

**NURMIJÄRVI GEOPHYSICAL
OBSERVATORY**

MAGNETIC RESULTS 2004

Editors K. Pajunpää and H. Nevanlinna

**ILMATIETEEN LAITOS
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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 2004. Magnetic isolines describing the distribution of geomagnetic field components in Finland 2005.0 are shown by a series of maps.		
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Contents

1 Description of the observatory	5
2 Recording instruments	5
3 Absolute measurements	6
4 Data processing and dissemination	6
5 IMAGE stations	6
6 SAMNET stations	7
7 Personnel	7
8 IMAGE Magnetometer Network	8
9 Baseline Measurements for FGE	9
10 Tables of Hourly Means of X, Y, and Z	10
11 Hourly Means minus Monthly Means	23
11.1 All Days	23
11.2 Quiet Days	24
11.3 Disturbed Days	25
12 Monthly and Annual Means	26
13 Hourly Means of All Days as Sequenced in Bartels' 27-day Solar Rotation Number	27
13.1 H-Component	27
13.2 D-Component	28
13.3 Z-Component	29
14 K-Indices	30
14.1 Monthly Tables of K-Indices	30
14.2 K-Indices Sequenced in Bartel's Solar Rotation Number	32
14.3 Ak-Indices	33
14.4 Table of Annual Ak-indices	34
15 Annual Means	35
16 Secular Variation	37
17 Tables of Annual Means	39
17.1 All Days	39
17.2 Quiet Days	40
17.3 Disturbed Days	41
18 Earth's Magnetic Field Maps of Finland 2005.0	42

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 2002 was published in 2004 containing minute data, annual means and base line values from Nurmijärvi together with data from 88 other magnetic observatories.

5 IMAGE stations

The IMAGE magnetometer network consisted at the end of 2004 of 29 stations from Tartu in Estonia to Ny Ålesund on Svalbard. The principal investigator of this international project was Ari Viljanen at AVA. The observatory operated nine IMAGE stations in Finland (including Nurmijärvi) 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.

A new IMAGE station was established at Mekrijärvi (MEK) in eastern Finland. Mekrijärvi is a research station of Joensuu University.

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 and KEV and MEK in Finland had direct network connections and OUJ and MAS were still operated through ordinary modems. The data of the nine 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 ($64^{\circ}31'N$, $27^{\circ}14'E$) 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
2004.5	12878	2228	50998

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

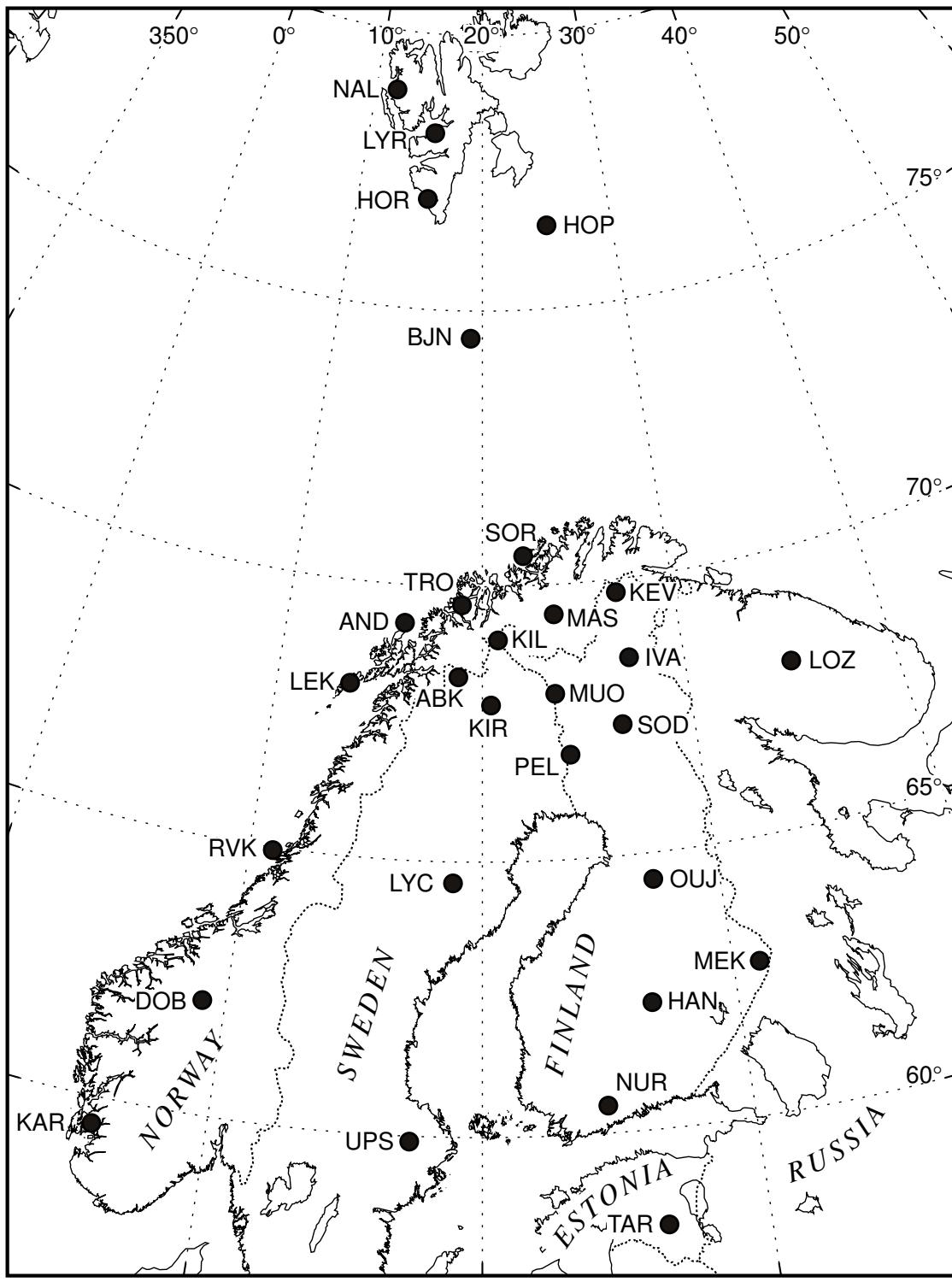
M.Sc. Anja Koistinen, assistant

Mr. Pentti Posio, technician

Ms. Tuulikki Kangas, secretary, retired for pension in Dec. 2005

8 IMAGE Magnetometer Network

IMAGE Magnetometer Network



December 2004

Figure 1: Map of IMAGE magnetometer network

9 Baseline Measurements for FGE

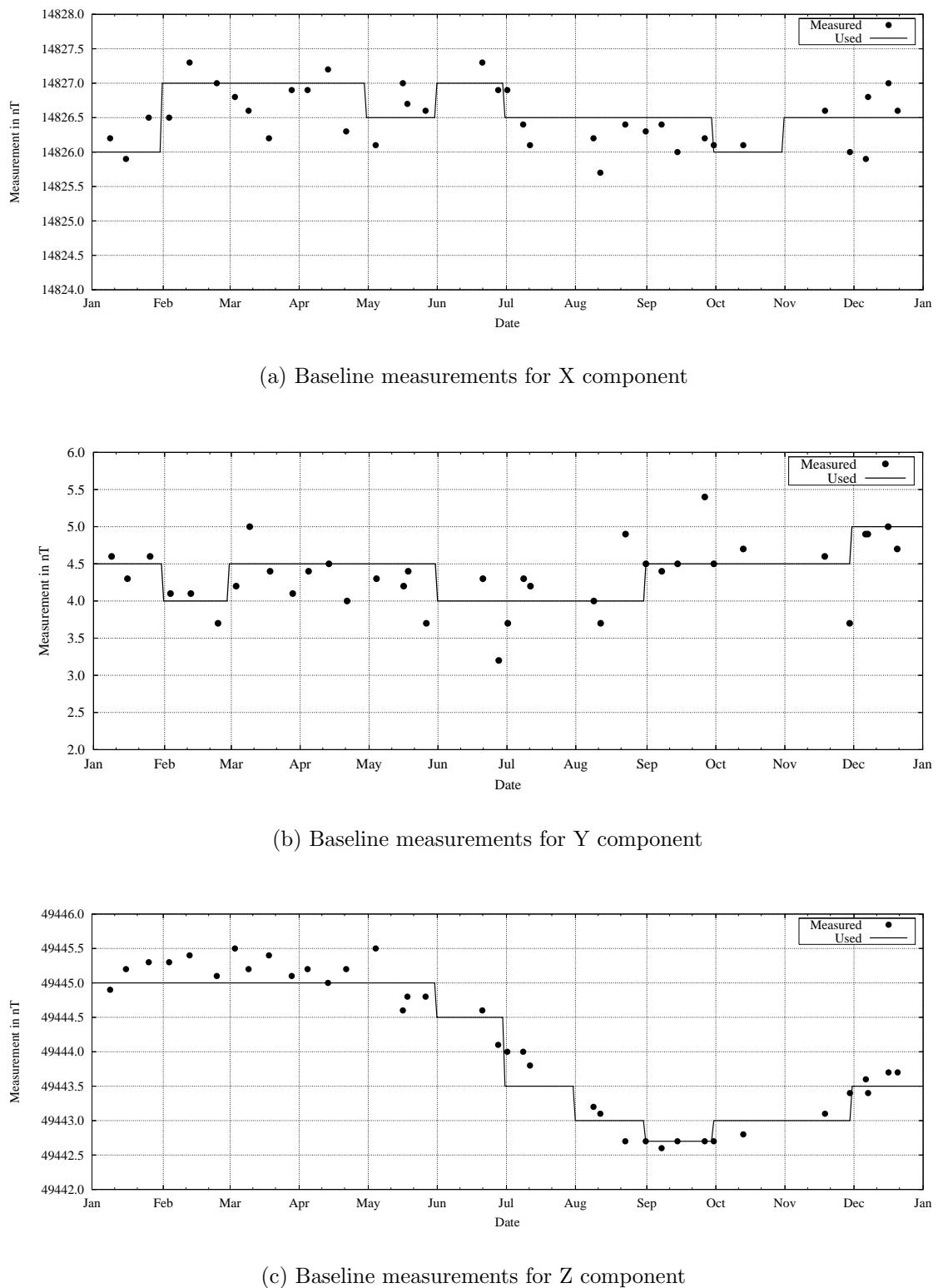


Figure 2: Baseline measurements

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 2004 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		-17	-24	-5	2	-1	-10	-10	-10	-14	-17	-11	-15	-21	-42	-14	-13	-10	-30	-38	-25	-6	15	-15	-20	-15
2		-21	-11	-2	-5	-2	-3	-9	-11	-12	-16	-15	-9	-8	-21	-29	-20	-9	-20	-22	-23	-3	-4	0	-5	-12
3		-3	-6	6	16	11	2	4	-6	-8	-32	-36	-26	-27	-24	-19	-17	-14	-10	-14	-26	10	-19	-16	-14	-11
4		-16	-7	-5	-7	-2	-10	2	-3	-21	-31	-31	-18	-14	-20	-18	-39	-29	-42	-36	-7	-14	-17	-20	-23	-18
5		-23	-29	-12	-10	-5	-7	-10	-12	-18	-19	-14	-15	-7	-20	-23	-17	1	-27	-23	-5	-18	-35	1	-33	-16
6		-43	-25	-19	-13	-5	-8	-11	0	-8	-17	-13	-5	-4	-7	-11	-13	-14	-16	-21	-13	-10	-31	-13	-27	-14
7	D	-23	-28	-24	-28	-13	-26	-38	-32	-52	-30	-14	-14	-23	-15	-23	-39	-30	-34	-38	-26	-27	-19	-21	-20	-26
8	Q	-18	-16	-14	-11	-10	-12	-11	-11	-10	-11	-7	-16	-12	-12	-7	-9	-11	-11	-12	-14	-6	-11	1	-6	-11
9		-24	-31	-12	-5	-5	-3	2	-31	-39	-28	-28	-22	-9	-10	-21	-23	-1	-3	-15	12	-6	-28	-31	-29	-16
10		-24	-26	-5	-8	-13	0	8	-11	-33	-21	-10	-5	-2	-4	-7	-14	-19	-14	-12	-15	-21	-13	-18	-13	
11		-17	-16	-15	-15	-12	-7	-3	-4	-14	-15	-20	-15	-18	-4	-30	-36	-15	-54	-27	-19	-15	-5	-18	-17	
12	Q	-16	-14	-12	-8	-11	-7	-10	-10	-8	-6	-5	-2	-1	-10	-9	-24	-28	-20	-13	3	-34	-24	-9	-31	-13
13		-29	-27	-21	-17	-12	-9	-10	-12	-13	-11	-8	-7	-2	-17	-18	-11	1	-13	-36	-17	-15	-9	12	-18	-13
14	Q	-30	-36	-22	-21	-14	-16	-10	-5	0	4	1	-9	-18	-12	-9	-14	-17	-15	-22	-18	-22	-11	-13	-10	-14
15		-10	-12	-14	-21	-17	-14	-7	-7	-4	1	3	3	1	6	-6	-39	-18	-19	-35	-27	-20	-31	-27	-40	-15
16	D	-50	-28	-31	-25	-22	-14	-9	-3	-10	-17	-14	-31	-26	-16	-11	-9	-16	-17	-34	-39	-18	-21	-29	-24	-21
17		-27	-26	-27	-25	-17	-8	-9	-11	-15	-22	-18	-16	-21	-6	-13	-7	1	-13	-7	-20	-19	2	1	-18	-14
18		-16	-17	-18	-17	-17	-2	-3	-9	-14	-14	-12	-14	-9	-3	-3	-9	-7	-7	-8	10	-20	-23	-23	-11	
19		-25	-18	-16	-9	-7	-10	-9	-7	-14	-15	-21	-24	-11	-14	-32	-15	-19	-34	-37	-24	-23	-12	-13	-22	-18
20		-8	-22	-18	-23	-2	4	-11	-21	-18	-20	-19	-18	-24	-18	-30	-24	-9	-31	-28	-19	-19	-16	-4	-30	-18
21		-23	-13	-15	-15	-18	-9	-5	-13	-31	-16	-19	-27	-29	-23	-7	-15	-18	-11	-5	12	-12	-13	-12	-13	-15
22	D	-16	-4	-13	-8	-20	-9	17	9	-3	2	10	-5	-7	2	9	-23	-17	-28	-45	-79	-84	-99	-123	-91	-25
23	D	-81	-51	-28	-33	-39	-40	-22	-31	-40	-32	-39	-36	-38	-23	-37	-15	60	-13	-34	-3	-59	-48	-23	-51	-31
24		-89	-85	-26	-23	-13	-9	-16	-18	-20	-30	-33	-25	-21	-11	-11	-9	-7	-13	-9	-34	-21	-28	-21	-29	-25
25	D	-58	-21	1	-76	-3	-29	-46	-44	-36	-36	-39	-48	-31	-7	-2	-14	5	-18	-20	-46	-37	-65	-51	-31	
26		-46	-36	-32	-28	-15	-19	-17	-18	-25	-19	-20	-23	-18	-14	-21	-19	-15	-16	-12	6	-52	-29	-21	-35	-23
27		-45	-65	-45	-31	-21	-21	-18	-15	-19	-21	-18	-17	-6	-6	-7	0	-16	-11	-19	-10	-7	-2	2	12	-17
28		-25	7	-15	-4	2	3	-12	-6	0	3	-8	-7	-22	-14	-6	-9	-25	-30	-19	-1	3	-18	-6	-11	-9
29	Q	-12	-7	-6	-7	-3	-4	-1	0	-2	-6	-19	-42	-32	-15	-6	-5	-5	-6	-8	-8	-13	-12	0	0	-9
30		9	0	-4	0	6	10	14	8	4	1	-10	-41	-35	-27	-13	-20	-14	-13	-9	-13	-10	-1	-12	-2	-7
31	Q	-6	-7	-9	-4	2	3	4	-2	-10	-10	-13	-20	-16	-12	-9	-9	-7	-4	-11	-9	-13	-4	-2	-4	-7
All		-27	-23	-15	-15	-10	-10	-8	-11	-16	-16	-16	-18	-16	-13	-14	-17	-10	-19	-21	-16	-19	-19	-18	-23	-16
Quiet		-17	-16	-13	-7	-7	-6	-5	-6	-6	-9	-18	-16	-12	-8	-12	-13	-11	-13	-9	-16	-13	-7	-10	-11	
Dist.		-46	-26	-19	-34	-19	-24	-20	-20	-28	-23	-19	-27	-25	-8	-13	-20	1	-22	-34	-33	-47	-45	-52	-47	-27

January 2004 East component Y in nT (Y = 1400 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	248	256	241	256	254	246	246	238	239	247	233	235	233	249	240	241	246	272	312	279	276	252	264	248	252	
2	248	244	225	255	249	245	249	248	245	245	243	241	241	248	266	241	239	242	278	266	283	236	253	248	249	
3	243	242	235	231	239	234	235	236	238	249	259	238	233	248	235	266	247	245	251	266	337	280	256	246	249	
4	242	232	243	243	238	225	232	237	245	246	243	232	232	238	274	304	244	280	265	249	254	265	266	253	249	
5	242	226	215	235	220	234	247	245	248	251	239	242	239	238	294	246	298	277	266	251	259	271	252	279	251	
6	254	229	256	241	241	235	239	236	237	242	242	242	241	245	245	241	243	253	274	255	250	281	318	289	252	
7	D	272	262	240	223	215	195	214	227	208	229	240	255	268	255	293	263	248	301	286	276	252	258	256	250	
8	Q	255	248	250	249	247	247	247	246	244	245	244	249	247	254	248	244	245	251	251	251	248	237	279	249	
9		287	268	250	252	239	229	219	211	217	235	239	251	243	246	242	236	247	264	267	270	261	253	262	250	
10		267	256	277	252	241	241	227	229	217	227	234	238	246	250	243	244	254	259	257	243	252	256	247	247	
11		256	256	252	250	249	244	244	249	244	244	244	244	247	247	253	272	282	319	297	290	290	290	290	290	
12	D	268	243	272	264	259	255	250	250	244	240	239	242	240	246	242	240	247	253	278	266	264	264	264	264	
13	D	254	233	252	267	247	237	258	261	269	254	233	245	272	251	258	271	275	266	287	336	319	312	290	299	
14	D	288	291	274	234	239	228	235	229	239	247	240	246	265	228	239	236	271	293	287	277	263				
15	D	258	221	246	256	255	247	248	252	251	249	243	246	247	242	244	242	244	248	241	246	242	247	245	251	
16	D	313	295	294	257	273	264	257	258	264	270	269	272	272	271	272	274	277	261	237	246	287	276	253	251	
17		263	260	254	252	252	256	256	260	266	268	270	270	270	270	270	270	270	270	270	270	270	270	270	270	
18		302	296	293	273	258	257	255	254	259																

Nurmijärvi Finland

February 2004 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	-5	-5	-7	5	5	3	7	1	-2	-6	-6	-8	-5	-14	-13	-12	-5	-5	-6	-13	10	-9	-10	-4	
2	-7	-5	-3	-1	2	7	8	-24	-9	-14	-27	-25	-26	-20	-23	-15	-17	-9	-20	-10	-6	23	-7	-16	-10	
3	-27	-10	-2	-12	-2	-8	-23	-6	-11	-14	-14	-13	-13	-11	-14	-7	-17	-5	-34	-18	-10	-2	7	-5	-11	
4	-8	-5	-11	-5	-6	-6	-4	-11	-19	-15	-10	-14	-19	-22	-28	-12	-14	-9	-6	2	-8	-13	5	-1	-10	
5	-11	-13	-27	1	2	1	-3	-10	-11	-12	-17	-10	-4	-5	-3	-2	-1	-10	-4	2	1	-1	-5	-2	-6	
6	3	-1	-3	-2	-1	-4	-39	-8	1	-3	-22	-47	-19	-10	-11	-14	-5	-12	-20	-7	-11	-8	-1	0	-10	
7	-2	-1	-4	-9	-8	-5	-6	-9	-18	-13	-9	-13	-11	-10	-9	-8	-7	-2	-5	-13	-14	-7	-2	-3	-8	
8	Q	-4	-2	-1	0	1	0	-2	-1	0	-1	-1	-3	-7	-8	-6	-2	3	5	8	6	4	8	6	-1	0
9	-2	-1	-1	1	2	5	1	-1	-5	-7	-9	-6	-3	-13	-15	-6	-1	-5	-20	-25	-24	-24	-10	-7	-7	
10	Q	-16	-12	-9	-8	-7	-6	-8	-1	1	-1	-12	-4	-3	-5	-10	-7	-3	-12	-1	1	2	0	-4	-5	
11	D	-5	-1	-5	-8	-8	-6	-7	-6	-4	-1	-2	-3	-21	-17	4	59	240	261	11	-38	-39	-37	-24	-33	13
12	D	-32	-28	-34	-31	-23	-32	-35	-43	-32	-19	-26	-25	-22	-18	-19	-36	-43	-34	-17	-32	-30	-48	-33	-30	
13	D	-54	-23	-14	-33	-16	-15	-10	-16	-27	-31	-23	-21	-14	-24	-16	-25	-1	-26	-23	-11	-33	-47	-19	0	-22
14	-29	-26	-24	-24	-19	-25	-23	-18	-16	-19	-23	-24	-10	-19	-31	-12	-14	-4	-15	-33	-17	-16	-18	-20	-20	
15	D	-21	-29	-32	-9	-8	-16	-37	-21	-17	-34	-42	-23	-13	-12	-11	-16	-18	-16	-22	-21	-24	-13	-24	-20	-21
16	-8	-18	-16	-18	-18	-17	-15	-15	-15	-21	-13	-12	-13	-11	-9	-9	-6	-9	-12	-10	-7	-18	-9	-9	-13	
17	Q	-8	-11	-11	-14	-12	-11	-12	-14	-15	-14	-9	-5	-2	-3	-1	-3	-2	-1	-12	-7	-11	-10	-13	-9	
18	-14	-12	-7	-11	-12	-14	-12	-10	-9	-6	-5	-7	-10	-9	-4	-1	-10	-13	-4	-13	-31	-10	-7	-10		
19	-15	-12	-11	-4	-5	-4	-6	-7	-12	-13	-8	-8	-7	-5	-6	-8	-4	-5	-2	-9	-13	-6	4	-9	-7	
20	Q	-6	-10	-11	-7	-7	-6	-2	-2	-5	-8	-7	-5	-3	-3	-4	-5	-12	-23	-12	-19	-16	-3	-5	-8	
21	-4	-6	0	-2	-1	-3	-4	-4	-7	-6	-2	-4	-7	-8	-20	-5	-5	-6	-5	7	4	0	0	-10	-4	
22	-5	-3	-2	-4	8	6	3	2	-1	-5	-6	5	5	-1	-18	-18	-16	-5	0	-6	-8	0	-2	-3		
23	-3	-4	-12	-7	-4	-6	-9	-10	-10	-11	0	-3	-2	2	2	-2	1	-1	-16	-9	-4	14	5	1	-4	
24	-15	-11	-1	-7	-6	-8	-7	-19	-15	-10	-16	-8	-4	-6	-16	-18	-8	-12	-25	-24	-13	-19	-13	-4	-12	
25	-8	-8	-7	-7	-12	-8	-10	-14	-21	-21	-20	-13	-14	-5	-3	-1	0	2	1	-2	-4	-1	5	-4	-7	
26	Q	-3	-4	-3	-2	-1	-2	-3	-7	-7	-6	-3	-1	-1	2	1	5	7	9	9	9	11	10	10	9	2
27	6	7	8	5	10	14	7	-2	-6	-14	-5	2	3	8	7	11	7	3	-10	-45	-37	-13	0	-2		
28	-4	-5	-5	-2	2	3	-14	-19	-20	-24	-25	-39	-23	-18	-2	-27	-3	-6	-1	2	19	-1	-14	-12	-10	
29	D	-3	-4	-8	-3	9	-6	-1	-6	-9	-13	-7	-51	-23	-4	-25	-13	-9	-11	-6	-17	-10	21	-12	-18	-10

February 2004 East component Y in nT (Y = 1400 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	249	247	242	227	230	244	244	242	248	247	246	244	241	240	250	253	246	249	249	249	249	261	270	272	256	248	
2	252	248	249	248	248	245	241	228	228	235	246	254	236	246	305	285	262	251	255	289	267	251	251	251	251		
3	220	234	264	242	230	228	214	205	218	237	238	241	248	248	270	264	282	269	255	259	261	246	255	245	245		
4	254	238	259	257	251	250	249	249	243	237	238	234	246	250	259	273	249	248	267	274	270	260	249	257	253		
5	260	261	244	252	249	245	244	243	227	230	246	241	239	242	245	247	256	249	248	249	252	255	262	247	247		
6	246	257	253	252	249	244	192	210	237	238	234	238	244	210	250	264	270	287	284	279	255	250	243	243	250		
7	255	260	259	257	250	249	242	240	239	237	241	240	239	239	240	246	249	250	276	262	252	252	252	249	249		
8	Q	252	252	251	250	249	248	250	251	252	248	244	241	240	239	243	245	246	245	245	244	245	249	265	259	251	248
9	251	252	251	250	250	248	246	246	246	245	242	239	240	239	245	246	248	248	270	275	275	275	275	275	252	253	
10	Q	260	252	252	250	249	246	241	237	236	242	238	236	236	246	247	251	247	249	247	249	251	266	263	248	248	
11	D	256	253	255	254	252	251	252	249	241	236	224	222	201	203	230	202	242	263	267	258	264	286	282	246	246	
12	D	271	269	271	268	263	258	253	212	225	229	242	241	234	249	253	253	276	239	296	303	267	261	261	261	254	
13	D	254	247	281	271	261	238	244	240	224	238	240	253	234	234	237	252	271	258	281	281	263	263	259	259	259	
14	305	282	284	264	261	254	247	247	247	248	240	239	244	244	244	248	248	248	270	275	275	275	275	275	263	263	
15	D	271	267	241	284	265	257	256	251	240	237	236	242	235	235	238	247	251	271	257	262	260	267	269	257	257	
16	Q	289	263	261	260	258	258	258	255	256	254	255	254	254	254	254	254	254	254	254	254	254	254	254	254	254	
17	Q	265	272	269	265	261	255	253	251	246	240	239	239	241	245	249	250	247	244	250	252	261	266	270	254	254	
18	267	267	264	256	255	249	247	245	242	235	236	224	223	223	223	223	223	223	223	223	223	223	223	223	223		
19	255	262	260	255	256	255	256	253	250	240	228	229	230	236	237	244	245	245	245	255	255	255	255	255			
20	Q	269	255	258	253	254	252	251	255	259	253	257	255	256	256	256	256	256	256	256	256	256	256	256	256		
21	263	260	269	259	261	261	262	264	265	263	264	268	270	267	270	269	270	268	270	267	270	270	270	270	270		
22	263	266	263	264	263	262	260	263	266	270	269	270	271	272	274	275	276	277	278	278	278	278	278	278	278		
23	269	266	263	264	265	264	265	266	265	267	265	266	271	272</td													

