	639	635	638	639	639	643	648	650	649	643	639	637	639	642	643	644	645	647	649	650	650	641	636	633	642											
29	634	631	637	635	639	640	646	643	643	637	631	636	640	640	640	643	644	647	647	648	647	646	645	646	641											
30 a	638	640	639	641	643	646	646	643	643	646	644	646	647	645	645	649	651	654	655	652	646	642	643	643	645											
Mean	635	634	636	638	643	642	643	640	635	630	624	624	625	629	634	633	634	635	635	634	637	638	634	635	635											

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

85

135 ESKDALEUIR (Z)

44,000γ (0.44 C.G.S. unit) +

NOVEMBER

	Hour G.M.T.																								Mean
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1225	1225	1225	1224	1223	1223	1224	1225	1226	1225	1225	1222	1223	1224	1226	1226	1226	1230	1241	1237	1234	1231	1228	1227	1227
2 q	1226	1225	1225	1223	1221	1221	1221	1222	1222	1221	1219	1219	1221	1223	1226	1226	1229	1226	1226	1226	1226	1226	1226	1226	1224
3	1225	1223	1222	1221	1220	1220	1221	1223	1224	1221	1218	1218	1221	1226	1226	1227	1226	1227	1229	1226	1226	1226	1226	1227	1224
4	1220	1219	1219	1218	1219	1220	1220	1221	1221	1223	1220	1217	1216	1218	1220	1223	1223	1222	1221	1222	1223	1225	1226	1226	1221
5	1222	1215	1214	1215	1214	1209	1203	1206	1213	1216	1217	1215	1235	1248	1253	1261	1274	1274	1258	1245	1237	1233	1232	1230	1231
6	1230	1222	1221	1224	1223	1221	1221	1221	1221	1220	1218	1218	1221	1227	1231	1230	1226	1226	1226	1226	1226	1226	1226	1226	1224
7	1226	1226	1225	1224	1221	1221	1221	1223	1226	1225	1225	1225	1226	1231	1231	1230	1226	1226	1226	1227	1234	1233	1230	1227	1226
8	1226	1226	1226	1225	1223	1222	1222	1223	1222	1220	1218	1220	1223	1225	1226	1226	1227	1229	1226	1225	1223	1223	1225	1216	1224
9 q	1218	1220	1220	1221	1220	1220	1219	1218	1219	1217	1215	1215	1218	1220	1222	1224	1223	1222	1222	1222	1223	1224	1223	1222	1220
10 q	1222	1222	1222	1221	1221	1221	1220	1219	1218	1215	1214	1214	1215	1219	1220	1221	1221	1221	1220	1220	1220	1220	1220	1220	1219
11	1219	1219	1219	1219	1218	1217	1217	1217	1215	1213	1209	1209	1213	1217	1218	1219	1220	1221	1226	1236	1237	1232	1226	1223	1220
12	1209	1197	1206	1213	1218	1218	1218	1218	1217	1216	1213	1215	1218	1223	1226	1233	1236	1231	1234	1255	1261	1244	1219	1217	1223
13 d	1218	1214	1189	1183	1188	1194	1195	1202	1216	1224	1225	1236	1249	1256	1241	1244	1249	1245	1249	1250	1225	1206	1203	1215	1221
14 d	1220	1220	1211	1192	1183	1201	1209	1214	1218	1222	1226	1230	1243	1253	1243	1238	1241	1256	1254	1250	1225	1217	1212	1218	1225
15 d	1221	1221	1224	1225	1220	1216	1213	1218	1222	1225	1232	1248	1258	1268	1281	1282	1268	1249	1261	1251	1236	1231	1227	1225	1238
16 d	1220	1214	1198	1169	1192	1203	1210	1214	1221	1228	1230	1231	1236	1235	1232	1236	1244	1254	1264	1238	1237	1235	1214	1205	1223
17	1214	1213	1199	1205	1215	1216	1220	1221	1220	1221	1219	1221	1224	1227	1231	1232	1238	1250	1248	1238	1233	1231	1214	1204	1214
18	1219	1212	1203	1203	1202	1211	1219	1225	1226	1226	1230	1233	1231	1231	1235	1242	1238	1235	1231	1231	1232	1231	1227	1220	1225
19 d	1203	1199	1208	1197	1189	1191	1198	1205	1214	1218	1220	1223	1228	1258	1255	1243	1243	1242	1238	1237	1236	1224	1223	1221	1221
20	1215	1219	1234	1221	1231	1211	1215	1218	1225	1224	1223	1222	1225	1232	1237	1248	1245	1234	1235	1231	1229	1201	1214	1212	1225
21	1207	1206	1218	1223	1225	1223	1224	1223	1224	1226	1230	1232	1234	1237	1232	1232	1231	1231	1232	1235	1239	1235	1231	1226	1227
22	1225	1225	1226	1226	1226	1226	1225	1226	1226	1226	1226	1225	1227	1231	1233	1232	1231	1230	1227	1233	1233	1231	1230	1227	1228
23	1226	1226	1226	1226	1225	1225	1220	1215	1219	1221	1219	1217	1226	1231	1231	1232	1231	1229	1229	1239	1236	1219	1231	1225	1226
24	1186	1197	1212	1215	1215	1212	1209	1213	1215	1220	1218	1219	1220	1225	1227	1231	1233	1235	1234	1232	1231	1231	1230	1227	1220
25	1225	1225	1226	1226	1225	1215	1219	1219	1219	1219	1220	1223	1227	1229	1231	1235	1234	1231	1230	1232	1235	1235	1227	1217	1226
26	1213	1220	1218	1221	1225	1225	1225	1225	1226	1226	1225	1225	1223	1226	1230	1231	1229	1229	1229	1231	1231	1231	1229	1227	1226
27	1227	1226	1224	1221	1222	1222	1222	1225	1225	1226	1226	1224	1225	1226	1229	1231	1232	1235	1234	1234	1233	1232	1230	1222	1227
28 q	1219	1221	1222	1222	1223	1223	1222	1221	1221	1223	1221	1221	1221	1223	1225	1225	1225	1225	1225	1225	1225	1226	1230	1227	1223
29	1226	1225	1221	1219	1220	1220	1221	1222	1220	1220	1219	1219	1221	1223	1226	1226	1226	1225	1224	1223	1224	1224	1225	1225	1223
30 q	1225	1224	1224	1223	1222	1222	1222	1222	1221	1219	1218	1219	1221	1222	1222	1222	1221	1221	1221	1223	1226	1228	1226	1226	1223
Mean	1219	1218	1218	1215	1216	1216	1217	1219	1221	1221	1221	1223	1226	1231	1232	1234	1234	1234	1234	1233	1231	1227	1224	1221	1224

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

136 ESKDALEUIR

NOVEMBER

	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												
	Maximum 16,000γ +			Minimum 16,000γ +			Range			Maximum 11° +			Minimum 11° +						
	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	05 42	646	615	10 44	31	14 23	12.9	-0.3	18 31	13.2	18 46	1243	1222	05 42	21	0,0,1,2,1,1,3,2			
2 q	21 16	654	622	10 45	32	13 24	12.2	6.7	08 03	5.5	16 34	1230	1219	10 51	11	1,0,1,2,0,1,1,2			
3	20 35	651	625	14 24	26	15 12	13.7	3.6	24 00	10.1	18 17	1231	1215	11 03	16	1,0,1,1,2,3,2,2			
4	04 05	656	623	10 18	33	12 09	12.9	3.3	24 00	9.6	22 56	1227	1215	12 38	12	2,2,1,1,1,1,1,2			
5	06 26	665	580	16 36	85	16 10	20.7	0.6	03 56	20.1	16 50	1278	1201	06 45	77	2,3,3,2,3,3,3,0			
6	17 42	651	615	13 42	36	11 30	14.1	7.0	08 50	7.1	14 19	1231	1215	11 00	16	2,1,2,2,3,1,1,0			
7	17 24	652	616	10 36	36	12 11	13.1	5.0	20 34	8.1	20 59	1237	1220	05 02	17	0,1,2,1,1,1,2,1			
8	23 11	681	614	11 32	67	15 07	13.8	1.3	23 58	12.5	17 23	1230	1214	23 50	16	0,0,2,1,1,2,1,3			
9 q	22 45	656	630	00 42	26	13 39	11.1	0.7	00 09	10.4	15 11	1225	1214	00 00	11	3,1,1,1,0,0,0,2			
10 q	22 23	651	631	10 45	20	13 38	12.1	6.9	00 20	5.2	02 06	1222	1214	11 28	8	0,0,1,0,0,0,0,0			
11	13 12	655	615	19 30	40	13 53	15.0	3.7	21 44	11.3	19 56	1240	1208	11 50	32	0,0,0,1,2,2,3,2			
12	21 25	674	598	20 54	76	13 15	16.5	-12.7	21 20	29.2	21 01	1266	1194	01 19	72	3,2,1,2,3,2,4,5			
13 d	02 52	681	527	13 08	154	13 31	20.0	-14.0	19 53	34.0	13 20	1265	1182	02 55	83	4,4,3,3,5,4,4,4			
14 d	22 00	680	510	12 39	170	03 45	23.0	-15.6	17 38	38.6	13 04	1262	1171	04 05	91	3,4,2,2,5,5,4,4			
15 d	06 26	662	526	15 45	136	06 28	20.6	-25.2	18 54	45.8	15 54	1293	1205	06 38	88	2,3,4,4,4,5,5,3			
16 d	04 35	669	549	18 05	120	02 44	22.1	-10.6	18 12	32.7	18 07	1278	1153	03 10	125	4,4,3,2,3,4,4,3			
17	21 54	703	585	16 55	118	02 10	15.2	-3.8	17 53	19.0	18 00	1254	1197	02 45	57	3,2,2,2,3,4,4,4			
18	23 10	667	576	11 01	91	08 59	13.9	1.7	15 49	12.2	15 40	1243	1199	04 08	44	3,3,2,3,2,3,2,3			
19 d	20 30	694	543	13 20	151	13 59	17.0	-17.7	20 13	34.7	13 44	1270	1187	04 26	83	4,4,3,3,4,3,5,4			
20	18 45	677	582	22 19	95	20 26	13												

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						
	Hour	G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	639	639	641	642	645	649	651	650	653	651	650	647	644	646	646	646	650	651	652	652	650	647	646	649	647	647	647
2 q	647	645	646	646	646	647	646	649	651	652	649	648	647	646	649	649	646	647	645	642	646	645	642	647	647	647	647
3	641	641	643	641	641	646	650	649	650	650	643	636	634	634	630	640	637	637	634	638	638	644	640	631	640	640	640
4	649	630	634	638	641	641	643	646	646	644	643	642	645	647	649	649	652	651	636	646	646	641	640	651	644	644	644
5	645	644	643	634	637	644	645	645	645	644	641	638	640	646	644	642	641	642	643	649	647	647	646	643	643	643	643
6	642	639	642	643	646	649	650	650	651	657	657	656	647	639	633	638	640	646	646	646	644	642	637	634	634	644	644
7	637	634	653	642	642	650	646	647	646	643	636	633	642	644	645	644	646	646	644	644	644	642	644	652	642	643	643
8	642	641	640	638	642	644	649	650	649	646	643	644	646	650	651	644	645	647	646	642	646	636	636	655	645	645	645
9	636	638	641	642	643	646	646	646	642	637	636	638	639	639	642	643	642	633	632	638	637	638	643	639	640	640	640
10	639	639	640	640	643	644	643	644	641	635	625	633	636	637	637	637	644	650	653	652	650	649	646	633	641	641	641
11 d	636	630	636	638	645	650	663	667	661	649	625	622	624	578	612	630	623	597	597	601	609	617	618	617	627	627	627
12 d	629	627	631	625	641	636	627	630	632	631	630	622	605	617	621	610	633	630	620	603	615	631	630	634	625	625	625
13 d	632	630	630	636	637	645	646	642	636	628	625	630	622	623	625	638	641	642	629	617	644	617	630	635	633	633	633
14	634	637	634	639	639	646	644	646	640	633	631	634	635	635	638	638	637	630	632	630	633	635	636	644	637	637	637
15	640	638	638	639	642	649	651	649	647	651	647	642	635	635	640	645	646	644	642	626	621	632	624	630	640	640	640
16	635	638	638	640	645	646	649	650	643	635	638	640	642	643	642	644	644	641	641	645	647	642	655	644	643	643	643
17	639	638	642	644	647	655	658	657	655	650	648	645	642	641	643	647	638	646	649	649	642	631	643	638	645	645	645
18	642	649	642	642	642	645	648	649	649	648	647	648	648	647	641	638	642	642	646	642	642	641	646	645	645	645	645
19	644	641	642	644	646	650	651	654	655	653	653	652	646	646	645	646	644	635	629	634	635	641	636	640	644	644	644
20	638	638	642	646	642	646	651	650	650	649	648	647	646	645	641	644	642	639	638	641	641	646	643	637	644	644	644
21	648	639	638	643	643	646	646	646	645	643	642	642	649	651	646	646	645	644	643	645	645	641	634	657	644	644	644
22 d	644	645	648	649	650	649	656	660	666	661	654	648	651	650	647	636	634	641	630	626	630	633	636	638	645	645	645
23 q	637	638	640	640	642	644	646	646	644	643	643	643	646	645	640	643	651	649	634	630	642	645	642	641	642	642	642
24	634	636	633	641	640	645	659	650	645	643	637	633	638	644	642	642	645	646	641	644	642	638	638	641	642	642	642
25	646	638	641	642	643	646	646	658	657	652	649	645	646	649	642	645	643	642	642	642	643	638	631	632	644	644	644
26	636	638	638	640	641	641	642	642	642	643	647	654	659	661	653	649	646	647	647	645	645	635	626	630	644	644	644
27	637	634	640	641	642	644	642	642	643	647	647	650	652	650	646	645	639	649	653	644	651	682	651	621	645	645	645
28	632	630	632	638	640	644	644	645	644	642	645	648	650	642	640	641	643	642	645	634	644	641	644	639	641	641	641
29 d	649	636	636	638	641	645	646	644	643	641	643	650	656	650	650	650	658	640	651	650	648	646	650	624	645	645	645
30 q	636	640	642	642	640	643	648	651	646	646	646	645	647	651	653	650	651	649	638	641	642	644	643	643	645	645	645
31 q	643	643	642	642	642	643	649	652	650	647	641	642	646	649	646	646	649	652	652	649	646	642	642	638	646	646	646
Mean	640	638	640	641	643	646	648	649	647	645	642	642	642	641	641	642	643	642	640	638	640	640	639	638	642	642	642

639 at 0-1h. January 1, 1954.

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

138		ESKDALEMUIR (D)												11° +												DECEMBER											
		Hour G.M.T.																																			
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean											
1	q	7.8	8.0	8.1	8.4	8.2	7.3	7.3	7.7	8.1	8.4	8.8	9.3	9.9	10.3	9.7	9.3	9.0	8.6	8.6	8.3	7.8	7.6	6.0	6.7	8.3											
2	q	7.1	8.1	8.3	8.0	7.9	7.9	7.6	7.7	8.3	9.1	9.3	10.1	11.3	10.5	9.6	9.2	9.7	9.7	8.8	8.2	7.8	7.7	7.7	7.8	8.6											
3		7.8	7.8	9.3	8.5	7.7	7.4	6.8	7.2	7.6	8.4	8.8	10.4	12.3	13.1	12.6	12.4	11.1	10.0	8.6	8.7	7.7	6.9	6.9	6.2	8.9											
4		-2.6	4.2	6.5	8.1	6.9	7.2	8.2	8.5	8.5	8.9	10.2	10.2	11.1	11.2	10.0	10.1	9.7	10.7	7.9	9.0	8.1	7.4	7.0	4.8	8.0											
5		6.9	5.5	6.5	6.8	7.0	7.1	7.6	8.0	8.0	8.5	8.5	9.4	10.0	10.6	10.0	9.6	9.2	8.0	7.6	8.0	7.9	7.9	7.8	7.2	8.1											
6		7.0	7.1	8.3	8.6	8.6	8.1	7.9	7.9	8.2	8.4	9.8	11.9	11.7	12.5	12.7	13.3	10.9	9.6	9.1	8.2	7.3	4.6	3.6	6.5	8.8											
7		7.6	6.9	9.8	6.0	6.9	7.1	7.6	8.0	7.3	7.6	8.8	9.6	10.6	10.9	10.0	9.3	8.9	8.9	8.4	8.1	7.6	7.3	5.9	6.2	8.1											
8		7.9	7.8	7.4	7.5	7.9	8.1	7.4	7.6	7.8	8.1	9.0	9.8	10.5	10.8	11.3	11.8	11.2	10.8	9.6	8.4	7.3	6.7	5.4	0.7	8.4											
9		0.3	6.6	8.5	8.4	8.4	8.6	8.2	8.1	8.0	7.9	8.5	9.4	10.8	10.8	10.5	9.6	10.7	10.2	9.2	6.6	-1.8	6.9	5.9	6.2	7.8											
10		6.6	8.1	8.4	8.2	8.0	7.9	7.7	7.9	8.0	8.4	9.4	11.1	10.8	11.0	10.5	9.9	9.0	9.4	9.3	8.4	7.9	7.2	4.5	5.9	8.5											
11	d	5.2	6.6	7.2	7.3	9.4	8.4	9.9	10.5	10.3	9.9	10.8	13.0	13.2	16.3	14.8	13.8	12.5	9.4	5.3	2.8	-2.0	-2.8	0.3	3.4	8.1											
12	d	13.5	7.8	6.9	11.1	9.9	10.9	12.6	9.1	9.9	7.2	8.0	10.0	10.7	12.5	13.0	8.0	8.4	3.0	-0.3	1.0	3.5	6.9	6.9	11.8	8.4											
13	d	5.8	7.0	7.6	7.5	8.9	9.8	9.8	9.4	8.4	8.3	8.4	10.0	11.2	11.9	10.9	10.2	9.0	8.6	8.4	3.7	4.5	4.8	6.2	6.9	8.2											
14		7.6	7.9	8.2	9.3	8.7	8.5	8.1	8.2	8.2	8.9	9.5	10.5	11.0	9.8	8.6	8.1	8.4	7.5	7.9	5.8	3.6	6.9	6.6	6.6	8.1											
15		7.6	8.0	8.4	8.4	8.8	8.9	8.1	8.9	9.2	9.4	9.4	10.0	9.3	9.4	9.3	9.3	9.0	8.9	8.4	6.6	1.5	1.5	3.0	6.1	7.8											
16		8.0	10.0	9.4	8.7	8.4	8.1	8.5	8.7	8.4	9.5	10.0	10.2	10.2	10.6	10.3	9.3	8.5	8.5	8.2	8.4	7.9	7.1	5.3	5.9	8.7											
17		6.3	8.1	8.6	8.5	8.6	9.0	9.4	9.4	9.1	8.8	9.1	9.1	9.8	10.2	10.2	9.7	7.9	7.7	8.2	8.9	8.4	4.4	1.4	6.9	8.2											
18		7.7	10.0	8.2	8.9	8.6	8.9	8.9	8.7	8.7	9.3	9.7	9.5	9.9	10.9	11.1	11.3	11.1	8.8	7.5	8.6	7.5	6.6	5.8	7.3	8.9											
19		7.2	8.4	8.6	8.4	8.4	8.4	8.5	8.7	8.4	8.7	9.5	10.0	10.9	10.7	9.9	9.4	8.9	8.7	9.6	8.0	6.4	5.0	5.5	6.9	8.5											
20		8.0	7.9	8.3	7.5	7.6	8.1	8.0	8.0	7.9	8.2	9.1	10.4	10.8	11.2	10.7	10.3	11.3	10.5	8.2	7.5	6.9	8.0	7.3	7.3	8.7											
21		8.3	8.0	7.7	8.4	8.1	8.4	8.5	8.3	7.9	8.4	9.9	9.5	9.8	9.8	9.1	9.1	9.1	8.6	8.4	7.9	7.6	7.6	4.6	5.5	8.3											
22	d	6.9	8.2	8.5	8.1	8.4	10.0	9.8	8.6	8.7	8.5	8.7	9.2	10.3	11.2	11.0	10.7	8.4	9.8	9.1	3.2	3.3	6.2	6.2	6.3	8.3											
23	q	7.0	7.3	7.5	8.2	8.3	8.2	8.1	7.8	7.7	8.3	8.9	9.0	9.5	9.9	9.5	9.1	9.3	10.3	6.4	9.2	8.5	7.3	6.2	6.0	8.2											
24		6.4	5.4	7.0	7.6	6.9	6.6	6.8	7.2	7.4	8.1	8.2	8.5	9.6	9.7	9.0	8.6	8.5	8.4	7.9	7.3	7.6	7.7	7.1	7.2	7.7											
25		8.1	7.2	7.6	6.7	8.4	7.3	7.9	8.2	8.1	8.9	9.6	9.6	10.3	10.6	9.6	8.9	9.5	7.7	8.8	7.2	6.9	8.0	2.6	7.6	8.1											
26		7.4	7.9	8.1	8.1	8.0	7.9	7.9	8.0	8.2	8.9	9.4	10.2	9.9	9.8	8.0	8.6	9.1	8.9	8.4	8.1	5.9	3.1	2.5	7.1	7.9											
27		8.1	7.6	7.8	7.6	7.6	7.6	7.9	8.3	8.4	9.4	9.4	9.7	9.3	7.9	7.8	8.6	9.0	9.1	9.8	10.4	8.1	5.9	6.1	5.2	8.2											
28		7.9	6.6	4.8	5.2	7.5	7.8	7.8	8.5	8.9	9.8	10.6	9.9	10.7	10.2	8.4	8.9	9.1	8.7	9.4	4.8	6.0	7.6	7.6	6.9	8.1											
29	d	9.0	7.1	7.0	7.0	7.0	7.3	7.1	7.2	7.2	8.2	9.7	10.8	10.9	8.8	8.4	10.1	10.5	9.9	9.0	8.8	8.1	6.7	-2.9	2.6	7.7											
30	q	7.1	7.9	7.9	7.3	7.4	8.7	8.3	7.9	7.4	7.6	9.5	9.7	9.1	9.1	8.2	8.3	8.4	9.0	8.5	7.8	7.9	7.3	7.5	6.6	8.1											
31	q	7.0	7.0	7.2	7.2	6.8	6.9	6.6	8.0	8.0	8.5	8.9	8.9	9.1	8.4	7.9	7.7	7.9	7.9	7.9	7.7	7.9	7.2	6.9	6.9	7.7											
Mean		7.0	7.5	7.9	7.9	8.0	8.1	8.2	8.3	8.3	8.6	9.3	10.0	10.5	10.6	10.1	9.8	9.5	8.9	8.1	7.3	6.3	6.2	5.3	6.3	8.2											

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

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139 ESKDALEUIR (Z)		44,000γ (0.44 C.G.S. unit) +																			DECEMBER					
		Hour G.M.T.																								
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
		γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1225	1223	1221	1221	1220	1220	1219	1218	1217	1218	1217	1216	1216	1218	1219	1220	1221	1221	1221	1221	1222	1223	1224	1225	1222	1221
2 q	1220	1219	1219	1219	1219	1220	1220	1221	1220	1219	1218	1217	1215	1218	1221	1221	1221	1223	1225	1225	1226	1226	1225	1224	1224	1221
3	1224	1222	1219	1215	1219	1219	1219	1219	1217	1215	1217	1218	1218	1218	1219	1221	1221	1226	1228	1231	1230	1229	1226	1226	1226	1222
4	1213	1207	1213	1218	1219	1218	1218	1218	1219	1219	1219	1220	1220	1220	1221	1221	1221	1221	1221	1230	1226	1226	1225	1226	1225	1220
5	1219	1217	1209	1211	1215	1218	1219	1218	1218	1218	1220	1220	1220	1220	1221	1224	1225	1225	1225	1223	1221	1221	1221	1221	1222	1220
6	1222	1222	1220	1220	1220	1219	1219	1217	1216	1214	1210	1210	1210	1217	1221	1225	1226	1227	1226	1226	1226	1227	1233	1231	1229	1222
7	1226	1226	1211	1213	1215	1215	1216	1218	1220	1218	1218	1218	1218	1219	1220	1222	1224	1224	1223	1224	1224	1224	1224	1222	1221	1220
8	1221	1222	1222	1223	1220	1220	1219	1217	1217	1216	1218	1217	1217	1217	1221	1225	1224	1224	1225	1230	1228	1231	1231	1227	1227	1222
9	1225	1221	1221	1221	1221	1221	1220	1220	1221	1221	1220	1221	1221	1221	1224	1225	1226	1226	1228	1231	1231	1231	1224	1224	1225	1224
10	1225	1224	1224	1224	1223	1222	1221	1220	1219	1218	1219	1219	1219	1219	1221	1225	1228	1227	1225	1223	1221	1221	1221	1221	1222	1222
11 d	1219	1220	1220	1220	1217	1216	1215	1214	1214	1213	1215	1215	1215	1219	1242	1245	1237	1242	1254	1267	1265	1243	1226	1220	1213	1228
12 d	1207	1207	1216	1218	1214	1209	1212	1217	1222	1225	1225	1225	1225	1227	1227	1234	1247	1241	1243	1247	1246	1244	1234	1228	1202	1226
13 d	1202	1211	1220	1221	1221	1221	1219	1221	1221	1223	1222	1225	1225	1225	1227	1229	1229	1228	1229	1232	1242	1227	1231	1230	1228	1225
14	1226	1225	1226	1223	1223	1222	1223	1225	1226	1223	1225	1224	1224	1225	1226	1227	1229	1230	1231	1231	1233	1231	1227	1227	1223	1226
15	1221	1222	1223	1223	1223	1223	1221	1222	1221	1222	1223	1225	1226	1225	1226	1227	1229	1226	1226	1226	1232	1236	1230	1227	1224	1225
16	1221	1215	1214	1217	1218	1220	1220	1220	1222	1221	1222	1225	1225	1222	1224	1225	1225	1225	1225	1226	1226	1225	1226	1223	1219	1222
17	1220	1220	1219	1219	1218	1216	1215	1216	1217	1217	1218	1219	1219	1218	1221	1223	1221	1223	1221	1220	1221	1223	1227	1226	1221	1220
18	1220	1211	1214	1216	1217	1218	1218	1218	1218	1218	1218	1218	1219	1218	1218	1222	1222	1222	1226	1228	1226	1227	1227	1226	1221	1220
19	1219	1219	1219	1219	1219	1218	1218	1218	1216	1215	1215	1215	1214	1214	1216	1219	1220	1221	1225	1229	1233	1234	1236	1235	1231	1222
20	1227	1226	1223	1220	1219	1216	1217	1218	1219	1220	1219	1219	1219	1219	1221	1223	1225	1225	1226	1229	1230	1229	1226	1225	1226	1223
21	1222	1220	1220	1220	1221	1220	1220	1220	1220	1221	1221	1217	1217	1217	1218	1221	1222	1222	1222	1222	1222	1222	1223	1227	1216	1221
22 q	1219	1219	1219	1219	1218	1217	1214	1214	1213	1215	1215	1217	1220	1222	1223	1226	1228	1231	1230	1231	1237	1234	1231	1229	1229	1223
23 q	1227	1225	1225	1224	1223	1223	1222	1222	1222	1221	1222	1222	1222	1222	1223	1225	1225	1225	1225	1225	1230	1231	1229	1227	1229	1225
24	1227	1230	1226	1225	1225	1225	1223	1223	1223	1223	1221	1223	1225	1225	1225	1226	1225	1225	1226	1226	1226	1226	1226	1227	1226	1225
25	1222	1222	1223	1223	1222	1221	1220	1218	1218	1219	1219	1219	1219	1219	1220	1223	1224	1226	1229	1226	1226	1226	1229	1235	1231	1223
26	1226	1225	1226	1225	1225	1225	1225	1225	1223	1223	1221	1220	1220	1220	1221	1223	1225	1225	1225	1225	1225	1226	1227	1229	1227	1224
27	1226	1226	1226	1225	1223	1221	1222	1221	1220	1219	1219	1219	1220	1220	1221	1221	1222	1224	1223	1222	1226	1230	1216	1209	1220	1222
28	1226	1229	1229	1226	1224	1222	1221	1221	1221	1221	1222	1223	1225	1223	1224	1225	1226	1225	1227	1226	1232	1230	1226	1226	1226	1225
29 d	1219	1219	1222	1222	1222	1221	1221	1221	1221	1221	1221	1219	1218	1220	1221	1221	1220	1219	1225	1225	1225	1225	1226	1229	1226	1222
30 q	1223	1221	1220	1220	1221	1220	1220	1221	1221	1221	1221	1219	1216	1218	1220	1223	1224	1223	1223	1226	1227	1226	1226	1226	1225	1222
31 q	1224	1222	1221	1220	1219	1220	1220	1219	1221	1220	1220	1220	1220	1219	1221	1223	1223	1223	1221	1221	1222	1223	1225	1226	1226	1222
Mean	1221	1221	1220	1220	1220	1219	1219	1219	1219	1219	1219	1220	1220	1220	1222	1224	1225	1226	1227	1228	1229	1228	1227	1226	1224	1223

1226 at 0-1h. January 1, 1954.

