

I. EARTH CURRENTS

The coordinates of the Observatory are:

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

$$\phi = 47.2^{\circ} \quad l = 98.3^{\circ}$$

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

The tables published in this part 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 K₁—K₅.

The T-scale is linear; its steps correspond to 1.8 mV/km. The monthly mean T-values are separately given for the North-South and East-West components. The scales for K₁—K₅ are as 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 mni.	29	43	67	88	110	131	191	234	339

See also Part V. of this Report (p 137) on an unexplained change in the apparent scale value of the component E_y.

All values in the table are given 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.

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 years. 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. Basic data are estimated amplitudes in halfhour intervals.

VI. Micropulsation indices for the year 1985. The indices have been determined from occurrence frequency of different period micropulsations, striving at a possibly uniform distribution of days in each of the five possible indices (1—5) in a basic interval.

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 the 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 Geod., Geoph. Mont. Hung.* 7 1972/15). and A. ADAM, J. VERŐ, J. CZ. MILETITS, L. HOLLÓ and A. WALLNER: The geophysical observatory near Nagycenk. I. Electromagnetic measurement and processing of data (*Acta Geod., Geoph. Mont. Hung.* 16 1981/333).

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 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.

*I. Activity indices T and K₁—K₅**January*

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	23343669	36	7	4	5	3	7
2.	33333217	25	7	3	4	3	2
3.	52133114	20	6	2	4	2	3
4.	41231214	18	6	3	4	2	3
5.	11111113	10	6	2	3	2	1
6.	21001212	9	5	2	4	1	1
7.	11100111	6	4	1	4	1	0
8.	11010379	22	5	2	5	2	6
9.	67789794	57	7	6	6	4	6
10.	45246493	37	8	4	5	4	6
11.	31332354	24	6	2	5	3	5
12.	23534555	32	7	2	5	3	5
13.	33323452	25	7	3	5	3	3
14.	22122721	19	6	2	4	1	3
15.	21112129	19	6	1	4	2	2
16.	54465999	51	7	3	4	3	2
17.	33466596	42	6	2	4	2	2
18.	23344432	25	5	3	4	2	2
19.	21112122	12	3	1	4	1	2
20.	10002242	11	3	1	4	2	2
21.	13322211	15	3	1	4	2	1
22.	01121235	15	4	2	5	1	3
23.	36586527	42	7	4	5	3	6
24.	10111222	10	6	3	4	1	2
25.	23132111	14	6	2	5	2	2
26.	01124332	16	6	3	4	1	2
27.	21111144	15	4	3	4	2	3
28.	66336999	51	5	3	6	9	7
29.	72131169	30	5	2	5	3	4
30.	93112544	29	6	3	4	3	4
31.	53333232	24	6	3	5	2	3

Monthly averages: T (N) 2.609
T (E) 2.145
K₁ 5.64
K₂ 2.52
K₃ 4.45
K₄ 2.42
K₅ 3.23

February

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	42223423	22	7	4	4	2	2
2.	12223231	16	7	4	5	1	2
3.	21112231	13	6	2	4	1	2
4.	10111001	5	5	3	4	1	0
5.	15324653	29	6	3	6	3	2
6.	64767493	46	7	5	7	5	6
7.	52335425	29	8	4	4	3	4
8.	32144865	33	6	4	5	1	6
9.	23434433	26	7	3	5	3	4
10.	45534492	36	7	4	5	3	5
11.	12333544	25	7	4	5	2	3
12.	11322521	17	7	4	5	2	3
13.	00113394	21	8	4	5	1	3
14.	32445345	30	9	4	4	3	4
15.	32221113	15	7	5	4	2	2
16.	01233332	17	7	3	6	1	2
17.	23323321	19	7	3	4	2	2
18.	02111111	8	6	2	4	1	1
19.	01111122	9	6	2	4	1	2
20.	31111010	8	4	0	4	1	2
21.	01111123	10	4	1	4	2	1
22.	21012113	11	5	3	4	1	2
23.	13012123	13	4	1	4	1	3
24.	34322226	24	6	3	5	2	4
25.	22122341	17	6	3	4	2	2
26.	42110031	12	5	2	4	0	2
27.	12112129	19	7	2	5	1	3
28.	77577472	46	8	5	6	4	8

Monthly averages: T (N) 2.446

T (E) 1.982

K₁ 6.39K₂ 3.11K₃ 4.64K₄ 1.86K₅ 2.93

<i>March</i>							
Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	13542215	23	8	4	6	3	4
2.	22326594	33	9	5	5	3	6
3.	23321225	20	7	3	4	2	3
4.	22111234	36	7	3	5	1	1
5.	52563799	46	8	5	6	6	8
6.	92455425	36	9	4	6	4	6
7.	32543795	38	8	5	5	3	6
8.	54575444	38	8	5	5	4	4
9.	21111102	9	7	3	4	1	0
10.	31163225	23	6	3	5	3	2
11.	20011311	9	4	1	4	3	0
12.	01111234	13	7	2	5	1	2
13.	10121100	6	7	2	4	0	0
14.	00112343	14	7	3	5	2	2
15.	23323111	16	6	3	5	2	1
16.	32123313	18	7	4	5	1	2
17.	32111124	15	7	4	4	2	2
18.	32111124	15	6	1	4	2	4
19.	11122342	16	6	3	4	3	3
20.	10122210	9	4	1	4	1	1
21.	12011111	8	4	2	4	2	1
22.	31012104	12	3	1	4	1	1
23.	11111111	8	4	2	4	1	1
24.	10111114	10	4	1	4	1	2
25.	10012131	9	4	1	4	1	1
26.	41111111	11	5	2	4	0	3
27.	10013233	13	4	1	5	1	3
28.	63211223	20	7	2	5	2	4
29.	11112233	14	7	3	4	1	2
30.	51113212	16	6	3	4	2	3
31.	21224121	15	5	3	5	2	1

Monthly averages: T (N) 2.085
 T (E) 1.764
 K₁ 6.16
 K₂ 2.74
 K₃ 4.58
 K₄ 1.97
 K₅ 2.55

April

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	12556834	34	7	4	5	4	5
2.	12443462	26	9	5	6	3	3
3.	94233393	36	8	4	6	3	6
4.	23323444	25	6	3	5	3	3
5.	12222011	11	6	2	5	1	2
6.	11123122	13	6	3	5	1	1
7.	11221220	11	5	2	4	2	0
8.	00112134	12	6	3	4	2	2
9.	62239922	35	4	3	5	3	4
10.	02133223	16	6	2	5	2	1
11.	24112221	15	7	3	4	2	1
12.	11222121	12	6	3	4	0	1
13.	11121223	13	6	2	4	1	2
14.	22112013	12	4	1	4	1	2
15.	11011101	6	6	2	4	1	1
16.	12142112	14	5	4	5	2	2
17.	20122011	9	5	3	4	1	1
18.	40101100	7	4	2	4	1	2
19.	21232367	26	5	2	5	2	5
20.	47871128	38	5	2	5	3	5
21.	99994893	60	7	4	6	4	9
22.	42232211	17	6	1	4	2	1
23.	32353311	21	7	4	6	2	2
24.	44574211	28	8	3	5	3	3
25.	34334122	22	6	2	5	2	3
26.	79746658	52	7	5	6	4	8
27.	45336514	31	6	2	5	3	4
28.	98484421	40	5	3	5	5	6
29.	37612210	22	7	3	5	3	3
30.	11199967	43	7	5	7	6	5

Monthly averages: T(N) 2.729

T (E) 2.413

K₁ 6.07K₂ 2.90K₃ 4.90K₄ 2.40K₅ 3.10

<i>May</i>							
Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	42247612	28	5	3	5	3	3
2.	46562111	26	6	2	5	3	4
3.	12232222	16	7	4	5	2	2
4.	12122311	13	5	1	5	2	2
5.	11111132	11	5	2	5	1	2
6.	33222221	17	7	3	5	2	3
7.	32201112	12	6	2	5	2	1
8.	22221121	13	6	0	4	2	1
9.	41121110	11	5	1	4	0	2
10.	00111113	8	5	3	5	1	1
11.	32211111	12	4	1	5	2	2
12.	11212122	12	4	2	4	1	2
13.	31111215	15	6	2	5	2	2
14.	22110131	11	5	2	4	1	2
15.	32122223	17	7	3	4	1	3
16.	12212343	18	5	2	4	2	2
17.	122212	10	6	2	4	2	2
18.	12112222	13	4	1	4	0	1
19.	12112231	13	4	1	4	1	2
20.	11000231	8	2	0	3	1	1
21.	21111122	11	6	2	4	0	2
22.	12210111	9	6	1	4	0	2
23.	42100011	9	4	1	4	1	1
24.	12011232	12	4	1	4	1	2
25.	01011324	12	5	1	4	0	2
26.	52213331	20	6	3	4	2	2
27.	11225211	15	6	3	4	0	1
28.	16111112	14	6	2	4	0	1
29.	13110211	10	4	1	4	1	0
30.	01111100	5	4	1	4	1	0
31.	32111115	15	4	2	4	1	1

Monthly averages: T (N) 1.459
T (E) 1.354
K₁ 5.06
K₂ 1.78
K₃ 4.10
K₄ 1.23
K₅ 1.74

June

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	34532232	24	5	2	5	3	3
2.	21102122	11	5	1	4	0	2
3.	01001241	9	3	0	4	0	1
4.	11111211	9	5	1	4	0	1
5.	11111111	8	5	3	4	1	0
6.	31514926	31	6	3	5	2	5
7.	43344454	31	6	2	5	3	4
8.	43343322	24	7	4	5	2	1
9.	22322159	26	6	3	4	3	6
10.	65554231	31	7	4	5	3	6
11.	21122233	16	6	2	5	3	2
12.	42111211	13	5	2	4	0	2
13.	11111112	9	5	2	4	1	1
14.	21111102	9	3	0	4	1	1
15.	12101020	7	4	1	4	0	1
16.	00100001	2	4	1	4	0	0
17.	12113241	15	5	1	5	2	2
18.	11201221	10	4	2	5	1	1
19.	11111110	7	4	1	4	0	1
20.	03215613	21	3	0	5	3	3
21.	32122111	10	4	2	4	2	2
22.	14521111	16	4	1	5	2	2
23.	23213111	14	3	2	4	1	1
24.	11111211	9	4	2	4	0	1
25.	53621144	26	4	2	4	2	4
26.	42225554	29	6	3	5	4	5
27.	32322334	22	6	2	5	3	3
28.	25445232	27	7	3	6	4	4
29.	32243324	23	6	3	5	2	2
30.	21111224	14	7	2	4	1	2

Monthly averages: T (N) 1.862
T (E) 1.700
K₁ 4.97
K₂ 1.90
K₃ 4.50
K₄ 1.63
K₅ 2.30

July

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	32122212	15	5	1	4	2	2
2.	11111111	8	7	3	4	0	0
3.	12201122	11	6	2	4	0	2
4.	43337577	39	7	4	5	5	7
5.	42333424	25	6	3	5	4	3
6.	44434456	34	7	4	5	4	5
7.	44333313	24	7	4	5	3	3
8.	22333344	24	7	3	4	2	5
9.	22111111	10	6	2	4	1	1
10.	11121334	16	7	2	4	1	2
11.	24632352	27	7	3	4	3	4
12.	87454697	50	7	4	5	4	7
13.	31234586	32	5	2	4	2	4
14.	33223111	15	5	2	4	2	2
15.	14111100	9	7	2	4	1	1
16.	12001111	7	5	0	4	0	1
17.	32135421	21	6	3	4	2	2
18.	32222225	20	7	3	4	2	4
19.	11222311	13	5	2	4	1	1
20.	03112212	12	6	1	4	0	2
21.	11111101	7	5	2	4	0	1
22.	11112122	11	4	2	4	0	1
23.	29833142	32	6	3	5	2	4
24.	52223226	24	6	2	4	2	3
25.	43333242	24	7	3	5	3	3
26.	23532255	27	7	4	4	3	4
27.	63345232	28	7	4	5	2	4
28.	43234322	23	8	4	5	3	3
29.	32302121	14	6	2	4	1	2
30.	12245312	20	6	1	5	2	2
31.	22256846	35	6	3	5	2	5

Monthly averages T (N) 2.386
 T (E) 2.081
 K₁ 6.23
 K₂ 2.78
 K₃ 4.35
 K₄ 1.90
 K₅ 2.90

