

## I. EARTH CURRENTS

In the present report of the Observatory, six kinds of tables are published in the section Earth Currents.

The coordinates of the Observatory are:

$$\varphi = 47^{\circ}38' \qquad \lambda = 16^{\circ}43'$$

$$\Phi = 47,2^{\circ} \qquad A = 98,3^{\circ}$$

All times are given in this part in CET (i. e. GMT + 1h), nearly (—7 min) corresponding to LT.

The tables published are the following:

I. The activity indices T of the general activity for each three hour interval of the local day, as well as the character figures of single frequency bands for whole days  $K_1$ — $K_5$ .

The T-scale is linear; its scale corresponds to 1.8 mV/km. The monthly mean T-values are separately given for the North-South and East-West components. The scales for  $K_1$ — $K_5$  are follows:

| Frequency band      | limits between K-values |     |     |     |     |     |     |     |     |
|---------------------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                     | 0—1                     | 1—2 | 2—3 | 3—4 | 4—5 | 5—6 | 6—7 | 7—8 | 8—9 |
| 1. Period 0— 2 min  | 2                       | 4   | 7   | 13  | 18  | 23  | 29  | 41  | 54  |
| 2. Period 2— 6 min  | 9                       | 13  | 18  | 23  | 29  | 34  | 41  | 56  | 90  |
| 3. Period 6—12 min  | 16                      | 22  | 25  | 32  | 38  | 45  | 56  | 83  | 120 |
| 4. Period 12—24 min | 34                      | 43  | 54  | 70  | 85  | 101 | 124 | 151 | 202 |
| 5. Period 24—60 min | 29                      | 43  | 67  | 88  | 110 | 131 | 191 | 234 | 339 |

All these values are given in the table in units of  $10^{-5}$  V/km.

Values in brackets mean extrapolated ones from incomplete material, where the lacking hours have been substituted by the average of recorded hours.

II. Monthly and yearly means, and means for disturbed and quiet days of the amplitudes of the former frequency bands and of the earth current field intensity. D and Q days are the same as in section Geomagnetism. The rows 1—5 contain the average amplitudes of the five bands in  $10^{-5}$  V/km. Row 6 contains the hourly means of the earth current scalar intensity corrected for long period variation (equally in  $10^{-5}$  V/km.)

III. Results of harmonical analyses from monthly means of the earth current scalar intensity.

IV. Time of special events (common table from magnetic and earth current records).

The catalogue of Pc 1 events contains occurrence times, amplitudes and quality. Typical cases for the A, B and C events can be seen in the 1976 Observatory Report.

In this report, we publish also data from 1977 and 1978 for the Pc 1 activity. However, during a great part of these years, the recording was impossible due to restoration and building activities in the observatory.

V. Average amplitudes in 12 pulsation bands. Here numerical data are presented on the average amplitudes of pulsations for (nearly complete) months. Averages are derived from manually processed earth current records (6 mm min) for three-hour intervals of the day. Such averages (expressed in  $\mu\text{V/km}$ ) are published for each month and for the year. As the bands where amplitudes are determined have different bandwidths, amplitudes are comparable in different bands only after a correction for bandwidth. Data for the same band are, however, directly comparable. Initial data are estimated amplitudes in half-hour intervals.

VI. Micropulsation indices for the year 1978. The indices have been determined from the occurrence frequency of different period micropulsations, striving at a possibly uniform distribution of days in each of the five possible indices (1—5).

The determination of these indices can be shortly explained as follows: The days are arranged according to the occurrence frequency of each band. Index 1 is attributed to the days with lowest fifth of occurrence frequencies (0 to 20 per cent), index 2 to days with occurrence frequencies in the second lowest fifth (20 to 40 per cent) etc., index 5 to days with highest occurrence frequencies (80 to 100 per cent). It must be reminded that mainly in the lowest and highest period bands the uniform distribution could not be achieved due to insufficient occurrence of these bands on the records.

The bands are the following:

|    |    |    |        |
|----|----|----|--------|
| P1 | 0  | to | 5 sec  |
| P2 | 5  | to | 10 sec |
| P3 | 10 | to | 15 sec |

|     |    |    |         |
|-----|----|----|---------|
| P4  | 15 | to | 20 sec  |
| P5  | 20 | to | 25 sec  |
| P6  | 25 | to | 30 sec  |
| P7  | 30 | to | 40 sec  |
| P8  | 40 | to | 60 sec  |
| P9  | 60 | to | 90 sec  |
| P10 | 90 | to | 120 sec |
| P11 | 2  | to | 5 min   |
| P12 | 5  | to | 10 min  |

For a detailed description of the method of determination of these indices, see:

L. HOLLÓ, M. TÁTRALLYAY and J. VERŐ: Experimental results with the characterization of geomagnetic micropulsations (*Acta Geodaetica, Geophysica et Montanistica Hungarica*, 7(1972)15).

Daily Pc 1 indices are determined on the basis of the duration of the events. The scale of the indices is the following:

- 0 no record
- 1 no Pc 1 activity
- 2 Pc 1 activity during 1 — 40 minutes
- 3 Pc 1 activity during 41 — 100 minutes
- 4 Pc 1 activity during 101 — 160 minutes
- 5 Pc 1 activity during more than 160 minutes

Mrs. J. CZUCZOR, L. HOLLÓ and J. VERŐ took part in the processing and compilation of the data.

Records were taken in the Observatory with three instruments of the types GMG T9/1956 and GMG T14/1962, with small modifications in order to meet the demands of the use in the observatory. A general description of the processing and compilation is found in the report of the Observatory from 1966 in German by A. ÁDÁM, J. VERŐ, A. WALLNER: *Tellurische und erdmagnetische Messungen im Observatorium bei Nagycenk. Observatoriumsberichte des Geophysikalischen Forschungslaboratoriums der Ungarische Akademie der Wissenschaften vom Jahre 1966*, Sopron, 1967.

I. Activity indices  $T$  and  $K_1-K_5$ 

| January           |          |     |       |       |       |       |       |
|-------------------|----------|-----|-------|-------|-------|-------|-------|
| Day               | T        | Sum | $K_1$ | $K_2$ | $K_3$ | $K_4$ | $K_5$ |
| 1.                | 12332104 | 16  | 4     | 2     | 5     | 0     | 0     |
| 2.                | 30123294 | 24  | 4     | 2     | 5     | 2     | 5     |
| 3.                | 51013164 | 21  | 4     | 1     | 5     | 3     | 4     |
| 4.                | 43236496 | 37  | 4     | 2     | 7     | 5     | 7     |
| 5.                | 54431242 | 25  | 3     | 0     | 4     | 2     | 5     |
| 6.                | 44437572 | 36  | 4     | 2     | 4     | 3     | 2     |
| 7.                | 31147896 | 39  | 5     | 2     | 4     | 3     | 4     |
| 8.                | 33311011 | 13  | 2     | 0     | 4     | 1     | 1     |
| 9.                | 38344421 | 29  | 4     | 1     | 5     | 1     | 3     |
| 10.               | 01011010 | 4   | 2     | 0     | 4     | 0     | 0     |
| 11.               | 11112000 | 6   | 3     | 0     | 4     | 0     | 0     |
| 12.               | 01113111 | 9   | 3     | 0     | 4     | 1     | 0     |
| 13.               | 30211100 | 8   | 4     | 2     | 4     | 0     | 0     |
| 14.               | 00122320 | 10  | 1     | 0     | 4     | 1     | 0     |
| 15.               | 01124253 | 18  | 2     | 0     | 4     | 1     | 2     |
| 16.               | 22122101 | 11  | 4     | 0     | 4     | 1     | 0     |
| 17.               | 01125131 | 14  | 3     | 0     | 4     | 1     | 1     |
| 18.               | 21123211 | 13  | 3     | 0     | 4     | 1     | 2     |
| 19.               | 44253212 | 23  | 2     | 0     | 5     | 1     | 2     |
| 20.               | 21123230 | 14  | 3     | 0     | 4     | 0     | 2     |
| 21.               | 13153221 | 16  | 3     | 0     | 4     | 0     | 1     |
| 22.               | 01242049 | 22  | 4     | 1     | 5     | 0     | 5     |
| 23.               | 32144399 | 35  | 4     | 1     | 4     | 3     | 3     |
| 24.               | 34143222 | 21  | 4     | 2     | 4     | 2     | 2     |
| 25.               | 87386646 | 48  | 5     | 3     | 5     | 3     | 6     |
| 26.               | 43322667 | 33  | 4     | 2     | 5     | 3     | 4     |
| 27.               | 52324269 | 33  | 4     | 2     | 5     | 3     | 4     |
| 28.               | 21144151 | 19  | 4     | 1     | 5     | 2     | 2     |
| 29.               | 22223112 | 15  | 3     | 1     | 4     | 1     | 2     |
| 30.               | 32145224 | 23  | 5     | 2     | 5     | 2     | 5     |
| 31.               | 22243122 | 18  | 5     | 1     | 4     | 1     | 4     |
| Monthly averages: |          |     | T (N) | 2,569 |       |       |       |
|                   |          |     | T (E) | 1,661 |       |       |       |
|                   |          |     | $K_1$ | 3,52  |       |       |       |
|                   |          |     | $K_2$ | 0,97  |       |       |       |
|                   |          |     | $K_3$ | 4,45  |       |       |       |
|                   |          |     | $K_4$ | 1,52  |       |       |       |
|                   |          |     | $K_5$ | 2,52  |       |       |       |

## February

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 11150000 | 8   | 4              | 1              | 4              | 8              | 2              |
| 2.  | 21133011 | 12  | 2              | 0              | 4              | 2              | 3              |
| 3.  | 11010193 | 16  | 3              | 1              | 5              | 3              | 1              |
| 4.  | 45224962 | 34  | 5              | 2              | 5              | 4              | 6              |
| 5.  | 51123000 | 12  | 4              | 0              | 5              | 1              | 2              |
| 6.  | 13113126 | 18  | 5              | 1              | 5              | 2              | 3              |
| 7.  | 11122102 | 10  | 3              | 0              | 5              | 1              | 1              |
| 8.  | 12131110 | 10  | 3              | 0              | 4              | 1              | 1              |
| 9.  | 21143113 | 16  | 3              | 0              | 4              | 1              | 3              |
| 10. | 11111120 | 8   | 3              | 0              | 4              | 1              | 2              |
| 11. | 44233001 | 17  | 3              | 1              | 5              | 4              | 2              |
| 12. | 54448221 | 30  | 4              | 1              | 5              | 3              | 5              |
| 13. | 00111000 | 3   | 4              | 1              | 4              | 0              | 0              |
| 14. | 00000002 | 2   | 1              | 0              | 4              | 0              | 1              |
| 15. | 01133310 | 12  | 3              | 0              | 5              | 1              | 3              |
| 16. | 01124100 | 9   | 3              | 0              | 4              | 1              | 2              |
| 17. | 01211101 | 7   | 0              | 0              | 4              | 1              | 1              |
| 18. | 19783217 | 38  | 5              | 3              | 6              | 5              | 6              |
| 19. | 53345321 | 26  | 4              | 1              | 5              | 3              | 4              |
| 20. | 11120112 | 9   | 5              | 1              | 6              | 1              | 1              |
| 21. | 19778999 | 59  | 8              | 8              | 8              | 7              | 8              |
| 22. | 65369944 | 46  | 6              | 3              | 5              | 3              | 4              |
| 23. | 89768535 | 51  | 6              | 4              | 5              | 3              | 2              |
| 24. | 23245424 | 26  | 4              | 0              | 4              | 1              | 3              |
| 25. | 21534116 | 22  | 3              | 0              | 4              | 1              | 4              |
| 26. | 42222355 | 25  | 3              | 0              | 4              | 2              | 3              |
| 27. | 72243420 | 24  | 3              | 0              | 4              | 1              | 3              |
| 28. | 31145463 | 27  | 3              | 0              | 4              | 3              | 3              |

Monthly averages:

|                |       |
|----------------|-------|
| T (N)          | 2,509 |
| T (E)          | 1 562 |
| K <sub>1</sub> | 3,68  |
| K <sub>2</sub> | 1,00  |
| K <sub>3</sub> | 4,68  |
| K <sub>4</sub> | 2,11  |
| K <sub>5</sub> | 2,82  |

| March             |          |                |                |                |                |                |                |
|-------------------|----------|----------------|----------------|----------------|----------------|----------------|----------------|
| Day               | T        | Sum            | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
| 1.                | 33122211 | 15             | 3              | 0              | 4              | 1              | 2              |
| 2.                | 32132125 | 19             | 4              | 0              | 4              | 1              | 2              |
| 3.                | 32122321 | 16             | 3              | 1              | 4              | 1              | 0              |
| 4.                | 55236349 | 37             | 3              | 0              | 4              | 2              | 3              |
| 5.                | 32332031 | 17             | 4              | 0              | 4              | 2              | 2              |
| 6.                | 22155446 | 29             | 3              | 0              | 5              | 3              | 4              |
| 7.                | 11111012 | 8              | 2              | 0              | 4              | 2              | 0              |
| 8.                | 1.113111 | 9              | 3              | 0              | 4              | 1              | 1              |
| 9.                | 32054312 | 20             | 4              | 0              | 4              | 2              | 2              |
| 10.               | 65667469 | 49             | 4              | 2              | 5              | 5              | 4              |
| 11.               | 93363120 | 27             | 3              | 1              | 5              | 2              | 3              |
| 12.               | 00121011 | 6              | 2              | 0              | 4              | 0              | 0              |
| 13.               | 01121101 | 7              | 3              | 0              | 4              | 1              | 1              |
| 14.               | 00000001 | 1              | 3              | 0              | 4              | 0              | 0              |
| 15.               | 00312433 | 16             | 3              | 0              | 5              | 3              | 1              |
| 16.               | 32133202 | 16             | 4              | 0              | 5              | 1              | 2              |
| 17.               | 24747320 | 29             | 6              | 4              | 6              | 4              | 2              |
| 18.               | 31332200 | 14             | 3              | 0              | 4              | 2              | 2              |
| 19.               | 00235321 | 16             | 3              | 0              | 4              | 2              | 2              |
| 20.               | 11212102 | 10             | 4              | 1              | 4              | 2              | 1              |
| 21.               | 00112111 | 7              | 2              | 0              | 4              | 1              | 1              |
| 22.               | 10278963 | 36             | 6              | 2              | 6              | 4              | 4              |
| 23.               | 33432111 | 18             | 5              | 1              | 5              | 3              | 2              |
| 24.               | 22423122 | 18             | 3              | 0              | 5              | 3              | 1              |
| 25.               | 32153214 | 24             | 6              | 1              | 4              | 3              | 3              |
| 26.               | 53346345 | 33             | 5              | 0              | 5              | 5              | 6              |
| 27.               | 11355334 | 25             | 5              | 0              | 5              | 5              | 4              |
| 28.               | 32275734 | 33             | 4              | 1              | 5              | 5              | 6              |
| 29.               | 99505597 | 58             | 7              | 4              | 6              | 7              | 7              |
| 30.               | 54212112 | 18             | 4              | 0              | 4              | 1              | 1              |
| 31.               | 32122224 | 13             | 4              | 0              | 4              | 2              | 3              |
| Monthly averages: |          | T (N)          | 2,597          |                |                |                |                |
|                   |          | T (E)          | 1,766          |                |                |                |                |
|                   |          | K <sub>1</sub> | 3,81           |                |                |                |                |
|                   |          | K <sub>2</sub> | 0,58           |                |                |                |                |
|                   |          | K <sub>3</sub> | 4,52           |                |                |                |                |
|                   |          | K <sub>4</sub> | 2,45           |                |                |                |                |
|                   |          | K <sub>5</sub> | 2,32           |                |                |                |                |

## April

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 54244319 | 32  | 4              | 2              | 5              | 2              | 5              |
| 2.  | 99435743 | 44  | 4              | 1              | 5              | 4              | 5              |
| 3.  | 12256699 | 40  | 7              | 2              | 5              | 3              | 6              |
| 4.  | 98445101 | 32  | 5              | 2              | 5              | 4              | 7              |
| 5.  | 78899963 | 61  | 9              | 8              | 8              | 8              | 3              |
| 6.  | 22123222 | 16  | 5              | 1              | 4              | 1              | 2              |
| 7.  | 21232121 | 14  | 3              | 0              | 5              | 1              | 1              |
| 8.  | 32222134 | 19  | 5              | 0              | 4              | 2              | 2              |
| 9.  | 32112112 | 13  | 3              | 0              | 5              | 2              | 2              |
| 10. | 11233221 | 15  | 4              | 1              | 4              | 1              | 2              |
| 11. | 11131212 | 12  | 4              | 0              | 4              | 2              | 0              |
| 12. | 22332226 | 22  | 6              | 1              | 5              | 3              | 2              |
| 13. | 41223222 | 18  | 5              | 1              | 4              | 1              | 3              |
| 14. | 22333435 | 25  | 7              | 2              | 5              | 3              | 3              |
| 15. | 32224314 | 21  | 6              | 2              | 4              | 2              | 3              |
| 16. | 65442111 | 24  | 5              | 0              | 5              | 4              | 3              |
| 17. | 32322113 | 17  | 6              | 2              | 6              | 3              | 2              |
| 18. | 11121011 | 8   | 4              | 1              | 4              | 2              | 1              |
| 19. | 11121010 | 7   | 4              | 0              | 4              | 1              | 1              |
| 20. | 20111001 | 6   | 4              | 2              | 4              | 1              | 0              |
| 21. | 01113634 | 19  | 4              | 0              | 5              | 5              | 6              |
| 22. | 66845555 | 44  | 5              | 1              | 6              | 5              | 5              |
| 23. | 53333311 | 22  | 5              | 1              | 5              | 3              | 2              |
| 24. | 23212102 | 13  | 5              | 0              | 4              | 1              | 1              |
| 25. | 99999749 | 65  | 9              | 9              | 9              | 9              | 8              |
| 26. | 62122112 | 17  | 3              | 0              | 4              | 3              | 3              |
| 27. | 12433345 | 25  | 6              | 1              | 5              | 3              | 3              |
| 28. | 53544233 | 29  | 5              | 0              | 5              | 2              | 5              |
| 29. | 45546539 | 41  | 7              | 2              | 7              | 5              | 7              |
| 30. | 85346212 | 31  | 7              | 1              | 5              | 4              | 6              |

Monthly averages:    T (N) 3,008  
                               T (E) 2,404  
                               K<sub>1</sub> 5,20  
                               K<sub>2</sub> 1,43  
                               K<sub>3</sub> 5,00  
                               K<sub>4</sub> 3,00  
                               K<sub>5</sub> 3,30

| May               |          |                |                |                |                |                |                |
|-------------------|----------|----------------|----------------|----------------|----------------|----------------|----------------|
| Day               | T        | Sum            | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
| 1.                | 23423114 | 20             | 6              | 1              | 4              | 2              | 2              |
| 2.                | 64222111 | 19             | 5              | 0              | 4              | 2              | 4              |
| 3.                | 02111211 | 9              | 3              | 0              | 4              | 0              | 1              |
| 4.                | 10011012 | 6              | 3              | 1              | 4              | 0              | 1              |
| 5.                | 21112121 | 11             | 3              | 0              | 4              | 1              | 1              |
| 6.                | 10112111 | 8              | 3              | 0              | 4              | 2              | 1              |
| 7.                | 11112221 | 11             | 3              | 0              | 4              | 1              | 2              |
| 8.                | 11121212 | 11             | 4              | 1              | 4              | 0              | 2              |
| 9.                | 11543243 | 23             | 5              | 1              | 5              | 3              | 4              |
| 10.               | 11112212 | 11             | 5              | 1              | 4              | 2              | 1              |
| 11.               | 32336543 | 29             | 6              | 4              | 6              | 5              | 6              |
| 12.               | 23233212 | 18             | 6              | 3              | 5              | 3              | 3              |
| 13.               | 22222211 | 14             | 6              | 2              | 5              | 3              | 2              |
| 14.               | 12423412 | 19             | 4              | 2              | 5              | 3              | 4              |
| 15.               | 31323212 | 17             | 5              | 2              | 5              | 3              | 3              |
| 16.               | 11101011 | 6              | 4              | 1              | 4              | 1              | 0              |
| 17.               | 21111000 | 6              | 5              | 3              | 4              | 1              | 1              |
| 18.               | 11112142 | 13             | 4              | 1              | 4              | 1              | 0              |
| 19.               | 55334324 | 29             | 6              | 1              | 5              | 3              | 6              |
| 20.               | 23423223 | 21             | 5              | 1              | 5              | 2              | 2              |
| 21.               | 10111252 | 13             | 5              | 1              | 4              | 2              | 2              |
| 22.               | 34244464 | 31             | 6              | 2              | 5              | 3              | 6              |
| 23.               | 34211014 | 16             | 5              | 1              | 5              | 2              | 3              |
| 24.               | 24234235 | 25             | 5              | 1              | 4              | 2              | 4              |
| 25.               | 45544553 | 35             | 9              | 5              | 7              | 7              | 4              |
| 26.               | 44645523 | 33             | 7              | 5              | 7              | 6              | 6              |
| 27.               | 23424221 | 20             | 6              | 3              | 5              | 3              | 3              |
| 28.               | 22121231 | 14             | 5              | 1              | 4              | 1              | 2              |
| 29.               | 11212189 | 25             | 7              | 5              | 7              | 3              | 1              |
| 30.               | 96732210 | 30             | 4              | 4              | 7              | 5              | 2              |
| 31.               | 00152210 | 11             | 3              | 0              | 5              | 2              | 0              |
| Monthly averages: |          | T (N)          | 2,101          |                |                |                |                |
|                   |          | T (E)          | 1,690          |                |                |                |                |
|                   |          | K <sub>1</sub> | 4,94           |                |                |                |                |
|                   |          | K <sub>2</sub> | 1,71           |                |                |                |                |
|                   |          | K <sub>3</sub> | 4,81           |                |                |                |                |
|                   |          | K <sub>4</sub> | 2,39           |                |                |                |                |
|                   |          | K <sub>5</sub> | 2,55           |                |                |                |                |



