

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.

Because of reconstruction works at the observatory the determination of the hourly means of the quantities of positive and negative charges transported by point-discharge was suspended from August 1977 till December 1978. Thus the publication of data regularly given in Table II has also been suspended.

All data are presented in universal time (GMT).

Tables were compiled by F. MÄRCZ. 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. MÄRCZ: „Atmosphärisch-elektrische und ionosphärische Messungen im Observatorium bei Nagycenk”, Observatoriumsberichte des Geophysikalischen Forschungslaboratoriums der Ungarischen Akademie der Wissenschaften vom Jahre 1966, Sopron, 1967.

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.	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	—	—	—	—	—	—	—	—	—	170	260	200	160
3.	80	40	50	60	80	90	100	40	60	90	110	80	60
4.	±S	20	30	20	30	60	80	100	140	160	110	±S	+S
5.	80	70	60	60	±S	±S	±S	—S	+S	20	—10	20	—S
6.	70	70	70	60	50	50	70	90	(130)	140	140	180	+S
7.	70	70	50	50	50	50	(—30)	—	—	—	—	—	—
8.	0	—20	—10	—60	—120	—120	(—110)	(—90)	—70	—60	—90	—80	—80
9.	—40	—50	—60	—50	—80	—70	—60	—	—	—60	—60	—70	—60
10.	20	—20	—60	—60	—60	—50	20	—	—	—	—	—	—
11.	20	—60	—50	—100	—140	—70	—110	—130	(—60)	—80	—60	—50	—50
12.	—100	—140	0	30	30	40	50	110	80	110	100	100	100
13.	70	70	100	90	60	80	120	110	120	100	100	140	150
14.	—70	—40	—60	—90	—70	—110	—50	—10	40	—20	—40	—40	30
15.	10	—10	0	10	30	70	80	70	30	70	20	—20	10
16.	40	40	40	30	40	70	20	—	—	—	—	70	110
17.	10	—20	10	—20	—10	0	—	—	—	—	—	—	—
18.	10	20	50	60	10	—10	(—20)	—40	—50	—50	40	—10	—20
19.	20	20	20	0	20	—10	—10	20	—70	—80	—60	0	0
20.	—20	—30	—40	—40	—50	—40	—10	—30	—20	—40	—10	10	0
21.	20	30	50	80	100	100	130	0	180	190	170	140	150
22.	30	30	40	30	30	20	70	10	20	70	40	50	50
23.	20	0	30	70	90	60	20	120	—	100	60	40	60
24.	—70	—60	—120	—200	—90	—150	—140	—170	—150	—140	—100	—150	—120
25.	+S	+S	40	50	80	—	—	—	—	100	110	110	120
26.	50	50	40	50	50	60	70	90	+S	+S	140	120	110
27.	80	70	80	70	70	70	80	110	150	140	110	100	110
28.	90	100	110	100	110	90	90	50	10	30	20	—	—
29.	—	—	—	—	—	—	—	—	—	50	70	30	—30
30.	—	—	—	—	—	—	—	—	—	—	—	—	—
31.	—	—	—	—	—	—	—	—	—	140	150	180	190
Means	20	10	18	12	12	12	31	30	26	48	58	48	48
Number of days	24	25	26	26	25	24	20	18	16	24	24	24	22

13	14	15	16	17	18	19	20	21	22	23	Daily means
—	—	—	—	—	—	—	—	—	—	—	—
160	140	140	130	130	100	120	140	100	30	100	—
60	30	20	20	0	10	30	50	40	50	+S	54
140	140	140	140	130	110	100	100	80	80	80	—
70	80	80	70	160	140	160	140	130	100	80	—
170	120	120	120	90	70	100	110	90	80	90	98
—	50	30	40	70	90	80	50	10	—20	—60	—
—70	—50	—80	—100	—80	—60	—40	—70	—70	—60	—50	—
—70	—40	—50	—40	60	—10	—30	—70	—10	—40	—60	—
—	10	30	—10	—10	0	20	70	110	60	120	—
—30	—80	—110	—160	—150	—140	—130	—110	—80	—60	—60	—87
110	70	60	60	70	90	100	90	—30	70	70	53
110	70	110	70	50	50	70	30	80	40	—80	80
50	70	60	50	50	40	40	70	70	30	—10	—0.4
30	30	50	50	100	70	60	80	30	30	40	39
90	60	50	10	—20	—20	—30	0	—20	40	30	—
70	40	60	70	70	70	+S	±S	—20	20	20	—
—10	—10	20	30	30	30	30	—20	30	20	30	8
30	0	30	—10	—20	—20	—40	70	30	20	20	—1
0	20	40	50	80	60	30	30	20	40	30	3
130	120	90	80	90	40	80	80	80	70	80	95
80	100	90	50	40	30	20	0	—10	—10	10	37
60	80	60	0	—40	—60	—60	—40	30	—20	—50	27
—130	—140	—120	—100	—50	—40	20	30	—60	±S	—S	—
120	120	110	120	100	90	100	90	100	80	50	—
120	120	80	90	80	90	70	80	60	—S	60	—
130	140	130	160	140	150	150	120	90	100	90	110
—	—	—	—	—	—	—	—	—	—	—	—
10	20	—S	±S	±S	+S	+S	+S	160	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
190	160	150	140	140	140	100	100	140	150	80	—
62	53	51	42	49	41	44	47	38	38	28	
26	28	27	27	27	27	26	26	27	25	25	

February

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	30	30	30	20	20	30	40	30	50	50	90	120	110
2.	-80	-80	-90	-80	-100	-S	-S	±S	-110	—	60	-10	-50
3.	30	10	10	30	20	50	70	0	-10	60	70	70	70
4.	50	60	60	50	40	50	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	70	70	70	70
6.	10	0	-10	-30	-40	-60	-50	10	—	'40'	50	80	70
7.	20	30	30	40	20	10	20	(30)	110	90	110	100	80
8.	-S	+S	+S	+S	70	30	170	(140)	180	180	160	130	150
9.	30	60	70	60	120	90	40	(90)	150	180	190	240	260
10.	50	70	60	10	-50	-50	-50	-40	-110	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	—	—	—	—
12.	—	—	—	—	—	-10	-30	±S	±S	+S	60	50	30
13.	80	80	60	70	60	50	40	90	—	90	80	80	70
14.	150	160	130	100	90	90	130	20	20	10	10	20	20
15.	30	30	20	20	50	50	70	90	130	110	160	200	170
16.	±S	20	20	30	40	50	30	60	50	0	20	50	80
17.	40	30	20	20	20	30	20	10	90	140	180	250	250
18.	20	10	60	40	90	150	130	140	'180	+S	+S	+S	+S
19.	130	120	140	140	150	140	150	120	130	150	140	150	-S
20.	0	10	20	40	60	70	+S	180	—	'180	140	170	220
21.	110	80	80	90	90	90	140	180	+S	+S	+S	+S	+S
22.	140	110	130	130	130	160	140	10	50	60	90	120	110
23.	110	80	80	60	40	50	30	110	110	110	120	110	140
24.	-10	70	120	-50	-100	-50	'-40	(-70)	10	20	50	70	140
25.	40	40	60	40	20	30	40	20	'60	110	110	90	110
26.	-120	-100	-80	-70	-90	-180	-140	-50	-90	-10	-40	-20	-10
27.	80	+S	-S	-S	-S	-S	-S	—	(80)	70	70	70	90
28.	20	10	40	90	30	30	30	50	60	50	120	110	120
Means	42	40	46	37	33	38	47	57	56	84	92	101	105
Number of days	23	23	23	23	24	24	22	18	19	21	23	23	22

