

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.

Meteorological observations are usually accomplished at the observatory three times a day. Letters in the column „Remarks” indicate the weather type of a day based on these observations. The letters used according to the Beaufort Weather Notation are the following:

Appearance of sky	b = blue sky (cloudless)
	c = cloudy
	o = overcast
Precipitation	r = rain
	p = passing showers
	s = snow
	bs = blowing snow
	d = drizzle
	h = hail
Electrical phenomena	t = thunder
	l = distant lightning
Atmospheric obscurity	f = fog
	z = haze
	m = mist

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 Ferenc MÁRCZ. Both the equipments and the methods of measurement of potential gradient and point-discharge have been described in the paper by Pál BENCZE und Ferenc MÁRCZ: „Atmosphärisch-elektrische und ionosphärische Messungen im Observatorium bei Nagycenk”, Observatoriumsberichte des Geophysikalischen Forschungslaboratoriums der Ungarischen Akademie der Wissenschaften vom Jahre 1936, Sopron, 1967.

*Hourly means of the potential gradient and
meteorological conditions*

January

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	-120	-250	+S	-90	50	60	110	90	100	110	200	210	[190]
2.	40	40	70	80	80	80	100	80	80	130	130	70	—
3.	240	130	100	110	100	70	130	160	190	70	130	180	[180]
4.	60	50	60	60	90	80	70	90	140	140	—	-140	-120
5.	50	50	40	50	40	60	110	90	90	60	80	[100]	110
6.	150	210	150	+S	$\pm$ S	+S	160	200	180	90	+S	$\pm$ S	+S
7.	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	0	20	10	0	+S	+S	+S	130	+S	+S	+S	+S	—
9.	110	170	180	90	70	100	100	100	+S	[190]	170	180	200
10.	+S	120	120	110	120	80	50	50	90	90	130	—	200
11.	110	60	60	70	70	110	120	+S	+S	—	+S	+S	160
12.	20	-20	-40	10	30	30	30	30	40	[70]	90	100	100
13.	90	100	90	70	+S	$\pm$ S	$\pm$ S	$\pm$ S	30	0	60	120	130
14.	70	90	40	40	50	100	110	90	80	110	140	150	120
15.	150	130	80	50	30	70	50	100	90	[80]	[110]	130	150
16.	150	200	190	180	130	180	190	180	—	[230]	+S	+S	+S
17.	200	210	230	220	190	190	+S	+S	+S	+S	+S	+S	+S
18.	200	+S	170	130	130	180	190	200	150	150	[130]	110	130
19.	190	170	150	100	0	-30	-20	-10	-10	100	—	130	+S
20.	-30	-30	-130	-180	-170	-140	-70	-130	[-110]	-170	-70	-80	-90
21.	160	170	190	200	190	170	200	90	+S	—	—	—	—
22.	—	—	—	—	—	—	—	—	—	—	—	—	—
23.	—	—	—	—	—	—	—	—	—	—	90	140	50
24.	0	-20	70	40	-20	0	40	+S	+S	+S	10	0	150
25.	190	+S	+S	+S	220	+S	+S	200	[230]	50	170	180	230
26.	30	-10	-20	100	+S	$\pm$ S	-S	140	170	+S	+S	200	170
27.	-20	+S	+S	50	90	120	150	200	120	[150]	140	140	120
28.	140	120	110	110	130	140	170	200	[170]	140	130	140	110
29.	150	170	130	140	200	220	190	180	+S	[210]	—	-20	210
30.	50	60	70	60	60	40	70	110	—	[160]	[160]	190	190
31.	+S	100	-70	-60	-130	-80	-100	-210	[-200]	-160	-150	-160	-140
Means	92	82	82	67	73	80	93	98	86	91	97	94	116
Number of days	26	25	25	26	24	23	23	24	19	22	19	22	22

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
190	210	170	110	220	60	0	-150	-60	0	40	63	o r m
10	140	230	+S	50	40	110	-80	-90	-150	120	—	c r
160	120	130	150	150	130	110	130	130	80	80	132	o r
80	70	110	120	110	140	150	100	90	80	70	74	o
150	130	130	150	220	190	210	180	160	150	130	114	o s
+S	190	110	30	-40	0	-20	-60	-140	-150	—	—	o b s
—	—	—	—	—	—	70	90	40	10	20	—	o b s
—	—	—	—	—	—	—	—	—	+S	+S	—	o b s
190	180	110	120	90	80	100	110	+S	+S	+S	—	o s
+S	+S	220	+S	150	150	130	100	100	100	130	—	o
180	+S	170	+S	+S	90	0	50	+S	+S	+S	—	c
110	110	70	70	80	110	100	80	90	70	90	61	c s
150	140	130	110	110	150	160	90	80	100	90	—	o s
100	110	100	140	130	140	150	170	190	190	170	116	c s
140	60	50	10	-S	+S	+S	+S	+S	+S	+S	—	o r
+S	+S	+S	+S	+S	+S	+S	+S	+S	+S	220	—	c r
+S	+S	200	140	170	+S	+S	200	200	200	180	—	c
190	200	180	160	140	170	200	190	180	150	170	165	c z
+S	200	0	40	50	80	110	130	20	-20	-10	—	c z
20	20	30	70	70	50	-20	50	30	130	130	-34	o
—	—	—	—	—	—	—	—	—	—	—	—	c
—	—	—	—	—	—	—	—	—	—	—	—	o s
100	40	60	0	50	150	60	40	10	-80	-10	—	o s
140	130	+S	+S	+S	+S	+S	190	140	130	120	—	o d m
+S	+S	160	60	60	50	100	120	100	80	140	—	o r f
80	30	60	80	-20	80	-40	-S	-S	30	-80	—	o r
80	100	+S	+S	+S	+S	+S	+S	+S	190	180	—	c r
100	100	70	90	100	110	70	150	120	60	70	119	c r
230	180	200	+S	+S	+S	30	120	140	100	80	—	c
160	180	210	230	+S	+S	+S	240	+S	+S	+S	—	o
-100	-80	-120	-160	-170	-230	-200	-200	-130	0	-60	-122	
117	116	116	86	86	87	72	85	67	63	90	89	
21	22	24	20	20	20	22	24	21	23	23		

February

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—90	—40	—70	—90	—90	—80	—40	10	0	—10	0	10	0
2.	140	100	140	40	—100	+S	+S	$\pm S$	$\pm S$	40	100	80	[50]
3.	50	60	100	130	50	60	120	70	70	100	100	[180]	[160]
4.	70	30	50	20	40	100	10	90	90	[140]	140	200	+S
5.	80	100	80	90	70	70	90	80	100	100	[100]	100	100
6.	70	70	70	80	80	80	90	110	—	[240]	250	190	170
7.	140	160	110	100	160	150	180	200	190	200	[210]	220	+S
8.	100	100	60	90	80	30	60	30	80	40	80	[80]	[120]
9.	80	110	110	140	150	160	130	130	[150]	170	140	130	20
10.	140	130	130	90	110	110	100	100	140	150	150	[120]	130
11.	180	150	110	130	130	120	140	170	170	170	190	[200]	200
12.	140	120	140	160	150	180	50	90	110	90	170	[170]	180
13.	200	170	150	150	100	120	150	170	—	[210]	220	+S	+S
14.	120	90	80	120	140	130	120	190	230	[220]	[220]	210	240
15.	150	160	130	180	160	190	200	190	220	140	[200]	+S	+S
16.	0	50	—10	—20	—90	0	30	—20	[—40]	[—20]	50	190	180
17.	—100	—170	—90	—30	—60	—80	0	—20	—110	—20	30	[40]	80
18.	90	60	+S	130	30	30	10	—30	—110	[—140]	—140	—110	—110
19.	100	60	120	180	160	90	140	150	70	[130]	[80]	110	80
20.	—100	—130	—140	—80	30	80	60	10	—	[10]	$\pm S$	$\pm S$	$\pm S$
21.	100	90	70	0	—120	50	70	70	100	70	$\pm S$	$\pm S$	$\pm S$
22.	$\pm S$	40	$\pm S$	$\pm S$	50	70	90	110	120	120	110	[100]	110
23.	30	20	30	+S	—S	70	100	180	230	[230]	[210]	190	160
24.	70	60	70	60	90	90	90	80	100	100	110	140	140
25.	80	70	50	50	30	90	140	110	120	120	130	150	—
26.	110	130	130	120	130	130	140	+S	240	[230]	200	210	200
27.	140	160	170	180	90	130	120	170	—	[180]	150	90	—
28.	—	—	—	—	—	—	—	—	—	—	—	—	[100]
Means	80	72	72	81	62	83	92	98	103	111	128	130	116
Number of days	26	27	25	25	26	26	26	25	22	27	25	23	20