August

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	54234423	27	6	4	5	3	3
2.	22221233	17	6	2	4	2	3
3.	22111221	12	4	1	4	1	2
4.	22112211	12	5	2	4	1	1
5.	11101011	6	3	2	4	1	1
6.	11000021	5	3	2	4	0	0
7.	11100001	4	3	2	4	0	1
8.	11111111	8	5	2	4	1	2
9.	21001124	11	5	3	4	1	3
10.	22212222	15	6	2	5	2	2
11.	62111010	12	6	2	4	1	0
12.	11112488	26	4	2	5	4	4
13.	94646439	45	8	4	6	4	6
14.	32521212	18	7	3	5	2	3
15.	22223213	17	7	3	4	2	3
16.	11221233	15	7	2	4	1	2
17.	41122223	17	6	2	5	1	1
18.	22123235	20	7	3	5	3	4
19.	44212114	19	6	3	4	3	3
20.	33413312	20	7	3	5	2	2
21.	21223111	13	7	2	4	2	2
22.	42234466	31	7	3	4	3	5
23.	33254225	31	8	3	5	3	4
24.	31322012	14	7	3	5	0	1
25.	22332212	17	5	2	4	1	2
26.	32322224	20	7	2	4	1	3
27.	44243231	23	8	4	5	2	4
28.	31424444	26	8	4	4	2	3
29.	33445333	28	8	4	5	2	5
30.	23111132	14	7	2	4	1	2
31.	32233543	25	6	2	4	3	5

Monthly averages: T (N) 2.036
T (E) 1.859
K₁ 6.00
K₂ 2.78
K₃ 4.42
K₄ 1.78
K₅ 2.64

September							
Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	11111122	10	5	2	4	1	1
2.	01111101	6	6	2	4	0	1
3.	11121101	8	5	2	4	1	0
4.	01100110	4	2	1	4	1	1
5.	00001022	5	3	1	3	1	1
6.	11112132	12	4	1	5	1	3
7.	32101114	13	6	2	4	0	3
8.	11113323	15	5	2	4	1	3
9.	11233323	18	6	2	5	2	3
10.	11222123	14	7	3	5	2	3
11.	21111132	12	5	1	4	0	2
12.	11111131	10	5	2	4	0	3
13.	00011110	4	3	0	4	0	1
14.	31479524	35	6	4	4	3	5
15.	11122195	22	7	3	4	1	4
16.	54437435	35	7	4	5	2	5
17.	32243333	23	7	4	5	3	4
18.	21133210	13	8	4	5	2	2
19.	21346549	34	6	3	5	3	6
20.	33445437	33	7	3	5	2	2
21.	33355444	31	8	5	5	3	4
22.	22223321	17	8	5	5	2	3
23.	11225110	13	7	5	5	2	2
24.	01233454	22	7	6	5	3	3
25.	33233344	25	8	6	5	2	5
26.	31551135	24	7	6	5	2	2
27.	32333138	26	8	6	5	3	3
28.	31123221	15	7	4	5	3	1
29.	01132111	10	7	3	4	1	1
30.	21111124	13	7	6	5	1	1
Nonthly averages							
T (N)		1.983					
T (E)		1.785					
K ₁		6.13					
K ₂		3.27					
K ₃		4.53					
K ₄		1.60					
K ₅		2.60					

October

Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	11001002	5	5	3	4	0	1
2.	20111022	9	4	3	4	1	2
3.	11122221	12	4	4	4	1	2
4.	21111214	13	3	2	4	2	2
5.	34747599	48	8	6	6	5	6
6.	64557855	45	7	5	6	4	6
7.	38333295	36	6	4	4	2	5
8.	62223414	24	7	4	4	2	4
9.	11211130	10	7	4	5	1	2
10.	11111012	8	7	4	4	2	2
11.	11122433	17	7	5	6	3	4
12.	42123343	22	8	6	4	3	3
13.	53323434	27	7	6	5	2	4
14.	23333343	24	7	5	5	2	1
15.	12454131	21	6	3	5	3	2
16.	22442321	20	7	5	5	1	4
17.	34242231	21	5	3	4	0	2
18.	32234325	24	7	4	4	2	3
19.	52434210	21	7	6	4	1	1
20.	01234120	13	8	3	4	1	2
21.	33436733	32	8	3	5	2	6
22.	32322242	20	8	5	4	2	3
23.	12334233	21	9	6	5	2	3
24.	22211151	15	7	4	4	1	2
25.	11122122	12	7	4	4	1	2
26.	11122001	8	7	3	4	1	1
27.	11111011	7	4	3	4	1	1
28.	21121000	7	5	3	4	0	1
29.	32132110	13	3	2	4	1	2
30.	00011122	7	5	2	4	1	1
31.	11113221	12	3	2	4	1	1

Monthly averages T (N) 2.000
 T (E) 1.851
 K₁ 6.23
 K₂ 3.94
 K₃ 4.42
 K₄ 1.64
 K₅ 2.61

November							
Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	21232562	23	6	4	5	3	3
2.	01216969	34	6	4	5	1	6
3.	63343732	31	7	4	5	2	4
4.	32221442	20	7	4	5	3	4
5.	10111118	14	3	2	4	0	3
6.	12223331	17	7	3	4	2	2
7.	12111021	9	5	2	4	0	1
8.	20100132	9	5	3	4	0	1
9.	13134441	21	7	4	5	2	2
10.	33235436	29	9	6	5	3	4
11.	71132221	19	7	4	4	2	2
12.	01122112	10	6	3	4	1	0
13.	41235359	32	7	4	5	3	4
14.	67223232	27	7	4	4	1	3
15.	53137332	27	8	4	4	1	4
16.	13233323	20	9	4	5	3	2
17.	00133391	10	7	3	4	2	3
18.	22323244	22	7	3	5	1	2
19.	23221121	14	7	3	4	1	1
20.	11121101	8	4	2	4	0	0
21.	11011012	7	6	2	4	0	2
22.	21111122	11	5	2	4	0	2
23.	01111122	9	7	3	4	0	1
24.	01111001	5	5	2	3	1	0
25.	11112100	7	4	1	4	1	1
26.	10110001	4	2	2	3	1	1
27.	04533611	23	7	4	5	3	4
28.	22221121	13	7	4	5	2	2
29.	00124399	28	5	3	5	3	7
30.	96549435	45	7	5	5	5	8

Monthly averages: T (N) 2.162
T (E) 1.888
K₁ 6.20
K₂ 3.27
K₃ 4.37
K₄ 1.57
K₅ 2.63

<i>December</i>							
Day	T	Sum	K ₁	K ₂	K ₃	K ₄	K ₅
1.	11133227	20	7	3	4	2	2
2.	33223232	20	7	4	4	2	2
3.	22123421	17	9	4	4	2	2
4.	11224162	19	7	5	6	2	4
5.	12122221	13	7	3	4	2	2
6.	11122221	12	7	5	4	2	2
7.	01121121	9	6	4	4	1	1
8.	00111110	5	6	2	4	0	0
9.	12000013	7	5	2	4	1	1
10.	23246411	23	5	4	5	3	3
11.	42121111	13	7	4	4	2	2
12.	12011225	14	7	3	4	1	2
13.	44256524	32	5	4	6	3	4
14.	42111125	17	6	3	4	1	2
15.	43111013	14	5	2	5	1	3
16.	30111002	8	7	3	4	1	1
17.	32011111	10	6	3	4	1	2
18.	00323442	18	4	2	5	2	2
19.	33447885	42	6	3	4	3	6
20.	42111000	9	5	2	4	2	2
21.	11121010	7	6	3	4	1	1
22.	12121111	10	6	2	5	1	1
23.	00010011	3	3	1	4	1	1
24.	32121100	10	5	1	3	3	2
25.	10011123	9	7	4	4	0	2
26.	32111120	11	7	3	4	1	2
27.	11112146	17	7	3	4	1	2
28.	45656873	44	8	4	4	2	6
29.	12221001	9	7	2	4	0	1
30.	56584796	50	8	5	5	6	7
31.	32246591	32	9	7	5	3	5

Monthly averages T (N) 1.887
 T (E) 1.710
 K₁ 6.35
 K₂ 3.23
 K₃ 4.29
 K₄ 1.71
 K₅ 2.42

II. Average amplitudes for different periods

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
January North												
1.	5	9	8	8	11	13	14	23	29	27	21	23
2.	8	10	5	9	11	13	16	26	22	23	20	22
3.	35	35	37	36	37	35	39	43	36	40	40	35
4.	37	57	52	53	66	56	57	48	52	53	60	53
5.	125	88	81	63	58	82	43	24	39	46	45	63
6.	-13	-28	-12	-10	-32	-9	-6	-21	-5	-34	-24	-31
January East												
1.	10	10	9	8	16	19	21	31	35	37	34	39
2.	8	12	10	8	12	13	16	25	20	21	24	22
3.	35	35	34	37	37	37	35	42	35	38	39	33
4.	42	53	41	38	39	39	41	35	37	44	47	44
5.	84	76	38	66	51	38	44	34	28	38	37	42
6.	-1	-1	+10	-11	-5	-8	-18	+19	+31	+22	+23	+6
February North												
1.	8	6	12	7	13	15	17	31	32	30	28	23
2.	11	12	12	8	10	16	14	23	26	25	24	20
3.	38	34	35	35	35	39	37	37	41	43	40	38
4.	46	45	49	40	51	61	54	41	48	59	44	57
5.	78	75	96	67	77	58	46	79	51	53	44	46
6.	-29	+2	-37	+5	-5	-15	-17	-11	+9	0	-30	-39
February East												
1.	14	10	12	14	17	21	24	38	53	46	48	43
2.	14	11	13	9	16	17	19	25	28	30	30	28
3.	33	35	37	36	38	39	37	38	40	34	46	44
4.	36	38	48	41	48	47	44	50	43	47	41	48
5.	68	50	33	50	42	36	36	34	49	33	30	30
6.	+5	+5	+10	-6	+2	-13	-7	+1	+42	+37	+26	+19

and hourly means of earth current elements

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
21	19	19	19	18	16	14	10	9	11	11	10	15.3
23	23	20	19	17	17	14	13	9	10	12	16	15.8
42	40	40	41	37	36	38	35	33	35	33	38	37.3
50	57	59	42	45	63	48	62	64	53	67	84	55.8
42	38	87	81	75	109	117	136	155	133	178	89	83.2
-21	+10	+44	+15	+33	+22	+40	+17	+18	+42	-1	+4	

Component												
47	51	44	40	33	24	19	15	9	13	17	14	24.8
25	27	25	19	19	15	15	11	10	13	17	18	16.9
33	37	38	35	31	35	37	39	34	34	35	35	35.8
37	49	42	22	38	42	45	41	48	64	34	82	43.5
48	30	71	69	64	81	107	75	102	87	162	85	64.9
-11	-12	+3	-8	+12	-1	-5	-23	-5	-3	-11	-2	

Component												
24	24	21	22	17	17	16	17	16	13	12	15	18.2
20	19	19	18	18	19	16	17	15	13	12	16	16.8
40	39	39	41	36	35	37	38	38	38	37	41	38.0
50	53	48	46	48	39	37	46	39	41	44	46	47.2
73	60	62	53	64	98	114	114	179	88	111	114	79.2
-50	-3	+13	+33	+30	+18	+63	+17	+10	+11	+17	+10	

Component												
50	52	47	43	39	26	25	22	21	19	15	23	30.1
30	29	27	27	23	20	18	20	10	15	14	19	20.8
36	35	39	38	37	36	39	33	36	39	37	41	37.6
39	39	39	32	37	41	33	44	47	46	44	39	42.1
49	48	54	54	62	55	94	76	113	74	78	104	56.3
-11	-12	-25	+5	-3	-8	-17	-13	-8	-5	-6	-16	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
March North												
1.	13	13	11	12	13	16	25	27	30	22	26	26
2.	12	15	13	13	12	13	19	22	19	16	18	20
3.	39	38	37	36	36	37	38	43	36	41	39	44
4.	48	45	43	45	55	46	41	52	41	53	50	42
5.	105	120	84	58	53	39	56	29	27	42	43	42
6.	-22	-20	-12	+7	-12	-6	+12	+38	+39	-7	-64	-115
March East												
1.	18	20	15	13	17	24	31	32	39	35	40	47
2.	17	13	9	12	15	15	19	22	22	21	26	24
3.	35	36	36	36	32	37	37	34	30	41	34	33
4.	44	35	35	38	41	30	27	38	35	34	39	33
5.	75	68	47	31	31	45	48	34	38	42	35	40
6.	+2	+5	+12	+4	+1	-7	-7	+15	+32	+33	+24	-15
April North												
1.	9	9	12	18	20	24	31	22	25	25	24	23
2.	13	8	14	19	17	22	25	22	20	19	19	20
3.	35	38	40	39	38	38	42	42	42	38	38	41
4.	52	55	52	45	68	45	57	58	53	52	56	55
5.	134	101	195	157	82	58	52	40	54	80	78	65
6.	-16	+13	-4	-12	0	+38	+50	+83	+54	-33	-116	-166
April East												
1.	16	13	19	23	28	28	32	31	37	42	44	41
2.	17	11	15	13	16	16	20	19	24	24	25	22
3.	38	38	39	35	37	35	37	40	38	36	40	39
4.	49	55	49	43	41	36	45	38	43	39	55	50
5.	78	62	76	110	79	68	58	40	45	79	55	61
6.	-16	+1	+29	+2	+21	+26	+41	+50	+73	+54	+19	-15