13	14	15	16	17	18	19	20	21	22	23	Daily means
110	90	60	30	30	20	0	0	-60	-50	-60	34
-40	-30	20	20	-30	0	20	10	-40	10	20	—
50	60	50	50	60	50	70	70	70	80	40	47
—	—	—	—	—	—	—	—	—	—	—	—
30	60	70	80	80	90	90	70	70	40	30	—
80	80	120	90	60	50	50	70	60	40	40	35
90	130	100	60	30	0	-10	-40	-30	-90	-S	41
150	130	120	30	30	10	-20	40	10	-10	10	—
270	+S	+S	220	160	140	110	90	80	40	50	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
20	0	-40	-50	20	-10	-10	-50	-20	30	50	—
60	50	90	90	110	120	130	70	130	130	130	85
20	20	10	-10	-10	20	20	60	70	30	20	50
160	160	160	170	160	170	170	150	-S	+S	+S	—
90	80	80	90	100	100	100	80	70	70	70	60
180	180	160	+S	50	150	130	130	120	130	60	104
+S	+S	+S	+S	+S	220	190	180	+S	+S	140	—
+S	+S	+S	+S	+S	+S	-S	-70	-10	-40	-20	—
190	210	190	170	160	140	110	160	160	160	120	—
+S	+S	+S	+S	+S	+S	+S	+S	+S	+S	210	—
140	170	170	160	140	160	200	190	130	130	130	129
160	160	130	110	130	140	140	130	120	110	30	107
160	140	140	130	40	20	-50	-20	0	170	90	46
120	90	80	80	70	70	50	60	-10	-80	-100	50
10	30	0	20	10	20	-50	0	10	60	70	-34
80	70	50	30	50	50	60	60	40	50	50	—
100	80	80	80	90	80	50	70	70	70	50	66
104	93	88	79	70	79	67	63	47	49	53	
22	21	21	21	22	23	23	24	22	22	23	

March													
Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	40	50	50	70	50	20	10	0	70	50	60
2.	50	60	30	30	50	50	40	100	110	110	110	110	120
3.	+S	+S	+S	170	120	130	(130)	110	100	130	130	130	180
4.	+S	+S	+S	+S	+S	+S	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	40	30	20	70	60	100	120
6.	+S	+S	30	—10	—10	0	—10	—20	—	—	10	20	60
7.	90	80	100	100	120	110	120	110	130	140	150	150	150
8.	70	80	90	60	80	110	100	+S	+S	+S	+S	+S	+S
9.	—S	+S	+S	+S	—20	+S	+S	80	+S	+S	+S	+S	+S
10.	80	60	70	70	70	80	80	100	150	180	130	100	120
11.	130	120	100	70	50	—	—	—	110	100	120	140	120
12.	80	60	70	70	80	90	100	120	160	200	210	+S	+S
13.	30	40	30	30	30	40	50	(70)	—	30	30	30	20
14.	40	40	40	10	10	20	20	80	90	120	90	90	80
15.	40	40	40	50	40	40	70	+S	+S	—20	80	70	30
16.	180	160	150	150	150	150	160	100	90	80	100	90	90
17.	20	10	10	10	—S	—	—	—	(+S)	130	50	50	160
18.	170	70	60	60	90	70	70	80	70	70	70	80	70
19.	20	20	10	20	20	30	40	50	110	160	150	30	90
20.	130	100	110	100	110	110	100	50	—	30	—S	50	50
21.	+S	+S	110	150	150	110	120	—	30	—20	—10	—S	—
22.	30	10	20	30	40	30	50	50	80	110	160	160	140
23.	50	50	40	30	20	40	60	+S	100	120	100	80	±S
24.	+S	80	—S	—10	—10	0	10	30	0	—50	10	0	±S
25.	±S	±S	±S	10	20	10	30	30	50	60	50	110	120
26.	50	50	50	60	50	50	70	110	—S	—S	+S	±S	70
27.	50	40	50	50	50	50	50	230	170	150	160	170	160
28.	70	—10	—10	20	—20	—20	50	0	—	70	70	70	90
29.	50	40	50	130	150	190	220	230	130	130	130	90	70
30.	10	20	30	40	40	60	130	160	110	100	100	80	70
31.	60	50	50	50	50	60	70	70	90	120	100	80	70
Means	67	55	55	57	56	65	73	83	91	39	93	85	96
Number of days	23	24	25	28	28	26	26	23	21	26	26	25	24

13	14	15	16	17	18	19	20	21	22	23	Daily means
70	50	60	60	40	10	30	50	50	50	30	44
150	150	120	100	70	90	80	70	140	180	180	96
180	140	140	110	120	130	130	140	+S	+S	+S	—
—	—	—	—	—	—	—	—	—	—	—	—
150	180	150	120	130	130	20	±S	±S	—120	—90	—
60	110	80	60	—20	30	30	±S	120	130	110	—
150	120	110	120	150	150	110	120	120	110	80	120
+S	150	130	90	70	60	100	90	60	60	50	—
+S	180	170	140	140	210	160	130	100	60	80	—
90	110	100	90	80	80	90	90	90	90	90	95
70	50	50	60	60	60	40	50	90	80	90	—
250	200	170	170	170	110	70	70	60	60	50	119
10	0	—10	10	110	90	—20	20	20	30	30	—
80	70	60	60	70	80	80	70	60	50	40	61
±S	—S	50	60	50	50	70	80	100	100	130	—
70	50	40	40	40	40	40	30	40	30	20	87
230	170	130	120	120	110	±S	±S	±S	±S	—	—
70	40	40	30	20	30	40	50	30	40	30	60
90	80	70	70	60	60	80	80	100	150	150	73
20	—S	50	50	50	50	40	30	30	10	—50	—
20	0	40	40	60	60	20	40	20	30	+S	—
150	120	120	±S	+S	+S	70	90	70	50	40	—
—S	—30	±S	±S	—40	+S	30	30	10	10	10	—
±S	—70	±S	±S	±S	±S	±S	±S	30	±S	±S	—
110	80	50	50	50	50	40	40	50	50	50	—
—40	±S	40	10	50	60	70	70	70	50	40	—
140	120	110	110	70	60	70	50	50	50	50	94
100	80	60	50	50	40	30	40	10	20	40	39
80	70	50	40	30	40	40	30	20	20	10	85
50	50	50	50	50	50	50	50	50	50	50	63
70	50	50	50	50	50	50	40	30	40	40	60
97	86	81	73	68	73	59	63	60	55	52	
25	27	28	27	28	27	28	26	27	27	26	