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
—80	—30	50	10	—20	70	10	60	—10	110	130	—8	c r
80	60	120	120	140	190	160	200	140	150	100	—	o r f
100	140	70	100	120	80	0	100	100	120	100	95	o r
+S	120	50	50	80	130	150	140	100	80	70	—	o r
100	90	70	110	120	130	130	120	100	80	80	95	o
170	120	150	120	120	190	170	150	150	170	140	137	c
+S	130	140	170	240	+S	190	140	110	110	60	—	b z
130	±S	±S	±S	+S	±S	—S	140	—S	±S	120	—	o s
80	140	±S	±S	±S	80	70	110	140	150	160	—	o s
140	170	170	160	160	150	150	160	140	110	120	135	c
210	230	240	260	190	150	80	120	120	100	170	164	c
200	200	200	190	190	180	120	130	140	120	170	150	c
220	210	190	190	140	160	180	190	200	170	150	—	b z
230	240	+S	150	200	+S	230	210	220	180	140	—	c
230	230	240	210	210	200	70	90	140	140	120	173	c
180	160	170	200	180	170	120	50	—60	—70	—90	55	b z
110	150	170	200	160	170	70	100	80	100	120	38	o s
10	—40	20	10	80	0	10	30	90	120	130	7	o s
70	0	—60	—70	—130	—140	—150	—110	—110	—110	—100	23	o z
—S	30	230	+S	+S	+S	+S	+S	150	140	120	—	o r m
+S	180	170	160	210	±S	±S	±S	±S	±S	±S	—	o r
130	150	150	150	150	150	140	90	70	60	50	—	c r
170	170	150	120	130	20	60	10	70	40	50	—	o
130	130	140	150	170	180	180	160	120	130	90	116	c
180	160	140	130	160	210	200	160	130	160	150	129	b
220	190	150	140	140	140	100	90	130	180	170	157	o r
—	—	—	—	—	—	—	—	—	—	—	—	o r f
100	110	100	110	120	160	130	90	—60	40	30	—	o r
135	132	134	131	136	126	107	109	96	103	98	106	
23	26	24	24	24	22	24	25	25	25	26		

March

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	70	50	50	70	40	80	100	100	—	90	50	50
2.	$\pm S$	$\pm S$	—	—	—	—	—	—	—	—	—	—	80
3.	$\pm S$	80	90	90	100	—	120	160	140	—	150	190	170
4.	80	70	60	90	80	100	150	140	150	130	[140]	190	290
5.	110	100	110	120	120	80	120	80	110	110	[160]	150	130
6.	30	10	60	60	100	110	60	50	—	[20]	70	50	20
7.	50	90	50	—140	—100	$\pm S$	$\pm S$	100	—60	—40	—70	[—10]	20
8.	$\pm S$	—90	—160	—40	—10	—60	—20	—60	—90	[—30]	20	50	70
9.	—50	—30	0	0	0	40	30	50	100	—	100	100	100
10.	60	50	80	70	90	140	200	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$
11.	50	90	90	80	70	80	60	[60]	[80]	80	70	70	90
12.	60	60	50	70	70	70	120	130	110	60	120	130	140
13.	80	100	70	40	—10	$\pm S$	$\pm S$	$\pm S$	—S	—	40	70	130
14.	100	80	70	80	70	90	$\pm S$	$\pm S$	$\pm S$	[110]	120	130	140
15.	100	90	80	90	90	90	30	60	[40]	0	100	160	210
16.	110	100	80	60	60	50	60	80	120	[40]	$\pm S$	$\pm S$	10
17.	70	70	80	70	90	100	100	110	100	80	[90]	$\pm S$	110
18.	$\pm S$	90	30	30	30	20	10	—40	—S	$\pm S$	$\pm S$	$\pm S$	[—10]
19.	70	80	30	90	80	60	50	80	20	70	[80]	$\pm S$	$\pm S$
20.	$\pm S$	$\pm S$	50	—S	60	70	80	100	—	80	$\pm S$	$\pm S$	$\pm S$
21.	110	110	110	110	90	90	130	140	170	[150]	—	140	120
22.	20	30	40	10	20	70	120	120	130	—	—	110	110
23.	70	90	100	100	100	90	100	180	110	100	—	40	90
24.	90	90	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$\pm S$	50	90	$\pm S$	$\pm S$	$\pm S$	$\pm S$
25.	60	60	50	50	50	60	70	80	100	—	100	110	130
26.	230	230	160	110	170	200	210	230	260	[250]	[200]	160	150
27.	100	140	130	110	110	130	170	$\pm S$	220	210	[180]	170	160
28.	30	0	—40	—30	—30	10	60	90	[110]	—	40	80	50
29.	40	40	80	90	100	110	$\pm S$	150	110	—	60	100	130
30.	90	100	90	70	40	70	30	10	80	[80]	130	160	170
31.	80	50	50	60	90	100	120	110	110	[110]	130	180	190
Means	73	71	62	57	62	77	92	91	100	85	96	112	110
Number of days	26	29	29	28	29	26	25	26	24	19	22	23	27

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
70	—	—	—	—	+S	±S	—S	—S	—S	—S	—	o r
—	—	—	—	—	—	+S	—	—	±S	—S	—	o r
210	190	140	140	140	120	130	140	140	140	100	—	c r
220	250	250	260	260	250	+S	+S	210	160	160	—	c
130	130	110	110	120	110	60	0	—30	—20	20	93	o z
100	70	150	130	70	0	50	+S	+S	20	40	—	o r z
40	50	120	70	100	60	70	60	80	20	±S	—	o r m
90	80	60	20	—20	20	—40	—50	10	—40	—20	—13	c
90	90	90	80	70	90	80	70	60	60	60	56	c
+S	80	80	80	60	50	90	80	70	70	60	—	c z
70	70	60	80	±S	±S	±S	±S	±S	50	40	—	o r
110	130	140	140	100	80	90	90	80	80	80	96	c r
—S	90	70	60	120	+S	+S	+S	—	[70]	80	—	o r
140	140	140	130	100	100	120	120	130	140	120	—	c s
220	130	130	120	190	230	160	160	160	110	140	123	c
40	70	80	80	+S	+S	90	90	70	60	70	—	o r
90	80	90	110	100	120	110	90	60	—20	—90	79	c
+S	+S	60	50	60	100	+S	100	160	80	60	—	o r
±S	±S	+S	90	120	100	80	70	—S	—20	+S	—	c r
±S	±S	±S	+S	90	90	100	130	110	120	120	—	c s
160	110	160	150	140	150	130	0	—10	20	—20	107	o s
100	110	120	120	110	130	130	140	170	160	100	—	o
100	110	110	100	130	+S	70	60	±S	100	100	—	c r
±S	±S	130	130	120	120	120	100	90	70	70	—	c r
150	170	150	70	40	120	170	200	190	190	200	112	o
140	130	120	110	110	130	140	120	110	130	100	163	c z
80	90	80	50	70	80	100	80	80	30	50	114	o z
—20	±S	+S	90	—170	+S	+S	—240	—110	—10	0	—	o r z
130	130	180	130	170	210	180	130	170	120	100	—	o r
160	130	140	100	100	130	120	120	120	100	90	101	o r
160	140	140	140	180	220	130	110	100	90	80	120	o
116	115	119	105	99	117	103	79	93	72	71	91	
24	24	26	28	27	24	24	25	24	29	27		

