

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. Further informations are given by P. BENCZE and F. MÁRCZ: „The Geophysical Observatory near Nagycenk. II. Atmospheric electric and ionospheric measurements” Acta Geod. Geoph. Moont. Hung. 16, 1961, 353-357.



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.	0	30	90	30	60	60	60	100	[140]	150	170	+S	30
2.	30	-50	0	30	-20	30	10	20	10	30	[40]	60	90
3.	90	80	70	70	80	40	60	60	40	70	140	140	[190]
4.	140	110	20	70	20	20	80	[110]	—	130	190	160	160
5.	50	80	50	60	110	140	120	140	170	150	[140]	150	140
6.	-90	10	50	90	90	90	110	110	130	140	[120]	120	140
7.	70	60	50	40	40	60	80	110	90	70	70	[60]	80
8.	130	130	140	160	140	110	130	150	180	150	180	150	[190]
9.	90	30	-40	-30	50	-40	0	30	30	10	[-30]	80	30
10.	+S	20	80	60	40	20	50	30	-10	90	[160]	180	270
11.	-70	-80	-80	-60	-30	-40	-60	—	—	-60	-40	-50	-40
12.	-10	-20	-90	-40	-60	-60	-50	0	-10	-20	-20	-20	[20]
13.	10	-10	-140	-160	-10	90	-50	-160	-70	120	110	190	[190]
14.	-80	-110	-10	-90	-110	-160	-140	-190	-130	-120	30	[-20]	-70
15.	-40	-40	-50	-40	-60	-100	-70	-90	-70	-50	[-20]	-40	0
16.	-70	-50	-50	-40	-80	-30	-70	-50	-50	-60	[-50]	-60	30
17.	100	80	100	80	120	80	90	0	20	-30	[0]	+S	-70
18.	20	-110	-80	-50	0	-30	-20	—	—	20	-10	-20	-10
19.	40	70	170	150	120	90	80	60	60	60	[60]	40	100
20.	10	40	50	50	60	50	60	70	70	100	[70]	20	10
21.	-50	-60	-40	-20	-10	20	30	30	10	20	[0]	30	10
22.	70	60	60	70	60	60	80	80	70	90	70	[110]	130
23.	40	50	50	60	70	50	70	40	80	50	[70]	100	130
24.	90	70	80	80	80	110	130	140	120	[100]	40	60	150
25.	120	150	110	140	130	140	130	70	—	[60]	80	100	160
26.	-30	-40	-40	-20	0	-10	-60	-50	-50	-70	[-60]	-60	-60
27.	0	30	20	0	20	30	50	60	50	70	[60]	70	90
28.	100	70	30	90	100	70	30	60	60	80	30	[40]	70
29.	30	30	10	20	30	-20	+S	+S	-50	+S	50	30	-50
30.	50	30	10	+S	+S	120	40	-80	-80	-90	30	100	-100
31.	40	40	30	20	20	50	50	70	80	[+S]	—	30	40
Means	29	23	21	27	35	33	34	33	33	43	56	60	66
Number of days	30	31	31	30	30	31	30	28	27	29	30	29	31

13	14	15	16	17	18	19	20	21	22	23	Daily means
-160	30	-10	20	30	-10	60	+S	-50	+S	-120	—
110	100	90	90	100	110	110	120	100	100	90	58
[+S]	180	230	240	170	140	180	190	150	140	130	125
150	150	120	170	110	110	160	140	150	130	70	116
170	180	150	190	180	170	130	120	80	30	-30	120
140	120	50	40	60	110	120	140	140	110	90	93
80	90	130	110	120	110	90	90	90	0	110	79
240	240	200	240	+S	+S	200	190	200	150	110	—
-30	-40	-70	-10	70	40	70	80	0	110	±S	19
280	+S	+S	+S	+S	130	80	-20	-70	-90	-70	—
-20	-10	40	40	30	30	40	20	-30	-10	20	—
0	-10	50	60	60	0	0	30	30	40	-60	-8
200	210	180	120	170	+S	+S	90	20	-60	20	—
-50	-60	-40	0	20	-30	-80	-20	-60	-80	-80	-70
-30	-30	-60	-60	-30	-10	-50	-50	60	10	-50	-38
70	+S	60	-90	40	-60	-50	-30	-30	40	40	-29
-10	-60	80	70	-80	-110	-100	-70	-50	0	20	11
50	80	110	80	110	60	50	60	110	50	170	—
70	80	80	110	50	50	60	70	60	10	-10	72
20	30	90	-60	0	50	-50	-50	-50	0	-10	26
20	0	0	10	10	40	30	30	80	80	100	15
140	100	90	90	50	60	30	50	40	40	50	73
160	150	150	130	120	90	120	150	130	130	90	95
80	70	70	90	70	40	50	30	40	40	50	78
130	160	110	90	60	10	30	0	-50	-20	-40	81
-20	0	-40	-90	-60	-20	-10	-20	-10	0	0	-34
100	120	130	100	110	120	160	130	170	110	90	79
120	90	80	70	90	80	70	60	40	50	40	68
10	—	±S	70	100	100	100	100	90	80	50	—
100	0	40	30	20	30	60	50	50	40	40	—
80	90	90	100	100	100	70	70	60	60	60	—
67	74	76	68	65	53	58	58	48	43	32	
30	28	29	30	29	29	30	30	31	30	30	

February

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	60	50	50	50	50	60	60	[70]	—	80	80	90	90
2.	60	50	40	30	40	40	50	50	70	50	[60]	50	60
3.	60	70	60	50	80	90	100	120	130	120	[110]	120	130
4.	80	70	60	60	50	50	10	40	60	90	[80]	90	70
5.	—50	—20	10	40	70	30	20	30	[40]	30	40	70	100
6.	130	90	—10	160	120	160	+S	+S	170	200	[170]	+S	+S
7.	0	—90	40	0	30	80	140	160	170	[120]	110	110	80
8.	100	70	100	110	100	+S	+S	—	—	200	180	160	+S
9.	±S	±S	30	30	30	30	80	90	100	90	[80]	90	110
10.	150	140	140	140	120	130	130	180	170	170	130	[160]	130
11.	10	0	—50	—90	—30	—50	—60	—50	—40	—40	—20	[—10]	—20
12.	—20	—40	—70	—40	—50	30	0	10	30	60	[40]	130	70
13.	120	60	60	80	90	100	90	70	30	[30]	—20	—20	20
14.	40	10	—10	—30	—40	10	10	20	—20	[10]	—20	10	—60
15.	—50	0	—10	—20	—10	40	20	[—70]	—	[—60]	—50	—70	—50
16.	—30	—60	—50	—30	—20	—30	20	20	[10]	30	30	40	60
17.	40	30	40	20	—20	0	40	40	—	—	—	30	[80]
18.	50	50	50	70	80	80	40	90	70	40	70	[70]	90
19.	—40	40	10	30	50	40	40	30	60	70	[90]	100	130
20.	40	50	40	50	40	50	80	90	160	150	[130]	130	130
21.	50	60	80	30	60	40	40	60	100	150	180	[180]	170
22.	110	80	80	130	140	60	50	+S	—	+S	+S	+S	+S
23.	10	—110	—130	—50	30	10	—60	30	30	70	[20]	—10	10
24.	10	—70	30	70	50	60	70	120	110	90	100	80	80
25.	140	80	100	—10	30	—40	—30	70	70	50	[30]	10	100
26.	30	30	30	10	—20	0	—20	—10	50	50	50	40	80
27.	20	20	20	40	50	40	50	60	80	[90]	120	120	130
28.	80	60	70	60	80	90	120	130	+S	[+S]	+S	200	200
Means	44	27	29	35	43	44	42	58	75	78	72	76	80
Number of days	27	27	26	28	28	27	26	25	22	25	25	26	25

