

III. ATMOSPHERIC ELECTRICITY

Atmospheric electricity data have been published since 1962. Table I contains the hourly average values of the potential gradient expressed in V/m. Hourly averages have been taken only from hours having a recording period of 30 minutes or more. If values were available only for part of an hour the average is entered in square brackets []. These data have been used in the determination of the monthly and daily means. Values uncertain for some reason are entered in round brackets () and have not been used in calculating of monthly and daily means. Daily means of each day with 24 hours of recording are entered. However, loss of a maximum of one hour's data out of twelve (for example, on account of instrument maintenance or calibration) has not precluded entering this mean value. In hours marked by S the value of the potential gradient exceeded permanently or several times the measuring limits of the equipment making the determination of an hourly average impossible. The directions of the deviations are marked by signs.

Table II gives the hourly means of the quantities of positive and negative charges transported by point-discharge for each month. The values are expressed in 10^{-6} Asec/hour.

All data are presented in universal time (GMT).

Tables were compiled by F. MÁRCZ. Both the equipments and the methods of measurement of potential gradient and point-discharge have been described in the paper by P. BENCZE and F. MÁRCZ: „Atmosphärisch-elektrische und ionosphärische Messungen im Observatorium bei Nagycenk”, Observatoriumsberichte des Geophysikalischen Forschungslaboratoriums der Ungarischen Akademie der Wissenschaften vom Jahre 1966, Sopron, 1967.

MAGYAR
TUDOMÁNYOS AKADÉMIA
KÖNYVTÁRA

I.

Hourly means of the potential gradient

January

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	150	130	100	100	70	50	60	80	120	110	180	160	110
2.	-10	50	40	50	50	60	50	50	—	[120]	150	130	120
3.	80	-S	±S	±S	±S	+S	+S	60	30	[80]	90	120	110
4.	180	130	130	130	90	90	40	60	-10	—	-30	20	90
5.	-20	80	60	50	40	40	70	80	[110]	60	80	120	130
6.	-170	-180	-140	-130	-100	-100	-80	-130	—	[-190]	-240	-220	-140
7.	-160	-130	-130	-110	-110	-140	-170	-180	-190	[-170]	-140	-160	-100
8.	-140	-180	-140	-160	-140	-140	-160	-170	-170	[-140]	-110	-100	-100
9.	60	50	70	-40	100	200	170	170	[170]	[140]	200	170	140
10.	-30	-10	+S	+S	80	-40	130	190	+S	+S	200	180	220
11.	-100	-20	-60	-80	-140	-10	50	130	[110]	70	40	70	90
12.	-30	-170	-140	-170	-260	-350	-350	-290	[-200]	[-350]	-310	-220	-200
13.	-S	-S	-290	-220	-190	-240	-260	-220	—	[-130]	-230	-310	-310
14.	-250	-210	-310	-350	-370	-160	-230	-130	-270	[-120]	-270	-100	-210
15.	+S	180	180	180	90	60	120	-80	[-130]	[-160]	-130	-10	100
16.	+S	+S	+S	140	120	100	-20	20	0	[50]	[-210]	20	130
17.	120	100	50	-80	-70	70	60	[100]	—	—	—	—	—
18.	—	—	—	—	—	—	—	—	—	—	—	—	—
19.	—	—	—	—	—	—	—	—	—	—	—	—	—
20.	—	—	—	—	—	—	—	—	—	—	—	—	—
21.	—	—	—	—	—	—	—	—	—	—	—	—	—
22.	—	—	—	—	—	—	—	—	—	—	—	—	—
23.	—	—	—	—	—	—	—	—	—	—	—	—	—
24.	—	—	—	—	—	—	—	—	—	—	—	—	—
25.	—	—	—	—	—	—	—	—	—	—	—	—	—
26.	—	—	—	—	—	—	—	—	—	—	—	—	—
27.	—	—	—	—	—	—	—	—	—	—	—	—	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	—	—	—
30.	—	—	—	—	—	—	—	—	—	—	—	—	50
31.	30	40	30	30	50	50	30	[80]	130	—	+S	+S	230
Means	-19	-9	-37	-41	-41	-27	-29	-10	-23	-45	-46	-8	26
Number of days	15	15	15	16	17	17	17	18	13	14	16	16	18

13	14	15	16	17	18	19	20	21	22	23	Daily means
150	160	180	230	230	180	160	100	40	-30	-80	114
100	60	50	120	200	+S	+S	130	+S	+S	+S	—
200	160	+S	+S	+S	+S	+S	230	140	190	190	—
150	160	130	190	+S	140	20	10	-20	-10	30	78
210	170	80	120	60	0	-110	-140	-190	-140	-180	33
-100	-90	50	-80	-80	-110	-160	-170	-140	-160	-160	-131
-110	-130	-140	-100	-130	-90	-100	-60	-80	-130	-130	-129
-130	-60	40	0	0	20	-90	-40	-60	-30	-60	-94
140	80	90	100	50	80	130	130	200	130	70	117
220	130	70	40	+S	160	90	50	10	-30	-140	—
60	20	50	-60	-10	-60	-30	10	-140	-160	-20	-8
-140	-200	-220	-290	-S	-S	-240	-S	-160	-S	-S	—
-130	-100	-180	-130	-10	-70	-100	-250	-180	-100	-150	—
-180	-270	-250	-160	-100	-120	-110	-130	-50	50	40	-178
110	±S	±S	±S	±S	+S	+S	80	80	110	90	—
130	50	-50	-20	0	-50	-30	60	+S	+S	100	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
70	50	60	120	140	60	+S	90	50	10	10	—
+S	260	220	+S	+S	+S	220	180	220	220	+S	—
44	26	11	5	29	11	-25	16	-18	-5	-26	-10
17	17	16	15	12	13	14	17	16	15	15	

February

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	100	110	90	80	100	90	90	+S	+S	+S	170	180	170
2.	90	120	100	130	160	+S	+S	+S	+S	+S	+S	+S	+S
3.	110	-20	-150	-180	±S	±S	-S	0	—	90	40	100	110
4.	70	60	60	70	120	120	130	+S	+S	200	200	+S	180
5.	120	130	70	80	80	110	90	60	—	90	80	100	—
6.	±S	+S	+S	+S	+S	+S	+S	+S	+S	—	160	90	200
7.	140	120	80	70	70	70	90	110	80	[110]	130	120	130
8.	-80	-90	-70	-70	-70	-90	-80	-80	-80	-S	±S	-S	±S
9.	-10	+S	40	+S	+S	40	50	60	60	160	160	80	60
10.	50	50	50	50	50	50	80	120	—	—	[160]	160	230
11.	80	70	90	80	90	120	100	150	[210]	[200]	210	230	250
12.	50	50	50	50	50	60	40	-10	40	[50]	[80]	30	70
13.	70	60	100	+S	+S	180	200	190	130	[170]	[220]	200	200
14.	-10	-260	-170	-260	-90	50	60	130	+S	+S	+S	80	70
15.	60	-90	±S	±S	±S	±S	+S	60	80	110	[50]	+S	±S
16.	140	150	80	70	180	130	120	180	—	-S	±S	±S	±S
17.	—	—	—	—	—	—	—	—	—	+S	+S	130	180
18.	—	—	—	—	—	—	—	—	—	—	+S	+S	+S
19.	30	30	-90	-200	-150	-100	-170	-240	-70	[70]	10	80	+S
20.	30	20	0	10	10	-100	-130	-30	20	—	90	+S	+S
21.	130	-60	-250	-170	-250	-240	-S	-S	-S	-S	-S	-S	-S
22.	20	130	200	140	+S	+S	+S	+S	[220]	170	+S	240	190
23.	50	50	50	130	130	170	230	+S	[--60]	-170	-150	-120	-60
24.	50	100	130	-10	10	80	110	80	—	-S	-S	-S	-S
25.	0	90	±S	130	±S	110	+S	+S	[140]	[170]	190	170	110
26.	50	70	100	170	+S	+S	120	40	30	[90]	130	120	150
27.	100	90	100	40	40	30	50	110	[120]	90	110	50	130
28.	90	60	60	100	120	130	120	150	100	[80]	[130]	170	220
Means	61	43	31	23	36	51	68	54	68	105	114	116	144
Number of days	25	24	23	22	18	20	19	20	15	16	19	19	18