April

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	90	60	50	50	50	50	60	60	40	[50]	90	120	130
2.	70	70	50	30	30	30	40	40	50	[50]	+S	-30	+S
3.	50	50	40	40	50	60	90	100	90	60	60	[30]	10
4.	20	40	-S	50	30	50	50	60	70	60	-	±S	50
5.	-	-	-	-	-	-	-	-	-	[-10]	90	120	±S
6.	0	40	-10	-10	60	120	+S	+S	±S	-50	±S	-S	+S
7.	-S	80	50	60	60	80	90	120	120	[130]	[60]	-S	+S
8.	90	90	80	70	90	100	130	150	130	110	0	10	-S
9.	-60	10	10	-30	-10	0	30	-10	10	-50	[40]	30	50
10.	80	50	60	50	50	70	90	100	130	-	-	70	70
11.	50	20	30	30	30	50	90	70	70	140	[110]	80	70
12.	70	60	50	50	60	80	130	160	150	[140]	[150]	170	170
13.	-	-	-	-	-	-	-	-	-	-	-	-	-
14.	-	-	-	-	-	-	-	-	-	-	-	-	-
15.	-	-	-	-	-	-	-	-	-	-	[50]	[50]	90
16.	70	70	70	80	80	90	120	150	200	160	140	[140]	150
17.	-	-	-	-	-	-	-	-	-	-	[250]	260	250
18.	90	70	70	70	60	90	170	150	120	110	-	-10	100
19.	+S	110	110	110	100	110	130	130	110	130	[120]	[90]	60
20.	70	70	80	70	90	110	130	130	170	150	120	110	100
21.	110	100	90	90	110	130	160	170	170	150	-	110	100
22.	+S	+S	±S	±S	70	90	60	+S	-30	10	0	-70	10
23.	100	100	100	90	90	80	110	120	120	90	80	[90]	[80]
24.	70	70	70	80	80	10	40	10	[40]	-	-S	±S	±S
25.	110	100	110	130	130	130	130	160	-	[90]	100	110	120
26.	60	30	30	30	30	0	-100	-80	10	-20	30	30	[50]
27.	120	120	120	90	90	110	130	120	130	140	170	190	200
28.	80	90	80	90	90	130	110	130	140	160	160	-	[180]
29.	-	-	-	-	-	-	-	-	-	[150]	140	130	140
30.	50	50	30	30	20	50	70	100	170	150	-	180	160
Means	66	67	62	59	64	76	90	97	100	88	98	87	106
Number of days	21	23	22	23	24	24	23	22	22	24	20	23	22

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
130	130	130	140	150	160	130	120	130	120	100	98	c
+S	+S	-S	30	+S	60	40	50	60	50	50	—	c
40	60	60	60	-120	-210	-140	-10	40	40	40	25	o r
+S	50	—	—	—	—	—	—	—	—	—	—	c r
90	110	40	60	-20	-20	0	-20	+S	-70	80	—	o r
60	80	40	-30	40	-90	+S	-S	-S	$\pm S$	-S	—	o r
50	70	70	90	100	160	130	120	110	90	80	—	o r
-40	40	50	50	0	70	10	-80	-10	10	-130	44	o r
—	90	[80]	110	100	130	100	90	70	50	60	39	o r
80	70	70	90	90	110	90	90	70	60	30	—	c
70	60	50	50	50	50	10	10	60	50	50	56	c
160	150	170	130	100	50	—	—	—	—	—	—	c r
—	—	—	—	—	—	—	—	—	—	—	—	o r z t
—	—	—	—	—	—	—	—	—	—	—	—	o r f
110	120	130	100	110	120	130	110	90	60	80	—	o r
150	160	160	170	180	160	150	130	110	100	90	128	b
150	100	90	70	100	90	80	90	110	120	110	—	c
230	220	200	$\pm S$	$\pm S$	$\pm S$	$\pm S$	100	170	140	180	—	o r
10	40	20	100	100	100	100	90	90	70	70	91	c r
100	110	110	120	130	130	140	150	140	110	100	114	c
20	-60	-20	0	-80	-30	-70	$\pm S$	$\pm S$	$\pm S$	$\pm S$	—	c r
-130	-150	-290	+S	90	+S	10	60	90	100	100	—	o r
100	100	80	+S	70	80	60	20	20	60	80	83	c
$\pm S$	-S	110	+S	110	100	100	100	110	120	100	—	o
120	110	110	100	100	100	100	100	90	30	80	107	c
60	70	100	110	110	120	130	180	150	140	110	58	o
190	[150]	170	150	170	110	100	90	90	80	80	130	o
160	150	170	150	120	100	100	100	100	—	—	—	c
170	170	170	140	160	110	100	100	80	40	30	—	c z
140	170	140	90	50	70	100	80	70	60	50	90	c z
93	91	85	90	80	73	71	78	89	71	70	81	
24	26	26	23	25	25	24	24	23	23	23		

May

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	50	60	60	50	90	100	110	100	100	[90]	[90]
2.	50	60	70	70	50	50	50	20	—50	30	30	40	[50]
3.	80	110	90	90	70	70	90	70	70	40	30	40	[20]
4.	20	80	100	90	90	80	40	—70	—100	—180	[—80]	—40	0
5.	60	80	100	70	100	150	180	180	170	180	160	150	[120]
6.	50	50	60	50	50	80	70	100	[100]	100	100	100	80
7.	140	170	160	100	190	100	50	[80]	90	110	110	130	150
8.	30	40	40	50	50	90	80	80	100	—	—	120	110
9.	60	60	50	50	30	40	40	50	70	80	90	80	80
10.	70	50	50	60	50	50	140	110	70	[70]	50	70	50
11.	30	30	30	30	30	30	60	70	—100	—240	—210	[—90]	—30
12.	30	30	30	30	30	30	40	30	30	40	30	30	[30]
13.	50	50	50	40	40	60	90	70	70	70	40	30	[30]
14.	40	30	30	30	30	40	+S	50	50	70	100	80	80
15.	70	50	60	60	40	50	50	60	60	[—130]	—110	10	30
16.	50	50	70	60	60	90	90	80	90	80	70	50	50
17.	50	30	0	40	+S	+S	±S	—60	—60	—80	—80	—100	[—30]
18.	50	50	50	70	80	110	240	160	130	110	—S	±S	±S
19.	20	0	0	10	30	50	50	50	60	[60]	40	50	50
20.	140	110	80	60	70	70	90	150	150	150	150	120	[120]
21.	50	60	50	40	50	50	50	70	80	60	80	70	50
22.	30	20	10	30	40	50	60	60	[70]	[90]	80	[20]	40
23.	—20	—20	—40	30	10	40	70	120	220	80	100	[80]	[80]
24.	20	50	50	40	40	50	50	30	20	10	0	10	30
25.	50	60	60	60	70	80	60	50	30	60	[70]	60	+S
26.	40	30	50	—S	±S	20	—20	70	70	[80]	70	30	40
27.	40	30	40	30	20	30	80	[110]	[110]	100	70	60	40
28.	70	50	40	40	50	100	100	100	110	110	[110]	100	100
29.	50	40	30	40	40	90	100	100	—	[70]	60	50	50
30.	20	20	20	20	20	20	20	10	30	0	10	[20]	[20]
31.	±S	20	±S	±S	+S	—	—	—	—	—	—	—	—
Means	50	49	49	50	53	63	75	70	64	46	45	50	55
Number of days	30	31	30	29	28	29	28	30	29	29	28	29	28