## June

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 01100011 | 4   | 2              | 0              | 4              | 0              | 0              |
| 2.  | 11112103 | 10  | 2              | 0              | 4              | 0              | 1              |
| 3.  | 10000111 | 4   | 2              | 0              | 4              | 1              | 0              |
| 4.  | 01011121 | 7   | 2              | 0              | 4              | 1              | 0              |
| 5.  | 11102201 | 8   | 1              | 0              | 4              | 1              | 0              |
| 6.  | 01034399 | 29  | 4              | 2              | 7              | 7              | 5              |
| 7.  | 98843422 | 40  | 6              | 4              | 6              | 6              | 7              |
| 8.  | 32331222 | 18  | 6              | 2              | 5              | 2              | 2              |
| 9.  | 22344434 | 26  | 7              | 4              | 7              | 3              | 3              |
| 10. | 24322321 | 19  | 5              | 2              | 5              | 3              | 2              |
| 11. | 13212211 | 13  | 5              | 0              | 4              | 2              | 2              |
| 12. | 12210001 | 7   | 3              | 0              | 5              | 1              | 2              |
| 13. | 11113212 | 12  | 3              | 0              | 5              | 1              | 1              |
| 14. | 12221311 | 13  | 3              | 0              | 4              | 1              | 1              |
| 15. | 12212222 | 14  | 4              | 0              | 4              | 1              | 2              |
| 16. | 21123335 | 20  | 6              | 0              | 5              | 2              | 3              |
| 17. | 11522421 | 18  | 5              | 0              | 5              | 3              | 2              |
| 18. | 13111111 | 10  | 4              | 0              | 4              | 1              | 1              |
| 19. | 14110000 | 7   | 2              | 0              | 4              | 1              | 1              |
| 20. | 01113222 | 12  | 2              | 0              | 5              | 2              | 2              |
| 21. | 22422232 | 19  | 3              | 0              | 5              | 2              | 4              |
| 22. | 32312564 | 26  | 5              | 0              | 5              | 3              | 5              |
| 23. | 24622225 | 25  | 6              | 2              | 5              | 3              | 6              |
| 24. | 21121121 | 11  | 5              | 1              | 4              | 1              | 1              |
| 25. | 21212162 | 17  | 6              | 1              | 4              | 0              | 1              |
| 26. | 11113734 | 21  | 3              | 1              | 5              | 1              | 2              |
| 27. | 31222100 | 11  | 4              | 0              | 4              | 1              | 2              |
| 28. | 02211010 | 7   | 4              | 0              | 4              | 0              | 0              |
| 29. | 10012131 | 8   | 3              | 0              | 4              | 0              | 2              |
| 30. | 21111422 | 14  | 3              | 0              | 4              | 1              | 4              |

Monthly averages:

T (N) 1,712  
 T (E) 1,442  
 K<sub>1</sub> 3,87  
 K<sub>2</sub> 0,61  
 K<sub>3</sub> 4,61  
 K<sub>4</sub> 1,65  
 K<sub>5</sub> 2,06

## July

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 21321111 | 12  | 3              | 0              | 4              | 1              | 2              |
| 2.  | 12101011 | 7   | 4              | 0              | 4              | 0              | 0              |
| 3.  | 11286322 | 25  | 4              | 1              | 5              | 3              | 3              |
| 4.  | 24320001 | 12  | 2              | 0              | 4              | 1              | 2              |
| 5.  | 01121232 | 12  | 1              | 0              | 4              | 0              | 2              |
| 6.  | 13334185 | 28  | 5              | 1              | 5              | 3              | 5              |
| 7.  | 54423453 | 30  | 6              | 1              | 5              | 4              | 5              |
| 8.  | 32211222 | 15  | 5              | 1              | 5              | 2              | 1              |
| 9.  | 11111210 | 8   | 4              | 1              | 4              | 0              | 0              |
| 10. | 11102111 | 8   | 3              | 0              | 4              | 0              | 0              |
| 11. | 10110001 | 4   | 3              | 0              | 4              | 0              | 0              |
| 12. | 01203632 | 17  | 4              | 0              | 5              | 2              | 4              |
| 13. | 22532611 | 22  | 3              | 0              | 4              | 2              | 3              |
| 14. | 11111223 | 12  | 3              | 0              | 4              | 1              | 1              |
| 15. | 54321123 | 21  | 3              | 0              | 5              | 3              | 3              |
| 16. | 32122213 | 16  | 4              | 0              | 4              | 1              | 2              |
| 17. | 32323229 | 26  | 5              | 1              | 4              | 3              | 3              |
| 18. | 56333323 | 28  | 6              | 2              | 4              | 2              | 3              |
| 19. | 33432123 | 21  | 7              | 2              | 5              | 2              | 2              |
| 20. | 02326334 | 23  | 3              | 0              | 5              | 2              | 6              |
| 21. | 52111214 | 17  | 4              | 0              | 4              | 1              | 2              |
| 22. | 12112110 | 17  | 4              | 1              | 4              | 1              | 1              |
| 23. | 12211011 | 9   | 3              | 1              | 4              | 0              | 1              |
| 24. | 21101011 | 7   | 2              | 0              | 4              | 1              | 1              |
| 25. | 11110010 | 5   | 4              | 0              | 4              | 0              | 0              |
| 26. | 11210096 | 20  | 3              | 0              | 5              | 1              | 4              |
| 27. | 93314733 | 33  | 4              | 0              | 6              | 4              | 6              |
| 28. | 63111124 | 19  | 5              | 1              | 5              | 2              | 2              |
| 29. | 25434697 | 40  | 4              | 2              | 5              | 6              | 6              |
| 30. | 83222111 | 20  | 4              | 0              | 5              | 3              | 3              |
| 31. | 01100000 | 2   | 0              | 0              | 4              | 0              | 0              |

Monthly averages:

T (N) 1.935  
 T (E) 1.637  
 K<sub>1</sub> 3.71  
 K<sub>2</sub> 0.52  
 K<sub>3</sub> 4.45  
 K<sub>4</sub> 1.65  
 K<sub>5</sub> 2.23

## August

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 00027423 | 18  | 4              | 1              | 4              | 4              | 2              |
| 2.  | 31221220 | 13  | 3              | 0              | 4              | 2              | 1              |
| 3.  | 13121111 | 11  | 4              | 1              | 4              | 1              | 0              |
| 4.  | 11212215 | 15  | 3              | 0              | 4              | 1              | 3              |
| 5.  | 11110112 | 8   | 3              | 0              | 4              | 1              | 1              |
| 6.  | 32334221 | 20  | 4              | 1              | 4              | 3              | 5              |
| 7.  | 12111132 | 12  | 4              | 2              | 5              | 2              | 3              |
| 8.  | 11111111 | 8   | 4              | 1              | 4              | 1              | 2              |
| 9.  | 21112110 | 9   | 6              | 1              | 4              | 1              | 2              |
| 10. | 11011124 | 11  | 4              | 0              | 4              | 2              | 2              |
| 11. | 21212153 | 17  | 2              | 0              | 5              | 3              | 2              |
| 12. | 21343157 | 26  | 3              | 0              | 5              | 5              | 4              |
| 13. | 42579999 | 54  | 7              | 8              | 9              | 9              | 8              |
| 14. | 41121121 | 13  | 4              | 1              | 4              | 3              | 1              |
| 15. | 01111112 | 8   | 4              | 1              | 4              | 1              | 0              |
| 16. | 11111100 | 6   | 3              | 1              | 4              | 0              | 1              |
| 17. | 11111221 | 10  | 4              | 1              | 5              | 1              | 1              |
| 18. | 10112325 | 15  | 6              | 2              | 5              | 3              | 2              |
| 19. | 78695435 | 47  | 6              | 2              | 6              | 6              | 7              |
| 20. | 43757797 | 49  | 8              | 6              | 7              | 8              | 6              |
| 21. | 64327543 | 34  | 6              | 3              | 6              | 5              | 5              |
| 22. | 34533331 | 25  | 9              | 6              | 7              | 2              | 2              |
| 23. | 01222001 | 8   | 5              | 0              | 4              | 1              | 1              |
| 24. | 00122452 | 16  | 7              | 1              | 4              | 3              | 4              |
| 25. | 22364567 | 35  | 7              | 2              | 6              | 6              | 3              |
| 26. | 43252131 | 21  | 5              | 2              | 4              | 2              | 3              |
| 27. | 03332231 | 17  | 5              | 1              | 4              | 3              | 3              |
| 28. | 31133102 | 14  | 5              | 2              | 4              | 1              | 1              |
| 29. | 31859999 | 53  | 7              | 4              | 6              | 8              | 7              |
| 30. | 73432111 | 22  | 5              | 3              | 5              | 3              | 3              |
| 31. | 10224122 | 14  | 4              | 1              | 5              | 3              | 2              |

Monthly averages: T (N) 2,351  
T (E) 1,871  
K<sub>1</sub> 4,87  
K<sub>2</sub> 1,74  
K<sub>3</sub> 4,84  
K<sub>4</sub> 3,03  
K<sub>5</sub> 2,81

## September

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 11021123 | 11  | 3              | 0              | 4              | 2              | 1              |
| 2.  | 21111111 | 9   | 4              | 0              | 4              | 1              | 1              |
| 3.  | 42123011 | 14  | 3              | 0              | 5              | 4              | 2              |
| 4.  | 01243221 | 15  | 7              | 3              | 5              | 3              | 3              |
| 5.  | 25233326 | 26  | 5              | 2              | 5              | 3              | 5              |
| 6.  | 32222200 | 13  | 4              | 0              | 5              | 3              | 3              |
| 7.  | 22111011 | 9   | 6              | 2              | 4              | 1              | 1              |
| 8.  | 10121122 | 10  | 3              | 0              | 4              | 2              | 1              |
| 9.  | 10101111 | 6   | 3              | 0              | 4              | 1              | 1              |
| 10. | 11112211 | 10  | 2              | 0              | 5              | 3              | 2              |
| 11. | 10132611 | 15  | 3              | 0              | 5              | 2              | 3              |
| 12. | 21011121 | 9   | 3              | 0              | 5              | 1              | 1              |
| 13. | 52214112 | 18  | 4              | 0              | 4              | 2              | 2              |
| 14. | 00131034 | 12  | 4              | 2              | 5              | 3              | 1              |
| 15. | 22155121 | 19  | 5              | 0              | 6              | 4              | 2              |
| 16. | 33375122 | 26  | 6              | 1              | 5              | 3              | 4              |
| 17. | 13333313 | 20  | 6              | 1              | 5              | 4              | 3              |
| 18. | 55959964 | 52  | 6              | 3              | 7              | 8              | 7              |
| 19. | 22211221 | 13  | 3              | 0              | 5              | 2              | 2              |
| 20. | 31229634 | 30  | 6              | 0              | 5              | 5              | 5              |
| 21. | 84322131 | 24  | 3              | 0              | 5              | 3              | 3              |
| 22. | 22112111 | 11  | 4              | 0              | 5              | 2              | 2              |
| 23. | 01112210 | 8   | 3              | 0              | 4              | 2              | 1              |
| 24. | 02132316 | 18  | 4              | 1              | 5              | 2              | 2              |
| 25. | 14220134 | 17  | 4              | 0              | 5              | 1              | 5              |
| 26. | 33343243 | 25  | 5              | 0              | 5              | 3              | 5              |
| 27. | 36334122 | 24  | 4              | 0              | 5              | 3              | 4              |
| 28. | 11311123 | 13  | 3              | 0              | 5              | 2              | 3              |
| 29. | 32314122 | 18  | 6              | 1              | 5              | 3              | 4              |
| 30. | 34553314 | 28  | 5              | 1              | 5              | 5              | 4              |

Monthly averages: T (N) 2,100  
T (E) 1,504  
K<sub>1</sub> 4,23  
K<sub>2</sub> 0,57  
K<sub>3</sub> 4,87  
K<sub>4</sub> 2,77  
K<sub>5</sub> 2,77

## October

| Day | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
|-----|----------|-----|----------------|----------------|----------------|----------------|----------------|
| 1.  | 31122100 | 10  | 3              | 0              | 4              | 1              | 1              |
| 2.  | 10022141 | 11  | 3              | 0              | 4              | 2              | 2              |
| 3.  | 33311342 | 20  | 6              | 2              | 4              | 2              | 3              |
| 4.  | 31291000 | 16  | 5              | 0              | 6              | 2              | 4              |
| 5.  | 00212123 | 11  | 4              | 0              | 5              | 2              | 2              |
| 6.  | 22229893 | 37  | 5              | 3              | 7              | 6              | 4              |
| 7.  | 24847627 | 42  | 5              | 3              | 7              | 7              | 6              |
| 8.  | 59257566 | 45  | 5              | 1              | 5              | 6              | 7              |
| 9.  | 53231242 | 22  | 4              | 0              | 5              | 3              | 3              |
| 10. | 12232342 | 19  | 4              | 2              | 5              | 2              | 3              |
| 11. | 10123111 | 10  | 3              | 0              | 4              | 2              | 2              |
| 12. | 01122113 | 11  | 2              | 0              | 4              | 1              | 2              |
| 13. | 52462132 | 25  | 6              | 1              | 5              | 5              | 3              |
| 14. | 21351110 | 14  | 4              | 0              | 5              | 3              | 1              |
| 15. | 00128121 | 15  | 3              | 0              | 5              | 3              | 2              |
| 16. | 11143110 | 12  | 4              | 0              | 4              | 3              | 1              |
| 17. | 11121101 | 8   | 2              | 0              | 4              | 0              | 1              |
| 18. | 10110000 | 3   | 0              | 0              | 4              | 0              | 0              |
| 19. | 10017212 | 14  | 1              | 0              | 5              | 2              | 1              |
| 20. | 10121111 | 8   | 2              | 0              | 4              | 1              | 2              |
| 21. | 22132317 | 21  | 2              | 0              | 4              | 1              | 5              |
| 22. | 32242341 | 21  | 3              | 0              | 4              | 2              | 6              |
| 23. | 11023101 | 9   | 3              | 0              | 4              | 2              | 3              |
| 24. | 11233210 | 13  | 2              | 0              | 5              | 3              | 2              |
| 25. | 01233122 | 14  | 2              | 0              | 4              | 2              | 3              |
| 26. | 12122112 | 12  | 3              | 0              | 4              | 2              | 2              |
| 27. | 00121112 | 8   | 3              | 0              | 4              | 0              | 2              |
| 28. | 02122003 | 10  | 2              | 0              | 4              | 1              | 2              |
| 29. | 32111122 | 13  | 2              | 0              | 4              | 1              | 4              |
| 30. | 21120000 | 6   | 3              | 0              | 4              | 1              | 0              |
| 31. | 00223111 | 10  | 3              | 0              | 5              | 2              | 1              |

Monthly averages: T (N) 1,883  
T (E) 1,121  
K<sub>1</sub> 3,23  
K<sub>2</sub> 0,39  
K<sub>3</sub> 4,58  
K<sub>4</sub> 2,26  
K<sub>5</sub> 2,58

| November          |          |                |                |                |                |                |                |
|-------------------|----------|----------------|----------------|----------------|----------------|----------------|----------------|
| Day               | T        | Sum            | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
| 1.                | 21155233 | 22             | 3              | 1              | 6              | 3              | 6              |
| 2.                | 22233220 | 16             | 3              | 0              | 5              | 3              | 3              |
| 3.                | 00133123 | 13             | 4              | 0              | 4              | 2              | 2              |
| 4.                | 23222121 | 15             | 3              | 1              | 5              | 3              | 1              |
| 5.                | 00001011 | 3              | 3              | 0              | 4              | 0              | 0              |
| 6.                | 00011000 | 2              | 0              | 0              | 4              | 1              | 0              |
| 7.                | 01112231 | 14             | 2              | 0              | 4              | 2              | 2              |
| 8.                | 11245111 | 16             | 2              | 0              | 5              | 2              | 2              |
| 9.                | 12235445 | 26             | 3              | 1              | 5              | 4              | 6              |
| 10.               | 03131112 | 12             | 3              | 0              | 5              | 3              | 1              |
| 11.               | 14234432 | 23             | 4              | 2              | 5              | 2              | 6              |
| 12.               | 01223111 | 11             | 3              | 1              | 5              | 3              | 1              |
| 13.               | 34355859 | 42             | 5              | 3              | 6              | 4              | 8              |
| 14.               | 94121000 | 17             | 0              | 0              | 4              | 2              | 3              |
| 15.               | 01112000 | 5              | 0              | 0              | 3              | 1              | 0              |
| 16.               | 11322121 | 13             | 2              | 1              | 4              | 2              | 2              |
| 17.               | 31321022 | 14             | 2              | 0              | 4              | 1              | 1              |
| 18.               | 03121100 | 8              | 2              | 0              | 4              | 1              | 0              |
| 19.               | 00122102 | 8              | 2              | 0              | 4              | 1              | 0              |
| 20.               | 10123221 | 12             | 2              | 0              | 4              | 1              | 0              |
| 21.               | 11010100 | 4              | 1              | 0              | 4              | 0              | 0              |
| 22.               | 00011000 | 2              | 0              | 0              | 3              | 0              | 0              |
| 23.               | 00012011 | 5              | 1              | 0              | 3              | 0              | 0              |
| 24.               | 12136235 | 23             | 2              | 0              | 4              | 2              | 4              |
| 25.               | 24111001 | 10             | 2              | 0              | 4              | 1              | 2              |
| 26.               | 10001121 | 6              | 2              | 0              | 4              | 1              | 1              |
| 27.               | 12111000 | 6              | 2              | 0              | 4              | 1              | 0              |
| 28.               | 00000000 | 0              | 3              | 0              | 4              | 0              | 0              |
| 29.               | 00011221 | 7              | 2              | 0              | 4              | 1              | 1              |
| 30.               | 01964321 | 26             | 2              | 2              | 5              | 2              | 3              |
| Monthly averages: |          | T (N)          | 1,488          | T (E)          | 0,950          |                |                |
|                   |          | K <sub>1</sub> | 2,17           | K <sub>2</sub> | 0,40           |                |                |
|                   |          | K <sub>3</sub> | 4,30           | K <sub>4</sub> | 1,63           |                |                |
|                   |          | K <sub>5</sub> | 1,83           |                |                |                |                |

| December |          |     |                |                |                |                |                |
|----------|----------|-----|----------------|----------------|----------------|----------------|----------------|
| Day      | T        | Sum | K <sub>1</sub> | K <sub>2</sub> | K <sub>3</sub> | K <sub>4</sub> | K <sub>5</sub> |
| 1.       | 21132212 | 14  | 0              | 0              | 4              | 2              | 1              |
| 2.       | 31133011 | 13  | 2              | 0              | 4              | 1              | 2              |
| 3.       | 11222000 | 8   | 1              | 0              | 4              | 0              | 0              |
| 4.       | 11223491 | 23  | 2              | 0              | 4              | 2              | 5              |
| 5.       | 11121100 | 17  | 2              | 0              | 4              | 0              | 2              |
| 6.       | 11021001 | 6   | 2              | 0              | 3              | 1              | 1              |
| 7.       | 00001001 | 2   | 2              | 0              | 4              | 0              | 0              |
| 8.       | 01134221 | 14  | 3              | 1              | 5              | 2              | 4              |
| 9.       | 22243101 | 15  | 4              | 1              | 5              | 2              | 1              |
| 10.      | 00121131 | 9   | 3              | 0              | 4              | 1              | 1              |
| 11.      | 11011030 | 7   | 3              | 0              | 4              | 0              | 1              |
| 12.      | 10021111 | 7   | 1              | 0              | 4              | 0              | 1              |
| 13.      | 00011011 | 4   | 1              | 0              | 4              | 0              | 0              |
| 14.      | 00011011 | 4   | 1              | 0              | 4              | 0              | 1              |
| 15.      | 01033111 | 10  | 0              | 0              | 4              | 1              | 2              |
| 16.      | 11122111 | 10  | 1              | 0              | 4              | 1              | 2              |
| 17.      | 22223222 | 17  | 3              | 0              | 4              | 3              | 3              |
| 18.      | 11122001 | 8   | 2              | 0              | 5              | 2              | 1              |
| 19.      | 00111032 | 8   | 2              | 0              | 4              | 0              | 2              |
| 20.      | 00011211 | 6   | 0              | 0              | 4              | 1              | 1              |
| 21.      | 00010111 | 4   | 2              | 0              | 4              | 1              | 1              |
| 22.      | 31144132 | 19  | 3              | 0              | 4              | 2              | 3              |
| 23.      | 00011001 | 3   | 2              | 0              | 4              | 0              | 0              |
| 24.      | 31121211 | 12  | 2              | 1              | 4              | 1              | 2              |
| 25.      | 00000002 | 2   | 1              | 0              | 3              | 0              | 0              |
| 26.      | 01123325 | 17  | 4              | 2              | 4              | 2              | 1              |
| 27.      | 03144420 | 18  | 5              | 2              | 5              | 3              | 2              |
| 28.      | 01135315 | 19  | 4              | 2              | 4              | 2              | 2              |
| 29.      | 36264674 | 38  | 4              | 3              | 6              | 3              | 6              |
| 30.      | 53134252 | 25  | 4              | 1              | 4              | 3              | 4              |
| 31.      | 11212134 | 15  | 4              | 1              | 4              | 1              | 2              |

Monthly averages:

|                |       |
|----------------|-------|
| T (N)          | 1,427 |
| T (E)          | 0,842 |
| K <sub>1</sub> | 2,25  |
| K <sub>2</sub> | 0,45  |
| K <sub>3</sub> | 4,13  |
| K <sub>4</sub> | 1,19  |
| K <sub>5</sub> | 1,75  |