April

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	60	80	110	120	120	130	70	70	80	60	80	70
2.	80	120	140	150	150	140	110	70	70	90	100	90	90
3.	20	20	30	40	40	50	30	40	0	0	10	30	0
4.	50	50	40	50	40	40	0	—10	10	90	110	120	120
5.	20	10	40	40	50	60	80	60	—	80	80	70	90
6.	10	10	20	20	20	30	70	100	170	190	170	160	140
7.	60	50	60	50	40	60	+S	+S	+S	130	110	90	80
8.	110	170	+S	+S	+S	+S	+S	+S	160	160	120	120	120
9.	40	30	30	50	70	80	100	120	130	160	140	130	120
10.	20	30	30	20	20	30	30	50	—	50	60	60	70
11.	10	10	0	30	20	40	40	60	80	80	60	40	40
12.	70	50	20	20	30	—S	±S	+S	±S	±S	±S	±S	20
13.	60	80	120	+S	±S	±S	±S	—50	—10	—30	—30	20	30
14.	60	50	50	30	20	10	10	110	110	120	140	120	120
15.	230	220	220	+S	230	230	170	160	200	200	210	200	220
16.	90	80	100	70	40	70	80	60	+S	100	100	±S	±S
17.	250	240	+S	180	170	—30	—	—	(70)	60	±S	±S	±S
18.	200	200	200	200	210	210	(140)	130	160	170	150	140	130
19.	80	80	80	70	70	40	40	100	30	50	80	90	130
20.	70	60	60	80	80	80	90	90	110	130	120	100	110
21.	30	20	—10	—20	—10	10	—	40	40	60	60	70	70
22.	60	50	50	60	60	60	70	90	120	(120)	120	120	110
23.	10	20	20	10	0	30	40	50	80	130	130	140	130
24.	30	50	110	180	190	200	220	110	—	80	60	50	50
25.	20	60	130	150	170	230	+S	150	100	110	+S	80	80
26.	40	50	140	150	160	200	220	130	120	130	100	60	60
27.	50	50	60	80	50	70	70	90	40	40	50	50	70
28.	20	80	120	100	110	80	40	80	80	80	80	100	100
29.	50	60	60	70	70	80	80	90	90	100	100	80	+S
30.	30	30	20	40	30	50	50	50	70	100	90	110	120
Means	64	70	72	76	80	84	80	78	88	98	96	93	92
Number of days	30	30	28	27	28	27	22	26	23	28	27	27	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
70	60	60	30	40	50	30	50	40	50	50	68
80	70	$\pm S$	$\pm S$	$-S$	20	$+S$	$+S$	50	50	50	—
60	40	70	60	70	80	$\pm S$	$\pm S$	$\pm S$	80	50	—
120	120	100	80	80	50	40	40	50	40	40	61
100	110	110	130	110	110	80	70	50	30	20	70
110	100	100	120	140	90	80	80	90	60	60	89
70	90	90	80	70	50	60	100	100	80	80	—
110	110	100	110	110	110	140	80	70	50	50	—
110	90	70	40	30	40	50	30	30	30	30	73
80	70	60	50	40	30	30	10	0	10	10	37
50	40	30	40	60	60	60	60	60	60	70	46
0	30	60	70	30	30	10	20	60	40	30	—
40	60	$\pm S$	$\pm S$	$\pm S$	$+S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	-30	—
110	110	110	100	100	110	160	180	190	210	210	106
220	220	160	150	150	150	120	130	120	80	90	177
$\pm S$	$\pm S$	$-S$	$-S$	100	130	210	230	250	250	230	—
$+S$	$+S$	$+S$	60	40	60	70	70	80	100	130	—
120	130	120	110	130	130	130	90	70	80	80	144
110	110	100	120	130	130	120	120	120	110	100	92
120	90	90	70	50	50	40	40	40	40	30	77
70	80	60	50	40	60	60	70	70	80	60	46
100	110	90	90	90	60	60	40	30	40	20	74
150	80	110	$\pm S$	$\pm S$	40	80	$\pm S$	$-S$	20	40	—
-10	40	40	40	30	20	$\overline{10}$	10	10	20	20	68
70	20	$\pm S$	$\pm S$	$\pm S$	60	60	70	50	60	50	—
-10	50	30	$\pm S$	-20	20	30	30	40	40	50	79
70	60	60	50	50	50	50	40	40	40	30	55
90	80	70	70	80	80	60	60	60	50	40	75
$\pm S$	$+S$	$+S$	$+S$	$\pm S$	30	40	40	40	30	20	—
110	80	70	50	30	40	40	40	50	40	50	58
86	83	82	77	71	67	71	69	69	64	59	
27	27	24	23	25	29	27	26	27	29	30	