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

140 ESKDALEUIR		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 11° +	Minimum 11° +	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 q	23 13	655	638 00 55	17	13 19	10.3	5.1 22 20	5.2	22 30	1225	1215	11 20	10	0,0,1,0,0,0,0,1	2	0	84.4		
2 q	09 13	655	638 20 06	17	12 39	11.4	6.8 00 39	4.6	20 22	1226	1216	11 35	10	1,0,2,1,0,1,1,1	7	0	84.4		
3	24 00	655	627 23 37	28	13 36	13.4	6.0 23 26	7.4	19 00	1232	1214	03 01	18	1,1,0,1,1,1,2,2	9	0	84.4		
4	00 07	692	617 01 32	75	13 00	11.6	9.6 00 34	21.2	18 35	1233	1203	01 09	30	4,1,1,1,0,1,3,2	13	1	84.4		
5	00 00	659	630 03 02	29	13 34	10.8	4.1 02 37	6.7	15 54	1225	1207	02 28	18	2,1,1,1,0,2,1,0	8	0	84.4		
6	11 06	661	625 14 18	36	15 17	14.4	2.6 22 26	11.8	21 30	1235	1209	11 11	26	1,0,0,1,3,2,1,2	10	0	84.4		
7	22 35	672	629 11 12	43	02 17	12.3	4.4 22 28	7.9	00 00	1227	1208	02 51	19	3,1,1,1,0,0,0,3	9	0	84.4		
8	23 37	676	630 21 40	46	15 42	12.4	3.4 24 00	15.8	22 11	1232	1216	08 11	16	0,0,1,0,1,2,2,3	9	0	84.4		
9	20 05	657	622 20 47	35	13 19	11.4	7.7 20 20	19.1	18 18	1232	1220	10 29	12	4,0,0,0,0,2,4,2	12	1	84.4		
10	17 50	658	621 10 30	37	11 30	11.6	3.4 22 34	8.2	16 00	1227	1216	09 40	11	1,0,0,2,1,2,0,2	8	0	84.4		
11 d	07 48	671	666 13 19	105	13 34	8.7	11.1 21 19	19.8	18 01	1272	1209	23 19	63	2,3,2,3,4,4,4,4	26	1	84.4		
12 d	04 30	652	577 15 28	75	00 37	17.9	5.0 18 09	22.9	15 42	1253	1193	24 00	60	4,2,2,2,2,4,4,3	23	1	-		
13 d	20 03	722	598 19 12	124	13 58	12.5	5.9 19 57	18.4	19 31	1244	1193	00 00	51	1,1,2,1,2,1,5,2	15	1	84.0		
14	23 25	652	621 19 17	31	12 44	11.6	1.8 20 16	9.8	19 32	1233	1220	2							

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 ESKDALEMMUR

	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.	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.	+1.1	-1.3	+0.4	+1.3	+7.1	+8.6	+10.9	+8.3	+4.4	-1.7	-7.8	-10.0	-7.6	-3.3	-3.6	-6.1	-3.4	-2.1	+0.6	-1.9	-1.5	+2.7	+3.8	+1.0
Mar.	-0.3	+0.3	-1.1	-1.3	+1.8	+7.2	+8.5	+4.3	-1.1	-3.5	-3.7	-6.3	-7.8	-4.6	-3.9	-3.1	-4.5	-0.6	+2.7	+2.5	+4.8	+5.9	+2.7	+1.0
Apr.	+1.4	+1.7	+4.1	+0.8	+2.5	+7.3	+7.4	+3.4	-1.2	-11.2	-16.0	-20.7	-17.5	-10.7	-3.9	+1.7	+2.1	+1.0	+5.6	+8.5	+11.7	+10.7	+7.9	+3.3
May	+5.8	+5.4	+4.4	+2.0	+6.0	+8.0	+5.3	+0.4	-7.4	-16.1	-23.6	-28.2	-26.7	-20.2	-11.7	-3.2	+2.4	+10.7	+15.8	+15.8	+13.1	+16.7	+16.1	+9.2
June	+6.8	+4.8	+1.7	+2.2	+4.2	-0.1	-2.5	-5.5	-11.4	-19.1	-26.1	-27.0	-20.8	-14.0	-8.5	-1.1	+8.4	+15.4	+21.1	+21.1	+17.0	+12.6	+10.7	+9.8
July	+5.1	+4.2	+4.3	+4.4	+1.9	+0.6	-3.1	-10.2	-14.0	-23.1	-25.6	-25.9	-19.5	-13.3	-9.2	-1.1	+10.7	+18.1	+23.2	+23.1	+18.3	+13.0	+10.4	+7.5
Aug.	+8.7	+7.9	+3.4	+0.6	+5.1	+3.1	-5.1	-8.6	-20.3	-26.7	-30.4	-30.3	-20.3	-13.7	-4.9	+4.4	+10.1	+16.5	+20.3	+21.5	+19.5	+15.5	+13.5	+10.3
Sept.	+9.5	+5.1	+6.4	+6.6	+4.7	+0.4	-2.9	-8.1	-19.1	-31.3	-32.1	-29.8	-20.8	-11.3	-2.5	+4.5	+7.1	+13.5	+17.0	+21.1	+21.9	+15.4	+15.9	+8.8
Oct.	+5.0	+1.2	-2.8	+4.1	+10.4	+8.0	+1.9	-8.7	-11.2	-19.3	-26.0	-23.2	-17.5	-6.9	-1.0	+2.5	+7.1	+10.5	+9.6	+12.7	+14.5	+12.4	+8.5	+8.3
Nov.	+5.1	+5.3	+6.7	+3.4	+6.7	+8.6	+6.9	+4.9	-1.7	-12.3	-17.7	-17.3	-17.0	-13.2	-8.4	+4.5	+0.5	+6.1	+6.4	+6.5	+4.6	+10.7	+6.2	+3.4
Dec.	+2.0	+0.5	+2.1	+3.3	+8.2	+7.7	+7.9	+4.9	+0.6	-3.8	-11.0	-12.6	-12.6	-8.5	-3.5	-2.7	-1.7	+0.1	+2.0	+0.7	+5.0	+6.3	+2.3	+2.9
Year	-1.2	-3.3	-2.0	-1.1	+0.8	+3.7	+5.8	+6.5	+5.2	+2.7	-0.6	-1.7	-2.0	-2.8	-2.4	-1.2	+0.1	-0.8	-2.1	-2.6	+0.1	+0.2	+0.3	-1.7
Winter	+4.1	+2.6	+2.3	+2.2	+4.9	+5.3	+3.4	-0.7	-6.5	-13.8	-18.4	-19.4	-15.8	-10.2	-5.3	-0.8	+3.2	+7.4	+10.1	+10.7	+10.7	+10.1	+8.2	+5.3
Equinox	+0.4	-0.9	-0.1	+0.5	+4.5	+6.8	+8.3	+6.0	+2.3	-1.6	-5.8	-7.7	-7.5	-4.9	-3.4	-3.2	-2.3	-0.8	+0.8	-0.4	+2.1	+3.7	+2.3	+0.8
Summer	+4.3	+3.4	+3.1	+2.6	+6.4	+8.0	+5.4	0.0	-5.4	-14.7	-20.9	-22.3	-19.7	-12.7	-6.3	-0.9	+3.0	+7.1	+9.4	+10.8	+11.0	+12.6	+9.7	+6.1
Summer	+7.5	+5.5	+4.0	+3.5	+4.0	+1.0	-3.3	-8.1	-16.2	-25.1	-28.5	-28.3	-20.4	-13.1	-6.3	+1.7	+9.0	+15.9	+20.5	+21.7	+19.1	+14.2	+12.6	+9.1
WEST COMPONENT																								
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.	-6.5	-6.7	-6.5	-4.1	-3.1	-1.1	+0.2	+1.4	+3.5	+6.2	+7.1	+11.2	+15.5	+14.4	+12.3	+6.1	+4.2	+2.1	-6.6	-9.3	-8.9	-9.6	-11.0	-10.9
Mar.	-5.4	-5.9	-8.1	-9.2	-8.5	-5.6	-2.5	-0.9	+0.8	+3.1	+6.5	+11.6	+16.2	+18.3	+15.8	+11.9	+5.1	+1.8	-2.9	-5.7	-4.0	-10.9	-13.2	-8.3
Apr.	-6.7	-7.4	-6.7	-7.2	-9.1	-7.6	-4.2	-4.4	-5.3	-5.0	+1.3	+11.8	+21.8	+27.1	+27.1	+21.8	+12.8	+9.5	-4.6	-11.4	-15.0	-16.5	-12.9	-9.5
May	-5.5	-6.1	-8.7	-8.6	-8.0	-9.0	-10.0	-13.3	-15.3	-14.1	-6.4	+5.0	+17.2	+25.6	+25.7	+22.7	+17.6	+11.6	+6.8	+0.4	-1.8	-5.6	-8.7	-11.4
June	-12.8	-9.8	-8.6	-7.6	-8.5	-13.7	-17.7	-22.8	-20.3	-12.9	-3.2	+10.2	+22.5	+27.2	+27.0	+23.4	+19.8	+15.2	+8.6	+5.1	+1.8	-2.6	-9.7	-10.6
July	-4.2	-5.3	-8.7	-13.0	-14.3	-19.2	-20.5	-20.5	-18.2	-15.3	-5.4	+6.3	+16.3	+23.3	+24.7	+22.6	+22.0	+18.6	+15.0	+7.8	+3.7	-2.5	-7.3	-5.9
Aug.	-7.0	-7.5	-7.3	-11.8	-13.3	-17.8	-18.2	-20.3	-15.9	-8.4	+1.4		+14.1	+22.4	+27.2	+25.1	+22.1	+19.0	+14.6	+10.1	+4.6	-2.1	-5.8	-7.1
Sept.	-4.7	-3.6	-6.3	-11.5	-12.1	-17.9	-18.6	-20.6	-18.7	-11.4	+1.9	+15.8	+27.1	+30.1	+27.8	+19.1	+12.8	+6.2	+3.6	+0.4	-7.5	-5.5	-3.1	-3.4
Oct.	-13.3	-11.2	-9.0	-9.6	-10.8	-6.7	-5.3	-7.0	-6.8	-3.6	+4.2	+17.9	+24.8	+28.0	+22.7	+15.3	+9.1	+2.6	-2.3	-4.8	-6.4	-8.0	-9.5	-10.3
Nov.	-10.7	-6.4	-4.7	-1.1	0.0	+0.3	+1.8	+0.3	-3.8	-5.4	+0.5	+10.8	+18.4	+22.1	+20.7	+13.2	+9.0	+4.7	-3.7	-5.4	-14.3	-14.3	-16.3	-15.7
Dec.	-4.5	-3.4	-0.9	+0.1	+0.3	0.0	+4.0	+2.1	-0.5	-1.4	+2.6	+8.7	+14.3	+15.3	+13.1	+8.8	+4.6	-0.3	-6.3	-7.2	-12.8	-14.7	-11.9	-9.7
Year	-6.4	-4.4	-2.3	-1.8	-0.8	+0.2	+1.1	+1.4	+1.1	+2.3	+5.0	+8.2	+10.6	+11.2	+8.6	+7.2	+6.0	+3.1	-0.9	-5.2	-9.8	-9.9	-14.6	-9.9
Winter	-7.3	-6.5	-6.5	-7.1	-7.4	-8.2	-7.5	-8.6	-8.6	-6.1	+0.5	+9.9	+18.2	+22.1	+21.1	+16.5	+12.1	+7.9	+1.8	-2.1	-5.9	-8.5	-10.3	-9.4
Equinox	-5.7	-5.1	-4.4	-3.8	-3.0	-1.6	+0.7	+1.0	+1.3	+2.5	+5.3	+9.9	+14.1	+14.8	+12.4	+8.5	+5.0	+1.7	-4.2	-6.9	-8.9	-11.3	-12.7	-9.7
Summer	-9.1	-7.8	-7.3	-6.6	-7.0	-5.7	-4.4	-6.1	-7.8	-7.0	-0.1	+11.4	+20.6	+25.7	+24.1	+18.3	+12.1	+7.1	-1.0	-5.3	-9.4	-11.1	-11.9	-11.7
Summer	-7.2	-6.6	-7.7	-11.0	-12.1	-17.1	-18.8	-20.5	-19.4	-13.9	-3.8	+8.4	+20.0	+25.8	+26.7	+22.6	+19.2	+14.7	+10.5	+5.9	+0.6	-3.2	-6.5	-6.7
VERTICAL COMPONENT																								
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.	-4.9	-6.3	-6.9	-7.5	-8.1	-7.5	-7.4	-7.3	-7.0	-6.4	-5.5	-3.3	-1.4	+2.1	+6.3	+10.6	+11.3	+11.2	+12.5	+10.6	+8.7	+6.1	+1.1	-1.0
Mar.	-7.1	-10.0	-8.4	-7.5	-6.7	-6.9	-6.6	-6.5	-4.6	-2.9	-4.3	-5.1	-2.8	+0.8	+4.1	+8.7	+12.4	+13.1	+12.4	+11.8	+8.0	+6.8	+2.7	-1.4
Apr.	-11.0	-12.8	-12.8	-14.4	-12.5	-9.6	-7.5	-5.3	-3.9	-3.0	-4.8	-5.6	-3.6	+1.1	+8.9	+14.5	+21.4	+20.7	+19.7	+14.3	+8.3	+2.3	-0.4	-4.0
May	-8.3	-8.7	-9.3	-9.4	-9.7	-8.0	-7.0	-5.6	-5.2	-5.7	-7.5	-8.8	-7.5	-2.6	+5.1	+10.7	+15.8	+17.9	+17.3	+16.0	+13.0	+8.6	+1.9	-3.0
June	-9.7	-11.5	-10.9	-7.6	-5.4	-5.0	-4.0	-2.9	-4.1	-7.0	-8.7	-8.9	-6.0	+1.2	+6.8	+12.7	+16.9	+18.6	+18.4	+15.6	+11.1	+2.2	-3.6	-8.2
July	-1.3	-4.5	-5.6	-4.8	-3.4	-2.3	-2.9	-3.1	-5.1	-6.4	-8.7	-11.6	-10.4	-6.1	-1.8	+2.9	+6.9	+11.6	+14.7	+16.8	+12.8	+8.3	+3.2	+0.8
Aug.	-6.5	-11.5	-11.4	-12.1	-10.2	-6.9	-5.5	-4.3	-3.6	-5.4	-7.1	-9.1	-7.4	-2.9	+2.2	+8.8	+14.1	+16.8	+18.0	+17.1	+14.2	+9.5	+3.2	0.0
Sept.	-10.3	-14.6	-19.2	-17.1	-14.4	-11.0	-6.8	-2.9	-1.7	-3.0	-5.9	-8.3	-6.0	+0.7	+9.9	+18.4	+21.8	+23.7	+21.0	+18.1	+12.8	+5.6	-1.5	-9.3
Oct.	-18.2	-20.4	-21.4	-19.4	-11.0	-7.2	-5.6	-3.2	-3.0	-2.7	-3.1	-4.2	-1.4	+3.9	+13.5	+19.5	+24.2	+22.5	+20.4	+16.5	+10.7	+4.0	-2.8	-11.6
Nov.	-12.3	-13.8	-12.9	-13.5	-12.1	-8.7	-6.5	-3.7	-1.8	-0.3	-2.2	-3.1	-0.1	+4.3	+9.1	+18.3	+19.3	+19.3	+16.1	+10.2	+6.9	+1.1	-3.7	-9.9
Dec.	-5.2	-6.3	-6.8	-9.0	-8.2	-8.1	-7.3	-5.7	-3.7	-3.0	-3.1	-2.0	+1.9	+6.6	+7.8	+9.1	+9.4	+9.3	+9.5	+8.8	+6.8	+2.0	-0.4	-2.4
Year	-1.3	-2.2	-2.4	-2.4	-2.6	-3.2	-3.4	-3.4	-3.2	-3.5	-3.2	-3.0	-2.6	-0.5	+1.7	+2.6	+2.9	+4.0	+5.5	+6.6	+5.4	+3.9	+3.4	+0.9
Winter	-8.0	-10.2	-10.7	-10.4	-8.7	-7.0	-5.9	-4.5	-3.9	-4.1	-5.3	-6.1	-3.9	+0.7	+6.1	+11.4	+14.7	+15.7	+15.6	+13.5	+9.9	+5.0	+0.3	-4.1
Equinox	-4.6	-6.2	-6.1	-6.6	-6.4	-6.4	-6.2	-5.7	-4.6	-3.9	-4.0	-3.3	-1.2	+2.3	+5.0	+7.7	+9.0	+9.4	+10.0	+9.5	+7.2	+4.7	+1.7	-1.0
Summer	-12.5	-13.9	-14.1	-14.2	-11.3	-8.4	-6.6	-4.5	-3.5	-2.9	-4.4	-5.4	-3.1	+1.7	+9.1	+15.7	+20.2	+20.1	+18.4	+14.3	+9.7	+4.0	-1.3	-7.1
Summer	-6.9	-10.5	-11.8	-10.4	-8.3	-6.3	-4.8	-3.3	-3.6	-5.5	-7.6	-9.5	-7.5	-1.8	+4.3	+10.7	+14.9	+17.7	+18.0	+16.9	+12.7	+6.4	+0.3	-4.2

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

ALL DAYS

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

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	Hour G.M.T.																							
	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.	-1.36	-1.31	-1.33	-0.89	-0.92	-0.57	-0.39	-0.06	+0.54	+1.33	+1.75	+2.68	+3.46	+3.06	+2.64	+1.49	+0.99	+0.52	-1.36	-1.82	-1.75	-2.06	-2.39	-2.25
Feb.	-1.09	-1.20	-1.60	-1.81	-1.79	-1.43	-0.85	-0.35	+0.20	+0.76	+1.46	+2.61	+3.61	+3.89	+3.37	+2.54	+1.21	+0.38	-0.70	-1.26	-1.00	-2.44	-2.78	-1.73
Mar.	-1.42	-1.57	-1.52	-1.50	-1.96	-1.83	-1.15	-1.03	-1.02	-0.56	+0.91	+3.22	+5.12	+5.94	+5.66	+4.36	+2.52	+1.90	-1.15	-2.66	-3.51	-3.77	-2.93	-2.05
Apr.	-1.35	-1.46	-1.93	-1.82	-1.86	-2.14	-2.24	-2.72	-2.81	-2.22	-0.36	+2.15	+4.56	+6.00	+5.69	+4.74	+3.47	+1.92	+0.74	-0.55	-0.90	-1.81	-2.42	-2.68
May	-2.88	-2.18	-1.82	-1.63	-1.89	-2.78	-3.49	-4.40	-3.66	-1.85	+0.40	+3.15	+5.41	+6.09	+5.82	+4.79	+3.68	+2.47	+0.89	+0.19	-0.32	-1.03	-2.41	-2.55
June	-1.06	-1.24	-1.95	-2.81	-2.99	-3.92	-4.04	-3.76	-3.13	-2.18	-0.06	+2.32	+4.10	+5.26	+5.38	+4.64	+4.04	+3.04	+2.12	+0.66	+0.01	-1.03	-1.90	-1.50
July	-1.77	-1.83	-1.62	-2.41	-2.91	-3.71	-3.48	-3.35	-3.30	-2.16	-0.49	+1.50	+3.66	+5.09	+5.71	+4.92	+4.07	+3.19	+2.15	+1.18	+0.15	-1.04	-1.71	-1.84
Aug.	-1.33	-0.94	-1.53	-2.60	-2.65	-3.65	-3.65	-3.85	-3.02	-1.05	+1.68	+4.40	+6.33	+6.56	+5.73	+3.69	+2.31	+0.72	+0.04	-0.76	-2.39	-1.73	-1.26	-1.05
Sept.	-2.90	-2.31	-1.71	-2.12	-2.61	-1.68	-1.15	-1.07	-0.92	+0.04	+1.89	+4.55	+5.73	+5.95	+4.64	+3.01	+1.57	+0.10	-0.85	-1.48	-1.88	-2.11	-2.27	-2.42
Oct.	-2.38	-1.51	-1.23	-0.35	-0.26	-0.28	+0.10	-0.14	-0.70	-0.60	+0.80	+2.88	+4.40	+5.00	+4.53	+2.86	+1.80	+0.71	-1.01	-1.36	-3.08	-3.33	-3.54	-3.31
Nov.	-1.00	-0.71	-0.27	-0.12	-0.27	-0.31	+0.49	+0.24	-0.13	-0.14	+0.96	+2.27	+3.39	+3.45	+2.80	+1.88	+1.00	-0.06	-1.36	-1.48	-2.80	-3.24	-2.51	-2.08
Dec.	-1.26	-0.76	-0.38	-0.32	-0.20	-0.10	-0.02	+0.02	+0.02	+0.36	+1.03	+1.73	+2.23	+2.39	+1.84	+1.52	+1.22	+0.66	-0.11	-0.96	-1.99	-2.01	-2.97	-1.94
Year	-1.65	-1.42	-1.41	-1.53	-1.69	-1.87	-1.66	-1.71	-1.49	-0.69	+0.83	+2.79	+4.33	+4.89	+4.48	+3.37	+2.32	+1.30	-0.05	-0.86	-1.62	-2.13	-2.42	-2.12
Winter	-1.18	-0.99	-0.89	-0.79	-0.79	-0.60	-0.19	-0.04	+0.16	+0.58	+1.30	+2.32	+3.17	+3.20	+2.66	+1.86	+1.11	+0.37	-0.88	-1.38	-1.89	-2.44	-2.66	-2.00
Equinox	-2.01	-1.71	-1.60	-1.45	-1.67	-1.48	-1.11	-1.24	-1.36	-0.83	+0.81	+3.20	+4.95	+5.72	+5.13	+3.74	+2.34	+1.16	-0.57	-1.51	-2.34	-2.75	-2.79	-2.61
Summer	-1.76	-1.55	-1.73	-2.36	-2.61	-3.51	-3.67	-3.84	-3.28	-1.81	+0.38	+2.84	+4.87	+5.75	+5.66	+4.51	+3.53	+2.35	+1.30	+0.32	-0.64	-1.21	-1.82	-1.73
INCLINATION																								
Jan.	-0.11	+0.02	-0.11	-0.22	-0.63	-0.73	-0.90	-0.74	-0.51	-0.12	+0.29	+0.43	+0.26	+0.08	+0.23	+0.58	+0.45	+0.38	+0.35	+0.51	+0.43	+0.10	-0.08	+0.05
Feb.	-0.09	-0.19	-0.03	+0.02	-0.17	-0.57	-0.69	-0.43	-0.05	+0.12	+0.05	+0.14	+0.23	+0.09	+0.15	+0.26	+0.53	+0.33	+0.16	+0.20	-0.06	-0.08	+0.06	+0.01
Mar.	-0.28	-0.33	-0.50	-0.31	-0.35	-0.62	-0.61	-0.31	+0.05	+0.73	+0.91	+1.07	+0.77	+0.37	+0.12	-0.04	+0.22	+0.32	+0.18	-0.06	-0.37	-0.43	-0.36	-0.19
Apr.	-0.51	-0.49	-0.40	-0.25	-0.53	-0.61	-0.39	+0.01	+0.55	+1.10	+1.45	+1.57	+1.35	+0.93	+0.56	+0.18	0.00	-0.41	-0.70	-0.65	-0.52	-0.81	-0.90	-0.53
May	-0.52	-0.47	-0.27	-0.23	-0.30	+0.07	+0.30	+0.59	+0.91	+1.25	+1.54	+1.42	+0.92	+0.59	+0.37	+0.08	-0.39	-0.75	-1.05	-1.07	-0.87	-0.74	-0.67	-0.71
June	-0.31	-0.32	-0.30	-0.24	-0.02	+0.15	+0.40	+0.86	+1.03	+1.56	+1.54	+1.34	+0.82	+0.42	+0.24	-0.15	-0.82	-1.15	-1.36	-1.21	-0.94	-0.62	-0.51	-0.39
July	-0.64	-0.70	-0.41	-0.19	-0.41	-0.14	+0.44	+0.70	+1.51	+1.83	+1.94	+1.75	+0.97	+0.54	+0.02	-0.40	-0.60	-0.92	-1.09	-1.13	-0.99	-0.76	-0.73	-0.58
Aug.	-0.82	-0.64	-0.81	-0.70	-0.51	-0.06	+0.26	+0.73	+1.46	+2.13	+1.94	+1.55	+0.86	+0.36	+0.05	-0.09	-0.09	-0.39	-0.65	-0.95	-1.02	-0.80	-1.04	-0.76
Sept.	-0.60	-0.43	-0.23	-0.62	-0.81	-0.61	-0.19	+0.58	+0.75	+1.25	+1.58	+1.19	+0.80	+0.18	+0.10	+0.12	+0.01	-0.18	-0.10	-0.37	-0.61	-0.61	-0.50	-0.70
Oct.	-0.50	-0.61	-0.70	-0.54	-0.74	-0.78	-0.64	-0.42	+0.12	+0.87	+1.11	+0.92	+0.88	+0.69	+0.51	+0.57	+0.33	+0.01	+0.02	-0.10	+0.05	-0.49	-0.29	-0.26
Nov.	-0.20	-0.14	-0.29	-0.44	-0.75	-0.71	-0.75	-0.49	-0.12	+0.19	+0.61	+0.67	+0.69	+0.52	+0.25	+0.28	+0.29	+0.23	+0.19	+0.26	+0.01	-0.17	-0.01	-0.13
Dec.	+0.13	+0.22	+0.10	+0.03	-0.10	-0.33	-0.48	-0.53	-0.43	-0.29	-0.11	-0.07	-0.07	+0.03	+0.09	+0.05	-0.02	+0.11	+0.28	+0.40	+0.25	+0.21	+0.25	+0.26
Year	-0.37	-0.34	-0.33	-0.31	-0.44	-0.41	-0.27	+0.04	+0.44	+0.88	+1.07	+1.00	+0.71	+0.40	+0.22	+0.12	0.00	-0.20	-0.31	-0.35	-0.39	-0.43	-0.39	-0.33
Winter	-0.07	-0.03	-0.08	-0.15	-0.41	-0.59	-0.71	-0.55	-0.28	-0.02	+0.22	+0.29	+0.28	+0.18	+0.16	+0.29	+0.31	+0.26	+0.25	+0.35	+0.16	+0.01	+0.05	+0.05
Equinox	-0.47	-0.46	-0.45	-0.44	-0.61	-0.66	-0.46	-0.03	+0.37	+0.99	+1.27	+1.19	+0.95	+0.54	+0.33	+0.21	+0.14	-0.06	-0.15	-0.29	-0.36	-0.59	-0.51	-0.42
Summer	-0.57	-0.53	-0.45	-0.35	-0.31	0.00	+0.34	+0.72	+1.23	+1.69	+1.74	+1.51	+0.90	+0.48	+0.17	-0.14	-0.48	-0.80	-1.04	-1.09	-0.95	-0.73	-0.74	-0.63
HORIZONTAL FORCE																								
Jan.	-0.2	-2.6	-0.9	+0.5	+6.4	+8.2	+10.7	+8.4	+5.0	-0.5	-6.3	-7.6	-4.4	-0.4	-1.1	-4.8	-2.5	-1.6	-0.7	-3.7	-3.2	+0.8	+1.6	-1.1
Feb.	-1.3	-0.8	-2.7	-3.1	+0.1	+6.0	+7.9	+4.0	-0.9	-2.8	-2.4	-3.9	-4.5	-1.0	-0.8	-0.7	-3.4	-0.2	+2.1	+1.3	+3.9	+3.7	+0.1	-0.6
Mar.	+0.1	+0.2	+2.7	-0.6	+0.7	+5.7	+6.4	+2.5	-2.2	-12.0	-15.4	-18.0	-12.9	-5.2	+1.5	+5.9	+4.6	+2.8	+4.6	+6.1	+8.6	+7.3	+5.2	+1.4
Apr.	+4.6	+4.1	+2.6	+0.3	+4.3	+6.1	+3.3	-2.2	-10.2	-18.5	-24.4	-26.7	-22.9	-14.8	-6.5	+1.3	+5.8	+12.7	+16.8	+15.6	+12.5	+15.3	+14.1	+6.8
May	+4.2	+2.8	0.0	+0.7	+2.5	-2.8	-5.9	-9.8	-15.1	-21.2	-26.2	-24.5	-16.0	-8.4	-3.1	+3.5	+12.1	+18.1	+22.4	+21.7	+17.0	+11.9	+8.6	+7.5
June	+4.2	+3.1	+2.5	+1.8	-0.9	-3.1	-7.0	-14.0	-17.3	-25.6	-26.2	-24.2	-16.0	-8.5	-4.2	+3.3	+14.8	+21.4	+25.7	+24.2	+18.7	+12.3	+8.8	+6.2
July	+7.2	+6.3	+1.9	-1.7	+2.4	-0.4	-8.5	-12.0	-23.9	-29.3	-31.5	-29.4	-17.2	-9.1	+0.5	+9.2	+14.2	+19.9	+22.8	+23.0	+20.0	+14.8	+12.1	+8.7
Aug.	+8.4	+4.3	+5.1	+4.2	+2.3	-3.1	-6.4	-12.0	-22.4	-32.9	-31.1	-26.2	-15.1	-5.2	+2.9	+8.1	+9.4	+14.5	+17.4	+20.8	+20.0	+14.0	+15.0	+8.0
Sept.	+2.3	-1.0	-4.5	+2.2	+8.1	+6.5	+0.8	-9.9	-12.3	-19.6	-24.7	-19.3	-12.4	-1.3	+3.4	+5.4	+8.7	+10.8	+9.0	+11.5	+13.0	+10.6	+6.5	+6.2
Oct.	+2.9	+4.0	+5.7	+3.1	+6.6	+8.5	+7.1	+4.9	-2.4	-13.1	-17.3	-14.9	-13.1	-8.7	-4.2	-1.8	+2.2	+6.9	+5.6	+5.3	+1.8	+7.7	+2.9	+0.3
Nov.	+1.1	-0.2	+1.9	+3.3	+8.1	+7.6	+8.5	+5.2	+0.5	-4.0	-10.3	-10.7	-9.6	-5.4	-0.9	-0.9	-0.8	0.0	+0.7	-0.7	+2.4	+3.3	-0.1	+1.0
Dec.	-2.4	-4.1	-2.4	-1.4	+0.6	+3.7	+5.9	+6.7	+5.3	+3.1	+0.4	-0.1	+0.1	-0.6	-0.7	+0.2	+1.3	-0.2	-2.2	-3.6	-1.8	-1.7	-2.5	-3.6
Year	+2.6	+1.3	+1.0	+0.8	+3.4	+3.6	+1.9	-2.3	-8.0	-14.7	-18.0	-17.1	-12.0	-5.7	-1.1	+2.4	+5.5	+8.8	+10.3	+10.1	+9.4	+8.3	+6.0	+3.4
Winter	-0.7	-1.9	-1.0	-0.2	+3.8	+6.4	+8.3	+6.1	+2.5	-1.1	-4.7	-5.6	-4.6	-1.9	-0.9	-1.5	-1.3	-0.5	0.0	-1.7	+0.3	+1.5	-0.2	-1.1
Equinox	+2.5	+1.8	+1.6	+1.3	+4.9	+6.7	+4.4	-1.2	-6.8	-15.8	-20.5	-19.7	-15.3	-7.5	-1.5	+2.7	+5.3	+8.3	+9.0	+9.6	+9.0	+10.2	+7.2	+3.7
Summer	+6.0	+4.1	+2.4	+1.3	+1.6	-2.3	-6.9	-11.9	-19.7	-27.3	-28.7	-26.1	-16.1	-7.8	-1.0	+6.0	+12.6	+18.5	+22.1	+22.4	+18.9	+13.3	+11.1	+7.6

