NURMIJÄRVI GEOPHYSICAL OBSERVATORY

MAGNETIC RESULTS 2003

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Abstract
The magnetic yearbook of the magnetic recordings at the Nurmijärvi observatory contains tables, figures of hourly, monthly, and yearly means of the magnetic field components X, Y and Z as well as magnetic activity indices (K, Ak) in 2003. Magnetic isolines describing the distribution of geomagnetic field components in Finland 2004.0 are shown by a series of maps.

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Note

Contents

1 Description of the observatory

The Nurmijärvi Geophysical Observatory of the Finnish Meteorological Institute (FMI) started recording the Earth's magnetic field in April 1952. The first yearbook was for 1953. The observatory is a part of Space Research Division (AVA).

The observatory lies in a pine forest on a moraine ridge by a lake shore, about 40 kilometers NNW of Helsinki. There are no artificial disturbance sources nearby.

Coordinates:

	Lat.	Lon.
Geographical	60°30.5′N	24°39.3′E
Geomagnetic	57°43.8′	113°28.8′
Corr.geomagnetic	56°49.2′	102°31.2′

The magnetic coordinates are referred to the IGRF-95 model.

L-value	3.3
Height	$105m$

The Nurmijärvi observatory is running two digital magnetometers, which are controlled once per week with absolute measurements. An other magnetic recording instruments at the observatory is the three-component pulsation magnetometer of the Sodankylä Geophysical Observatory. The Air quality department of FMI makes continuous airborne radioactivity recording. Hydrological and meteorological observations are part of the daily routine. The Helsinki University operates the seismic station.

The observatory has a magnetic calibration and test laboratory consisting of the magnetometer calibration system and the magnetic cleanliness measuring system. The calibrations are performed with three component coils and a computer controlled measuring system. Angles between sensors are measured with accuracy better than one minute of arc and the transformation factors with 0.03% accuracy. The facility includes a temperature test system for the magnetometer sensors with good temperature control and a non-tilting pillar. The magnetic cleanliness measuring system is used for testing satellite instruments and materials. Objects are measured on a rotating table inside the big calibration coils, which can reduce the Earth's field down to zero. Common software is used both for magnetic calibrations and cleanliness measurements. The demagnetizing system operates at $3Hz$ and can generate alternating fields from $5mT$ down to $30nT$.

2 Recording instruments

In the variation room the Danish suspended flux gate magnetometer (FGE) is the primary instrument. The Ukrainian LEMI-004 flux gate magnetometer is the second variometer. The sensors are directed in geographic north and east directions measuring the X, Y and Z components. The temperature in the variometer room is kept constant at $18°C$. Analog voltages from the magnetometers are AD-converted in the variation room and the digital data are transferred through optical wires to the computers in the main observatory building. The Linux based software stores the data in three files as one-second, ten-seconds and one-minute averages. Timing is based on GPS time sheared through the local network. The standard one-minute values are averages over one minute periods starting and ending at a half minute

(e.g. 59:30 - 00:30, 00:30 - 01:30, 01:30 - 02:30). The given time is the starting minute at the centre of the period (00, 01, 02 etc.).

3 Absolute measurements

The total field (F) was measured by a Polish PMP-7 proton precession magnetometer and declination and inclination with a DI-flux-magnetometer, which consists of a flux-gate element mounted on the telescope of a non-magnetic Zeiss-Jena theodolite (010B). The absolute measurements were done on average once a week. The base line values as determined for the FGE are shown in Fig. 2.

4 Data processing and dissemination

In the processing the final base line values and sensitivities were used and hourly mean values were calculated. The measured base line values were followed closer than half a nanoTesla. All the digital data were visually inspected on the computer screen.

Tables showing the three-hour K-indices were computed from 10 s data using the 'FMI' algorithm. The upper limit for K=9 is $750nT$.

Daily magnetograms and K-indices were published in the monthly bulletin together with the Sodankylä Geophysical Observatory of the University of Oulu. The bulletin contains daily magnetograms of Nurmijärvi, Hankasalmi, Oulujärvi and Sodankylä, daily ionosond and riometer recordings and cosmic ray data.

Daily files of minute data were sent by e-mail for the INTERMAGNET system. INTERMAGNET CD-ROM 2001 was published in 2003 containing minute data, annual means and base line values from Nurmijärvi together with data from 82 other magnetic observatories.

5 IMAGE stations

The IMAGE magnetometer network consisted at the end of 2003 of 28 stations from Tartu in Estonia to Ny Ålesund on Svalbard. The principal investigator of this international project was Ari Viljanen at GEO. The observatory operated eight IMAGE stations in Finland, one in Estonia and one in northern Norway. At seven of the stations the service and absolute measurements were done in co-operation with the Sodankylä Geophysical Observatory of the Oulu University.

The last German fluxgate magnetometer at MAS (Norway) was replaced by a new Ukrainian LEMI fluxgate magnetometer.

The data sampling interval at the IMAGE stations was 10 seconds and the 10-s values were averages over the seconds 00-10, 10-20, 20-30 etc. The time stamp given for the 10-second period was the first second of that period.

Data from most of the stations was transmitted through ISDN modems to Nurmijärvi. TAR in Estonia had a direct network connection and OUJ and MAS were still operated througn ordinary modems. The data of the eight stations was processed and inspected at the observatory and was sent to the AVA for IMAGE filing. Data transmission from the other IMAGE stations was also operated at the observatory.

The annual mean values are calculated for Oulujärvi ($64°31'N$, $27°14'E$) since 1993 (all days):

Year	X	Y	Z
1993.5	12971	1912	50591
1994.5	12953	1935	50616
1995.5	12951	1963	50642
1996.5	12937	1994	50664
1997.5	12926	2023	50701
1998.5	12912	2051	50742
1999.5	12902	2077	50780
2000.5	12892	2108	50828
2001.5	12889	2136	50867
2002.5	12886	2168	50914
2003.5	12870	2200	50961

6 SAMNET stations

The observatory provided 1-second data from the stations KIL, OUJ, HAN and NUR for the SAMNET magnetometer network operated by the Lancaster University in United Kingdom.

7 Personnel

Ph.D. Kari Pajunpää, head of the observatory
M.Sc. Anja Koistinen, assistant
Mr. Pentti Posio, technician
Ms. Tuulikki Kangas, secretary

8 IMAGE Magnetometer Network

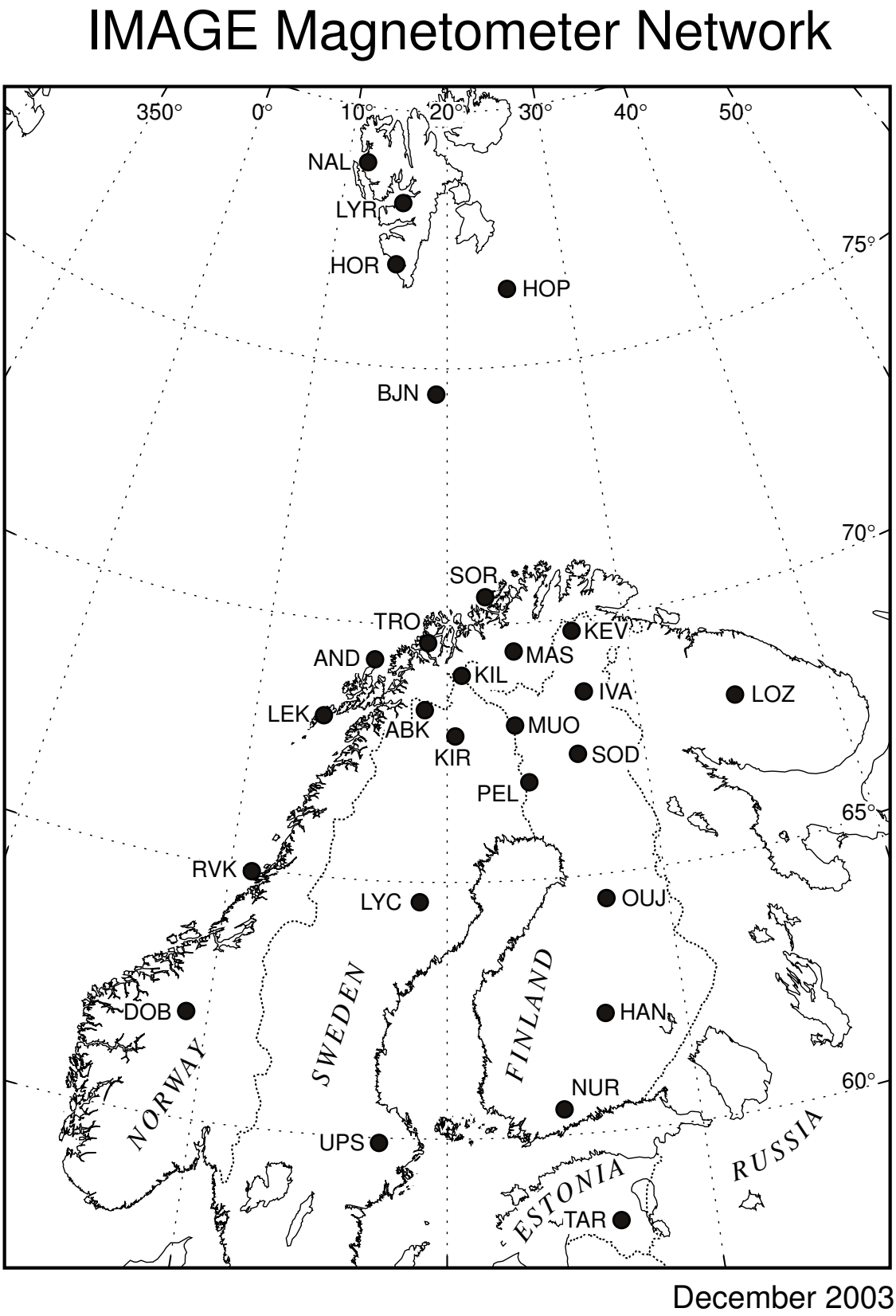
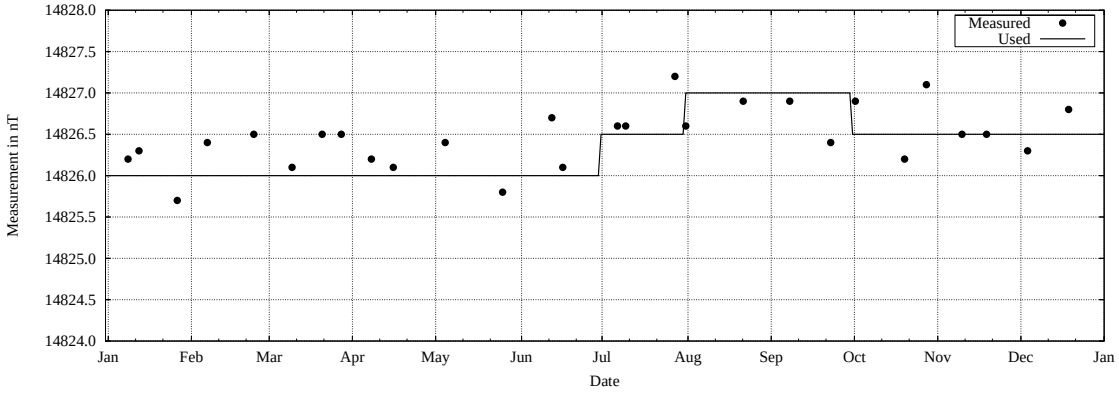
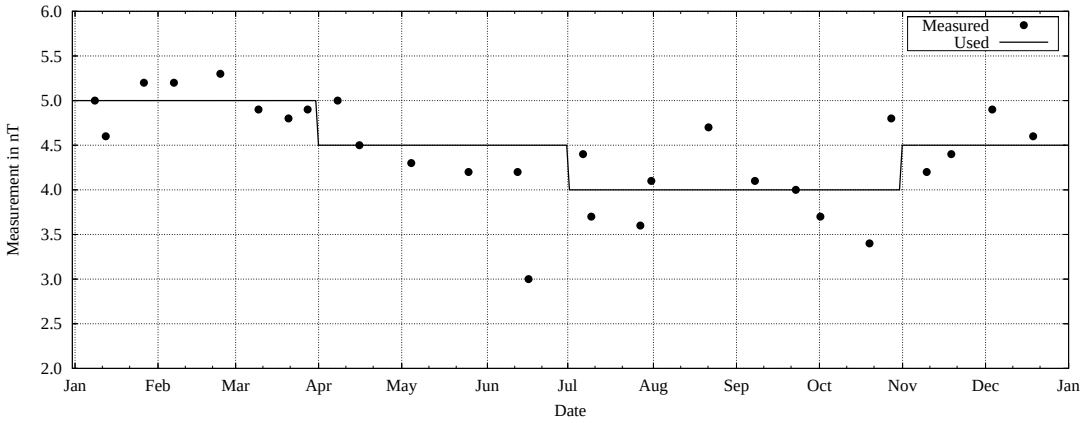


Figure 1: Map of IMAGE magnetometer network

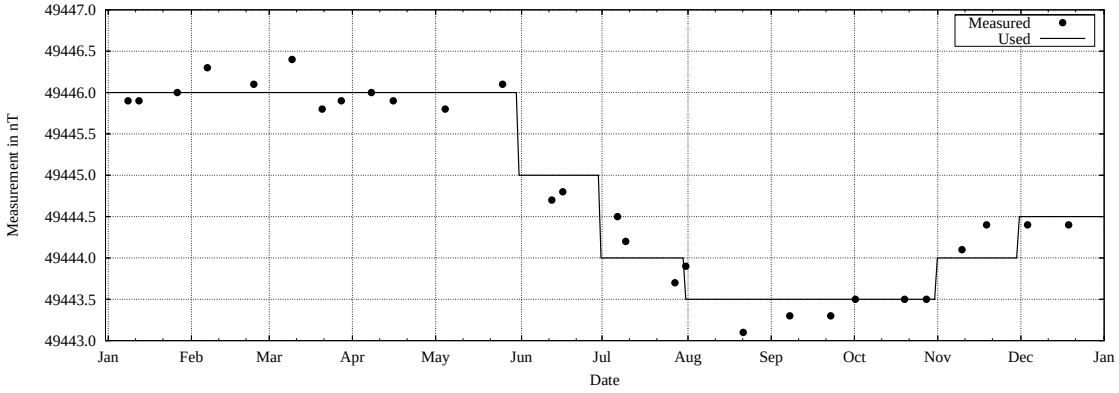
9 Baseline Measurements for FGE



(a) Baseline measurements for X component



(b) Baseline measurements for Y component



(c) Baseline measurements for Z component

Figure 2: Baseline measurements

10 Tables of Hourly Means of X, Y, and Z

Explanations of the tables:

- **X** is the North component of the magnetic vector
- **Y** is the East component of the magnetic vector
- **Z** is the vertical component of the magnetic vector
- The unit is nanotesla (nT) = 10^{-9} T
- The time is universal time (UTC). The local time is UTC + 2 h (during the daylight saving time UTC + 3 h)

Nurmijärvi Finland

January 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		2	4	4	2	10	7	5	-7	-6	-9	-10	-11	-9	-15	-11	-7	-1	2	1	0	-5	-17	-18	-6	-4
2		-6	-2	-2	1	1	2	3	-1	-6	-11	-12	-9	-4	-3	-8	-11	-7	-10	-13	0	5	6	7	7	-3
3		15	1	-2	1	4	5	8	8	4	0	3	1	9	2	14	8	29	-27	-22	-15	-11	-21	-22	-36	-2
4		0	2	-17	-18	-17	-14	-10	-12	-17	-19	-14	-11	-12	-13	-9	-10	5	-4	-10	2	-5	-10	-10	-5	-9
5		-5	-6	-5	-5	-4	-5	-5	-2	-7	-8	-10	-7	-3	4	0	-5	1	1	-10	-6	-4	13	-7	-4	-4
6	Q	-1	0	1	1	2	2	0	-4	-9	-14	-11	-5	1	4	4	2	5	6	4	-2	0	-1	8	-1	0
7	Q	-6	-7	-2	2	1	0	0	2	1	-5	-6	-1	-1	-3	-4	-5	-3	-2	0	-13	-3	-4	-5	-6	-3
8	Q	-2	-2	-3	0	4	3	-1	-5	-10	-7	-9	-4	4	7	6	7	8	8	8	4	3	-2	1	0	1
9	Q	0	0	-2	0	1	3	4	3	-1	-6	-7	-4	1	4	8	10	13	14	5	-5	-1	-2	6	4	2
10		5	1	-3	3	11	10	7	4	1	-2	-2	3	6	-6	1	-1	2	-12	-12	-14	-4	-2	-11	-9	-1
11		-18	-17	-9	9	-3	-6	-7	-11	-14	-19	-18	-17	-13	-6	-5	-2	0	0	3	-8	-1	7	-8	-6	-7
12		-9	-9	-8	-7	-6	0	-2	-2	-7	-6	-10	-10	-6	-3	-3	-7	-2	-6	-19	-9	-2	-3	1	0	-6
13		-10	-11	0	-1	-5	-7	-8	-10	-9	-7	-4	-3	-5	-2	1	2	6	7	7	7	5	3	-1	6	-2
14		-4	-8	-3	-7	-7	3	-3	1	1	-5	-13	-15	-11	-7	-5	1	2	1	2	3	2	3	-5	-3	-3
15		-2	-1	6	2	2	4	1	2	5	0	-6	0	0	-3	-6	-2	-3	-2	5	2	4	1	-2	-5	0
16	Q	-6	-4	-2	-3	-3	-2	-2	-3	-5	-8	-9	-9	-17	-10	-3	-1	2	3	1	0	-8	-5	-8	-9	-5
17		-5	-5	-5	-3	-1	2	4	7	5	2	-7	1	3	2	5	-4	-3	-8	-9	-6	-1	0	-2	1	-1
18		0	4	7	6	9	14	11	10	12	6	-5	-8	-5	-28	-23	-9	-15	-12	-10	-14	-8	-22	-21	-15	-5
19		0	5	5	8	8	8	0	-7	-6	-22	-28	-17	-21	-11	-20	-29	-25	-21	-13	-12	-3	-4	-17	-11	-10
20		-11	-10	12	6	-7	-3	-2	-3	-7	-13	-16	-23	-17	-11	-13	-10	-19	-30	-20	-9	-2	-12	-17	-29	-11
21		-7	7	-4	1	-7	-4	-3	-1	-13	-11	-11	-28	-20	-23	-26	-14	-8	-10	-2	-5	-2	5	11	3	-7
22	D	-18	-18	-7	-4	-3	1	0	3	1	-11	-20	-24	-17	-10	-10	-5	-12	-22	-3	-9	-4	17	-14	-14	-8
23	D	-15	-7	-38	-11	8	3	-2	-2	-2	-5	-8	-7	-13	-5	-15	-7	-9	-19	-7	-3	-6	-7	-10	-24	-9
24		-20	-18	0	-5	-2	-1	-2	-4	-13	-15	-18	-15	-7	-5	-4	-28	-24	-20	0	-12	-18	-2	-42	-43	-13
25	D	-35	-36	-24	-12	-13	-6	-30	-33	-26	-23	-24	-21	-33	-22	-18	-7	-11	-9	-13	-9	-9	-11	-4	-20	-19
26	D	-17	-2	1	-5	-7	7	-1	-10	-15	-13	-13	-24	-13	-12	-20	-14	-19	-25	-19	11	-15	-19	-18	-8	-11
27		-3	-1	-5	-8	-4	1	-1	-4	-11	-17	-20	-19	-12	-3	0	2	7	22	12	9	3	16	4	9	-1
28		-17	-33	-21	-29	3	8	2	1	-5	-13	-8	-7	-5	3	7	5	7	6	5	1	-5	0	-3	-8	-4
29		-7	-2	0	-2	0	2	-1	-4	-5	-1	-5	-19	-14	-19	-14	-8	7	1	-18	-17	-13	-39	-48	-40	-11
30	D	-81	-87	-32	-14	-10	-19	-5	-2	-10	-23	-25	-30	-22	-9	-16	-8	-8	-18	-26	-16	-15	-13	-15	-20	-22
31		-7	-30	-7	-8	-12	-11	-14	-28	-33	-37	-29	-55	-22	-14	-14	-14	-15	-20	-15	-8	-9	-14	-17	-15	-19
All		-9	-9	-5	-3	-1	0	-2	-4	-7	-10	-12	-13	-9	-7	-6	-5	-3	-7	-6	-5	-4	-4	-9	-10	-6
Quiet		-3	-3	-2	0	1	1	0	-1	-5	-8	-8	-5	-2	0	2	3	5	6	4	-3	-2	-3	0	-2	-1
Dist.		-33	-30	-20	-9	-5	-3	-8	-9	-11	-15	-18	-21	-20	-11	-16	-8	-12	-18	-13	-5	-10	-7	-12	-17	-14

January 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		15	14	13	5	8	11	15	12	5	8	3	3	2	6	6	13	13	12	15	17	33	41	48	20	14
2		28	17	8	11	12	15	20	21	21	15	8	6	5	5	7	7	9	12	16	15	15	14	15	19	13
3		29	21	16	15	14	13	13	13	12	10	6	-2	-3	-8	-8	-22	111	7	27	23	19	74	46	47	20
4		74	31	44	30	26	8	18	19	13	16	8	5	9	10	8	18	35	15	14	55	25	23	15	20	23
5		37	28	23	19	20	19	20	22	19	20	8	-1	-2	6	-4	7	-3	5	16	25	23	17	36	28	16
6	Q	23	20	18	16	16	17	18	19	18	14	9	5	5	10	11	10	12	12	14	14	19	22	20	31	16
7	Q	28	21	18	19	17	18	19	19	16	14	12	-1	-4	-5	-7	-5	1	-2	37	23	23	31	39	30	15
8	Q	19	19	18	16	13	15	16	15	15	14	7	2	2	5	9	10	10	15	14	15	22	23	22	22	14
9	Q	20	19	18	17	16	18	20	19	16	14	11	5	3	6	7	5	5	4	5	18	14	25	23	18	13
10		14	18	22	17	22	20	18	16	12	5	6	-1	-12	-6	-7	-5	-4	0	10	32	36	38	38	93	16
11		62	32	32	19	21	20	21	20	20	15	9	3	5	8	5	2	2	4	5	9	18	32	37	28	18
12		37	36	35	28	26	25	13	17	16	16	11	4	-4	4	3	6	8	6	25	19	21	21	21	25	18
13		36	28	36	23	24	20	23	18	16	15	13	0	-1	4	6	6	9	7	9	16	15	19	20	38	17
14		54	42	48	42	37	31	21	23	21	20	13	-1	7	11	12	10	8	14	14	13	14	18	15	20	21
15		21	25	30	27	22	20	18	13	8	9	12	7	4	3	6	4	-1	12	16	19	25	21	24	31	16
16	Q	27	28	22	19	16	17	18	18	18	12	8	5	6	10	7	11	14	14	18	24	30	30	30	27	18
17		31	27	25	22	22	21	16	13	13	12	8	-2	-4	5	0	10	12	14	15	16	17	16	16	13	14
18		12	11	8	14	18	18	12	10	12	15	12	3	-6	-4	-5	4	2	12	19	27	55	38	30	22	14
19		13	17	21	19	19	16	4	-8	0	16	12	8	2	10	13	39	39	51	37	39	43	64	31	20	22
20		21	16	26	21	15	19	19	23	24	20	14	10	12	9	23	27	18	36	25	58	34	34	37	38	24
21		21	26	23	22	13	10	10	9	22	28	13	16	24	15	26	45	19	25	51	25	20	23	40	52	24
22	D	70	45	27	6	2	-1	12	21	18	18	13	7	4	18	15	15	19	67	50	20	34	38	41	63	26
23	D	61	51	25	33	29	22	17	18	16	18	14	11	11	17	38	19	18	43	18	19	36	43	36	37	27
24		6	1	17	22	22	20	20	20	20	18	3	8	9	11	11	18	35	33	57	26	42	60	100	79	27
25	D	40	19	9	13	13	-11	-38	-33	-2	21	25	14	32	45	39	34	21	42	24	20	30	26	32	29	19
26	D	3	32	37	20	4	12	7	9	17	24	24	20	34	8	33	35	30	40	28	53	51	50	57	47	28
27		19	9	19	20	19	23	23	24	24	22	17	9	5	9	14	16	15	5	6	10	18	39	47	51	19
28		59	34	50	7	6	18	25	27	29	23	16	5	8	8	10	9	10	11	13	13	24	54	41	22	22
29		18	19	17	18	17	21	29	31	25	13	12	10	1	-8	-10	1	43	31	28	55	64	77	104	77	29
30	D	114	89	51	44	42	43	27	25	27	18	12	10	-8	-20	-13	-25	9	38	39	21	20	24	28	32	27
31		32	50	44	36	23	30	33	31	21	9	4	8	7	-2	1	24	1	11	16	15	16	28	32	33	21
All		34	27	26	21	18	18	16	16	16	16	11	6	5	6	8	11	17	19	22	24	28	34	36	36	20
Quiet		23	21	19	17	16	17	18	18	17	13	9	3	2	5	5	6	8	8	17	19	22	26	27	26	15
Dist.		58	47	30	23	18	13	5	8	15	20	18	12	15	14	22	15	19	46	32	27	34	36	39	42	25

January 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		19	19	17	16	14	15	18	18	18	20	19	22	28	28	28	29	27	24	22	22	24	24	10	-5	20
2		9	13	15	16	18	19	20	19	20	22	22	21	24	24	25	28	27	31	33	28	22	20	17	13	21
3		-2	6	14	17	17	18	19	20	21	19	16	16	19	21	25	35	76	69	100	96	65	57	24	22	33
4		12	-23	-16	2	9	18	22	26	27	31	32	32	35	35	34	36	31	26	35	32	18	25	19	7	21
5		15	15	17	19	20	21	25	24	22	22	22	21	23	23	25	29	28	34	38	33	26	7	13	23	23
6	Q	22	21	20	20	19	20	20	21	22	19	18	20	22	22	20	20	21	21	22	24	25	21	-3	2	19
7	Q	13	17	20	20	19	20	20	19	17	16	16	16	20	21	24	29	34	39	41	36	32	29	26	24	24
8	Q	22	21	22	20	20	20	20	20	20	20	21	20	20	18	18	18	19	21	20	21	24	22	21	20	20
9	Q	18	18	17	17	17	18	18	18	17	16	16	16	19	20	18	17	17	19	23	31	30	31	25	23	20
10		21	20	18	17	15	14	14	15	17	18	18	18	21	26	26	31	34	44	54	59	45	41	34	40	27
11		13	14	14	6	12	18	22	23	24	24	23	23	27	28	26	26	27	30	34	36	32	24	13	24	23
12		24	23	21	21	20	18	14	15	22	21	18	21	26	25	24	25	26	32	42	38	32	30	28	22	25
13		20	12	9	17	16	20	20	18	18	19	20	22	26	25	24	25	26	25	25	24	22	23	24	25	21
14		4	9	8	10	11	14	13	19	22	20	18	21	26	25	24	23	23	23	23	23	24	21	24	19	19
15		22	17	10	13	15	15	14	14	16	19	21	25	24	25	26	27	29	33	26	25	23	19	18	16	21
16	Q	20	21	19	18	20	21	21	20	21	20	20	20	23	26	25	23	22	22	25	26	23	24	17	18	21
17		18	17	17	17	19	18	19	15	16	19	19	20	20	20	22	22	22	25	28	26	22	18	15	12	19
18		14	14	13	14	15	14	13	12	13	15	14	15	23	35	36	29	45	46	40	36	32	13	2	-7	21
19		-12	2	13	15	15	16	14	13	14	18	23	26	33	35	46	77	94	70	18	26	4	4	15	19	25
20		18	1	-56	-57	-17	10	17	18	20	21	21	23	25	27	33	31	33	36	30	25	3	6	3	-7	11
21		-1	-21	-5	9	8	12	17	19	20	25	24	29	33	33	38	39	29	30	29	22	23	19	2	-26	17
22	D	-19	-6	-5	2	7	11	21	23	21	22	24	25	30	35	31	28	33	48	34	28	22	-2	-4	-76	14
23	D	-42	-30	-72	-37	-2	5	12	16	18	20	18	19	26	29	43	33	33	44	33	31	29	25	18	3	11
24		-15	-40	-23	8	17	20	22	22	22	23	23	26	27	27	28	45	56	75	40	32	6	-16	-31	-52	14
25	D	-14	-15	-2	8	11	13	9	13	20	47	41	38	52	59	66	51	48	48	43	35	33	26	13	1	27
26	D	-62	-15	3	11	14	14	18	19	24	27	27	29	41	39	49	42	50	51	41	25	15	8	-15	-15	18
27		8	15	19	23	24	23	23	23	23	24	25	25	28	29	27	25	23	21	22	22	24	11	4	2	21
28		1	-11	2	8	2	4	14	17	23	27	25	25	23	25	25	23	22	22	22	24	29	11	13	23	17
29		22	19	18	20	21	22	24	23	21	22	23	24	32	36	42	41	66	26	55	48	-22	-33	-36	-46	20
30	D	-83	-58	-52	-7	14	22	15	16	19	24	29	29	45	55	51	56	139	144	103	60	39	33	28	25	31
31		-5	-8	14	4	6	16	25	27	28	30	36	44	47	43	56	74	65	61	53	46	41	43	40	37	34
All		3	3	4	9	13	16	18	19	20	22	22	24	28	30	32	33	40	40	37	34	25	19	12	6	21
Quiet		19	20	19	19	19	20	20	20	19	18	18	18	21	21	21	22	23	24	26	28	27	25	17	17	21
Dist.		-44	-25	-25	-5	9	13	15	18	21	28	28	28	39	43	48	42	61	67	50	36	28	18	8	-12	20

Nurmijärvi Finland

February 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-19	-19	-16	-13	-13	-17	-16	-17	-18	-18	-16	-18	-14	-9	-7	-5	2	-4	0	22	3	-50	-26	-44	-14
2	D	-13	-21	-8	-28	-18	2	-6	-28	-24	-32	-44	-37	-22	-2	1	175	-11	-23	-12	-67	-70	-83	-73	-57	-21
3	D	-80	-42	-42	-30	-33	-24	-17	-16	-15	-10	-11	-13	-16	-27	-20	-16	-8	-6	11	-28	-11	-14	4	-30	-21
4	D	-14	-20	-11	7	-5	0	-7	-30	-75	-56	-27	-28	-24	-19	-20	-12	-8	-10	-24	-32	-9	-36	-44	-29	-22
5		-37	-14	-21	-17	-20	-16	-13	-8	-15	-24	-25	-24	-14	-13	-26	-18	-12	2	-11	-10	-9	0	-7	-5	-15
6		-11	-7	-4	-1	-1	-1	-6	-21	-15	-18	-19	-20	-29	-17	-4	-2	-11	-13	-31	-26	-20	-18	-13	-17	-14
7		-23	-17	-16	-13	-12	-10	-10	-19	-27	-36	-30	-28	-27	-34	-16	-16	-18	-17	-13	-16	-33	-9	-7	-10	-19
8		-16	-7	-14	-12	-6	-3	-7	-10	-31	-24	-27	-27	-26	-17	-30	-18	-10	-10	-4	-21	-8	-10	2	-14	-15
9		-23	-17	-1	-10	-10	-7	-6	-21	-15	-19	-19	-16	-17	-8	1	-7	-2	-22	-40	-36	-18	-15	-30	-22	-16
10		-3	-26	-29	-9	-2	-17	-24	-22	-24	-30	-31	-28	-22	-13	-7	-7	-6	-6	-8	-14	-11	-9	-8	13	-14
11	Q	-31	-31	-21	-15	-4	6	-4	-21	-21	-25	-26	-23	-18	-18	-12	-5	-6	-5	-12	-4	-4	-4	-7	-3	-13
12		-4	-5	-7	-9	-6	5	13	6	-4	-4	-10	-16	-16	-10	-5	1	-27	-14	-9	-3	-5	5	-15	-21	-7
13	Q	-15	-7	-5	0	3	4	5	5	-1	-9	-10	-18	-14	-12	-6	-2	1	2	3	3	5	1	-11	-35	-5
14		-47	-17	-7	-4	-8	3	3	-3	-5	-3	-8	-5	-20	-4	-16	-26	-14	-15	-25	-4	-4	4	2	4	-9
15	D	-15	-20	-9	-11	2	9	-2	-4	-7	-17	-31	-30	-28	-19	-21	-21	-18	-31	-18	-11	-4	-8	-12	-10	-14
16		-9	-5	-6	-2	-3	-1	2	-2	-11	-13	-20	-20	-20	-20	-16	-12	-3	5	-8	-10	11	-5	-12	5	-7
17		-3	-5	0	-2	2	1	0	4	-5	-10	-26	-24	-16	-17	-8	-18	-4	-4	-1	2	3	8	22	13	-4
18		11	12	11	8	6	12	31	14	10	-6	-15	-22	-16	-12	-10	-5	-8	-1	-1	5	1	0	15	10	2
19		3	-2	-3	2	0	0	-2	0	0	-5	-4	0	-8	-3	-5	-8	0	8	8	9	12	6	17	-8	1
20		-1	0	7	10	11	3	-3	-2	-8	-9	-33	-22	-14	-10	-8	0	-1	-6	31	2	15	-14	5	5	-2
21		0	-1	-3	-18	-9	4	8	2	-10	-15	-15	-14	-7	-3	-4	-6	-29	-8	-4	-8	22	-5	-5	-3	-6
22		-3	0	5	-5	4	6	5	-1	-6	-21	-16	-16	-20	-9	-16	-19	-7	0	1	5	4	-1	1	-1	-5
23	Q	7	0	-2	1	3	3	4	2	-3	-7	-8	-8	-8	-24	-15	-7	-9	-12	8	2	0	11	1	-6	-3
24	Q	-3	-5	0	4	4	5	4	2	-2	-6	-4	-16	-14	-14	-7	1	-1	-1	4	4	-1	2	7	4	-1
25	Q	0	-4	0	4	5	6	5	-3	-9	-9	-12	-12	-2	-3	2	1	3	1	-2	1	3	4	6	8	0
26		5	6	6	7	11	16	10	-4	-16	-27	-23	-14	-18	-17	-5	-4	-4	-2	9	12	8	5	-46	-16	-4
27	D	-48	-87	-101	-24	-12	-10	-15	-22	-34	-33	-37	-15	-9	7	-2	-6	-22	-21	-15	-58	-29	-95	-15	-3	-29
28		-24	-12	-10	-9	-7	-6	-10	-15	-38	-47	-30	-34	-19	-15	-24	-5	-4	-28	-44	-50	-34	-14	-18	-13	-21
All		-15	-13	-11	-7	-4	-1	-2	-8	-15	-19	-21	-19	-17	-13	-11	-2	-8	-8	-7	-12	-6	-12	-10	-10	-11
Quiet		-8	-9	-6	-1	2	5	3	-3	-7	-11	-12	-15	-11	-14	-8	-2	-2	-3	0	1	1	3	-1	-7	-4
Dist.		-34	-38	-34	-17	-13	-5	-10	-20	-31	-30	-30	-25	-19	-12	-12	24	-13	-18	-12	-39	-25	-47	-28	-26	-21

February 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		27	35	34	29	26	27	28	30	25	21	19	13	11	13	4	-1	15	12	14	21	99	84	65	98	31
2	D	99	152	143	51	15	30	10	37	2	9	14	-3	14	3	-1	3	18	6	54	104	63	89	66	99	45
3	D	83	64	67	47	34	28	33	29	25	21	10	23	7	27	13	5	12	54	63	36	32	49	56	69	37
4	D	30	52	76	59	57	31	34	34	5	-6	11	7	15	15	19	22	18	16	68	47	40	44	57	54	34
5		52	40	38	41	35	22	31	34	28	26	19	6	11	2	14	19	13	35	17	29	38	48	28	29	27
6		29	14	17	20	20	24	24	22	23	10	8	-4	-3	-10	8	-14	-18	2	22	44	48	45	35	29	17
7		15	15	30	27	24	24	22	22	23	11	-1	0	-5	-3	-3	-3	4	5	21	55	53	31	25	37	18
8		39	25	35	25	21	28	30	29	24	26	10	1	1	1	9	4	7	15	40	40	32	31	52	69	25
9		52	57	39	30	33	27	27	28	22	21	13	9	-1	4	-12	9	6	57	42	40	46	71	61	44	30
10		67	75	51	27	32	17	-2	14	21	19	14	11	-2	-1	4	5	3	7	30	42	40	32	40	69	26
11	Q	69	56	48	42	39	27	20	27	30	22	22	14	4	-1	-1	0	1	-6	10	19	20	22	25	26	22
12		24	26	24	21	18	25	23	25	26	10	10	8	3	1	5	3	47	17	15	29	47	48	60	58	24
13	Q	33	17	20	24	23	20	21	23	24	22	9	8	5	12	13	13	13	14	16	17	17	18	56	85	22
14		65	31	34	26	14	9	18	15	14	9	13	3	10	0	4	9	11	15	40	14	24	29	18	38	19
15	D	55	41	27	22	1	19	17	18	16	4	-1	4	4	3	31	27	97	32	23	26	35	23	35	13	24
16		17	14	25	26	26	18	5	11	14	16	5	8	12	19	14	12	27	43	26	37	64	31	32	16	22
17		31	31	28	23	20	16	14	13	19	15	12	2	2	12	20	20	15	33	23	20	27	24	28	29	20
18		29	20	18	9	9	27	18	23	22	19	12	1	4	-4	-4	1	2	4	24	36	21	22	3	31	15
19		31	35	30	24	24	22	24	24	23	20	11	3	5	6	7	31	7	6	6	24	45	63	59	38	24
20		24	23	23	23	20	12	11	9	21	12	15	1	2	5	10	14	15	29	76	59	50	49	25	21	23
21		29	28	20	4	3	14	17	18	22	15	10	3	5	6	13	21	31	15	19	24	43	26	29	24	18
22		24	20	15	19	20	19	21	25	28	27	18	5	7	7	23	40	13	12	15	15	19	30	43	19	20
23	Q	15	33	19	15	10	14	19	25	28	21	14	9	6	17	11	13	26	27	23	21	28	27	24	22	19
24	Q	25	29	22	17	19	22	27	30	30	22	12	9	11	11	15	27	18	19	17	19	29	36	37	35	22
25	Q	34	24	22	21	21	23	26	34	32	22	12	3	-5	5	9	19	19	19	25	26	23	22	19	19	20
26		21	17	21	21	22	17	22	19	21	18	4	-6	-10	-11	-4	4	20	35	32	24	30	38	46	36	18
27	D	74	102	72	53	35	34	35	36	36	21	16	-7	-25	-2	-16	-15	32	31	21	43	84	70	79	55	36
28		33	30	24	22	22	19	19	20	26	23	-3	-4	-13	-20	-5	14	48	60	49	70	72	39	34	26	25
All		40	40	36	27	23	22	21	24	22	17	11	4	3	4	7	11	18	22	30	35	42	41	41	42	24
Quiet		35	32	26	24	22	21	23	28	29	22	14	8	4	9	9	15	16	15	18	20	23	25	32	37	21
Dist.		68	82	77	46	28	28	25	31	17	10	10	5	3	9	9	8	35	28	46	51	51	55	58	58	35