## II. Average amplitudes for different periods

| Hour<br>Parameter | 0  | 1   | 2  | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  |
|-------------------|----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| January North     |    |     |    |     |     |     |     |     |     |     |     |     |
| 1.                | 3  | 5   | 5  | 6   | 4   | 6   | 13  | 12  | 18  | 16  | 10  | 11  |
| 2.                | 4  | 5   | 5  | 4   | 3   | 3   | 5   | 8   | 16  | 16  | 9   | 11  |
| 3.                | 38 | 37  | 36 | 37  | 35  | 34  | 36  | 35  | 37  | 40  | 37  | 38  |
| 4.                | 55 | 40  | 46 | 35  | 37  | 42  | 35  | 36  | 35  | 38  | 39  | 48  |
| 5.                | 48 | 63  | 62 | 64  | 62  | 46  | 34  | 31  | 33  | 48  | 54  | 85  |
| 6.                | +6 | +3  | +6 | -13 | -27 | -25 | -22 | -26 | +19 | +22 | -15 | -42 |
| January East      |    |     |    |     |     |     |     |     |     |     |     |     |
| 1.                | 8  | 5   | 4  | 3   | 5   | 8   | 9   | 14  | 17  | 21  | 16  | 20  |
| 2.                | 5  | 4   | 5  | 3   | 4   | 8   | 5   | 9   | 12  | 14  | 13  | 13  |
| 3.                | 37 | 36  | 33 | 35  | 36  | 33  | 37  | 36  | 35  | 37  | 37  | 37  |
| 4.                | 43 | 33  | 37 | 24  | 30  | 35  | 27  | 30  | 32  | 45  | 36  | 44  |
| 5.                | 85 | 49  | 39 | 78  | 53  | 42  | 33  | 26  | 23  | 12  | 19  | 30  |
| 6.                | -3 | +9  | -1 | -6  | +5  | -10 | -14 | -24 | +3  | +40 | +46 | +30 |
| February North    |    |     |    |     |     |     |     |     |     |     |     |     |
| 1.                | 3  | 6   | 5  | 5   | 5   | 9   | 12  | 15  | 16  | 10  | 9   | 14  |
| 2.                | 2  | 6   | 3  | 2   | 5   | 7   | 11  | 15  | 17  | 10  | 7   | 10  |
| 3.                | 35 | 37  | 36 | 37  | 39  | 39  | 39  | 48  | 41  | 46  | 37  | 39  |
| 4.                | 39 | 35  | 60 | 53  | 44  | 65  | 44  | 53  | 58  | 52  | 47  | 65  |
| 5.                | 76 | 100 | 64 | 67  | 81  | 37  | 50  | 36  | 53  | 64  | 136 | 96  |
| 6.                | +9 | -1  | +7 | +6  | -9  | -10 | -13 | +13 | +57 | +22 | -39 | -82 |
| February East     |    |     |    |     |     |     |     |     |     |     |     |     |
| 1.                | 6  | 10  | 8  | 5   | 10  | 12  | 14  | 18  | 15  | 18  | 19  | 23  |
| 2.                | 5  | 3   | 3  | 5   | 6   | 10  | 10  | 15  | 14  | 10  | 10  | 14  |
| 3.                | 36 | 37  | 37 | 39  | 37  | 40  | 36  | 37  | 39  | 37  | 34  | 38  |
| 4.                | 45 | 34  | 48 | 41  | 48  | 51  | 37  | 37  | 29  | 44  | 44  | 42  |
| 5.                | 51 | 66  | 54 | 59  | 45  | 25  | 44  | 42  | 56  | 39  | 62  | 60  |
| 6.                | -4 | +6  | -3 | +1  | +9  | -12 | -13 | +6  | +41 | +53 | +51 | +34 |



*and hourly means of earth current elements*

| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | Averages |
|----|----|----|----|----|----|----|----|----|----|----|----|----------|
|----|----|----|----|----|----|----|----|----|----|----|----|----------|

Component

|     |     |     |     |     |     |     |     |     |     |     |     |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 14  | 13  | 12  | 11  | 7   | 3   | 6   | 5   | 6   | 3   | 4   | 5   | 8,3  |
| 13  | 12  | 9   | 10  | 6   | 3   | 6   | 6   | 6   | 4   | 5   | 5   | 7,2  |
| 38  | 38  | 37  | 34  | 37  | 37  | 33  | 36  | 36  | 35  | 34  | 38  | 36,4 |
| 51  | 57  | 41  | 34  | 45  | 34  | 42  | 59  | 51  | 45  | 37  | 47  | 43,0 |
| 73  | 48  | 62  | 85  | 49  | 56  | 76  | 142 | 100 | 87  | 104 | 89  | 66,8 |
| —70 | —41 | —17 | +14 | +28 | +24 | +31 | +27 | +32 | +39 | +24 | +24 |      |

Component

|     |     |    |    |     |    |     |     |     |    |    |     |      |
|-----|-----|----|----|-----|----|-----|-----|-----|----|----|-----|------|
| 22  | 23  | 19 | 17 | 14  | 6  | 6   | 10  | 8   | 5  | 6  | 11  | 11,5 |
| 17  | 17  | 11 | 11 | 10  | 5  | 7   | 6   | 5   | 6  | 3  | 8   | 8,5  |
| 38  | 38  | 38 | 35 | 36  | 35 | 53  | 37  | 36  | 37 | 36 | 36  | 36,7 |
| 35  | 37  | 30 | 22 | 26  | 42 | 55  | 31  | 40  | 44 | 42 | 34  | 35,5 |
| 39  | 25  | 37 | 65 | 64  | 35 | 59  | 123 | 107 | 55 | 97 | 116 | 54,5 |
| +23 | +10 | —2 | —8 | —13 | —7 | —26 | —23 | —15 | +5 | —7 | —15 | 0    |

Component

|     |     |     |     |     |     |     |     |     |     |     |    |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|------|
| 13  | 8   | 10  | 10  | 8   | 6   | 4   | 5   | 5   | 5   | 8   | 3  | 8,1  |
| 10  | 6   | 5   | 8   | 10  | 12  | 6   | 5   | 5   | 6   | 9   | 3  | 7,6  |
| 39  | 44  | 38  | 39  | 35  | 48  | 41  | 37  | 38  | 39  | 39  | 37 | 39,2 |
| 57  | 66  | 56  | 55  | 53  | 35  | 46  | 41  | 45  | 52  | 54  | 48 | 50,9 |
| 114 | 68  | 96  | 69  | 44  | 61  | 66  | 82  | 78  | 91  | 129 | 75 | 76,5 |
| —88 | —71 | —11 | +18 | +40 | +19 | +16 | +22 | +25 | +41 | +27 | +4 |      |

Component

|    |     |     |     |    |     |     |     |     |    |     |    |      |
|----|-----|-----|-----|----|-----|-----|-----|-----|----|-----|----|------|
| 20 | 21  | 19  | 20  | 19 | 8   | 7   | 6   | 6   | 8  | 18  | 8  | 13,3 |
| 15 | 12  | 10  | 14  | 12 | 13  | 4   | 7   | 10  | 8  | 15  | 8  | 9,7  |
| 39 | 50  | 37  | 39  | 49 | 48  | 37  | 37  | 45  | 37 | 43  | 38 | 39,2 |
| 64 | 43  | 23  | 43  | 49 | 33  | 42  | 42  | 74  | 51 | 37  | 46 | 43,7 |
| 33 | 46  | 68  | 46  | 30 | 45  | 53  | 66  | 46  | 73 | 107 | 77 | 53,8 |
| —8 | —12 | —19 | —25 | —1 | —29 | —24 | —20 | —26 | —8 | +2  | +1 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| March North       |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 4   | 5   | 6   | 5   | 9   | 8   | 10  | 16  | 15  | 13  | 7   | 12   |
| 2.                | 4   | 2   | 4   | 4   | 6   | 5   | 9   | 13  | 13  | 10  | 7   | 11   |
| 3.                | 36  | 37  | 37  | 37  | 36  | 38  | 37  | 45  | 38  | 38  | 39  | 42   |
| 4.                | 39  | 58  | 49  | 42  | 45  | 43  | 44  | 57  | 63  | 62  | 62  | 78   |
| 5.                | 95  | 69  | 57  | 75  | 28  | 20  | 40  | 33  | 42  | 57  | 48  | 89   |
| 6.                | +8  | +16 | -8  | +7  | -5  | -4  | +2  | +30 | +65 | +19 | -72 | -131 |
| March East        |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 9   | 5   | 3   | 5   | 6   | 8   | 16  | 21  | 27  | 24  | 19  | 22   |
| 2.                | 9   | 3   | 1   | 3   | 2   | 8   | 6   | 8   | 14  | 16  | 15  | 13   |
| 3.                | 35  | 36  | 34  | 36  | 37  | 36  | 37  | 41  | 37  | 38  | 41  | 38   |
| 4.                | 45  | 59  | 41  | 35  | 33  | 27  | 34  | 39  | 42  | 44  | 61  | 61   |
| 5.                | 103 | 71  | 60  | 59  | 33  | 41  | 33  | 32  | 29  | 50  | 31  | 61   |
| 6.                | -10 | +13 | +8  | -13 | +12 | +6  | -5  | -3  | +35 | +60 | +42 | +28  |
| April North       |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 10  | 11  | 9   | 8   | 13  | 23  | 27  | 25  | 28  | 28  | 23  | 24   |
| 2.                | 6   | 8   | 5   | 6   | 10  | 20  | 26  | 29  | 27  | 28  | 22  | 30   |
| 3.                | 36  | 38  | 39  | 40  | 40  | 49  | 40  | 64  | 55  | 55  | 56  | 60   |
| 4.                | 54  | 82  | 50  | 44  | 44  | 75  | 110 | 69  | 72  | 66  | 70  | 94   |
| 5.                | 154 | 92  | 125 | 149 | 91  | 63  | 61  | 76  | 38  | 61  | 64  | 53   |
| 6.                | +17 | +18 | +24 | +8  | +9  | -10 | +18 | +40 | +29 | -12 | -97 | -151 |
| April East        |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 16  | 12  | 12  | 15  | 16  | 26  | 36  | 37  | 36  | 40  | 43  | 39   |
| 2.                | 6   | 7   | 5   | 5   | 8   | 12  | 21  | 28  | 32  | 31  | 31  | 36   |
| 3.                | 43  | 41  | 39  | 42  | 43  | 46  | 44  | 66  | 67  | 54  | 57  | 61   |
| 4.                | 62  | 50  | 70  | 50  | 53  | 62  | 39  | 59  | 52  | 78  | 92  | 93   |
| 5.                | 95  | 119 | 57  | 98  | 97  | 61  | 74  | 41  | 34  | 33  | 32  | 30   |
| 6.                | +24 | +19 | +1  | +10 | +8  | -2  | -12 | +11 | +33 | +41 | +15 | -6   |

| 12        | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23 | Averages |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----------|
| Component |     |     |     |     |     |     |     |     |     |     |    |          |
| 13        | 10  | 8   | 6   | 5   | 3   | 3   | 2   | 2   | 3   | 6   | 4  | 7,2      |
| 12        | 8   | 5   | 6   | 3   | 3   | 3   | 0   | 2   | 2   | 6   | 4  | 5,9      |
| 42        | 39  | 35  | 40  | 37  | 35  | 37  | 37  | 37  | 35  | 35  | 34 | 37,6     |
| 58        | 85  | 48  | 65  | 51  | 39  | 50  | 63  | 52  | 53  | 72  | 44 | 55,1     |
| 84        | 80  | 96  | 53  | 55  | 74  | 46  | 65  | 49  | 69  | 93  | 80 | 62,5     |
| -129      | -90 | -17 | +34 | +75 | +58 | +39 | +23 | +32 | +20 | +25 | +1 |          |

|           |    |     |     |    |     |     |     |     |    |     |    |      |
|-----------|----|-----|-----|----|-----|-----|-----|-----|----|-----|----|------|
| Component |    |     |     |    |     |     |     |     |    |     |    |      |
| 27        | 21 | 20  | 16  | 13 | 9   | 7   | 3   | 3   | 7  | 11  | 9  | 13,0 |
| 17        | 11 | 9   | 8   | 8  | 6   | 3   | 2   | 3   | 1  | 8   | 6  | 7,6  |
| 38        | 39 | 37  | 37  | 38 | 37  | 38  | 36  | 37  | 35 | 37  | 36 | 37,1 |
| 55        | 42 | 53  | 64  | 63 | 41  | 48  | 37  | 41  | 46 | 45  | 42 | 45,7 |
| 44        | 64 | 49  | 45  | 30 | 59  | 57  | 89  | 67  | 71 | 67  | 96 | 55,8 |
| +1        | -6 | -20 | -14 | -3 | -13 | -46 | -38 | -11 | -6 | -19 | +1 |      |

|           |      |     |     |     |     |     |     |     |     |     |     |      |
|-----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Component |      |     |     |     |     |     |     |     |     |     |     |      |
| 17        | 16   | 14  | 11  | 14  | 11  | 3   | 4   | 8   | 7   | 6   | 6   | 14,4 |
| 16        | 12   | 9   | 7   | 11  | 10  | 2   | 1   | 6   | 6   | 5   | 4   | 12,6 |
| 48        | 49   | 44  | 44  | 47  | 47  | 38  | 37  | 39  | 37  | 37  | 37  | 44,6 |
| 79        | 97   | 103 | 67  | 59  | 67  | 28  | 36  | 52  | 56  | 44  | 53  | 65,5 |
| 73        | 67   | 67  | 68  | 54  | 70  | 92  | 85  | 82  | 119 | 125 | 136 | 86,0 |
| -164      | -101 | -16 | +55 | +68 | +89 | +48 | +27 | +20 | +23 | +32 | +26 |      |

|           |    |     |    |     |     |     |     |     |     |     |     |      |
|-----------|----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Component |    |     |    |     |     |     |     |     |     |     |     |      |
| 35        | 33 | 31  | 27 | 26  | 16  | 8   | 7   | 10  | 13  | 13  | 11  | 23,2 |
| 23        | 19 | 18  | 16 | 16  | 15  | 5   | 3   | 7   | 8   | 5   | 10  | 15,3 |
| 56        | 48 | 47  | 48 | 44  | 49  | 37  | 38  | 36  | 38  | 38  | 44  | 47,0 |
| 58        | 91 | 83  | 61 | 55  | 62  | 40  | 40  | 42  | 59  | 51  | 61  | 61,0 |
| 61        | 48 | 76  | 60 | 56  | 95  | 75  | 64  | 107 | 123 | 103 | 92  | 72,0 |
| -11       | -5 | +13 | -9 | -24 | -28 | -14 | -27 | -16 | -19 | -15 | +12 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| May North         |     |     |     |     |     |     |     |     |     |      |      |      |
| 1.                | 7   | 8   | 13  | 13  | 16  | 18  | 18  | 21  | 16  | 16   | 11   | 12   |
| 2.                | 8   | 6   | 16  | 12  | 12  | 15  | 18  | 16  | 16  | 9    | 10   | 7    |
| 3.                | 39  | 37  | 47  | 37  | 38  | 40  | 42  | 43  | 39  | 39   | 39   | 38   |
| 4.                | 46  | 64  | 48  | 40  | 41  | 78  | 53  | 58  | 57  | 55   | 61   | 64   |
| 5.                | 70  | 49  | 99  | 72  | 69  | 51  | 96  | 48  | 66  | 67   | 71   | 66   |
| 6.                | -5  | +20 | +13 | +14 | +39 | +81 | +61 | +22 | -32 | -103 | -147 | -167 |
| May East          |     |     |     |     |     |     |     |     |     |      |      |      |
| 1.                | 10  | 12  | 14  | 15  | 16  | 21  | 35  | 35  | 33  | 30   | 26   | 31   |
| 2.                | 9   | 6   | 17  | 6   | 8   | 18  | 21  | 16  | 16  | 20   | 19   | 19   |
| 3.                | 46  | 39  | 51  | 38  | 37  | 36  | 36  | 44  | 46  | 37   | 51   | 39   |
| 4.                | 46  | 61  | 53  | 36  | 33  | 41  | 42  | 51  | 35  | 57   | 56   | 59   |
| 5.                | 57  | 48  | 43  | 57  | 53  | 34  | 38  | 32  | 45  | 33   | 45   | 49   |
| 6.                | +2  | +10 | +17 | -4  | -7  | +5  | +21 | +15 | +30 | +8   | -20  | -35  |
| June North        |     |     |     |     |     |     |     |     |     |      |      |      |
| 1.                | 7   | 6   | 8   | 10  | 10  | 11  | 10  | 14  | 14  | 11   | 8    | 10   |
| 2.                | 7   | 5   | 7   | 8   | 8   | 8   | 8   | 12  | 7   | 7    | 3    | 4    |
| 3.                | 38  | 36  | 37  | 37  | 42  | 39  | 40  | 38  | 41  | 38   | 37   | 36   |
| 4.                | 35  | 59  | 32  | 35  | 53  | 47  | 71  | 50  | 69  | 40   | 41   | 43   |
| 5.                | 77  | 38  | 56  | 37  | 37  | 77  | 79  | 65  | 24  | 31   | 55   | 46   |
| 6.                | +11 | +5  | +3  | +13 | +51 | +95 | +71 | +48 | +6  | -90  | -153 | -165 |
| June East         |     |     |     |     |     |     |     |     |     |      |      |      |
| 1.                | 7   | 6   | 10  | 10  | 11  | 12  | 19  | 21  | 23  | 25   | 25   | 23   |
| 2.                | 5   | 4   | 7   | 5   | 3   | 8   | 10  | 12  | 14  | 12   | 13   | 10   |
| 3.                | 37  | 36  | 35  | 37  | 36  | 36  | 39  | 40  | 39  | 35   | 39   | 37   |
| 4.                | 32  | 50  | 30  | 38  | 25  | 35  | 25  | 39  | 51  | 41   | 47   | 49   |
| 5.                | 65  | 36  | 44  | 17  | 47  | 63  | 55  | 31  | 36  | 20   | 36   | 42   |
| 6.                | +13 | +11 | +13 | -3  | -10 | +19 | +36 | +44 | +46 | +19  | -10  | -33  |

| 12        | 13  | 14  | 15  | 16  | 17   | 18  | 19  | 20 | 21 | 22  | 23 | Averages |
|-----------|-----|-----|-----|-----|------|-----|-----|----|----|-----|----|----------|
| Component |     |     |     |     |      |     |     |    |    |     |    |          |
| 10        | 14  | 7   | 7   | 5   | 4    | 3   | 5   | 6  | 8  | 12  | 5  | 10,6     |
| 7         | 7   | 3   | 3   | 3   | 3    | 2   | 2   | 3  | 3  | 14  | 5  | 8,3      |
| 38        | 38  | 39  | 38  | 37  | 35   | 34  | 35  | 37 | 37 | 53  | 38 | 39,1     |
| 80        | 51  | 65  | 56  | 42  | 37   | 39  | 40  | 51 | 43 | 57  | 55 | 53,5     |
| 70        | 99  | 88  | 62  | 64  | 60   | 41  | 60  | 62 | 77 | 68  | 83 | 69,1     |
| -139      | -68 | +23 | +63 | +93 | +109 | +67 | +39 | +1 | -6 | +22 | -2 |          |

|           |     |     |    |     |     |     |     |    |    |    |    |      |
|-----------|-----|-----|----|-----|-----|-----|-----|----|----|----|----|------|
| Component |     |     |    |     |     |     |     |    |    |    |    |      |
| 29        | 32  | 27  | 20 | 16  | 14  | 13  | 10  | 10 | 12 | 13 | 9  | 20,2 |
| 20        | 20  | 18  | 10 | 12  | 10  | 6   | 3   | 6  | 9  | 15 | 5  | 12,8 |
| 37        | 39  | 40  | 38 | 39  | 37  | 37  | 36  | 38 | 39 | 58 | 38 | 40,7 |
| 67        | 51  | 50  | 64 | 46  | 38  | 42  | 39  | 48 | 57 | 71 | 63 | 50,2 |
| 69        | 47  | 69  | 54 | 73  | 81  | 51  | 71  | 49 | 57 | 53 | 51 | 52,4 |
| -5        | +20 | +27 | -3 | -15 | -13 | -11 | -20 | -5 | -9 | -3 | -6 |      |

|           |     |     |     |     |     |     |     |    |     |     |     |      |
|-----------|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|------|
| Component |     |     |     |     |     |     |     |    |     |     |     |      |
| 5         | 4   | 5   | 4   | 2   | 1   | 2   | 4   | 9  | 8   | 7   | 5   | 7,2  |
| 1         | 0   | 2   | 4   | 0   | 0   | 6   | 5   | 13 | 11  | 6   | 5   | 5,8  |
| 37        | 35  | 36  | 37  | 37  | 37  | 35  | 40  | 47 | 37  | 38  | 46  | 38,3 |
| 45        | 49  | 47  | 49  | 39  | 33  | 38  | 34  | 59 | 50  | 52  | 85  | 48,1 |
| 44        | 67  | 47  | 55  | 65  | 68  | 53  | 57  | 68 | 70  | 66  | 62  | 56,0 |
| -127      | -83 | -26 | +42 | +84 | +87 | +64 | +18 | +7 | +16 | +15 | +10 |      |

|           |     |    |     |     |     |     |     |     |    |     |     |      |
|-----------|-----|----|-----|-----|-----|-----|-----|-----|----|-----|-----|------|
| Component |     |    |     |     |     |     |     |     |    |     |     |      |
| 19        | 19  | 19 | 13  | 13  | 7   | 7   | 7   | 14  | 11 | 8   | 10  | 14,0 |
| 13        | 8   | 9  | 7   | 7   | 2   | 3   | 6   | 11  | 11 | 8   | 6   | 8,1  |
| 40        | 43  | 40 | 38  | 38  | 38  | 34  | 37  | 46  | 41 | 38  | 38  | 38,2 |
| 36        | 45  | 65 | 41  | 41  | 35  | 41  | 43  | 79  | 55 | 46  | 43  | 42,3 |
| 35        | 41  | 39 | 76  | 83  | 92  | 76  | 70  | 74  | 49 | 52  | 100 | 53,3 |
| -24       | -11 | -2 | -13 | -21 | -14 | -26 | -31 | -21 | -2 | +10 | +13 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| July North        |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 8   | 10  | 10  | 9   | 13  | 13  | 15  | 12  | 15  | 11  | 11   | 8    |
| 2.                | 14  | 13  | 15  | 5   | 8   | 9   | 11  | 8   | 8   | 6   | 5    | 2    |
| 3.                | 37  | 38  | 37  | 36  | 36  | 38  | 37  | 37  | 36  | 36  | 36   | 37   |
| 4.                | 42  | 45  | 45  | 35  | 39  | 58  | 42  | 45  | 39  | 43  | 40   | 44   |
| 5.                | 77  | 96  | 62  | 39  | 38  | 55  | 8   | 39  | 37  | 20  | 36   | 48   |
| 6.                | +25 | +24 | +16 | +15 | +34 | +84 | +78 | +40 | -7  | -73 | -143 | -188 |
| July East         |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 12  | 8   | 9   | 8   | 6   | 13  | 21  | 20  | 20  | 22  | 21   | 23   |
| 2.                | 5   | 3   | 6   | 4   | 2   | 6   | 8   | 10  | 9   | 12  | 10   | 8    |
| 3.                | 38  | 38  | 37  | 36  | 35  | 34  | 33  | 37  | 35  | 35  | 33   | 33   |
| 4.                | 55  | 44  | 35  | 38  | 31  | 34  | 37  | 38  | 33  | 39  | 33   | 35   |
| 5.                | 60  | 57  | 39  | 20  | 42  | 31  | 45  | 18  | 31  | 26  | 47   | 58   |
| 6.                | +2  | +16 | +16 | -4  | -12 | +2  | +28 | +44 | +55 | +40 | +21  | -6   |
| August North      |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 6   | 7   | 9   | 13  | 15  | 19  | 23  | 20  | 21  | 20  | 17   | 14   |
| 2.                | 5   | 8   | 9   | 10  | 12  | 18  | 24  | 19  | 16  | 15  | 18   | 12   |
| 3.                | 37  | 37  | 36  | 36  | 37  | 38  | 41  | 45  | 42  | 38  | 41   | 39   |
| 4.                | 45  | 60  | 56  | 64  | 44  | 38  | 59  | 88  | 59  | 41  | 56   | 63   |
| 5.                | 45  | 87  | 54  | 48  | 48  | 57  | 76  | 59  | 31  | 53  | 76   | 64   |
| 6.                | +19 | +8  | +23 | +29 | +14 | +66 | +78 | +52 | +7  | -84 | -146 | -162 |
| August East       |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 11  | 8   | 9   | 14  | 13  | 21  | 28  | 31  | 30  | 31  | 33   | 29   |
| 2.                | 6   | 6   | 7   | 7   | 8   | 10  | 23  | 20  | 19  | 19  | 19   | 20   |
| 3.                | 36  | 38  | 35  | 35  | 34  | 38  | 38  | 41  | 37  | 37  | 46   | 44   |
| 4.                | 51  | 62  | 46  | 37  | 44  | 36  | 39  | 68  | 37  | 54  | 50   | 58   |
| 5.                | 55  | 39  | 53  | 39  | 13  | 26  | 59  | 22  | 36  | 42  | 63   | 50   |
| 6.                | +10 | +8  | +3  | +2  | -5  | +3  | +42 | +52 | +71 | +49 | +2   | -39  |