13	14	15	16	17	18	19	20	21	22	23	Daily means
150	170	170	110	130	130	170	200	+S	170	70	—
+S	+S	+S	+S	+S	+S	230	+S	180	90	90	—
150	130	110	100	120	130	130	110	130	110	90	—
170	190	190	170	190	200	160	150	130	100	110	—
[80]	100	120	130	140	—S	—S	—S	±S	+S	—S	—
210	220	140	120	90	70	80	60	80	110	170	—
140	150	80	—30	—20	—60	—20	—60	—50	—70	—90	54
±S	±S	—S	+S	—30	—190	10	50	—110	0	10	—
50	70	30	60	100	110	30	70	70	70	50	—
210	240	200	200	190	200	170	130	140	140	100	—
+S	+S	+S	160	100	50	30	60	80	90	60	—
20	30	50	40	50	50	90	50	50	—80	50	42
210	170	150	130	100	80	150	+S	+S	+S	50	—
140	+S	+S	+S	+S	+S	130	100	170	90	70	—
+S	+S	+S	+S	—130	50	60	130	30	120	180	—
+S	+S	—	—	—	—	—	—	—	—	—	—
200	150	130	70	20	—	—	—	—	—	—	—
210	220	230	100	100	110	140	80	70	70	70	—
+S	230	210	130	80	70	70	130	120	50	—20	—
200	130	+S	—S	—S	—S	+S	—S	+S	40	+S	—
—S	—S	—S	—S	—S	—S	—80	50	50	10	140	—
170	+S	110	50	130	70	120	80	30	10	—60	—
60	100	40	30	110	+S	210	160	70	70	100	55
—190	—20	—S	±S	+S	70	70	20	70	70	—150	—
60	170	200	160	100	200	200	220	220	+S	150	—
160	—20	110	—50	—280	—100	—190	—250	30	100	90	—
200	200	190	120	90	120	70	70	110	140	110	103
240	230	230	220	190	160	140	90	120	140	80	140
153	143	142	101	71	76	93	77	81	71	63	83
21	20	19	20	22	20	24	22	22	23	24	

March

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	50	30	40	60	40	60	20	70	—	50	50	70
2.	0	40	70	—70	—40	50	20	60	140	70	[60]	50	40
3.	60	60	90	110	120	70	—20	—60	[0]	—	30	200	130
4.	230	200	+S	+S	100	30	10	30	50	80	110	150	80
5.	120	100	90	110	130	150	210	180	170	[180]	220	240	+S
6.	160	110	100	80	90	90	120	170	170	[170]	[190]	220	230
7.	90	80	90	60	70	90	100	110	90	[70]	70	80	110
8.	80	50	50	70	60	60	90	110	140	—	170	210	230
9.	80	90	120	100	70	80	130	180	130	[120]	120	150	180
10.	220	220	200	170	170	170	160	200	—	[180]	190	240	270
11.	50	10	30	30	—40	—60	—30	40	60	[130]	110	110	170
12.	160	140	70	90	40	—20	70	—30	80	[90]	160	180	180
13.	110	80	80	100	80	90	120	100	130	[130]	130	120	100
14.	50	50	50	50	50	60	100	100	130	—	—	—	120
15.	70	—40	—160	—160	—50	90	—100	10	50	[—10]	—30	40	—20
16.	—180	—60	—10	—70	90	50	+S	—S	—S	100	60	—20	0
17.	100	190	100	210	180	140	130	70	—	[240]	130	40	—S
18.	+S	—210	—40	40	100	50	40	—50	60	[30]	60	110	120
19.	90	80	80	90	80	80	60	90	40	[—10]	—40	—20	+S
20.	0	0	—50	—60	—70	—50	—20	20	20	[70]	110	110	120
21.	100	100	100	110	110	110	120	120	140	[170]	190	170	200
22.	120	120	110	70	70	80	100	80	100	[80]	110	120	80
23.	30	40	50	50	60	30	20	20	—	30	40	60	50
24.	—10	—70	—10	30	40	30	50	30	[40]	20	30	30	30
25.	100	100	110	100	100	50	60	50	30	[—40]	60	100	30
26.	60	80	80	80	50	130	100	40	70	[—50]	—130	—30	70
27.	+S	+S	+S	+S	100	+S	+S	+S	30	[30]	40	60	90
28.	100	100	90	90	90	100	110	100	70	[100]	100	90	100
29.	90	80	90	80	50	60	90	90	110	120	[100]	100	100
30.	70	60	40	50	60	60	100	100	[110]	[100]	90	70	70
31.	—20	30	40	50	60	60	30	—S	—	+S	+S	+S	+S
Means	75	63	58	59	67	66	70	71	86	85	86	104	109
Number of days	29	30	29	29	31	30	29	28	26	26	29	29	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
20	10	50	90	120	100	70	50	80	80	70	58
70	70	60	80	80	100	110	120	50	30	20	53
120	130	100	140	150	150	270	120	170	170	+S	105
120	90	120	180	240	220	200	170	130	100	100	—
250	220	+S	230	250	+S	+S	200	200	170	160	—
180	200	190	180	180	180	180	120	120	120	90	152
120	120	120	120	130	120	90	100	50	80	60	93
220	140	90	100	110	100	100	100	110	80	90	111
220	180	160	170	150	180	220	250	250	200	220	156
230	200	190	140	130	200	140	80	40	20	10	164
130	130	120	120	130	130	130	110	100	120	130	82
150	120	130	140	100	100	100	100	40	120	140	102
70	60	80	70	50	70	70	70	50	50	50	86
60	90	80	50	80	100	130	150	110	100	90	—
-50	-50	-90	-S	±S	±S	±S	±S	±S	±S	+S	—
-50	-100	-70	-90	-50	-60	60	190	190	110	110	—
-S	-S	±S	+S	-S	+S	-S	+S	-S	-290	-130	—
170	130	130	130	80	110	100	110	120	120	90	70
100	40	+S	-S	70	-60	-150	-80	-20	10	10	—
120	130	200	+S	+S	40	-50	-200	0	110	110	—
210	220	200	190	190	100	60	100	100	130	120	140
30	20	30	30	50	80	70	60	60	70	50	75
20	30	10	30	10	0	20	70	30	40	-30	31
50	60	90	120	150	160	110	130	110	100	100	59
50	90	60	30	100	50	40	30	+S	±S	100	—
±S	±S	±S	±S	+S	±S	+S	±S	±S	±S	+S	—
120	100	100	120	120	100	100	90	100	100	100	—
90	80	100	120	90	120	100	130	130	110	100	100
100	100	100	100	+S	80	50	70	70	60	60	85
50	80	90	100	90	90	80	80	60	50	30	74
70	120	120	120	90	70	-40	-40	10	40	100	—
105	97	95	108	111	97	87	89	91	79	77	85
29	29	27	26	26	27	27	28	27	28	28	