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
21	20	20	19	15	16	17	18	17	16	12	10	18.1
15	13	10	12	9	14	13	17	15	15	9	13	14.5
42	39	35	38	39	37	35	37	35	37	38	35	38.0
52	53	47	56	43	41	37	44	44	49	45	43	46.5
30	42	36	53	69	98	81	107	97	183	77	91	69.3
-103	-55	+8	+73	+66	+16	+20	+39	+50	+36	+6	+5	

Component												
43	50	54	53	39	30	24	21	20	20	14	16	29.8
23	31	24	26	22	17	14	17	13	13	14	15	18.5
35	33	35	37	34	40	35	36	37	35	39	33	35.4
40	48	43	52	41	47	36	85	46	39	42	47	41.5
26	34	30	34	44	35	71	69	64	121	92	68	50.9
-24	-20	-15	0	-6	-2	0	-17	-14	-20	+15	+5	

Component												
22	22	19	17	11	13	11	11	12	11	10	11	17.1
23	17	17	16	13	8	12	13	10	12	11	11	15.9
43	51	39	41	38	38	38	38	37	35	37	38	39.3
58	77	57	56	62	43	44	50	40	47	43	51	53.2
40	51	76	51	74	81	115	76	112	105	123	77	86.5
-143	-53	+5	+60	+70	+59	+21	+22	+15	+30	+22	0	

Component												
43	43	41	35	33	22	18	13	13	13	16	16	27.5
27	30	26	20	22	20	13	11	8	12	14	14	18.3
46	55	47	34	37	37	37	37	37	36	38	38	38.8
54	65	56	58	47	57	52	46	44	45	41	45	48.0
38	33	58	92	95	79	86	68	93	82	92	55	70.5
-42	-17	-21	-2	-19	-4	-61	-47	-35	-13	-14	-9	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
	May North											
1.	5	7	14	17	18	17	19	19	15	17	12	10
2.	7	9	19	16	17	15	15	16	12	10	8	5
3.	35	34	40	37	37	38	36	38	34	37	33	35
4.	38	40	38	36	47	50	41	39	49	37	40	42
5.	79	57	64	77	31	44	63	34	23	33	37	35
6.	+18	+34	+25	+19	+33	+66	+39	+27	-23	-93	-137	-155
	May East											
1.	10	9	11	19	21	20	23	31	29	30	31	27
2.	7	5	12	11	9	10	12	19	16	18	18	16
3.	38	36	36	35	36	35	31	28	34	34	34	35
4.	31	38	37	43	27	24	33	24	35	35	34	39
5.	52	52	47	37	37	35	23	35	33	27	41	23
6.	+17	+14	+17	+9	+4	+21	+31	+54	+64	+21	-7	-44
	June North											
1.	9	14	12	15	17	20	21	20	16	18	14	13
2.	17	15	9	14	12	19	19	20	13	7	13	10
3.	38	37	37	35	37	37	41	37	38	38	37	37
4.	41	46	42	48	44	46	49	44	42	46	39	43
5.	65	74	84	64	56	60	62	37	38	36	39	38
6.	+25	+14	+13	+27	+46	+56	+36	+20	-9	-47	-118	-147
	June East											
1.	18	19	13	16	17	21	23	29	29	26	28	27
2.	15	18	8	12	10	14	18	11	17	16	13	18
3.	35	38	32	35	36	35	33	34	35	35	35	36
4.	44	33	52	45	32	32	43	26	25	32	46	45
5.	74	57	53	26	37	44	29	36	52	31	22	32
6.	+27	+14	+35	+28	+30	+30	+38	+48	+65	+61	0	-39

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
10	12	10	12	6	4	7	12	8	8	12	6	11.5
8	4	10	2	6	5	7	11	9	11	11	9	10.1
37	37	36	33	34	35	30	34	37	36	37	35	35.6
30	35	31	44	34	31	36	38	39	39	39	35	38.7
36	36	38	55	43	39	49	44	59	44	69	63	48.0
-116	-50	+17	+41	+41	+36	+32	+11	+27	+35	+38	+35	

Component												
31	27	29	26	22	15	17	15	9	9	17	9	20.3
13	16	16	16	11	11	10	12	9	9	14	13	12.6
31	39	36	35	32	31	34	35	33	34	36	34	34.3
35	41	33	36	33	35	35	36	39	32	41	35	34.6
29	27	34	46	54	51	46	59	42	52	61	60	42.0
-30	+3	+18	-6	-17	-15	-44	-55	-37	-22	+4	+2	

Component												
7	10	9	8	10	8	7	8	11	7	12	12	12.4
5	7	7	6	7	5	8	12	11	5	11	10	10.9
38	37	35	37	36	35	36	34	34	33	37	38	36.6
49	41	43	37	43	35	37	47	32	39	39	35	42.0
48	70	64	58	43	79	55	50	98	84	81	116	62.5
-126	-89	-40	0	+32	+72	+39	+42	+51	+38	+38	+28	

Component												
26	25	23	24	23	20	15	10	11	8	14	14	20.0
11	15	19	13	13	14	15	10	11	7	13	10	13.4
39	36	35	41	37	36	35	38	37	34	38	37	35.9
55	56	39	38	50	36	37	43	53	38	59	41	41.7
40	38	58	53	48	79	60	82	60	81	61	96	52.0
-13	-3	-22	-36	-50	-33	-64	-82	-41	+3	+13	-7	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
July North												
1.	17	20	20	21	23	26	27	29	28	27	23	18
2.	9	15	12	15	16	22	19	20	20	19	14	15
3.	35	39	37	36	34	39	34	38	39	40	39	41
4.	50	45	52	41	48	53	44	61	48	52	51	50
5.	81	101	70	62	46	57	77	42	30	34	66	64
6.	0	-12	+14	-15	+41	+48	+70	+16	+25	-8	-107	-130
July East												
1.	16	18	17	17	19	23	33	34	45	46	43	42
2.	12	13	9	10	10	15	17	23	23	20	20	22
3.	38	37	37	37	34	37	37	37	33	35	34	32
4.	41	46	46	39	34	32	37	31	39	35	37	44
5.	63	48	46	37	53	43	37	31	16	39	64	63
6.	-6	+8	+15	+8	+14	+16	+38	-7	+38	+35	+32	+29
August North												
1.	11	13	16	16	25	26	29	27	21	19	17	15
2.	7	8	14	14	15	17	19	20	16	12	13	10
3.	35	39	37	38	37	37	42	36	39	34	36	44
4.	50	59	51	41	52	50	53	51	35	35	37	42
5.	71	63	84	57	45	56	38	31	44	44	68	53
6.	+20	+8	-4	+12	+18	+55	+56	+7	-4	-75	-138	-139
August East												
1.	15	18	17	20	25	27	41	49	41	39	44	35
2.	9	10	12	12	17	15	23	20	21	25	21	20
3.	36	37	35	36	37	36	33	34	35	33	32	37
4.	40	51	57	44	37	39	36	34	30	27	42	40
5.	68	52	38	39	57	35	33	35	42	48	52	53
6.	+19	+22	+1	+9	-1	+23	+56	+69	+82	+64	-4	-35

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
20	17	17	17	15	13	13	14	14	13	14	15	19.2
16	17	12	12	8	9	8	10	12	12	9	13	13.9
38	38	34	38	36	37	38	36	33	35	33	33	36.7
55	54	49	44	41	38	40	38	39	36	42	44	46.9
93	60	93	61	85	69	82	103	142	109	114	84	76.0
-107	-84	+30	+18	+22	+39	+10	+5	+29	+52	+53	-11	

Component												
42	37	31	32	24	26	21	18	13	19	17	17	27.1
24	26	21	19	35	20	16	11	14	11	13	15	17.5
37	38	44	37	38	35	36	37	34	34	34	38	36.3
62	38	51	43	52	47	53	52	38	63	52	43	44.0
63	64	63	80	76	84	96	101	147	57	71	56	62.4
+4	-1	+4	0	-19	-17	-23	-52	-60	-26	-20	-12	

Component												
15	16	15	12	8	8	10	16	15	9	13	13	16.0
10	9	10	8	8	5	6	15	13	10	14	12	11.9
37	39	36	35	37	35	32	33	37	33	37	35	36.7
51	45	42	42	47	33	31	35	34	35	38	55	43.5
55	45	59	42	35	61	79	77	85	155	109	125	65.9
-103	-49	+10	+40	+55	+64	+23	+38	+34	+36	+25	+12	

Component												
35	41	36	33	24	28	19	19	16	13	20	21	28.2
21	20	19	20	16	16	13	15	15	16	16	16	17.0
31	39	33	37	38	34	34	38	39	36	37	34	35.5
45	45	45	38	38	39	37	44	42	46	44	47	41.1
51	41	50	49	39	60	84	71	91	106	153	99	60.3
-33	-32	-23	-15	-29	-21	-44	-55	-38	-9	-22	+22	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
September North												
1.	7	10	13	14	19	23	29	24	25	22	22	19
2.	9	11	12	14	15	19	22	23	18	16	14	19
3.	35	33	34	35	37	35	39	38	38	36	37	41
4.	37	50	39	42	38	36	43	50	43	32	47	50
5.	64	54	64	58	32	43	41	38	35	65	64	69
6.	+15	-4	+14	-8	+5	+5	+28	+35	+15	-45	-95	-119
September East												
1.	11	11	12	17	22	29	32	35	40	40	42	43
2.	13	13	13	15	16	22	25	25	28	27	29	29
3.	31	32	29	34	31	35	27	32	30	29	32	37
4.	36	37	41	35	25	32	44	32	32	31	37	49
5.	59	50	40	40	41	38	37	52	43	49	49	39
6.	+24	+12	+16	+10	+12	+7	+34	+74	+73	+48	+32	+1
October North												
1.	5	12	8	10	12	17	26	30	24	26	22	20
2.	13	12	8	13	12	15	21	25	24	16	15	16
3.	33	35	36	37	37	35	39	38	42	39	39	36
4.	32	48	37	47	40	43	47	51	50	42	52	49
5.	59	74	83	54	71	41	48	42	27	35	63	70
6.	-6	-10	-5	+9	-22	-3	+9	+31	+37	+9	-54	-108
October East												
1.	7	12	9	16	21	28	33	39	45	44	44	52
2.	16	19	13	18	21	26	30	34	30	36	34	34
3.	27	33	27	28	29	27	32	30	29	24	28	30
4.	37	39	38	36	39	42	34	39	44	33	40	44
5.	52	55	44	39	48	35	48	46	46	52	53	52
6.	+14	+19	+21	+2	-7	+1	+9	+34	+47	+38	+45	+20

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
17	21	19	14	11	11	13	13	13	11	10	13	16.4
19	16	14	11	7	8	13	11	11	12	16	11	14.2
44	41	38	37	34	35	37	33	35	33	35	37	36.5
49	52	43	44	37	36	41	31	38	38	37	52	41.9
74	76	78	47	46	54	77	83	92	122	115	91	65.9
-97	-53	+4	+46	+52	+55	+38	+47	+56	+9	-13	+13	

Component												
44	45	40	37	28	28	17	17	16	14	17	13	27.1
33	32	28	23	22	18	19	16	13	14	16	19	21.2
37	37	37	31	34	33	35	29	34	35	34	35	32.9
47	42	36	37	43	32	35	46	38	49	46	42	38.5
64	56	80	46	50	62	64	61	118	103	110	83	59.8
-20	-50	-29	-35	-20	-26	-44	-41	-32	-21	-23	0	

Component												
21	21	18	15	12	13	12	13	8	9	8	9	15.5
17	16	12	10	15	16	16	17	14	11	11	14	15.0
39	40	34	35	37	37	38	37	37	38	36	38	37.3
49	42	39	33	41	44	40	31	36	53	41	44	43.0
40	38	39	60	42	92	140	107	66	74	66	82	63.0
-102	-44	+9	+48	+32	+49	+33	+33	+26	+16	+23	-9	