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March 2004 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		-17	0	-1	-5	0	-3	-4	-11	-27	-28	-23	-12	-10	1	-8	-19	-13	-13	-12	13	-26	-23	-34	-85	-15
2	D	-21	-14	-26	-23	-14	-7	-10	-18	-44	-25	-18	-12	-9	-5	-14	-8	-13	-2	-5	9	-8	6	-4	-12	
3		-3	-3	-6	-4	3	1	-3	-10	-15	-25	-42	-29	-21	-10	-2	-6	3	-4	3	13	-5	-3	0	-2	
4		0	-1	-1	3	2	5	3	-8	-15	-16	-20	-19	-11	-4	-3	-5	-5	1	1	-2	1	1	1	-4	
5		2	1	5	-1	-3	5	-9	-11	-14	-17	-20	-7	0	1	2	1	0	2	1	3	2	2	5	1	
6	Q	1	-1	-1	-2	2	2	1	-8	-17	-21	-17	-10	-3	3	6	6	4	5	7	8	7	6	0		
7	Q	4	3	3	3	3	3	2	-3	-14	-19	-22	-16	-9	-2	1	1	2	2	1	6	9	-1	2	-2	
8	Q	4	3	4	5	6	4	2	-9	-27	-30	-21	-12	-8	-4	-1	-2	-3	-5	-1	2	3	4	4	3	
9	D	4	3	2	0	4	0	-4	-6	-21	-31	-22	-5	4	6	7	-1	106	65	74	-15	-13	-57	-77	-178	
10	D	-135	-54	-43	-18	-36	-59	-16	-47	-90	-55	-46	-26	-22	-3	-17	-19	-26	-21	-17	-9	-25	-90	-91	-41	
11	D	-52	-15	-24	-17	-9	-12	-21	-24	-38	-34	-35	-25	-14	-5	20	-4	-1	-13	-18	-84	-25	-62	-51	-47	-26
12	D	-106	-23	-17	-26	-30	-38	-44	-45	-39	-33	-37	-17	-16	-15	-10	24	-24	-29	-17	-4	-3	-7	-14	-6	-23
13		-13	0	-11	-13	-14	-15	-45	-62	-34	-31	-24	-28	-14	-9	-11	-20	-29	-21	-10	-8	-30	-24	-27	-18	-21
14		-33	-24	-12	-13	-12	-19	-24	-18	-37	-36	-31	-38	-34	-15	-8	-16	-15	-13	-7	-29	-50	-33	-22	-18	-23
15		-17	-9	-7	-20	-5	-6	-15	-19	-22	-37	-27	-25	-13	-21	-3	-4	-14	1	-13	-12	4	-8	-12	-16	-13
16		-10	1	-10	-8	-8	-13	-14	-15	-17	-19	-19	-12	0	-2	-5	6	-1	-5	0	1	17	-9	-26	-24	-8
17		-12	-15	-13	-10	-12	-2	-10	-13	-20	-24	-23	-25	-15	-9	-2	-1	1	9	-8	-10	-9	-8	-9	-10	
18		-16	-25	-16	-9	-8	-12	-24	-19	-24	-24	-14	-18	-6	-7	-3	-2	-10	-1	8	-17	-15	-10	-4	-12	
19		7	-10	-4	-5	-3	-8	-10	-16	-19	-21	-17	-14	-3	3	7	4	3	2	0	3	-4	0	6	4	
20		1	3	10	4	-1	1	3	-7	-21	-35	-29	-13	-4	-4	7	11	1	15	-4	-5	-7	-3	0	-5	
21		-17	-2	-2	-3	1	4	-9	-22	-23	-22	-20	-10	-5	2	3	-7	-17	-12	-10	-5	9	-4	0	-2	
22		-4	-5	-5	-5	-5	-8	-12	-28	-30	-33	-24	-15	-9	0	2	-7	2	24	-9	-4	-11	-3	-5	-6	
23		-11	-19	-12	-1	0	0	-11	-15	-19	-23	-19	-14	-11	-5	-5	-1	1	2	-1	-6	11	-4	-1	-7	
24	Q	-4	-3	-1	3	5	5	-1	-9	-15	-19	-17	-13	-6	-3	-1	-1	0	5	9	10	11	12	10	13	
25	Q	7	5	6	8	11	13	10	0	-9	-20	-21	-16	-9	-3	4	5	5	14	9	4	8	10	9	7	
26		9	10	7	9	13	17	16	6	-7	-19	-19	-1	1	14	1	10	-18	-2	-1	19	-3	-1	-2		
27		1	3	-2	0	6	8	6	-8	-11	-18	-14	-36	-18	-4	3	8	14	-14	-8	-6	-4	-13	5	-22	
28		-18	-16	-26	-50	-39	-3	-13	-17	-36	-34	-29	-18	-18	-7	-14	-8	-4	8	-7	-10	6	-5	-6	-4	
29		2	0	-7	-14	-9	-1	-12	-18	-35	-40	-29	-23	-20	-16	-20	-9	-9	6	-3	-1	2	1	10	0	
30		-2	-1	-1	-3	-2	-1	-20	-18	-25	-29	-32	-44	-19	12	-23	-11	-9	-6	-4	-2	3	2	1	-8	
31		-4	-7	-10	-6	-5	-8	-9	-17	-37	-42	-36	-27	-15	-4	-8	0	-8	-4	2	-9	-3	-1	-1	-2	
All		-15	-7	-7	-7	-5	-4	-9	-17	-26	-28	-25	-19	-11	-4	-1	-3	-2	-1	-1	-6	-3	-9	-10	-17	-10
Quiet		3	1	2	3	6	5	3	-6	-16	-22	-20	-14	-7	-2	2	2	4	5	5	7	9	6	6	-1	
Dist.		-62	-20	-23	-15	-16	-22	-18	-28	-48	-37	-31	-17	-11	-4	-3	-2	9	0	3	-25	-8	-32	-45	-65	-22

March 2004 East component Y in nT (Y = 1400 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		222	243	256	252	253	253	256	252	248	247	237	231	228	251	274	291	268	261	268	292	291	293	257	257		
2	D	255	248	236	250	262	262	267	261	263	253	245	240	236	243	263	282	268	256	255	256	274	273	255	258	257	
3		253	248	242	246	253	254	255	252	250	242	244	230	245	235	241	265	270	253	278	271	262	252	249	250	252	
4		248	249	249	252	252	254	258	259	256	245	238	236	238	243	247	252	254	267	261	253	254	253	248	247	250	
5		244	241	252	261	265	264	261	257	254	246	236	231	228	235	240	243	248	251	250	248	251	252	256	257	248	
6	Q	254	247	253	255	256	256	257	263	259	249	235	229	223	242	248	244	247	246	247	249	249	250	250	248	248	
7	Q	252	253	254	255	257	258	262	264	261	252	242	233	230	231	238	246	246	249	253	250	265	258	253	250	250	
8	Q	251	254	255	257	259	259	260	262	249	240	232	224	225	229	239	248	251	247	248	249	252	250	250	250	248	
9	D	252	252	254	251	252	261	264	265	262	245	234	223	213	203	207	217	255	271	267	279	279	281	340	232	256	
10	D	269	301	292	275	257	257	277	262	261	244	243	243	242	241	281	253	249	258	264	303	295	291	285	270	270	
11	D	268	284	284	264	255	260	266	263	266	249	246	239	235	239	231	290	311	334	308	344	317	311	305	277	277	
12	D	294	277	274	267	263	265	268	257	260	254	252	247	230	235	240	294	307	305	259	256	256	260	259	260	256	256
13		264	253	271	269	275	259	229	250	237	243	225	223	227	233	238	246	246	249	251	250	257	257	257	257	257	
14		278	272	273	271	274	267	259	257	252	243	230	227	221	231	237	241	253	257	274	266	267	259	249	253	253	
15		272	270	288	268	270	262	273	257	264	257	249	245	242	231	216	226	236	242	254	283	278	274	273	266	261	
16		267	282	274	267	262	260	263	258	266	263	252	249	241	230	228	223	226	220	226	226	226	226	226	226	226	
17		259	262	275	276	275	273	260	248	232	223	211	227	236	246	251	291	268	273	265	251	267	261	257	257	257	
18		278	258	252	244	241	247	247	257	252	243	230	227	225	221	231	237	241	253	257	274	266	265	264	263	262	
19		263	289	275	271	273	274	271	267	255	242	2															

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April 2004 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	Q	-4	-4	-2	-1	2	3	0	-11	-22	-28	-25	-23	-12	-1	-6	2	4	5	6	2	6	2	4	4	-4
2	Q	5	-1	0	2	3	1	-15	-26	-33	-33	-28	-13	-5	0	4	2	4	7	8	8	7	7	-4		
3	D	6	3	-2	1	2	-2	-15	-16	-24	-23	-28	-33	-5	-17	32	32	64	178	-36	-110	-261	-226	-304	-258	
4	-183	-48	-30	-20	-19	-23	-31	-41	-36	-30	-27	-20	-11	-6	-3	1	-4	0	3	7	8	2	0	3	-21	
5	D	0	-1	-3	-4	-1	2	3	-6	-15	-26	-27	-15	2	24	33	-5	9	49	12	-106	-68	-47	-61	-44	
6	D	-49	-67	-41	-9	-16	-46	-42	-26	-24	-47	-36	-22	30	-27	-15	-15	-10	-11	-8	5	-8	-20	-27	-10	-23
7	-15	-21	-33	-6	-8	-24	-25	-35	-44	-45	-42	-27	-10	-6	-2	4	1	1	2	-3	-4	-6	-17	-4	-15	
8	-12	-8	-3	-5	-16	-5	-23	-32	-32	-44	-41	-34	-21	-7	-9	-2	-13	-3	-5	2	0	5	7	-3	-13	
9	D	-3	-8	-5	-26	-23	-8	-3	-29	-43	-53	-38	-28	-20	-14	4	-10	-3	2	18	5	-2	1	-7	-12	
10	-4	-3	-8	-13	-6	-4	-15	-31	-38	-44	-46	-35	-20	-10	-2	6	6	8	9	28	-32	-5	0	-11		
11	-4	5	-12	-6	-8	-10	-14	-16	-29	-34	-32	-25	-8	-5	-7	4	1	-3	11	-3	-17	-7	-10	-8	-10	
12	-6	-20	-6	0	2	2	-4	-4	-17	-29	-19	-12	-13	-6	3	-5	0	5	17	1	2	4	-1	-7	-5	
13	1	-3	-10	-7	-3	-2	-8	-21	-25	-31	-33	-26	-19	-14	-4	4	1	5	8	15	3	4	2	-5	-7	
14	-2	-4	-10	-6	1	3	-4	-14	-19	-20	-20	-15	-7	-4	-2	0	4	3	4	3	0	12	3	2	-4	
15	2	4	4	1	-1	-1	-4	-9	-17	-20	-11	-4	5	11	10	-2	6	11	15	5	1	18	28	-1	2	
16	3	7	5	4	-5	-28	-45	-47	-41	-40	-23	-28	-32	-14	-1	0	2	-3	8	1	15	-1	-3	-7	-11	
17	-1	-2	-4	-4	-14	-11	-3	-9	-24	-36	-35	-28	-12	-7	9	8	8	9	14	4	-2	1	9	1	-5	
18	5	1	0	-1	-2	-7	-10	-24	-39	-37	-39	-30	-15	0	-14	-11	12	12	1	-1	2	7	1	-2	-8	
19	-6	-6	3	3	3	3	3	-4	-15	-31	-35	-27	-17	-2	7	9	12	11	6	3	8	7	-2	-2		
20	Q	2	2	6	7	5	-4	-15	-27	-30	-24	-13	-5	-1	4	8	10	14	17	22	21	23	21	24	3	
21	5	7	9	12	7	11	7	-5	-17	-26	-26	-21	-7	-8	2	1	7	13	25	10	8	6	8	6	1	
22	Q	8	8	8	8	8	4	-1	-9	-18	-25	-28	-18	-11	-7	-3	6	8	11	20	12	15	14	12	15	
23	D	15	11	9	12	14	11	8	4	-10	-53	-44	-25	-22	38	15	25	-14	-13	-9	-6	1	7	-17	-14	
24	-4	0	2	0	0	0	-6	-17	-28	-30	-42	-44	-22	-9	-1	-3	8	8	8	10	10	6	9	6	-6	
25	1	-3	4	0	3	-4	8	-11	-40	-39	-34	-33	-16	-10	3	12	1	5	11	12	4	2	1	-5		
26	1	-5	-13	-6	1	-4	-12	-17	-19	-29	-33	-23	-13	-6	-3	-2	-12	9	22	12	6	10	13	14	-3	
27	11	9	10	8	8	11	8	0	-11	-17	-18	-22	-17	-8	-6	1	16	15	2	7	10	11	9	8	2	
28	3	4	7	8	7	5	0	-7	-11	-15	-19	-10	-3	4	6	34	-4	5	12	13	23	-2	-5	9	3	
29	Q	1	1	2	1	-3	-6	-6	-10	-21	-28	-19	-11	-1	0	0	4	4	8	11	10	12	15	12	7	-1
30	8	8	-1	2	-5	-10	-4	-11	-25	-26	-22	-18	-12	-4	2	7	5	17	18	29	4	-34	-40	-6	-5	
All	-7	-5	-4	-2	-2	-4	-9	-17	-26	-32	-30	-23	-9	-4	2	4	5	13	8	-1	-6	-7	-11	-9	-7	
Quiet	3	1	3	3	3	2	-3	-12	-23	-29	-26	-19	-8	-3	-1	5	5	8	12	11	13	12	11	11	-1	
Dist.	-6	-12	-9	-5	-9	-10	-15	-23	-40	-35	-25	-6	1	14	5	9	41	-5	-42	-68	-57	-82	-67	-18		

April 2004 East component Y in nT (Y = 1400 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	Q	256	259	257	259	260	266	272	273	269	256	239	228	231	250	248	249	250	254	258	261	257	252	251	253	
2	Q	247	257	262	263	264	268	272	274	267	255	239	225	218	224	236	245	251	251	252	251	250	252	254	251	
3	D	256	255	249	251	260	270	271	266	270	257	245	232	222	223	209	197	203	208	258	216	260	332	450	400	
4	407	267	244	261	266	277	284	284	276	260	245	235	226	230	238	242	248	249	247	249	250	252	256	258	261	
5	D	263	265	266	266	269	275	280	277	269	256	240	221	211	203	207	208	222	239	243	281	275	298	254	254	
6	D	290	298	261	270	276	269	251	276	266	240	236	219	223	225	241	255	262	262	261	267	278	260	255	259	
7	271	269	246	263	271	273	277	278	270	255	240	229	222	232	235	243	253	256	259	266	266	275	272	258		
8	279	271	269	270	256	267	267	257	259	258	237	230	221	224	224	234	248	252	256	263	255	255	266	258		
9	D	262	260	251	256	257	270	275	277	276	258	246	230	224	227	239	251	250	252	257	269	254	261	257		
10	259	260	262	240	256	265	265	270	272	269	259	250	236	229	235	240	247	251	253	257	260	287	305	261	258	
11	269	270	304	278	272	272	264	259	241	229	228	231	238	246	252	257	279	272	267	273	261	244	260	252		
12	258	243	244	269	273	276	270	278	272	263	248	233	236	242	248	253	256	262	266	266	257	258	257			
13	253	263	263	263	262	267	275	273	264	254	243	229	230	234	241	248	256	257	269	261	256	256	256			
14	261	263	263	268	270	276	274	272	270	253	252	244	228	234	241	248	256	257	269	264	277	269	255			
15	257	263	263	267	273	273	275	273	270	254	251	244	226	233	242	248	252	255	263	251	254	253	251			
16	254	264	266	270	275	273	274	272	276	270	254	247	234	228	230	258	251	255	263	271	272	260	241	252		
17	252	265	272	275	268	270	275	273	274	265	257	243	234	222	228	238	243	249	250	256	257	242	247	252		
18	250	261	267	272	275	275	273	274	272	267	253	249	232	218	205	211	221	232	237	269	258	277	269	255		
19	258	247	263	265	266	273	274	272	270	253	252	244	225	227	241	244	247	250	254	268	253	257	257			
20	Q	247	253	268	263	265	274	275	273	270	255	251	244	229	232	239	244	246	243	247	250	251	252	252		
21	262	260	263	265	267	272	275	276	270	255	252	246	230</													

Nurmijärvi Finland

May 2004 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		1	-7	-23	-8	-6	-12	-18	-20	-21	-29	-28	-23	-10	-14	-8	11	9	8	24	15	6	1	-2	-9	-7
2		-3	-1	-3	0	1	-8	-21	-29	-34	-30	-23	-31	-14	-5	0	9	10	13	14	14	12	9	5	4	-5
3		8	10	9	1	3	-1	-6	-14	-25	-29	-25	-14	-4	6	8	2	10	28	18	16	16	15	17	8	2
4		7	13	7	-7	-6	-9	-16	-24	-31	-43	-37	-24	-13	-7	3	4	11	15	20	12	6	0	-2	-5	
5	D	4	2	2	-12	-21	-4	-6	-22	-40	-49	-35	-13	-14	0	3	10	37	25	14	16	6	5	17	5	-3
6		2	-2	-2	-4	-7	-11	-19	-27	-26	-27	-33	-30	-19	-2	-2	12	5	13	24	7	9	11	4	5	-5
7	D	-10	-3	-14	-20	-10	-23	-22	-33	-29	-26	-35	-25	-6	10	24	33	6	5	23	4	3	-1	-10	-5	-7
8		-3	-1	-13	-3	-2	-1	-2	-10	-19	-36	-39	-20	8	15	12	15	22	17	10	0	-4	-3	-8	-10	-3
9		-7	-1	-4	-2	-1	-3	-10	-20	-26	-32	-31	-25	-12	-17	-9	11	17	8	9	6	5	5	5	3	-5
10		2	-1	-3	-5	6	6	-2	-10	-15	-29	-32	-25	-15	-3	3	9	10	13	17	12	6	7	7	-1	
11		22	3	3	-2	2	1	-8	-19	-28	-37	-33	-12	2	7	4	6	13	22	25	16	9	10	7	-14	0
12		11	6	-14	-7	6	-1	-13	-22	-37	-32	-25	-12	-4	4	8	7	12	17	14	19	11	4	2	-2	
13		4	8	4	4	7	3	-17	-36	-30	-34	-20	-18	-5	-7	-3	-2	19	18	11	14	-2	-7	-6	(-4)	
14		-6	-4	-1	-3	-6	-9	-25	-25	-23	-14	-7	10	4	0	5	10	16	22	17	13	22	22	(2)		
15		16	9	3	0	1	-4	-11	-10	-16	-23	-26	-16	-8	1	12	15	17	15	19	14	8	7	9	1	
16	Q	-5	4	2	1	-1	-9	-14	-15	-20	-25	-29	-15	-2	0	5	7	10	17	18	16	11	6	1	-1	-2
17	Q	2	4	2	2	-3	-13	-19	-23	-20	-18	-5	0	6	5	2	7	10	12	13	16	20	13	15	1	
18	Q	8	9	6	4	-1	-11	-21	-28	-41	-27	-15	4	8	11	17	22	22	22	23	22	19	19	4		
19		19	19	18	10	-2	-5	-8	-13	-14	-17	-7	-3	4	38	60	41	28	18	12	11	14	11	15	11	
20	D	9	11	9	5	4	-2	-17	-13	-7	-17	-21	-51	-6	7	16	18	28	24	25	21	10	6	-4	2	
21		-7	13	11	11	2	-7	-23	-35	-32	-32	-30	-11	4	1	5	5	14	16	12	12	7	7	6	8	-2
22		9	13	11	9	1	-7	-6	-13	-39	-26	-24	-20	-9	-7	3	3	13	17	19	21	16	13	8	12	1
23		-4	-3	2	-2	-6	1	-1	-12	-29	-26	-9	12	2	13	24	33	23	22	6	10	8	4	-5	3	
24		-8	9	6	6	3	1	-21	-57	-42	-38	-24	5	-18	3	-6	6	7	9	17	14	13	12	6	-4	
25		4	6	2	7	5	-5	-20	-28	-24	-31	-28	-17	-10	-2	3	9	12	10	10	9	6	2	-4		
26	Q	1	3	7	9	5	-4	-12	-11	-18	-24	-23	-8	-7	4	13	15	12	15	17	17	17	20	12	11	3
27	Q	14	15	12	13	3	-8	-17	-24	-26	-27	-29	-17	-10	5	10	11	17	22	15	11	14	12	12	11	
28		11	8	12	11	2	-8	-13	-19	-20	-23	-22	-15	-1	-3	9	24	30	30	27	16	-8	-28	-36	-3	
29	D	-16	-6	-18	-9	-4	-16	-26	-33	-50	-41	-36	-33	-18	-6	5	20	4	6	24	29	27	17	-19	-7	-9
30		-1	3	11	8	5	-1	-7	-16	-18	-24	-17	-24	-2	-13	1	7	31	24	29	18	2	-1	-2	7	1
31	D	3	-20	-14	7	3	-3	-23	-38	-41	-40	-54	-31	-29	-14	-7	5	7	10	12	24	20	26	3	4	-8
All		3	4	1	0	-6	-14	-22	-26	-30	-27	-18	-6	0	6	12	16	17	18	14	10	7	4	2	-1	
Quiet		4	7	6	6	2	-6	-13	-18	-23	-27	-25	-12	-3	4	9	10	14	17	17	16	16	11	11	2	
Dist.		-2	-3	-7	-6	-7	-13	-22	-28	-33	-37	-31	-30	-11	1	11	17	17	14	22	18	14	6	-2	-1	-5

May 2004 East component Y in nT (Y = 1400 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		261	266	276	282	281	288	291	280	263	249	237	230	230	234	242	242	243	246	260	257	249	253	258	251	257
2		240	262	273	276	277	276	270	258	244	228	226	230	233	242	247	250	250	247	248	250	260	263	266	254	
3		266	264	265	268	271	277	279	274	261	242	230	225	222	226	233	240	245	246	250	254	246	245	237	270	251
4		264	271	278	278	270	277	272	265	249	242	232	221	221	234	243	248	250	252	263	257	266	263	260	258	
5	D	270	278	281	275	263	257	271	269	254	237	233	220	221	222	224	231	230	261	265	256	254	272	264	253	
6		263	260	258	271	277	277	271	256	246	236	236	227	233	247	243	245	252	256	264	278	263	256	240	267	256
7	D	268	272	267	260	251	273	277	267	255	245	235	231	229	245	250	255	249	249	243	255	254	252	251	241	251
8		271	267	265	264	274	268	267	265	258	252	245	221	223	223	233	230	252	253	247	258	251	249	241	251	
9		252	264	273	276	269	271	276	277	268	255	237	226	225	231	243	246	255	255	255	257	255	257	255	255	
10		262	264	260	263	273	280	278	272	262	249	235	229	228	231	239	248	252	253	253	255	253	257	257	257	
11		271	285	275	290	276	272	260	244	231	221	219	225	229	235	242	243	248	247	257	254	253	253	253	258	
12		310	297	269	219	261	286	284	277	254	254	254	220	226	237	243	247	247	247	248	249	255	257	257	254	
13		267	269	275	278	280	277	276	251	247	243	230	230	235	242	247	250	250	252	254	252	247	247	247	257	
14		266	269	275	278	282	281	274	261	244	229	219	225	232	240	245	243	244	249	253	252	252	252	252	252	
15		257	277	280	281	288	285	281	270	254	234	224	224	224	237	249	255	255	255	257	255	257	257	257	257	
16	Q	262	267	280	284	282	273	267	253	236	222	222	228	235	242	247	247	257	254	258	268	274	266	256	257	
17	Q	267	259	260	276	281	287	284	278	267	251	231	229	229	238	242	247	251	254	253	255	256	256	256	256	
18	Q	255	263	272	273	270	276	274	269	254	242	230	229	229	238	242	247	251	254	253	255	255	255	255	255	
19	D	290	296	268	255	281	286	292	283	263	247	232	225	226												

Nurmijärvi Finland

June 2004 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	-6	-21	-11	10	-4	-8	-21	-27	-46	-29	-17	-10	-26	-19	4	26	25	17	16	23	11	4	0	-6	-2		
2		7	3	7	5	-5	-11	-18	-23	-34	-44	-24	-10	-2	3	13	23	18	22	30	21	5	-6	13	4	0		
3		-2	-5	-8	-18	-2	0	-16	-25	-20	-33	-27	-12	2	7	18	16	20	15	18	17	20	12	3	-2	-1		
4		-4	2	10	8	10	3	-1	-14	-24	-29	-25	-17	-4	7	14	11	5	6	12	17	10	10	2	1			
5		7	8	8	8	6	-6	-20	-26	-22	-13	-26	6	22	-2	30	30	34	14	12	12	-4	-6	-15	3			
6		-5	7	-11	-8	-4	-9	-16	-29	-28	-31	-20	-22	-11	16	15	26	30	21	12	25	23	7	3	5	0		
7		5	-3	5	9	2	-3	-14	-20	-28	-24	-35	-17	-15	8	23	27	24	21	22	14	3	-11	-32	-24	-3		
8		-21	-2	-7	-4	-6	-15	-30	-40	-44	-34	-24	2	14	8	-7	-2	22	23	18	17	7	3	(-5)				
9	D	-1	-1	6	1	-8	-21	-37	-25	-19	-29	-11	-13	2	-2	12	26	11	24	22	23	12	8	-1	4	-1		
10		10	-7	4	-1	-7	-9	-17	-17	-20	-21	-15	-2	8	9	4	5	9	14	23	28	20	5	0	-1	1		
11		-14	-5	9	3	-2	-9	-17	-31	-31	-27	-21	-11	-8	5	11	15	12	9	14	12	11	7	7	(-3)			
12		8	9	7	2	0	-2	-11	-16	-21	-24	-20	-6	-9	-3	4	10	10	13	14	13	10	7	5	1			
13		7	9	10	9	0	-12	-15	-16	-10	-7	-4	-6	0	10	22	23	26	21	21	23	26	26	19	9			
14		28	30	30	24	15	11	6	-5	-6	-8	-4	11	28	-12	-17	8	25	6	10	21	15	12	11	13	11		
15	D	10	19	18	11	4	-2	-44	-53	-24	-8	-3	-1	44	12	31	31	27	12	14	7	10	-1	-7	-2	4		
16		2	7	4	1	-6	-17	-26	-39	-30	-37	-21	-7	13	18	10	6	14	10	9	11	6	8	12	14	-2		
17		10	9	8	5	-7	-14	-20	-19	-18	-19	-23	-9	11	16	22	12	10	13	23	13	3	1	4	2			
18		4	11	8	3	-2	-8	-11	-17	-16	-20	-21	-13	6	16	61	38	31	5	12	12	7	5	4	0	5		
19		3	2	11	15	9	1	-10	-18	-27	-19	-12	-13	5	-4	9	12	11	17	13	18	16	12	9	10	3		
20	Q	11	11	12	7	3	-2	-9	-17	-21	-28	-22	-18	-6	4	9	18	18	26	17	13	13	14	14	3			
21		14	15	16	14	11	5	-2	-13	-19	-14	-9	1	7	16	19	19	13	13	21	19	16	12	11	9	8		
22	Q	10	11	13	10	2	-4	-7	-12	-16	-23	-20	-19	-5	8	9	16	15	18	19	19	16	12	11	4			
23	Q	11	14	16	17	11	1	-7	-12	-15	-17	-17	-14	-3	8	12	22	16	15	18	21	22	20	15	12	7		
24		14	18	19	18	14	4	-16	-22	-25	-24	-20	-15	6	4	17	23	22	18	16	18	17	16	15	6			
25	Q	16	16	15	12	6	-1	-3	-7	-10	-12	-10	-5	-9	7	18	27	25	19	16	10	5	6	6	6			
26		8	9	12	11	8	-2	-11	-15	-16	-16	-14	-11	1	8	31	19	20	27	23	15	4	2	0	-10	4		
27	Q	-4	-2	0	1	-3	-7	-12	-14	-13	-17	-20	-17	-16	-4	3	16	23	22	21	17	13	9	12	1			
28	D	17	17	18	-8	12	2	-8	-18	-26	-25	-32	-15	-15	-12	13	11	20	29	30	39	21	21	31	15	6		
29	D	-12	0	-10	-7	2	-20	-46	-46	-37	-40	-44	-27	-19	-19	-1	8	23	20	27	27	4	-2	-7	1	-10		
30		-4	-6	2	3	-7	-19	-23	-21	-29	-26	-19	-14	-2	7	7	12	20	23	21	19	14	12	12	13	0		
All		5	6	7	5	2	-5	-15	-21	-23	-23	-19	-12	1	4	12	18	18	18	19	14	8	6	5	2			
Quiet		9	10	11	9	4	-1	-7	-11	-14	-19	-18	-15	-7	2	8	18	20	19	20	19	16	13	11	4			
Dist.		4	3	4	1	1	-10	-31	-34	-30	-26	-21	-13	-8	-8	12	20	21	20	22	24	12	6	3	2	0		