February 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		34	37	26	21	24	25	25	23	21	22	23	23	25	29	29	28	34	31	27	25	1	-13	-13	-29	20
2	D	-30	-37	-43	-23	-19	-12	-6	5	6	13	23	41	52	62	118	239	145	134	153	-29	-19	-31	-26	-90	26
3	D	-86	-68	-33	-11	10	27	28	26	24	24	28	29	40	58	50	45	42	62	4	33	38	33	1	2	17
4	D	13	17	19	-18	-4	2	19	23	30	40	43	41	44	47	45	42	34	38	56	43	6	-20	1	8	24
5		17	-9	12	21	26	20	26	27	27	30	33	38	42	42	56	57	51	39	34	40	37	28	18	23	31
6		23	27	27	26	26	26	28	27	23	22	21	25	25	37	50	49	65	90	102	85	56	32	30	14	39
7		-5	-26	0	18	27	30	31	30	27	23	25	27	37	45	44	46	48	54	55	37	30	38	31	27	29
8		23	2	5	3	7	16	24	23	19	19	22	25	31	43	55	44	40	44	50	42	34	22	25	-6	26
9		-8	-32	-13	0	19	23	22	22	20	18	20	23	29	34	42	45	46	90	86	90	74	41	36	28	31
10		-4	-14	7	-12	4	6	11	20	27	26	31	31	32	35	38	39	39	43	44	42	38	35	27	1	23
11	Q	-2	-4	-10	2	6	10	12	17	20	22	24	27	29	32	32	33	38	43	45	34	29	28	28	26	22
12		25	25	24	20	17	17	17	19	19	17	17	19	19	22	27	34	69	47	42	34	33	-19	-21	-16	21
13	Q	12	22	26	27	24	22	20	20	18	17	18	21	23	30	30	28	26	24	24	23	22	20	-7	-26	19
14		-44	-15	10	21	17	19	20	23	24	25	27	28	26	33	41	51	43	58	61	37	30	26	23	-9	24
15	D	-46	-8	16	15	11	12	19	21	23	25	34	44	44	64	73	73	101	52	43	38	28	21	16	14	31
16		16	15	23	24	21	22	20	23	26	28	27	32	39	58	55	43	38	29	28	32	18	8	5	-37	25
17		-8	16	19	21	21	20	21	21	20	18	21	25	29	35	46	40	36	41	31	28	21	18	4	3	23
18		9	13	13	13	10	12	11	13	14	15	17	20	23	23	32	34	34	36	39	29	27	21	-42	-29	16
19		-2	9	15	17	19	19	19	17	13	12	14	16	20	24	27	37	32	28	28	32	20	6	-25	-8	16
20		10	13	13	14	15	12	17	16	17	13	19	26	27	37	32	32	32	41	16	0	5	2	-8	3	17
21		14	17	16	4	4	11	14	16	21	19	19	19	21	21	24	35	53	36	31	32	13	-6	11	16	19
22		18	19	10	14	19	18	20	21	19	17	16	21	27	33	44	50	34	28	26	25	25	27	16	14	23
23	Q	7	7	16	15	12	16	19	21	18	15	16	19	26	42	36	34	35	35	20	20	23	13	11	8	20
24	Q	8	16	19	20	20	20	21	19	18	16	18	22	28	28	31	33	28	26	24	23	25	19	3	-8	20
25	Q	1	13	17	20	21	21	21	18	13	10	12	14	23	22	23	26	25	24	27	25	22	21	21	19	19
26		19	19	19	20	20	20	18	17	15	14	18	31	29	32	33	31	36	34	32	24	29	27	-42	-57	18
27	D	-67	-84	-109	-10	15	29	33	32	31	29	26	36	44	97	73	84	96	96	83	36	35	-54	-65	-42	18
28		-27	15	25	27	26	27	28	26	23	21	23	33	53	54	51	60	59	68	69	62	52	44	27	-35	34
All		-3	0	6	11	15	17	20	21	21	20	23	27	32	40	44	50	48	49	46	34	27	14	3	-7	23
Quiet		5	11	14	17	17	18	19	19	17	16	17	21	26	31	31	31	30	30	28	25	24	20	11	4	20
Dist.		-43	-36	-30	-10	3	12	19	21	23	26	30	38	45	66	72	96	83	76	68	24	18	-10	-14	-22	23

Nurmijärvi Finland

March 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-20	-27	-14	-8	-9	-11	-16	-20	-20	-32	-33	-26	-30	-15	-7	-14	-10	-1	2	-8	-39	-36	-9	-3	-17
2		-10	-7	-5	4	7	1	-5	-13	-20	-24	-14	-9	-7	-8	-14	-12	1	0	0	-26	-30	-1	0	-5	-8
3		-20	-14	-9	-4	-1	1	1	-3	-16	-26	-14	-7	4	-8	-3	11	-2	10	20	-12	-6	0	-18	-100	-9
4	D	-75	-26	-35	-20	-20	-8	-22	-41	-40	-34	-26	-35	-45	-24	-17	-5	-22	-14	-6	5	-28	-42	-21	2	-25
5		-27	-19	-10	-12	-12	-5	-5	-10	-24	-35	-32	-31	-23	-21	-16	-4	-8	-2	-7	-7	16	4	-27	-40	-15
6		-19	-34	-24	-16	-6	-8	-19	-25	-31	-23	-24	-19	-20	9	4	-17	-11	-9	-15	-17	-38	-50	-32	-14	-19
7		-17	-35	-31	-21	-16	-15	-17	-13	-12	-33	-39	-25	-12	-12	-11	-8	-8	-2	0	-1	-9	-6	-9	3	-15
8	Q	-3	-3	-2	-2	-1	1	-3	-11	-19	-23	-24	-18	-21	-18	-16	1	-4	-14	-26	-16	-14	-10	0	-1	-10
9		-7	-8	-2	-3	-5	-14	-15	-19	-27	-27	-29	-25	-23	-10	-2	-6	-2	3	-1	-3	-8	-15	1	-7	-11
10		-3	-3	-2	-8	1	5	5	-13	-15	-7	-6	-16	3	3	-11	-5	-8	-10	-11	-13	-23	-27	-20	-6	-8
11		1	-5	-9	-8	-8	-10	-6	-11	-19	-21	-29	-28	-18	-8	3	-3	6	8	0	1	1	2	2	3	-7
12	Q	0	0	1	3	5	9	10	1	-7	-11	-12	-15	-9	-5	3	5	4	7	9	9	10	29	0	-5	2
13		-17	8	6	9	4	10	9	8	-3	-10	-15	-9	-2	-11	-13	-2	-2	3	5	7	8	7	5	6	0
14		6	3	1	2	6	11	14	4	-15	-34	-24	-41	4	-17	-23	-11	-10	-5	7	2	-27	-17	-2	-2	-7
15		-43	-1	-23	-17	-5	0	-4	-27	-45	-39	-37	-20	-15	-9	-3	-5	-8	3	-18	-4	-13	-7	13	1	-14
16		-4	-5	-4	-3	2	4	0	-8	-18	-29	-27	-12	-26	-2	-6	0	-12	-1	-40	-79	-187	-94	-44	-1	-25
17	D	-18	-21	-16	-21	-41	-48	-21	-30	-44	-58	-36	-46	-27	8	26	21	-28	-15	-12	-12	-8	18	-72	-74	-24
18		-73	-43	-14	-6	-20	-18	-15	-34	-46	-45	-43	-35	-16	4	22	-14	-12	-10	1	-2	-4	1	10	-7	-17
19		-7	-17	-15	6	6	-5	-2	-12	-21	-26	-25	-24	-27	-7	-12	-2	3	-3	5	10	9	6	6	1	-6
20		0	3	6	7	10	17	6	-2	-17	-24	-22	-7	-14	9	32	29	43	26	-7	-68	-54	-44	-18	-43	-6
21		-33	-50	-5	3	-3	-33	-11	-12	-31	-24	-42	-43	-21	-15	-6	-6	-5	1	-3	3	7	14	-5	-22	-14
22		-30	-11	-8	-1	-14	-24	-20	-9	-17	-16	-28	-18	-16	-11	-4	-2	1	-1	3	5	4	10	-1	-2	-9
23		-9	-23	-10	5	2	1	-8	-28	-19	-27	-54	-41	-19	-1	-15	-17	-2	-1	24	-18	-12	-6	4	9	-11
24	Q	-2	-5	-2	-9	-4	1	-6	-20	-31	-34	-26	-19	-10	-10	-5	-5	-1	0	2	3	7	4	4	5	-7
25	Q	4	6	5	5	5	1	-5	-14	-22	-28	-25	-18	-13	-5	5	1	4	7	4	9	10	9	14	15	-1
26	Q	15	14	13	12	10	14	11	-1	-9	-12	-14	-17	-19	-13	-4	1	7	10	24	16	17	9	-1	8	4
27		-23	-19	7	5	1	0	-28	-41	-27	-28	-45	-26	-1	-6	1	14	20	-12	-12	-14	-11	-8	-18	-24	-12
28		-31	-30	-24	-21	-7	-7	-27	-56	-41	-40	-33	-26	-19	-10	-6	10	17	-8	-10	-22	-67	-84	-150	-43	-31
29	D	-61	-40	-35	-47	-48	-27	-28	-41	-52	-53	-57	-50	-33	-6	36	24	31	13	-56	-38	-44	-39	-87	-163	-38
30	D	-59	-54	-24	-8	-30	-22	-14	-21	-38	-32	-26	-32	-36	-1	19	25	29	14	-12	-33	-85	-92	-184	-76	-33
31	D	-26	-15	-21	-15	-9	-7	-10	-20	-33	-29	-38	-32	-18	20	146	109	-21	17	-32	-53	-108	-88	-61	-75	-18
All		-20	-16	-10	-6	-6	-6	-8	-17	-25	-28	-29	-25	-17	-6	3	4	0	0	-5	-12	-23	-18	-23	-21	-13
Quiet		3	2	3	2	3	5	2	-9	-18	-22	-20	-17	-14	-10	-4	1	2	2	2	4	6	8	3	4	-3
Dist.		-48	-31	-26	-22	-30	-22	-19	-31	-41	-41	-36	-39	-32	-1	42	35	-2	3	-24	-26	-55	-49	-85	-77	-27

March 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		46	64	26	26	24	24	26	26	20	18	10	-7	4	-7	8	12	24	15	15	64	51	48	38	25	25
2		33	31	25	26	31	32	35	37	34	22	-1	-7	-12	-9	3	18	27	11	18	93	58	42	54	36	27
3		66	73	47	46	40	35	36	37	30	15	7	-2	-17	-5	-8	-8	-14	3	88	21	28	30	40	54	27
4	D	115	62	73	61	52	31	31	19	31	23	9	-8	10	5	-5	49	15	15	30	47	60	34	36	45	35
5		63	46	38	28	33	35	37	39	38	23	8	3	-13	-5	-4	-6	34	75	28	41	79	50	59	12	31
6		65	75	46	58	42	36	39	29	17	15	0	-9	-21	1	0	-7	17	69	26	44	71	41	50	23	30
7		13	12	13	45	35	38	35	35	25	21	10	3	-3	1	9	19	19	20	21	29	47	34	16	19	22
8	Q	31	32	30	34	31	34	40	43	38	28	17	-1	-1	8	12	14	33	33	32	45	41	31	30	48	29
9		36	35	34	38	35	26	27	30	31	27	17	2	4	-1	5	11	15	12	20	30	27	50	48	34	25
10		26	29	32	39	21	29	30	28	27	12	-1	-2	-16	-6	-14	-15	36	35	26	35	63	22	21	37	21
11		15	27	39	31	38	36	18	17	22	14	9	-1	-7	-9	-7	2	4	2	21	23	24	23	20	24	16
12	Q	20	20	33	33	32	32	35	36	37	31	16	9	-1	2	6	15	14	16	17	17	25	36	65	33	24
13		24	21	41	36	27	13	22	38	33	25	12	-4	-12	-5	-1	7	9	12	16	16	17	24	24	24	17
14		23	24	27	22	31	34	38	38	23	16	-2	-4	-18	21	0	9	18	21	82	103	67	30	36	19	27
15		9	11	50	17	33	36	37	31	24	13	6	2	-4	6	6	13	24	90	72	52	35	19	18	36	26
16		20	29	22	15	26	34	40	38	32	20	13	-9	8	-4	1	42	24	26	45	102	85	90	97	29	34
17	D	36	29	28	30	12	-10	28	48	36	27	6	2	0	18	35	27	13	23	25	26	40	37	54	48	26
18		31	-1	44	37	13	3	14	24	29	21	15	16	-12	-9	60	16	21	21	40	31	28	24	12	18	21
19		28	18	12	27	19	23	31	41	44	36	20	7	6	2	8	18	20	23	24	18	19	33	25	27	22
20		26	26	27	27	27	29	20	22	15	18	9	4	-15	-16	21	36	43	44	21	26	55	77	41	26	25
21		44	14	31	34	27	14	23	33	31	21	28	8	3	24	8	14	18	20	30	69	41	24	20	38	26
22		70	41	35	31	16	-7	14	29	32	25	17	10	10	17	11	15	19	20	22	36	38	36	22	34	25
23		31	11	20	31	31	32	38	36	24	17	30	4	-1	2	12	21	20	45	96	63	43	36	6	-17	26
24	Q	17	30	31	26	34	43	47	42	29	19	13	9	6	12	18	22	23	30	27	25	25	25	22	22	25
25	Q	24	25	25	28	32	37	41	39	31	16	6	1	1	5	11	17	20	17	17	23	22	21	19	22	21
26	Q	24	26	27	29	25	30	39	41	31	14	2	-7	-3	-3	6	16	19	16	10	17	38	41	44	25	21
27		19	54	49	48	48	52	48	0	17	9	-2	-15	-30	-13	-15	6	21	37	48	48	65	30	42	68	26
28		57	59	42	29	46	49	51	37	18	16	1	-7	-6	-3	15	23	67	53	36	39	35	70	55	75	36
29	D	49	16	35	13	11	33	38	47	42	26	10	-3	-10	-21	-1	2	4	22	14	66	71	111	99	135	34
30	D	91	98	27	50	61	58	59	60	38	23	13	-5	-5	-16	10	16	23	60	61	45	65	87	85	63	45
31	D	37	36	50	48	47	50	55	52	38	14	3	-12	-9	-1	42	21	35	84	67	83	51	93	62	53	42
All		38	34	34	34	32	30	35	35	30	20	10	-1	-5	0	8	14	21	31	35	44	45	43	41	37	27
Quiet		23	27	29	30	31	35	40	40	33	21	11	2	1	5	11	17	22	22	21	25	30	31	36	30	24
Dist.		66	48	43	40	37	32	42	45	37	22	8	-5	-3	-3	16	23	18	41	39	53	57	72	67	69	36

March 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-53	-30	19	29	30	32	30	28	21	18	21	29	23	32	41	44	44	36	37	42	26	5	27	31	23
2		32	30	22	14	15	19	24	29	30	28	29	36	46	53	47	46	42	38	46	51	25	19	-7	-24	29
3		-34	-3	22	25	26	28	29	28	24	22	21	22	26	29	33	44	86	107	74	57	54	37	-31	-95	26
4	D	-78	-28	-33	-43	-6	3	10	14	28	42	48	55	61	48	53	90	63	53	55	27	21	-27	-19	-3	18
5		-16	-16	14	21	17	21	28	26	23	24	29	29	39	52	48	60	76	63	50	50	20	-5	-9	-53	25
6		-24	-37	-62	-42	-20	-2	16	19	18	22	26	33	53	89	120	138	114	76	57	53	31	3	-6	-4	28
7		18	-1	-42	-8	21	26	32	36	31	26	29	28	33	38	45	43	37	36	34	38	39	31	22	-9	24
8	Q	20	27	29	28	28	29	31	31	28	24	23	26	35	45	39	39	59	67	75	56	50	34	12	-1	35
9		9	22	18	14	15	15	13	17	20	19	17	23	27	31	39	40	40	41	48	38	39	24	-9	15	24
10		30	31	29	26	18	20	21	20	25	21	24	27	54	74	72	79	100	65	63	58	28	-38	-9	11	35
11		-22	4	17	25	29	26	20	22	24	24	23	24	28	35	45	45	37	41	41	36	32	30	28	27	27
12	Q	20	14	21	24	26	25	25	22	19	16	17	20	29	29	29	28	26	28	28	29	30	-5	-7	10	21
13		-6	-46	-13	2	11	10	16	20	19	16	16	21	37	51	45	36	30	30	31	30	29	28	28	28	19
14		26	26	25	25	22	23	22	20	20	25	33	36	54	99	63	45	41	39	53	-4	-12	-20	-33	9	27
15		-51	-74	-47	-3	16	27	24	24	31	34	31	37	41	55	48	50	70	61	49	26	22	-21	-4	-15	18
16		10	21	22	23	27	30	27	27	23	19	20	32	54	73	97	109	58	51	52	-22	-175	-122	-89	-10	15
17	D	8	23	35	25	23	24	23	35	42	42	47	49	59	91	162	138	91	58	43	41	19	-92	-92	-122	32
18		-89	-63	-13	25	14	21	23	29	32	40	61	56	47	72	98	53	49	44	41	33	31	11	-9	-4	25
19		13	-9	-10	5	6	24	27	30	34	32	30	32	38	42	41	43	43	43	38	31	31	19	26	32	27
20		33	31	31	30	30	31	31	28	25	21	25	53	63	71	101	95	93	78	51	15	33	-32	-35	-53	35
21		-40	-59	6	24	23	19	23	22	22	27	51	53	47	62	41	36	33	36	44	39	26	-2	-68	-72	16
22		-28	7	26	26	17	13	22	24	21	22	21	28	40	46	42	36	34	33	34	35	29	-16	-8	13	22
23		20	-11	5	17	24	27	26	31	29	30	56	42	32	45	49	46	41	53	36	21	30	25	-3	-27	27
24	Q	1	22	27	29	31	31	27	27	32	35	32	32	33	34	33	31	32	34	33	31	30	28	28	29	29
25	Q	30	29	28	28	29	31	29	26	24	20	21	22	25	29	32	33	33	32	32	31	29	28	28	28	28
26	Q	27	28	27	27	27	25	24	20	15	12	16	25	31	38	40	39	35	32	30	34	33	22	21	20	27
27		-54	-70	3	24	28	28	23	16	23	31	29	36	64	76	79	130	174	134	90	55	22	-13	-42	-63	34
28		-43	-18	-13	-18	-1	15	22	25	23	17	15	19	25	38	47	49	74	60	60	46	-24	-94	-176	-95	2
29	D	-60	-65	-75	-59	-44	-9	15	24	35	35	35	37	45	73	116	142	173	143	17	13	-21	-83	-155	-163	7
30	D	-156	-127	-7	32	27	33	28	23	21	23	26	38	46	67	101	117	106	58	45	24	-45	-102	-115	-60	8
31	D	14	49	44	43	43	45	40	35	32	34	37	55	70	117	199	184	128	65	49	48	-66	-35	-29	-52	48
All		-14	-9	5	13	18	22	24	25	26	26	29	34	42	56	66	68	66	56	46	34	13	-12	-24	-22	25
Quiet		20	24	26	27	28	28	27	25	24	21	22	25	31	35	35	34	37	39	40	36	34	21	17	17	28
Dist.		-54	-30	-7	-1	9	19	23	26	31	35	39	47	56	79	126	134	112	75	42	31	-18	-68	-82	-80	23

Nurmijärvi Finland

Aprl 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-59	-78	-88	-38	-4	-8	-17	-30	-37	-42	-38	-32	-15	-8	-3	-3	10	10	8	-5	-27	-6	-4	-11	-22
2		-13	-12	-6	-4	-16	-39	-23	-38	-58	-54	-35	-16	-6	-23	4	-14	-2	17	15	-18	-42	-19	-71	-34	-21
3		1	-8	-7	-4	-4	-3	-10	-24	-44	-49	-42	-32	-24	-6	11	-8	8	8	16	3	6	2	-24	-65	-13
4	D	0	-16	-25	1	3	-7	-17	-33	-42	-58	-40	-11	7	24	7	12	-11	-1	-10	-4	1	-26	-56	-91	-16
5	D	-47	-48	-36	-22	-33	-36	-16	-29	-48	-51	-44	-35	-12	-3	3	-11	5	18	-20	-32	-41	-27	-30	-10	-25
6	Q	-22	-14	-8	-10	-11	-8	-8	-19	-31	-46	-39	-31	-21	-11	-4	1	-2	15	1	-4	-1	-1	-2	-7	-12
7	Q	1	-5	-6	-4	0	1	-4	-14	-28	-34	-29	-27	-3	-12	11	-3	-2	-3	7	11	12	14	10	10	-4
8		12	24	21	16	11	14	5	-37	-40	-38	-53	-41	-3	9	14	-30	-10	-6	-6	-1	2	2	2	-1	-6
9		-26	-9	-15	5	0	0	-31	-38	-31	-46	-37	-47	-6	41	-19	-12	14	-9	5	8	12	10	15	12	-9
10		5	6	5	4	1	-13	-15	-24	-42	-47	-58	-50	-29	-12	-13	9	8	3	1	-8	-31	-25	-13	-1	-14
11		-5	-5	-6	-13	-11	-8	-12	-23	-37	-45	-39	-21	-14	-4	4	7	3	7	10	3	17	4	-21	-33	-10
12	Q	0	-8	-4	4	5	1	-4	-15	-22	-29	-32	-25	-12	6	3	7	2	13	10	8	9	8	8	7	-3
13	Q	5	1	-10	-3	12	13	-1	-18	-32	-36	-38	-18	-13	-11	0	5	9	10	11	12	11	12	14	14	-2
14		12	13	13	12	-3	8	10	-1	-17	-27	-30	-14	-3	11	10	-27	-13	-2	1	3	4	7	2	17	-1
15		1	-1	-16	1	14	5	-13	-32	-35	-54	-42	-26	-31	-17	3	4	15	14	12	17	11	16	6	7	-6
16	D	-1	-10	15	19	14	14	0	-28	-31	-53	-69	-41	-20	-13	-3	24	13	17	3	17	37	-1	-6	-4	-4
17		-4	-3	-18	-24	-30	-39	-21	-22	-31	-41	-67	-58	-32	-26	6	27	6	7	6	7	4	3	6	3	-14
18		4	2	3	4	-9	-45	-9	-8	-20	-43	-35	-21	-30	-12	3	15	10	-4	6	10	12	21	2	-17	-7
19	Q	-2	2	1	2	2	-4	-11	-17	-29	-38	-34	-21	-13	-6	-1	3	6	7	16	21	10	4	9	-7	-4
20		-8	-5	-8	-13	-14	-19	-10	-11	-22	-33	-35	-27	-14	0	9	19	23	18	17	20	24	21	23	-18	-3
21		-34	-56	-4	-18	-12	-14	-52	-50	-32	-38	-42	-38	-31	-15	-14	4	3	16	21	12	2	-16	-30	-32	-19
22		-24	-24	-14	-36	-15	-1	-9	-22	-24	-41	-35	2	-3	-5	-26	-9	35	19	10	2	-14	-1	-13	1	-10
23		-3	-6	-4	-2	-11	-38	-65	-79	-66	-34	-43	-17	-16	-5	-27	6	16	7	11	16	4	3	-4	-4	-15
24		-5	0	-3	-2	-3	-11	-36	-54	-55	-55	-33	-16	-3	-9	8	27	18	28	5	-7	-55	-37	-42	-15	-15
25	D	-29	-27	-29	-38	-48	-59	-45	-44	-59	-85	-82	-52	-44	-33	-4	-1	24	11	0	2	8	0	-58	-43	-31
26		-21	-8	-1	-8	-7	-15	-27	-53	-51	-45	-38	-29	-20	-2	16	21	14	35	26	17	15	-1	3	-3	-8
27		-15	-3	4	-2	-17	-25	-17	-16	-30	-38	-25	-12	-17	-21	-7	40	3	21	22	22	9	9	-17	-3	-6
28		-9	-18	-6	-2	-12	-39	-48	-63	-72	-72	-43	-31	-8	-4	-13	-8	5	5	6	10	10	3	-4	-5	-17
29		1	-2	1	0	-8	-19	-19	-32	-48	-47	-33	-17	4	32	69	78	63	67	2	-30	-77	-38	-62	-116	-10
30	D	-34	-61	-87	-33	-7	-8	-32	-45	-58	-62	-59	-56	-23	2	-4	60	14	3	6	-17	-53	-59	-97	-108	-34
All		-10	-13	-11	-7	-7	-13	-19	-31	-39	-46	-42	-29	-15	-4	1	8	10	12	7	3	-4	-4	-15	-18	-12
Quiet		-4	-5	-5	-2	1	1	-6	-17	-28	-37	-34	-24	-12	-7	2	2	3	8	9	9	8	7	8	4	-5
Dist.		-22	-32	-33	-15	-14	-19	-22	-36	-48	-62	-59	-39	-18	-4	0	17	9	10	-4	-7	-10	-23	-49	-51	-22

Aprl 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		65	116	59	41	53	59	63	64	53	29	9	1	-2	5	8	25	27	38	45	61	66	37	32	25	41
2		18	24	32	37	30	13	1	16	17	16	3	-10	-4	-7	-14	8	29	45	67	61	69	87	67	24	26
3		41	38	41	43	41	45	50	50	37	16	3	-5	-7	-8	-6	12	17	18	63	27	30	103	101	60	34
4	D	54	61	24	45	46	49	59	53	47	35	12	-16	-11	-16	-27	-18	22	28	28	26	91	66	84	104	35
5	D	64	57	32	38	26	23	45	43	42	30	7	-9	-10	1	-13	-8	7	45	49	81	60	28	13	19	28
6	Q	22	18	22	33	33	38	51	54	50	38	21	3	-9	-8	3	14	24	51	30	27	26	27	38	23	26
7	Q	18	30	33	38	41	44	49	51	45	31	12	-8	-20	-18	-24	-9	2	16	23	22	23	25	25	23	20
8		23	23	25	26	19	22	30	36	26	18	4	-13	-23	-21	-22	-20	12	28	36	28	29	24	21	27	15
9		-9	15	21	18	21	28	40	11	21	13	-1	-8	-10	0	-11	2	15	26	12	11	16	24	27	31	13
10		34	37	35	17	29	24	24	32	24	19	-1	-8	-17	-7	3	21	47	39	28	57	83	58	33	30	27
11		28	32	37	32	31	44	52	48	36	23	8	3	0	2	10	28	32	24	30	33	43	32	17	8	26
12	Q	44	33	30	33	34	39	37	40	37	27	15	5	1	-1	23	21	20	39	30	24	22	20	23	25	26
13	Q	28	32	21	18	40	46	48	43	37	22	14	1	9	10	13	18	23	20	18	20	20	19	20	27	24
14		26	29	29	31	25	26	36	41	38	30	18	-2	-8	-10	-7	-7	14	21	37	41	20	17	17	0	19
15		21	33	11	14	23	12	27	19	21	14	7	-14	-8	5	11	11	13	15	18	21	20	24	21	5	14
16	D	12	-2	30	42	36	35	35	34	34	29	14	5	-8	-1	14	27	36	40	28	44	67	59	36	33	28
17		30	25	30	30	19	26	33	43	40	30	34	13	2	2	18	66	33	46	45	33	28	29	27	25	29
18		22	26	27	33	27	0	18	36	35	23	13	-8	-3	-5	0	33	24	29	19	27	25	46	39	50	22
19	Q	21	26	36	40	42	43	44	44	36	21	8	-2	-4	6	14	20	21	22	33	58	38	32	32	11	27
20		-6	10	21	44	34	24	27	34	40	26	11	-1	-4	-7	-5	4	11	18	20	18	34	34	25	32	19
21		72	115	78	69	68	53	49	18	29	23	3	-2	-4	-4	7	21	27	20	42	33	83	66	73	79	42
22		72	69	48	47	22	31	59	60	40	28	10	-4	-14	-6	7	13	29	48	45	43	65	52	43	30	35
23		38	36	42	43	52	54	30	18	16	17	4	-8	-13	-13	-3	20	33	24	33	63	46	29	34	44	27
24		26	33	42	46	54	59	47	25	33	16	-1	-15	-23	-26	-29	1	19	28	80	60	69	38	33	40	27
25	D	40	38	25	20	23	47	66	48	38	31	2	-15	-18	-5	8	24	31	48	37	28	33	48	81	64	31
26		53	44	45	49	48	60	63	52	22	9	-9	-22	-25	-16	4	9	20	37	39	35	64	45	45	53	30
27		67	47	42	47	51	43	46	43	25	3	-15	-22	-15	-6	7	12	29	28	26	25	24	40	30	28	25
28		28	20	45	51	41	50	23	27	23	6	-10	-7	-6	7	19	29	33	25	24	21	22	26	28	29	23
29		33	34	38	45	54	61	48	45	33	18	0	-8	-14	-12	-9	20	8	19	30	61	0	40	81	63	29
30	D	37	23	0	43	42	56	54	52	33	18	5	-19	-15	-14	-1	13	2	17	32	46	50	22	42	114	27
All		34	37	33	37	37	38	42	39	34	22	7	-7	-9	-6	0	14	22	30	35	38	42	40	40	38	26
Quiet		27	28	28	33	38	42	46	46	41	28	14	0	-4	-2	6	13	18	30	27	30	26	25	27	22	24
Dist.		41	35	22	37	34	42	52	46	39	29	8	-11	-12	-7	-4	7	19	35	35	45	60	45	51	67	30

Aprl 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-83	-80	-108	-55	12	39	47	47	44	37	33	36	42	43	48	59	67	67	43	7	0	23	28	15	17
2		20	26	32	31	26	24	26	30	35	33	36	56	84	70	75	72	72	54	20	29	9	-52	-52	-51	29
3		-10	15	34	38	39	39	38	32	30	29	32	34	35	35	53	52	51	52	45	34	37	15	-18	-77	28
4	D	-47	-24	-18	18	27	32	32	28	26	34	29	40	86	111	111	128	111	66	45	44	31	-65	-79	-133	26
5	D	-52	-35	-18	8	5	17	36	36	36	35	40	43	75	84	82	76	104	81	93	13	-44	3	-1	14	30
6	Q	12	29	36	36	43	48	50	47	42	37	34	29	33	38	43	49	58	60	42	43	40	38	35	32	40
7	Q	22	28	35	37	38	38	40	40	36	32	28	31	45	52	54	57	57	52	45	39	35	32	33	34	39
8		33	31	30	28	26	22	21	22	16	12	19	31	50	75	99	108	80	84	69	49	39	39	35	29	44
9		-6	-32	-2	5	0	12	18	21	23	26	30	40	67	133	86	60	68	69	48	42	37	34	30	32	35
10		34	34	31	14	8	17	25	25	30	34	35	36	56	64	62	70	87	69	58	45	-9	16	28	42	38
11		40	36	35	32	29	38	37	34	32	32	33	40	36	41	45	58	59	53	49	15	-4	19	0	-58	31
12	Q	-3	19	30	30	33	33	34	36	32	28	24	24	31	40	54	50	48	45	37	33	32	32	33	33	33
13	Q	33	34	25	14	18	25	30	31	29	26	21	30	49	43	36	33	34	32	31	32	32	32	31	31	31
14		30	30	31	31	29	28	27	27	24	20	15	22	47	81	107	104	66	48	45	33	34	32	28	-22	38
15		5	18	7	9	13	13	22	26	27	27	38	39	43	58	52	41	36	34	34	37	36	26	19	11	28
16	D	-11	-26	8	20	21	23	25	29	29	31	47	39	50	51	64	87	69	53	47	24	-42	-26	12	19	27
17		27	28	22	19	11	23	42	40	32	37	60	64	53	49	71	104	77	69	49	9	33	34	31	32	42
18		29	33	35	35	29	16	32	34	32	31	33	44	57	60	67	77	64	56	43	39	29	2	5	-13	36
19	Q	2	27	33	36	37	37	37	33	29	25	23	28	35	47	45	45	43	41	42	37	26	24	24	3	32
20		-28	-13	-10	6	20	22	26	32	26	21	18	21	28	32	35	40	46	53	50	43	37	30	16	-56	21
21		-84	-77	-28	-15	5	20	21	24	31	30	37	54	50	50	53	63	60	52	42	37	21	-18	-36	-46	14
22		-37	-24	0	-6	-10	-2	12	26	26	33	38	56	63	76	58	54	62	43	42	41	24	36	1	-12	25
23		22	29	32	39	39	32	24	22	24	27	26	40	51	63	61	85	67	48	47	17	4	24	24	4	35
24		-12	-1	26	36	38	34	28	24	22	19	27	30	40	64	94	129	91	91	79	21	-31	-85	-68	-50	27
25	D	-30	-4	-1	-28	-19	6	32	40	42	54	66	76	85	62	65	58	66	81	61	46	25	-41	-102	-137	21
26		-57	-5	29	31	37	40	35	36	35	37	37	41	52	64	73	69	69	53	39	41	18	8	17	7	34
27		-8	17	28	32	29	24	22	23	21	21	32	42	48	38	38	58	63	54	49	19	2	18	-10	-15	27
28		3	-22	-34	-17	-8	10	19	21	22	30	50	58	56	61	56	50	46	37	35	36	37	39	40	41	28
29		38	34	40	42	40	36	35	29	22	19	21	28	44	66	95	124	128	126	107	14	-53	1	-52	-135	35
30	D	-74	-73	-102	-5	37	44	42	47	47	52	65	69	76	75	88	116	108	99	-1	32	-18	-59	-127	-134	17
All		-6	2	9	17	22	26	30	31	30	30	34	41	52	61	66	73	68	61	48	32	14	7	-2	-19	30
Quiet		13	27	32	31	34	36	38	37	33	30	26	28	38	44	47	47	48	46	39	37	33	32	31	27	35
Dist.		-43	-32	-26	3	14	25	33	36	36	41	49	53	74	77	82	93	92	76	49	32	-10	-38	-59	-74	24