Component												
49	52	51	44	37	31	21	21	17	13	10	12	29.5
31	37	34	28	24	20	21	17	16	15	14	15	24.3
32	32	31	28	27	24	31	32	31	31	32	31	29.4
40	45	34	40	42	38	48	45	34	42	42	42	39.9
46	51	56	67	55	94	113	113	77	98	54	57	60.5
-8	-30	-15	-1	-10	-20	-44	-44	-38	-46	+4	+6	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
November North												
1.	7	8	8	9	10	14	17	25	23	17	18	20
2.	13	14	11	14	11	19	16	20	25	19	20	24
3.	37	37	36	35	43	38	39	37	34	38	38	40
4.	55	38	37	44	38	53	49	44	53	53	49	47
5.	75	70	65	76	59	45	53	38	28	20	43	56
6.	-27	-30	-18	-48	-18	-3	+1	+21	+24	+6	-33	-57
November East												
1.	12	13	13	22	25	30	34	40	40	37	43	50
2.	13	14	10	19	21	28	26	25	24	23	29	28
3.	32	29	30	26	28	25	28	27	35	29	28	32
4.	44	30	34	37	33	40	49	35	41	46	38	37
5.	43	54	54	38	59	53	43	49	44	45	48	52
6.	-7	+10	-12	-22	-13	-10	-15	-16	+40	+40	+41	+29
December North												
1.	1	8	6	6	7	9	9	19	25	19	20	19
2.	6	12	12	13	12	8	15	16	25	23	20	23
3.	35	33	33	33	33	36	37	37	39	40	38	39
4.	35	32	39	43	38	46	39	34	45	42	45	40
5.	67	117	84	63	66	63	41	49	34	45	57	52
6.	-16	-31	-23	-13	-10	-31	-5	-13	+1	+6	-11	-23
December East												
1.	15	12	10	17	20	24	26	34	46	39	44	52
2.	11	14	13	15	14	15	21	26	28	25	26	28
3.	28	27	28	23	32	30	27	26	32	33	31	29
4.	33	52	38	42	40	39	33	34	47	47	46	41
5.	58	56	41	42	54	48	46	41	39	51	52	57
6.	+19	-2	+5	+1	0	-14	-21	-13	+17	+36	+24	+6

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
21	18	16	17	13	11	13	13	11	13	12	10	14.3
23	22	20	17	17	16	15	20	12	10	17	12	17.0
40	40	35	37	36	34	34	31	37	35	34	34	36.6
44	43	46	38	35	37	41	32	44	37	38	40	43.1
59	61	45	60	74	77	90	109	92	71	125	91	66.0
-69	-10	+2	+39	+33	+17	+31	+50	+65	+60	-16	-15	

Component												
30	47	47	48	32	25	25	22	14	14	16	9	29.1
28	26	25	28	20	18	16	17	17	16	19	14	21.0
30	32	28	31	27	28	25	28	27	23	29	31	28.7
45	31	47	48	43	37	34	35	47	35	41	32	39.1
43	83	61	50	61	104	86	104	92	116	98	61	64.2
-5	+4	-19	-2	-5	-22	-35	-20	-4	0	-16	+8	

Component												
19	20	15	17	17	12	12	10	10	5	5	5	12.3
23	22	22	17	17	14	16	13	13	8	10	9	15.4
39	43	38	37	38	14	33	34	37	34	36	37	35.5
44	39	49	53	39	40	76	39	35	44	41	46	42.6
44	37	31	44	53	48	82	99	73	59	89	53	60.4
-24	+12	+11	+16	+30	+15	+29	+15	+38	+24	-1	+7	

Component												
55	62	59	43	37	33	27	17	15	12	9	11	30.0
35	38	30	30	25	23	20	13	14	12	12	14	20.9
28	28	30	24	25	18	31	31	26	32	30	33	28.6
36	42	27	38	38	33	39	41	44	28	38	42	39.1
57	48	60	66	53	64	123	96	82	80	59	83	60.7
+17	-3	-1	+2	-12	-13	-20	-12	-12	-2	-2	+1	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
Year 1985 North												
1.	8	11	12	13	15	18	22	25	24	22	21	19
2.	10	12	12	14	13	17	18	21	20	17	16	17
3.	36	36	37	36	37	28	39	39	38	39	38	39
4.	43	47	44	44	49	45	48	48	47	46	48	48
5.	84	83	88	71	56	54	52	40	36	44	54	55
6.	-4	-5	-4	-2	+4	+17	+23	+20	+14	-27	-77	-102
Year 1985 East												
1.	14	14	13	17	21	24	30	35	40	38	41	41
2.	12	13	11	13	15	17	21	23	23	24	24	24
3.	34	35	34	34	35	34	33	33	34	33	35	35
4.	40	42	43	40	36	36	39	35	37	37	42	43
5.	64	57	46	46	49	43	40	39	39	45	45	46
6.	+7	+9	+13	+7	+5	+7	+15	+28	+51	+41	+21	-3

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
18	18	16	16	13	12	12	13	12	11	11	11	15.5
17	15	14	12	12	11	12	14	12	11	12	15	14.3
40	40	37	37	37	36	35	35	36	35	36	37	36.8
48	49	46	44	43	40	42	41	40	44	43	48	45.2
53	51	59	55	59	75	90	92	104	102	105	89	68.8
-88	-36	+9	+36	+41	+38	+31	+28	+34	+32	+16	+7	
Component												
43	44	42	38	31	26	21	18	15	14	15	15	27.1
25	27	24	22	19	18	16	14	13	13	15	15	18.4
35	37	34	34	33	32	34	35	34	34	35	35	34.2
44	40	41	40	42	40	40	47	43	44	44	45	40.8
46	46	56	59	59	71	86	81	90	69	91	75	58.7
-14	-14	-12	-8	-13	-15	-33	-38	-27	-14	-6	-4	

Hour Parameter	0	1	2	3	4	5	6	7	8	9	10	11
Quiet days North												
1.	5	8	9	9	2	4	18	17	19	15	15	14
2.	8	8	10	11	9	12	14	15	16	12	12	14
3.	34	35	34	32	40	40	36	36	36	37	34	35
4.	36	37	38	40	42	39	37	39	31	36	34	35
5.	28	29	40	31	29	41	33	23	26	26	37	42
6.	+4	0	-1	-3	+10	+29	+25	+22	+14	-32	-77	-104
Quiet days East												
1.	10	10	14	17	18	19	24	27	29	30	31	34
2.	10	10	10	11	12	16	17	33	19	19	19	20
3.	32	33	30	30	32	30	29	31	30	29	31	29
4.	30	32	32	28	30	31	31	28	29	28	34	32
5.	31	27	28	24	33	28	26	24	28	32	30	39
6.	+9	+2	-2	-8	-9	+1	+2	+10	+40	+34	+23	-4
Disturbed days North												
1.	9	14	16	14	23	23	28	42	41	36	29	26
2.	14	15	14	18	23	27	32	45	34	36	32	27
3.	39	42	39	44	43	46	56	51	46	53	26	44
4.	72	75	88	54	79	97	205	70	101	98	88	57
5.	333	318	317	298	174	160	100	138	84	98	116	101
6.	-17	+3	-54	-56	-46	-19	+16	+30	+84	+44	+6	-4
Disturbed days East												
1.	24	21	21	21	28	34	36	55	71	55	55	57
2.	21	19	17	25	27	27	30	45	45	34	32	35
3.	39	45	37	41	37	44	41	59	61	46	50	53
4.	79	70	125	57	41	95	60	60	62	88	69	64
5.	117	118	67	292	187	98	118	69	98	108	95	86
6.	+3	+34	+35	-7	+45	+97	+98	0	+79	+37	+19	-4

12	13	14	15	16	17	18	19	20	21	22	23	Averages
Component												
12	13	11	10	7	5	8	9	9	4	6	8	10.8
12	12	10	9	8	6	8	14	14	8	8	11	10.8
35	34	15	34	34	32	33	32	34	32	34	36	34.8
40	32	14	30	35	30	27	27	34	34	37	34	34.8
22	29	9	24	27	32	31	36	44	15	38	43	32.5
-90	-43	-11	+43	+36	+28	+22	+23	+34	+23	+27	+19	
Component												
30	31	26	27	22	15	8	14	10	7	10	9	20.2
16	19	16	18	13	13	12	12	12	9	11	10	16.3
32	37	30	30	28	29	30	15	33	32	31	32	30.8
31	31	29	27	28	28	27	29	41	30	35	35	30.8
28	27	31	32	32	31	33	38	37	50	47	41	32.5
-15	-22	-20	-15	-10	-11	-11	-18	-15	+8	+16	+17	
Component												
25	25	21	23	15	26	15	17	20	17	15	11	22.0
26	21	27	21	23	25	20	17	16	12	16	12	23.2
46	45	42	45	41	39	37	45	37	38	42	41	43.2
74	60	88	74	64	81	136	71	86	59	111	48	82.8
86	143	156	109	145	187	227	299	310	276	238	108	187.4
-71	+64	-9	-8	+56	+87	+52	-16	-12	-44	-39	-47	
Component												
56	55	59	48	39	34	28	26	23	20	25	19	37.9
32	32	35	36	27	26	17	23	23	18	21	17	30.7
39	39	43	30	42	30	36	38	30	36	39	30	41.4
60	75	36	50	71	46	93	69	43	47	39	74	13.0
70	163	187	137	73	243	240	274	240	200	232	69	152.1
-1	+40	-12	-43	-34	-32	-90	-98	-45	+7	-62	-7	

III.

Results of harmonical analysis of the daily variations

	A ₁	q ₁	A ₂	q ₂	A ₃	q ₃	A ₄	q ₄	A ₅	q ₅	A ₆	q ₆
North Component												
January	27	181	11	292	9	176	6	322	2	209	6	295
February	22	171	17	280	9	107	8	277	11	168	7	267
March	28	139	41	276	29	125	28	300	4	72	8	150
April	34	112	60	285	50	129	21	321	4	261	6	2
May	58	108	51	309	36	153	9	339	1	151	5	326
June	62	105	54	285	21	131	4	265	4	174	7	35
July	38	99	47	281	34	150	17	287	2	125	14	338
August	49	119	53	299	33	151	7	347	1	59	7	35
September	38	128	46	289	26	118	15	344	4	70	7	127
October	25	135	37	275	28	109	21	306	7	167	4	285
November	24	173	34	252	12	144	19	318	8	53	5	39
December	21	189	11	246	4	152	8	288	4	163	2	72
YEAR	31	128	37	285	23	136	13	312	2	150	3	5
Q	33	116	35	285	26	137	10	301	3	108	2	78
D	31	258	26	259	35	76	11	50	9	206	20	5
East Component												
January	9	318	5	171	11	64	6	275	2	278	2	50
February	12	335	9	164	12	42	8	270	2	11	4	73
March	11	10	6	192	14	67	7	261	5	179	3	265
April	37	356	10	243	17	104	13	279	3	285	6	351
May	29	5	3	334	25	126	11	332	7	207	5	344
June	47	12	7	141	16	130	11	297	10	226	13	6
July	31	336	8	63	7	68	6	200	1	97	7	303
August	40	7	13	216	28	109	7	335	3	200	5	35
September	41	2	14	197	20	80	4	316	3	313	5	127
October	29	350	11	124	20	75	5	233	3	355	5	202
November	15	327	15	133	9	27	12	260	3	75	5	93
December	8	324	13	116	7	34	6	263	5	138	4	69
Year	25	354	6	166	13	87	7	281	2	231	3	19
Q	12	13	15	174	11	86	6	234	3	185	3	345
D	53	356	10	57	10	172	4	283	5	54	30	19