June 2004 East component Y in nT (Y = 1400 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	268	251	240	263	282	292	292	276	268	250	236	226	236	237	240	249	246	256	250	253	244	264	241	256		
2		256	264	275	283	283	288	285	281	267	254	243	226	234	238	243	255	248	265	260	241	255	265	258			
3		265	270	276	268	268	272	282	277	268	252	240	230	229	233	233	236	248	249	247	252	254	260	283	277	257	
4		278	263	264	272	277	280	281	277	268	255	237	225	220	219	229	240	249	250	253	254	257	253	254	254		
5		248	265	271	284	289	297	294	287	269	253	233	225	216	231	231	236	246	255	264	254	257	277	301	289	261	
6		264	267	266	270	272	278	293	291	278	261	239	227	225	227	249	243	244	249	253	254	254	261	256	260	257	
7		263	250	262	286	291	294	293	284	268	248	229	218	229	231	242	250	255	256	250	248	247	266	265	259	259	
8		306	272	255	278	298	301	297	287	271	252	237	227	229	237	240	247	248	248	253	247	254	254	257	262	(262)	
9	D	248	267	283	283	289	289	284	286	271	256	244	237	237	237	236	247	237	226	226	226	227	247	254	252	255	
10		253	251	287	295	284	279	275	270	262	258	249	237	227	229	238	242	244	245	244	248	255	273	266	258	259	
11		272	257	285	284	288	284	287	270	257	248	242	242	243	247	250	252	254	254	254	254	257	258	267	262	262	
12		260	264	271	278	283	283	281	276	255	241	234	234	234	241	241	243	248	255	255	255	255	258	261	261	257	
13		261	264	273	273	278	280	277	275	265	253	245	235	235	245	245	255	252	252	252	252	252	257	260	259	259	
14		268	268	271	276	277	280	275	272	265	253	243	232	229	234	243	249	254	254	254	254	254	257	260	259	259	
15	D	270	272	274	273	277	276	276	270	265	256	247	236	236	242	237	237	237	237	237	237	237	237	237	237	237	
16		248	249	253	255	258	266	268	268	265	257	257	264	271	281	291	281	279	278	277	272	274	274	274	274	265	
17		260	256	264	266	272	271	268	263	255	249	236	226	226	236	246	256	260	268	276	276	276	276	276	276	276	
18		214	250	242	246	267	269	269	266	263	263	263	263														

Nurmijärvi Finland

July 2004 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		6	9	5	0	-4	-16	-23	-37	-40	-36	-27	-12	-7	8	22	17	19	17	17	11	11	10	8	7	-2
2		9	10	8	-3	-11	-8	-13	-19	-31	-33	-25	-5	-9	20	21	22	35	32	20	17	8	6	-4	-13	1
3		6	6	10	6	1	-14	-29	-42	-36	-29	-23	-12	-4	5	9	11	16	14	23	22	9	8	7	5	-1
4		7	12	11	9	3	1	-9	-21	-23	-22	-25	-16	-3	-1	9	19	17	24	12	14	11	9	8	7	2
5		10	2	1	-1	-1	-1	-7	-16	-18	-19	-20	-15	-9	-2	3	16	17	22	22	16	11	9	7	3	1
6	Q	10	10	10	6	-9	-14	-9	-3	-14	-18	-25	-30	-14	-6	1	10	15	19	17	16	12	9	5	3	0
7	Q	7	6	6	7	7	4	4	2	-10	-22	-15	0	5	13	12	16	16	15	15	17	10	8	8	(5)	
8	Q	8	9	11	14	13	4	-4	-11	-16	-23	-26	-22	-10	-2	7	10	13	19	21	21	20	18	16	15	4
9	Q	14	13	17	18	15	8	2	6	1	-10	-21	-19	-13	-4	3	11	12	22	27	21	22	19	17	16	8
10		15	16	15	11	15	12	1	-17	-24	-25	-16	-3	-5	3	6	11	23	7	25	32	27	23	25	8	
11		24	20	16	22	18	4	-8	-14	-21	-24	-48	-14	-3	-10	20	24	20	17	29	30	21	8	7	7	6
12		9	12	29	23	17	10	0	-8	-11	-22	-26	-23	-14	-5	21	13	18	21	17	16	22	20	3	15	7
13		2	4	12	4	1	-6	-27	-45	-41	-32	-22	-22	-6	8	27	7	20	35	24	9	5	10	10	10	-1
14		11	10	12	7	-1	-19	-29	-23	-31	-27	-18	-11	0	12	13	16	15	13	11	12	9	9	2	-2	
15		-2	5	7	1	-11	-21	-23	-26	-29	-34	-28	-14	0	9	14	16	20	9	3	21	23	8	-8	5	-1
16		13	16	22	18	9	2	-6	-18	-26	-28	-29	-24	-16	-16	1	3	18	37	33	25	22	16	-2	-22	2
17		-59	-83	-142	-11	-11	-16	-17	-52	-46	-45	-62	-63	-41	-26	-6	9	18	22	16	6	-1	-3	-1	-7	-26
18		-9	-5	-1	2	-2	-18	-25	-37	-49	-43	-38	-32	-27	-18	1	16	26	21	17	6	2	0	0	-5	-9
19		-2	-4	2	2	-1	-3	-16	-29	-34	-50	-46	-44	-31	-3	2	27	11	21	20	18	6	2	-8	-13	-7
20		-4	-1	-4	-3	-5	-17	-37	-41	-43	-45	-39	-38	-31	-11	13	7	11	7	25	20	23	8	0	-4	-8
21	Q	-3	1	1	2	-3	-7	-14	-15	-18	-26	-30	-31	-21	-9	-4	6	11	13	7	5	8	7	4	3	-5
22		2	3	5	9	7	-3	-13	-21	-31	-37	-26	-7	-2	-21	35	-2	23	14	40	31	37	-67	-217	-146	-16
23	D	-207	-69	-108	-128	-131	-162	-159	-157	-145	-70	-55	-32	-20	92	142	117	78	37	0	-10	-13	-17	-15	-42	
24	D	-8	-3	-3	-6	-15	-30	-33	-27	-26	-33	-31	-24	-45	-39	-6	24	39	53	12	8	2	-4	-27	-96	-10
25	D	-143	-152	-188	-236	-249	-243	-204	-150	-104	72	105	397	404	363	168	276	319	68	9	-79	-107	-195	-431	-188	-21
26	D	-186	-76	-117	-55	-29	-38	-46	-56	-65	-68	-59	-43	-21	-19	-17	-11	-1	-1	-9	-3	-7	1	-119	-44	
27	D	-541	-239	-78	22	-1	-88	-223	-190	-137	-224	-23	260	469	588	245	397	35	30	-24	-57	-78	-108	-72	-166	-8
28		42	33	-46	-60	-49	-96	-79	-57	-52	-43	-50	-43	-13	11	28	48	3	-22	-14	-8	-28	-37	-32	-32	
29		50	45	33	-40	-47	-38	-48	-43	-47	-40	-32	-29	-27	-28	-23	-20	-19	-9	-13	-12	-16	-21	-23	-25	-30
30		-29	-28	-28	-26	-20	-22	-32	-33	-40	-50	-52	-47	-34	-33	-22	-16	0	-5	1	-6	-4	-12	-1	-12	-2
31		-8	-8	-7	-12	-15	-19	-25	-36	-46	-41	-33	-14	-4	-7	5	10	-11	-10	-11	-13	-11	-15	-14	-12	-15
All		-37	-19	-18	-13	-16	-28	-37	-40	-41	-38	-28	-1	-18	28	24	36	26	18	13	6	2	-8	-24	-24	-8
Quiet		7	8	9	5	-1	-4	-4	-11	-19	-26	-25	-15	-4	2	10	13	18	18	15	16	13	10	9	2	
Dist.		-217	-108	-99	-81	-85	-112	-133	-116	-96	-64	-13	112	183	197	106	159	92	38	-1	-29	-39	-65	-109	-117	-25

July 2004 East component Y in nT (Y = 1400 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		268	264	275	290	296	291	287	272	265	256	245	242	236	237	242	249	254	253	255	258	255	261	253	252	261
2		261	270	279	283	275	279	284	281	270	254	242	231	230	228	236	241	246	259	255	251	250	255	256	259	256
3		262	279	276	288	298	296	288	272	256	245	234	220	216	229	236	247	253	258	261	269	259	255	261	259	259
4		262	258	280	291	289	283	278	274	269	257	244	240	238	237	242	246	257	258	260	265	259	260	255	260	260
5		263	274	281	287	292	286	285	277	259	259	239	228	225	226	236	247	255	258	261	263	259	259	259	259	260
6	Q	253	266	273	278	283	267	277	287	280	263	243	234	233	234	238	247	250	256	259	258	255	262	264	265	259
7	Q	266	269	276	282	286	292	293	283	275	250	230	230	228	239	247	252	255	257	258	265	261	260	262	(263)	
8	Q	266	271	271	281	277	280	282	281	272	261	241	261	246	233	237	241	245	251	251	254	256	258	262	263	258
9	Q	264	268	273	281	282	278	280	279	274	269	240	246	244	240	243	249	253	258	262	265	264	265	264	265	265
10		256	260	264	263	272	278	282	281	276	250	239	233	233	233	247	258	263	265	264	265	263	264	265	264	265
11		253	249	278	287	290	294	280	273	269	256	244	236	233	240	249	257	266	263	262	259	258	260	264	264	264
12		252	272	274	271	283	280	278	283	277	265	250	240	237	247	255	266	256	255	256	256	256	263	265	263	263
13		249	251	281	285	295	304	293	274	281	274	252	244	234	238	239	247	254	256	257	258	265	272	274	274	274
14		269	268	272	274	278	273	273	268	258	246	226	247	235	235	238	247	252	256	260	261	266	265	265	265	265
15		265	275	280	286	288	297	295	287	280	275	259	246	232	232	235	245	257	260	265	264	265	265	265	265	265
16		276	275	275	281	287	286	287	279	269	259	251	244	244	244	254	259	259	266	265	266	270	272	273	273	273
17		302	254	250	276	282	284	297	280	282	277	263	256	251	248	249	257	264	268	272	270	275</				

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August 2004 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	-14	-19	-16	-13	-12	-12	-19	-30	-38	-42	-38	-32	-25	-13	-10	-6	-7	-8	-10	-4	0	-2	-10	-17	-17	
2	-20	-23	-21	-14	-18	-21	-29	-37	-46	-34	-25	-30	-21	-9	-1	-5	-3	-2	0	3	-1	-8	-14	-21	-17	
3	Q	-6	-3	-3	-10	-16	-16	-14	-18	-25	-31	-32	-24	-18	-14	-6	-4	-3	-4	-5	-4	-5	-6	-6	-12	
4	Q	-6	-5	-5	-6	-9	-10	-14	-19	-27	-29	-32	-24	-17	-8	-5	-11	0	6	7	6	5	-1	1	0	-8
5	-2	-2	0	2	-3	-8	-14	-16	-20	-22	-26	-22	-22	-18	-7	5	13	10	12	7	9	3	-2	-6		
6	-11	-11	-1	6	-2	-9	-18	-28	-37	-38	-30	-20	-13	-8	-7	-1	-1	1	8	16	13	13	10	10	-7	
7	7	10	7	-3	-8	-12	-10	-24	-32	-38	-27	-30	-28	-37	-3	-5	-12	-5	1	2	8	-9	-11	-4	-11	
8	Q	-10	-7	-7	-10	-18	-17	-18	-23	-30	-35	-35	-30	-23	-21	-11	-8	-1	-1	-1	-1	-1	-1	-1	(-19)	
9	D	-11	-19	2	-3	-12	-20	-27	-33	-41	-49	-32	-23	-13	12	11	23	40	18	6	-7	-16	-20	-29	-14	-11
10	-8	-6	-5	-10	-12	-17	-17	-30	-44	-47	-22	-17	0	12	11	16	-5	-1	5	9	-2	-6	-8	-5	-9	
11	-13	-11	-7	-2	-2	-8	-26	-39	-43	-40	-30	-16	-4	-4	-1	2	-4	3	2	1	1	-1	-10	-13	-11	
12	-13	-18	-10	-1	-6	-9	-18	-32	-42	-42	-36	-34	-19	-14	-3	0	8	7	0	-5	0	9	2	-12	-12	
13	8	7	9	10	5	-12	-31	-35	-43	-45	-37	-23	-9	0	3	2	-3	2	3	0	-5	-4	-7	-8		
14	-7	-6	-3	-2	-3	-8	-20	-35	-47	-54	-46	-31	-5	-9	-2	-3	-2	0	0	-1	-8	-9	-10	-13		
15	-8	-4	-1	0	-10	-19	-24	-31	-34	-30	-27	-18	-12	-11	3	4	8	1	9	10	9	4	-5	-1	-8	
16	-1	-6	-3	-9	-23	-40	-50	-56	-46	-31	-16	-5	27	13	17	9	21	14	4	-3	-1	-9	-5	-9		
17	-5	2	-9	-17	-15	-13	-28	-21	-34	-25	-25	-30	-22	-13	-5	0	2	8	9	5	6	9	5	5	-9	
18	0	0	3	0	-3	-8	-15	-25	-33	-33	-32	-17	-10	-4	-2	-17	2	10	7	10	13	4	4	-5		
19	D	-1	-12	-1	5	4	0	-11	-19	-26	-31	-19	-16	-1	12	1	14	10	2	-5	1	1	0	1	-5	
20	-7	-8	-20	-20	4	-3	-52	-35	-32	-40	-22	-5	7	14	22	6	11	22	3	-4	-4	-11	(-8)			
21	-10	-6	-4	-21	-22	-36	-40	-32	-40	-31	-25	-38	-24	-6	11	16	2	4	3	7	4	-2	-12	-13		
22	-3	-5	-5	-6	-13	-17	-17	-23	-30	-35	-29	-14	-14	-9	-1	4	5	2	-3	-6	-7	-9	-8	-11		
23	Q	-7	-8	-7	-6	-8	-12	-12	-15	-18	-23	-24	-22	-18	-7	1	2	-6	-1	0	0	-2	-1	0	-8	
24	-3	-5	-7	-6	-6	-7	-5	-7	-12	-16	-20	-10	-12	-7	-5	3	-1	2	1	4	5	-2	-7	-4	-5	
25	-3	-3	-0	0	-3	-7	-13	-17	-20	-27	-31	-23	-14	-13	-1	-5	2	4	4	0	-3	-5	-7			
26	-3	-5	-1	-2	-5	-10	-17	-26	-34	-33	-22	-13	-10	-5	-13	-8	-5	7	1	-1	-4	-3	0	-4	-9	
27	-10	-5	-1	-1	-3	-2	-15	-23	-45	-37	-25	-8	-5	-3	3	6	-3	3	-5	6	-4	-4	-4	-8		
28	-4	-4	-9	-12	-7	-7	-18	-30	-37	-37	-21	-14	-3	14	8	5	5	12	13	14	5	9	10	12		
29	30	D	11	10	6	8	10	7	-8	-21	-38	-37	-44	-26	-2	59	99	141	97	16	-81	-141	-257	-369	-240	-39
31	D	-139	-95	-98	-81	-63	-56	-49	-99	-68	-45	-54	-41	-21	-12	6	-2	-19	-12	-9	0	-27	-21	-18	-19	-43
All	-10	-9	-7	-7	-9	-12	-20	-29	-36	-35	-31	-24	-15	-6	1	6	6	5	1	-1	-5	-11	-18	-16	-12	
Quiet	-6	-6	-6	-7	-11	-12	-13	-16	-22	-27	-29	-22	-17	-11	-5	-3	-2	1	1	2	1	-2	-3	-3	-9	
Dist.	-29	-25	-22	-18	-11	-14	-22	-41	-44	-38	-39	-30	-15	11	22	35	31	8	-14	-26	-36	-60	-84	-57	-22	

August 2004 East component Y in nT (Y = 1400 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	270	251	281	304	298	301	298	289	280	266	252	246	243	242	245	255	265	271	268	270	271	288	274	277	271	
2	280	287	294	300	295	279	285	275	268	249	241	237	240	253	258	261	259	267	267	269	278	263	270			
3	Q	274	280	285	288	282	274	266	251	239	234	241	247	254	258	261	265	266	267	268	271	272	266			
4	Q	272	273	275	279	283	287	289	288	274	259	244	229	229	239	245	257	258	259	259	261	262	266	263		
5	269	271	274	282	288	290	287	281	271	255	236	226	224	232	240	251	260	262	262	265	266	263	275	263		
6	281	270	276	296	300	299	295	288	278	266	253	240	234	238	243	249	254	257	256	253	256	262	268	265		
7	255	277	273	275	272	255	265	265	256	245	234	224	228	234	240	245	252	258	267	268	272	278	257	259		
8	Q	271	274	277	282	282	287	291	289	278	268	262	254	259	253	259	265	271	274	278	272	278	272	278		
9	D	314	312	278	281	288	290	285	282	272	256	246	242	248	249	264	265	269	275	286	272	267	308	296	276	
10	D	262	269	275	274	274	276	278	272	256	243	224	227	233	239	254	267	266	269	275	286	272	267	308	296	
11	267	262	290	292	294	295	291	291	276	256	243	224	227	233	239	254	274	266	267	261	268	264	260	259	261	
12	267	282	290	292	294	295	291	291	276	256	243	224	227	233	239	254	274	266	267	261	268	278	267	268	266	
13	254	256	273	281	291	294	300	298	282	257	234	226	228	239	253	260	265	268	270	261	269	272	275	265	266	
14	288	290	291	293	298	301	305	297	282	259	232	221	233	247	256	262	265	266	261	263	262	267	268	267	263	
15	274	275	279	282	289	292	297	297	282	265	243	223	236	243	254	265	269	272	273	270	276	271	278	271	278	
16	274	275	278	281	282	287	287	287	287	276	266	252	236	236	241	254	255	257	261	261	272	271	279	276	271	
17	275	278	280	281	283	281	274	274	274	262	245	232	231	236	243	254	264	267	274	274	274	277	276	274	276	
18	274	274	274	276	279	278	280	273	273	268	254	239	237	243	247	256	265	272	276	276	276	276	276	276	276	
19	270	272	269	268	277	272	270	270	278	263	248	232	237	243	241	247	250	254	258	268	267	266	272	272	272	
20	D	268	270	265	264	264	263	263	263	263	250	230	230	234	236	243	248	252	256	262	260	263	271	273	272	

Nurmijärvi Finland

September 2004 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	-18	-22	-29	-19	-16	-22	-29	-39	-45	-44	-38	-25	-12	-8	3	-4	-6	-5	-8	-7	-8	-10	-22	-16	-19		
2	-14	-12	-11	-11	-15	-24	-26	-28	-40	-46	-42	-27	-15	-5	-2	-8	-13	-8	-8	-3	-1	-1	-7	-7	-16		
3	Q	-10	-12	-12	-10	-8	-13	-21	-33	-41	-42	-33	-19	-11	-9	-9	-9	-3	-2	-4	-1	0	-2	-4	-4	-13	
4	Q	-4	-4	-4	-5	-7	-10	-14	-20	-28	-35	-35	-27	-16	-9	-1	0	1	2	6	8	7	5	8	4	-7	
5	3	5	5	4	3	0	-5	-20	-35	-41	-32	-34	-23	-27	-7	19	-4	0	-12	-17	-6	-3	-5	-2	-10		
6	D	-6	-6	-1	0	-1	-9	-27	-34	-50	-56	-38	-5	-2	-2	-19	-14	-12	-17	-10	-5	-2	-1	-12	-7	-14	
7	-14	-14	-8	-7	-12	-32	-33	-35	-43	-47	-35	-29	-17	-12	-20	-12	-2	-3	0	0	-2	-3	-9	-18			
8	-7	-5	-7	-6	-18	-19	-22	-36	-42	-39	-36	-31	-20	-10	-6	-12	-10	-7	-7	-4	-2	-2	-4	-5	-15		
9	-8	-10	-11	-12	-11	-15	-23	-28	-31	-29	-28	-24	-16	-13	-14	-10	-7	-6	-1	2	0	-2	-1	-12			
10	Q	0	-2	-1	-3	-4	-7	-12	-21	-32	-41	-46	-36	-26	-20	-16	-13	-10	-7	-6	-4	-4	-5	-2	-14		
11	Q	-4	-4	-4	-3	0	-1	-7	-28	-31	-27	-23	-11	-7	-6	-8	-7	-2	-1	0	-5	-7	-3	-3	-9		
12	Q	-7	-8	-9	-6	-7	-11	-18	-27	-37	-41	-36	-26	-17	-11	-8	-6	0	-1	-1	-4	-1	-4	-13			
13	-5	-8	-10	-12	-14	-14	-17	-25	-29	-25	-17	-13	-10	-8	-5	-2	1	3	5	32	21	28	13	-5			
14	D	-3	0	-11	-8	-5	-47	-41	-23	-22	-33	-47	-39	-31	-12	-12	-10	2	10	6	13	-41	-51	-28	-15	-18	
15	-38	-61	-25	-20	-19	-24	-33	-43	-48	-45	-39	-37	-30	-6	-6	-8	-5	3	4	-3	-8	-11	-12	-22	-23		
16	D	-11	-5	-6	-7	-12	-15	-26	-31	-37	-49	-32	-21	-9	-9	-17	-9	0	-1	7	2	20	-2	-19	-26	-3	-13
17	D	-7	-68	-50	-17	-14	-12	-16	-34	-41	-26	-31	-21	-4	1	-9	-13	-9	-5	-3	14	-14	-17	-17	-17		
18	-27	-17	-25	-26	4	-3	-9	-17	-29	-33	-46	-34	-30	-10	-14	-10	-8	-5	-3	-1	-1	-2	-3	-4	-15		
19	-6	-7	-8	-8	-8	-16	-24	-33	-38	-39	-32	-19	-12	-11	-13	-5	-2	-5	-9	-8	-7	-19	-14				
20	-24	-7	-3	-2	1	-2	-5	-22	-71	-49	-48	-28	-23	-12	-11	-18	-6	-6	-4	-4	-3	-1	4	-14			
21	-5	-12	-1	0	-12	-12	-22	-34	-46	-42	-31	-22	-14	-8	-5	-1	-5	2	0	1	-2	-3	-2	-4	-12		
22	D	-6	-5	-7	-9	-10	-12	-15	-19	-25	-30	-26	-9	-10	-5	-16	-22	-19	-3	-24	-24	-45	-14	-24	-14	-16	
23	-29	-15	-30	-5	-1	-38	-17	-21	-30	-33	-28	-20	-9	-7	-3	-12	-10	-6	-6	-2	-10	-9	-14	-15			
24	-13	-10	-20	-12	-12	-16	-23	-30	-34	-34	-32	-23	-12	-5	-5	-5	-7	-7	-2	-9	-5	-2	-2	-6	-14		
25	-6	-4	-6	-6	-10	-11	-14	-20	-26	-25	-19	-22	-23	-25	-18	-12	-8	-1	-3	-5	-3	-6	-4	-3	-12		
26	-5	-3	-4	-6	-9	-15	-21	-25	-30	-30	-24	-18	-11	-21	-5	-4	-1	4	2	1	-6	-2	6	0	-9		
27	0	3	-3	-2	-5	-6	-13	-18	-23	-23	-14	-13	-14	-7	-11	-6	5	1	-3	-15	-7	-1	-1	-1	-8		
28	-2	-3	-3	-7	3	-3	-4	-14	-26	-21	-21	-13	-8	-6	-5	-4	-2	2	2	3	5	2	7	2	-5		
29	-3	-6	-4	-1	-1	-5	-10	-19	-23	-23	-21	-13	-10	-5	-5	-3	0	3	-5	-2	0	2	2	1	-6		
30	0	-1	-2	-2	-1	0	-5	-15	-26	-27	-20	-13	-6	-4	0	0	1	3	2	5	-1	-1	0	-1	-5		
All	-9	-11	-10	-8	-7	-13	-18	-25	-34	-36	-32	-24	-16	-10	-7	-8	-6	-2	-4	-2	-4	-5	-4	-5	-13		
Quiet	-5	-6	-6	-5	-5	-8	-14	-23	-33	-38	-35	-26	-16	-12	-9	-8	-5	-2	-1	0	-1	-3	-1	-2	-11		
Dist.	-6	-17	-15	-8	-8	-19	-24	-25	-34	-42	-34	-21	-15	-8	-6	-11	-9	-2	-6	-1	-19	-17	-15	-10	-16		