| 12        | 13   | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Averages |
|-----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| Component |      |     |     |     |     |     |     |     |     |     |     |          |
| 4         | 4    | 3   | 1   | 1   | 1   | 1   | 3   | 10  | 7   | 9   | 9   | 7,9      |
| 2         | 2    | 2   | 0   | 0   | 1   | 1   | 2   | 10  | 6   | 5   | 9   | 5,9      |
| 37        | 37   | 37  | 36  | 35  | 35  | 35  | 35  | 38  | 36  | 39  | 39  | 36,7     |
| 45        | 45   | 45  | 40  | 42  | 39  | 45  | 41  | 52  | 44  | 46  | 53  | 43,9     |
| 81        | 62   | 64  | 55  | 63  | 67  | 48  | 64  | 64  | 64  | 109 | 102 | 58,3     |
| -166      | -103 | -30 | +42 | +93 | +88 | +60 | +33 | +12 | +21 | +12 | +31 |          |

|           |     |     |     |     |     |     |     |     |     |    |    |      |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|------|
| Component |     |     |     |     |     |     |     |     |     |    |    |      |
| 20        | 17  | 17  | 12  | 8   | 9   | 6   | 6   | 10  | 9   | 13 | 10 | 13,5 |
| 9         | 9   | 9   | 7   | 5   | 5   | 3   | 3   | 9   | 8   | 9  | 6  | 6,8  |
| 37        | 37  | 35  | 37  | 35  | 37  | 37  | 44  | 37  | 36  | 41 | 38 | 36,4 |
| 37        | 37  | 40  | 42  | 51  | 43  | 38  | 60  | 55  | 39  | 59 | 52 | 41,8 |
| 85        | 48  | 61  | 67  | 60  | 75  | 75  | 73  | 78  | 64  | 82 | 80 | 55,1 |
| -31       | -24 | -20 | -23 | -20 | -27 | -16 | -17 | -26 | -12 | +3 | +9 |      |

|           |     |     |     |     |     |     |    |     |     |     |     |      |
|-----------|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|------|
| Component |     |     |     |     |     |     |    |     |     |     |     |      |
| 13        | 13  | 11  | 8   | 8   | 5   | 12  | 9  | 11  | 9   | 7   | 9   | 12,4 |
| 10        | 12  | 13  | 7   | 6   | 3   | 16  | 7  | 8   | 7   | 8   | 7   | 11,2 |
| 42        | 44  | 41  | 45  | 42  | 39  | 57  | 37 | 37  | 38  | 39  | 37  | 40,3 |
| 55        | 94  | 70  | 63  | 46  | 76  | 102 | 84 | 67  | 92  | 67  | 71  | 65,2 |
| 107       | 111 | 89  | 80  | 66  | 55  | 46  | 67 | 102 | 75  | 72  | 101 | 71,1 |
| -145      | -67 | +12 | +48 | +88 | +77 | +36 | +3 | -8  | +14 | +18 | +21 |      |

|           |     |     |     |     |     |     |    |     |     |    |    |      |
|-----------|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|------|
| Component |     |     |     |     |     |     |    |     |     |    |    |      |
| 34        | 33  | 26  | 22  | 21  | 19  | 17  | 9  | 11  | 12  | 10 | 12 | 20,2 |
| 23        | 22  | 13  | 18  | 16  | 9   | 17  | 8  | 11  | 16  | 8  | 11 | 14,0 |
| 49        | 48  | 45  | 49  | 45  | 44  | 55  | 42 | 41  | 46  | 38 | 42 | 41,8 |
| 66        | 62  | 106 | 62  | 51  | 101 | 97  | 74 | 51  | 56  | 67 | 73 | 60,3 |
| 92        | 129 | 59  | 61  | 80  | 61  | 99  | 82 | 131 | 79  | 85 | 92 | 64,3 |
| -50       | -29 | -29 | -20 | -25 | -27 | -23 | -8 | -5  | +18 | +3 | -4 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10   | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|
| September North   |     |     |     |     |     |     |     |     |      |     |      |      |
| 1.                | 8   | 8   | 7   | 7   | 9   | 11  | 20  | 14  | 13   | 9   | 8    | 9    |
| 2.                | 9   | 8   | 7   | 4   | 5   | 7   | 16  | 11  | 10   | 7   | 5    | 5    |
| 3.                | 38  | 40  | 40  | 37  | 37  | 40  | 52  | 46  | 37   | 39  | 43   | 38   |
| 4.                | 48  | 49  | 59  | 46  | 48  | 63  | 74  | 77  | 71   | 65  | 66   | 60   |
| 5.                | 90  | 76  | 91  | 95  | 82  | 44  | 27  | 25  | 57   | 33  | 91   | 106  |
| 6.                | +6  | +32 | +16 | +10 | +15 | +35 | +73 | +80 | +41  | -62 | -170 | -197 |
| September East    |     |     |     |     |     |     |     |     |      |     |      |      |
| 1.                | 13  | 10  | 8   | 10  | 13  | 19  | 25  | 24  | 24   | 23  | 25   | 24   |
| 2.                | 8   | 5   | 4   | 2   | 5   | 4   | 10  | 14  | 10   | 7   | 12   | 8    |
| 3.                | 37  | 35  | 38  | 38  | 38  | 38  | 43  | 38  | 48   | 35  | 37   | 39   |
| 4.                | 42  | 47  | 43  | 35  | 47  | 51  | 50  | 52  | 46   | 48  | 61   | 64   |
| 5.                | 89  | 76  | 74  | 60  | 62  | 33  | 28  | 41  | 39   | 57  | 44   | 58   |
| 6.                | -10 | +3  | +15 | +6  | +1  | -5  | +21 | +71 | +75  | +59 | -15  | -45  |
| October North     |     |     |     |     |     |     |     |     |      |     |      |      |
| 1.                | 3   | 3   | 5   | 8   | 5   | 9   | 12  | 15  | 11   | 8   | 10   | 6    |
| 2.                | 2   | 2   | 2   | 3   | 5   | 3   | 9   | 17  | 8    | 6   | 6    | 5    |
| 3.                | 36  | 36  | 38  | 37  | 35  | 38  | 38  | 42  | 42   | 39  | 41   | 39   |
| 4.                | 39  | 44  | 31  | 31  | 48  | 43  | 58  | 69  | 72   | 52  | 81   | 82   |
| 5.                | 64  | 59  | 63  | 113 | 41  | 62  | 42  | 29  | 48   | 52  | 46   | 107  |
| 6.                | +3  | +11 | +8  | -5  | +3  | +2  | +36 | +91 | +107 | +17 | -92  | -170 |
| October East      |     |     |     |     |     |     |     |     |      |     |      |      |
| 1.                | 6   | 3   | 3   | 6   | 7   | 6   | 16  | 19  | 16   | 18  | 14   | 16   |
| 2.                | 3   | 1   | 2   | 3   | 3   | 2   | 8   | 8   | 9    | 6   | 8    | 6    |
| 3.                | 36  | 36  | 36  | 36  | 34  | 44  | 37  | 36  | 39   | 33  | 51   | 37   |
| 4.                | 33  | 30  | 33  | 30  | 40  | 48  | 33  | 33  | 28   | 37  | 59   | 47   |
| 5.                | 67  | 36  | 31  | 67  | 28  | 38  | 39  | 38  | 52   | 44  | 37   | 67   |
| 6.                | -6  | +10 | +8  | +2  | -8  | -8  | -13 | +23 | +54  | +69 | +62  | +29  |



| 12        | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20 | 21  | 22 | 23  | Averages |
|-----------|-----|-----|-----|-----|-----|-----|-----|----|-----|----|-----|----------|
| Component |     |     |     |     |     |     |     |    |     |    |     |          |
| 10        | 8   | 10  | 9   | 6   | 5   | 3   | 3   | 5  | 7   | 4  | 7   | 8,5      |
| 9         | 5   | 8   | 5   | 2   | 2   | 2   | 2   | 5  | 4   | 5  | 8   | 6,3      |
| 43        | 39  | 44  | 41  | 37  | 38  | 37  | 37  | 38 | 37  | 36 | 38  | 40,0     |
| 68        | 78  | 59  | 49  | 55  | 68  | 37  | 42  | 41 | 76  | 48 | 41  | 58,0     |
| 85        | 132 | 73  | 49  | 71  | 38  | 71  | 56  | 67 | 83  | 78 | 89  | 71,3     |
| -131      | -37 | +20 | +69 | +79 | +60 | +10 | +28 | +3 | +16 | -8 | +10 |          |

|           |     |     |    |    |     |     |     |     |     |    |    |      |
|-----------|-----|-----|----|----|-----|-----|-----|-----|-----|----|----|------|
| Component |     |     |    |    |     |     |     |     |     |    |    |      |
| 23        | 26  | 23  | 21 | 16 | 11  | 5   | 4   | 7   | 10  | 8  | 8  | 15,8 |
| 12        | 7   | 11  | 8  | 7  | 4   | 2   | 2   | 7   | 5   | 6  | 9  | 7,0  |
| 42        | 43  | 40  | 38 | 37 | 39  | 36  | 33  | 36  | 36  | 38 | 39 | 38,3 |
| 62        | 62  | 58  | 53 | 47 | 48  | 46  | 49  | 50  | 53  | 57 | 50 | 50,9 |
| 57        | 77  | 37  | 42 | 65 | 65  | 52  | 49  | 53  | 61  | 77 | 68 | 57,0 |
| -29       | -24 | -19 | -4 | +1 | -23 | -35 | -17 | -14 | -10 | -2 | -5 |      |

|           |     |    |     |     |     |     |    |    |     |     |     |      |
|-----------|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|------|
| Component |     |    |     |     |     |     |    |    |     |     |     |      |
| 6         | 6   | 9  | 8   | 5   | 5   | 6   | 2  | 5  | 5   | 7   | 4   | 6,7  |
| 7         | 5   | 5  | 8   | 4   | 2   | 2   | 0  | 6  | 5   | 5   | 5   | 5,0  |
| 39        | 53  | 42 | 45  | 36  | 36  | 37  | 35 | 36 | 38  | 38  | 36  | 38,9 |
| 81        | 63  | 63 | 55  | 44  | 56  | 47  | 45 | 39 | 36  | 46  | 42  | 52,7 |
| 100       | 69  | 90 | 57  | 53  | 46  | 84  | 61 | 65 | 84  | 137 | 70  | 68,4 |
| -152      | -96 | -1 | +50 | +54 | +33 | +17 | +5 | +6 | +24 | +33 | +15 |      |

|           |     |     |    |    |     |     |     |     |     |     |     |      |
|-----------|-----|-----|----|----|-----|-----|-----|-----|-----|-----|-----|------|
| Component |     |     |    |    |     |     |     |     |     |     |     |      |
| 17        | 17  | 17  | 12 | 10 | 7   | 6   | 3   | 6   | 5   | 10  | 8   | 10,3 |
| 9         | 8   | 6   | 8  | 5  | 5   | 3   | 3   | 2   | 5   | 8   | 5   | 5,2  |
| 39        | 45  | 39  | 39 | 37 | 37  | 37  | 39  | 37  | 35  | 35  | 35  | 37,8 |
| 45        | 49  | 48  | 49 | 53 | 48  | 48  | 55  | 45  | 42  | 41  | 41  | 42,3 |
| 67        | 36  | 53  | 40 | 30 | 45  | 72  | 39  | 40  | 86  | 73  | 61  | 48,6 |
| -8        | -24 | -11 | +2 | -1 | -31 | -41 | -38 | -19 | -17 | -25 | -10 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| November North    |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 0   | 3   | 3   | 4   | 2   | 4   | 5   | 13  | 9   | 11  | 7   | 4    |
| 2.                | 0   | 0   | 1   | 2   | 2   | 2   | 4   | 9   | 10  | 16  | 6   | 6    |
| 3.                | 36  | 35  | 33  | 34  | 35  | 32  | 32  | 34  | 38  | 36  | 37  | 41   |
| 4.                | 37  | 40  | 32  | 41  | 46  | 38  | 38  | 36  | 53  | 50  | 48  | 51   |
| 5.                | 49  | 37  | 36  | 109 | 52  | 53  | 42  | 49  | 30  | 51  | 58  | 71   |
| 6.                | +4  | +11 | +5  | -19 | +5  | +11 | +11 | +44 | +84 | +38 | -52 | -128 |
| November East     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 2   | 1   | 2   | 4   | 4   | 4   | 5   | 8   | 11  | 10  | 7   | 7    |
| 2.                | 1   | 2   | 3   | 4   | 5   | 4   | 5   | 7   | 7   | 10  | 5   | 9    |
| 3.                | 33  | 33  | 31  | 34  | 36  | 34  | 32  | 35  | 32  | 34  | 34  | 37   |
| 4.                | 34  | 38  | 28  | 48  | 36  | 34  | 34  | 32  | 31  | 30  | 42  | 38   |
| 5.                | 38  | 26  | 37  | 36  | 23  | 23  | 22  | 27  | 26  | 38  | 25  | 41   |
| 6.                | -5  | +2  | -7  | -9  | -9  | -8  | -1  | +13 | +47 | +74 | +70 | +38  |
| December North    |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 1   | 3   | 5   | 3   | 3   | 2   | 3   | 8   | 10  | 8   | 5   | 5    |
| 2.                | 1   | 5   | 3   | 3   | 2   | 1   | 2   | 4   | 8   | 9   | 4   | 5    |
| 3.                | 36  | 34  | 34  | 34  | 36  | 34  | 35  | 34  | 38  | 40  | 44  | 35   |
| 4.                | 37  | 38  | 37  | 38  | 39  | 36  | 38  | 33  | 39  | 47  | 44  | 47   |
| 5.                | 49  | 59  | 44  | 27  | 39  | 49  | 37  | 27  | 22  | 25  | 52  | 81   |
| 6.                | -10 | -23 | -26 | -20 | -18 | -15 | -7  | +6  | +43 | +37 | -5  | -60  |
| December East     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1.                | 2   | 3   | 5   | 1   | 5   | 4   | 6   | 6   | 9   | 8   | 11  | 9    |
| 2.                | 5   | 3   | 2   | 3   | 5   | 1   | 5   | 4   | 6   | 3   | 6   | 8    |
| 3.                | 31  | 35  | 33  | 33  | 33  | 34  | 33  | 34  | 35  | 35  | 33  | 36   |
| 4.                | 30  | 33  | 28  | 31  | 30  | 30  | 26  | 35  | 27  | 41  | 44  | 44   |
| 5.                | 46  | 30  | 33  | 27  | 35  | 43  | 33  | 25  | 30  | 19  | 35  | 37   |
| 6.                | -5  | +3  | -2  | -5  | -17 | -20 | -21 | -14 | +22 | +47 | +59 | +38  |

| 12        | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Averages |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| Component |     |     |     |     |     |     |     |     |     |     |     |          |
| 6         | 8   | 6   | 4   | 2   | 2   | 2   | 4   | 4   | 4   | 3   | 2   | 4,7      |
| 9         | 10  | 5   | 5   | 3   | 1   | 2   | 4   | 4   | 5   | 5   | 1   | 4,7      |
| 38        | 39  | 38  | 38  | 34  | 34  | 34  | 32  | 36  | 35  | 32  | 33  | 35,3     |
| 52        | 67  | 65  | 48  | 41  | 41  | 44  | 38  | 56  | 36  | 44  | 34  | 44,8     |
| 84        | 58  | 59  | 46  | 69  | 71  | 63  | 70  | 34  | 76  | 40  | 49  | 56,5     |
| —111      | —53 | —8  | +10 | +11 | +6  | +23 | +7  | +38 | +38 | +15 | +10 |          |
| Component |     |     |     |     |     |     |     |     |     |     |     |          |
| 9         | 10  | 5   | 6   | 2   | 2   | 3   | 4   | 4   | 4   | 5   | 2   | 5,0      |
| 8         | 6   | 5   | 4   | 5   | 6   | 5   | 5   | 7   | 5   | 8   | 4   | 5,4      |
| 36        | 38  | 37  | 34  | 34  | 29  | 33  | 34  | 32  | 31  | 28  | 29  | 33,3     |
| 50        | 39  | 55  | 34  | 36  | 33  | 36  | 45  | 37  | 35  | 34  | 29  | 37,0     |
| 35        | 47  | 31  | 41  | 42  | 49  | 43  | 31  | 46  | 67  | 54  | 49  | 37,4     |
| —2        | —7  | —4  | —4  | —15 | —19 | —19 | —31 | —31 | —37 | —25 | —11 |          |
| Component |     |     |     |     |     |     |     |     |     |     |     |          |
| 5         | 8   | 7   | 6   | 3   | 3   | 3   | 3   | 5   | 6   | 3   | 2   | 4,6      |
| 8         | 10  | 5   | 5   | 3   | 3   | 2   | 4   | 3   | 8   | 3   | 3   | 4,3      |
| 35        | 35  | 35  | 38  | 34  | 36  | 34  | 33  | 40  | 35  | 35  | 35  | 35,8     |
| 41        | 58  | 47  | 39  | 40  | 37  | 37  | 33  | 43  | 34  | 44  | 37  | 40,1     |
| 66        | 58  | 39  | 39  | 44  | 54  | 96  | 76  | 37  | 50  | 45  | 62  | 49,1     |
| —75       | —58 | —15 | +15 | +23 | +18 | +19 | +37 | +46 | +44 | +32 | +15 |          |
| Component |     |     |     |     |     |     |     |     |     |     |     |          |
| 11        | 11  | 10  | 10  | 6   | 5   | 3   | 8   | 3   | 8   | 4   | 3   | 6,3      |
| 8         | 7   | 5   | 5   | 6   | 4   | 4   | 5   | 5   | 7   | 5   | 8   | 5,0      |
| 37        | 37  | 34  | 38  | 34  | 34  | 33  | 30  | 35  | 33  | 35  | 33  | 34,1     |
| 43        | 41  | 41  | 26  | 32  | 31  | 35  | 38  | 36  | 40  | 40  | 42  | 35,2     |
| 33        | 38  | 30  | 51  | 48  | 54  | 75  | 80  | 49  | 59  | 48  | 66  | 42,7     |
| +10       | —2  | —3  | —2  | +3  | —9  | —15 | —20 | —8  | —24 | —6  | —8  |          |

| Hour<br>Parameter | 0  | 1   | 2  | 3  | 4  | 5   | 6   | 7   | 8   | 9   | 10  | 11   |
|-------------------|----|-----|----|----|----|-----|-----|-----|-----|-----|-----|------|
| Year 1979 North   |    |     |    |    |    |     |     |     |     |     |     |      |
| 1.                | 5  | 6   | 7  | 8  | 9  | 11  | 14  | 15  | 15  | 14  | 10  | 11   |
| 2.                | 5  | 6   | 6  | 5  | 6  | 8   | 12  | 13  | 13  | 12  | 8   | 9    |
| 3.                | 37 | 37  | 37 | 36 | 37 | 38  | 39  | 43  | 40  | 40  | 41  | 40   |
| 4.                | 43 | 51  | 46 | 42 | 44 | 52  | 56  | 56  | 57  | 51  | 55  | 61   |
| 5.                | 78 | 69  | 81 | 75 | 56 | 51  | 49  | 43  | 40  | 47  | 66  | 76   |
| 6.                | +8 | +10 | +7 | +4 | +9 | +26 | +32 | +37 | +35 | -22 | -94 | -137 |
| Year 1979 East    |    |     |    |    |    |     |     |     |     |     |     |      |
| 1.                | 8  | 7   | 7  | 8  | 9  | 13  | 19  | 21  | 22  | 23  | 22  | 22   |
| 2.                | 6  | 4   | 5  | 4  | 5  | 8   | 11  | 13  | 14  | 13  | 13  | 14   |
| 3.                | 37 | 37  | 37 | 37 | 36 | 37  | 37  | 40  | 41  | 37  | 41  | 40   |
| 4.                | 43 | 45  | 41 | 37 | 37 | 40  | 35  | 43  | 37  | 46  | 52  | 53   |
| 5.                | 68 | 55  | 47 | 51 | 44 | 38  | 41  | 30  | 36  | 36  | 40  | 49   |
| 6.                | +1 | +9  | +6 | -2 | -3 | -2  | +6  | +20 | +43 | +46 | +27 | +3   |

| 12        | 13  | 14 | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Averages |
|-----------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| Component |     |    |     |     |     |     |     |     |     |     |     |          |
| 10        | 9   | 8  | 7   | 6   | 4   | 4   | 4   | 6   | 6   | 6   | 5   | 8,4      |
| 9         | 7   | 6  | 6   | 4   | 4   | 4   | 3   | 6   | 6   | 6   | 5   | 7,1      |
| 40        | 41  | 39 | 40  | 37  | 38  | 38  | 36  | 38  | 37  | 38  | 37  | 38,5     |
| 59        | 68  | 59 | 52  | 47  | 47  | 46  | 46  | 51  | 51  | 51  | 51  | 51,8     |
| 82        | 77  | 73 | 60  | 58  | 60  | 65  | 74  | 67  | 80  | 89  | 83  | 66,0     |
| -125      | -72 | -7 | +39 | +61 | +56 | +36 | +22 | +18 | +24 | +21 | +14 |          |

