

### 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 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. 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<br>Day   | 0    | 1   | 2    | 3    | 4    | 5   | 6   | 7   | 8    | 9    | 10   | 11   | 12  |
| 1.                | 80   | 60  | 50   | 0    | 0    | 90  | 60  | 70  | 60   | 50   | +S   | +S   | +S  |
| 2.                | 60   | 70  | 70   | 70   | 60   | 90  | 110 | 80  | —    | 80   | 30   | —S   | 50  |
| 3.                | 100  | 80  | 70   | 80   | 70   | 80  | 120 | 110 | 140  | 90   | 80   | —20  | 80  |
| 4.                | 30   | 40  | 60   | 50   | +S   | 30  | 40  | 60  | +S   | +S   | +S   | +S   | +S  |
| 5.                | 60   | 80  | 70   | 60   | 80   | 110 | 110 | 110 | 120  | 120  | 100  | 110  | 120 |
| 6.                | 80   | 70  | 60   | 50   | 70   | 80  | 80  | 70  | 50   | 80   | 80   | 120  | 140 |
| 7.                | 110  | 110 | 110  | 120  | 120  | 90  | 90  | 100 | 140  | +S   | +S   | +S   | +S  |
| 8.                | 20   | 10  | 0    | 30   | 110  | 120 | 110 | 70  | —    | 150  | 120  | 150  | 150 |
| 9.                | 120  | 120 | 130  | 130  | 130  | 120 | 100 | 100 | 130  | —    | —    | —    | —   |
| 10.               | 60   | —60 | —50  | +S   | +S   | +S  | 100 | 100 | 90   | 70   | 40   | 40   | 80  |
| 11.               | —60  | —80 | —90  | —40  | 20   | 20  | 10  | 40  | 0    | +S   | +S   | +S   | +S  |
| 12.               | 40   | 30  | 40   | 30   | 10   | 0   | 10  | 20  | 60   | 60   | 40   | 60   | 40  |
| 13.               | 40   | 40  | 30   | 20   | 10   | 0   | 30  | 30  | 90   | 70   | 90   | 120  | 100 |
| 14.               | 20   | 20  | 20   | 40   | 10   | —30 | —30 | —80 | —100 | —180 | 20   | —80  | —60 |
| 15.               | 100  | 40  | 90   | 60   | —50  | 30  | 70  | +S  | —    | +S   | 0    | 40   | 90  |
| 16.               | —    | —   | —    | —    | —    | —   | —   | —   | —    | —    | —50  | —30  | —40 |
| 17.               | +S   | 110 | 120  | 100  | 150  | 110 | 100 | 100 | 120  | 140  | 150  | —    | —   |
| 18.               | 160  | 80  | 100  | 20   | 110  | 80  | 80  | 90  | 70   | 60   | 160  | 140  | 160 |
| 19.               | 100  | 40  | 40   | 40   | 70   | 60  | 120 | —   | —    | —    | —    | —    | —   |
| 20.               | —    | —   | —    | —    | —    | —   | 120 | 120 | 150  | 60   | 80   | 160  | 140 |
| 21.               | 120  | 120 | 120  | 80   | 110  | 110 | 110 | 120 | 100  | 80   | 90   | 90   | 90  |
| 22.               | —100 | —90 | —100 | —100 | —100 | —80 | —90 | —60 | —    | —80  | —130 | —140 | —20 |
| 23.               | 80   | 60  | 60   | 40   | 40   | 80  | 60  | 40  | 50   | 60   | 80   | 80   | 80  |
| 24.               | 210  | 210 | 160  | 210  | 180  | 120 | 90  | 10  | 30   | —10  | —50  | 40   | —40 |
| 25.               | —    | —   | 40   | 40   | 40   | 60  | 30  | —20 | 110  | —    | —    | —    | 170 |
| 26.               | —50  | 50  | 50   | 40   | 60   | 70  | 30  | 30  | 30   | 80   | 110  | 200  | 80  |
| 27.               | 110  | 80  | 60   | 50   | 50   | 100 | 120 | 80  | 40   | 70   | 90   | 40   | —   |
| 28.               | 40   | 20  | 40   | 20   | 50   | 60  | 70  | 90  | 100  | 90   | 120  | 130  | 170 |
| 29.               | —    | —   | —    | —    | —    | —   | —   | —   | —    | —    | —    | —    | —   |
| 30.               | 90   | 130 | 140  | 110  | 130  | 140 | —   | —   | —    | —    | —    | —    | —   |
| 31.               | —    | —   | —    | —    | —    | —   | —   | —   | —    | —    | —    | —    | —   |
| Maens             | 65   | 55  | 55   | 52   | 61   | 67  | 69  | 59  | 75   | 57   | 60   | 66   | 79  |
| Number<br>of days | 25   | 26  | 27   | 26   | 25   | 26  | 27  | 25  | 21   | 20   | 21   | 19   | 20  |

| 13  | 14  | 15  | 16   | 17  | 18  | 19   | 20   | 21  | 22   | 23   | Daily means |
|-----|-----|-----|------|-----|-----|------|------|-----|------|------|-------------|
| +S  | —   | +S  | +S   | 90  | 50  | —S   | —S   | —60 | 60   | 0    | —           |
| 40  | 50  | 80  | 100  | 110 | 120 | 120  | 120  | 100 | 90   | 100  | —           |
| 110 | 140 | 110 | 70   | 90  | 160 | 100  | 80   | 70  | 60   | 40   | 88          |
| 90  | 100 | 70  | 80   | 30  | 90  | 80   | 100  | 90  | 70   | 50   | —           |
| 120 | 110 | 110 | 140  | 120 | 140 | 120  | 140  | 120 | +S   | 90   | 107         |
| +S  | +S  | 170 | 160  | 140 | 160 | 140  | 120  | 120 | 100  | 110  | —           |
| 120 | 120 | 90  | 80   | 100 | 80  | 90   | 90   | 110 | 160  | 80   | —           |
| 120 | 100 | 90  | 90   | 100 | 100 | 90   | 120  | 120 | 120  | 100  | 95          |
| —   | —   | —   | —    | —   | —   | —    | —    | 40  | 10   | 40   | —           |
| 120 | 130 | 120 | 130  | 120 | 90  | 70   | 0    | —80 | —120 | —30  | —           |
| ±S  | ±S  | +S  | 80   | 40  | 80  | 90   | 70   | 60  | 40   | 60   | —           |
| 30  | 20  | 70  | +S   | ±S  | 70  | 30   | 80   | 80  | 60   | 40   | —           |
| 80  | ±S  | 20  | 40   | 60  | —10 | —50  | 10   | 30  | 10   | 0    | 37          |
| —20 | —60 | —90 | —50  | —10 | 90  | 70   | 40   | —40 | 40   | 90   | —16         |
| 70  | —70 | —30 | —20  | —30 | 10  | —110 | —220 | —   | —    | —    | —           |
| —30 | —50 | —40 | —100 | —50 | 0   | 10   | +S   | ±S  | +S   | +S   | —           |
| —   | —   | 150 | 150  | 110 | 70  | 90   | 140  | 100 | 70   | 100  | —           |
| 140 | 140 | 120 | 100  | 40  | —50 | 20   | 80   | —10 | 10   | 90   | 83          |
| —   | —   | —   | —    | —   | —   | —    | —    | —   | —    | —    | —           |
| 150 | 160 | 110 | 140  | 150 | 110 | 90   | 120  | 150 | 120  | 120  | —           |
| 80  | 40  | 100 | 140  | 80  | 80  | —30  | —20  | —30 | —50  | —100 | 68          |
| 30  | 30  | 70  | 50   | 0   | 60  | 170  | 180  | 200 | 170  | 130  | 0           |
| 130 | 100 | 90  | 90   | 100 | 90  | 120  | 190  | 160 | 190  | +S   | 90          |
| +S  | +S  | ±S  | ±S   | —   | —   | —    | ±S   | ±S  | ±S   | —    | —           |
| 180 | 130 | 140 | 170  | 180 | 170 | 130  | 160  | 160 | 80   | 20   | —           |
| 90  | 60  | 30  | 90   | 70  | 40  | 60   | 70   | 50  | 70   | 90   | 63          |
| —   | —   | 40  | 40   | 50  | 60  | —20  | 20   | 30  | 30   | 30   | —           |
| 110 | 130 | 130 | 130  | 170 | +S  | +S   | +S   | +S  | 30   | —    | —           |
| —   | —   | —   | —    | —   | —   | —    | —    | —   | —    | 60   | —           |
| —   | —   | —   | —    | —   | —   | —    | —    | —   | —    | —    | —           |
| —   | —   | —   | —    | —   | —   | —    | —    | —   | —    | —    | —           |
| 88  | 73  | 76  | 82   | 80  | 78  | 64   | 77   | 68  | 59   | 57   |             |
| 20  | 19  | 23  | 23   | 24  | 24  | 23   | 22   | 23  | 23   | 23   |             |

| February       |     |     |     |     |     |     |     |     |      |      |      |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|
| Hour GMT       | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8    | 9    | 10   | 11  | 12  |
| Day            |     |     |     |     |     |     |     |     |      |      |      |     |     |
| 1.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 2.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 3.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 4.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 5.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 6.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 7.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 8.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 9.             | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | 40  |
| 10.            | 100 | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 11.            | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 12.            | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 13.            | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 14.            | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | —   |
| 15.            | —   | —   | —   | —   | —   | —   | —   | —   | —    | —    | —    | —   | 30  |
| 16.            | 120 | 90  | +S  | +S  | +S  | +S  | +S  | +S  | +S   | +S   | 40   | 0   | —20 |
| 17.            | 30  | 40  | 30  | 40  | 30  | 30  | 20  | 30  | ±S   | ±S   | —    | —   | 90  |
| 18.            | 90  | 70  | 140 | 100 | 40  | 60  | 70  | 70  | '60' | 90   | 60   | 70  | 90  |
| 19.            | 80  | 60  | 150 | 150 | 80  | 80  | 110 | 80  | —    | 110  | 90   | 110 | 100 |
| 20.            | 130 | 100 | 100 | 90  | 80  | 80  | 90  | 90  | 90   | 100' | 100' | 110 | 150 |
| 21.            | 40  | 50  | 50  | 80  | 60  | 60  | 100 | 130 | 110  | —    | 120  | 120 | 130 |
| 22.            | 80  | 90  | 70  | 70  | 80  | 90  | 110 | 110 | 140  | 140  | 140' | 150 | 150 |
| 23.            | 90  | 80  | 110 | 90  | 130 | 140 | 140 | 170 | 170  | 150' | 140  | 140 | 130 |
| 24.            | 80  | 50  | 60  | 50  | 50  | 70  | 80  | 90  | 80   | 90'  | 110  | 110 | 110 |
| 25.            | 130 | 120 | 80  | 70  | 50  | 80  | 50  | 40  | 0    | —30' | —10  | 80  | 60  |
| 26.            | —20 | —10 | 10  | —20 | —40 | 0   | 50  | 50  | —    | 110  | 60   | 60  | 80  |
| 27.            | 60  | 80  | 70  | 80  | 70  | 80  | 80  | 90  | 90   | 110  | 110  | 130 | 140 |
| 28.            | 110 | 60  | 50  | 70  | 70  | 0   | +S  | +S  | —70  | 120, | 190  | 190 | 140 |
| Means          | 80  | 68  | 77  | 73  | 58  | 64  | 82  | 86  | 74   | 99   | 96   | 106 | 95  |
| Number of days | 14  | 13  | 12  | 12  | 12  | 12  | 11  | 11  | 9    | 10   | 12   | 12  | 15  |

| 13  | 14  | 15  | 16   | 17   | 18  | 19  | 20  | 21  | 22  | 23  | Daily means |
|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-------------|
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| 40  | 70  | 100 | 100  | 100  | 90  | 90  | 140 | 160 | 140 | 120 | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —   | —   | —   | —    | —    | —   | —   | —   | —   | —   | —   | —           |
| —10 | +S  | +S  | —140 | 10   | 80  | 30  | —80 | —90 | 150 | 90  | —           |
| 70  | 80  | 80  | —160 | —110 | +S  | +S  | +S  | —20 | 0   | 40  | —           |
| 30  | 20  | 10  | 0    | 20   | 20  | 0   | —50 | +S  | +S  | 110 | —           |
| 60  | 110 | 150 | 160  | 160  | 150 | +S  | 80  | 60  | 140 | 100 | 95          |
| 110 | 140 | 130 | 110  | 110  | 110 | 150 | 160 | 160 | 180 | 160 | 118         |
| 130 | 130 | 110 | 100  | 110  | 100 | 90  | 90  | 100 | 80  | 30  | 99          |
| 120 | 120 | 110 | 110  | 90   | 90  | 90  | 80  | 80  | 80  | 70  | 91          |
| 170 | 200 | 180 | 190  | 200  | 200 | 170 | 140 | 140 | 130 | 90  | 135         |
| 150 | 170 | 170 | 150  | 140  | 130 | 130 | 140 | 170 | 150 | 120 | 138         |
| 120 | 140 | 140 | 130  | 120  | 90  | 90  | 80  | 80  | 90  | 110 | 93          |
| 50  | —10 | —40 | —20  | —20  | —10 | 40  | 40  | —40 | —30 | —30 | 27          |
| 90  | 80  | 80  | 80   | 90   | 60  | 60  | 80  | 80  | 70  | 70  | 51          |
| 150 | 150 | 150 | 110  | 90   | 130 | 150 | 60  | 90  | 120 | 150 | 106         |
| 70  | 40  | —40 | —60  | —10  | —20 | —30 | —70 | —90 | —70 | —80 | —           |
| 90  | 103 | 95  | 57   | 73   | 87  | 82  | 64  | 63  | 88  | 77  |             |
| 15  | 14  | 14  | 15   | 15   | 14  | 13  | 14  | 14  | 14  | 15  |             |