September 2004 East component Y in nT (Y = 1400 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	275	285	280	282	287	289	289	282	264	249	245	242	246	251	259	266	270	270	266	262	282	279	280	271	271	
2	275	272	288	291	290	291	288	283	271	260	254	246	247	252	260	264	264	265	269	275	276	276	273	270	270	
3	Q	275	274	277	280	282	284	280	275	265	251	239	235	240	248	253	259	264	266	263	265	268	269	265	265	265
4	Q	269	270	273	278	282	285	285	282	276	264	249	240	235	241	249	257	258	257	258	260	263	272	268	266	264
5	267	269	275	280	285	290	292	289	276	260	245	238	232	240	250	251	274	274	273	272	261	263	263	266	266	
6	D	255	271	277	282	287	294	286	277	272	251	239	230	240	241	244	250	266	314	273	267	267	265	239	260	264
7	275	286	276	283	287	283	275	272	271	256	249	246	249	255	256	266	267	270	275	276	280	276	269	269	269	
8	256	273	282	288	273	277	279	280	267	253	248	245	260	259	262	265	265	266	265	266	267	268	267	267	267	
9	270	271	274	277	279	281	284	281	275	264	252	245	243	245	254	261	261	263	262	264	265	266	264	264	264	
10	Q	268	270	274	275	276	279	278	275	275	263	251	239	235	245	256	261	263	265	266	266	265	265	264	264	
11	Q	267	268	270	271	272	276	279	275	275	264	251	247	244	254	259	261	261	260	260	260	260	274	272	264	
12	Q	267	273	274	275	276	278	279	276	274	271	264	252	245	252	256	267	266	259	272	253	271	266	266	266	
13	270	274	274	275	276	278	279	276	275	273	267	253	245	257	257	263	264	264	265	266	267	267	270	270	270	
14	D	267	278	274	273	274	275	276	277	277	277	272	267	257	257	263	264	264	265	265	266	267	267	267	267	267
15	269	274	276	274	274	275	274	274	275	275	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	
16	D	231	252	263	268	274	282	285	287	282	279	275	274	278	281	286	291	295	292	288	289	290	286	283	281	286
17	D	253	215	241	263	275	281	282	281	276	279	274	270	267	267	270	270	270	270	270	270	270	270	270	270	270
18	219	222	210	220	243	259	271	276	277	280	281	287	284	285	285	288	287	287	287	287	287	287	287	287	287	
19	287	287	287	287	287	286	283	282	279	278	270	280	283	290	291	292	290	292	292	290	292	292	292	292	292	
20	257	269	281	286	285	285	282	285	286	286																

Nurmijärvi Finland

October 2004 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	-2	-1	-2	-1	-3	-10	-19	-28	-34	-25	-16	-10	-2	0	2	5	3	5	2	9	5	7	-4	
2		5	-1	-2	5	7	5	-10	-18	-28	-33	-36	-45	-33	-13	-11	-20	-21	-12	-18	-9	-9	-5	-5	-3	
3		0	-1	-1	0	-1	-6	-14	-21	-31	-36	-30	-29	-13	-14	-10	-29	-29	-33	-39	-29	-19	-2	-22	-38	
4	D	-18	-18	-15	-8	-17	-10	-8	-14	-27	-26	-28	-28	-28	-22	-13	-23	-26	-21	-21	-20	-17	-20	-19	-11	
5		-7	-12	-12	-10	-5	-9	-10	-11	-18	-17	-21	-20	-16	-11	-8	-8	-6	-7	-8	-3	-5	-5	-9	-13	
6		-11	-8	-8	-5	-3	-3	0	-12	-21	-32	-32	-29	-24	-17	-13	-9	-7	-7	-6	-8	-8	-5	-6	-11	
7	Q	-6	-5	-5	-5	-1	0	-3	-15	-24	-30	-31	-29	-24	-16	-9	-4	-3	-1	1	2	2	2	3	2	
8		4	3	3	5	6	8	3	-11	-20	-24	-22	-17	-13	-8	-3	-5	-8	2	4	4	4	0	0	-6	
9		3	-1	-2	-6	-4	-4	-7	-13	-20	-31	-26	-20	-12	-11	-9	-4	-3	-7	-4	-2	-2	-1	-4		
10		-8	-16	0	-1	-6	-6	-9	-15	-18	-20	-24	-19	-7	-5	-9	-4	-3	-3	-5	-6	-11	-9	2	-9	
11		-12	-21	-17	-25	-18	-9	-12	-11	-22	-26	-24	-19	-22	-24	-23	-10	-9	-3	-4	-6	-6	-8	-13	-8	
12		-5	-11	-16	-14	-7	-7	-7	-13	-31	-27	-24	-23	-16	-9	-5	-8	-8	-5	-3	-2	-1	5	-14	12	
13	D	-15	-34	-45	4	5	-38	-33	-31	-38	-31	-38	-15	-16	-21	-21	-12	-37	-36	-40	-30	-16	-26	-21	-25	-23
14	D	-17	-18	-13	-16	-3	-13	-43	-44	-40	-41	-39	-37	-32	-22	-25	-14	-10	-31	-18	5	-13	-15	-17	-18	
15		-14	-15	-16	-16	-8	-6	-10	-20	-25	-38	-43	-34	-25	-22	-18	-16	-12	-9	-10	-14	2	3	-5	-11	
16		-13	-18	-9	-4	-1	-2	-6	-17	-26	-33	-34	-27	-19	-12	-10	-9	-7	-5	-4	-3	-4	-4	-4	-11	
17	Q	-5	-5	-4	-1	2	2	-3	-11	-20	-29	-31	-25	-16	-8	-5	-3	-2	-1	-1	-1	-2	-2	-1	-7	
18		-1	-1	-1	1	4	6	2	-9	-22	-31	-32	-27	-18	-6	-1	-6	-5	-1	-5	-9	-3	1	3	0	
19		-2	-2	-2	-2	-1	-2	-5	-11	-22	-30	-30	-25	-16	-9	-1	-8	-4	-2	4	4	2	6	5		
20		2	5	5	7	-5	-14	-7	-8	-18	-23	-26	-23	-16	-7	-18	-24	-27	-14	-12	-11	-15	-11	-23		
21		-9	-10	-10	-11	-4	0	-12	-26	-23	-27	-32	-28	-22	-16	-12	-10	-8	-7	-8	-6	-1	-11	-4	-6	
22		-5	-8	-7	-6	-6	-6	-8	-18	-29	-31	-29	-26	-16	-11	-13	-9	-9	-3	-6	-4	-2	-3	-4	-11	
23	Q	-3	-3	-3	-1	1	0	-6	-15	-23	-26	-20	-13	-7	-3	-4	-3	-1	-3	0	1	0	-2	1	3	
24		4	-1	-1	0	1	-1	-12	-25	-34	-30	-21	-16	-8	-2	-1	3	1	1	-24	-29	-14	-15	-10	-13	
25		-13	-6	-13	9	3	2	-2	-21	-31	-36	-31	-22	-16	-14	-10	-7	-9	-16	-8	-9	-4	0	-7	1	
26	Q	-7	-10	-9	-9	-8	-9	-13	-23	-32	-35	-29	-20	-10	-6	-5	-5	-4	-4	-3	-3	-3	-3	-4	-11	
27		-4	-4	-4	-1	0	-2	-9	-20	-28	-29	-24	-15	0	2	2	3	-3	-6	-2	-1	3	0	-4	-2	
28	Q	-3	-4	-3	-4	-2	-3	-8	-15	-21	-21	-16	-9	-3	-1	-1	0	2	3	3	4	3	4	1	-4	
29		-1	-3	-2	0	2	1	-5	-12	-21	-24	-24	-17	-14	-9	-9	-14	-16	-14	-13	-22	-14	-10	-12	-11	
30	D	-10	-3	4	4	-10	-9	-15	-29	-40	-40	-40	-31	-25	-20	-20	-11	-14	-10	-7	-7	-21	-22	-28	-16	-18
31	D	-15	-16	-17	-18	-11	-8	-9	-17	-26	-30	-37	-35	-24	-22	-31	-24	-27	-19	-15	-14	6	-7	-15	-20	-19
All		-6	-8	-7	-4	-3	-4	-9	-17	-26	-30	-29	-24	-17	-12	-10	-10	-9	-8	-7	-6	5	7	-7	-11	
Quiet		-5	-5	-5	-4	-2	-2	-7	-16	-24	-28	-25	-19	-12	-7	-5	-3	-2	-1	0	1	0	0	0	0	
Dist.		-15	-18	-17	-7	-7	-15	-22	-27	-34	-34	-36	-29	-25	-22	-20	-22	-22	-24	-18	-11	-14	-17	-21	-17	

October 2004 East component Y in nT ($Y = 1400$ 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	272	272	274	272	275	278	279	276	270	263	253	246	247	250	256	258	257	259	260	262	269	270	268	265	
2		271	272	268	272	269	269	269	270	268	254	239	223	233	237	255	263	265	269	289	270	274	274	268	263	
3		265	270	270	271	272	272	267	260	250	244	235	229	237	240	261	244	266	289	303	299	286	319	297	280	
4		312	292	279	282	269	272	281	281	279	270	257	252	249	248	256	260	265	271	286	304	286	286	273	252	
5		275	284	283	277	278	279	285	284	282	274	265	258	263	265	265	266	275	278	278	294	280	274	273	268	
6	Q	276	276	275	275	273	278	279	282	282	273	260	249	248	252	258	265	266	265	266	272	280	274	273	270	
7		274	277	275	275	273	273	276	278	279	274	264	258	253	248	249	256	260	261	261	263	265	266	270	270	
8		271	271	271	271	270	270	277	277	274	264	251	241	240	243	248	255	257	259	263	265	267	285	289	287	
9		269	281	283	276	273	276	277	275	267	264	257	249	248	251	259	260	260	257	260	266	269	271	273	282	
10		293	289	278	292	280	276	280	280	273	265	260	257	252	248	257	261	266	264	269	276	286	283	285	277	
11	D	275	268	262	265	267	269	278	278	275	277	265	250	246	240	254	281	261	274	270	277	282	288	298	265	
12		272	283	274	282	271	273	278	281	284	281	269	261	256	257	259	258	259	261	261	266	270	269	275	304	
13		304	287	230	264	274	275	257	232	249	254	252	247	240	230	226	227	257	273	280	286	317	332	292	286	
14		D	265	240	269	267	270	278	274	263	263	262	257	251	234	246	246	266	300	334	276	277	285	293	288	
15		259	269	261	265	257	269	274	284	286	275	268	257	245	245	263	262	266	270	285	289	283	284	275	277	
16	Q	275	255	262	276	275	278	284	289	286	277	266	253	252	259	265	266	267	269	270	272	272	273	272	270	
17		271	272	270	270	271	277	282	288	285	273	263	252	250	255	262	265	267	268	269	271	272	271	270	269	
18		270	269	269	269	271	276	283	288	285	273	259	248	246	248	255	256	262	261	262	274	311	288	283	277	
19		275	272	274	273	274	274	279	282	279	269	260	250	243	249	256	251	260	259	263	267	270	274	286	279	
20		274	273	272	274	274	269	272	268	270	261	249	231	238	235	237	253	264	270	274	278	279	269	265	263	
21	Q	267	282	280	284	260	263	279	281	278	276	259	255	257	261	266	267	268	268	270	270	276	278	273	275	
22		256	273	275	275	276	275	282	283	279	266	252	250	249	255	260	263	263	283	269	276	272	270	270	267	
23		Q	267	268	269	269	270	275	281	281	272	261	252	248	251	254	258	260	261	263	262	266	268	270	269	277
24		277	270	268	270	273	275	280	281	276	265	252	248	246	248	251	250	250	257	304	292	279	289	286	274	
25		269	273	281	269	280	277	276	270	267	260	246	243	243	253	261	263	281	271	270	274	274	269	270	267	
26	Q	272	271	271	275	276	279	278	276	269	261	252	250	245	264	265	265	267	269	270	272	271	272	272	268	
27		271	272	273	274	275	277	282	283	275	264	257	255	254	257	259	261	265	271	271	272	276	274	274	268	
28		Q	273	271	272	271	274	277	279	276	271	262	254	253	256	261	262	262	264	264	266	268	271	274	276	
29		269	270	270	272	274	274	279	278	272	259	248	239	228	240	247	245	255	261	269	312	301	280	274	275	
30		D	288	277	299	282	265	276	278	274	268	264	258	252	246	260	267	263	287	270	269	272	296	311	292	
31	D	275	276	275	275	280	278	279	280	279	269	260	252	245	251	264	263	276	273	272	274	285	273	291	298	
All		274	273	272	273	273	274	277	278	274	265	255	248	246	250	258	263	266	268	273	277	278	282	279	275	
Quiet		271	272	272	271	273	277	280	280	274	264	256	251	252	256	260	262	265	267	268	272	272	272	272	267	
Dist.		289	274	267	274	273	271	267	269	268	262	255	244	242	247	262	282	275	285	296	288	300	282	277	274	

October 2004 Vertical component Z in nT ($Z = 49400$ 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		284	283	283	283	284	284	283	282	280	277	278	280	282	284	284	285	285	285	285	280	277	280	281	282			
2		281	280	279	279	278	277	277	279	277	276	281	286	287	300	311	316	310	300	298	291	289	287	283	271	287		
3		279	282	283	284	285	285	284	283	280	276	276	291	302	323	329	331	339	337	310	293	286	236	237	236	289		
4	D	200	245	275	280	274	276	281	285	285	282	284	289	292	294	299	304	313	314	313	312	288	287	282	270	251	282	
5		269	284	286	287	287	296	292	290	290	289	287	285	286	289	289	291	292	290	285	285	274	280	280	280	280	280	
6		281	281	282	283	285	285	286	285	284	282	285	290	292	293	291	290	290	290	290	289	286	285	285	287	287		
7	Q	285	285	285	285	285	286	287	285	286	282	281	283	288	292	292	290	287	287	287	286	286	286	285	284	286	286	
8		283	282	282	283	282	282	281	278	277	272	272	275	277	283	291	303	299	291	287	285	285	285	278	279	283	283	
9		259	267	274	279	282	284	284	282	278	274	275	277	282	285	287	287	288	290	293	292	289	287	285	280	282	282	
10		279	281	272	264	275	280	284	284	281	278	282	283	285	290	288	287	287	287	287	289	290	290	284	265	268	281	
11		264	248	259	256	265	276	273	284	283	281	281	284	287	296	307	307	307	295	295	292	291	288	277	267	240	279	
12		248	264	272	272	272	280	287	284	284	286	282	281	286	282	291	290	290	290	289	288	286	281	261	228	278	278	
13	D	223	210	204	239	258	255	274	281	280	288	287	289	293	332	388	418	378	355	330	313	262	271	264	242	199	286	
14	D	246	237	239	264	274	278	285	290	290	295	303	310	314	322	330	325	304	293	293	295	254	250	262	263	272	284	
15		278	286	285	282	281	286	287	285	282	285	290	294	301	303	304	300	297	300	291	291	277	259	270	279	278	279	
16		282	279	276	281	283	287	291	291	287	287	289	290	292	293	291	290	289	289	289	288	288	287	287	287	287	287	
17	Q	286	286	286	287	287	288	290	292	291	288	285	283	288	292	291	289	288	288	288	287	287	286	286	286	288	288	
18		286	286	285	286	286	287	288	287	287	286	285	287	290	292	290	294	292	295	298	291	278	278	283	283	283	283	
19		285	286	284	286	286	286	287	289	288	284	283	286	289	294	292	293	292	294	292	289	287	286	286	278	277	287	
20		281	283	283	281	282	282	286	289	290	288	287	288	291	301	329	368	343	312	300	294	295	293	291	274	297	297	
21		247	265	278	282	272	268	278	285	287	287	288	291	294	293	291	290	290	290	290	290	290	290	287	285	284	282	283
22		274	278	284	286	287	288	291	289	287	288	291	292	294	293	292	293	293	287	287	285	283	285	286	286	286	286	
23	Q	286	285	286	286	286	286	287	288	287	287	286	285	287	290	292	290	294	292	295	298	291	278	278	283	283	283	283
24		273	280	283	284	285	287	288	288	285	283	283	285	289	289	287	291	299	328	303	292	290	292	289	289	289	289	289
25		285	276	278	275	278	272	282	281	285	289	291	289	294	297	293	293	301	293	291	290	287	276	280	287	286	286	287
26	Q	285	285	288	287	288	289	290	289	288	285	286	287	290	290	290	288	287	287	287	287	285	284	282	282	283	283	283
27		286	285	286	286	286	287	289	288	285	283	285	287	286	284	283	285	287	288	286	285	285	285	286	286	286	286	286
28	Q	284	284	285	285	286	286	286	286	284	283	281	282	285	285	285	285	285	285	285	285	285	286	282	280	284	284	284
29		282	283	284	284	284	285	287	287	285	281	279	284	292	294	305	320	311	321	325	319	299	293	291	285	293	293	293
30	D	270	235	221	238	257	270	278	282	282	282	286	294	295	295	303	298	315	297	296	291	292	256	245	269	277		
31	D	280	282	274	284	286	286	285	284	284	284	288	292	293	303	314	321	322	306	303	301	297	294	253	236	251	259	286
All		272	273	275	278	280	282	285	286	284	283	284	288	293	294	301	301	299	297	295	289	285	279	275	272	286		
Quiet		285	285	285	286	287	287	288	289	285	284	285	288	290	288	287	286	287	286	286	286	285	284	286				
Dist.		244	242	243	261	270	273	281	284	286	290	297	312	323	335	327	318	307	302	278	271	260	254	250	283			

Nurmijärvi Finland

November 2004 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	-14	-9	-8	-6	-6	-12	-18	-24	-27	-25	-15	-15	-20	-8	-8	-7	-6	-5	-6	-6	-3	-7	-12		
2	Q	-5	-1	-8	-6	-5	-7	-10	-19	-23	-27	-26	-19	-12	-11	-12	-16	-29	-24	-11	-9	-6	-3	-5	-3	-12	
3		-5	-7	-5	-4	-3	-2	-3	-12	-18	-20	-24	-26	-12	-2	0	1	3	-9	-3	-16	-59	-82	-19	-3	-14	
4		-9	-10	-10	-7	-5	-3	-3	-16	-24	-30	-27	-22	-15	-9	-8	-7	-12	-21	-14	1	-1	-2	-2	-4	-11	
5	Q	-1	-10	-9	-8	-5	-7	-12	-19	-27	-31	-30	-23	-17	-11	-8	-6	-5	-4	-4	-3	-5	-6	-6	-11		
6	Q	-6	-5	-5	-5	-3	-3	-2	-5	-12	-21	-24	-25	-18	-11	-6	-4	-3	-2	-1	-1	-4	-6	-7	-6	-8	
7	D	-7	-6	-3	7	5	7	7	2	-5	-9	-4	22	31	19	16	17	22	-4	10	16	-139	-267	-451	-1097	-76	
8	D	-1105	-124	-447	-605	-1115	-799	-434	-66	-81	-20	88	-20	-50	-75	-78	-73	-67	-58	-57	-106	-172	-216	-116	-165	-248	
9	D	-165	-128	-75	-96	-73	-69	-63	-48	-64	-73	-59	-5	51	149	251	212	120	33	-48	-517	-1234	-294	-236	-155	-108	
10	D	-176	-198	-69	-116	-300	-326	-236	-267	-376	-288	-31	211	195	75	114	7	-70	-100	-45	-100	-92	-140	-112	-68	-75	-95
11		-79	-90	-61	-50	-53	-89	-65	-74	-61	-51	-50	-50	-44	-40	-42	-40	-21	-29	-37	-33	-17	-30	-32	-49		
12	D	-74	-75	-80	-24	-22	-31	-20	-17	-33	-65	-61	-51	-40	-40	-28	-28	-37	-36	-29	-14	-46	-64	-73	-48	-44	-44
13		-44	-51	-47	-34	-39	-29	-33	-41	-43	-45	-49	-42	-31	-29	-26	-30	-35	-34	-31	-27	-28	-21	-29	-31	-35	
14		-38	-31	-50	-35	-28	-25	-25	-31	-43	-46	-44	-42	-40	-39	-36	-28	-25	-25	-24	-28	-27	-28	-29	-33		
15	Q	-30	-29	-27	-24	-24	-24	-25	-30	-39	-42	-40	-36	-31	-25	-23	-23	-22	-21	-21	-22	-22	-22	-23	-24	-27	
16		-23	-22	-19	-15	-12	-10	-10	-24	-36	-45	-40	-36	-29	-26	-26	-30	-22	-22	-26	-20	-21	-29	-18	-24	-25	
17		-27	-28	-27	-23	-22	-22	-22	-43	-44	-40	-40	-36	-29	-29	-27	-25	-23	-21	-22	-21	-23	-22	-23	-23	-28	
18	Q	-23	-23	-21	-20	-19	-20	-21	-25	-29	-33	-30	-24	-19	-19	-20	-20	-19	-16	-16	-17	-17	-18	-19	-20	-21	
19		-18	-17	-16	-17	-19	-19	-20	-18	-18	-19	-17	-17	-16	-14	-11	-9	-7	-5	-5	-4	-10	-11	-12	-17	-13	-14
20		-14	-22	-22	-22	-22	-20	-6	-16	-17	-24	-26	-41	-40	-19	-33	-27	-14	-17	-26	-17	-28	-28	-24	-11	-23	
21		-21	-25	-28	-23	-18	-20	-22	-24	-29	-47	-51	-38	-33	-35	-41	-13	-32	-20	-13	-21	-11	-17	-25	-25	-26	
22		-18	-22	-23	-22	-19	-23	-27	-22	-29	-40	-30	-23	-22	-21	-22	-20	-22	-21	-22	-18	23	21	21	24	23	
23		-10	-20	-21	-20	-20	-19	-20	-23	-26	-28	-26	-21	-17	-12	-12	-15	-15	-14	-17	-16	-12	-16	-22	-6	-18	
24		-9	-20	-14	-14	-9	-7	-11	-14	-16	-19	-28	-32	-23	-26	-30	-25	-23	-26	-25	-22	-23	-20	-18	-25	-20	
25		-27	-36	-50	-40	-21	-18	-23	-28	-32	-28	-36	-39	-36	-39	-40	-32	-26	-17	-28	-32	-27	-36	-19	-31		
26		-28	-24	-24	-24	-20	-14	-25	-24	-33	-47	-41	-34	-23	-26	-26	-31	-23	-35	-34	-32	-33	-27	-33	-28	-29	
27		-24	-25	-24	-20	-16	-13	-20	-24	-28	-31	-26	-27	-28	-31	-37	-37	-38	-51	-48	-45	-50	-42	-54	-32		
28		-35	-19	-17	-15	-6	-17	-25	-28	-24	-27	-33	-32	-38	-35	-32	-39	-39	-28	-19	-17	-22	-25	-26	-23	-26	
29		-18	-27	-20	-9	-8	-3	-8	-13	-17	-18	-20	-17	-26	-22	-20	-14	-26	-19	-19	-17	-18	-8	-14	-17		
30		-25	-28	-29	-23	-25	-8	-9	-7	-15	-21	-27	-26	-25	-17	-17	-21	-21	-16	-22	5	-29	-24	-37	-23	-20	
All		-69	-38	-42	-44	-64	-54	-42	-37	-40	-31	-22	-20	-19	-13	-13	-16	-19	-20	-23	-40	-76	-50	-48	-67	-38	
Quiet		-13	-14	-14	-13	-11	-12	-15	-21	-28	-31	-30	-24	-18	-14	-13	-14	-15	-13	-11	-11	-11	-12	-12	-16		
Dist.		-305	-106	-135	-167	-301	-244	-155	-101	-94	-27	35	27	13	33	34	30	12	-42	-149	-350	-192	-184	-307	-114		

November 2004 East component Y in nT ($Y = 1400$ 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		268	265	273	275	275	276	279	283	281	275	265	262	259	269	279	268	269	270	270	270	271	272	275	266	271	
2	Q	269	272	277	275	275	276	281	286	278	273	261	253	248	253	256	251	255	270	277	281	280	277	277	279	270	
3		281	279	276	276	275	276	279	283	279	265	255	244	251	254	257	261	262	262	288	287	287	343	306	278	275	
4		274	275	277	277	269	274	280	281	279	273	262	256	255	257	260	259	259	261	264	268	291	284	274	277	288	
5	Q	275	281	280	278	275	277	279	285	282	274	266	259	259	263	266	268	269	271	271	273	275	274	272	272	272	
6	Q	272	271	271	272	272	273	275	279	276	269	263	260	258	261	264	267	268	269	269	272	275	274	273	273	270	
7	D	274	274	274	280	279	272	275	278	277	270	260	243	248	233	253	233	230	290	271	251	264	345	362	404	277	
8	D	462	469	409	334	286	355	308	397	381	358	350	310	312	304	304	298	300	297	307	347	356	310	329	383	344	
9	D	322	247	237	254	206	277	284	307	292	295	301	302	299	256	363	290	256	323	292	344	356	326	305	334	295	
10	D	281	308	339	342	299	187	231	335	331	400	397	309	290	354	324	348	339	347	347	330	303	283	294	284	317	
11		272	258	279	275	274	251	253	264	277	280	275	289	282	283	293	283	291	284	288	285	278	274	281	290	277	
12	D	293	294	280	290	276	286	289	284	278	283	283	279	275	277	273	266	265	281	305	315	343	360	311	296	291	
13		289	284	286	289	284	284	285	281	276	271	271	267	272	273	289	279	283	285	288	303	292	286	282			
14		283	285	276	278	278	287	288	290	292	284	276	267	261	269	269	275	277	279	280	282	288	284	285	281	280	
15	Q	279	279	277	278	279	281	283	288	287	279	274	270	268	269	273	275	276	277	278	280	280	280	277	278	278	
16		278	276	274	274	276	278	279	281	280	276	263	267	262	261	257	265	272	277	293	292	287	297	293	288	277	
17		283	279	280	278	278	281	283	288	284	277	264	263	265	268	271	257	277	278	280	281	282	283	282	278	277	
18	Q	284	282	281	281	278	277	279	280	279	275	270	266	269	270	272	273	276	277	278	278	278	278	278	276		
19		276	275	275	277	278	277	277	277	274	269	266	266	265	266	267	266	267	266	267	272	278	279	285	291	273	
20		305	292	285	287	282	277	269	274	274	266	261	256	246	234	234	268	262	276	265	269	342	309	296	295	277	
21		285	283	276	272	275	277	280	283	279	272	287	263	267	287	257	310	275	283	290	282	288	300	283	270	280	
22		284	282	281	283	281	281	277	278	274	272	271	266	266	270	273	275	276	280	281	284	283	288	297	278		
23		291	297	287	285	280	281	283	284	285	281	274	264	261	264	262	272	273	271	285	284	282	286	283	283		
24		299	285	284	276	275	276	278	280	277	273	269	264	255	254	265	265	271	274	277	284	287	295	290	297	277	
25		296	300	289	272	274	274	273	268	270	276	273	270	269	268	266	306	270	274	288	273	288	299	270	267	294	280
26		284	277	281	277	272	259	251	259	270	272	264	267	267	268	273	286	278	286	299	285	295	317	300	293	278	
27		280	280	276	278	279	277	268	271	276	284	275	268	265	268	263	282	289	319	300	308	310	327	315	298	285	
28		273	291	282	279	278	266	267	275	271	264	255	247	245	243	249	258	265	288	283	294	300	318	312	298	275	
29		285	288	287	287	288	280	277	275	276	277	271	256	260	264	267	264	274	279	327	278	283	295	306	280	280	
30		292	304	275	279	268	267	276	288	270	266	273	264	266	264	260	270	269	272	298	339	304	292	279	282	280	
All		289	288	284	282	276	275	276	286	284	282	277	267	265	267	273	274	273	282	286	293	293	297	292	294	281	
Quiet		276	277	277	277	276	277	279	283	280	274	267	262	260	263	266	267	269	272	275	276	277	277	276	276	273	
Dist.		326	318	308	300	269	275	277	320	312	321	318	289	283	287	301	291	279	308	305	317	325	325	320	340	305	