May													
Hour GMT	0	1	2	3	4	5	6	7	8	9	10	11	12
Day													
1.	30	40	20	20	20	40	50	70	100	110	100	110	130
2.	50	50	70	70	90	80	—	—	—	90	80	50	60
3.	80	80	70	70	60	60	60	60	70	70	70	40	80
4.	80	70	80	90	90	90	80	100	80	70	70	60	60
5.	30	40	40	50	60	70	80	50	60	50	50	50	40
6.	10	10	20	20	—10	—20	—10	30	40	60	70	70	60
7.	20	+S	+S	20	—40	—S	+S	—S	10	80	40	30	50
8.	0	10	10	10	20	40	70	—	—	120	120	80	40
9.	150	150	140	140	140	130	120	150	110	90	90	80	80
10.	150	150	150	150	140	150	150	120	130	130	130	110	90
11.	30	40	150	170	150	170	+S	70	100	130	120	110	100
12.	100	110	110	110	110	120	130	30	60	70	60	30	0
13.	—10	0	10	0	10	10	10	30	40	100	90	80	30
14.	+S	+S	+S	+S	+S	—S	—S	+S	+S	+S	+S	—S	—50
15.	—10	—10	—10	0	—10	10	20	—	—	100	80	80	80
16.	—10	0	—10	—10	—10	10	30	110	120	150	150	140	110
17.	230	240	240	+S	+S	+S	+S	100	130	+S	+S	—S	+S
18.	—10	—10	—30	—20	30	0	20	50	50	80	70	70	60
19.	140	130	160	0	10	30	20	70	—30	0	40	40	30
20.	+S	+S	+S	+S	50	30	20	30	70	70	50	140	150
21.	30	50	40	50	80	140	90	70	70	90	60	50	60
22.	40	40	30	50	50	60	70	40	—	0	10	+S	—60
23.	40	40	40	40	30	50	—	—	170	140	110	120	80
24.	170	170	160	170	170	140	120	130	120	90	70	70	70
25.	160	150	150	90	—140	30	—10	210	+S	+S	90	60	50
26.	120	150	110	—	—	60	140	150	130	120	130	130	120
27.	240	230	220	220	220	180	150	110	130	140	130	120	120
28.	250	250	240	250	+S	+S	+S	130	150	160	150	+S	+S
29.	80	110	60	50	130	220	190	100	—	+S	+S	+S	+S
30.	190	190	170	180	180	200	190	110	120	140	110	110	+S
31.	40	60	60	70	100	140	140	120	150	150	150	120	110
Means	83	91	89	76	64	83	80	90	91	96	89	83	65
Number of days	29	28	28	27	27	27	24	25	24	27	28	26	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
120	70	60	50	—S	+S	250	150	110	140	50	—
50	40	40	50	60	70	70	60	60	70	60	—
80	80	80	80	80	80	90	80	90	80	70	73
60	70	40	20	20	30	20	20	20	10	30	57
40	50	50	40	20	30	40	40	0	10	20	42
70	80	70	70	80	80	60	80	60	50	30	45
70	80	±S	±S	+S	±S	±S	—10	30	40	40	—
90	80	90	60	70	90	80	80	70	100	140	—
90	90	30	60	30	—10	10	40	110	140	140	96
90	90	110	110	110	—S	20	0	±S	±S	0	—
100	100	90	110	110	100	110	100	90	90	90	106
0	10	30	20	10	0	0	—20	—10	20	0	46
20	—70	—200	—200	—S	—S	±S	+S	—30	±S	±S	—
0	20	30	30	20	10	0	—10	—20	—10	—10	—
80	80	±S	±S	±S	110	—50	—20	—10	—10	—20	—
100	±S	120	100	80	20	60	70	170	170	180	80
±S	±S	20	20	20	20	20	10	30	50	20	—
60	60	50	50	50	60	100	70	90	100	110	48
40	40	40	50	50	60	±S	±S	+S	+S	+S	—
110	90	100	90	60	50	50	50	30	50	30	—
50	50	40	30	10	10	20	40	—50	20	40	48
10	±S	±S	±S	±S	±S	30	10	—30	80	20	—
±S	±S	60	50	50	70	120	160	150	160	170	—
60	60	70	60	70	50	60	70	80	140	150	105
60	60	60	50	50	60	80	70	70	100	110	—
100	100	100	90	90	110	100	110	150	180	230	—
±S	±S	70	+S	170	+S	+S	220	220	200	230	—
±S	±S	+S	100	80	60	100	130	150	150	90	—
±S	+S	±S	+S	90	70	90	110	180	200	170	—
±S	+S	70	30	60	50	30	40	40	30	50	—
100	90	80	70	70	70	70	70	90	100	100	97
66	62	54	50	62	45	60	63	67	88	81	
25	23	26	26	26	25	27	29	29	28	29	

June													
Hour GMT	0	1	2	3	4	5	6	7	8	9	10	11	12
Day													
1.	110	170	180	210	200	150	100	70	110	120	120	110	90
2.	100	100	110	120	120	150	140	70	100	110	110	100	110
3.	90	100	100	100	110	100	120	70	70	90	100	110	110
4.	0	10	10	10	20	40	40	30	50	50	70	60	30
5.	0	—10	0	10	20	20	20	30	—	150	140	130	+S
6.	120	140	150	150	180	160	20	170	150	130	80	120	130
7.	80	80	90	130	120	110	90	80	110	120	120	110	90
8.	10	10	20	30	40	90	110	90	80	110	±S	±S	±S
9.	—10	—20	—10	0	10	90	120	80	110	80	60	50	40
10.	20	—10	—10	—40	—10	—S	50	70	80	80	—S	±S	±S
11.	20	—10	—20	+S	—30	10	30	140	190	130	70	50	40
12.	20	30	40	30	30	30	40	—	—	180	150	±S	±S
13.	0	—20	—S	—10	—10	30	120	0	+S	+S	250	220	210
14.	30	30	30	30	50	90	140	240	260	290	260	240	220
15.	10	10	10	10	20	70	100	80	130	—	—	60	60
16.	0	0	0	0	10	30	0	220	190	180	180	180	170
17.	140	110	140	180	+S	20	120	110	140	130	140	110	—20
18.	40	0	50	80	190	+S	+S	180	170	170	180	180	190
19.	90	70	60	50	40	140	220	250	—	140	150	120	110
20.	—10	0	10	10	20	70	40	50	110	130	120	130	±S
21.	30	20	10	10	20	110	160	140	130	120	100	80	90
22.	20	10	10	10	40	40	40	60	120	120	120	100	80
23.	20	20	10	20	30	30	40	80	1'10'	120	120	±S	±S
24.	0	20	30	30	30	80	80	0	80	90	90	70	±S
25.	80	80	80	50	40	20	40	0	20	20	90	80	70
26.	20	20	30	30	90	90	(90)	—	—	—	—	—	—
27.	0	—10	—10	—10	10	0	10	30	40	—S	—S	—	—
28.	—	0	20	10	20	(20)	—	—	—	—	—	0	40
29.	50	40	50	40	50	50	70	70	—	—	70	70	70
30.	20	30	30	30	40	60	70	80	90	120	110	110	120
Means	38	34	42	46	52	70	79	92	115	124	125	108	98
Number of days	29	30	29	29	29	27	27	27	23	24	24	24	21

13	14	15	16	17	18	19	20	21	22	23	Daily means
80	70	100	100	70	60	20	20	70	70	80	103
110	110	100	90	90	80	50	50	60	70	80	97
90	100	90	80	40	20	0	20	20	30	10	74
20	20	10	10	20	20	20	20	20	10	0	25
±S	±S	±S	±S	10	50	80	120	120	130	120	—
120	110	80	30	90	70	60	60	50	40	40	102
90	70	130	±S	±S	0	—10	—10	—10	—10	0	—
±S	±S	20	—10	—30	—10	0	0	10	—40	—10	—
50	20	10	10	10	0	—20	—10	—10	—20	0	27
±S	±S	—S	±S	±S	±S	±S	±S	—10	30	30	—
30	50	50	40	40	30	20	20	20	20	20	42
±S	±S	±S	±S	±S	—40	—30	—50	—10	0	—10	—
220	240	240	220	220	140	80	70	50	60	40	—
220	180	170	±S	30	40	30	20	20	20	10	115
60	50	50	50	30	10	0	0	0	0	0	—
160	140	150	130	120	110	90	90	90	140	130	105
—20	110	40	70	140	140	150	—S	0	40	40	94
180	190	180	160	180	160	120	90	70	60	90	—
120	90	80	80	50	30	30	20	0	0	0	84
±S	±S	0	+S	±S	±S	+S	10	20	10	0	—
80	50	30	20	30	30	30	50	40	30	20	60
40	50	50	60	40	30	30	20	10	0	20	47
±S	±S	+S	40	20	30	40	10	—80	—90	—20	—
0	+S	20	—S	±S	±S	±S	—S	±S	80	120	—
±S	+S	±S	±S	60	70	60	40	10	—10	10	—
—	—	—	—	(30)	30	30	20	30	10	10	—
60	50	60	50	60	60	50	50	30	10	—	—
10	+S	+S	10	—10	20	30	30	40	50	50	—
50	50	50	70	70	70	70	80	70	20	10	—
130	130	120	110	90	70	70	60	60	60	60	78
88	94	80	68	61	49	41	33	27	27	33	
22	20	23	21	24	27	27	27	29	30	29	