Nurmijärvi Finland

May 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-57	-153	-63	-26	-48	-84	-76	-66	-58	-39	-38	-31	-29	25	55	14	-5	28	13	-4	-10	-20	-18	-23	-30
2		-13	-26	-27	-58	-31	-14	-23	-41	-49	-53	-29	-38	-4	-8	4	24	10	7	8	7	1	-4	1	0	-15
3	Q	-6	-6	-8	-21	-16	-9	-15	-28	-33	-27	-38	-23	-9	-15	-30	-7	6	4	17	17	17	12	-1	-11	-10
4	Q	-10	-7	-3	-3	-8	-17	-25	-36	-41	-40	-30	-19	-5	1	3	7	5	17	12	13	16	20	22	17	-5
5		16	17	20	24	20	6	-4	-14	-25	-30	-24	-8	-1	11	22	63	54	28	43	27	25	26	32	18	14
6		9	1	15	14	17	14	8	-4	-17	-22	-22	-6	6	40	57	54	28	37	16	11	1	-13	-2	-8	10
7	D	-14	-21	-43	8	-16	-30	-26	-48	-43	-57	-38	-1	17	16	59	54	11	17	10	17	-4	-15	-5	-9	-7
8	D	-14	-25	-4	-9	-44	-60	-33	-30	-30	-34	-19	-14	22	-24	27	-3	15	50	41	-6	-9	-9	-5	-20	-10
9		-34	-26	2	8	-22	-41	-17	-14	-16	-44	-23	-20	11	-43	-41	-18	-6	-12	-3	6	7	-9	-8	-49	-17
10		-55	-74	-139	-163	-134	-84	-106	-101	-82	-63	-57	-34	-26	-17	-12	6	1	0	27	-5	-15	-15	-27	-11	-49
11		-59	-82	-40	-2	-4	-15	-31	-72	-97	-74	-40	-10	-53	-17	-6	10	16	11	2	10	3	5	12	3	-22
12		-15	-9	-23	-25	-18	-13	-31	-50	-48	-49	-27	-25		22	31	-2	-6	20	16	-3	-5	1	-15	-15	(-12)
13		-16	-18	7	12	-2	-9	-23	-31	-18	-25	-35	-29	-24	44	22	19	-8	16	15	23	-1	-19	15	2	-3
14		-21	-44	-19	-3	-14	-38	-29	-40	-37	-56	-45	-42	-13	5	48	72	18	29	28	5	-19	-5	1	-12	-10
15		-25	-6	-6	-21	-45	-62	-71	-40	-33	-29	-32	-10	-10	19	-6	29	63	10	3	-2	-9	-7	-16	-4	-13
16	Q	-16	-12	-6	1	-8	-20	-31	-45	-43	-37	-24	-6	-5	1	7	10	12	16	21	18	1	-11	-2	0	-8
17	Q	1	9	8	4	-14	-27	-34	-32	-27	-25	-18	-13	-17	-13	-12	4	8	9	17	8	5	5	2	2	-6
18	Q	3	6	9	12	5	-5	-11	-22	-27	-26	-22	-14	-5	0	4	13	25	42	35	37	24	9	7	5	4
19		-5	-17	4	2	4	-2	-17	-24	-28	-31	-24	-22	-22	10	20	11	14	22	25	14	8	4	-15	-23	-4
20		-14	1	2	-2	-7	-17	-24	-34	-52	-52	-52	-20	-33	5	14	-8	3	12	15	13	14	2	3	3	-10
21		2	6	0	-18	-9	-18	-26	-27	-33	-33	-23	-12	22	31	50	26	89	79	18	-10	-45	-137	-93	-56	-9
22		-75	-63	-52	-54	-56	-39	-51	-80	-75	-50	-33	-28	-8	23	71	59	8	9	15	12	15	-2	-6	-5	-19
23		-5	-1	-15	-43	-58	-41	-25	-20	-28	-30	-5	-12	18	-8	-12	17	41	45	11	10	3	0	-4	-14	-7
24		-3	2	4	-3	-27	-24	-36	-43	-27	-27	-25	-14	7	23	-11	3	22	31	32	20	4	-1	-21	-19	-6
25		-41	-19	-44	-37	-31	-31	-44	-50	-42	-47	-30	-27	-19	-8	-6	13	34	44	33	11	-7	-8	-6	-13	-16
26		-9	-15	-37	-2	-3	-9	-19	-54	-57	-37	-34	-32	-10	-4	17	-16	-1	16	29	28	12	14	17	-29	-10
27		-20	-32	3	-33	-54	-50	-42	-39	-38	-56	-20	-28	-34	13	-9	-8	25	26	32	27	-4	-27	3	-41	-17
28		-24	-10	-41	-11	-19	-29	-29	-40	-54	-36	7	63	24	19	33	28	26	33	26	7	2	-27	-35	-55	-6
29	D	-32	-40	-36	-47	-42	-29	-56	-64	-64	-38	-22	-20	42	92	255	281	119	99	-1	-69	-216	-555	-812	-528	-74
30	D	-572	-489	-139	-17	-18	-21	-29	-27	-20	-20	-10	-17	-28	5	5	-6	23	33	20	22	43	20	-1	-22	-53
31		-107	-10	6	11	-89	-90	-32	-47	-46	-45	-32	-19	-11	12	-13	-8	1	10	4	6	2	2	2	-4	-21
All		-40	-38	-21	-16	-25	-29	-32	-41	-42	-40	-28	-17	-7	8	21	24	21	25	19	9	-5	-25	-31	-30	-14
Quiet		-6	-2	0	-1	-8	-16	-23	-32	-34	-31	-26	-15	-8	-5	-6	5	11	18	20	19	13	7	6	3	-5
Dist.		-138	-146	-57	-18	-34	-45	-44	-47	-43	-38	-25	-16	5	23	80	68	33	46	16	-8	-39	-116	-168	-120	-35

May 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	138	111	50	54	53	39	35	41	37	38	32	11	4	-5	40	23	28	36	45	31	47	54	59	42	43
2		24	28	30	17	24	46	59	58	45	26	4	-2	-13	-7	-2	26	21	22	27	28	31	16	33	33	24
3	Q	42	46	45	34	34	50	58	60	45	28	15	-1	-11	-9	3	10	19	19	20	34	44	49	46	36	30
4	Q	31	33	42	52	56	57	56	45	30	14	-3	-10	-10	-5	5	10	16	20	17	22	21	21	20	29	24
5		31	33	36	40	49	50	50	45	30	12	-7	-19	-17	-13	-3	1	30	7	14	26	18	25	41	25	21
6		31	36	48	46	48	45	42	37	35	22	7	-7	-6	-3	31	14	21	51	42	63	24	37	38	47	31
7	D	44	34	6	31	29	15	16	42	27	19	19	4	11	22	25	35	39	32	46	29	56	53	32	21	29
8	D	12	39	39	46	34	11	13	22	37	34	17	3	13	21	18	39	27	66	49	37	31	26	43	47	30
9		19	21	51	46	32	21	22	37	39	32	24	4	-9	22	28	41	38	35	29	25	41	41	36	76	31
10		41	83	-52	-11	31	47	1	9	27	28	23	20	20	24	27	31	33	39	68	62	34	30	23	28	28
11		26	28	26	61	66	60	51	54	34	12	3	-12	-3	6	16	28	33	35	27	25	31	21	38	23	29
12		37	36	44	47	42	50	49	46	27	11	-1	-10		1	17	16	14	23	38	30	22	32	32	20	(27)
13		44	10	36	47	45	47	39	39	36	37	11	2	-2	13	29	18	22	34	54	70	34	9	25	37	31
14		33	7	33	39	35	45	40	43	57	43	26	16	12	13	32	43	32	43	32	51	20	30	42	44	34
15		41	38	47	46	41	41	28	22	29	23	10	-2	10	9	23	24	41	35	37	45	56	38	26	15	30
16	Q	38	25	32	57	63	65	59	43	24	11	7	4	8	17	23	20	20	19	21	38	43	28	26	40	30
17	Q	19	44	57	60	62	42	28	19	22	17	2	-3	-2	5	14	21	24	24	23	25	20	25	27	30	25
18	Q	33	34	38	44	40	45	45	45	34	16	-6	-19	-19	-9	5	11	14	15	19	58	35	31	26	43	24
19		78	65	53	58	60	71	61	49	39	21	2	-13	-11	-9	5	11	16	22	24	23	23	34	64	58	34
20		43	31	46	51	56	57	62	60	41	19	0	-13	-20	-12	-3	4	12	18	21	24	32	41	35	20	26
21		29	39	55	47	60	74	67	56	44	28	11	-2	-15	-12	-4	-4	34	16	63	40	67	66	67	54	37
22		65	93	65	82	45	52	65	46	31	23	10	4	7	2	12	37	23	14	14	39	14	28	29	28	35
23		35	45	58	55	34	43	50	38	33	21	9	2	-1	17	23	24	29	60	27	16	15	22	23	52	30
24		58	53	56	65	53	28	29	42	26	11	1	-6	-5	14	16	13	20	20	49	32	33	45	37	29	30
25		36	63	48	40	52	62	59	48	32	11	4	1	1	9	20	21	31	46	34	36	31	29	28	18	32
26		61	60	42	57	56	54	62	58	35	20	9	12	12	15	14	22	20	20	19	33	25	28	56	78	36
27		50	29	60	67	71	59	58	54	46	26	2	-1	4	-10	5	11	7	23	19	50	50	40	46	39	34
28		57	57	66	64	73	66	41	45	37	18	13	-3	-11	-2	-1	16	28	25	22	26	27	21	35	50	32
29	D	46	35	38	42	55	65	70	53	31	20	7	0	-9	-12	-3	30	-3	-21	45	32	51	81	153	243	44
30	D	245	264	111	90	134	125	99	63	30	19	9	7	17	22	27	34	15	13	17	19	67	58	15	51	65
31		19	37	65	72	62	14	53	52	39	19	4	0	3	10	22	34	34	33	30	28	30	34	33	34	32
All		49	50	44	50	51	50	47	44	35	22	9	-1	-1	4	15	21	24	27	32	35	35	35	40	45	32
Quiet		33	36	43	49	51	52	49	42	31	17	3	-6	-7	0	10	14	19	19	20	35	33	31	29	35	27
Dist.		97	97	49	53	61	51	47	44	32	26	17	5	7	10	21	32	21	25	40	30	50	54	60	81	42

May 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-199	-224	-25	13	7	10	36	47	61	76	95	82	69	105	132	92	81	65	24	39	46	42	32	27	31
2		24	6	3	7	31	43	44	46	46	42	41	38	54	60	64	75	55	48	49	45	37	11	12	18	37
3	Q	29	32	34	30	32	37	40	36	34	30	33	43	48	53	48	43	45	42	41	41	38	22	17	21	36
4	Q	25	28	31	36	37	34	34	33	28	23	24	31	37	39	37	35	34	38	37	37	37	36	34	34	33
5		35	36	36	36	34	32	33	33	25	23	22	27	33	32	35	54	74	55	50	47	38	13	5	17	34
6		27	27	36	35	33	28	28	29	28	25	23	35	57	78	102	110	98	91	60	39	21	3	-52	-86	36
7	D	-61	-25	-78	-23	2	15	26	40	48	42	69	94	115	117	123	107	102	75	63	21	-15	10	32	24	39
8	D	-35	-49	16	35	23	14	16	30	37	44	51	57	94	72	83	81	70	88	25	36	33	-31	-57	-24	30
9		-23	-49	6	23	19	19	26	23	21	17	43	71	107	104	63	69	62	49	45	42	29	-10	-32	-64	27
10		-79	-192	-243	-204	-130	-34	-12	12	34	52	56	53	54	51	46	50	56	58	50	44	40	38	24	29	-6
11		-24	-110	-50	14	31	33	35	38	41	40	36	52	56	73	75	91	79	77	60	44	24	23	0	10	31
12		19	35	32	30	34	31	33	31	27	33	47	51		94	94	68	51	58	70	54	-6	13	6	-2	(39)
13		-29	-16	28	39	36	36	35	38	37	43	53	52	48	95	91	81	74	80	59	33	31	-16	-26	-8	37
14		11	-38	-11	15	20	32	40	38	44	42	41	43	49	67	97	92	75	72	26	41	-11	-8	-4	-1	32
15		-7	12	29	32	31	36	36	47	46	37	31	43	65	78	75	79	71	62	58	43	37	33	8	-10	41
16	Q	12	12	8	29	38	40	41	40	36	33	31	35	39	40	39	38	39	42	45	48	33	0	-11	-5	29
17	Q	6	27	38	38	36	34	33	32	30	19	15	24	33	39	37	44	47	48	45	45	38	35	38	40	34
18	Q	40	40	39	35	33	34	35	33	26	16	13	21	31	35	35	38	41	45	51	50	19	32	32	19	33
19		11	4	14	28	35	37	35	35	29	24	25	30	31	39	52	62	67	64	60	52	45	19	12	-8	33
20		3	11	26	38	38	38	36	30	30	26	23	33	37	62	68	52	44	40	39	37	36	30	31	7	34
21		-4	10	16	14	26	32	28	26	23	22	22	24	34	45	63	67	89	84	48	28	-42	-73	-114	-47	18
22		-115	-109	-101	-19	3	34	42	45	52	49	54	59	68	77	130	116	72	55	52	58	12	35	36	36	31
23		38	44	34	19	13	8	25	39	40	46	57	49	63	62	54	57	70	72	48	42	38	41	39	19	42
24		-1	28	41	40	29	13	18	24	35	35	35	34	49	87	75	60	66	72	76	43	28	19	19	-19	38
25		-26	2	-20	-3	23	42	50	50	48	45	48	46	45	41	42	51	68	77	66	56	50	49	47	18	38
26		-14	-6	-35	17	32	37	41	38	43	48	44	40	40	46	54	49	46	45	44	47	38	14	-13	-38	27
27		-10	-55	-45	-24	1	14	28	41	40	30	36	46	51	54	55	49	54	62	58	51	-27	-36	6	-22	19
28		-98	-74	-80	-10	22	36	47	48	47	53	67	126	107	87	82	107	96	84	55	41	26	3	-22	-37	34
29	D	-69	-26	3	7	26	45	46	51	46	48	53	61	75	110	216	255	162	166	16	-234	-276	-61	79	-102	29
30	D	-94	97	76	87	65	57	46	50	56	58	57	62	59	65	74	80	73	78	67	66	1	-26	-12	22	49
31		-71	-24	28	36	3	-36	13	25	32	34	36	38	46	60	62	62	57	56	52	50	48	49	48	47	31
All		-22	-18	-4	14	21	27	33	36	38	37	41	48	56	67	74	74	68	66	50	35	14	10	7	-3	32
Quiet		22	28	30	34	35	36	37	35	31	24	23	31	37	41	39	39	41	43	44	44	33	25	22	22	33
Dist.		-91	-45	-2	24	25	28	34	44	50	53	65	71	83	93	126	123	98	94	39	-14	-42	-13	15	-10	35

Nurmijärvi Finland

June 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		2	1	-9	-20	-13	-33	-25	-34	-42	-42	-41	-22	20	3	-13	10	21	32	37	28	-9	-5	11	2	-6
2	D	5	19	1	-29	-24	-46	-97	-110	-80	-61	-47	-37	-43	-15	14	2	8	13	17	11	5	11	2	-42	-22
3		-53	-3	-1	-14	-16	-24	-36	-42	-32	-37	-37	-19	10	-10	25	-15	6	22	32	27	10	-40	-36	-17	-12
4		-10	7	-3	4	-5	-12	-26	-41	-40	-36	-18	-12	9	13	28	64	31	42	53	10	-2	-2	4	-4	2
5	Q	-6	-6	-3	-5	-3	-9	-22	-37	-48	-32	-15	0	2	12	12	47	23	17	20	2	2	8	8	9	-1
6		7	8	5	7	9	3	-15	-20	-25	-35	-40	-27	-12	17	5	24	53	35	33	18	20	13	8	16	4
7		2	-18	2	-4	-19	-12	-14	-24	-20	-12	-11	0	-4	-21	19	48	27	27	24	25	29	0	3	1	2
8		9	-7	-24	-45	-34	-24	-18	-19	-33	-25	-37	-10	-11	13	36	87	109	67	25	8	12	-36	-46	-35	-2
9		-15	1	-4	-36	-33	-36	-39	-29	-25	-27	0	-42	0	1	11	19	17	37	26	22	16	-89	-93	-68	-16
10		0	13	12	11	-2	-20	-33	-69	-59	-23	-14	-24	-18	-17	12	18	28	10	37	24	16	13	2	-2	-4
11		-3	2	5	-8	1	2	-22	-31	-21	-27	-24	-19	-4	-10	-6	15	29	33	32	23	24	5	2	4	0
12	Q	7	16	12	2	-5	-11	-16	-15	-20	-24	-26		8	-3	22	33	16	21	18	18	18	15	13	13	(5)
13	Q	11	13	15	11	5	1	0	-4	-17	-27	-31	-26	-8	11	11	15	25	26	36	35	33	20	19	11	8
14		13	20	22	18	-23	-49	-62	-53	-38	-32	-24	-20	-40	-1	14	35	67	59	47	29	12	19	6	5	1
15		-7	-17	5	8	-27	-49	-42	-38	-55	-60	-46	-14	3	12	39	58	50	40	31	18	16	15	13	3	-2
16	D	19	13	-12	-8	21	7	-11	-18	-20	-18	-19	-21	23	70	53	30	25	27	4	-35	-50	-72	-82	-99	-7
17	D	-54	-13	-93	-72	-58	-105	-110	-107	-90	-38	-13	-18	33	-2	10	-4	-1	-1	-6	2	-6	-13	-22	-32	-34
18	D	-10	-75	-71	-18	-55	-105	-202	-191	-161	-100	-56	-16	-10	-5	31	13	76	22	27	11	-16	-24	-28	-26	-41
19		-78	-70	-48	-24	-20	-56	-57	-54	-53	-38	-55	-37	-32	-4	-2	13	27	19	19	25	-6	-7	-5	-6	-23
20	Q	-13	-9	-6	-8	-8	-14	-21	-21	-26	-41	-31	-18	-16	12	30	40	11	8	10	7	13	7	2	-3	-4
21		-30	-50	-44	-20	-19	-42	-66	-69	-54	-58	-43	-26	-20	-6	2	20	61	35	7	7	6	2	-11	-16	-18
22	Q	-5	-21	-7	-6	-4	-21	-39	-49	-44	-35	-43	-43	-28	-16	-1	19	33	46	40	18	6	-11	-21	-21	-11
23		-20	-23	-17	-2	-13	-38	-29	-29	-33	-41	-43	-32	-31	3	-7	-2	26	35	34	28	22	17	-1	-3	-8
24		-13	-24	-28	-21	-35	-51	-50	-58	-55	-38	-20	2	68	7	17	9	-2	-2	-2	2	8	-6	-6	-6	-13
25		-4	-5	0	0	-6	-9	-37	-36	-35	-36	-36	-19	-7	-3	6	52	33	43	23	22	2	1	-21	0	-3
26		-24	-15	7	-1	-12	-10	-21	-17	-24	-40	-31	-16	43	23	27	5	18	35	27	26	29	28	27	16	4
27		18	-18	12	14	1	1	-36	-58	-39	-44	-30	-7	-13	78	49	26	51	51	15	38	15	19	-15	-6	5
28	D	1	-5	-16	-20	-43	0	-7	-18	-24	-44	-64	-34	11	80	69	20	79	50	22	23	8	3	-30	-18	2
29		-28	-29	1	-4	1	-16	-29	-41	-63	-83	-53	-9	-3	2	-7	19	22	15	25	32	19	15	-13	-14	-10
30		3	3	-27	-26	-3	-20	-14	-40	-30	-35	-39	-23	-10	22	20	42	22	21	20	19	17	9	17	9	-2
All		-9	-10	-10	-11	-15	-27	-40	-46	-43	-40	-33	-20	-3	9	17	25	33	29	24	17	9	-3	-10	-11	-7
Quiet		-1	-2	2	-1	-3	-11	-19	-25	-31	-31	-29	-22	-9	3	15	31	21	24	25	16	14	8	4	2	-1
Dist.		-8	-12	-38	-29	-32	-50	-85	-89	-75	-52	-40	-25	3	26	35	12	37	22	13	2	-12	-19	-32	-44	-20

June 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		39	38	38	36	55	45	56	46	35	29	16	11	7	15	23	23	17	22	24	51	64	43	29	8	32
2	D	28	27	33	15	15	46	92	73	42	35	17	18	9	4	23	40	39	40	49	30	30	27	21	27	33
3		50	51	66	60	63	59	57	50	39	30	24	10	0	2	17	21	24	27	23	29	11	16	32	33	33
4		63	53	59	65	67	65	58	43	36	24	16	-2	-2	11	15	42	27	33	38	32	23	16	27	10	34
5	Q	17	28	38	52	63	70	65	54	40	25	6	-2	3	6	15	40	30	31	46	33	18	19	18	31	31
6		30	38	49	54	63	62	50	49	37	21	7	-6	-7	1	12	20	28	44	31	45	40	30	32	20	31
7		16	7	36	43	62	66	53	44	35	25	13	16	19	14	15	20	40	35	22	19	27	66	65	48	34
8		54	42	37	48	53	52	63	59	45	41	32	19	13	9	4	10	15	29	31	23	37	38	71	60	37
9		40	48	48	45	48	38	46	47	48	36	25	19	11	20	14	13	16	21	23	27	22	25	85	58	34
10		60	48	55	61	55	52	43	58	20	21	6	5	11	15	18	15	21	21	30	21	22	25	27	23	31
11		33	39	43	41	52	59	62	63	48	32	17	8	2	12	16	18	25	33	27	29	37	30	30	32	33
12	Q	36	42	47	52	61	68	68	60	51	38	20		-2	1	11	22	29	34	33	28	25	25	28	21	(35)
13	Q	24	42	54	62	64	61	59	55	42	25	9	1	1	4	10	18	25	26	18	19	23	54	56	46	33
14		43	48	59	62	55	29	31	43	29	17	-5	-20	-30	-22	-7	-6	6	41	50	28	46	47	38	34	26
15		39	35	43	71	66	75	51	58	46	28	6	-18	-24	-15	-10	-9	-1	5	31	18	13	35	36	34	26
16	D	51	48	62	18	65	72	71	61	47	27	5	-14	-24	-22	-17	15	29	33	25	23	50	102	113	133	41
17	D	93	55	71	73	52	4	25	51	52	34	15	8	-3	-8	-7	22	11	8	13	11	20	44	42	43	30
18	D	84	62	44	57	50	67	51	58	73	25	17	16	15	7	5	26	7	28	54	35	23	56	57	45	40
19		60	55	45	57	75	79	64	60	52	41	25	12	3	1	8	24	26	28	40	46	28	27	29	32	38
20	Q	39	45	56	68	75	73	72	65	50	27	10	-3	-10	-16	-10	16	23	24	23	25	21	31	38	37	32
21		30	32	49	54	49	64	61	57	35	26	18	12	14	9	15	15	16	40	23	18	33	61	46	50	35
22	Q	45	53	53	60	66	64	59	52	43	24	11	2	-2	3	9	15	20	22	45	46	38	32	48	51	36
23		50	47	57	68	76	73	64	56	51	34	14	11	12	5	14	21	17	19	39	23	34	42	34	45	38
24		45	42	24	47	66	53	43	40	46	23	16	5	-1	12	6	13	22	27	27	24	29	26	31	33	29
25		43	44	59	67	64	69	77	64	52	37	19	4	-8	-4	9	13	30	40	30	35	50	25	6	40	36
26		46	35	56	68	53	71	79	66	52	29	-3	-8	-16	-3	-2	8	15	21	19	22	30	20	18	10	29
27		30	14	44	62	68	79	74	59	32	18	7	11	0	-3	28	30	24	23	28	37	36	34	22	21	32
28	D	46	38	34	37	9	35	62	63	46	45	18	-2	-14	-3	17	19	33	36	35	33	17	20	4	44	28
29		31	41	49	42	67	79	68	69	66	57	30	19	18	20	28	35	41	35	27	37	32	27	10	41	40
30		24	51	43	35	44	42	58	41	39	31	15	4	2	12	14	26	34	37	32	36	44	32	44	35	32
All		43	42	48	53	57	59	59	55	44	30	14	5	0	3	10	19	23	29	31	29	31	36	38	38	33
Quiet		32	42	50	59	66	67	65	57	45	28	11	0	-2	-1	7	22	25	27	33	30	25	32	38	37	33
Dist.		60	46	49	40	38	45	60	61	52	33	14	5	-4	-4	4	25	24	29	35	26	28	50	47	58	34

June 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		50	50	44	43	48	44	47	49	54	50	48	50	63	71	79	76	66	69	69	62	18	-1	10	-41	47
2	D	-34	10	19	-3	-33	-6	7	23	58	68	73	94	84	89	98	104	90	83	71	50	52	48	14	-44	42
3		-55	1	22	39	43	50	52	53	53	49	60	61	64	65	86	69	67	70	63	52	7	-91	-62	-90	30
4		-42	-18	11	43	43	45	45	42	42	49	63	63	78	79	74	85	73	85	58	55	31	28	37	14	45
5	Q	11	25	32	40	53	52	48	45	44	44	37	46	57	61	64	71	63	63	69	57	50	49	41	33	48
6		38	40	41	42	44	42	42	43	39	37	42	50	55	62	66	70	83	89	73	59	53	39	31	4	49
7		8	-6	7	9	26	34	38	42	37	33	33	45	64	73	84	98	99	86	72	58	44	8	2	20	42
8		32	29	24	9	20	40	46	42	44	47	40	43	54	68	79	102	82	75	66	53	-10	-70	-35	-22	36
9		1	35	41	24	28	30	36	43	44	44	59	58	64	75	68	62	64	65	61	48	38	-128	-117	-113	26
10		-34	28	45	51	48	44	49	54	67	62	56	59	57	56	69	74	80	73	64	32	46	46	34	25	49
11		28	38	36	33	34	37	37	42	38	35	28	27	42	49	53	58	61	59	52	50	46	39	43	44	42
12	Q	45	49	49	46	44	39	37	34	28	27	28		48	50	53	59	56	51	46	45	45	44	39	30	(43)
13	Q	19	30	32	32	30	32	31	29	32	27	27	28	32	37	40	46	49	45	42	42	42	29	6	14	32
14		27	35	37	37	34	32	31	35	45	44	42	56	59	54	53	51	64	81	61	49	38	22	23	25	43
15		18	-5	-6	23	20	34	39	38	35	36	37	43	53	56	59	62	64	65	57	42	40	37	27	14	37
16	D	22	31	14	-39	1	19	27	32	28	26	39	64	90	122	142	142	123	89	29	-4	-22	-77	-146	-149	25
17	D	-55	0	-33	-31	-16	-47	-14	23	45	93	101	108	96	77	81	102	76	60	48	41	34	40	27	8	36
18	D	-36	-58	-51	2	5	1	-24	-11	-2	41	84	57	64	84	131	116	118	101	97	62	48	11	5	14	36
19		-23	-20	5	34	52	46	55	62	65	62	56	62	59	67	61	67	76	79	80	47	51	55	57	57	50
20	Q	52	56	56	56	54	48	46	49	44	40	39	45	50	58	64	79	71	66	59	57	44	28	43	46	52
21		25	-52	-45	-5	19	26	28	47	57	56	54	53	52	54	61	68	95	98	67	55	46	29	29	34	40
22	Q	44	36	47	47	49	44	38	36	40	45	50	45	38	42	48	53	59	67	72	46	50	41	21	5	44
23		-3	-36	2	33	41	37	41	42	42	43	52	49	45	54	56	61	60	59	65	55	55	33	26	24	39
24		29	22	-30	-24	7	14	20	29	42	56	75	91	155	125	112	90	77	68	57	51	46	35	26	38	50
25		42	48	48	45	46	48	45	52	42	44	46	47	54	56	56	70	76	77	57	49	49	47	15	11	49
26		10	16	33	37	34	39	41	45	40	40	44	48	67	64	64	64	60	61	57	51	44	41	35	24	44
27		26	27	27	36	22	29	32	42	50	55	56	72	90	122	166	126	95	68	50	41	34	35	6	-13	54
28	D	31	38	19	10	-15	-7	20	35	36	41	63	62	76	99	146	124	125	66	68	63	49	40	-25	-28	47
29		-22	-44	-6	9	21	32	38	38	45	52	47	57	64	72	82	78	76	71	66	44	39	37	-7	-23	36
30		21	32	20	12	21	28	47	47	62	56	48	41	51	71	72	88	85	83	71	62	59	47	45	43	50
All		9	15	18	23	27	30	34	39	43	47	51	56	64	70	79	80	78	72	62	49	39	18	8	0	42
Quiet		34	39	43	44	46	43	40	38	38	37	36	41	45	50	54	62	60	58	58	49	46	38	30	26	44
Dist.		-14	4	-6	-12	-11	-8	3	21	33	54	72	77	82	94	120	117	106	80	63	42	32	12	-25	-40	37

Nurmijärvi Finland

July 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		9	3	-2	-3	-8	-5	-6	-15	-24	-38	-35	-21	6	9	14	20	12	19	22	17	16	8	3	4	0
2		-1	3	6	7	-1	-12	-20	-27	-46	-46	-18	-9	-20	-25	-2	13	13	41	28	23	4	2	2	-2	-4
3		-5	-10	-11	-8	-1	6	-2	-14	-23	-32	-21	-8	-3	32	19	23	30	22	65	30	33	24	18	-8	6
4		6	8	14	10	-12	-24	-13	-20	-33	-38	-24	-28	14	22	35	35	54	33	26	24	14	8	9	-15	4
5		-4	-4	-23	-19		-30	-28	-29	-35	-45	-40	-27	16	-21	27	56	52	56	35	20	13	5	-9	-2	(-2)
6		-2	6	10	7	-3	-14	-13	-27	-35	-40	-42	-28	-12	13	45	-2	22	4	14	13	4	0	2	5	-3
7		2	10	-10	6	2	-12	-40	-55	-38	-37	-17	8	32	-16	12	22	10	8	15	16	16	1	1	-1	-3
8	Q	0	0	0	-2	-7	-11	-15	-19	-28	-31	-23	-8	-4	15	-1	4	5	-2	1	3	4	5	4	2	-5
9	Q	1	1	2	1	-11	-13	-7	-11	-16	-19	-21	-24	-14	11	16	17	13	15	20	26	23	19	16	13	3
10	Q	16	19	25	19	12	-1	-7	-13	-21	-28	-13	-16		-3	14	17	20	29	35	34	38	27	18	15	(10)
11	D	13	1	4	-8	1	-23	-29	-38	-56	-83	-63	-37	-17	4	65	60	118	80	45	21	-60	-29	-40	-124	-8
12	D	-116	-107	-83	-211	-190	-196	-77	-89	-78	-84	-63	-40	-9	-14	50	28	15	19	14	4	-11	-13	-20	-42	-55
13		-15	-17	-9	-11	-19	-20	-35	-58	-57	-53	-34	-15	-29	-14	-4	27	35	25	25	7	2	-11	-12	-8	-13
14		-9	-4	0	-7	-17	-23	-37	-44	-51	-49	-48	-37	-20	-15	-4	9	36	23	22	12	2	2	10	-1	-10
15		-61	-24	-35	-58	-35	-38	-18	-29	-38	-30	-31	-45	-29	-15	-2	1	1	8	18	23	41	16	-32	-32	-18
16	D	-57	-29	-14	-10	-30	-56	-51	-68	-101	-70	-30	83	198	138	59	16	-2	2	-4	-14	2	-60	-21	-35	-6
17		-18	-36	-47	-30	-24	-33	-43	-53	-55	-50	-30	-35	-3	39	22	-1	-1	2	38	26	5	-5	-1	-10	-14
18		-13	-6	-34	-42	-11	-12	-22	-34	-37	-37	-37	-35	-29	-17	-5	-3	11	36	20	20	12	7	1	-31	-13
19		-53	-42	-19	-19	-6	-1	-7	-22	-43	-57	-38	-25	-4	-29	5	6	2	45	24	16	14	-18	-106	-115	-20
20		-14	-18	-52	-12	-8	-31	-44	-44	-40	-40	-39	-38	-31	5	-5	37	10	12	17	14	14	24	9	-27	-13
21	Q	-28	-33	-7	1	-2	-9	-15	-26	-37	-35	-37	-27	-9	-13	-9	-3	4	10	5	11	6	-4	-6	-2	-11
22	Q	-1	-6	5	3	-9	-15	-17	-24	-38	-43	-31	-26	-20	-14	1	8	20	16	36	14	6	6	5	5	-5
23		1	-6	-2	-1	-1	-7	-14	-28	-35	-38	-39	-28	-15	-4	5	46	55	17	25	30	13	-5	-11	-10	-2
24		3	15	19	19	14	7	0	-11	-21	-31	-31	-24	-3	10	13	24	26	28	22	21	23	14	-8	0	5
25		3	6	14	11	4	-7	-32	-35	-18	-17	-17	-5	-37	-25	-6	4	7	15	22	18	15	14	12	12	-2
26		6	5	10	6	-11	-20	-7	-10	-27	-20	-3	7	-5	0	68	-2	44	102	76	62	-6	-54	4	-57	7
27		-63	-52	-25	-2	-2	-11	-62	-89	-59	-58	-57	-24	-19	38	18	8	26	18	11	12	2	6	-4	-8	-17
28		-9	-9	5	6	3	-2	-11	-23	-35	-35	-32	-44	-22	-9	81	23	24	19	27	9	7	23	5	4	0
29	D	6	5	-16	-37	-52	-13	-17			-45	-59	-28		-8	77	105	53	48	11	-3	3	-9	-76	-66	(-6)
30		-14	-6	-12	-30	-16	-22	-41	-64	-66	-75	-59	-45	-4	8	28	13	43	29	28	26	2	-12	-17	-37	-14
31	D	-26	-10	2	-2	-35	-47	-46	-52	-41	-86	-84	-56	-7	38	-15	50	32	4	10	4	13	-13	-11	-36	-17
All		-14	-11	-9	-13	-16	-22	-25	-36	-41	-45	-36	-22	-3	5	20	21	25	25	24	17	9	-1	-8	-20	-7
Quiet		-2	-4	5	4	-4	-10	-12	-18	-28	-31	-25	-20	-12	-1	4	8	12	13	19	18	15	11	8	7	-2
Dist.		-36	-28	-21	-53	-61	-67	-44	-62	-69	-73	-60	-16	41	32	47	52	43	30	15	3	-11	-25	-34	-61	-19

July 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		38	40	46	55	51	62	61	52	47	34	15	1	-3	8	16	24	36	36	35	39	35	29	30	39	34
2		40	45	45	51	52	51	54	59	34	15	1	-9	-7	0	3	13	18	18	37	30	29	25	24	25	27
3		45	41	30	34	56	66	66	57	45	36	22	12	2	-1	10	19	21	30	19	37	29	31	25	50	33
4		63	47	57	57	54	38	28	42	36	25	11	-3	0	10	12	27	40	41	29	28	33	27	15	24	31
5		27	38	31	37		48	47	53	46	27	10	3	0	8	15	19	43	41	29	26	33	24	29	36	(29)
6		37	40	41	46	56	64	67	61	51	41	21	10	3	-7	1	14	24	26	25	24	30	33	27	38	32
7		34	27	14	46	56	48	52	43	26	23	21	4	1	14	26	40	35	34	34	33	35	27	27	31	30
8	Q	36	44	51	57	63	60	52	44	33	23	12	-2	-6	-4	10	17	23	30	29	32	33	32	34	35	31
9	Q	36	36	40	44	45	52	57	62	57	43	27	13	11	20	29	33	32	31	32	24	26	25	23	27	34
10	Q	30	40	49	52	60	63	66	64	50	38	26	11		2	3	6	11	12	16	19	18	26	24	27	(31)
11	D	47	52	45	24	28	44	40	33	62	32	6	-18	-21	-11	-10	17	4	19	32	28	29	29	51	69	26
12	D	83	137	90	42	36	64	84	99	73	60	45	38	31	36	30	22	29	25	40	42	24	30	65	40	53
13		60	59	65	64	72	78	79	59	29	13	2	-3	5	14	20	25	58	37	28	33	35	36	44	43	40
14		49	52	65	76	78	64	62	63	49	34	26	11	-3	-4	3	15	25	22	33	22	27	27	29	20	35
15		18	58	64	48	53	54	75	66	50	38	25	30	14	15	19	28	30	32	30	32	59	46	55	42	41
16	D	32	52	67	67	61	25	37	74	40	56	28	14	3	-25	-29	-2	-4	13	17	15	16	7	29	47	27
17		22	16	60	66	67	73	76	63	49	34	15	6	6	7	20	23	20	25	58	42	28	22	24	58	37
18		58	52	46	38	66	82	76	71	57	45	25	15	16	16	16	20	21	24	38	25	27	35	34	71	41
19		108	85	50	54	76	82	79	78	63	42	23	4	-10	-7	-12	18	15	8	27	25	36	46	34	59	41
20		49	55	51	45	61	70	61	53	43	39	28	12	-1	-9	3	5	17	21	26	25	46	48	39	38	34
21	Q	62	39	48	52	63	76	74	72	61	48	28	16	9	19	25	26	31	34	36	34	36	33	37	38	42
22	Q	45	53	59	59	61	64	62	62	55	42	25	5	-5	-9	5	17	25	27	45	30	31	31	34	36	36
23		35	42	47	59	59	68	66	68	54	32	14	3	2	5	11	20	38	44	35	42	31	44	59	68	40
24		42	44	50	54	55	62	64	56	44	30	16	3	-5	0	11	17	21	23	31	28	24	41	52	39	34
25		41	48	57	64	70	64	61	35	32	25	8	-4	2	-5	5	16	22	23	23	26	28	32	33	40	31
26		48	54	52	59	72	68	58	57	41	22	6	-5	-2	4	-14	-3	-12	94	56	40	61	76	60	56	40
27		67	41	27	39	56	60	64	36	38	37	22	16	16	22	21	28	42	40	41	40	34	38	38	35	37
28		30	35	48	57	64	66	62	56	43	33	28	10	-8	-1	1	43	34	49	48	31	33	44	27	40	36
29	D	40	41	32	24	28	34	54			43	25	19		9	28	53	38	34	39	64	51	33	90	96	(42)
30		64	53	51	53	63	67	77	69	55	41	26	3	10	18	17	36	64	57	64	56	50	46	33	8	45
31	D	-4	26	53	56	50	49	44	50	37	48	23	11	10	20	32	45	53	43	37	26	2	39	55	17	34
All		45	48	49	51	58	60	61	59	47	35	20	7	2	5	11	22	27	32	34	32	33	34	38	42	36
Quiet		42	42	49	53	58	63	62	61	51	39	24	9	2	6	14	20	24	27	32	28	29	29	30	32	34
Dist.		40	62	57	42	40	43	52	64	53	48	25	13	6	6	10	27	24	27	33	35	24	27	58	54	36