April

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	120	120	120	120	60	90	90	100	[150]	[120]	100	70	—S
2.	40	50	—110	—60	50	60	70	80	90	[80]	100	70	100
3.	80	80	60	50	60	90	90	120	—	[110]	120	100	110
4.	70	60	70	70	90	30	90	100	120	[150]	140	140	130
5.	60	70	100	90	70	30	80	100	30	[50]	100	100	100
6.	110	70	120	70	150	160	150	150	[140]	150	130	90	100
7.	50	40	40	50	50	60	90	100	80	[100]	70	60	70
8.	80	60	50	60	60	70	130	160	—	[170]	200	230	170
9.	50	60	60	70	60	70	100	120	120	[120]	150	170	170
10.	80	70	90	80	80	100	110	140	[130]	[140]	170	190	210
11.	60	50	40	40	30	30	70	70	[70]	[60]	20	—50	30
12.	—70	50	70	70	70	70	80	80	90	[90]	70	90	70
13.	30	—30	—S	±S	±S	±S	—10	40	[130]	[70]	70	+S	+S
14.	30	30	30	30	40	60	60	30	—	[70]	30	50	70
15.	50	60	50	70	60	70	100	120	110	[110]	110	110	120
16.	50	20	60	—50	10	+S	40	50	[—10]	+S	10	50	70
17.	70	70	80	30	+S	70	±S	70	70	[30]	80	+S	60
18.	40	40	40	40	40	30	50	70	40	—S	±S	+S	+S
19.	70	60	60	50	50	70	100	90	80	[70]	40	70	80
20.	60	50	40	30	40	40	70	70	70	[100]	80	80	70
21.	40	40	40	30	10	30	70	30	—	[80]	80	70	70
22.	50	40	40	0	20	30	50	60	70	[80]	60	70	60
23.	30	—S	±S	±S	±S	20	—	80	[80]	[110]	100	100	100
24.	50	60	50	60	70	60	60	60	[40]	[10]	20	—20	—10
25.	30	30	40	20	30	60	+S	0	[80]	90	110	70	80
26.	40	60	40	50	50	90	100	90	[70]	70	[70]	[70]	70
27.	40	60	40	40	40	50	50	50	[70]	80	70	60	60
28.	30	30	30	40	40	80	70	80	[80]	—	100	80	70
29.	40	40	40	40	40	50	60	60	[70]	70	60	100	80
30.	—	—	60	60	50	60	100	—	—	—	—	—	—
Means	51	51	52	45	53	66	79	83	83	92	90	85	89
Number of days	29	28	28	28	27	28	27	29	25	26	28	26	26

13	14	15	16	17	18	19	20	21	22	23	Daily means
+ S	± S	160	± S	± S	± S	+ S	60	50	50	40	—
100	70	80	100	100	96	80	70	80	70	70	64
130	90	100	80	70	70	100	110	80	100	100	91
110	100	90	90	100	100	70	90	110	120	90	99
140	100	100	150	140	150	140	140	120	110	100	101
100	90	90	80	90	96	90	80	50	50	50	102
70	70	70	60	70	90	90	80	80	80	70	70
180	150	140	130	110	120	170	70	60	70	70	118
180	190	210	190	160	210	140	120	90	80	70	123
220	220	180	100	110	90	80	80	70	70	70	120
60	70	70	90	100	120	120	-30	± S	± S	-110	—
70	70	70	60	60	70	70	70	40	30	30	61
60	90	70	70	70	70	60	80	100	70	40	—
+ S	+ S	60	40	60	60	70	80	70	60	50	—
120	150	170	140	120	80	50	60	80	80	60	94
80	80	50	70	40	- S	± S	70	70	30	40	—
+ S	40	70	70	± S	+ S	70	+ S	40	40	30	—
± S	+ S	60	50	60	70	60	70	70	70	70	—
± S	+ S	70	70	70	80	80	70	80	60	70	—
50	50	50	30	40	30	50	40	50	40	40	53
60	60	60	60	60	60	50	50	50	50	60	55
60	20	30	20	30	60	40	20	20	0	40	40
100	± S	± S	100	100	30	70	+ S	-30	70	50	—
40	40	40	50	60	70	70	70	70	70	40	47
80	70	70	60	50	50	60	50	50	50	30	55
70	70	70	50	40	30	30	30	30	20	10	55
60	60	60	40	30	40	50	50	40	40	30	50
60	50	60	50	50	60	50	50	60	60	50	58
60	60	60	60	60	50	70	70	[60]	—	—	—
—	+ S	+ S	60	60	50	60	40	40	60	50	—
94	86	86	77	75	77	76	66	61	61	49	72
24	24	28	29	28	27	28	28	29	28	29	

May

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	40	40	40	60	80	80	[90]	100	70	70	80
2.	100	100	100	100	100	120	140	150	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	—	—	—	—	—	—	—	—	—	—	—	—	0
9.	20	20	20	30	40	40	50	70	—	[60]	40	20	30
10.	20	50	30	+S	±S	+S	100	80	30	[30]	40	20	20
11.	40	50	40	40	40	50	70	90	[100]	[100]	100	100	100
12.	70	60	50	60	60	100	100	—	[130]	140	130	130	120
13.	40	40	40	50	50	50	90	100	100	[90]	110	80	50
14.	50	50	50	40	50	90	90	90	90	—	[80]	60	50
15.	50	50	50	50	50	60	60	60	70	70	[70]	[90]	100
16.	50	50	50	50	40	50	60	70	—	80	60	80	90
17.	10	10	10	+S	+S	70	40	50	40	[50]	70	50	50
18.	20	20	20	30	30	40	50	[50]	[50]	50	50	50	40
19.	20	50	±S	—S	—50	100	80	0	—	20	+S	10	80
20.	30	+S	20	20	20	20	20	0	20	[40]	[—10]	20	10
21.	20	20	20	20	20	20	20	50	60	—	0	0	0
22.	20	20	20	20	30	40	50	90	100	100	[90]	80	80
23.	50	40	30	40	70	70	90	110	[120]	120	150	130	120
24.	120	120	70	60	50	70	90	110	[110]	130	130	120	120
25.	20	0	—20	—30	—60	—10	30	30	[40]	[40]	[60]	60	50
26.	30	20	—20	20	30	—10	60	100	—	[30]	20	30	40
27.	50	40	50	+S	±S	30	170	140	[130]	110	100	100	70
28.	60	70	50	60	120	100	90	120	[120]	[130]	130	110	110
29.	80	60	50	10	0	10	20	20	40	[50]	40	40	40
30.	50	50	40	30	30	60	80	100	90	[80]	[70]	50	60
31.	30	20	10	30	20	50	80	70	80	[60]	50	20	50
Means	44	44	34	37	35	53	72	76	81	76	72	63	62
Number of days	25	24	24	21	22	24	25	24	20	22	23	24	25