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

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

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

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	Hour G.M.T.																							
	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.	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.	-7.2	-5.9	-5.2	-1.4	+0.3	+2.0	+3.5	+3.3	+3.2	+0.5	-2.5	-4.3	-2.3	-0.1	+0.2	-2.9	+1.8	+2.5	+3.6	+3.0	+0.7	+1.6	+7.0	-1.6
Mar.	-1.8	-0.9	-1.0	+0.3	+1.8	+3.3	+4.5	+4.7	+4.1	+0.1	-3.1	-6.4	-6.5	-5.0	-1.9	-1.0	-0.7	-0.3	+1.1	+2.5	+2.2	+3.0	+1.5	-0.5
Apr.	-0.1	+3.2	-2.1	+2.1	+3.5	+4.6	+5.9	+3.5	-1.7	-7.0	-13.9	-17.1	-14.2	-10.6	-5.1	-1.0	+2.3	+3.8	+5.5	+7.7	+8.6	+7.2	+7.1	+7.7
May	+6.0	+2.9	+0.3	+1.9	+2.6	+6.1	+6.1	+3.7	-2.6	-13.2	-21.6	-25.6	-23.4	-15.2	-8.2	-0.3	+4.8	+10.5	+14.1	+11.1	+11.2	+10.4	+10.7	+7.7
June	+7.2	+6.6	+5.0	+2.8	+4.6	+3.6	+1.8	-2.1	-8.6	-18.5	-22.5	-25.7	-20.0	-10.6	-7.3	-1.3	+4.9	+8.7	+10.3	+15.5	+12.1	+11.7	+11.1	+10.8
July	+3.4	+1.7	+3.1	+4.0	+3.6	+0.4	-4.3	-9.4	-13.4	-17.6	-19.3	-19.1	-17.1	-10.2	-3.9	+4.1	+6.0	+11.8	+15.8	+14.9	+15.7	+11.8	+10.0	+8.1
Aug.	+6.4	+7.6	+6.0	+5.9	+5.6	+4.6	+0.8	-7.4	-17.7	-23.7	-25.2	-24.0	-18.7	-14.1	-6.0	-0.1	+6.5	+13.7	+17.6	+16.4	+14.6	+11.7	+11.1	+8.4
Sept.	+7.4	+5.3	+4.5	+4.9	+3.7	+4.8	+2.1	-4.9	-13.9	-20.4	-22.4	-19.4	-14.3	-13.7	-7.9	+2.2	+4.9	+8.9	+12.6	+13.6	+11.9	+11.2	+9.9	+9.2
Oct.	+5.7	+4.3	+1.8	+3.7	+8.2	+10.0	+9.7	+3.2	-3.7	-15.3	-21.5	-24.6	-18.2	-9.7	-3.9	-0.1	+4.7	+3.8	+0.5	+5.6	+10.7	+8.9	+7.9	+8.4
Nov.	+6.6	+4.9	+3.3	+3.3	+3.8	+3.1	+4.3	+4.9	+1.3	-6.7	-15.6	-19.7	-18.0	-12.1	-6.7	-2.5	-0.5	+4.0	+5.7	+6.1	+6.1	+8.7	+8.3	+7.5
Dec.	-2.7	-3.4	-2.0	-0.6	+1.3	+3.0	+4.9	+4.0	+3.8	-1.5	-6.8	-8.3	-7.5	-5.4	-2.8	-0.4	+1.2	+4.1	+5.6	+6.0	+4.7	+1.4	+1.5	0.0
Year	-4.0	-3.7	-2.8	-2.6	-1.9	+0.3	+3.1	+4.5	+3.6	+2.3	-0.5	-1.5	-0.9	+0.7	+0.6	+0.9	+3.9	+3.2	-0.6	-2.0	-0.8	+0.2	-0.5	-1.4
Winter	+2.1	+1.9	+0.9	+2.0	+2.3	+3.9	+3.5	+0.6	-3.8	-10.2	-14.6	-16.3	-13.4	-8.8	-3.6	-0.2	+3.4	+6.2	+7.7	+8.3	+8.2	+7.3	+7.7	+5.4
Equinox	-3.9	-3.5	-2.8	-1.1	+0.4	+2.2	+4.1	+4.1	+3.6	+0.3	-3.3	-5.1	-4.3	-2.5	-1.0	-0.8	+1.6	+2.3	+2.4	+2.4	+1.7	+1.6	+2.4	-0.8
Summer	+4.3	+3.8	+0.8	+2.7	+4.6	+6.0	+6.5	+3.9	-1.7	-10.6	-18.2	-21.7	-18.4	-11.9	-6.0	-1.0	+3.1	+5.5	+6.5	+7.7	+9.1	+8.8	+8.5	+7.8
Year	+6.1	+5.3	+4.6	+4.3	+4.3	+3.4	+0.1	-5.9	-13.4	-20.1	-22.3	-22.1	-17.5	-12.1	-6.2	+1.3	+5.5	+10.8	+14.1	+15.1	+13.6	+11.6	+10.5	+9.2
WEST COMPONENT																								
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.	-6.2	-1.0	-0.2	-3.4	-2.4	-2.5	-2.3	-3.2	-3.1	-1.7	0.0	+3.9	+9.2	+7.9	+5.5	+5.1	+6.6	+7.3	+5.5	+3.2	-1.2	-5.2	-12.3	-9.6
Mar.	-4.6	-2.6	-2.0	-2.2	-2.9	-3.5	-3.9	-4.3	-4.1	-2.9	+1.3	+6.8	+10.7	+12.1	+9.3	+6.5	+4.5	+3.7	+2.0	+0.8	+0.1	-9.5	-9.6	-5.8
Apr.	-7.5	-5.7	-6.1	-6.5	-8.2	-8.0	-6.9	-9.4	-15.2	-15.1	-7.8	+5.8	+18.3	+22.7	+21.7	+17.2	+9.8	+6.4	+4.0	+1.2	+1.7	-3.3	-4.0	-5.1
May	-6.1	-6.8	-11.3	-12.3	-13.8	-11.0	-11.6	-12.9	-14.3	-13.1	-4.6	+7.1	+17.7	+23.5	+23.5	+19.5	+14.5	+11.0	+7.3	+1.3	+2.7	-1.8	-3.3	-5.2
June	+0.5	-2.1	-2.5	-4.4	-8.8	-14.6	-20.2	-25.7	-26.4	-19.5	-8.9	+5.6	+18.6	+25.2	+21.7	+16.6	+13.2	+11.1	+7.8	+7.7	+2.8	+0.1	+1.7	+0.6
July	-4.2	-5.6	-5.3	-10.7	-16.3	-17.3	-19.9	-20.6	-18.7	-16.8	-6.4	+5.7	+15.0	+19.7	+20.6	+19.2	+16.1	+15.7	+11.4	+9.3	+8.3	+3.9	+0.9	-3.9
Aug.	+0.5	+1.2	-4.6	-7.9	-14.3	-19.4	-20.1	-21.8	-22.0	-15.9	-9.6	+0.2	+12.2	+20.3	+22.1	+21.7	+18.0	+13.3	+8.6	+7.3	+6.7	+3.3	-0.3	+0.3
Sept.	-1.9	-3.9	-7.1	-9.2	-13.4	-16.7	-20.4	-22.0	-21.9	-14.7	-1.5	+14.1	+24.2	+25.7	+20.6	+14.1	+7.7	+4.1	+5.1	+7.8	+6.5	+1.7	+1.9	-0.8
Oct.	-0.5	-3.9	-3.5	-7.8	-9.2	-8.4	-11.2	-15.6	-15.7	-16.1	-6.0	+7.3	+17.5	+21.8	+19.4	+13.5	+8.9	+7.7	+3.0	+3.3	+3.4	+0.6	-5.6	-2.9
Nov.	-8.6	-7.5	-6.3	-5.2	-5.6	-4.9	-5.3	-9.3	-13.9	-14.1	-7.5	+4.8	+15.7	+20.7	+19.3	+13.7	+7.8	+7.2	+7.1	+2.1	-0.1	-1.3	-3.9	-4.7
Dec.	-10.7	-5.5	-3.4	-1.6	-2.7	-1.6	-1.5	-3.5	-5.6	-5.1	-1.6	+6.1	+10.9	+11.7	+9.2	+6.7	+4.1	+5.3	+4.2	+2.7	+0.8	-3.6	-6.6	-8.4
Year	-5.7	-3.3	-2.5	-2.3	-2.7	-1.9	-2.4	-0.9	-0.7	+1.4	+4.3	+5.7	+7.7	+7.3	+4.0	+2.8	+4.1	+5.2	-0.9	-0.1	-1.2	-3.8	-6.7	-7.1
Winter	-4.6	-3.9	-4.6	-6.1	-4.4	-9.2	-10.5	-12.5	-13.4	-11.1	-4.0	+6.1	+14.8	+18.3	+12.5	+13.0	+9.6	+8.1	+5.4	+3.9	+2.5	-1.6	-4.0	-4.4
Equinox	-6.8	-3.1	-2.0	-2.4	-2.7	-2.4	-2.5	-3.0	-3.4	-2.1	+1.0	+5.6	+9.7	+9.8	+7.0	+5.3	+4.8	+5.3	+2.7	+1.7	-0.4	-5.5	-8.8	-7.7
Summer	-5.7	-6.0	-6.8	-8.0	-9.2	-8.1	-8.7	-11.8	-14.8	-14.6	-6.5	+6.3	+17.3	+22.2	+21.0	+16.0	+10.3	+8.1	+5.3	+2.0	+1.9	-1.4	-4.2	-4.5
Year	-1.3	-2.6	-4.9	-8.1	-13.2	-17.0	-20.2	-22.5	-22.3	-16.6	-6.6	+6.4	+17.5	+22.7	+21.2	+17.9	+13.7	+11.1	+8.2	+8.1	+6.1	+2.2	+1.0	-0.9
VERTICAL COMPONENT																								
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.	+4.0	+2.0	+0.2	+0.2	+0.6	+0.3	+0.2	-1.0	-2.2	-2.4	-3.0	-4.2	-5.4	-2.4	+1.4	+1.6	+1.6	+1.7	+1.8	+1.6	+2.4	+2.6	+0.4	-2.0
Mar.	+1.6	+1.1	+0.6	+0.5	+0.4	-0.5	-0.8	-1.9	-2.4	-1.3	-3.6	-5.5	-5.2	-2.9	0.0	+1.5	+2.8	+2.3	+2.6	+1.9	+2.6	+3.5	+2.0	+0.7
Apr.	+4.1	-0.1	+1.0	+0.3	+1.1	+0.3	-0.3	+0.7	+2.4	+1.1	-3.7	-8.1	-9.5	-7.3	-3.8	+0.1	+2.9	+2.7	+1.5	+2.1	+1.6	+3.5	+3.9	+3.5
May	-2.6	-1.8	-2.2	-1.6	-0.4	-0.1	-0.4	-2.2	-4.2	-5.8	-8.2	-11.0	-9.0	-5.0	-1.4	+4.0	+7.6	+9.1	+9.6	+9.4	+7.4	+6.4	+2.8	-0.4
June	+2.0	+1.4	+0.7	+1.2	+3.4	+4.2	+3.8	+3.4	+0.1	-3.0	-7.6	-9.8	-8.6	-5.6	-2.1	+0.4	+1.8	+2.2	+3.4	+3.0	+3.5	+2.4	+0.8	-1.0
July	+2.1	+1.6	+0.3	+2.0	+3.4	+3.3	+1.4	+1.0	-1.3	-5.0	-9.9	-14.4	-11.7	-8.4	-5.5	-1.8	+3.0	+4.7	+8.6	+7.6	+6.5	+6.0	+4.1	+2.4
Aug.	+2.9	+0.8	+0.1	+0.1	+3.3	+5.0	+4.5	+3.3	+1.3	-7.0	-10.9	-14.7	-13.1	-9.4	-6.1	-0.7	+5.9	+8.0	+7.9	+6.5	+4.9	+4.2	+2.7	+0.5
Sept.	+0.8	-0.3	+0.7	+0.2	+2.9	+3.7	+4.4	+4.1	+2.7	-3.2	-10.1	-14.1	-13.4	-8.3	-1.5	+4.2	+7.7	+7.1	+2.8	+1.7	+1.5	+3.0	+2.3	+1.1
Oct.	+2.0	+0.1	0.0	-0.9	-1.1	-1.0	-0.7	+0.3	-1.6	-3.7	-7.0	-10.1	-11.2	-7.9	-2.8	+1.7	+3.9	+4.8	+8.1	+8.9	+5.4	+4.7	+5.0	+3.1
Nov.	+0.7	+0.5	-0.4	-0.7	-0.5	-0.3	+0.3	+1.1	+0.6	-1.1	-4.5	-7.9	-8.1	-6.9	-2.8	+2.1	+3.7	+2.3	+2.1	+3.9	+5.2	+3.9	+3.7	+3.1
Dec.	+0.1	+0.5	+0.8	+0.1	-0.5	-0.5	-1.1	-1.5	-1.6	-2.9	-4.5	-4.3	-2.7	-0.5	+1.2	+1.7	+1.9	+1.1	+0.9	+1.3	+2.2	+2.9	+3.1	+2.3
Year	+1.8	0.0	-0.8	-1.2	-1.6	-1.5	-1.6	-2.0	-2.0	-2.4	-3.0	-4.2	-3.0	-1.2	+0.4	+0.8	+1.0	+0.9	+2.6	+3.4	+3.4	+3.4	+3.6	+3.2
Winter	+1.6	+0.5	+0.1	0.0	+0.9	+1.1	+0.8	+0.4	-0.7	-3.1	-6.3	-9.0	-8.4	-5.5	-1.9	+1.3	+3.7	+3.9	+4.3	+4.3	+3.9	+3.9	+2.9	+1.4
Equinox	+1.9	+0.9	+0.2	-0.1	-0.3	-0.5	-0.8	-1.6	-2.1	-2.3	-3.5	-4.5	-4.1	-1.7	+0.7	+1.4	+1.8	+1.5	+2.0	+2.1	+2.7	+3.1	+2.3	+1.1
Summer	+1.1	-0.3	-0.4	-0.7	-0.2	-0.3	-0.3	0.0	-0.7	-2.4	-5.9	-9.3	-9.5	-6.8	-2.7	+2.0	+4.5	+4.7	+5.3	+6.1	+4.9	+4.6	+3.9	+2.3
Year	+1.9	+0.9	+0.5	+0.9	+3.3	+4.1	+3.5	+2.9	+0.7	-4.5	-9.6	-13.3	-11.7	-7.9	-3.8	+0.5	+4.6	+5.5	+5.7	+4.7	+4.1	+3.9	+2.5	+0.7

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; "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.																							
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
DECLINATION (measured positive towards the west)																								
Jan.	-0.97	+0.04	+0.17	-0.64	-0.50	-0.59	-0.62	-0.78	-0.75	-0.36	+0.11	+0.96	+1.97	+1.62	+1.11	+1.16	+1.26	+1.37	+0.98	+0.52	-0.27	-1.12	-2.79	-1.88
Feb.	-0.86	-0.49	-0.37	-0.46	-0.65	-0.85	-0.98	-1.07	-0.99	-0.58	+0.39	+1.63	+2.44	+2.65	+1.97	+1.36	+0.93	+0.77	+0.36	+0.07	-0.07	-2.04	-2.01	-1.15
Mar.	-1.52	-1.29	-1.16	-1.41	-1.80	-1.81	-1.64	-2.05	-3.02	-2.79	-1.02	+1.87	+4.30	+5.03	+4.62	+3.53	+1.90	+1.15	+0.58	-0.07	0.00	-0.95	-1.10	-1.35
Apr.	-1.49	-1.50	-2.31	-2.57	-2.91	-2.48	-2.59	-2.77	-2.79	-2.12	-0.07	+2.47	+4.53	+5.38	+5.11	+3.97	+2.75	+1.82	+0.91	-0.17	+0.09	-0.78	-1.11	-1.37
May	-0.19	-0.69	-0.70	-1.01	-1.97	-3.11	-4.17	-5.13	-5.00	-3.21	-0.91	+2.17	+4.57	+5.53	+4.68	+3.41	+2.47	+1.91	+1.17	+0.95	+0.08	-0.45	-0.09	-0.31
June	-0.99	-1.20	-1.19	-2.32	-3.46	-3.53	-3.86	-3.80	-3.25	-2.70	-0.53	+1.92	+3.73	+4.40	+4.33	+3.72	+3.02	+2.71	+1.68	+1.30	+1.05	+0.32	-0.23	-1.12
July	-0.15	-0.07	-1.18	-1.83	-3.11	-4.11	-4.11	-4.13	-3.74	-2.27	-0.93	+1.01	+3.23	+4.67	+4.72	+4.41	+3.39	+2.15	+1.03	+0.83	+0.78	+0.19	-0.51	-0.27
Aug.	-0.69	-1.00	-1.61	-2.06	-2.86	-3.57	-4.22	-4.26	-3.87	-2.16	+0.59	+3.64	+5.47	+5.76	+4.49	+2.76	+1.36	+0.47	+0.52	+1.04	+0.85	-0.10	-0.01	-0.54
Sept.	-0.32	-0.97	-0.78	-1.73	-2.19	-2.10	-2.65	-3.29	-3.04	-2.65	-0.36	+2.47	+4.28	+4.81	+4.08	+2.75	+1.61	+1.40	+0.59	+0.45	+0.26	-0.23	-1.46	-0.93
Oct.	-2.01	-1.71	-1.41	-1.19	-1.29	-1.11	-1.25	-2.09	-2.87	-2.59	-0.89	+1.77	+3.91	+4.67	+4.17	+2.87	+1.61	+1.29	+1.21	+0.17	-0.27	-0.61	-1.13	-1.25
Nov.	-2.06	-0.97	-0.61	-0.30	-0.61	-0.45	-0.50	-0.87	-1.29	-0.98	-0.05	+1.57	+2.50	+2.59	+1.97	+1.38	+0.77	+0.89	+0.62	+0.31	-0.03	-0.78	-1.39	-1.71
Dec.	-0.99	-0.53	-0.39	-0.37	-0.47	-0.40	-0.61	-0.37	-0.29	+0.19	+0.89	+1.21	+1.59	+1.45	+0.79	+0.53	+0.67	+0.90	-0.15	+0.05	-0.21	-0.77	-1.33	-1.39
Year	-1.02	-0.87	-0.96	-1.32	-1.82	-2.01	-2.27	-2.55	-2.57	-1.85	-0.23	+1.89	+3.54	+4.05	+2.67	+2.65	+1.81	+1.40	+0.79	+0.45	+0.19	-0.62	-1.10	-1.11
Winter	-1.22	-0.49	-0.30	-0.44	-0.56	-0.57	-0.68	-0.77	-0.83	-0.43	+0.33	+1.34	+2.13	+2.08	+1.46	+1.11	+0.91	+0.98	+0.45	+0.24	-0.15	-1.18	-1.88	-1.53
Equinox	-1.33	-1.37	-1.41	-1.73	-2.05	-1.87	-2.03	-2.55	-2.93	-2.54	-0.59	+2.15	+4.25	+4.97	+4.49	+3.28	+1.97	+1.41	+0.82	+0.09	+0.02	-0.64	-1.20	-1.23
Summer	-0.51	-0.74	-1.17	-1.81	-2.85	-3.58	-4.09	-4.33	-3.97	-2.56	-0.45	+2.19	+4.25	+5.09	+4.55	+3.57	+2.56	+1.81	+1.10	+1.03	+0.69	-0.01	-0.21	-0.56
INCLINATION																								
Jan.	+0.65	+0.45	+0.35	+0.14	+0.03	-0.09	-0.20	-0.20	-0.22	-0.07	+0.09	+0.13	-0.10	-0.15	-0.05	+0.16	-0.16	-0.22	-0.26	-0.20	+0.03	+0.02	-0.29	+0.18
Feb.	+0.22	+0.12	+0.11	+0.02	-0.07	-0.19	-0.27	-0.30	-0.27	0.00	+0.10	+0.20	+0.16	+0.10	0.00	+0.02	+0.06	+0.03	-0.04	-0.13	-0.08	+0.01	+0.08	+0.12
Mar.	+0.21	-0.14	+0.24	-0.05	-0.09	-0.19	-0.30	-0.09	+0.37	+0.68	+0.93	+0.85	+0.46	+0.22	-0.04	-0.16	-0.21	-0.27	-0.38	-0.47	-0.55	-0.34	-0.32	-0.36
Apr.	-0.38	-0.15	+0.07	-0.01	0.00	-0.26	-0.26	-0.13	+0.25	+0.90	+1.28	+1.32	+1.09	+0.57	+0.20	-0.14	-0.32	-0.61	-0.79	-0.51	-0.59	-0.51	-0.59	-0.45
May	-0.43	-0.37	-0.28	-0.10	-0.10	+0.06	+0.24	+0.56	+0.91	+1.39	+1.41	+1.37	+0.86	+0.23	+0.15	-0.12	-0.45	-0.66	-0.69	-1.05	-0.75	-0.71	-0.73	-0.74
June	-0.11	0.00	-0.13	-0.08	+0.06	+0.28	+0.58	+0.91	+1.09	+1.25	+1.11	+0.82	+0.64	+0.21	-0.15	-0.56	-0.53	-0.86	-0.97	-0.91	-0.98	-0.68	-0.57	-0.42
July	-0.36	-0.50	-0.33	-0.29	-0.10	+0.07	+0.32	+0.85	+1.48	+1.59	+1.51	+1.21	+0.75	+0.43	-0.04	-0.29	-0.52	-0.88	-1.07	-1.01	-0.92	-0.71	-0.66	-0.54
Aug.	-0.44	-0.31	-0.19	-0.19	+0.01	-0.01	+0.23	+0.71	+1.26	+1.45	+1.24	+0.74	+0.29	+0.37	+0.21	-0.23	-0.23	-0.46	-0.82	-0.95	-0.83	-0.68	-0.62	-0.57
Sept.	-0.32	-0.23	-0.07	-0.16	-0.45	-0.57	-0.51	0.00	+0.41	+1.12	+1.32	+1.27	+0.69	+0.16	-0.06	-0.13	-0.33	-0.23	+0.13	-0.19	-0.61	-0.48	-0.33	-0.44
Oct.	-0.31	-0.21	-0.14	-0.16	-0.19	-0.15	-0.21	-0.17	+0.11	+0.60	+1.01	+1.04	+0.78	+0.36	+0.12	+0.04	+0.02	-0.30	-0.42	-0.33	-0.27	-0.46	-0.41	-0.35
Nov.	+0.32	+0.31	+0.19	+0.06	-0.07	-0.19	-0.33	-0.25	-0.21	+0.10	+0.36	+0.36	+0.29	+0.19	+0.10	-0.02	-0.09	-0.31	-0.40	-0.40	-0.27	+0.02	+0.06	+0.16
Dec.	+0.38	+0.29	+0.19	+0.17	+0.12	-0.03	-0.21	-0.33	-0.28	-0.23	-0.10	-0.08	-0.11	-0.17	-0.08	-0.07	-0.28	-0.25	+0.12	+0.22	+0.15	+0.12	+0.21	+0.27
Year	-0.04	-0.06	-0.00	-0.05	-0.07	-0.11	-0.07	+0.13	+0.41	+0.73	+0.86	+0.77	+0.48	+0.19	+0.03	-0.12	-0.26	-0.42	-0.47	-0.49	-0.47	-0.37	-0.34	-0.26
Winter	+0.39	+0.29	+0.21	+0.10	0.00	-0.13	-0.25	-0.27	-0.25	-0.05	+0.11	+0.15	+0.06	-0.01	-0.01	+0.02	-0.12	-0.18	-0.15	-0.13	-0.04	+0.04	+0.02	+0.18
Equinox	-0.18	-0.18	+0.02	-0.09	-0.19	-0.29	-0.32	-0.10	+0.28	+0.83	+1.13	+1.12	+0.75	+0.33	+0.05	-0.09	-0.22	-0.33	-0.37	-0.38	-0.50	-0.45	-0.41	-0.40
Summer	-0.33	-0.29	-0.23	-0.16	-0.03	+0.10	+0.34	+0.75	+1.19	+1.42	+1.32	+1.04	+0.64	+0.31	+0.04	-0.30	-0.43	-0.72	-0.89	-0.98	-0.87	-0.69	-0.64	-0.57
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.	-8.3	-6.0	-5.1	-2.0	-0.2	+1.5	+3.0	+2.6	+2.5	+0.2	-2.5	-3.4	-0.5	+1.4	+1.3	-1.8	+3.0	+3.9	+4.6	+3.6	+0.5	+0.6	+4.5	-3.4
Mar.	-2.7	-1.4	-1.4	-0.1	+1.2	+2.6	+3.7	+3.8	+3.2	-0.5	-2.8	-5.0	-4.3	-2.6	0.0	+0.3	+0.2	+0.4	+1.5	+2.6	+2.2	+1.1	-0.4	-1.6
Apr.	-1.6	+2.0	-3.2	+0.8	+1.8	+3.0	+4.4	+1.6	-4.6	-9.8	-15.2	-15.6	-10.4	-6.0	-0.8	+2.4	+4.2	+5.0	+6.2	+7.8	+8.8	+6.4	+6.2	+6.6
May	+4.7	+1.5	-1.9	-0.5	-0.1	+3.8	+3.7	+1.1	-5.3	-15.5	-22.1	-23.7	-19.5	-10.3	-3.5	+3.5	+7.5	+12.4	+15.3	+11.1	+11.5	+9.9	+9.9	+6.5
June	+7.2	+6.1	+4.4	+1.9	+2.8	+0.7	-2.2	-7.1	-13.6	-21.9	-23.8	-24.1	-16.0	-5.5	-3.0	+1.9	+7.4	+10.7	+11.6	+16.7	+12.4	+11.5	+11.2	+10.7
July	+2.5	+0.6	+2.0	+1.9	+0.4	-3.0	-8.1	-13.2	-16.8	-20.5	-20.2	-17.6	-13.9	-6.2	+0.2	+7.7	+9.0	+14.6	+17.7	+16.4	+17.0	+12.3	+10.0	+7.2
Aug.	+6.4	+7.7	+5.0	+4.3	+2.7	+0.8	-3.1	-11.5	-21.6	-26.3	-26.6	-23.5	-16.0	-9.9	-1.6	+4.1	+9.9	+16.0	+18.9	+17.5	+15.6	+12.1	+10.8	+8.3
Sept.	+6.9	+4.5	+3.1	+2.9	+0.9	+1.5	-1.9	-9.1	-17.9	-22.9	-22.3	-16.3	-9.3	-8.5	-3.7	+4.9	+6.3	+9.5	+13.3	+14.9	+12.9	+11.3	+10.1	+8.9
Oct.	+5.5	+3.5	+1.1	+2.1	+6.3	+8.2	+7.3	+0.1	-6.7	-18.1	-22.3	-22.7	-14.5	-5.3	-0.1	+2.5	+6.3	+5.2	+1.1	+6.1	+11.1	+8.9	+6.7	+7.7
Nov.	+4.8	+3.3	+2.0	+2.2	+2.6	+2.1	+3.2	+3.0	-1.4	-9.3	-16.8	-18.4	-14.6	-7.9	-2.8	+0.2	+1.0	+5.3	+7.0	+6.4	+6.0	+8.3	+7.4	+6.4
Dec.	-4.7	-4.4	-2.6	-0.9	+0.8	+2.6	+4.5	+3.2	+2.6	-2.5	-7.0	-7.0	-5.3	-3.0	-1.0	+0.9	+2.0	+5.0	+6.3	+6.4	+4.8	+0.7	+0.2	-1.6
Year	+1.2	+1.1	0.0	+0.8	+1.4	+2.0	+1.4	-1.8	-6.3	-12.1	-15.1	-14.8	-10.3	-5.1	-1.1	+2.3	+5.2	+7.7	+8.6	+8.9	+8.5	+6.9	+6.2	+4.4
Winter	-5.2	-4.0	-3.1	-1.5	-0.1	+1.7	+3.5	+3.5	+2.9	-0.1	-3.0	-3.9	-2.4	-0.5	+0.4	+0.2	+2.5	+3.3	+2.9	+2.7	+1.6	+0.5	+0.6	-2.3
Equinox	+3.1	+2.6	-0.5	+1.1	+2.7	+4.3	+4.7	+1.5	-4.5	-13.2	-19.1	-20.1	-14.7	-7.4	-1.8	+2.1	+5.0	+7.0	+7.4	+7.9	+9.3	+8.4	+7.5	+6.8
Summer	+5.7	+4.7	+3.6	+2.7	+1.7	0.0	-3.8	-10.2	-17.5	-22.9	-23.2	-20.4	-13.8	-7.5	-2.0	+4.7	+8.1	+12.7	+15.4	+16.4	+14.5	+11.8	+10.5	+8.8