|           |    |    |     |     |     |     |     |     |     |    |    |      |
|-----------|----|----|-----|-----|-----|-----|-----|-----|-----|----|----|------|
| Component |    |    |     |     |     |     |     |     |     |    |    |      |
| 22        | 22 | 19 | 16  | 14  | 10  | 7   | 7   | 8   | 9   | 10 | 8  | 13,9 |
| 15        | 12 | 10 | 10  | 9   | 7   | 5   | 5   | 7   | 7   | 8  | 7  | 8,8  |
| 41        | 42 | 39 | 39  | 39  | 39  | 39  | 37  | 38  | 37  | 39 | 37 | 38,4 |
| 51        | 50 | 53 | 47  | 46  | 46  | 47  | 46  | 50  | 48  | 49 | 48 | 45,3 |
| 54        | 54 | 51 | 54  | 55  | 63  | 66  | 70  | 71  | 70  | 75 | 79 | 53,9 |
| -11       | -9 | -7 | -10 | -11 | -20 | -25 | -24 | -16 | -10 | -7 | -2 |      |

| Hour<br>Parameter | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Quiet days North  |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 4   | 4   | 5   | 5   | 7   | 7   | 9   | 12  | 11  | 8   | 5    | 8    |
| 2.                | 4   | 2   | 3   | 4   | 5   | 4   | 7   | 6   | 6   | 4   | 3    | 3    |
| 3.                | 36  | 35  | 34  | 33  | 35  | 33  | 35  | 35  | 36  | 38  | 36   | 35   |
| 4.                | 42  | 32  | 31  | 29  | 34  | 39  | 39  | 38  | 42  | 36  | 38   | 38   |
| 5.                | 25  | 23  | 27  | 29  | 25  | 23  | 28  | 22  | 23  | 22  | 28   | 30   |
| 6.                | +12 | +15 | +15 | +11 | +23 | +39 | +44 | +37 | +38 | -26 | -103 | -142 |
| Quiet days East   |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 5   | 2   | 4   | 5   | 5   | 8   | 13  | 10  | 12  | 13  | 14   | 15   |
| 2.                | 3   | 2   | 3   | 3   | 2   | 3   | 5   | 6   | 7   | 6   | 7    | 5    |
| 3.                | 34  | 36  | 33  | 35  | 34  | 34  | 33  | 33  | 34  | 33  | 33   | 33   |
| 4.                | 32  | 32  | 30  | 30  | 25  | 32  | 27  | 31  | 29  | 33  | 32   | 35   |
| 5.                | 28  | 17  | 23  | 17  | 24  | 16  | 20  | 14  | 24  | 23  | 23   | 24   |
| 6.                | +1  | +1  | 0   | -3  | -11 | -4  | +7  | +20 | +41 | +39 | +21  | -3   |
| Disturbed days    |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 6   | 7   | 14  | 12  | 14  | 23  | 31  | 33  | 32  | 36  | 28   | 39   |
| 2.                | 8   | 9   | 12  | 12  | 15  | 27  | 40  | 46  | 40  | 37  | 33   | 48   |
| 3.                | 41  | 42  | 39  | 42  | 43  | 58  | 45  | 94  | 61  | 66  | 75   | 80   |
| 4.                | 51  | 102 | 66  | 86  | 65  | 113 | 141 | 138 | 93  | 103 | 102  | 136  |
| 5.                | 175 | 133 | 199 | 198 | 158 | 89  | 168 | 93  | 55  | 80  | 156  | 143  |
| 6.                | -1  | +33 | +20 | +41 | +6  | +29 | +11 | +19 | +18 | -22 | -84  | -111 |
| Disturbed East    |     |     |     |     |     |     |     |     |     |     |      |      |
| 1.                | 14  | 15  | 15  | 19  | 15  | 24  | 48  | 48  | 40  | 51  | 55   | 52   |
| 2.                | 8   | 9   | 8   | 9   | 12  | 18  | 34  | 46  | 39  | 46  | 45   | 53   |
| 3.                | 41  | 44  | 41  | 46  | 44  | 51  | 57  | 96  | 95  | 59  | 66   | 71   |
| 4.                | 69  | 97  | 59  | 51  | 60  | 81  | 73  | 101 | 69  | 101 | 111  | 102  |
| 5.                | 127 | 82  | 152 | 168 | 157 | 101 | 146 | 75  | 51  | 70  | 134  | 98   |
| 6.                | -5  | +17 | -12 | +15 | +33 | -7  | +1  | +2  | +45 | +52 | +32  | +21  |

| 12        | 13  | 14 | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Averages |
|-----------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| Component |     |    |     |     |     |     |     |     |     |     |     |          |
| 6         | 6   | 4  | 3   | 4   | 2   | 1   | 4   | 5   | 3   | 3   | 3   | 5,4      |
| 4         | 3   | 3  | 1   | 1   | 1   | 1   | 3   | 5   | 4   | 4   | 3   | 3,4      |
| 35        | 35  | 35 | 35  | 34  | 33  | 33  | 34  | 35  | 36  | 35  | 35  | 34,9     |
| 37        | 35  | 33 | 35  | 33  | 30  | 34  | 31  | 32  | 37  | 40  | 33  | 35,3     |
| 34        | 31  | 31 | 29  | 22  | 24  | 23  | 26  | 30  | 34  | 29  | 38  | 27,4     |
| —135      | —65 | —9 | +36 | +53 | +44 | +25 | +20 | +19 | +20 | +16 | +11 |          |

|           |     |     |    |    |    |     |     |    |    |    |    |      |
|-----------|-----|-----|----|----|----|-----|-----|----|----|----|----|------|
| Component |     |     |    |    |    |     |     |    |    |    |    |      |
| 16        | 14  | 12  | 9  | 7  | 5  | 5   | 3   | 5  | 5  | 5  | 3  | 8,1  |
| 7         | 6   | 6   | 4  | 5  | 3  | 3   | 3   | 5  | 5  | 5  | 4  | 4,5  |
| 34        | 34  | 35  | 35 | 33 | 32 | 34  | 33  | 34 | 33 | 33 | 34 | 33,8 |
| 32        | 29  | 31  | 32 | 30 | 31 | 30  | 32  | 32 | 33 | 32 | 36 | 31,1 |
| 26        | 23  | 26  | 28 | 26 | 31 | 26  | 28  | 34 | 32 | 33 | 40 | 25,2 |
| —16       | —15 | —12 | —8 | —5 | —9 | —14 | —19 | —5 | —8 | —1 | +2 |      |

|           |     |     |     |     |     |     |     |     |     |     |     |       |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Component |     |     |     |     |     |     |     |     |     |     |     |       |
| 26        | 22  | 21  | 15  | 18  | 15  | 11  | 8   | 13  | 15  | 10  | 6   | 18,9  |
| 33        | 24  | 17  | 12  | 19  | 13  | 16  | 3   | 11  | 13  | 13  | 4   | 21,1  |
| 57        | 60  | 50  | 49  | 51  | 55  | 57  | 41  | 48  | 44  | 42  | 37  | 53,1  |
| 94        | 120 | 115 | 75  | 87  | 112 | 126 | 120 | 98  | 114 | 103 | 95  | 102,4 |
| 179       | 213 | 111 | 167 | 120 | 151 | 128 | 153 | 136 | 132 | 240 | 173 | 147,8 |
| —134      | —95 | —25 | +13 | +47 | +80 | +54 | +8  | +18 | +14 | +33 | +28 |       |

|           |     |     |     |     |     |     |     |     |     |     |     |       |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Component |     |     |     |     |     |     |     |     |     |     |     |       |
| 55        | 42  | 33  | 34  | 32  | 29  | 17  | 16  | 21  | 18  | 16  | 12  | 30,0  |
| 39        | 33  | 28  | 22  | 30  | 28  | 17  | 14  | 15  | 12  | 9   | 10  | 24,3  |
| 72        | 60  | 52  | 54  | 53  | 60  | 49  | 45  | 42  | 41  | 41  | 46  | 55,3  |
| 75        | 132 | 129 | 93  | 111 | 133 | 122 | 97  | 82  | 111 | 59  | 81  | 91,6  |
| 107       | 138 | 109 | 129 | 149 | 134 | 142 | 161 | 155 | 123 | 215 | 188 | 129,6 |
| —16       | +19 | +6  | —24 | —32 | —60 | —38 | —26 | —7  | —15 | —4  | +2  |       |

## III.

*Results of harmonical analysis of the daily variations*

|                 | A <sub>1</sub> | $\varphi_1$ | A <sub>2</sub> | $\varphi_2$ | A <sub>3</sub> | $\varphi_3$ | A <sub>4</sub> | $\varphi_4$ | A <sub>5</sub> | $\varphi_5$ | A <sub>6</sub> | $\varphi_6$ |
|-----------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| North Component |                |             |                |             |                |             |                |             |                |             |                |             |
| January         | 27             | 142         | 17             | 230         | 17             | 72          | 15             | 273         | 3              | 118         | 4              | 327         |
| February        | 25             | 116         | 28             | 255         | 24             | 95          | 24             | 286         | 4              | 192         | 4              | 63          |
| March           | 34             | 119         | 47             | 273         | 40             | 96          | 23             | 289         | 5              | 186         | 7              | 51          |
| April           | 49             | 118         | 54             | 285         | 45             | 100         | 21             | 285         | 5              | 217         | 4              | 272         |
| May             | 53             | 122         | 81             | 308         | 36             | 134         | 3              | 105         | 1              | 104         | 8              | 310         |
| June            | 51             | 107         | 78             | 297         | 37             | 137         | 5              | 134         | 6              | 260         | 7              | 36          |
| July            | 61             | 107         | 79             | 295         | 41             | 124         | 3              | 224         | 2              | 7           | 6              | 338         |
| August          | 47             | 106         | 70             | 303         | 46             | 133         | 5              | 317         | 8              | 273         | 6              | 289         |
| September       | 42             | 107         | 69             | 302         | 54             | 133         | 27             | 347         | 7              | 250         | 7              | 56          |
| October         | 34             | 91          | 53             | 272         | 57             | 114         | 31             | 306         | 9              | 204         | 1              | 74          |
| November        | 27             | 91          | 37             | 254         | 31             | 112         | 27             | 312         | 11             | 153         | 11             | 15          |
| December        | 21             | 139         | 32             | 229         | 18             | 99          | 18             | 275         | 7              | 115         | 2              | 65          |
| Year            | 38             | 112         | 50             | 286         | 36             | 117         | 14             | 299         | 3              | 198         | 4              | 4           |
| Q               | 40             | 102         | 52             | 289         | 35             | 123         | 16             | 306         | 3              | 163         | 5              | 10          |
| D               | 47             | 107         | 45             | 288         | 30             | 92          | 12             | 258         | 7              | 227         | 6              | 307         |
| East Component  |                |             |                |             |                |             |                |             |                |             |                |             |
| January         | 14             | 307         | 16             | 113         | 9              | 343         | 8              | 229         | 3              | 54          | 8              | 4           |
| February        | 20             | 338         | 17             | 149         | 12             | 35          | 11             | 236         | 3              | 140         | 2              | 87          |
| March           | 23             | 338         | 14             | 136         | 10             | 42          | 10             | 238         | 5              | 43          | 10             | 39          |
| April           | 17             | 353         | 7              | 117         | 8              | 72          | 8              | 307         | 10             | 144         | 1              | 8           |
| May             | 9              | 359         | 4              | 355         | 11             | 148         | 14             | 356         | 5              | 194         | 7              | 336         |
| June            | 21             | 17          | 7              | 222         | 18             | 130         | 7              | 347         | 5              | 243         | 6              | 311         |
| July            | 24             | 6           | 14             | 193         | 16             | 86          | 6              | 335         | 1              | 239         | 6              | 263         |
| August          | 26             | 20          | 23             | 218         | 16             | 108         | 14             | 321         | 2              | 215         | 3              | 343         |
| September       | 25             | 6           | 15             | 231         | 22             | 104         | 17             | 319         | 7              | 231         | 6              | 95          |
| October         | 29             | 331         | 15             | 146         | 18             | 53          | 14             | 269         | 6              | 42          | 3              | 103         |
| November        | 31             | 318         | 15             | 148         | 18             | 45          | 6              | 244         | 8              | 98          | 2              | 291         |
| December        | 17             | 296         | 16             | 128         | 15             | 25          | 8              | 236         | 4              | 68          | 1              | 342         |
| Year            | 19             | 345         | 10             | 163         | 11             | 75          | 7              | 291         | 2              | 124         | 2              | 4           |
| Q               | 13             | 347         | 11             | 188         | 12             | 79          | 6              | 284         | 1              | 175         | 1              | 11          |
| D               | 26             | 349         | 16             | 131         | 1              | 312         | 11             | 292         | 12             | 130         | 3              | 67          |



## IV.

*Special phenomena  
(magnetic and earth current date)*

## SSC-s

| Month | Day | CET<br>(GMT+1h) | Amplitude in<br>E(mV/km) H(gamma) |     | Ex | Ey  | Hx    | Hy | End of Storm |       |
|-------|-----|-----------------|-----------------------------------|-----|----|-----|-------|----|--------------|-------|
| 01.   | 04. | 18.15           | 9                                 | 100 | +  | +   | +     | —  | 01.05        | 05.00 |
|       | 07. | 13.15 (?)       | 10                                | 35  | +  | (?) | — (?) | +  | 01.08        | 01.00 |
|       | 09. | 04.45           | 10                                | 45  | +  | +   | +     | —  | 01.09        | 18.00 |
|       | 25. | 02.45           | 12,5                              | 30  | +  | +   | +     | —  | 01.25        | 23.00 |
| 02.   | 03. | 19.15           | 12                                | 28  | +  | +   | +     | —  | 02.04        | 05.00 |
|       | 11. | 02.45           | 9                                 | 30  | +  | +   | +     | —  | 02.11        | 07.00 |
|       | 18. | 04.00           | 12,5                              | 55  | +  | +   | +     | —  | 02.18        | 12.00 |
|       | 21. | 04.00           | 18                                | 50  | +  | +   | +     | —  | continued    |       |
|       |     | 16.45 (?)       | > 18                              | 65  | +  | +   | +     | —  | continued    |       |
|       | 22. | 12.00 (?)       | 12,5                              | 50  | +  | +   | +     | —  | continued    |       |
|       |     | 15.45 (?)       | > 20                              | 60  | +  | +   | +     | —  | 02.24        | 00.00 |
| 03.   | 04. | 05.45           | 12                                | 22  | +  | +   | +     | —  | 03.05        | 13.00 |
|       | 09. | 09.00           | 8                                 | 26  | +  | +   | +     | +  | 03.11        | 20.00 |
|       | 15. | 07.00           | 5,5                               | 18  | —  | +   | +     | +  | continued    |       |
|       | 17. | 03.30           | 11                                | 30  | +  | +   | +     | —  | 03.17        | 20.00 |
|       | 22. | 09.30           | 13,5                              | 30  | +  | +   | +     | —  | 03.23        | 03.00 |
| 04.   | 03. | 11.00           | 10                                | 22  | —  | +   | +     | +  | 04.04        | 16.00 |
|       | 05. | 03.00           | 14,5                              | 60  | +  | +   | +     | —  | 04.05        | 20.00 |
|       | 25. | 01.00           | 11                                | 85  | +  | +   | +     | —  | 04.26        | 02.00 |
| 05.   | 29. | 19.45           | 14,5                              | 55  | +  | +   | +     | —  | continued    |       |
|       |     | 22.00           | > 25                              | 120 | +  | +   | +     | —  | 05.30        | 09.00 |
|       | 31. | 10.30 (?)       | 11                                | 22  | +  | +   | +     | —  | 05.31        | 12.00 |
| 06.   | 06. | 20.30           | > 12,5                            | 110 | +  | +   | +     | —  | 06.07        | 18.00 |
| 07.   | 06. | 20.30           | 15                                | 65  | +  | +   | +     | —  | 07.07        | 22.00 |
|       | 26. | 19.30           | 8                                 | 45  | +  | +   | +     | —  | 07.28        | 04.00 |
|       | 28. | 22.00           | 4,5                               | 18  | +  | +   | +     | —  | 07.30        | 02.00 |
| 08.   | 01. | 12.45           | 7                                 | 32  | +  | +   | +     | —  | 08.02        | 02.00 |
|       | 13. | 07.15           | 11                                | 28  | —  | —   | —     | +  | 08.13        | 23.00 |
|       | 20. | 07.30           | 11                                | 22  | +  | +   | +     | —  | continued    |       |
|       |     | 18.00           | ?                                 | 110 | +  | +   | +     | —  | 08.21        | 22.00 |
|       | 29. | 06.00           | 8                                 | 28  | +  | +   | +     | —  | 08.30        | 03.00 |
| 10.   | 06. | 12.15           | 18                                | 80  | +  | +   | +     | —  | 10.06        | 20.00 |
| 11.   | 09. | 13.00           | 6,5                               | 18  | +  | +   | +     | —  | 11.09        | 23.00 |
|       | 11. | 03.15           | 10                                | 28  | +  | +   | +     | —  | no storm     |       |
|       | 18. | 03.15 (?)       | 7                                 | 14  | +  | +   | +     | —  | no storm     |       |
|       | 30. | 08.30           | 14,5                              | 30  | +  | +   | +     | —  | 11.30        | 18.00 |

| <i>Bays</i> |     |                 |              |          | <i>Pt-s</i> |    |    |          |                    |
|-------------|-----|-----------------|--------------|----------|-------------|----|----|----------|--------------------|
| Month       | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex          | Ey | Hx | Hy       | Ex Ey              |
|             |     |                 | E(mV/km)     | H(gamma) |             |    |    | E(mV/km) |                    |
| 01.         | 01. | 23.45           | 9            | 45       | —           | +  | +  | +        | tr                 |
|             | 02. | 18.45           | 14,5         | 95       | +           | +  | +  | +        |                    |
|             | 03. | 19.00           | 10           | 70       | —           | —  | —  | +        |                    |
|             |     | 23.45 (si?)     | 6,5          | 18       | —           | —  | —  | 0        |                    |
|             | 04. | 19.00           | 28           | 130      | +           | +  | +  | +        | tr                 |
|             |     | 22.45           | 11           | 40       | —           | +  | +  | +        | tr                 |
|             | 06. | 02.30           | 5,5          | 15       | +           | +  | +  | —        |                    |
|             |     | 18.30           | 7,5          | 35       | +           | +  | +  | +        |                    |
|             | 07. | 01.00           |              |          |             |    |    |          | 3(pg, 8min period) |
|             | 13. | 00.45           | 7            | 35       | +           | +  | +  | +        | tr                 |
|             | 15. | 20.15           | 9            | 35       | —           | +  | +  | +        | tr                 |
|             | 17. | 18.45           | 4,5          | 23       | —           | +  | +  | +        | 4,5 + +            |
|             | 19. | 02.00           | 7            | 40       | —           | +  | +  | +        | tr                 |
|             | 21. | 11.00           | 7            | 17       | +           | +  | +  | —        |                    |
|             | 22. | 20.30           | 8            | 45       | +           | +  | +  | —        | tr                 |
|             |     | 23.15           | 12,5         | 70       | +           | +  | +  | —        | tr                 |
|             | 24. | 02.45           | 10           | 55       | —           | +  | +  | +        |                    |
|             | 25. | 03.00           | 14,5         | 80       | +           | +  | +  | —        | tr                 |
|             | 26. | 16.45           | 9            | 70       | —           | +  | +  | +        | tr                 |
|             |     | 23.30           | 16           | 80       | —           | +  | +  | —        | tr                 |
|             | 27. | 19.30           | 12           | 55       | +           | +  | +  | —        |                    |
|             |     | 22.00           | 14,5         | 70       | —           | +  | +  | +        | tr                 |
|             | 28. | 19.45           | 7            | 50       | —           | —  | —  | +        |                    |
|             | 30. | 22.30           | 4,5          | 45       | —           | +  | +  | +        | tr                 |
| 02.         | 04. | 16.00           | 14,5         | 85       | —           | —  | —  | +        |                    |
|             | 05. | 01.00           | 6            | 30       | +           | +  | +  | —        | tr                 |
|             | 06. | 22.30           | 9            | 60       | —           | +  | +  | +        | tr                 |
|             | 07. |                 |              |          |             |    |    |          | 2 — +              |
|             | 09. | 21.45           | 5,5          | 28       | —           | +  | +  | +        | tr                 |
|             | 12. | 01.30           | 5,5          | 25       | +           | +  | +  | —        | tr                 |
|             | 18. | 10.45           | 14,5         | 45       | —           | —  | —  | +        |                    |