July													
Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	30	30	20	20	20	20	20	40	60	60	70	60
2.	20	10	—20	10	0	20	20	—80	150	+S	70	100	50
3	0	10	20	20	20	20	30	(40)	40	40	60	70	70
4.	60	50	50	50	50	70	80	0	90	70	60	60	50
5.	(50)	50	40	50	50	20	20	10	10	40	30	±S	±S
6.	40	40	50	50	60	70	110	0	10	70	110	100	80
7.	60	60	50	50	50	50	60	70	100	100	100	90	70
8.	60	40	40	40	40	70	60	60	50	50	50	50	50
9.	40	40	30	50	50	60	80	120	140	80	70	0	40
10.	10	10	20	10	30	30	—50	50	—	+S	+S	+S	+S
11.	20	20	30	30	70	60	80	60	60	70	80	60	80
12.	30	30	50	40	40	60	70	80	90	90	±S	±S	±S
13.	30	30	30	40	50	60	70	60	60	100	80	80	90
14.	10	30	10	20	20	50	60	60	80	90	100	90	90
15.	40	40	40	30	40	50	20	30	30	50	60	70	70
16.	140	+S	70	60	90	120	150	140	100	80	50	50	40
17.	40	30	30	20	20	20	30	—	—	70	60	60	50
18.	30	50	40	+S	±S	60	110	70	70	80	30	+S	—S
19.	±S	±S	±S	—	—	—	—	—	—	—	—	—	—
20.	—	—	—	—	—	—	—	—	—	—	—	—	—
21.	—	—	—	—	—	—	—	—	—	—	—	—	—
22.	—	—	—	0	20	20	60	+S	40	30	—20	40	40
23.	40	50	40	40	40	60	50	30	50	60	—10	10	—
24.	—	—	—	—	—	—	—	70	—	90	110	100	100
25.	—	—	—	—	—	—	—	—	—	—	—	—	—
26.	—	—	—	—	—	—	—	—	—	—	—	—	—
27.	—	—	—	—	—	—	—	—	—	—	—	—	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	—	—	—
30.	—	—	—	—	—	—	—	—	—	—	—	—	—
31.	—	—	—	—	—	—	—	—	—	—	—	—	—
Means	40	34	34	33	40	50	57	47	67	69	61	65	64
Number of days	18	18	19	19	19	20	20	18	18	19	19	17	16

13	14	15	16	17	18	19	20	21	22	23	Daily means
60	60	70	70	70	60	70	50	+S	±S	20	—
30	50	50	60	50	40	30	20	10	20	10	31
70	60	80	70	70	60	60	60	70	60	70	49
50	50	60	70	70	80	80	110	100	80	60	65
+S	60	—S	±S	80	70	80	50	50	50	50	—
70	70	±S	±S	50	50	60	70	90	90	70	—
120	60	60	60	50	60	70	60	50	50	60	67
50	60	70	70	±S	10	40	40	40	40	40	49
50	—S	±S	70	60	+S	70	50	50	40	20	—
±S	60	60	(60)	60	60	30	30	30	20	20	—
60	70	70	60	60	50	60	50	40	20	30	54
+S	50	50	50	40	—S	50	±S	20	20	10	—
80	80	+S	+S	100	100	60	20	30	50	40	—
±S	±S	30	30	30	30	40	30	40	50	40	—
70	70	70	50	60	80	80	80	80	50	80	56
40	50	50	60	50	50	40	40	60	60	50	71
50	50	50	50	40	40	40	30	30	30	20	—
±S	90	±S	±S	±S	±S	±S	±S	±S	±S	±S	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
50	50	50	70	80	70	60	50	50	60	70	—
—	—	—	—	—	20	—10	10	40	—10	—30	—
100	90	100	100	90	80	70	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
63	63	61	63	62	56	54	47	49	43	38	
15	18	15	15	18	18	20	18	18	18	19	

August													
Hour GMT	0	1	2	3	4	5	6	7	8	9	10	11	12
Day													
1.	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	80	80
5.	50	50	50	40	40	50	50	—	70	100	70	70	60
6.	20	20	20	30	30	40	40	40	50	50	50	50	30
7.	10	10	10	10	10	20	40	40	—	60	40	40	30
8.	20	10	10	±S	—30	—40	10	30	40	30	—40	—80	±S
9.	10	10	10	20	20	30	40	40	30	40	30	20	30
10.	30	30	20	30	20	40	40	40	40	40	30	30	30
11.	20	20	30	30	30	40	50	60	70	70	70	60	±S
12.	20	20	30	40	20	20	40	80	60	40	70	60	70
13.	20	30	20	20	20	30	30	40	70	60	50	40	50
14.	10	10	20	20	20	30	40	50	—	(70)	70	60	40
15.	30	20	40	40	30	50	50	50	30	20	10	30	20
16.	10	10	20	40	50	70	80	0	(70)	60	60	70	70
17.	30	30	40	40	40	50	50	60	70	50	30	40	40
18.	40	50	30	30	40	30	60	—	—	±S	60	30	50
19.	40	40	30	30	40	50	70	(90)	90	90	80	70	60
20.	20	10	30	30	20	50	70	(90)	110	100	80	80	70
21.	40	30	30	30	30	40	50	—	—	110	90	80	70
22.	40	30	20	30	30	50	80	60	70	70	60	80	70
23.	30	20	20	20	30	40	50	0	30	10	30	50	60
24.	30	30	30	30	30	50	50	30	30	40	50	40	40
25.	50	20	60	30	30	60	60	(70)	80	70	60	50	60
26.	60	50	40	20	30	50	50	40	40	50	30	60	40
27.	30	40	30	20	30	40	40	(40)	40	50	50	50	60
28.	20	30	40	40	40	60	80	—	—	90	80	70	60
29.	50	60	40	40	30	40	60	60	70	40	30	40	30
30.	20	20	30	20	30	50	40	50	60	50	30	80	100
31.	0	20	40	50	40	70	70	110	80	100	70	60	40
Means	28	27	29	30	28	41	51	46	59	60	50	50	52
Number of days	27	27	27	26	27	27	27	19	21	25	27	28	26