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; "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.	+15.5	+4.8	+9.2	+4.7	+16.4	+22.9	+27.0	+15.7	-2.5	-15.2	-23.9	-21.9	-21.1	-9.5	-7.8	-7.9	-6.8	-3.7	+2.1	-6.1	-6.8	+6.5	+9.7	-0.9
Feb.	-0.7	-2.3	-3.1	-2.0	+2.5	+12.3	+10.4	-4.7	-18.7	-10.5	-6.1	-6.2	-11.9	-1.7	-3.2	+2.2	-2.5	+0.7	+15.4	+1.9	+16.0	+15.8	-5.5	+1.9
Mar.	-12.5	+2.4	+12.7	-3.6	+1.9	+13.3	+8.7	-8.0	-12.2	-25.3	-25.2	-28.1	-24.9	-5.6	+7.4	+15.6	+21.4	+4.5	+11.1	+4.2	+11.6	+16.3	+12.9	+1.4
Apr.	-4.7	+12.8	+11.2	-2.5	+9.3	+8.8	+1.6	-8.8	-23.3	-17.8	-26.6	-32.0	-28.7	-22.4	-10.1	-0.5	-1.3	+17.3	+21.0	+17.7	+11.4	+36.1	+22.1	+9.3
May	+12.7	+4.4	+3.6	+13.1	+3.0	-3.8	+0.9	-2.8	-10.1	-21.4	-46.6	-41.8	-21.5	-1.5	+0.5	+5.3	+20.1	+24.6	+30.0	+23.1	+10.1	+2.5	+1.6	-5.8
June	+11.2	+11.4	+9.3	+13.5	0.0	-4.2	-3.3	-21.7	-16.2	-38.8	-41.2	-33.7	-18.1	-9.7	-17.0	-2.5	+23.7	+29.8	+28.7	+28.5	+18.9	+12.5	+11.1	+7.9
July	+10.6	+11.6	+6.4	-14.6	+14.1	+3.6	-13.3	-2.0	-25.5	-44.8	-46.2	-40.8	-20.3	-11.3	-1.0	+12.6	+16.0	+27.7	+30.1	+26.6	+19.9	+14.1	+19.6	+7.2
Aug.	+12.6	-0.9	+16.2	+19.9	+14.7	-10.6	-18.5	-18.5	-32.7	-47.8	-42.9	-37.1	-27.5	-3.5	+4.3	+15.9	+5.4	+27.1	+20.6	+33.7	+21.9	+14.9	+27.0	+5.9
Sept.	-1.1	-9.4	-18.4	-2.3	+12.2	+9.7	-7.9	-17.8	-14.1	-22.8	-41.1	-25.8	-16.2	+4.1	+6.0	+11.0	+20.5	+31.8	+21.5	+20.7	+23.8	+16.2	-2.4	+1.9
Oct.	+8.6	+11.0	+23.1	+3.9	+6.5	+10.4	+2.1	-1.0	-8.7	-22.7	-29.6	-15.3	-16.8	+1.1	-0.3	-3.6	-1.1	+19.3	+6.5	+5.2	+3.6	+17.6	-6.5	-13.6
Nov.	+11.0	+8.4	+12.5	+13.5	+28.4	+13.9	+5.8	-0.5	-5.7	-6.9	-15.6	-20.0	-33.7	-28.3	-3.0	-3.8	-4.3	-4.5	-5.9	-2.7	+14.1	+14.8	+7.5	+5.1
Dec.	+3.0	-0.6	+1.7	+2.1	+7.1	+8.8	+10.8	+12.6	+11.6	+6.6	-0.5	-2.9	-6.2	-14.9	-7.2	-4.4	+1.3	-4.9	-7.7	-11.3	-1.4	-2.5	+2.3	-3.5
Year	+5.5	+4.5	+7.0	+3.9	+9.6	+7.1	+2.0	-4.8	-13.2	-22.3	-28.8	-25.5	-20.6	-8.6	-2.6	+3.3	+7.7	+14.2	+14.4	+11.7	+11.9	+13.7	+8.2	+1.4
Winter	+7.2	+2.6	+4.9	+4.6	+13.6	+14.5	+13.5	+5.7	-3.9	-6.5	-11.5	-12.7	-18.2	-13.6	-5.3	-3.5	-3.1	-3.1	+0.9	-4.7	+5.5	+8.7	+3.5	+0.7
Equinox	-2.4	+4.2	+7.1	-1.1	+7.5	+10.5	+1.1	-9.0	-14.5	-22.2	-30.7	-25.3	-21.6	-5.6	+0.8	+5.6	+9.9	+18.2	+15.0	+11.9	+12.6	+21.5	+6.6	-0.3
Summer	+12.7	+6.7	+8.8	+8.0	+7.9	-3.8	-8.6	-11.2	-21.1	-38.2	-44.2	-38.4	-21.9	-6.2	-3.3	+7.8	+16.3	+27.4	+27.4	+27.9	+17.7	+11.0	+14.8	+2.7
WEST COMPONENT																								
Jan.	-8.3	-6.5	-0.1	+0.9	-1.4	+2.2	+6.5	+3.2	+12.8	+14.9	+12.9	+18.9	+24.3	+22.3	+18.1	+5.1	-6.6	-1.6	-27.8	-24.5	-16.1	-15.5	-14.8	-19.2
Feb.	-5.3	-8.0	-10.4	-16.8	-20.2	-2.4	+5.8	+10.6	+13.9	+18.2	+15.6	+19.9	+27.7	+29.9	+27.7	+23.8	+14.1	-8.7	-31.7	-29.0	-17.4	-25.4	-32.6	+0.9
Mar.	-2.6	-0.1	-0.3	-0.7	-14.0	-15.9	-1.4	+7.1	+16.2	+12.8	+14.0	+21.7	+28.9	+36.0	+37.9	+20.5	+4.7	+7.4	-45.1	-64.0	-35.1	-18.9	-5.6	-3.5
Apr.	-7.2	-13.6	-17.4	-3.5	+4.8	+1.5	-2.4	-6.5	-7.9	-8.6	-5.5	+3.7	+14.0	+27.9	+26.1	+23.4	+15.6	+13.3	-3.2	-9.6	-15.4	-13.9	-8.4	-7.1
May	-19.5	-13.0	-18.5	-17.0	-6.2	-3.3	-12.2	-20.2	-15.2	-10.1	-3.9	+10.6	+29.9	+36.1	+45.5	+43.9	+42.9	+32.1	+8.6	+6.5	+3.9	-13.8	-55.7	-51.3
June	+2.5	-4.4	-13.3	-19.5	-20.1	-17.1	-11.5	-17.5	-9.3	-18.9	-5.6	+5.8	+15.6	+26.1	+33.7	+30.7	+32.2	+22.5	+18.2	+3.0	-6.4	-13.0	-19.2	-14.5
July	-15.3	-13.6	-10.0	+0.5	-3.6	-6.1	-10.1	-14.0	-24.3	-22.8	-11.3	+0.7	+15.0	+25.6	+35.5	+23.1	+21.8	+20.1	+14.6	+7.5	+0.9	-6.2	-13.9	-14.0
Aug.	-20.0	-2.6	-11.1	-28.5	-20.6	-20.9	-16.2	-19.7	-16.8	-5.5	+13.1	+26.6	+37.3	+40.2	+42.4	+23.6	+14.1	+8.8	-0.1	-16.6	-18.3	-10.4	+1.1	+0.3
Sept.	-56.1	-44.5	-15.2	-1.2	-6.2	+4.3	+8.8	+13.8	+1.3	+5.8	+9.1	+27.5	+35.4	+39.3	+29.5	+30.8	+6.6	-4.0	-13.6	-12.9	+1.4	-5.1	-25.3	-29.4
Oct.	-11.3	-4.2	+1.8	+4.3	+10.3	+11.2	+21.2	+20.7	+17.1	+8.0	+16.0	+24.9	+26.0	+29.7	+33.5	+20.1	+11.8	+2.3	-30.8	-24.6	-51.4	-56.2	-42.7	-37.8
Nov.	+7.5	+8.1	+8.5	+13.3	+12.2	+7.3	+26.3	+22.5	+12.9	+5.0	+6.9	+7.7	+11.7	+15.2	+11.9	+4.9	-7.1	-23.8	-41.5	-29.9	-38.2	-23.7	-12.1	-5.5
Dec.	+0.2	-4.2	-3.2	+0.6	+4.2	+7.2	+10.4	+6.4	+5.9	+2.5	+4.6	+11.4	+14.1	+16.6	+15.6	+10.9	+8.1	-1.1	-10.7	-23.3	-23.4	-19.3	-23.3	-10.4
Year	-11.4	-8.9	-7.4	-5.6	-4.7	-2.7	+2.1	+0.5	+0.5	+0.1	+5.5	+14.9	+23.3	+28.3	+29.8	+21.7	+13.2	+5.6	-13.6	-18.1	-17.9	-18.4	-21.0	-16.0
Winter	-1.5	-2.6	-1.4	-0.5	-1.3	+3.5	+12.3	+10.7	+11.4	+10.2	+10.0	+14.5	+19.4	+21.0	+18.3	+11.2	+2.1	-8.8	-27.9	-26.7	-23.8	-20.9	-20.7	-8.5
Equinox	-19.3	-15.6	-7.8	-0.3	-1.3	+0.3	+6.6	+8.8	+6.6	+4.5	+8.4	+19.5	+26.1	+33.3	+31.7	+23.7	+9.7	+4.7	-23.2	-27.8	-25.1	-23.6	-20.5	-19.5
Summer	-13.1	-8.4	-13.3	-16.1	-11.5	-11.9	-12.5	-17.9	-16.5	-14.3	-1.9	+10.9	+24.5	+30.9	+39.3	+30.3	+27.8	+20.9	+10.3	+0.1	-5.0	-10.9	-21.9	-19.9
VERTICAL COMPONENT																								
Jan.	-12.3	-10.2	-15.4	-19.9	-22.8	-21.0	-21.5	-18.6	-15.6	-13.1	-10.2	-1.6	+9.3	+13.4	+18.8	+27.1	+29.0	+26.6	+31.9	+23.0	+13.2	+8.9	-9.0	-10.0
Feb.	-35.8	-36.7	-33.0	-32.5	-22.1	-20.6	-17.5	-14.1	-5.4	-0.1	+4.0	+4.7	+9.0	+15.7	+16.6	+23.1	+31.1	+38.0	+36.1	+32.7	+13.0	+4.1	+1.8	-12.1
Mar.	-45.4	-33.8	-30.1	-41.6	-38.6	-22.6	-17.8	-15.6	-13.1	-8.2	-1.4	+3.8	+11.8	+20.8	+44.3	+48.8	+63.0	+51.6	+47.0	+24.6	+3.7	-15.6	-17.0	-18.6
Apr.	-29.6	-21.5	-22.6	-31.5	-35.2	-29.5	-23.2	-16.3	-9.4	-5.3	-2.6	-0.7	+1.4	+8.3	+23.8	+32.9	+38.8	+35.5	+35.0	+30.9	+26.2	+9.3	-6.4	-8.3
May	-12.6	-22.3	-31.6	-34.1	-31.6	-30.1	-20.6	-11.5	-8.0	-7.9	-3.2	+1.3	+7.6	+28.3	+35.8	+46.7	+53.4	+55.7	+50.0	+35.5	+13.0	-22.1	-39.6	-52.1
June	-12.9	-27.7	-27.1	-25.3	-17.7	-15.3	-14.1	-13.3	-15.3	-12.9	-9.7	-7.3	-5.7	-0.5	+8.5	+15.9	+23.3	+36.5	+37.3	+42.5	+27.9	+13.7	+0.9	-1.7
July	-13.5	-22.0	-27.5	-39.6	-40.6	-31.1	-24.2	-15.6	-9.7	-6.2	-4.3	-2.2	+3.7	+10.4	+17.3	+33.6	+37.4	+33.9	+35.6	+32.2	+23.9	+13.4	-1.1	-3.8
Aug.	-15.0	-39.7	-55.8	-49.5	-42.9	-33.8	-24.5	-13.9	-7.2	-3.1	-3.4	-1.7	+3.4	+14.1	+29.8	+54.3	+58.9	+60.0	+55.5	+43.3	+25.6	+10.7	-16.2	-48.9
Sept.	-68.9	-68.2	-68.5	-70.4	-35.4	-21.7	-16.6	-11.6	-1.9	+3.8	+7.7	+9.4	+17.5	+27.0	+50.3	+62.6	+85.4	+71.3	+53.2	+34.2	+13.9	-1.4	-20.7	-51.0
Oct.	-44.2	-51.8	-51.4	-56.6	-43.4	-27.8	-18.8	-9.8	-3.6	+4.4	+4.4	+4.0	+15.8	+27.0	+34.6	+66.6	+72.4	+80.2	+59.2	+27.8	+6.6	-10.6	-27.0	-58.0
Nov.	-9.5	-12.3	-19.9	-32.7	-31.5	-24.9	-20.9	-15.3	-7.6	-2.5	+0.7	+7.7	+16.9	+28.1	+24.5	+22.7	+23.1	+23.3	+27.3	+19.3	+6.0	-3.3	-10.1	-9.1
Dec.	-11.4	-9.5	-5.2	-4.7	-6.3	-7.8	-8.5	-7.3	-6.0	-5.5	-4.4	-4.1	-2.0	+3.3	+6.4	+7.5	+7.5	+11.6	+15.7	+18.3	+10.0	+4.9	+2.6	-5.1
Year	-25.9	-29.6	-32.5	-36.5	-30.7	-23.9	-19.0	-13.6	-8.6	-4.7	-1.9	+1.1	+7.4	+16.3	+25.9	+36.8	+43.6	+43.7	+40.3	+30.4	+15.3	+1.0	-11.8	-23.2
Winter	-17.3	-17.2	-18.4	-22.5	-20.7	-18.6	-17.1	-13.8	-8.7	-5.3	-2.5	+1.7	+8.3	+15.1	+16.6	+20.1	+22.7	+24.9	+27.7	+23.3	+10.5	+3.7	-3.7	-9.1
Equinox	-47.0	-43.8	-43.1	-50.0	-38.1	-25.4	-19.1	-13.3	-7.0	-1.3	+2.0	+4.1	+11.6	+20.8	+38.3	+52.7	+64.9	+59.7	+48.6	+29.4	+12.6	-4.6	-17.8	-34.0
Summer	-13.5	-27.9	-35.5	-37.1	-33.2	-27.6	-20.9	-13.6	-10.1	-7.5	-5.1	-2.5	+2.3	+13.1	+22.9	+37.6	+43.3	+46.5	+44.6	+38.4	+22.6	+3.9	-14.0	-26.6

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

INTERNATIONAL DISTURBED 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
DECLINATION (measured positive towards the west)																								
Jan.	-2.30	-1.52	-0.38	0.00	-0.94	-0.47	+0.22	+0.02	+2.70	+3.64	+3.58	+4.72	+5.78	+4.92	+4.00	+1.36	-1.06	-0.17	-5.72	-4.72	-3.00	-3.40	-3.40	-3.86
Feb.	-1.05	-1.54	-1.99	-3.34	-4.20	-0.99	+0.76	+2.34	+3.57	+4.12	+3.41	+4.30	+6.09	+6.14	+5.75	+4.74	+2.96	-1.79	-7.06	-5.96	-4.17	-5.80	-6.39	+0.10
Mar.	-0.03	-0.12	-0.57	+0.01	-2.91	-3.76	-0.63	+1.77	+3.77	+3.62	+3.85	+5.53	+6.87	+7.54	+7.39	+3.53	+0.09	+1.32	-9.59	-13.17	-7.59	-4.50	-1.65	-0.77
Apr.	-1.27	-3.28	-3.98	-0.61	+0.60	-0.06	-0.55	-0.96	-0.68	-1.03	-0.04	+2.04	+3.99	+6.56	+5.70	+4.77	+3.22	+2.00	-1.49	-2.66	-3.58	-4.27	-2.60	-1.82
May	-4.48	-2.81	-3.90	-3.97	-1.38	-0.51	-2.52	-3.99	-2.68	-1.19	+1.08	+3.83	+6.94	+7.39	+9.22	+8.69	+7.90	+5.53	+0.54	+0.39	+0.38	-2.91	-11.36	-10.19
June	+0.05	-1.34	-3.06	-4.49	-4.06	-3.30	-2.19	-2.68	-1.24	-2.27	+0.52	+2.52	+3.89	+5.68	+7.50	+6.33	+5.58	+3.36	+2.53	-0.54	-2.06	-3.13	-4.34	-3.26
July	-3.53	-3.22	-2.29	+0.69	-1.29	-1.38	-1.51	-2.75	-3.91	-2.82	-0.43	+1.77	+3.85	+5.64	+7.23	+4.17	+3.77	+2.96	+1.75	+0.45	-0.61	-1.82	-3.59	-3.13
Aug.	-4.57	-0.50	-2.91	-6.59	-4.77	-3.82	-2.55	-3.25	-2.11	+0.80	+4.37	+6.89	+8.67	+8.30	+8.43	+4.15	+2.65	+0.70	-0.85	-4.73	-4.59	-2.70	-0.85	-0.17
Sept.	-11.36	-8.67	-2.36	-0.16	-1.74	+0.49	+2.10	+3.52	+0.82	+2.09	+3.48	+6.62	+7.84	+7.81	+5.76	+5.82	+0.52	-2.09	-3.62	-3.44	-0.66	-1.69	-5.04	-6.04
Oct.	-2.64	-1.30	-0.55	+0.72	+1.82	+1.86	+4.22	+4.24	+3.83	+2.54	+4.44	+5.68	+5.96	+6.00	+6.81	+4.22	+2.44	-0.30	-6.52	-5.20	-10.59	-12.12	-8.42	-7.14
Nov.	+1.08	+1.32	+1.23	+2.16	+1.34	+0.92	+5.12	+4.60	+2.85	+1.30	+2.02	+2.36	+3.72	+4.22	+2.53	+1.14	-1.28	-4.66	-8.20	-5.96	-8.33	-5.40	-2.76	-1.32
Dec.	-0.08	-0.83	-0.72	+0.03	+0.56	+1.11	+1.68	+0.79	+0.74	+0.25	+0.96	+2.43	+3.10	+3.97	+3.46	+2.39	+1.60	-0.03	-1.86	-4.27	-4.68	-3.81	-4.82	-1.97
Year	-2.51	-1.98	-1.79	-1.29	-1.33	-0.83	+0.35	+0.30	+0.64	+0.92	+2.27	+4.06	+5.56	+6.10	+6.15	+4.28	+2.37	+0.57	-3.34	-4.15	-4.12	-4.29	-4.60	-3.30
Winter	-0.59	-0.64	-0.47	-0.29	-0.81	+0.14	+1.95	+1.94	+2.47	+2.33	+2.49	+3.45	+4.67	+4.81	+3.93	+2.41	+0.55	-1.66	-5.71	-5.23	-5.05	-4.60	-4.34	-1.76
Equinox	-3.83	-3.34	-1.87	-0.01	-0.56	-0.37	+1.29	+2.14	+1.93	+1.81	+2.93	+4.97	+6.17	+6.98	+6.41	+4.59	+1.57	+0.23	-5.31	-6.12	-5.61	-5.65	-4.43	-3.94
Summer	-3.13	-1.97	-3.04	-3.59	-2.63	-2.25	-2.19	-3.17	-2.49	-1.37	+1.39	+3.75	+5.84	+6.50	+8.09	+5.83	+4.97	+3.14	+0.99	-1.11	-1.72	-2.64	-5.03	-4.19
INCLINATION																								
Jan.	-1.21	-0.48	-0.98	-0.81	-1.62	-2.05	-2.39	-1.53	-0.38	+0.48	+1.16	+1.15	+1.30	+0.67	+0.74	+1.12	+1.25	+0.91	+1.01	+1.29	+0.98	-0.01	-0.66	+0.06
Feb.	-0.77	-0.65	-0.47	-0.45	-0.44	-1.28	-1.19	-0.17	+0.92	+0.45	+0.29	+0.26	+0.64	+0.11	+0.25	+0.11	+0.75	+1.00	+0.29	+1.06	-0.50	-0.61	+0.83	-0.43
Mar.	-0.26	-0.99	-1.57	-0.77	-0.89	-1.23	-0.99	+0.05	+0.27	+1.29	+1.44	+1.65	+1.55	+0.41	+0.11	-0.09	+0.08	+0.88	+1.01	+1.16	-0.22	-1.21	-1.19	-0.51
Apr.	-0.33	-1.19	-1.07	-0.57	-1.54	-1.32	-0.65	+0.26	+1.40	+1.15	+1.76	+2.04	+1.74	+1.31	+0.91	+0.53	+0.83	-0.43	-0.48	-0.28	+0.10	-1.96	-1.50	-0.72
May	-0.89	-0.67	-0.77	-1.48	-0.89	-0.45	-0.41	+0.17	+0.67	+1.35	+3.04	+2.64	+1.21	+0.32	+0.26	+0.23	-0.57	-0.67	-0.85	-0.73	-0.40	-0.53	-0.35	-0.23
June	-1.09	-1.37	-1.10	-1.26	-0.17	+0.12	+0.02	+1.33	+0.81	+2.48	+2.54	+1.96	+0.85	+0.29	+0.89	+0.16	-1.40	-1.35	-1.21	-0.86	-0.47	-0.31	-0.45	-0.37
July	-0.82	-1.12	-0.97	-0.02	-1.88	-0.92	+0.41	-0.07	+1.75	+3.09	+3.08	+2.62	+1.23	+0.67	+0.03	-0.30	-0.41	-1.25	-1.29	-1.05	-0.73	-0.51	-1.13	-0.38
Aug.	-0.94	-0.88	-2.29	-2.15	-1.75	+0.14	+0.83	+1.13	+2.19	+3.13	+2.56	+2.05	+1.40	+0.05	-0.10	-0.01	+0.91	-0.42	+0.01	-0.93	-0.57	-0.58	-2.19	-1.59
Sept.	-0.90	-0.48	-0.28	-1.57	-1.59	-1.23	0.00	+0.71	+0.86	+1.52	+2.77	+1.57	+1.04	-0.11	+0.46	+0.42	+0.67	-0.28	+0.07	-0.35	-1.24	-1.03	-0.03	-1.00
Oct.	-1.51	-1.94	-2.81	-1.71	-1.63	-1.51	-0.87	-0.44	+0.26	+7.49	+1.85	+0.78	+1.16	+0.21	+0.44	+1.62	+1.70	+0.67	+1.42	+0.66	+0.59	-0.70	+0.31	-0.05
Nov.	-1.05	-0.96	-1.42	-1.86	-2.80	-1.62	-1.24	-0.63	+0.02	+0.33	+0.95	+1.41	+2.48	+2.35	+0.65	+0.75	+0.94	+1.18	+1.60	+1.04	-0.29	-0.75	-0.58	-0.49
Dec.	-0.48	-0.14	-0.20	-0.26	-0.68	-0.86	-1.05	-1.09	-0.99	-0.60	-0.13	-0.06	+0.18	+0.85	+0.43	+0.33	0.00	+0.62	+1.03	+1.49	+0.64	+0.54	+0.21	+0.24
Year	-0.85	-0.91	-1.16	-1.08	-1.32	-1.02	+0.63	+0.03	+0.65	+1.35	+1.77	+1.51	+1.23	+0.59	+0.42	+0.40	+0.40	+0.07	+0.22	+0.21	-0.17	-0.64	-0.56	-0.46
Winter	-0.88	-0.56	-0.75	-0.85	-1.39	-1.46	-1.47	-0.85	-0.11	+0.17	+0.57	+0.69	+1.15	+0.99	+0.52	+0.58	+0.73	+0.93	+0.98	+1.22	+0.20	-0.21	-0.05	-0.16
Equinox	-0.75	-1.15	-1.43	-1.16	-1.41	-1.32	-0.63	+0.15	+0.70	+1.37	+1.96	+1.51	+1.37	+0.45	+0.48	+0.62	+0.82	+0.21	+0.51	+0.30	-0.19	-1.23	-0.61	-0.57
Summer	-0.93	-1.01	-1.28	-1.23	-1.17	-0.28	+0.22	+0.64	+1.35	+2.51	+2.80	+2.32	+1.18	+0.33	+0.27	+0.02	-0.37	-0.93	-0.84	-0.89	-0.54	-0.49	-1.03	-0.64
HORIZONTAL FORCE																								
Jan.	+13.6	+3.4	+9.0	+4.8	+15.8	+22.9	+27.8	+16.0	0.0	-12.0	-21.0	-17.8	-16.0	-5.0	-4.2	-6.8	-8.0	-3.9	-3.4	-10.8	-9.8	+3.4	+6.6	-4.6
Feb.	-1.7	-3.8	-5.1	-5.2	-1.5	+11.6	+11.3	-2.6	-15.7	-6.8	-2.9	-2.2	-6.3	+4.2	+2.3	+6.8	+0.3	-1.0	+8.9	-3.8	-12.3	+10.6	-11.7	+2.0
Mar.	-12.8	+2.3	+12.4	-3.7	-0.9	+10.0	+8.3	-6.5	-8.8	-22.3	-22.0	-23.3	-18.8	+1.5	+14.6	+19.3	+21.9	+5.8	+2.1	-8.3	+4.6	+12.3	+11.6	+0.7
Apr.	-6.0	+9.9	+7.6	-3.1	+10.0	+8.9	+1.2	-9.9	-24.4	-19.1	-27.2	-30.7	-25.4	-16.5	-4.8	+4.1	+1.8	+19.5	+20.0	+15.5	+8.2	+32.7	+20.0	+7.7
May	+8.7	+1.8	-0.1	+9.5	+1.7	-4.4	-1.5	-6.7	-12.9	-23.0	-46.5	-38.9	-15.3	+5.6	+9.3	+13.7	+28.1	+30.4	+31.1	+23.9	+10.7	-0.2	-9.3	-15.7
June	+11.5	+10.3	+6.5	+9.5	-3.9	-7.4	-5.5	-24.7	-17.7	-41.7	-41.5	-31.9	-14.7	-4.5	-10.1	+3.5	+29.5	+33.6	+31.7	+28.5	+17.3	+9.7	+7.1	+4.9
July	+7.4	+8.7	+4.3	-14.2	+13.1	+2.3	-15.0	-4.7	-29.7	-48.4	-47.5	-39.9	-17.0	-6.1	+5.9	+16.8	+19.9	+31.1	+32.4	+27.5	+19.7	+12.6	+16.5	+4.3
Aug.	+8.5	-1.4	+13.7	+14.0	+10.4	-14.5	-21.4	-22.0	-35.3	-48.0	-39.5	-31.2	-19.7	+4.4	+12.5	+20.2	+8.0	+28.3	+20.2	+29.8	+17.9	+12.6	+26.7	+5.8
Sept.	-11.9	-17.8	-21.0	-2.5	+10.8	+10.4	-6.1	-14.8	-13.6	-21.3	-38.6	-20.0	-9.1	+11.6	+11.6	+16.7	+21.4	+30.4	+18.5	+17.8	+23.6	+14.9	-7.2	-3.8
Oct.	+6.3	+10.0	+23.0	+4.7	+8.4	+12.4	+6.1	+3.0	-5.2	-20.7	-26.0	-10.2	-11.5	+6.8	+6.2	+0.3	+1.2	+19.4	+0.5	+0.4	-6.4	+6.5	-14.6	-20.6
Nov.	+12.2	+9.8	+13.9	+15.8	+30.2	+15.0	+10.8	+3.8	-3.1	-5.8	-14.0	-18.2	-30.8	-24.8	-0.7	-2.8	-5.6	-9.0	-13.8	-8.4	+6.5	+10.0	+5.0	+4.0
Dec.	+3.0	-1.4	+1.1	+2.2	+7.8	+10.0	+12.6	+13.6	+12.5	+7.0	+0.4	-0.6	-3.4	-11.4	-4.1	-2.2	+2.8	-5.0	-9.6	-15.6	-5.9	-6.2	-2.2	-5.4
Year	+3.2	+2.7	+5.4	+2.7	+8.5	+6.4	+2.4	-4.6	-12.8	-21.8	-27.2	-22.1	-15.7	-2.9	+3.2	+7.5	+10.1	+15.0	+11.5	+8.0	+8.2	+9.9	+4.0	-1.7
Winter	+6.8	+2.0	+4.5	+4.4	+13.1	+14.9	+15.6	+7.7	-1.6	-4.4	-9.4	-9.7	-14.1	-9.3	-1.7	-1.3	-2.6	-4.7	-4.5	-9.7	+0.8	+4.5	-0.6	-1.0
Equinox	-6.1	+1.1	+5.5	-1.1	+7.1	+10.4	+2.4	-7.1	-13.0	-20.9	-28.5	-21.1	-16.2	+0.9	+6.9	+10.1	+11.6	+18.8	+10.3	+6.3	+7.5	+16.6	+2.5	-4.0
Summer	+9.0	+4.9	+6.1	+4.7	+5.3	-6.0	-10.9	-14.5	-23.9	-40.3	-43.7	-35.5	-16.7	-0.1	+4.4	+13.5	+21.4	+30.9	+28.9	+27.4	+16.4	+8.7	+10.3	-0.2

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

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1953

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

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	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	W	Z	N	W	Z	N	W	Z	D	I	H	D	I	H	D	I	H
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	20.9	26.5	20.6	14.2	21.5	9.4	50.9	52.1	54.7	5.85	1.48	18.3	4.76	0.94	12.9	11.50	3.69	48.8
Feb.	16.3	31.5	23.1	11.2	21.7	9.0	34.7	62.5	74.7	6.67	1.22	12.4	4.69	0.52	8.8	13.20	2.34	28.0
Mar.	32.4	43.6	35.8	25.7	37.9	13.6	49.5	101.9	108.4	9.71	1.69	26.6	8.05	1.48	24.4	20.71	3.22	45.2
Apr.	44.9	41.0	27.6	39.7	37.8	20.6	68.1	45.3	74.0	8.81	2.47	43.5	8.29	2.11	39.0	10.83	4.00	63.4
May	48.1	50.0	30.1	41.2	51.6	14.0	76.6	101.2	107.8	10.49	2.61	48.6	10.66	2.46	40.8	20.58	4.52	77.6
June	49.1	45.2	28.4	35.1	41.2	23.0	71.0	53.8	70.2	9.42	2.92	51.9	8.26	2.23	38.2	11.99	3.94	75.3
July	51.9	47.5	30.2	42.8	44.1	22.7	76.3	59.8	78.0	9.42	3.07	54.5	8.85	2.66	45.5	11.14	4.97	80.8
Aug.	54.0	50.7	42.9	36.0	47.7	21.8	81.5	70.9	115.8	10.41	3.17	53.7	10.02	2.40	37.8	15.26	5.42	77.8
Sept.	40.5	41.3	45.6	35.3	37.9	20.1	72.9	95.4	155.8	8.85	2.39	37.7	8.10	1.93	33.8	19.20	4.36	69.0
Oct.	28.4	38.4	33.1	28.4	34.8	13.3	52.7	89.7	138.2	8.54	1.89	25.8	7.54	1.50	26.7	18.93	4.66	49.0
Nov.	20.8	30.0	18.5	14.3	22.4	7.6	62.1	67.8	60.8	6.69	1.44	19.2	4.65	0.76	13.4	13.45	5.28	61.0
Dec.	9.8	25.8	10.1	8.5	14.8	7.8	27.5	40.0	29.7	5.36	0.88	10.8	2.98	0.71	8.9	8.65	2.58	29.2
Year	30.1	32.4	28.8	24.6	31.7	15.2	43.2	50.8	89.0	8.35	1.51	33.6	7.24	1.35	27.5	14.62	3.09	58.8
Winter	16.0	27.5	18.1	9.2	18.6	8.5	32.7	48.9	55.0	6.14	1.06	15.2	4.27	0.66	11.0	11.70	2.62	41.7
Equinox	34.9	37.6	35.5	30.8	37.0	16.9	52.2	61.1	119.1	8.98	1.93	33.4	7.99	1.63	31.0	17.42	3.39	56.7
Summer	50.2	47.2	29.8	37.4	45.2	20.4	72.1	61.2	92.9	9.59	2.83	51.1	9.45	2.40	40.6	14.74	4.08	77.9

NON-CYCLIC CHANGE

148 ESKDALEMUIR

	All days			Quiet days			Disturbed days		
	H	D	Z	H	D	Z	H	D	Z
	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	0.0	-0.05	+0.4	+2.3	-0.75	-5.3	-12.7	+0.01	-1.8
Feb.	+0.3	-0.01	-0.3	+2.2	+0.10	-1.3	-5.7	+0.43	-0.4
Mar.	0.0	0.00	-0.4	+11.0	+0.73	-3.6	+13.1	+2.17	+13.8
Apr.	0.0	-0.05	+0.9	-0.9	-0.59	+2.6	+11.5	+2.83	+10.9
May	+0.3	-0.08	-0.1	+2.6	-0.38	-3.2	-31.1	-5.91	-38.7
June	-0.2	+0.07	-0.2	+3.1	-0.50	-0.4	-8.6	-0.18	+5.0
July	+0.3	0.00	-0.1	+1.9	-0.28	-3.1	-6.0	+0.74	0.0
Aug.	0.0	-0.07	-0.4	+1.2	+0.07	-0.1	-4.7	+2.18	-23.7
Sept.	0.0	-0.01	+0.6	+1.5	-0.55	-0.4	-6.6	+3.56	-1.6
Oct.	-0.1	+0.01	0.0	+1.9	+0.34	+1.0	-16.8	-1.85	-19.1
Nov.	+0.1	0.00	0.0	-2.2	+0.65	+1.6	-4.3	-0.71	-0.3
Dec.	-0.1	-0.05	0.0	+1.8	+0.20	0.0	-5.4	-0.19	+3.8
Year	+0.1	-0.02	0.0	+2.2	-0.08	-1.0	-6.4	+0.26	-4.3
Winter	+0.1	-0.03	0.0	+1.0	+0.05	-1.3	-7.0	-0.11	+0.3
Equinox	0.0	-0.01	+0.3	+3.4	-0.02	-0.1	+0.3	+1.68	+1.0
Summer	+0.1	-0.02	-0.2	+2.2	-0.27	-1.7	-12.6	-0.79	-14.3

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

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

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

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	16,000 γ +			11° +			44,000 γ +			γ	γ	°	γ
Jan.	616	627	604	14.4	14.7	14.0	1227	1224	1230	16297	3239	69 49.6	48183
Feb.	623	627	612	13.5	14.1	11.9	1219	1221	1214	16305	3236	69 49.0	48178
Mar.	620	628	607	12.8	13.7	12.1	1222	1223	1223	16303	3232	69 49.2	48179
Apr.	628	628	621	12.6	12.6	12.8	1219	1222	1214	16311	3233	69 48.4	48179
May	629	633	624	11.5	11.9	10.8	1222	1223	1217	16313	3228	69 48.6	48182
June	637	640	632	11.4	11.3	12.1	1223	1222	1224	16321	3229	69 48.1	48186
July	636	639	632	10.9	11.0	11.7	1223	1215	1219	16320	3226	69 48.2	48185
Aug.	632	639	623	10.2	10.0	10.0	1215	1215	1212	16317	3222	69 48.3	48177
Sept.	628	636	614	9.4	9.7	8.4	1219	1219	1214	16314	3217	69 48.6	48179
Oct.	630	639	608	8.9	9.6	7.8	1222	1217	1226	16316	3215	69 48.6	48183
Nov.	634	642	622	8.2	8.4	7.8	1225	1222	1226	16321	3213	69 48.3	48187
Dec.	642	645	635	8.2	8.2	8.2	1223	1222	1225	16328	3216	69 47.8	48188
Year	630	635	619	11.0	11.3	10.6	1221	1220	1220	16314	3225	69 48.6	48182

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE
Values of a_n, b_n in the series $\Sigma(a_n \cos 15nt + b_n \sin 15nt)$, t being reckoned in hours from midnight G.M.T.
Longitude of Eskdalemuir Observatory, $3^{\circ}12'W$.