| March             |     |     |      |     |     |     |     |     |      |     |     |     |     |
|-------------------|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|
| Hour GMT<br>Day   | 0   | 1   | 2    | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10  | 11  | 12  |
| 1.                | —40 | —40 | 40   | 50  | 70  | 70  | 80  | 60  | 70   | 80  | 90  | 80  | 120 |
| 2.                | 60  | 50  | 50   | 50  | 70  | 80  | 90  | 90  | 110  | 90  | 80  | 90  | 130 |
| 3.                | 120 | 120 | 130  | 150 | 170 | +S  | +S  | +S  | 180  | 180 | 170 | 150 | 150 |
| 4.                | 90  | 110 | 130  | 90  | 110 | 150 | 140 | 130 | 120  | 110 | 110 | 140 | 110 |
| 5.                | 80  | 80  | 90   | 110 | 90  | 110 | 130 | 120 | —    | 90  | 100 | 120 | 90  |
| 6.                | 70  | 60  | 40   | 30  | 30  | 10  | 30  | 10  | —10  | —30 | —10 | 10  | 30  |
| 7.                | 20  | —60 | —100 | —40 | —40 | —40 | —30 | 0   | —20  | —10 | 0   | 30  | 40  |
| 8.                | 10  | —10 | 0    | 90  | 40  | 0   | 0   | —10 | 20   | 80  | 90  | 30  | 40  |
| 9.                | 70  | 60  | 40   | 70  | 70  | 70  | 70  | 70  | 80   | 90  | 80  | 70  | 80  |
| 10.               | 30  | 40  | 40   | 70  | 70  | 40  | 30  | 40  | 30   | 60  | 70  | 70  | 70  |
| 11.               | 60  | 60  | 70   | 70  | 60  | 60  | 60  | 40  | 40   | 20  | 40  | 40  | 40  |
| 12.               | —   | —   | —    | —   | —   | —   | —   | —   | —    | —   | —   | —   | —   |
| 13.               | 60  | 0   | 30   | 30  | —   | —   | —   | —   | —    | —   | —   | 140 | 180 |
| 14.               | —10 | —30 | 30   | 120 | +S  | 200 | 220 | 190 | —    | —   | —   | —   | —   |
| 15.               | 0   | 60  | 100  | 120 | —   | —   | —   | 150 | 80   | —   | 90  | 90  | 60  |
| 16.               | 40  | 50  | 60   | 60  | 60  | 30  | 60  | 60  | 80   | 60  | 50  | 50  | 80  |
| 17.               | +S  | +S  | 30   | 0   | 10  | 40  | —80 | +S  | 60   | 50  | 50  | 80  | 100 |
| 18.               | 50  | 50  | 50   | 50  | 50  | 50  | 60  | 80  | 90   | 80  | 90  | 80  | 80  |
| 19.               | 50  | 40  | 60   | 50  | 50  | 50  | 60  | 100 | —    | 110 | 90  | 90  | 90  |
| 20.               | 10  | 40  | 60   | 40  | 80  | 80  | +S  | 80  | 80   | 90  | 80  | 70  | 60  |
| 21.               | 60  | 60  | 60   | 40  | 40  | 60  | 100 | 100 | 100  | 90  | 90  | 80  | 80  |
| 22.               | 60  | 70  | 80   | 70  | 60  | 40  | 60  | 90  | 100  | 100 | 110 | 100 | 120 |
| 23.               | 40  | 40  | 40   | 60  | 60  | 100 | 100 | 90  | 90   | 90  | 80  | 80  | 90  |
| 24.               | 80  | 80  | 90   | 80  | 20  | 90  | 110 | +S  | 130  | 160 | 140 | 120 | 110 |
| 25.               | 70  | 60  | 60   | 40  | 40  | 60  | 70  | 60  | 70   | 80  | 70  | 70  | 70  |
| 26.               | 70  | 70  | 80   | 80  | 90  | 110 | 120 | 130 | —    | 140 | 140 | 140 | 110 |
| 27.               | 80  | 100 | 90   | 90  | 90  | 100 | 100 | 100 | 90   | 100 | 90  | 80  | 90  |
| 28.               | 80  | 60  | 80   | 60  | 60  | 60  | 40  | 50  | 30   | 10  | 50  | 80  | 60  |
| 29.               | 50  | 40  | 50   | 50  | 60  | 60  | 80  | +S  | +S   | +S  | +S  | +S  | +S  |
| 30.               | 80  | 50  | 50   | 30  | 40  | 50  | 30  | —S  | —110 | +S  | —30 | 90  | 50  |
| 31.               | 100 | 60  | 40   | 50  | 50  | 60  | 90  | 90  | 140  | 110 | 90  | 80  | 60  |
| Means             | 53  | 47  | 56   | 62  | 63  | 68  | 70  | 80  | 69   | 81  | 78  | 84  | 85  |
| Number<br>of days | 29  | 29  | 30   | 30  | 27  | 27  | 26  | 24  | 24   | 25  | 27  | 28  | 28  |

| 13  | 14  | 15  | 16  | 17   | 18  | 19   | 20   | 21  | 22  | 23  | Daily means |
|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-------------|
| 120 | 90  | 120 | 120 | 80   | 40  | 60   | 70   | 70  | 70  | 70  | 68          |
| 140 | 150 | 140 | 110 | 110  | 110 | 110  | 90   | 90  | 120 | 110 | 97          |
| 150 | 140 | 90  | 80  | 60   | 90  | 110  | 90   | 90  | 90  | 90  | —           |
| 110 | 110 | 90  | 90  | 80   | 110 | 110  | 120  | 110 | 80  | 60  | 109         |
| 90  | 100 | 80  | 70  | 110  | 120 | 90   | 80   | 30  | 30  | 40  | 89          |
| 110 | 90  | 90  | 70  | 40   | 20  | —30  | 20   | 20  | —30 | —60 | 28          |
| 40  | 40  | 80  | 90  | 90   | 90  | 90   | 80   | 80  | 40  | 60  | 22          |
| 30  | 30  | —S  | 40  | 40   | ±S  | —S   | 70   | 70  | 70  | 40  | —           |
| 70  | 60  | 70  | 60  | 40   | 40  | 40   | 20   | 30  | 30  | 30  | 59          |
| —S  | +S  | ±S  | ±S  | 70   | 70  | 90   | 80   | 80  | 90  | 70  | —           |
| 30  | 20  | —80 | 10  | 30   | —20 | —160 | —110 | —   | —   | —   | —           |
| —   | —   | 120 | 70  | 0    | 90  | +S   | +S   | +S  | ±S  | ±S  | —           |
| 150 | 90  | 100 | 90  | 90   | 70  | +S   | 30   | —20 | —70 | —40 | —           |
| 60  | 60  | 100 | 100 | 110  | 110 | 80   | 100  | 50  | 80  | 60  | —           |
| 90  | 60  | 80  | 80  | 60   | 60  | 60   | 80   | 80  | 50  | 40  | —           |
| 90  | 80  | 60  | 60  | +S   | —S  | ±S   | —S   | ±S  | +S  | ±S  | —           |
| 100 | 100 | 90  | 90  | 80   | 100 | 90   | 100  | 100 | 90  | 60  | —           |
| 90  | 80  | 80  | 90  | 80   | 40  | 50   | 30   | 40  | 60  | 60  | 65          |
| 80  | 70  | 60  | 60  | 70   | 80  | 90   | 90   | 80  | 90  | 60  | 73          |
| 60  | 40  | 60  | 70  | 60   | 70  | 70   | 90   | 70  | 60  | 60  | 64          |
| 60  | 30  | 30  | 40  | 10   | 30  | 80   | 80   | 80  | 70  | 70  | 64          |
| —30 | —30 | 10  | 30  | —140 | —60 | —100 | —100 | —10 | 0   | 20  | 27          |
| 110 | 120 | —S  | +S  | 90   | ±S  | ±S   | ±S   | ±S  | ±S  | 40  | —           |
| 100 | 90  | 90  | 90  | 70   | 70  | 60   | 40   | 40  | 40  | 60  | 88          |
| 60  | 60  | 60  | 60  | 40   | 40  | 30   | 40   | 20  | 20  | 70  | 55          |
| 80  | 80  | 60  | 50  | 60   | 60  | 50   | 80   | 80  | 80  | 60  | 88          |
| 80  | 50  | 90  | 100 | 100  | 60  | 80   | 60   | 60  | 60  | 60  | 83          |
| 60  | 60  | 60  | 60  | 60   | 80  | 60   | 80   | 60  | 50  | 50  | 58          |
| +S  | —S  | +S  | ±S  | ±S   | —S  | 10   | —40  | 50  | 50  | 50  | —           |
| +S  | +S  | +S  | —S  | —30  | 30  | —70  | 40   | 50  | 80  | 80  | —           |
| 90  | 80  | 60  | 90  | 90   | 100 | 110  | 110  | 100 | 90  | 80  | 84          |
| 82  | 72  | 73  | 73  | 57   | 63  | 48   | 54   | 59  | 55  | 52  |             |
| 27  | 27  | 26  | 27  | 29   | 27  | 26   | 28   | 27  | 27  | 28  |             |

April

| Hour GMT<br>Day   | 0   | 1   | 2   | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10          | 11      | 12      |
|-------------------|-----|-----|-----|---------|---------|---------|---------|---------|---------|---------|-------------|---------|---------|
| 1.                | 50  | 40  | 60  | 50      | 60      | 80      | 80      | 90      | [80]    | 60      | +S          | $\pm S$ | $\pm S$ |
| 2.                | 40  | 40  | 30  | 30      | 40      | 80      | 100     | [110]   | —       | 80      | 70          | 70      | 80      |
| 3.                | 40  | 60  | 60  | 40      | 60      | 70      | 90      | [130]   | 130     | 90      | 80          | 80      | 70      |
| 4.                | 40  | 60  | 40  | 40      | 40      | 30      | 60      | 80      | 70      | [60]    | 40          | 60      | 40      |
| 5.                | 80  | 60  | 60  | 60      | 60      | 70      | 130     | [100]   | 90      | 80      | 80          | 80      | 70      |
| 6.                | 40  | 40  | 40  | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | —S          | 0       | $\pm S$ |
| 7.                | 100 | 40  | 90  | 40      | 60      | 30      | [60]    | [70]    | 90      | 60      | 70          | 40      | 60      |
| 8.                | 10  | 30  | 10  | 20      | +S      | 30      | 40      | 40      | 80      | 90      | [90]        | 70      | 60      |
| 9.                | 80  | 60  | 80  | 90      | 80      | 100     | 100     | 90      | —       | [80]    | 80          | 70      | 80      |
| 10.               | 20  | 30  | 10  | 20      | 30      | 70      | 80      | 80      | [40]    | 40      | 70          | 90      | 90      |
| 11.               | 30  | 30  | 30  | 30      | 40      | 60      | 80      | [90]    | 90      | 80      | 80          | 70      | 80      |
| 12.               | 30  | 20  | 30  | 30      | 40      | 60      | 70      | [70]    | (90)    | 80      | 90          | 100     | 110     |
| 13.               | 60  | 40  | 60  | 40      | 40      | 40      | 60      | [80]    | 80      | 90      | 100         | 110     | 100     |
| 14.               | 10  | 10  | 10  | 20      | 30      | 40      | [70]    | [70]    | 60      | 60      | 70          | 60      | 70      |
| 15.               | 30  | 20  | 10  | 10      | 30      | 40      | 40      | 60      | [60]    | 80      | 80          | 80      | 80      |
| 16.               | 30  | 20  | 10  | 20      | 30      | 70      | 60      | [80]    | 90      | 110     | 90          | 70      | 70      |
| 17.               | 30  | 60  | 60  | 40      | 10      | 30      | 60      | 70      | —       | 100     | 110         | 110     | 130     |
| 18.               | —10 | —10 | —40 | —40     | —70     | —70     | —90     | —60     | —60     | —60     | [—50]       | —10     | 10      |
| 19.               | 40  | 40  | 40  | 50      | 40      | 50      | 60      | 100     | 100     | 90      | 90          | [90]    | 100     |
| 20.               | 10  | 30  | 40  | 50      | 60      | 70      | 90      | [100]   | [100]   | 110     | 110         | 100     | 110     |
| 21.               | 40  | 30  | 30  | 30      | 40      | 50      | 70      | 70      | [50]    | 50      | 30          | 50      | 90      |
| 22.               | 30  | 40  | 30  | 30      | 40      | 60      | 100     | 90      | [60]    | 70      | 50          | 60      | 50      |
| 23.               | 10  | 30  | 10  | 10      | 30      | 40      | 70      | 70      | —       | [80]    | 60          | 50      | 40      |
| 24.               | 60  | 80  | 60  | 40      | 30      | 10      | 50      | 50      | [50]    | [10]    | 0           | 30      | 50      |
| 25.               | 30  | —30 | —30 | —130    | —40     | —170    | —80     | —90     | —60     | 30      | 80          | 100     | 90      |
| 26.               | 50  | 80  | 90  | 90      | 80      | 90      | 50      | 60      | [100]   | 100     | 100         | $\pm S$ | +S      |
| 27.               | 30  | 40  | 40  | 40      | 50      | 0       | $\pm S$ | $\pm S$ | [+S]    | [—S]    | ( $\pm S$ ) | $\pm S$ | $\pm S$ |
| 28.               | 0   | 30  | 10  | —10     | —10     | —60     | 0       | 0       | —30     | —10     | —60         | —60     | —90     |
| 29.               | 40  | 10  | 0   | 0       | 30      | 40      | 80      | 100     | [110]   | [130]   | 90          | 80      | 80      |
| 30.               | 60  | 50  | 40  | 40      | 40      | 50      | 60      | 60      | [80]    | [80]    | 60          | 50      | 50      |
| Means             | 37  | 36  | 34  | 27      | 35      | 37      | 59      | 66      | 63      | 69      | 65          | 63      | 68      |
| Number<br>of days | 30  | 30  | 30  | 29      | 28      | 29      | 23      | 23      | 23      | 28      | 27          | 27      | 26      |