July 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		45	43	42	42	36	41	44	44	45	46	48	50	53	61	67	67	64	58	57	55	52	47	40	38	49
2		37	45	41	41	42	40	34	30	29	27	33	47	55	50	54	54	50	54	64	61	57	51	48	30	45
3		13	9	17	31	37	39	42	44	40	37	39	43	48	61	65	74	79	77	61	38	58	50	37	-1	43
4		6	17	15	29	32	32	32	35	38	41	61	65	92	94	88	92	84	76	62	56	45	36	16	6	48
5		-35	-17	-4	10		25	26	33	40	38	35	46	69	60	64	86	95	79	67	61	43	39	35	39	(41)
6		45	45	48	51	49	41	41	42	40	38	38	35	39	43	58	59	61	54	52	48	48	49	47	40	46
7		34	28	15	30	37	38	43	48	56	48	39	41	60	64	74	77	65	60	56	54	52	48	48	48	48
8	Q	49	50	48	47	46	47	44	41	38	35	35	39	48	51	50	51	50	50	45	46	46	45	45	45	45
9	Q	45	46	45	45	45	41	38	35	31	29	32	40	46	48	51	56	57	53	52	49	48	46	43	42	44
10	Q	42	44	45	44	42	39	36	33	29	26	29	31		50	48	51	47	42	43	44	45	44	39	33	(40)
11	D	10	6	6	-16	-23	1	9	17	32	54	75	71	68	94	166	195	166	130	120	96	-22	15	10	-86	50
12	D	-174	-166	-53	-122	-141	-95	21	39	58	57	59	64	82	85	94	72	66	65	73	67	61	49	40	27	14
13		19	22	43	50	43	52	53	54	53	47	46	56	62	67	66	76	94	70	66	61	54	41	28	25	52
14		23	27	31	38	43	41	43	45	43	38	35	39	45	54	55	56	66	66	70	60	58	53	51	31	46
15		-67	-20	-1	-21	-11	7	34	46	45	41	57	71	61	63	60	60	56	55	56	60	30	-33	-41	-56	23
16	D	-89	-38	9	31	28	7	12	27	38	73	93	216	257	181	141	143	116	117	85	62	35	-77	-37	-33	58
17		-25	-22	10	50	63	59	58	52	52	57	59	58	61	84	97	83	65	61	64	46	50	36	-11	11	47
18		31	45	30	13	36	50	51	52	51	47	42	40	40	45	50	53	54	60	69	60	53	52	39	-22	43
19		-75	-46	13	32	41	50	49	45	47	42	36	42	57	66	75	85	64	61	68	60	52	1	-122	-135	25
20		-16	13	2	35	47	51	47	45	41	40	46	49	50	61	68	74	66	57	54	50	48	35	-17	-27	38
21	Q	-44	-25	6	29	37	48	51	51	49	41	38	35	41	45	50	52	51	53	56	55	53	50	50	51	38
22	Q	50	46	41	46	47	49	50	50	45	33	29	36	45	50	52	54	59	58	59	48	49	49	48	48	48
23		46	44	43	43	42	45	39	34	36	35	32	30	37	45	49	65	87	81	69	57	44	28	14	24	45
24		44	50	53	53	48	45	42	39	36	33	28	30	40	47	53	56	55	53	52	48	45	39	10	-16	41
25		34	43	49	49	45	41	40	37	37	35	32	48	49	48	49	46	47	48	46	46	45	45	44	40	43
26		40	44	49	49	43	36	35	32	29	27	21	25	32	43	63	67	77	146	80	88	60	-48	18	-42	42
27		-53	-53	-69	-11	28	40	38	47	63	65	71	84	85	106	109	88	81	67	66	54	36	38	36	39	44
28		41	43	52	51	51	49	47	48	48	47	45	46	60	65	109	128	112	103	80	68	57	35	15	31	60
29	D	41	48	36	8	8	15	28			45	45	58		78	102	116	122	102	31	39	63	38	-96	-75	(41)
30		4	36	42	44	54	46	45	50	62	62	65	63	91	91	97	96	108	95	86	38	36	24	11	-2	56
31	D	-40	-1	29	41	37	40	53	58	57	65	93	87	100	124	118	119	113	92	79	57	0	-11	11	-21	54
All		3	13	24	28	31	34	39	42	44	43	46	54	65	69	76	79	77	72	64	56	45	29	16	4	44
Quiet		28	32	37	42	43	45	44	42	38	33	33	36	45	49	50	53	53	51	51	48	48	47	45	44	43
Dist.		-50	-30	5	-11	-18	-6	25	35	46	59	73	99	127	112	124	129	117	101	78	64	27	3	-14	-37	44

Nurmijärvi Finland

August 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-65	-68	-42	-60	-33	-51		-48	-51	-53	-41	-8	-14			17	27	19	5	10	6	3	-25	-84	(-26)
2		-11	-11	-12	-5	-6	-9	-27	-58	-50	-40	-32	-31	-11	8	11	54	44	14	3	11	13	-2	-9	-19	-7
3		-8	-11	-13	-22	-35	-27	-32	-35	-37	-45	-36	-36	-31	-17	-5	14	24	25	27	15	1	-10	0	-7	-13
4	Q	-2	0	0	1	-6	-15	-30	-45	-39	-47	-35	-29	-11	-2	6	22	18	28	24	18	15	9	19	15	-4
5	Q	18	11	8	8	5	2	-2	-12	-23	-34	-32	-26	-17	-6	5	15	19	26	29	27	24	27	31	1	4
6		-20	-9	-86	-33	-27	-38	-106	-96	-57	-48	-49	-33	-27	3	7	-7	-14	-7	0	3	6	4	1	-2	-27
7		-3	-6	-3	-1	-13	-19	-26	-26	-25	-20	-17	-17	-8	17	44	10	41	43	25	-31	-40	-77	4	1	-6
8		-8	-50	-90	-48	-37	-79	-5	-42	-36	-63	-50	-37	-21	-6	1	23	35	31	37	8	6	8	-4	-22	-19
9		-10	3	12	8	-1	-16	-28	-38	-38	-37	-15	-15	-21	-7	8	8	21	12	24	16	8	12	-8	-16	-5
10		4	4	-13	1	-3	-15	-27	-33	-37	-35	-38	-15	-4	-3	6	5	7	11	25	16	6	4	1	0	-6
11		-3	3	6	-2	-4	-9	-20	-29	-31	-39	-31	-20	-3	0	9	-4	7	25	15	24	11	-2	-15	-5	-5
12		-25	-3	8	-25	-5	-7	-21	-43	-38	-39	-38	-10	-23	12	38	19	19	44	10	7	11	3	0	-6	-5
13		-1	2	-11	-44	-9	-8	-30	-42	-47	-40	-28	-11	7	-11	4	10	12	15	14	12	14	6	4	11	-7
14		-1	-12	-7	1	0	-20	-47	-40	-37	-36	-27	-24	-4	4	9	16	21	16	39	24	-3	3	-9	-6	-6
15		-4	-6	1	0	-8	-19	-20	-23	-35	-30	-17	-11	-2	15	31	25	-2	14	12	8	10	11	2	8	-2
16	Q	7	5	5	-6	-3	-4	-14	-28	-40	-41	-37	-13	-4	-6	23	21	10	12	17	12	15	15	10	9	-1
17		8	11	11	8	1	-4	-7	-10	-15	-19	-20	-15	-5	3	24	25	57	38	66	53	21	-1	-28	-145	2
18	D	-59	-11	-15	-14	-84	-155	-147	-227	-135	-6	16	166	178	206	272	269	30	-10	-91	-112	-170	-212	-259	-161	-31
19		-168	-100	-51	-60	-41	-44	-28	-39	-48	-52	-44	-36	-33	-31	-22	-19	-19	-2	-7	-3	9	-1	-11	-11	-36
20		-17	-15	-14	-18	-32	-35	-30	-26	-34	-36	-40	-24	-28	-8	10	36	27	22	1	6	3	4	-9	12	-10
21	D	-29	-4	-4	-30	-28	-50	-66	-72	-46	-32	-66	-35	8	9	-2	57	105	54	9	-42	-36	-61	-50	-119	-22
22	D	-51	-77	-28	-9	-26	-61	-40	-47	-73	-68	-77	-43	8	27	56	10	25	46	-2	0	8	4	-26	-11	-19
23	D	-22	-26	-38	-69	-15	-25	-46	-84	-68	-43	-36	-15	-15	18	-11	32	20	16	-5	-1	-10	-8	-15	-7	-20
24		-13	-13	-10	-13	-18	-22	-36	-65	-80	-58	-47	-17	-23	-22	-8	-9	-2	1	7	21	-15	-23	-15	-7	-20
25		-15	-15	-12	-12	-41	-35	-52	-62	-67	-51	-43	-43	-30	-19	24	-7	12	13	2	1	3	-4	-4	-5	-19
26		-5	-15	-10	-8	-9	-15	-26	-30	-34	-33	-26	-20	-9	-14	-2	11	-1	-3	-6	0	-6	-15	-9	-6	-12
27	Q	-8	-12	-10	-8	-6	-14	-26	-39	-49	-47	-35	-25	-7	-6	8	6	14	-6	-1	6	-5	-3	2	4	-11
28		-16	-37	-8	-6	-20	-20	-30	-25	-36	-57	-28	2	-14	-8	18	1	2	19	24	5	6	5	6	9	-9
29		5	3	6	6	0	-10	-19	-27	-33	-32	-33	-12	-9	6	24	10	18	18	13	-10	8	2	7	5	-2
30		-6	-12	-26	-44	-10	-8	-22	-37	-39	-51	-34	-40	-19	-12	4	6	1	11	9	10	4	3	2	0	-13
31	Q	1	2	1	-1	-7	-7	-11	-22	-33	-43	-37	-27	-13	-4	7	13	3	6	15	2	2	3	2	5	-6
All		-17	-15	-14	-16	-17	-27	-34	-47	-45	-41	-35	-17	-7	5	20	22	19	18	11	4	-2	-10	-13	-18	-12
Quiet		4	1	1	-1	-3	-8	-17	-29	-37	-42	-35	-24	-10	-5	10	15	13	13	17	13	10	10	13	7	-4
Dist.		-45	-37	-25	-36	-37	-68	-75	-96	-75	-40	-41	13	33	65	79	77	41	25	-17	-29	-40	-55	-75	-76	-22

August 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	0	65	43	41	40	45		37	43	37	25	24	24			44	47	46	44	43	32	44	52	13	(38)
2		51	31	54	52	49	66	61	57	48	37	20	8	6	14	17	42	53	40	35	27	48	48	46	23	39
3		23	26	60	58	68	67	71	61	51	37	24	10	13	22	28	32	38	38	47	38	51	37	39	35	41
4	Q	40	49	52	60	60	65	64	55	45	31	18	7	-1	6	18	25	29	33	32	40	45	40	32	38	37
5	Q	49	50	55	65	71	75	78	72	61	45	33	15	3	3	9	16	20	19	23	21	21	23	27	61	38
6		97	107	83	100	73	62	64	41	41	27	17	3	5	-2	19	23	32	30	27	32	30	28	31	43	42
7		46	53	60	66	75	69	66	53	41	30	12	-1	-5	-2	20	27	14	35	37	24	45	75	46	47	39
8		46	44	60	46	85	40	54	57	49	33	26	18	7	10	18	25	19	28	60	28	41	44	39	23	38
9		27	43	59	61	61	68	62	50	43	29	14	14	13	9	30	33	37	38	53	33	36	24	44	48	39
10		49	67	84	81	81	77	73	63	48	32	21	10	0	11	26	33	35	34	46	44	34	29	29	29	43
11		29	46	57	64	65	66	63	51	41	27	9	-4	-6	1	18	29	35	44	32	40	50	48	32	31	36
12		43	35	69	68	61	67	67	64	41	22	9	-1	-2	6	7	32	27	50	27	28	30	30	39	23	35
13		30	44	55	54	58	63	66	60	42	28	15	6	0	10	16	21	23	26	27	33	28	7	24	43	32
14		46	34	34	64	70	76	75	43	33	27	14	8	6	14	24	30	36	42	51	51	41	39	37	37	39
15		45	44	50	67	74	73	66	58	37	16	1	-5	-7	-4	3	11	27	25	48	38	28	24	7	38	32
16	Q	48	50	50	59	55	61	66	57	41	24	10	-12	-12	-4	2	18	23	22	21	25	20	33	36	38	30
17		37	45	52	58	63	66	65	58	46	30	13	1	-2	2	-3	2	1	-4	3	29	36	42	119	131	37
18	D	104	48	77	52	14	-5	50	21	31	47	34	59	30	-5	-7	21	43	53	43	71	93	101	115	95	49
19		119	97	86	87	74	75	81	66	55	37	18	8	5	19	33	42	44	34	31	31	33	35	40	44	50
20		49	55	59	57	49	34	49	48	35	28	18	7	7	8	16	23	56	51	37	27	40	73	42	59	39
21	D	80	56	42	34	33	4	35	36	40	41	27	17	8	0	21	18	44	89	86	84	154	100	70	64	49
22	D	67	93	90	78	64	47	57	61	58	49	36	21	15	20	43	42	67	60	45	31	78	16	39	53	51
23	D	45	39	41	25	60	49	56	62	62	41	19	11	27	27	34	57	72	52	39	41	35	28	24	25	40
24		32	33	53	56	50	55	61	55	37	26	14	16	24	21	27	37	31	34	49	83	62	65	53	45	42
25		36	18	36	33	8	8	37	38	40	46	31	24	17	20	22	44	52	59	47	50	50	46	38	37	35
26		37	52	53	56	65	66	67	61	47	33	17	15	14	12	23	40	45	72	59	47	51	63	30	28	44
27	Q	38	42	41	51	56	55	55	52	38	22	10	5	5	17	29	42	50	47	57	60	53	42	33	45	39
28		69	65	92	78	68	57	50	49	34	19	3	-3	2	16	20	29	30	40	61	45	30	29	42	49	41
29		44	47	50	53	53	50	47	44	31	11	-4	-4	-3	7	25	19	23	26	49	73	79	38	33	37	34
30		44	43	42	43	55	64	68	60	48	32	13	10	5	12	17	32	50	45	37	30	32	32	40	38	37
31	Q	44	47	47	50	57	60	58	54	44	26	13	2	-1	12	36	38	36	31	35	44	40	38	41	37	37
All		49	50	58	59	58	56	61	53	43	31	17	9	6	9	20	30	37	40	41	42	47	43	43	44	39
Quiet		44	47	49	57	60	63	64	58	46	30	17	3	-1	7	19	28	32	31	34	38	36	35	34	44	36
Dist.		59	60	59	46	42	28	50	44	47	43	28	27	21	11	23	36	54	60	51	54	78	58	60	50	45

August 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-122	-110	-60	-7	17	23		43	45	52	52	84	100			96	97	90	69	67	50	25	-3	-64	(26)
2		-35	-53	-9	23	33	43	43	45	51	50	48	50	68	85	86	101	92	70	64	59	33	24	23	18	42
3		25	20	39	42	44	49	49	52	53	52	55	60	71	81	73	66	67	70	70	42	32	6	36	29	49
4	Q	35	46	52	55	52	51	49	47	45	45	44	40	45	52	56	63	62	68	67	58	43	50	51	47	51
5	Q	49	53	54	55	51	48	46	46	40	31	25	26	35	45	47	49	47	47	48	47	46	38	15	4	41
6		-18	-107	-143	-49	10	42	34	48	62	58	63	73	70	66	68	55	54	48	45	49	49	49	48	48	30
7		53	53	54	57	53	50	44	42	36	35	40	44	49	60	93	71	66	88	61	-91	-77	-132	-16	23	31
8		38	-40	-46	-16	21	-20	19	35	49	48	54	53	59	70	75	86	80	87	66	52	53	49	48	37	40
9		30	46	52	53	50	47	44	41	43	45	49	52	56	65	72	60	61	57	57	50	44	-4	29	17	47
10		-19	-9	-20	29	44	45	45	41	39	42	45	39	43	46	57	58	56	52	52	44	44	47	46	44	38
11		41	48	50	47	46	43	43	43	39	38	41	41	46	50	56	54	57	61	58	50	34	27	9	1	43
12		-11	-17	16	6	21	25	31	39	50	51	59	67	74	92	93	91	78	71	60	60	14	22	33	29	44
13		36	46	44	36	43	47	49	49	41	37	35	41	47	55	61	64	60	58	56	52	50	-6	-15	30	42
14		22	29	22	43	50	44	45	44	41	36	34	42	49	57	59	58	62	66	59	39	38	46	38	34	44
15		36	43	46	48	49	45	42	44	43	43	41	40	43	51	58	66	63	55	59	52	50	37	3	18	45
16	Q	34	44	44	43	48	47	42	43	43	41	39	48	59	61	65	71	67	60	56	54	41	41	44	46	49
17		46	48	50	51	51	49	46	42	38	34	31	29	37	47	47	45	53	65	94	125	71	53	-13	-99	43
18	D	-94	-55	-57	0	-6	-25	10	48	84	188	163	217	212	225	217	169	76	49	29	31	-66	-182	-140	-146	40
19		-34	-11	21	44	69	70	75	70	68	68	69	68	67	69	71	73	69	64	60	61	62	63	62	62	57
20		61	62	61	60	53	52	58	56	54	50	47	54	63	62	66	83	93	82	76	64	67	53	31	-28	58
21	D	-26	26	49	33	21	7	24	50	63	62	67	72	100	144	117	136	213	135	112	37	-61	-81	-13	-201	45
22	D	-69	-83	5	47	51	45	79	74	75	90	86	95	108	142	175	137	122	74	63	68	12	-26	1	40	59
23	D	44	46	31	12	42	41	45	54	75	85	69	86	106	113	103	117	89	74	74	54	37	36	4	-3	60
24		-3	22	42	47	50	54	55	60	67	61	58	81	93	83	84	76	63	60	70	51	32	30	43	54	56
25		51	6	11	35	34	33	48	66	67	60	59	67	73	75	92	94	90	76	65	61	52	51	53	33	56
26		-3	21	50	59	63	60	58	57	49	43	45	62	72	71	80	90	90	91	71	64	55	47	35	27	57
27	Q	43	52	57	58	58	58	56	54	53	53	56	60	70	77	86	85	87	81	78	59	54	56	45	5	60
28		6	-7	-1	24	30	47	55	55	44	44	41	53	59	60	79	84	78	72	62	55	57	56	45	42	48
29		50	55	57	56	55	54	54	54	50	48	54	67	67	84	98	101	106	94	79	51	18	38	52	56	62
30		47	35	34	12	33	41	48	46	49	50	54	53	68	73	78	81	83	73	66	59	55	44	48	51	53
31	Q	52	55	56	57	55	57	56	56	52	51	52	53	57	64	84	78	69	59	58	58	54	54	54	52	58
All		12	12	21	34	42	41	46	50	52	55	54	62	70	77	83	82	79	71	65	51	34	20	22	10	48
Quiet		42	50	53	53	53	52	50	49	47	44	43	45	53	60	67	69	67	63	61	55	48	48	42	31	52
Dist.		-53	-35	-6	17	25	18	39	54	68	95	87	111	125	156	153	131	119	84	69	51	-6	-46	-30	-75	48

Nurmijärvi Finland

September 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		5	2	3	18	23	9	-5	-21	-27	-27	-29	-18	-11	-2	-1	5	9	21	16	4	-1	-7	-2	1	-2
2		-6	7	-4	1	-1	-3	-8	-14	-23	-21	-26	-17	5	24	27	5	2	5	5	5	6	4	8	5	-1
3		-4	-11	7	1	-7	-16	-9	-16	-28	-46	-41	-40	-9	-7	3	-4	1	16	5	2	3	3	3	-8	-9
4		-8	-1	-7	2	-18	-17	-24	-36	-43	-58	-39	-18	-5	20	-3	13	3	9	13	16	-5	-6	-35	-19	-11
5		4	-16	-8	-14	-7	-19	-23	-28	-39	-39	-35	-16	-9	2	7	9	4	-3	1	6	2	-2	-5	-4	-10
6		-7	-14	-11	-1	-4	-11	-22	-33	-30	-34	-15	-15	-3	-4	-2	2	-2	5	7	10	2	3	-1	4	-7
7	Q	-4	-8	-6	-7	-12	-14	-16	-21	-27	-30	-23	-12	-4	1	7	8	4	1	6	3	3	4	3	3	-6
8		4	1	0	-2	-7	-17	-27	-31	-31	-22	-9	2	7	20	5	6	8	11	17	6	11	9	9	17	-1
9		3	3	2	-1	-6	-11	-18	-19	-16	-9	-21	-27	9	12	-6	-8	5	16	22	-5	6	-17	-31	-57	-7
10		-22	-4	-3	-5	-10	-21	-36	-46	-44	-39	-43	-11	-1	18	-14	-4	-1	-4	7	-6	-14	-4	-3	-2	-13
11		-3	-33	-3	-1	-18	-15	-26	-35	-41	-37	-29	-13	-6	4	8	3	11	-2	8	25	-1	-4	2	2	-9
12		5	-1	1	-3	-11	-27	-21	-25	-33	-28	-23	-7	3	7	11	10	1	0	6	10	8	7	6	4	-4
13		-8	-4	-11	-10	-7	-18	-25	-32	-40	-34	-19	-11	-3	-3	0	-1	-3	2	6	3	0	-6	1	-1	-9
14	Q	-7	-6	4	1	-2	-7	-16	-23	-25	-26	-19	-9	3	0	-2	-4	-3	5	6	9	6	3	1	6	-4
15		4	3	0	0	1	-3	-9	-15	-19	-20	-20	-14	-6	6	9	5	9	11	12	25	25	10	19	11	2
16	D	-8	-14	-5	13	5	-3	-12	-20	-40	-43	-39	-34	-13	29	93	18	5	9	16	-16	-13	-13	-9	-14	-5
17	D	-13	-42	-8	12	-11	-24	-48	-19	-53	-75	-40	-32	-34	146	47	-9	-20	15	-2	-21	-43	-87	-95	-71	-22
18	D	-124	-63	-59	-26	-25	-52	-25	-42	-47	-56	-38	-50	-18	15	13	7	37	3	-23	-44	-61	-35	-77	-98	-37
19	D	-45	-4	-9	-22	-25	-24	-44	-47	-71	-90	-38	-7	-3	-14	8	6	51	-9	-11	-12	-2	-12	-20	-31	-20
20		-29	-19	-31	-17	-49	-14	-33	-33	-47	-51	-42	-36	-35	-27	-20	-9	14	-5	-17	-11	-9	-2	-9	-10	-23
21		-36	-24	-3	-4	-8	-17	-33	-43	-47	-41	-56	-48	-30	-1	-1	-5	-18	-4	-7	-2	-12	-12	-7	-2	-19
22		-9	-17	-21	-12	-9	-18	-28	-45	-41	-46	-32	-34	-16	-4	1	-6	-14	-16	-18	-3	-13	-6	-6	-6	-18
23		-7	-11	-18	-25	-14	-12	-19	-34	-43	-51	-50	-38	-33	-8	-4	-16	-8	3	3	-9	-1	8	4	-6	-16
24	D	4	-20	-74	-15	-25	-16	-39	-64	-46	-38	-43	-22	-33	-14	13	14	-5	-22	-18	-16	-30	-9	-34	-93	-27
25		-32	-15	-9	7	-16	-27	-31	-36	-45	-54	-32	-30	-22	-16	4	-11	13	-9	-17	-20	-43	-27	-8	-11	-20
26		-16	-21	-18	-5	-4	-14	-18	-30	-54	-54	-36	-26	-17	-12	-8	5	1	-17	-18	-19	1	-8	-9	-22	-17
27		-14	-7	-10	-8	-6	-6	-12	-20	-28	-34	-30	-25	-21	-17	-13	-9	-5	-3	1	1	5	2	-2	-11	
28	Q	-1	-4	-6	-7	-6	-5	-9	-15	-27	-36	-39	-32	-20	-17	-9	-11	-2	1	0	5	-1	2	1	-1	-10
29	Q	-3	-4	-4	1	1	3	0	-9	-21	-33	-38	-35	-26	-17	-9	-5	-4	0	4	0	1	5	3	2	-8
30	Q	1	1	2	3	7	8	5	-5	-21	-31	-28	-26	-19	-9	-4	-14	-19	-14	-6	-6	0	3	10	-2	-7
All		-13	-12	-10	-4	-9	-14	-21	-29	-36	-40	-32	-23	-12	4	5	0	3	1	1	-2	-6	-6	-9	-14	-12
Quiet		-3	-4	-2	-2	-2	-3	-7	-15	-24	-31	-29	-23	-13	-8	-3	-5	-5	-1	2	2	2	3	4	2	-7
Dist.		-37	-29	-31	-7	-16	-24	-33	-38	-51	-60	-40	-29	-20	32	35	7	14	-1	-8	-22	-30	-31	-47	-61	-22

September 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		36	37	35	44	59	62	56	59	56	44	26	10	4	5	12	20	26	28	38	61	49	51	43	50	38
2		56	50	58	59	59	58	58	51	41	24	10	0	-4	-3	26	25	26	28	30	42	47	37	31	39	35
3		53	48	56	63	64	48	51	48	39	28	3	9	-4	-2	12	21	23	23	51	36	30	66	61	35	36
4		39	39	46	52	67	60	59	55	34	21	13	5	12	8	28	32	29	27	70	62	70	112	65	61	44
5		27	39	50	62	67	70	62	53	41	25	15	4	18	19	30	70	46	29	30	43	41	39	43	44	40
6		44	42	36	56	61	65	63	51	30	19	5	7	15	24	30	38	51	52	41	46	37	31	31	35	38
7	Q	43	42	49	55	57	55	52	43	33	21	10	7	12	21	32	39	39	35	42	35	34	35	39	41	36
8		41	44	47	54	60	63	60	50	36	22	9	5	13	16	25	25	20	23	25	25	29	33	46	53	34
9		57	53	54	57	59	60	54	42	31	13	4	0	-9	-11	5	14	21	26	69	42	72	67	41	45	36
10		84	63	61	61	63	62	61	55	36	16	12	6	14	14	26	31	29	41	88	55	37	46	55	47	44
11		51	38	58	67	42	41	41	36	31	18	8	2	13	17	25	30	30	34	40	63	47	23	37	46	35
12		42	39	49	55	59	51	45	46	37	19	8	4	12	33	36	35	32	35	32	29	40	35	38	44	36
13		33	38	42	51	52	54	47	35	33	25	23	23	26	32	34	33	31	30	33	36	35	31	35	54	36
14	Q	51	62	59	55	56	56	56	49	35	22	18	21	18	22	26	29	32	34	34	41	38	45	49	34	39
15		47	48	49	47	48	49	48	47	42	29	17	15	17	20	21	24	25	24	24	28	36	40	31	76	35
16	D	58	63	62	52	16	11	7	9	33	24	16	3	-1	-11	56	9	18	33	56	30	42	51	52	49	31
17	D	61	27	4	55	64	46	10	21	24	39	39	33	24	60	51	16	24	85	71	56	55	59	86	107	46
18	D	95	41	32	42	33	53	51	43	51	60	35	53	31	70	31	35	98	72	66	83	123	91	87	37	59
19	D	35	71	62	48	40	46	47	60	58	36	30	33	50	32	61	55	101	69	54	48	41	69	53	39	52
20		23	40	44	35	15	24	29	58	58	50	48	37	30	27	68	46	86	53	48	49	54	44	49	44	44
21		37	14	46	51	51	53	53	54	48	34	30	26	26	20	38	36	38	64	57	43	46	46	41	40	41
22		41	34	19	33	40	49	42	38	33	35	23	16	14	19	47	45	72	56	55	72	46	39	38	38	39
23		39	42	29	28	26	60	64	58	46	31	19	8	16	18	22	39	38	75	65	56	47	44	39	32	39
24	D	33	75	38	16	27	29	40	40	34	27	29	18	23	13	45	90	71	49	58	20	36	45	66	56	41
25		42	93	78	60	61	47	32	33	33	24	23	39	27	26	54	44	79	59	76	71	56	42	36	34	49
26		32	41	41	51	48	47	47	42	37	31	28	20	24	28	35	70	80	60	74	53	34	39	44	20	43
27		34	61	54	51	52	51	50	49	43	33	21	14	13	17	25	33	36	38	37	39	41	51	47	45	39
28	Q	41	45	46	46	47	49	54	54	49	37	24	16	12	16	20	30	50	39	40	51	46	44	44	45	39
29	Q	40	44	40	41	40	47	53	57	53	43	27	16	14	15	22	23	28	34	37	43	46	62	50	41	38
30	Q	42	44	46	47	49	50	55	55	46	36	23	12	4	7	17	17	39	38	41	48	38	39	44	60	37
All		45	47	46	50	49	51	48	46	40	29	20	15	15	19	32	35	44	43	49	47	46	49	47	46	40
Quiet		43	47	48	49	50	51	54	52	43	32	21	14	12	16	23	28	38	36	39	43	40	45	45	44	38
Dist.		56	55	40	43	36	37	31	35	40	37	30	28	25	33	49	41	62	62	61	48	59	63	69	58	46

September 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		49	45	41	38	35	37	41	43	44	37	32	34	43	51	54	60	63	70	47	42	51	50	44	53	46
2		45	31	40	49	51	50	52	50	46	45	43	43	54	79	118	84	65	58	56	57	55	51	29	18	53
3		9	12	34	40	40	44	45	46	41	42	47	45	48	54	60	60	57	63	76	60	56	48	41	32	46
4		4	27	35	44	29	38	48	45	47	45	49	59	64	78	82	81	73	69	60	35	15	-2	6	-31	42
5		-24	27	48	41	46	53	53	49	48	48	47	60	68	67	68	85	67	57	55	52	50	46	44	51	50
6		51	51	49	49	52	52	53	55	49	46	47	50	58	55	55	59	62	59	52	52	49	44	41	39	51
7	Q	34	41	48	48	51	55	56	52	48	45	44	46	49	50	53	55	53	53	53	50	51	50	51	51	49
8		49	51	52	53	55	55	50	45	41	36	37	43	46	47	45	46	45	47	49	53	54	52	51	44	48
9		42	48	50	52	50	47	45	43	44	40	43	43	45	59	68	66	64	59	53	54	33	22	11	-57	43
10		-69	31	49	53	53	56	58	56	48	46	51	61	64	72	65	72	63	64	57	42	38	11	18	27	45
11		25	28	39	34	32	41	47	50	45	41	41	54	54	57	54	52	56	63	59	33	41	39	38	44	44
12		37	35	44	47	48	49	45	42	41	39	42	49	58	63	62	57	54	55	53	51	52	50	51	50	49
13		46	34	34	41	44	47	49	50	52	52	49	50	51	51	53	51	52	53	53	53	52	42	25	38	47
14	Q	35	38	45	48	50	50	49	48	47	41	40	44	49	52	54	54	51	52	51	50	49	50	50	42	47
15		43	47	48	49	49	49	46	45	45	42	39	40	43	46	47	47	48	48	50	49	41	48	23	8	43
16	D	30	-9	-17	5	8	15	20	25	41	62	71	74	87	114	227	161	155	154	131	80	72	58	34	11	67
17	D	21	-3	-42	-11	20	34	33	49	55	68	86	109	162	240	176	125	121	122	15	31	6	-123	-86	-160	44
18	D	-101	-58	-18	26	24	30	48	51	60	72	81	113	104	132	98	109	114	42	75	33	-9	-12	-40	-103	36
19	D	-92	-16	37	44	38	46	55	64	69	72	67	97	113	110	133	107	89	65	49	35	21	19	31	-8	52
20		-23	-10	3	38	19	38	42	52	67	80	97	99	98	109	120	87	101	67	69	63	51	27	43	49	58
21		29	27	49	53	55	58	59	65	64	65	67	66	66	91	117	125	115	75	63	44	55	55	49	42	65
22		49	47	43	37	43	50	59	57	58	61	71	68	81	95	108	86	90	71	69	31	48	56	55	57	62
23		57	57	50	36	32	46	53	56	54	56	61	70	70	72	73	76	66	69	51	56	57	48	51	42	57
24	D	-11	-34	-62	-27	-25	27	40	51	60	61	64	80	82	98	135	123	133	101	92	28	-27	-28	-30	-89	35
25		-45	-17	-1	22	32	44	54	66	70	69	79	104	98	111	118	99	96	86	76	40	19	13	31	46	55
26		45	48	57	58	59	58	60	59	63	72	70	70	72	80	82	93	82	80	71	60	41	43	47	17	62
27		13	37	50	55	58	60	59	57	51	45	48	52	54	57	60	60	59	59	58	58	58	49	46	48	52
28	Q	50	53	55	56	57	57	56	52	50	49	48	51	58	62	67	67	69	60	61	55	53	52	47	48	56
29	Q	50	51	51	50	54	57	55	54	52	50	50	52	54	60	63	63	63	63	62	63	60	51	50	53	55
30	Q	55	55	54	54	55	54	50	49	49	46	46	48	52	61	73	83	84	80	71	66	61	57	51	38	58
All		17	26	32	39	40	46	49	51	52	53	55	62	68	79	86	80	77	69	61	49	42	32	30	17	51
Quiet		45	48	51	51	53	55	53	51	49	46	46	48	52	57	62	64	64	61	60	57	55	52	50	46	53
Dist.		-30	-24	-20	7	13	31	39	48	57	67	74	94	110	139	154	125	123	97	73	41	13	-17	-18	-70	47

Nurmijärvi Finland

October 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-7	-20	-2	-3	-3	-5	-16	-20	-30	-38	-41	-35	-25	-17	-14	-3	1	7	13	16	15	-40	-78	-27	-15
2		-12	-11	-14	-12	-11	-13	-15	-19	-24	-36	-39	-35	-23	-13	0	15	10	7	2	2	-7	-14	-2	-6	-11
3		-3	-14	-5	-11	-15	-10	-17	-24	-32	-39	-31	-25	-13	-5	-2	-3	-6	-10	-1	-8	-2	-2	2	-4	-12
4	Q	-1	-7	-9	-6	-4	-3	-13	-11	-16	-22	-21	-17	-26	-14	-5	-3	-2	0	-1	-1	-1	-2	-3	-3	-8
5		-4	-5	-6	-6	-4	-2	-4	-10	-18	-23	-24	-19	-13	-7	0	4	3	15	11	15	13	1	-18	7	-4
6		-1	-1	-1	-1	1	3	2	-1	-14	-19	-20	-15	-8	3	-1	3	4	10	-7	-10	-4	4	5	-4	-3
7		-13	-17	-2	1	2	2	-7	-16	-29	-27	-26	-25	-14	-11	-16	-14	-10	8	7	5	1	-4	-7	-2	-9
8		1	-3	-1	2	2	0	-7	-18	-29	-35	-31	-18	-12	-6	-3	-3	-2	1	3	-1	1	-1	2	-6	-7
9		4	3	-6	-3	0	-2	-9	-17	-28	-31	-30	-20	-9	-3	-1	-1	-1	0	1	0	-1	2	1	0	-6
10	Q	0	-1	-2	-3	-3	-6	-13	-24	-33	-35	-30	-20	-8	-1	2	0	1	2	3	4	3	4	-5	-6	-7
11	Q	-4	-4	-1	1	1	-4	-13	-26	-35	-36	-32	-22	-9	-3	-3	-2	0	3	3	1	1	3	1	-2	-8
12	Q	0	0	1	3	5	3	-2	-12	-22	-27	-30	-23	-8	-4	-3	-1	0	1	3	3	5	5	3	8	-4
13		9	4	-8	10	7	12	5	1	3	-5	-12	-19	-14	-7	-1	-10	-25	-19	-6	-1	-30	-64	-16	-37	-9
14	D	-4	-3	-9	-9	-11	-35	-39	-29	-43	-57	-42	-48	-29	-23	-27	-6	-16	-20	84	-11	-45	-146	-495	-118	-49
15		-34	-38	-42	-38	-42	-52	-66	-48	-56	-41	-43	-38	-58	-26	-34	-5	-13	-28	-24	-5	-6	-89	-56	-27	-38
16		-64	-67	-30	-19	-16	-13	-16	-21	-26	-63	-58	-44	-26	-26	-24	-22	-28	-5	-27	-29	-18	-6	-20	-9	-28
17		-16	-23	-34	-19	-48	-57	-55	-50	-50	-53	-54	-36	-23	-16	-21	-22	-17	-12	-14	-25	-4	-19	-22	-16	-29
18		-6	-23	-24	1	-26	-30	-40	-40	-27	-45	-48	-46	-26	-14	-11	-25	-27	-9	-25	-27	-5	-15	-16	-6	-23
19		-15	-16	-30	-31	-19	-10	-27	-40	-50	-57	-67	-38	-44	2	6	16	-4	-15	-64	-62	-73	-78	-43	-20	-33
20		-35	-26	-21	-22	-20	-17	-16	-33	-85	-84	-63	-45	-32	-36	-28	-20	-23	-23	-16	6	-13	-91	-85	-76	-38
21	D	-45	-81	-20	-7	-8	-30	-51	-67	-50	-45	-27	-32	-9	16	22	-14	15	-15	-56	-32	-74	-190	-151	-34	-41
22		-83	-59	-28	-9	-29	-25	-41	-31	-48	-48	-37	-20	-17	-19	-4	-10	-4	-30	-21	-18	-17	-14	-15	-14	-27
23	Q	-10	-10	-11	-7	-4	-2	-6	-14	-24	-32	-34	-33	-27	-15	-12	-10	-9	-7	-7	-5	-5	-5	-5	-5	-12
24		-5	-5	-2	0	3	6	-2	-14	-24	-22	-32	-24	-6	24	22	130	32	0	37	52	-27	-9	-2	-26	4
25		-14	-26	-19	-4	-9	-5	-10	-21	-24	-24	-25	-22	-13	10	-5	-25	-16	-22	-20	-14	-14	6	-11	-15	-14
26				-28	-22	-14	-18	-27	-38	-42	-39	-27	-22	-10	-7	-7	-7	-4	-3	0	14	12	-9	-20	-18	(-15)
27		-30	-34	-34	-29	-30	-38	-48	-46	-57	-67	-52	-40	-27	-22	-19	-16	-11	-15	-21	-9	-8	-12	-10	-12	-29
28		-13	-15	-9	-19	-20	-7	-8	-29	-42	-47	-34	-53	-27	-20	-12	1	8	-3	-7	-8	-23	-23	-25	-59	-21
29	D	-24	-45	-46	-33	-29	-28	-508	-168	-185	-87	-53	-55	-18	97	163	264	299	253	96	-614	-1054	-998	-1041	-771	-191
30	D	-747	-949	-568	-299	-101	-75	-72	-72	-72	-67	-60	-42	-26	9	-24	-39	-7	-51	40	-493	-1037	-1266	-873	-704	-316
31	D	-868	-596	-140	-57	-64	-59	-47	-23	-24	-26	-13	50	13	-8	-27	-29	-34	-31	-22	-27	-11	-20	-20	-29	-88
All		-68	-70	-37	-21	-16	-17	-38	-32	-40	-41	-37	-28	-19	-5	-3	5	4	0	-1	-41	-78	-100	-98	-66	-35
Quiet		-3	-4	-4	-2	-1	-2	-9	-18	-26	-30	-29	-23	-16	-8	-4	-3	-2	0	0	0	1	1	-2	-2	-8
Dist.		-338	-335	-156	-81	-42	-45	-143	-72	-75	-57	-39	-25	-14	18	21	35	51	27	28	-235	-444	-524	-516	-331	-137