13	14	15	16	17	18	19	20	21	22	23	Daily means
100	80	80	80	110	120	110	100	80	70	50	77
70	60	60	70	80	90	80	70	60	60	50	58
120	120	120	110	100	110	120	120	150	80	70	103
70	60	50	60	70	50	40	40	30	0	-50	51
90	80	90	90	60	30	40	20	30	120	110	49
130	170	160	160	+S	+S	210	+S	+S	110	-30	—
120	110	110	70	80	60	120	90	70	110	100	83
120	90	90	100	100	80	40	180	90	20	40	—
130	130	140	170	170	140	180	180	200	140	140	—
140	130	130	120	120	120	70	30	10	-10	10	115
10	40	30	10	30	40	0	0	-10	-10	-10	-13
40	20	-30	20	50	70	30	110	130	110	90	33
150	70	-50	20	-20	-10	50	20	-70	30	-50	35
-20	-60	-50	-40	-30	10	40	-10	10	-30	-30	-12
40	-20	-30	-60	-50	-50	-50	-40	-70	-70	-10	-32
80	70	110	110	120	50	80	80	70	80	60	37
60	80	90	60	20	-20	50	100	90	80	50	—
130	110	150	120	80	110	80	30	60	20	-10	71
170	160	140	140	130	120	110	80	80	100	20	79
180	170	160	110	130	170	130	80	60	40	30	100
170	170	150	170	240	180	130	130	110	100	100	119
+S	+S	+S	+S	+S	+S	+S	140	70	10	-40	—
70	120	80	110	130	30	30	120	30	30	50	27
[120]	120	120	130	130	130	80	100	100	80	80	83
170	130	-10	-20	0	60	10	60	30	10	20	44
40	30	20	30	40	50	40	40	20	-30	-10	25
110	140	140	160	160	140	140	130	90	70	70	91
200	160	140	140	140	100	—	—	—	—	—	—
104	94	80	83	84	76	75	77	58	49	33	
27	27	27	27	26	26	26	26	26	27	27	

March

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—	—	—	—	—	—	—	—	—	130	140	120	130
2.	20	—	—	—	—	—	—30	30	0	—20	+S	+S	30
3.	50	40	40	50	50	70	100	90	100	110	[80]	90	100
4.	70	70	60	60	70	100	90	80	90	80	[70]	70	80
5.	20	10	10	20	30	30	30	40	50	50	[50]	70	70
6.	10	10	30	20	30	30	50	80	30	100	[80]	90	110
7.	—10	—30	—30	—40	—30	10	30	50	0	50	[80]	70	80
8.	50	50	40	50	50	50	40	—	—	50	50	40	40
9.	—20	—10	—10	—20	—40	—30	0	20	40	50	60	[70]	60
10.	30	30	40	50	50	50	50	70	80	60	[50]	50	50
11.	50	50	50	+S	—S	40	40	30	+S	—S	[50]	—10	10
12.	60	—	—	50	50	60	80	80	60	70	[70]	80	80
13.	—20	10	20	20	50	70	80	60	50	[30]	60	60	70
14.	40	50	40	50	50	50	60	60	40	+S	—S	[+S]	70
15.	50	50	50	50	50	50	50	—	—	80	80	100	110
16.	0	0	20	—10	10	20	20	20	40	60	70	90	[100]
17.	—30	—40	—20	10	40	—10	—10	10	20	50	60	[60]	70
18.	50	40	40	30	20	10	—10	10	40	40	[30]	60	90
19.	+S	+S	+S	+S	+S	+S	90	130	110	80	[50]	30	40
20.	50	50	50	50	50	50	50	50	[50]	50	50	50	50
21.	40	40	50	60	50	40	40	40	40	[50]	60	70	70
22.	30	30	40	50	50	70	70	—	—	80	60	50	20
23.	40	30	30	30	40	60	60	90	80	70	[80]	80	90
24.	40	40	30	20	30	40	60	[60]	70	80	90	90	100
25.	60	50	50	50	50	60	60	70	[80]	80	90	70	80
29.	30	30	—20	+S	+S	+S	[30]	—	50	50	—S	+S	+S
27.	40	40	40	30	20	0	20	60	[90]	100	100	110	120
28.	—10	—40	20	20	20	—10	10	40	60	[60]	70	70	80
29.	30	30	—20	+S	+S	+S	[30]	—	50	50	—S	+S	+S
30.	40	60	40	60	50	30	70	100	100	[90]	80	70	50
31.	100	50	10	—	30	30	+S	+S	+S	30	30	10	10
Means	32	27	28	31	35	37	43	57	59	64	68	67	72
Number of days	29	27	27	25	26	27	29	25	25	29	28	28	30

MAGYAR
TUDOMÁNYOS AKADÉMIA
KÖNYVTÁRA

13	14	15	16	17	18	19	20	21	22	23	Daily means
130	160	130	130	130	120	100	90	70	70	20	—
40	50	50	60	70	70	60	50	50	40	40	—
100	90	80	90	90	90	90	90	90	80	70	80
60	70	80	60	50	50	50	50	40	30	30	65
80	110	110	120	120	100	100	70	90	80	—30	60
120	120	110	100	80	60	—10	—30	—40	—30	—20	49
80	80	70	60	50	50	50	50	50	40	40	35
50	70	50	50	50	50	50	10	10	30	10	—
80	70	70	60	50	40	30	50	50	40	30	31
60	50	60	50	50	40	—10	0	40	50	50	46
50	50	50	70	70	90	70	70	90	90	70	—
90	100	60	50	50	50	30	0	50	50	50	—
80	100	100	90	80	110	100	100	50	40	40	60
90	110	110	110	80	90	80	70	70	50	40	—
100	80	70	50	50	60	60	40	30	20	10	—
90	80	70	70	50	20	—10	—40	—10	0	0	32
50	50	50	50	50	40	0	10	30	30	50	26
60	60	60	—60	+S	+S	+S	30	—30	20	—60	—
50	50	50	50	60	70	50	60	50	40	50	—
50	50	60	50	50	50	40	40	60	50	40	50
80	70	70	60	60	50	50	40	30	—10	20	49
+S	+S	+S	60	40	30	50	60	60	60	50	—
90	100	90	90	80	100	90	90	90	60	40	71
100	110	110	100	120	100	100	80	100	80	60	75
90	100	100	100	90	60	60	50	40	40	50	68
100	100	90	90	80	80	80	60	60	60	50	61
100	60	40	30	30	50	30	20	—10	—50	—20	44
60	50	30	40	40	50	40	40	40	40	30	35
+S	50	40	60	70	70	40	40	30	30	40	—
60	60	80	70	60	110	70	90	70	70	90	70
20	10	10	10	30	30	—10	—40	—40	—50	—60	—
78	77	72	65	66	66	51	43	42	37	28	
29	30	30	31	30	30	30	31	31	31	31	