| 13   | 14  | 15  | 16  | 17  | 18   | 19  | 20  | 21   | 22  | 23  | Daily means |
|------|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-------------|
| 30   | 50  | 0   | 50  | 50  | 60   | 90  | 100 | 80   | 50  | 40  | —           |
| 80   | 90  | 90  | 110 | 100 | 100  | 90  | 100 | 80   | 70  | 60  | 77          |
| 70   | 70  | 70  | 60  | 40  | 40   | 44  | 30  | 30   | 30  | 40  | 63          |
| 60   | +S  | —   | —   | ±S  | ±S   | ±S  | +S  | 40   | 70  | 60  | —           |
| 60   | 60  | 70  | 90  | 80  | 80   | 90  | 90  | 70   | 60  | 70  | 77          |
| ±S   | ±S  | ±S  | ±S  | ±S  | —50  | 30  | 20  | 0    | 10  | —20 | —           |
| 40   | 40  | 40  | 40  | 40  | 40   | 40  | 30  | 30   | 10  | 10  | 49          |
| 40   | 40  | 60  | 30  | 30  | 40   | 60  | 70  | 70   | 60  | 70  | 50          |
| 90   | 80  | 90  | 100 | 110 | 90   | 80  | 40  | 30   | 30  | 20  | 76          |
| 80   | 90  | 100 | 90  | 90  | 80   | 80  | 60  | 40   | 30  | 30  | 60          |
| 80   | 80  | 80  | 70  | 70  | 70   | 60  | 60  | 30   | 30  | 20  | 60          |
| 120  | 140 | 110 | 100 | 140 | 150  | 110 | 90  | 60   | 60  | 60  | 81          |
| 90   | 90  | 70  | 80  | 30  | 40   | 40  | 30  | 20   | 10  | 10  | 59          |
| 70   | 80  | 70  | 70  | 60  | 40   | 40  | 30  | 20   | 20  | 30  | 46          |
| 80   | 80  | 90  | 100 | 90  | 60   | 60  | 40  | 40   | 30  | 40  | 55          |
| 70   | 80  | 60  | 60  | 60  | 40   | 40  | 60  | 40   | 30  | 30  | 55          |
| 130  | 70  | 50  | 50  | 40  | 10   | 0   | 10  | —40  | —10 | —10 | 48          |
| 10   | 0   | 10  | 30  | 50  | 40   | 60  | 90  | 70   | 50  | 40  | —5          |
| 90   | 90  | 90  | 90  | 100 | 100  | 90  | 90  | 90   | 70  | 60  | 77          |
| 110  | 110 | 100 | 90  | 90  | 70   | 100 | 70  | 50   | 50  | 40  | 78          |
| 100  | 110 | 110 | 70  | 50  | 50   | 60  | 50  | 50   | 40  | 30  | 56          |
| 60   | 60  | 50  | 50  | 60  | —160 | 50  | 30  | 40   | 10  | 10  | 40          |
| 40   | 40  | 50  | 50  | 60  | 80   | 80  | 80  | 60   | 60  | 60  | 50          |
| 50   | 50  | 50  | 60  | 80  | 80   | 80  | 60  | 40   | 30  | 30  | 47          |
| 80   | ±S  | ±S  | ±S  | 90  | ±S   | ±S  | ±S  | ±S   | ±S  | 80  | —           |
| 80   | 100 | 100 | 100 | 100 | 110  | 90  | 90  | 60   | 10  | 10  | 79          |
| —100 | 30  | 30  | 50  | 50  | 80   | 60  | 60  | 30   | 30  | 30  | —           |
| ±S   | ±S  | —40 | —60 | —50 | —110 | 0   | 50  | —10  | 10  | 0   | —           |
| 100  | 100 | 110 | 110 | 90  | 90   | 80  | 60  | 60   | 60  | 50  | 71          |
| 50   | 50  | 60  | 60  | 80  | 90   | 30  | —40 | —190 | —60 | —10 | 35          |
| 66   | 72  | 66  | 67  | 67  | 50   | 62  | 55  | 34   | 33  | 33  |             |
| 28   | 26  | 27  | 27  | 28  | 28   | 28  | 28  | 29   | 29  | 30  |             |

| May               |      |     |     |     |     |      |      |      |       |      |       |     |     |
|-------------------|------|-----|-----|-----|-----|------|------|------|-------|------|-------|-----|-----|
| Hour GMT<br>Day   | 0    | 1   | 2   | 3   | 4   | 5    | 6    | 7    | 8     | 9    | 10    | 11  | 12  |
| 1.                | 30   | 0   | 60  | 50  | 40  | —100 | —140 | —280 | —90   | 80   | ±S    | ±S  | ±S  |
| 2.                | 0    | 40  | 50  | 60  | 40  | —60  | 60   | 80   | —     | 150  | (130) | 80  | 100 |
| 3.                | —100 | 90  | 80  | 80  | 40  | +S   | 150  | 160  | 190   | 180  | 160   | +S  | +S  |
| 4.                | 100  | 90  | 80  | 80  | 80  | 80   | 100  | 90   | (110) | (80) | 80    | 80  | 90  |
| 5.                | 70   | 80  | 80  | 70  | 30  | 20   | 40   | 60   | ±S    | ±S   | +S    | ±S  | ±S  |
| 6.                | 70   | 70  | 70  | 60  | 60  | 80   | 90   | 90   | 80    | 70   | 60    | 70  | 70  |
| 7.                | 20   | —10 | 0   | 40  | 60  | 40   | 60   | 70   | —     | 80   | 60    | 60  | 80  |
| 8.                | 50   | 60  | 50  | 40  | 40  | 40   | 50   | 80   | 90    | 100  | 100   | 90  | 90  |
| 9.                | 40   | 50  | 0   | 10  | 0   | 40   | 60   | 80   | 90    | 90   | 90    | 80  | 90  |
| 10.               | 40   | 40  | 50  | 60  | 50  | 90   | 100  | 60   | 90    | 100  | 100   | 100 | 90  |
| 11.               | —70  | —30 | —20 | —20 | —10 | 0    | —10  | 30   | 60    | 90   | 100   | 110 | 110 |
| 12.               | 0    | 40  | +S  | 40  | 30  | 90   | 130  | 160  | 160   | 50   | 60    | 80  | 50  |
| 13.               | —10  | —10 | —10 | 0   | 0   | 10   | 40   | 60   | 80    | 60   | 60    | 60  | 80  |
| 14.               | 0    | —10 | 0   | 10  | 10  | 40   | 80   | 100  | —     | 100  | 100   | 90  | 100 |
| 15.               | 30   | 10  | 30  | 40  | 50  | 60   | 50   | 60   | 80    | 90   | 90    | 80  | 90  |
| 16.               | 10   | 10  | 30  | 10  | 50  | 90   | 60   | 60   | 60    | 50   | 60    | 50  | 50  |
| 17.               | 10   | 10  | 10  | 10  | 40  | 50   | 50   | 60   | 80    | 80   | 60    | 60  | 80  |
| 18.               | 50   | 50  | 50  | 50  | 50  | 40   | 40   | 60   | 50    | 50   | 50    | 50  | 50  |
| 19.               | 30   | 10  | 10  | 30  | 30  | 40   | 40   | 50   | 60    | 50   | 50    | 60  | 60  |
| 20.               | 10   | 10  | 10  | 30  | 40  | 30   | 60   | 60   | 60    | 60   | 50    | 50  | 50  |
| 21.               | 10   | 0   | 0   | 10  | 30  | 60   | 50   | 50   | —     | 80   | 90    | 120 | —   |
| 22.               | 20   | 30  | 30  | 30  | 50  | 60   | 60   | 90   | 120   | 110  | 130   | 130 | 110 |
| 23.               | 0    | 30  | 10  | 30  | 40  | 60   | 60   | 70   | 70    | 60   | 60    | 60  | 40  |
| 24.               | 0    | 10  | 30  | 30  | 30  | 0    | —10  | 10   | 40    | 60   | 60    | 60  | 60  |
| 25.               | 40   | 60  | 40  | 40  | 60  | 70   | 60   | 70   | 100   | 90   | 100   | 90  | 100 |
| 26.               | 30   | 30  | 30  | 10  | 30  | 30   | 40   | 40   | 60    | 70   | 90    | 70  | 70  |
| 27.               | 40   | 60  | 40  | 40  | 40  | 40   | 60   | 70   | 70    | 70   | 70    | 70  | 70  |
| 28.               | 40   | 40  | 40  | 10  | 30  | 60   | 70   | +S   | —     | 50   | 50    | 60  | 60  |
| 29.               | 20   | 40  | 40  | 10  | 20  | 60   | 50   | 60   | 60    | 50   | 50    | 50  | 70  |
| 30.               | 20   | 20  | 20  | 20  | 50  | 50   | 50   | 50   | 60    | 50   | 60    | 60  | 60  |
| 31.               | 10   | 20  | 10  | 20  | 40  | 40   | 40   | 50   | 60    | 70   | 60    | 60  | 60  |
| Means             | 20   | 30  | 31  | 32  | 37  | 42   | 53   | 58   | 74    | 76   | 77    | 74  | 75  |
| Number<br>of days | 31   | 31  | 30  | 31  | 31  | 30   | 31   | 30   | 24    | 29   | 28    | 28  | 27  |

| 13  | 14      | 15  | 16      | 17      | 18      | 19      | 20      | 21      | 22      | 23      | Daily means |
|-----|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|-------------|
| 80  | 90      | 100 | -10     | -100    | -100    | -30     | -40     | 40      | 10      | -60     | —           |
| 100 | 100     | 60  | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | —           |
| +S  | $\pm S$ | +S  | 130     | 130     | 140     | 110     | 130     | 130     | 130     | 110     | —           |
| 90  | 90      | 90  | 90      | 90      | 90      | 70      | 70      | 70      | 40      | 30      | —           |
| -10 | 40      | +S  | 30      | 60      | 40      | 70      | 70      | 70      | 70      | 70      | —           |
| 80  | 70      | 80  | 80      | 90      | 70      | 60      | 40      | 30      | 20      | 30      | 66          |
| 90  | 80      | 90  | 90      | 100     | 100     | 90      | 80      | 80      | 60      | 60      | 64          |
| 80  | 90      | 90  | 100     | 110     | 90      | 50      | 40      | 30      | 40      | 40      | 68          |
| 90  | 80      | 90  | 90      | 90      | 90      | 80      | 90      | 40      | 40      | 50      | 65          |
| 100 | 90      | 60  | 80      | 100     | 60      | 50      | 40      | 50      | 50      | 40      | 70          |
| 110 | 110     | 110 | 110     | 90      | 80      | 60      | 50      | 30      | -10     | 0       | 45          |
| 50  | 50      | 50  | 60      | 60      | 60      | 50      | 40      | 10      | 0       | -10     | 57          |
| 80  | 80      | 60  | 60      | 60      | 60      | 50      | 50      | 40      | 30      | 10      | 42          |
| 90  | 90      | 80  | 60      | 60      | 50      | 50      | 40      | 40      | 30      | 30      | 54          |
| 100 | 90      | 100 | 100     | 80      | 40      | 30      | 10      | 10      | 10      | 10      | 56          |
| 50  | 50      | 50  | 50      | 50      | 60      | 50      | 40      | 50      | 40      | 10      | 45          |
| 60  | 80      | 80  | 80      | 80      | 80      | 60      | 50      | 50      | 40      | 50      | 55          |
| 60  | 50      | 50  | 50      | 50      | 40      | 40      | 40      | 40      | 30      | 30      | 47          |
| 60  | 80      | 90  | 90      | 80      | 50      | 50      | 40      | 30      | 40      | 30      | 48          |
| 50  | 50      | 60  | 60      | 60      | 60      | 50      | 50      | 40      | 30      | 30      | 46          |
| —   | —       | —   | —       | —       | —       | 20      | 20      | 20      | 30      | 30      | —           |
| 100 | 90      | 90  | 70      | 60      | 40      | 30      | 30      | 10      | 10      | 0       | 63          |
| 60  | 60      | 60  | 70      | 90      | 70      | 60      | 40      | 60      | 40      | 30      | 51          |
| 60  | 60      | 60  | 60      | 60      | 60      | 60      | 60      | 60      | 60      | 40      | 43          |
| 110 | 110     | 90  | 60      | 60      | 60      | 40      | 40      | 40      | 40      | 40      | 67          |
| 60  | 70      | 70  | 70      | 70      | 60      | 70      | 70      | 60      | 60      | 40      | 54          |
| 70  | 60      | 70  | 60      | 60      | 60      | 60      | 70      | 70      | 70      | 60      | 60          |
| 70  | 80      | 80  | 90      | 80      | 40      | 40      | 40      | 20      | 20      | 20      | —           |
| 70  | 80      | 80  | 80      | 80      | 50      | 20      | 40      | 20      | 40      | 20      | 48          |
| 60  | 60      | 60  | 50      | 40      | 20      | 20      | 10      | 10      | 10      | 20      | 39          |
| -50 | $\pm S$ | 0   | 50      | 20      | 40      | 20      | 20      | 20      | 10      | 10      | 29          |
| 70  | 76      | 73  | 71      | 68      | 57      | 49      | 46      | 42      | 36      | 29      |             |
| 29  | 28      | 28  | 29      | 29      | 29      | 30      | 30      | 30      | 30      | 30      |             |