| Days  |     |                 |              |          | Pt-s |    |    |          |                     |    |   |
|-------|-----|-----------------|--------------|----------|------|----|----|----------|---------------------|----|---|
| Month | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex   | Ey | Hx | Hy       | Ex                  | Ey |   |
|       |     |                 | E(mV/km)     | H(gamma) |      |    |    | E(mV/km) |                     |    |   |
| 02.   | 18. | 21.30           | 12,5         | 75       | —    | +  | +  | +        | tr                  |    |   |
|       | 21. | 22.30           | 28           | 100      | —    | —  | —  | +        |                     |    |   |
|       | 25. | 22.00           | 12           | 28       | +    | +  | +  | —        |                     |    |   |
|       | 26. | 21.30           | 10           | 42       | +    | +  | +  | —        | tr                  |    |   |
|       | 27. | 01.30           | 10           | 65       | +    | +  | +  | —        | tr                  |    |   |
|       |     | 10.30           | 5,5          | 22       | —    | —  | —  | +        |                     |    |   |
|       | 28. | 01.45           | 5,5          | 28       | +    | +  | +  | —        | tr                  |    |   |
|       |     | 18.45           | 10           | 40       | +    | +  | +  | +        | tr                  |    |   |
| 03.   | 02. | 01.30           | 7            | 35       | +    | +  | +  | —        | tr                  |    |   |
|       |     | 21.00           | 6,5          | 45       | —    | +  | —  | +        | tr                  |    |   |
|       | 04. | 01.15           | 9            | 48       | +    | +  | +  | —        | tr                  |    |   |
|       |     | 23.30           | 20           | 80       | —    | +  | +  | +        | tr                  |    |   |
|       | 05. | 20.00           | 4,5          | 32       | —    | +  | +  | +        | tr                  |    |   |
|       | 06. | 21.30           | 9            | 65       | —    | +  | —  | +        | tr                  |    |   |
|       | 10. | 13.00           | 12,5         | 50       | —    | —  | —  | +        |                     |    |   |
|       | 11. | 00.00           | 20           | 85       | +    | —  | +  | —        | tr                  |    |   |
|       | 14. | 22.30           |              |          |      |    |    |          | 3,5                 | +  | + |
|       | 20. | 22.00           | 4,5          | 20       | +    | +  | +  | 0        | 3,5                 | +  | + |
|       | 25. | 22.30           | 9            | 40       | —    | +  | +  | —        | tr                  |    |   |
|       | 26. | 11.00           | 7            | 18       | +    | +  | +  | —        |                     |    |   |
|       |     | 13.15           | 11           | 22       | —    | —  | —  | +        |                     |    |   |
|       |     | 21.45           | 9            | 45       | —    | +  | +  | +        | tr                  |    |   |
|       | 27. | 11.30           | 8            | 25       | +    | +  | +  | —        |                     |    |   |
|       | 28. | 03.15           | 6,5          | 35       | +    | +  | +  | —        | tr                  |    |   |
|       | 29. | 00.30           | 16           | 95       | +    | +  | +  | —        | tr                  |    |   |
|       |     | 03.00           | 14,5         | 100      | +    | +  | +  | —        | tr                  |    |   |
|       | 30. | 01.45           | 12,5         | 55       | +    | +  | +  | —        | tr                  |    |   |
|       | 31. | 01.00           | 8            | 32       | +    | +  | +  | —        | 2                   | +  | + |
|       |     | 23.45           | 8            | 45       | +    | +  | +  | —        | tr                  |    |   |
| 04.   | 01. | 22.45 (ssc?)    | 18           | 85       | +    | +  | +  | —        | tr                  |    |   |
|       | 04. | 12.45           | 11           | 45       | —    | —  | —  | +        |                     |    |   |
|       | 12. | 23.30           | 9            | 48       | +    | +  | +  | —        | tr                  |    |   |
|       | 14. | 22.45           | 7            | 55       | —    | 0  | +  | +        | tr                  |    |   |
|       | 17. | 01.30           | 4,5          | 18       | +    | +  | +  | —        | 2,5                 | +  | + |
|       |     | 05.30           |              |          |      |    |    |          | 4 (pg. 5min period) |    |   |
|       |     | 21.15           | 7            | 28       | +    | +  | +  | —        | 2,5                 |    |   |

| <i>Bays</i> |     |                 |              |          | <i>Pt-s</i> |    |    |    |          |    |    |
|-------------|-----|-----------------|--------------|----------|-------------|----|----|----|----------|----|----|
| Month       | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex          | Ey | Hx | Hy | E(mV/km) | Ex | Ey |
|             |     |                 | E(mV/km)     | H(gamma) |             |    |    |    |          |    |    |
| 04.         | 20. | 00.30           | 3,5          | 13       | +           | +  | +  | —  | 2,5      | +  | +  |
|             | 22. | 00.30           | 6,5          | 55       | +           | +  | +  | —  | tr       |    |    |
|             | 25. | 21.00           | 18           | 70       | —           | +  | +  | +  | tr       |    |    |
|             | 26. | 00.15           | 9            | 55       | +           | —  | +  | —  | tr       |    |    |
|             | 29. | 22.00           | 21,5         | 85       | +           | —  | +  | +  | tr       |    |    |
| 05.         | 02. | 02.15           | 9            | 55       | +           | +  | +  | —  | tr       |    |    |
|             | 09. | 20.45           | 9            | 45       | +           | +  | +  | +  |          |    |    |
|             | 16. | 21.45           | 3,5          | 12       | +           | +  | +  | —  |          |    |    |
|             | 19. | 01.30           | 9            | 45       | +           | +  | +  | —  | tr       |    |    |
|             | 22. | 22.30           | 8            | 50       | —           | +  | +  | +  |          |    |    |
|             | 23. | 21.30           | 7            | 40       | —           | —  | —  | +  | 2,5      | +  | +  |
|             | 28. | 19.00           | 5,5          | 35       | +           | +  | +  | +  |          |    |    |
|             | 02. | 23.15           | 6,5          | 18       | —           | —  | —  | —  | 2        | +  | +  |
|             | 03. | 21.30           | 3,5          | 15       | —           | +  | +  | +  | 2,5      | +  | +  |
|             | 04. | 20.45           | 4,5          | 15       | —           | —  | +  | —  |          |    |    |
| 06.         | 06. | 15.30           | 5,5          | 22       | —           | —  | —  | +  |          |    |    |
|             |     | 23.45           | > 24         | 120      | +           | +  | +  | —  | tr       |    |    |
|             | 11. | 00.45           |              |          |             |    |    |    | 2        | +  | +  |
|             | 13. | 01.30           | 2,5          | 10       | +           | +  | +  | —  |          |    |    |
|             | 17. | 06.15           | 9            | 28       | —           | —  | —  | +  |          |    |    |
|             | 18. | 20.15           |              |          |             |    |    |    | 2,5      | —  | +  |
|             | 20. | 13.30           | 5,5          | 28       | +           | +  | +  | —  |          |    |    |
|             |     | 21.15           | 4,5          | 25       | —           | +  | +  | +  | 3,5      | +  | +  |
|             | 22. | 01.15           | 5,5          | 35       | —           | +  | +  | +  | 2        | +  | +  |
|             |     | 17.15           | 12           | 25       | —           | —  | —  | +  |          |    |    |
|             |     | 19.00           | 12           | 35       | —           | —  | —  | +  |          |    |    |
|             | 23. | 06.15           | 11           | 28       | +           | —  | +  | —  |          |    |    |
|             |     | 22.00           | 7            | 48       | —           | —  | —  | +  | tr       |    |    |
|             | 25. | 20.45           |              |          |             |    |    |    | 13,5     | +  | +  |
|             | 29. | 20.00           | 8            | 35       | —           | +  | +  | +  | tr       |    |    |
| 07.         | 01. | 00.30           | 3,5          | 10       | —           | —  | —  | +  |          |    |    |
|             | 03. | 11.45           | 13,5         | 52       | +           | +  | +  | —  |          |    |    |
|             | 09. | 16.45           | 4,5          | 32       | +           | +  | +  | +  | tr       |    |    |
|             | 11. | 22.15           |              |          |             |    |    |    | 2,5      | +  | +  |
|             | 12. | 17.00           | 9            | 30       | —           | —  | —  | +  |          |    |    |
|             | 13. | 16.00           | 11           | 40       | —           | —  | —  | 0  | tr       |    |    |

| Days  |     |                 |              |          | Pt-s |    |    |          |     |    |   |
|-------|-----|-----------------|--------------|----------|------|----|----|----------|-----|----|---|
| Month | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex   | Ey | Hx | Hy       | Ex  | Ey |   |
|       |     |                 | E(mV/km)     | H(gamma) |      |    |    | E(mV/km) |     |    |   |
| 07.   | 15. | 00.30           | 7            | 42       | —    | +  | +  | +        | tr  |    |   |
|       | 16. | 22.00           | 5,5          | 28       | —    | +  | +  | +        |     |    |   |
|       | 17. | 22.45           | 9            | 52       | —    | —  | —  | +        | tr  |    |   |
|       | 18. | 22.15           | 4,5          | 25       | 0    | +  | +  | 0        | tr  |    |   |
|       | 19. | 00.30           | 4,5          | 35       | +    | +  | +  | —        | 2,5 | +  | + |
|       |     | 22.30           | 6,5          | 18       | +    | +  | +  | —        | 5,5 | +  | + |
|       | 20. | 23.45           | 10           | 45       | +    | +  | +  | —        | 3,5 | +  | + |
|       | 21. | 21.45           | 5,5          | 28       | —    | +  | +  | +        | tr  |    |   |
|       | 22. | 23.00           |              |          |      |    |    |          | 2   | +  | + |
|       | 27. | 01.45           | 14,5         | 80       | +    | +  | +  | —        | tr  |    |   |
|       |     | 17.45           | 14,5         | 55       | +    | +  | +  | —        |     |    |   |
|       | 29. | 19.30           | 11           | 35       | —    | —  | —  | +        |     |    |   |
|       |     | 22.30           | 18           | 45       | —    | —  | —  | +        |     |    |   |
| 08.   | 02. | 19.30           | 4,5          | 12       | —    | —  | —  | +        |     |    |   |
|       | 04. | 21.30           | 8            | 38       | —    | +  | +  | +        | tr  |    |   |
|       | 07. | 01.30           | 3,5          | 18       | +    | +  | +  | —        | 2,5 | +  | + |
|       |     | 19.45           | 6,5          | 22       | +    | +  | —  | +        | 2   | +  | + |
|       |     | 20.45           | 4,5          | 32       | —    | —  | —  | +        | tr  |    |   |
|       | 09. | 00.45           | 4,5          | 25       | +    | +  | +  | —        | 2,5 | +  | + |
|       | 10. | 21.00           | 8            | 22       | +    | +  | +  | —        |     |    |   |
|       | 11. | 19.15 (ssc ?)   | 11           | 30       | +    | +  | +  | —        |     |    |   |
|       | 12. | 20.30           | 9            | 32       | —    | —  | —  | +        |     |    |   |
|       |     | 22.30           | 10           | 28       | —    | —  | —  | +        |     |    |   |
|       | 17. | 02.00           |              |          |      |    |    |          | 3,5 | +  | + |
|       |     | 17.00           | 6,5          | 18       | +    | +  | +  | —        |     |    |   |
|       | 18. | 15.00           | 6,5          | 28       | +    | +  | +  | —        |     |    |   |
|       | 25. | 23.15           | 11           | 35       | —    | —  | —  | +        |     |    |   |
| 09.   | 26. | 20.00           | 4,5          | 22       | —    | +  | +  | —        | tr  |    |   |
|       | 28. | 01.45           | 4,5          | 30       | +    | +  | +  | —        | 2,5 | +  | + |
|       | 29. | 17.45           | > 30         | 130      | +    | +  | +  | —        | tr  |    |   |
|       | 01. | 20.30           | 5,5          | 38       | +    | +  | +  | —        | tr  |    |   |
|       | 03. | 02.15           | 6,5          | 28       | +    | +  | +  | —        | tr  |    |   |
|       | 05. | 21.00           | 10           | 72       | —    | +  | +  | +        | tr  |    |   |
|       | 06. | 02.30           | 8            | 35       | +    | +  | +  | —        | tr  |    |   |
|       | 08. | 20.30           |              |          |      |    |    |          | 2,5 | +  | + |
|       | 11. | 16.30           | 12,5         | 32       | —    | —  | —  | +        |     |    |   |

| Bays  |       |                 |              |          | Pt-s |    |    |    |           |   |    |    |
|-------|-------|-----------------|--------------|----------|------|----|----|----|-----------|---|----|----|
| Month | Day   | CET<br>(GMT+1h) | Amplitude in |          | Ex   | Ey | Hx | Hy | E(mV, km) |   | Ex | Ey |
|       |       |                 | E(mV/km)     | H(gamma) |      |    |    |    |           |   |    |    |
| 09.   | 13.   | 00.00           | 11           | 45       | —    | +  | +  | +  | tr        |   |    |    |
|       |       | 14.15           | 4,5          | 25       | +    | +  | +  | —  | tr        |   |    |    |
|       |       | 22.45           | 2,5          | 15       | +    | +  | +  | 0  | 2,5       | + | +  |    |
|       | 14.   | 20.45           | 5,5          | 32       | —    | +  | +  | +  | tr        |   |    |    |
|       | 15.   | 11.15           | 9            | 35       | +    | +  | +  | —  |           |   |    |    |
|       | 16.   | 01.15           | 6,5          | 22       | +    | +  | +  | —  | 2         | + | +  |    |
|       |       | 10.30           | 6,5          | 25       | —    | —  | —  | +  |           |   |    |    |
|       |       | 23.30           | 5,5          | 30       | +    | +  | +  | —  | tr        |   |    |    |
|       | 20.   | 23.15           | 7            | 35       | +    | +  | +  | +  | 2,5       | + | +  |    |
|       | 21.   | 01.30           | 15,5         | 60       | +    | +  | +  | +  | tr        |   |    |    |
|       | 24.   | 21.15           | 3,5          | 18       | —    | +  | +  | +  | 2,5       | + | +  |    |
|       |       | 22.00           | 12,5         | 50       | +    | 0  | —  | —  | tr        |   |    |    |
|       | 25.   | 03.45           | 8            | 55       | —    | +  | +  | +  |           |   |    |    |
|       |       | 21.15           | 6,5          | 32       | —    | —  | —  | +  |           |   |    |    |
|       | 26.   | 02.15           | 5,5          | 35       | +    | +  | +  | —  | 3,5       | + | +  |    |
|       |       | 20.30           | 12,5         | 42       | —    | +  | +  | +  | tr        |   |    |    |
|       | 27.   | 04.00           | 12,5         | 45       | —    | +  | +  | —  |           |   |    |    |
|       | 29.   | 23.30           |              |          |      |    |    |    | 2,5       | + | +  |    |
|       | 30.   | 22.00           | 8            | 35       | —    | +  | +  | +  | tr        |   |    |    |
| 10.   | 01.   | 01.45           | 5,5          | 28       | +    | +  | +  | —  | tr        |   |    |    |
|       | 02.   | 23.45           | 5,5          | 35       | —    | +  | +  | +  | tr        |   |    |    |
|       | 03.   | 17.30           | 9            | 45       | —    | —  | —  | +  | tr        |   |    |    |
|       | 04.   | 11.15 (?)       | 14,5         | 42       | +    | +  | +  | —  |           |   |    |    |
|       | 05.   | 23.45           | 5,5          | 18       | +    | +  | +  | —  | tr        |   |    |    |
|       | 07.   | 21.00           | 14,5         | 60       | —    | —  | —  | +  | tr        |   |    |    |
|       | 08.   | 03.00           | 21,5         | 70       | +    | +  | +  | —  | tr        |   |    |    |
|       |       | 17.45           | 12,5         | 50       | —    | —  | —  | +  |           |   |    |    |
|       |       | 21.45           | 9            | 65       | —    | +  | +  | +  | tr        |   |    |    |
|       | 09.   | 19.30           | 6,5          | 40       | —    | —  | —  | +  | tr        |   |    |    |
|       | 10.   | 19.45           | 6,5          | 55       | —    | +  | +  | +  | tr        |   |    |    |
|       |       | 22.45           | 5,5          | 25       | —    | +  | +  | +  | 2         | + | +  |    |
|       | 12.   | 23.45           | 8            | 45       | —    | +  | +  | +  | 2         | + | +  |    |
|       | 14.   | 10.00           | 9            | 25       | +    | +  | +  | —  |           |   |    |    |
|       | 16.   | 11.30           | 8            | 28       | +    | +  | +  | —  |           |   |    |    |
|       | 20.   | 20.45           |              |          |      |    |    |    | 2,5       | + | +  |    |
|       | 21.   | 11.30           | 6,5          | 22       | +    | +  | +  | —  |           |   |    |    |
|       |       | 12.15           | 6,5          | 18       | —    | —  | —  | +  |           |   |    |    |
|       |       | 22.00           | 16           | 42       | +    | +  | +  | —  | 2,5       | + | +  |    |
| 22.   | 17.45 | 9               | 35           | —        | +    | +  | +  | tr |           |   |    |    |

| <i>Bays</i> |     |                 |              |          | <i>Pt-s</i> |    |    |    |          |   |    |    |
|-------------|-----|-----------------|--------------|----------|-------------|----|----|----|----------|---|----|----|
| Month       | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex          | Ey | Hx | Hy | E(mV/km) |   | Ex | Ey |
|             |     |                 | E(mV/km)     | H(gamma) |             |    |    |    |          |   |    |    |
| 10.         | 26. | 22.45           | 3,5          | 25       | +           | +  | +  | —  | 2,5      | + | +  |    |
|             | 27. | 21.45           | 3,5          | 15       | —           | +  | +  | +  | 2,5      | + | +  |    |
|             | 28. | 22.00           | 5,5          | 28       | —           | +  | +  | +  | 4,5      | + | +  |    |
|             |     | 23.45           | 7            | 40       | —           | +  | +  | +  | tr       |   |    |    |
|             | 29. | 21.30           | 3,5          | 18       | —           | +  | +  | +  | 2        | + | +  |    |
| 11.         | 01. | 00.30           | 5,5          | 28       | —           | +  | +  | +  | tr       |   |    |    |
|             |     | 11.00           | 11           | 18       | —           | —  | —  | +  |          |   |    |    |
|             | 03. | 21.15           | 5,5          | 28       | —           | +  | +  | +  | tr       |   |    |    |
|             | 07. | 14.45 (ssc?)    | 5,5          | 18       | +           | +  | +  | —  |          |   |    |    |
|             |     | 19.15           | 7            | 28       | —           | +  | +  | +  | tr       |   |    |    |
|             | 13. | 16.30           | 14,5         | 80       | +           | —  | —  | —  | tr       |   |    |    |
|             |     | 23.30           | 12,5         | 60       | —           | +  | +  | +  | tr       |   |    |    |
|             | 17. | 20.45           | 4,5          | 18       | —           | —  | —  | +  | 2,5      | + | +  |    |
|             | 19. | 22.15           | 4,5          | 22       | +           | —  | —  | —  | tr       |   |    |    |
|             | 24. | 22.00           | 6,5          | 50       | —           | +  | +  | +  | tr       |   |    |    |
|             | 26. | 20.15           | 3,5          | 28       | —           | —  | —  | +  | 2,5      | + | +  |    |
| 12.         | 27. | 03.30           | 4,5          | 12       | +           | +  | +  | —  |          |   |    |    |
|             | 30. | 23.00           | 4,5          | 12       | —           | +  | +  | —  | 2,5      | + | +  |    |
|             | 02. | 02.30           | 5,5          | 30       | +           | —  | 0  | —  | tr       |   |    |    |
|             | 04. | 17.45           | 21,5         | 80       | —           | +  | +  | +  | tr       |   |    |    |
|             | 09. | 10.45           | 8            | 18       | +           | +  | +  | —  |          |   |    |    |
|             | 10. | 18.00           | 4,5          | 35       | —           | +  | +  | +  |          |   |    |    |
|             | 12. | 11.15           | 3,5          | 12       | +           | +  | +  | —  |          |   |    |    |
|             |     | 21.30           | 4,5          | 22       | +           | +  | +  | —  | tr       |   |    |    |
|             | 17. | 00.15           | 4,5          | 35       | —           | +  | +  | +  | tr       |   |    |    |
|             |     | 22.45           | 4,5          | 22       | —           | +  | +  | +  | 3,5      | + | —  |    |
|             | 19. | 21.45           | 2,5          | 22       | +           | +  | +  | +  | 2,5      | + | +  |    |
|             | 23. | 23.45           |              |          |             |    |    |    | 2,5      | + | +  |    |
|             | 24. | 00.30           | 4,5          | 18       | +           | +  | +  | —  | 2,5      | + | +  |    |
|             | 25. | 23.30           | 3,5          | 12       | —           | —  | —  | +  |          |   |    |    |
|             | 26. | 21.15           | 8            | 38       | —           | +  | +  | +  | 2,5      | + | +  |    |
|             | 27. | 17.00           | 8            | 50       | —           | +  | —  | +  |          |   |    |    |
|             | 28. | 12.00           | 6,5          | 40       | —           | —  | —  | +  |          |   |    |    |
|             |     | 23.00           | 8            | 35       | +           | +  | +  | —  | 2,5      | + | +  |    |
|             | 29. | 04.30           | 11           | 40       | —           | +  | —  | —  | tr       |   |    |    |
|             | 30. | 19.15           | 8            | 50       | +           | +  | +  | +  | 2        | + | +  |    |
|             | 31. | 18.45           | 7            | 25       | —           | +  | +  | +  | tr       |   |    |    |
|             |     | 23.30           | 10,5         | 40       | +           | +  | +  | —  | 2        | + | +  |    |

*Further Pi-traces*

| Month | Day | CET   | Month | Day | CET   | Month | Day | CET   |
|-------|-----|-------|-------|-----|-------|-------|-----|-------|
| 01.   | 06. | 00.30 | 03.   | 26. | 18.30 | 06.   | 18. | 23.00 |
|       | 09. | 01.30 |       | 27. | 22.15 |       | 20. | 20.45 |
|       | 11. | 02.30 |       | 29. | 18.45 |       | 21. | 19.45 |
|       |     | 03.00 |       | 30. | 23.30 |       | 22. | 23.00 |
|       | 12. | 23.30 | 04.   | 04. | 22.30 |       | 24. | 18.30 |
|       | 13. | 23.15 |       | 08. | 21.45 |       | 25. | 00.00 |
|       | 18. | 00.30 |       | 11. | 23.30 |       | 28. | 18.45 |
|       | 20. | 00.00 |       | 17. | 11.45 |       | 29. | 01.15 |
|       |     | 23.30 |       | 19. | 16.00 |       |     | 12.00 |
|       | 25. | 21.30 |       | 20. | 21.00 |       |     | 23.45 |
|       | 26. | 20.15 |       | 21. | 20.45 |       | 30. | 00.45 |
|       | 31. | 20.45 |       |     | 21.30 |       |     | 01.00 |
| 02.   | 06. | 00.15 |       | 24. | 21.00 |       |     | 01.15 |
|       |     | 00.45 |       | 26. | 22.30 |       |     | 02.00 |
|       | 07. | 17.30 |       | 29. | 20.30 | 07.   | 01. | 02.00 |
|       | 08. | 16.30 | 05.   | 02. | 20.30 |       | 02. | 20.45 |
|       | 09. | 00.00 |       | 03. | 03.00 |       | 03. | 02.00 |
|       |     | 23.30 |       |     | 22.00 |       |     | 22.45 |
|       | 11. | 00.30 |       | 05. | 00.00 |       | 04. | 03.15 |
|       | 14. | 22.00 |       | 11. | 01.15 |       |     | 05.30 |
|       | 16. | 01.00 |       |     | 22.45 |       | 08. | 20.30 |
|       | 25. | 21.00 |       | 14. | 15.30 |       |     | 21.15 |
|       | 26. | 00.45 |       | 17. | 00.30 |       |     | 22.15 |
| 03.   | 02. | 01.00 |       |     | 02.30 |       |     | 22.45 |
|       | 06. | 00.15 |       | 18. | 09.15 |       | 10. | 20.00 |
|       |     | 21.00 |       | 22. | 23.30 |       |     | 21.15 |
|       | 08. | 01.15 |       | 24. | 21.30 |       | 11. | 22.30 |
|       |     | 23.45 | 06.   | 05. | 02.00 |       | 12. | 22.30 |
|       | 09. | 00.30 |       | 11. | 01.30 |       | 13. | 23.30 |
|       | 10. | 23.45 |       | 12. | 21.30 |       | 14. | 00.45 |
|       | 11. | 00.45 |       | 15. | 19.45 |       |     | 20.45 |
|       | 13. | 22.15 |       |     | 20.15 |       | 16. | 20.30 |
|       | 14. | 21.00 |       |     | 20.45 |       | 17. | 22.30 |
|       |     | 21.30 |       |     | 21.15 |       | 19. | 21.15 |
|       | 19. | 23.15 |       | 16. | 21.00 |       |     | 22.00 |
|       | 20. | 16.45 |       |     | 21.15 |       | 23. | 02.45 |
|       | 25. | 00.15 |       |     | 21.30 |       | 24. | 00.15 |