April

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	-70	-30	30	40	20	30	-10	-10	-30	-10	-20	-10	30
2.	20	20	20	30	30	30	70	70	70	[50]	80	70	70
3.	50	60	30	40	60	70	50	[60]	70	80	80	90	80
4.	20	10	20	30	30	30	40	50	60	[30]	70	60	60
5.	40	40	30	40	40	50	—	—	80	80	60	50	70
6.	40	20	-10	-30	-50	-10	60	60	70	[70]	80	80	80
7.	40	40	0	-30	-10	10	10	±S	-S	-S	40	0	30
8.	40	40	40	20	20	30	40	40	[80]	80	80	70	80
9.	±S	70	±S	70	50	+S	70	20	90	[80]	70	70	80
10.	0	-20	30	40	50	70	70	100	70	[70]	60	30	50
11.	±S	±S	+S	40	50	60	70	60	[50]	40	30	50	-20
12.	60	50	50	50	60	80	80	[80]	80	90	80	90	90
13.	20	10	20	30	30	40	—	—	60	40	30	30	40
14.	50	50	50	40	60	40	40	40	70	[90]	90	110	150
15.	90	90	100	100	100	100	100	100	90	[100]	100	100	110
16.	70	60	70	100	90	80	80	90	100	[100]	120	160	150
17.	90	90	90	80	70	90	90	90	110	[100]	100	90	70
18.	10	40	50	10	-10	-10	20	70	80	[70]	±S	±S	±S
19.	0	50	30	-40	-40	0	[0]	—	120	90	±S	±S	±S
20.	60	60	50	50	60	70	[60]	70	80	50	60	70	+S
21.	80	80	60	60	60	70	80	100	80	[80]	60	60	40
22.	±S	±S	±S	0	0	60	80	90	80	[70]	30	90	90
23.	70	+S	40	50	30	70	70	60	70	[70]	60	70	70
24.	30	20	20	20	20	40	50	50	[70]	60	60	50	60
25.	-20	-60	-10	-20	-50	0	20	40	50	[50]	40	40	40
26.	40	40	40	40	30	40	—	—	50	50	60	60	40
27.	60	50	40	70	±S	±S	±S	80	90	[90]	±S	40	30
28.	60	60	60	70	80	90	90	80	70	[70]	80	(70)	70
29.	-30	-30	-10	-20	-10	30	70	70	[100]	90	60	80	70
30.	60	30	30	-40	10	50	80	90	70	[50]	40	30	30
Means	36	35	36	31	30	47	57	66	73	69	66	64	65
Number of days	27	27	27	30	29	28	26	25	29	29	27	27	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
33	40	40	40	40	50	50	30	30	30	30	15
50	60	50	60	70	40	40	50	30	30	40	48
70	70	60	50	50	40	40	40	40	30	10	55
60	70	90	100	100	90	80	60	50	40	30	55
70	50	60	60	40	60	60	30	20	40	40	—
70	60	60	70	60	70	50	50	60	50	40	46
30	+S	+S	90	40	30	50	40	60	50	50	—
100	80	60	80	120	110	70	40	±S	+S	±S	—
90	90	90	120	90	150	90	60	50	40	30	—
40	40	50	80	—S	50	60	40	40	60	50	49
+S	+S	50	80	60	10	30	±S	±S	10	30	—
60	50	90	60	60	40	—S	±S	±S	—S	—10	—
40	40	30	10	40	60	30	30	40	50	70	—
160	160	160	130	130	120	160	130	110	100	90	97
110	100	100	100	60	60	70	80	70	60	50	89
150	160	160	120	80	80	80	70	60	80	80	100
60	60	60	±S	—S	±S	—30	10	10	—10	—10	—
10	10	—S	30	30	110	80	40	30	30	0	—
±S	+S	80	100	60	30	80	90	70	70	50	—
130	40	60	70	90	80	100	120	110	100	70	74
40	80	90	110	120	120	80	60	60	50	40	73
90	120	110	100	90	110	0	—20	—50	—90	40	—
60	60	60	70	60	40	50	40	20	50	50	56
60	60	70	60	70	70	60	70	60	60	50	52
50	50	40	40	40	30	30	40	50	60	50	25
40	10	20	40	20	0	±S	30	40	±S	+S	—
20	0	—40	20	30	60	50	70	80	80	70	—
80	60	70	60	50	50	50	50	40	30	0	62
70	70	50	60	80	60	70	80	70	50	50	50
40	40	40	50	40	50	50	50	50	50	40	43
67	64	66	72	65	64	58	53	48	44	40	
28	27	28	29	28	29	28	28	27	27	28	

May

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	40	40	40	40	40	40	+S	+S	+S	80	+S	±S	±S
2.	40	50	50	40	40	80	40	60	80	[80]	70	80	80
3.	20	20	20	30	40	50	60	—	70	70	60	70	70
4.	50	50	40	60	60	80	70	70	[70]	60	50	40	30
5.	30	30	40	40	50	50	40	40	40	[10]	—10	—20	10
6.	60	80	70	70	70	50	50	40	[50]	50	40	30	30
7.	40	30	40	50	40	60	50	50	[50]	50	—S	±S	±S
8.	40	40	40	40	30	30	40	40	[—20]	—30	10	10	30
9.	40	30	30	30	0	—10	30	30	30	[10]	10	30	—
10.	50	50	50	50	50	60	[30]	—	50	50	50	80	60
11.	+S	+S	±S	+S	+S	±S	±S	—S	—S	[—S]	10	20	70
12.	50	60	50	60	80	70	100	100	100	90	100	90	80
13.	0	—20	10	30	20	20	70	80	[100]	90	70	70	80
14.	30	20	10	—10	0	20	40	60	70	[70]	70	70	60
15.	20	20	20	30	40	60	70	80	80	[90]	70	70	80
16.	30	20	20	20	30	30	40	30	30	30	[30]	30	30
17.	30	20	20	20	30	30	40	—	—	50	40	40	40
18.	40	30	30	40	40	40	60	60	50	50	[50]	50	40
19.	30	40	40	50	50	50	60	60	60	[40]	50	60	80
20.	40	40	40	40	40	50	40	60	60	80	[90]	100	110
21.	40	40	40	30	30	20	+S	±S	[±S]	50	30	10	50
22.	20	30	20	30	30	50	50	[50]	50	50	40	40	40
23.	—	—	—	—	—	—	—	—	—	—	30	0	20
24.	70	70	40	30	50	70	30	—	±S	—S	20	50	30
25.	20	20	20	20	40	50	60	60	40	40	[40]	40	40
26.	20	20	10	10	10	30	30	50	[70]	100	99	80	50
27.	30	30	30	30	30	40	40	40	[40]	40	30	30	30
28.	20	20	20	20	30	40	30	30	40	[30]	30	30	40
29.	±S	—	—	—	—	±S	50	70	50	30	—10	10	10
30.	30	40	20	10	10	20	40	40	30	[40]	20	60	50
31.	40	50	40	40	30	50	50	—	[50]	50	40	40	40
Means	35	35	32	34	36	44	49	55	54	52	42	45	49
Number of days	28	28	26	28	28	28	27	22	25	28	29	29	28