| June              |    |     |      |     |     |     |     |      |      |      |     |      |     |
|-------------------|----|-----|------|-----|-----|-----|-----|------|------|------|-----|------|-----|
| Hour GMT<br>Day   | 0  | 1   | 2    | 3   | 4   | 5   | 6   | 7    | 8    | 9    | 10  | 11   | 12  |
| 1.                | 20 | 40  | 40   | 50  | 50  | 70  | 70  | 50   | 80   | 90   | 80  | 70   | 70  |
| 2.                | 40 | 20  | 40   | 40  | 50  | 50  | 50  | 60   | 60   | 70   | 70  | 60   | 70  |
| 3.                | 20 | 40  | 20   | 40  | 40  | 50  | 40  | 40   | 50   | 60   | 60  | 60   | 60  |
| 4.                | 20 | 10  | 0    | 10  | 20  | 40  | 40  | 50   | —    | 70   | 70  | 70   | 80  |
| 5.                | 10 | 10  | 10   | 40  | 30  | 40  | 40  | 50   | 50   | 50   | 50  | 40   | 40  |
| 6.                | 10 | 0   | 0    | 30  | 30  | 50  | 40  | 50   | 50   | 50   | 70  | 70   | 80  |
| 7.                | 80 | 80  | 90   | 90  | 110 | 140 | 150 | 160  | +S   | ±S   | 110 | 70   | 70  |
| 8.                | 40 | 10  | −60  | −10 | ±S  | ±S  | ±S  | ±S   | ±S   | ±S   | 190 | 120  | 80  |
| 9.                | 50 | 40  | 0    | 40  | 50  | 50  | 80  | 110  | 120  | 110  | 90  | 70   | 70  |
| 10.               | 40 | 50  | 50   | 50  | 50  | 90  | 190 | 140  | 160  | 160  | 150 | 150  | 150 |
| 11.               | 50 | 50  | 50   | 70  | 80  | 70  | 70  | 90   | —    | 0    | 80  | 100  | 110 |
| 12.               | 40 | 40  | 40   | +S  | 30  | 50  | 60  | 50   | (50) | (80) | 70  | 70   | 70  |
| 13.               | 50 | 50  | 50   | 70  | 50  | 90  | 90  | 70   | 70   | 50   | 90  | ±S   | ±S  |
| 14.               | 30 | 80  | —    | —   | —   | —   | —   | —    | —    | —    | —   | —    | —   |
| 15.               | −S | 10  | 20   | 10  | 20  | 70  | 50  | 50   | 80   | 80   | 50  | 50   | 50  |
| 16.               | 40 | 30  | 30   | 20  | 10  | 10  | 10  | 30   | 40   | 50   | 20  | 70   | 50  |
| 17.               | 30 | ±S  | −100 | 30  | 30  | 50  | +S  | +S   | —    | —    | 80  | 70   | 110 |
| 18.               | 30 | 30  | 30   | 20  | 30  | 70  | +S  | 60   | —    | (10) | 30  | 30   | 40  |
| 19.               | +S | −20 | 0    | 10  | 40  | 60  | 50  | 80   | 100  | 90   | 80  | 80   | 70  |
| 20.               | ±S | ±S  | ±S   | ±S  | −S  | −S  | −70 | 0    | −30  | 50   | −10 | 10   | 30  |
| 21.               | 20 | 30  | 30   | 40  | 40  | 50  | 60  | 70   | 110  | 60   | −10 | 40   | +S  |
| 22.               | 50 | 70  | 100  | 80  | 50  | 50  | 60  | 110  | 100  | 60   | 50  | 60   | 80  |
| 23.               | 50 | 40  | 30   | 30  | 20  | 30  | 20  | 10   | −10  | 0    | 10  | 50   | 30  |
| 24.               | 20 | 30  | 30   | 20  | 20  | 30  | 50  | 50   | 50   | 50   | 40  | 30   | 30  |
| 25.               | 20 | 20  | 30   | 40  | 60  | 70  | 50  | 50   | —    | +S   | ±S  | +S   | +S  |
| 26.               | 40 | 40  | 30   | 30  | 30  | 80  | 100 | (±S) | (±S) | ±S   | ±S  | (±S) | ±S  |
| 27.               | 0  | 10  | 20   | 40  | 60  | 120 | +S  | +S   | +S   | 150  | 100 | 40   | 30  |
| 28.               | 10 | 10  | 20   | 30  | 30  | 60  | 60  | 30   | −S   | ±S   | ±S  | ±S   | +S  |
| 29.               | 40 | 20  | 30   | 40  | 60  | 60  | 60  | 70   | 80   | 80   | 70  | 70   | 60  |
| 30.               | 20 | 10  | 30   | 30  | 30  | 30  | 50  | 60   | 40   | 30   | 30  | 40   | 30  |
| Means             | 32 | 30  | 24   | 37  | 41  | 60  | 59  | 64   | 67   | 67   | 66  | 64   | 65  |
| Number<br>of days | 27 | 28  | 28   | 27  | 27  | 27  | 25  | 25   | 18   | 21   | 26  | 25   | 24  |

| 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Daily means |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| 80  | 90  | —S  | +S  | 40  | 40  | 40  | 40  | 40  | 50  | 50  | —           |
| 80  | 80  | +S  | 70  | 40  | 20  | 40  | 40  | 40  | 40  | 20  | 50          |
| 60  | 60  | 70  | 70  | 40  | 40  | 40  | 20  | 20  | 20  | 40  | 44          |
| 70  | 80  | 80  | 70  | 50  | 30  | 10  | 10  | 0   | 0   | 0   | 38          |
| —40 | 40  | 50  | 50  | 50  | 50  | 40  | 40  | 10  | 0   | 0   | 31          |
| 80  | 90  | 110 | 110 | 110 | 90  | 90  | 90  | 120 | 110 | 90  | 68          |
| 50  | 50  | —30 | 70  | 50  | 40  | 50  | 50  | 30  | 30  | 40  | —           |
| 110 | 120 | 140 | 140 | 110 | 90  | 90  | 70  | 70  | 80  | 50  | —           |
| 80  | ±S  | —   | ±S  | ±S  | ±S  | ±S  | 50  | 50  | 30  | 30  | —           |
| 150 | 110 | 110 | 80  | 90  | 80  | 70  | 80  | 80  | 50  | 50  | 99          |
| 110 | 90  | 10  | +S  | 40  | 40  | 50  | 50  | 50  | 40  | 40  | —           |
| 70  | 70  | 70  | 80  | 60  | 50  | 50  | 60  | 50  | 50  | 40  | —           |
| 40  | 50  | 50  | 60  | 50  | 50  | 50  | 50  | 40  | 30  | 30  | —           |
| —   | —   | 40  | 50  | 40  | 70  | 50  | 40  | 30  | —S  | ±S  | —           |
| 50  | 50  | 50  | 40  | ±S  | ±S  | 40  | 40  | 40  | 30  | 30  | —           |
| +S  | ±S  | 60  | ±S  | ±S  | ±S  | ±S  | ±S  | ±S  | ±S  | ±S  | —           |
| +S  | ±S  | ±S  | ±S  | 0   | +S  | 40  | 40  | 20  | 20  | 30  | —           |
| 40  | 40  | 30  | 40  | 30  | 30  | 30  | 30  | 50  | 40  | +S  | —           |
| 70  | 60  | 70  | 70  | 60  | 50  | 40  | 20  | 20  | 10  | ±S  | 51          |
| —20 | 30  | 40  | 50  | 80  | —40 | —20 | 10  | —20 | —40 | —20 | —           |
| 30  | 40  | —50 | —10 | 0   | —10 | 20  | 50  | 50  | 60  | 40  | 33          |
| 70  | 80  | 70  | 70  | 90  | 100 | 130 | 170 | 70  | 50  | 50  | 78          |
| 20  | 30  | 50  | 50  | 50  | 60  | 50  | 50  | 30  | 30  | 30  | 32          |
| 30  | 20  | 20  | 40  | 40  | 40  | 40  | 30  | 20  | 30  | 30  | 33          |
| 40  | 50  | 60  | 70  | 60  | 40  | 40  | 40  | 50  | 40  | 50  | —           |
| ±S  | ±S  | +S  | 60  | 30  | 30  | 40  | —20 | —40 | —70 | —50 | —           |
| 40  | 40  | —70 | 50  | 50  | 50  | 50  | 50  | 40  | 30  | 20  | —           |
| ±S  | 60  | 40  | 40  | 30  | 40  | 40  | 40  | 40  | 40  | 40  | —           |
| 80  | 70  | 80  | 90  | 90  | 40  | 50  | 30  | 10  | 20  | 30  | 55          |
| +S  | ±S  | 30  | 10  | 30  | 40  | 40  | 30  | 40  | 90  | 60  | —           |
| 58  | 63  | 47  | 61  | 52  | 45  | 46  | 45  | 36  | 33  | 32  |             |
| 24  | 24  | 25  | 25  | 27  | 26  | 28  | 29  | 29  | 28  | 26  |             |

July

| Hour GMT<br>Day   | 0   | 1   | 2   | 3   | 4   | 5    | 6    | 7   | 8   | 9   | 10  | 11  | 12  |
|-------------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|
| 1.                | 50  | 50  | 40  | 40  | 40  | 60   | 60   | 70  | 80  | 70  | 60  | 60  | 40  |
| 2.                | 0   | 20  | 20  | -10 | 40  | 80   | -40  | -50 | —   | -30 | 30  | 30  | 40  |
| 3.                | 40  | 40  | 40  | -10 | 10  | -100 | -180 | -60 | 20  | -20 | -10 | 120 | 90  |
| 4.                | -10 | -20 | -20 | -30 | -40 | -40  | 20   | 60  | 120 | 90  | 70  | 60  | 60  |
| 5.                | 40  | 30  | 30  | 20  | 20  | 50   | 70   | 100 | 100 | 90  | 80  | 70  | 30  |
| 6.                | 30  | 40  | 50  | 40  | 40  | 40   | 50   | 60  | 70  | 70  | 70  | 60  | 50  |
| 7.                | 20  | 20  | 10  | 20  | 20  | 30   | 50   | 50  | 40  | 50  | 40  | 30  | 30  |
| 8.                | 10  | 10  | 10  | 10  | 20  | 30   | 20   | -50 | -80 | ±S  | -S  | -70 | -30 |
| 9.                | 50  | —   | —   | —   | —   | —    | —    | —   | —   | 30  | 40  | 50  | 30  |
| 10.               | -30 | +S  | ±S  | 20  | 30  | 100  | 120  | 10  | 100 | 60  | 80  | 80  | 60  |
| 11.               | 40  | 30  | 40  | 40  | 50  | 50   | 50   | 80  | 0   | 80  | 70  | 60  | 50  |
| 12.               | 50  | 40  | 30  | 40  | 40  | 50   | 50   | 30  | 40  | 10  | 30  | 30  | 40  |
| 13.               | 50  | 40  | 40  | -50 | 60  | 80   | 120  | 140 | 110 | 120 | +S  | 140 | 80  |
| 14.               | 90  | 40  | 10  | 30  | 20  | 80   | 120  | 70  | 90  | +S  | 70  | 60  | 40  |
| 15.               | 0   | -10 | -10 | 30  | 30  | 40   | 80   | 100 | 100 | 90  | 90  | 90  | 50  |
| 16.               | 30  | 20  | 20  | 20  | 30  | 40   | 30   | 30  | —   | 10  | 30  | 30  | 40  |
| 17.               | 20  | 20  | 10  | 30  | 40  | 50   | 40   | 30  | 60  | 40  | 30  | 30  | 30  |
| 18.               | 30  | 20  | 20  | 0   | 10  | 30   | 50   | 40  | 20  | 30  | 80  | 40  | 20  |
| 19.               | 40  | 50  | 50  | 50  | 60  | 60   | 60   | 50  | 50  | 50  | 50  | 50  | ±S  |
| 20.               | 20  | 20  | 30  | 20  | -30 | 40   | ±S   | ±S  | 110 | 40  | +S  | 80  | 70  |
| 21.               | 20  | 30  | 30  | 30  | 20  | 20   | 90   | 140 | 140 | 90  | 120 | 80  | 60  |
| 22.               | -10 | 10  | 30  | 30  | ±S  | +S   | 50   | 20  | 60  | 40  | 30  | 70  | 30  |
| 23.               | 40  | 40  | 30  | 40  | 40  | 70   | 100  | 120 | —   | 110 | 70  | 60  | 60  |
| 24.               | 40  | 40  | 40  | 30  | 40  | 50   | 50   | 50  | 50  | 50  | 50  | 30  | 40  |
| 25.               | 20  | 30  | 20  | 30  | 30  | 40   | 50   | 50  | 50  | 60  | 70  | 50  | 50  |
| 26.               | 40  | 20  | 20  | 30  | 30  | 40   | 60   | 50  | 50  | 50  | 50  | 60  | 60  |
| 27.               | 20  | 20  | 20  | 30  | 30  | 30   | 120  | 80  | 70  | 0   | 50  | 60  | 30  |
| 28.               | 20  | 20  | 10  | 10  | 10  | 10   | 40   | 70  | 60  | 50  | 40  | 70  | 60  |
| 29.               | 20  | 10  | 20  | 30  | 30  | 40   | 30   | 30  | 30  | 40  | 40  | ±S  | ±S  |
| 30.               | 40  | 20  | 10  | 10  | 50  | 50   | 60   | 50  | —   | —   | 60  | 40  | 60  |
| 31.               | -10 | ±S  | +S  | 20  | 30  | 80   | 80   | 70  | 80  | 80  | 70  | 60  | +S  |
| Means             | 26  | 25  | 23  | 20  | 28  | 41   | 52   | 51  | 62  | 52  | 56  | 56  | 45  |
| Number<br>of days | 31  | 28  | 28  | 30  | 29  | 29   | 29   | 29  | 26  | 28  | 28  | 30  | 28  |

