NURMIJÄRVI GEOPHYSICAL OBSERVATORY

MAGNETIC RESULTS 2005

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1 Introduction

This report presents magnetic measurements carried out at the Nurmijärvi (NUR) Geophysical Observatory between January 1 and December 31, 2005. The observatory is operated by the Finnish Meteorological Institute (FMI) and is part of the Space Research Division of the institute. Information about the IMAGE magnetometer network is included in this report, as it is partly operated by the observatory. The Nurmijärvi Geophysical Observatory started recording the Earth's magnetic field in April 1952. The first yearbook was for 1953.

2 Description of the observatory

The observatory is located some 40 km NNW from Helsinki in the northern part of the Nurmijärvi municipality having about 36,000 inhabitants. The observatory lies on a moraine ridge by the lake Sääksjärvi. The 7 ha forest area of the observatory is limited to the lake in the North and North-East, to a nature reserve forest in the South and to a private forest in the West. There are no artificial disturbance sources nearby.

The coordinates of the observatory are:

	Lat.	Lon.
Geographical	$60^{\circ}30.5'N$	$24^{\circ}39.3'E$
Geomagnetic	$57^{\circ}43.8'$	$113^{\circ}28.8'$
Corr.geomagnetic	$56^{\circ}49.2'$	$102^{\circ}31.2'$

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 usually once per week with absolute measurements. An other magnetic recording system 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. An automatic weather station observes the following: temperature, humidity, snow depth, current weather and clouds. The Vaisala company installed at the observatory an automatic station as part of the Helsinki Testbed project. An automatic rain gauge is part to the system. Precipitation and snow depth are measured also manually at the observatory. Helsinki University operates the seismic station. Water level in the lake Sääksjärvi is recorded for the needs of the Nurmijärvi municipality.

3 Recording instruments

In the variation room the Danish suspended flux gate magnetometer (FGE-89) was the primary instrument. The Ukrainian LEMI-004 flux gate magnetometer was the second variometer. The sensors were directed in geographic North and East directions measuring the X, Y and Z components. The temperature in the variometer room was kept at $18 \pm 1^{\circ}C$. During cold seasons in the winter the temperature dropped down to about $16^{\circ}C$ for a few days. The FGE magnetometer data was corrected for the temperature variations with coefficients -0.22, -0.10

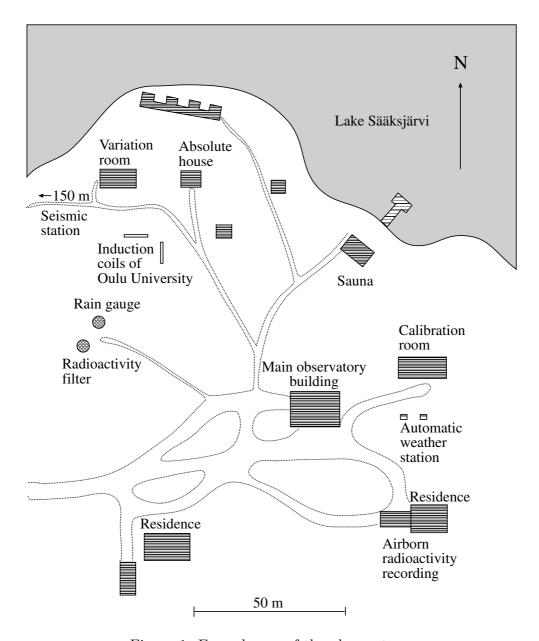


Figure 1: Formal map of the observatory.





Figure 2: The suspended FGE magnetometer sensor on the left and the electronics unit above.

and $-0.05nT/\circ C$. Analog voltages from the magnetometers were AD-converted in the variation room and the digital data were transferred through optical wires to the computers in the main observatory building. The Linux based software stored the data in three files as one-second, ten-seconds and one-minute averages. Timing was based on GPS time sheared through the local network. The standard one-minute values were 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 was the starting minute at the centre of the period (00, 01, 02 etc.).





Figure 3: The LEMI-004 magnetometer electronics on the left and the sensor above.

4 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. 7.



Figure 4: The magnetometer hut at the Pello (PEL) IMAGE station. The computer is in the house and data transfer is through optical wires.

5 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.