November 2004 Vertical component Z in nT ($Z = 49400$ nT + tabular values)

November 2004		Vertical component of the wind in m/s ($Z = 45460 \text{ m}^2/\text{s}$ + thermal 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		273	278	285	287	287	287	287	285	283	284	285	288	291	294	298	293	292	291	290	289	289	288	287	283		
2	Q	276	273	278	283	285	286	288	289	288	286	286	292	293	294	300	315	316	306	305	315	306	299	295	291	289	
3		286	287	287	287	287	287	287	286	284	283	285	290	290	289	288	288	297	302	298	232	179	183	258	276		
4		285	291	289	285	282	279	282	284	288	289	286	284	286	290	292	291	297	309	308	298	278	287	287	274	288	
5	Q	257	278	285	287	288	288	291	292	289	285	285	287	288	289	290	289	289	288	288	289	288	288	288	288	286	
6	Q	288	287	287	287	287	288	289	288	286	287	286	286	287	288	288	288	287	287	287	289	289	288	287	287	287	
7	D	286	286	285	282	279	281	284	287	284	281	279	275	274	276	275	276	288	354	314	327	301	207	364	174	-54	
8	D	249	106	-172	-135	-197	295	326	431	457	449	455	391	391	356	338	329	323	322	310	207	141	70	114	83	235	
9	D	56	78	129	198	208	284	311	340	335	335	358	414	473	536	506	536	509	311	271	150	201	216	329	336	313	
10	D	232	269	291	321	169	101	198	269	408	409	441	369	473	494	481	460	389	301	310	324	221	224	286	283	325	
11		279	263	283	302	307	304	313	318	316	317	322	329	335	330	328	334	326	322	319	318	320	316	304	269	311	
12	D	235	255	235	272	299	304	314	308	305	311	325	320	325	327	328	337	364	344	309	333	303	287	307	310	307	
13		307	309	309	313	316	315	316	319	317	315	318	324	324	321	320	319	324	322	320	318	317	311	310	309	316	
14		296	267	283	297	309	313	315	316	317	315	311	313	317	321	321	318	316	314	313	316	315	313	312	311	310	
15	Q	311	311	311	311	311	313	315	315	314	313	312	310	311	312	312	311	311	311	311	311	310	309	309	309	311	
16		308	308	307	307	306	307	306	305	308	309	311	308	311	313	317	320	316	318	322	321	317	316	306	307	312	
17		308	309	309	309	308	308	307	309	313	311	309	309	310	313	314	313	312	311	312	311	310	309	308	303	310	
18	Q	302	305	303	306	306	307	307	308	304	305	306	307	307	308	308	307	307	307	306	306	305	305	306	305	306	
19		304	304	304	303	304	304	304	304	302	302	302	303	304	305	303	304	303	303	305	305	304	305	308	301	304	
20		299	299	300	300	296	292	293	294	296	301	305	324	324	327	331	322	315	309	332	352	315	311	302	295	310	
21		303	305	306	305	302	304	304	304	301	304	314	313	326	332	334	311	355	319	316	301	300	283	286	297	293	309
22		290	291	297	301	304	304	307	303	304	304	307	304	307	308	309	308	308	306	309	308	303	307	305	303	305	
23		292	289	294	298	301	304	304	305	303	303	302	300	303	303	306	305	307	307	308	303	303	301	301	283	301	
24		274	277	289	292	296	298	299	299	296	296	290	305	308	311	313	311	311	312	310	302	276	268	284	297	274	
25		272	250	236	238	259	289	301	301	303	308	311	316	328	342	329	327	319	302	303	304	292	269	269	294	274	
26		274	284	286	295	296	292	295	298	302	305	307	309	310	311	312	315	312	318	321	313	303	282	285	292	301	
27		298	299	302	304	304	303	300	302	303	307	305	306	305	308	314	320	334	360	340	332	328	317	290	247	307	
28		292	244	282	289	293	302	307	312	308	308	314	321	332	334	358	363	368	349	326	303	307	312	310			
29		320	311	301	300	302	299	296	298	299	298	298	302	303	306	309	311	325	332	332	313	315	305	269	227	303	
30		254	272	287	291	298	295	294	302	301	300	300	303	306	307	308	314	315	317	324	303	299	303	292	287	299	
All		275	273	269	277	273	291	298	306	311	313	314	313	321	324	328	326	326	317	310	302	287	284	281	271	300	
Quiet		287	291	293	295	296	297	298	295	295	295	297	298	298	299	302	303	300	308	298	296	296	295	296	295	296	
Dist.		212	199	154	188	152	153	287	327	358	373	372	356	387	397	406	390	388	338	305	263	215	223	242	192	201	

Nurmijärvi Finland

December 2004 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	-16	-18	-21	-23	-16	-13	-13	-16	-26	-49	-33	-36	-33	-28	-21	-21	-19	-18	-16	-20	-16	-17	-6	-19	-15	-21	
2	Q	-23	-21	-19	-18	-15	-14	-15	-16	-21	-27	-30	-28	-22	-18	-17	-19	-14	-12	-14	-15	-14	-14	-13	-15	-18	
3	Q	-15	-17	-16	-13	-7	-7	-10	-14	-18	-21	-19	-15	-13	-12	-12	-12	-13	-11	-10	-9	-9	-12	-12	-14	-15	-13
4	Q	-14	-14	-13	-12	-11	-11	-11	-15	-18	-20	-18	-16	-13	-12	-10	-8	-8	-8	-9	-10	-9	-11	-12	-13	-12	
5	-13	-13	-13	-12	-10	-3	0	3	27	16	12	10	15	14	14	11	7	9	8	0	-1	-5	-5	-5	3		
6	D	-1	-11	-9	-7	-5	-15	-5	-17	-34	-35	-34	-35	-29	-35	-25	-33	-54	-64	-72	-58	-42	-38	-53	-24	-31	
7	-28	-39	-38	-28	-25	-36	-27	-31	-32	-33	-37	-37	-30	-38	-29	-32	-37	-31	-17	-36	-26	-26	-3	-28	-30		
8	-24	-20	-22	-19	-11	-8	-20	-20	-20	-25	-26	-21	-22	-22	-31	-27	-33	-28	-25	-19	-24	-11	-34	-30	-23		
9	-30	-23	-15	-13	-13	-13	-14	-16	-23	-25	-31	-36	-23	-26	-22	-21	-27	-33	-30	-30	-25	-20	-19	-24	-23		
10	-23	-16	-14	-12	-14	-10	-9	-7	-13	-22	-32	-24	-25	-32	-44	-49	-41	-41	-42	-40	-34	-29	-25	-27			
11	-24	-19	-16	-12	-10	-12	-21	-16	-20	-25	-25	-22	-33	-39	-26	-10	-25	-30	-37	-73	-80	-30	-25	-27			
12	D	-36	-32	-66	-24	-1	-11	-33	-16	-15	-21	-46	-36	-26	-34	-37	-55	-56	-22	-14	-16	-18	-18	-15	-22	-28	
13	-40	-14	-11	-15	-16	-30	-28	-37	-31	-28	-25	-25	-22	-22	-24	-24	-17	-16	-14	-15	-15	-15	-16	-22			
14	-15	-16	-16	-14	-16	-15	-13	-15	-13	-16	-22	-29	-21	-25	-17	-18	-17	-13	-9	-16	-36	-31	-24	-24	-19		
15	-23	-17	-20	-20	-20	-14	-11	-16	-17	-20	-21	-19	-15	-13	-15	-15	-21	-16	-17	-16	-27	-29	-31	-22	-19		
16	-15	-18	-16	-21	-17	-13	-10	-18	-14	-13	-13	-11	-11	-21	-13	-7	-13	-8	-17	-27	-41	-31	-21	-17			
17	D	-17	-24	-25	-19	-17	-9	-15	-22	-16	-19	-19	-14	-14	-14	-21	1	-32	-25	-24	-15	4	-11	-27	-17		
18	-8	-14	-32	-15	-12	-12	-16	-17	-19	-19	-20	-13	-25	-33	-16	-15	-13	-14	-10	-10	-16	-15	-13	-16			
19	Q	-18	-18	-17	-14	-10	-10	-13	-15	-13	-14	-12	-13	-11	-9	-9	-10	-11	-12	-14	-13	-14	-13	-13			
20	-12	-13	-14	-8	-6	-7	-8	-11	-11	-10	-11	-9	-9	-7	-6	-7	-10	-10	-7	-8	-7	-10	-14	-9			
21	-14	-13	-7	-11	-9	-5	-2	13	5	1	-29	-29	-17	-11	-10	-23	-31	-21	-3	-3	-18	-18	-23	-16	-12		
22	D	-19	-17	-14	-5	-0	-13	-12	-2	-8	-47	-26	-18	-14	-19	-23	-14	-22	-21	-16	-21	-20	-24	-23	-16		
23	-15	-21	-15	-14	-16	-12	-14	-14	-17	-22	-29	-24	-20	-16	-16	-23	-15	-13	-15	-17	-21	-32	-19	-21	-18		
24	Q	-19	-17	-16	-15	-13	-12	-13	-12	-20	-23	-23	-17	-13	-10	-10	-20	-24	-18	-19	-12	-12	-12	-15	-16		
25	-15	-6	-7	-2	0	-18	9	-3	-10	-13	-20	-18	-16	-13	-10	-7	-10	-9	-14	-20	-10	-15	-18	-20	-11		
26	-17	-19	-21	-11	-3	-5	-6	-7	-9	-15	-21	-25	-15	-15	-5	-5	-6	-14	-16	-17	-14	-18	-16	-15	-13		
27	-14	-14	-11	-11	-10	-8	-8	-3	-6	-8	-9	-6	-2	0	-1	-4	-8	-6	-6	-14	-25	-32	-20	-26	-11		
28	-21	-12	-17	-9	-4	-12	-15	-21	-29	-29	-30	-32	-27	-21	-18	-32	-32	-49	-44	-58	-38	-62	-52	-76	-31		
29	-49	-27	-27	-26	-23	-20	-13	-12	-24	-38	-34	-22	-13	-29	-21	-26	-23	-20	-17	-21	-23	-13	-30	-24			
30	D	-26	-22	-26	-19	-18	-11	4	8	-8	-11	-17	-19	-19	-24	-12	-25	-26	-27	-26	-30	-26	-24	-15	-17	-18	
31	-13	-18	-17	-12	-15	-10	-12	-20	-21	-18	-15	-16	-21	-12	-9	-11	-12	-16	-15	-15	-15	-17	-11	-18	-15		
All	-20	-18	-19	-15	-12	-12	-10	-13	-16	-20	-23	-22	-18	-18	-18	-19	-20	-20	-19	-20	-22	-22	-20	-22	-18		
Quiet	-18	-17	-16	-14	-11	-11	-12	-14	-18	-21	-20	-18	-14	-12	-12	-14	-14	-12	-12	-13	-11	-12	-13	-14	-14		
Dist.	-20	-21	-28	-15	-8	-12	-6	-8	-17	-26	-28	-25	-20	-25	-22	-31	-31	-30	-24	-19	-24	-23	-22	-22			

December 2004 East component Y in nT (Y = 1400 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	285	278	283	275	264	276	282	282	287	284	275	269	266	267	270	271	273	281	279	282	284	294	284	287	278	
2	Q	284	278	277	276	278	280	280	283	278	272	265	264	266	269	273	274	276	280	289	286	280	278	278	277	
3	Q	277	276	275	275	276	276	276	273	271	271	269	268	270	271	273	276	278	277	275	283	285	284	276	275	
4	Q	275	275	276	276	277	278	278	278	275	271	269	265	265	270	272	273	275	276	276	278	278	277	275	275	
5	277	276	276	275	274	274	273	273	272	262	258	255	253	257	279	259	265	265	266	271	271	280	275	267		
6	D	273	276	274	274	281	270	259	272	286	255	264	267	251	255	261	262	284	307	360	331	300	299	285	276	
7	288	289	278	272	274	274	271	277	278	268	267	266	263	277	268	270	284	286	335	315	285	288	279	281		
8	276	280	270	267	273	272	276	274	270	266	271	268	268	270	290	278	281	283	295	277	282	313	300	287		
9	274	263	278	278	277	277	278	278	278	271	266	262	266	266	270	272	276	278	277	278	278	278	278	275		
10	268	264	275	277	273	275	277	275	274	268	267	261	253	251	263	274	288	306	306	313	315	303	290	280		
11	275	277	274	275	276	274	274	279	273	268	267	267	270	270	290	321	263	272	287	311	326	271	278	277		
12	D	273	277	274	277	276	275	276	276	273	274	274	277	277	277	277	276	278	278	278	278	278	278	278	278	
13	300	315	288	245	270	273	297	294	276	279	269	262	267	266	264	282	316	287	288	297	291	275	278	278		
14	256	295	276	280	286	278	275	273	271	271	269	271	269	272	270	270	276	278	282	284	288	289	278	278		
15	289	290	288	282	278	279	271	274	275	274	267	266	268	271	271	276	274	275	275	275	275	275	275	275		
16	276	284	284	271	279	281	281	278	273	270	266	269	267	265	256	256	269	272	287	314	326	286	273	278		
17	D	278	285	274	277	276	265	270	279	269	262	267	266	264	282	316	287	276	284	297	291	275	278	278		
18	256	295	276	280	286	278	275	273	271	271	269	271	268	270	270	276	278	282	2							

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	-11	-6	1	1	7	7	8	5	0	0	-2	0	3	2	0	6	-3	-5	1	-3	-3	-1	-6	14884	
February	-2	0	0	1	4	3	-1	-2	-2	-4	-5	-5	-2	0	-2	1	10	10	0	-2	-4	1	1	0	14892
March	-5	3	3	3	5	5	0	-7	-16	-18	-15	-9	-1	5	8	7	8	9	9	4	7	1	0	-7	14890
April	0	3	3	6	5	3	-1	-9	-18	-25	-22	-16	-2	4	9	11	12	20	15	7	2	0	-4	-1	14893
May	5	5	2	2	1	-4	-12	-21	-25	-29	-25	-17	-4	1	7	13	17	18	20	16	12	9	5	4	14899
June	3	4	5	3	0	-7	-17	-23	-25	-25	-21	-14	-1	2	10	16	17	16	16	17	12	6	4	3	14902
July	-29	-11	-10	-5	-8	-19	-29	-32	-32	-29	-20	7	26	36	32	44	34	27	22	15	10	0	-15	-15	14892
August	2	3	4	5	3	0	-8	-18	-24	-24	-19	-12	-4	6	13	18	18	16	13	10	7	1	-6	-4	14888
September	3	2	2	5	5	-1	-5	-12	-22	-24	-20	-11	-4	2	5	5	7	11	9	10	9	8	8	7	14887
October	5	3	4	7	9	7	2	-6	-15	-18	-17	-12	-5	0	2	1	1	3	3	5	6	6	5	4	14889
November	-32	0	-4	-6	-26	-17	-4	1	-2	6	16	17	19	25	25	22	18	18	15	-2	-38	-12	-10	-29	14862
December	-2	0	-1	4	6	6	8	5	2	-2	-5	-4	1	0	1	-1	-2	-2	0	-2	-3	-4	-2	-3	14882
Winter	-11	-2	-1	0	-2	0	3	3	-1	0	2	2	4	7	6	5	8	6	2	-1	-12	-5	-3	-10	14880
Equinox	1	3	3	5	6	4	-1	-9	-18	-21	-19	-12	-3	3	6	6	7	11	9	6	6	4	2	1	14890
Summer	-5	0	1	1	-1	-8	-17	-23	-27	-27	-21	-9	4	11	16	23	22	19	18	14	10	4	-3	-3	14895
Year	-5	0	1	2	1	-1	-5	-10	-15	-16	-13	-6	2	7	9	12	12	12	10	6	1	1	-1	-4	14888

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	0	0	-3	-7	-11	-10	-10	-13	-12	-14	-14	-11	-10	1	-3	2	13	15	12	22	17	15	13	1654
February	8	5	7	5	2	-1	-7	-8	-8	-11	-13	-15	-15	-13	-7	-3	3	5	6	9	11	16	15	11	1652
March	4	6	5	4	4	7	8	8	4	-6	-18	-26	-29	-26	-15	-5	4	9	9	10	14	12	11	8	1656
April	9	6	7	8	10	12	17	17	10	-2	-16	-27	-30	-27	-20	-14	-7	-3	2	8	7	12	14	7	1655
May	8	12	14	15	20	23	23	18	6	-7	-20	-30	-31	-25	-19	-12	-7	-4	-2	0	2	3	5	9	1656
June	8	8	14	20	25	27	26	19	9	-3	-17	-27	-30	-26	-20	-14	-9	-7	-6	-5	-1	-1	2	5	1658
July	8	11	11	16	21	21	17	12	4	-9	-20	-25	-29	-24	-19	-10	-5	-5	-3	-4	-1	7	6	1666	
August	9	10	13	17	18	19	20	14	5	-8	-23	-32	-32	-27	-18	-9	-3	1	2	2	9	11	5	1665	
September	7	9	10	11	12	14	14	11	4	-9	-19	-25	-25	-19	-12	-7	-2	1	2	3	2	7	3	7	1667
October	5	5	3	5	4	5	8	9	5	-3	-13	-21	-23	-19	-11	-6	-3	-1	4	8	9	13	10	6	1669
November	8	6	3	0	-6	-6	-5	5	2	0	-5	-15	-16	-14	-9	-7	-8	0	5	11	12	16	11	12	1681
December	3	5	1	-3	-4	-4	-3	-2	-3	-7	-9	-12	-13	-10	-5	-6	0	1	9	10	14	17	14	6	1678
Winter	7	4	2	-1	-4	-5	-6	-4	-5	-7	-10	-14	-14	-12	-5	-5	-1	5	9	11	15	16	14	10	1666
Equinox	7	6	6	7	7	9	12	11	6	-5	-17	-25	-27	-23	-15	-8	-2	2	4	7	8	11	10	7	1662
Summer	8	11	13	17	21	22	22	17	8	-4	-18	-27	-29	-27	-20	-14	-7	-4	-3	-2	0	3	6	6	1661
Year	7	7	7	8	9	9	8	3	-5	-15	-22	-23	-20	-13	-9	-3	1	3	5	8	10	10	8	1663	

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	-25	-29	-25	-20	-14	-10	-6	-4	-2	2	5	12	19	21	26	25	29	28	25	13	-5	-16	-21	-26	49671
February	-12	-9	-10	-11	-8	-7	-7	-6	-5	-3	0	2	5	9	14	19	21	15	16	8	1	-8	-13	-11	49669
March	-24	-16	-12	-10	-7	-3	0	0	-1	-3	-3	1	6	13	21	28	31	23	15	4	-6	-13	-21	-23	49666
April	-14	-6	-4	-2	-1	0	1	0	-3	-6	-6	-4	4	9	13	18	22	22	16	5	-10	-15	-21	-18	49666
May	-12	-9	-8	-8	-5	-2	-1	-2	-4	-6	-6	-1	5	8	10	13	15	15	12	9	3	-4	-11	-12	49665
June	-10	-10	-8	-5	-2	-1	-1	-3	-4	-7	-8	-4	3	8	10	13	14	12	9	6	2	-1	-6	-9	49668
July	-51	-42	-32	-11	-3	-4	-2	1	8	13	13	18	17	10	25	28	28	28	22	12	3	-13	-29	-39	49667
August	-14	-10	-6	-4	-3	-2	-2	-3	-3	-5	-6	-2	4	11	19	21	21	15	7	1	-4	-8	-15	-14	49683
September	-14	-12	-11	-7	-3	-1	0	0	-1	-3	-3	1	5	11	15	14	14	10	9	4	-2	-3	-11	-16	49683
October	-14	-12	-11	-8	-5	-3	0	0	-1	-2	-1	2	7	12	16	16	14	11	9	3	-1	-7	-11	-14	49686
November	-24	-27	-30	-22	-26	-9	-2	6	11	14	14	14	21	25	28	27	27	17	11	2	-13	-16	-18	-28	49700
December	-15	-13	-11	-8	-5	-4	-3	-3	-2	-1	0	2	5	8	10	15	15	13	11	6	3	-5	-9	-10	49702
Winter	-19	-20	-19	-15	-14	-8	-5	-2	0	3	5	7	12	16	20	21	23	19	16	7	-4	-11	-16	-19	49686
Equinox	-16	-11	-9	-7	-4	-2	0	0	-1	-3	-3	0	6	11	16	19	20	16	12	4	-5	-10	-16	-18	49675
Summer	-22	-18	-14	-7	-3	-2	-1	-2	-1	-1	-2	3	8	10	16	19	19	18	13	7	1	-7	-15	-19	49671
Year	-19	-16	-14	-10	-7	-4	-2	-1	-1	0	3	9	12	17	20	21	18	14	6	-2	-9	-15	-18	49677	

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	-6	-5	-2	1	4	4	5	5	5	5	-2	-7	-5	-1	3	-1	-3	0	-2	2	-6	-2	4	1	14889
February	-3	-4	-3	-2	-1	-1	-1	-1	-2	-3	0	0	1	0	2	3	-1	4	1	3	5	5	5	1	14896
March	3	2	3	4	6	6	3	-5	-16	-21	-19	-13	-6	-1	3	3	2	5	5	6	8	9	6	7	14899
April	3	2	4	4	4	2	-2	-11	-22	-28	-25	-18	-8	-2	0	6	6	9	13	12	14	13	12	12	14899
May	2	5	5	4	0	-8	-15	-20	-24	-29	-27	-14	-4	3	7	9	12	16	15	14	14	14	10	10	14902
June	4	6	7	5	-1	-6	-12	-16	-19	-23	-23	-20	-11	-3	4	14	16	15	16	14	12	9	7	6	14904
July	5	5	7	7	2	-4	-7	-7	-14	-22	-28	-27	-17	-7	0	7	10	15	15	13	13	10	7	7	14903
August	3	4	4	2	-2	-3	-3	-6	-12	-17	-19	-12	-8	-2	5	6	7	11	11	11	10	8	7	7	14890
September	6	5	5	6	6	3	-3	-12	-22	-27	-24	-15	-5	-1	2	3	6	9	10	11	10	8	10	9	14889
October	2	2	2	3	6	5	0	-9	-17	-21	-18	-12	-5	0	2	4	5	6	7	8	7	7	7	7	14893
November	3	2	2	3	5	4	1	-5	-12	-15	-14	-8	-2	1	3	2	1	2	5	5	5	5	4	4	14884
December	-3	-3	-2	0	3	4	2	0	-4	-7	-6	-3	0	2	3	0	1	2	2	1	3	2	2	0	14886
Winter	-2	-2	-1	0	2	3	2	0	-3	-5	-5	-5	-2	1	2	1	0	1	2	2	1	3	4	2	14889
Equinox	4	3	3	4	5	4	-1	-9	-19	-24	-22	-14	-6	-1	2	4	5	7	9	9	10	9	9	9	14895
Summer	3	5	5	5	0	-5	-9	-12	-18	-23	-24	-18	-10	-2	4	9	12	15	15	14	13	11	8	8	14900
Year	2	2	3	3	3	1	-3	-7	-13	-17	-17	-13	-6	-1	2	5	6	7	8	8	8	7	7	6	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	4	1	-2	1	0	-1	-2	-4	-6	-8	-9	-6	-8	-6	0	-5	-5	-6	3	7	14	11	7	17	1648
February	11	9	8	7	7	6	4	2	-2	-7	-9	-13	-14	-13	-8	-7	-6	-2	-3	1	2	7	10	10	1649
March	5	5	6	8	8	10	13	17	12	1	-12	-21	-23	-20	-11	-4	-3	-2	0	1	0	2	3	3	1649
April	2	7	11	12	14	16	20	18	11	1	-13	-24	-27	-22	-13	-9	-5	-4	-2	-1	0	3	4	4	1652
May	7	10	16	21	24	26	23	19	8	-8	-22	-30	-28	-22	-15	-10	-6	-3	-4	-6	-4	-2	3	3	1656
June	7	9	15	22	25	26	28	24	12	-2	-17	-27	-28	-24	-18	-14	-11	-8	-5	-4	-6	-3	-1	1	1659
July	3	8	14	20	22	21	24	23	16	3	-12	-23	-28	-28	-23	-17	-11	-5	-3	-3	-2	-2	-1	1	1660
August	7	8	10	14	15	16	18	19	10	-1	-13	-24	-28	-22	-15	-8	-4	-4	-4	-3	-1	-1	3	5	1665
September	5	6	9	11	13	16	17	16	11	-1	-15	-24	-27	-20	-12	-6	-3	-2	-1	-2	0	4	4	3	1665
October	4	5	4	4	6	9	13	13	7	-3	-12	-16	-16	-11	-7	-5	-4	-4	-2	-1	1	5	5	5	1667
November	2	3	4	3	3	4	6	10	7	1	-6	-11	-13	-10	-7	-7	-4	-1	1	3	4	3	3	1673	
December	5	1	0	0	1	2	3	3	2	-2	-5	-9	-10	-7	-5	0	-1	0	2	5	6	5	3	2	1676
Winter	5	4	3	3	3	3	3	3	0	-4	-7	-10	-11	-9	-5	-5	-4	-2	-1	4	7	6	6	8	1662
Equinox	4	6	8	9	10	13	16	16	10	-1	-13	-21	-23	-18	-11	-6	-4	-3	-1	-1	0	3	4	4	1658
Summer	6	9	14	19	22	22	24	21	12	-2	-16	-26	-28	-24	-18	-12	-9	-5	-4	-4	-4	-2	1	2	1660
Year	5	6	8	10	11	13	14	13	7	-2	-12	-19	-21	-17	-11	-8	-5	-4	-2	0	1	3	4	5	1660