13	14	15	16	17	18	19	20	21	22	23	Daily means
80	90	80	80	80	80	70	80	80	100	110	74
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
0	0	10	30	40	40	20	30	40	40	20	—
30	40	40	100	± S	± S	60	40	20	30	10	—
50	50	50	50	50	50	50	50	50	50	40	—
90	60	70	70	70	90	110	80	70	70	70	74
100	100	90	70	60	60	50	50	50	50	40	81
40	50	50	40	40	40	40	50	50	50	50	58
50	60	60	60	50	60	70	50	50	50	50	61
100	100	80	60	70	50	50	50	50	50	50	64
80	50	50	120	60	50	40	30	20	20	30	56
60	50	50	40	40	30	40	40	30	30	30	—
40	40	40	40	40	40	40	40	40	40	40	39
+S	—S	30	50	50	40	0	10	40	± S	± S	—
20	30	40	30	40	30	30	30	30	20	20	23
20	20	20	20	20	20	20	10	10	10	10	19
90	70	60	60	60	70	50	50	60	50	40	58
110	80	80	80	100	110	70	70	60	80	90	86
120	120	100	70	70	60	70	60	40	20	20	85
40	40	30	30	40	40	60	70	60	50	40	30
50	60	70	70	50	70	100	70	70	50	40	46
40	80	70	60	50	50	50	50	50	50	50	—
120	120	120	80	40	70	70	70	70	60	70	90
50	60	70	40	70	80	90	70	40	40	40	46
60	20	30	20	40	60	70	70	60	40	40	54
60	70	70	± S	± S	± S	± S	30	50	+S	—40	—
63	61	58	57	53	56	55	50	48	46	40	56
24	24	25	24	23	23	24	25	25	23	24	

June

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	20	30	50	60	70	+S	+S	129	90	[70]	50	50	40
2.	40	50	30	40	30	20	40	40	—	[60]	90	100	70
3.	20	10	0	-30	+S	10	90	60	[60]	40	30	30	30
4.	30	30	20	30	20	30	30	30	30	[40]	30	20	30
5.	10	30	10	30	30	30	40	\pm S	20	40	100	40	80
6.	140	80	100	110	90	100	110	100	180	—	200	\pm S	\pm S
7.	\pm S	30	30	\pm S	50	\pm S	-S	-S	\pm S	\pm S	10	+S	+S
8.	80	60	50	80	160	170	110	+S	0	100	+S	80	[80]
9.	90	90	90	90	90	90	110	130	—	[130]	120	90	90
10.	80	80	90	130	90	80	90	100	140	[120]	80	80	80
11.	70	70	60	70	90	100	90	120	130	[100]	130	110	90
12.	50	60	60	70	90	130	150	180	170	[180]	200	140	130
13.	70	70	80	100	140	110	70	-10	50	100	—	\pm S	\pm S
14.	90	70	70	50	50	140	+S	160	100	[80]	120	110	80
15.	30	40	60	130	110	110	80	100	80	[80]	140	220	\pm S
16.	60	50	50	50	50	70	70	50	—	[50]	70	20	\pm S
17.	40	30	30	30	40	60	60	70	40	[30]	30	50	50
18.	30	30	30	30	30	50	80	80	80	[70]	[50]	60	50
19.	30	30	60	50	90	90	80	[100]	+S	+S	40	30	30
20.	50	70	80	40	60	100	130	130	[90]	70	50	+S	+S
21.	\pm S	+S	+S	\pm S	30	90	200	100	[50]	80	60	100	40
22.	50	40	30	40	30	30	70	50	[50]	70	70	80	90
23.	70	90	90	90	90	100	110	110	—	100	60	50	50
24.	40	50	50	50	0	0	-50	--20	10	[40]	40	30	50
25.	30	30	30	30	30	50	60	60	[50]	60	60	60	70
26.	-S	+S	-120	0	+S	100	20	+S	\pm S	+S	-100	30	50
27.	50	50	50	50	60	70	90	100	110	[80]	60	60	70
28.	50	40	50	50	50	40	30	50	50	[40]	50	40	50
29.	10	-10	0	20	20	10	10	50	[90]	70	60	90	80
30.	40	40	30	50	-20	30	50	50	—	[-80]	\pm S	\pm S	\pm S
Means	51	48	43	55	60	72	75	81	76	70	70	71	64
Number of days	27	28	29	28	28	28	27	26	22	26	27	25	23

13	14	15	16	17	18	19	20	21	22	23	Daily means
60	60	50	50	50	50	60	50	50	40	40	—
50	0	70	40	30	60	30	10	-10	0	20	40
40	60	90	100	80	60	70	50	30	30	30	43
40	60	80	50	60	100	30	30	30	20	30	38
±S	±S	±S	±S	+S	130	130	110	150	130	140	—
±S	±S	±S	±S	40	150	180	120	40	+S	±S	—
±S	±S	+S	50	30	+S	-90	50	40	30	40	—
90	40	10	30	30	40	70	90	90	90	90	—
100	90	110	100	120	130	140	110	110	110	80	105
90	90	110	110	120	100	80	100	100	90	70	96
110	100	120	120	140	150	140	100	80	70	70	101
120	120	130	130	140	220	140	130	80	60	50	122
±S	±S	±S	+S	60	120	120	130	90	70	80	—
-50	+S	130	120	110	90	100	120	60	30	30	85
±S	130	150	150	120	130	110	100	70	80	80	—
70	90	90	70	80	50	50	40	40	40	40	57
60	-S	±S	40	40	60	70	40	30	40	30	—
40	60	40	40	50	40	30	30	30	30	30	45
90	-10	50	20	-S	30	90	60	+S	+S	70	—
+S	50	-100	10	-10	+S	+S	-80	+S	+S	±S	—
40	40	30	50	50	50	60	80	60	40	40	—
100	100	100	100	100	90	100	60	50	50	60	67
[40]	30	40	30	40	30	50	50	60	40	50	64
40	40	40	60	50	50	40	50	50	80	50	35
80	80	80	90	80	70	70	60	60	30	±S	57
90	20	10	10	0	10	20	30	40	50	60	—
70	70	90	90	90	80	50	50	50	50	50	68
±S	±S	30	40	50	110	90	50	30	-10	10	—
10	50	40	10	50	50	40	50	50	30	30	38
±S	-S	+S	10	20	40	30	40	40	40	50	—
63	62	66	64	65	82	72	64	57	50	53	64
22	22	24	27	28	28	29	30	28	27	27	