October 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		53	37	43	52	51	52	53	54	49	42	31	22	17	15	19	26	30	31	27	28	83	154	118	74	48
2		78	77	65	64	55	46	51	54	51	46	32	21	16	20	26	31	27	18	26	33	29	71	62	73	45
3		81	79	81	63	33	19	42	53	50	45	39	26	14	12	18	25	33	42	58	40	38	42	55	42	43
4	Q	44	49	48	46	48	53	52	47	41	39	34	25	25	28	26	32	34	36	38	39	41	43	44	45	40
5		45	45	46	45	44	46	52	55	53	43	34	25	18	18	23	27	30	29	27	27	35	55	70	76	40
6		63	52	50	48	47	46	49	51	50	39	31	24	18	10	20	21	23	26	57	57	60	45	43	54	41
7		66	53	40	46	45	47	51	50	46	34	18	27	25	17	26	29	42	73	58	46	51	51	47	28	42
8		44	46	44	42	46	47	54	55	48	36	28	20	17	20	28	33	33	34	37	39	41	40	36	50	38
9		38	65	52	44	53	57	60	58	49	35	25	17	12	21	33	35	38	37	38	38	41	40	40	41	40
10	Q	42	42	43	45	47	53	59	59	50	38	27	19	17	23	31	33	34	37	38	37	39	40	55	53	40
11	Q	52	48	46	46	47	53	57	54	47	33	20	13	14	20	30	33	35	35	37	37	39	42	46	48	39
12	Q	51	47	45	45	44	47	51	53	48	35	23	12	8	14	23	28	27	32	36	37	41	48	48	53	37
13		59	61	43	31	47	46	50	51	48	35	27	22	14	13	10	12	14	37	36	37	85	149	51	39	42
14	D	31	44	52	47	50	41	-2	23	43	16	29	22	5	12	34	23	18	53	125	88	69	233	179	124	57
15		78	72	59	49	44	27	47	58	59	62	53	57	36	66	46	98	136	66	102	73	62	75	53	60	64
16		46	35	-5	55	57	59	62	70	56	50	44	40	40	35	87	64	54	72	47	70	33	42	53	28	50
17		43	61	48	38	22	6	-10	23	45	44	31	29	59	25	31	41	52	48	53	66	66	53	18	35	39
18		48	37	26	41	35	7	27	36	39	33	29	18	9	33	50	39	50	77	72	66	58	51	74	51	42
19		39	58	23	10	10	11	34	39	38	20	16	16	27	35	51	96	55	61	139	83	85	44	87	91	49
20		65	39	43	42	46	51	57	54	59	46	31	22	30	29	15	56	41	33	69	106	90	129	117	77	56
21	D	36	38	27	49	38	42	36	16	26	27	21	30	24	39	71	26	41	53	118	101	91	145	89	84	53
22		38	4	14	21	16	10	11	24	37	43	45	34	33	33	36	35	137	49	46	58	50	51	54	51	39
23	Q	47	45	46	45	45	43	46	53	54	48	42	35	30	30	33	36	37	40	42	43	46	47	48	47	43
24		46	45	45	44	42	42	46	54	51	39	34	20	18	9	47	83	22	-5	4	45	53	45	41	52	39
25		42	42	46	54	52	50	49	51	46	38	33	28	24	15	9	41	29	33	35	45	50	63	52	53	41
26				57	52	52	48	53	53	48	31	24	21	23	32	37	38	37	37	34	32	53	91	75	91	(46)
27		92	76	71	66	61	67	67	50	44	34	29	22	24	32	38	36	38	49	45	47	47	49	47	52	49
28		51	55	58	74	66	74	67	58	37	24	32	-8	9	27	37	45	63	48	60	73	86	64	37	20	48
29	D	52	73	55	52	56	61	-3	296	138	38	51	-7	22	-26	-47	43	16	-5	-37	48	289	272	-9	414	77
30	D	234	265	34	114	108	98	96	80	67	66	67	57	58	94	102	118	113	195	79	73	506	322	246	194	141
31	D	192	77	80	72	93	78	65	52	58	50	50	5	-1	-9	9	21	68	50	50	55	66	42	72	102	58
All		63	59	46	50	48	46	46	58	51	39	33	23	22	24	32	42	45	46	51	54	78	85	66	74	49
Quiet		47	46	45	45	46	50	53	53	48	38	29	21	19	23	28	32	33	36	38	39	41	44	48	49	40
Dist.		109	100	49	67	69	64	38	94	66	39	44	21	22	22	34	46	51	69	67	73	204	203	115	184	77

October 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		37	38	36	45	52	55	55	56	54	50	50	53	54	58	59	59	56	55	54	56	53	-31	9	54	47
2		41	58	59	57	57	61	62	60	58	56	56	58	59	60	60	63	60	63	69	62	58	54	60	50	58
3		40	33	15	30	18	21	45	53	52	53	53	53	55	60	63	66	69	80	63	62	60	56	56	55	50
4	Q	55	54	55	55	55	54	54	54	55	55	52	54	59	60	56	56	55	55	55	55	56	56	55	55	55
5		54	54	54	54	53	54	55	53	49	47	48	47	48	49	51	51	51	51	52	54	57	63	48	44	52
6		45	53	53	53	51	51	52	51	50	47	45	45	48	53	53	54	55	56	71	65	63	48	22	15	50
7		-12	1	28	47	51	54	57	57	58	57	60	67	70	69	73	68	70	60	56	42	50	47	43	29	50
8		36	48	52	53	55	59	61	59	55	52	52	53	55	58	58	55	55	55	56	57	55	28	26	37	51
9		14	11	36	48	51	54	55	54	50	48	48	49	54	57	56	53	54	54	54	54	54	54	53	53	49
10	Q	53	53	53	54	55	56	56	54	50	47	44	47	52	54	55	53	53	53	53	53	53	52	50	52	52
11	Q	52	53	54	53	55	58	58	57	54	51	48	48	54	58	57	54	54	53	54	54	54	53	52	52	54
12	Q	53	52	52	53	53	56	57	57	52	48	44	44	48	53	55	57	57	59	59	58	56	52	50	47	53
13		34	32	36	36	39	45	48	50	47	44	46	47	48	57	67	91	125	102	72	58	51	37	21	-19	51
14	D	-2	37	49	52	53	52	47	54	61	74	88	94	114	138	147	89	99	118	67	40	26	-159	-180	-84	45
15		51	59	61	65	64	52	68	80	101	108	118	138	95	120	121	117	89	75	77	3	-1	-37	-72	6	65
16		-4	-21	-10	27	53	60	63	62	60	71	91	104	99	99	133	93	94	68	35	61	37	42	35	-26	55
17		-30	25	31	39	24	27	35	48	68	86	76	92	116	92	95	88	86	71	70	67	39	26	-28	-1	52
18		35	29	39	41	41	40	41	49	59	65	69	77	87	127	102	91	112	91	70	63	45	46	27	11	61
19		30	32	31	34	38	42	47	56	66	81	83	97	107	134	142	110	107	132	67	25	-3	-68	-37	-11	56
20		1	26	56	60	68	73	77	69	72	99	87	78	91	104	117	142	125	102	95	70	-43	-86	-33	-35	59
21	D	7	-79	-22	28	45	55	70	78	69	72	89	103	142	176	182	132	193	43	38	-7	-25	-157	-117	-28	45
22		-36	-36	8	-6	35	45	58	79	85	81	88	105	96	86	83	92	156	123	91	75	71	67	66	66	66
23	Q	64	63	65	64	63	63	66	65	63	57	57	60	63	64	63	62	63	63	63	63	63	62	62	61	63
24		61	61	60	60	59	60	64	64	60	56	57	69	88	147	159	205	162	152	142	143	67	71	79	68	92
25		65	68	56	59	59	63	67	69	66	61	61	62	71	86	135	120	100	81	77	72	74	70	61	66	74
26				70	70	68	67	69	70	67	68	70	68	68	66	65	65	64	64	64	68	80	53	47	26	(64)
27		21	35	50	45	40	50	53	54	54	54	54	63	70	74	74	74	78	79	76	70	67	67	66	64	60
28		64	64	62	53	68	65	58	57	53	51	63	74	75	75	75	87	99	77	85	76	51	61	38	-77	61
29	D	-65	-10	17	48	57	58	67	284	66	102	98	85	125	184	293	383	293	-61	74	-78	-76	-37	20	-406	63
30	D	11	-432	-614	-198	95	123	136	119	110	107	105	115	138	175	188	185	125	73	141	-428	-409	-195	289	145	4
31	D	308	72	-6	139	164	134	104	97	89	98	108	102	106	137	128	132	147	112	119	108	54	34	28	30	106
All		36	18	19	42	56	58	61	70	63	66	68	73	79	91	99	98	97	73	72	39	27	14	29	13	57
Quiet		55	55	56	56	56	57	58	57	55	52	49	50	55	58	57	56	56	57	57	56	56	55	54	53	55
Dist.		52	-82	-115	14	83	84	85	126	79	91	97	100	125	162	187	184	171	57	88	-73	-86	-103	8	-69	53

Nurmijärvi Finland

November 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-69	-27	-35	-28	-13	-17	-33	-35	-38	-45	-35	-16	-13	-13	-1	2	-8	-14	-8	-17	-44	-48	-13	-24	-25
2		-21	-20	-14	-10	-20	-14	-15	-25	-35	-43	-45	-31	-17	-1	-9	-13	-18	-8	-17	-25	-17	-12	-10	-20	-19
3		-29	-18	-24	-22	-8	-14	-14	-22	-35	-45	-56	-31	-21	-15	-7	-6	-5	0	-1	4	2	-9	-19	-18	-17
4		-20	-7	-9	-7	-8	-2	-2	-36	7	37	-13	-43	-44	-41	-40	-39	-35	-32	-28	-26	-17	-17	-26	-28	-20
5	Q	-25	-23	-22	-19	-18	-16	-18	-25	-29	-30	-28	-20	-17	-16	-14	-15	-10	-8	-11	-7	-8	2	-16	-19	-17
6		-24	-15	-19	-15	-10	-6	-3	-12	-22	-28	-28	-21	-14	-13	-8	-3	-4	-10	-10	15	7	-37	-58	-19	-15
7		-25	-26	-20	-8	-2	0	-2	-7	-17	-27	-23	-16	-7	-10	-6	-7	-2	-4	-7	-8	-6	-1	-5	0	-10
8	Q	-6	-9	-7	-3	1	4	1	-6	-14	-19	-19	-8	1	5	6	-15	-6	-3	-21	-20	-12	-3	-5	-7	-7
9		-7	-8	-15	-3	7	8	2	-8	-39	-40	-25	-20	-7	-34	-40	-28	-18	-23	16	-56	-22	-18	-15	-19	-17
10		-26	-21	-28	-23	-10	-7	-5	-12	-32	-53	-36	-25	-25	-12	-21	-21	-17	-15	-8	-59	-60	-52	-77	-53	-29
11	D	-66	-38	-34	-25	-19	-18	-4	-21	-81	-89	-44	-3	-11	4	-5	16	-31	-28	-40	-50	-65	-53	-60	-69	-35
12		-65	-51	-26	-9	-13	-23	-29	-33	-41	-46	-43	-30	-18	-21	-16	-27	-15	-17	-56	-45	-19	-20	-21	-20	-29
13	D	-34	-28	-29	-15	-17	-16	-14	-15	-43	-59	-22	-12	-39	5	-11	-29	-20	-14	-18	-68	-44	-61	-141	-82	-34
14		-62	-48	-21	-22	-26	-26	-26	-24	-31	-48	-44	-38	-12	-28	-11	-19	-18	-28	-34	-84	-50	-39	-27	-17	-33
15	D	-21	-20	-17	-18	-22	-9	-41	-19	-35	-38	-20	-13	-25	-10	-7	-27	28	-9	-32	-36	-29	-13	-40	-60	-22
16	D	-24	-19	-27	-43	-31	-10	-18	-33	-72	-55	-31	-24	-37	-17	-9	9	-26	-34	-43	-31	-32	-17	-24	-70	-30
17		-77	-45	-51	-31	-32	-16	-26	-23	-42	-45	-35	-28	-21	-18	-28	-10	-25	-11	-30	-22	-19	-35	-41	-18	-30
18		-25	-63	-43	-13	-9	-10	-13	-14	-24	-41	-45	-40	-31	-14	-18	-17	-19	1	-4	-17	-16	-11	-18	-22	-22
19		-13	-14	-14	-13	-7	-9	-20	-31	-36	-31	-30	-30	-22	-20	-12	-15	2	-13	7	-10	-6	-4	-5	-5	-15
20	D	-6	-6	-4	-7	-6	-6	-11	-25	-18	-3	-13	-7	118	90	492	278	-414	-584	-539	-453	-241	-308	-527	-363	-107
21		-305	-81	-107	-108	-76	-74	-76	-89	-88	-76	-70	-67	-57	-63	-55	-47	-48	-47	-47	-45	-34	-34	-43	-36	-74
22		-44	-39	-49	-42	-38	-34	-32	-36	-36	-35	-27	-29	-31	-20	-12	-36	-4	-44	-57	-138	-104	-86	-117	-74	-49
23		-30	-34	-48	-59	-44	-50	-32	-33	-26	-33	-33	-29	-19	-25	-29	-20	-19	-16	-16	-21	-12	-32	-28	-17	-29
24		-22	-20	-19	-22	-21	-17	-16	-16	-14	-14	-15	-19	-13	-6	-30	-26	-16	-13	-4	-12	-13	-29	-8	-22	-17
25		-30	-25	-19	-17	-17	-15	-12	-13	-16	-23	-24	-19	-31	-19	-15	-22	-12	-30	-15	-5	-6	-7	-16	-12	-18
26		-12	-20	-21	-17	-13	-13	-10	-14	-18	-22	-21	-19	-13	-21	-16	-12	-20	-12	-10	-1	3	-12	-5	-9	-14
27	Q	-10	-8	-10	-11	-10	-11	-9	-11		-21	-20	-15	-10	-9	-8	-8	-7	-6	-5	-3	-5	-9	-6	-6	(-9)
28	Q	-8	-9	-11	-11	-8	-6	-5	-11	-15	-20	-17	-10	-7	-18	-14	-8	-5	-8	-6	-4	-3	-3	-5	-7	-9
29	Q	-5	-8	-14	-9	-11	-12	-12	-16	-21	-24	-23	-17	-13	-16	-11	-10	-7	-3	-3	-4	-2	2	-3	-6	-10
30		-7	-11	-6	-7	0	6	5	5	1	-5	-9	-6	0	-1	3	-7	-18	-40	-29	-27	-32	-27	-25	-13	-11
All		-37	-25	-25	-21	-17	-14	-16	-22	-31	-34	-30	-23	-15	-13	2	-6	-27	-36	-36	-42	-30	-33	-47	-38	-26
Quiet		-11	-11	-13	-11	-9	-8	-8	-13	-20	-23	-22	-14	-9	-11	-8	-11	-7	-6	-9	-8	-6	-2	-7	-9	-11
Dist.		-30	-22	-22	-21	-19	-12	-18	-23	-50	-49	-26	-12	1	14	92	50	-93	-134	-134	-127	-82	-91	-158	-129	-46

November 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		77	67	65	59	63	54	62	63	51	33	28	28	28	33	57	71	58	48	59	104	107	54	71	83	59
2		87	59	52	58	57	51	51	55	54	33	24	20	23	22	15	27	28	41	49	97	56	70	65	83	49
3		75	56	48	40	43	49	58	56	52	40	29	21	22	27	34	38	40	43	45	55	59	54	49	58	46
4		58	45	52	45	51	50	65	68	57	82	53	29	21	31	40	44	47	47	46	62	70	64	62	56	52
5	Q	49	47	48	47	48	49	51	54	52	45	40	37	39	41	41	40	39	38	47	47	54	47	43	66	46
6		46	54	48	54	53	58	58	58	55	48	43	37	35	39	49	41	40	38	45	55	23	112	89	64	52
7		47	44	34	51	48	51	54	54	47	40	35	29	28	27	31	32	38	48	57	52	50	45	48	54	44
8	Q	51	48	45	45	44	44	45	46	45	40	33	27	25	30	28	57	41	36	52	79	67	53	52	44	45
9		42	44	38	30	34	38	46	46	44	36	19	23	35	79	45	19	37	71	129	91	80	73	49	49	50
10		54	34	42	38	32	35	36	39	41	43	43	25	35	20	20	40	41	57	151	111	91	92	88	89	54
11	D	121	76	39	58	47	9	24	36	42	53	32	37	56	41	58	90	104	77	120	82	88	51	87	43	61
12		27	28	17	43	47	44	36	31	31	42	49	34	31	53	62	65	174	86	106	109	90	68	47	33	56
13	D	14	33	16	43	40	43	44	47	46	50	41	9	70	20	75	28	39	94	42	140	103	111	20	77	52
14		80	32	39	51	32	25	35	36	32	35	36	66	42	50	70	37	46	71	121	91	92	87	49	59	55
15	D	68	56	50	47	41	42	7	16	34	38	36	38	58	41	97	47	115	96	78	92	70	100	86	74	59
16	D	90	76	58	44	36	44	44	48	46	39	34	36	49	37	74	145	48	85	112	80	67	78	72	68	63
17		29	26	17	18	15	2	-14	26	34	45	38	56	48	44	118	71	60	94	79	79	62	71	69	72	48
18		72	39	30	47	48	43	46	54	52	45	42	33	29	44	54	60	40	63	69	65	54	46	40	37	48
19		44	44	43	47	47	48	49	47	48	45	37	51	39	28	45	49	68	55	78	47	46	46	47	48	48
20	D	46	43	44	46	23	15	30	51	64	32	27	33	-14	90	28	-12	-271	143	118	157	178	178	312	242	67
21		157	79	57	73	70	66	62	54	69	73	70	64	53	55	57	48	46	53	57	59	66	88	73	62	67
22		59	109	96	67	64	59	56	54	56	51	42	34	37	37	27	62	40	92	79	81	65	98	138	112	67
23		75	61	75	63	74	50	47	51	53	51	49	42	38	30	46	33	42	44	44	61	114	88	67	56	56
24		56	51	55	50	49	51	50	48	46	40	39	37	34	31	41	46	29	40	66	55	78	75	56	54	49
25		57	34	59	54	60	39	45	45	39	41	36	31	35	38	28	25	93	50	48	60	55	53	62	84	49
26		87	74	50	56	56	56	51	51	53	53	49	44	35	35	39	34	43	46	46	59	62	55	49	56	52
27	Q	55	53	53	48	47	47	49	50		44	36	33	33	34	38	41	41	41	44	46	66	57	48	49	(46)
28	Q	50	50	51	44	49	48	49	49	47	41	34	27	28	35	27	40	39	39	44	46	48	49	51	51	43
29	Q	50	55	56	56	49	49	51	52	55	49	41	33	27	34	39	39	42	42	42	43	45	57	58	50	46
30		50	54	57	56	50	47	44	45	43	38	33	27	26	30	24	31	4	42	71	81	88	86	73	85	49
All		62	52	48	49	47	44	44	48	48	45	38	35	35	38	47	46	42	61	71	76	73	73	71	69	53
Quiet		51	51	50	48	47	47	49	50	50	44	37	31	31	35	35	44	40	39	46	52	56	53	50	52	45
Dist.		68	57	41	47	37	31	30	39	46	42	34	31	44	46	66	60	7	99	94	110	101	104	115	101	60

November 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-18	47	56	41	51	62	70	84	82	81	84	91	90	100	105	95	88	91	79	75	62	17	34	45	67
2		42	54	68	75	70	76	79	79	76	72	75	75	90	92	94	106	111	116	93	55	75	75	60	48	77
3		35	31	51	49	59	67	78	78	77	71	68	71	75	80	80	80	76	77	75	73	59	65	53	9	64
4		28	58	64	68	66	67	67	56	53	82	164	94	87	86	87	85	85	84	85	94	84	70	70	69	77
5	Q	74	78	79	77	75	74	72	71	69	69	66	68	71	72	73	72	73	76	81	77	68	45	14	34	68
6		40	55	67	67	69	70	71	72	72	72	71	72	76	78	80	77	76	82	83	71	-37	-34	-25	25	56
7		43	45	62	60	66	67	67	69	68	69	71	72	74	74	75	74	74	76	79	78	76	72	69	65	69
8	Q	62	65	66	66	66	66	66	66	65	63	63	63	63	63	67	88	75	75	83	67	57	58	57	57	66
9		61	61	56	56	58	61	64	65	69	77	73	74	82	132	162	98	92	104	43	27	71	37	14	34	70
10		37	38	38	47	63	69	69	70	71	76	75	86	91	94	147	144	117	113	126	52	16	-42	-141	-92	57
11	D	-96	-45	22	37	45	48	56	66	75	112	112	164	155	197	178	224	160	134	42	67	-62	-23	0	-8	69
12		-3	3	10	44	55	68	73	78	78	87	100	84	87	92	90	95	109	66	33	2	33	69	57	40	60
13	D	21	20	38	63	56	64	66	73	75	86	80	90	159	144	193	148	174	137	-31	26	47	-4	-110	-92	63
14		-44	13	44	44	43	53	69	71	78	83	93	125	134	150	111	85	85	95	78	-11	-24	-7	-27	28	57
15	D	45	58	65	60	57	60	65	77	88	96	89	117	122	130	189	136	211	103	117	86	-8	16	13	-41	81
16	D	14	30	38	36	48	67	70	80	94	88	96	106	101	104	133	104	111	122	105	76	62	-14	-24	-1	69
17		-28	-38	-1	27	45	47	56	74	85	91	100	127	96	114	135	165	122	106	40	69	43	-1	-52	-4	59
18		13	-9	-6	49	58	69	73	79	79	78	89	92	97	113	103	95	88	70	43	70	55	41	43	29	63
19		47	61	65	67	66	65	68	73	74	73	77	83	84	83	84	84	77	81	69	68	68	67	67	66	72
20	D	66	66	65	64	55	49	55	64	77	87	150	138	252	259	42	-403	-438	23	-127	52	79	113	80	2	36
21		81	145	181	151	131	116	127	116	119	122	115	113	117	113	110	111	124	124	106	115	115	95	92	94	118
22		90	66	48	91	92	92	89	89	91	87	86	86	85	92	99	169	191	71	112	52	27	14	-11	25	81
23		73	88	70	61	71	60	63	74	76	82	86	87	94	96	105	96	91	89	90	98	90	64	72	75	81
24		85	82	73	81	83	81	79	80	80	75	75	79	83	85	100	96	93	95	89	87	92	78	62	81	83
25		79	78	74	80	75	68	73	79	81	82	81	83	86	88	87	105	111	99	90	76	69	65	66	73	81
26		73	73	75	77	77	75	75	76	76	75	75	75	79	81	82	82	89	85	83	81	71	72	69	63	77
27	Q	71	73	72	74	74	75	74	73		73	75	74	76	77	76	75	74	75	75	76	76	72	73	73	(74)
28	Q	72	72	70	69	72	73	71	70	71	71	70	73	76	84	81	79	78	78	77	74	72	72	71	72	74
29	Q	70	66	64	69	73	74	74	72	74	73	71	72	75	78	76	75	75	74	74	75	73	67	62	64	72
30		67	68	67	67	66	66	65	66	67	67	69	70	71	74	71	87	113	167	145	84	73	90	76	58	80
All		40	50	58	64	66	68	71	75	77	81	87	90	98	104	104	88	87	93	71	66	53	44	29	33	71
Quiet		70	71	70	71	72	72	71	70	70	69	69	70	72	75	75	78	75	76	78	74	69	63	56	60	71
Dist.		10	26	46	52	52	58	62	72	82	94	106	123	158	167	147	42	44	104	21	62	23	17	-8	-28	64

Nurmijärvi Finland

December 2003 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-19	-27	-27	-20	-17	-12	-15	-19	-25	-23	-17	-15	-10	-10	-9	-11	-13	-7	-9	-7	-7	-7	-6	-3	-14
2		-7	-7	-6	-10	-9	-6	-9	-8	-9	-17	-18	-21	-14	-5	-2	-2	-2	-1	-1	-3	-4	-8	-5	-6	-7
3	Q	-7	-10	-9	-8	-7	-5	-4	-4	-9	-16	-16	-16	-14	-7	-1	0	0	-5	-5	-3	-7	-10	-13	-12	-8
4		-9	-6	-7	-7	-3	-1	1	-5	-12	-15	-12	-5	-1	0	-1	2	4	7	3	4	-1	-9	-4	6	-3
5	D	-16	-15	0	5	-4	-8	-17	-4	-17	-22	-29	-41	-50	-22	11	-23	-48	-34	-33	-42	-37	-48	-78	-27	-25
6		-32	-30	-70	-35	-22	-8	-13	-25	-33	-36	-39	-29	-30	-35	-34	-36	-29	-35	-40	-25	-23	-15	-18	-18	-30
7		-17	-17	-16	-15	-13	-7	-3	-10	-19	-17	-16	-14	-21	-19	-16	-25	-34	-39	-43	-29	-24	-32	-12	-16	-20
8	D	-19	-12	-10	-16	-17	8	-2	-13	-20	-17	-34	-21	-19	-14	-18	-22	-55	-41	-37	-43	-70	-63	-79	-30	-28
9	D	-41	-22	-21	-6	-18	-13	-23	-18	-25	-37	-29	-26	-32	-16	-24	-41	-26	-31	-5	-15	-26	-4	-37	-22	-23
10	D	-23	-69	-8	-2	-14	-9	-19	-23	-26	-32	-49	-34	-21	-13	-13	-14	-34	-46	-62	-33	-27	-49	3	-39	-27
11	D	-98	-32	-23	-17	-24	-24	-22	-15	-23	-34	-21	-19	-16	-39	-18	-23	-19	-4	-21	-17	6	-21	-50	-4	-24
12		-20	-23	-22	-6	-8	-15	-19	-14	-16	-16	-10	-6	-12	-8	-33	-27	-26	-19	-9	-16	-5	19	-6	-10	-14
13		-40	-27	-24	-22	-15	-12	-14	-13	-16	-21	-24	-22	-21	-15	-44	-48	-23	0	-26	-11	-4	-8	-21	-20	-20
14		-43	-20	-12	-19	-13	-2	-6	-12	-15	-21	-27	-23	-11	-30	-14	-23	17	-10	-45	-37	-27	-24	-38	-48	-21
15		-39	-40	-17	-13	0	-8	-14	-12	-22	-35	-34	-25	-27	-23	-13	-20	-2	0	-20	-18	-11	-11	-11	-13	-18
16		-16	-14	-11	-10	-7	-5	-5	-7	-19	-18	-17	-17	-12	-12	-9	-20	-30	-28	-13	-10	-2	-9	-12	-3	-13
17		-5	-9	-7	-7	-4	-7	-4	-4	-8	-12	-17	-18	-11	-7	-9	-17	-8	2	-1	-6	-6	-6	-5	-6	-8
18	Q	-5	-6	-3	-2	-1	-3	-2	-1	-2	-6	-10	-9	-11	-9	-7	-7	-5	-6	-4	-4	-4	-4	-4	-4	-5
19	Q	-5	-2	0	2	4	5	4	1	-1	-6	-10	-9	-6	-3	-1	-1	-1	-1	0	0	-2	-2	-2	-1	-2
20		-1	1	4	7	11	14	16	12	14	15	10	2	0	-1	-1	-6	7	22	-24	-11	-3	-20	-23	-26	1
21		-17	-25	-17	-12	-13	-14	-12	-8	-25	-18	-22	-17	-16	-17	-13	-27	-24	-2	-10	-11	6	-10	-22	-14	-15
22		-10	-6	-15	-11	-6	-7	-7	-7	-13	-20	-28	-31	-29	-16	-10	-10	-16	-27	-26	-18	-14	-17	-15	-18	-16
23		-9	-10	-10	-10	-8	-4	-7	-9	-12	-17	-20	-18	-12	-10	-10	-18	-15	-20	-5	6	-9	-14	-14	-11	-11
24		-10	-12	-9	-3	-4	-2	1	-5	-9	-12	-12	-10	-9	-9	-4	-1	-11	-20	-10	-3	-6	-2	-15	-21	-8
25	Q	-15	-10	-7	-5	-3	0	0	-4	-7	-11	-13	-16	-14	-4	-8	-6	-10	-2	1	1	-1	-2	-3	-7	-6
26		3	-6	-6	-2	-1	8	-1	-4	-8	-9	-8	-10	-10	-6	-5	-4	-3	-2	-1	2	-3	-1	-3	-5	-4
27		-12	-11	-5	-1	8	-1	-5	-4	-5	-7	0	3	5	6	4	-5	-7	-2	0	1	-2	-11	-54	-47	-6
28		-28	-31	-23	-22	-25	-24	-11	-14	-11	-13	-21	-17	-11	-8	-11	-7	-6	-6	-22	-22	3	-13	-13	-6	-15
29	Q	-10	-9	-9	-8	-9	-9	-9	-8	-4	-2	-2	-2	2	-1	-7	-15	-11	-20	-8	-5	-7	-7	-7	-11	-7
30		-13	-13	-10	-8	-6	-4	-4	-7	-2	-3	-6	-4	-3	-1	-2	-1	-1	1	-16	-6	-20	-9	-7	-13	-7
31		-16	-11	-4	1	8	9	3	-3	-3	-5	-9	-6	-9	-18	-22	-16	-40	-33	-31	-29	-21	-22	-30	-25	-14
All		-19	-17	-13	-9	-8	-5	-7	-9	-13	-16	-18	-16	-14	-12	-11	-15	-15	-13	-17	-13	-11	-14	-20	-15	-13
Quiet		-8	-7	-6	-4	-3	-3	-2	-3	-5	-8	-10	-10	-9	-5	-5	-6	-5	-6	-3	-2	-4	-5	-6	-7	-6
Dist.		-39	-30	-12	-7	-16	-9	-17	-15	-22	-28	-32	-28	-28	-21	-12	-25	-36	-31	-32	-30	-31	-37	-48	-24	-25

December 2003 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		61	68	67	48	48	60	56	56	54	53	43	33	31	38	41	36	44	44	44	49	50	51	53	79	50
2		66	52	55	52	53	53	43	43	43	36	35	33	33	32	37	38	39	42	45	48	49	53	50	49	45
3	Q	49	53	49	49	50	51	50	52	49	43	41	38	36	40	40	39	49	37	43	49	52	60	64	65	48
4		55	50	46	48	50	51	51	48	47	43	38	33	31	33	37	37	38	38	41	42	69	60	56	85	47
5	D	75	60	50	55	51	41	10	16	45	42	56	37	33	31	53	49	32	53	87	113	72	101	58	96	55
6		66	59	32	37	38	49	50	47	52	53	37	48	25	28	40	69	84	87	79	65	61	77	60	65	55
7		66	48	36	39	38	45	44	46	48	49	44	39	40	41	47	60	46	70	72	74	76	64	105	74	55
8	D	64	54	45	34	13	22	28	36	47	47	37	15	29	40	43	49	100	105	75	177	81	97	54	48	56
9	D	29	25	43	29	1	3	22	27	27	49	50	42	49	77	110	76	42	71	124	59	90	78	66	47	51
10	D	46	30	19	38	38	32	29	24	29	45	39	32	37	53	74	75	160	108	70	89	96	39	84	39	55
11	D	59	32	57	44	38	14	1	32	36	58	46	36	67	53	89	67	89	68	58	98	72	65	91	54	55
12		69	45	31	24	35	23	25	25	21	39	39	42	48	48	52	65	62	70	71	56	70	49	62	91	48
13		75	43	44	39	37	19	32	35	44	39	47	33	45	44	57	98	89	86	62	74	58	47	41	90	53
14		43	37	42	36	30	38	45	42	46	37	36	36	37	48	48	62	170	161	111	88	63	57	50	8	57
15		20	49	43	50	30	27	37	43	46	54	45	40	38	56	85	47	76	80	66	55	79	57	52	54	51
16		39	40	36	43	43	44	46	44	49	47	40	42	43	39	40	44	66	60	51	55	59	62	52	43	47
17		43	45	49	44	39	43	50	53	52	50	44	39	38	38	38	43	43	56	57	47	47	48	48	46	46
18	Q	45	39	46	44	45	44	47	48	50	47	46	44	43	43	43	44	43	43	46	47	47	47	47	46	45
19	Q	44	42	41	42	42	45	48	49	47	45	41	38	38	40	41	43	43	44	46	46	48	47	47	45	44
20		44	42	41	41	39	39	40	41	40	36	35	34	33	16	6	13	7	50	41	51	69	90	89	92	43
21		78	84	75	68	44	46	46	46	47	35	34	41	35	35	24	46	50	63	57	51	59	50	71	57	52
22		62	50	56	52	50	42	32	42	46	50	37	40	43	33	36	38	28	77	45	61	60	59	60	50	48
23		50	52	49	51	45	45	49	52	52	50	45	45	42	40	31	40	49	40	53	49	62	60	55	51	48
24		52	49	53	46	46	47	49	51	51	48	44	40	39	41	41	37	41	60	41	47	50	69	72	60	49
25	Q	50	44	44	43	43	45	48	50	52	49	42	39	43	38	41	44	35	44	47	48	49	49	48	51	45
26		52	58	59	51	50	46	50	50	50	45	36	37	40	38	40	41	40	43	45	49	51	49	54	65	48
27		58	52	51	47	47	51	51	49	48	42	31	37	33	38	37	34	38	41	45	50	50	91	83	105	50
28		72	59	52	53	55	52	54	50	48	40	43	40	33	38	41	41	43	37	66	45	69	59	55	53	50
29	Q	52	50	48	46	48	49	49	47	45	43	39	42	44	44	37	31	61	41	47	50	53	56	57	59	47
30		57	56	53	55	54	52	51	51	51	45	40	39	41	38	42	41	40	40	44	51	54	55	50	61	48
31		58	52	51	57	51	43	44	44	43	41	35	29	35	40	41	44	128	114	98	104	67	67	51	40	57
All		55	49	47	45	42	41	41	43	45	45	41	37	39	41	46	48	60	64	60	64	62	62	61	60	50
Quiet		48	45	45	45	46	47	48	49	49	45	42	40	41	41	40	40	46	42	46	48	50	52	52	53	46
Dist.		55	40	43	40	28	22	18	27	37	48	46	32	43	51	74	63	84	81	83	107	82	76	70	57	54

December 2003 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		49	64	71	51	48	64	70	75	78	77	76	75	75	75	75	77	81	79	78	75	73	72	69	46	70
2		48	59	65	65	67	65	64	65	66	66	68	71	73	74	72	71	71	72	72	73	74	74	73	71	68
3	Q	70	68	69	68	69	68	68	67	66	66	69	69	70	72	72	72	76	77	80	78	77	77	73	71	71
4		66	67	68	68	68	68	66	65	64	67	69	69	70	71	71	70	69	69	72	73	79	72	69	54	68
5	D	58	63	58	56	54	61	66	66	72	93	96	102	115	97	177	226	214	184	169	131	99	30	-79	-58	90
6		-1	17	-20	-12	38	66	73	72	77	84	88	106	96	105	116	124	117	94	88	84	75	60	35	32	67
7		26	44	56	63	68	70	68	68	69	70	70	76	80	80	85	102	111	125	158	177	100	79	53	20	80
8	D	43	57	64	61	51	52	58	64	75	82	83	99	144	102	87	85	157	150	104	53	-19	-6	-18	13	68
9	D	-1	19	41	47	41	49	66	78	83	101	98	95	97	120	118	119	92	98	90	58	54	-12	11	48	67
10	D	44	8	20	39	57	64	66	73	80	94	95	103	122	113	112	148	92	149	65	80	2	-49	13	22	67
11	D	-24	-19	26	58	48	62	57	72	75	101	93	100	110	114	145	162	114	80	82	74	53	44	5	14	69
12		13	47	57	52	61	57	65	68	69	75	73	77	84	86	96	100	101	107	77	75	55	1	20	-6	63
13		2	28	50	64	67	65	68	74	84	81	85	91	110	98	114	121	121	86	90	73	43	25	8	17	69
14		6	51	65	64	63	67	68	69	73	76	79	84	95	106	90	102	101	81	85	27	40	60	37	5	66
15		-9	16	10	27	46	56	68	76	80	88	91	95	100	111	103	87	91	74	72	78	65	46	64	65	67
16		53	53	58	65	71	72	71	73	75	77	74	78	79	79	76	80	88	87	81	76	57	62	59	53	71
17		53	61	64	64	64	70	73	73	71	69	69	71	71	71	72	76	75	74	65	66	69	68	67	67	68
18	Q	64	64	65	66	67	67	69	69	68	67	69	71	70	71	71	70	70	70	70	70	69	67	67	65	68
19	Q	65	65	64	65	65	65	65	65	67	68	66	69	71	71	69	68	68	68	67	67	67	66	66	63	67
20		64	64	63	61	62	61	60	59	58	57	57	62	66	66	73	87	96	192	111	103	97	92	66	77	77
21		59	55	28	42	61	66	71	68	67	70	69	72	74	78	82	103	128	112	75	77	34	37	56	62	69
22		45	39	45	54	56	59	60	64	68	73	74	83	84	80	79	78	92	105	90	90	75	50	50	50	69
23		50	62	65	66	68	69	70	70	69	69	70	70	71	72	74	84	82	84	82	62	58	68	67	66	69
24		68	70	69	64	65	66	66	66	67	67	67	66	69	69	68	68	73	82	74	70	69	66	61	65	68
25	Q	65	66	66	67	67	67	66	65	65	66	67	69	72	72	74	74	74	72	69	68	67	66	65	66	68
26		59	48	52	53	55	56	57	60	62	62	62	65	68	69	68	68	69	71	70	68	69	67	67	55	63
27		65	66	62	50	50	54	60	61	62	63	60	63	63	64	65	69	74	72	70	68	68	76	15	41	61
28		71	75	77	70	67	72	75	72	69	67	66	68	73	73	76	74	75	78	89	84	80	70	73	73	74
29	Q	71	69	67	66	66	65	64	63	64	64	62	63	66	66	68	75	87	81	75	70	69	69	66	67	69
30		67	67	66	65	66	65	65	64	66	65	63	65	67	67	67	67	68	69	80	82	76	76	76	80	69
31		74	68	61	60	61	58	60	62	62	63	67	72	73	76	83	83	142	110	104	30	43	-28	-4	34	63
All		45	51	54	56	60	63	66	68	70	74	74	78	83	83	87	93	96	95	86	76	62	50	43	45	69
Quiet		67	66	66	66	67	66	66	66	66	66	67	68	70	70	71	72	75	74	72	70	70	69	67	67	69
Dist.		24	26	42	52	50	57	63	70	77	94	93	100	117	109	128	148	134	132	102	79	38	1	-14	8	72