IV.
Special phenomena
 (magnetic and earth current data)

SSC-s

Month	Day	CET (UT+1h)	Amplitude in E (mV/km) H (nT)		Ex	Ey	Hx	Hy	End of storm	
01.	08.	15.15	6.5	16	+	+	+	—	01.09	20.00
02.	05.	04.45	11	25	+	+	+	—	02.07	01.00
03.	04.	19.30	5.5	14	—	—	—	+	(?) no storm	
04.	30.	10.30	20	40	+	+	+	—	03.30	23.00
		12.30	23.5	28	+	+	+	—	in storm	
06.	06.	12.15	6.5	14	—	—	—	+	06.07	22.00
	09.	18.15	8	22	+	+	+	—	06.10	13.00
	11.	20.30	4.5	10	+	+	+	—	no storm	
	20.	13.00	2.5	12	+	+	+	—	06.20	18.00
07.	22.	20.45	3.5	16	+	+	+	—	07.23	06.00
08.	12.	15.45	7	30	+	+	+	—	08.14	00.00
09.	14.	07.00	6.5	20	+	+	+	—	09.14	17.00
10.	31.	12.00	4.5	15	+	+	+	—	no storm	
11.	27.	08.45	8	18	—	—	—	+		
		06.00	7	25	+	+	+	—	11.27	19.00
	29.	09.00	2.5	18	+	+	+	—	11.30	15.00
12.	12.	22.15	8	25	+	+	+	—	(b?) 12.13	17.00
	18.	07.45	6.5	22	+	+	+	—	12.18	19.00

Bays						Pi-s					
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
01.	01.	21.15	22.5	190	+	+	+	—	tr		
	02.	22.45	14.5	75	+	+	+	—	tr		
	03.	00.45	8	40	+	+	+	—	tr		
	04.	00.15	6.5	32	+	+	+	—	tr		
		22.00	5.5	35	—	+	+	+	2.5	+	+
	05.	23.30	4.5	15	—	+	+	+	2	+	+
	06.	21.30	4.5	28	—	+	+	+	2	+	+
	07.	19.30							2.5	+	+
	08.	21.00	12	75	—	+	+	+	tr		
	09.	17.30	16	90	—	+	—	+	tr		
		22.15	6.5	38	—	+	+	+	2	+	+
	10.	18.15							4.5 (pg)		
		18.30	17	90	—	+	+	+	3.5	—	—
	11.	19.15	7	50	—	—	—	+	tr		
	12.	21.15	9	48	—	—	+	—			
	13.	20.15	8	38	+	+	+	+	2	+	+
	14.	17.15	8	50	—	+	+	+	tr		
	17.	18.30	10	45	+	+	+	—	tr		
	18.	20.15	3.5	13	—	0	0	+	3.5	+	+
		21.15	5.5	22	—	+	+	+	2.7	+	+
	20.	01.30	3.5	12	+	+	+	—	2	+	+
		18.15	5.5	45	—	—	—	+			
	21.	05.30	4.5	35	+	—	—	—			
	22.	17.45	10	22	+	+	—	+	tr		
		23.00	11	80	—	+	+	+	2.5	+	+
	23.	04.45	11	60	+	—	+	—	tr		
		11.00	12.5	28	—	—	—	+			
		14.15	12.5	72	—	—	—	+			
		17.30	10	42	+	+	+	+	3.5	+	+
		21.45	8.5	45	+	+	+	—			
26.	23.15							2.5	+	+	
28.	01.15	12.5	52	—	—	—	—				
	03.00	14.5	80	—	+	+	+	tr			
	17.15	22	62	+	—	—	—	tr			
	19.45	14.5	70	+	+	+	—				

Bays					Pi-s						
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
01.	28.	23.00	21.15	85	+	+	+	—			
	29.	00.45	7	115	+	+	+	—			
		20.30	10	65	—	—	—	+			
		23.30	18	110	+	+	+	—	tr		
	30.	17.30	6.5	60	—	+	+	+	tr		
	31.	02.15	6.5	25	+	+	+	—	2.5	+	+
		23.15							3.5	+	+
		23.45	4.5	30	—	+	+	+	tr		
02.	01.	17.30	8	55	—	+	+	+	tr		
		21.00	4.5	45	—	+	+	+	tr		
	03.	21.00	4.5	28	+	+	+	—	2.5	+	+
	05.	20.15	10	55	—	+	+	+	tr		
	06.	17.45	14.5	125	—	—	—	+	tr		
	07.	21.30			—				2.5	+	+
		22.15	8	25	—	0	0	+	3.5	+	+
		23.00	4.5	32	0	+	+	—	tr		
	08.	20.15	12.5	70	+	+	+	—	tr		
	10.	19.30	14.5	100	+	+	+	+	tr		
	11.	23.15	3.5	42	+	+	+	+	2.5	+	+
	12.	15.30	9	52	—	—	—	+	tr		
	13.	20.00	12.5	70	—	+	+	+	tr		
		23.45	5.5	25	+	+	+	—	3.5	+	+
	14.	22.45	12	55	+	+	+	—	tr		
	15.	22.30	5.5	28	—	+	+	+	tr		
	16.	19.30	8	35	+	+	+	+	tr		
	19.	20.45	10	22	—	+	+	+	tr		
	22.	23.30							3.5	+	+
	23.	03.45	5.5	15	—	—	—	+			
		15.15							2.5	+	+
	24.	01.30							2.5	+	+
		03.30	7	28	+	+	+	—			
		21.30	7	35	+	+	+	—	3.5	+	+
	26.	00.45	6.5	18	+	+	+	—	7	+	+
	27.	00.30		18					2	+	+
		23.00	16	160	—	+	+	—	3.5	+	+

Bays					Pi-s						
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
04.	09.	00.00	14.5	70	—	+	+	+	tr		
		15.30	16	72	—	—	—	—	tr		
	10.	23.45							2.5	+	+
	14.	02.30							2	+	+
		22.30	4.5	12	+	+	+	—	3.5	+	+
	15.	23.15							3.5	+	+
	16.	00.15							2.5	+	+
		01.30							2	+	+
	17.	00.30	3.5	12	+	+	+	—	2.5	+	+
	18.	00.45	8	35	+	+	+	—	tr		
	19.	18.15	8	22	—	—	—	—			
		20.00	7	40	+	+	+	—			
		22.45	12	75	+	+	+	—	tr		
		20.	21.00	12	30	+	+	+	— (ssc ?)		
	21.	02.45	30	170	—	+	+	+	tr		
		08.45	?	135	?	?	—	—			
		18.00	20	60	+	+	+	—	tr		
		24.	02.15	8	45	+	+	+	—	2.5	+
	10.15		12.5	30	—	—	—	+(+ SI)	tr		
	25.	02.15							4.5	+	+
	26.	00.30	10	55	+	0	+	—	tr		
		03.00	18	60	+	+	+	—			
		22.30	15.5	65	—	+	+	+	2	+	+
		28.	00.45	25	90	+	+	+	— (ssc ?)	tr	
	30.	14.30	9	42	+	—	—	—	tr		
		19.45	125	42	—	—	+	—			
05.	03.	23.30							2.5	+	+
	05.	18.15	3.5	14	+	+	+	—			
	07.	00.30	6.5	25	+	+	+	—	3.5	—	—
		22.45							2.5	+	+
	09.	00.30	6.5	45	+	+	+	—	2.5	+	+
	12.	02.30							2	+	+
	13.	22.15	8	35	+	+	+	—	2	+	+
	15.	23.00	5.5	35	+	+	+	—	tr		
	17.	22.15	4.5	22	+	+	+	+	2.5	+	+

		Bays			Pi-s							
Month	Day	CET (UT+1h)	Amplitude in E (mV/km) H (nT)		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey	
05.	21.	02.30							2.5	+	+	
		22.45	3.5	22	—	+	+	+	2	+	+	
	02.30							2.5	+	+		
	20.30	6.5	15	+	+	—	+					
	06.	01.	03.15	4.5	28	+	+	+	—	4.5	+	+
		02.	00.15	5.5	25	+	+	+	—	2.5	+	+
		03.	18.30							8	+	+
		05.	00.15							2.5	+	+
		06.	00.15							2.5	+	+
00.45									3.5	+	+	
01.00									3.5	+	+	
03.30									2.5	+	+	
		17.00	20	82	—	+	+	+	tr			
		12.45	14.5	55	+	+	+	+	tr			
07.		20.30	8	55	+	+	+	+	tr			
08.		01.00	6.5	35	+	+	+	—	tr			
09.		23.00	25	100	+	+	+	+	tr			
12.		21.30	4.5	22	—	+	+	+	tr			
14.		22.00							2	+	+	
17.		03.15							2.5	+	+	
		18.15	6.5	18	+	+	+	0				
18.		00.15							2	+	+	
		18.30							2.5	+	+	
19.		19.45							2.5	+	+	
20.		16.45	21.5	85	—	—	—	+				
		21.30	4.5	18	+	+	+	—				
		20.00	6.5	32	+	+	+	—				
21.		00.15							4.5	+	+	
		22.45							3.5	+	+	
		23.15							2	+	+	

Bays					Pi-s						
Month	Day	CET (UT+1h)	Amplitude in E (mV/km) H (nT)		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
06.	23.	02.45	2.5	28	+	0	+	-	tr		
	25.	20.30							3.5	+	+
		21.00	7	40	+	-	-	-			
	26.	01.00	5.5	35	+	+	+	- (+SI)	2.5	+	+
		13.30	9	35	-	-	-	+			
		20.00	12.5	50	-	-	-	+	tr		
	27.	17.15	6.5	25	+	+	+	-			
		22.15	6.5	35	-	+	+	+	2.5	+	+
	29.	00.00	4.5	22	-	+	+	+			
		21.00	7	38	-	+	+	+	tr		
07.	01.	02.00	9	62	+	+	+	-	tr		
	03.	20.45	6.5	22	-	-	-	+			
	04.	01.00	6.5	32	+	+	+	-	2.5	+	+
		20.00	14.5	85	+	+	+	+	tr		
	06.	21.30	11	50	-	+	+	+	tr		
	08.	19.00	8	38	-	-	-	+	2.5	+	+
		23.00	?	45	?	+	+	+	tr		
	09.	21.15							2	+	+
	11.	20.30	9	21	+	+	+	-			
	12.	02.30	12	45	-	-	-	+			
		19.15	16	60	+	+	+	+	tr		
		20.00	21.5	125	+	+	+	+	tr		
	13.	18.30	14.5	72	-	+	+	+	tr		
	17.	02.15	5	25	-	-	-	+			
	18.	21.30	6.5	42	-	+	+	+	2	+	+
	23.	19.30	3.5	35	-	+	+	+	tr		
		23.45	5.5	38	+	+	+	-	tr		
	24.	21.15	12	32	-	+	+	+	tr		
	28.	00.30	9	35	+	+	+	-	tr		
	31.	22.30	12	52	+	+	+	-	tr		
08..	06.	20.45	45	18	-	+	+	+	3.5	+	+
	07.	01.45							3.5	+	+
		14.30							(pg) 2		
	09.	01.30	4.5	15	+	+	+	-	2.5	+	+
		20.30							5.5	-	+

Bays							Pi-s				
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
08.	10.	21.30							3.5	+	+
	11.	01.30	9	35	+	+	+	—	tr		
	12.	00.00	15	55	+	+	+	—	tr		
		04.30							(pg) 3.5		
	13.	21.00	21.5	70	—	+	+	+	tr		
		22.00	13.5	65	—	+	+	+	tr		
	16.	19.30	6.5	35	—	+	+	+	3.5	+	+
		23.15	5.5	32	—	+	+	+	tr		
	17.	23.45	4.5	32	+	+	+	—	tr		
	19.	23.30	7	15	+	+	+	—			
	22.	00.00	6.5	35	+	+	+	—	2.5	+	+
		09.00	5.5	60	—	—	—	—			
		17.15	8	60	+	+	+	+			
		20.30	12.5	70	+	+	+	+			
	23.	01.00	5.5	12	+	+	+	—	tr		
		22.00	8	42	+	+	+	—	2.5	+	+
	26.	23.15	6.5	42	+	—	—	—	2.5	+	+
	28.	02.00							5.5	+	+
	30.	20.30	7	30	—	+	+	+	2.5	+	+
	31.	17.15	12	65	—	+	—	+			
		23.30	5	35	+	+	+	—	tr		
09.	01.	21.30	2.5	22	—	+	+	+	2.5	+	+
	03.	23.30							3.5	+	+
	05.	20.45							3.5	+	+
		22.45	3.5	12	—	—	—	+			
	06.	18.15	7	35	+	+	—	+	3.5	+	+
	07.	00.45	6.5	35	+	+	+	—	2.5	+	+
		23.00	6.5	28	+	+	+	—	2.5	+	+
	08.	22.45	4.5	35	+	+	+	—	3.5	+	+
	09.	22.30	6.5	25	+	+	+	+	2.5	+	+
	10.	20.15	5.5	30	—	+	+	+	tr		
		23.00	6.5	42	+	+	+	—	3.5	+	+
	11.	19.45	4.5	45	—	+	+	+			
	12.	18.30	5.5	30	—	+	+	+	2.5	+	+
	14.	00.30	6.5	30	+	+	+	—	tr		