July

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	40	30	40	50	50	50	80	110	120	—	[100]	110	110
2.	30	30	30	40	40	90	70	70	80	[80]	90	80	80
3.	40	50	50	30	40	70	60	70	100	[80]	80	70	70
4.	40	50	40	60	60	70	80	80	70	[70]	—	—	—
5.	—	—	—	—	—	—	[30]	40	50	50	[40]	50	70
6.	30	30	30	30	40	50	50	40	[40]	30	40	40	60
7.	30	30	30	40	50	50	50	[40]	—	50	40	40	30
8.	—10	20	60	—50	+S	170	50	100	[180]	70	—S	—S	50
9.	40	40	40	40	50	80	100	100	90	[80]	40	80	—50
10.	50	30	40	40	40	[40]	—	—	80	90	[90]	50	50
11.	50	30	—30	70	10	—20	10	—10	+S	60	[—20]	—	—
12.	40	40	40	30	30	30	40	+S	—S	—	—	—	—
13.	—	—	—	40	50	—	—	—	80	100	100	—	—
14.	+S	40	40	50	50	60	90	100	—	[60]	60	70	60
15.	70	100	100	100	80	110	110	130	140	120	[100]	[100]	110
16.	30	30	30	30	20	30	50	70	90	[90]	100	100	90
17.	40	40	40	40	40	50	50	50	[60]	70	70	60	60
18.	20	20	30	30	30	40	40	50	70	[80]	40	20	30
19.	30	30	20	30	30	50	70	70	[80]	[90]	80	90	80
20.	20	20	20	20	20	20	20	30	[50]	60	70	50	40
21.	60	60	40	20	20	40	30	40	40	—	[60]	60	100
22.	50	50	50	30	50	80	90	100	90	90	120	[110]	90
23.	30	30	30	20	30	40	50	70	100	120	[100]	100	80
24.	30	30	30	30	30	50	50	30	[30]	20	[20]	30	30
25.	30	30	20	10	10	40	40	30	—	30	30	30	30
26.	30	30	30	30	40	40	50	50	50	50	[60]	50	60
27.	30	20	20	20	30	30	30	50	50	60	30	[40]	40
28.	30	20	20	20	30	30	40	80	—	—	[110]	110	100
29.	30	20	30	30	40	80	90	80	90	100	[100]	100	90
30.	90	80	70	80	100	110	130	130	160	140	[110]	—50	+S
31.	90	70	60	80	120	100	+S	50	30	60	[50]	40	+S
Means	39	38	36	36	42	58	59	66	81	74	68	63	62
Number of days	28	29	29	30	29	29	28	28	25	27	28	26	25

13	14	15	16	17	18	19	20	21	22	23	Daily means
100	100	100	110	100	96	80	70	60	30	40	77
70	60	60	60	60	60	60	50	40	30	30	58
60	50	40	40	60	60	50	60	50	40	40	57
—	—	—	—	—	—	—	—	—	—	—	—
70	50	30	50	40	50	40	30	30	30	30	—
50	60	50	70	+S	+S	—S	40	40	40	30	—
20	30	30	±S	±S	20	±S	+S	40	50	10	—
70	60	60	40	30	80	90	70	80	70	60	—
50	50	40	30	100	60	40	50	50	40	30	53
40	40	40	30	20	30	50	60	50	30	30	—
—	50	60	50	50	40	—	—	—	50	50	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	40	30	40	70	80	80	60	60	—
70	70	70	70	60	60	70	80	80	70	70	—
100	100	100	100	90	90	90	70	60	50	50	95
90	70	60	50	40	40	40	40	40	40	40	55
50	50	50	40	50	60	60	60	50	50	30	51
30	40	70	50	40	40	—	—	30	30	30	—
80	90	110	110	100	80	70	70	60	60	40	68
30	40	50	40	40	50	40	30	70	70	50	40
80	90	90	90	70	70	50	60	50	60	60	58
100	90	90	60	40	40	50	40	30	30	30	67
80	60	60	60	70	[80]	—	—	[50]	60	30	—
30	30	30	30	40	40	30	40	30	30	30	32
40	40	40	30	40	40	50	40	40	40	30	33
60	60	60	60	60	60	50	40	40	30	30	47
40	30	40	40	40	30	30	30	20	20	30	33
110	130	+S	120	80	150	160	160	130	100	60	—
80	90	70	50	30	50	80	100	90	70	100	24
±S	—50	—S	—S	±S	—10	90	90	100	130	100	—
+S	+S	90	±S	20	100	60	40	50	50	40	—
64	59	61	58	54	57	63	60	55	50	43	56
25	27	26	26	26	28	24	25	28	29	29	

August

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	20	40	50	50	60	150	190	190	110	30	[30]	30	40
2.	60	60	50	50	50	80	80	100	100	[70]	40	30	40
3.	30	30	30	30	30	50	70	80	100	120	[120]	100	90
4.	40	30	30	30	30	50	+S	100	—	[80]	80	120	130
5.	70	60	70	50	60	40	40	60	80	90	[100]	110	100
6.	50	40	40	40	50	60	100	90	70	[90]	100	100	90
7.	50	40	40	30	30	50	50	50	60	[40]	30	50	± S
8.	± S	± S	—S	60	60	30	—80	—40	140	[170]	+S	150	140
9.	60	50	60	50	80	70	70	90	100	100	[110]	120	—
10.	—	100	70	50	110	100	100	140	160	[130]	130	100	80
11.	90	80	70	80	80	90	120	120	[150]	—	[150]	150	140
12.	40	30	30	30	30	50	80	40	40	[40]	40	30	30
13.	50	70	70	80	90	210	170	180	[150]	[140]	100	100	90
14.	50	40	50	60	80	130	100	[100]	[90]	90	90	50	50
15.	60	50	40	60	80	80	170	200	140	110	+S	± S	± S
16.	50	50	40	40	—30	130	+S	—50	[50]	[140]	160	80	+S
17.	50	50	50	60	80	130	210	180	[90]	100	70	60	60
18.	80	80	70	60	70	80	80	70	—	[100]	90	70	80
19.	—50	—100	—90	—60	—20	60	170	+S	+S	[40]	[110]	110	90
20.	60	40	40	40	60	80	90	80	[90]	100	120	100	100
21.	90	70	90	90	70	120	100	100	90	[70]	70	—40	± S
22.	—10	0	10	10	10	10	30	40	110	[70]	30	30	40
23.	70	60	+S	+S	40	30	30	30	30	[70]	30	50	10
24.	100	70	+S	30	+S	70	120	70	60	[150]	170	90	40
25.	—	—	—	—	—	—	—	—	—	[130]	160	120	120
26.	—20	+S	± S	+S	—S	± S	± S	+S	+S	50	[110]	60	20
27.	50	80	60	+S	70	50	20	70	60	[60]	[60]	70	80
28.	70	50	30	50	40	40	60	90	60	—10	+S	+S	150
29.	70	60	50	40	40	50	70	60	50	80	[40]	+S	± S
30.	60	30	40	60	60	30	120	100	100	100	[100]	80	70
31.	70	70	60	60	60	40	70	70	80	[80]	70	60	60
Means	50	48	44	46	53	76	90	86	91	88	90	78	78
Number of days	28	28	26	27	28	29	27	28	26	30	28	28	25