Electricity blackouts occurred in the Autumn causing gaps in the magnetic data. The longest blackout after a heavy snowfall lasted for over 30 hours on 30.11.-1.12. Another reason for short data gaps was in the software.

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 2003 was published in 2005 containing minute data, annual means and base line values from Nurmijärvi together with data from 91 other magnetic observatories.

6 IMAGE stations

The IMAGE magnetometer network consisted at the end of 2005 of 29 stations from Tartu in Estonia to Ny Ålesund on Svalbard. The principal investigator of this international project was Ari Viljanen at FMI. 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



Figure 5: The magnetometer hut at the Tõravere (TAR) observatory in Estonia. A new concrete basement for secular variation measurements in the front.

in co-operation with the Sodankylä Geophysical Observatory of the Oulu 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 was still operated througn an ordinary modem. The Hankasalmi (HAN) station was moved 7km southwest to a new site. The data of the nine stations was processed and inspected at the observatory and was sent to the AVA/FMI for IMAGE filing. Data transmission from the other IMAGE stations was also operated at the observatory.

The annual mean values were calculated for Oulujärvi $(64^{\circ}31'N, 27^{\circ}14'E)$ since 1993 (all days):

Year	X[nT]	Y[nT]	Z[nT]
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
2005.5	12867	2256	51035

7 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.

8 Personnel

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

9 IMAGE Magnetometer Network

IMAGE Magnetometer Network

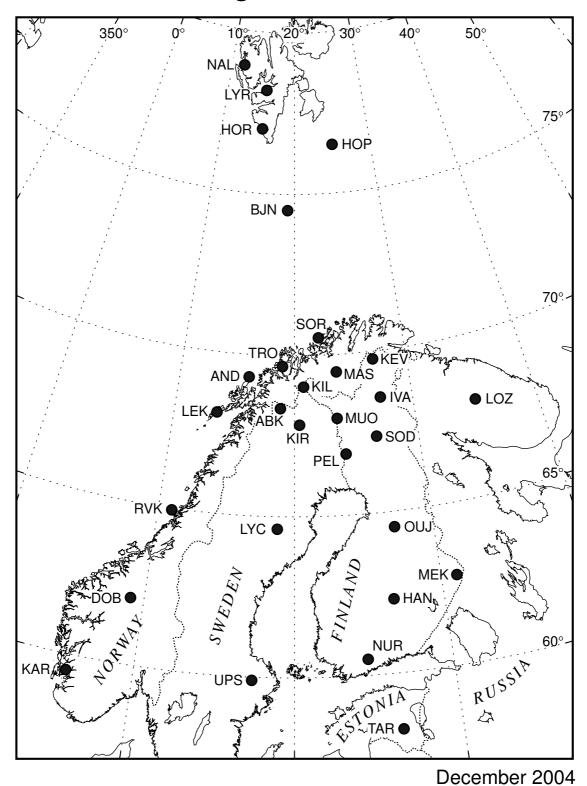
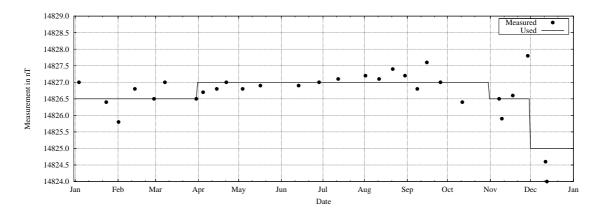
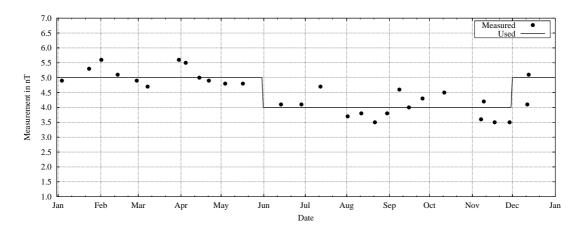


Figure 6: Map of IMAGE magnetometer network

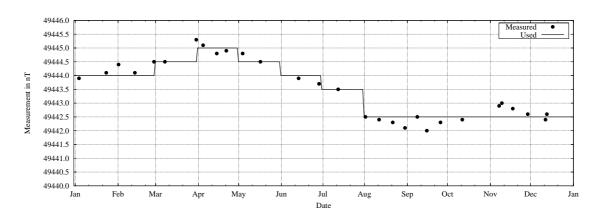
10 Baseline Measurements for FGE



(a) Baseline measurements for X component



(b) Baseline measurements for Y component



(c) Baseline measurements for Z component

Figure 7: Baseline measurements

11 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
- ullet **Z** is the vertical component of the magnetic vector
- The unit is nanotesla (nT) = 10^{-9} T
- \bullet The time is universal time (UTC). The local time is UTC + 2 h (during the daylight saving time UTC + 3 h)