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	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
	ALL DAYS																							
Jan.	+3.3	+3.9	-3.9	-1.2	+1.6	-2.8	+0.5	+0.7	-10.8	+0.4	+1.9	+2.9	-0.1	-0.8	+0.4	+0.4	-0.5	-10.1	-2.6	+0.1	+0.1	-0.2	-0.4	0.0
Feb.	+3.5	+1.2	-3.1	-2.1	+0.1	-2.1	+0.6	+0.7	-11.3	-3.0	+2.8	+3.3	+0.3	-0.9	+0.4	+2.1	-0.7	-9.9	-3.7	-1.4	+0.3	-0.1	-0.7	-1.1
Mar.	+9.2	-1.7	-6.7	-1.2	+2.1	-3.1	-1.9	+1.2	-14.0	-5.7	+3.3	+9.8	+1.9	-2.4	+1.3	+1.4	-3.6	-13.8	-6.1	-1.2	+2.3	+1.0	-0.1	-0.7
Apr.	+16.1	-4.4	-9.5	-2.2	+2.3	-1.7	+0.2	0.0	-8.9	-12.4	+0.9	+9.4	-0.9	-3.2	+0.8	+1.8	+0.4	-12.1	-6.1	-1.7	+1.0	+0.7	-1.1	-0.2
May	+14.8	-8.9	-8.9	-0.1	+1.0	-0.1	+0.7	+1.3	-10.2	-16.0	+2.1	+9.5	-4.2	-2.1	+0.1	+0.1	-1.8	-11.3	-8.2	0.0	+0.5	+0.1	-0.6	+0.5
June	+15.0	-10.6	-9.3	+0.7	-0.5	+0.4	+1.0	+1.0	-7.4	-18.1	+2.2	+8.2	-1.1	0.0	+1.0	+1.6	+4.4	-8.0	-5.8	-2.6	+0.1	+0.2	-0.1	+0.5
July	+16.9	-11.3	-8.8	+2.4	+0.8	-2.0	+0.9	+1.1	-6.8	-18.4	+0.4	+8.6	-0.9	-10.4	0.0	+1.8	+0.8	-12.1	-6.0	-3.5	+1.3	-0.1	-0.2	-0.2
Aug.	+17.5	-10.8	-8.2	+3.0	0.0	-3.4	-0.5	+1.9	-10.2	-13.3	+8.2	+9.0	-2.5	-2.1	+1.7	+1.1	-4.3	-15.6	-8.0	-2.7	+3.0	+0.5	+1.0	+0.1
Sept.	+12.0	-6.5	-7.8	+2.2	+0.4	-4.4	+0.3	-0.3	-13.9	-6.7	+4.2	+5.7	-2.3	-3.6	+1.0	+1.3	-7.5	-15.2	-8.6	-2.0	+1.6	-1.0	-0.5	-1.1
Oct.	+10.3	+0.2	-6.8	-0.3	+1.7	-1.3	+0.3	+0.9	-12.2	-1.6	-0.2	+8.5	-1.3	-2.4	+1.2	+2.0	-6.3	-12.2	-5.7	-0.5	+1.9	+0.8	-0.9	-0.6
Nov.	+6.0	+1.9	-4.9	-0.7	+1.3	-2.2	-0.7	+0.1	-9.1	+1.2	+1.1	+6.3	-0.1	-1.3	+1.1	+1.6	-2.5	-8.8	-1.4	0.0	+0.3	-0.2	-0.6	+0.8
Dec.	-0.6	+2.3	-1.9	-1.7	+1.3	-1.0	-0.1	-0.2	-8.6	+0.1	-0.3	+3.9	-0.4	+0.6	+0.8	+0.7	+1.4	-4.3	-1.1	-0.7	-0.2	-0.3	-0.4	0.0
Year	+10.3	-3.7	-6.6	-0.1	+1.0	-2.0	+0.1	+0.7	-10.3	-7.8	+2.2	+7.1	-0.9	-1.6	+0.8	+1.3	-1.7	-11.2	-5.3	-1.4	+1.0	+0.1	-0.5	-0.2
Winter	+3.1	+2.3	-3.5	-1.5	+1.1	-2.0	+0.1	+0.3	-10.0	-0.2	+1.4	+4.1	-0.1	-0.6	+0.7	+1.2	-0.6	-8.3	-2.2	-0.5	+0.1	-0.2	-0.5	-0.1
Equinox	+11.9	-3.1	-7.7	-0.3	+1.6	-2.6	-0.3	+0.4	-12.3	-6.6	+2.1	+8.4	-0.7	-2.9	+1.1	+1.6	-4.3	-13.4	-6.6	-1.4	+1.7	+0.3	-0.6	-0.7
Summer	+16.1	-10.4	-8.8	+1.5	+0.3	-1.3	+0.5	+1.3	-8.7	-16.5	+3.2	+8.8	-2.2	-1.3	+0.7	+1.2	-0.2	-11.6	-7.0	-2.1	+1.2	+0.2	-0.5	+0.3
	QUIET DAYS																							
Year	+8.0	-2.3	-5.5	0.0	+1.6	-1.4	-0.1	-0.7	-4.8	-9.6	+2.0	+5.5	-2.7	-1.7	+1.1	+1.1	+3.7	-2.1	-3.2	-0.6	+1.5	-0.3	-0.6	-0.2
Winter	+0.5	+0.1	-3.1	-1.6	+1.0	-0.9	-0.3	+0.1	-5.4	-3.0	-0.3	+2.9	-2.0	+0.3	+0.6	+1.4	+2.2	-2.1	-0.9	-0.1	+0.6	-0.5	+0.5	-0.1
Equinox	+0.2	-0.6	-6.9	-0.4	+3.1	-1.9	-0.4	+0.9	-6.3	-10.8	+2.3	+6.8	-1.9	-3.9	+1.3	+2.1	+3.9	-2.6	-3.3	-1.1	+1.6	+0.3	-0.8	-0.4
Summer	+13.5	-5.9	-6.9	+1.8	+0.4	-1.2	+0.6	+0.7	-3.8	-15.9	+5.1	+7.6	-2.9	-1.9	+0.6	+1.4	+5.0	-1.6	-5.3	-0.7	+2.1	-0.5	-0.5	0.0
	DISTURBED DAYS																							
Year	+13.2	-8.5	-9.4	+2.6	+0.7	-3.5	-0.2	+0.3	-17.8	-1.3	+2.5	+10.3	+1.8	-3.3	0.0	+1.0	-16.2	-32.0	-10.4	-1.6	+1.9	+2.0	+0.3	+0.4
Winter	+8.5	+2.3	-5.8	-1.0	+1.2	-4.0	-0.1	-1.6	-15.2	+8.7	+5.2	+7.0	+4.3	-3.2	-0.1	+1.2	-8.7	-20.9	-4.0	-0.7	-0.8	+1.2	+0.3	+1.3
Equinox	+12.3	-9.1	-10.3	+3.5	+0.1	-4.1	-1.1	+0.2	-22.2	+5.9	+2.5	+12.2	+2.3	-4.4	-1.1	+0.3	-26.5	-37.3	-15.8	+0.2	+4.2	+2.6	0.0	-1.7
Summer	+18.9	-18.9	-11.9	-5.2	+0.7	-2.5	+0.5	+2.4	-16.1	-18.4	-0.2	+11.5	-1.0	-2.5	+1.2	+1.6	-16.2	-32.0	-10.4	-1.6	+1.9	+2.0	+0.3	+0.4

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

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	North component								West component								Vertical component							
	c ₁	α ₁	c ₂	α ₂	c ₃	α ₃	c ₄	α ₄	c ₁	α ₁	c ₂	α ₂	c ₃	α ₃	c ₄	α ₄	c ₁	α ₁	c ₂	α ₂	c ₃	α ₃	c ₄	α ₄
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
ALL DAYS																								
Jan.	5.1	44	4.0	259	3.1	160	0.8	50	10.8	275	3.5	41	0.8	196	0.5	59	10.1	186	2.6	278	0.2	155	0.4	283
Feb.	3.7	74	3.8	242	2.1	187	0.9	54	11.7	258	4.3	47	0.9	172	2.1	24	9.9	187	4.0	256	0.3	111	1.3	222
Mar.	9.3	104	6.9	267	3.7	156	2.2	315	15.1	251	10.3	25	3.1	152	1.9	55	14.3	198	6.3	265	2.5	76	0.7	197
Apr.	16.7	108	9.8	263	2.8	136	0.1	97	15.2	219	9.4	12	3.3	205	2.0	36	12.1	181	6.3	261	1.2	66	1.2	272
May	17.3	124	8.9	275	1.0	105	1.5	41	19.0	216	9.7	19	4.7	254	0.1	78	11.4	192	8.2	276	0.6	86	0.8	322
June	18.4	128	9.3	281	0.7	320	1.5	57	19.5	205	8.5	21	1.1	279	1.9	44	9.1	154	6.3	252	0.3	34	0.5	359
July	20.3	127	9.1	292	2.2	169	1.5	50	19.6	203	8.6	9	10.5	195	1.8	12	12.1	179	7.0	246	1.5	104	0.3	238
Aug.	20.5	125	8.8	296	3.4	190	2.0	359	16.8	221	12.2	49	3.2	240	2.0	70	16.2	199	8.4	258	3.0	91	1.0	99
Sept.	13.6	121	8.1	292	4.4	184	0.4	157	15.4	247	7.1	43	4.3	221	1.7	49	16.9	210	8.8	263	1.9	132	1.2	216
Oct.	10.3	92	6.8	274	2.2	138	0.9	30	12.3	265	8.5	5	2.7	218	2.3	43	13.7	210	5.7	271	2.1	77	1.1	251
Nov.	6.3	75	5.0	268	2.5	160	0.7	289	9.2	281	6.3	16	1.3	193	2.0	47	9.1	199	1.4	277	0.3	135	1.0	338
Dec.	2.3	348	2.5	233	1.7	137	0.2	225	8.6	274	4.0	2	0.7	337	1.1	60	4.5	166	1.3	246	0.4	226	0.4	285
Year	11.0	113	6.7	276	2.2	163	0.7	22	12.9	236	7.4	24	1.9	20	1.5	44	11.3	192	5.5	261	1.0	93	0.6	264
Winter	3.8	56	3.7	254	2.3	161	0.3	25	10.0	272	4.3	25	0.6	195	1.4	42	8.3	187	2.3	264	0.2	162	0.5	274
Equinox	12.3	108	7.7	274	3.1	158	0.5	340	13.9	245	8.6	20	3.0	202	2.0	45	14.1	201	6.8	265	1.7	88	0.9	236
Summer	19.2	126	8.9	286	1.3	176	1.5	34	18.6	211	9.4	27	2.6	248	1.3	43	11.6	184	7.3	260	1.3	90	0.6	312
QUIET DAYS																								
Year	8.3	109	5.5	276	2.1	141	0.7	3	10.7	210	5.9	27	3.2	248	1.5	59	4.2	123	3.2	265	1.5	109	0.6	265
Winter	0.5	77	3.5	249	1.3	140	0.4	295	6.2	244	2.9	360	2.1	289	1.5	35	3.0	137	0.9	273	0.8	138	0.5	116
Equinox	10.3	96	6.9	273	3.6	131	1.0	347	12.5	214	7.2	25	4.3	216	2.5	43	4.7	127	3.5	258	1.6	91	0.9	255
Summer	14.7	117	7.1	291	1.3	170	1.0	54	16.3	197	9.1	40	3.4	247	1.6	37	5.2	111	5.4	269	2.1	113	0.5	279
DISTURBED DAYS																								
Year	15.8	126	9.7	292	3.6	179	0.4	338	17.9	269	10.6	20	3.8	161	1.0	10	35.8	210	10.5	268	2.8	53	0.5	51
Winter	8.7	78	5.9	266	4.2	173	1.7	197	17.5	303	8.7	43	5.3	136	1.2	7	22.7	206	4.0	267	1.4	335	1.4	27
Equinox	15.3	130	10.9	295	4.1	188	1.1	295	23.0	288	12.5	18	4.9	162	1.1	298	45.8	219	15.8	277	5.0	68	1.7	192
Summer	26.8	138	13.1	300	2.6	175	2.5	25	24.4	224	11.5	5	2.7	211	2.0	49	35.8	210	10.5	268	2.8	53	0.5	51

KEW

KEW OBSERVATORY

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

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

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book, 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 at 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. per hour or more. This gauge stands on the lawn about 6.5 metres west-north-west of the tilting-siphon recorder. The Jardi rate-of-rainfall recorder has proved to be unreliable at rates below 6 mm. per hour and such values are omitted from Table 162.

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

Solar radiation.— The factors by which the printed values 1939 to 1945 should be multiplied are given in the Introduction for the years in question.*

Details of the change of pyrlieliographs are given in the Introduction for 1951.

Identification numbers of instruments in use in 1953.

Thermometers Nos. 788 and 738 continued in use as the control dry-bulb and wet-bulb thermometers respectively. Rain measure No. 1999 was used as the measuring glass for the control rain-gauge throughout the year. Grass Minimum Thermometer No. 18004 was broken on 1 February and thermometer No. 18003 was used in replacement as from 2 February.

Thermometer corrections 1953

	Nos.	788	738	M.O.	20430	20428	M.O.	18003	18004
	N.P.L.	1933	1933	N.P.L.	1948	1949	N.P.L.	1929	1929
	°F.			°F.			°F.		
Certified	2	+0.1	+0.2	22	-0.1	0.0	2	-0.2	-0.2
	12	+0.1	+0.1	32	-0.1	0.0	22	-0.1	-0.1
	32	0.0	0.0	42	-0.1	0.0	32	0.0	0.0
	52	-0.1	-0.1	52	-0.1	0.0	52	0.0	0.0
	72	0.0	-0.1	62	-0.1	-0.1	72	0.0	0.0
	92	0.0	-0.1	72	-0.1	-0.1	..	..	..
Applied		0.0	0.0		-0.1	0.0		0.0	above

Notes on the meteorological summaries

The mean temperature for the year of 283.6°A. (51.1°F.) was well above the average of 282.8°A. (49.6°F.) for the period 1871-1915. There were only two months June and July when the mean temperature was below the average, whilst December, November and May had mean temperatures 6.1°F., 4.1°F. and 3.4°F. above the average for the period 1871-1915.

There were three days, 24 May, 25 May and 12 August on which the maximum temperature in the north-wall screen exceeded 300° A. (80.6°F.). The highest reading was 304.2°A. (88.1°F.) at 14h.20m. on 12 August. No "ice days" occurred in 1953. The lowest temperature in the north-wall screen was 269.2°A. (25.2°F.) registered at 23h.15m. 12 January, whilst the lowest reading of the grass minimum thermometer was 261.6°A. (11.4°F.) 7 February.

Despite the wet months of April and July, with totals 152 and 167 per cent respectively of the average for the standard period 1881-1915, the rainfall of 499 mm. for the year 1953 was 18 per cent below the average. This was due to the exceptional dryness of March and December, the driest of that name since 1933, both of whom had only a quarter of the normal amounts whilst January and November each had totals of about half the average. The heaviest rainfall in one day was 28 mm. on 1 November.

The sunshine for the year, 1585 hours, was 116 hours above the normal total for the period 1906-35. August and September, with 30 per cent excess over the average, and April and May, with 20 per cent more sunshine than normal, were the sunniest months. January with a deficit of 20 per cent; June and October with 15 per cent less than the average, were the least sunny months of 1953.

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

The highest wind speed recorded in a gust was 29 m./sec. (65 m.p.h.) at 17h.55m. on 31 January. 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	
	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.20	0.02	212	315	0.38	0.31	154	151	0.19	0.17	355	346	0.07	0.07	221	202
February	0.06	0.05	206	73	0.38	0.36	151	146	0.10	0.12	323	340	0.01	0.03	167	108
March	0.29	0.11	2	38	0.48	0.40	153	149	0.10	0.07	256	332	0.12	0.04	27	25
April	0.27	0.28	65	31	0.41	0.40	151	151	0.05	0.03	183	185	0.04	0.04	25	353
May	0.25	0.32	9	27	0.37	0.35	142	148	0.10	0.09	154	161	0.03	0.02	288	319
June	0.25	0.30	35	17	0.31	0.32	149	143	0.07	0.09	171	160	0.02	0.01	36	260
July	0.45	0.26	68	16	0.28	0.31	140	140	0.11	0.10	139	153	0.03	0.01	289	281
August	0.22	0.21	16	20	0.35	0.34	149	144	0.10	0.06	153	155	0.02	0.04	295	309
September	0.10	0.12	190	6	0.42	0.40	154	152	0.04	0.01	21	350	0.04	0.04	346	332
October	0.09	0.06	19	76	0.41	0.38	163	160	0.10	0.09	11	359	0.03	0.01	10	22
November	0.18	0.03	4	124	0.39	0.34	162	160	0.14	0.13	360	358	0.02	0.03	136	183
December	0.15	0.08	354	137	0.35	0.31	154	152	0.16	0.15	4	353	0.09	0.07	210	205
Arithmetic mean	0.21	0.15			0.38	0.35			0.11	0.09			0.04	0.03		
Year	0.13	0.14	31	29	0.37	0.35	150	150	0.02	0.03	5	359	0.01	0.01	325	280
Winter	0.04	0.13	310	111	0.37	0.33	155	152	0.14	0.14	353	350	0.04	0.05	205	208
Equinox	0.12	0.14	34	32	0.42	0.39	149	153	0.23	0.04	306	345	0.55	0.03	18	359
Summer	0.27	0.27	39	20	0.33	0.33	145	144	0.09	0.08	153	157	0.02	0.02	307	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	
	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926	1953	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.73	0.99	220	221	0.36	0.43	10	35	0.10	0.17	203	208	0.04	0.01	285	3
February	1.47	1.53	221	221	0.45	0.57	25	34	0.13	0.12	200	211	0.05	0.06	7	169
March	3.34	2.45	216	222	0.93	0.63	17	40	0.04	0.07	100	334	0.14	0.11	142	197
April	2.89	3.21	225	226	0.41	0.48	39	51	0.15	0.22	10	24	0.06	0.07	225	218
May	3.50	3.72	223	227	0.13	0.15	30	74	0.22	0.31	24	35	0.04	0.04	27	20
June	2.99	3.72	221	226	0.21	0.02	11	84	0.05	0.26	137	35	0.15	0.10	16	33
July	2.79	3.68	224	222	0.13	0.06	187	50	0.24	0.29	20	31	0.08	0.07	77	28
August	3.34	3.54	223	218	0.29	0.34	56	52	0.33	0.30	27	28	0.03	0.03	354	218
September	3.11	3.22	226	220	0.58	0.71	46	49	0.16	0.14	42	24	0.15	0.16	213	213
October	2.16	2.32	223	226	0.63	0.76	39	50	0.07	0.10	231	248	0.13	0.12	214	200
November	1.24	1.39	225	225	0.41	0.57	44	44	0.11	0.18	212	232	0.04	0.02	188	141
December	0.72	0.90	201	222	0.40	0.40	22	41	0.16	0.16	184	215	0.08	0.04	335	38
Arithmetic mean	2.36	2.56			0.41	0.43			0.15	0.19			0.08	0.07		
Year	2.35	2.56	222	220	0.38	0.42	31	45	0.05	0.08	36	17	0.01	0.02	203	195
Winter	1.03	1.20	218	216	0.40	0.49	26	39	0.12	0.15	198	217	0.02	0.01	264	121
Equinox	2.87	2.80	222	221	0.62	0.64	32	47	0.06	0.09	28	4	0.10	0.11	196	207
Summer	3.16	3.67	223	220	0.12	0.14	43	59	0.88	0.29	80	32	0.07	0.04	29	27

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

Atmospheric Electricity

Considerable difficulties were experienced with the instruments. Continuation of the troubles mentioned in the Introduction to the 1949 Year Book prevented satisfactory measurements of air-earth current by the Wilson apparatus and lead to some doubt about the accuracy of the potential gradient measurements given in Table 174 (the errors are not thought to exceed 10 per cent). The underground laboratory was filled with flood water on 31 January when the Thames overflowed its banks and no measurements were possible until 16 March.

The Kelvin electrograph records were satisfactory for the first four months of the year. Factors for the reduction of the records were obtained from observations of the potential of a wire stretched 1 m. above the level grass surface of the paddock.* From May onwards the behaviour of the electrograph became erratic, probably through defects in the insulation, and the records obtained were too unreliable to warrant the publication of data in Tables 175-177 after April 1953.

The mean factor for the Kelvin electrograph for the four months for which data are published was 4.09 giving an equivalent height for the collector of 24.4 cm. The extreme hourly values of potential gradient in Table 176 are plus 1420 v./m. at 9h. on 20 January and minus 1400 v./m. at 21h. on 8 February.

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 has 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. During 1953, for 331 days on which the record of the Owens pollution recorder was available, the highest estimate of pollution was 1.7 mg./m³ this value occurring at 24h. on 10 January and at 24h. on 20 January. There were 35 days on which the pollution reached 0.95 mg./m³. The number of hours credited with at least 0.95 mg./m³ was 198 of which 100 were recorded in March.

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 1953 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-standardized during 1953. The total number of shocks measured during the year was 439. The phases of 99 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed.

No British earthquake was recorded during 1953.

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

PRESSURE AT STATION LEVEL

103

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	09.7	92.6	99.1	23.8	11.2	18.3	36.4	33.1	34.7	11.9	08.1	09.9	23.0	10.3	15.9	08.9	02.8	05.2
2	13.8	09.7	11.8	27.9	23.8	26.0	36.2	34.1	35.2	08.7	96.4	02.2	30.0	23.0	26.9	03.6	00.4	02.4
3	17.5	08.7	12.1	34.3	27.9	31.6	37.8	35.1	36.3	03.3	99.5	01.9	29.9	27.3	28.8	04.7	99.8	02.0
4	26.7	17.5	22.9	33.7	18.8	25.9	36.7	33.9	35.4	06.5	01.9	04.0	29.3	27.6	28.6	12.0	04.5	07.9
5	26.4	11.0	21.3	19.2	13.9	17.0	38.7	35.8	37.6	05.3	99.6	01.6	28.7	23.5	26.2	19.9	12.0	15.3
6	11.0	03.6	05.6	14.6	10.7	12.4	37.8	32.2	35.4	08.9	99.8	02.4	23.5	18.9	20.9	27.9	19.7	20.6
7	19.3	08.5	15.8	17.8	14.4	15.7	37.4	31.1	33.4	17.6	08.9	15.5	21.1	19.0	20.1	20.7	19.0	19.9
8	20.8	18.8	19.8	17.4	94.0	09.3	38.5	36.9	37.6	17.3	06.1	11.1	21.0	19.0	20.1	20.5	17.4	19.0
9	19.3	17.2	17.6	99.2	86.0	94.6	41.6	37.9	39.7	12.7	04.3	06.9	20.8	14.5	17.9	17.6	14.2	15.6
10	25.1	16.9	20.5	86.0	61.5	68.3	43.3	38.2	41.2	23.0	12.7	19.1	16.6	14.4	15.4	14.7	12.3	13.7
11	29.7	25.1	27.7	99.8	72.8	87.9	38.2	34.7	35.8	22.7	10.3	16.5	14.8	11.1	12.8	14.0	10.3	12.2
12	31.5	29.2	30.5	19.1	99.8	10.1	36.7	34.0	35.2	10.3	03.3	06.4	12.1	10.3	11.3	12.6	09.2	10.9
13	30.8	26.8	29.1	24.8	19.1	22.8	38.9	36.5	37.5	19.0	10.1	14.8	10.6	00.0	05.4	12.1	11.0	11.5
14	27.0	24.6	25.8	23.1	15.8	18.5	38.7	31.1	35.6	20.6	17.2	18.3	04.1	98.3	00.9	11.8	05.4	08.8
15	25.5	21.4	23.4	26.2	23.1	25.0	31.1	20.5	24.6	22.2	20.3	21.3	05.5	02.2	03.7	05.4	02.7	03.7
16	25.2	21.3	23.2	28.6	25.0	25.8	24.2	20.3	21.7	20.8	11.2	16.6	10.6	03.9	06.8	07.6	04.0	05.5
17	27.5	24.5	25.7	25.0	19.3	21.5	25.7	23.6	24.6	18.5	09.3	12.9	19.4	10.0	14.3	08.1	06.8	07.3
18	34.1	27.3	30.4	19.4	16.2	18.0	25.0	23.1	24.1	21.5	18.5	19.8	19.3	10.8	15.7	12.6	07.8	09.8
19	36.3	34.1	35.3	16.2	12.7	14.3	26.1	23.4	24.5	23.2	21.0	22.1	20.7	10.3	15.0	12.5	10.4	11.5
20	36.2	33.7	35.0	20.9	15.8	18.7	29.5	26.0	27.7	23.0	20.3	21.8	22.3	18.1	20.4	12.4	11.4	11.9
21	33.9	29.9	32.1	26.4	20.1	23.2	30.8	29.0	29.9	21.1	17.9	19.4	18.4	15.1	16.5	12.4	08.1	10.4
22	29.9	23.7	26.5	28.0	24.6	26.7	31.8	29.0	30.3	18.6	16.3	17.6	16.2	15.3	15.8	16.3	07.7	12.4
23	23.7	17.7	20.4	24.6	21.2	22.2	35.0	31.7	33.1	17.9	14.8	16.5	21.7	15.0	18.2	17.4	15.5	16.6
24	17.7	10.5	13.7	26.5	21.4	23.4	36.4	33.9	35.3	16.4	13.4	15.0	23.5	20.9	22.1	17.2	15.3	16.3
25	19.7	09.9	13.6	31.7	26.4	28.9	35.3	29.4	32.4	15.7	13.4	14.6	22.4	18.1	20.5	18.2	16.1	17.0
26	24.9	19.7	22.7	33.5	31.6	32.4	29.4	19.2	23.1	13.9	98.3	07.5	26.1	21.1	24.3	18.3	16.0	17.4
27	21.5	15.7	17.3	38.2	32.8	35.3	22.3	17.7	20.7	98.3	89.8	91.6	24.9	16.5	20.4	19.2	17.4	18.3
28	21.1	16.2	19.3	39.4	36.4	37.8	17.7	09.6	11.7	99.1	89.2	92.8	29.2	22.3	27.4	18.9	16.1	17.5
29	24.1	20.8	22.3				10.4	08.5	09.8	07.8	99.1	04.7	27.2	17.4	21.3	17.3	12.7	14.7
30	23.6	01.2	17.0				08.5	99.2	03.2	10.3	03.3	06.3	17.4	09.2	12.0	14.2	12.1	13.4
31	11.2	94.1	02.3				12.2	06.4	10.6				11.9	08.9	10.9			
Mean	24.02	17.16	20.04	22.27	14.15	18.27	31.24	26.94	28.97	14.54	07.81	11.04	20.07	14.59	17.31	14.10	10.63	12.29

	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	14.5	10.9	12.6	17.4	15.5	16.5	20.7	13.3	17.8	28.5	24.8	27.0	98.7	83.6	89.9	25.3	21.1	23.4
2	16.2	13.3	14.4	19.3	16.3	17.5	13.3	07.7	09.8	28.0	20.9	24.5	00.8	85.6	93.1	21.1	11.9	16.5
3	20.0	16.0	17.7	24.1	19.3	22.1	21.7	10.5	16.1	22.5	19.3	20.5	07.5	00.8	05.0	11.9	02.8	06.4
4	21.0	18.7	20.0	24.4	20.9	22.9	25.1	20.6	22.3	30.9	22.3	26.0	17.7	99.9	09.7	17.2	05.5	09.9
5	19.9	15.1	17.7	24.1	22.0	23.0	31.0	25.1	27.8	33.9	30.9	33.0	21.1	14.3	16.5	23.2	17.2	21.2
6	15.1	11.7	12.8	25.3	24.0	24.7	33.0	30.8	32.0	33.3	26.6	29.6	29.0	21.1	26.9	23.6	21.8	22.9
7	12.0	08.4	09.9	25.0	21.0	23.0	32.5	28.2	30.2	26.6	24.4	25.6	26.5	16.1	20.1	21.8	15.9	18.4
8	11.9	10.5	11.2	21.1	19.5	20.3	28.2	21.3	24.7	28.3	25.8	27.2	19.8	12.9	16.9	18.6	14.5	16.4
9	14.7	09.2	11.5	20.2	16.3	18.2	21.3	15.2	18.0	28.8	25.4	27.2	21.0	11.5	14.6	22.2	18.6	20.5
10	18.9	14.7	17.2	22.2	16.7	19.1	20.5	13.5	16.4	25.6	18.7	22.0	26.7	21.0	24.8	25.0	21.7	23.2
11	18.9	08.0	14.8	22.4	16.5	20.1	20.4	16.5	18.9	18.7	09.2	13.9	26.5	23.0	24.8	25.3	22.9	24.3
12	08.0	94.9	98.9	16.5	10.0	12.4	21.2	17.7	19.3	09.2	02.5	05.6	23.0	19.8	21.2	22.9	20.1	21.7
13	03.6	96.0	99.2	19.0	10.1	14.8	22.2	17.9	20.4	04.3	97.5	00.1	24.2	19.7	22.5	20.1	12.7	16.2
14	09.3	03.3	05.6	20.4	16.6	18.4	17.9	05.4	11.4	14.1	04.3	09.9	25.9	23.0	23.9	12.7	08.8	10.6
15	13.7	09.0	10.5	16.6	10.1	13.0	05.4	01.2	02.9	17.2	13.5	15.3	30.0	25.6	27.3	18.6	12.6	16.4
16	13.6	06.8	10.2	20.7	14.2	18.0	07.2	02.4	05.4	19.8	17.2	18.6	33.0	29.8	31.8	21.7	17.9	19.5
17	08.0	06.1	06.7	20.8	15.5	18.7	09.7	06.2	07.7	26.9	19.4	23.0	32.7	28.6	30.6	21.5	18.5	20.0
18	16.7	08.0	11.0	19.0	12.9	15.2	10.3	08.6	09.6	29.5	26.9	28.5	28.6	27.1	27.7	18.5	14.2	16.2
19	22.8	16.7	20.8	20.5	12.5	17.9	09.4	97.5	06.1	28.7	26.8	27.9	30.7	28.5	29.7	21.6	14.0	16.3
20	22.2	17.6	19.8	12.5	03.6	07.6	02.6	95.4	99.6	27.8	25.7	26.7	31.9	30.2	30.8	27.7	21.6	25.1
21	17.6	06.4	11.0	03.6	99.8	01.3	99.5	87.2	90.4	25.9	20.0	23.2	30.2	27.4	28.4	27.1	23.2	24.9
22	06.9	04.1	05.3	13.0	01.9	06.2	98.0	89.9	94.6	20.0	12.0	15.8	27.4	24.6	25.9	24.2	20.1	22.3
23	17.8	06.9	11.5	14.7	08.9	12.0	00.9	89.2	94.7	12.5	08.7	10.4	24.6	22.1	23.0	22.7	17.1	20.5
24	19.5	16.2	18.1	09.4	06.4	07.7	08.9	00.9	04.2	14.8	07.6	12.3	23.1	21.2	22.1	17.7	13.2	16.0
25	16.2	08.9	11.6	13.9	09.1	12.1	17.2	08.9	12.9	12.7	05.5	08.4	25.8	23.1	25.0	20.8	14.1	16.1
26	11.5	09.1	10.3	18.0	13.4	15.2	19.0	15.4	17.4	12.7	99.5	08.7	24.4	13.3	18.5	24.3	14.2	20.0
27	09.2	03.8	06.0	22.0	18.0	20.7	15.5	05.8	10.0	01.6	93.9	97.9	13.3	08.4	10.2	25.4	16.5	22.9
28	11.4	06.7	08.6	22.2	18.7	20.8	22.3	06.1	14.9	11.5	01.6	06.7	18.0	11.5	15.4	24.6	22.3	23.6
29	11.9	09.9	11.2	18.7	11.3	13.7	23.3	20.8	22.2	14.9	11.5	13.9	18.5	14.6	16.9	26.1	23.2	24.5
30	14.7	11.2	13.2	16.5	11.5	13.6	25.1	22.2	23.4	13.7	06.0	09.5	23.1	13.5	17.1	26.5	24.1	25.4
31	15.7	05.0	10.1	22.0	16.5	20.3				10.1	98.7	05.7				32.4	24.2	28.3
Mean	14.63	09.13	11.59	18.89	13.84	16.36	16.78	10.05	13.37	20.42	14.42	17.57	22.78	16.73	19.68	22.33	16.98	19.67
Annual																		