13	14	15	16	17	18	19	20	21	22	23	Daily means	
40	30	40	40	50	70	90	70	70	80	60	68	
40	50	60	70	70	70	70	60	50	40	30	59	
100	90	90	70	70	60	40	40	40	40	30	65	
100	120	120	130	150	100	80	100	50	60	70	—	
110	130	130	150	120	110	100	90	80	80	70	88	
100	90	90	90	100	90	80	40	60	50	50	73	
±S	—S	±S	±S	60	70	100	90	90	40	±S	—	
140	100	80	60	60	60	60	40	30	50	60	—	
—	—	—	—	—	—	—	—	—	—	—	—	
90	90	100	110	120	100	90	100	100	100	100	103	
110	80	80	80	100	90	80	60	60	40	30	93	
40	40	50	40	40	50	60	60	60	70	50	45	
90	80	—S	±S	70	90	90	90	70	70	50	—	
±S	±S	—S	160	+S	100	100	80	60	70	50	—	
100	100	80	100	80	100	90	50	40	50	40	—	
+S	20	0	60	40	40	30	50	60	90	50	—	
60	80	70	90	100	100	100	100	100	100	90	91	
40	30	50	50	90	90	—10	—10	—40	—40	—50	49	
60	50	60	70	70	70	70	60	60	80	70	—	
100	60	70	70	80	80	50	50	60	50	70	73	
±S	—S	—70	30	0	+S	±S	±S	±S	40	20	+S	—
40	50	60	60	50	40	+S	+S	50	80	60	—	
10	60	80	90	50	30	40	90	100	100	100	—	
70	60	70	100	+S	60	20	—	—	—	—	—	
110	100	80	70	60	70	70	110	120	40	10	—	
20	50	50	50	40	30	60	60	40	50	60	—	
±S	—S	20	110	70	70	70	70	80	60	70	—	
120	120	+S	+S	50	50	70	70	60	60	70	—	
30	60	±S	±S	±S	±S	±S	±S	±S	—40	—30	—	
80	70	70	70	60	80	100	120	70	70	70	78	
70	70	70	50	60	70	80	70	70	70	50	66	
75	72	64	80	71	73	70	70	62	56	51	69	
25	26	25	26	27	28	27	26	28	29	27		

September

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	60	70	200	200	+S	[120]	—	80	60	60	70
2.	50	50	50	40	40	50	150	90	100	110	[130]	140	150
3.	60	70	80	80	60	70	60	40	[60]	90	140	150	160
4.	±S	±S	40	20	40	60	90	90	130	[140]	[140]	140	150
5.	50	30	20	40	40	50	80	80	70	50	—	—90	10
6.	50	50	50	50	90	90	+S	150	150	[150]	150	130	150
7.	80	70	70	60	80	90	160	140	140	[150]	[150]	150	130
8.	50	40	50	40	40	50	100	80	—	[70]	70	90	80
9.	20	20	20	30	30	60	90	80	50	50	[30]	30	40
10.	30	30	50	60	60	50	80	50	60	50	[40]	50	60
11.	90	10	—10	30	40	80	±S	±S	90	±S	+S	170	100
12.	100	90	70	70	70	30	100	170	150	[130]	100	80	80
13.	50	50	30	30	50	50	60	100	80	[60]	60	50	60
14.	40	30	50	30	—20	—30	30	[50]	[60]	50	40	30	40
15.	50	30	30	30	30	40	±S	[—20]	—	120	+S	+S	80
16.	80	100	20	60	120	80	130	110	100	—	—30	+S	±S
17.	80	90	60	50	60	80	+S	+S	+S	90	90	80	80
18.	40	30	30	40	40	50	70	100	[80]	70	90	100	70
19.	30	60	70	90	120	140	80	70	—	50	10	50	10
20.	90	80	50	80	100	80	+S	+S	[220]	160	130	130	130
21.	40	40	30	30	40	40	70	80	[70]	[90]	90	70	70
22.	70	70	60	60	60	80	80	100	—	—	—	120	100
23.	50	30	40	110	70	70	100	60	80	140	[130]	[100]	110
24.	50	50	30	50	50	40	+S	+S	180	150	140	140	170
25.	40	40	50	50	30	40	60	[50]	30	[40]	60	70	70
26.	40	40	40	50	50	70	70	70	60	80	[80]	90	90
27.	40	40	40	30	30	30	30	[40]	[40]	40	50	40	40
28.	20	0	20	30	50	50	20	30	[80]	[110]	100	120	120
29.	20	20	—20	—20	—20	—20	30	[50]	—	—	80	90	90
30.	80	100	100	90	90	80	70	[80]	80	100	90	70	70
Means	53	48	43	49	58	62	79	79	94	94	85	88	89
Number of days	29	29	30	30	30	30	23	26	23	26	26	28	29

13	14	15	16	17	18	19	20	21	22	23	Daily means
80	80	80	70	110	60	50	50	50	40	50	—
160	160	150	110	80	90	140	150	130	110	80	105
160	180	190	180	120	110	70	80	60	+S	±S	—
150	150	150	130	140	110	90	90	90	80	60	—
100	110	110	110	100	110	110	110	80	70	70	66
150	140	160	150	120	100	140	120	80	80	90	113
120	100	90	70	70	70	50	30	30	40	50	91
60	40	50	50	60	50	50	40	40	40	30	55
40	40	50	50	60	40	30	40	40	40	30	42
60	±S	±S	50	60	70	80	—S	±S	+S	+S	—
90	80	80	80	90	90	80	80	70	70	90	—
80	60	70	±S	±S	40	70	90	100	100	70	—
50	60	50	50	60	60	60	50	50	50	50	56
50	50	50	50	50	60	50	50	70	50	50	41
140	120	+S	±S	±S	—50	±S	—10	30	40	50	—
+S	±S	—20	60	90	+S	170	100	50	20	60	—
90	80	120	80	80	90	150	140	120	100	40	—
60	60	100	90	140	170	220	220	170	40	30	88
70	20	—80	10	150	50	60	10	50	80	50	54
140	130	100	90	70	90	70	50	50	50	40	—
70	70	70	80	100	100	130	130	100	90	70	74
100	100	100	90	120	140	150	160	100	80	70	—
120	120	150	170	110	110	100	90	100	60	80	96
170	130	90	140	120	100	90	80	100	100	80	—
70	70	80	50	30	50	90	90	80	60	40	56
90	90	90	80	90	70	80	70	60	50	60	69
60	60	60	60	100	100	100	130	90	50	40	56
130	120	60	40	20	30	40	40	30	40	30	55
70	70	70	70	70	70	80	70	80	70	70	—
80	70	90	80	80	100	70	80	100	110	90	85
97	91	84	84	89	79	92	84	76	65	58	76
29	28	28	28	28	29	29	29	29	28	28	