Nurmijärvi Finland $\label{eq:multiple} \mbox{January 2005 North component X in nT (X = 14900 nT + tabular values)}$

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		-12	-14	-12	-9	-5	-13	-9	-6	-11	-16	-17	-15	-22	-20	-10	-14	-19	-20	-27	-53	-37	-28	-24	-34	-19
2	D	-29	-19	10	-5	-26	-22	-15	-28	-34	-39	-30	-23	-18	-21	-32	-25	-37	-49	-43	-28	-43	-20	-58	-56	-29
3		-44	-22	-18	-20	-28	-18	-14	-17	-25	-32	-44	-39	-37	-50	-54	-25	-36	-38	-35	-20	-4	-19	-23	-22	-29
4		-18	-16	-13	-14	-21	-13	-14	-15	-21	-26	-25	-23	-31	-16	-23	-7	-47	-34	-13	-23	-19	-25	-23	-34	-21
5		-32	-23	-18	-20	-10	-16	-17	-16	-35	-28	-29	-34	-35	-26	-19	-35	-6	-19	-27	-25	-21	-21	-7	-7	-22
6	Q	-16	-16	-14	-14	-11	-10	-9	-10	-13	-16	-19	-20	-14	-10	-8	-10	-12	-12	-17	-6	-15	-14	-14	-15	-13
7		-15	-15	-14	-13	-11	-9	-8	-10	-11	-12	-10	-14	-10	-7	-34	-91	-50	-29	-25	-21	-27	-49	56	-105	-22
8		-149	-75	-72	-75	-53	-26	-31	-35	-21	-21	-34	-39	-27	-25	-27	-27	-27	-24	-29	-34	-31	-23	-31	-28	-40
9	Q	-24	-24	-23	-20	-19	-17	-17	-19	-21	-25	-21	-27	-21	-18	-17	-17	-16	-15	-13	-13	-14	-15	-16	-16	-19
10		-17	-17	-15	-12	-9	-9	-9	-15	-17	-18	-18	-12	-11	-9	-14	-17	-16	-19	-13	-14	-22	-15	-28	-24	-15
11		-22	-19	-17	-15	-17	-16	-8	-16	-27	-23	-28	-24	-18	-15	-17	-27	-18	-4	-6	-6	-11	-16	-32	2	-17
12		-24	-19	-44	-43	-17	-14	-18	-19	-19	-20	-28	-25	-20	-44	-20	-18	-26	-25	-40	-30	-12	-8	-22	-28	-24
13		-25	-32	-31	-28	-38	-30	-13	-13	-16	-21	-27	-22	-15	-13	-21	-22	-26	-15	-17	-14	-29	-28	-10	-21	-22
14		-12	-18	-21	-19	-18	-13	-10	-15	-19	-21	-26	-24	-18	-12	-9	-10	-12	-10	-10	-11	17	6	-53	-31	-15
15		-12	-27	-24	-27	-20	-20	-24	-22	-27	-27	-31	-33	-24	-19	-20	-23	-22	-1	-18	-20	-7	-16	-16	-16	-21
16		-17	-20	-12	-7	-13	-11	-15	-19	-20	-26	-27	-30	-14	0	-5	-8	-8	-16	-11	-6	1	-13	-10	-27	-14