| 13      | 14      | 15      | 16          | 17      | 18      | 19      | 20      | 21      | 22      | 23      | Daily means |
|---------|---------|---------|-------------|---------|---------|---------|---------|---------|---------|---------|-------------|
| 40      | 30      | 40      | 40          | 40      | 50      | 50      | 50      | 70      | 50      | 30      | 50          |
| 60      | $\pm S$ | $\pm S$ | -30         | 20      | -40     | -90     | -40     | 0       | 10      | 30      | —           |
| -50     | 10      | 0       | -60         | -50     | -10     | -80     | -30     | 30      | -10     | -30     | -13         |
| 50      | 50      | 40      | 40          | 40      | 50      | 50      | 50      | 50      | 50      | 50      | 35          |
| 50      | 40      | 40      | 50          | 50      | 50      | 50      | 50      | 50      | 40      | 30      | 51          |
| 50      | 40      | 40      | 40          | 40      | 40      | 40      | 40      | $\pm S$ | $\pm S$ | 30      | —           |
| 30      | $\pm S$ | $\pm S$ | 30          | 30      | 40      | 30      | +S      | 30      | 30      | 20      | —           |
| 30      | 70      | 50      | +S          | 40      | -S      | $\pm S$ | 20      | 20      | 40      | 50      | —           |
| 20      | 40      | 40      | 20          | 30      | 80      | 40      | 30      | 70      | -S      | -50     | —           |
| 60      | 60      | 60      | 60          | 40      | 30      | 50      | 40      | 50      | 40      | 40      | —           |
| 50      | 40      | 30      | 40          | 30      | 30      | 50      | 30      | 40      | 40      | 40      | 44          |
| 30      | 60      | 80      | 90          | -S      | $\pm S$ | +S      | $\pm S$ | $\pm S$ | $\pm S$ | -S      | —           |
| 110     | 80      | 80      | +S          | $\pm S$ | $\pm S$ | $\pm S$ | -S      | 40      | 110     | 120     | —           |
| 20      | 30      | 20      | 10          | 20      | 10      | 60      | -10     | -20     | 0       | 0       | 37          |
| 50      | 60      | 50      | 40          | 40      | 40      | 40      | 40      | 40      | 60      | 50      | 50          |
| 70      | 40      | 40      | 60          | 70      | 50      | 40      | 10      | 0       | 10      | 20      | 32          |
| 20      | +S      | 30      | 30          | 0       | 10      | 20      | 30      | 50      | 40      | 30      | 30          |
| 20      | 30      | 20      | 30          | 40      | 40      | 30      | 40      | 60      | 50      | 40      | 33          |
| $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$     | 20      | 20      | 30      | 30      | 10      | 20      | 20      | —           |
| $\pm S$ | $\pm S$ | $\pm S$ | ( $\pm S$ ) | $\pm S$ | -10     | 10      | 20      | 30      | 10      | 10      | —           |
| 60      | 60      | 60      | 50          | 50      | 40      | 50      | 30      | +S      | -70     | $\pm S$ | —           |
| 20      | 20      | 10      | -50         | -40     | 0       | 30      | 40      | 30      | 40      | 40      | —           |
| 50      | 50      | 50      | 50          | 50      | 50      | 50      | 50      | 50      | 50      | 50      | 58          |
| 40      | 30      | 30      | 30          | 40      | 40      | 50      | 50      | 40      | 30      | 20      | 40          |
| 50      | 50      | 50      | 40          | 40      | 30      | 30      | 50      | 50      | 40      | 40      | 43          |
| 70      | 60      | 50      | 20          | 30      | 40      | 40      | 30      | +S      | -S      | 20      | —           |
| $\pm S$ | -S      | 60      | 50          | +S      | $\pm S$ | 40      | 30      | 20      | $\pm S$ | -S      | —           |
| 50      | 40      | +S      | 60          | 40      | 40      | 20      | 20      | 20      | 20      | 20      | 35          |
| 90      | 50      | 50      | 50          | 50      | 50      | 50      | 40      | 40      | 40      | 40      | 40          |
| $\pm S$ | —       | —       | -S          | $\pm S$ | $\pm S$ | $\pm S$ | -S      | 30      | 30      | 30      | —           |
| $\pm S$ | $\pm S$ | +S      | -20         | $\pm S$ | —       | —       | —       | 20      | 40      | 60      | —           |
| 44      | 45      | 43      | 30          | 30      | 31      | 30      | 23      | 34      | 31      | 30      |             |
| 26      | 23      | 24      | 26          | 25      | 25      | 26      | 26      | 27      | 26      | 28      |             |

| August            |    |    |     |    |     |    |      |     |     |     |     |     |     |
|-------------------|----|----|-----|----|-----|----|------|-----|-----|-----|-----|-----|-----|
| Hour GMT<br>Day   | 1  | 2  | 3   | 4  | 5   | 6  | 7    | 8   | 9   | 10  | 11  | 12  |     |
| 1.                | 40 | 20 | 20  | 20 | 20  | 60 | 90   | 80  | 60  | 40  | 30  | 90  | 100 |
| 2.                | 30 | 30 | 30  | 20 | 20  | 40 | 40   | 40  | 80  | 80  | 80  | 80  | 70  |
| 3.                | 40 | 20 | 20  | 40 | 30  | 40 | 40   | 60  | 60  | 70  | 80  | 60  | 70  |
| 4.                | —  | —  | —   | —  | —   | —  | —    | 110 | 70  | 60  | 60  | 40  | +S  |
| 5.                | 30 | 30 | 20  | 20 | 30  | 40 | 80   | 90  | 90  | 80  | 70  | 70  | 70  |
| 6.                | 40 | 30 | 30  | 30 | 30  | 70 | 70   | 60  | —   | 50  | 60  | 40  | 40  |
| 7.                | 30 | 20 | 20  | 20 | 20  | 40 | 40   | 30  | 40  | 40  | 30  | 40  | 40  |
| 8.                | 30 | 30 | 30  | 20 | 20  | 20 | 30   | 30  | 30  | —50 | —70 | —40 | 40  |
| 9.                | 50 | 40 | 60  | 70 | 70  | 90 | 90   | —10 | 10  | 30  | 70  | 110 | 90  |
| 10.               | 60 | 40 | 20  | 20 | 40  | 30 | 30   | 30  | 50  | —10 | —40 | —30 | +S  |
| 11.               | 40 | 40 | 40  | 40 | 40  | 70 | 60   | 60  | 50  | 70  | 80  | 60  | 60  |
| 12.               | 30 | 20 | 20  | 20 | 30  | 30 | 40   | 60  | 80  | 90  | 70  | 50  | 50  |
| 13.               | 20 | 20 | 30  | 30 | 40  | 70 | 80   | 100 | —   | 90  | 80  | 50  | 50  |
| 14.               | 50 | 50 | 60  | 70 | 70  | 80 | 80   | 70  | —   | 70  | 70  | 60  | 70  |
| 15.               | 40 | 50 | 60  | 50 | 60  | 70 | 80   | 120 | 130 | 130 | 120 | 120 | 110 |
| 16.               | 40 | 20 | 30  | 50 | 50  | 60 | 70   | 70  | —   | —   | 60  | 70  | 70  |
| 17.               | 20 | 20 | 30  | 30 | 40  | 60 | 50   | 50  | 50  | 50  | 70  | 70  | 70  |
| 18.               | 30 | 40 | 50  | 50 | 50  | 50 | 60   | 80  | 70  | 90  | 80  | 80  | 50  |
| 19.               | 60 | 40 | 70  | 80 | 110 | 80 | 70   | 60  | 50  | 40  | 50  | 40  | 40  |
| 20.               | 60 | +S | —10 | 30 | 40  | 30 | 30   | 70  | 80  | +S  | +S  | 140 | +S  |
| 21.               | 50 | 50 | 40  | 40 | 50  | 70 | (70) | 70  | —   | —   | 80  | 70  | 70  |
| 22.               | 30 | 40 | 40  | 50 | 50  | 50 | 50   | 40  | 40  | 50  | 50  | 50  | 50  |
| 23.               | 50 | 50 | 50  | 50 | 40  | 40 | 90   | 80  | 60  | 60  | 50  | 50  | 40  |
| 24.               | 40 | 70 | 60  | 50 | 30  | 30 | 40   | 50  | 70  | 110 | 120 | 110 | 80  |
| 25.               | 70 | 80 | 70  | 50 | 40  | 50 | 50   | 30  | 50  | 30  | 30  | 40  | 20  |
| 26.               | 30 | 30 | 40  | 40 | 40  | 60 | 50   | 50  | 60  | 50  | 50  | 50  | 20  |
| 27.               | 40 | 40 | 40  | 40 | 50  | 60 | 70   | 50  | —   | 40  | 50  | 40  | 50  |
| 28.               | 40 | 50 | 50  | 40 | 50  | 60 | 80   | 70  | 70  | 70  | 60  | 40  | 40  |
| 29.               | 40 | 40 | 40  | 50 | 70  | 80 | 110  | 80  | 110 | 120 | 70  | 70  | 80  |
| 30.               | 50 | 50 | 50  | 40 | 50  | 50 | 50   | 60  | 70  | 120 | 140 | 120 | 100 |
| 31.               | 50 | 50 | 50  | 50 | 50  | 50 | 80   | —   | 90  | 80  | 80  | 80  | 80  |
| Means             | 41 | 38 | 39  | 40 | 44  | 54 | 62   | 61  | 65  | 62  | 61  | 65  | 61  |
| Number<br>of days | 30 | 29 | 30  | 30 | 30  | 30 | 29   | 30  | 25  | 28  | 30  | 31  | 28  |

| 13    | 14      | 15      | 16      | 17      | 18      | 19      | 20      | 21      | 22      | 23 | Daily means |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|-------------|
| 70    | 60      | 70      | 70      | 30      | 30      | 10      | 20      | 30      | 40      | 40 | 48          |
| 70    | 70      | 70      | 40      | 60      | 70      | 60      | 60      | 40      | 30      | 40 | 52          |
| 90    | 90      | 80      | 120     | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | —  | —           |
| +S    | $\pm S$ | $\pm S$ | $\pm S$ | 20      | 30      | 20      | 40      | 70      | 60      | 40 | —           |
| 80    | 70      | 70      | 80      | 70      | 60      | 40      | 40      | 30      | 30      | 30 | 55          |
| 40    | 30      | 30      | 40      | 40      | 40      | 50      | 40      | 40      | 40      | 30 | 42          |
| 40    | 40      | 40      | 40      | 40      | 30      | 20      | 40      | 40      | 30      | 30 | 33          |
| 40    | 50      | 40      | 40      | 40      | 60      | 40      | —20     | $\pm S$ | 70      | 50 | 27          |
| 90    | 80      | 80      | 70      | 50      | 30      | 50      | 50      | 60      | 60      | 70 | 61          |
| +S    | 10      | 30      | 30      | 40      | 50      | 60      | 80      | 60      | 50      | 50 | —           |
| 50    | 40      | 50      | 50      | 50      | 50      | 50      | 60      | 40      | 40      | 40 | 51          |
| 70    | 50      | 50      | 70      | 30      | 40      | 40      | 40      | 30      | 40      | 40 | 45          |
| 50    | 50      | 30      | 30      | 50      | 30      | 70      | 70      | 50      | 50      | 60 | 52          |
| 70    | 60      | 70      | 100     | 100     | 90      | 70      | 60      | 50      | 50      | 40 | 68          |
| 100   | 90      | 90      | 70      | 50      | 60      | 60      | 50      | 40      | 40      | 30 | 76          |
| 60    | 80      | 90      | 80      | 60      | 50      | 50      | 30      | 30      | 20      | 10 | —           |
| 60    | 60      | 70      | 60      | 50      | 40      | 40      | 40      | 40      | 30      | 20 | 47          |
| 60    | 50      | 60      | 60      | 50      | 50      | 70      | 70      | 70      | 80      | 60 | 60          |
| —40   | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | +S      | $\pm S$ | $\pm S$ | —S      | 70 | —           |
| +S    | 40      | 40      | 40      | 40      | 50      | 60      | 80      | 80      | 70      | 60 | —           |
| 70    | 70      | 100     | 100     | 80      | 60      | 50      | 50      | 70      | 60      | 40 | —           |
| 40    | 40      | 40      | 50      | 40      | 40      | 50      | 50      | 50      | 50      | 50 | 45          |
| 40    | 50      | 40      | 50      | 50      | 50      | 50      | 40      | 30      | 30      | 30 | 49          |
| 80    | 90      | 60      | $\pm S$ | —10     | 30      | 60      | 110     | 100     | 70      | 70 | 66          |
| 10    | 40      | 50      | 50      | 60      | 50      | 50      | 50      | 50      | 40      | 30 | 45          |
| 30    | 30      | 60      | 70      | 60      | 60      | 50      | 40      | 30      | 10      | 30 | 43          |
| 50    | 60      | 70      | 50      | 50      | 70      | 70      | 60      | 50      | 50      | 40 | 52          |
| 50    | $\pm S$ | $\pm S$ | $\pm S$ | 30      | 40      | 70      | 70      | 50      | 50      | 50 | —           |
| 90    | 110     | 120     | 120     | 120     | 130     | 70      | 60      | 50      | 50      | 50 | 80          |
| —     | 100     | 120     | 110     | 80      | 70      | 60      | 70      | 50      | 50      | 50 | 74          |
| (100) | 100     | 100     | 90      | 90      | 90      | 70      | 100     | 100     | 80      | 70 | 76          |
| 56    | 61      | 59      | 66      | 52      | 53      | 52      | 53      | 51      | 47      | 44 |             |
| 26    | 28      | 28      | 27      | 29      | 29      | 29      | 29      | 28      | 29      | 30 |             |