13	14	15	16	17	18	19	20	21	22	23	Daily means
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
60	60	70	60	—10	60	80	90	80	70	60	—
70	70	50	40	30	20	30	20	10	10	10	46
10	40	40	30	30	20	20	10	20	20	0	30
10	10	10	0	20	20	20	30	30	30	30	23
(—10)	20	—20	—50	10	0	—10	—100	—60	30	20	—
30	40	40	40	50	50	50	50	50	50	50	35
40	30	±S	+S	70	40	40	40	40	40	30	—
±S	±S	±S	40	30	20	30	40	30	30	10	—
40	10	30	30	40	50	60	60	60	40	30	43
60	50	+S	±S	50	40	40	30	20	10	10	—
40	20	30	20	30	50	60	40	40	40	40	—
40	10	30	40	40	50	40	30	30	40	30	33
50	30	40	40	50	50	60	50	50	50	20	45
50	50	50	30	0	—10	±S	±S	±S	±S	±S	—
60	+S	20	30	30	30	20	40	40	30	30	—
60	60	60	50	40	30	20	20	40	30	30	49
50	50	50	50	50	30	20	40	40	40	30	49
80	70	70	70	60	60	40	50	50	40	30	—
60	70	60	40	30	30	30	30	30	20	10	46
60	50	60	50	40	40	40	40	60	40	30	38
50	50	60	60	60	50	70	60	60	70	70	48
70	80	70	60	50	40	70	60	30	20	60	54
20	40	60	60	50	50	40	50	50	50	40	45
60	60	80	70	60	70	50	40	30	20	0	44
60	50	50	40	40	40	40	40	50	60	60	—
30	20	30	40	40	40	30	30	10	10	10	37
100	60	±S	±S	±S	80	110	100	80	30	—30	—
40	0	20	30	60	50	50	50	60	60	60	51
50	42	44	39	39	39	43	39	38	36	29	
26	26	24	25	27	28	27	27	27	27	27	

September

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	40	40	30	40	40	30	20	50	40	40	40
2.	40	40	40	20	30	40	50	60	80	70	+S	50	+S
3.	20	20	20	20	20	30	40	50	80	70	70	40	40
4.	30	30	30	30	30	40	50	60	—	70	90	50	60
5.	40	40	40	40	50	50	70	80	+S	+S	+S	130	+S
6.	40	40	50	40	40	50	80	50	70	80	90	90	100
7.	40	40	30	30	30	40	50	40	40	50	50	50	50
8.	—	—	—	—	—	—	—	—	—	—	—	—	—
9.	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	60	70	60	70
12.	+S	+S	+S	+S	+S	+S	30	40	40	20	—10	30	60
13.	40	30	—S	40	80	90	100	90	80	70	60	70	70
14.	60	50	30	30	30	40	40	50	70	80	60	80	90
15.	50	50	50	+S	70	40	80	60	80	80	70	70	80
16.	40	30	20	0	30	40	40	40	40	20	20	10	10
17.	30	30	20	10	10	20	40	80	80	90	80	30	30
18.	40	40	40	40	50	50	70	(80)	—	100	90	80	80
19.	70	50	40	50	40	50	70	70	40	40	40	50	50
20.	+S	+S	40	50	50	60	70	70	70	+S	+S	70	50
21.	50	50	40	40	40	50	50	50	50	40	10	40	20
22.	50	50	50	40	50	50	60	110	60	50	20	10	30
23.	20	30	20	20	20	20	30	30	80	+S	60	40	40
24.	30	20	30	40	20	30	30	20	40	20	30	30	50
25.	—	—	—	—	—	—	—	—	—	80	80	70	70
26.	50	40	40	40	50	50	50	0	70	70	90	70	70
27.	10	0	40	—50	—40	+S	+S	+S	+S	+S	+S	40	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	40	50	40	40	40	40	(30)	30	—S	—S	0	40	30
30.	50	50	40	50	40	30	40	40	50	40	30	—30	50
Means	40	37	36	30	35	43	54	52	60	60	52	52	56
Number of days	22	22	22	22	23	22	22	22	19	21	22	26	23

13	14	15	16	17	18	19	20	21	22	23	Daily means
40	30	30	50	40	30	+S	+S	110	30	30	—
70	60	50	30	50	±S	+S	60	50	40	30	—
60	70	70	80	70	80	70	70	50	40	40	51
70	70	60	50	50	60	60	50	50	50	50	52
110	110	110	80	70	60	40	40	50	40	40	—
100	100	80	50	60	70	50	40	40	20	20	60
50	50	50	50	60	60	40	50	40	30	—	44
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
70	80	60	50	40	40	40	50	60	50	±S	—
±S	±S	±S	±S	50	70	70	60	60	60	40	—
70	70	80	80	80	90	80	80	80	70	50	72
90	80	70	50	50	70	60	40	30	40	50	56
90	70	70	40	40	40	50	50	50	40	50	60
30	30	40	40	50	50	60	60	60	50	40	35
80	80	60	50	60	80	60	70	70	60	40	57
50	40	40	50	70	90	100	50	50	60	80	—
50	50	60	60	±S	70	60	50	50	50	50	53
50	40	40	50	50	60	50	50	50	60	50	—
20	20	40	40	70	50	40	50	50	40	50	42
40	20	60	30	30	50	70	+S	+S	40	30	—
50	50	50	50	50	60	60	70	60	50	50	44
50	—	—	—	—	—	—	—	—	—	—	—
80	100	90	50	40	60	60	60	60	60	50	—
50	50	50	50	50	60	50	40	20	40	40	50
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	40	50	50	50	50	50	—
70	70	70	70	60	50	50	30	50	60	30	—
±S	±S	20	±S	±S	±S	±S	±S	±S	10	—10	—
63	61	59	52	54	60	58	53	54	46	41	
23	22	23	22	22	23	22	22	23	25	23	