13	14	15	16	17	18	19	20	21	22	23	Daily means
+S	+S	90	80	-140	-80	120	100	90	100	40	—
90	100	100	110	100	90	80	70	40	30	30	68
60	60	50	50	40	50	50	50	50	50	60	50
10	20	20	30	30	40	40	30	40	40	40	45
10	20	30	40	40	60	70	70	70	60	50	36
20	20	30	40	40	40	30	30	40	40	50	45
±S	+S	10	±S	40	40	40	40	50	50	50	—
+S	+S	90	100	100	130	40	100	70	40	20	—
(40)	30	40	50	40	50	50	30	-30	40	50	—
70	70	30	—	80	70	70	70	50	30	70	56
90	70	50	40	40	40	50	40	60	50	30	—
70	70	70	80	80	100	60	60	50	30	20	72
80	80	80	70	70	80	50	20	20	40	30	52
60	70	70	70	60	40	70	50	30	20	10	44
90	90	80	70	60	80	60	30	30	20	30	58
30	30	30	30	30	30	40	30	30	30	30	30
40	50	50	50	50	40	40	40	40	40	40	—
-S	-S	40	40	40	40	40	40	40	40	40	—
80	70	40	+S	70	50	60	60	50	50	40	54
120	120	90	60	60	50	40	30	40	50	30	62
60	50	50	40	—	—	40	40	20	10	20	—
40	50	±S	±S	-10	—	—	—	—	—	—	—
30	30	10	20	30	30	40	40	50	70	70	—
40	50	60	50	50	40	40	40	40	30	20	—
50	70	60	60	70	70	60	70	60	40	30	47
50	40	50	40	40	40	40	30	20	20	30	40
30	30	40	40	30	30	20	20	30	20	20	31
40	30	40	50	50	30	0	0	-50	0	40	25
0	40	60	70	60	60	40	30	20	10	30	—
50	70	70	70	50	40	40	40	50	40	40	40
50	50	50	40	40	40	50	40	20	30	10	41
52	55	53	55	45	49	49	45	37	37	36	
26	27	30	27	30	29	30	30	30	30	30	

June

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	20	20	20	10	20	30	40	40	30	[40]	30	40	40
2.	10	20	20	20	20	—	—	—	—	—	—	—	—
3.	20	10	20	30	40	—	—	—	—	—	—	—	—
4.	10	10	10	20	20	40	40	40	30	20	—	30	30
5.	10	10	0	10	10	10	10	[20]	20	20	20	20	20
6.	10	10	10	10	20	30	30	30	30	[30]	30	40	30
7.	30	20	20	20	20	20	30	—	[20]	20	30	30	30
8.	30	30	20	10	10	20	30	[50]	60	70	70	50	50
9.	0	0	20	20	20	20	30	30	[30]	[30]	50	60	50
10.	30	40	40	30	30	60	70	90	[70]	[60]	50	50	50
11.	30	30	30	30	30	30	[30]	[30]	40	30	40	40	30
12.	10	20	30	+S	+S	50	30	30	[30]	30	30	30	[±S]
13.	—	—	—	—	—	—	—	—	—	—	—	—	—
14.	—	—	—	—	—	—	—	—	—	—	—	—	—
15.	—	—	—	—	—	—	—	—	—	—	—	—	—
16.	—	—	—	—	—	—	—	—	—	—	—	—	—
17.	—	—	—	—	—	—	—	—	—	—	—	—	—
18.	—	—	—	—	—	—	—	—	—	—	—	—	—
19.	—	—	—	—	—	+S	-S	30	[100]	+S	100	+S	10
20.	30	30	20	20	30	60	[70]	30	40	50	10	-10	40
21.	10	10	20	20	30	30	40	—	60	50	50	50	50
22.	50	40	30	30	30	50	50	[50]	50	50	40	+S	-20
23.	20	20	10	20	40	50	50	50	—	50	40	60	+S
24.	+S	100	80	80	+S	+S	60	90	70	[50]	40	30	40
25.	40	30	40	30	30	50	60	[60]	60	40	20	20	20
26.	20	20	20	30	30	30	0	20	[10]	20	20	30	(50)
27.	—	—	—	—	—	—	—	—	—	—	—	—	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	—	—	—
30.	—	—	—	—	—	—	—	—	—	—	—	—	—
Means	21	25	24	24	25	36	39	43	44	39	39	36	31
Number of days	18	19	19	18	17	16	17	16	17	17	17	16	15

13	14	15	16	17	18	19	20	21	22	23	Daily means
40	50	50	50	40	30	20	10	10	10	10	29
—	30	30	30	30	30	20	20	10	10	10	—
—	20	20	20	20	10	10	10	0	10	10	—
30	40	40	40	30	30	20	20	20	10	10	26
20	20	20	30	30	30	30	30	30	20	10	19
30	40	40	30	40	40	30	30	30	30	20	28
30	30	+S	±S	+S	10	10	10	-10	30	30	—
50	40	50	50	40	30	20	0	0	0	0	33
40	40	40	50	40	30	+S	±S	+S	10	0	—
60	60	70	60	70	60	40	50	30	30	30	51
30	30	30	30	30	30	20	20	20	20	10	29
[±S]	10	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
20	20	+S	+S	40	30	30	20	20	10	20	—
20	-S	30	30	30	20	20	10	20	10	10	27
+S	30	-S	-S	±S	40	30	20	40	50	50	—
40	-S	50	50	50	50	40	30	20	20	30	38
—	—	+S	+S	+S	+S	+S	+S	+S	+S	+S	—
30	30	40	40	40	40	40	30	30	30	30	—
20	20	30	30	30	30	30	20	30	30	30	33
50	50	50	±S	±S	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
34	33	39	39	37	32	26	21	19	19	18	
15	17	15	14	15	17	16	16	16	17	17	