September

| Hour GMT<br>Day   | 0  | 1  | 2  | 3   | 4       | 5   | 6       | 7   | 8     | 9   | 10   | 11  | 12  |
|-------------------|----|----|----|-----|---------|-----|---------|-----|-------|-----|------|-----|-----|
| 1.                | 60 | 60 | 60 | 60  | 70      | 120 | 150     | 120 | (110) | 120 | 120  | 140 | 130 |
| 2.                | 60 | 60 | 50 | 60  | 80      | 90  | 100     | 100 | 100   | 120 | 110  | 70  | 70  |
| 3.                | 50 | 40 | 40 | 40  | 40      | 70  | 60      | 70  | —     | 60  | 60   | 80  | 80  |
| 4.                | 50 | 30 | 10 | +S  | $\pm$ S | +S  | $\pm$ S | —S  | 100   | 110 | (50) | 40  | 30  |
| 5.                | 10 | 10 | 10 | 20  | 30      | 30  | 40      | 50  | 60    | 60  | 50   | 50  | 40  |
| 6.                | 60 | 50 | 50 | 50  | 70      | 60  | 80      | 110 | 130   | 140 | 110  | 70  | 70  |
| 7.                | 50 | 50 | 50 | 50  | 70      | 70  | 90      | 80  | 110   | 120 | 120  | 120 | 120 |
| 8.                | 50 | 40 | 40 | 50  | 50      | 50  | 60      | 90  | 90    | 80  | 70   | 60  | 50  |
| 9.                | 50 | 40 | 40 | 40  | 30      | 40  | 50      | 70  | 70    | 70  | 60   | 80  | 90  |
| 10.               | 40 | 40 | 40 | 50  | 50      | 60  | —       | 70  | 60    | 60  | 50   | 70  | 70  |
| 11.               | 20 | 30 | 30 | 40  | 70      | 80  | 110     | 170 | 130   | 130 | 90   | 80  | 90  |
| 12.               | 50 | 60 | 60 | 30  | 30      | 40  | 50      | 70  | 80    | 80  | 70   | 90  | 80  |
| 13.               | 40 | 40 | 40 | 60  | 110     | —   | —       | —   | —     | —   | 60   | 50  | 50  |
| 14.               | 40 | 40 | 40 | 40  | 40      | 40  | 50      | 50  | 70    | 70  | 60   | 60  | 60  |
| 15.               | 20 | 30 | 20 | 50  | 50      | 70  | 90      | 70  | 90    | 80  | 50   | 50  | 50  |
| 16.               | 50 | 50 | 50 | 50  | 50      | 70  | 110     | 140 | 130   | 120 | 70   | 70  | 70  |
| 17.               | 30 | 30 | 40 | 30  | 40      | 40  | 50      | 50  | —     | 70  | 80   | 90  | 90  |
| 18.               | 70 | 70 | 80 | 60  | 50      | 60  | 80      | 70  | 70    | 70  | 70   | 50  | 50  |
| 19.               | 50 | 40 | 40 | 40  | 60      | 50  | 50      | 50  | 50    | 50  | 50   | 50  | 50  |
| 20.               | 50 | 50 | 60 | 60  | 70      | 80  | 70      | 60  | 70    | 60  | 60   | 70  | 100 |
| 21.               | 50 | 50 | 50 | 50  | 50      | 50  | 50      | 60  | 70    | 60  | 70   | 70  | 70  |
| 22.               | 50 | 50 | 50 | 40  | 60      | 60  | 90      | 90  | 120   | 60  | 60   | 60  | —S  |
| 23.               | 60 | 70 | 70 | 70  | 70      | 60  | 50      | 50  | 40    | +S  | 10   | —10 | 40  |
| 24.               | 40 | 50 | 50 | 40  | 30      | 10  | —20     | 10  | —     | 10  | —40  | 0   | 0   |
| 25.               | 40 | 40 | 50 | 40  | 50      | 50  | 70      | 50  | 50    | 50  | 60   | 50  | 50  |
| 26.               | 50 | 50 | 50 | 60  | 60      | 60  | 70      | 90  | 90    | 110 | 120  | 100 | 100 |
| 27.               | 50 | 40 | 50 | 50  | 50      | 50  | 60      | 120 | —     | —   | 80   | 70  | 70  |
| 28.               | 50 | 50 | 40 | 50  | 40      | 40  | 70      | 100 | 90    | 110 | 100  | 110 | 110 |
| 29.               | 20 | 30 | 20 | —10 | —10     | 10  | 10      | 20  | 30    | 20  | 30   | 30  | 50  |
| 30.               | 20 | 20 | 30 | 30  | 40      | 40  | 70      | 60  | 80    | 100 | 100  | 100 | 110 |
| Means             | 44 | 44 | 44 | 45  | 52      | 55  | 67      | 76  | 83    | 81  | 69   | 67  | 70  |
| Number<br>of days | 30 | 30 | 30 | 29  | 29      | 28  | 27      | 28  | 24    | 27  | 29   | 30  | 29  |

| 13      | 14      | 15   | 16      | 17      | 18      | 19      | 20      | 21   | 22  | 23 | Daily means |
|---------|---------|------|---------|---------|---------|---------|---------|------|-----|----|-------------|
| 140     | 130     | 110  | 110     | 120     | 120     | 110     | 90      | 110  | 70  | 80 | 104         |
| 80      | 90      | 70   | 80      | 80      | 90      | 80      | 60      | 50   | 50  | 40 | 77          |
| 70      | 70      | 70   | 70      | 70      | 70      | 70      | 60      | 60   | 60  | 60 | 62          |
| 30      | 30      | 40   | $\pm S$ | $\pm S$ | $\pm S$ | 20      | 30      | $+S$ | -10 | 0  | —           |
| 10      | 10      | 40   | 40      | 50      | 50      | 50      | 70      | 60   | 60  | 60 | 40          |
| 70      | 60      | 50   | 60      | 70      | 60      | 60      | 60      | 60   | 60  | 50 | 71          |
| 110     | 100     | 90   | 60      | 50      | 50      | 50      | 50      | 60   | 50  | 50 | 76          |
| 60      | 60      | 70   | 50      | 50      | 50      | 40      | 40      | 40   | 40  | 50 | 55          |
| 100     | 110     | 100  | 90      | 70      | 50      | 40      | 40      | 40   | 40  | 40 | 60          |
| $+S$    | $\pm S$ | $+S$ | 30      | 30      | 30      | 20      | 20      | 20   | 30  | 30 | —           |
| 70      | 70      | 60   | 60      | 50      | 40      | 30      | 40      | 40   | 40  | 40 | 67          |
| 70      | 60      | 50   | 50      | 70      | 70      | 50      | 40      | 40   | 30  | 30 | 56          |
| 50      | 50      | 50   | 40      | 40      | 50      | 40      | 50      | 40   | 40  | 40 | —           |
| 70      | 70      | 50   | 50      | 40      | $+S$    | $\pm S$ | $\pm S$ | 40   | 20  | 20 | —           |
| 40      | 40      | 40   | 40      | 40      | 40      | 50      | $\pm S$ | 40   | 50  | 40 | —           |
| 70      | 70      | 70   | 90      | 90      | 90      | 60      | 50      | 40   | 30  | 30 | 72          |
| 90      | 80      | 60   | 50      | 50      | 60      | 80      | 80      | 80   | 80  | 70 | 62          |
| 50      | 50      | 50   | 50      | 50      | 60      | 60      | 60      | 60   | 50  | 50 | 60          |
| 50      | 50      | 50   | 50      | 50      | 50      | 40      | 40      | 50   | 50  | 60 | 49          |
| 80      | 60      | 60   | 70      | 60      | 70      | 70      | 50      | 30   | 40  | 50 | 63          |
| 70      | 80      | 70   | 50      | 40      | 60      | 60      | 70      | 70   | 50  | 50 | 59          |
| $\pm S$ | 100     | 50   | 20      | 30      | 60      | 60      | 70      | 70   | 50  | 50 | —           |
| 40      | 40      | 40   | 60      | 80      | 50      | 40      | 20      | 40   | 50  | 30 | 47          |
| $-S$    | $+S$    | 30   | 50      | 60      | 50      | 40      | 50      | 40   | 40  | 40 | —           |
| 50      | 50      | 50   | 70      | 110     | 110     | 120     | 130     | 110  | 70  | 50 | 65          |
| 110     | 120     | 100  | 90      | 80      | 70      | 70      | 70      | 50   | 50  | 50 | 78          |
| 70      | 80      | 70   | 60      | 40      | 40      | 50      | 70      | 60   | 80  | 30 | —           |
| 110     | 110     | 100  | 90      | 60      | 70      | 30      | 60      | 60   | 40  | 40 | 72          |
| 60      | 60      | 60   | 50      | 30      | 30      | 40      | 40      | 40   | 30  | 30 | 30          |
| 130     | 140     | 150  | 130     | 100     | 80      | 80      | 80      | 70   | 50  | 60 | 78          |
| 72      | 73      | 66   | 62      | 61      | 61      | 56      | 57      | 54   | 46  | 44 |             |
| 27      | 28      | 29   | 29      | 29      | 28      | 29      | 28      | 29   | 30  | 30 |             |

| October           |     |     |     |     |     |     |     |     |     |     |     |     |      |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Hour GMT<br>Day   | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12   |
| 1.                | 70  | 60  | 50  | 50  | 40  | 40  | 50  | 40  | —   | —   | —   | —   | —    |
| 2.                | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | 50  | 70   |
| 3.                | 40  | 30  | 20  | 20  | 20  | 30  | 40  | 30  | 40  | 50  | 50  | 50  | 50   |
| 4.                | 50  | 40  | 30  | 20  | 30  | 40  | 40  | 30  | 40  | 50  | 50  | 50  | 50   |
| 5.                | 10  | 20  | 30  | 40  | 40  | 50  | 50  | 40  | 50  | 70  | 70  | 80  | 80   |
| 6.                | 10  | —10 | —10 | 10  | 30  | 50  | 50  | 0   | 30  | 30  | 40  | 10  | 0    |
| 7.                | 50  | 60  | 70  | 60  | 60  | 50  | 60  | 50  | 60  | 70  | 80  | 70  | 70   |
| 8.                | 50  | 50  | 50  | 50  | 40  | 50  | 50  | 60  | —   | 50  | 60  | 70  | 50   |
| 9.                | 30  | 30  | 20  | 10  | 20  | 30  | 30  | 30  | 40  | 50  | 50  | 50  | 50   |
| 10.               | 50  | 30  | 20  | 10  | 20  | 30  | 30  | 20  | 30  | 10  | 20  | 20  | 20   |
| 11.               | —40 | —50 | —30 | —20 | —40 | —50 | —10 | 20  | 10  | 30  | 40  | 40  | 50   |
| 12.               | 20  | 20  | 20  | 10  | 10  | 10  | 0   | 20  | 30  | 40  | 40  | 50  | 50   |
| 13.               | 50  | 40  | 50  | 50  | 50  | 50  | 30  | 40  | 70  | 60  | 70  | 30  | 30   |
| 14.               | 40  | 30  | 30  | 40  | 40  | 50  | 60  | 50  | 60  | 70  | 60  | 50  | 40   |
| 15.               | —   | —   | —   | —   | —   | —   | —   | —   | —   | 40  | 30  | 40  | ±S   |
| 16.               | 30  | 30  | 40  | 20  | 30  | 30  | 50  | 50  | 50  | 40  | 50  | 30  | (40) |
| 17.               | 30  | 40  | 30  | 30  | 0   | 20  | 40  | 40  | 50  | 50  | 30  | 30  | 30   |
| 18.               | 30  | 30  | 40  | 30  | 10  | 30  | 40  | 50  | 40  | —10 | 10  | 50  | 70   |
| 19.               | 50  | 40  | 50  | 50  | 60  | 50  | 60  | 20  | —40 | 40  | 10  | 10  | —10  |
| 20.               | 30  | 30  | 20  | 30  | 30  | 60  | 80  | 100 | 100 | 90  | 70  | 80  | 70   |
| 21.               | 80  | 80  | 70  | 60  | 60  | 80  | 70  | 70  | 80  | 80  | 90  | 100 | 80   |
| 22.               | 60  | 60  | 70  | 60  | 80  | 70  | 70  | 90  | 60  | —   | —   | 10  | —10  |
| 23.               | 0   | —40 | —40 | —20 | —30 | —40 | —70 | —40 | —10 | 30  | 40  | 40  | 30   |
| 24.               | 10  | 10  | 20  | 30  | 30  | —50 | 10  | 80  | 90  | 130 | 140 | 110 | 130  |
| 25.               | 70  | 30  | 30  | 40  | 0   | —10 | 0   | 30  | 40  | 70  | 60  | 70  | 80   |
| 26.               | 60  | 40  | 60  | 40  | 70  | 90  | 80  | 60  | 60  | 70  | 80  | 100 | 120  |
| 27.               | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | 20  | 30   |
| 28.               | 20  | 10  | 10  | —10 | 0   | —20 | —10 | —60 | —60 | —50 | 20  | 60  | 50   |
| 29.               | 0   | 10  | —10 | —10 | —10 | —10 | 0   | 0   | —   | 20  | 10  | 30  | 10   |
| 30.               | 130 | 60  | 30  | 40  | 80  | 50  | 90  | 80  | 80  | 70  | 50  | 40  | 30   |
| 31.               | —10 | 0   | 30  | 20  | 0   | 20  | 10  | 20  | —   | 70  | 60  | 40  | 70   |
| Means             | 36  | 28  | 29  | 27  | 28  | 29  | 36  | 36  | 42  | 49  | 51  | 49  | 50   |
| Number<br>of days | 28  | 28  | 28  | 28  | 28  | 28  | 28  | 28  | 24  | 27  | 27  | 30  | 28   |