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
30	—S	±S	±S	10	60	60	60	50	30	30	—	c r z l
[60]	70	60	60	70	80	80	80	70	70	60	53	c
—S	—S	±S	±S	±S	20	20	+S	80	60	±S	—	o r z
30	30	50	80	90	90	70	40	40	40	80	28	c r
90	80	80	80	90	100	80	50	30	30	40	102	c z
80	70	80	80	80	70	90	90	80	70	100	78	b
150	150	160	140	110	80	80	60	40	60	40	110	c
120	120	110	100	110	80	100	70	90	100	70	—	c
[90]	110	100	100	100	100	70	60	70	50	50	70	c
90	80	±S	±S	+S	+S	10	20	30	30	30	—	o r z
10	50	50	60	60	60	60	50	50	40	30	7	c
[30]	30	40	60	50	50	30	40	30	40	40	35	c z
40	50	50	50	50	60	60	80	70	40	50	54	c
[30]	40	60	+S	+S	+S	70	70	70	60	60	—	c
30	40	60	50	60	60	50	50	50	50	60	36	o
50	[60]	70	+S	40	30	30	20	0	50	40	56	o r
±S	±S	±S	80	90	140	130	130	120	90	60	—	o r l
+S	+S	110	100	90	60	40	50	70	60	50	—	o r
90	110	130	130	140	150	170	120	110	110	130	78	o
130	110	100	100	[120]	[70]	50	50	50	60	60	98	c
60	80	60	[60]	70	60	70	60	50	50	40	59	c
50	50	+S	+S	±S	—160	50	90	—40	—90	0	—	o r
90	80	80	80	100	50	+S	±S	±S	±S	+S	—	o r t
40	60	80	[100]	100	100	100	90	80	50	60	53	c r
+S	—50	60	40	50	40	50	60	60	60	50	—	c
30	10	40	50	70	70	70	60	50	60	50	—	c
30	40	50	60	70	50	60	60	40	50	70	56	o
100	100	100	100	100	100	80	50	50	50	50	82	c
50	60	80	80	100	70	20	20	30	30	20	56	c
30	20	20	30	30	40	70	100	20	±S	±S	—	c r
—	—	—	—	—	—	—	—	—	—	—	—	o p z
63	63	75	78	79	64	66	64	53	50	53	59	
26	26	25	24	26	28	29	28	29	28	27		

June

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	—	—	—	70
6.	50	80	90	110	120	130	80	90	150	130	[140]	130	110
7.	60	60	70	50	70	100	60	70	50	40	40	30	[50]
8.	40	50	50	50	70	50	50	40	[60]	[80]	100	110	$\pm S$
9.	—	—	—	—	—	—	—	—	—	[20]	40	30	0
10.	60	20	30	50	50	30	20	20	20	10	10	10	20
11.	90	70	70	80	80	90	90	100	100	80	70	[30]	[100]
12.	20	20	20	20	40	50	50	50	—	[110]	100	90	80
13.	70	50	10	50	50	50	40	30	50	[100]	50	90	110
14.	50	50	50	50	70	80	90	110	90	70	[50]	[80]	$\pm S$
15.	50	50	40	50	50	50	40	—90	50	[70]	70	60	50
16.	90	70	70	60	80	90	120	150	150	160	160	[130]	[120]
17.	50	50	50	50	50	50	50	—	—	—	—	—	—
18.	—	—	—	—	—	—	—	—	—	—	—	—	—
19.	—	—	—	—	—	—	—	—	[170]	160	120	110	90
20.	60	70	70	70	90	70	70	60	70	110	120	120	120
21.	50	50	50	60	60	60	50	30	40	30	40	40	40
22.	50	50	50	50	50	60	110	120	110	110	[100]	80	70
23.	60	50	50	40	60	80	60	60	[60]	[50]	60	60	60
24.	70	40	40	80	70	70	30	40	70	90	70	70	[70]
25.	40	40	40	50	60	70	70	70	70	70	—	50	30
26.	50	50	40	50	70	70	70	70	[70]	—	[40]	[20]	20
27.	40	40	60	70	60	70	60	30	20	30	30	30	[30]
28.	60	60	60	60	60	80	110	130	150	130	110	130	100
29.	20	40	40	20	20	$\pm S$	$\pm S$	$\pm S$	170	[150]	130	120	100
30.	50	30	40	40	60	80	60	80	[80]	80	90	90	100
Means	54	50	50	55	63	70	66	63	86	85	79	74	70
Number of days	22	22	22	22	22	21	21	20	21	22	22	23	22

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
—	—	—	—	—	—	—	—	—	—	—	—	o r t
—	—	—	—	—	—	—	—	—	—	—	—	c
—	—	—	—	—	—	—	—	—	—	—	—	c
—	—	—	—	—	—	—	—	—	—	—	—	c
50	50	40	40	30	±S	30	100	70	50	50	—	c r
130	80	70	50	50	80	70	50	50	50	50	89	o r
+S	+S	±S	60	30	±S	±S	50	40	40	40	—	o z
±S	±S	130	100	—	—	—	—	—	—	—	—	c p l
10	10	20	—30	—20	30	50	80	100	110	80	—	o r
50	70	120	120	100	80	70	110	100	80	90	56	o
+S	40	+S	10	70	60	50	50	50	40	20	—	c
80	90	80	50	50	50	50	100	80	60	80	62	c r z
120	80	100	110	120	130	120	120	50	70	70	78	o r
+S	50	50	70	90	90	110	110	70	50	50	—	c
60	80	70	90	90	80	90	100	100	100	100	63	o
160	160	120	170	180	200	140	140	100	80	50	123	c
—	—	—	—	—	—	—	—	—	—	—	—	o
—	—	—	—	—	—	—	—	—	—	—	—	c
80	120	+S	+S	—	—	—	—10	70	90	70	—	c z
[110]	160	+S	+S	60	70	100	80	50	50	50	—	c
60	[60]	70	50	90	70	100	70	50	30	40	54	c
80	100	90	100	100	110	110	110	100	90	80	87	c
70	70	80	90	90	80	70	70	70	70	70	66	b
10	+S	+S	+S	60	60	60	60	70	70	40	—	c
30	40	60	60	70	70	60	80	80	70	70	59	c
10	30	30	40	50	60	60	40	40	40	40	46	
30	10	60	60	80	90	80	90	90	80	60	54	c
80	80	+S	±S	110	±S	±S	±S	±S	±S	+S	—	o r
100	100	100	80	60	70	70	60	60	60	40	—	c r
90	100	110	100	110	100	90	100	80	70	80	80	c
71	75	78	71	76	83	79	80	73	66	60	70	
20	21	18	20	22	19	20	22	22	22	22		