July

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	—	—	—	—	—	—	—	—	—	—	—	—	—
9.	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	—	—	—	—
12.	—	—	—	—	—	—	—	—	—	—	+S	+S	+S
13.	—	20	10	60	60	70	70	60	—	—	100	80	60
14.	60	30	50	70	100	90	90	70	[70]	70	40	40	50
15.	40	40	20	30	60	70	60	40	50	[50]	40	40	40
16.	30	60	60	70	110	90	60	110	[110]	80	70	60	50
17.	20	20	20	30	30	50	60	[50]	60	70	70	70	60
18.	30	20	30	30	30	30	40	[40]	50	40	30	30	60
19.	50	50	10	20	30	40	—	—	50	60	70	80	80
20.	—20	—50	—50	0	20	40	70	80	[80]	70	50	40	40
21.	30	30	30	30	40	50	60	[70]	50	50	50	40	40
22.	20	30	20	20	20	40	50	50	50	[60]	60	50	50
23.	50	40	30	40	30	[40]	70	60	—	—	—	—	—
24.	—	—	—	—	—	—	—	—	—	—	—	—	—
25.	—	—	—	—	—	—	—	—	—	—	—	—	—
26.	—	—	—	—	—	—	—	—	—	—	—	—	—
27.	—	—	—	—	—	—	—	—	—	50	40	30	30
28.	50	50	50	40	50	40	50	60	40	40	70	80	80
29.	50	40	50	50	60	60	[60]	—	—	100	100	80	60
30.	50	50	50	60	—	—	—	—	—	—	—	—	—
31.	50	40	40	30	40	40	[40]	[40]	40	40	40	20	30
Means	36	31	28	39	49	54	60	61	59	60	59	53	52
Number of days	14	15	15	15	14	14	13	12	11	13	14	14	14

13	14	15	16	17	18	19	20	21	22	23	Daily means
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
60	60	60	80	-S	±S	+S	—	—	—	—	—
60	80	70	70	70	80	90	60	70	60	60	—
40	30	30	20	30	40	40	60	40	60	50	53
40	30	30	30	40	40	40	40	30	30	30	40
30	20	30	30	±S	-S	40	40	30	30	20	—
70	±S	+S	+S	+S	40	30	30	30	30	20	—
60	50	20	20	20	20	±S	-S	10	60	100	—
70	80	90	80	80	60	40	10	0	-30	-40	—
50	40	40	50	50	40	50	40	40	30	30	35
0	10	80	40	50	40	40	50	50	30	20	41
70	+S	±S	±S	+S	120	70	60	80	100	60	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
30	50	60	60	50	50	50	50	50	50	50	—
80	60	60	50	50	40	30	40	40	50	40	52
60	60	70	60	70	80	80	70	60	70	50	—
—	—	60	50	50	50	50	50	50	50	50	—
30	30	30	30	20	±S	±S	±S	—	—	—	—
50	46	52	48	48	54	50	46	41	44	39	—
15	13	14	14	12	13	13	13	14	14	14	—

August

Hour GMT	August												
Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—	—	—	—	—	130	110	[100]	[70]	80	80	80	50
2.	30	30	40	40	40	70	[80]	—	[100]	80	80	70	80
3.	40	30	30	20	30	30	40	[30]	30	10	40	40	50
4.	30	30	40	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	80	60
5.	—	—	—	—	—	—	—	—	150	150	70	70	60
6.	30	30	30	30	30	40	50	[50]	[40]	50	80	70	60
7.	50	50	40	40	$\pm S$	$\pm S$	$\pm S$	[80]	[70]	100	80	70	$\pm S$
8.	—	—	—	—	—	—	—	—	—	150	130	110	100
9.	40	40	40	40	40	80	140	—	[70]	60	40	40	50
10.	40	30	30	20	30	[40]	$\pm S$	$\pm S$	$\pm S$	50	80	80	90
11.	30	20	20	20	40	40	50	[50]	70	70	80	80	80
12.	30	40	30	30	40	50	[70]	[40]	40	50	50	40	40
13.	50	50	50	60	80	100	[110]	[50]	50	50	40	40	40
14.	40	40	30	30	40	50	[60]	[60]	70	70	50	50	30
15.	50	30	20	20	20	30	40	[40]	[40]	40	40	40	40
16.	40	$\pm S$	$\pm S$	10	10	40	70	—	[60]	50	50	50	60
17.	40	30	30	40	50	40	50	[50]	60	80	$\pm S$	$\pm S$	$\pm S$
18.	70	60	50	60	50	70	130	[120]	80	70	60	50	50
19.	40	40	40	40	50	70	80	[80]	90	80	70	60	50
20.	40	40	30	30	40	40	[40]	[40]	40	50	40	40	40
21.	—	—	—	—	—	—	—	—	[70]	60	50	50	50
22.	40	30	30	30	30	30	40	[50]	70	90	90	60	50
23.	50	40	30	40	40	50	70	—	60	70	60	60	70
24.	30	30	20	30	40	40	50	[50]	50	40	40	50	$\pm S$
25.	30	30	30	40	30	[40]	[50]	60	60	50	50	40	50
26.	40	30	30	20	30	40	40	40	[50]	[50]	(40)	50	60
27.	30	20	30	40	40	30	40	[50]	50	50	50	50	40
28.	30	30	20	20	30	30	[20]	[40]	40	60	$\pm S$	$\pm S$	—S
29.	30	60	30	40	40	50	40	70	[70]	70	40	50	50
30.	40	0	90	30	30	50	80	120	90	—	70	70	60
31.	40	40	30	30	50	50	70	60	60	[50]	50	50	50
Means	39	35	34	33	38	51	65	60	64	67	61	58	56
Number of days	27	26	26	26	25	26	25	22	28	29	27	29	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
50	40	40	40	50	50	50	50	50	40	40	—
80	80	50	50	30	40	40	10	30	40	40	54
50	40	30	40	40	40	40	30	40	40	30	35
50	40	40	50	40	—S	±S	—	—	—	—	—
80	110	100	70	40	40	40	40	40	30	20	—
50	50	50	50	50	40	50	50	50	70	60	48
—	—	—	—	—	—	—	—	—	—	—	—
90	100	±S	±S	±S	±S	50	50	50	50	40	—
+S	±S	±S	±S	50	40	40	30	50	50	40	—
60	50	40	50	80	70	60	50	50	50	40	—
70	60	70	80	60	50	50	40	30	30	20	50
50	40	40	30	20	10	10	40	40	40	50	38
40	+S	+S	±S	±S	—S	±S	±S	±S	±S	20	—
40	70	50	60	70	70	50	50	40	50	50	51
40	40	40	40	50	40	50	50	40	50	40	39
60	50	40	30	50	50	50	50	40	40	40	—
±S	±S	+S	+S	+S	+S	150	130	110	100	80	—
30	20	30	30	40	40	50	50	50	50	40	56
±S	—40	70	±S	±S	±S	±S	—S	30	40	30	—
30	20	30	20	20	20	10	—70	±S	—	—	—
50	50	50	50	50	40	40	40	50	50	40	—
50	50	50	40	40	50	50	50	50	40	40	48
80	80	70	50	40	50	50	50	50	50	40	54
±S	70	30	50	70	60	50	50	30	40	40	—
50	60	70	50	50	50	50	50	50	40	40	47
60	50	50	50	50	40	40	30	40	30	30	41
50	50	50	50	50	40	40	50	40	40	30	42
±S	110	70	0	—20	—10	30	20	+S	+S	30	—
40	40	+S	±S	—S	40	60	50	40	50	90	—
70	60	40	40	50	40	40	40	40	30	30	53
50	50	40	40	40	40	40	40	50	50	40	46
55	53	50	44	44	42	47	41	45	46	40	
25	27	25	24	25	25	27	27	26	26	28	