| 13   | 14  | 15  | 16  | 17  | 18  | 19  | 20   | 21  | 22  | 23  | Daily means |
|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------------|
| —    | —   | —   | —   | —   | —   | —   | —    | —   | —   | —   | —           |
| 80   | 70  | 70  | 70  | 70  | 70  | 60  | 50   | 40  | 40  | 40  | —           |
| 50   | 50  | 50  | 50  | 50  | 40  | 50  | 40   | 50  | 50  | 50  | 42          |
| 50   | 50  | 50  | 50  | 40  | 30  | 30  | 10   | 10  | 20  | 10  | 36          |
| 70   | 80  | 80  | 80  | 90  | 70  | 30  | 20   | 30  | 10  | 60  | 52          |
| —20  | 40  | 80  | 180 | +S  | 120 | 100 | 90   | 70  | 70  | 60  | 45          |
| 70   | 70  | 60  | 50  | 50  | 70  | 70  | 70   | 50  | 50  | 50  | 61          |
| 50   | 60  | 50  | 40  | 50  | 40  | 40  | 50   | 40  | 40  | 30  | 49          |
| 50   | 50  | 50  | 30  | 20  | 70  | 50  | 50   | 50  | 50  | 50  | 40          |
| 30   | 40  | 30  | 30  | 60  | 40  | 30  | 10   | —20 | —10 | —20 | 22          |
| 50   | 60  | 50  | 50  | 50  | 20  | 30  | 50   | 40  | 20  | 30  | 17          |
| 50   | 50  | 60  | 50  | 50  | 40  | 30  | 40   | 40  | 30  | 50  | 34          |
| 40   | 50  | 50  | 50  | 50  | 50  | 50  | 50   | 40  | 40  | 40  | 47          |
| 40   | 50  | 30  | 10  | 30  | 40  | 40  | (30) | —   | —   | —   | —           |
| —S   | 30  | —20 | —40 | —30 | —10 | 40  | 10   | 10  | 30  | 40  | —           |
| (30) | 40  | 40  | 50  | 50  | 50  | 50  | 60   | 50  | 40  | 40  | —           |
| 80   | 90  | 80  | 40  | 40  | +S  | 80  | ±S   | ±S  | 30  | 40  | —           |
| 70   | 60  | 60  | 60  | 60  | 60  | 40  | ±S   | ±S  | 20  | 30  | —           |
| 0    | 30  | 40  | 40  | 40  | 40  | 70  | 60   | 60  | 60  | 50  | 37          |
| 60   | 50  | 70  | 80  | 100 | 110 | 90  | 100  | 90  | 80  | 80  | 71          |
| 80   | 60  | 80  | 70  | 60  | 80  | 80  | 60   | 60  | 70  | 70  | 74          |
| —10  | —30 | —40 | —50 | 0   | 10  | 10  | 50   | —10 | —20 | —60 | —           |
| 0    | —30 | —40 | —40 | 40  | 20  | 30  | 30   | 30  | —40 | —10 | —7          |
| 160  | 150 | 150 | 130 | 160 | 150 | 120 | 80   | 80  | 60  | 50  | 85          |
| 80   | 80  | 60  | 60  | 40  | 50  | 80  | 80   | 30  | 50  | 50  | 49          |
| 80   | 80  | 80  | 80  | 70  | 70  | 40  | —10  | —30 | —10 | —   | 60          |
| 50   | 50  | 30  | 40  | 40  | 10  | 60  | 60   | 40  | 20  | 10  | —           |
| 70   | 60  | 60  | 40  | 20  | 0   | 30  | 30   | 30  | 10  | 30  | 14          |
| 40   | 40  | 40  | 80  | 80  | 160 | 80  | 130  | 150 | 120 | 130 | 47          |
| —40  | —60 | —20 | —20 | —20 | —20 | —10 | —30  | —10 | 0   | —10 | 25          |
| 80   | 90  | 100 | 100 | 120 | 110 | 140 | 90   | 80  | 80  | 60  | 60          |
| 50   | 50  | 49  | 49  | 51  | 55  | 55  | 49   | 41  | 35  | 38  |             |
| 28   | 30  | 30  | 30  | 29  | 29  | 30  | 27   | 27  | 29  | 28  |             |

| November          |     |     |     |      |     |     |     |     |     |      |     |     |     |
|-------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Hour GMT          | 0   | 1   | 2   | 3    | 4   | 5   | 6   | 7   | 8   | 9    | 10  | 11  | 12  |
| Day               |     |     |     |      |     |     |     |     |     |      |     |     |     |
| 1.                | 70  | 60  | 60  | 90   | 40  | 10  | 90  | 60  | 30  | 60   | 70  | 60  | 90  |
| 2.                | 30  | 10  | 10  | 10   | 20  | 40  | 60  | 80  | 100 | 90   | 90  | 70  | 70  |
| 3.                | 30  | 30  | 20  | 30   | 20  | 20  | 20  | 10  | 30  | 20   | 40  | 40  | 80  |
| 4.                | 60  | 60  | 60  | 60   | 90  | 90  | 30  | 60  | 70  | 40   | 60  | 40  | 70  |
| 5.                | -40 | -10 | -10 | 0    | -10 | -30 | -60 | -90 | -   | -100 | -70 | -50 | -50 |
| 6.                | 200 | +S  | 110 | +S   | 100 | 50  | 10  | 40  | 50  | 60   | 80  | 80  | 100 |
| 7.                | 40  | 50  | 50  | 50   | 60  | 80  | 80  | 90  | 80  | 80   | 80  | 120 | 110 |
| 8.                | -S  | +S  | -80 | -100 | -60 | -50 | 30  | 60  | 80  | 80   | 70  | 70  | 70  |
| 9.                | 40  | 10  | -20 | 30   | 60  | 50  | 80  | 90  | 90  | 100  | 100 | 110 | 90  |
| 10.               | -   | -   | -   | -    | -30 | 40  | 30  | 10  | -   | -    | -   | 50  | 80  |
| 11.               | -20 | -20 | 10  | -20  | -50 | -50 | -30 | -40 | -70 | 90   | 120 | 20  | 40  |
| 12.               | 50  | 30  | 10  | 30   | 30  | 30  | 40  | 50  | -   | 90   | 80  | 80  | 90  |
| 13.               | 30  | 30  | -10 | 20   | 40  | 60  | 40  | 110 | 120 | 110  | 120 | 110 | 100 |
| 14.               | 80  | 60  | 40  | 40   | 40  | 60  | 40  | 60  | 50  | 50   | 50  | 40  | 20  |
| 15.               | 80  | 90  | 110 | 90   | 90  | 100 | 120 | 160 | 60  | -    | -   | -   | -   |
| 16.               | -   | 10  | 30  | 40   | 50  | 60  | 60  | 60  | 70  | 70   | 120 | 140 | 170 |
| 17.               | 40  | -30 | +S  | +S   | -20 | 10  | -10 | 60  | 80  | 100  | 100 | 110 | 100 |
| 18.               | -   | -   | -   | -    | -   | -   | -   | -   | -   | -    | -   | -   | -   |
| 19.               | -   | -   | -   | -    | -   | -   | -   | -   | -   | -    | -   | -   | -   |
| 20.               | -   | -   | -   | -    | -   | -   | -   | -   | -   | -    | -   | -   | -   |
| 21.               | -   | -   | -   | -    | -   | -   | -   | -   | -   | -    | -   | 40  | 60  |
| 22.               | 40  | 30  | 30  | 60   | 70  | 80  | 80  | 70  | 90  | 80   | 100 | 90  | 120 |
| 23.               | 60  | 80  | 60  | 70   | 80  | 100 | 120 | 140 | 180 | 120  | 110 | 100 | 90  |
| 24.               | 30  | 10  | 10  | -10  | -40 | 30  | -40 | 60  | 130 | 120  | 130 | 120 | 130 |
| 25.               | 50  | 70  | 80  | 60   | 50  | 60  | 30  | 30  | 30  | 60   | 80  | 80  | 80  |
| 26.               | 90  | 60  | 60  | 70   | 30  | 110 | 130 | 190 | -   | 150  | 100 | 90  | 80  |
| 27.               | 90  | 100 | 130 | 90   | 70  | 80  | +S  | 50  | -30 | -80  | 70  | 80  | 120 |
| 28.               | 180 | 170 | 140 | 140  | 140 | 150 | 120 | 110 | +S  | +S   | -40 | -30 | -60 |
| 29.               | 20  | 20  | 30  | 30   | 30  | 30  | 50  | 80  | 30  | 70   | +S  | +S  | 80  |
| 30.               | 100 | 100 | 90  | 120  | 120 | 30  | 120 | 130 | +S  | +S   | +S  | 180 | 180 |
| Means             | 59  | 44  | 43  | 43   | 41  | 50  | 52  | 67  | 64  | 66   | 75  | 74  | 81  |
| Number<br>of days | 23  | 23  | 24  | 23   | 26  | 26  | 25  | 26  | 20  | 22   | 22  | 25  | 26  |

| 13   | 14  | 15  | 16      | 17      | 18      | 19      | 20      | 21      | 22      | 23      | Daily means |
|------|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|-------------|
| 80   | 40  | 20  | 10      | 10      | 10      | 80      | 40      | 120     | 100     | 60      | 57          |
| 70   | 60  | 80  | 90      | 100     | $\pm S$ | $\pm S$ | 0       | 20      | 30      | 20      | —           |
| 60   | 40  | —10 | 40      | 70      | 70      | 70      | 90      | 90      | 70      | 60      | 43          |
| 80   | 80  | 60  | 60      | 30      | 10      | —40     | —30     | —40     | —10     | —40     | 42          |
| —90  | —10 | —50 | $\pm S$ | $\pm S$ | 50      | 30      | 120     | 140     | 130     | 170     | —           |
| (80) | 60  | 60  | 60      | 10      | $\pm S$ | $\pm S$ | 60      | 50      | 60      | 40      | —           |
| 100  | 70  | 70  | 60      | 90      | 60      | 50      | 70      | 50      | 20      | 30      | 68          |
| 60   | 60  | 70  | 90      | 100     | 130     | 120     | 80      | 70      | 50      | 50      | —           |
| 60   | 50  | 40  | 30      | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | —       | —       | —       | —           |
| 90   | 50  | 70  | 60      | —50     | 50      | 40      | 20      | 10      | 0       | —10     | —           |
| 30   | 40  | 40  | 10      | —10     | 60      | —40     | —100    | 30      | —10     | —70     | —2          |
| 130  | 120 | 110 | 90      | 80      | 100     | 70      | 70      | 70      | 30      | 30      | 66          |
| 140  | 170 | 180 | 180     | 170     | 220     | 130     | 190     | 170     | 110     | 80      | 109         |
| 20   | —20 | 30  | 40      | 40      | 30      | 60      | 70      | 40      | 30      | 30      | 42          |
| —    | —   | —   | —       | —       | —       | —       | —       | —       | —       | —       | —           |
| 160  | 90  | 80  | 70      | 70      | 90      | 90      | $\pm S$ | $\pm S$ | $\pm S$ | $\pm S$ | —           |
| —    | —   | —   | —       | —       | —       | —       | —       | —       | —       | —       | —           |
| —    | —   | —   | —       | —       | —       | —       | —       | —       | —       | —       | —           |
| —    | —   | —   | —       | —       | —       | —       | —       | —       | —       | —       | —           |
| —    | —   | —   | —       | —       | —       | —       | —       | —       | —       | —       | —           |
| 70   | 90  | 70  | 80      | 90      | 90      | 70      | 70      | 70      | 60      | 50      | —           |
| 140  | 140 | 160 | 170     | 110     | 90      | 60      | 80      | 90      | 100     | 80      | 90          |
| 80   | 70  | 60  | 70      | 80      | 60      | 40      | 40      | 40      | 20      | 30      | 79          |
| 130  | 120 | 110 | 130     | 120     | 110     | 70      | 70      | 60      | 40      | 40      | 70          |
| 110  | 90  | 120 | 130     | 130     | 140     | 130     | 130     | 110     | 70      | 70      | 83          |
| 60   | —10 | 20  | 80      | 80      | 70      | 80      | 30      | 90      | 120     | 140     | 86          |
| 90   | 90  | 120 | 90      | 90      | 140     | 140     | 140     | 140     | 130     | 140     | 90          |
| 10   | 60  | 140 | 70      | 20      | 20      | 50      | 70      | 50      | 30      | 30      | —           |
| 80   | 180 | 180 | 160     | 130     | $\pm S$ | 110     | 120     | 70      | 80      | 90      | —           |
| 190  | 150 | 120 | 100     | 130     | 150     | 160     | 150     | 120     | 90      | 70      | —           |
| 81   | 75  | 78  | 82      | 73      | 83      | 71      | 69      | 72      | 59      | 52      |             |
| 24   | 25  | 25  | 24      | 23      | 21      | 22      | 23      | 23      | 23      | 23      |             |