July

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	60	60	60	60	80	110	100	120	150	140	130	[120]	[100]
2.	60	40	30	40	40	50	50	20	20	10	20	20	[30]
3.	50	40	40	50	60	60	70	70	—	[—40]	—10	10	40
4.	80	60	50	40	70	110	110	120	120	100	90	[100]	[90]
5.	60	100	100	90	100	100	—	—	—	—	—	—	—
6.	40	40	30	50	50	60	80	120	150	[160]	150	140	110
7.	60	40	60	40	50	40	20	40	40	30	20	[20]	30
8.	30	30	40	40	40	40	60	60	60	60	30	[30]	30
9.	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	—	—	—	—	—	—	—	—	—	[150]	140	140	130
12.	80	70	90	60	70	80	[110]	120	110	100	70	70	70
13.	50	50	50	70	70	70	[70]	60	50	30	30	30	30
14.	50	40	40	40	40	50	[50]	50	40	50	40	40	60
15.	50	40	40	60	60	100	[100]	100	110	100	100	110	130
16.	50	50	70	60	30	50	60	60	60	[80]	70	70	90
17.	70	60	50	90	90	100	110	—	—	—	—	±S	±S
18.	50	50	60	20	40	100	150	150	150	140	140	140	[130]
19.	100	110	100	100	100	170	140	140	190	210	190	[180]	[190]
20.	50	60	50	70	70	70	50	50	80	60	[90]	[90]	70
21.	+S	±S	±S	±S	±S	+S	70	180	[110]	90	60	60	40
22.	+S	60	60	60	30	50	70	70	—	100	[80]	60	60
23.	—S	40	50	30	60	90	120	110	100	90	70	80	60
24.	60	50	40	60	70	90	90	100	—	100	100	+S	—S
25.	60	50	50	60	70	110	90	80	80	[70]	[80]	80	80
26.	±S	—40	60	20	20	40	—S	+S	[80]	110	60	+S	180
27.	30	10	20	20	30	50	90	70	[70]	80	60	60	60
28.	30	30	40	40	50	60	70	70	60	[60]	60	60	90
29.	30	40	40	40	20	40	60	50	50	40	60	[70]	[70]
30.	20	20	20	10	20	20	20	30	40	40	70	60	[70]
31.	20	20	20	20	20	50	60	50	—	[70]	90	120	120
Means	52	45	50	50	54	73	80	84	87	83	77	78	83
Number of days	24	27	27	27	27	27	26	25	22	27	27	25	26

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
100	100	70	60	50	60	70	60	40	40	50	83	c z
40	40	40	40	50	40	40	40	40	60	40	38	c z
50	70	70	60	80	+S	±S	+S	70	±S	±S	—	c r
90	90	100	90	90	80	80	60	50	60	60	83	c r
—	—	[130]	130	130	150	140	140	120	90	60	—	o
100	100	120	130	140	130	100	90	80	60	50	95	b
20	30	40	40	50	40	50	50	50	50	40	40	c
30	60	60	60	60	50	20	20	20	40	±S	42	o r z
—	—	—	—	—	—	—	—	—	—	—	—	o r z
—	—	—	—	—	—	—	—	—	—	—	—	c r
110	100	100	110	120	110	90	100	100	110	100	—	c
70	80	70	70	60	60	50	50	70	70	70	76	b
40	50	50	60	80	70	60	60	70	70	70	56	c
30	50	70	70	90	100	90	70	70	50	50	56	c
140	±S	±S	±S	±S	+S	10	40	60	30	50	—	o r
70	60	70	90	90	120	120	130	100	90	90	76	c
±S	+S	160	120	100	70	70	60	60	60	60	—	o r z
[130]	120	130	140	140	150	170	100	90	100	90	112	b z
140	140	140	130	80	120	140	110	100	60	70	131	c z
60	50	50	60	60	60	60	60	50	50	50	61	c r z
40	50	60	50	60	60	70	70	—	±S	±S	—	o r
60	60	70	80	100	140	100	100	110	—S	±S	—	c r
60	±S	±S	±S	70	80	70	±S	±S	—S	50	—	c r
—S	±S	±S	20	40	40	40	60	60	60	90	—	c r
90	70	90	70	60	60	40	40	60	20	±S	68	o r
160	80	20	10	20	20	20	20	10	20	20	—	o r z
60	70	80	80	60	60	50	40	40	40	40	53	c
100	100	70	40	40	30	30	30	20	30	40	52	c
90	80	60	—S	±S	70	50	40	40	40	20	—	c z
80	80	70	40	20	40	40	50	40	40	20	40	c
120	100	70	60	60	50	40	50	50	50	50	59	b
81	76	79	73	74	76	68	64	62	56	55	69	
26	24	26	26	27	27	28	27	27	25	24		

August

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	40	30	40	40	50	60	90	70	80	90	110	100	[90]
2.	20	20	20	40	40	50	60	—	—	—	—	—	—
3.	40	40	$\pm S$	$\pm S$	$\pm S$	—S	90	150	$\pm S$	$\pm S$	—S	110	90
4.	70	50	50	70	70	70	—	—	—	—	—	—	—
5.	70	70	70	110	110	120	130	[90]	80	90	80	80	[40]
6.	120	60	90	90	120	150	180	200	90	+S	$\pm S$	+S	150
7.	—70	—240	—70	—100	—30	—30	0	110	—	+S	+S	200	180
8.	70	70	70	70	80	100	100	[80]	[110]	90	80	70	70
9.	70	80	80	80	90	100	[110]	—	—	—	—	—	—
10.	50	40	40	60	80	120	110	100	100	110	100	90	[80]
11.	80	70	60	60	60	80	70	$\pm S$	$\pm S$	$\pm S$	50	100	[70]
12.	60	60	50	40	50	90	150	100	100	90	70	[90]	70
13.	20	20	20	20	20	—80	[—20]	20	30	30	+S	70	70
14.	50	30	30	40	40	70	110	+S	—	[100]	110	120	120
15.	90	80	80	90	90	90	120	160	110	140	120	[100]	80
16.	50	40	40	40	40	60	70	90	100	[90]	70	60	50
17.	40	50	50	50	70	100	120	110	70	70	80	90	+S
18.	120	100	70	100	70	70	110	110	[150]	160	160	130	120
19.	80	70	60	50	70	70	90	120	[130]	160	150	100	70
20.	30	20	20	20	20	40	50	70	[70]	[90]	70	60	60
21.	40	40	70	40	30	70	80	140	—	[120]	90	100	100
22.	30	30	20	20	30	60	90	80	120	[150]	150	90	90
23.	40	40	40	30	40	50	100	70	90	120	120	110	[100]
24.	40	40	40	30	40	70	80	50	60	[70]	[70]	60	40
25.	40	40	40	30	20	30	30	70	[60]	[60]	70	80	70
26.	70	70	50	70	100	120	+S	+S	170	120	120	[90]	70
27.	70	70	$\pm S$	$\pm S$	40	90	110	70	90	[70]	80	80	80
28.	70	70	70	80	70	70	70	70	—	—	—	90	100
29.	100	60	70	60	90	80	150	160	150	130	120	110	100
30.	50	30	40	40	50	50	60	90	—	—	—	—	—
31.	40	30	30	30	50	40	60	—	—	—	—	—	—
Means	55	41	46	48	57	69	89	99	98	102	99	95	86
Number of days	31	31	29	29	30	30	29	24	20	21	21	25	25