PRESSURE AT STATION LEVEL

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

155 KEW OBSERVATORY: $h_b = 10.4$ m.

Hour G.M.T.	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	20.39	20.19	20.17	20.12	19.99	19.82	19.93	20.25	21.00	21.00	21.20	21.20	20.94	20.57	20.40	20.53	20.62	20.77	20.91	21.08	21.18	21.18	21.09	21.09	20.99	20.64
Feb.	17.93	17.83	17.82	17.66	17.58	17.66	17.70	17.90	18.29	18.46	18.61	18.70	18.55	18.35	18.09	18.00	18.06	18.17	18.47	18.69	18.80	18.92	18.93	18.87	18.83	18.27
Mar.	29.66	29.62	29.43	29.20	29.13	29.06	29.17	29.35	29.45	29.55	29.56	29.48	29.22	28.88	28.51	28.19	27.97	28.02	28.21	28.48	28.70	28.87	28.93	28.96	28.87	28.97
Apr.	11.56	11.31	11.08	10.93	10.82	10.86	11.07	11.23	11.20	11.24	11.26	11.18	10.98	10.82	10.66	10.49	10.33	10.45	10.67	10.96	11.33	11.53	11.54	11.63	11.51	11.04
May	17.62	17.44	17.30	17.22	17.13	17.22	17.39	17.59	17.74	17.73	17.68	17.58	17.43	17.35	17.09	16.93	16.75	16.70	16.72	16.87	17.20	17.56	17.66	17.68	17.57	17.31
June	12.56	12.37	12.25	12.13	12.13	12.23	12.38	12.50	12.54	12.50	12.46	12.42	12.32	12.19	12.00	11.86	11.80	11.75	11.92	12.14	12.35	12.68	12.70	12.77	12.74	12.29
July	12.22	12.07	11.89	11.68	11.58	11.57	11.64	11.69	11.72	11.63	11.51	11.38	11.26	11.19	11.12	11.14	11.08	10.98	11.13	11.40	11.68	12.06	12.24	12.32	12.27	11.59
Aug.	16.48	16.44	16.35	16.28	16.23	16.31	16.51	16.68	16.74	16.80	16.72	16.55	16.43	16.26	16.58	15.97	15.81	15.73	15.85	16.03	16.33	16.51	16.68	16.70	16.63	16.37
Sept.	13.49	13.32	13.08	12.95	12.76	12.79	13.01	13.35	13.54	13.73	13.73	13.72	13.53	13.43	13.24	13.08	13.08	13.18	13.34	13.58	13.78	13.84	13.82	13.79	13.64	13.37
Oct.	18.16	18.05	17.82	17.59	17.52	17.52	17.61	17.86	18.11	18.15	18.10	17.94	17.63	17.31	17.10	16.93	16.91	17.04	17.27	17.40	17.48	17.52	17.47	17.39	17.31	17.57
Nov.	19.43	19.37	19.31	19.21	19.18	19.27	19.40	19.65	19.94	20.13	20.22	20.14	19.76	19.46	19.25	19.16	19.24	19.48	19.75	19.93	20.00	20.15	20.18	20.23	20.24	19.68
Dec.	19.61	19.50	19.55	19.54	19.41	19.34	19.41	19.58	19.92	20.20	20.37	20.17	19.76	19.44	19.27	19.23	19.35	19.48	19.53	19.69	19.79	19.86	19.98	20.00	19.91	19.67
Annual	17.46	17.32	17.20	17.07	16.99	17.00	17.13	17.33	17.51	17.62	17.65	17.56	17.34	17.13	16.93	16.82	16.77	16.84	17.00	17.21	17.41	17.58	17.62	17.64	17.57	17.26

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

PRESSURE REDUCED TO MEAN SEA LEVEL

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

156 KEW OBSERVATORY: $h_b = 10.4$ m.

Hour G.M.T.	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	21.70	21.50	21.49	21.43	21.30	21.13	21.25	21.57	21.93	22.31	22.51	22.51	22.25	21.87	21.70	21.83	21.92	22.08	22.22	22.39	22.49	22.49	22.40	22.41	22.30	21.95
Feb.	19.23	19.14	19.13	18.97	18.89	18.97	19.01	19.21	19.60	19.77	19.92	20.01	19.84	19.64	19.39	19.30	19.35	19.47	19.77	19.99	20.10	20.23	20.23	20.18	20.13	19.58
Mar.	30.98	30.95	30.75	30.53	30.45	30.39	30.49	30.67	30.77	30.87	30.87	30.80	30.53	30.18	29.81	28.48	29.26	29.32	29.51	29.78	30.01	30.19	30.25	30.28	30.19	30.28
Apr.	12.85	12.60	12.37	12.22	12.12	12.15	12.36	12.52	12.49	12.52	12.53	12.45	12.25	12.07	11.93	11.75	11.60	11.72	11.94	12.23	12.61	12.81	12.82	12.91	12.79	12.32
May	18.89	18.71	18.58	18.50	18.40	18.49	18.67	18.86	19.01	19.00	18.95	18.83	18.68	18.59	18.34	18.19	18.00	17.94	17.97	18.13	18.46	18.83	18.92	18.95	18.85	18.57
June	13.82	13.63	13.52	13.39	13.39	13.49	13.64	13.76	13.79	13.75	13.71	13.66	13.56	13.43	13.24	13.09	13.03	12.98	13.17	13.38	13.59	13.93	13.96	14.03	14.00	13.54
July	13.47	13.32	13.14	12.94	12.84	12.82	12.90	12.92	12.96	12.88	12.75	12.62	12.50	12.43	12.35	12.37	12.31	11.21	12.37	12.63	12.92	13.31	13.49	13.57	13.52	12.84
Aug.	17.73	17.69	17.60	17.53	17.49	17.57	17.77	17.94	17.99	18.04	17.96	17.79	17.66	17.49	17.39	17.20	17.04	16.96	17.08	17.27	17.57	17.75	17.93	17.95	17.89	17.61
Sept.	14.75	14.58	14.35	14.21	14.03	14.05	14.27	14.61	14.80	14.99	15.03	14.97	14.78	14.67	14.47	14.32	14.31	14.42	14.59	14.83	15.04	15.10	15.07	15.05	14.90	14.63
Oct.	19.44	19.33	19.10	18.87	18.80	18.80	18.89	19.14	19.39	19.43	19.37	19.21	18.89	18.57	18.36	18.19	18.17	18.31	18.54	18.67	18.76	18.80	18.75	18.67	18.59	18.84
Nov.	20.71	20.66	20.60	20.50	20.47	20.56	20.69	20.94	21.23	21.42	21.51	21.42	21.04	20.74	20.53	20.44	20.52	20.76	21.04	21.22	21.29	21.44	21.47	21.50	21.53	20.96
Dec.	20.90	20.79	20.83	20.83	20.70	20.63	20.70	20.88	21.21	21.49	21.66	21.46	21.05	20.72	20.56	20.52	20.64	20.77	20.83	20.98	21.08	21.15	21.27	21.29	21.20	20.95
Annual	18.74	18.60	18.48	18.35	18.27	18.28	18.41	18.61	18.79	18.90	18.92	18.83	18.61	18.39	18.19	18.08	18.03	18.10	18.27	18.48	18.68	18.86	18.90	18.92	18.85	18.53

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

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

TEMPERATURE

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

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

Hour G.M.T.	0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	76.27	76.19	76.23	76.37	76.33	76.22	76.16	76.14	76.05	76.27	76.52	76.84	77.21	77.62	77.88	77.93	77.72	77.34	77.11	76.96	76.77	76.55	76.41	76.40	76.34	76.73
Feb.	76.59	76.40	76.39	76.32	76.23	76.24	76.26	76.26	76.30	76.76	77.28	78.00	78.59	78.98	79.20	79.34	79.14	78.63	78.13	77.66	77.41	77.18	76.95	76.72	76.47	77.37
Mar.	76.92	76.67	76.17	75.95	75.81	75.75	75.85	75.58	76.15	77.30	78.32	79.53	80.95	81.88	82.46	82.68	82.73	82.16	81.19	80.03	78.87	78.30	77.79	77.43	77.05	78.61
Apr.	79.53	79.31	79.07	78.97	78.76	78.66	78.80	79.35	80.21	81.24	82.11	82.91	83.60	84.17	84.44	84.47	84.44	84.06	83.38	82.55	81.65	81.10	80.52	80.02	79.62	81.39
May	84.34	83.79	83.44	83.26	83.00	83.02	83.73	84.47	85.36	86.42	87.36	88.13	88.90	89.35	89.91	89.95	90.06	89.85	89.30	88.44	87.39	86.39	85.53	84.92	84.43	86.51
June	85.77	85.34	85.15	84.83	84.76	84.84	85.39	86.03	86.71	87.65	88.41	89.12	89.94	90.28	90.86	90.89	90.70	90.53	89.94	89.36	88.48	87.83	87.02	86.31	85.93	87.76
July	87.42	86.92	86.55	86.38	86.27	86.42	87.00	87.75	88.60	89.36	90.10	90.65	91.02	91.26	91.53	91.56	91.58	91.84	91.36	90.84	89.74	88.93	88.22	87.70	87.25	89.12
Aug.	88.45	88.18	87.80	87.40	87.09	86.95	87.39	88.25	89.39	90.58	91.39	92.14	92.71	93.48	93.68	93.80	93.83	93.57	93.39	92.20	90.95	90.14	89.55	89.05	88.57	90.47
Sept.	85.63	85.33	85.10	84.81	84.68	84.59	84.60	85.15	86.22	87.45	88.27	89.26	89.91	90.53	90.85	90.96	90.78	90.35	89.33	88.78	87.45	86.98	86.52	86.09	85.63	87.46
Oct.	83.00	82.74	82.71	82.49	82.44	82.25	82.22	82.29	82.69	83.54	84.48	85.25	85.99	86.39	86.75	86.79	86.52	85.89	85.17	84.42	84.06	83.87	83.52	83.03	82.87	84.10
Nov.	81.30	81.26	81.17	80.94	80.89	80.97	81.06	80.93	80.94	81.58	82.12	82.73	83.07	83.38	83.57	83.55	83.24	82.75	82.38	82.03	81.88	81.76	81.55	81.37	81.15	81.93
Dec.	81.02	80.94	80.89	80.76	80.66	80.51	80.45	80.28	80.21	80.47	80.82	81.28	81.80	82.01	82.20	82.22	81.93	81.63	81.44	81.23	81.15	81.07	81.01	80.91	80.88	81.12
Annual	82.22	81.96	81.76	81.57	81.44	81.																				

TEMPERATURE

105

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

158 KEW OBSERVATORY: North-wall screen: h_t (height of thermometer bulb above ground) = 3.0 m.

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	76.9	74.2	75.7	79.5	74.3	76.9	81.2	74.2	76.9	83.8	79.4	81.2	82.1	79.2	80.8	88.0	79.8	83.0
2	78.3	75.1	76.4	79.0	75.1	76.6	79.4	71.9	75.9	84.9	79.9	82.4	88.3	80.1	83.9	84.8	79.8	81.8
3	75.3	73.6	74.7	76.5	74.9	75.7	82.2	70.4	75.3	83.8	79.1	80.9	91.3	77.4	84.5	84.0	80.4	82.0
4	76.3	74.3	75.3	77.7	72.5	75.5	86.9	70.8	77.9	83.4	77.1	80.0	91.2	79.2	86.1	87.9	80.0	83.9
5	75.0	72.7	74.2	78.0	73.1	75.6	77.9	72.0	75.4	82.2	77.7	80.1	94.9	81.1	88.9	89.2	81.4	85.0
6	75.8	73.5	74.6	78.4	72.1	75.7	79.7	75.1	77.0	81.3	77.0	79.4	89.6	82.8	86.2	89.2	80.9	85.0
7	74.9	72.3	73.7	75.6	70.3	72.8	83.0	73.7	77.8	85.1	75.6	79.9	87.9	80.0	83.3	87.7	81.7	84.4
8	76.0	73.3	74.8	78.2	69.7	73.2	81.2	73.3	76.9	86.1	74.0	80.7	88.0	78.9	82.9	89.9	81.0	84.7
9	78.3	73.3	76.2	78.8	75.2	77.1	84.7	70.6	77.9	83.6	78.7	81.1	89.8	77.3	84.1	93.7	80.9	86.9
10	79.5	76.3	78.1	78.7	74.9	76.7	81.8	73.4	77.1	84.3	76.5	80.1	86.5	79.5	82.7	95.2	82.8	89.4
11	79.6	76.0	77.3	76.0	73.3	74.9	82.1	74.8	79.0	85.7	73.6	80.6	89.8	75.4	83.6	90.6	84.1	87.3
12	77.2	69.2	75.3	75.4	73.9	74.6	82.9	78.4	80.3	84.6	78.2	81.6	88.1	77.9	83.1	88.5	86.1	87.1
13	75.7	70.0	73.8	76.1	73.8	74.6	82.7	74.5	79.9	84.1	77.2	80.1	90.2	78.7	84.5	89.0	86.2	87.3
14	75.4	72.6	74.3	74.8	72.4	73.7	82.4	73.8	77.9	82.8	77.2	79.6	88.3	83.1	85.4	92.5	85.8	88.1
15	78.5	74.3	76.3	74.8	72.5	73.5	82.1	73.7	77.6	83.2	75.9	79.2	87.2	84.9	86.3	91.9	84.9	87.4
16	81.5	78.3	79.8	76.9	71.9	74.1	86.8	70.2	78.1	86.3	77.9	81.7	89.2	85.1	86.7	91.0	85.3	87.0
17	80.2	79.3	79.4	81.1	74.3	78.2	86.2	72.1	78.4	84.3	80.6	82.3	90.6	83.3	86.9	88.8	85.2	86.6
18	80.4	75.3	78.3	84.7	78.9	81.5	79.2	73.7	76.6	87.8	79.7	83.7	92.0	79.7	86.4	90.7	82.9	86.8
19	75.7	72.7	74.6	82.1	78.2	80.3	80.1	76.2	77.9	85.7	77.8	81.4	88.2	84.0	86.5	89.7	83.8	87.0
20	79.1	70.7	73.9	83.0	76.9	80.1	82.6	76.7	78.9	87.0	78.1	81.8	93.1	80.4	87.5	92.2	86.8	88.9
21	78.3	70.9	75.7	84.6	81.0	82.7	81.9	76.0	77.9	89.9	77.4	83.6	92.2	84.3	88.5	93.0	85.7	89.5
22	79.2	72.9	77.0	84.8	81.7	82.9	82.3	75.4	77.6	90.8	78.3	84.2	91.0	84.0	87.7	92.5	85.6	89.2
23	76.7	71.6	75.1	83.1	80.8	81.8	85.3	75.6	79.8	89.8	78.2	82.4	94.0	87.0	89.7	94.6	82.8	88.9
24	76.0	74.0	75.1	82.9	76.1	80.6	88.2	75.2	80.7	90.1	78.1	83.7	00.8	86.1	92.6	95.1	86.4	91.3
25	78.9	74.4	76.2	84.0	74.0	79.1	92.4	71.9	81.2	84.9	77.8	81.6	03.1	88.4	95.6	99.0	88.3	92.8
26	78.6	75.3	76.6	83.5	73.3	78.8	89.4	75.0	80.9	84.2	76.3	80.5	95.5	87.2	91.5	99.2	86.8	94.0
27	82.7	77.4	81.0	86.9	74.8	79.4	82.4	75.3	78.5	85.9	80.0	81.9	91.0	84.5	88.3	96.3	88.3	91.3
28	83.9	80.7	82.5	83.6	75.4	79.5	86.0	76.9	81.9	84.7	80.1	81.7	91.2	83.3	87.0	96.9	87.5	90.7
29	86.4	80.9	83.0				85.0	82.4	83.6	86.0	78.8	81.9	91.3	84.6	88.0	99.0	86.9	93.0
30	82.3	79.6	80.4				83.8	79.0	81.8	83.2	81.4	82.4	90.2	84.9	86.9	97.4	88.0	92.1
31	83.4	75.6	78.9				84.2	77.8	80.4				89.0	81.6	85.7			
Mean	78.6	74.5	76.7	80.0	74.8	77.4	83.4	74.5	78.6	85.3	77.9	81.4	90.8	82.1	86.5	91.9	84.2	87.8

	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	97.3	87.9	91.6	93.7	81.4	87.6	95.0	85.8	90.1	93.3	86.2	89.5	85.8	82.7	84.2	83.7	74.4	80.0
2	92.7	85.9	88.6	93.8	83.4	88.9	92.5	87.1	89.9	91.3	82.1	87.0	83.0	77.1	80.8	85.8	80.6	83.5
3	91.0	85.9	87.8	95.7	84.2	90.3	92.2	83.2	88.2	91.7	82.0	86.3	82.6	75.0	79.3	86.7	82.8	85.1
4	96.0	86.4	90.8	96.9	86.7	91.4	91.4	81.8	86.5	87.4	81.9	85.3	84.5	72.9	81.5	88.1	83.0	85.3
5	97.7	84.9	91.7	94.4	89.5	91.8	94.5	81.7	88.0	87.1	78.7	82.8	81.2	72.9	78.3	85.2	82.9	84.1
6	94.2	88.8	91.0	95.8	89.4	92.8	93.6	83.2	88.5	87.7	77.5	82.7	83.5	75.0	79.3	84.3	82.6	83.6
7	93.3	86.9	90.4	96.1	88.8	92.9	95.4	83.7	89.4	86.0	80.9	83.6	85.3	79.9	83.4	83.2	81.7	82.4
8	93.0	84.8	88.6	96.1	86.8	92.1	96.8	81.8	89.6	87.3	80.5	84.4	86.2	79.9	83.7	82.4	81.4	82.0
9	90.8	85.0	87.7	99.4	84.2	92.0	93.7	83.9	88.3	88.1	77.3	82.1	85.3	79.7	83.6	81.7	79.2	80.5
10	93.1	84.0	88.0	97.2	88.7	92.7	89.3	83.1	87.0	87.9	77.1	81.9	84.2	75.8	80.5	82.2	78.9	80.4
11	91.3	84.5	87.8	99.1	85.5	92.8	93.2	81.1	87.2	90.9	76.1	82.7	84.7	80.8	82.7	83.6	82.2	83.0
12	89.9	86.9	88.3	04.2	90.3	96.6	91.8	83.8	88.7	88.9	78.9	84.9	85.8	82.1	83.9	83.6	81.4	82.4
13	92.1	86.5	88.5	96.2	88.9	93.1	91.9	80.6	86.5	88.3	84.4	86.5	86.7	83.8	85.2	84.9	81.7	83.1
14	92.2	86.1	88.5	96.1	85.6	90.7	92.4	83.4	87.7	84.5	82.3	83.3	85.9	83.9	84.8	86.1	81.5	83.6
15	93.5	85.1	89.1	95.2	84.0	89.7	93.7	86.3	88.8	84.5	82.1	83.3	86.3	83.5	84.7	82.9	80.4	81.6
16	91.8	85.0	88.6	93.8	85.1	89.5	91.1	86.3	88.5	87.8	78.8	83.3	85.5	78.8	82.3	84.9	81.7	83.5
17	92.1	87.1	89.5	93.7	84.8	89.6	89.3	84.6	87.0	85.1	82.3	83.9	81.9	78.7	80.5	82.7	78.6	81.7
18	92.4	86.3	88.8	94.3	86.2	90.4	92.0	81.3	87.2	86.0	82.4	84.3	83.7	80.7	82.2	80.6	78.7	79.8
19	93.9	84.5	88.9	93.2	82.4	88.5	89.9	82.7	87.1	87.6	83.3	85.2	83.1	78.4	81.1	81.6	78.5	80.3
20	94.2	86.9	90.6	93.9	88.1	90.7	91.9	85.0	88.3	87.2	83.4	84.9	82.3	75.6	79.4	81.0	73.5	78.9
21	94.2	86.0	90.5	91.2	86.2	88.0	88.9	86.0	87.5	86.9	84.1	85.5	81.8	79.8	80.9	81.4	72.7	77.1
22	92.8	86.7	88.7	90.9	86.0	88.2	89.0	85.4	86.7	86.6	84.1	85.3	80.5	78.2	79.6	83.4	81.1	82.4
23	93.0	85.7	88.9	91.0	84.4	88.2	89.1	82.5	86.0	87.8	81.6	85.2	80.5	78.0	79.4	83.9	77.2	80.3
24	93.0	84.6	89.1	92.7	87.9	90.0	89.6	81.0	85.4	87.6	80.4	84.6	82.4	79.0	80.8	82.6	78.5	80.6
25	96.6	84.8	90.4	93.4	87.1	89.8	91.2	81.8	86.0	88.0	82.9	85.4	82.2	76.2	80.1	81.1	76.3	79.0
26	91.7	86.3	88.7	92.0	83.3	88.3	91.9	81.7	85.8	86.4	81.6	84.6	83.4	74.9	81.1	84.1	74.9	78.9
27	90.9	85.9	88.0	93.6	82.6	88.3	89.9	80.9	85.3	86.1	81.6	83.7	85.0	82.3	83.9	83.6	76.9	79.5
28	94.4	84.6	89.2	92.4	85.8	89.2	88.2	82.0	85.3	84.0	78.4	81.7	86.2	81.6	84.0	81.3	76.3	78.9
29	91.7	85.2	88.2	93.0	87.1	89.9	88.6	80.6	85.1	84.9	75.4	81.1	85.2	79.1	82.8	80.6	76.5	78.5
30	92.2	85.4	89.0	93.9	88.0	90.9	91.2	85.7	88.3	85.0	75.6	81.4	85.9	79.2	83.8	78.7	76.3	77.5
31	89.2	83.3	87.1	94.0	86.3	89.5				84.3	74.6	80.6				79.1	75.5	77.3
Mean	93.0	85.7	89.1	94.7	86.1	90.5	91.6	83.3	87.5	87.3	80.6	84.1	84.0	78.9	81.9	83.1	79.0	81.1

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	90.1	6.7	52.5	4.2	87.3	7.1	85.4	9.3	83.5	8.8	68.6	8.4	83.3	17.9	81.3	13.5	76.7	15.0	81.9	15.4	90.2	12.0	93.5	9.4
2	80.2	6.3	71.0	5.6	92.9	7.0	84.8	10.0	69.7	9.1	76.7	8.7	80.2	14.2	72.0	13.0	77.5	14.9	85.5	13.7	80.7	8.5	96.0	12.2
3	84.9	5.9	75.7	5.6	90.1	6.5	75.5	8.0	56.0	7.6	80.9	9.3	84.2	14.2	67.6	13.4	68.6	9.7	86.7	13.2	87.6	8.4	90.7	12.8
4	77.4	5.6	72.5	5.3	80.0	6.9	73.7	7.4	65.1	9.8	73.5	9.6	77.5	15.8	77.3	16.3	81.3	12.6	80.2	11.5	77.0	8.5	91.6	13.1
5	76.9	5.1	65.7	4.8	90.2	6.6	78.0	7.9	67.4	12.2	73.4	10.3	72.8	15.7	82.2	17.8	76.4	13.0	75.1	9.1	91.4	8.1	94.8	12.5
6	94.4	6.5	69.8	5.2	89.9	7.3	82.6	7.9	69.0	10.5	64.2	9.0	87.6	18.1	75.3	17.4	72.7	12.8	79.9	9.6	86.2	8.2	94.1	12.0
7	77.5	5.0	80.7	4.9	77.5	6.7	74.8	7.4	67.2	8.4	65.8	8.9	74.5	14.8	76.5	17.8	70.0	13.1	74.5	9.5	88.7	11.2	91.2	10.8
8	88.3	6.1	91.7	5.7	78.1	6.3	66.4	7.0	70.0	8.5	69.8	9.6	70.5	12.5	67.7	15.0	72.2	13.6	70.8	9.5	94.8	12.2	88.8	10.2
9	96.3	7.4	83.4	6.8	79.7	6.9	58.8	6.4	64.4	8.5	74.7	11.9	75.1	12.6	72.0	15.8	76.0	13.2	83.9	9.7	94.7	12.1	93.7	9.7
10	92.8	8.2	91.8	7.3	78.7	6.4	68.7	6.9	61.1	7.4	70.5	13.2	72.5	12.4	61.6	14.1	63.9	10.2	90.0	10.3	87.8	9.1	96.2	9.9
11	92.9	7.7	84.4	5.9	68.8	6.4	81.8	8.5	61.3	7.8	87.5	14.3	78.5	13.2	69.0	15.9	69.5	11.3	83.2	10.0	78.2	9.4	89.7	11.0
12	90.9	6.6	84.0	5.8	74.1	7.6	85.5	9.6	68.0	8.4	87.9	14.1	93.2	16.2	67.7	19.7	76.5	13.6	94.0	13.1	82.9	10.8	89.0	10.5
13	97.5	6.3	71.2	4.9	81.2	8.1	74.5	7.5	64.0	8.7	88.2	14.4	79.1	13.4	73.2	17.2	81.1	12.6	94.0	14.6	88.3	12.6	91.6	11.3
14	98.0	6.6	86.5	5.6	80.9	7.0	67.1	6.5	80.3	11.6	86.0	14.8	75.9	13.4	69.5	14.1	63.7	10.7	80.3	10.1	79.4	11.0	92.8	11.9
15	97.9	7.6	69.3	4.4	67.0	5.7	66.3	6.3	94.5	14.4	82.7	13.6	69.9	12.8	80.1	15.2	74.3	13.3	75.3	9.4	89.5	12.3	96.2	10.8
16	94.9	9.4	77.3	5.1	68.1	6.0	75.3	8.5	84.7	13.3	87.0	13.9	84.6	15.0	68.7	12.9	82.0	14.5	81.3	10.2	91.3	10.7	89.6	11.4
17	92.3	8.9	93.9	8.3	67.8	6.1	86.2	10.1	80.8	12.8	83.8	13.1	80.5	15.1	70.7	13.4	89.3	14.3	95.0	12.4	98.4	10.2	91.0	10.2
18	84.7	7.5	88.5	9.8	80.6	6.4	73.1	9.4	83.3	12.8	75.8	12.0	80.3	14.4	64.7	12.8	83.5	13.5	89.6	12.0	89.7	10.4	98.6	9.7
19	97.8	6.7	91.8	9.4	84.1	7.3	67.1	7.4	82.1	12.7	90.3	14.4	71.0	12.8	73.7	13.0	84.4	13.6	88.6	12.6	82.9	8.9	81.6	8.3
20	93.4	6.1	90.3	9.1	89.3	8.2	70.7	8.0	70.4	11.6	79.8	14.4	77.8	15.7	83.9	17.0	78.8	13.7	89.8	12.5	89.7	8.6	85.5	7.9
21	92.0	6.8	90.5	10.9	85.7	7.4	62.8	8.0	72.8	12.8	81.5	15.3	71.7	14.3	78.2	13.3	79.2	13.1	90.6	13.1	84.2	9.0	94.7	7.7
22	89.1	7.2	86.2	10.5	83.3	7.1	55.9	7.4	79.2	13.2	78.4	14.4	85.8	15.3	70.4	12.2	80.7	12.7	95.5	13.7	85.0	8.3	94.4	11.1
23	92.4	6.6	81.4	9.2	82.1	8.1	72.4	8.5	83.0	15.8	75.5	13.6	77.6	14.0	89.6	15.5	84.1	12.6	94.5	13.4	89.5	8.6	97.2	9.9
24	86.7	6.2	84.4	8.8	83.5	8.8	70.4	9.1	76.3	17.4	79.5	16.7	73.2	13.4	77.7	15.1	91.5	13.2	89.4	12.2	91.5	9.7	80.2	8.4
25	80.7	6.2	86.6	8.2	75.5	8.2	55.0	6.1	66.9	18.4	77.7	17.9	73.1	14.5	68.3	13.1	88.4	13.2	91.4	13.2	97.7	9.9	78.9	7.4
26	83.6	6.6	88.6	8.2	76.5	8.2	65.6	6.8	59.4	12.7	70.2	17.5	75.8	13.5	69.6	12.1	87.3	12.9	80.6	11.0	93.3	10.1	90.0	8.4
27	89.0	9.5	90.7	8.7	63.7	5.8	84.8	9.7	79.3	13.8	76.0	16.0	79.0	13.5	72.8	12.7	96.0	13.7	93.5	12.0	86.3	11.3	77.3	7.5
28	82.6	9.8	79.3	7.7	86.6	9.9	77.7	8.7	61.7	9.9	84.7	17.2	70.8	13.0	73.1	13.5	72.1	10.3	93.5	10.5	89.5	11.8	82.2	7.6
29	82.1	10.1			81.9	10.5	70.0	8.0	69.3	11.8	69.9	16.3	82.3	14.2	92.0	17.7	84.5	11.9	87.9	9.5	96.2	11.7	80.9	7.3
30	90.1	9.3			76.2	8.6	91.1	10.7	66.2	10.5	79.3	17.5	73.4	13.3	75.5	15.5	83.7	14.6	88.0	9.7	86.7	11.2	90.2	7.6
31	64.3	6.0			69.4	7.1			63.7	9.4			90.7	14.6	74.2	13.9			92.4	9.6			85.5	7.1
Mean*	88.1	7.1	81.4	7.0	79.7	7.3	73.4	8.1	71.6	11.3	78.0	13.3	78.1	14.3	74.1	14.8	78.7	12.9	86.3	11.5	88.3	10.2	89.9	9.9