17	D	-30	-64	-20	-40	-34	-27	-22	-23	-22	-35	-25	35	-1	-6	23	54	467	227	19	-21	-30	-38	-35	-35	13
18	D	-134	-167	-82	-47	-78	-48	-47	-107	-152	-37	-54	-29	-13	-15	-10	-44	-45	-30	-20	-39	-54	-123	-54	-55	-62
19	D	-40	-118	-79	-128	-88	-74	-40	-26	-43	-50	-19	-1	11	-6	-9	-33	-51	-29	-43	-37	-35	-48	-44	-48	-45
20		-36	-39	-42	-32	-26	-24	-23	-32	-33	-32	-30	-27	-32	-18	-3	-26	-29	-39	-20	-21	-26	-23	-21	-30	-28
21	D	-35	-22	-21	-20	-17	-14	-15	-18	-24	-29	-29	-29	-24	-20	-13	-13	-9	96	-74	-44	-170	-278	-522	-259	-67
22		-141	-125	-99	-119	-70	-79	-51	-42	-44	-40	-44	-47	-34	-35	-27	-33	-22	-29	-37	-37	-25	-44	-33	-39	-54
23		-47	-37	-44	-16	-29	-22	-24	-33	-37	-38	-31	-36	-29	-14	-17	-18	-17	-15	-22	-23	-20	-28	-16	-9	-26
24		-25	-27	-26	-22	-20	-17	-18	-17	-22	-24	-24	-27	-28	-20	-14	-13	-26	-10	-15	-24	-21	-15	-14	-16	-20
25	Q	-18	-17	-17	-16	-15	-14	-13	-16	-19	-24	-23	-19	-14	-12	-14	-22	-21	-20	-18	-15	-14	-16	-15	-16	-17
26	Q	-18	-20	-20	-16	-13	-11	-14	-16	-22	-24	-24	-19	-17	-13	-10	-10	-10	-12	-14	-7	-11	-10	-12	-11	-15
27	Q	-11	-12	-10	-8	-7	-7	-9	-10	-14	-18	-17	-13	-6	-3	-3	-4	-3	-3	-4	-1	0	-3	0	0	-7
28		-8	-5	-2	-5	-5	-1	2	-1	-8	-14	-14	-12	-11	-8	-7	-5	-6	-8	-8	-21	-24	-22	-11	-12	-9
29		12	-13	-6	-4	-1	7	-5	-2	-4	-8	-27	-27	-12	-4	-13	-38	-16	-17	-28	-27	-27	-23	-27	-6	-13
30		-21	-26	-18	-21	-13	-10	-10	-21	-27	-25	-37	-30	-24	-30	-16	-15	-23	-23	-21	-13	-10	-9	-4	-15	-19
31		-13	-14	-8	-2	-1	-2	-3	-20	-22	-28	-32	-31	-53	-27	-26	-47	-32	-30	-32	-11	-10	-16	-13	-15	-20
All		-33	-35	-27	-27	-24	-19	-17	-21	-27	-26	-27	-23	-20	-17	-16	-21	-7	-9	-22	-21	-24	-32	-37	-33	-24
Quiet		-17	-18	-17	-15	-13	-12	-12	-14	-18	-21	-21	-20	-14	-11	-10	-13	-12	-12	-13	-8	-11	-12	-11	-11	-14
Dist.		-54	-78	-38	-48	-49	-37	-28	-40	-55	-38	-31	-10	-9	-14	-8	-12	65	43	-32	-34	-66	-101	-142	-91	-38