11 Hourly Means minus Monthly Means

11.1 All Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-3	-3	1	3	5	7	5	3	0	-4	-6	-6	-3	-1	0	1	3	0	0	1	2	2	-3	-4	14894
February	-4	-3	0	4	6	10	9	2	-5	-8	-10	-9	-6	-2	0	8	2	2	3	-1	4	-2	1	0	14889
March	-7	-2	3	7	7	7	5	-4	-12	-15	-16	-12	-4	7	16	17	13	14	8	1	-10	-5	-10	-8	14887
Aprl	1	-1	1	5	5	-1	-7	-19	-27	-34	-30	-17	-3	8	13	20	21	24	19	15	8	8	-3	-7	14888
May	-25	-23	-7	-2	-11	-15	-18	-27	-27	-26	-14	-3	7	23	35	38	35	40	33	23	10	-10	-17	-16	14886
June	-2	-3	-4	-4	-8	-20	-33	-39	-37	-33	-26	-13	4	16	24	32	40	36	31	24	16	4	-3	-4	14893
July	-7	-4	-2	-6	-8	-15	-18	-28	-34	-38	-29	-15	4	12	27	28	33	32	31	25	16	6	-1	-12	14893
August	-5	-3	-3	-5	-5	-15	-22	-35	-34	-30	-23	-5	5	16	31	34	30	29	22	15	9	2	-2	-6	14888
September	-1	0	1	7	3	-2	-9	-17	-25	-28	-21	-12	-1	16	17	12	14	12	12	10	6	5	2	-2	14888
October	-33	-34	-2	14	19	18	-3	4	-5	-6	-1	7	16	30	32	40	39	35	34	-6	-43	-64	-62	-31	14865
November	-12	0	0	5	9	11	9	4	-6	-8	-4	3	11	13	27	20	-1	-10	-10	-17	-4	-7	-21	-12	14874
December	-6	-4	0	4	6	8	6	5	0	-3	-5	-3	-1	1	2	-2	-2	0	-3	0	2	-1	-6	-2	14887
Winter	-6	-2	0	4	6	9	7	3	-2	-6	-6	-4	0	3	7	7	1	-2	-3	-4	1	-2	-7	-4	14886
Equinox	-10	-9	1	8	8	6	-3	-9	-17	-21	-17	-8	2	15	20	22	22	21	18	5	-10	-14	-19	-12	14882
Summer	-10	-8	-4	-4	-8	-16	-23	-32	-33	-31	-23	-9	5	17	29	33	34	34	29	22	13	0	-6	-10	14890
Year	-9	-7	-1	3	2	-1	-6	-13	-18	-19	-15	-7	2	12	19	21	19	18	15	8	1	-5	-11	-9	14886

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	14	8	6	1	-1	-2	-3	-3	-3	-4	-9	-14	-15	-14	-11	-8	-3	0	2	5	8	15	16	16	1620
February	16	15	12	3	-1	-2	-3	0	-2	-7	-13	-20	-22	-20	-17	-14	-6	-2	5	11	17	17	16	18	1624
March	11	8	7	7	5	3	8	8	3	-7	-17	-28	-32	-27	-19	-13	-5	4	8	18	19	17	14	10	1627
Aprl	8	11	7	10	10	12	15	13	7	-5	-20	-33	-36	-32	-27	-13	-5	3	8	11	16	13	13	11	1626
May	17	18	12	18	20	18	15	12	3	-10	-23	-33	-33	-27	-17	-10	-8	-5	0	3	3	3	8	13	1632
June	10	8	15	19	24	26	26	22	11	-3	-19	-29	-33	-30	-24	-14	-10	-4	-2	-4	-2	3	5	5	1633
July	9	13	14	15	22	25	26	23	11	0	-16	-28	-33	-30	-25	-14	-8	-4	-1	-3	-3	-1	3	6	1636
August	9	11	18	19	19	16	22	14	4	-8	-22	-30	-33	-30	-20	-10	-3	1	2	2	7	3	3	4	1639
September	5	7	6	10	9	10	8	6	0	-11	-20	-25	-25	-21	-8	-5	4	3	9	7	6	8	7	6	1640
October	14	10	-3	1	-1	-3	-3	8	1	-10	-16	-26	-27	-25	-17	-7	-4	-3	2	5	29	36	17	25	1649
November	10	0	-5	-3	-5	-9	-8	-5	-5	-8	-14	-18	-18	-14	-6	-6	-11	8	19	24	21	21	18	16	1653
December	5	-1	-3	-5	-8	-9	-9	-7	-5	-5	-9	-12	-11	-9	-4	-2	11	14	11	14	12	12	11	10	1650
Winter	11	5	2	-1	-4	-6	-6	-4	-4	-6	-11	-16	-16	-14	-9	-7	-2	5	9	13	14	16	15	15	1637
Equinox	9	9	4	7	6	6	7	9	3	-8	-18	-28	-30	-26	-18	-9	-2	2	7	10	17	19	13	13	1636
Summer	11	13	15	18	21	21	22	18	7	-5	-20	-30	-33	-30	-21	-12	-7	-3	0	0	1	2	5	7	1635
Year	11	9	7	8	8	7	8	8	2	-6	-17	-25	-26	-23	-16	-10	-4	1	5	8	11	12	11	12	1636

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-19	-18	-18	-12	-8	-5	-3	-2	-1	1	1	2	7	8	11	12	18	19	16	12	4	-2	-9	-15	49621
February	-26	-23	-17	-12	-8	-6	-3	-2	-3	-3	-1	4	8	17	21	26	25	26	23	10	4	-10	-20	-30	49623
March	-39	-34	-20	-11	-7	-2	0	0	1	1	5	9	17	31	41	43	42	31	22	10	-11	-36	-48	-46	49625
Aprl	-37	-28	-22	-14	-9	-4	0	1	0	0	4	10	22	31	35	42	38	30	18	1	-16	-23	-33	-49	49630
May	-54	-50	-36	-18	-11	-5	1	4	6	5	9	16	24	34	42	42	36	34	17	3	-18	-22	-25	-35	49632
June	-33	-28	-24	-19	-15	-12	-8	-3	1	5	9	14	22	28	37	38	36	30	20	7	-3	-24	-34	-42	49642
July	-41	-31	-20	-16	-13	-10	-4	-2	0	0	2	11	21	25	32	35	33	28	20	12	1	-14	-28	-40	49644
August	-36	-36	-26	-13	-6	-7	-1	2	4	7	6	14	22	30	35	35	31	23	17	4	-14	-28	-25	-38	49648
September	-34	-25	-18	-11	-10	-4	-1	0	1	2	5	12	18	29	36	29	26	18	11	-1	-9	-18	-20	-34	49651
October	-21	-39	-38	-14	-1	1	5	13	6	9	11	16	22	34	42	41	40	16	15	-17	-30	-43	-28	-44	49657
November	-31	-21	-13	-7	-5	-2	1	4	7	10	16	20	27	33	33	17	16	22	0	-4	-18	-27	-41	-38	49671
December	-24	-18	-15	-13	-9	-6	-3	-1	1	5	5	9	14	14	18	24	27	26	16	7	-7	-19	-26	-24	49669
Winter	-25	-20	-16	-11	-7	-5	-2	0	1	3	5	9	14	18	21	20	22	23	14	6	-4	-15	-24	-26	49646
Equinox	-33	-32	-24	-13	-6	-2	1	4	2	3	6	12	20	31	39	39	37	24	16	-2	-17	-30	-32	-43	49641
Summer	-41	-36	-27	-17	-11	-8	-3	0	3	4	7	14	22	29	36	38	34	29	19	6	-8	-22	-28	-39	49641
Year	-33	-29	-22	-13	-8	-5	-2	1	2	4	6	11	19	26	32	32	31	25	16	4	-10	-22	-28	-36	49643

11.2 Quiet Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-2	-2	-1	1	2	2	1	0	-4	-7	-7	-4	-1	1	3	4	6	7	5	-2	-1	-2	1	-1	14899
February	-4	-5	-1	3	7	9	7	1	-3	-7	-8	-11	-7	-10	-3	2	2	2	5	6	5	7	4	-2	14896
March	5	5	6	4	6	8	4	-6	-15	-19	-18	-15	-12	-8	-1	3	5	5	5	7	8	11	6	7	14897
Aprl	1	0	0	3	6	6	-1	-12	-24	-32	-30	-20	-7	-2	7	7	7	13	14	14	13	12	13	8	14895
May	-1	3	5	3	-3	-11	-18	-28	-29	-26	-22	-10	-3	-1	-1	10	16	22	25	23	17	12	10	8	14895
June	0	-1	3	-1	-2	-10	-19	-25	-30	-31	-28	-21	-8	4	15	31	22	24	25	16	15	8	5	3	14899
July	-1	-2	7	6	-2	-8	-10	-17	-26	-30	-23	-18	-10	1	6	10	14	15	21	19	17	12	9	8	14898
August	7	5	4	2	0	-4	-13	-26	-33	-39	-32	-20	-7	-1	13	19	16	17	20	16	14	13	16	10	14896
September	4	3	5	5	5	4	0	-8	-17	-24	-23	-16	-6	-1	4	2	2	5	9	9	9	10	10	9	14893
October	5	3	3	5	7	5	-2	-10	-18	-23	-22	-15	-8	0	4	4	6	8	8	8	8	9	6	6	14892
November	0	-1	-2	0	1	3	2	-3	-9	-12	-11	-4	1	0	2	-1	3	5	1	3	4	8	4	2	14889
December	-3	-2	0	1	2	3	3	2	1	-3	-5	-5	-3	1	1	0	0	-1	2	3	1	1	-1	-1	14894
Winter	-2	-2	-1	1	3	4	3	0	-3	-7	-8	-6	-2	-2	1	1	3	3	3	2	3	4	2	-1	14895
Equinox	4	3	3	4	6	6	0	-9	-18	-24	-23	-16	-8	-3	3	4	5	8	9	10	10	10	9	8	14894
Summer	1	1	5	3	-2	-8	-15	-24	-30	-31	-26	-17	-7	1	8	18	17	20	23	19	16	12	10	7	14897
Year	1	1	2	3	2	1	-4	-11	-17	-21	-19	-13	-6	-1	4	8	8	10	12	10	9	9	7	5	14895

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	8	6	4	2	1	2	3	3	1	-2	-6	-12	-13	-10	-10	-9	-7	-7	2	3	6	11	12	10	1615
February	14	11	5	3	1	0	1	7	8	1	-7	-13	-17	-12	-12	-7	-6	-7	-3	-1	2	4	11	16	1621
March	-1	3	5	6	7	11	17	16	9	-2	-13	-22	-23	-19	-13	-7	-2	-1	-3	2	6	7	12	6	1624
Aprl	2	3	4	8	14	18	21	22	17	3	-10	-25	-29	-27	-19	-12	-7	5	2	6	1	0	3	-3	1624
May	6	10	16	23	24	25	22	16	4	-9	-24	-32	-33	-27	-17	-12	-8	-7	-7	9	6	4	2	9	1627
June	-1	9	16	25	32	34	31	24	12	-6	-22	-34	-36	-34	-26	-11	-8	-6	0	-3	-8	-1	4	4	1633
July	7	8	14	18	24	28	27	26	16	4	-11	-26	-32	-29	-20	-15	-10	-8	-3	-7	-6	-5	-4	-2	1635
August	7	11	13	21	23	27	28	21	9	-7	-20	-33	-37	-29	-18	-9	-5	-6	-3	2	0	-1	-3	8	1636
September	5	9	10	11	12	13	16	13	5	-6	-18	-24	-26	-22	-15	-10	0	-2	1	5	2	7	7	6	1638
October	7	7	6	6	6	10	13	14	8	-1	-11	-19	-21	-17	-11	-8	-6	-4	-2	-1	1	4	8	9	1640
November	6	5	5	3	2	2	4	5	4	-1	-9	-14	-15	-10	-11	-2	-5	-6	0	7	11	7	5	6	1645
December	2	0	-1	-1	0	1	2	3	3	0	-4	-6	-5	-5	-5	-6	0	-4	0	2	4	6	7	7	1646
Winter	8	5	3	2	1	1	3	4	3	-1	-6	-11	-12	-9	-9	-6	-4	-6	0	3	6	7	9	10	1632
Equinox	4	5	6	8	10	13	17	16	10	-2	-13	-22	-25	-21	-14	-9	-4	0	-1	3	3	5	8	5	1631
Summer	5	9	15	22	26	29	27	22	11	-4	-19	-31	-35	-30	-20	-12	-8	-7	-3	0	-2	-1	0	4	1633
Year	5	7	8	10	12	14	16	14	8	-2	-13	-21	-24	-20	-15	-9	-5	-4	-1	2	2	4	5	6	1632

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-2	-1	-1	-2	-2	-1	-1	-1	-2	-2	-3	-3	0	0	0	1	2	3	5	7	6	4	-4	-4	49621
February	-15	-9	-6	-3	-3	-2	-1	-1	-3	-4	-3	1	6	11	11	11	10	10	8	5	4	0	-9	-16	49620
March	-8	-4	-2	-1	0	0	-1	-3	-4	-7	-6	-3	3	7	7	6	9	11	12	8	6	-7	-11	-11	49628
Aprl	-22	-7	-3	-4	-1	1	3	2	-1	-5	-9	-7	4	9	12	12	13	11	4	2	-2	-3	-3	-8	49635
May	-11	-5	-3	0	2	3	3	2	-2	-9	-10	-2	4	8	6	6	8	10	11	11	0	-8	-11	-11	49633
June	-10	-5	-1	0	2	-1	-4	-6	-6	-7	-8	-3	1	6	10	18	16	14	14	5	2	-6	-14	-18	49644
July	-15	-11	-6	-1	0	1	1	-1	-5	-10	-11	-7	2	6	7	10	10	8	8	5	5	4	2	1	49643
August	-9	-2	1	1	1	0	-2	-3	-5	-8	-9	-7	1	8	16	17	15	11	10	3	-4	-4	-10	-21	49652
September	-9	-5	-3	-2	0	1	0	-2	-4	-7	-8	-5	-1	4	9	11	11	8	6	4	2	-1	-3	-7	49653
October	0	0	0	0	1	2	3	2	0	-4	-6	-5	0	2	2	1	1	1	1	1	1	0	-1	-2	49655
November	-1	0	0	0	1	2	1	0	-1	-1	-2	-1	2	4	4	7	4	5	7	3	-1	-8	-15	-11	49671
December	-1	-2	-2	-2	-2	-2	-2	-3	-2	-2	-2	0	1	2	2	3	7	5	4	2	1	1	-1	-2	49669
Winter	-5	-3	-3	-2	-1	-1	-1	-1	-3	-2	-2	-1	2	4	4	6	6	6	6	4	2	-1	-7	-8	49645
Equinox	-10	-4	-2	-2	0	1	1	0	-3	-6	-7	-5	1	6	7	8	8	8	6	4	2	-3	-5	-7	49643
Summer	-11	-6	-2	0	1	1	0	-2	-5	-9	-9	-5	2	7	10	13	12	11	10	6	1	-4	-8	-13	49643
Year	-9	-4	-2	-1	0	0	0	-1	-4	-5	-6	-3	2	6	7	9	9	8	7	5	2	-2	-7	-9	49644

11.3 Disturbed Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-19	-16	-6	5	9	11	6	5	3	-1	-4	-8	-6	2	-2	6	2	-5	0	9	4	7	2	-4	14886
February	-13	-16	-13	4	8	17	12	1	-10	-8	-9	-3	2	9	9	46	8	3	9	-18	-3	-26	-6	-4	14879
March	-21	-4	1	5	-2	5	8	-3	-14	-14	-9	-11	-4	27	69	62	25	30	4	1	-27	-21	-58	-50	14873
Aprl	0	-10	-10	7	8	3	0	-14	-25	-40	-36	-17	4	18	22	39	31	32	18	15	13	-1	-27	-29	14878
May	-103	-111	-22	17	1	-10	-9	-12	-8	-3	9	18	39	57	115	103	67	80	51	26	-5	-81	-134	-86	14865
June	13	8	-18	-9	-11	-29	-65	-68	-55	-32	-19	-5	23	46	56	33	58	43	33	23	9	2	-11	-23	14880
July	-17	-9	-2	-35	-42	-48	-25	-43	-50	-55	-41	3	60	50	66	71	62	49	34	21	8	-6	-15	-42	14881
August	-22	-14	-2	-13	-14	-45	-51	-72	-51	-17	-17	36	56	88	102	100	65	49	6	-5	-17	-31	-52	-53	14877
September	-15	-7	-9	15	6	-2	-11	-16	-29	-38	-18	-7	2	54	57	29	36	21	14	0	-8	-9	-25	-39	14878
October	-201	-198	-19	56	95	92	-6	65	62	81	98	112	123	155	159	172	189	165	166	-98	-307	-387	-379	-194	14763
November	15	23	23	24	27	34	28	23	-4	-3	20	34	47	60	137	95	-47	-88	-89	-82	-37	-45	-113	-83	14854
December	-14	-5	13	18	10	16	9	11	3	-3	-7	-3	-2	5	13	1	-11	-6	-6	-5	-5	-11	-22	1	14875
Winter	-8	-3	4	13	13	19	14	10	-2	-4	0	5	10	19	39	37	-12	-24	-21	-24	-10	-19	-35	-22	14873
Equinox	-59	-55	-9	21	27	25	-2	8	-2	-3	9	19	31	63	77	76	70	62	50	-20	-82	-104	-122	-78	14848
Summer	-32	-31	-11	-10	-16	-33	-37	-49	-41	-27	-17	13	44	59	84	77	63	55	31	16	-1	-29	-53	-51	14876
Year	-33	-30	-5	8	8	4	-8	-10	-14	-11	-3	13	28	47	66	63	40	31	20	-9	-31	-51	-70	-50	14866

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	32	22	4	-2	-7	-12	-20	-17	-10	-6	-8	-13	-11	-12	-3	-10	-6	21	6	1	9	11	13	17	1625
February	33	47	42	11	-7	-7	-9	-4	-18	-25	-25	-30	-32	-26	-26	-27	0	-7	11	16	16	20	23	23	1635
March	29	12	6	4	1	-4	6	9	1	-14	-28	-41	-39	-39	-20	-13	-18	5	3	17	21	36	31	33	1636
Aprl	11	5	-8	8	5	12	22	16	9	-1	-22	-40	-42	-37	-34	-22	-10	6	5	15	30	15	21	37	1630
May	55	54	7	10	19	9	4	2	-10	-16	-25	-37	-35	-32	-21	-10	-21	-17	-2	-13	8	12	18	39	1642
June	26	12	14	6	4	10	26	27	18	-1	-20	-29	-38	-39	-30	-10	-11	-5	1	-8	-6	16	13	24	1634
July	3	26	21	6	4	7	16	28	17	12	-11	-23	-31	-30	-26	-9	-12	-9	-3	-1	-12	-9	22	18	1636
August	13	14	13	0	-4	-18	4	-2	1	-3	-18	-19	-25	-35	-23	-9	9	14	6	8	33	12	14	4	1646
September	11	10	-6	-3	-10	-9	-15	-11	-6	-9	-16	-18	-20	-13	3	-4	17	16	15	2	14	17	23	12	1646
October	32	22	-28	-10	-8	-13	-39	16	-11	-38	-34	-56	-56	-55	-44	-31	-26	-8	-10	-4	127	126	38	106	1677
November	7	-4	-19	-13	-23	-30	-31	-21	-14	-18	-26	-30	-17	-15	6	-1	-54	39	34	50	41	43	55	41	1660
December	0	-14	-12	-14	-26	-32	-36	-27	-18	-6	-9	-22	-12	-4	19	9	30	26	28	53	28	21	16	2	1654
Winter	18	13	4	-5	-16	-20	-24	-17	-15	-14	-17	-24	-18	-14	-1	-7	-7	20	20	30	23	24	27	20	1644
Equinox	21	12	-9	0	-3	-3	-6	8	-2	-15	-25	-39	-39	-36	-24	-18	-9	5	3	8	48	49	28	47	1647
Summer	24	27	14	6	6	2	13	13	6	-2	-18	-27	-32	-34	-25	-10	-9	-4	0	-3	6	8	17	21	1640
Year	21	17	3	0	-4	-7	-6	1	-4	-10	-20	-30	-30	-28	-16	-11	-8	7	8	11	26	27	24	30	1644

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-64	-45	-46	-25	-11	-7	-5	-3	0	8	8	8	19	23	27	22	40	47	30	16	7	-2	-12	-33	49620
February	-66	-59	-53	-33	-20	-11	-4	-2	0	3	7	15	22	42	48	73	60	53	45	1	-6	-33	-38	-45	49623
March	-77	-52	-30	-23	-14	-3	0	4	9	12	16	24	34	56	103	111	89	53	19	8	-41	-91	-105	-102	49623
Aprl	-67	-57	-51	-22	-10	0	9	12	11	17	25	29	50	52	58	69	67	52	25	8	-34	-62	-84	-98	49624
May	-127	-80	-37	-11	-11	-7	-1	9	14	18	30	36	47	58	90	88	62	59	4	-50	-77	-48	-20	-46	49635
June	-52	-33	-44	-50	-49	-45	-34	-17	-4	16	35	40	45	57	82	80	69	43	25	5	-5	-25	-63	-77	49637
July	-94	-74	-38	-55	-62	-49	-19	-8	3	15	30	56	83	69	81	86	73	58	34	21	-16	-41	-58	-81	49643
August	-100	-81	-53	-29	-21	-28	-7	8	22	49	41	64	79	110	107	85	73	38	23	5	-52	-92	-77	-121	49646
September	-77	-71	-67	-39	-34	-16	-8	1	10	20	27	48	63	92	107	78	76	50	26	-5	-34	-64	-65	-117	49647
October	-1	-135	-168	-39	30	32	32	73	26	38	45	47	72	109	135	131	118	4	35	-126	-139	-156	-45	-121	49653
November	-54	-38	-18	-12	-12	-6	-1	8	18	30	42	59	94	103	83	-22	-20	40	-43	-2	-40	-46	-72	-92	49664
December	-48	-47	-30	-20	-22	-15	-9	-2	5	22	21	28	45	37	56	76	61	60	30	7	-35	-71	-86	-64	49672
Winter	-58	-47	-37	-22	-16	-10	-5	1	6	16	19	28	45	51	54	37	36	50	16	5	-18	-38	-52	-58	49645
Equinox	-56	-79	-79	-31	-7	3	8	22	14	22	28	37	55	77	101	97	88	40	26	-29	-62	-93	-74	-110	49637
Summer	-93	-67	-43	-36	-36	-32	-16	-2	9	25	34	49	63	71	89	85	70	49	22	-5	-38	-51	-54	-81	49640
Year	-69	-64	-53	-30	-20	-13	-4	7	10	21	27	38	54	67	81	73	64	46	21	-9	-39	-61	-60	-83	49641

12 Monthly and Annual Means

All days

	Z	H	D	F	X	Y	I
January	49621	14981	6° 12.4′	51833	14894	1620	73° 12.0′
February	49623	14978	6° 13.6′	51834	14889	1624	73° 12.3′
March	49625	14975	6° 14.2′	51835	14887	1627	73° 12.4′
Aprl	49630	14977	6° 14.1′	51841	14888	1626	73° 12.5′
May	49632	14975	6° 15.3′	51842	14886	1632	73° 12.6′
June	49642	14982	6° 15.5′	51854	14893	1633	73° 12.3′
July	49644	14982	6° 16.0′	51855	14893	1636	73° 12.4′
August	49648	14978	6° 17.0′	51858	14888	1639	73° 12.7′
September	49651	14978	6° 17.2′	51861	14888	1640	73° 12.8′
October	49657	14956	6° 19.9′	51860	14865	1649	73° 14.3′
November	49671	14966	6° 20.4′	51876	14874	1653	73° 13.9′
December	49669	14978	6° 19.5′	51878	14887	1650	73° 13.2′
Winter	49646	14976	6° 16.5′	51856	14886	1637	73° 12.8′
Equinox	49641	14972	6° 16.3′	51849	14882	1636	73° 13.0′
Summer	49641	14980	6° 16.0′	51852	14890	1635	73° 12.5′
Year	49643	14976	6° 16.3′	51852	14886	1636	73° 12.8′

5 Quiet days

	Z	H	D	F	X	Y	I
January	49621	14986	6° 11.2′	51835	14899	1615	73° 11.7′
February	49620	14984	6° 12.7′	51833	14896	1621	73° 11.8′
March	49628	14986	6° 13.2′	51841	14897	1624	73° 11.9′
Aprl	49635	14983	6° 13.4′	51847	14895	1624	73° 12.1′
May	49633	14984	6° 13.9′	51846	14895	1627	73° 12.1′
June	49644	14989	6° 15.4′	51857	14899	1633	73° 12.0′
July	49643	14988	6° 15.7′	51856	14898	1635	73° 12.0′
August	49652	14986	6° 16.1′	51864	14896	1636	73° 12.3′
September	49653	14983	6° 16.6′	51864	14893	1638	73° 12.5′
October	49655	14982	6° 17.0′	51866	14892	1640	73° 12.6′
November	49671	14980	6° 18.3′	51880	14889	1645	73° 13.0′
December	49669	14985	6° 18.3′	51880	14894	1646	73° 12.7′
Winter	49645	14984	6° 15.1′	51857	14895	1632	73° 12.3′
Equinox	49643	14984	6° 15.1′	51855	14894	1631	73° 12.3′
Summer	49643	14987	6° 15.3′	51856	14897	1633	73° 12.1′
Year	49644	14985	6° 15.2′	51856	14895	1632	73° 12.2′

5 Disturbed days

	Z	H	D	F	X	Y	I
January	49620	14975	6° 13.9′	51831	14886	1625	73° 12.4′
February	49623	14968	6° 16.3′	51831	14879	1635	73° 12.9′
March	49623	14962	6° 16.7′	51829	14873	1636	73° 13.2′
Aprl	49624	14967	6° 15.1′	51832	14878	1630	73° 13.0′
May	49635	14956	6° 18.2′	51839	14865	1642	73° 13.9′
June	49637	14969	6° 16.1′	51845	14880	1634	73° 13.1′
July	49643	14971	6° 16.5′	51852	14881	1636	73° 13.1′
August	49646	14967	6° 18.8′	51853	14877	1646	73° 13.4′
September	49647	14969	6° 18.7′	51854	14878	1646	73° 13.3′
October	49653	14858	6° 28.9′	51828	14763	1677	73° 20.5′
November	49664	14947	6° 22.7′	51864	14854	1660	73° 15.0′
December	49672	14966	6° 20.8′	51878	14875	1654	73° 13.9′
Winter	49645	14964	6° 18.4′	51851	14873	1644	73° 13.6′
Equinox	49637	14939	6° 19.8′	51836	14848	1647	73° 15.0′
Summer	49640	14966	6° 17.4′	51847	14876	1640	73° 13.4′
Year	49641	14956	6° 18.5′	51845	14866	1644	73° 14.0′

13 Hourly Means of All Days as Sequenced in Bartels' 27-day Solar Rotation Number

13.1 H-Component

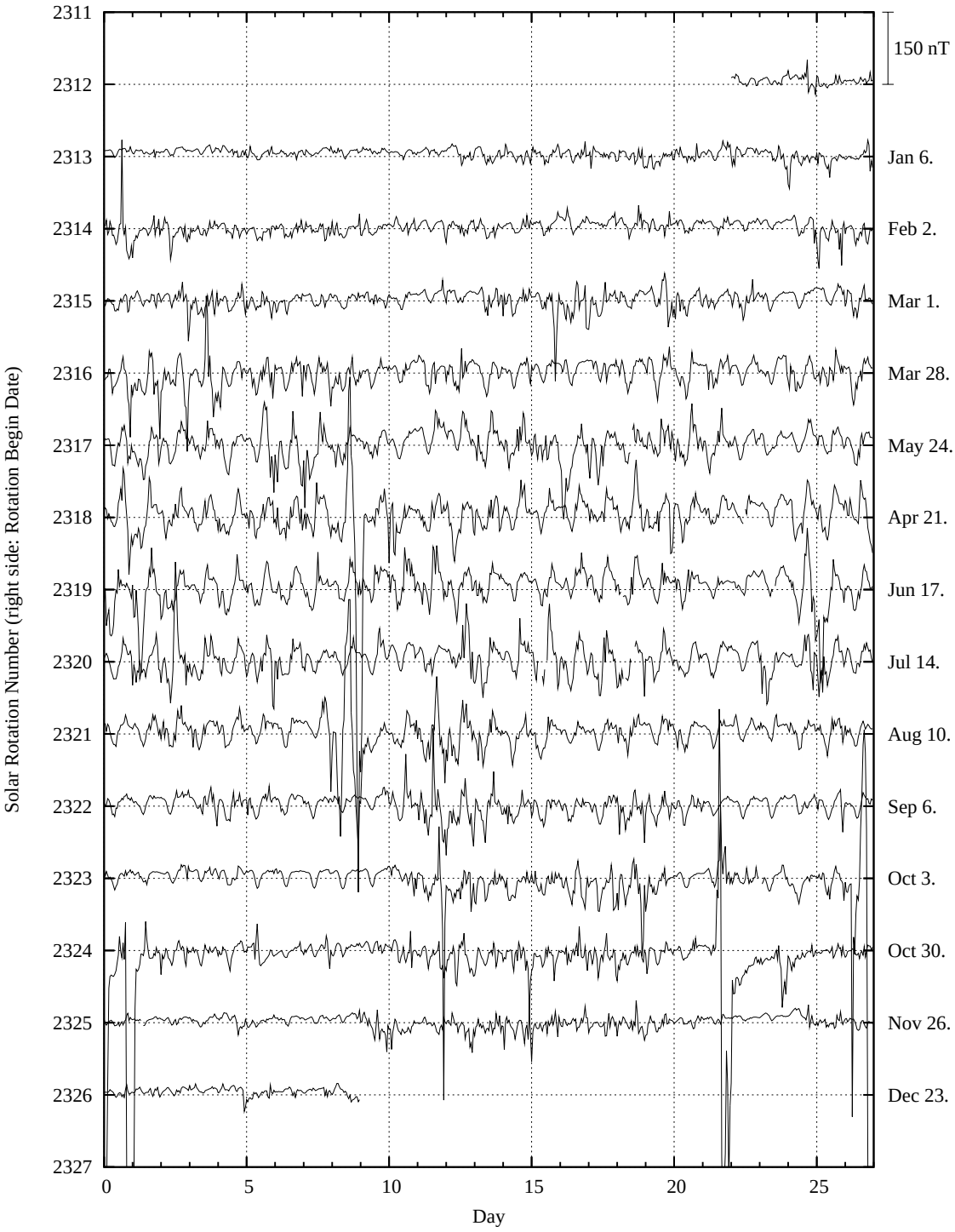


Figure 3: Hourly means of H sequenced in Bartels' solar rotation cycles.

13.2 D-Component

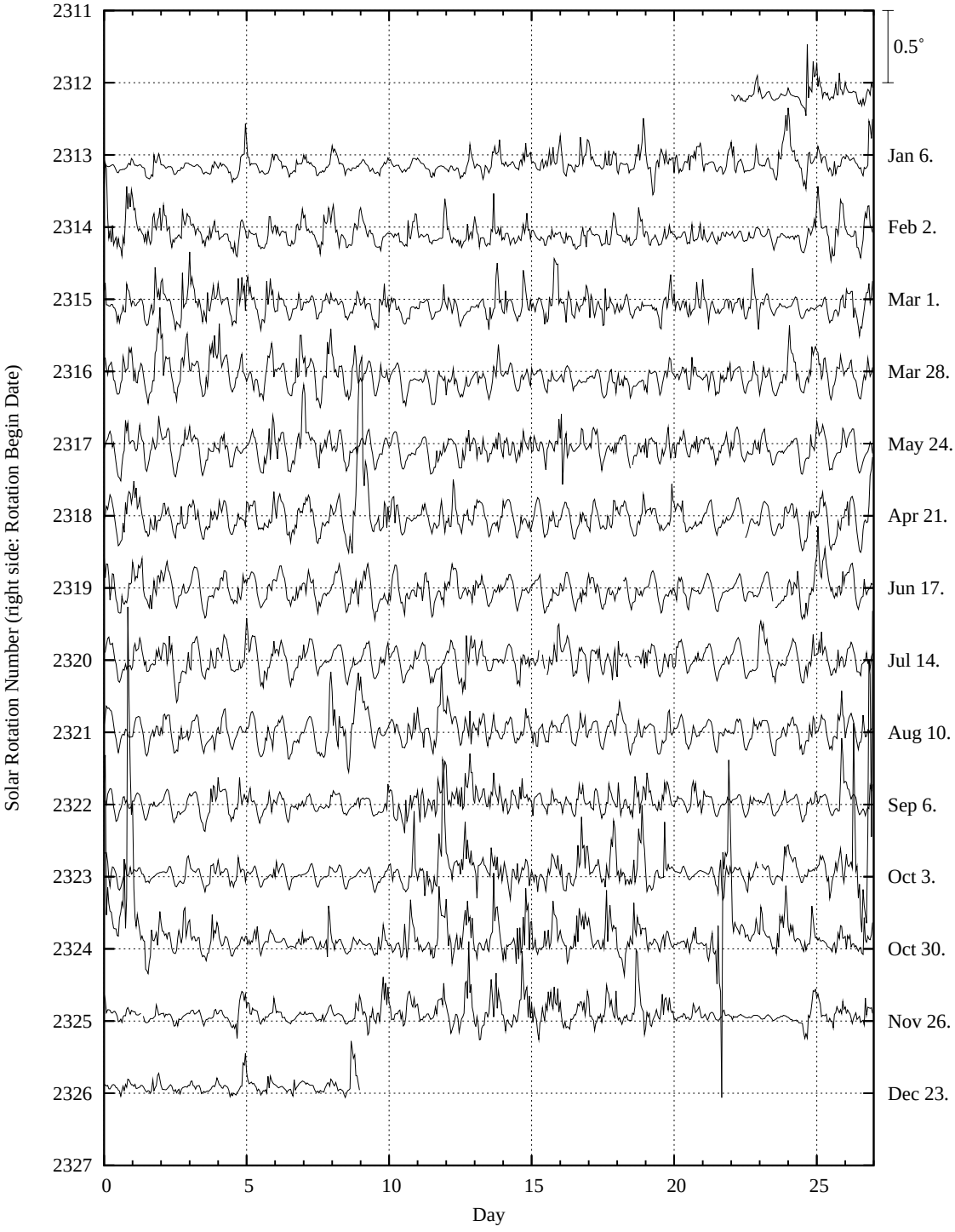


Figure 4: Hourly means of D sequenced in Bartels' solar rotation cycles.

13.3 Z-Component

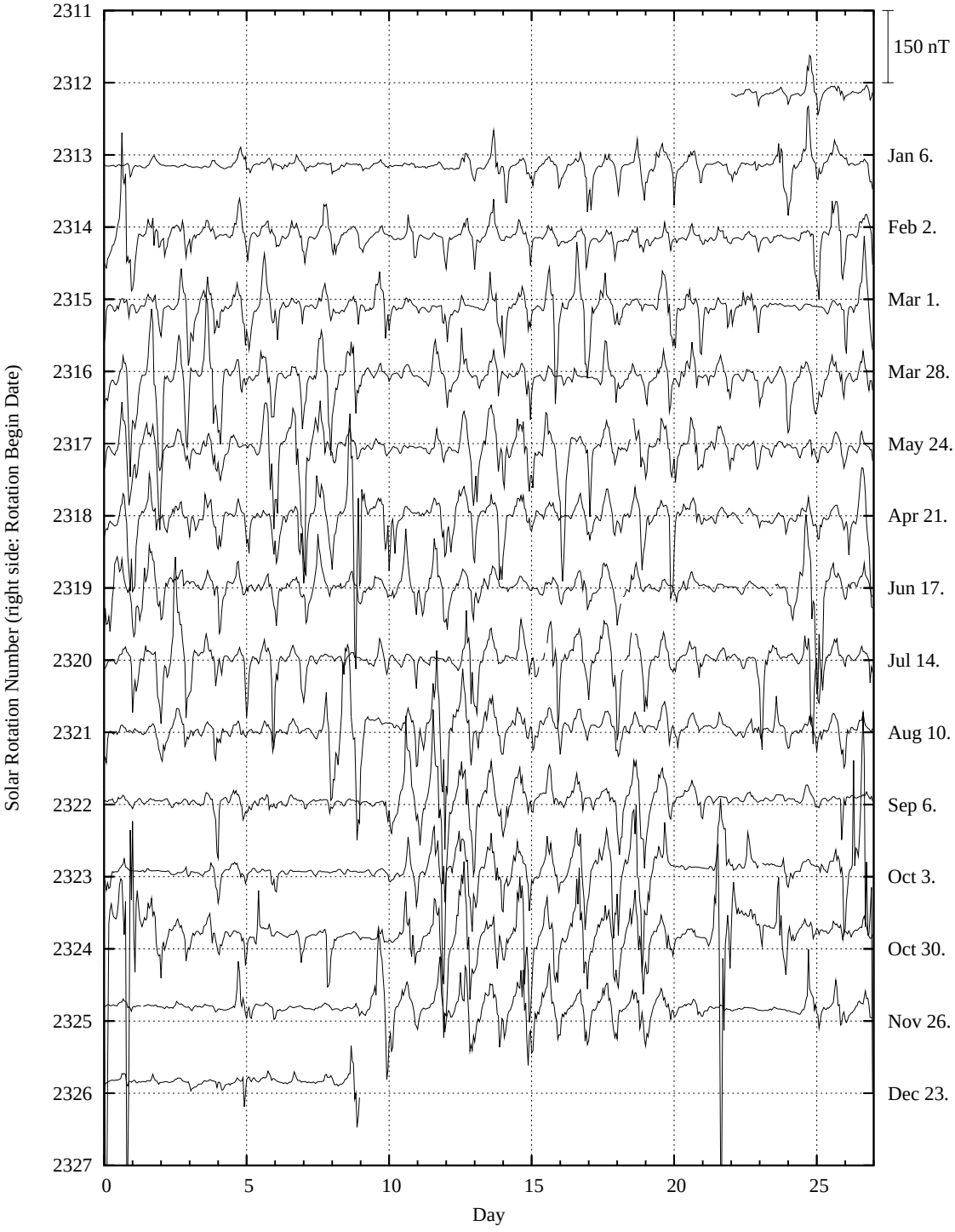


Figure 5: Hourly means of Z sequenced in Bartels' solar rotation cycles.