* 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	
	per cent.																									
Jan.	92.0	92.2	92.1	91.0	90.7	90.3	90.2	90.8	91.2	90.2	88.5	87.2	85.5	83.9	81.3	80.7	82.5	84.7	86.3	87.5	88.1	88.5	89.9	90.2	90.5	88.1
Feb.	84.4	84.6	85.0	85.8	86.0	86.4	86.5	86.1	86.5	84.8	82.6	79.2	76.1	73.5	72.6	70.9	71.2	75.1	77.9	81.5	83.3	83.7	84.6	84.5	85.9	81.4
Mar.	89.2	90.2	91.9	92.2	92.9	93.9	91.6	93.1	91.1	85.7	81.0	74.0	68.2	63.8	61.3	62.2	60.1	62.0	66.5	72.6	77.6	80.5	84.8	86.7	88.8	79.7
Apr.	82.3	84.3	85.7	86.6	87.0	88.0	87.2	86.2	81.0	74.8	69.8	64.9	61.8	58.9	56.8	58.1	57.5	59.1	61.5	65.9	71.5	74.7	77.8	80.1	82.6	73.4
May	81.6	84.0	85.6	85.8	87.2	87.1	83.9	80.3	76.8	71.2	69.2	66.3	62.7	60.1	57.3	56.7	56.1	56.5	58.1	61.9	66.1	70.7	75.6	78.4	81.3	71.6
June	86.7	89.6	89.4	90.9	90.4	90.0	87.4	84.0	79.8	76.4	73.8	70.9	67.3	66.9	64.6	64.8	66.2	66.9	69.2	72.2	76.4	78.7	83.0	86.3	86.9	78.0
July	87.6	89.4	91.1	91.9	92.2	91.3	88.4	85.2	80.7	77.4	72.9	69.1	69.1	68.5	67.3	66.1	66.2	64.4	66.6	68.5	73.9	78.1	82.5	85.3	87.9	78.1
Aug.	85.8	86.5	88.3	89.2	90.6	91.5	89.6	86.3	79.4	72.4	66.5	63.4	60.7	57.5	57.4	57.5	57.5	58.7	60.7	65.7	72.5	76.5	80.5	83.2	85.3	74.1
Sept.	88.6	89.6	90.7	91.7	92.7	92.3	91.3	90.9	86.8	80.4	74.7	69.1	65.2	62.0	60.1	59.6	60.9	63.7	68.9	76.4	80.1	83.2	86.1	87.8	88.8	78.9
Oct.	91.3	91.7	92.2	92.5	92.6	93.0	93.5	92.5	90.4	86.7	82.8	79.0		76.0	73.6	73.7	75.2	78.7	82.2	86.1	87.1	87.7	89.9	91.1	91.2	86.3
Nov.	91.0	91.6	91.5	91.9	92.3	91.6	91.2	91.5	92.3	90.6	88.4	85.3	83.9	82.4	81.5	81.7	83.0	84.5	86.5	88.1	89.3	89.0	89.9	90.3	91.4	88.3
Dec.	92.7	92.2	92.3	92.2	92.8	92.7	92.3	92.5	92.9	91.8	91.0	88.7	85.7	83.8	83.3	83.9	85.8	87.5	89.1	89.9	90.5	90.8	91.4	92.3	92.3	89.9
Annual	87.8	88.9	89.7	90.2	90.6	90.7	89.4	88.4	85.9	82.2	78.8	75.2	72.1	69.8	68.1	68.0	68.5	70.1	72.8	76.3	79.7	81.8	84.7	86.3	87.8	80.7

VAPOUR PRESSURE

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

161 KEW OBSERVATORY: $h_t = 3.0$ m.

	Hour G.M.T.																								Mean*
	0	1	2	3	4	5	6	7																	

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	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	0.8	1.1	...	...	...	...	...	...	...	12.5	3.8	39	7.7	12.2	...	2.9	0.9	37
2	...	...	...	0.2	0.2	...	...	...	...	1.9	1.8	18	...	...	...	1.8	2.0	10
3	0.2	0.1	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3	2.1	6
4	...	...	...	...	...	...	...	...	...	0.5	0.6	...	...	...	...	...	...	...
5	1.4	1.9	...	...	...	...	...	...	...	2.1	1.5	15	...	...	...	...	...	...
6	11.8	11.1	...	...	...	...	...	...	...	5.4	1.3	18	...	...	...	...	...	...
7	0.1	0.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	7.8	7.8	8	...	...	...	...	...	...	...	...	...	...	...	...
9	0.4	0.3	...	2.1	1.3	10	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	11.8	11.5	16	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	2.2	1.7	12	...	...	...	...	...	...	...	...	...	7.3	5.2	18
12	...	...	...	1.3	1.3	...	...	...	...	4.0	4.1	9	...	...	...	0.1	0.5	...
13	...	...	...	...	...	...	...	...	...	0.7	0.4	19	...	...	...	0.7	1.6	6
14	0.3	0.4	...	2.8	4.2	6	...	...	...	0.1	0.2	...	4.5	3.8	12	0.9	0.8	8
15	0.5	1.1	...	...	...	...	...	...	...	...	...	...	6.6	5.7	11	16.7	1.9	105
16	...	...	...	...	...	...	...	...	...	2.5	2.7	7	5.8	3.5	30	4.0	2.1	24
17	...	...	...	0.1	0.1	...	...	...	...	1.7	2.0	6	0.7	0.4	...	2.9	0.8	24
18	...	...	...	...	...	...	...	...	...	...	...	...	5.7	3.1	18	...	...	...
19	...	...	...	0.9	0.8	77	...	...	...	...	...	...	0.1	...	...	2.0	1.8	9
20	...	...	...	...	...	...	...	...	...	...	...	...	0.6	1.1	7	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.1	3.6	17
22	...	...	...	...	...	...	...	...	...	...	...	...	0.3	0.8	...	0.4	0.4	10
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	0.6	0.6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	0.1	0.1	6	...	...	...	3.1	2.6	28	...	...	...	0.6	0.6	...	...	...	...
27	0.6	1.0	...	...	...	...	...	...	...	3.7	2.5	9	5.7	1.4	47	...	...	...
28	...	...	...	...	...	...	2.4	2.2	10	2.5	1.2	19	...	...	...	0.5	1.0	6
29	...	...	...	...	...	...	...	...	...	2.4	2.7	6	...	...	...	...	...	...
30	0.7	0.4	12	...	...	...	5.4	2.9	45	16.3	10.4	15	1.2	0.5	30	...	...	...
31	4.0	1.4	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	21.5	19.6	-	29.2	28.9	-	10.9	7.7	-	56.3	35.2	-	39.5	33.1	-	46.6	24.7	-

	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	3.3	1.9	30	...	...	...	...	...	...	...	...	...	27.9	11.1	50	...	...	...
2	2.2	1.2	8	...	...	...	2.7	1.5	12	...	...	...	1.0	0.2	19	...	...	...
3	0.8	0.7	...	...	...	...	...	...	...	...	...	...	0.1	0.2	...	0.6	0.7	...
4	...	...	...	...	...	...	0.2	0.2	...	...	...	...	1.6	1.2	11	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.3	...	0.1	0.1	...
6	0.4	1.1	12	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.1	...
7	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.2	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	0.6	0.8	7	...	...	...
9	3.3	1.8	35	...	...	...	...	...	...	...	...	...	2.6	3.4	15	...	...	...
10	0.5	0.4	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	2.3	4.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	12.2	8.0	11	...	...	...	...	...	...	0.7	1.1	...	...	...	...	...	...	...
13	1.2	1.6	39	...	...	...	...	...	...	21.8	7.5	16	...	...	...	0.3	0.6	9
14	3.0	0.8	30	...	...	...	...	...	...	...	...	...	...	...	...	2.0	0.7	24
15	0.5	0.2	28	...	...	...	5.2	4.2	10	...	...	...	...	...	...	2.0	1.4	7
16	2.9	1.1	13	...	...	...	5.1	3.0	43	...	...	...	...	...	...	...	...	...
17	0.1	0.1	...	...	...	...	12.5	4.6	15	1.7	4.2	...	...	...	...	...	...	...
18	14.4	1.1	97	0.7	0.5	25	...	...	...	0.3	0.3	...	...	...	...	...	...	...
19	...	...	...	1.7	2.0	8	2.2	2.0	9	...	...	...	...	...	...	...	...	...
20	1.3	1.0	11	16.1	5.3	47	6.1	2.4	22	...	...	...	...	...	...	...	...	...
21	...	...	...	4.7	2.6	48	7.3	3.1	46	...	...	...	...	...	...	...	...	...
22	9.0	2.2	60	0.5	0.3	15	4.4	2.7	14	1.0	2.0	...	...	...	...	0.4	0.6	...
23	1.2	0.5	20	3.3	1.9	9	1.3	1.2	10	1.2	0.7	10	...	...	...	...	...	...
24	...	...	...	1.0	0.7	19	1.3	0.5	32	1.2	0.5	9	1.1	1.3	8	0.4	0.4	...
25	...	...	...	...	...	...	...	...	...	1.4	0.8	25	...	...	...	0.1	0.1	...
26	2.5	0.5	46	...	...	...	...	...	...	...	...	...	2.3	1.3	14	0.5	0.9	...
27	11.7	1.5	90	...	...	...	2.6	2.8	8	16.2	13.0	46	0.2	0.3	7	...	...	...
28	...	...	...	...	...	...	...	...	...	1.0	1.9	...	...	...	...	...	...	...
29	1.6	1.2	15	10.8	6.8	13	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	5.1	2.0	16	...	...	...	6.8	2.3	42	...	...	...	4.3	6.4	...
31	17.4	11.8	10	...	...	...	...	...	...	4.9	2.3	15	...	...	...	2.0	2.5	...
Total	91.8	43.4	-	43.9	22.1	-	50.9	28.2	-	58.2	36.6	-	37.6	20.3	-	12.8	14.5	...

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.	1.5	1.2	4.7	2.3	2.3	1.8	0.3	0.1	0.6	0.4	0.4	0.2	0.2	0.3	...	0.5	0.7	0.5	0.3	0.3	0.4	0.2	1.3	1.0		21.5					
Feb.	0.7	1.0	1.5	1.1	2.0	1.2	1.6	1.3	0.5	1.1	0.9	0.8	0.8	3.0	0.6	0.5	1.9	1.3	1.4	2.9	1.8	1.0	0.1	0.2		29.2					
Mar.	...	...	0.1	...	...	...	1.9	2.2	0.1	1.5	0.4	0.1	...	1.4	0.2	0.9	1.8	0.2	...	...	...	...	...	0.1		10.9
Apr.	2.3	0.9	0.1	0.2	1.1	1.8	3.2	0.4	0.2	0.6	1.3	4.2	2.7	3.8	4.8	6.3	1.8	6.6	3.1	2.7	1.9	1.4	2.2	2.7		56.3					
May	1.3	1.5	2.3	2.3	1.6	4.7	1.9	1.0	1.1	2.6	2.1	0.8	2.8	2.0	0.5	0.2	1.0	3.0	3.9	0.3	0.8	0.2	0.2	1.4		39.5					
June	0.5	0.3	0.8	0.3	0.4	1.5	1.1	1.2	0.1	...	0.4	...	4.9	2.1	3.1	7.3	10.6	3.6	2.7	0.2	0.3	0.7	1.6	2.9		46.6					
July	4.3	2.6	3.0	1.1	1.7	1.7	3.0	6.1	5.6	4.0	8.6	4.9	5.4	5.3	1.8	2.1	5.6	15.8	2.9	1.6	1.3	0.2	0.9	2.3		91.8					
Aug.	1.2	0.9	1.0	8.0	3.9	5.4	2.0	0.8	0.1	0.9	1.2	0.2	...	1.0	3.2	1.8	2.4	2.7	0.7	...	4.2	0.8	0.8	0.7		43.9					
Sept.	2.9	5.8	8.3	2.3	0.7	4.4	...	...	1.8	4.2	0.5	2.3	2.1	1.6	0.4	0.3	0.5	1.0	0.8	1.8	1.7	1.9	2.2	3.4		50.9			
Oct.	1.4	0.1	0.6	1.5	2.7	3.5	5.1	8.4	6.7	5.4	5.4	8.7	3.9	0.8	0.7	...	0.1	0.1	0.9	...	0.1	0.7	0.2	1.2		58.2					
Nov.	1.5	0.1	...	0.9	3.5	1.2	1.7	0.8	4.1	2.1	2.3	7.6	2.9	0.8	1.4	1.1	4.2	...	0.1	...	0.7	0.4	0.1	0.1		37.6					
Dec.	1.1	0.5	2.0	0.2	0.1	0.2	0.2	0.1	0.4	0.2	...	0.1	...	...	0.2	0.2	0.4	0.1	2.0	0.7	0.3	1.6	1.4	0.8		12.8			
Annual	18.7	14.9	24.4	20.2	20.0	27.4	22.0	22.4	21.3	23.0	23.5	29.9	25.7	22.1	16.9	21.2	31.0	34.9	18.8	10.5	13.5	9.1	11.0	16.8		499.2					

RAINFALL

Monthly and annual totals of duration 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.	1.3	0.9	1.7	1.0	1.3	1.0	0.7	0.6	0.5	1.4	0.6	0.3	0.5	0.6	...	1.0	1.4	0.8	0.2	0.8	0.3	0.3	1.2	1.2	19.6					
Feb.	0.4	1.0	1.3	1.2	2.1	1.3	1.6	0.5	0.9	1.2	1.4	1.0	1.0	2.6	1.1	0.8	1.7	1.6	2.0	1.8	1.2	0.7	...	0.5	28.9					
Mar.	...	...	0.3	...	...	...	1.2	1.6	0.1	0.9	0.3	0.1	...	0.6	0.3	1.0	1.0	0.3	...	...	...	...	...	...	7.7
Apr.	1.8	1.2	0.2	0.2	0.3	1.5	1.6	0.6	0.5	0.9	0.9	2.1	2.3	2.2	3.1	2.6	1.4	2.1	1.2	1.7	1.4	1.3	1.8	2.3	35.2					
May	0.7	2.1	2.3	2.8	2.6	2.6	2.4	1.1	1.9	1.8	1.8	1.0	1.8	1.8	1.0	0.3	0.6	1.1	0.8	0.3	0.3	0.2	0.4	1.4	33.1					
June	1.1	0.2	1.3	0.2	0.8	1.8	1.5	1.4	0.1	...	0.2	...	1.8	1.8	1.4	1.7	1.7	2.2	1.2	0.1	1.0	1.1	1.1	1.0	24.7					
July	2.3	3.1	3.0	1.9	1.3	2.2	1.8	2.8	2.7	2.1	2.0	2.0	1.7	2.1	0.9	1.1	0.8	1.7	0.9	1.6	1.5	0.8	1.3	1.8	43.4					
Aug.	0.5	1.0	1.3	1.0	2.3	2.7	1.7	0.6	0.1	0.3	0.7	0.2	...	0.7	0.9	1.1	1.1	2.3	0.4	...	1.4	0.6	0.5	0.7	22.1					
Sept.	2.7	3.2	2.3	1.4	0.7	1.1	...	...	1.0	1.0	0.8	1.0	0.8	0.8	0.6	0.2	0.5	1.0	1.0	0.5	1.0	1.4	2.2	3.0	28.2			
Oct.	0.7	0.4	1.0	1.6	2.6	3.8	2.0	2.3	2.3	2.5	3.9	4.0	2.9	2.0	1.6	...	0.2	0.4	0.5	...	0.1	1.1	0.2	0.5	36.6					
Nov.	0.9	0.3	...	0.4	0.7	0.7	1.1	0.7	1.1	0.9	1.4	3.4	2.7	1.2	1.2	1.0	0.7	...	0.2	...	0.6	0.7	0.2	0.2	20.3					
Dec.	1.5	0.6	1.1	0.5	0.1	0.2	0.1	0.1	0.4	0.4	...	0.2	...	...	0.2	0.5	0.8	0.3	1.1	1.0	0.8	1.6	1.9	1.1	14.5			
Annual	13.9	14.0	15.8	12.2	14.8	18.9	15.7	12.3	11.6	13.4	14.0	15.3	15.5	16.4	12.3	11.3	11.9	13.8	9.5	7.8	9.6	9.8	10.8	13.7	314.3					

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": February 20-March 25; August 1-17

"Partial drought": February 15-March 29; November 10-December 14

"Dry spell": January 7-30; February 15-March 25; August 1-18; September 28-October 12; November 27-December 13

Wet Periods

The following definitions are adopted by the British Rainfall Organization

A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0.2 mm. of rain or more
 A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1.0 mm. of rain or more

"Rain spell": No occasions

"Wet spell": No occasions

Rainfall Duration

Hours	0.1-1.0	1.1-2.0	2.1-6.0	6.1-12.0	>12.0
Number of days	56	40	33	9	2

Continuous or Heavy Falls

The fall of the longest duration occurred on July 31 when 14 mm. fell in exactly 10 hr.

Heavy Falls in short periods

None occurred in 1953

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 105 mm./hr. on June 15.

The maximum rate exceeded 50 mm./hr. on February 19; June 15; July 18, 22 and 27.

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_g (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	...	...	...	6.3	69	790	3.3	30	330	1.2	9	80	...	...	...	6.5	40	1160
2	2.1	27	200	2.8	31	310	...	...	120	2.1	16	130	9.7	65	1550	2.2	14	160
3	1.7	22	170	...	...	...	5.7	52	540	4.7	36	650	14.2	96	3220	...	...	...
4	...	...	...	3.9	42	520	3.8	34	540	8.4	64	1500	5.2	35	620	5.2	32	490
5	1.3	16	200	4.5	48	750	...	...	120	4.9	37	450	11.7	78	2310	1.2	7	170
6	...	...	...	4.4	47	640	2.2	20	240	5.2	39	880	10.1	67	1860	10.9	67	1760
7	0.3	4	30	3.6	38	430	2.5	22	200	9.8	74	1880	10.3	68	1690	3.9	24	380
8	...	...	...	0.1	1	30	7.3	65	850	7.5	56	850	4.3	28	450	8.0	49	1470
9	...	...	...	3.4	36	590	6.6	58	800	...	...	...	13.2	87	2460	10.4	63	2010
10	0.9	11	80	...	...	...	2.2	19	260	7.0	52	780	8.6	56	1770	10.7	65	1170
11	1.4	17	100	...	...	...	2.8	25	360	4.7	35	790	13.7	89	3260	0.9	5	80
12	1.1	13	100	0.3	3	...	1.7	15	80	...	...	20	11.6	75	1510	...	...	...
13	...	...	...	1.7	17	160	1.5	13	100	9.0	66	1400	10.8	70	1990	...	...	...
14	...	...	...	...	...	...	5.7	49	65	7.4	54	960	4.7	30	680	2.3	14	200
15	...	...	...	1.4	14	80	8.5	72	1230	3.8	28	480	...	...	...	4.5	27	640
16	...	...	...	3.3	33	410	8.6	73	1490	2.3	17	240	5.4	35	800	1.6	10	150
17	...	...	...	...	...	...	5.5	46	740	0.1	1	...	8.4	54	1180	2.3	14	170
18	5.9	70	640	0.6	6	30	...	...	10	4.5	32	410	0.7	4	90	9.2	56	1280
19	...	...	...	...	...	20	...	...	...	11.6	83	1610	3.6	23	250	0.1	1	...
20	3.3	39	390	3.2	31	520	...	...	150	8.1	58	1360	12.3	78	2590	7.0	42	960
21	...	...	...	...	...	...	2.1	17	190	12.2	86	2330	4.9	31	790	7.4	45	740
22	...	...	...	0.8	8	110	4.2	34	380	13.0	91	2710	5.3	33	770	12.4	75	2310
23	...	...	...	...	...	...	1.5	12	200	7.2	50	1130	4.9	31	650	3.7	22	490
24	...	...	...	7.0	67	1010	...	...	10	5.9	41	720	11.0	69	2050	5.1	32	440
25	3.4	39	340	4.6	44	710	7.3	59	650	7.8	54	890	13.8	86	2230	7.3	44	1250
26	3.0	34	290	1.1	10	150	4.5	36	380	9.9	68	1250	12.6	79	2500	12.0	73	1970
27	...	...	...	0.9	8	180	7.1	57	1150	1.9	13	170	0.8	5	60	11.0	66	1390
28	...	...	10	7.7	72	1030	0.5	4	10	2.2	15	210	11.6	72	2720	5.1	31	670
29	5.2	58	760	...	...	...	1.7	13	20	8.7	59	1180	2.8	17	370	12.9	78	2190
30	...	...	...	...	...	...	3.5	27	590	...	...	...	7.9	49	1180	10.6	64	1510
31	4.3	48	410	...	...	...	9.5	74	1640	...	...	...	5.6	35	490	...	...	...
Mean	1.09		120	2.20		300	3.54		460	5.70		840	7.73		1360	5.81		840

	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	2.8	17	320	5.5	36	610	11.0	81	2770	5.6	48	620	...	...	...	2.8	34	340
2	1.2	7	110	10.9	71	1620	4.7	35	950	5.6	49	1000	4.6	48	540	0.7	9	60
3	1.8	11	170	13.3	87	2230	7.5	56	1140	5.8	51	1000	4.9	52	680	0.1	1	10
4	5.5	33	440	7.5	49	1040	2.9	22	350	1.3	11	120	8.1	86	1430	2.5	31	250
5	13.7	83	2870	0.6	3	40	9.3	70	1760	7.5	66	1230	...	...	...	...	...	...
6	1.8	11	240	2.2	7	160	11.0	83	2220	6.9	61	1030	7.2	77	1190	...	...	...
7	7.0	43	930	0.6	3	60	11.5	87	2240	0.7	6	40	...	...	...	...	...	...
8	8.6	53	1150	11.2	75	2230	10.8	82	2320	3.2	29	360	...	...	...	...	...	...
9	8.1	50	1080	11.7	78	2440	5.1	39	430	7.4	67	1250	...	...	...	...	...	...
10	5.4	33	600	13.3	90	3020	4.0	31	290	5.2	47	620	6.9	76	1150	...	...	20
11	9.2	57	1490	12.4	84	2670	9.4	73	2030	6.5	59	1030	1.4	15	170	...	...	...
12	0.5	3	40	10.2	69	1900	4.3	33	320	...	...	...	0.9	10	90	...	...	...
13	3.5	22	400	9.3	63	1420	2.3	18	120	...	...	...	0.1	1	...	0.7	9	...
14	8.0	50	1070	12.0	82	2440	10.1	79	2230	...	...	...	...	...	...	...	...	...
15	11.5	71	1790	...	...	20	2.1	17	170	...	...	...	0.1	1	20	...	...	...
16	2.1	13	200	10.0	69	1590	8.2	65	1290	4.3	40	530	4.9	56	650	...	...	10
17	11.4	71	1530	12.1	84	2250	2.2	18	330	...	...	...	...	...	...	...	...	50
18	8.5	53	1260	11.2	78	2060	9.3	75	1560	...	...	...	...	...	...	...	...	...
19	9.5	59	1890	8.5	59	1290	4.5	27	790	0.3	3	...	5.4	63	740	...	...	...
20	6.7	42	690	3.7	26	370	9.7	79	1410	1.2	12	140	...	...	...	1.2	15	120
21	5.3	33	750	6.7	47	1250	5.8	47	570	...	...	...	...	...	...	...	...	...
22	2.9	18	230	8.6	61	1130	1.3	11	80	...	...	...	...	...	...	...	...	...
23	5.0	32	850	0.5	35	50	3.7	30	460	0.5	5	30	...	...	...	...	...	...
24	13.6	86	2890	8.6	61	1530	4.3	36	630	1.4	14	200	...	...	...	5.8	75	900
25	10.7	68	2520	9.9	71	1490	6.7	56	1230	5.6	56	700	0.3	4	30	3.9	50	390
26	9.6	61	1330	10.2	73	1730	7.2	60	1450	7.4	74	1140	2.2	26	-	0.3	4	30
27	5.9	38	750	8.6	62	1290	...	...	...	...	...	...	0.1	1	...	5.5	71	690
28	11.9	76	2310	6.2	45	730	8.3	70	-	0.5	5	50	2.5	30	240	4.0	51	430
29	3.6	23	260	...	...	...	4.2	36	-	2.9	27	260	0.9	11	150	4.3	55	440
30	6.9	45	970	5.8	42	1230	2.4	21	300	1.3	12	130	2.3	28	220	...	...	...
31	1.2	8	60	9.1	67	1320	...	...	...	...	...	10	...	...	...	1.0	13	90
Mean	6.56		1000	7.75		1310	6.13		1050	2.62		370	1.76		250	1.06		130
Annual Mean										4.34		670						

See Introduction for corrections to tabulated values of radiation.

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.	-	-	-	-	...	1.0	3.5	4.4	7.1		7.7	6.7	3.5	...	...	-	-	-	-		33.9	13
Feb.	-	-	-	...	0.3	5.3	9.1	10.2	10.9		7.4	7.2	5.6	4.4	1.2	...	-	-	-		61.6	22
Mar.	-	-	...	1.0	4.0	7.4	9.4	11.9	13.5		14.2	14.6	14.3	12.5	5.8	1.2	...	-	-		109.8	30
Apr.	-	...	1.1	8.7	11.8	14.6	14.3	15.6	16.5		16.1	14.9	15.6	17.1	12.9	10.2	1.7	...	-		171.1	41
May	...	0.4	9.6	13.2	14.1	15.5	17.8	17.9	18.8		18.4	20.7	19.5	20.9	20.8	17.5	12.9	1.7	...		239.7	50
June	...	0.4	4.3	8.1	10.1	11.5	13.0	13.1	15.6		15.2	14.7	17.2	13.5	12.9	13.2	8.9	2.7	...		174.4	35
July	...	0.9	9.0	14.4	15.0	14.8	14.6	15.9	15.5		16.3	16.0	14.4	12.8	13.6	14.5	12.3	3.4	...		203.4	41
Aug.	-	...	4.1	15.1	18.8	20.5	20.7	20.8	20.3		20.3	17.7	18.9	18.6	17.4	17.4	9.2	0.6	-		240.4	53
Sept.	-	-	...	2.5	14.1	17.5	17.3	19.5	17.1		17.5	17.1	19.5	16.9	13.4	9.9	1.2	0.3	-		183.8	49
Oct.	-	-	-	...	1.1	3.8	6.9	9.9	11.4		12.2	12.6	10.8	8.9	3.5	...	-	-	-		81.1	24
Nov.	-	-	-	-	0.2	4.1	6.9	8.6	7.1		7.9	6.8	6.5	4.4	0.3	-	-	-	-		52.8	20
Dec.	-	-	-	-	...	...	2.8	4.0	5.7		7.2	6.2	6.1	0.8	...	-	-	-	-		32.8	13
Annual	...	1.7	28.1	63.0	89.5	116.0	136.3	151.8	159.5		160.4	155.2	151.9	130.8	101.8	83.9	46.2	8.7	...		1584.8	35

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM
Monthly and annual totals between exact hours, local apparent time

168 KEW OBSERVATORY: h_g = 13.3 m.

	Hour L.A.T.																				Total
	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12		12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21		
	<i>joules per square centimetre</i>																				
Jan.	-	-	-	-	...	140	510	530	640		680	760	350	110	...	-	-	-	-		3720
Feb.	-	-	-	...	50	560	1300	1570	1790		950	900	660	490	210	...	-	-	-		8480
Mar.	-	-	10	220	580	1140	1380	1300	1750		1810	1800	1620	1510	1010	210	...	-	-		14340
Apr.	-	...	220	1080	1670	2020	2210	2130	2500		2660	2370	2590	2650	1650	1050	250	...	-		25050
May	...	160	1080	1850	2580	2850	3080	3660	3960		4170	4050	3840	3860	3280	2400	1130	130	...		42080
June	...	120	480	920	1330	1360	1860	2060	2490		2340	2370	2520	2340	1960	1770	970	310	...		25200
July	...	250	1210	2420	2320	2360	2420	2490	2590		2590	2720	2380	1720	1840	2010	1550	280	...		31150
Aug.	-	40	750	2100	3020	3730	3750	3880	4170		3740	3190	3740	3020	2690	2250	900	210	-		41180
Sept.	-	-	60	670	2010	2620	2550	3270	3040		3200	2890	3360	2690	1930	1060	80	-	-		29430
Oct.	-	-	-	20	190	680	1100	1670	1780		1670	1640	1410	940	350	30	-	-	-		11480
Nov.	-	-	-	-	90	620	900	1230	1160		1250	850	730	440	20	-	-	-	-		7290
Dec.	-	-	-	-	...	60	280	520	830		780	760	520	80	...	-	-	-	-		3830
Annual	...	570	3810	9280	13840	18140	21340	24310	26700		25840	24300	23720	19850	14940	10780	4880	930	...		243230

See Introduction for corrections to tabulated values.