October

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	90	70	60	30	70	70	80	100	[80]	90	80	50	± S
2.	50	60	40	50	60	60	70	60	[40]	50	70	70	60
3.	40	50	40	50	50	-20	-70	-120	[-70]	0	70	70	60
4.	—	40	40	[30]	30	—	[60]	[70]	70	100	60	50	—
5.	70	70	60	50	60	50	70	110	[100]	120	120	110	120
6.	80	90	80	70	70	80	90	150	[130]	—	[140]	150	160
7.	60	30	30	30	40	30	30	50	—	30	30	50	50
8.	110	110	100	90	110	70	70	[100]	140	[140]	[90]	90	100
9.	50	50	50	50	50	50	50	40	20	50	[80]	80	90
10.	70	60	70	70	70	80	100	90	80	80	[100]	110	100
11.	60	50	70	100	100	100	120	130	120	[110]	100	130	120
12.	90	100	100	80	110	90	90	90	[130]	110	130	120	90
13.	50	60	60	80	110	110	130	200	[130]	—	—	70	70
14.	80	80	110	150	70	0	[10]	-20	10	[20]	30	0	50
15.	+S	+S	+S	+S	+S	+S	+S	180	+S	200	[130]	140	160
16.	90	70	70	70	80	80	90	140	130	130	[170]	160	150
17.	90	60	70	50	70	90	110	[130]	[190]	180	170	130	120
18.	100	60	90	100	+S	+S	+S	+S	+S	+S	+S	110	130
19.	110	170	+S	+S	+S	+S	+S	+S	—	—	—	—	—
20.	60	60	50	50	50	70	80	80	—	—	70	80	80
21.	30	40	60	60	50	30	90	90	[70]	30	50	40	80
22.	150	150	80	140	160	140	170	140	—	140	130	120	—
23.	100	100	90	80	110	160	180	200	[150]	140	150	150	140
24.	60	—	30	0	± S	± S	—	—	30	-20	0	-10	-10
25.	—	—	—	—	—	—	—	—	—	60	+S	70	100
26.	80	—	60	50	50	—	40	30	—	170	170	110	110
27.	50	60	60	60	60	60	60	[110]	—	120	130	140	130
28.	90	60	50	50	30	50	60	50	[50]	60	70	100	110
29.	50	40	30	30	50	50	50	[110]	130	150	150	150	140
30.	50	50	50	70	50	50	40	[50]	90	70	50	100	110
31.	40	50	50	50	30	70	90	100	100	[80]	110	100	90
Means	73	70	63	64	69	70	75	91	87	93	98	95	100
Number of days	28	27	28	28	26	24	26	27	22	26	27	30	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
±S	±S	±S	+S	±S	30	70	-60	80	60	60	—
70	70	90	80	90	70	50	60	40	40	30	60
50	80	70	40	+S	±S	-10	30	50	70	—	—
—	—	—	—	—	—	—	80	80	70	70	—
120	120	120	120	110	120	100	100	80	60	70	93
130	100	80	—	120	110	110	100	70	70	70	102
70	60	60	70	30	50	50	80	70	70	80	50
90	100	110	130	130	90	60	60	70	70	50	95
90	110	110	110	110	80	120	90	90	70	80	74
100	100	110	130	120	120	130	130	130	110	90	98
110	110	120	130	130	180	160	200	130	130	130	118
70	70	80	90	60	80	90	60	50	50	50	87
80	100	100	100	100	100	110	120	120	120	110	—
50	50	40	60	50	0	20	20	50	110	+S	45
180	180	140	120	120	100	120	110	100	100	100	—
130	150	120	120	110	120	130	120	110	130	80	115
130	[130]	150	160	180	170	140	110	110	110	100	123
130	160	150	170	+S	190	210	160	190	100	60	—
—	—	—	—	—	110	120	100	80	80	50	—
80	100	120	110	70	90	80	50	60	40	20	—
110	120	110	110	130	140	140	130	120	130	120	89
—	—	110	150	140	120	120	110	100	100	110	—
140	100	100	90	100	100	150	150	100	—	70	124
40	30	30	30	70	60	30	-20	—	—	—	—
100	80	100	80	100	110	120	150	100	110	90	—
140	130	90	90	80	70	70	40	40	40	20	—
130	150	170	180	180	200	140	130	120	100	110	115
90	100	70	70	60	80	130	100	90	80	50	73
130	140	120	150	210	110	60	30	10	-20	30	88
110	100	110	80	70	80	90	80	60	50	40	71
90	60	60	80	80	70	80	90	100	70	60	75
102	104	101	106	106	102	100	87	87	80	71	87
27	27	28	27	26	29	30	31	30	29	28	

November

Hour GMT													
Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	60	40	40	50	50	70	60	[80]	130	150	130	100	80
2.	90	60	60	50	60	60	70	110	[110]	[110]	120	90	90
3.	50	50	50	50	50	50	70	100	110	100	—	[110]	120
4.	40	50	70	50	60	60	100	120	140	120	[100]	100	140
5.	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	—	—	—	—	—	—	—	—	—	—20	—10	—30	—20
9.	—10	—10	0	20	20	20	30	50	50	[50]	50	10	—20
10.	40	50	10	—20	50	—S	±S	70	—	[80]	80	110	110
11.	10	10	20	30	50	40	50	20	[70]	40	—10	—30	—30
12.	100	140	70	120	80	60	+S	+S	+S	+S	+S	120	50
13.	0	0	0	10	40	30	20	10	40	—	30	40	20
14.	20	70	30	30	40	70	110	70	40	[70]	10	0	100
15.	40	50	10	60	50	50	40	40	40	—	60	120	110
16.	50	120	90	90	110	60	80	90	130	[140]	130	150	140
17.	+S	+S	+S	0	10	0	10	10	—	[60]	100	100	100
18.	—10	—100	0	±S	50	+S	30	30	60	100	[100]	90	90
19.	50	40	40	50	60	60	50	50	90	0	—	70	90
20.	160	140	140	80	90	110	120	120	190	180	[220]	200	160
21.	70	50	50	60	80	70	90	110	80	100	[90]	120	100
22.	30	40	20	10	50	90	140	220	+S	[210]	190	250	170
23.	70	60	50	60	20	50	80	50	[30]	30	30	60	90
24.	+S	160	100	90	100	120	160	60	—	10	—	20	10
25.	30	20	—30	0	20	30	70	70	+S	[190]	—	110	90
26.	0	—10	20	—40	—50	0	50	90	90	[90]	100	110	130
27.	—	—	—	—	—	—	—	—	—	+S	+S	[160]	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	—	190	160
30.	200	140	130	130	130	140	140	170	180	190	[180]	[200]	160
Means	52	53	44	45	53	59	75	79	93	95	89	99	90
Number of days	21	22	22	22	23	21	21	22	17	21	19	26	25