14 K-Indices

14.1 Monthly Tables of K-Indices

January

Day	K								Ak
1	0	2	2	1	2	1	3	4	9
2	2	1	0	1	1	1	2	1	4
3	3	1	2	1	3	6	5	4	25
4	5	3	2	2	2	3	4	3	18
5	2	1	2	1	2	2	2	3	7
6	0	1	1	0	0	1	1	2	2
7	1	1	1	1	1	2	4	2	7
8	2	0	1	1	0	1	1	1	3
9	0	0	0	0	0	1	2	2	2
10	2	1	1	2	2	2	3	4	10
11	3	3	1	1	1	1	3	3	9
12	2	2	1	1	2	2	2	2	6
13	3	1	1	2	1	1	1	3	7
14	3	2	2	2	2	2	1	2	8
15	2	1	1	1	1	2	1	1	4
16	1	0	1	1	1	1	2	2	4
17	1	1	1	2	2	2	1	1	5
18	1	2	2	2	3	2	4	4	13
19	3	2	2	3	3	4	4	4	18
20	3	3	2	2	2	3	4	3	14
21	3	2	3	3	3	3	4	4	17
22	4	2	2	2	2	4	4	5	20
23	4	3	1	2	3	3	2	3	13
24	3	2	2	2	2	4	4	4	16
25	3	3	4	4	4	3	3	3	20
26	4	3	2	3	3	3	4	3	17
27	3	3	1	0	1	3	2	3	9
28	4	4	2	2	2	2	2	3	13
29	1	1	2	2	3	5	4	4	17
30	5	3	3	3	3	5	3	2	22
31	3	3	2	3	3	3	2	1	12
Mean									11.3

February

Day	K								Ak
1	2	1	1	1	2	3	5	4	14
2	5	5	4	3	4	8	6	6	71
3	5	2	2	2	4	4	4	4	22
4	4	4	4	3	2	3	5	4	24
5	3	2	2	2	3	4	2	3	13
6	2	1	2	3	3	3	3	3	12
7	3	2	2	2	2	2	4	2	11
8	3	2	2	3	3	2	3	4	14
9	3	2	2	2	2	4	4	4	16
10	4	4	3	2	1	1	3	4	16
11	3	2	2	2	1	2	2	1	7
12	1	2	2	2	2	4	4	4	14
13	2	1	1	2	1	0	2	4	7
14	4	2	2	3	3	3	3	3	15
15	3	3	2	3	3	5	3	3	18
16	2	2	3	3	3	4	4	4	18
17	2	2	3	3	2	3	2	3	11
18	2	5	3	3	3	2	3	4	19
19	2	2	1	2	3	3	3	4	12
20	2	2	3	3	2	3	5	3	16
21	2	2	2	3	2	3	4	2	12
22	2	2	2	2	3	3	1	3	10
23	3	2	2	2	3	2	3	2	10
24	1	0	1	2	2	2	2	3	6
25	2	0	2	1	2	1	1	1	4
26	1	2	2	3	3	2	2	4	11
27	5	3	2	3	4	4	4	5	27
28	3	1	2	3	3	3	3	3	13
Mean									15.8

March

Day	K								Ak
1	4	1	2	3	3	3	4	3	16
2	2	2	1	2	3	3	5	3	15
3	3	1	2	2	3	5	6	6	32
4	5	3	3	3	3	4	4	4	24
5	3	2	2	3	3	5	4	5	23
6	4	3	3	3	3	5	4	4	24
7	3	3	3	3	3	1	3	3	14
8	1	1	1	2	2	3	3	3	9
9	2	2	2	2	2	2	3	4	11
10	1	2	2	3	3	4	4	5	19
11	3	2	2	2	2	3	2	1	9
12	2	2	2	2	2	1	2	4	9
13	4	3	2	3	4	1	1	1	13
14	2	2	3	3	4	2	5	3	18
15	5	3	3	3	3	4	5	3	25
16	2	2	3	4	4	4	6	6	34
17	2	4	4	3	5	4	4	6	32
18	4	4	4	4	5	2	2	3	23
19	3	3	2	2	2	2	2	2	9
20	1	3	3	3	4	5	5	5	27
21	4	3	3	3	3	2	4	5	21
22	3	3	3	3	2	1	3	4	14
23	3	3	3	3	3	4	4	3	18
24	3	2	2	2	1	2	2	0	7
25	0	1	1	1	1	2	1	1	3
26	0	2	2	1	2	2	3	3	8
27	4	2	4	3	4	4	3	4	22
28	3	3	3	2	2	4	4	6	24
29	4	3	2	3	3	4	6	6	33
30	6	4	3	4	4	4	6	6	45
31	4	2	2	4	6	6	5	5	41
Mean									20.1

Aprl

Day	K								Ak
1	5	3	2	2	2	4	5	2	21
2	2	3	3	3	3	4	4	5	21
3	3	2	2	2	3	3	4	5	18
4	4	3	2	3	4	4	4	5	24
5	4	3	3	3	3	4	5	3	22
6	2	2	2	2	1	3	2	3	9
7	1	0	1	2	3	2	1	1	5
8	3	2	3	4	4	4	2	2	17
9	4	3	3	3	5	4	2	2	20
10	2	3	3	4	4	3	5	4	23
11	2	3	2	2	2	2	4	4	13
12	3	2	1	2	3	3	1	0	8
13	2	3	2	3	2	1	1	1	8
14	2	2	1	3	3	4	4	3	15
15	3	3	3	4	3	2	2	3	15
16	4	3	4	3	4	4	4	4	24
17	3	4	3	4	3	4	4	1	20
18	2	4	3	4	3	3	2	4	18
19	2	3	1	2	2	2	4	3	11
20	3	3	2	1	3	3	3	4	14
21	4	3	4	3	3	3	4	3	20
22	4	3	2	4	3	4	3	3	19
23	1	3	3	4	4	3	3	3	17
24	2	2	3	3	4	3	4	4	18
25	3	3	3	4	3	3	2	6	24
26	3	2	2	3	3	4	4	3	16
27	3	3	2	3	3	4	3	3	16
28	3	3	2	3	3	2	2	1	11
29	1	2	2	2	3	4	6	5	24
30	5	3	3	3	4	5	5	6	37
Mean									17.6

May

Day	K								Ak
1	6	4	4	4	5	4	3	3	33
2	3	4	3	3	3	3	1	3	15
3	1	3	1	3	3	3	2	2	10
4	1	1	1	3	2	2	1	2	6
5	1	2	2	3	3	4	3	3	13
6	3	2	3	3	5	4	5	4	25
7	4	4	4	4	5	5	4	3	31
8	4	4	3	4	5	5	5	4	33
9	4	4	4	5	5	4	2	4	30
10	7	6	5	3	2	4	5	3	48
11	5	3	4	4	5	4	3	3	28
12	3	3	3	4	3	3	5	3	21
13	4	3	4	4	5	4	4	4	28
14	4	4	3	3	5	5	4	3	28
15	3	3	3	3	4	4	3	3	18
16	3	2	2	2	2	2	3	3	10
17	3	2	2	2	2	2	2	0	7
18	1	1	1	2	1	3	4	3	10
19	3	3	2	2	3	3	2	3	12
20	3	2	2	3	4	1	2	3	12
21	3	2	2	2	3	5	5	6	28
22	5	4	3	3	4	4	4	2	24
23	2	3	3	3	3	4	2	3	15
24	3	3	3	3	4	3	4	4	20
25	3	3	3	3	2	3	3	3	14
26	4	2	3	3	3	3	3	4	17
27	4	3	3	4	4	3	4	4	23
28	5	4	4	5	5	4	3	4	33
29	4	3	2	4	8	8	9	9	170
30	9	6	5	4	5	6	5	5	97
31	6	6	2	2	4	2	2	2	28
Mean									28.6

June

Day	K								Ak
1	2	3	3	3	5	3	4	4	21
2	3	4	5	5	4	4	3	5	32
3	5	3	3	3	4	4	4	4	25
4	3	2	3	4	5	4	4	3	23
5	2	2	2	2	3	4	3	2	12
6	2	2	3	3	4	4	3	3	16
7	4	3	3	4	5	4	3	4	25
8	3	4	4	4	5	6	5	5	40
9	3	3	3	4	4	3	3	5	22
10	4	3	4	3	4	3	3	3	20
11	2	3	3	3	3	3	2	2	12
12	2	1	2	2	3	3	1	2	8
13	3	1	1	1	2	2	2	4	9
14	2	3	3	4	4	4	4	4	22
15	3	4	3	3	3	3	3	3	17
16	3	4	2	4	4	4	5	5	28
17	5	4	4	4	5	5	3	3	32
18	5	5	5	6	4	5	4	4	44
19	4	4	3	3	3	3	3	2	17
20	2	2	2	3	3	3	3	2	11
21	4	3	3	2	3	4	4	4	20
22	3	2	3	3	2	3	4	3	15
23	3	3	2	4	3	3	3	3	16
24	3	3	3	5	5	3	2	2	21
25	2	2	3	3	3	4	4	4	18
26	3	3	2	3	4	4	2	3	16
27	4	3	4	4	5	4	3	3	25
28	3	4	3	5	5	5	3	4	30
29	3	3	3	5	4	4	4	4	25
30	4	4	4	3	3	4	2	2	19
Mean									21.4

July

Day	K								Ak
1	2	2	2	2	4	2	2	2	10
2	1	2	3	3	3	3	3	2	12
3	3	2	2	2	4	4	4	4	18
4	4	4	3	5	4	4	3	3	25
5	3	3	3	3	5	3	3	2	18
6	2	2	2	2	4	4	2	2	12
7	3	2	3	3	4	3	2	1	13
8	1	0	1	2	3	2	1	0	5
9	1	1	1	2	2	1	2	1	5
10	1	1	2	3		1	2	3	8
11	3	3	4	4	5	5	6	6	43
12	5	6	4	3	4	4	4	4	35
13	3	3	3	3	2	3	2	2	12
14	2	2	2	2	4	3	3	4	14
15	4	4	3	4	3	2	5	5	27
16	4	4	5	6	6	4	4	5	46
17	4	3	2	4	4	3	3	3	19
18	3	3	2	2	3	3	3	4	15
19	4	3	3	4	5	4	3	6	32
20	4	3	3	3	4	3	3	4	20
21	4	2	2	2	2	1	2	1	9
22	2	1	2	3	2	2	3	1	8
23	2	2	2	2	3	4	3	3	13
24	2	1	1	1	2	3	2	3	8
25	1	1	2	3	3	2	2	1	8
26	2	3	3	3	5	6	6	5	39
27	5	3	4	4	4	3	2	2	22
28	2	2	2	3	5	4	3	3	18
29	3	4	3	4	5	5	5	5	35
30	3	3	3	4	4	4	4	4	23
31	4	4	3	5	5	5	4	4	33
Mean									19.5

August

Day	K								Ak
1	5	4	4	4	5	3	4	6	37
2	4	3	3	3	3	5	4	4	24
3	3	3	3	3	2	2	3	3	13
4	1	2	2	2	1	3	3	3	9
5	2	1	1	1	2	2	2	4	8
6	6	4	4	4	4	2	2	2	26
7	1	2	2	3	5	5	7	5	40
8	5	5	4	4	4	4	5	3	33
9	3	2	3	3	3	3	3	4	16
10	3	2	2	3	3	2	2	1	10
11	2	2	2	3	3	3	3	3	12
12	4	4	4	4	4	4	3	3	24
13	3	4	3	2	4	3	2	3	16
14	3	2	3	3	3	3	3	2	13
15	2	2	2	3	3	4	3	3	14
16	2	2	1	3	3	3	2	1	9
17	1	0	1	2	6	4	3	6	27
18	6	6	5	7	8	9	6	6	144
19	6	3	3	3	3	3	3	2	22
20	1	2	3	3	3	4	2	4	15
21	4	4	4	5	5	6	5	6	48
22	5	5	4	4	5	4	4	4	35
23	4	5	4	4	4	5	2	3	28
24	2	2	3	4	3	3	4	3	16
25	3	3	3	3	4	3	2	2	15
26	3	1	1	2	3	3	3	4	13
27	1	1	1	2	2	3	3	3	9
28	3	2	3	4	3	4	3	3	17
29	1	1	1	3	3	4	5	2	15
30	3	4	2	3	3	2	2	1	12
31	1	2	1	2	2	2	2	1	6
Mean									23.4

September

Day	K								Ak
1	2	3	3	2	2	3	4	2	13
2	3	2	2	3	4	2	2	2	12
3	3	2	3	3	3	3	4	3	16
4	3	3	3	3	4	3	4	5	22
5	3	3	3	3	3	4	2	1	14
6	2	2	1	3	2	3	2	2	9
7	2	1	1	1	1	2	2	1	5
8	1	0	1	1	3	2	2	3	7
9	2	1	2	4	4	3	4	4	18
10	4	2	3	4	3	3	4	3	19
11	4	3	1	2	2	3	3	3	13
12	2	2	2	3	2	2	2	1	8
13	3	2	2	2	1	1	2	3	8
14	2	0	1	1	2	2	2	2	5
15	1	0	0	1	1	1	2	3	4
16	4	3	3	3	6	4	5	4	32
17	5	4	4	5	7	6	5	6	62
18	5	4	3	5	4	5	5	5	39
19	4	3	4	5	4	5	5	3	32
20	3	4	3	3	4	5	2	3	21
21	4	2	3	3	4	4	4	3	20
22	3	2	2	3	3	4	5	1	17
23	2	3	2	3	3	4	3	3	15
24	5	4	4	3	5	4	5	5	36
25	4	3	3	4	4	5	4	4	27
26	2	2	3	3	3	3	3	3	13
27	3	1	1	2	1	1	1	2	6
28	1	0	2	1	2	3	2	1	6
29	1	1	0	1	1	1	1	3	4
30	0	0	1	1	2	2	2	2	4
Mean									16.9

October

Day	K								Ak
1	3	1	1	1	1	2	4	5	14
2	3	2	2	1	1	2	3	3	9
3	3	3	3	2	3	4	4	2	16
4	2	1	2	2	2	1	0	0	4
5	0	0	0	0	0	1	3	4	6
6	2	1	1	2	2	2	3	3	8
7	4	2	3	3	3	4	3	3	17
8	2	1	2	2	2	1	1	3	7
9	3	2	1	2	2	1	0	0	5
10	0	0	0	0	1	1	1	2	2
11	1	0	0	0	0	0	1	1	1
12	1	0	0	1	1	1	2	2	3
13	3	2	1	2	2	3	5	6	23
14	3	3	4	4	4	4	9	8	97
15	4	4	4	3	4	5	5	5	33
16	5	3	3	3	4	4	4	4	25
17	4	3	4	3	4	2	3	4	20
18	3	3	3	3	4	4	3	4	20
19	3	3	3	4	6	6	6	6	49
20	3	2	3	3	4	4	5	5	25
21	4	3	3	4	6	8	5	7	74
22	5	4	3	3	4	5	4	1	26
23	2	1	2	2	2	1	0	0	4
24	0	2	2	2	4	8	6	4	49
25	3	3	3	3	4	4	1	4	18
26		2	2	2	1	1	4	4	12
27	3	3	3	2	2	2	2	1	10
28	3	3	3	4	2	5	4	5	25
29	4	4	9	7	9	9	9	9	274
30	9	8	6	5	6	7	9	9	224
31	9	8	7	7	7	5	5	5	151
Mean									40.4

November

Day	K								Ak
1	4	4	3	3	3	3	4	4	21
2	3	3	3	2	2	3	5	3	17
3	3	3	3	3	3	3	3	3	15
4	3	3	6	6	3	2	3	2	29
5	1	0	1	2	1	2	2	3	6
6	3	1	1	1	2	3	5	4	15
7	2	2	2	2	2	2	2	2	7
8	1	1	1	2	3	4	3	2	10
9	2	2	3	3	6	5	6	3	33
10	3	3	2	3	3	4	5	5	24
11	5	4	5	5	5	6	5	4	47
12	4	3	3	3	3	5	5	2	24
13	3	3	4	4	5	6	7	6	54
14	4	3	3	3	4	3	5	4	24
15	2	3	4	4	5	6	4	5	35
16	3	4	4	4	5	5	5	5	36
17	4	4	4	3	5	6	6	4	41
18	4	3	3	3	4	5	3	2	21
19	2	2	2	2	3	4	4	1	13
20	2	2	5	6	9	9	9	8	198
21	7	6	5	3	2	3	4	4	45
22	4	2	2	2	3	8	7	6	65
23	4	3	3	2	3	2	5	4	20
24	2	2	2	2	4	3	3	3	13
25	3	3	3	2	3	4	3	3	16
26	3	2	2	1	2	2	2	3	9
27	2	1		1	1	1	2	2	5
28	2	2	1	2	3	1	0	0	5
29	2	1	1	1	1	1	1	2	4
30	1	2	1	1	2	4	4	4	13
Mean									28.8

December

Day	K								Ak
1	3	3	2	2	1	2	0	3	9
2	2	1	2	2	1	0	1	1	4
3	1	1	1	1	1	2	1	2	4
4	1	0	0	0	0	1	3	3	5
5	3	3	3	3	5	5	4	5	29
6	4	3	2	4	2	5	3	4	22
7	3	1	1	1	2	3	3	4	11
8	2	3	2	3	4	5	6	5	31
9	3	3	3	3	4	4	5	5	26
10	5	3	3	3	4	6	6	5	41
11	5	3	4	4	5	5	4	4	33
12	3	3	3	2	3	4	4	4	19
13	4	3	3	3	4	4	4	4	23
14	4	3	3	3	4	5	5	4	28
15	4	3	3	3	5	4	3	2	21
16	2	1	2	3	1	3	2	3	9
17	2	1	1	1	2	3	2	1	6
18	1	1	1	1	1	1	0	0	2
19	0	0	1	1	2	0	0	1	2
20	0	1	1	3	3	6	3	3	18
21	4	3	3	3	2	4	4	4	20
22	2	2	3	3	3	4	3	3	15
23	2	1	1	1	2	2	3	2	7
24	1	1	1	1	1	3	2	3	7
25	2	0	1	1	2	3	0	1	5
26	3	2	1	1	1	1	1	3	7
27	1	2	1	3	1	1	2	5	11
28	3	2	2	2	2	2	4	2	11
29	1	0	1	1	1	3	1	1	4
30	1	0	1	0	1	1	3	3	5
31	3	2	1	2	3	6	5	4	25
Mean									14.8

14.2 K-Indices Sequenced in Bartel's Solar Rotation Number

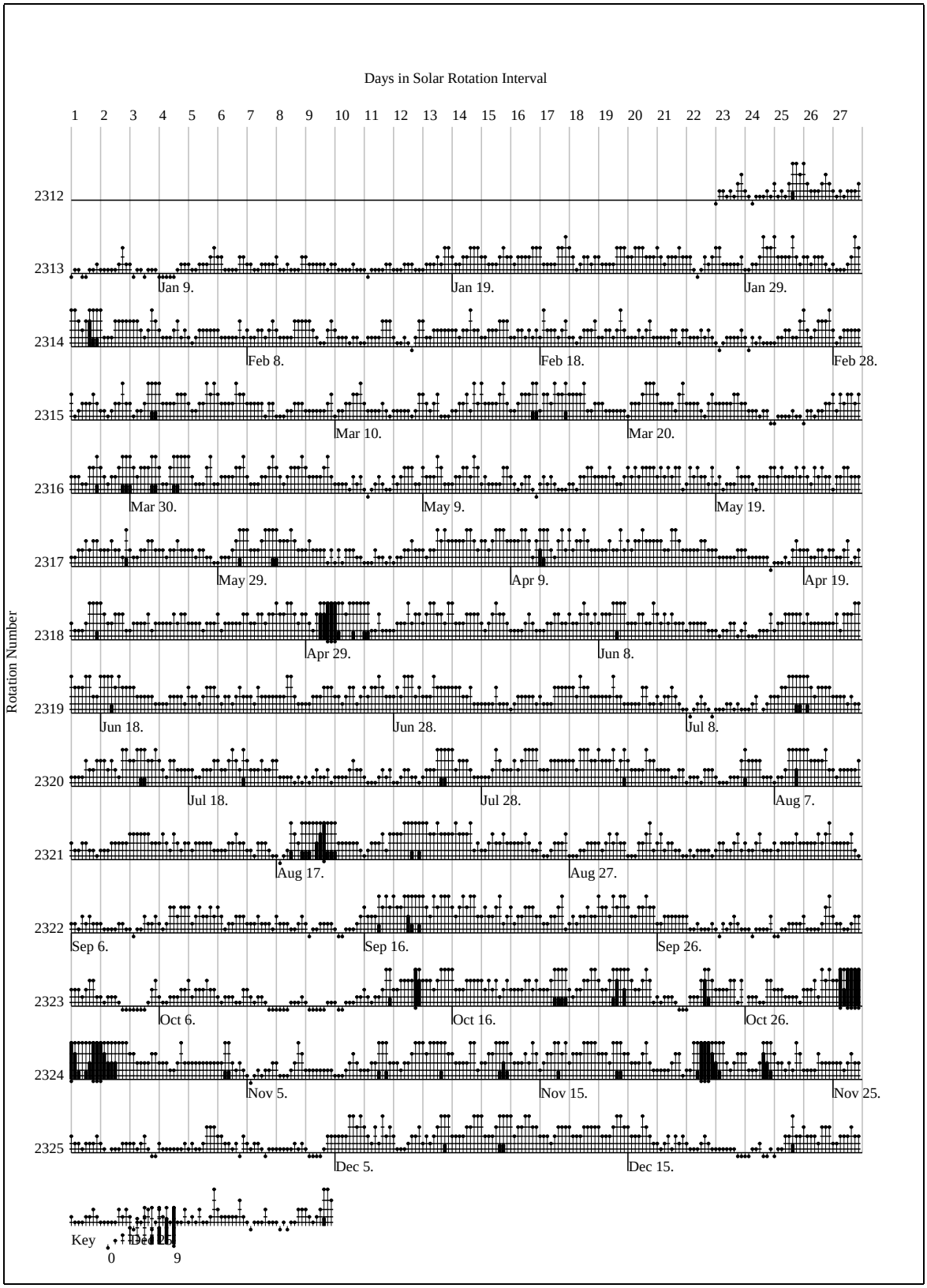


Figure 6: K-indices sequenced in Bartel's solar rotation number

14.3 Ak-Indices

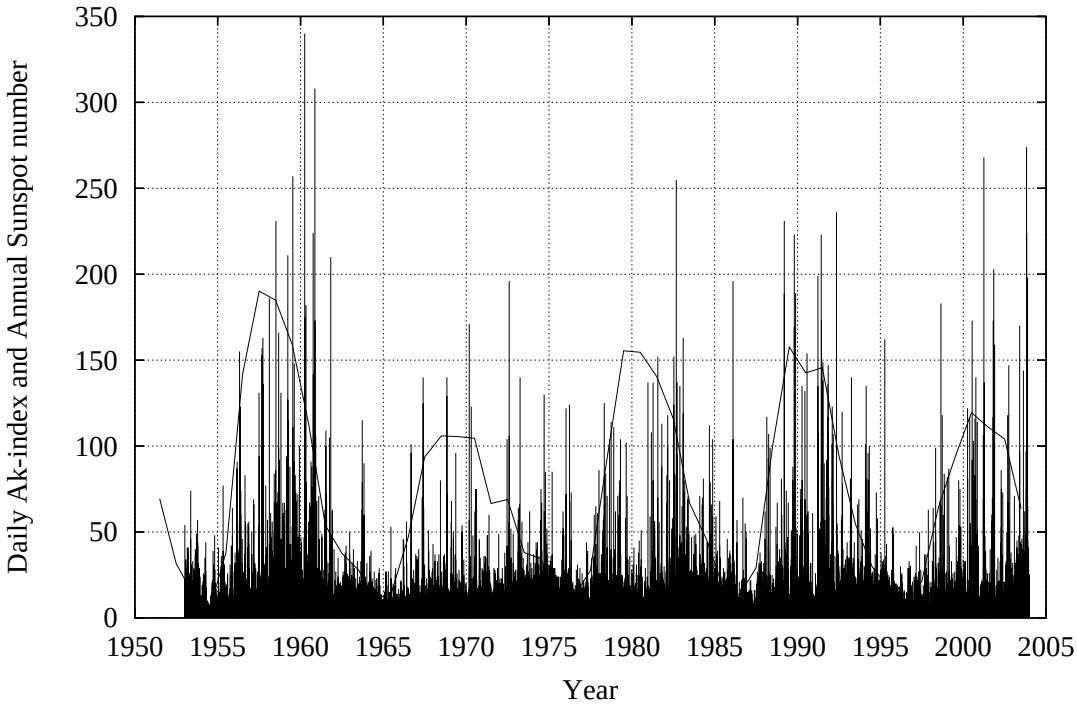


Figure 7: Daily Ak-indices (vertical lines) and sunspots (solid line)

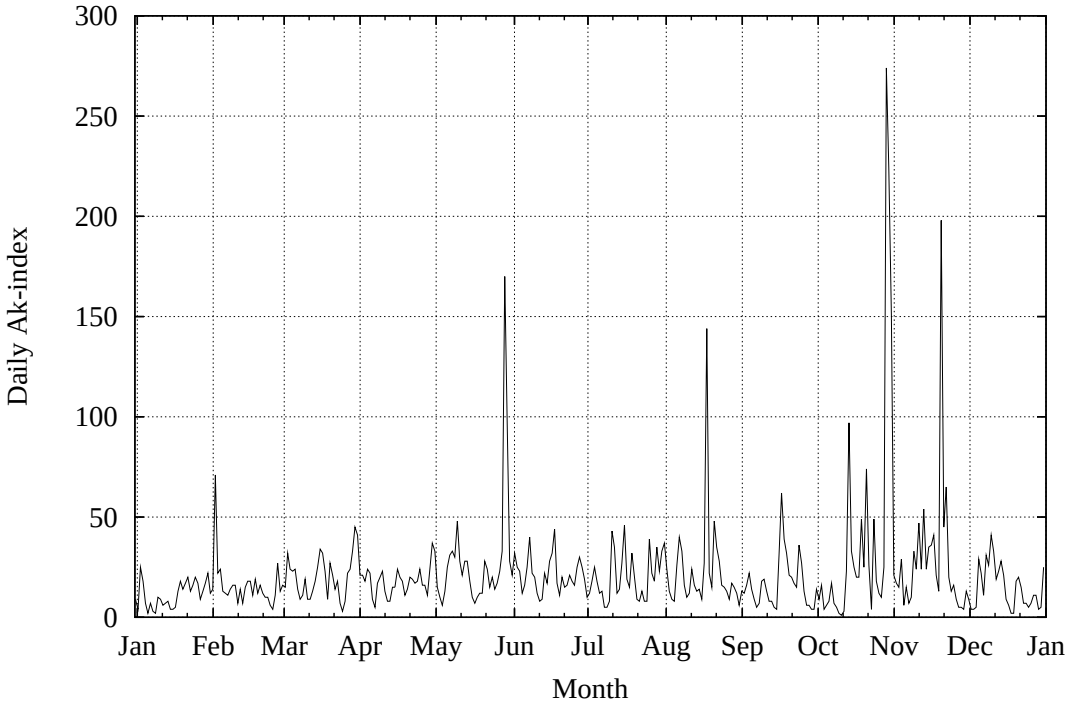


Figure 8: Daily Ak-indices

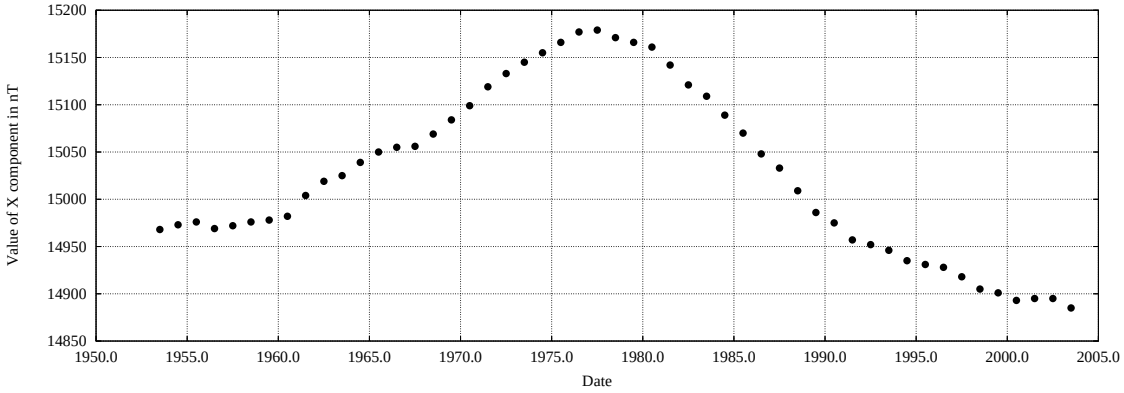
14.4 Table of Annual Ak-indices

m/M denotes sunspot minimum/maximum

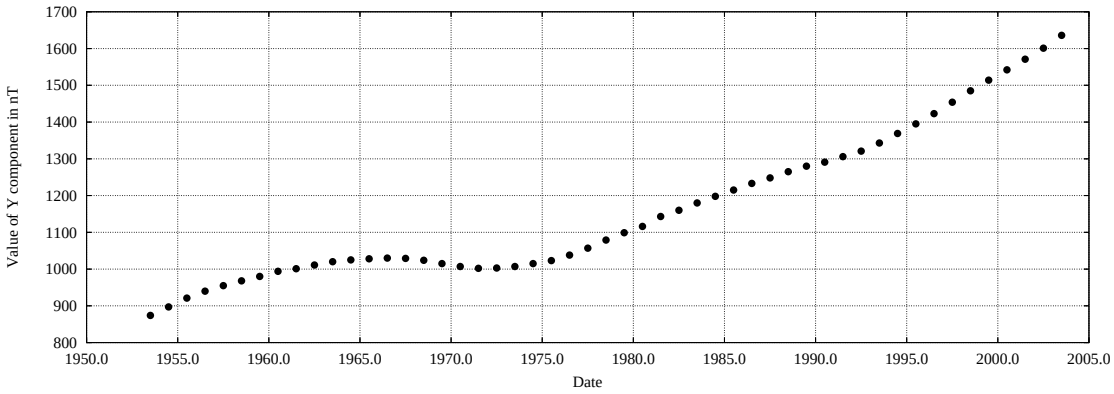
Year	Ak
1953	11
1954m	8
1955	9
1956	14
1957M	16
1958	18
1959	21
1960	22
1961	12
1962	10
1963	10
1964m	8
1965	6
1966	8
1967	10
1968M	11
1969	10
1970	10
1971	9
1972	10
1973	13
1974	15
1975	11
1976m	10
1977	9
1978	13

Year	Ak
1979M	12
1980	9
1981	13
1982	19
1983	15
1984	14
1985	10
1986m	10
1987	8
1988	11
1989M	16
1990	13
1991	21
1992	15
1993	13
1994	16
1995	11
1996m	9
1997	8
1998	12
1999	12
2000M	15
2001	14
2002	13
2003	22

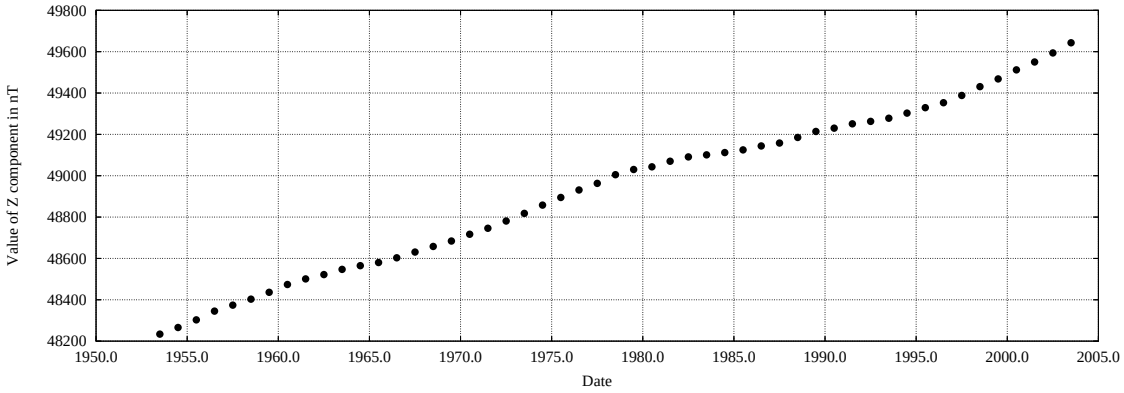
15 Annual Means



(a) Annual means for X component

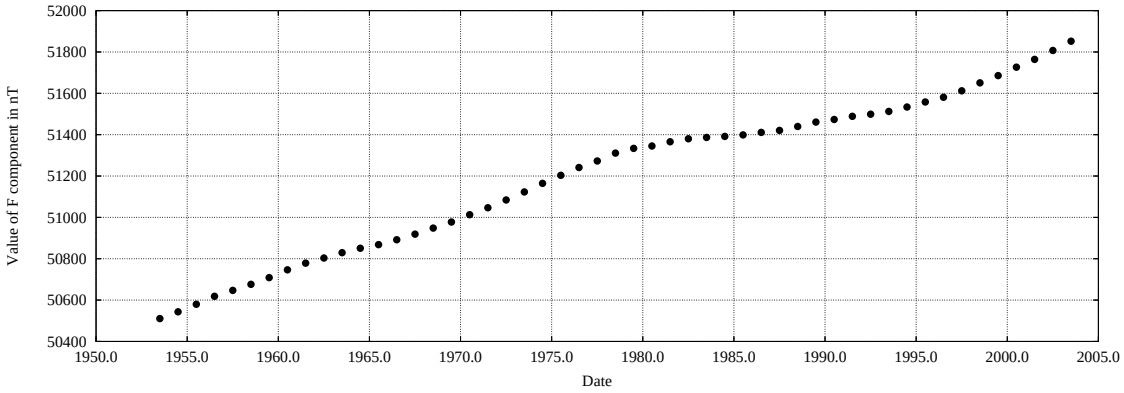


(b) Annual means for Y component

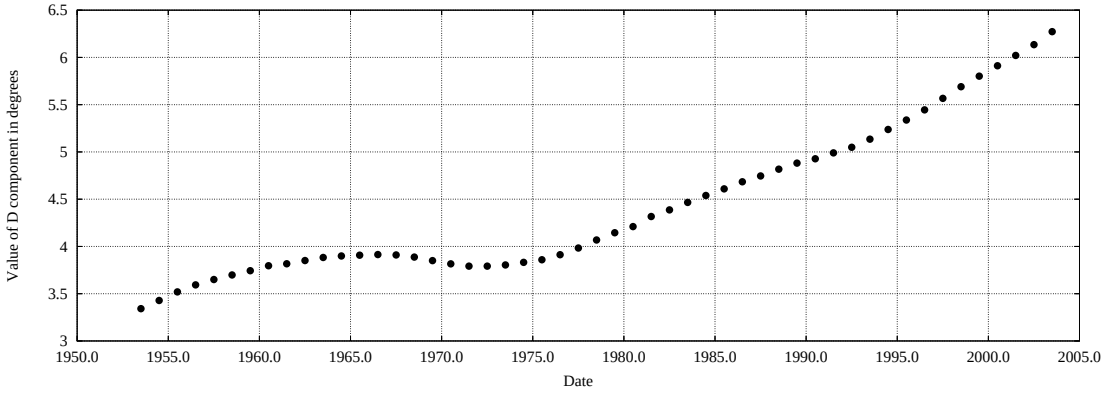


(c) Annual means for Z component

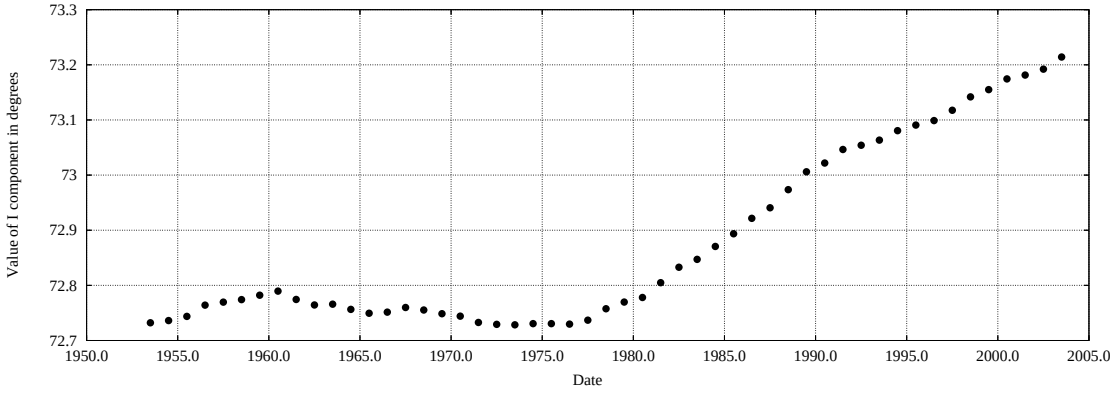
Figure 9: Figures of annual means of X, Y, and Z