													October
Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	-60	$\pm S$	10	20	10	20	[70]	40	$+S$	100	$+S$	80	80
2.	20	30	40	60	80	90	100	$+S$	—	100	80	60	80
3.	40	40	30	20	30	40	50	[50]	20	50	70	60	70
4.	70	70	60	40	-10	10	60	[60]	60	70	50	50	50
5.	$\pm S$	-40	20	30	30	30	50	[50]	50	60	50	50	$\pm S$
6.	30	40	40	30	30	20	40	[60]	60	60	60	50	40
7.	50	40	40	50	50	40	50	[70]	80	110	120	130	140
8.	20	10	20	20	40	50	50	30	20	30	50	50	60
9.	30	30	30	10	10	40	50	40	—	60	60	70	80
10.	40	40	30	20	30	10	0	30	[60]	80	80	110	110
11.	50	70	120	160	170	90	140	$+S$	$+S$	160	120	90	90
12.	70	70	80	90	110	50	90	[120]	120	$+S$	$+S$	90	100
13.	20	30	20	40	100	90	90	[120]	[40]	40	70	90	120
14.	60	60	70	50	30	40	30	[50]	[50]	40	30	50	50
15.	0	30	40	40	100	120	80	130	[110]	60	70	60	70
16.	70	60	90	60	80	90	80	—	—	100	50	40	40
17.	120	120	150	100	20	50	100	120	—	[60]	30	40	50
18.	40	30	40	50	40	50	50	60	40	[30]	30	70	70
19.	140	100	120	110	80	30	10	[50]	[30]	30	20	0	10
20.	40	40	50	50	50	50	50	130	$+S$	$+S$	120	90	90
21.	50	50	50	50	20	0	40	—	[40]	40	20	20	10
22.	50	50	50	50	50	50	50	60	40	[80]	50	50	50
23.	—	—	—	—	—	—	-10	20	70	[130]	60	70	50
24.	40	30	30	20	10	20	20	40	50	[50]	50	60	70
25.	110	120	130	$+S$	120	$+S$	90	70	150	140	150	110	80
26.	0	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$+S$	40	$+S$	[110]	$\pm S$	50	80	$+S$
27.	30	30	40	40	40	50	50	80	110	[100]	$+S$	80	80
28.	60	60	60	60	60	70	60	60	[60]	50	60	70	70
29.	20	40	10	20	10	10	30	50	[80]	90	100	90	90
30.	30	30	20	40	40	50	50	50	—	[80]	50	50	50
31.	40	40	30	30	40	50	50	70	[70]	80	80	90	80
Means	44	47	52	49	51	47	55	66	66	74	65	68	70
Number of days	29	28	29	28	29	28	31	26	23	28	28	31	28

13	14	15	16	17	18	19	20	21	22	23	Daily means
70	50	+S	±S	—S	—S	—S	20	50	50	—20	—
—	90	80	80	70	70	40	40	60	50	30	—
(50)	50	40	60	60	60	50	80	50	30	±S	—
50	50	30	40	±S	±S	—S	—S	+S	10	0	—
60	50	50	60	50	60	50	40	30	20	20	40
40	50	60	80	60	70	50	50	60	50	50	49
130	110	110	80	60	70	50	50	30	20	20	71
60	60	60	50	50	20	40	50	50	40	30	40
80	60	70	60	50	40	40	40	40	40	40	47
100	90	90	80	90	60	60	80	80	70	50	62
90	80	80	70	60	70	70	80	90	90	70	—
100	60	60	90	90	70	70	50	50	50	40	
120	100	80	90	80	50	70	70	100	110	70	75
70	80	70	50	50	30	50	30	20	30	20	46
60	60	60	60	60	50	50	50	40	40	50	62
50	50	50	70	120	120	100	+S	+S	+S	+S	—
50	50	50	50	40	50	50	50	70	40	40	65
50	50	50	50	50	60	60	50	50	90	70	51
10	20	10	10	30	10	10	10	50	50	40	41
80	60	60	80	50	50	70	50	40	50	50	—
30	40	40	70	80	80	70	50	70	60	50	45
30	30	30	—10	0	20	50	60	50	20	—	—
50	50	50	70	80	60	60	50	60	60	50	—
80	70	50	80	50	60	80	90	90	100	120	57
90	130	70	90	70	40	60	—S	10	—40	—30	—
90	+S	±S	±S	+S	120	±S	±S	40	90	40	—
80	50	60	60	70	100	50	50	60	60	70	63
60	70	70	80	90	30	30	30	20	0	10	70
100	100	100	140	120	130	120	90	60	50	40	70
70	60	70	100	110	100	70	80	60	40	50	59
80	70	40	50	60	50	20	10	30	30	20	50
70	65	60	67	66	62	57	50	52	47	40	
29	30	29	29	28	29	28	27	29	30	28	

November

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	40	40	50	120	130	+S	140	80	70	60	50	40	70
2.	-10	-10	-10	20	30	50	—	—	—	40	40	50	30
3.	-10	-10	40	20	100	120	150	50	60	60	50	50	50
4.	20	30	40	20	40	40	50	40	—	30	40	40	50
5.	0	-20	10	20	30	40	40	40	30	50	40	50	60
6.	50	40	30	30	40	40	50	40	30	20	20	20	20
7.	50	40	40	40	40	50	40	40	50	40	40	50	40
8.	30	30	10	10	0	20	40	-10	-20	-30	-20	0	-10
9.	10	0	-10	30	50	50	50	50	40	50	30	30	40
10.	10	20	0	0	-10	-30	-20	-20	-10	(-30)	0	10	10
11.	20	20	10	10	0	20	30	10	10	30	20	10	30
12.	10	10	10	20	10	-20	20	10	-10	10	0	-10	0
13.	0	-10	20	20	10	20	30	30	—	30	30	30	50
14.	60	80	70	60	70	60	70	60	50	—	50	70	70
15.	40	10	-30	10	0	20	-10	-10	-10	-40	0	-30	10
16.	(-30)	-10	-30	-20	-20	0	10	20	0	0	10	0	-10
17.	30	40	30	40	60	70	100	100	80	60	70	70	80
18.	70	80	70	90	60	70	70	80	100	110	80	80	90
19.	-50	-20	-10	-20	0	0	-50	-50	-40	-50	-10	-20	-30
20.	10	0	-20	10	0	10	30	30	—	—	—	40	90
21.	160	160	130	200	130	130	100	90	60	40	30	40	40
22.	90	90	70	90	90	90	80	100	90	80	70	80	60
23.	130	+S	110	140	140	+S	130	140	110	70	—	60	40
24.	20	20	30	30	30	30	30	40	60	60	60	60	60
25.	30	60	90	90	80	60	60	40	(60)	50	50	20	30
26.	20	30	40	10	30	30	30	80	20	20	+S	10	30
27.	+S	+S	30	50	-30	30	10	+S	—	—	—	—	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	—
29.	—	—	—	—	—	—	—	—	—	—	-30	-20	-20
30.	10	-30	-30	-20	-20	-20	-20	-20	-10	10	30	40	50
Means	32	27	28	40	39	38	47	41	35	33	30	31	37
Number of days	26	26	28	28	28	26	27	26	22	24	25	28	28