September

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	30	20	30	40	40	30	40	40	50	40	30	[20]	30
2.	30	20	30	30	40	30	60	[70]	50	60	60	60	40
3.	60	40	50	40	50	40	[40]	60	70	80	70	80	80
4.	40	40	50	50	50	40	[90]	50	50	50	50	50	50
5.	50	60	60	50	70	80	70	60	[70]	80	80	80	70
6.	40	50	60	60	60	50	50	—	[40]	30	30	40	30
7.	30	30	20	30	40	40	60	[50]	50	50	60	70	60
8.	±S	90	±S	±S	±S	30	80	80	[70]	60	50	60	60
9.	10	20	30	30	±S	(±S)	±S	±S	±S	±S	±S	—40	30
10.	50	50	60	50	50	50	70	[80]	80	90	90	—	—
11.	50	40	40	50	50	50	[80]	90	80	60	70	70	70
12.	60	50	60	60	50	50	70	80	[60]	70	80	100	120
13.	30	20	30	40	60	60	80	—	—	—	—	—	—
14.	40	30	30	30	40	40	60	[70]	—	—	—	—	—
15.	30	50	50	50	60	60	200	+S	—	—	—	—	—
16.	30	40	50	40	60	120	150	80	80	[80]	70	70	70
17.	50	60	70	110	70	110	—	—	—	—	70	70	50
18.	50	40	40	40	50	50	70	90	[60]	50	40	50	40
19.	30	40	40	30	40	40	60	70	[60]	50	50	50	50
20.	40	40	40	40	40	50	—	—	—	—	—	—	—
21.	—	—	—	—	—	—	—	—	—	—	—	—	—
22.	—	—	—	—	—	—	—	—	[80]	80	70	60	±S
23.	40	40	40	40	40	50	80	130	110	[50]	100	80	50
24.	20	—80	—110	—10	80	90	130	130	+S	[120]	120	110	110
25.	30	30	30	50	40	40	50	60	[50]	40	60	50	50
26.	10	—10	—20	20	—40	—40	10	[20]	30	40	40	40	40
27.	50	50	50	40	50	50	80	60	—	[60]	60	60	80
28.	40	40	50	60	70	80	80	80	80	70	[90]	100	80
29.	30	40	40	50	50	50	30	100	[70]	70	80	100	110
30.	50	50	70	50	50	50	70	90	60	30	20	[40]	40
Means	38	35	37	43	48	51	74	75	64	61	64	61	61
Number of days	27	28	27	27	26	27	25	22	21	23	24	24	23

13	14	15	16	17	18	19	20	21	22	23	Daily means
50	40	40	40	40	50	50	50	40	30	20	37
50	70	70	60	70	50	50	50	50	50	50	50
80	80	80	60	50	50	40	40	40	50	60	58
50	50	50	50	50	40	50	50	50	50	50	50
80	70	60	60	70	60	50	60	50	50	50	64
30	20	20	40	40	50	60	50	40	40	40	43
70	70	70	30	30	40	30	30	30	-S	(±S)	—
70	60	60	40	40	±S	—	±S	-50	20	20	—
50	50	90	110	120	140	110	90	70	90	70	—
100	100	90	80	70	70	70	70	70	60	50	71
70	60	70	70	50	60	70	80	80	50	50	63
110	100	100	90	70	50	50	40	40	50	40	69
70	50	50	60	50	50	70	60	50	50	50	—
80	70	70	60	70	60	50	40	40	40	40	—
50	50	60	50	50	10	10	30	50	30	30	—
60	60	70	70	50	60	60	60	70	60	60	68
50	50	60	70	80	80	70	60	50	50	50	—
50	50	50	50	50	50	50	50	40	20	20	48
50	50	50	50	50	50	40	40	40	40	40	46
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	20	20	20	20	30	10	30	—
70	90	100	110	80	80	50	30	+S	-S	±S	—
110	90	60	60	60	40	40	40	30	30	30	57
50	50	50	40	20	0	30	50	0	10	10	37
50	40	50	30	30	40	50	60	70	80	70	30
90	90	90	70	50	40	50	50	40	40	30	58
90	100	90	80	90	80	70	50	40	50	30	70
110	100	120	110	110	80	60	70	70	50	50	73
40	50	40	40	50	50	50	60	50	60	50	50
68	65	67	62	58	54	52	51	44	45	42	
27	27	27	27	28	27	27	27	27	26	26	

October

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	70	60	60	70	50	50	70	100	—	—	—	—
2.	120	0	10	50	60	110	130	+S	+S	150	[130]	80	70
3.	50	50	50	60	60	60	60	180	100	[70]	80	80	80
4.	20	40	50	60	70	80	120	90	—	[60]	20	10	40
5.	40	50	10	-10	0	20	0	20	30	10	50	—	—
6.	110	90	90	90	100	180	140	70	60	[70]	—	—	—
7.	80	20	-20	-20	0	20	50	80	90	[70]	—	—	60
8.	60	50	20	-40	10	30	60	50	70	60	10	+S	0
9.	70	60	80	80	150	110	70	+S	150	60	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	150	120	100
11.	100	110	90	90	100	90	130	180	—	[80]	+S	70	60
12.	220	160	140	150	140	220	190	210	130	—	—	180	90
13.	90	90	90	80	70	80	100	60	40	[70]	[40]	30	20
14.	10	0	0	—	+S	+S	+S	+S	+S	+S	+S	+S	180
15.	60	80	90	50	+S	+S	+S	60	80	80	70	[50]	60
16.	40	40	50	40	40	40	70	60	60	80	80	80	90
17.	20	10	20	40	40	50	80	70	30	40	40	60	70
18.	40	20	20	30	+S	+S	+S	+S	—	+S	+S	70	30
19.	100	70	-30	20	40	30	30	20	40	40	40	[90]	[100]
20.	10	40	100	120	80	100	90	100	130	140	120	[100]	110
21.	60	30	20	0	-10	0	0	30	10	-10	[-10]	30	-20
22.	-40	-50	-50	-40	-30	-20	-40	-20	-50	-90	-40	-70	[-20]
23.	-20	-40	-30	-90	-50	-60	-100	40	40	10	[-30]	-20	0
24.	20	40	40	60	80	80	80	30	70	80	[100]	90	90
25.	40	30	30	30	20	30	30	40	—	—	[10]	30	40
26.	60	50	+S	+S	230	140	100	120	90	80	90	[90]	90
27.	30	30	60	60	70	80	80	80	130	90	[80]	—	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	—	—	—
30.	—	—	—	—	—	—	—	—	—	—	—	—	—
31.	—	—	—	—	—	—	—	—	—	—	—	—	—
Means	55	44	39	40	58	66	66	75	70	59	54	62	61
Number of days	26	26	25	24	23	23	23	22	20	21	19	19	22