January 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		79	79	80	75	73	64	53	76	76	81	75	68	66	71	70	72	73	97	115	148	108	84	90	95	82
2	D	84	105	96	72	37	78	65	88	82	95	84	78	75	78	83	147	105	112	105	95	113	207	125	118	97
3		78	79	79	67	33	39	60	69	76	86	84	71	93	81	76	78	92	137	81	90	100	90	85	77	79
4		73	94	63	80	80	75	75	72	75	79	77	72	83	81	97	132	82	85	99	100	90	86	83	78	84
5		58	68	79	66	56	58	67	75	78	86	76	84	79	87	112	85	124	99	92	97	104	95	91	85	83
6	Q	80	77	74	73	74	76	78	79	79	77	74	69	68	71	73	73	74	74	79	106	95	87	78	79	78
7		78	78	78	77	77	78	80	81	82	80	72	69	68	70	71	118	96	50	81	100	134	130	293	160	96
8		209	180	111	11	26	59	75	79	73	74	77	73	70	74	76	77	79	74	79	88	98	103	90	81	85
9	Q	80	80	80	80	81	82	84	85	87	88	80	79	77	76	76	77	76	77	77	77	78	82	81	81	80
10		81	78	76	74	74	75	77	79	79	77	71	68	68	71	69	68	64	63	68	69	83	115	95	93	76
11		91	88	81	77	73	67	65	70	77	72	73	70	69	65	69	70	78	66	71	73	79	138	94	133	79
12		124	101	116	70	101	92	83	79	81	67	66	66	59	77	81	107	71	73	121	106	98	103	87	97	89
13		92	85	80	80	76	69	74	78	82	78	82	73	69	71	76	80	82	77	91	95	77	106	77	93	81
14		94	95	82	81	82	72	74	87	87	85	78	71	65	70	72	73	72	76	77	77	139	143	140	155	89
15		139	124	104	87	86	81	83	79	79	83	81	73	69	76	90	88	74	106	82	84	82	83	82	83	87
16		78	77	63	77	78	81	81	84	81	84	72	68	64	61	69	75	75	71	77	78	88	86	100	105	78
17	D	96	94	148	89	92	100	97	95	88	92	87	86	93	78	40	0	41	100	85	67	70	79	77	84	82
18	D	99	104	103	86	27	87	128	173	83	96	61	73	80	104	165	135	89	79	110	84	123	132	84	99	100
19	D	67	43	-23	-41	13	28	35	90	125	139	126	110	120	120	103	84	118	122	82	80	84	84	85	78	78
20		76	77	77	81	85	88	92	103	97	90	82	76	73	74	77	89	186	90	94	85	90	95	76	96	90
21	D	72	72	85	86	87	89	87	85	83	83	86	74	73	72	78	94	89	221	113	183	64	184	288	194	110
22		104	77	89	67	88	76	66	97	84	93	86	85	77	87	101	86	86	99	84	120	135	119	124	129	94
23		99	89	93	86	80	84	90	93	84	81	74	71	73	73	88	88	85	86	96	99	99	90	81	117	87
24		95	86	77	82	83	86	90	90	90	84	86	71	74	87	81	106	90	86	106	87	87	84	81	90	87
25	Q	82	81	79	78	80	81	84	84	79	74	71	68	67	70	66	66	74	75	80	95	105	93	85	80	79
26	Q	83	81	81	83	83	83	85	85	81	75	75	67	68	72	74	75	76	76	81	87	84	86	80	78	79
27	Q	77	78	76	80	81	82	83	82	79	77	71	65	64	68	69	71	72	70	70	72	74	79	81	76	75
28		76	69	76	74	74	74	80	82	81	78	73	68	67	69	72	72	74	71	75	88	130	97	84	82	79
29		102	91	75	74	73	69	73	78	78	70	64	59	67	70	69	76	71	76	109	182	93	86	76	71	81
30		111	87	72	67	43	75	75	79	78	73	73	71	65	87	77	71	82	104	90	85	81	86	90	90	80
31		81	77	50	74	75	78	79	75	79	79	72	64	77	101	68	101	137	93	87	104	86	81	78	76	82
All		91	87	81	71	70	75	78	85	83	83	78	73	73	78	80	85	87	90	89	97	96	104	102	98	85
Quiet		80	79	78	79	80	81	83	83	81	78	74	70	68	71	71	72	74	74	77	87	87	85	81	79	78
Dist.		84	84	82	58	51	76	82	106	92	101	89	84	88	90	94	92	89	127	99	102	91	137	132	115	94