(a) Annual means for F component



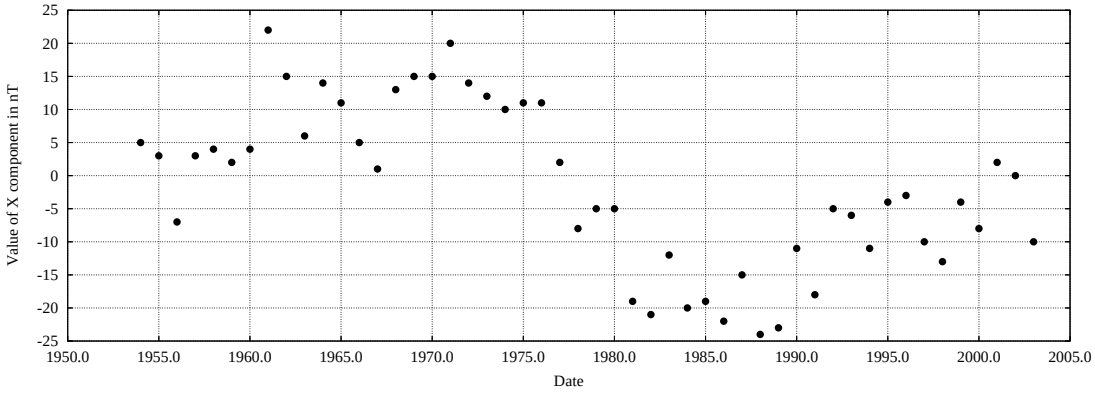
(b) Annual means for D component



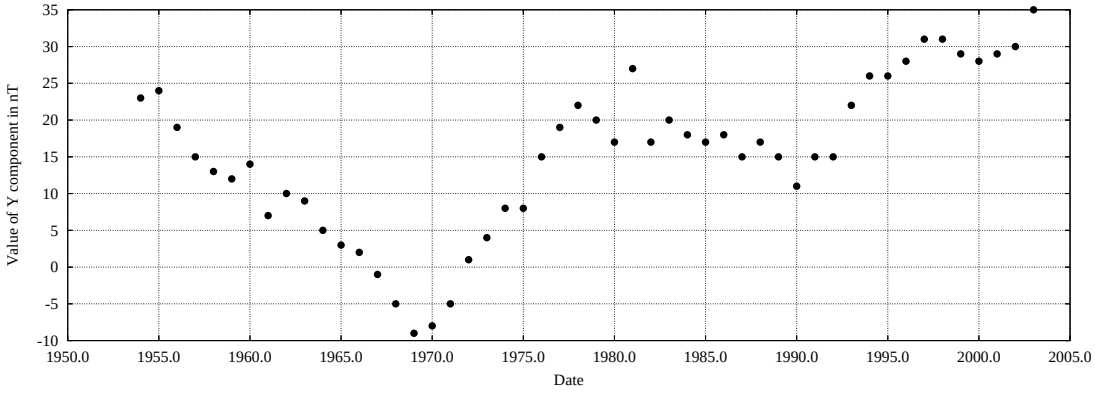
(c) Annual means for I component

Figure 10: Figures of annual means of F, D, and I

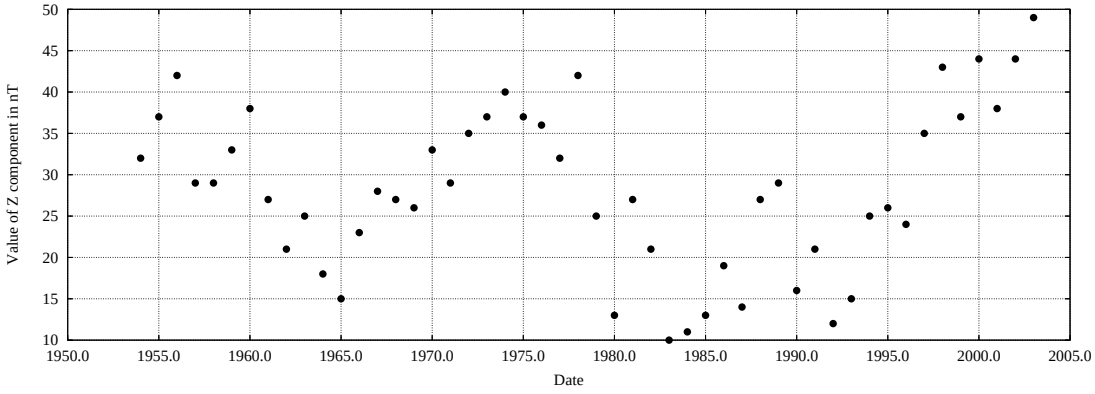
16 Secular Variation



(a) Annual change of X component

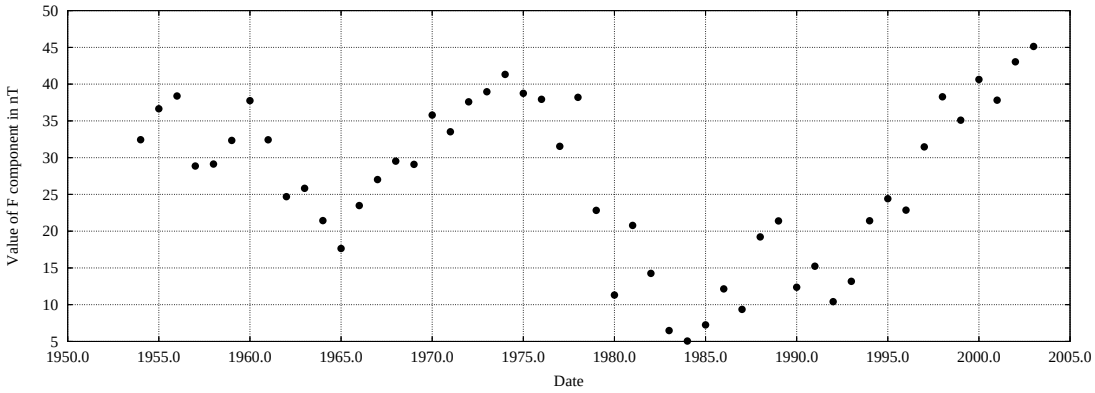


(b) Annual change of Y component

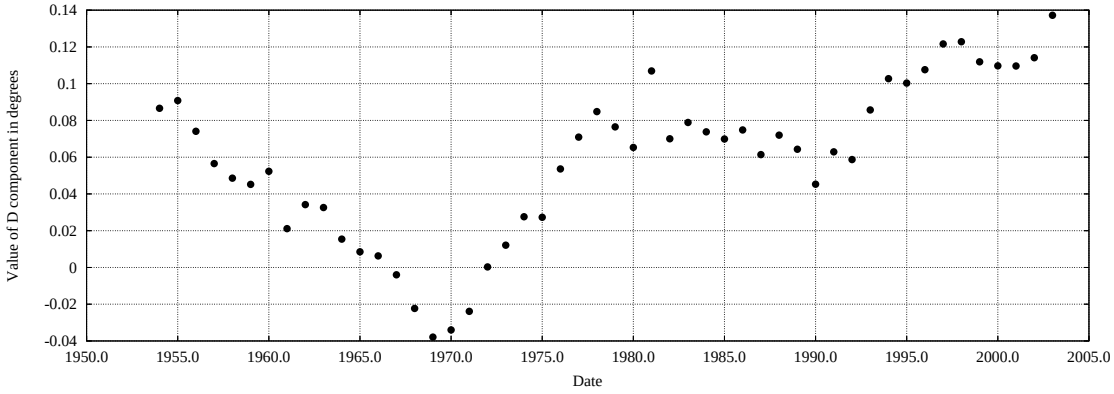


(c) Annual change of Z component

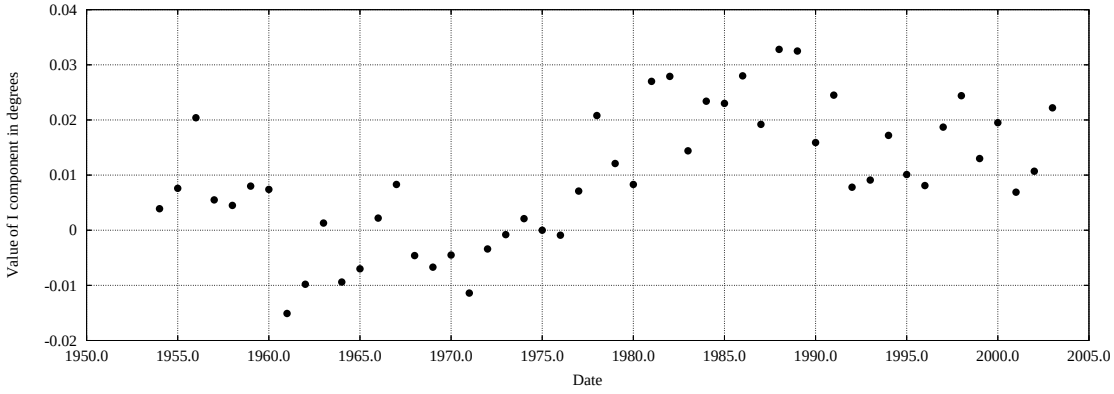
Figure 11: Annual change of components X, Y, and X



(a) Annual change of F component



(b) Annual change of D component



(c) Annual change of I component

Figure 12: Annual change of components F, D, and I

17 Tables of Annual Means

17.1 All Days

Year	X	Y	Z	D	H	F	I
1953	14968	874	48234	3° 20.5′	14993	50511	72° 43.9′
1954	14973	897	48266	3° 25.7′	15000	50543	72° 44.2′
1955	14976	921	48303	3° 31.1′	15004	50580	72° 44.6′
1956	14969	940	48345	3° 35.6′	14998	50618	72° 45.8′
1957	14972	955	48374	3° 39.0′	15002	50647	72° 46.2′
1958	14976	968	48403	3° 41.9′	15007	50676	72° 46.4′
1959	14978	980	48436	3° 44.6′	15010	50708	72° 46.9′
1960	14982	994	48474	3° 47.7′	15015	50746	72° 47.4′
1961	15004	1001	48501	3° 49.0′	15037	50779	72° 46.5′
1962	15019	1011	48522	3° 51.1′	15053	50803	72° 45.9′
1963	15025	1020	48547	3° 53.0′	15060	50829	72° 45.9′
1964	15039	1025	48565	3° 53.9′	15074	50851	72° 45.4′
1965	15050	1028	48580	3° 54.5′	15085	50868	72° 45.0′
1966	15055	1030	48603	3° 54.8′	15090	50892	72° 45.1′
1967	15056	1029	48631	3° 54.6′	15091	50919	72° 45.6′
1968	15069	1024	48658	3° 53.3′	15104	50948	72° 45.3′
1969	15084	1015	48684	3° 51.0′	15118	50977	72° 44.9′
1970	15099	1007	48717	3° 48.9′	15133	51013	72° 44.6′
1971	15119	1002	48746	3° 47.5′	15152	51047	72° 44.0′
1972	15133	1003	48781	3° 47.5′	15166	51084	72° 43.8′
1973	15145	1007	48818	3° 48.2′	15178	51123	72° 43.7′
1974	15155	1015	48858	3° 49.9′	15189	51165	72° 43.8′
1975	15166	1023	48895	3° 51.5′	15200	51203	72° 43.8′
1976	15177	1038	48931	3° 54.8′	15212	51241	72° 43.8′
1977	15179	1057	48963	3° 59.0′	15216	51273	72° 44.2′
1978	15171	1079	49005	4° 04.1′	15209	51311	72° 45.5′
1979	15166	1099	49030	4° 08.7′	15206	51334	72° 46.2′
1980	15161	1116	49043	4° 12.6′	15202	51345	72° 46.7′
1981	15142	1143	49070	4° 19.0′	15185	51366	72° 48.3′
1982	15121	1160	49091	4° 23.2′	15165	51380	72° 50.0′
1983	15109	1180	49101	4° 27.9′	15155	51387	72° 50.8′
1984	15089	1198	49112	4° 32.4′	15136	51392	72° 52.2′
1985	15070	1215	49125	4° 36.6′	15119	51399	72° 53.6′
1986	15048	1233	49144	4° 41.1′	15098	51411	72° 55.3′
1987	15033	1248	49158	4° 44.7′	15085	51420	72° 56.4′
1988	15009	1265	49185	4° 49.1′	15062	51440	72° 58.4′
1989	14986	1280	49214	4° 52.9′	15041	51461	73° 00.4′
1990	14975	1291	49230	4° 55.6′	15031	51473	73° 01.3′
1991	14957	1306	49251	4° 59.4′	15014	51489	73° 02.8′
1992	14952	1321	49263	5° 02.9′	15010	51499	73° 03.3′
1993	14946	1343	49278	5° 08.1′	15006	51512	73° 03.8′
1994	14935	1369	49303	5° 14.2′	14998	51534	73° 04.8′
1995	14931	1395	49329	5° 20.3′	14996	51558	73° 05.4′
1996	14928	1423	49353	5° 26.7′	14996	51581	73° 05.9′
1997	14918	1454	49388	5° 34.0′	14989	51612	73° 07.1′
1998	14905	1485	49431	5° 41.4′	14979	51651	73° 08.5′
1999	14901	1514	49468	5° 48.1′	14978	51686	73° 09.3′
2000	14893	1542	49512	5° 54.7′	14973	51726	73° 10.5′
2001	14895	1571	49550	6° 01.2′	14978	51764	73° 10.9′
2002	14895	1601	49594	6° 08.1′	14981	51807	73° 11.5′
2003	14885	1636	49643	6° 16.3′	14975	51852	73° 12.9′

17.2 Quiet Days

Year	X	Y	Z	D	H	F	I
1953	14975	872	48235	3° 20.0′	15000	50514	72° 43.5′
1954	14977	895	48266	3° 25.2′	15004	50544	72° 43.9′
1955	14980	919	48302	3° 30.6′	15008	50580	72° 44.4′
1956	14978	936	48343	3° 34.6′	15007	50619	72° 45.2′
1957	14978	951	48372	3° 38.0′	15008	50647	72° 45.8′
1958	14984	965	48400	3° 41.1′	15015	50676	72° 45.9′
1959	14986	976	48433	3° 43.6′	15018	50708	72° 46.4′
1960	14993	989	48474	3° 46.4′	15026	50749	72° 46.7′
1962	15022	1009	48523	3° 50.6′	15056	50805	72° 45.7′
1963	15032	1018	48547	3° 52.5′	15066	50831	72° 45.5′
1964	15042	1024	48566	3° 53.7′	15077	50852	72° 45.2′
1965	15051	1027	48581	3° 54.2′	15086	50869	72° 44.9′
1966	15059	1028	48602	3° 54.3′	15094	50892	72° 44.8′
1967	15062	1028	48630	3° 54.3′	15097	50920	72° 45.2′
1968	15073	1022	48657	3° 52.7′	15108	50948	72° 45.1′
1969	15089	1013	48684	3° 50.4′	15123	50979	72° 44.6′
1970	15104	1005	48715	3° 48.4′	15137	51013	72° 44.3′
1971	15124	1001	48746	3° 47.2′	15157	51048	72° 43.6′
1972	15139	1001	48780	3° 47.0′	15172	51085	72° 43.4′
1973	15151	1004	48819	3° 47.5′	15184	51126	72° 43.4′
1974	15162	1012	48859	3° 49.1′	15196	51167	72° 43.4′
1975	15171	1020	48896	3° 50.8′	15205	51206	72° 43.5′
1976	15182	1035	48930	3° 54.0′	15217	51242	72° 43.5′
1977	15184	1054	48963	3° 58.2′	15221	51274	72° 43.9′
1978	15178	1075	49003	4° 03.1′	15216	51311	72° 45.0′
1979	15171	1096	49028	4° 07.9′	15211	51333	72° 45.8′
1980	15163	1115	49042	4° 12.3′	15204	51345	72° 46.5′
1981	15148	1140	49067	4° 18.2′	15191	51365	72° 47.9′
1982	15128	1157	49090	4° 22.4′	15172	51381	72° 49.5′
1983	15115	1176	49101	4° 26.9′	15161	51388	72° 50.5′
1984	15095	1195	49113	4° 31.6′	15142	51394	72° 51.9′
1985	15076	1212	49125	4° 35.8′	15125	51401	72° 53.2′
1986	15055	1230	49144	4° 40.2′	15105	51413	72° 54.9′
1987	15037	1246	49158	4° 44.2′	15089	51422	72° 56.2′
1988	15014	1262	49182	4° 48.3′	15067	51438	72° 58.1′
1989	14995	1276	49213	4° 51.8′	15049	51463	72° 59.8′
1990	14982	1288	49227	4° 54.8′	15037	51472	73° 00.8′
1991	14965	1302	49248	4° 58.3′	15022	51488	73° 02.2′
1992	14959	1318	49261	5° 02.1′	15017	51499	73° 02.8′
1993	14952	1341	49277	5° 07.5′	15012	51513	73° 03.4′
1994	14944	1365	49304	5° 13.1′	15006	51537	73° 04.3′
1995	14937	1392	49328	5° 19.4′	15002	51559	73° 05.1′
1996	14934	1421	49353	5° 26.1′	15001	51583	73° 05.6′
1997	14923	1452	49388	5° 33.4′	14993	51614	73° 06.7′
1998	14910	1484	49431	5° 41.0′	14984	51652	73° 08.2′
1999	14905	1512	49467	5° 47.5′	14981	51686	73° 09.0′
2000	14900	1540	49510	5° 54.1′	14979	51726	73° 10.0′
2001	14901	1569	49548	6° 00.6′	14983	51764	73° 10.5′
2002	14901	1599	49593	6° 07.5′	14987	51808	73° 11.1′
2003	14896	1632	49644	6° 15.1′	14985	51856	73° 12.2′

17.3 Disturbed Days

Year	X	Y	Z	D	H	F	I
1953	14975	872	48235	3° 20.0′	15000	50514	72° 43.5′
1954	14977	895	48266	3° 25.2′	15004	50544	72° 43.9′
1955	14980	919	48302	3° 30.6′	15008	50580	72° 44.4′
1956	14978	936	48343	3° 34.6′	15007	50619	72° 45.2′
1957	14978	951	48372	3° 38.0′	15008	50647	72° 45.8′
1958	14984	965	48400	3° 41.1′	15015	50676	72° 45.9′
1959	14986	976	48433	3° 43.6′	15018	50708	72° 46.4′
1960	14993	989	48474	3° 46.4′	15026	50749	72° 46.7′
1962	15022	1009	48523	3° 50.6′	15056	50805	72° 45.7′
1963	15032	1018	48547	3° 52.5′	15066	50831	72° 45.5′
1964	15042	1024	48566	3° 53.7′	15077	50852	72° 45.2′
1965	15051	1027	48581	3° 54.2′	15086	50869	72° 44.9′
1966	15059	1028	48602	3° 54.3′	15094	50892	72° 44.8′
1967	15062	1028	48630	3° 54.3′	15097	50920	72° 45.2′
1968	15073	1022	48657	3° 52.7′	15108	50948	72° 45.1′
1969	15089	1013	48684	3° 50.4′	15123	50979	72° 44.6′
1970	15104	1005	48715	3° 48.4′	15137	51013	72° 44.3′
1971	15124	1001	48746	3° 47.2′	15157	51048	72° 43.6′
1972	15139	1001	48780	3° 47.0′	15172	51085	72° 43.4′
1973	15151	1004	48819	3° 47.5′	15184	51126	72° 43.4′
1974	15162	1012	48859	3° 49.1′	15196	51167	72° 43.4′
1975	15171	1020	48896	3° 50.8′	15205	51206	72° 43.5′
1976	15182	1035	48930	3° 54.0′	15217	51242	72° 43.5′
1977	15184	1054	48963	3° 58.2′	15221	51274	72° 43.9′
1978	15178	1075	49003	4° 03.1′	15216	51311	72° 45.0′
1979	15171	1096	49028	4° 07.9′	15211	51333	72° 45.8′
1980	15163	1115	49042	4° 12.3′	15204	51345	72° 46.5′
1981	15148	1140	49067	4° 18.2′	15191	51365	72° 47.9′
1982	15128	1157	49090	4° 22.4′	15172	51381	72° 49.5′
1983	15115	1176	49101	4° 26.9′	15161	51388	72° 50.5′
1984	15095	1195	49113	4° 31.6′	15142	51394	72° 51.9′
1985	15076	1212	49125	4° 35.8′	15125	51401	72° 53.2′
1986	15055	1230	49144	4° 40.2′	15105	51413	72° 54.9′
1987	15037	1246	49158	4° 44.2′	15089	51422	72° 56.2′
1988	15014	1262	49182	4° 48.3′	15067	51438	72° 58.1′
1989	14995	1276	49213	4° 51.8′	15049	51463	72° 59.8′
1990	14982	1288	49227	4° 54.8′	15037	51472	73° 00.8′
1991	14965	1302	49248	4° 58.3′	15022	51488	73° 02.2′
1992	14959	1318	49261	5° 02.1′	15017	51499	73° 02.8′
1993	14952	1341	49277	5° 07.5′	15012	51513	73° 03.4′
1994	14944	1365	49304	5° 13.1′	15006	51537	73° 04.3′
1995	14937	1392	49328	5° 19.4′	15002	51559	73° 05.1′
1996	14934	1421	49353	5° 26.1′	15001	51583	73° 05.6′
1997	14923	1452	49388	5° 33.4′	14993	51614	73° 06.7′
1998	14910	1484	49431	5° 41.0′	14984	51652	73° 08.2′
1999	14905	1512	49467	5° 47.5′	14981	51686	73° 09.0′
2000	14900	1540	49510	5° 54.1′	14979	51726	73° 10.0′
2001	14901	1569	49548	6° 00.6′	14983	51764	73° 10.5′
2002	14901	1599	49593	6° 07.5′	14987	51808	73° 11.1′
2003	14896	1632	49644	6° 15.1′	14985	51856	73° 12.2′

18 Earth's Magnetic Field Maps of Finland 2004.0

The isolines of total field (F) and horizontal field (H) are given in nanoteslas (nT), declination (D, positive eastwards) and inclination (I, positive downwards) in degrees of arc (see also www.geo.fmi.fi/MAGN/magncharts.html)

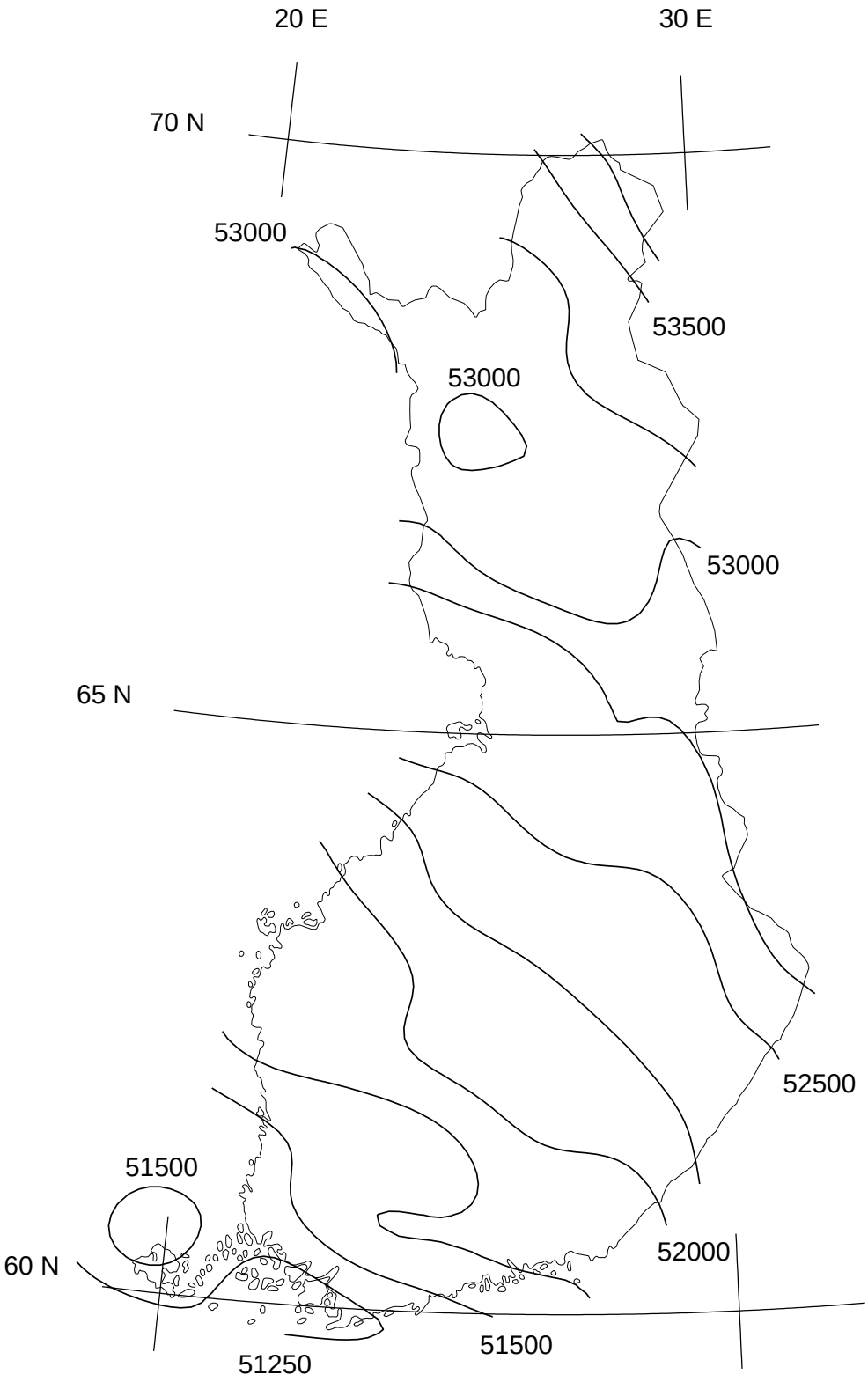


Figure 13: Total intensity F 2004.0 in nT

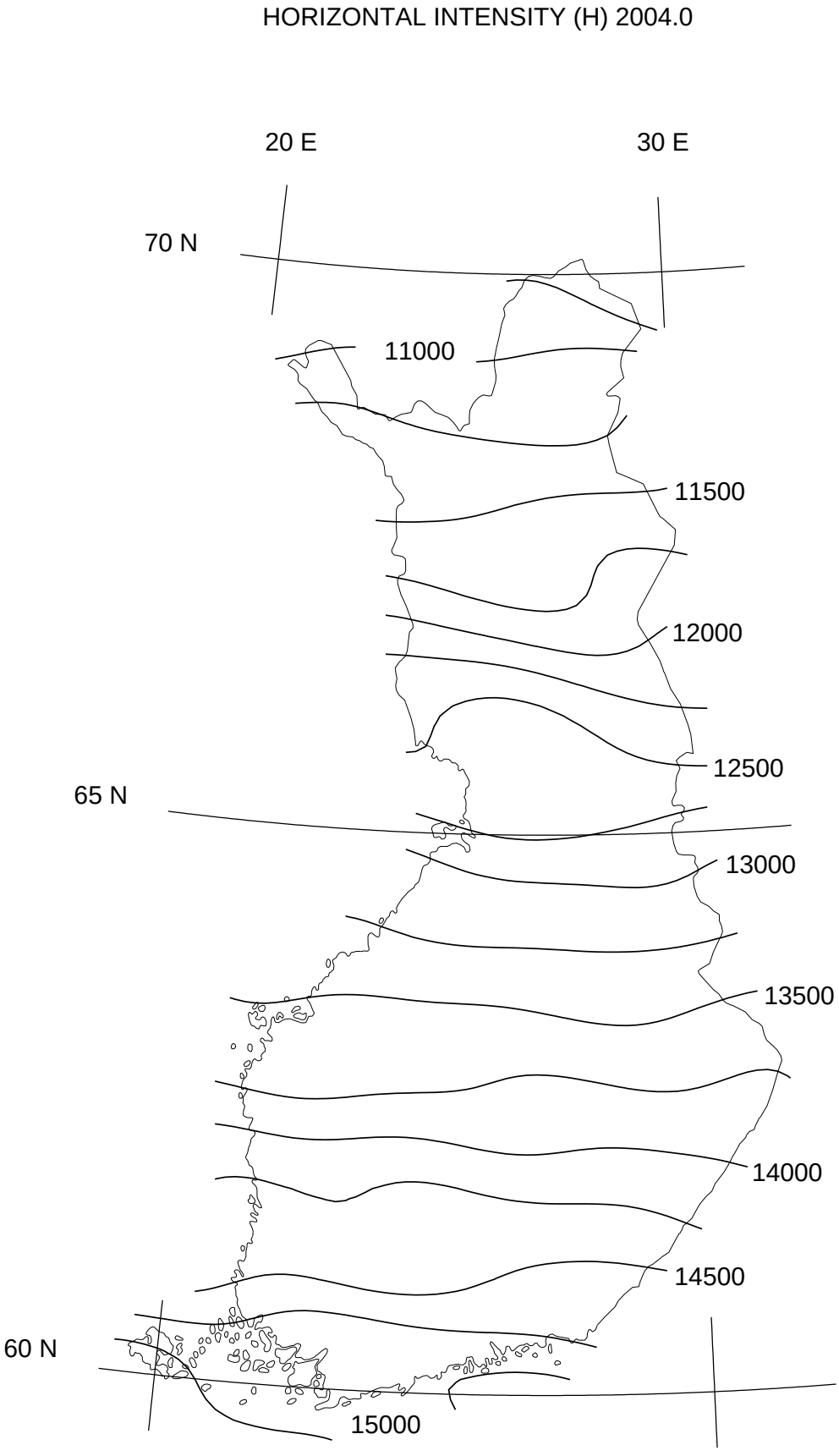


Figure 14: Horizontal intensity H 2004.0 in nT

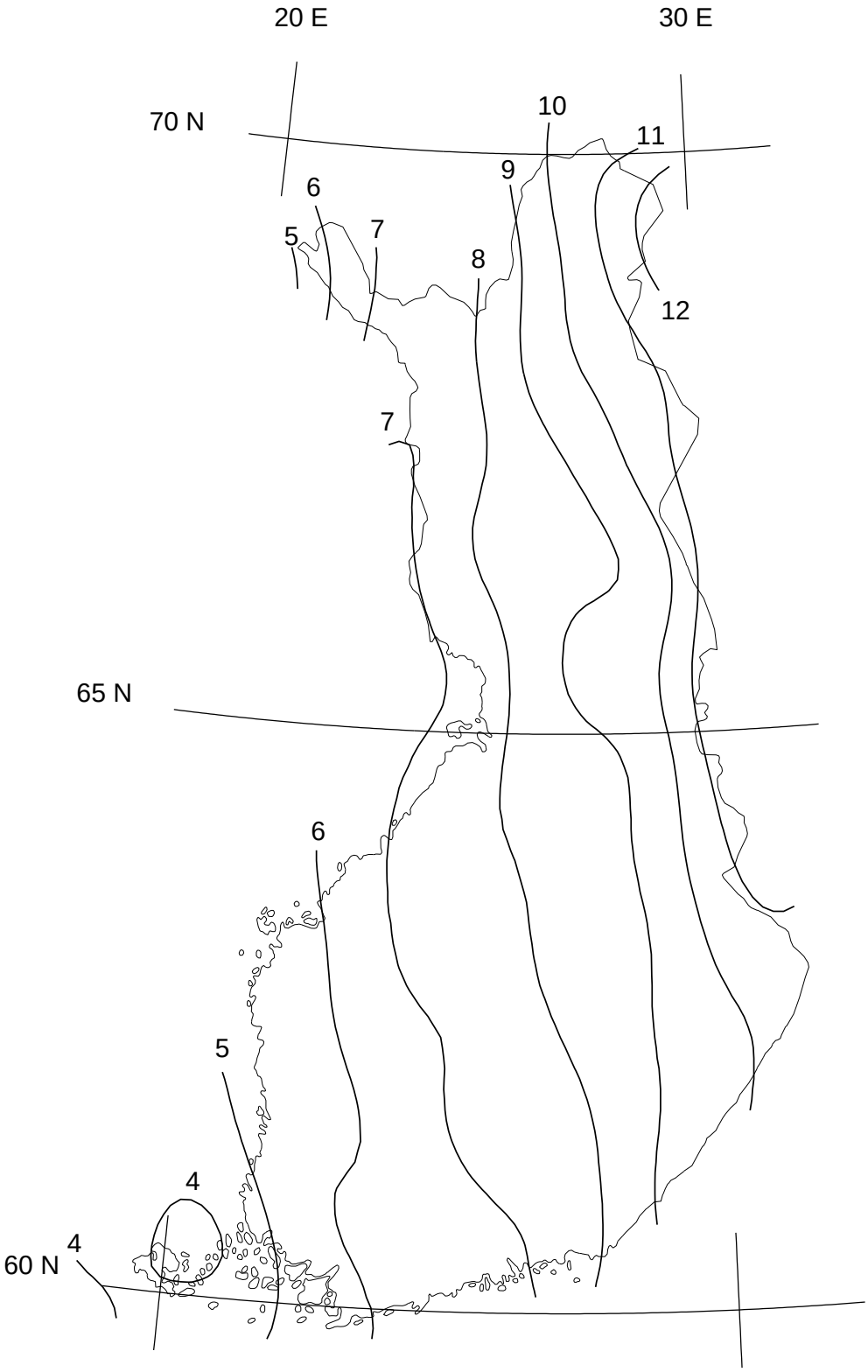


Figure 15: Declination D 2004.0 in degreees

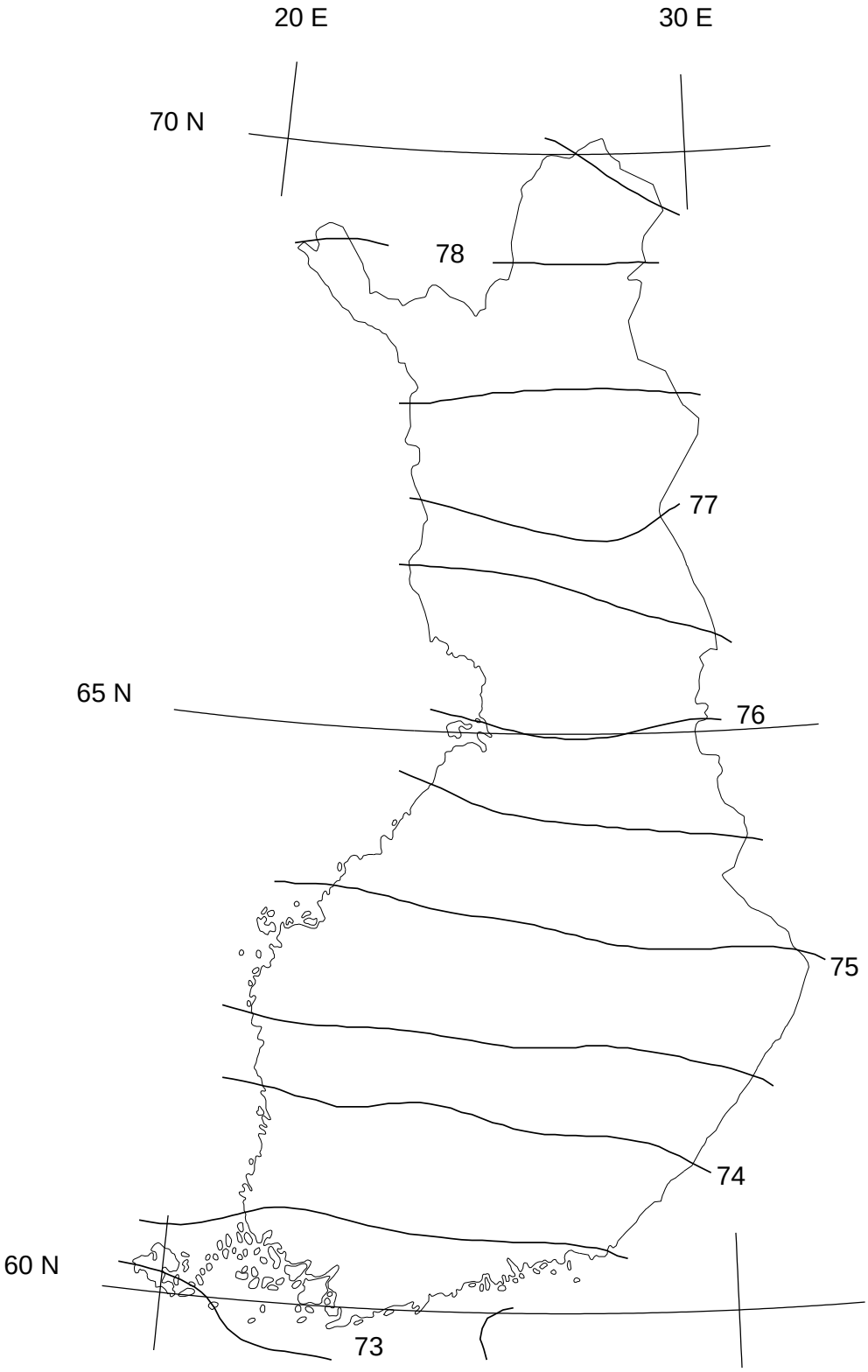


Figure 16: Inclination I 2004.0 in degrees

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Magnetic Results 2003, Helsinki 2006, 47 p.