13	14	15	16	17	18	19	20	21	22	23	Daily means
—	—	—	—	—	—	—	—	—	—	—	—
80	90	60	40	40	50	10	-10	-10	-10	50	—
70	60	60	50	50	40	30	40	40	30	-20	60
10	20	0	30	60	-20	60	90	40	70	20	45
—	—	—	—	—	—	—	—	—	—	130	—
—	—	—	—	—	—	—	—	180	80	70	—
70	60	60	50	50	60	60	50	60	40	70	—
90	80	90	110	100	80	70	60	70	50	70	54
—	—	—	—	—	—	—	—	—	—	—	—
90	100	120	120	110	90	90	90	110	140	110	—
±S	±S	±S	±S	40	60	30	30	40	30	—	—
70	100	140	110	110	80	80	100	90	80	80	—
0	10	-10	0	20	40	70	50	40	10	30	47
120	100	80	90	100	90	70	70	40	±S	80	—
80	60	50	50	50	60	80	90	70	50	50	—
[90]	90	80	80	90	120	90	70	50	40	30	66
70	70	70	80	100	100	80	70	70	50	40	57
40	60	70	60	40	70	90	110	90	80	70	—
100	70	80	160	160	110	90	90	90	10	-10	64
110	110	90	60	60	70	80	70	40	30	40	83
-20	-10	10	-10	-10	-50	0	10	-10	0	10	2
10	0	10	0	0	10	0	10	-10	-50	10	-24
10	30	40	40	80	60	100	90	100	80	40	13
100	80	60	80	60	80	90	90	80	60	60	71
60	70	90	100	80	40	40	20	20	60	60	—
90	100	90	70	80	90	60	30	20	30	10	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
64	64	64	65	67	60	62	60	57	44	48	
21	21	21	21	22	22	22	22	23	22	23	

November

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	—	—	—	—	—	—	—	—	—	—	—	—	—
9.	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	—	—	—	130
12.	+S	50	70	80	50	60	50	20	0	0	30	60	—
13.	—60	—70	—40	—30	—60	10	20	70	—	—	—	—	—
14.	±S	±S	±S	±S	—S	—S	—20	0	—50	—10	10	—60	—S
15.	60	50	50	50	50	50	60	70	—	[80]	80	70	—
16.	30	50	30	30	60	60	100	80	100	100	70	50	—
17.	—	—	—	—	—	—	—	—	—	—	—	—	—
18.	—	—	—	—	—	—	—	—	—	—	—	80	70
19.	50	30	30	30	40	30	70	200	160	120	160	130	—
20.	80	60	60	60	50	90	110	—	+S	110	[50]	50	60
21.	50	50	60	90	80	60	60	90	80	80	[90]	90	60
22.	—40	—40	—30	—40	—50	—60	—60	—	—	—30	—30	—10	40
23.	100	110	130	130	150	160	110	80	70	10	40	30	30
24.	20	—30	—40	—80	10	0	—10	100	140	110	[110]	120	130
25.	60	50	50	40	30	60	50	100	120	70	[80]	20	—20
26.	210	130	160	160	+S	210	+S	+S	80	70	[80]	30	60
27.	50	30	10	—20	40	—20	—20	—50	—10	—10	[10]	—10	0
28.	70	70	50	30	60	70	20	0	60	60	[40]	30	100
29.	40	40	60	70	60	40	60	60	—	—	60	50	50
30.	10	—10	—70	—160	—160	—110	10	—30	—20	+S	[30]	—10	—40
Means	49	36	36	28	27	46	38	56	61	54	57	42	52
Number of days	15	16	16	16	15	16	16	14	12	14	16	17	13

13	14	15	16	17	18	19	20	21	22	23	Daily means
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
110	120	130	110	120	110	100	120	200	+S	+S	—
—	—	—	10	40	70	30	20	-10	-30	0	—
—	—	-50	-70	-70	0	10	0	0	40	10	—
40	70	70	60	80	60	60	90	100	80	80	—
—	—	110	140	160	160	100	70	40	60	20	—
—	—	70	90	130	130	140	120	130	120	—	—
—	—	—	—	—	—	—	—	—	—	—	—
70	60	70	110	100	60	60	70	50	80	70	—
—	—	—	120	100	90	70	30	30	50	90	—
50	50	50	50	70	70	60	80	50	40	50	—
20	10	10	0	-30	-30	-10	-20	-30	-30	-30	33
70	90	110	100	130	140	130	130	70	10	80	—
[20]	40	70	40	30	40	30	50	150	80	30	70
120	70	-20	-90	40	90	80	80	60	60	80	48
30	80	90	130	210	190	110	60	170	210	230	93
40	30	0	10	100	50	-10	-30	0	-20	50	—
30	90	100	30	20	60	110	120	110	80	70	34
120	130	120	100	20	30	20	20	70	60	10	56
60	-60	-80	-100	-90	-100	-140	-100	-90	-50	50	—
-20	-20	-30	30	40	60	-40	10	-110	+S	-10	-30
54	54	48	46	63	67	48	48	52	49	52	—
14	14	17	19	19	19	19	19	19	17	17	—

December

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	-170	-50	-10	-40	0	50	70	130	120	150	[140]	120	120
2.	40	50	40	60	70	80	70	90	120	120	[120]	100	90
3.	40	50	50	150	160	110	140	170	+S	+S	+S	+S	+S
4.	+S	200	200	140	120	110	100	60	[30]	30	10	30	30
5.	-40	-90	-40	30	30	90	80	120	40	[-10]	-20	50	50
6.	20	20	-20	50	-50	-40	10	-10	—	—	-30	-60	-50
7.	60	40	50	40	50	30	50	50	70	60	[30]	40	40
8.	-50	-30	-10	30	30	30	50	50	60	60	[70]	—	—
9.	-40	-10	-20	20	80	—	—	30	70	-50	[0]	50	-50
10.	60	10	40	50	30	50	10	40	50	60	[60]	70	70
11.	+S	+S	+S	+S	+S	-10	40	80	110	90	[80]	90	70
12.	50	30	30	50	50	40	70	110	100	150	120	[120]	100
13.	30	30	-10	-10	0	40	60	70	—	—	90	90	80
14.	90	120	110	70	10	-10	10	40	0	60	[30]	40	80
15.	60	50	40	40	60	40	10	40	—	-50	0	20	0
16.	40	50	60	80	120	150	+S	+S	+S	[140]	220	150	160
17.	70	70	70	30	60	80	130	[160]	80	70	70	50	90
18.	30	50	40	30	40	30	50	80	60	40	+S	+S	+S
19.	-10	50	+S	+S	-30	10	+S	-70	70	[160]	120	80	+S
20.	100	100	100	70	80	50	50	—	—	80	130	150	130
21.	90	120	90	80	80	0	40	100	90	0	30	-S	-S
22.	130	90	70	50	50	+S	+S	+S	+S	200	[120]	+S	+S
23.	40	+S	10	30	60	110	50	110	80	[110]	150	110	140
24.	-50	-170	-170	-160	10	-20	+S	-S	60	20	50	50	50
25.	30	20	30	30	50	50	70	80	90	90	[110]	80	80
26.	-40	-30	-20	-20	-20	-20	0	-10	10	40	[50]	60	110
27.	50	50	60	80	80	70	70	[80]	—	100	100	80	110
28.	+S	50	+S	50	30	10	10	50	70	+S	+S	+S	40
29.	50	60	50	40	40	50	40	60	70	90	80	30	40
30.	0	20	30	20	30	30	-20	-S	-S	100	[100]	100	100
31.	60	70	60	80	100	70	70	100	60	[80]	[110]	90	100
Means	27	35	33	40	47	44	51	72	69	74	78	72	71
Number of days	28	29	28	29	30	29	26	26	22	27	28	25	25