January 2005 Vertical component Z in n
T (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		93	95	98	99	99	96	95	93	96	99	100	100	105	110	106	106	106	127	121	149	131	114	100	111	106
2	D	77	48	29	41	51	82	86	101	114	123	116	111	110	111	121	150	121	145	130	111	107	55	42	38	92
3		-8	60	86	87	79	83	95	98	103	110	113	120	138	134	136	123	130	133	121	115	88	91	98	99	101
4		83	60	64	58	83	98	99	100	103	105	106	108	124	120	142	124	124	120	94	98	99	82	66	56	97
5		26	50	70	85	87	94	100	102	106	113	111	123	121	128	121	124	122	105	111	110	102	99	87	73	99
6	Q	80	93	98	100	101	102	102	102	103	103	103	105	106	105	104	104	104	104	106	106	96	101	102	102	101
7		102	102	102	101	101	101	100	100	99	96	95	98	101	102	109	193	213	160	175	179	161	121	107	-191	109
8		-154	-142	-32	0	38	80	91	100	104	105	107	109	111	110	110	110	109	110	114	120	114	108	102	107	72
9	Q	107	106	106	106	107	106	106	106	105	104	104	107	110	109	108	106	106	106	106	106	106	106	105	105	106
10		104	104	103	103	102	103	102	104	105	102	102	104	107	107	107	110	112	118	119	117	127	121	109	105	108
11		100	99	102	102	94	92	93	97	102	105	102	102	108	111	111	120	124	107	105	105	111	117	117	95	105
12		75	97	68	15	62	93	94	99	106	106	110	126	121	139	139	145	124	136	148	136	138	91	84	76	105
13		83	94	102	103	102	105	103	106	108	107	106	106	108	109	113	115	124	102	111	111	68	99	80	80	102
14		84	90	98	103	104	102	98	102	105	103	102	104	109	109	106	106	106	106	104	106	110	38	44	61	96
15		72	75	81	74	87	96	105	102	106	110	114	110	113	117	119	116	115	109	106	111	102	104	106	104	102
16		97	93	83	86	94	100	99	103	102	102	104	104	105	108	108	111	113	120	117	114	105	88	106	87	102
17	D	52	-4	28	23	53	87	100	105	105	113	129	174	200	183	131	168	357	325	238	150	144	88	92	94	131
18	D	-16	-143	-80	41	0	82	114	177	123	144	144	131	154	193	244	206	148	143	142	113	81	-60	-66	42	86
19	D	53	-50	-98	-54	24	72	101	106	119	150	175	207	221	182	173	155	176	139	125	119	112	82	38	70	100
20		98	108	110	114	114	114	114	114	113	115	114	112	115	120	126	141	159	134	119	91	102	97	71	77	112
21	D	84	82	92	103	108	108	107	110	112	114	114	113	119	119	121	127	125	123	50	-75	20	64	24	-73	83
22		53	85	113	96	98	90	107	120	113	122	122	125	128	137	143	151	133	134	133	131	111	104	99	86	114
23		95	101	102	88	97	109	108	109	106	112	114	115	123	123	128	123	138	108	116	115	113	82	60	71	106
24		92	102	100	104	110	110	109	107	105	106	108	110	116	123	117	121	116	116	112	116	116	110	103	100	110
25	Q	105	108	109	110	110	110	109	107	106	107	108	110	112	113	115	116	117	118	119	114	111	109	109	106	111
26	Q	107	107	109	110	110	108	108	108	108	107	105	105	107	108	109	109	108	108	110	108	106	104	104	105	107
27	Q	105	105	105	105	105	105	104	102	101	103	105	104	104	105	105	104	104	105	107	107	107	107	104	102	105
28		103	98	97	98	101	100	101	100	99	100	99	99	101	103	104	103	103	104	106	112	114	106	103	89	102
29		66	85	96	99	101	99	101	101	98	98	99	101	103	106	113	123	114	115	130	124	108	97	32	11	97
30		56	81	86	87	80	92	101	101	103	104	107	112	112	124	116	113	117	120	117	115	110	105	100	99	102
31		101	96	81	82	91	95	98	100	100	101	101	108	135	146	132	138	138	117	120	108	94	102	103	100	108
All		70	67	74	80	87	97	101	106	106	109	111	115	121	123	124	128	132	126	120	111	107	91	82	70	102
Quiet		101	104	105	106	107	106	106	105	104	105	105	106	108	108	108	108	108	108	109	108	105	105	105	104	106
Dist.		50	-14	-6	31	47	86	101	120	115	129	136	147	161	158	158	161	185	175	137	83	93	46	26	34	98