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
90	90	70	30	40	50	40	30	20	20	20	58	c z
—	—	—	—	[70]	60	40	30	30	30	40	—	c r
160	140	[80]	40	20	20	40	40	50	60	80	—	c r
—	—	—	—	[60]	70	70	50	70	70	50	—	c
±S	±S	+S	+S	±S	+S	40	80	120	100	90	—	o r z
±S	[90]	±S	+S	+S	+S	50	70	+S	±S	60	—	c r
210	180	180	150	160	160	180	160	140	120	100	—	o r
70	70	80	80	80	90	80	70	70	60	70	78	c
—	—	—	—	—	—	70	70	60	70	70	—	c
70	60	20	+S	—S	120	±S	80	70	110	100	—	o r
30	60	40	70	70	70	90	80	60	70	60	—	c r
50	60	50	50	60	70	50	40	30	30	20	64	c r
40	60	20	70	70	60	80	80	70	50	50	38	o r
100	90	90	70	90	90	100	80	90	80	90	—	c r
60	90	90	100	110	120	70	80	50	50	40	92	c
30	70	±S	+S	±S	30	50	40	40	50	30	—	c d
±S	±S	±S	±S	±S	90	100	80	90	80	140	—	c r
120	120	120	110	110	110	80	80	80	100	80	108	c
60	50	40	50	50	70	70	60	50	50	40	75	c
80	120	20	40	40	70	90	120	90	80	90	61	o f
110	100	100	120	120	120	150	110	70	50	40	87	c
100	90	100	120	110	90	80	70	70	70	50	80	c
120	120	120	120	90	90	90	70	50	50	50	80	c
±S	±S	30	70	80	100	60	60	40	50	40	—	c f
50	50	70	50	—90	50	70	80	70	70	70	49	o r f
60	90	100	80	70	90	90	110	90	70	90	—	c r f
90	90	80	—70	50	90	70	70	60	60	70	—	c
100	80	90	90	70	90	100	80	80	90	100	—	c z
80	[70]	60	50	50	50	60	50	40	50	60	83	c z
—	[80]	[80]	50	60	70	60	60	50	40	40	—	o z
30	[40]	50	60	50	40	40	40	50	50	30	—	o z
83	86	74	70	68	80	75	72	65	64	63	74	
23	25	24	23	25	28	30	31	30	30	31		

September

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	30	20	20	20	20	30	50	40	50	60	[70]	70	100
2.	50	40	30	40	30	60	90	130	80	[80]	[70]	60	60
3.	70	80	60	60	60	60	[100]	100	110	100	100	60	60
4.	50	50	50	50	50	60	60	[60]	—	—	[70]	40	40
5.	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	50	30	40	50	40	50	[120]	—	—	—	—	120	[120]
7.	20	10	20	40	50	50	60	60	110	[120]	120	120	140
8.	60	50	60	50	70	80	80	90	90	120	[130]	120	120
9.	—10	0	±S	+S	±S	+S	+S	+S	+S	±S	±S	0	—10
10.	±S	±S	±S	—S	±S	—110	+S	+S	—180	20	—40	40	[110]
11.	80	80	70	70	60	80	+S	+S	—	—	100	50	—20
12.	80	70	90	90	90	120	120	120	110	120	120	80	40
13.	—120	—210	20	10	30	50	90	150	130	90	120	120	90
14.	80	70	70	70	70	80	90	80	70	40	60	50	90
15.	90	90	50	50	110	120	+S	+S	110	90	30	40	80
16.	60	10	0	—60	—80	—110	—S	+S	—40	60	—S	—S	50
17.	0	20	—70	—40	—80	50	—70	80	+S	+S	160	90	60
18.	30	30	40	40	40	40	70	60	—	[80]	80	100	120
19.	90	80	100	90	90	80	90	160	100	90	[90]	80	70
20.	30	40	40	40	50	90	90	60	90	50	70	90	[70]
21.	50	50	60	60	50	50	90	70	[50]	60	90	80	90
22.	40	0	30	50	50	50	—10	—10	40	50	20	20	+S
23.	70	70	50	60	60	90	130	+S	+S	180	100	[80]	70
24.	90	90	100	110	120	90	+S	+S	120	100	90	[90]	120
25.	140	+S	+S	+S	+S	+S	+S	+S	+S	—	—	[90]	110
26.	100	+S	+S	+S	+S	+S	+S	+S	+S	+S	100	90	90
27.	—	—	—	—	—	—	—	—	—	—	—	—	—
28.	80	60	50	50	50	70	+S	—	—	—	—	—	+S
29.	90	50	90	80	60	70	+S	+S	+S	140	[120]	110	120
30.	80	80	80	110	80	70	+S	130	50	60	70	60	80
Means	55	38	48	50	49	55	74	86	64	86	84	75	80
Number of days	27	25	24	24	24	25	17	16	17	20	23	26	26

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
170	$\pm S$	$\pm S$	$\pm S$	30	40	30	20	40	50	60	—	o d t
60	60	80	100	80	90	90	70	60	100	80	70	c
80	80	90	100	90	90	80	70	70	60	40	78	c
50	50	50	50	70	80	90	20	—	—	—	—	c
[160]	140	[90]	90	90	120	90	50	50	60	50	—	o
120	90	80	50	60	70	50	40	50	40	40	—	c z
150	150	150	130	120	120	90	70	60	50	60	86	c
100	70	70	50	60	$\pm S$	$\pm S$	$\pm S$	$\pm S$	$-S$	-40	—	c r t
30	120	40	80	90	110	130	180	190	$\pm S$	-60	—	o r f
70	10	50	50	50	40	80	120	120	120	80	—	o r z
40	70	60	80	90	70	70	70	70	60	60	—	o r z
$-S$	-10	160	130	40	0	10	100	100	110	60	85	o r z
60	70	60	80	110	120	130	110	120	80	90	67	o r
90	90	90	90	80	60	80	90	120	120	80	80	o r z
90	80	[40]	$\pm S$	$\pm S$	$\pm S$	$\pm S$	-90	-10	20	20	—	o r z
30	50	$\pm S$	-30	$\pm S$	-30	20	50	80	30	20	—	o r z
60	70	70	50	50	60	70	80	60	50	50	—	o r z
120	120	120	90	90	90	80	90	90	90	120	80	c
70	80	70	70	90	50	50	50	30	30	20	76	c f
70	60	90	80	80	$\pm S$	160	110	70	80	50	—	o r z
100	100	90	90	70	50	20	10	20	10	-40	57	c
$\pm S$	$\pm S$	$\pm S$	$-S$	$-S$	120	100	150	100	80	60	—	o r z
70	70	70	60	50	60	60	70	60	60	90	—	c r z
110	120	100	90	50	40	80	50	50	70	110	—	o f
120	100	100	90	110	120	140	160	170	110	140	—	o f
[100]	120	120	120	—	—	—	—	—	—	—	—	o f
—	170	170	140	120	90	80	80	60	80	90	—	c z
$\pm S$	180	120	140	140	130	140	120	80	60	60	—	o r z
150	130	110	100	120	120	100	90	90	80	50	—	c z
80	80	80	70	50	50	80	90	80	80	90	77	o f
90	90	90	83	80	75	81	76	77	68	55	71	
26	28	27	27	26	26	27	28	27	26	28		

October

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	100	90	100	90	50	90	90	120	140	150	160	160	160
2.	30	40	30	50	50	50	50	50	—	—	60	50	30
3.	110	220	170	90	130	170	180	140	110	70	60	[50]	70
4.	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	—	—	—	—	—	—	—	—	—	—	—	—	60
6.	80	70	50	70	70	80	120	120	110	80	[80]	[100]	120
7.	70	70	60	60	50	110	120	150	110	—	—	[130]	100
8.	90	90	90	70	90	90	100	120	130	100	100	[70]	100
9.	100	60	30	10	30	60	90	[100]	[50]	70	40	30	60
10.	40	50	50	50	60	60	90	110	[100]	100	130	110	[120]
11.	120	120	130	110	110	110	110	120	120	[130]	150	130	160
12.	100	110	110	120	60	50	30	70	—30	50	[80]	60	70
13.	—70	30	170	200	60	60	70	100	[—10]	—	—	90	110
14.	130	110	100	110	150	120	130	160	130	110	[100]	100	110
15.	200	+S	+S	+S	200	100	(60)	(90)	(90)	(60)	[70]	[110]	100
16.	100	80	190	280	+S	+S	160	50	[70]	—	100	110	110
17.	40	40	40	50	150	40	20	—40	—20	[30]	[20]	20	50
18.	10	10	40	20	0	+S	—S	+S	80	+S	[90]	90	100
19.	60	50	50	60	70	70	90	160	[160]	150	130	130	150
20.	10	30	30	50	60	60	60	50	90	110	—	80	80
21.	0	0	30	10	20	30	30	—10	0	30	80	120	100
22.	40	10	70	80	70	110	110	140	130	110	[120]	[110]	90
23.	110	100	90	80	110	120	+S	+S	+S	—	150	90	90
24.	110	140	200	210	230	+S	+S	+S	+S	150	100	[60]	[50]
25.	170	230	140	100	160	+S	120	100	[70]	140	150	150	160
26.	100	250	+S	+S	+S	+S	+S	+S	+S	180	200	[120]	80
27.	150	150	140	+S	+S	170	150	60	30	10	10	[—10]	40
28.	—10	—20	—10	30	—20	100	140	90	80	100	70	30	[30]
29.	—40	—40	10	0	0	60	40	110	30	[—10]	30	40	0
30.	—	—	—	—	—	—	—	—	—	—	—	—	150
31.	120	100	100	110	120	+S	150	220	[230]	[230]	150	140	130
Means	74	81	85	84	83	87	98	100	83	100	97	88	93
Number of days	28	27	26	25	25	22	23	23	23	21	25	28	30