Bays					Pi-s							
Month	Day	CET (UT+1h)	Amplitude in E (mV/km) H(nT)		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey	
09.	14.	13.45	15	65	+	+	+	— (SI?)				
		21.30	6.5	18	—	+	+	+	2.5	+	+	
		22.30	6.5	28	+	+	+	—	3	+	+	
	15.	20.15	14.5	115	—	+	+	+	tr			
	16.	12.30	8	75	—	—	—	+				
		22.45	7	45	+	+	+	—	tr			
	17.	20.45	5.5	40	—	+	+	+	tr			
	19.	16.30	9	90	—	—	—	+				
		21.00	16	110	+	+	+	+	tr			
	25.	22.00	8	50	+	+	+	—	tr			
	26.	10.15	5.5	55	—	—	—	—				
		20.00	4.5	40	—	+	+	+	2.5	+	+	
		23.00	6.5	30	—	+	+	+	3.5	+	+	
	27.	20.00	5.5	40	—	+	+	+	2.5	+	+	
		22.15	12.5	80	+	+	+	—	3.5	+	+	
30.	00.30							4.5	+	+		
	23.00	6	35	+	+	+	—	2.5	+	+		
10.	01.	23.30							4.5	+	+	
	02.	01.30	4.5	25	+	+	+	—	3.5	+	+	
		23.30							2.5	+	+	
	04.	01.30	4.5	18	+	+	+	+	2	+	+	
	05.	19.30	12.5	80	—	+	+	+	tr			
		20.45	23.5	160	—	+	+	+	tr			
		23.30	9	85	+	+	+	—	tr			
	06.	15.00	12	95	—	+	+	+				
	07.	18.00	20	95	—	+	+	+	tr			
		21.45	8	35	+	+	+	—				
		23.45	12	52	+	+	+	—	tr			
	08.	17.00	7	40	—	+	+	+	2	+	+	
		21.15	10	52	+	+	+	+				
	09.	19.15	4.5	25	+	+	+	—	tr			
	12.	01.30	7	42	+	+	+	—	tr			
	13.	18.00	9	52	—	+	+	+	tr			
		21.45	8	40	+	+	+	—	2.5	+	+	
	18.	01.45							2.5	+	+	

Bays					Pi-s						
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E (mV/km)	H (nT)							
10.	20.	20.15	4.5	18	—	+	+	+	2	+	+
	21.	17.15	14.5	72	—	+	+	+	2	+	+
		22.00							2.5	+	+
		23.45	7	30	+	+	+	—			
	22.	20.15	5.5	45	—	+	+	+	tr		
	23.	20.00	6.5	35	+	+	+	—	tr		
	24.	19.30	8	22	+	+	+	—	tr		
	26.	23.30							2.5	+	+
	27.	00.00							2.5	+	+
		21.15							2.5	+	+
	28.	00.15	3.5	35	+	+	+	—	tr		
	29.	01.30	4.5	22	+	+	+	—	3.5	+	+
	30.	20.00	4.5	15	—	+	+	+	3.5	+	+
11.	01.	01.30							2.5	+	+
		19.30	12.5	80	—	+	+	+	2.5	+	+
	02.	16.15	14.5	85	—	+	—	+	tr		
		20.30	17	145	—	+	+	+	tr		
	03.	17.30	17	65	+	+	+	+	tr		
		20.45	5.5	30	+	+	+	+	tr		
		22.15							2.5	+	+
	04.	16.45	7	42	—	+	+	+	4.5	+	+
		18.30	9	50	—	+	+	+	tr		
	05.	21.45	12	65	+	+	+	—	tr		
	06.	08.00	7	12	—	+	+	+	tr		
	07.	20.15							3.5	—	+
	08.	00.30	2.5	25	+	+	+	—	tr		
		20.30	6.5	45	—	+	—	+	2.5	+	+
	09.	16.00	6	70	—	—	—	+			
	10.	22.00	13.5	55	—	+	+	+	4.5	+	+
	13.	20.45	15.5	130	—	+	+	+	tr		
	15.	00.15	8	55	+	+	+	—	2.5	+	+
		13.45	9	55	—	—	—	+			
		19.45	7	30	—	+	+	+			
	16.	22.00	3.5	35	+	+	+	—	tr		
	17.	18.00	16	100	—	+	+	+	tr		

Bays					Pi-s						
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
11.	18.	20.15	6	40	+	+	+	+	2	+	+
	19.	03.30	7	45	+	-	-	-	2	+	+
	22.	19.30	4,5	22	-	+	+	+	2	+	+
	23.	22.00							2,5	+	+
	24.	13.45							(pg) 1.5		
		22.00							2.5	+	+
		23.45	3.5	18	+	+	+	-	2.5	+	+
	25.	00.30							2.5	+	+
	26.	00.30							2.5	+	+
	28.	19.45	3.5	18	-	+	+	+	tr		
	29.	19.30	20	180	-	+	+	+	tr		
	30.	00.30	27	100	+	+	+	+	tr		
		01.30	25	135	+	+	+	-	tr		
		13.00	23	130	-	-	-	+			
		21.00	10	62	+	+	+	-	2.5	+	+
12.	01.	21.00	12.5	75	-	+	+	+	2	+	+
	02.	22.15	7	42	-	+	+	+	tr		
	03.	16.30	4.5	42	-	+	-	+			
	04.	19.15	11	45	-	+	+	+	tr		
	05.	19.00	4.5	22	-	+	+	+	tr		
	06.	97.00	3.5	8	-	-	-	+	(sfe)		
	07.	20.15	4.5	25	-	+	+	+	2.5	-	+
	13.	15.30	9	35	+	-	-	-			
		23.45	9	40	+	+	+	-	2.5	+	+
	14.	23.30	6.5	42	+	+	+	-	2.5	+	+
	15.	22.00	5.5	35	+	0	+	-	4.5	+	+
	16.	00.45	5.5	35	+	+	+	-	tr		
	19.	00.00	5.5	30	+	+	+	-	tr (ssc: end of storm 12.14 21.00)		
		17.30	16	120	-	+	+	+	tr		
		19.30	10	45	-	-	-	+	tr		
	24.	01.15	7	25	+	+	+	-			
	25.	23.30	6.5	30	+	+	+	+	4.5	+	+
	27.	20.00	8	55	-	-	-	+			
	28.	16.00	9	72	-	-	-	+			

Bays					Pi-s						
Monik	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy	E(mV/km)	Ex	Ey
			E(mV/km)	H(nT)							
12.	28.	20.00	12.5	50	—	+	+	+	tr		
	30.	18.15	25	100	+	+	+	+	tr		
		22.00	8	55	+	+	+	—	tr		
	31.	18.30	16	95	—	+	+	+	tr		

Further pi-traces

Month	Day	CET	Month	Day	CET	Month	Day	CET
01.	01.	01.15	02.	09.	19.00	03.	03.	21.30
		01.45			19.15			22.15
	03.	00.15			22.00		09.	02.15
	05.	22.45		17.	21.45		10.	00.15
	07.	01.30		18.	20.00			00.45
	08.	01.30			20.30		14.	11.15
		02.45		19.	02.30		15.	00.45
	12.	00.15			14.45			02.45
	13.	20.45		20.	20.00		16.	00.45
		23.00		22.	05.15			01.00
	14.	00.00			21.30			20.30
		00.30			22.30		17.	00.30
	15.	01.00			22.45			02.30
		22.30		23.	23.45			19.15
		23.30		24.	21.00			19.30
	18.	03.15			22.15			20.45
		04.15		26.	18.45		18.	20.45
		23.15			19.00		19.	19.00
		23.45			19.15		21.	02.45
	24.	20.00		27.	02.45			03.30
02.	01.	00.45		28.	02.45		22.	01.15
		21.30	03.	03.	16.00			23.30
		22.30			19.00			15.30
		23.15			21.15			20.30
	02.	22.30			22.15		24.	10.30
	04.	22.15			22.30			21.30
	05.	00.30			22.45		25.	23.30
		02.15		04.	02.15		26.	03.30
	07.	01.45			22.45		27.	18.45
	08.	02.15		07.	18.30			19.00
	09.	00.30			18.45		28.	23.15

Further pi-traces

Month	Day	CET	Month	Day	CET	Month	Day	CET
03.	28.	23.30	04.	12.	19.30	05.	10.	22.30
	29.	00.15			21.30			22.45
		00.45		14.	21.30		12.	20.15
		17.15		15.	21.45			20.30
		18.30		16.	02.00			20.45
	30.	00.30			03.30		13.	00.30
		18.30			04.45			22.45
	31.	00.00			22.30		14.	19.30
		01.30			23.15			20.00
		02.00		17.	18.45			20.15
					22.30			20.30
04.	02.	15.15		20.	03.15		15.	01.45
		22.30		23.	00.45			02.30
		22.45			20.30			04.45
		23.15			21.00			19.30
	03.	16.30		24.	00.45			20.15
		22.45		29.	17.15			22.15
		23.15		30.	23.15		17.	21.30
		23.45			20.15			21.45
05.	22.45		05.	03.	20.15			21.45
06.	00.15				20.30		18.	18.15
	05.15				21.30			21.45
08.	20.30		04.	19.15				22.30
09.	21.45		05.	01.00			19.	18.00
10.	22.30		06.	17.45				20.30
	22.45			18.00				20.45
	23.15			18.45			20.	22.45
11.	00.15		07.	02.30			21.	03.45
	02.00			02.45				18.15
	03.00		08.	03.30			22.	21.45
	23.45		09.	04.30			23.	03.30
12.	15.45		10.	22.15				07.30

Further pi-traces

Month	Day	CET	Month	Day	CET	Month	Day	CET
05.	24.	20.00	06.	14.	01.15	07.	07.	23.45
		21.30			02.30		11.	00.45
		22.15			03.00			01.30
	25.	22.15	15.		17.45			02.45
	27.	02.45			19.30		14.	18.30
		20.00			19.45		15.	23.30
	29.	22.45			20.15		16.	03.15
	31.	16.30	16.		22.30		17.	01.30
		21.00			23.30		18.	00.45
		23.45	17.		00.00		19.	03.30
06.	01.	00.15			01.00			23.15
		22.30			19.00		20.	03.45
	02.	01.45	18.		17.35		21.	01.30
	03.	23.45			18.15		25.	01.00
	04.	16.30	19.		03.15			19.45
		16.45			18.30		28.	21.00
	05.	20.30			19.15		29.	19.45
		23.30	26.		19.30	08.	01.	22.00
	06.	22.00	27.		18.45		02.	00.45
	07.	02.15	28.		01.15			01.15
	08.	23.45	28.		01.45			20.15
	09.	00.15			18.45			20.45
		01.45			19.45		03.	23.30
		02.45	29.		01.15		04.	20.45
		20.30	30.		00.45			23.45
	11.	00.30	07.	01.	22.00		05.	02.00
		00.45			22.30			02.45
		01.45		02.	22.30			20.15
		02.45			23.15			21.30
	13.	22.30	03.		19.25		06.	19.45
	14.	00.45	07.		00.45		07.	16.30

Further pi-traces

Month	Day	CET	Month	Day	CET	Month	Day	CET
08.	07.	23.00	08.	29.	19.45	09.	24.	17.45
		23.30	09.	03.	00.00			18.15
	08.	20.15			23.00			22.00
	09.	21.15			23.45	25.		18.45
		21.45	04.		17.30	26.		22.30
	10.	20.00	05.		13.45	28.		18.45
		21.15			18.45			22.15
	11.	19.15			19.45			22.30
	12.	10.45			22.15			22.45
	15.	07.15	06.		03.30			23.30
		21.30	07.		02.30	29.		18.45
	16.	23.45	10.		20.00			20.00
	17.	04.00			21.45			21.00
		19.45	12.		02.00	30.		00.45
		20.00			03.00			19.00
		20.15	14.		04.45			20.15
	18.	18.00			23.30	10.	02.	00.15
		18.45			23.45			18.45
		22.15	18.		01.15			19.30
	19.	20.45			03.15			22.45
	20.	16.30	19.		00.15			23.45
		22.45			01.30	03.		19.15
		23.30			02.15			22.15
	23.	00.30			04.00	06.		22.00
		20.30	21.		22.00	09.		15.00
	24.	01.00			22.30			18.30
		22.00			22.45			19.30
		22.30	22.		00.45			19.45
	25.	16.45	23.		21.00			22.30
	27.	23.30			22.30	10.		21.15
	28.	18.45	24.		01.30	11.		01.00