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	-4	-3	-3	-2	-2	-2	-2	-2	-2	-1	1	6	7	6	7	8	11	12	14	1	0	-13	-18	-18	49669
February	-3	-3	-1	-1	-2	-2	-4	-4	-3	-2	-2	-1	1	3	3	5	7	5	6	4	2	-2	-2	49669	
March	0	1	2	2	1	1	0	-1	-4	-8	-9	-7	-4	0	4	5	3	3	4	4	2	0	0	0	49664
April	-2	1	4	4	4	4	3	0	-6	-11	-12	-10	-5	1	2	4	5	4	4	4	3	2	-2	-2	49665
May	-4	-1	1	2	1	1	-1	-4	-7	-8	-10	-6	-1	0	2	5	8	9	7	5	4	1	-3	-3	49666
June	2	3	3	2	1	-2	-3	-4	-8	-11	-11	-7	-2	0	2	6	8	7	6	4	2	2	1	0	49668
July	-4	0	2	0	0	-1	-2	-5	-5	-8	-12	-9	-4	1	4	8	9	8	6	4	2	1	0	1	49669
August	-3	1	2	2	0	-1	-2	-4	-5	-9	-12	-8	-1	4	9	9	5	3	2	1	1	1	1	1	49685
September	-1	1	1	2	2	2	1	0	-2	-6	-9	-8	-3	2	4	3	2	2	2	2	2	1	0	-1	49685
October	-1	-1	-1	0	0	2	3	2	-1	-2	-2	-1	2	3	2	1	0	0	0	0	0	0	-1	-2	49686
November	-10	-6	-3	-2	-1	1	2	0	-1	-2	-1	1	2	2	3	5	5	3	2	2	1	0	-1	-1	49696
December	-3	-2	0	0	0	-1	-1	-2	-2	-2	-2	-1	1	2	1	2	2	2	3	3	1	0	-1	-2	49702
Winter	-5	-3	-2	-1	-1	-1	-1	-1	-2	-2	-1	1	2	3	3	4	6	7	6	3	1	-3	-6	-6	49684
Equinox	-1	1	2	2	2	2	0	-3	-7	-8	-7	-3	2	3	3	2	3	3	2	2	0	-1	-1	-1	49675
Summer	-2	1	2	2	1	0	-2	-4	-6	-9	-11	-7	-2	2	5	7	8	7	5	3	2	1	-1	-1	49672
Year	-3	-1	1	1	0	0	-1	-2	-4	-6	-6	-4	-1	2	4	5	5	5	3	2	0	-2	-3	49677	

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	1	8	-7	8	3	7	7	-1	5	8	0	2	19	14	7	28	5	-7	-6	-20	-18	-25	-20	14873
February	-9	-3	-5	-3	4	-1	-4	-5	-4	-6	-6	-11	-5	-1	1	11	49	47	-1	-7	-14	-7	-11	-7	14886
March	-40	2	-1	7	6	0	4	-6	-26	-15	-9	5	10	17	19	20	30	21	25	-3	13	-10	-24	-43	14878
April	12	6	10	13	13	10	8	4	-5	-22	-16	-6	24	19	32	24	27	59	14	-24	-49	-39	-64	-48	14882
May	3	1	-2	-1	-2	-9	-17	-23	-28	-33	-27	-25	-6	6	15	22	22	19	27	23	19	11	2	4	14895
June	4	3	4	2	2	-9	-31	-33	-30	-26	-21	-13	8	-8	12	21	22	21	22	24	12	6	4	3	14900
July	-192	-83	-74	-56	-60	-87	-108	-91	-71	-40	12	136	208	222	131	184	117	62	24	-4	-14	-40	-84	-92	14875
August	-8	-3	-1	3	10	7	-1	-19	-22	-17	-17	-8	7	32	44	57	52	29	7	-5	-14	-39	-62	-35	14879
September	9	-1	0	7	7	-4	-9	-9	-18	-26	-18	-6	1	8	9	5	7	13	9	14	-3	-2	0	5	14884
October	6	3	3	14	13	5	-1	-6	-14	-13	-16	-9	-4	-1	0	-1	-2	-4	3	10	6	4	0	3	14879
November	-191	8	-21	-53	-187	-130	-41	13	20	87	149	142	128	148	148	124	102	94	72	-35	-235	-78	-70	-193	14786
December	2	1	-6	7	14	10	16	14	5	-4	-6	-3	2	-3	0	-9	-11	-9	-8	-2	3	-2	-1	14878	
Winter	-54	2	-6	-14	-40	-29	-5	7	5	20	36	32	32	41	41	33	42	34	14	-14	-68	-25	-27	-55	14856
Equinox	-3	2	3	10	10	3	1	-5	-16	-19	-15	-4	8	11	15	12	16	22	13	-1	-8	-12	-22	-21	14881
Summer	-48	-20	-18	-13	-13	-25	-41	-43	-38	-29	-13	22	54	63	50	71	53	33	20	9	1	-16	-35	-30	14887
Year	-35	-6	-7	-6	-14	-17	-15	-13	-16	-9	3	17	31	38	35	39	37	30	16	-2	-25	-17	-28	-35	14875

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	18	10	5	-12	-15	-26	-17	-22	-20	-17	-26	-20	-8	-20	-8	-7	-7	45	25	23	29	29	22	18	1661
February	4	1	4	10	6	-6	-17	-14	-13	-13	-15	-19	-18	-22	-7	-2	10	14	14	9	4	24	26	20	1655
March	4	9	4	-3	1	-3	4	-2	-2	-15	-22	-29	-33	-32	-20	3	8	7	11	16	23	23	22	1664	
April	7	8	0	3	6	12	13	16	12	-7	-19	-31	-35	-36	-34	-34	-21	-7	6	25	7	28	51	30	1658
May	20	20	12	14	17	20	22	14	3	-11	-21	-30	-29	-25	-20	-14	-12	-5	-5	-3	8	10	7	9	1656
June	12	15	16	19	27	31	27	13	4	0	-11	-24	-31	-26	-19	-9	-5	-8	-4	3	-2	2	-1	1658	
July	32	39	0	-4	7	4	4	5	12	21	14	14	7	-31	-31	-40	-18	-16	-15	-16	-12	1	8	16	1679
August	16	14	5	10	6	8	6	2	-5	-14	-30	-34	-32	-30	-26	-17	-10	12	16	10	13	31	33	17	1668
September	4	8	4	9	10	9	5	1	-4	-18	-27	-34	-30	-19	-11	-9	5	14	20	12	5	23	5	18	1668
October	16	2	-6	2	0	-1	-6	-3	-4	-10	-17	-29	-30	-26	-10	10	16	3	12	24	15	28	9	4	1672
November	22	14	3	-5	-36	-29	-27	15	7	17	14	-16	-22	-18	-3	-14	-26	3	0	13	20	20	16	35	1705
December	14	12	1	-4	-7	-12	-12	-10	-5	-10	-11	-9	-18	-14	-8	1	22	6	13	18	15	13	7	-2	1679
Winter	14	9	3	-3	-13	-18	-18	-8	-8	-6	-9	-16	-18	-6	-6	-6	0	17	13	16	17	22	18	18	1675
Equinox	8	7	1	3	5	4	4	3	1	-13	-21	-31	-32	-28	-19	-7	2	4	12	19	13	26	22	18	1666
Summer	20	22	8	10	14	16	15	8	4	-1	-12	-19	-21	-28	-26	-23	-12	-4	-3	3	10	12	10	1665	
Year	14	13	4	3	2	1	0	1	-1	-7	-14	-22	-23	-25	-17	-12	-4	6	8	11	11	19	17	15	1669

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	-54	-63	-72	-67	-49	-31	-20	-15	-8	0	10	38	67	65	71	57	73	77	52	35	-40	-43	-39	-46	49675
February	-19	-15	-26	-34	-24	-21	-19	-16	-15	-7	3	5	9	16	28	51	66	48	46	10	-15	-22	-25	-26	49677
March	-84	-45	-35	-29	-18	-15	2	6	12	12	9	10	12	24	43	68	84	60	46	17	-10	-35	-64	-70	49664
April	-9	-11	-8	-10	-7	-6	-3	-2	-2	-4	0	2	19	23	35	46	68	72	40	-9	-44	-40	-78	-71	49667
May	-12	-10	-21	-20	-15	-9	-3	-4	-4	-3	2	8	13	15	19	20	23	25	12	11	3	-8	-21	-20	49663
June	-16	-26	-24	-16	-8	-4	-5	-5	-3	-3	-4	2	15	21	17	24	29	24	15	4	2	-4	-12	-26	49668
July	-249	-170	-124	-59	-24	-31	-10	17	58	93	106	122	87	16	87	94	87	94	71	23	-1	-45	-91	-152	49647
August	-38	-32	-28	-27	-19	-12	-6	-3	0	1	4	13	20	39	64	76	74	52	14	-14	-29	-44	-69	-35	49684
September	-17	-19	-23	-15	-9	-4	-2	0	0	2	14	28	43	50	41	40	25	16	-7	-27	-23	-49	-65	49681	
October	-39	-41	-40	-22	-13	-10	-3	1	3	3	7	14	29	40	52	44	35	24	19	-5	-12	-23	-29	-33	49683
November	-79	-92	-137	-103	-139	-38	-4	36	67	82	81	65	96	106	115	99	97	47	14	-28	-76	-59	-49	-99	49691
December	-27	-23	-20	-13	-12	-12	-10	-9	-6	-3	2	4	7	15	22	46	39	22	18	9	3	-5	-19	-29	49705
Winter	-45	-48	-64	-54	-56	-26	-13	-1	10	18	24	28	45	51	59	63	69	49	33	7	-32	-32	-33	-50	49687
Equinox	-37	-29	-27	-19	-12	-9	-1	1	3	3	4	10	22	33	45	50	57	45	30	-1	-24	-30	-55	-60	49674
Summer	-79	-59	-49	-30	-16	-14	-7	1	13	22	27	36	34	23	47	54	54	49	28	6	-6	-25	-48	-58	49665
Year	-54	-46	-47	-35	-28	-16	-7	0	9	14	18	25	33	35	50	55	60	48	30	4	-21	-29	-45	-56	49675

12 Monthly and Annual Means

All days

	Z	H	D	F	X	Y	I
January	49671	14975	6° 20.4'	51879	14884	1654	73° 13.4'
February	49669	14983	6° 19.7'	51880	14892	1652	73° 12.8'
March	49666	14982	6° 20.7'	51877	14890	1656	73° 12.8'
April	49666	14984	6° 20.5'	51877	14893	1655	73° 12.7'
May	49665	14990	6° 20.6'	51878	14899	1656	73° 12.3'
June	49668	14994	6° 21.0'	51882	14902	1658	73° 12.1'
July	49667	14985	6° 22.9'	51878	14892	1666	73° 12.7'
August	49683	14981	6° 23.0'	51892	14888	1665	73° 13.2'
September	49683	14981	6° 23.4'	51892	14887	1667	73° 13.2'
October	49686	14982	6° 23.7'	51895	14889	1669	73° 13.2'
November	49700	14957	6° 27.3'	51901	14862	1681	73° 15.1'
December	49702	14976	6° 26.1'	51909	14882	1678	73° 13.9'
Winter	49686	14973	6° 23.4'	51893	14880	1666	73° 13.8'
Equinox	49675	14982	6° 22.1'	51885	14890	1662	73° 13.0'
Summer	49671	14987	6° 21.9'	51882	14895	1661	73° 12.6'
Year	49677	14981	6° 22.4'	51887	14888	1663	73° 13.1'

5 Quiet days

	Z	H	D	F	X	Y	I
January	49669	14980	6° 19.0'	51879	14889	1648	73° 13.0'
February	49669	14987	6° 19.1'	51880	14896	1649	73° 12.6'
March	49664	14990	6° 19.0'	51877	14899	1649	73° 12.3'
April	49665	14990	6° 19.7'	51878	14899	1652	73° 12.3'
May	49666	14993	6° 20.4'	51880	14902	1656	73° 12.1'
June	49668	14996	6° 21.0'	51883	14904	1659	73° 12.0'
July	49669	14995	6° 21.5'	51883	14903	1660	73° 12.1'
August	49685	14983	6° 22.8'	51895	14890	1665	73° 13.1'
September	49685	14982	6° 22.9'	51894	14889	1665	73° 13.2'
October	49686	14986	6° 23.3'	51897	14893	1667	73° 13.0'
November	49696	14978	6° 24.8'	51904	14884	1673	73° 13.7'
December	49702	14980	6° 25.3'	51910	14886	1676	73° 13.7'
Winter	49684	14981	6° 22.1'	51894	14889	1662	73° 13.2'
Equinox	49675	14987	6° 21.2'	51887	14895	1658	73° 12.7'
Summer	49672	14992	6° 21.4'	51885	14900	1660	73° 12.3'
Year	49677	14987	6° 21.6'	51888	14895	1660	73° 12.7'

5 Disturbed days

	Z	H	D	F	X	Y	I
January	49675	14965	6° 22.4'	51880	14873	1661	73° 14.0'
February	49677	14978	6° 20.7'	51886	14886	1655	73° 13.3'
March	49664	14971	6° 22.8'	51872	14878	1664	73° 13.5'
April	49667	14974	6° 21.4'	51875	14882	1658	73° 13.4'
May	49663	14987	6° 20.7'	51875	14895	1656	73° 12.4'
June	49668	14992	6° 21.0'	51881	14900	1658	73° 12.3'
July	49647	14970	6° 26.3'	51855	14875	1679	73° 13.3'
August	49684	14972	6° 23.8'	51891	14879	1668	73° 13.8'
September	49681	14978	6° 23.7'	51890	14884	1668	73° 13.4'
October	49683	14973	6° 24.8'	51890	14879	1672	73° 13.7'
November	49691	14884	6° 34.6'	51872	14786	1705	73° 19.5'
December	49705	14972	6° 26.3'	51911	14878	1679	73° 14.2'
Winter	49687	14950	6° 26.0'	51887	14856	1675	73° 15.3'
Equinox	49674	14974	6° 23.2'	51882	14881	1666	73° 13.5'
Summer	49665	14980	6° 23.0'	51875	14887	1665	73° 12.9'
Year	49675	14968	6° 24.0'	51881	14875	1669	73° 13.9'

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

13.1 H-Component

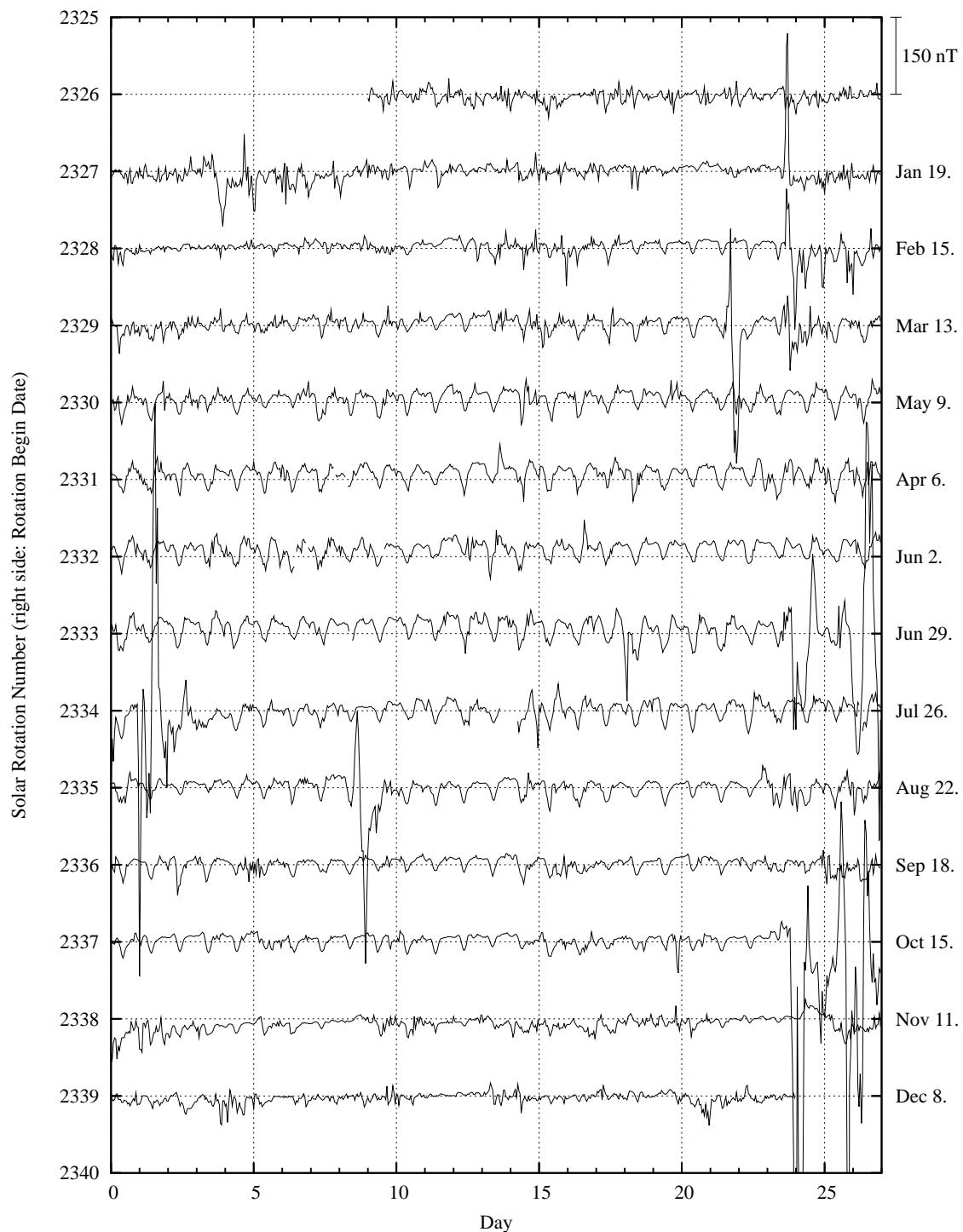


Figure 3: Hourly means of H sequenced in Bartels' solar rotation cycles.

13.2 D-Component

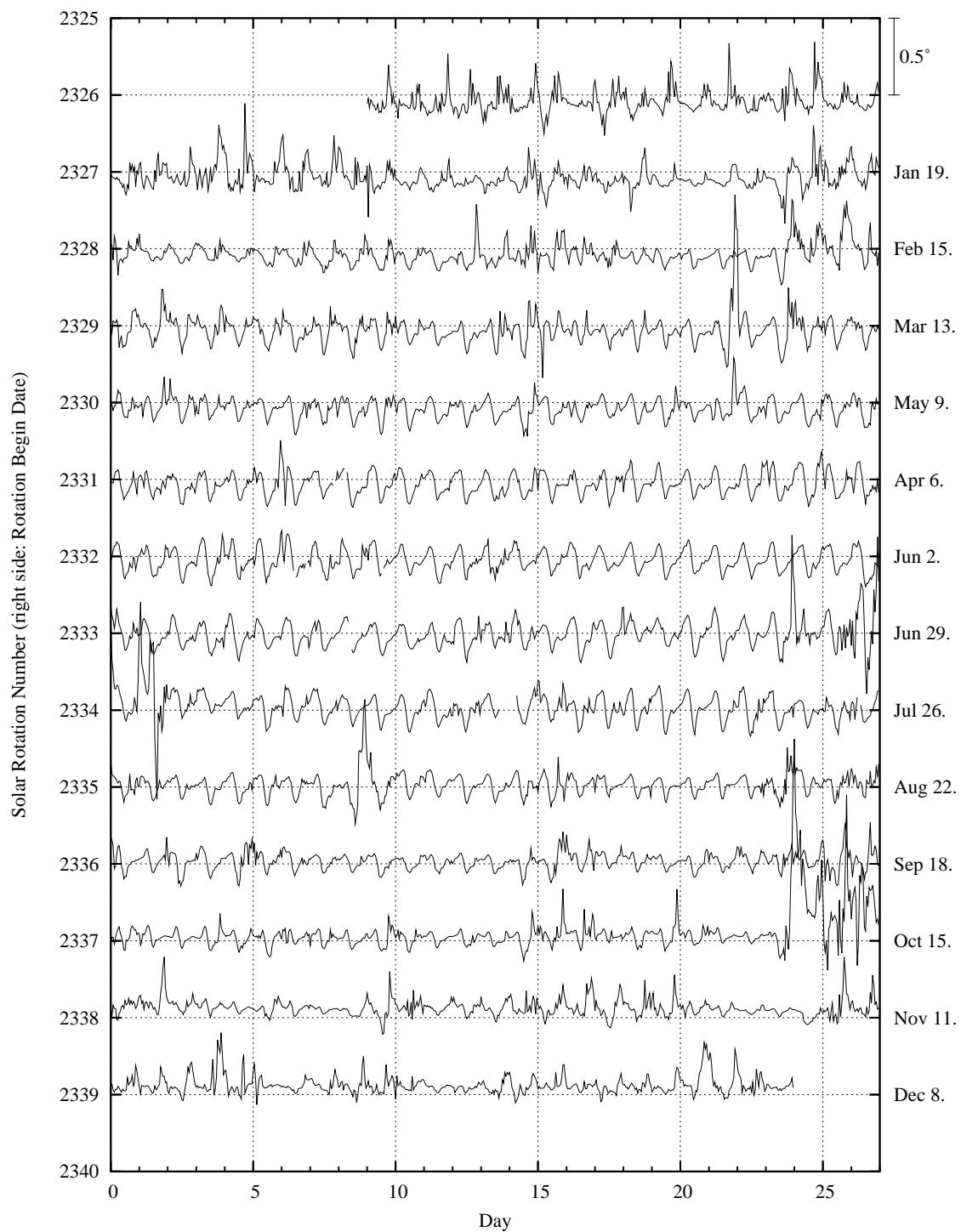


Figure 4: Hourly means of D sequenced in Bartels' solar rotation cycles.

13.3 Z-Component

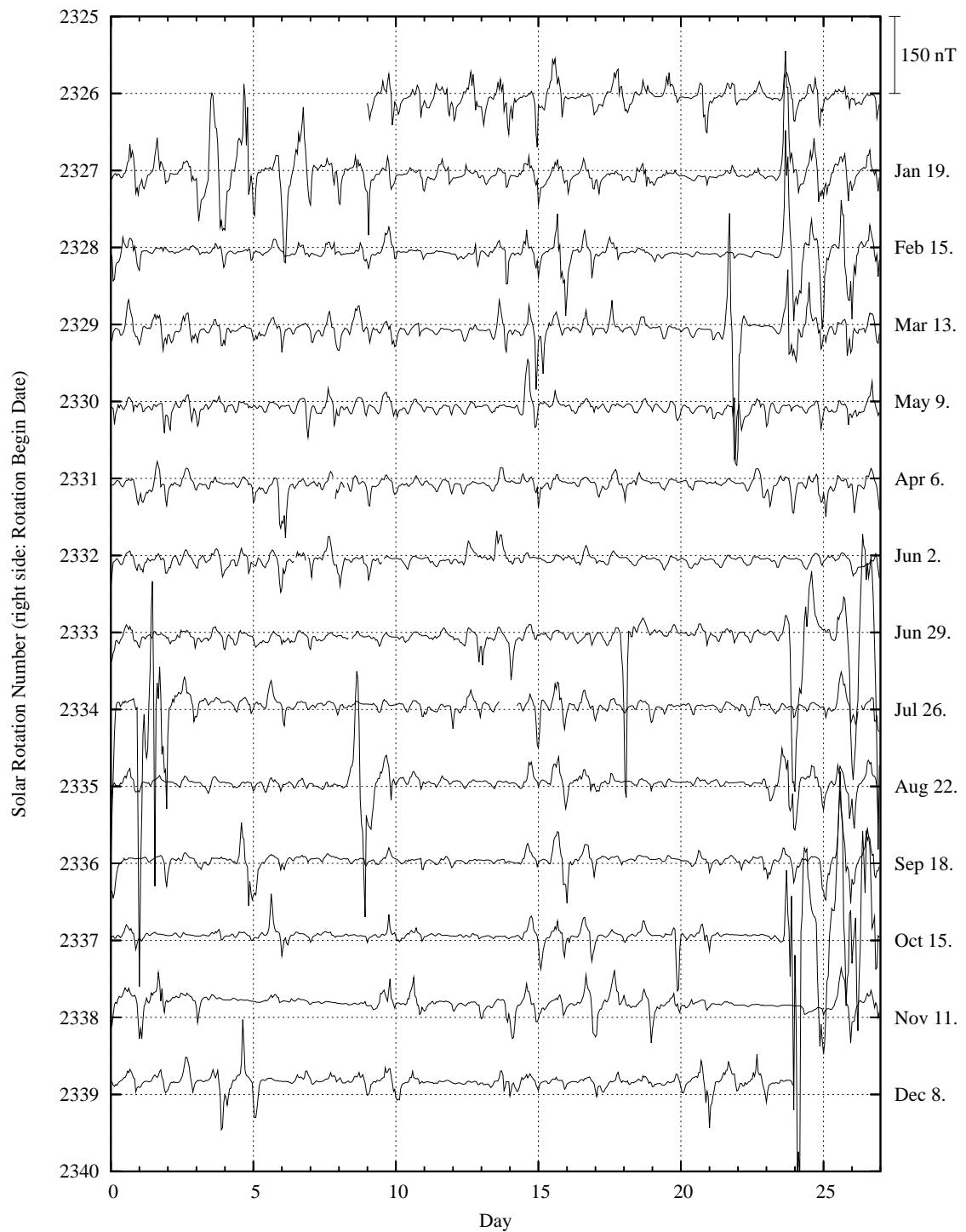


Figure 5: Hourly means of Z sequenced in Bartels' solar rotation cycles.