13	14	15	16	17	18	19	20	21	22	23	Daily means
170	120	70	20	40	50	30	-50	-10	-10	0	44
110	100	100	110	130	130	110	90	80	80	50	89
+S	+S	+S	+S	+S	+S	+S	+S	210	+S	+S	—
0	10	20	20	10	10	-10	30	-10	0	-10	47
40	80	70	60	10	40	10	30	-10	-30	-20	24
-60	-40	-50	-50	0	-40	10	40	50	40	20	—
10	40	30	20	10	10	10	-10	-50	-30	-50	27
220	200	+S	160	220	+S	120	90	30	-40	-10	—
-20	50	+S	170	30	+S	+S	+S	+S	+S	50	—
70	70	80	80	80	70	80	30	+S	+S	+S	—
70	70	70	110	100	110	80	100	80	70	50	—
0	-20	-40	-50	-50	-10	-20	-20	20	0	10	35
50	40	30	0	80	120	70	120	50	90	90	—
120	130	130	140	140	140	120	90	50	40	40	75
-10	-10	-60	-30	-20	-50	30	-60	10	20	10	6
150	150	130	130	120	120	+S	+S	120	110	80	—
110	80	70	100	100	90	60	20	-50	-40	10	66
+S	+S	+S	+S	+S	120	150	130	100	50	-10	—
120	40	10	0	0	10	40	60	90	110	110	—
60	40	60	40	40	-30	-10	20	10	40	30	—
-S	-S	90	170	+S	60	50	50	60	100	130	—
+S	0	100	+S	+S	+S	-S	-S	-170	-70	120	—
150	120	130	120	130	140	110	70	50	50	-10	90
-S	30	0	-20	-20	-20	-50	-S	-20	10	20	—
60	60	50	50	0	-20	-20	-40	-10	-30	-40	36
110	80	60	80	100	80	90	90	70	70	90	43
110	120	130	140	120	+S	120	100	70	90	30	89
50	70	80	80		—	—	80	90	70	60	—
[50]	50	40	50	50	50	40	40	40	30	20	48
100	100	100	120	140	150	140	140	100	80	90	—
100	90	100	100	110	110	+S	+S	+S	150	110	—
75	67	59	69	64	58	54	50	38	38	37	
26	28	27	28	26	25	25	25	28	28	29	

Hourly means of the quantities of positive and negative

Hour GMT Day		0	1	2	3	4	5	6	7	8	9	10	11
January	+	0	0	0	0	0	0	0	0	0	5	0	5
	-	0	0	0	0	3	0	0	1	5	4	0	1
February	+	0	1	0	0	0	0	0	0	0	0	0	0
	-	0	1	0	0	0	0	0	0	0	0	0	0
March	+	1	0	6	11	9	0	0	0	2	0	0	29
	-	0	1	1	1	16	0	0	0	3	0	5	11
April	+	12	20	0	0	3	12	1	12	11	0	1	5
	-	52	12	2	0	10	14	6	1	3	5	23	8
May	+	15	10	6	0	0	16	0	0	4	0	0	0
	-	6	9	11	0	0	18	0	0	14	20	0	1
June	+	0	5	0	0	1	4	0	0	13	33	0	1
	-	0	0	0	0	0	5	0	0	23	60	0	0
July	+	0	0	2	0	0	9	6	0	31	11	52	12
	-	1	0	4	0	6	13	14	0	10	21	43	0
August	+	0	0	6	0	3	3	20	28	6	0	2	6
	-	0	1	1	0	2	10	20	32	5	0	10	14
September	+	12	0	7	30	9	0	20	20	27	1	0	0
	-	22	0	11	6	13	0	21	30	5	0	0	0
October	+	0	0	0	0	0	23	0	2	1	11	15	22
	-	0	0	0	0	0	5	0	44	0	15	17	10
November	+	0	13	12	1	0	0	0	1	0	0	0	0
	-	2	2	17	0	0	0	0	0	0	0	0	0
December	+	22	13	13	24	0	0	0	0	0	3	5	39
	-	11	29	36	1	0	0	2	0	0	16	10	13

charges transported by point-discharge for each month

12	13	14	15	16	17	18	19	20	21	22	23	Means
0	0	0	2	0	0	0	0	0	0	0	0	0.5
1	1	4	4	0	0	0	0	0	0	0	0	1.5
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	0	1	0	0	0	0	0	0	2.7
0	0	0	0	0	0	0	0	0	0	0	0	1.6
2	5	0	0	0	0	0	0	0	36	47	0	7.0
19	0	0	0	0	0	1	0	0	13	28	39	9.8
0	1	18	7	5	0	0	0	0	0	0	0	3.4
1	70	5	10	2	0	0	0	0	0	0	0	7.0
5	10	11	80	15	45	25	55	104	5	11	17	18.3
13	12	11	151	23	15	96	45	20	12	34	1	21.7
13	0	16	40	25	12	19	23	17	0	2	0	12.1
2	0	0	16	19	6	39	26	3	0	2	0	9.4
5	17	2	52	21	27	4	18	0	30	25	0	11.5
22	0	14	5	55	48	11	48	12	7	0	0	13.2
0	0	0	0	0	0	0	0	0	0	0	2	5.3
0	0	0	0	0	0	0	0	0	0	0	44	6.3
1	48	8	1	2	2	19	11	0	0	0	0	6.9
0	28	13	1	6	2	18	17	0	0	0	0	7.3
0	0	0	0	0	0	0	0	0	0	0	0	1.3
0	0	0	0	0	0	0	0	0	0	0	0	0.9
31	8	21	24	6	3	2	5	6	15	28	8	11.7
11	83	66	14	15	1	1	7	1	27	24	38	17.0