Further pi-traces

Month	Day	CET	Month	Day	CET	Month	Day	CET
10.	11.	21.30	10.	30.	21.15	11.	20.	23.30
		21.45			23.30		21.	00.45
	12.	17.30		31.	02.45		22.	01.45
		21.30			17.45		23.	22.45
		22.30			22.45		24.	22.45
		23.15	11.	01.	22.30		26.	00.45
13.	01.30				22.45			01.45
14.	19.30				23.45		28.	18.45
	21.30			04.	16.15			20.45
	21.45				18.45	12.	01.	22.15
	22.30				22.30		02.	01.30
15.	22.30				23.45		03.	21.30
17.	01.45			06.	23.45		05.	20.45
	02.15			07.	00.30		06.	15.15
18.	01.15				02.00			22.45
	02.00				03.00		07.	02.00
	21.30				03.15			18.30
20.	18.00			08.	14.15		09.	02.30
21.	20.30			09.	23.00			03.00
24.	18.00				23.15		10.	02.00
	18.45			10.	01.00		13.	23.00
	19.00				21.30			23.30
25.	23.15			11.	22.30		14.	03.00
	23.30			12.	22.15			23.00
26.	21.15			13.	01.30		18.	03.00
	22.30			14.	17.15			03.15
27.	21.30			16.	21.15			20.45
	22.15			18.	19.30		17.	02.00
29.	02.30				22.45		19.	08.45
30.	18.15			10.	17.45			22.00
	19.30				20.46			22.15

Further pi-traces

Month Day CET

12.	21.	01.30
		19.45
	23.	19.45
	25.	18.15
		18.30
		22.30
	26.	19.00
	27.	01.00
		02.00
	28.	21.45
	30.	01.15
		21.45
		22.45
	31.	22.45

SI-s

Month	Day	CET (UT+1h)	Amplitude in E (mV/km) H (nT)		Ex	Ey	Hx	Hy
01.	01.	03.30	7	9	+	+	+	—
		18.15	4.5	10	—	—	—	+
	04.	10.30	5.5	18	+	+	+	—
	12.	06.30	9	18	+	—	—	—
	17.	12.15	5.5	10	—	—	—	+
	21.	04.30	6.5	18	—	—	+	—
	26.	12.45	8	16	+	+	+	—
	30.	04.15	6.5	12	+	+	+	—
	31.	06.30	5.5	12	—	—	—	+
02.	07.	01.00	4.5	10	—	—	—	+
	15.	01.30	3.5	8	—	—	—	+
	27.	22.30	8	18	—	—	—	+
03.	02.	13.00	9	18	—	—	—	+
	03.	07.30	6.5	10	—	—	—	+
	07.	16.45	10	22	—	—	—	+
	10.	10.30	10	25	+	+	+	—
		19.00	5.5	10	—	—	—	+
	15.	06.15	4.5	10	—	—	—	+
	16.	03.30	4.5	10	+	—	+	—
	28.	15.30	4.5	7	—	—	—	+
04.	01.	23.15	4	10	+	+	+	—
	02.	07.30	8	12	—	—	—	+
	09.	11.30	7	14	—	—	—	—
	16.	10.45	4.5	7	—	—	—	+
		11.30	3.5	12	—	—	—	+
		11.45	7	15	+	+	+	—
	20.	06.15	7	18	+	+	+	— (SSC ? storm till 11 h 00)
	26.	17.30	6.5	8	—	—	—	+
05.	01.	01.45	9	14	+	+	+	—
		13.45	12.5	12	+	+	+	—
		15.00	9	22	+	+	+	—

		<i>SI-s</i>						
Month	Day	CET (UT+1h)	Amplitude in		Ex	Ey	Hx	Hy
			E (mV/km)	H (nT)				
05.	01.	16.00	9	18	—	—	—	+
	11.	00.00	7	14	—	—	—	+
	20.	16.00	3.5	8	—	—	—	+
	23.	02.30	2.5	7	+	+	+	—
	26.	12.45	6.5	12	+	+	+	—
	27.	12.00	6.5	14	+	+	+	—
	28.	05.30	14.5	22	+	0	+	—
06.	06.	06.45	7	13	—	—	—	+
	08.	22.15	3.5	8	+	+	+	—
	09.	06.00	4.5	8	—	—	—	+
	11.	17.30	2.5	5	—	—	—	+
	17.	14.00	6.5	14	+	+	+	—
	26.	13.30	6.5	12	+	+	+	—
	30.	22.45	6.5	15	+	+	+	—
07.	06.	04.30	7	12	+	+	+	—
	10.	18.30	4.5	12	+	+	+	—
	12.	21.45	9	28	—	—	—	+
		22.30	8	18	+	+	+	—
	18.	03.00	5	12	+	+	+	—
	23.	04.45	6	20	—	—	—	+
	25.	12.30	4.5	12	+	+	+	—
	26.	19.30	10	28	+	+	+	—
08.	28.	10.00	4.5	12	+	+	+	—
	01.	02.30	4.5	10	+	+	+	—
	03.	17.30	4.5	12	—	—	—	+
	10.	23.00	3.5	8	+	+	+	—
	12.	12.45	4	12	—	—	—	+
	13.	14.45	7	30	—	+	—	+
		18.30	5.5	15	+	+	+	—
	14.	01.30	5.5	12	+	+	+	—
	18.	00.30	2	7	+	+	+	—

SI-s

Month	Day	CET (UT+1h)	E (mV/km)	Amplitude in H (nT)	Ex	Ey	Hx	Hy
08.	18.	04.15	4.5	12	+	+	+	—
	25.	06.15	4	10	—	—	—	+
09.	29.	11.45	5.5	14	+	+	+	—
10.	05.	03.30	3.5	10	—	—	—	+
	06.	19.00	6.5	18	—	—	—	+
	09.	06.45	6.5	8	—	—	—	+
	10.	19.30	2.5	8	+	+	+	—
	15.	09.30	12.5	22	—	+	—	—
		19.00	4.5	12	—	—	—	+
	17.	20.30	5.5	12	—	—	—	+
	18.	00.15	2.5	8	+	+	+	—
	20.	05.15	3.5	7	+	—	—	—
	23.	09.45	6.5	15	—	+	+	+
11.	06.	13.00	4.5	12	+	+	+	—
	08.	19.15	4.5	10	—	—	—	+
	09.	05.00	6.5	13	—	—	—	+
	16.	05.30	4.5	10	+	—	—	—
12.	01.	14.30	5.5	12	—	—	—	+
	04.	12.45	6.5	16	+	+	+	—
	09.	21.30	5.5	12	—	—	—	+
	10.	04.45	5.5	12	—	—	—	+
	12.	05.15	2.5	10	+	—	—	—
	18.	15.00	5.5	12	—	—	—	+
		17.15	6.5	13	—	—	—	+
	19.	01.45	3.5	12	—	—	—	+
	28.	05.45	4.5	8	+	—	—	—
	30.	06.30	8	14	+	—	+	—
		13.30	10	22	—	—	—	+

Needles

Month	Day	CET UT+1h)	Amplitude in E (mV km)	Ex	Ey
01.	01.	18.15	5.5	+	+
	06.	15.45	2.5	+	+
	18.	12.45	2	—	—
	19.	14.30	2.5	—	—
02.	05.	11.45	6.5	—	+
	08.	18.30	7	+	+
	09.	18.45	3.5	+	+
	11.	16.00	5.5	—	—
	18.	19.45	3.5	+	+
03.	07.	14.15	4.5	—	—
	13.	02.30	3.5	+	+
	19.	15.15	4.5	—	—
	27.	16.30	3.5	—	—
05.	03.	15.45	7	+	+
	25.	18.00	2	—	—
	26.	19.45	3.5	+	+
06.	09.	15.00	3.5	—	+
	13.	16.30	2.5	—	—
	17.	11.15	2	—	+
	19.	15.30	3.5	—	—
	20.	05.45	4.5	—	—
	25.	17.45	2.5	+	+
07.	03.	07.15	3.5	+	+
	04.	18.45	6.5	—	—
	19.	12.45	4.5	—	—
		13.45	2.5	—	—
	25.	17.45	2.5	+	+
08.	04.	14.30	2	—	—
	23.	21.15	4.5	+	+
	28.	17.45	6.5	+	—
09.	04.	19.15	3.5	+	—
	15.	06.45	3.5	+	+

Month	Day	CET UT+1h)	Amplitude in E (mV/km)	Ex	Ey
09.	19.	14.45	4	—	—
		15.00	4.5	—	—
	21.	18.30	8	+	+
	28.	19.15	5.5	—	—
10.	05.	05.45	3.5	—	—
	06.	11.15	4.5	+	—
	11.	13.45	6.5	—	—
	19.	06.30	6.5	+	+
		13.45	2.5	—	—
		16.00	2.5	—	—
		16.30	4.5	—	—
	20.	19.30	4.5	—	+
	21.	12.15	7	+	+
	23.	07.00	5.5	+	+
11.	26.	07.15	2.5	—	—
	01.	03.15	2	+	—
		06.	10.15	—	—
		08.	08.45	+	—
		13.	10.45	0	+
		15.	12.30	+	+
		23.	18.15	+	+
12.	01.	18.30	3.5	—	+
	10.	14.15	14.5	—	+
		17.00	8	+	+
	13.	08.00	4.5	—	+
	18.	12.30	4.5	—	—
	20.	03.45	2.5	—	+
	28.	14.00	3.5	—	0
	31.	09.30	4.5	—	—

1985

Pc 1-events

Month	Day	Duration		Quality
		hour min	hour min	
1.	6.	411—	421	B
		455—	505	C
		531—	645	B
		739—	803	C
		2055—	2136	C
	17.	1935—	1953	C
	18.	301—	353	C
2.	1.	348—	538	C
		649—	801	C
	7.	001—	017	C
	8.	050—	224	C
	13.	2351—14.	007	C
	16.	614—	643	C
3.	3.	257—	507	A
	5.	450—	806	B
	10.	408—	419	C
	11.	422—	449	C
	13.	309—	322	C
4.	6.	2155— 7.	238	B
	8.	1950— 9.	100	C
	14.	000—	038	C
	16.	625—	632	C
	17.	442—	528	C
	18.	043—	100	C
		313—	443	B
9.	2.	324—	534	B
	19.	242—	515	B
	29.	525—	714	C
10.	6.	1741—	2006	C
	9.	400—	507	B
	10.	318—	432	B
	21.	214—	610	C
		1724—	1804	C
	22.	036—	100	C

Month	Day	Duration		Quality
		hour min	hour min	
11.	1.	2342—	2. 041	C
	2.	1634—	1713	C
	8.	254—	305	C
		2252—	9. 049	C
	9.	159—	234	C
		309—	510	C
	22.	445—	543	C
	24.	426—	629	C
	27.	406—	552	C
	29.	1928—	2024	C
	30.	1431—	1439	C
		1543—	1703	C
12.	1.	131—	629	C
		2333—	2. 100	B
	2.	119—	349	B
		455—	522	C
		624—	713	C
	3.	210—	414	B
		508—	835	C
	4.	440—	616	B
		1930—	1949	C
		2149—	5. 309	C
	7.	109—	147	C
		333—	447	C
		643—	830	C
	8.	116—	145	C
	10.	449—	507	C
		700—	817	C
	16.	550—	613	B
		717—	903	B
	17.	307—	745	A
		820—	856	C
	18.	749—	800	C
	21.	633—	819	C
	30.	1819—	1848	C

V.