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
—	120	120	120	120	110	100	80	30	20	40	103	o z
50	50	70	50	30	30	60	70	70	40	30	—	o
120	30	—	—	—	—	—	—	—	—	—	—	o r f
—	—	—	—	—	—	—	—	—	—	—	—	o r
70	70	70	90	100	120	140	120	130	100	80	—	o r
110	110	120	120	150	170	180	120	80	60	60	101	c
100	100	110	140	180	200	150	130	110	110	100	—	o
100	100	80	100	110	110	110	100	100	100	100	98	c
100	100	80	100	80	110	180	140	100	50	60	76	o
160	170	200	170	190	180	120	170	130	160	120	118	c
100	70	120	160	130	130	60	80	100	90	100	115	b
90	70	80	100	120	190	170	100	100	110	0	84	o f
130	150	140	150	170	(190)	190	—	—	(100)	130	—	o f
80	80	80	90	110	130	110	130	140	140	200	119	c r f
110	80	50	40	50	120	210	230	160	260	130	—	o r f
140	120	100	80	70	90	100	60	50	50	40	—	o r f
60	50	40	10	20	40	60	60	70	60	50	40	b r z
100	90	90	150	±S	±S	10	80	90	110	90	—	o r
150	100	110	80	—10	20	—20	—30	—30	—30	0	70	c r
90	90	90	80	80	90	—10	0	20	—10	0	53	c
100	110	120	130	130	140	120	90	110	60	40	66	c
80	70	50	80	90	100	140	130	100	90	80	92	c z
80	80	100	100	90	90	80	60	70	90	100	—	o f
50	50	130	150	140	200	230	230	+S	+S	+S	—	o f
160	150	150	180	150	150	130	120	100	100	40	136	o f
70	100	120	130	+S	+S	120	+S	140	130	130	—	o f
50	90	70	90	70	90	110	90	30	—10	0	—	o f
50	30	20	70	20	0	—30	—30	—30	—20	—20	28	o f
—	—	—	—	—	—	—	—	—	—	—	—	o r f
150	200	140	120	190	150	130	110	100	140	150	—	o
130	100	110	90	50	80	40	—40	20	50	70	109	c
99	94	99	106	101	114	107	92	80	79	71	91	
28	29	28	28	26	25	28	26	26	26	27		

November

Hour GMT Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	50	40	80	150	+S	200	140	150	40	40	100	[120]	150
2.	60	50	40	50	50	70	30	0	-40	-50	-50	[-90]	-100
3.	-60	-70	-80	-120	-50	0	-10	-30	-20	-60	0	[60]	50
4.	110	70	60	70	50	90	90	150	[200]	—	—	[100]	90
5.	40	30	60	40	20	-10	-40	-10	-40	-60	[0]	-20	30
6.	0	-210	10	-S	-S	-S	+S	30	70	100	[70]	[70]	100
7.	110	100	60	60	70	80	80	70	100	[70]	120	120	160
8.	+S	50	130	+S	130	100	0	10	—	20	10	-30	50
9.	10	20	30	30	40	40	-10	70	50	[40]	30	30	40
10.	80	110	120	100	130	120	120	[110]	80	80	[100]	[50]	30
11.	120	140	120	100	110	100	110	140	120	120	110	120	110
12.	100	80	50	100	80	100	90	40	+S	110	90	50	100
13.	40	60	80	40	40	90	100	180	—	80	100	80	90
14.	150	140	140	130	130	—	—	—	—	—	—	100	160
15.	+S	+S	+S	+S	+S	100	60	20	0	-20	90	—	150
16.	150	120	140	100	70	110	100	80	[40]	0	20	70	100
17.	10	—	—	—	—	—	—	—	—	—	80	100	110
18.	70	50	60	60	50	50	50	30	30	50	50	[70]	[130]
19.	+S	+S	+S	130	100	30	40	30	30	100	140	[150]	150
20.	170	150	160	180	160	190	220	220	—	—	170	190	190
21.	100	90	90	110	50	60	40	90	30	-140	-30	[110]	100
22.	110	80	80	100	120	180	180	180	220	200	150	[180]	160
23.	110	100	50	90	130	140	220	190	[130]	[200]	150	150	90
24.	80	90	90	100	110	130	190	210	180	[180]	[180]	[180]	150
25.	-40	10	20	-10	-50	-70	-80	-50	-70	-50	10	20	[40]
26.	30	20	40	30	20	30	50	30	30	40	40	50	[60]
27.	80	80	60	50	40	60	60	80	60	70	-10	—	50
28.	110	90	50	90	+S	80	80	70	30	+S	+S	+S	+S
29.	150	120	110	110	80	120	260	260	—	—	260	140	220
30.	180	+S	+S	230	210	180	+S	280	+S	250	—	290	+S
Means	79	62	71	82	76	88	83	94	58	57	76	91	99
Number of days	27	26	26	26	25	27	26	28	22	24	26	27	28

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
120	160	150	150	180	+S	240	150	70	90	50	119	o f
-90	-100	-40	-20	-40	-50	-20	-60	-90	-80	-80	-27	o
80	100	100	120	60	-S	$\pm$ S	$\pm$ S	-S	0	50	—	o r
100	80	70	60	50	-20	20	50	10	40	20	—	o r
10	70	60	60	40	40	-30	30	10	20	-20	14	o r
120	90	90	0	40	40	30	150	210	110	100	—	o r
130	90	40	110	120	120	80	170	120	150	+S	101	o f
60	20	10	40	40	10	10	0	20	50	50	—	o r f
80	50	60	130	180	170	150	140	110	90	80	69	o r
30	130	140	140	140	140	130	120	120	120	120	107	o f
[120]	140	130	130	160	180	200	250	150	90	100	132	c z
140	180	170	170	150	40	10	-20	50	40	20	84	o r
100	90	100	100	90	130	100	100	140	190	190	100	o r
160	150	—	—	—	—	+S	+S	+S	+S	+S	—	o r f
90	100	140	130	170	180	180	180	150	150	130	—	o r f
—	90	50	90	100	100	100	100	60	30	30	80	o r f
150	150	180	200	190	190	230	200	240	140	80	—	c r
130	160	190	+S	+S	180	+S	+S	+S	+S	+S	—	b z
150	150	130	140	150	130	150	200	200	220	160	—	o
190	180	170	220	+S	+S	210	170	140	120	90	—	b
100	90	20	20	-60	80	30	120	120	110	120	60	b
120	140	170	190	190	170	140	100	120	120	110	146	o
70	90	90	90	60	120	140	120	90	50	50	113	b
140	130	130	120	140	190	120	50	-20	-80	-60	114	c
60	50	0	-20	-10	10	10	0	10	20	30	-7	o
60	70	80	130	100	90	70	20	50	20	50	50	o
130	200	200	130	200	190	170	120	70	70	50	96	o r z
$\pm$ S	220	300	+S	+S	170	130	130	120	170	150	—	o s f
170	220	250	220	140	+S	+S	+S	80	40	140	—	o z
+S	+S	+S	+S	310	280	+S	240	200	190	210	—	o f
101	113	114	110	111	115	104	109	94	81	75	89	
27	29	28	26	26	25	25	26	27	28	27		