14 K-Indices

14.1 Monthly Tables of K-Indices

January

Day	K					Ak
1	3	2	3	2	4	4
2	3	2	2	2	3	3
3	2	3	3	3	3	5
4	3	3	2	3	4	5
5	3	3	2	3	4	6
6	3	2	3	3	2	5
7	3	3	4	4	4	5
8	1	1	1	2	2	4
9	3	3	4	2	3	5
10	4	3	3	3	4	4
11	1	1	2	3	5	5
12	0	1	0	1	2	4
13	3	2	2	2	4	5
14	3	1	1	2	3	2
15	2	2	1	1	4	4
16	4	2	3	3	3	5
17	2	2	3	3	3	5
18	2	3	2	2	1	5
19	2	2	2	2	3	4
20	3	3	2	3	4	5
21	2	2	3	2	3	5
22	5	4	4	5	6	6
23	4	3	3	4	7	6
24	5	2	2	2	3	4
25	5	6	3	3	5	4
26	3	2	2	2	3	5
27	4	2	3	2	4	3
28	5	3	3	3	2	5
29	2	1	2	2	1	2
30	2	2	2	4	3	4
31	1	1	1	3	1	1
Mean						20.0

February

Day	K					Ak
1	1	2	2	1	2	8
2	1	1	3	3	3	5
3	4	3	3	3	4	3
4	4	2	3	2	2	3
5	3	2	2	3	2	3
6	2	3	4	4	3	4
7	1	1	2	1	1	3
8	0	0	1	1	0	1
9	1	0	1	1	2	3
10	2	1	1	2	3	0
11	2	1	1	2	8	7
12	2	3	4	3	5	6
13	4	3	2	3	4	4
14	4	3	3	3	4	4
15	4	3	3	3	4	3
16	4	1	1	2	1	0
17	1	0	0	0	0	1
18	2	1	0	0	3	3
19	2	2	2	1	0	2
20	1	1	0	0	2	2
21	2	1	0	1	2	3
22	2	1	1	2	3	2
23	2	2	1	2	2	2
24	3	2	1	2	3	3
25	2	1	1	1	0	3
26	1	1	0	0	1	0
27	0	3	2	2	1	2
28	1	2	3	3	3	4
29	2	3	3	4	3	4
30	1	2	2	3	2	2
31	1	1	2	2	3	3
Mean						13.1

March

Day	K					Ak
1	3	2	3	2	3	5
2	3	3	3	2	3	4
3	2	2	2	3	3	3
4	1	1	2	2	2	1
5	2	2	2	1	1	1
6	2	1	1	1	0	0
7	0	0	1	2	0	2
8	1	1	1	2	1	0
9	1	1	2	3	7	6
10	6	5	5	3	4	5
11	4	3	3	3	6	6
12	6	3	3	2	4	3
13	3	2	3	3	2	3
14	3	2	2	3	2	5
15	3	3	2	2	3	3
16	3	1	1	2	3	3
17	3	2	1	1	1	3
18	2	2	2	2	2	3
19	4	1	1	1	2	2
20	2	2	1	2	5	2
21	3	2	2	2	3	1
22	2	2	1	1	2	3
23	3	2	2	2	1	2
24	1	1	0	1	0	0
25	0	0	1	0	1	3
26	1	1	1	2	4	4
27	2	2	2	4	5	3
28	3	5	3	3	3	3
29	2	2	2	2	4	2
30	1	2	2	3	2	2
31	1	1	2	2	3	1
Mean						13.9

April

Day	K					Ak
1	0	0	1	1	2	1
2	1	0	1	1	1	0
3	1	2	2	3	5	7
4	7	2	1	2	3	25
5	1	1	1	1	3	5
6	4	3	3	4	5	2
7	3	2	2	2	1	11
8	2	2	2	3	2	9
9	3	3	3	3	2	12
10	2	2	2	1	1	3
11	3	2	2	2	3	11
12	3	2	2	3	2	4
13	2	1	1	1	1	6
14	1	1	0	0	1	2
15	1	0	1	3	2	7
16	2	2	2	3	3	11
17	2	2	1	2	1	6
18	1	2	2	2	3	10
19	2	1	2	2	1	6
20	2	0	2	2	1	4
21	1	2	2	2	1	7
22	0	0	2	1	4	4
23	2	2	3	3	4	15
24	1	1	2	4	2	8
25	2	2	3	3	2	10
26	2	1	1	1	2	6
27	0	1	1	1	5	5
28	1	0	2	1	2	11
29	1	1	1	1	1	4
30	2	2	2	1	3	13
Mean						12.1

May

Day	K					Ak
1	3	2	2	2	3	11
2	3	1	1	3	2	2
3	1	1	2	1	2	2
4	2	2	2	2	1	7
5	2	3	2	2	3	14
6	2	2	2	3	2	3
7	2	3	2	3	3	4
8	2	2	2	2	2	8
9	2	2	1	2	2	1
10	1	1	1	2	2	2
11	3	2	1	2	2	5
12	4	5	2	1	2	14
13	1	2	3	2	3	13
14	1	1	1	1	2	5
15	3	2	1	2	1	8
16	2	0	1	2	1	5
17	1	1	0	2	1	4
18	1	1	1	2	1	4
19	1	2	1	2	4	4
20	1	2	3	4	3	14
21	4	2	2	3	3	10
22	2	2	3	2	2	7
23	3	2	2	3	4	13
24	3	2	3	3	4	12
25	1	1	2	2	1	0
26	0	1	1	2	2	4
27	2	1	1	1	1	4
28	1	1	0	1	2	3
29	3	3	2	4	3	16
30	2	2	2	3	4	15
31	4	2	2	3	2	12
Mean						9.3

June

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

July

Day	K			Ak
1	2	2	2	2
2	2	2	1	3
3	3	1	2	2
4	2	2	1	2
5	3	1	1	2
6	1	2	2	2
7	0	1	2	
8	1	1	0	1
9	1	1	1	1
10	1	1	2	2
11	3	1	1	4
12	4	2	2	2
13	4	2	3	2
14	1	1	2	2
15	1	1	0	1
16	1	1	1	2
17	6	3	3	3
18	2	1	2	3
19	1	1	1	2
20	1	2	2	2
21	1	1	1	1
22	0	0	1	4
23	6	5	5	5
24	2	2	4	3
25	6	6	6	8
26	7	5	2	3
27	9	7	7	9
28	4	4	3	3
29	3	3	2	2
30	1	1	1	2
31	2	1	2	2
Mean	26.3			

August

Day	K			Ak
1	3	2	1	1
2	1	1	2	2
3	2	1	0	1
4	0	0	2	1
5	0	0	1	2
6	3	1	1	1
7	3	2	2	4
8	1	1	1	1
9	2	2	3	2
10	4	2	1	2
11	2	1	2	3
12	3	2	1	2
13	2	2	1	1
14	2	2	3	3
15	0	1	0	1
16	0	1	1	1
17	3	1	1	1
18	2	2	3	2
19	2	0	0	2
20	3	2	2	4
21	3	3	3	3
22	3	2	2	3
23	2	1	1	2
24	1	1	0	1
25	0	1	1	2
26	1	0	1	1
27	1	1	1	1
28	2	1	2	2
29	1	1	0	2
30	2	2	3	3
31	5	4	4	3
Mean	9.7			

September

Day	K			Ak
1	2	2	1	2
2	2	1	1	2
3	1	0	0	1
4	0	0	1	2
5	1	1	1	2
6	3	1	2	3
7	3	2	2	2
8	3	2	2	1
9	0	1	1	1
10	0	0	0	1
11	0	0	0	0
12	1	0	0	0
13	0	0	0	0
14	3	4	3	4
15	4	2	2	2
16	3	2	2	3
17	5	2	3	3
18	4	4	2	3
19	0	0	1	1
20	3	1	3	3
21	2	2	2	1
22	1	1	3	3
23	4	4	2	1
24	3	1	1	1
25	0	1	0	2
26	1	0	0	0
27	1	0	0	2
28	0	2	2	1
29	1	0	1	2
30	1	0	0	0
Mean	8.1			

October

Day	K			Ak
1	0	1	1	1
2	1	1	2	3
3	1	1	1	2
4	3	2	2	2
5	2	1	1	0
6	1	1	0	1
7	0	0	0	0
8	0	1	2	2
9	3	1	1	1
10	3	2	1	2
11	3	2	2	1
12	2	2	2	2
13	4	4	3	3
14	3	3	3	3
15	2	2	2	1
16	3	1	1	1
17	0	0	0	0
18	0	0	0	0
19	0	0	1	1
20	1	2	2	2
21	2	3	2	2
22	3	1	1	1
23	0	0	0	0
24	2	1	1	2
25	2	3	3	2
26	3	1	1	1
27	0	0	0	0
28	1	0	0	0
29	0	0	0	1
30	3	3	1	2
31	2	1	1	2
Mean	7.2			

November

Day	K			Ak
1	3	1	1	1
2	2	0	1	1
3	1	0	1	2
4	1	2	2	1
5	2	0	0	1
6	0	0	0	0
7	2	2	1	3
8	9	9	9	7
9	6	5	4	6
10	8	7	8	9
11	4	4	3	3
12	4	4	3	4
13	2	2	2	2
14	3	2	2	1
15	0	0	1	0
16	0	1	2	2
17	1	1	2	2
18	1	0	0	0
19	0	0	1	0
20	3	2	2	3
21	2	2	2	3
22	2	1	2	2
23	3	1	0	1
24	2	1	2	2
25	3	3	2	2
26	0	1	2	2
27	1	0	0	0
28	0	0	1	0
29	0	0	1	0
30	3	3	2	2
Mean	29.9			

December

Day	K			Ak
1	2	2	3	2
2	1	1	0	0
3	0	0	1	2
4	0	0	0	0
5	0	0	4	2
6	2	2	3	3
7	3	2	2	2
8	2	2	2	2
9	2	0	1	2
10	2	2	1	2
11	1	1	2	1
12	4	4	3	3
13	4	3	2	1
14	0	1	2	1
15	2	1	1	0
16	2	3	2	1
17	3	3	3	3
18	4	2	2	2
19	1	1	1	1
20	2	0	1	1
21	1	1	3	3
22	3	3	3	3
23	2	1	1	1
24	1	0	1	1
25	3	3	3	2
26	2	2	2	2
27	2	2	2	2
28	3	2	1	2
29	4	2	2	2
30	2	3	4	3
31	3	1	1	2
Mean	10.3			

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

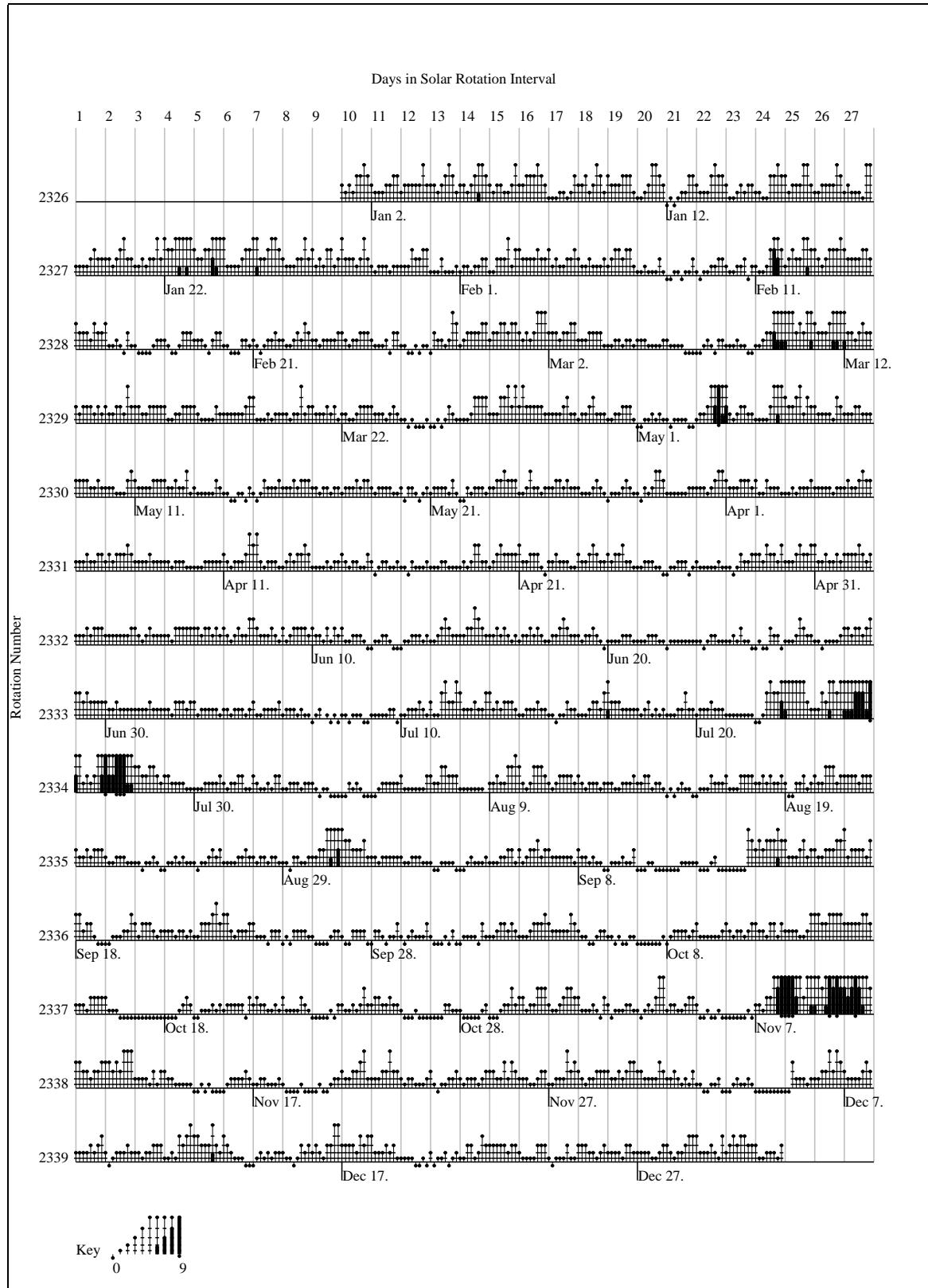


Figure 6: K-indices sequenced in Bartel's solar rotation number

14.3 Ak-Indices

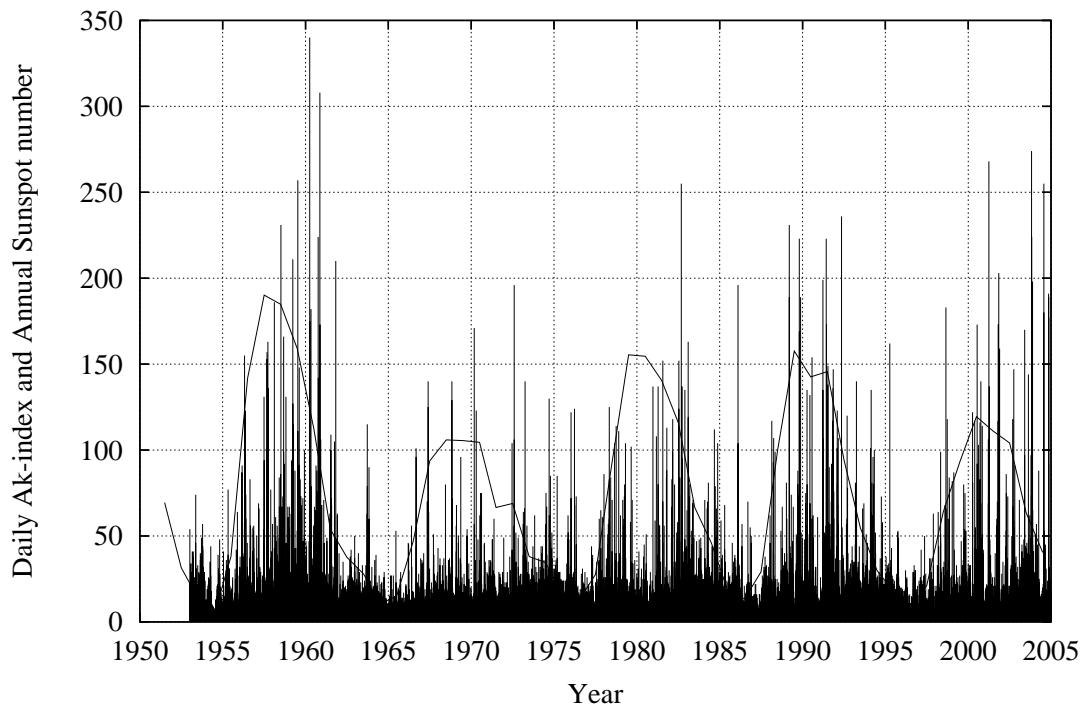


Figure 7: Daily Ak-indices (vertical lines) and sunspots (solid line)

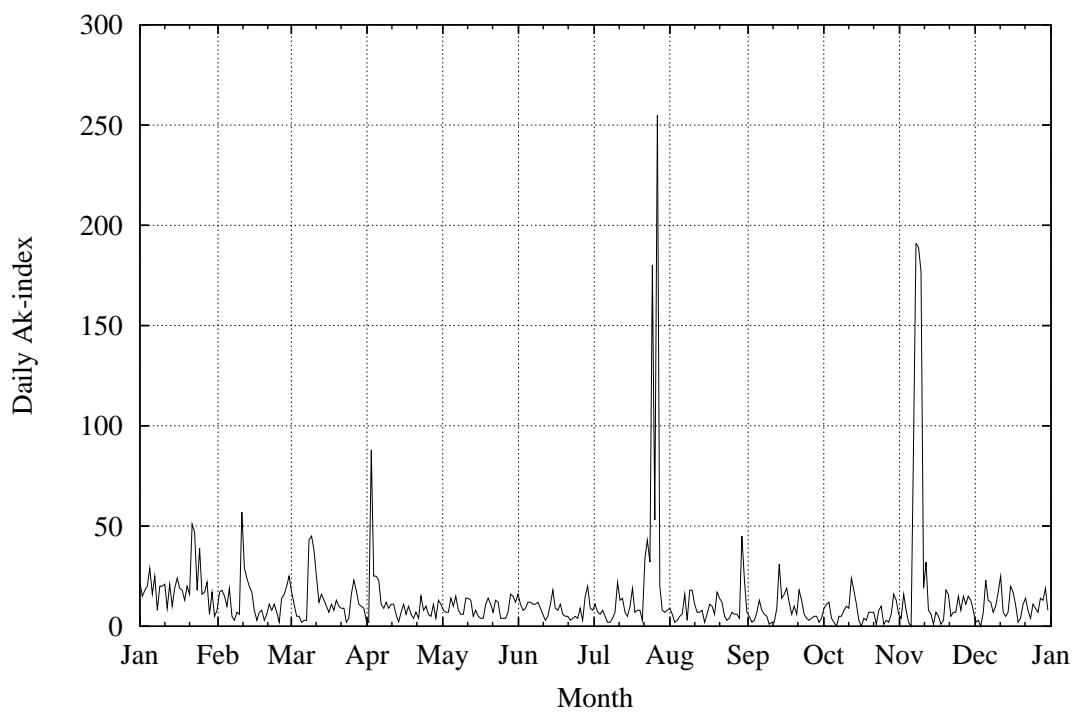


Figure 8: Daily Ak-indices

14.4 Table of Annual Ak-indices

m/M denotes sunspot minimum/maximum

Year	Ak	Year	Ak
1953	11	1979M	12
1954m	8	1980	9
1955	9	1981	13
1956	14	1982	19
1957M	16	1983	15
1958	18	1984	14
1959	21	1985	10
1960	22	1986m	10
1961	12	1987	8
1962	10	1988	11
1963	10	1989M	16
1964m	8	1990	13
1965	6	1991	21
1966	8	1992	15
1967	10	1993	13
1968M	11	1994	16
1969	10	1995	11
1970	10	1996m	9
1971	9	1997	8
1972	10	1998	12
1973	13	1999	12
1974	15	2000M	15
1975	11	2001	14
1976m	10	2002	13
1977	9	2003	22
1978	13	2004	14