13	14	15	16	17	18	19	20	21	22	23	Daily means
100	90	60	90	130	100	90	100	70	110	120	88
90	90	90	130	120	100	110	110	120	100	60	92
150	140	110	120	80	90	130	110	60	50	40	87
150	150	130	110	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
-10	10	10	0	-10	-10	-10	-10	-10	-10	-10	—
-10	10	0	-10	0	0	0	0	0	0	0	10
130	130	140	140	80	80	40	50	40	20	10	0
20	20	20	40	50	50	70	80	50	50	50	32
60	60	70	90	80	90	110	80	50	30	+S	—
20	0	20	40	30	10	50	50	70	+S	40	26
60	+S	90	80	40	50	30	50	50	50	50	53
80	90	80	50	30	10	0	0	10	20	30	47
130	110	120	80	50	50	50	40	50	60	140	94
100	90	100	100	100	100	90	60	60	-10	-60	—
100	100	90	90	110	140	140	100	60	50	50	—
140	120	140	130	150	160	140	140	100	110	110	91
160	180	210	200	160	130	120	120	110	100	70	145
80	70	100	130	60	80	90	80	70	50	50	80
200	140	60	-10	20	50	-20	100	60	0	80	91
100	110	110	130	50	60	140	+S	+S	+S	+S	—
-10	40	70	100	100	90	60	30	+S	+S	-40	—
80	90	90	110	120	90	70	170	60	+S	20	—
120	130	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
120	130	120	90	30	+S	130	60	140	250	240	—
150	120	130	50	-10	-90	0	20	20	20	10	105
92	93	90	87	70	65	71	70	59	55	50	72
25	24	24	24	23	22	23	22	21	19	21	

December

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	-20	20	—	—	—	—	—	—	—	—	—	130	150
2.	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	+S	-S	+S	+S
6.	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	—	—	—	—	—	—	—	—	—	—	—	—	—
9.	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	—	—	—	—
12.	30	60	40	60	30	60	30	50	80	—	—	170	190
13.	240	210	160	130	100	50	30	10	50	70	[50]	80	130
14.	80	70	110	100	110	70	80	120	[130]	130	220	210	130
15.	-140	-170	-170	-100	-120	-90	-100	-120	—	—	-130	-100	-120
16.	230	130	140	310	280	210	210	270	270	150	270	[270]	270
17.	100	100	100	80	70	70	100	130	170	240	[230]	230	240
18.	210	150	60	-120	-120	0	-50	10	70	10	[100]	280	190
19.	140	30	70	70	130	90	100	70	210	210	[90]	70	150
20.	130	310	310	270	340	320	290	+S	+S	+S	340	+S	290
21.	100	30	90	30	-30	-70	-30	10	10	-20	-50	70	210
22.	+S	+S	+S	+S	380	+S	+S	+S	+S	+S	+S	+S	+S
23.	-20	30	-150	-130	-100	-50	-50	40	[0]	-100	0	70	—
24.	100	0	-30	-20	10	30	-20	-50	[-50]	[0]	40	30	70
25.	30	10	20	40	10	30	60	-30	-20	-50	[-20]	-20	-20
26.	-200	-200	-120	-120	0	60	90	80	110	110	[100]	130	190
27.	0	60	100	70	180	90	60	70	80	[60]	60	70	60
28.	80	60	10	10	30	90	150	100	—	[120]	250	230	+S
29.	160	120	80	200	80	60	60	50	130	[180]	—	[220]	230
30.	120	60	60	60	50	60	100	60	[130]	[60]	80	150	200
31.	130	80	0	0	60	70	-140	-90	[120]	[130]	+S	30	+S
Means	75	58	46	49	75	61	51	43	93	81	102	122	151
Number of days	20	20	19	19	20	19	19	18	16	16	16	19	17

13	14	15	16	17	18	19	20	21	22	23	Daily means
130	190	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
-200	-110	-180	+S	± S	± S	-10	-30	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	0	30	--
220	240	260	280	260	210	240	260	260	190	190	--
190	140	160	160	190	190	110	130	140	140	160	126
170	170	120	100	160	130	130	130	50	-60	-140	105
-150	-120	-150	-170	-130	-170	100	70	40	210	190	--
190	140	90	100	100	60	90	100	130	140	110	178
210	230	310	290	190	170	170	220	180	150	210	175
150	220	240	210	230	260	230	10	0	90	70	104
-40	10	60	-60	-170	70	170	140	100	10	-50	70
310	290	260	240	320	330	320	+S	+S	270	70	--
290	330	+S	+S	+S	+S	+S	+S	+S	+S	+S	--
+S	+S	+S	+S	180	180	100	150	130	10	-70	--
--	[30]	60	40	100	90	120	30	10	-30	20	--
40	80	110	70	170	150	110	110	100	130	140	55
-90	-70	-70	40	0	30	-30	-160	-300	-160	-200	-40
210	170	150	100	80	40	40	80	60	110	60	55
200	210	200	160	180	150	110	60	110	210	140	112
+S	200	200	100	100	100	+S	+S	+S	100	-40	--
230	160	150	220	130	80	50	60	70	80	120	127
+S	270	200	240	180	220	150	280	180	130	160	139
± S	60	60	130	100	100	60	100	+S	120	60	--
121	133	117	125	125	126	119	97	79	92	62	92
17	21	19	18	19	19	19	18	16	20	20	

II. Hourly means of the quantities of positive and negative

<u>Hour GMT</u>		0	1	2	3	4	5	6	7	8	9	10	11
<u>Month</u>													
January	+	0	0	1	0	0	0	4	0	2	1	0	0
	-	0	0	0	1	0	0	0	0	0	0	0	0
February	+	1	0	1	11	20	1	0	0	0	0	4	1
	-	0	0	31	0	74	6	0	0	1	0	7	0
March	+	0	0	0	0	0	0	0	0	0	1	1	0
	-	0	0	0	0	0	0	0	0	0	0	0	0
April	+	0	0	19	8	0	1	8	0	0	0	0	26
	-	0	1	26	62	45	3	1	0	0	0	0	0
May	+	0	1	0	24	24	0	0	0	1	1	0	0
	-	0	0	0	1	2	0	0	0	0	0	0	0
June	+	50	0	2	39	1	12	0	3	1	16	6	19
	-	43	0	0	20	0	5	0	10	2	4	5	29
July	+	0	0	0	0	2	0	1	0	1	0	0	0
	-	0	0	0	0	0	0	0	0	0	0	1	0
August	+	19	15	38	0	0	28	9	0	0	0	0	1
	-	35	0	6	0	10	3	3	0	0	0	0	0
September	+	4	1	0	0	0	0	3	3	0	0	0	0
	5	5	5	0	6	0	0	1	2	0	0	0	0
October	+	0	0	0	0	1	2	0	0	0	0	0	0
	-	0	0	0	0	1	1	0	0	0	0	0	0
November	+	6	0	9	2	0	0	0	0	0	0	0	2
	-	4	0	20	2	0	27	12	0	0	0	0	0
December	+	1	1	3	0	0	0	3	0	0	0	0	0
	-	0	0	0	0	0	0	3	0	0	0	0	0