| December          |     |      |      |     |     |     |     |     |      |       |     |     |     |
|-------------------|-----|------|------|-----|-----|-----|-----|-----|------|-------|-----|-----|-----|
| Hour GMT<br>Day   | 0   | 1    | 2    | 3   | 4   | 5   | 6   | 7   | 8    | 9     | 10  | 11  | 12  |
| 1.                | 80  | 60   | 60   | 50  | 60  | 60  | 50  | 60  | 80   | 70    | 70  | 100 | 130 |
| 2.                | 50  | 50   | 50   | 50  | 50  | 50  | 50  | 60  | 80   | 80    | 60  | 80  | 90  |
| 3.                | 70  | 80   | 90   | 80  | 80  | 100 | 80  | —   | —    | (170) | 160 | 170 | 180 |
| 4.                | +S  | +S   | +S   | 210 | 190 | +S  | +S  | +S  | +S   | 160   | 150 | +S  | +S  |
| 5.                | 30  | 30   | 30   | 30  | 30  | 70  | +S  | +S  | 120  | 130   | 140 | 160 | 130 |
| 6.                | 80  | 180  | +S   | 20  | 40  | 30  | 40  | 50  | (60) | 80    | 140 | 90  | 80  |
| 7.                | 30  | 20   | 30   | 40  | 40  | 20  | 30  | 60  | 60   | 70    | 130 | 140 | 130 |
| 8.                | 100 | 90   | 90   | 90  | 90  | 100 | 90  | 120 | 120  | 110   | 140 | 160 | 130 |
| 9.                | 110 | 110  | 120  | 160 | +S  | 160 | +S  | +S  | +S   | +S    | +S  | 140 | 90  |
| 10.               | 50  | 60   | 80   | 80  | 60  | 80  | 90  | 40  | —    | 90    | 100 | 80  | 90  |
| 11.               | 10  | —60  | 20   | 60  | 50  | 70  | 70  | 20  | 40   | 60    | 60  | 70  | ±S  |
| 12.               | 30  | 20   | 10   | 10  | 30  | 40  | 60  | 50  | 60   | ±S    | 0   | 60  | 60  |
| 13.               | 50  | 40   | 60   | 80  | 110 | 120 | 150 | 130 | 160  | 130   | 90  | 80  | 50  |
| 14.               | —10 | —10  | —10  | —20 | 0   | 10  | 60  | 50  | 50   | 60    | 50  | 80  | 80  |
| 15.               | 80  | 100  | 180  | 170 | +S  | +S  | +S  | +S  | +S   | 50    | 20  | 10  | 40  |
| 16.               | 50  | 70   | 100  | +S  | 130 | 80  | 80  | 80  | 50   | 90    | 60  | 60  | 70  |
| 17.               | 30  | 20   | 20   | 10  | 40  | 80  | 140 | 170 | —    | —     | 130 | 110 | —S  |
| 18.               | 90  | 70   | 40   | 60  | 80  | 90  | 30  | 40  | 40   | 10    | —20 | 50  | 50  |
| 19.               | 40  | 60   | 60   | 50  | 50  | 70  | 90  | 110 | 120  | 110   | 110 | 100 | 100 |
| 20.               | ±S  | ±S   | +S   | 30  | 50  | 0   | —10 | —20 | —30  | 50    | 60  | 50  | 90  |
| 21.               | 30  | 40   | 90   | +S  | 40  | —10 | —40 | —60 | —40  | —90   | —10 | —10 | 20  |
| 22.               | 40  | 90   | 110  | 110 | 60  | +S  | +S  | 120 | —    | 60    | —10 | 20  | 30  |
| 23.               | —30 | 0    | 10   | 30  | 40  | 50  | 80  | 60  | 60   | 70    | —   | 90  | 100 |
| 24.               | 190 | 80   | —20  | 30  | 10  | —20 | —20 | 30  | 40   | 70    | 30  | 30  | 70  |
| 25.               | 50  | —200 | —120 | 30  | 40  | 140 | 170 | 150 | 130  | 120   | 140 | 140 | 140 |
| 26.               | 50  | 50   | 50   | 60  | 100 | 80  | 100 | 50  | —10  | 10    | 50  | 80  | 80  |
| 27.               | 70  | 70   | 80   | 80  | 70  | 60  | 70  | 70  | 70   | 60    | 50  | 30  | 30  |
| 28.               | —60 | —70  | —70  | —70 | —60 | —20 | —60 | —70 | —90  | —60   | —70 | —60 | —60 |
| 29.               | ±S  | +S   | 100  | 140 | 80  | 80  | 100 | 120 | 110  | 90    | 120 | 140 | 130 |
| 30.               | 70  | 40   | 120  | +S  | 130 | 120 | 80  | 80  | 160  | 160   | 110 | 60  | 90  |
| 31.               | +S  | +S   | +S   | +S  | +S  | +S  | 90  | +S  | 110  | 80    | 130 | 160 | +S  |
| Means             | 51  | 40   | 51   | 62  | 60  | 63  | 64  | 63  | 62   | 71    | 76  | 82  | 82  |
| Number<br>of days | 27  | 27   | 27   | 27  | 28  | 27  | 26  | 25  | 23   | 27    | 29  | 30  | 27  |

| 13  | 14  | 15  | 16   | 17   | 18  | 19  | 20  | 21  | 22  | 23  | Daily means |
|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-------------|
| 70  | 80  | 110 | 120  | 120  | 110 | 70  | 50  | 60  | 60  | 60  | 77          |
| 120 | 130 | 110 | 120  | 120  | 110 | 100 | 90  | 100 | 120 | 70  | 83          |
| 130 | 140 | 130 | 170  | 150  | 140 | 140 | 150 | +S  | +S  | +S  | —           |
| 180 | 90  | 80  | 100  | 80   | 80  | 80  | 70  | 60  | 30  | 30  | —           |
| 170 | +S  | +S  | +S   | +S   | +S  | +S  | +S  | +S  | +S  | +S  | —           |
| 50  | 0   | 30  | 30   | 30   | 40  | 20  | —40 | 20  | 130 | 80  | —           |
| 110 | 90  | 100 | 100  | 100  | 130 | 110 | 120 | 90  | 90  | 110 | 81          |
| 70  | 100 | 100 | 100  | 140  | 160 | 160 | 140 | 120 | 130 | 140 | 116         |
| 90  | 90  | 80  | 60   | 30   | 70  | 80  | 90  | 80  | 70  | 70  | —           |
| 50  | 100 | 80  | 80   | 90   | 100 | 100 | 90  | 90  | 50  | 70  | 78          |
| +S  | 60  | 80  | 110  | 80   | 90  | 90  | 70  | 60  | 50  | 50  | —           |
| 60  | 70  | 80  | 70   | 60   | 60  | 80  | 90  | +S  | 30  | 40  | 49          |
| 50  | 60  | 60  | 20   | 40   | 30  | 30  | 10  | —10 | —10 | —10 | 63          |
| 60  | 20  | 30  | —40  | 10   | —50 | —S  | ±S  | 170 | 70  | 40  | —           |
| 10  | —40 | —10 | 10   | 0    | —30 | ±S  | ±S  | 20  | 60  | 30  | —           |
| 70  | 60  | 70  | 120  | 110  | 80  | 110 | 90  | 60  | 40  | 40  | 77          |
| 60  | 90  | 80  | 70   | 90   | 50  | 70  | 110 | 110 | 100 | 80  | —           |
| 50  | 80  | 90  | 80   | 80   | 80  | 90  | 70  | 70  | 70  | 60  | 60          |
| 40  | 90  | 70  | 80   | 90   | 70  | 60  | 60  | 60  | +S  | ±S  | —           |
| 110 | 80  | 120 | 140  | 180  | 220 | 200 | 170 | 80  | 90  | 70  | —           |
| —10 | 20  | +S  | +S   | +S   | —40 | 140 | 70  | 30  | —30 | 50  | —           |
| 0   | 40  | 80  | —100 | —110 | —20 | 30  | 0   | 30  | 30  | —40 | —           |
| 110 | 110 | 100 | 90   | 110  | 110 | 110 | 80  | 120 | 180 | 150 | 80          |
| 110 | 40  | 60  | 70   | 10   | —50 | 40  | 70  | 30  | —30 | 50  | 38          |
| 160 | 150 | 170 | 170  | 130  | 130 | 120 | 110 | 100 | 100 | 80  | 98          |
| 60  | 100 | 100 | 120  | 30   | 10  | —20 | —20 | 100 | 90  | 30  | 56          |
| 40  | 20  | 30  | 20   | 20   | 20  | 0   | —20 | —20 | —20 | —40 | 36          |
| —50 | —40 | —30 | —40  | —70  | —80 | —60 | —60 | —60 | 50  | ±S  | —55         |
| 110 | 70  | 120 | 60   | —20  | 30  | 130 | 140 | 60  | 50  | 20  | —           |
| —   | —   | 70  | 100  | 80   | 80  | 70  | 40  | 80  | 110 | 80  | —           |
| 200 | 140 | 140 | 140  | 140  | 120 | 100 | 130 | 120 | 10  | 30  | —           |
| 79  | 70  | 80  | 75   | 66   | 62  | 80  | 70  | 65  | 61  | 53  |             |
| 29  | 29  | 29  | 29   | 29   | 30  | 28  | 28  | 28  | 28  | 27  |             |

*II. Hourly means of the quantities of positive and negative*

| <u>Hour GMT</u> |   | 0  | 1  | 2  | 3 | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 |
|-----------------|---|----|----|----|---|----|----|----|----|----|----|----|----|
| Day             |   |    |    |    |   |    |    |    |    |    |    |    |    |
| January         | + | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
|                 | — | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| February        | + | 0  | 0  | 0  | 0 | 0  | 0  | 2  | 0  | 2  | 11 | 9  | 4  |
|                 | — | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 1  | 10 | 7  | 2  |
| March           | + | 33 | 1  | 0  | 0 | 0  | 2  | 0  | 13 | 1  | 0  | 1  | 1  |
|                 | — | 10 | 4  | 0  | 0 | 0  | 1  | 0  | 1  | 0  | 1  | 2  | 6  |
| April           | + | 0  | 0  | 0  | 1 | 10 | 7  | 4  | 16 | 2  | 1  | 3  | 44 |
|                 | — | 0  | 0  | 0  | 1 | 1  | 10 | 24 | 13 | 2  | 0  | 1  | 96 |
| May             | + | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 2  | 7  | 1  | 16 |
|                 | — | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 1  | 5  | 0  | 30 |
| June            | + | 3  | 11 | 23 | 0 | 16 | 3  | 37 | 19 | 10 | 37 | 58 | 18 |
|                 | — | 3  | 16 | 12 | 6 | 17 | 18 | 0  | 42 | 40 | 25 | 20 | 18 |
| July            | + | 0  | 5  | 17 | 0 | 1  | 0  | 19 | 6  | 0  | 2  | 0  | 0  |
|                 | — | 0  | 30 | 2  | 0 | 0  | 0  | 7  | 29 | 0  | 2  | 1  | 4  |
| August          | + | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
|                 | — | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| September       | + | 0  | 0  | 0  | 2 | 8  | 1  | 7  | 0  | 1  | 2  | 0  | 0  |
|                 | — | 0  | 0  | 0  | 0 | 6  | 0  | 5  | 1  | 0  | 0  | 0  | 0  |
| October         | + | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
|                 | — | 0  | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| November        | + | 2  | 0  | 7  | 0 | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  |
|                 | — | 8  | 0  | 9  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| December        | + | 13 | 7  | 2  | 0 | 0  | 1  | 0  | 0  | 1  | 3  | 0  | 0  |
|                 | — | 9  | 10 | 0  | 0 | 0  | 1  | 0  | 0  | 0  | 7  | 0  | 0  |

*charges transported by point-discharge for each month*

| 12 | 13  | 14  | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | Means |
|----|-----|-----|----|----|----|----|----|----|----|----|----|-------|
| 0  | 3   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0,1   |
| 0  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0     |
| 1  | 0   | 0   | 1  | 0  | 0  | 2  | 0  | 1  | 0  | 1  | 1  | 1,5   |
| 0  | 0   | 0   | 0  | 0  | 0  | 5  | 0  | 1  | 0  | 0  | 0  | 1,1   |
| 10 | 0   | 3   | 0  | 22 | 6  | 20 | 56 | 1  | 25 | 17 | 1  | 8,9   |
| 38 | 0   | 0   | 1  | 7  | 4  | 24 | 18 | 41 | 21 | 14 | 2  | 8,1   |
| 53 | 5   | 5   | 8  | 6  | 31 | 61 | 61 | 7  | 0  | 2  | 0  | 13,6  |
| 11 | 3   | 6   | 2  | 2  | 10 | 13 | 55 | 0  | 1  | 1  | 0  | 10,5  |
| 28 | 0   | 33  | 0  | 10 | 25 | 39 | 74 | 29 | 21 | 18 | 1  | 12,7  |
| 22 | 5   | 13  | 0  | 4  | 21 | 79 | 7  | 93 | 44 | 15 | 0  | 14,1  |
| 9  | 40  | 93  | 14 | 82 | 56 | 50 | 56 | 28 | 40 | 1  | 10 | 29,8  |
| 99 | 3   | 100 | 60 | 66 | 73 | 79 | 40 | 31 | 5  | 5  | 32 | 33,8  |
| 5  | 33  | 36  | 40 | 72 | 30 | 49 | 65 | 8  | 12 | 4  | 5  | 17,0  |
| 5  | 153 | 175 | 44 | 11 | 28 | 20 | 46 | 12 | 2  | 4  | 5  | 24,2  |
| 15 | 3   | 63  | 37 | 20 | 55 | 14 | 11 | 26 | 10 | 25 | 0  | 11,6  |
| 4  | 0   | 62  | 19 | 39 | 28 | 2  | 28 | 24 | 9  | 10 | 0  | 9,4   |
| 0  | 7   | 40  | 6  | 6  | 32 | 18 | 5  | 4  | 4  | 0  | 0  | 6,0   |
| 1  | 8   | 16  | 0  | 4  | 9  | 11 | 4  | 6  | 0  | 0  | 0  | 3,0   |
| 3  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 11 | 29 | 0  | 0  | 1,8   |
| 5  | 1   | 0   | 0  | 0  | 0  | 0  | 0  | 11 | 6  | 0  | 1  | 1,0   |
| 0  | 0   | 0   | 0  | 2  | 0  | 0  | 8  | 0  | 0  | 0  | 5  | 1,0   |
| 0  | 1   | 1   | 0  | 1  | 0  | 2  | 8  | 0  | 0  | 0  | 4  | 1,4   |
| 11 | 4   | 2   | 0  | 0  | 0  | 5  | 13 | 14 | 0  | 1  | 11 | 3,7   |
| 13 | 0   | 0   | 0  | 0  | 0  | 2  | 16 | 4  | 0  | 0  | 9  | 3,0   |