15 Annual Means

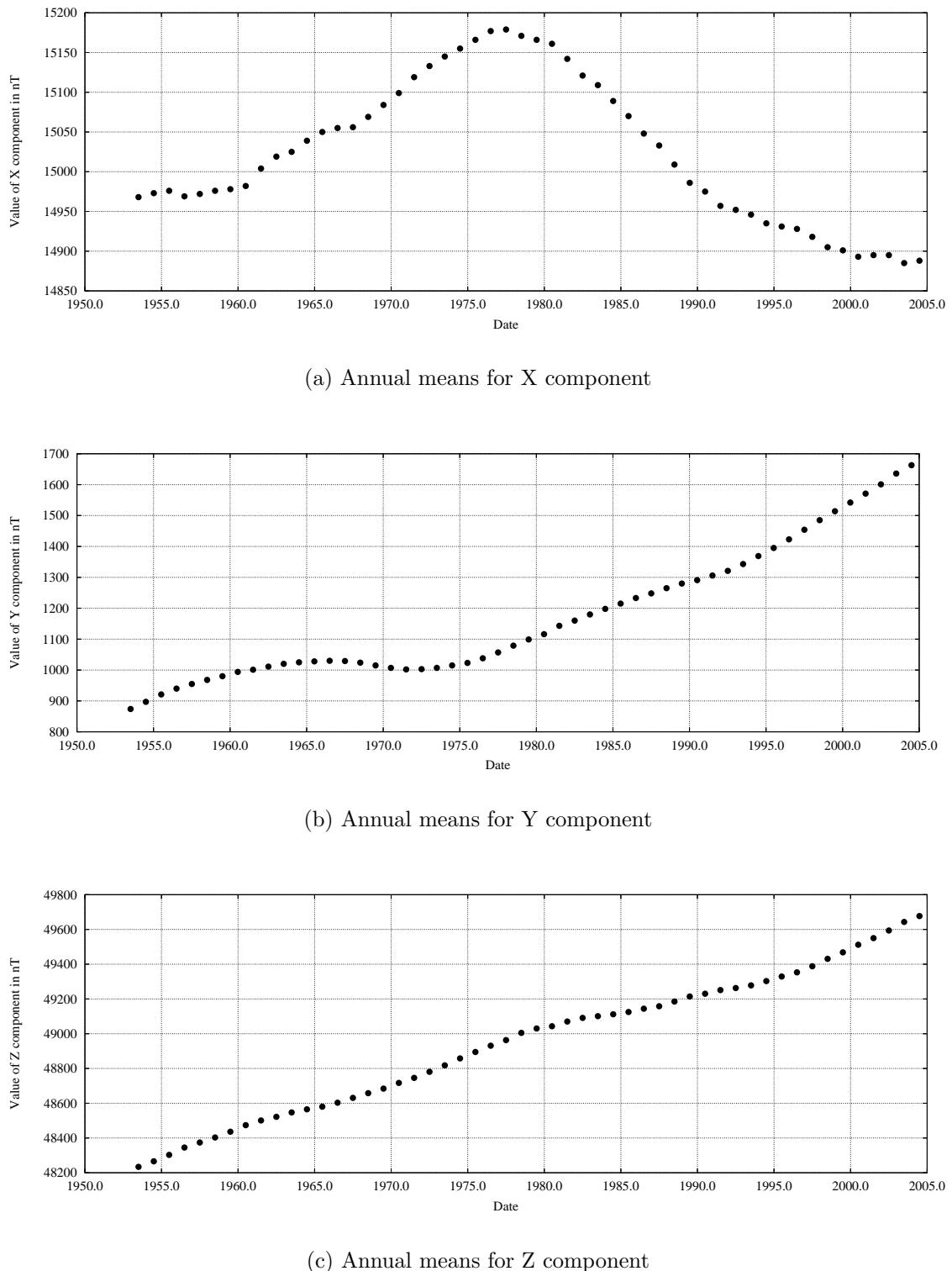


Figure 9: Figures of annual means of X, Y, and Z

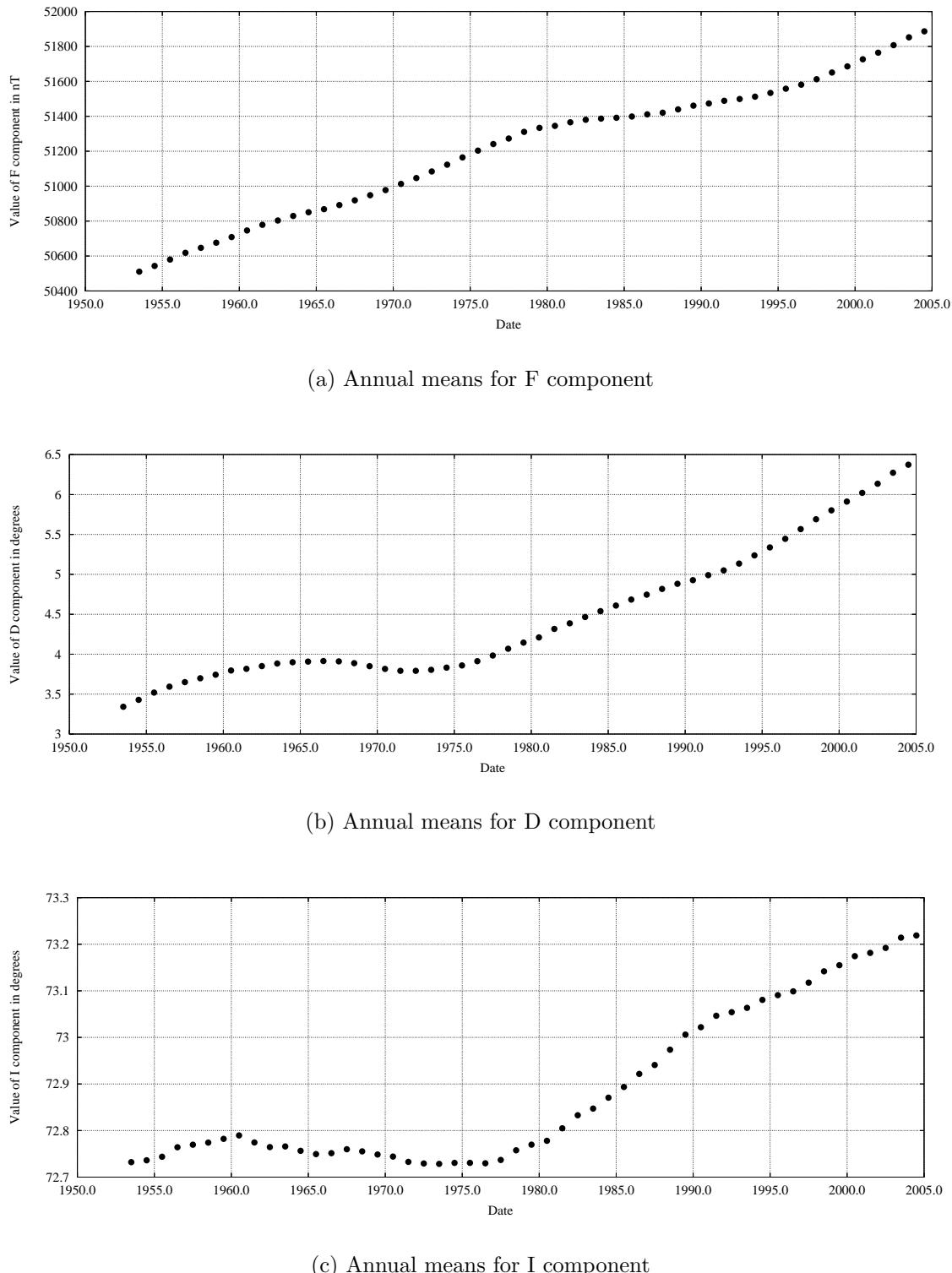


Figure 10: Figures of annual means of F, D, and I

16 Secular Variation

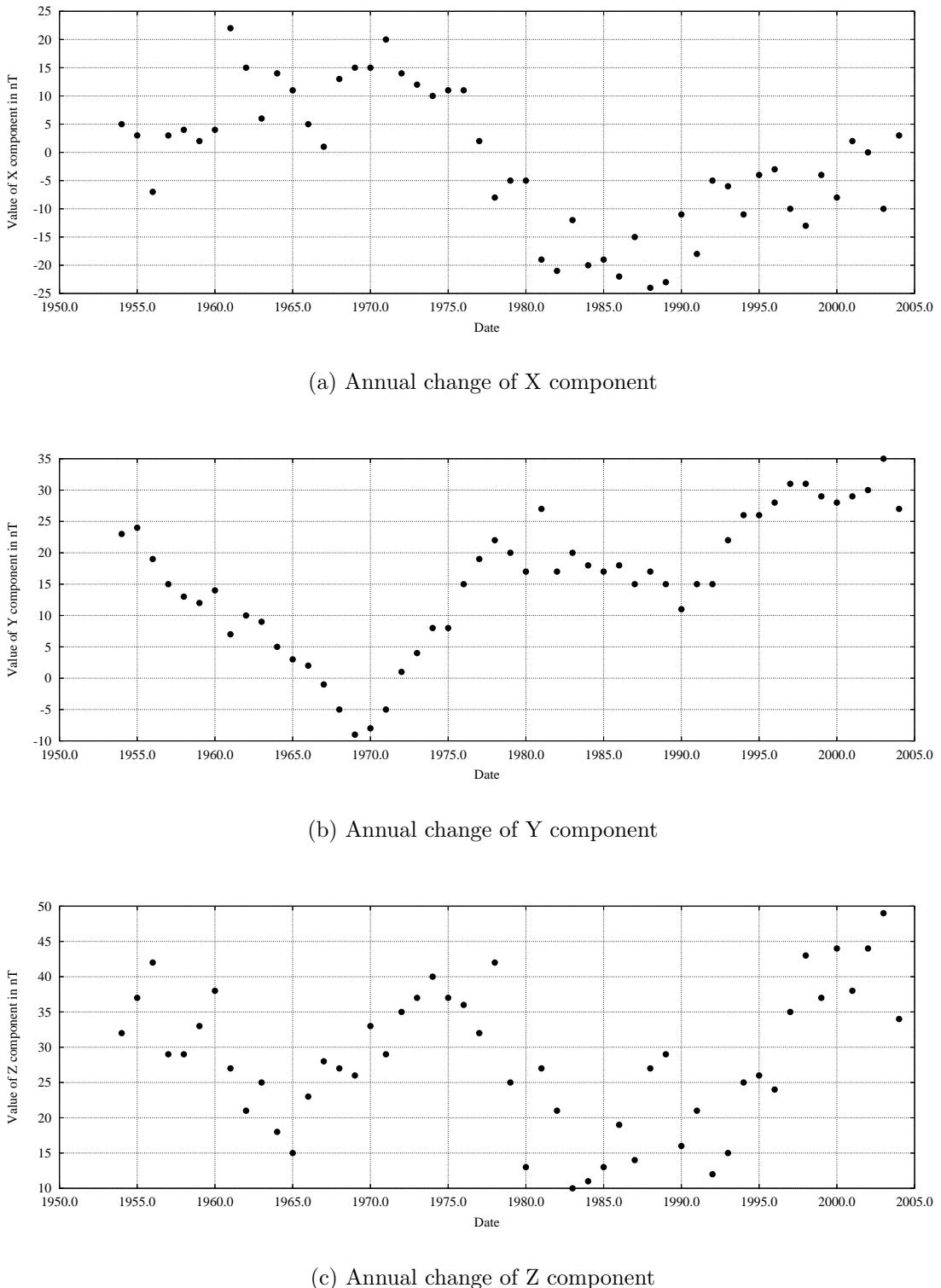


Figure 11: Annual change of components X, Y, and Z

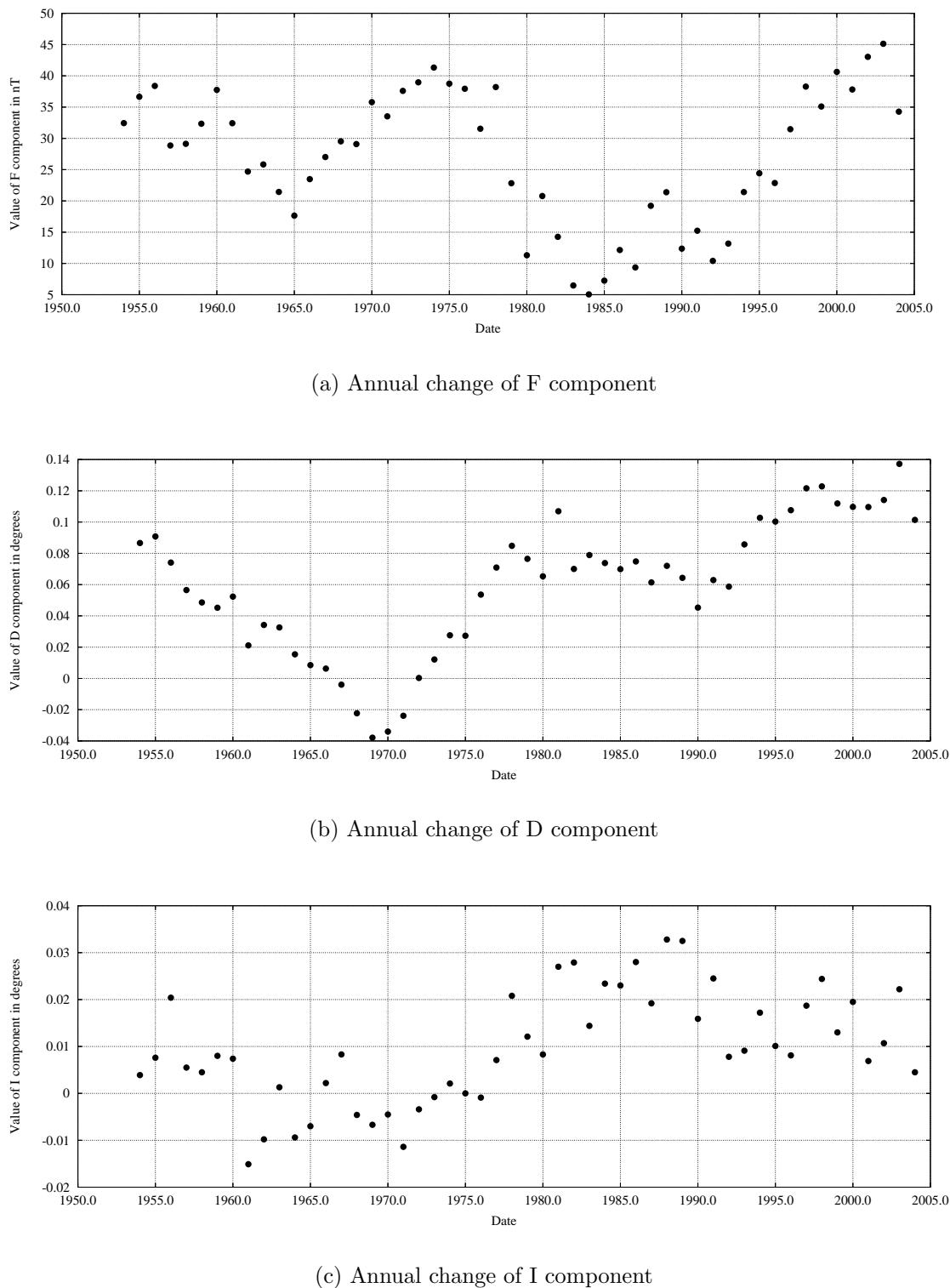


Figure 12: Annual change of components F, D, and I

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'
2004	14888	1663	49677	6° 22.4'	14981	51887	73° 13.1'

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'
2004	14894	1660	49677	6° 21.6'	14986	51888	73° 12.8'

17.3 Disturbed Days

Year	X	Y	Z	D	H	F	I
1953	14959	879	48230	3° 21.8'	14985	50504	72° 44.4'
1954	14968	899	48264	3° 26.2'	14995	50540	72° 44.4'
1955	14967	924	48301	3° 32.0'	14995	50575	72° 45.2'
1956	14952	945	48344	3° 37.0'	14982	50612	72° 46.9'
1957	14959	961	48376	3° 40.5'	14990	50645	72° 47.0'
1958	14958	974	48407	3° 43.5'	14990	50675	72° 47.7'
1959	14963	986	48439	3° 46.2'	14995	50707	72° 47.9'
1960	14960	1004	48468	3° 50.4'	14994	50734	72° 48.6'
1961	14992	1005	48498	3° 50.1'	15026	50772	72° 47.2'
1962	15013	1013	48522	3° 51.6'	15047	50802	72° 46.3'
1963	15014	1025	48543	3° 54.3'	15049	50822	72° 46.6'
1964	15035	1027	48564	3° 54.5'	15070	50848	72° 45.6'
1965	15044	1030	48580	3° 55.0'	15079	50866	72° 45.3'
1966	15046	1033	48602	3° 55.7'	15081	50888	72° 45.6'
1967	15042	1034	48630	3° 55.9'	15077	50914	72° 46.5'
1968	15061	1028	48659	3° 54.3'	15096	50947	72° 45.8'
1969	15074	1019	48684	3° 52.0'	15108	50974	72° 45.5'
1970	15089	1011	48721	3° 50.0'	15123	51014	72° 45.4'
1971	15111	1006	48746	3° 48.5'	15144	51044	72° 44.5'
1972	15122	1007	48780	3° 48.6'	15155	51080	72° 44.4'
1973	15133	1013	48816	3° 49.8'	15167	51118	72° 44.4'
1974	15147	1019	48857	3° 50.9'	15181	51161	72° 44.3'
1975	15157	1027	48892	3° 52.6'	15192	51198	72° 44.3'
1976	15166	1042	48931	3° 55.8'	15202	51238	72° 44.5'
1977	15169	1061	48962	4° 00.1'	15206	51269	72° 44.8'
1978	15158	1086	49006	4° 05.9'	15197	51308	72° 46.3'
1979	15158	1103	49031	4° 09.7'	15198	51332	72° 46.7'
1980	15153	1120	49046	4° 13.6'	15194	51346	72° 47.2'
1981	15133	1146	49073	4° 19.8'	15176	51366	72° 48.9'
1982	15106	1166	49089	4° 24.8'	15151	51374	72° 50.9'
1983	15099	1184	49099	4° 29.0'	15145	51382	72° 51.4'
1984	15078	1203	49108	4° 33.7'	15126	51385	72° 52.8'
1985	15061	1219	49124	4° 37.6'	15110	51395	72° 54.1'
1986	15037	1237	49141	4° 42.2'	15088	51405	72° 55.9'
1987	15027	1250	49161	4° 45.3'	15079	51422	72° 56.9'
1988	15001	1268	49186	4° 49.9'	15054	51438	72° 58.9'
1989	14968	1287	49212	4° 54.9'	15023	51454	73° 01.4'
1990	14964	1296	49232	4° 57.0'	15020	51472	73° 02.0'
1991	14942	1313	49257	5° 01.3'	15000	51490	73° 03.8'
1992	14943	1324	49264	5° 03.8'	15002	51497	73° 03.8'
1993	14937	1348	49277	5° 09.4'	14998	51509	73° 04.3'
1994	14924	1373	49300	5° 15.4'	14987	51528	73° 05.5'
1995	14924	1398	49328	5° 21.1'	14989	51555	73° 05.9'
1996	14923	1425	49350	5° 27.3'	14991	51577	73° 06.2'
1997	14909	1457	49388	5° 34.9'	14980	51610	73° 07.6'
1998	14893	1489	49431	5° 42.6'	14967	51647	73° 09.3'
1999	14891	1517	49468	5° 49.0'	14968	51683	73° 09.9'
2000	14878	1547	49514	5° 56.2'	14958	51724	73° 11.4'
2001	14880	1576	49554	6° 02.8'	14963	51764	73° 11.9'
2002	14886	1604	49594	6° 09.0'	14972	51805	73° 12.1'
2003	14866	1643	49641	6° 18.4'	14957	51845	73° 14.0'
2004	14875	1669	49675	6° 24.1'	14968	51881	73° 13.9'

18 Earth's Magnetic Field Maps of Finland 2005.0

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)

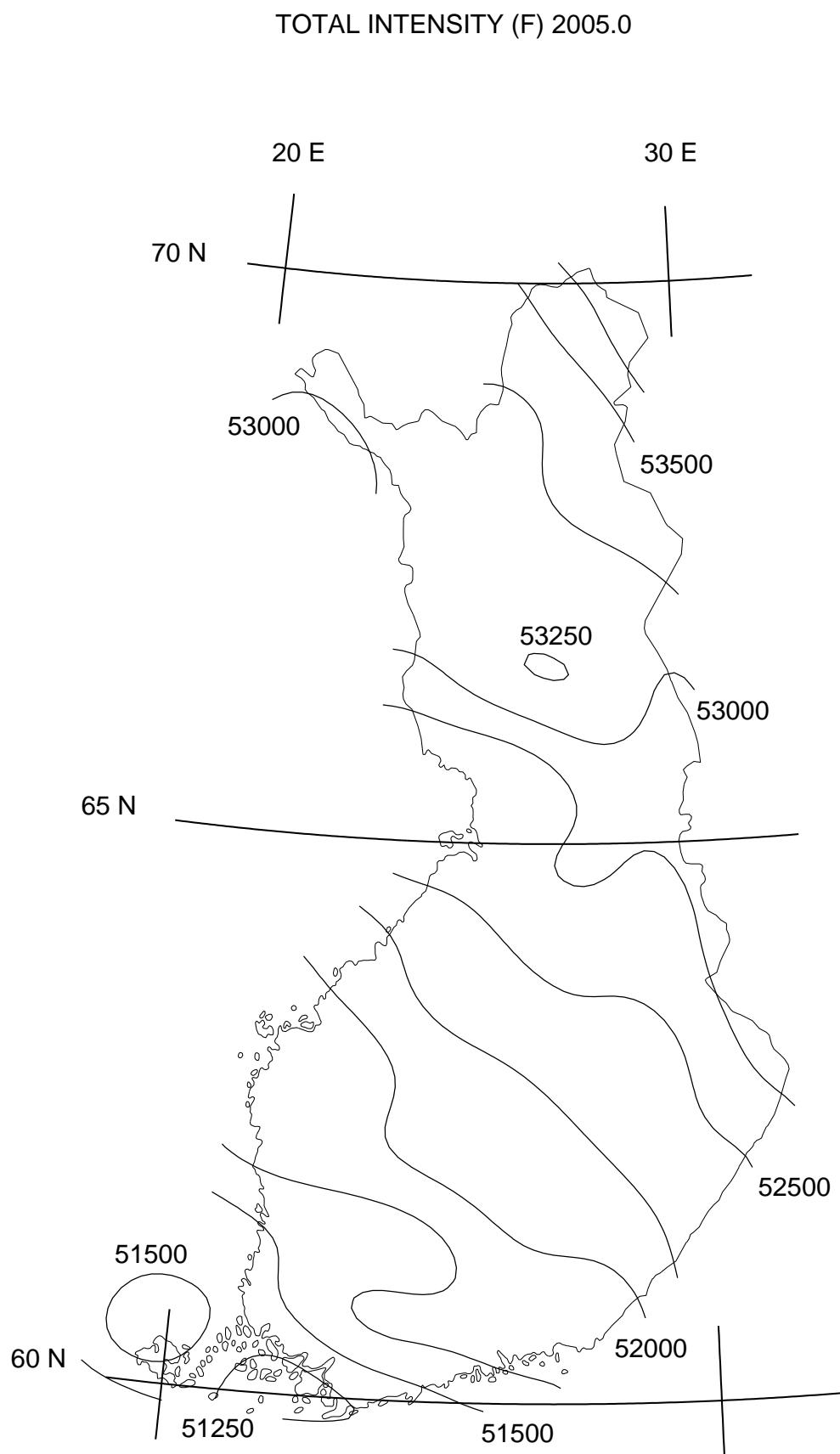


Figure 13: Total intensity F 2005.0 in nT

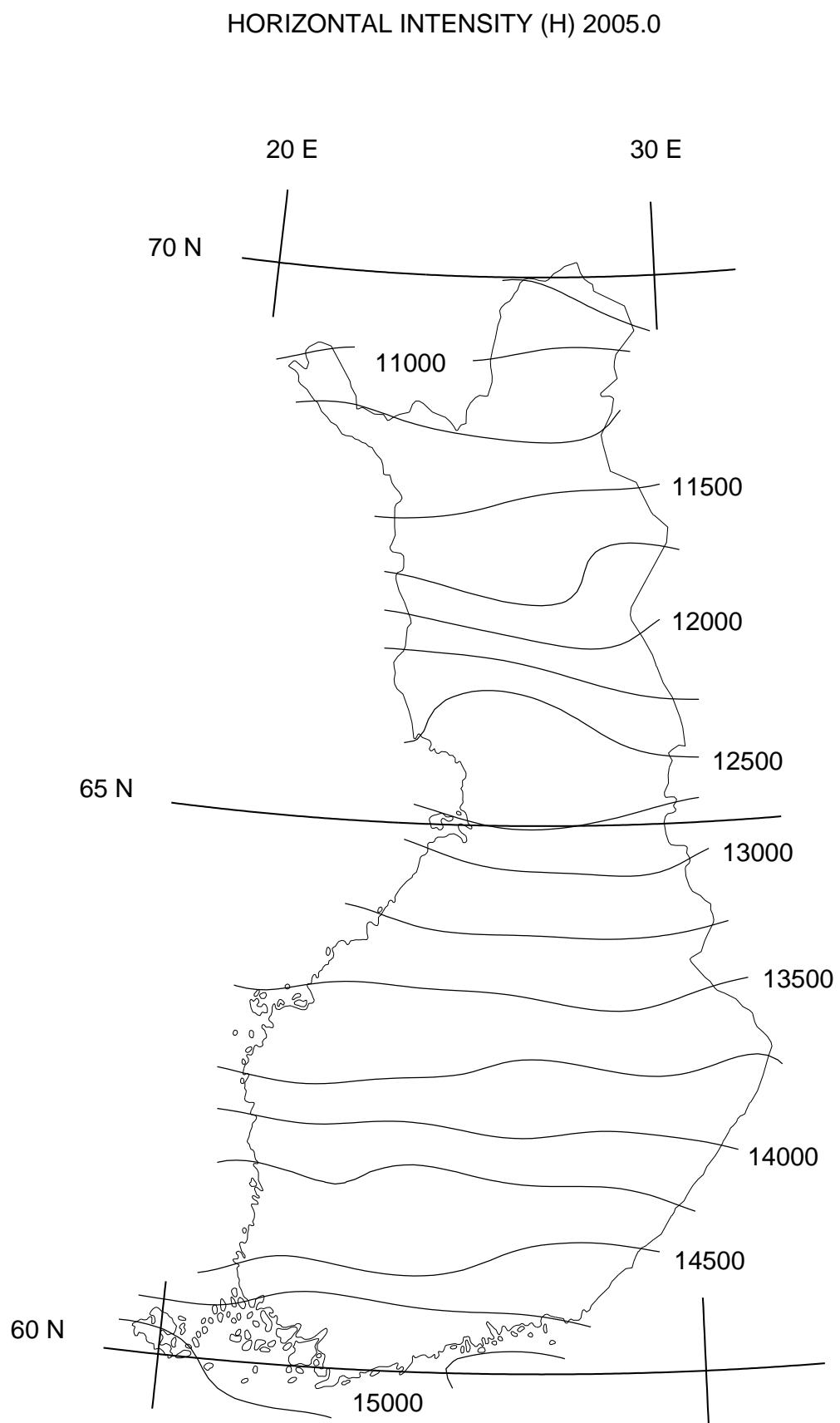


Figure 14: Horizontal intensity H 2005.0 in nT

DECLINATION (D) 2005.0

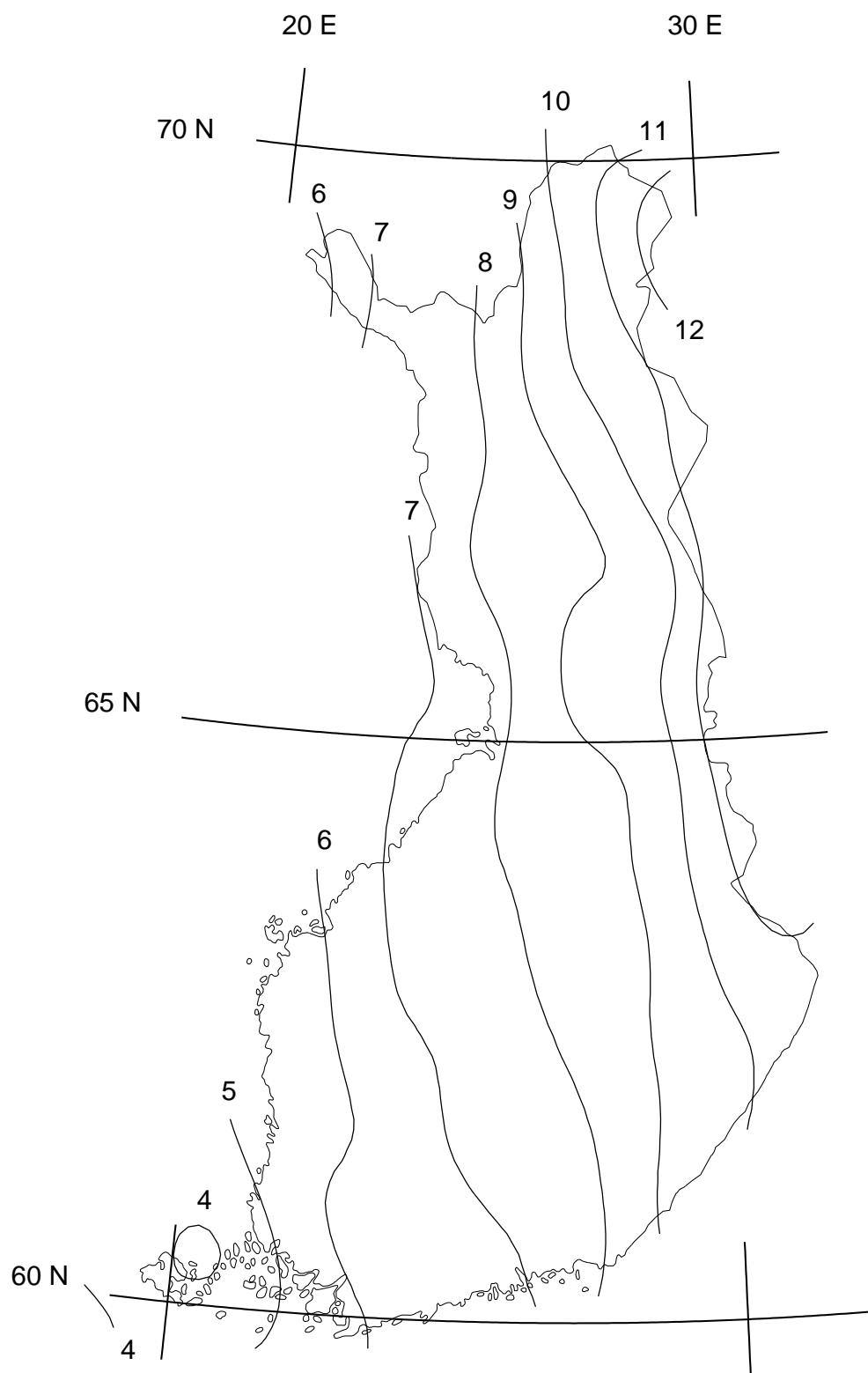


Figure 15: Declination D 2005.0 in degrees

INCLINATION (I) 2005.0

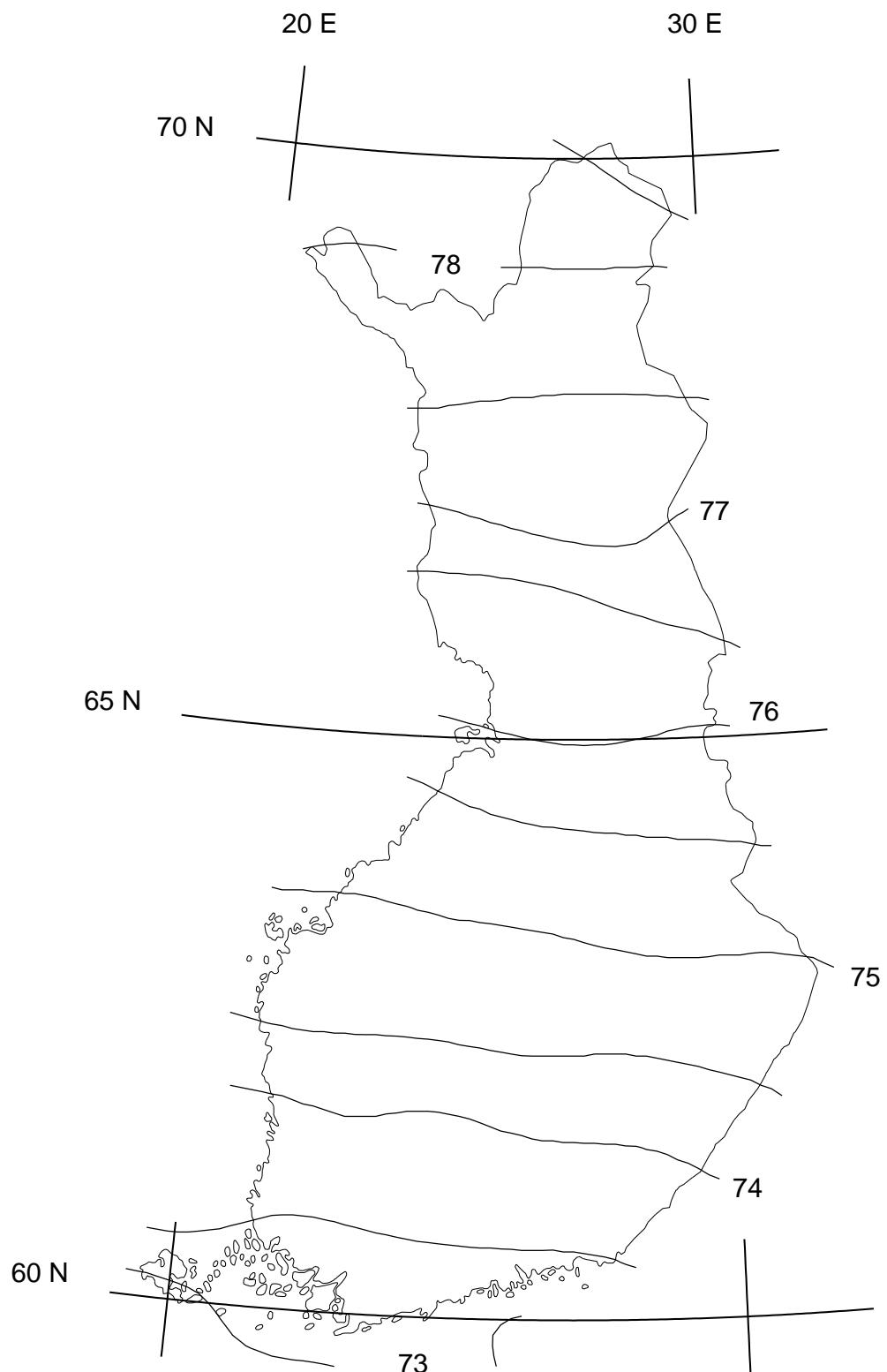


Figure 16: Inclination I 2005.0 in degrees

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