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

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 sec
0— 3	0	8	22	42	16	36	79	176	119	49	109	89
3— 6	3	4	40	143	83	95	44	72	40	16	109	234
6— 9	0	6	97	219	177	247	137	82	37	8	44	196
9—12	0	3	29	394	248	163	140	51	57	21	172	84
12—15	0	0	36	603	504	283	143	89	35	13	108	86
15—18	0	2	15	278	240	245	285	98	36	40	148	91
18—21	1	13	27	81	91	108	112	145	125	52	124	207
21—24	2	23	38	37	21	70	108	303	241	81	53	37
Average	1	7	38	210	173	156	131	127	86	35	108	128

February												
0— 3	1	12	17	26	14	66	70	283	119	72	27	48
3— 6	5	4	34	121	77	151	89	55	3	13	77	306
6— 9	0	15	37	300	184	202	175	73	52	0	222	180
9—12	0	1	7	596	205	218	165	93	80	6	91	103
12—15	0	1	12	685	318	318	146	82	44	15	155	15
15—18	0	1	15	418	227	210	103	59	11	43	75	57
18—21	1	10	18	82	46	141	130	146	138	28	19	116
21—24	0	17	29	33	9	27	89	0	377	71	32	61
Average	1	8	21	283	135	167	121	99	103	31	87	111

March												
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 sec
0— 3	1	12	19	33	22	75	84	196	187	53	23	112
3— 6	2	6	64	100	56	63	34	41	61	35	44	65
6— 9	2	3	66	432	131	122	37	19	23	24	65	20
9—12	0	2	37	465	149	181	132	67	37	8	31	25
12—15	0	3	40	585	169	178	126	99	55	8	9	148
15—18	0	3	15	250	208	187	177	165	83	53	35	60
18—21	2	17	21	80	21	75	117	149	90	51	78	148
21—24	0	27	29	30	10	34	83	300	297	56	36	40
Average	1	9	36	247	96	114	99	130	104	36	40	77

April												
0— 3	3	18	33	47	18	39	38	258	98	51	83	151
3— 6	2	14	54	126	61	87	82	38	101	23	61	191
6— 9	0	10	30	425	131	181	91	28	30	15	182	46
9—12	0	11	35	506	258	201	49	52	51	9	240	81
12—15	0	7	35	353	303	69	86	138	141	35	436	350
15—18	1	8	24	234	99	133	103	168	98	73	183	208
18—21	3	16	21	23	29	48	103	104	106	115	60	163
21—24	5	32	22	23	23	52	53	158	195	83	86	205
Average	2	15	32	217	59	101	76	117	103	51	166	174

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 sec
0— 3	8	7	24	27	10	34	43	111	173	52	26 109
3— 6	0	9	25	78	45	74	65	91	82	15	8 96
6— 9	0	4	23	214	103	84	115	77	54	24	41 13
9—12	0	7	21	243	93	126	96	77	30	12	116 102
12—15	0	5	11	197	116	106	98	85	81	53	65 70
15—18	0	11	23	72	38	89	103	171	75	42	112 75
18—21	1	34	23	29	7	25	38	182	281	39	57 33
21—24	3	36	12	10	14	6	79	130	324	130	90 94
Average	2	14	20	109	53	68	80	116	138	46	64 74

June											
0— 3	0	18	18	22	8	41	99	148	238	148	62 86
3— 6	0	8	34	57	44	105	67	53	54	30	81 59
6— 9	0	11	43	207	78	84	68	95	42	10	152 80
9—12	0	13	32	170	71	162	55	43	59	44	231 75
12—15	0	10	32	173	115	117	50	34	98	20	202 49
15—18	0	26	20	54	25	106	59	136	97	85	231 336
18—21	0	31	16	17	4	34	57	179	256	75	134 103
21—24	2	29	20	19	5	15	58	101	177	52	110 93
Average	0	18	24	90	44	83	64	99	128	58	135 110

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 sec
0— 3	0	17	31	37	14	25	41	166	147	59	119	218
3— 6	0	13	35	110	36	75	55	85	51	30	117	147
6— 9	0	9	82	384	86	145	71	29	32	4	112	39
9—12	0	3	33	345	171	293	145	43	30	9	183	197
12—15	0	4	40	289	157	152	185	42	128	69	253	185
15—18	0	10	14	71	31	88	171	141	68	63	159	319
18—21	0	19	20	27	10	48	135	116	102	45	110	260
21—24	2	25	27	33	23	23	56	240	172	61	103	321
Average	0	13	35	162	48	106	107	108	91	43	145	211

August												
0— 3	0	14	36	40	23	36	68	176	106	54	91	194
3— 6	3	10	70	137	47	57	42	102	58	26	161	228
6— 9	2	5	43	372	137	289	127	51	36	13	31	22
9—12	0	3	18	281	227	235	110	66	59	10	79	113
12—15	0	6	26	231	195	202	167	92	40	78	111	270
15—18	0	6	17	96	98	219	148	68	65	65	139	272
18—21	0	26	26	26	17	48	74	173	141	94	195	212
21—24	1	29	24	15	3	8	91	277	185	95	160	164
Average	1	12	33	150	93	130	103	126	86	54	121	184

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	300—600 sec
0— 3	1	13	23	38	14	19	41	79	148	67	85	68
3— 6	3	12	66	90	25	49	41	78	41	20	108	71
6— 9	0	11	50	331	106	98	23	57	38	6	100	85
9—12	0	11	48	403	173	148	49	57	70	13	225	136
12—15	0	12	33	307	118	103	134	106	198	38	240	113
15—18	1	13	18	139	63	159	77	144	35	71	168	88
18—21	0	21	19	33	41	76	73	153	71	92	111	57
21—24	0	33	28	18	5	18	124	304	125	91	90	29
Average	1	16	36	170	68	84	70	122	91	50	141	85

October

0— 3	0	16	29	46	11	24	75	106	74	69	105	44
3— 6	6	7	34	142	36	119	46	25	49	17	82	115
6— 9	1	7	29	319	42	142	89	60	36	24	125	109
9—12	0	3	33	465	160	287	103	40	43	20	233	45
12—15	0	5	9	497	216	260	107	96	84	27	66	58
15—18	0	8	12	125	96	248	158	148	67	15	114	85
18—21	3	16	19	62	19	120	105	138	106	115	77	94
21—24	0	31	34	21	29	19	58	222	201	110	54	85
Average	1	12	25	210	76	152	93	104	83	50	107	79

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 sec
0— 3	1	15	18	25	8	37	85	170	188	107	27	47
3— 6	2	7	33	119	79	170	157	58	31	13	11	166
6— 9	2	5	32	202	127	196	132	82	57	16	53	208
9— 12	0	8	32	528	117	94	88	114	79	73	184	86
12—15	0	7	27	561	224	107	202	82	74	44	101	54
15—18	0	8	15	167	172	218	163	155	75	17	76	0
18—21	1	14	24	48	83	76	119	127	133	52	34	85
21—24	0	36	22	24	8	15	46	330	213	108	25	66
Average	1	13	25	197	102	114	124	140	106	54	64	89

December

0— 3	5	22	22	16	9	15	82	78	177	34	69	107
3— 6	9	9	40	84	42	91	77	55	65	8	79	168
6— 9	3	10	46	196	131	126	117	34	122	10	173	189
9—12	0	8	47	399	64	98	113	117	73	28	363	178
12—15	0	4	27	503	188	163	229	193	122	6	196	141
15—18	0	4	13	109	145	346	159	98	92	8	61	153
18—21	0	9	33	31	18	121	178	84	200	26	39	214
21—24	0	34	34	19	13	25	137	146	149	41	45	261
Average	2	13	33	170	76	123	137	101	125	20	128	176

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 sec
0— 3	2	14	23	33	14	37	67	162	148	68	68	106
3— 6	3	9	44	109	53	95	67	63	53	21	78	154
6—9	1	8	48	300	119	160	99	57	47	13	108	99
9—12	0	6	31	400	161	184	104	68	56	21	179	102
12—15	0	5	27	415	219	176	139	95	92	34	162	128
15—18	0	8	17	168	120	187	142	137	67	48	125	145
18—21	1	19	22	45	32	77	103	141	146	65	87	141
21—24	1	29	27	24	14	26	82	208	221	82	74	124
Average	1	12	30	187	92	118	100	116	104	44	110	125

VI.

Micropulsation indices for the year
1985

*Activity indices for the micropulsations
(P1 to P12)*

1984. January—December

	January	February	March	April
1.	115544233244	415522344321	125354341112	255521334455
2.	115533324244	211434111112	115521321222	111551144141
3.	125413354243	111235445222	135525222121	155512331132
4.	115434534323	125315224212	115543231114	133514334144
5.	124354433311	155511125554	515522132122	125523235332
6.	115315445221	155511223155	155511223155	135224335411
7.	115213544522	114534242124	135512423134	515521434133
8.	353222345431	115533251114	115524433221	545423444444
9.	145522222145	155524125544	122113554111	155211242455
10.	125454234145	154531322345	245511235425	135422534222
11.	115453333134	115433444122	155512135241	115541153123
12.	123453133135	113425331212	155532133413	122424345311
13.	134434245342	132425515211	154532121111	134421445422
14.	124433345332	115521145125	145422345313	155422324443
15.	133532324212	113115543223	135524235225	155412245522
16.	113532354521	111534354222	144445344424	155511115542
17.	233453254122	114543234124	154313345321	155322125511
18.	455213455222	125534422221	155531135222	145422444212
19.	135422425143	154532342521	135323434311	155512324455
20.	145223435512	145521133422	155314323422	255214334454
21.	155421325553	000000000000	115314345511	245313424454
22.	115433121114	000000000000	155412125313	325424322221
23.	145522344221	155421335322	155513235512	145513213244
24.	135324542121	155522334225	145321145541	133555131114
25.	145521121224	135522144341	155212234452	155422244245
26.	115532114125	145324434221	135411135541	135531223322
27.	153522245524	144532353123	315411445231	145434334124
28.	255312335254	445541423323	135532143343	355311143255
29.	155423412414		135532243212	145522112144
30.	135213532445		255523134424	145421323345
31.	112522124121		142522234345	

	May	June	July	August
1.	155411414345	155511135355	131323555113	155423231255
2.	245532314325	145321455333	122324435511	155513244223
3.	324214545322	155312255232	155222335542	135424234441
4.	344512425443	135312245522	155421133354	155323441524
5.	522425155312	145322335531	145522213255	125322344542
6.	345522354134	155512115244	115512342155	153213424522
7.	145433254313	135422434135	125522332145	555323213551
8.	154214333532	000000000000	132532244143	255222354521
9.	245421244531	000000000000	153225525111	135114325522
10.	155411445521	155314331315	133433553114	245411245543
11.	155212445433	155314341144	155412354124	115224325511
12.	155311335425	155423234121	155412222354	155212345235
13.	155521444111	154321444511	355311424255	155325314255
14.	155522223111	155311125243	155312335353	145245333151
15.	125542145222	154412245531	125525214322	115115455422
16.	114521342142	145314335521	145332145511	152434145222
17.	152512335522	155212325432	145511234445	155411345511
18.	155212245421	154414214521	155521352343	133521434123
19.	155522155331	155214324552	125413334222	335423434225
20.	245513225112	155311224553	125513244222	145433232145
21.	135532225521	355311125554	134411345231	115542214322
22.	123323325521	145323232254	155312225515	155532434424
23.	155312425521	155412235521	155311234555	133423454243
24.	155212444541	125412114555	155411233345	135213554322
25.	115511111124	155411134552	145522425114	155411144535
26.	135523123343	153411435544	155432245125	155522224344
27.	115322554121	155512424314	143414535115	155522412354
28.	155421112541	155435233144	131315531314	152535325143
29.	155313325251	114333454121	132314544223	155422243424
30.	151214345521	131224455121	155522425135	155424332245
31.	155411134552		155322244545	155411334544

	September	October	November	December
1.	145422453421	155113445511	155422235524	545422434214
2.	323323453221	155411324541	255422334322	425214534215
3.	155213435521	155511124532	135532343324	534531345212
4.	155111433522	155312445344	133325555113	512523534124
5.	155111155541	155523224255	153314334541	115424435113
6.	155521124552	555521242155	115523222322	133115545111
7.	155213155131	155514323343	155213443321	525522125422
8.	155521234331	234522441122	155211355211	155114534333
9.	145411444144	345513424212	145521133425	155221425423
10.	144413245241	314224535312	155431535314	155422115455
11.	155213435323	245522244213	145513434225	111525135131
12.	155212345421	135524142134	135223445111	125423432125
13.	155212345541	125551243121	155512125544	155111255355
14.	155312235342	134524243131	113523152113	155522322124
15.	155521134334	155423225352	121434452121	115523442212
16.	145413232255	145244434224	141445223513	000000000000
17.	115523441333	125512143523	125532315131	155314331521
18.	134325435121	133522335221	135323535241	155421144355
19.	255212234555	114524333244	125532344111	155312335453
20.	245523233155	234224555341	125423324121	135511122223
21.	155521122253	545513233352	154512225331	000000000000
22.	125532221123	125544222245	154423125321	155511314113
23.	125523222345	123535235232	144222555211	155311215331
24.	155543123554	142534422222	154212544522	135411135431
25.	155522335125	122535424221	155411233544	125325335511
26.	155521245133	125411435512	155213124521	125322355221
27.	145543344134	135214235521	525413424355	152523435222
28.	154534524211	155411235522	145124545222	155511345145
29.	414524214522	155211335544	255312325555	133215523223
30.	155211255511	155511324521	155512344115	145522224244
31.		255311325531		135433521141

Pc 1 indices 1984

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

0 = no registration