*Further Pi-traces*

| Month | Day | CET   | Month | Day | CET   | Month | Day | CET   |
|-------|-----|-------|-------|-----|-------|-------|-----|-------|
| 07.   | 24. | 00.30 | 09.   | 07. | 21.30 | 10.   | 06. | 04.30 |
|       | 25. | 20.00 |       |     | 23.45 |       | 11. | 21.30 |
|       | 28. | 02.30 |       | 08. | 00.30 |       |     | 22.15 |
|       | 30. | 00.30 |       | 09. | 00.45 |       | 17. | 22.30 |
| 08.   | 02. | 00.15 |       |     | 03.00 |       | 19. | 23.30 |
|       | 04. | 20.45 |       |     | 17.00 |       | 20. | 07.15 |
|       | 05. | 04.45 |       |     | 20.15 |       | 22. | 01.45 |
|       | 06. | 22.30 |       |     | 23.30 |       | 23. | 03.00 |
|       | 07. | 20.15 |       | 11. | 23.30 |       | 25. | 03.15 |
|       |     | 21.45 |       | 12. | 00.30 |       | 27. | 16.45 |
|       |     | 22.30 |       | 13. | 21.30 | 11.   | 04. | 20.00 |
|       | 10. | 02.15 |       | 14. | 19.45 |       |     | 22.45 |
|       |     | 23.15 |       |     | 20.15 |       | 05. | 20.45 |
|       |     | 23.30 |       | 15. | 21.15 |       | 20. | 22.45 |
|       | 15. | 21.30 |       | 16. | 00.00 |       | 21. | 00.45 |
|       |     | 22.00 |       |     | 00.30 |       | 23. | 20.30 |
|       | 16. | 00.45 |       | 20. | 02.15 |       | 28. | 17.30 |
|       | 17. | 02.30 |       |     | 22.15 | 12.   | 05. | 23.30 |
|       | 18. | 20.45 |       | 21. | 00.45 |       | 06. | 21.45 |
|       |     | 21.00 |       | 22. | 00.00 |       | 09. | 21.15 |
|       |     | 23.30 |       |     | 01.00 |       | 11. | 19.15 |
|       | 22. | 19.15 |       |     | 02.45 |       |     | 19.45 |
|       |     | 19.30 |       | 23. | 17.30 |       | 12. | 20.30 |
|       | 24. | 17.30 |       | 25. | 20.00 |       | 13. | 20.45 |
|       | 28. | 22.45 |       | 27. | 23.15 |       |     | 21.45 |
|       |     | 23.15 |       | 30. | 00.00 |       | 16. | 19.30 |
|       |     | 23.30 |       |     | 00.15 |       | 19. | 19.00 |
|       |     | 23.45 |       |     | 21.45 |       | 22. | 01.00 |
|       | 29. | 00.45 | 10.   | 02. | 01.45 |       |     | 01.15 |
|       | 30. | 01.30 |       | 03. | 08.30 |       | 24. | 00.45 |
|       |     | 23.30 |       |     | 18.45 |       | 31. | 02.45 |
|       | 31. | 20.30 |       |     | 23.15 |       |     | 21.15 |
|       |     | 21.30 |       |     | 23.30 |       |     |       |
| 09.   | 02. | 00.45 |       | 05. | 20.30 |       |     |       |
|       | 03. | 19.15 |       |     | 20.45 |       |     |       |
|       | 07. | 01.30 |       |     | 21.15 |       |     |       |

*SI-s*

| Month | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex | Ey | Hx | Hy |
|-------|-----|-----------------|--------------|----------|----|----|----|----|
|       |     |                 | E(mV/km)     | H(gamma) |    |    |    |    |
| 01.   | 01. | 06.45           | 6,5          | 14       | —  | —  | —  | +  |
|       | 05. | 08.30           | 5,5          | 18       | —  | +  | +  | +  |
|       | 06. | 22.45           | 3,5          | 10       | +  | +  | +  | —  |
|       | 07. | 00.30           | 5,5          | 18       | +  | +  | +  | —  |
|       | 08. | 07.15           | 7            | 12       | +  | +  | +  | —  |
|       | 17. | 04.00           | 2            | 6        | +  | +  | +  | —  |
|       | 22. | 01.30           | 6,5          | 35       | —  | —  | —  | +  |
| 02.   | 23. | 22.30           | 6,5          | 18       | —  | —  | —  | +  |
|       | 25. | 07.45           | 8            | 17       | +  | +  | +  | —  |
|       | 30. | 18.45           | 3,5          | 14       | —  | —  | —  | +  |
| 03.   | 15. | 15.45           | 6,5          | 22       | —  | —  | —  | +  |
|       |     | 19.45           | 5,5          | 12       | —  | —  | —  | +  |
| 04.   | 19. | 11.30           | 3,5          | 8        | +  | +  | +  | +  |
| 05.   | 18. | 03.15           | 2,5          | 7        | —  | —  | —  | +  |
| 06.   | 17. | 10.45           | 3,5          | 12       | +  | +  | +  | —  |
|       | 18. | 01.45           | 2,5          | 7        | +  | +  | +  | —  |
|       | 19. | 04.45           | 6,5          | 20       | —  | +  | —  | +  |
|       | 30. | 18.45           | 3,5          | 14       | —  | —  | —  | +  |
|       | 28. | 22.15           | 8            | 18       | +  | +  | +  | —  |
| 07.   | 12. | 13.45 (ssc?)    | 6,5          | 22       | +  | +  | +  | —  |
|       | 13. | 09.15           | 4,5          | 12       | —  | —  | —  | +  |
|       | 17. | 21.45           | 4,5          | 12       | —  | —  | —  | +  |
|       | 19. | 07.00           | 7,5          | 16       | —  | —  | —  | +  |
|       |     | 07.45           | 7            | 16       | —  | —  | —  | +  |
|       | 21. | 01.00           | 12,5         | 25       | —  | —  | —  | +  |
|       | 23. | 13.15           | 5,5          | 14       | +  | +  | +  | —  |
| 08.   | 13. | 00.00           | 12,5         | 28       | —  | —  | —  | +  |
|       | 15. | 12.45           | 3,5          | 10       | —  | —  | —  | +  |
|       | 21. | 01.00           | 12,5         | 25       | —  | —  | —  | +  |
| 09.   | 04. | 15.45           | 3,5          | 12       | +  | +  | +  | —  |
|       | 17. | 04.45           | 5,5          | 12       | —  | —  | —  | +  |
|       | 18. | 04.45           | 8            | 16       | —  | —  | —  | +  |
|       |     | 21.45           | 7            | 18       | +  | +  | +  | —  |
|       | 21. | 20.00           | 6,5          | 14       | —  | —  | —  | +  |
|       | 22. | 04.00           | 5,5          | 14       | +  | +  | +  | —  |
|       |     |                 |              |          |    |    |    |    |

*SI-s*

| Month | Day | CET<br>(GMT+1h) | Amplitude in |          | Ex | Ey | Hx | Hy |
|-------|-----|-----------------|--------------|----------|----|----|----|----|
|       |     |                 | E(mV/km)     | H(gamma) |    |    |    |    |
| 09.   | 30. | 10.00           | 8            | 18       | —  | —  | —  | +  |
|       |     | 15.00           | 4,5          | 10       | +  | +  | +  | —  |
| 10.   | 07. | 05.30           | 7            | 18       | —  | —  | —  | +  |
|       | 13. | 19.30           | 2,5          | 8        | —  | —  | —  | +  |
|       | 16. | 08.45           | 3,5          | 7        | +  | +  | +  | —  |
| 11.   | 08. | 22.00           | 2,5          | 7        | —  | —  | —  | +  |
|       | 29. | 17.45 (ssc?)    | 4,5          | 12       | —  | —  | —  | +  |
|       | 30. | 18.45           | 3,5          | 8        | —  | —  | —  | +  |
| 12.   | 08. | 08.30           | 4,5          | 12       | —  | —  | —  | +  |
|       | 09. | 05.45           | 3,5          | 7        | +  | +  | +  | —  |
|       |     | 07.15           | 5,5          | 12       | —  | —  | —  | +  |
|       | 22. | 13.00           | 9            | 20       | +  | +  | +  | —  |
|       | 30. | 23.00           | 4,5          | 14       | —  | —  | —  | +  |

*Needles*

| Month | Day | CET<br>(GMT+1h) | Amplitude in<br>E(mV. km) | Ex | Ey |
|-------|-----|-----------------|---------------------------|----|----|
| 01.   | 06. | 07.45           | 9                         | +  | +  |
|       |     | 15.45           | 7                         | —  | —  |
| 02.   | 12. | 13.15           | 6,5                       | —  | —  |
| 03.   | 23. | 09.30           | 5,5                       | —  | —  |
|       | 29. | 09.30           | 5,5                       | —  | —  |
| 04.   | 14. | 16.15           | 3,5                       | —  | —  |
| 05.   | 08. | 17.30           | 2,5                       | —  | —  |
|       | 22. | 17.30           | 3,5                       | —  | —  |
| 06.   | 03. | 15.30           | 2                         | +  | +  |
| 07.   | 19. | 16.15           | 8                         | —  | —  |
| 08.   | 13. | 07.45           | 4,5                       | —  | —  |
|       | 14. | 09.45           | 2,5                       | +  | +  |
|       | 15. | 12.30           | 2                         | —  | —  |
| 09.   | 17. | 15.30           | 3,5                       | +  | +  |
| 10.   | 03. | 05.30           | 2,5                       | —  | —  |
|       | 05. | 14.30           | 2                         | +  | +  |
|       | 07. | 12.30           | 5,5                       | —  | —  |
|       |     | 15.00           | 5,5                       | —  | —  |
|       | 19. | 12.45           | 9                         | +  | —  |
| 11.   | 01. | 16.15           | 2,5                       | —  | +  |
|       | 26. | 13.30           | 2                         | —  | —  |
|       | 29. | 20.15           | 4,5                       | +  | +  |

1977

*Pc 1-events*

| Month | Day | Duration |           | Quality | Month | Day | Duration           |           | Quality |
|-------|-----|----------|-----------|---------|-------|-----|--------------------|-----------|---------|
| 1.    | 1.  | 423      | — 506     | B       | 3.    | 1.  | 351                | — 437     | C       |
|       |     | 1700     | — 1826    | C       |       |     | 446                | — 525     | C       |
|       |     | 2100     | — 2136    | B       |       | 16. | 540                | — 625     | C       |
|       |     | 2149     | — 2344    | B       |       |     | 2216               | — 2338    | C       |
|       | 3.  | 221      | — 239     | A       |       | 17. | 725                | — 808     | C       |
|       |     | 722      | — 816     | A       |       | 21. | 2001               | — 2222    | C       |
|       | 4.  | 711      | — 742     | A       |       | 23. | 1928               | — 2150    | C       |
| 10.   |     | 2218     | — 2233    | C       |       | 26. | 2240               | — 2305    | C       |
| 11.   |     | 114      | — 134     | C       |       | 27. | 502                | — 523     | C       |
|       |     | 607      | — 710     | C       | 4.    | 7.  | 1733               | — 1857    | B       |
| 19.   |     | 535      | — 715     | C       |       | 8.  | 2034               | — 2120    | B       |
| 31.   |     | 1550     | — 1844    | C       |       | 10. | 302                | — 402     | B       |
|       |     | 2000     | — 2202    | C       |       |     | 2047               | — 2130    | B       |
| 2.    | 1.  | 154      | — 336     | C       |       | 12. | 325                | — 453     | C       |
|       |     | 611      | — 810     | C       |       |     | 215                | — 613     | C       |
|       |     | 1320     | — 1516    | C       |       | 13. | 136                | — 235     | A       |
|       | 2.  | 2226     | — 2236    | C       |       |     | 346                | — 433     | C       |
|       |     | 2240     | — 2250    | C       |       | 14. | 304                | — 700     | B       |
|       |     | 2311     | — 2321    | C       |       | 16. | 1916               | — 2057    | C       |
|       | 3.  | 508      | — 517     | C       |       | 18. | 2240               | — 19. 126 | C       |
|       |     | 526      | — 612     | B       |       | 19. | 157                | — 407     | B       |
|       |     | 720      | — 742     | C       |       | 20. | 1946               | — 2127    | B       |
|       | 4.  | 237      | — 255     | C       |       |     | 2333               | — 21. 056 | C       |
|       |     | 518      | — 633     | B       |       | 21. | 2100               | — 2337    | C       |
|       | 5.  | 406      | — 418     | C       |       | 22. | 011                | — 105     | C       |
|       |     | 434      | — 442     | C       |       |     | 2214               | — 23. 205 | B       |
|       |     | 458      | — 526     | C       |       |     | 035                | — 702     | C       |
|       |     | 540      | — 601     | A       | 5.    | 4.  | 350                | — 600     | C       |
|       | 6.  | 444      | — 530     | B       |       |     | 125                | — 430     | C       |
|       |     | 2005     | — 2107    | C       |       | 14. | later no recording |           |         |
| 13.   |     | 058      | — 121     | C       |       |     |                    |           |         |
|       |     | 815      | — 858     | B       |       |     |                    |           |         |
| 17.   |     | 107      | — 121     | C       |       |     |                    |           |         |
|       |     | 2140     | — 2235    | C       |       |     |                    |           |         |
| 21.   |     | 2158     | — 010     | C       |       |     |                    |           |         |
| 22.   |     | 2353     | — 23. 118 | B       |       |     |                    |           |         |

1979

*Pc 1-events*

| Month | Day | Duration |       | Quality |   |
|-------|-----|----------|-------|---------|---|
| 1.    | 11. | 2216     | — 12. | 035     | C |
|       | 12. | 256      | —     | 404     | C |
|       |     | 417      | —     | 815     | C |
|       | 13. | 033      | —     | 244     | C |
|       |     | 302      | —     | 714     | C |
| 2.    | 10. | 606      | —     | 642     | C |
| 4.    | 7.  | 418      | —     | 445     | C |
|       | 7.  | 418      | —     | 630     | C |
| 8.    | 25. | 312      | —     | 442     | C |
| 9.    | 2.  | 515      | —     | 538     | C |

V.

Average amplitudes in 12 pulsation bands  
(monthly averages for 3 hour intervals in  $\mu\text{V/km}$ )

| January |         |      |       |       |       |       |       |       |       |        |         |                |
|---------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
| CET     | Periods |      |       |       |       |       |       |       |       |        |         |                |
|         | 1—5     | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300 | 300—600<br>sec |
| 0— 3    | 2       | 5    | 16    | 33    | 39    | 19    | 15    | 29    | 58    | 84     | 105     | 179            |
| 3— 6    | 0       | 5    | 19    | 30    | 60    | 62    | 21    | 17    | 26    | 21     | 184     | 123            |
| 6— 9    | 0       | 2    | 15    | 61    | 91    | 87    | 40    | 14    | 7     | 14     | 169     | 234            |
| 9—12    | 0       | 2    | 15    | 67    | 102   | 108   | 36    | 13    | 24    | 36     | 227     | 229            |
| 12—15   | 0       | 0    | 15    | 52    | 202   | 177   | 31    | 9     | 9     | 38     | 249     | 241            |
| 15—18   | 0       | 0    | 16    | 51    | 110   | 123   | 26    | 9     | 7     | 12     | 156     | 131            |
| 18—21   | 0       | 4    | 8     | 49    | 63    | 47    | 25    | 10    | 0     | 76     | 141     | 149            |
| 21—24   | 1       | 7    | 11    | 25    | 38    | 36    | 16    | 33    | 44    | 93     | 84      | 96             |
| Average | 1       | 3    | 14    | 47    | 90    | 84    | 27    | 17    | 21    | 46     | 166     | 174            |

| February |   |   |    |    |    |     |     |    |    |     |     |     |
|----------|---|---|----|----|----|-----|-----|----|----|-----|-----|-----|
| 0— 3     | 1 | 8 | 14 | 18 | 21 | 30  | 26  | 11 | 15 | 94  | 96  | 329 |
| 3— 6     | 0 | 5 | 13 | 26 | 56 | 47  | 32  | 29 | 9  | 29  | 131 | 366 |
| 6— 9     | 0 | 3 | 10 | 34 | 64 | 91  | 107 | 56 | 5  | 22  | 187 | 275 |
| 9—12     | 0 | 1 | 12 | 28 | 48 | 105 | 106 | 40 | 6  | 29  | 169 | 236 |
| 12—15    | 0 | 0 | 2  | 20 | 55 | 122 | 107 | 66 | 7  | 3   | 164 | 244 |
| 15—18    | 0 | 0 | 5  | 17 | 67 | 95  | 77  | 34 | 31 | 33  | 196 | 264 |
| 18—21    | 0 | 3 | 7  | 32 | 42 | 29  | 23  | 26 | 14 | 29  | 77  | 181 |
| 21—24    | 1 | 9 | 14 | 18 | 28 | 23  | 19  | 21 | 16 | 154 | 136 | 185 |
| Average  | 0 | 4 | 10 | 24 | 47 | 67  | 62  | 35 | 13 | 50  | 144 | 261 |



| CET     | March   |      |       |       |       |       |       |       |       |        |         |                |
|---------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
|         | Periods |      |       |       |       |       |       |       |       |        |         |                |
|         | 1—5     | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300 | 300—600<br>sec |
| 0— 3    | 1       | 17   | 31    | 22    | 20    | 17    | 8     | 16    | 53    | 140    | 81      | 119            |
| 3— 6    | 1       | 9    | 18    | 35    | 60    | 38    | 15    | 8     | 15    | 40     | 152     | 166            |
| 6— 9    | 0       | 1    | 5     | 39    | 91    | 112   | 106   | 43    | 6     | 20     | 134     | 213            |
| 9—12    | 0       | 0    | 22    | 41    | 40    | 95    | 189   | 70    | 24    | 96     | 136     | 273            |
| 12—15   | 0       | 0    | 6     | 40    | 48    | 96    | 137   | 32    | 8     | 80     | 232     | 113            |
| 15—18   | 0       | 1    | 7     | 21    | 40    | 67    | 86    | 45    | 8     | 32     | 226     | 132            |
| 18—21   | 0       | 8    | 21    | 30    | 35    | 21    | 14    | 11    | 23    | 74     | 191     | 205            |
| 21—24   | 0       | 15   | 28    | 16    | 16    | 23    | 11    | 8     | 28    | 153    | 156     | 131            |
| Average | 0       | 6    | 17    | 31    | 44    | 61    | 72    | 29    | 21    | 79     | 162     | 170            |

| April   |   |    |    |    |     |     |     |    |    |     |     |     |
|---------|---|----|----|----|-----|-----|-----|----|----|-----|-----|-----|
| 0— 3    | 0 | 14 | 39 | 27 | 31  | 14  | 16  | 18 | 59 | 97  | 354 | 296 |
| 3— 6    | 0 | 8  | 43 | 56 | 90  | 39  | 26  | 40 | 21 | 71  | 317 | 309 |
| 6— 9    | 0 | 0  | 15 | 48 | 168 | 226 | 227 | 21 | 32 | 42  | 393 | 352 |
| 9—12    | 0 | 0  | 1  | 18 | 179 | 276 | 183 | 46 | 86 | 59  | 424 | 415 |
| 12—15   | 0 | 0  | 1  | 29 | 161 | 232 | 170 | 31 | 45 | 79  | 140 | 220 |
| 15—18   | 0 | 0  | 1  | 32 | 95  | 111 | 88  | 56 | 8  | 83  | 289 | 294 |
| 18—21   | 0 | 3  | 27 | 52 | 42  | 25  | 10  | 22 | 21 | 92  | 205 | 98  |
| 21—24   | 0 | 13 | 31 | 44 | 18  | 10  | 16  | 8  | 50 | 213 | 290 | 159 |
| Average | 0 | 5  | 20 | 38 | 97  | 116 | 91  | 30 | 40 | 92  | 302 | 267 |

| May     |         |      |       |       |       |       |       |       |       |        |         |                |
|---------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
| CET     | Periods |      |       |       |       |       |       |       |       |        |         |                |
|         | 1—5     | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300 | 300—600<br>sec |
| 0— 3    | 0       | 12   | 55    | 41    | 30    | 16    | 27    | 20    | 93    | 80     | 81      | 236            |
| 3— 6    | 0       | 5    | 46    | 101   | 135   | 75    | 35    | 13    | 11    | 63     | 124     | 160            |
| 6— 9    | 0       | 0    | 9     | 102   | 269   | 302   | 87    | 5     | 6     | 21     | 229     | 259            |
| 9—12    | 0       | 0    | 4     | 38    | 235   | 307   | 102   | 0     | 6     | 61     | 172     | 317            |
| 12—15   | 0       | 0    | 0     | 30    | 200   | 321   | 152   | 25    | 7     | 58     | 170     | 177            |
| 15—18   | 0       | 0    | 4     | 64    | 142   | 112   | 109   | 20    | 8     | 51     | 190     | 302            |
| 18—21   | 0       | 4    | 28    | 58    | 57    | 29    | 22    | 26    | 38    | 106    | 183     | 233            |
| 21—24   | 0       | 9    | 63    | 36    | 32    | 18    | 17    | 27    | 38    | 163    | 110     | 199            |
| Average | 0       | 4    | 26    | 59    | 138   | 149   | 69    | 17    | 25    | 75     | 157     | 236            |