												December	
Hour GMT													
Day	0	1	2	3	4	5	6	7	8	9	10	11	12
1.	220	210	220	200	180	170	210	210	160	170	210	—	250
2.	150	160	170	170	170	150	150	160	190	+S	200	250	[260]
3.	110	100	30	90	110	130	110	150	180	260	220	[250]	[270]
4.	130	—10	70	70	80	90	90	80	—	100	±S	±S	±S
5.	100	60	50	60	70	100	110	150	160	140	[110]	130	120
6.	50	40	—S	0	±S	±S	110	±S	—S	130	[70]	80	120
7.	80	50	90	100	60	90	80	120	[130]	[130]	110	120	150
8.	60	70	70	60	50	60	80	110	110	[80]	80	80	100
9.	80	80	70	70	100	70	80	80	100	80	60	[70]	90
10.	70	70	70	70	50	60	50	90	100	70	80	[130]	[160]
11.	190	170	170	160	130	70	+S	+S	+S	+S	+S	+S	+S
12.	30	50	70	130	120	140	180	220	+S	220	[210]	190	210
13.	100	90	60	70	80	120	150	180	220	[220]	120	50	100
14.	30	30	40	20	40	50	40	60	—	90	30	30	50
15.	150	140	120	100	70	70	80	110	130	130	120	[160]	[170]
16.	110	60	20	30	—20	30	90	—50	—70	—40	—40	[—20]	0
17.	130	70	10	20	±S	+S	70	80	±S	±S	±S	[20]	[50]
18.	80	70	60	70	80	80	120	210	—	+S	+S	250	210
19.	30	70	50	50	60	70	70	90	120	[130]	—	150	150
20.	50	50	50	40	—70	10	50	100	110	100	150	140	120
21.	40	50	80	130	150	180	220	230	220	—	240	210	210
22.	50	30	—30	120	+S	±S	±S	+S	+S	70	150	—	[50]
23.	170	150	110	80	160	110	100	60	70	150	130	40	[130]
24.	80	70	60	40	60	100	90	100	100	110	120	150	[120]
25.	±S	±S	60	50	40	50	50	70	90	[80]	+S	—S	±S
26.	+S	+S	+S	+S	+S	+S	+S	+S	+S	+S	270	[190]	[250]
27.	220	+S	160	180	150	170	130	100	—	—	110	140	160
28.	130	130	100	110	130	170	170	200	200	—	160	150	170
29.	100	120	110	170	130	120	200	90	50	40	—	40	—10
30.	+S	110	70	100	80	80	50	230	+S	+S	+S	+S	90
31.	80	80	70	70	50	70	80	100	40	—20	[—20]	[30]	40
Means	101	85	79	88	86	97	108	123	121	111	126	121	135
Number of days	28	28	29	30	27	27	28	27	20	22	23	25	28

13	14	15	16	17	18	19	20	21	22	23	Daily means	Remarks
250	270	260	270	220	200	230	180	250	280	220	219	c z
210	250	320	280	210	250	100	100	70	190	200	190	o z
200	240	+S	230	150	210	+S	+S	280	190	150	—	b z
40	80	0	80	80	80	60	60	70	80	100	—	o r
120	140	190	210	190	190	120	70	70	10	30	113	o r
160	140	120	90	100	120	200	+S	90	160	70	—	o r
120	120	150	130	130	160	150	100	80	80	50	108	o
120	90	100	150	130	150	110	110	120	110	70	95	c
80	80	90	100	110	110	90	100	90	70	60	84	c
120	90	90	120	180	220	200	180	220	170	190	119	b
+S	170	120	150	+S	+S	90	140	150	120	40	—	o s f
170	110	120	110	50	70	90	160	180	160	120	135	b f
50	60	80	60	30	50	30	20	10	30	20	83	o z
100	130	140	140	160	160	160	190	190	190	170	97	o z
150	180	+S	220	220	180	160	120	30	100	120	132	o f
0	-30	-40	60	50	20	-10	50	90	120	110	22	o f
100	150	200	210	140	140	190	130	120	70	70	—	c s z
190	150	140	170	180	130	100	70	60	50	30	—	c
130	90	150	150	170	130	160	160	-S	+S	30	—	c s
150	110	100	80	80	130	140	60	150	60	40	83	o s
220	220	+S	+S	+S	220	190	+S	180	200	100	—	o s
90	50	110	100	+S	+S	120	110	100	150	190	—	o s f
170	140	100	70	80	70	70	50	110	80	60	103	o s
130	170	130	160	130	170	170	140	-S	-S	-S	—	o r z
+S	-S	20	+S	+S	+S	+S	+S	+S	+S	+S	—	o r f
230	200	200	220	170	210	180	150	120	140	150	—	o r m
170	180	190	190	140	150	190	200	190	190	180	—	c z
170	140	70	50	10	90	140	130	130	90	70	127	c z
20	50	50	60	70	50	100	140	130	210	+S	93	o s z
150	200	170	220	200	180	120	150	130	130	90	—	o s f
-10	-40	-10	-110	-30	-60	-80	-110	-110	-90	-100	-3	o z
131	131	120	137	124	135	123	110	118	119	94	113	
29	30	28	29	27	28	29	27	28	28	28		

Hourly means of the quantities of positive and negative

<u>Hour GMT</u> <u>Month</u>		0	1	2	3	4	5	6	7	8	9	10	11
January	+	0	0	14	3	8	15	26	31	13	16	1	5
	—	0	0	0	4	6	1	1	1	0	0	0	0
February	+	3	1	103	64	1	1	3	1	5	1	9	16
	—	2	0	11	26	0	0	2	0	7	0	65	33
March	+	6	0	2	2	4	29	50	43	0	32	50	45
	—	15	0	3	10	10	5	48	24	0	5	30	37
April	+	4	0	41	29	0	1	1	10	19	14	2	11
	—	4	0	16	8	0	0	0	24	14	14	4	21
May	+	11	0	1	0	21	11	6	0	18	9	0	0
	—	60	0	0	32	0	32	33	20	1	9	11	42
June	+	0	0	0	0	0	0	0	0	0	0	0	0
	—	0	0	0	0	0	0	0	0	0	0	0	0
July	+	50	51	41	22	26	13	0	0	0	0	0	55
	—	88	77	59	167	81	0	0	0	0	0	0	12
August	+	0	0	3	3	17	0	0	11	0	32	16	0
	—	0	0	5	0	0	0	0	0	79	26	13	0
September	+	3	1	2	1	21	0	0	0	4	14	27	0
	—	4	10	14	0	9	3	0	0	0	30	11	0
October	+	101	15	40	9	21	0	0	0	0	51	10	0
	—	48	76	49	51	10	2	0	0	0	0	0	0
November	+	0	1	2	2	0	0	0	0	0	1	3	2
	—	0	0	0	0	0	0	0	0	0	1	1	1
December	+	5	0	0	0	7	0	1	0	25	16	6	64
	—	6	1	0	0	1	0	0	0	34	27	8	8