13	14	15	16	17	18	19	20	21	22	23	Daily means
70	50	10	10	0	0	0	0	0	-10	-10	44
20	20	20	0	0	0	-10	-10	0	-10	-10	—
50	40	50	80	80	50	80	50	50	40	20	55
40	40	30	10	40	20	-10	-10	10	10	40	29
70	90	50	50	30	40	40	50	50	40	40	29
10	30	30	30	30	40	50	30	40	40	40	33
40	30	50	50	50	60	50	20	30	30	30	42
10	30	20	0	-10	-10	-10	-20	-10	0	0	2
30	20	20	30	50	10	20	10	10	20	10	27
40	0	10	20	10	10	0	10	0	0	0	3
30	20	50	60	50	50	50	0	30	40	10	25
-30	-10	10	40	40	50	-10	-40	-20	0	20	5
40	30	30	30	20	40	50	70	50	40	50	31
70	60	50	50	30	40	40	50	70	30	10	55
-10	-40	0	0	-10	0	0	-10	-20	-50	-40	-9
10	30	40	80	100	70	30	40	20	50	50	20
80	60	40	70	40	60	80	90	70	90	60	65
110	60	30	-20	-40	-30	-40	-30	10	40	-50	-45
0	0	-10	-30	0	0	0	-20	-20	-10	0	-18
110	120	120	130	130	140	130	130	190	200	190	—
40	40	-50	60	80	70	70	70	90	100	90	82
60	30	30	80	70	30	20	60	90	70	130	73
40	40	60	50	90	70	60	60	50	30	30	—
60	40	60	80	80	70	80	80	60	60	40	52
10	30	20	10	40	50	90	80	70	70	50	51
30	30	40	20	20	-S	±S	-S	±S	±S	+S	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
-30	-50	-40	-40	-40	-40	-50	-50	-50	-20	0	—
40	30	0	-20	0	0	0	0	-10	-10	-10	0
37	31	28	33	35	33	30	26	34	33	29	
28	28	28	28	28	27	27	27	26	27	27	

December													
Hour GMT	0	1	2	3	4	5	6	7	8	9	10	11	12
Day													
1.	—10	—10	—20	—20	10	30	30	30	40	70	70	70	90
2.	60	60	30	30	20	0	50	30	50	+S	40	40	60
3.	70	70	40	50	60	70	40	80	90	90	90	80	80
4.	70	80	40	10	—10	10	10	20	—	10	20	90	140
5.	10	40	50	—40	—20	10	10	30	50	50	40	70	70
6.	100	70	50	50	40	30	40	10	20	70	100	130	+S
7.	—30	—10	—80	—50	—40	—50	—20	—40	—40	10	30	60	70
8.	—30	—40	—10	—10	—20	—30	—20	—30	—70	—40	—50	—40	—90
9.	—90	—80	—70	—60	—S	—S	+S	—10	—40	—S	20	60	90
10.	+S	+S	—	—	—	—	—	—	—	—	—	170	140
11.	70	70	80	110	110	120	120	—110	—	150	130	130	90
12.	—40	—30	10	40	50	90	50	50	60	110	110	150	160
13.	+S	+S	90	80	+S	+S	90	130	70	60	80	110	110
14.	0	80	180	+S	+S	+S	110	80	110	130	80	90	90
15.	60	50	60	60	60	80	110	90	90	110	110	110	90
16.	70	60	80	80	110	110	130	110	90	70	70	60	80
17.	80	90	50	50	60	60	50	90	90	50	50	40	50
18.	+S	+S	+S	50	70	50	80	110	—	110	150	130	150
19.	80	90	130	+S	+S	+S	+S	+S	+S	150	130	+S	+S
20.	+S	+S	70	50	+S	+S	80	40	30	20	—20	—40	—50
21.	120	+S	+S	+S	+S	+S	+S	+S	+S	+S	+S	+S	+S
22.	30	40	70	80	80	110	90	80	50	60	50	40	70
23.	10	20	20	30	40	30	60	40	80	50	20	20	—20
24.	—30	—40	—10	—10	—40	—10	0	0	0	—50	—30	—10	—40
25.	20	—10	—30	10	+S	90	40	120	130	120	90	110	+S
26.	+S	+S	+S	+S	+S	60	80	50	30	130	150	130	130
27.	80	40	30	70	130	80	80	80	—	+S	+S	190	190
28.	+S	+S	+S	+S	+S	+S	160	—	—	—	—	—	160
29.	90	60	20	60	50	50	50	70	70	90	130	130	130
30.	—	—	60	80	90	90	70	90	70	60	90	80	80
31.	50	70	70	80	70	40	60	10	20	60	60	90	60
Means	35	33	39	35	44	49	61	54	47	70	67	82	81
Number of days	24	23	26	25	21	23	27	27	23	25	27	28	27

13	14	15	16	17	18	19	20	21	22	23	Daily means
70	80	80	90	80	80	80	90	60	60	50	50
100	80	100	140	130	120	130	100	90	80	90	71
80	70	70	60	60	60	80	100	90	80	40	71
160	110	120	170	140	170	130	+S	+S	160	-110	—
70	70	50	110	110	120	120	110	100	100	80	59
170	130	110	120	90	60	60	-10	-40	-60	-40	57
30	20	30	0	20	30	20	0	-40	-40	-10	-5
-60	-50	-80	-70	-70	-90	-90	-90	-80	-70	-70	-54
+S	110	140	+S	+S	+S	+S	+S	+S	+S	80	—
170	120	120	140	140	120	+S	130	130	80	90	—
80	70	90	50	10	10	-30	-40	-60	-70	-30	60
180	180	+S	+S	+S	+S	+S	+S	+S	+S	+S	—
90	80	60	60	60	70	90	70	0	10	-20	—
90	130	110	70	20	50	70	80	90	80	70	—
90	80	90	90	30	160	150	160	180	110	90	99
90	90	80	+S	—	—	—	—	—	70	80	—
110	90	60	50	70	80	70	90	130	110	110	74
160	150	160	130	120	130	110	110	80	70	80	—
+S	+S	80	80	30	40	70	+S	+S	+S	+S	—
0	-40	-40	-30	50	150	130	150	120	150	70	—
90	80	60	120	70	80	+S	+S	+S	+S	10	—
30	-10	70	20	-10	-10	40	30	10	10	30	44
30	60	60	90	80	60	70	80	130	40	80	49
-20	-50	-70	-50	-60	0	-20	-10	10	10	0	-22
+S	120	+S	+S	+S	90	60	60	60	+S	+S	—
150	110	110	80	70	30	40	30	40	50	50	—
180	+S	+S	+S	(190)	+S	180	180	(160)	+S	+S	—
90	20	10	0	20	40	130	70	50	130	60	—
90	90	110	90	70	90	80	80	50	10	—	77
90	130	160	(190)	(180)	(180)	140	110	80	90	110	—
70	50	80	80	90	80	70	80	80	90	70	66
89	75	72	68	59	70	76	70	57	54	41	
28	29	28	25	25	26	26	25	24	25	26	