| June    |   |    |    |    |     |     |    |    |    |     |     |     |
|---------|---|----|----|----|-----|-----|----|----|----|-----|-----|-----|
| 0— 3    | 0 | 16 | 24 | 21 | 24  | 27  | 32 | 36 | 70 | 113 | 96  | 136 |
| 3— 6    | 0 | 3  | 28 | 68 | 60  | 46  | 23 | 8  | 41 | 24  | 100 | 80  |
| 6— 9    | 0 | 2  | 17 | 88 | 173 | 192 | 63 | 22 | 3  | 26  | 127 | 125 |
| 9—12    | 0 | 0  | 5  | 38 | 201 | 233 | 76 | 43 | 0  | 26  | 138 | 173 |
| 12—15   | 0 | 0  | 8  | 52 | 126 | 138 | 86 | 30 | 11 | 134 | 210 | 210 |
| 15—18   | 0 | 0  | 14 | 41 | 64  | 66  | 21 | 51 | 11 | 129 | 206 | 182 |
| 18—21   | 0 | 5  | 26 | 45 | 32  | 24  | 22 | 32 | 39 | 239 | 150 | 210 |
| 21—24   | 0 | 15 | 30 | 32 | 31  | 11  | 15 | 22 | 92 | 271 | 61  | 172 |
| Average | 0 | 5  | 19 | 48 | 88  | 91  | 42 | 30 | 34 | 120 | 135 | 160 |

| July    |         |      |       |       |       |       |       |       |       |        |         |                |
|---------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
| CET     | Periods |      |       |       |       |       |       |       |       |        |         |                |
|         | 1-5     | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-40 | 40-60 | 60-90 | 90-120 | 120-300 | 300-600<br>sec |
| 0- 3    | 0       | 13   | 18    | 26    | 26    | 21    | 25    | 26    | 53    | 150    | 59      | 102            |
| 3- 6    | 0       | 6    | 24    | 63    | 58    | 33    | 31    | 19    | 20    | 59     | 63      | 230            |
| 6- 9    | 0       | 0    | 13    | 115   | 205   | 194   | 96    | 23    | 24    | 81     | 89      | 115            |
| 9-12    | 0       | 0    | 2     | 62    | 259   | 196   | 113   | 38    | 11    | 45     | 147     | 174            |
| 12-15   | 0       | 1    | 3     | 65    | 144   | 165   | 75    | 37    | 12    | 165    | 213     | 202            |
| 15-18   | 0       | 1    | 10    | 41    | 58    | 38    | 35    | 66    | 33    | 117    | 238     | 85             |
| 18-21   | 0       | 4    | 22    | 39    | 23    | 14    | 19    | 42    | 28    | 129    | 152     | 148            |
| 21-24   | 0       | 11   | 31    | 29    | 11    | 9     | 19    | 16    | 140   | 275    | 100     | 78             |
| Average | 0       | 5    | 15    | 55    | 98    | 84    | 52    | 33    | 40    | 120    | 133     | 142            |

| August  |   |    |    |    |     |     |     |    |     |     |     |     |
|---------|---|----|----|----|-----|-----|-----|----|-----|-----|-----|-----|
| 0- 3    | 0 | 9  | 18 | 20 | 41  | 51  | 54  | 50 | 49  | 191 | 76  | 129 |
| 3- 6    | 0 | 1  | 28 | 90 | 48  | 72  | 94  | 47 | 28  | 41  | 79  | 115 |
| 6- 9    | 0 | 0  | 23 | 83 | 200 | 171 | 165 | 56 | 40  | 94  | 345 | 47  |
| 9-12    | 0 | 0  | 44 | 93 | 113 | 296 | 216 | 75 | 24  | 99  | 259 | 272 |
| 12-15   | 0 | 0  | 40 | 47 | 154 | 150 | 226 | 62 | 18  | 67  | 258 | 461 |
| 15-18   | 0 | 0  | 3  | 32 | 63  | 111 | 129 | 59 | 8   | 61  | 297 | 492 |
| 18-21   | 0 | 5  | 25 | 32 | 34  | 30  | 38  | 47 | 120 | 222 | 176 | 307 |
| 21-24   | 0 | 11 | 21 | 29 | 21  | 27  | 36  | 50 | 126 | 228 | 126 | 254 |
| Average | 0 | 3  | 25 | 53 | 84  | 114 | 120 | 56 | 52  | 126 | 203 | 262 |

| September |         |      |       |       |       |       |       |       |       |        |                           |
|-----------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------------------------|
| CET       | Periods |      |       |       |       |       |       |       |       |        |                           |
|           | 1—5     | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300<br>300—600<br>sec |
| 0— 3      | 0       | 14   | 23    | 25    | 37    | 24    | 32    | 39    | 133   | 271    | 39 150                    |
| 3— 6      | 0       | 5    | 14    | 71    | 104   | 100   | 58    | 13    | 31    | 50     | 108 158                   |
| 6— 9      | 0       | 1    | 8     | 48    | 165   | 207   | 158   | 31    | 33    | 52     | 163 168                   |
| 9—12      | 0       | 0    | 7     | 14    | 127   | 239   | 180   | 33    | 0     | 106    | 137 136                   |
| 12—15     | 0       | 0    | 4     | 28    | 128   | 203   | 172   | 54    | 6     | 60     | 194 227                   |
| 15—18     | 0       | 2    | 8     | 38    | 92    | 118   | 112   | 48    | 39    | 78     | 140 193                   |
| 18—21     | 0       | 8    | 21    | 28    | 45    | 41    | 34    | 71    | 44    | 98     | 102 224                   |
| 21—24     | 0       | 8    | 15    | 28    | 27    | 25    | 39    | 46    | 104   | 282    | 144 95                    |
| Average   | 0       | 5    | 13    | 35    | 91    | 120   | 98    | 42    | 49    | 125    | 128 169                   |

| October |   |   |    |    |     |     |     |    |     |     |         |
|---------|---|---|----|----|-----|-----|-----|----|-----|-----|---------|
| 0— 3    | 0 | 4 | 22 | 24 | 35  | 38  | 33  | 26 | 67  | 70  | 40 75   |
| 3— 6    | 0 | 3 | 17 | 25 | 100 | 89  | 60  | 24 | 41  | 43  | 44 52   |
| 6— 9    | 0 | 1 | 10 | 28 | 45  | 175 | 147 | 77 | 11  | 63  | 98 94   |
| 9—12    | 0 | 0 | 6  | 17 | 34  | 106 | 315 | 35 | 14  | 52  | 106 108 |
| 12—15   | 0 | 0 | 1  | 15 | 46  | 121 | 264 | 70 | 19  | 50  | 154 310 |
| 15—18   | 0 | 0 | 10 | 36 | 43  | 85  | 116 | 48 | 24  | 92  | 166 201 |
| 18—21   | 0 | 1 | 12 | 34 | 46  | 37  | 34  | 35 | 28  | 100 | 105 185 |
| 21—24   | 0 | 8 | 15 | 28 | 27  | 25  | 39  | 46 | 104 | 82  | 144 95  |
| Average | 0 | 2 | 13 | 24 | 45  | 84  | 127 | 43 | 38  | 95  | 102 150 |

## November

| CET     | Periods |      |       |       |       |       |       |       |       |        |         |                |
|---------|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
|         | 1—5     | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300 | 300—600<br>sec |
| 0— 3    | 1       | 10   | 11    | 8     | 17    | 29    | 37    | 45    | 36    | 100    | 26      | 69             |
| 3— 6    | 1       | 9    | 10    | 18    | 29    | 58    | 56    | 66    | 36    | 51     | 94      | 134            |
| 6— 9    | 0       | 6    | 14    | 39    | 43    | 45    | 78    | 48    | 32    | 72     | 130     | 81             |
| 9—12    | 0       | 0    | 21    | 40    | 37    | 43    | 105   | 74    | 22    | 99     | 147     | 133            |
| 12—15   | 0       | 1    | 18    | 24    | 26    | 49    | 102   | 81    | 23    | 76     | 186     | 148            |
| 15—18   | 0       | 0    | 16    | 28    | 36    | 54    | 48    | 50    | 25    | 68     | 143     | 208            |
| 18—21   | 0       | 4    | 19    | 25    | 27    | 30    | 30    | 29    | 32    | 195    | 135     | 159            |
| 21—24   | 0       | 5    | 16    | 10    | 18    | 21    | 30    | 33    | 37    | 159    | 81      | 117            |
| Average | 0       | 4    | 16    | 24    | 29    | 37    | 61    | 53    | 30    | 103    | 118     | 131            |

## December

|         |   |   |    |    |     |     |     |    |    |     |     |     |
|---------|---|---|----|----|-----|-----|-----|----|----|-----|-----|-----|
| 0— 3    | 0 | 3 | 8  | 18 | 32  | 29  | 36  | 39 | 38 | 111 | 51  | 42  |
| 3— 6    | 1 | 2 | 7  | 22 | 30  | 69  | 67  | 54 | 33 | 42  | 69  | 132 |
| 6— 9    | 0 | 3 | 12 | 48 | 75  | 50  | 70  | 39 | 21 | 46  | 149 | 129 |
| 9—12    | 0 | 1 | 23 | 58 | 117 | 63  | 84  | 43 | 23 | 96  | 141 | 218 |
| 12—15   | 0 | 0 | 14 | 37 | 37  | 102 | 153 | 37 | 15 | 53  | 107 | 127 |
| 15—18   | 0 | 2 | 16 | 34 | 37  | 63  | 90  | 34 | 38 | 78  | 144 | 63  |
| 18—21   | 0 | 3 | 13 | 31 | 42  | 40  | 40  | 29 | 34 | 130 | 168 | 46  |
| 21—24   | 0 | 2 | 12 | 33 | 22  | 26  | 31  | 31 | 40 | 193 | 94  | 133 |
| Average | 0 | 2 | 13 | 34 | 47  | 54  | 71  | 38 | 30 | 95  | 115 | 111 |

| CET     | Yearly average |      |       |       |       |       |       |       |       |        |         |                |
|---------|----------------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|----------------|
|         | Periods        |      |       |       |       |       |       |       |       |        |         |                |
|         | 1—5            | 5—10 | 10—15 | 15—20 | 20—25 | 25—30 | 30—40 | 40—60 | 60—90 | 90—120 | 120—300 | 300—600<br>sec |
| 0— 3    | 0              | 10   | 23    | 24    | 29    | 26    | 28    | 29    | 61    | 125    | 92      | 155            |
| 3— 6    | 0              | 5    | 22    | 51    | 69    | 61    | 43    | 28    | 26    | 45     | 123     | 170            |
| 6— 9    | 0              | 2    | 12    | 61    | 133   | 155   | 112   | 36    | 18    | 46     | 185     | 176            |
| 9—12    | 0              | 1    | 13    | 42    | 123   | 170   | 142   | 42    | 20    | 68     | 183     | 224            |
| 12—15   | 0              | 0    | 9     | 36    | 111   | 157   | 140   | 44    | 15    | 66     | 189     | 222            |
| 15—18   | 0              | 1    | 9     | 37    | 75    | 87    | 78    | 43    | 20    | 69     | 199     | 212            |
| 18—21   | 0              | 4    | 19    | 38    | 41    | 31    | 26    | 32    | 35    | 124    | 149     | 178            |
| 21—24   | 0              | 9    | 25    | 27    | 23    | 22    | 23    | 27    | 67    | 205    | 123     | 147            |
| Average | 0              | 4    | 17    | 39    | 76    | 89    | 74    | 35    | 33    | 94     | 156     | 186            |

## VI.

Micropulsation indices for the year  
1979

Activity indices for the micropulsations  
(P1 to P12)

1979. January-December

|     | January      | February     | March        | April        |
|-----|--------------|--------------|--------------|--------------|
| 1.  | 112234542124 | 114345432322 | 355235521532 | 155352212554 |
| 2.  | 125553113355 | 112345522341 | 155323324523 | 155334124555 |
| 3.  | 125541111455 | 111344532134 | 254234414511 | 125435414355 |
| 4.  | 455421135555 | 123554324145 | 155531222555 |              |
| 5.  | 415444215555 | 352433542453 | 144443544135 | 155553114455 |
| 6.  | 235443122255 | 135444212553 | 255424214554 | 125445221152 |
| 7.  | 355542125355 | 112455512334 | 255234414542 |              |
| 8.  | 224454121355 | 135345312411 | 143123554511 | 155523512544 |
| 9.  | 125531122345 | 113355421422 | 335533114545 | 115454211554 |
| 10. | 112454321421 | 111145532212 | 145553114555 | 135355111252 |
| 11. | 111454113111 | 125442212345 | 135224553545 | 112553111243 |
| 12. | 111454241251 | 155433312555 | 123135523342 | 115534421544 |
| 13. | 112355413321 | 111135543111 | 111135541412 | 115345521254 |
| 14. | 112553112132 | 111344212232 | 122434531421 | 145334511555 |
| 15. | 115552111552 | 124444312455 | 155533211355 | 155544411455 |
| 16. | 132355212224 | 113333541221 | 155444222452 | 144335532455 |
| 17. | 112455111241 | 111245431124 | 123335531455 | 134135544545 |
| 18. | 115543112253 | 135543222555 | 141115552354 | 144452245542 |
| 19. | 145454222554 | 233323554545 | 125124554544 | 142345523243 |
| 20. | 111444321331 | 113223554413 | 131123554343 | 122212555541 |
| 21. | 112454322434 | 155521331455 | 144435212244 | 145453421555 |
| 22. | 122355332333 | 255433133555 | 145333522555 | 155323423555 |
| 23. | 255541112555 | 155333442355 | 115522332355 | 135235542255 |
| 24. | 155554111555 | 155115532545 | 155343223244 | 155353434321 |
| 25. | 145553114255 | 114345522544 | 155342222555 | 115533315555 |
| 26. | 153355311555 | 255111113522 | 155224313553 | 155553122444 |
| 27. | 134455331354 | 255234332343 |              | 145455414555 |
| 28. | 112455111322 | 355334423545 | 155234325555 | 155344423545 |
| 29. | 122355311543 |              | 155233213555 | 155433215555 |
| 30. | 114553113345 |              | 155124521354 | 145453414555 |
| 31. | 113355224133 |              | 115434412443 |              |



|     | May          | June         | July         | August       |
|-----|--------------|--------------|--------------|--------------|
| 1.  | 155344314545 | 121355522244 | 145553212524 | 155343421555 |
| 2.  | 155245414453 |              | 122445512533 | 125543333544 |
| 3.  | 125552324422 | 124552113542 | 115433512353 | 142354443542 |
| 4.  | 155453214542 | 135553213154 | 155531112543 | 125331233541 |
| 5.  | 155553114455 | 115552113352 | 115531121254 | 135543224343 |
| 6.  | 114551121153 | 125531123455 | 115444431544 | 115453215553 |
| 7.  | 115554112554 | 155225513555 | 155435212555 | 155344335542 |
| 8.  | 145552124534 | 155245334535 | 135354414555 | 121554144511 |
| 9.  | 115553111555 | 135255534554 | 125334554442 | 122155453511 |
| 10. | 115555321443 | 125335522534 | 125444432531 | 125434434552 |
| 11. | 115553311545 | 155355524514 | 115543423522 | 155543222544 |
| 12. | 135555311545 |              | 145533341553 | 145541122555 |
| 13. | 114554512545 |              | 155452115545 | 135432444555 |
| 14. | 113555222554 |              | 155552114543 | 224244454534 |
| 15. | 115455333244 | 155455234554 | 155531125555 | 155324534552 |
| 16. | 112335531341 | 135455115554 | 155551134542 | 112455332524 |
| 17. | 121235542533 | 145455333544 | 135454522545 | 135345422545 |
| 18. | 125542122554 | 124544333542 | 155554224534 | 144334524524 |
| 19. | 155444114554 | 155543123541 | 134355344532 | 155521325555 |
| 20. | 115355321235 | 145541124544 | 115543134555 | 145531213555 |
| 21. | 155233214522 | 155521114554 | 154444225534 | 135424525555 |
| 22. | 155542325555 | 155541113555 | 125453143543 | 111235533524 |
| 23. | 115355323434 | 155454233555 | 113324553521 | 111135531114 |
| 24. | 155354115545 | 145433144533 | 155532113544 | 115335523444 |
| 25. | 125555122555 | 135334345424 | 114333453523 | 115524532555 |
| 26. | 155455313545 | 145532434554 |              | 125433323554 |
| 27. | 115345534344 | 115455211144 | 155531231535 | 124345542543 |
| 28. | 155255435534 |              | 155334524524 | 133123553523 |
| 29. | 145354324544 | 145534214541 | 155511132555 |              |
| 30. | 125423424555 | 135552122534 | 125443144554 |              |
| 31. | 115334323245 |              | 115411111111 |              |

|     | Szeptember   | October      | November     | December     |
|-----|--------------|--------------|--------------|--------------|
| 1.  | 123355312414 | 114245533234 | 145444343555 | 135432433555 |
| 2.  | 134354222521 | 114325531555 | 155224555533 | 125334435554 |
| 3.  | 153355324443 | 115234555545 | 153235553524 | 124445422545 |
| 4.  | 115355321544 | 115543424412 | 124432554524 | 155311345552 |
| 5.  | 145544424555 | 115325534515 | 122223555511 | 115552314531 |
| 6.  | 155355424422 | 115442325555 | 113215542122 | 123323534542 |
| 7.  | 121225544511 | 135423443545 | 125225543452 | 115323541521 |
| 8.  | 153245441532 | 135321425555 | 125322454545 | 125543324545 |
| 9.  | 152233554521 | 144233514533 | 125453223555 | 113433552445 |
| 10. | 155531125553 | 155223515531 | 115123553345 | 125333554543 |
| 11. | 135444334443 | 112444224542 | 135522121555 | 125325543532 |
| 12. | 135542123534 | 145245423545 | 155431334555 | 155423445543 |
| 13. | 143235524521 | 155124534535 | 155422225555 | 115521443241 |
| 14. | 111345433433 | 122445412144 | 115531214543 | 115434423323 |
| 15. | 115544312345 |              | 111223531221 | 125534221554 |
| 16. | 155434525545 |              | 115224354551 | 245532235544 |
| 17. | 145234524535 | 121434311441 | 153135524524 | 125544314545 |
| 18. | 135333345555 | 111345412421 | 113333543254 |              |
| 19. | 115442442555 | 111244443223 | 235312555535 | 115245511521 |
| 20. | 145344312555 | 123334522554 | 125223544543 | 135432121231 |
| 21. | 155234434355 | 155322523554 | 135534315522 | 115432323122 |
| 22. | 125444414525 | 125433424543 | 114433342421 | 125531135555 |
| 23. | 123355422523 | 135345423554 | 125432323531 | 111454422233 |
| 24. | 145444325542 | 125533523544 | 455221145544 | 111445532545 |
| 25. | 145425414521 | 135333444544 | 255433213554 | 113353322221 |
| 26. | 155522434554 | 112124544432 | 125234521343 | 115523421555 |
| 27. | 135134534532 |              | 135344321541 | 113335542525 |
| 28. | 135334524554 | 115434534453 | 115311552521 | 113235545544 |
| 29. | 133325533535 | 125343423542 | 115122455523 | 455411435554 |
| 30. | 133323545545 | 112135534111 | 125433422555 | 155314415545 |
| 31. |              | 125324544521 |              | 114455313554 |

## Pc 1 indices 1977

|     | January | February | March | April | May | June | July | August | September | October | November | December |
|-----|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| 1.  | 5       | 5        | 3     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 2.  | 1       | 2        | 1     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 3.  | 3       | 3        | 1     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 4.  | 2       | 3        | 1     | 1     | 5   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 5.  | 0       | 3        | 1     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 6.  | 1       | 4        | 1     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 7.  | 1       | 4        | 1     | 1     | 1   | 1    | 1    | 0      | 0         | 0       | 0        | 0        |
| 8.  | 1       | 1        | 1     | 3     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 9.  | 1       | 1        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 10. | 2       | 1        | 1     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 11. | 3       | 0        | 1     | 1     | 4   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 12. | 1       | 1        | 1     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 13. | 1       | 5        | 1     | 3     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 14. | 1       | 0        | 1     | 5     | 5   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 15. | 1       | 1        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 16. | 0       | 1        | 4     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 17. | 0       | 3        | 3     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 18. | 1       | 1        | 1     | 3     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 19. | 4       | 1        | 1     | 5     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 20. | 1       | 1        | 1     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 21. | 1       | 4        | 4     | 5     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 22. | 1       | 2        | 1     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 23. | 1       | 3        | 4     | 4     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 24. | 1       | 1        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 25. | 1       | 1        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 26. | 1       | 1        | 2     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 27. | 1       | 1        | 2     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 28. | 1       | 1        | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 29. | 1       |          | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 30. | 1       |          | 1     | 1     | 1   | 1    | 0    | 0      | 0         | 0       | 0        | 0        |
| 31. | 5       |          | 1     |       | 1   |      | 0    | 0      |           | 0       |          | 0        |

0 = no recording

## Pc 1 indices 1978

|     | January | February | March | April | May | June | July | August | September | October | November | December |
|-----|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| 1.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 0        |
| 2.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 0        |
| 3.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 4.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 5.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 6.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 7.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 8.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 9.  | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 10. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 11. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 12. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 13. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 14. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 15. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 16. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 17. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 18. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 19. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 20. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 21. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 22. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 23. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 24. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 25. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 26. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 27. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 28. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 29. | 0       | 0        | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 30. | 0       |          | 0     | 0     | 0   | 0    | 0    | 0      | 0         | 0       | 0        | 1        |
| 31. | 0       |          | 0     |       | 0   |      | 0    | 0      |           | 0       |          | 1        |

0 = no recording

## Pc 1 indices 1979

|     | January | February | March | April | May | June | July | August | September | October | November | December |
|-----|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| 1.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 2.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 2         | 1       | 1        | 1        |
| 3.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 4.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 5.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 6.  | 1       | 0        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 7.  | 1       | 0        | 1     | 2     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 8.  | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 9.  | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 10. | 1       | 2        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 11. | 4       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 12. | 5       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 13. | 5       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 14. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 15. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 16. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 17. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 18. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 19. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 20. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 21. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 22. | 1       | 1        | 1     | 1     | 0   | 0    | 0    | 1      | 1         | 1       | 1        | 1        |
| 23. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 24. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 25. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 3      | 1         | 1       | 1        | 1        |
| 26. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 27. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 28. | 1       | 1        | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 29. | 1       |          | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 30. | 0       |          | 1     | 0     | 0   | 0    | 1    | 1      | 1         | 1       | 1        | 1        |
| 31. | 0       |          | 1     |       | 0   |      | 1    | 1      |           | 1       |          | 1        |

0 = no recording