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	3.9	14	8.1	24	3.4	9	6.0	20	4.7	16	4.9	19	4.3	13	1.1	7	4.2	12	3.5	12	7.2	22	1.6	9
2	2.1	9	5.9	19	0.8	3	6.9	19	4.5	15	5.4	19	4.0	11	1.2	7	6.1	17	1.4	6	3.6	17	2.4	9
3	3.6	13	5.1	13	0.6	3	2.7	9	3.9	12	4.1	14	2.6	10	1.4	11	4.6	15	0.9	6	2.0	16	4.6	15
4	4.5	12	3.2	14	0.7	3	2.8	15	3.8	12	1.3	9	1.1	9	4.0	13	0.9	4	2.9	9	3.2	13	2.4	14
5	2.0	9	4.2	14	2.1	8	5.7	17	1.9	8	2.8	9	2.3	10	2.6	11	1.5	7	2.0	9	1.0	5	3.9	9
6	2.8	12	3.7	13	1.5	5	5.0	15	2.0	9	3.2	11	4.3	11	2.2	11	2.9	11	1.4	10	1.6	6	4.1	9
7	4.5	14	1.8	11	3.0	14	2.1	9	3.1	10	4.3	12	5.3	15	0.5	5	3.1	11	2.5	9	6.3	17	3.1	10
8	1.5	9	2.4	15	1.7	9	3.2	11	2.7	10	3.7	10	5.0	16	2.6	10	1.3	6	1.7	6	4.2	17	0.9	4
9	1.5	5	4.7	16	2.1	10	5.8	15	2.3	11	3.4	12	3.9	16	0.8	6	2.9	11	1.0	6	3.7	15	0.9	3
10	1.3	7	5.4	20	0.9	7	2.9	11	4.3	12	2.1	11	2.0	8	1.7	6	3.8	15	1.0	7	2.1	9	1.0	3
11	2.3	9	7.9	19	4.4	17	3.6	16	1.7	8	1.7	8	3.4	14	2.5	10	3.4	13	1.3	8	4.0	14	2.8	7
12	1.6	7	7.9	17	4.6	16	4.2	17	3.3	10	1.6	7	4.3	14	2.4	14	3.0	11	0.8	4	4.4	13	3.0	8
13	0.9	4	5.6	18	2.2	7	3.5	17	5.6	15	0.8	5	4.7	17	4.5	14	2.1	8	2.7	11	4.2	14	2.6	8
14	1.2	4	2.3	9	4.0	13	4.4	21	4.7	20	2.0	14	4.5	15	2.0	10	4.0	13	5.4	16	5.0	14	2.3	10
15	2.8	8	2.8	7	3.1	11	3.5	12	5.7	17	2.6	13	3.9	15	1.9	10	2.5	10	2.7	12	3.3	11	1.5	9
16	0.6	3	1.1	5	1.5	9	2.6	11	6.0	20	3.2	11	3.4	15	3.0	10	3.4	14	0.7	4	1.3	8	4.4	12
17	0.8	4	2.2	8	1.8	7	2.4	8	4.9	17	2.3	9	5.0	18	4.0	15	2.8	16	0.8	7	0.4	3	2.4	7
18	2.0	9	2.0	10	4.4	11	4.7	15	3.0	12	2.1	11	3.0	14	4.4	14	2.6	11	3.0	9	0.9	3	0.9	5
19	1.0	4	2.9	9	3.2	10	6.4	13	4.9	16	5.0	14	3.8	13	3.5	13	3.4	15	2.2	8	1.6	7	4.7	15
20	0.7	3	4.2	14	3.2	7	4.9	11	2.8	13	4.6	16	5.5	15	4.8	16	4.1	13	0.9	4	1.1	5	1.7	8
21	0.8	3	4.7	12	3.9	8	4.5	11	2.8	11	3.9	13	3.7	15	4.3	19	8.4	24	1.3	6	1.7	7	1.2	8
22	1.1	6	4.1	12	3.5	8	4.6	12	3.2	12	2.6	11	4.0	16	5.0	17	6.3	20	0.9	3	1.8	5	2.6	8
23	1.3	6	4.8	13	1.2	4	2.8	8	4.4	13	0.9	6	3.3	12	4.8	17	2.8	11	1.9	11	2.5	7	1.6	7
24	1.9	9	3.6	12	0.5	3	1.7	10	2.1	8	1.6	8	3.6	15	5.3	19	1.5	7	2.9	12	2.2	8	3.7	13
25	2.2	8	1.4	9	0.8	5	2.8	11	2.9	13	1.5	6	3.0	16	4.1	13	1.1	5	2.1	10	0.7	5	2.8	10
26	2.5	11	0.3	2	3.2	16	4.4	14	3.6	13	1.9	9	5.6	19	2.2	10	0.9	5	4.2	16	4.3	15	3.2	14
27	5.9	16	0.9	7	2.6	10	3.6	14	3.7	13	3.9	13	4.1	15	1.9	8	1.0	7	4.2	16	5.8	16	3.3	13
28	4.6	15	3.4	11	6.9	19	4.0	14	3.3	15	4.9	13	2.8	10	2.9	10	3.3	12	0.8	6	2.3	9	3.1	12
29	3.7	13			9.5	23	5.4	17	3.2	15	5.3	14	2.6	12	4.3	14	3.9	15	0.8	4	2.4	10	2.2	9
30	4.9	18			7.2	19	5.0	19	4.5	18	4.5	13	2.6	11	5.5	15	5.1	18	2.6	11	3.3	11	0.7	3
31	9.6	29			5.7	16			3.3	13			2.6	15	5.2	15			3.7	17			3.5	12

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

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

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

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES							
	More than 17.1 m./sec.		10.8 to 17.1 m./sec.		5.5 to 10.7 m./sec.		1.6 to 5.4 m./sec.		Less than 1.6 m./sec.		No record		Highest hourly wind		Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Year from N.	Speed	Hour ended	Speed	Date	
Jan.	-	0	1	3	72	345	324	0	300	11	31 15	29	31 17 55			
Feb.	-	0	0	0	171	347	154	0	340	10	1 10	24	1 00 35			
Mar.	-	0	1	4	111	357	272	0	220	12	29 14	23	29 13 25			
Apr.	-	0	1	1	182	453	84	0	220	11	1 14	21	14 12 45			
May	-	0	0	0	126	506	112	0	225	9	17 14	20	14 12 45			
June	-	0	0	0	77	460	183	0	320	8	1 14	19	2 15 10			
July	-	0	0	0	125	511	108	0	210	10	26 14	19	26 16 40			
Aug.	-	0	0	0	114	426	204	0	215	8	23 17	19	21 14 50			
Sept.	-	0	1	1	113	399	207	0	215	11	21 14	24	21 13 50			
Oct.	-	0	0	0	43	343	358	0	170	9	27 06	17	31 22 40			
Nov.	-	0	0	0	114	375	231	0	180	10	1 14	22	1 13 50			
Dec.	-	0	0	0	33	482	229	0	205	8	3 21	15	3 20 50			
Year	-	0	4	9	1281	5004	2466	0	220	12	Mar. 29 14	29	Jan. 31 17 55			

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

172 KEW OBSERVATORY

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	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	75.8 79.6	77.2 79.1	78.3 79.2	80.1 79.7	82.3 81.6	87.5 85.4	92.2 87.2	88.8 88.0	90.2 88.8	87.6 87.4	82.9 85.3	81.4 83.3
2	75.9 79.6	76.8 79.0	77.7 79.2	80.3 79.8	82.1 81.8	86.7 85.4	91.6 87.4	88.8 88.0	88.6 90.8	87.4 87.6	82.8 85.2	81.3 83.3
3	75.8 79.4	76.4 78.8	77.2 79.2	80.7 79.9	82.9 81.8	86.0 85.5	91.2 87.5	89.6 88.0	90.0 88.8	87.3 87.4	81.6 85.2	81.7 83.3
4	75.6 79.4	76.1 78.9	77.0 79.2	80.6 79.9	83.4 81.8	85.6 85.3	90.4 87.6	88.9 88.8	87.4 87.4	82.1 85.1	82.6 83.2	
5	75.3 79.4	75.7 78.8	76.9 79.2	80.4 80.1	84.1 81.8	86.0 85.2	90.9 87.7	90.8 88.0	89.9 88.8	85.9 87.4	81.2 84.8	82.7 83.2
6	74.9 79.3	75.6 78.7	77.0 79.2	80.5 80.2	85.7 82.2	86.1 85.2	91.8 87.6	90.9 88.1	89.3 88.8	85.0 87.4	80.4 84.8	82.9 83.2
7	74.9 79.3	75.2 78.6	76.6 79.2	80.0 80.2	85.8 82.2	86.6 85.1	91.6 87.7	91.3 88.1	89.3 88.7	85.2 87.3	80.7 84.5	82.9 83.2
8	74.7 79.1	74.6 78.6	76.8 79.1	80.4 80.3	85.5 82.3	86.4 85.1	90.5 87.9	91.6 88.2	88.9 88.7	85.3 87.2	81.4 84.3	82.6 83.3
9	74.8 79.1	74.5 78.5	76.2 79.1	80.7 80.3	84.6 82.5	86.8 85.1	90.6 87.9	91.3 88.4	89.2 88.6	84.8 87.1	82.7 84.2	82.5 83.3
0	75.6 79.0	75.3 78.4	76.5 79.1	80.1 80.4	85.1 82.7	87.8 85.2	89.8 87.9	92.5 88.4	89.3 88.6	84.3 86.8	81.8 84.2	82.1 83.3
1	76.1 79.0	75.6 78.3	76.7 79.1	80.1 80.4	84.6 82.9	88.3 85.1	90.1 87.9	92.2 88.5	87.9 88.8	84.1 86.7	81.7 84.1	82.0 83.3
2	76.3 78.9	75.3 78.2	77.4 79.0	81.1 80.4	84.8 82.9	87.9 85.2	90.2 87.8	92.8 88.7	89.0 88.4	84.0 86.6	82.0 84.0	82.4 83.3
3	75.4 78.9	75.2 78.2	78.3 79.0	80.7 80.6	84.8 82.9	87.9 85.2	89.5 87.8	93.3 88.8	88.1 88.4	85.6 86.5	82.6 83.9	82.3 83.2
4	75.4 79.0	75.0 78.1	77.7 78.9	80.9 80.7	85.5 83.0	87.9 85.3	89.4 87.8	92.5 88.9	88.1 88.4	85.4 86.4	83.1 83.9	82.2 83.3
5	75.4 78.9	74.7 78.1	77.8 79.0	80.3 80.7	85.8 83.0	88.1 85.5	89.4 87.7	92.1 88.9	88.4 88.2	84.7 86.3	83.1 83.9	82.3 83.2
6	76.8 78.8	74.5 78.1	77.2 79.1	80.2 80.7	85.8 83.2	88.4 85.6	89.6 87.7	91.3 89.1	88.7 88.2	84.3 86.3	82.9 83.8	82.3 83.3
7	77.2 78.8	74.6 78.0	76.8 79.1	81.4 80.7	85.8 83.1	88.4 85.7	89.8 87.7	91.2 89.1	88.3 88.1	84.6 86.2	82.3 84.0	82.3 83.3
8	77.4 78.9	76.5 78.0	77.1 79.1	81.7 80.8	85.7 83.4	88.1 85.7	89.9 87.7	91.3 89.2	87.5 88.1	84.7 86.0	82.1 84.0	81.5 83.2
9	76.7 78.9	77.4 78.0	77.4 79.1	81.6 80.8	86.2 83.5	88.3 85.8	89.7 87.8	90.9 89.1	87.7 88.2	84.8 86.0	82.1 83.9	81.3 83.2
0	76.2 79.0	77.4 78.1	77.8 79.1	81.5 80.9	85.9 83.6	88.5 85.8	90.4 87.8	91.2 89.1	88.0 88.0	85.0 86.0	81.2 83.9	81.1 83.2
1	75.5 79.0	78.7 78.1	78.0 79.1	81.8 81.0	87.4 83.7	89.1 85.8	90.3 87.8	90.8 89.0	88.2 87.9	85.1 85.9	81.4 83.7	80.2 83.2
2	75.9 79.0	79.6 78.3	78.0 79.1	82.2 81.2	87.4 83.8	89.7 86.2	90.7 87.8	90.2 89.1	87.7 87.9	85.3 85.8	81.3 83.7	80.4 83.1
3	75.7 79.0	79.8 78.4	78.2 79.1	82.4 81.1	87.8 83.9	89.7 86.2	89.9 87.9	89.4 89.0	87.3 87.9	85.1 85.8	81.1 83.7	80.9 83.0
4	75.7 78.9	79.7 78.6	78.2 79.2	82.5 81.2	88.3 84.1	90.4 86.8	89.8 87.9	90.1 88.9	86.8 87.9	85.0 85.9	81.1 83.6	80.6 82.9
5	75.7 78.9	78.9 78.9	78.1 79.2	82.9 81.3	89.9 84.2	91.1 86.3	90.1 87.9	90.2 89.0	87.1 87.8	85.2 85.8	81.2 83.4	80.0 82.8
6	75.6 78.9	78.5 79.1	78.5 79.2	82.4 81.3	88.3 84.4	92.1 86.7	90.5 87.9	90.1 88.8	87.3 87.8	85.0 85.8	80.8 83.4	78.8 82.7
7	76.3 78.8	78.3 79.1	78.6 79.4	82.4 81.4	90.5 84.7	92.1 86.7	89.8 87.9	89.5 88.8	87.3 87.7	85.1 85.8	81.4 83.4	79.6 82.7
8	77.8 78.8	78.5 79.1	78.8 79.3	82.3 81.4	89.0 85.1	91.8 86.9	89.1 87.9	89.9 88.8	87.3 87.6	84.1 85.8	82.1 83.4	78.4 82.5
9	78.3 78.7		80.2 79.4	82.0 81.6	89.3 85.2	91.6 87.1	89.8 87.9	90.1 88.8	86.1 87.6	83.8 85.7	81.6 83.3	78.6 82.4
0	78.7 78.9		80.7 79.5	82.7 81.7	88.6 85.3	92.1 87.2	89.8 88.0	90.6 88.7	86.9 87.5	83.1 85.7	82.4 83.3	78.1 82.3
1	78.9 79.1		79.9 79.6		88.1 85.3		89.9 87.9	90.1 88.7		82.1 85.4		78.4 82.2
an	76.1 79.0	76.6 78.5	77.8 79.2	81.2 80.7	86.2 83.3	88.6 85.8	90.3 87.8	90.8 88.6	88.2 88.3	85.0 86.4	81.8 84.1	81.2 83.1
Year							83.7 83.8					

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

173 KEW OBSERVATORY

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	66.6	71.7	71.7	76.8	78.7	78.0	87.5	77.1	80.2	86.3	82.3	70.3
2	72.8	71.3	68.4	77.3	78.3	76.8	84.8	78.1	85.7	75.9	76.3	73.7
3	70.6	71.8	68.0	74.9	71.6	79.6	85.4	79.4	82.1	77.6	67.4	76.8
4	70.8	66.1	66.4	70.3	70.4	77.3	81.1	82.9	76.3	77.4	78.4	81.1
5	65.1	65.4	64.1	72.4	73.8	74.9	78.7	86.6	77.6	70.9	68.8	82.0
6	70.8	72.4	75.2	76.0	78.0	75.2	87.1	84.8	78.1	72.1	67.4	82.9
7	69.6	61.6	65.9	71.4	77.6	74.9	87.7	83.8	76.4	76.3	74.1	80.2
8	71.2	62.3	64.5	68.3	74.7	76.8	81.4	85.8	76.6	81.9	71.9	80.8
9	66.7	71.9	64.0	78.1	70.8	79.5	83.6	80.0	78.6	72.9	83.7	80.1
10	72.8	72.8	64.7	74.3	76.2	76.3	79.3	83.9	82.4	72.9	68.5	78.8
11	71.9	73.9	66.2	66.4	69.1	78.2	79.8	80.8	73.7	73.7	73.3	79.4
12	75.2	71.9	73.0	76.7	70.3	85.4	85.1	86.3	76.6	73.5	79.6	81.1
13	66.4	72.7	78.1	72.9	74.7	85.6	85.4	89.5	75.7	86.4	81.2	80.8
14	70.8	70.3	67.0	71.9	81.6	85.1	84.6	79.9	78.2	82.5	83.7	76.5
15	73.6	69.6	67.5	72.4	84.3	81.5	82.5	79.6	83.6	80.4	81.9	75.8
16	77.9	64.3	63.6	72.4	84.9	83.7	79.6	79.1	84.8	72.7	73.6	80.3
17	78.1	70.9	65.2	77.0	82.9	83.2	83.9	79.7	81.8	80.4	73.4	76.9
18	74.4	80.2	71.2	78.6	74.7	78.1	83.2	84.1	75.8	81.2	74.8	72.4
19	67.4	75.7	75.8	75.6	81.8	78.8	80.8	77.4	76.5	82.1	70.2	75.4
20	70.3	69.8	76.4	75.9	73.2	85.6	85.4	86.6	80.0	81.7	70.8	76.9
21	65.6	80.8	74.7	73.7	82.4	81.1	81.1	83.9	84.1	83.5	79.1	70.9
22	67.7	80.8	74.9	75.7	78.6	84.6	85.2	83.2	84.1	84.0	78.6	80.1
23	65.8	80.1	71.3	76.0	86.9	76.4	83.9	80.8	78.5	77.1	77.7	71.9
24	73.6	76.2	70.3	72.0	81.1	80.8	80.2	87.9	75.4	77.1	77.4	74.6
25	70.8	68.2	69.6	73.1	85.7	88.6	79.0	84.3	77.6	77.1	73.5	75.2
26	67.9	68.3	67.6	69.2	86.8	82.3	83.3	78.2	77.6	76.3	70.2	69.7
27	73.9	70.0	68.8	78.9	84.3	83.6	82.5	77.0	77.6	82.4	80.9	73.6
28	78.2	70.8	72.7	74.1	80.2	87.1	80.6	81.3	80.7	72.6	80.4	70.9
29	78.0		81.3	75.1	78.9	85.1	81.1	85.8	74.1	75.8	74.1	68.5
30	74.7		80.7	80.1	81.8	87.1	82.6	89.7	81.8	70.3	81.6	72.3
31	75.6		74.2		78.1		85.2	82.9		69.3		75.8
Mean	71.4	71.5	70.4	74.3	78.5	81.0	83.0	82.6	79.4	77.6	75.8	76.3
Year							76.8					

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^{-18} ohm. $^{-1}$ cm. $^{-1}$
 i = Air-earth current, unit 10^{-18} amp. cm. $^{-2}$

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	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
2	7.27
3
4	3.28
5	5.88	2.33
6	...	...	...	...	...	...	...	...	...	...	...	...	3.14	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	3.92	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	8.18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.85	...	...
10	...	...	...	...	...	...	...	...	...	4.91	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	5.12	...	...	...	...	...	...	...	...	...	...	...	2.71	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	2.83	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	1.35	...	...	...	...	...	...	...	...	1.25	...	...
17	...	...	...	...	...	...	...	...	...	5.16	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.02	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.42	...	...
20	12.50	...	...	4.22	...	...	...	...	...	6.05	...	...	1.86	...	...	...	...	...
21	10.18	...	...	...	...	...	...	...	...	5.52	...	...	1.39	...	...	...	...	...
22	6.70	...	...	...	...	...	...	...	...	4.37	...	...	...	...	...	1.47	...	...
23	...	...	...	...	...	...	8.40	...	...	4.53	...	...	...	...	...	1.78	...	...
24	...	...	...	3.35	...	...	...	...	...	2.05	...	...	...	...	...	2.36	...	...
25	...	...	...	4.86	...	...	...	...	...	...	...	...	...	...	...	2.77	...	...
26	7.91	...	...	4.52	...	...	...	...	...	...	...	...	...	...	...	2.22	...	...
27	...	...	...	...	...	...	2.25	...	...	2.01	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	2.82	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	2.05	...	...	...	...	...	...	...	...
30	3.43	...	...	...	...	...	3.13	...	...	...	...	...	...	...	...	1.58	...	...
31	...	...	...	...	...	...	3.27	...	...	...	...	...	...	...	...	...	...	...
Mean	7.46	-	-	4.24	-	-	3.68	-	-	3.95	-	-	2.68	-	-	1.97	-	-
No. of days used	9	-	-	4	-	-	5	-	-	10	-	-	8	-	-	10	-	-

* F for February was obtained by stretched wire method.

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	1.91	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	2.45	...	...	...	...	...	...	...	...
3	2.04	...	...	...	...	...	...	...	...	...	...	...
4	3.16	...	...	2.00	...	...	...	...	...	...	...	...	...	...	...
5	3.68	...	...	...	...	...	...	...	...
6
7	2.32	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	1.80	...	...	...	...	...	2.79	...	...	...	...	...	...	...	...	...	...	...
9	1.03	...	...	...	...	...	...	...	...	...	...	...
10	2.59	...	...	...	...	...	...	...	...	...	...	...
11	2.05	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	3.96	...	...	3.50	...	...	...	...	...
13	1.77	...	...	...	...	...	...	...	...	3.22	...	...	...	...	...
14
15	6.62	...	...
16	5.37	...	...	...	...	...	...	...	...
17	3.12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.85	...	...
18	2.20	...	...	...	...	...	5.78	...	...	...	...	...
19
20	5.17	...	...	...	...	...	...	...	...
21	6.31	...	...	...	...	...	...	...	...
22	5.24	...	...
23	2.34	...	...	...	...	...	...	...	...	...	...	...
24
25	3.24	...	...	...	...	...
26	1.81	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27
28
29	6.47	...	...
30	2.34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31
Mean	2.29	-	-	2.22	-	-	2.14	-	-	4.49	-	-	3.93	-	-	6.55	-	-
No. of days used	4	-	-	5	-	-	7	-	-	6	-	-	4	-	-	4	-	-

Year: Mean 3.80 - -
No. of days used 76 - -

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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	2	hr. 6.3	0	hr. 0.0	0	hr. 0.0	2	hr. 5.6	-	hr. -	-	hr. -
2	0	0.0	1	1.0	0	0.0	2	3.7	-	-	-	-
3	1	1.0	0	0.0	0	0.0	0	0.0	-	-	-	-
4	0	0.0	1	0.5	0	0.0	1	0.3	-	-	-	-
5	1	0.5	0	0.0	1	0.3	-	-	-	-	-	-
6	2	15.5	0	0.0	1	0.5	-	-	-	-	-	-
7	1	0.2	1	0.3	1	1.6	-	-	-	-	-	-
8	1	0.5	2	5.0	1	0.1	0	0.0	-	-	-	-
9	0	0.0	-	-	1	0.1	0	0.0	-	-	-	-
10	0	0.0	2	16.0	0	0.0	1	0.2	-	-	-	-
11	1	1.2	2	14.3	1	0.2	1	0.6	-	-	-	-
12	0	0.0	2	12.8	2	7.5	2	4.2	-	-	-	-
13	0	0.0	1	1.3	2	3.7	1	0.4	-	-	-	-
14	1	1.5	1	0.4	0	0.0	1	1.6	-	-	-	-
15	-	-	0	0.0	0	0.0	1	1.7	-	-	-	-
16	-	-	0	0.0	0	0.0	1	1.8	-	-	-	-
17	0	0.0	0	0.0	0	0.0	0	0.0	-	-	-	-
18	2	3.0	1	0.3	0	0.0	0	0.0	-	-	-	-
19	0	0.0	1	0.8	0	0.0	0	0.0	-	-	-	-
20	1	0.3	0	0.0	0	0.0	0	0.0	-	-	-	-
21	1	0.2	0	0.0	0	0.0	0	0.0	-	-	-	-
22	0	0.0	0	0.0	0	0.0	0	0.0	-	-	-	-
23	-	-	0	0.0	-	-	0	0.0	-	-	-	-
24	1	1.6	0	0.0	-	-	1	0.1	-	-	-	-
25	1	0.6	-	-	0	0.0	1	0.5	-	-	-	-
26	1	0.1	1	2.3	1	2.4	1	0.2	-	-	-	-
27	0	0.0	1	1.5	0	0.0	2	3.7	-	-	-	-
28	0	0.0	-	-	1	2.8	2	9.3	-	-	-	-
29	0	0.0	-	-	1	1.3	2	9.5	-	-	-	-
30	1	0.5	-	-	2	4.0	1	2.7	-	-	-	-
31	1	2.0	-	-	1	0.1	-	-	-	-	-	-
Total	-	35.0	-	56.5	-	24.6	-	46.1	-	-	-	-
No. of days used	-	28	-	25	-	29	-	27	-	-	-	-
Mean	-	1.3	-	2.3	-	0.8	-	1.7	-	-	-	-

See Introduction for explanation of reason for omission of data from May 1953 onwards.

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 4.22				FEBRUARY, factor 4.01				MARCH, factor 4.11			
	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	410	265	265	95	200	305	210	445	350	450	600	675
2	170	580	565	555	165	175	185	255	250	800	875	625
3	410	360	410	460	80	255	445	640	1200	950	925	600
4	145	195	390	555	550	665	210	280	825	1125	575	940
5	445	700	615	745	315	515	350	395	550	375	390	325
6	Z±	230	-25	-385	300	490	280	570	225	240	475	400
7	265	410	555	460	280	245	305	720	50	125	300	525
8	300	435	565	745	80	305	605	-1400	215	175	215	440
9	530	855	650	615	70	500	-	605	315	715	700	450
10	555	505	650	530	-1210	Z±	Z±	Z±	425	750	415	1100
11	505	845	625	625	-105	Z±	-25	-70	240	375	165	375
12	230	360	400	770	Z-	-115	-165	-25	-15	15	200	-65
13	520	650	445	810	95	95	325	535	135	150	925	465
14	830	1180	770	275	105	770	290	675	400	625	600	450
15	735	300	290	435	255	290	395	220	250	450	525	600
16	-	-	530	530	490	860	445	720	550	765	250	650
17	350	290	555	615	430	410	305	340	450	515	575	650
18	600	360	435	-35	150	220	315	360	300	525	650	465
19	-290	845	735	1025	245	305	280	535	175	500	615	500
20	1325	1420	1085	1160	360	305	350	350	135	485	725	475
21	410	845	855	745	115	105	360	235	300	400	515	385
22	700	555	555	795	255	185	290	305	315	385	515	375
23	-	-	435	470	150	395	395	455	325	315	-	-
24	290	480	410	Z±	280	290	280	515	-	-	835	815
25	315	530	290	375	315	620	-	585	475	925	235	575
26	265	505	-	650	175	325	490	445	500	475	Z±	325
27	110	230	275	135	-35	885	930	490	275	550	235	500
28	135	530	300	420	420	410	455	665	150	200	50	50
29	250	460	420	505	-	-	-	-	125	100	75	25
30	360	410	215	265	-	-	-	-	100	-240	Z±	475
31	-265	Z±	230	360	-	-	-	-	225	350	300	400
(a)	429	547	501	562	245	397	369	473	378	511	518	563
(b)	413	565	517	547	237	383	369	380	363	482	468	480
Mean	(a) 510 (b) 511				(a) 371 (b) 342				(a) 493 (b) 448			

	APRIL, factor 4.02				MAY, factor				JUNE, factor			
	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	265	265	-	Z±	-	-	-	-	-	-	-	-
2	165	150	Z±	-240	-	-	-	-	-	-	-	-
3	255	345	180	635	-	-	-	-	-	-	-	-
4	240	Z±	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	Z±	190	-	-	-	-	-	-	-	-
7	230	470	205	380	-	-	-	-	-	-	-	-
8	570	595	330	520	-	-	-	-	-	-	-	-
9	330	620	545	395	-	-	-	-	-	-	-	-
10	280	585	395	305	-	-	-	-	-	-	-	-
11	265	140	255	315	-	-	-	-	-	-	-	-
12	230	280	-480	Z±	-	-	-	-	-	-	-	-
13	330	420	255	430	-	-	-	-	-	-	-	-
14	205	305	Z±	290	-	-	-	-	-	-	-	-
15	280	330	315	355	-	-	-	-	-	-	-	-
16	455	345	330	230	-	-	-	-	-	-	-	-
17	115	240	75	535	-	-	-	-	-	-	-	-
18	230	635	620	520	-	-	-	-	-	-	-	-
19	315	315	395	445	-	-	-	-	-	-	-	-
20	230	560	510	520	-	-	-	-	-	-	-	-
21	370	355	445	520	-	-	-	-	-	-	-	-
22	305	735	420	445	-	-	-	-	-	-	-	-
23	255	545	510	535	-	-	-	-	-	-	-	-
24	660	535	180	190	-	-	-	-	-	-	-	-
25	115	430	150	455	-	-	-	-	-	-	-	-
26	125	355	305	330	-	-	-	-	-	-	-	-
27	90	420	215	65	-	-	-	-	-	-	-	-
28	150	75	-635	100	-	-	-	-	-	-	-	-
29	-280	Z-	-	480	-	-	-	-	-	-	-	-
30	115	230	Z±	240	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
(a)	299	428	276	393	-	-	-	-	-	-	-	-
(b)	284	431	286	392	-	-	-	-	-	-	-	-
Mean	(a) 349 (b) 348				(a) - (b) -				(a) - (b) -			

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.

See Introduction for explanation of reasons for omission of data from May 1953 onwards.

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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Selected quiet days

	Hour G.M.T.																								Non-cyclic change†	Mean
	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		
	volts per metre																									
Jan.	+8	+25	-22	-69	-100	-104	-113	-73	+54	+75	+53	+13	+14	-54	+12	+33	+29	-19	+32	+43	+92	+53	+9	+7	+585	439
Feb.	+14	-24	-75	-98	-98	-103	-104	-64	+20	+45	+60	+39	+20	+11	-14	-15	-39	+37	+47	+49	+57	+57	+114	+65	-103	361
Mar.	-126	-113	-129	-130	-108	-97	-89	+3	+78	+90	+56	+94	+115	+118	+71	+98	+75	+91	+69	+57	+26	+5	-119	-135	-195	499
Apr.	-62	-106	-101	-114	-117	-93	-22	+22	+108	+89	+39	-2	-22	-12	+5	-1	+37	+50	+88	+108	+80	+53	+19	-49	+13	410
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Winter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equinox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Summer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Winter: January, February, November, December

Equinox: March, April, September, October

Summer: May to August

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

See Introduction for explanation of reasons for omission of data from May 1953 onwards.

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

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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.	0.35	0.31	0.23	0.18	0.15	0.14	0.15	0.22	0.31	0.35	0.35	0.33	0.32	0.29	0.28	0.32	0.37	0.39	0.43	0.45	0.47	0.45	0.41	0.37	0.32	31
Feb.	0.19	0.16	0.14	0.14	0.13	0.11	0.17	0.23	0.27	0.26	0.28	0.27	0.25	0.25	0.22	0.22	0.24	0.30	0.34	0.34	0.36	0.35	0.29	0.25	0.24	28
Mar.	0.37	0.35	0.33	0.31	0.52	0.27	0.29	0.32	0.35	0.36	0.39	0.37	0.36	0.33	0.33	0.33	0.33	0.42	0.45	0.51	0.52	0.53	0.49	0.43	0.38	31
Apr.	0.05	0.05	0.04	0.05	0.06	0.06	0.09	0.14	0.12	0.09	0.08	0.06	0.05	0.05	0.05	0.06	0.08	0.13	0.17	0.20	0.19	0.17	0.13	0.10	0.10	28
May	0.06	0.04	0.04	0.04	0.06	0.06	0.08	0.07	0.06	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.03	0.05	0.07	0.08	0.07	0.07	0.05	0.04	0.04	27
June	0.06	0.05	0.04	0.06	0.05	0.04	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.06	0.05	0.06	0.04	0.05	0.04	27
July	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.02	0.01	0.02	0.03	0.01	23
Aug.	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.02	24
Sept.	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.07	0.04	0.04	0.03	0.01	0.01	0.02	0.01	0.02	0.03	0.03	0.05	0.06	0.06	0.05	0.03	0.03	30
Oct.	0.24	0.23	0.19	0.17	0.14	0.16	0.14	0.14	0.24	0.21	0.19	0.15	0.10	0.13	0.13	0.12	0.15	0.17	0.24	0.25	0.28	0.31	0.28	0.27	0.19	26
Nov.	0.09	0.07	0.08	0.07	0.05	0.03	0.03	0.05	0.10	0.13	0.10	0.10	0.11	0.12	0.11	0.13	0.16	0.20	0.27	0.29	0.27	0.26	0.21	0.16	0.13	26
Dec.	0.13	0.10	0.09	0.07	0.06	0.07	0.09	0.13	0.21	0.23	0.27	0.25	0.23	0.26	0.24	0.25	0.29	0.29	0.32	0.33	0.32	0.29	0.22	0.18	0.21	30
Year	0.14	0.12	0.11	0.10	0.11	0.09	0.10	0.12	0.15	0.15	0.15	0.13	0.12	0.12	0.12	0.12	0.14	0.17	0.19	0.21	0.22	0.21	0.19	0.16	0.14	331
Winter	0.19	0.16	0.13	0.11	0.10	0.09	0.11	0.16	0.22	0.24	0.25	0.24	0.23	0.23	0.21	0.23	0.27	0.29	0.34	0.35	0.35	0.34	0.28	0.24	0.23	115
Spring	0.21	0.20	0.19	0.18	0.29	0.17	0.19	0.23	0.23	0.23	0.23	0.21	0.21	0.19	0.19	0.19	0.21	0.27	0.31	0.35	0.35	0.35	0.31	0.27	0.24	59
Autumn	0.14	0.13	0.11	0.10	0.09	0.09	0.09	0.09	0.15	0.13	0.11	0.09	0.05	0.07	0.07	0.07	0.09	0.10	0.13	0.15	0.17	0.19	0.17	0.15	0.11	56
Summer	0.04	0.03	0.03	0.04	0.04	0.04	0.05	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.03	101