Nurmijärvi Finland $\label{eq:final} \mbox{February 2005 North component X in nT (X = 14900 nT + tabular values)}$

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		-15	-10	-13	-12	-11	-9	-10	-13	-20	-28	-30	-37	-28	-19	-16	-25	-18	-17	-17	-16	-10	-10	-9	-8	-17
2		-10	-12	-11	-8	-11	-4	-4	-7	-16	-20	-24	-20	-14	-6	-12	-14	-18	-8	-13	-3	-11	-14	-9	-8	-11
3		-8	-6	-1	0	-27	1	-8	-17	-33	-25	-24	-20	-14	-11	-11	-11	-12	-18	-17	-15	-10	-11	-6	-9	-13
4	Q	-10	-10	-9	-11	-10	-8	-9	-13	-19	-22	-23	-22	-15	-8	-10	-9	-14	-14	-15	-16	-11	-5	-8	-8	-13
5	Q	-8	-7	-6	-6	-2	-2	-5	-10	-17	-26	-26	-21	-12	-3	0	0	-2	-3	-4	-2	1	0	0	0	-7
6		-1	-3	-4	-1	1	4	-5	-20	-19	-23	-26	-26	-14	-8	-7	-6	-13	-17	-19	-5	-16	-13	-10	-7	-11
7	D	-21	-17	-12	-1	2	-3	-7	-13	-11	-15	-20	-18	-8	-5	-45	-30	-15	-19	-23	-24	-61	-60	-128	-52	-25
8	D	-46	-28	-30	-56	-24	-21	-14	-14	-22	-34	-35	-27	-28	-44	-38	-25	-15	-34	-3	-38	-28	-32	-40	-21	-29
9	D	-33	-13	-21	-35	-37	-9	-23	-27	-28	-42	-59	-48	-33	-24			-11	-12	-19	-14	-15	-19	-27	-40	(-27)
10	D	-19	-26	-7	-9	-12	-15	-8	-22	-33	-40	-44	-35	-24	-19	-14	-14	-13	-3	-16	3	-18	-16	-13	-10	-18
11		-13	-13	-18	-22	-16	-8	-8	-12	-21	-27	-32	-38	-28	-23	-15	-12	-11	-12	-23	-19	-21	-33	-8	-15	-19
12		-12	-12	-14	-16	-8	-10	-5	-6	-13	-24	-31	-30	-25	-19	-11	-10	-13	-11	-10	-12	-9	-6	-6	-7	-13
13	Q	-8	-7	-9	-8	-6	-7	-3	-3	-7	-14	-22	-23	-21	-16	-9	-7	-5	-5	-12	-1	-9	-7	-6	-6	-9
14		-8	-10	-7	-7	-4	3	5	1	-10	-18	-25	-24	-24	-18	-13	-10	-9	-9	-18	-25	-17	-16	-13	-4	-12
15	Q	-8	-8	-7	-4	-4	-4	-5	-4	-7	-12	-19	-19	-16	-10	-7	-5	-4	-5	-5	-3	-2	3	-1	-3	-7
16		-8	-11	-2	-1	-1	6	1	-4	-11	-21	-28	-26	-17	-15	-21	-14	-10	-46	-38	-23	-18	-3	-9	-19	-14
17		-14	-13	-11	-15	-18	-15	-13	-14	-16	-18	-21	-23	-22	-17	-10	-3	-11	-11	-8	-4	-5	-12	1	-8	-13
18	D	-70	-52	-93	-62	-21	-19	-26	-26	-10	-18	-24	-29	-17	-2	-6	7	-30	-24	-26	-22	-26	-27	-28	-32	-28
19		-26	-23	-23	-21	-20	-13	-17	-28	-39	-34	-25	-26	-42	-26	-24	-26	-13	-19	-32	-31	-17	-29	-21	-22	-25
20		-1	-24	-20	-19	-19	-28	-18	-12	-12	-15	-21	-20	-17	-20	-19	-15	-16	-29	-22	-21	-33	-24	-18	-38	-20
21		-19	-30	-14	-22	-20	-18	-15	-19	-19	-20	-19	-19	-19	-15	-17	-18	-18	-13	-12	-11	-12	-12	-11	-15	-17
22		-12	-11	-9	-6	-4	-2	-3	-8	-11	-15	-20	-22	-16	-10	-6	-6	-8	-10	-15	-11	-7	-7	-9	-7	-10
23	Q	-7	-7	-6	-5	-3	-3	-2	0	-4	-10	-8	-5	0	3	5	5	6	7	4	6	10	1	0	0	-1
24		0	1	2	3	3	5	2	1	-5	-11	-20	-19	-11	-22	-1	4	2	3	1	-1	-3	-4	-5	-4	-3
25		-5	-2	0	3	2	4	1	-4	-10	-28	-26	-29	-13	-10	-8	-10	-15	-20	-27	-20	-7	-4	-4	-7	-10
26		-17	-13	-10	-4	-5	-6	-4	-11	-16	-20	-27	-29	-24	-12	-13	-20	-16	-20	-14	-14	-16	-9	-8	-7	-14
27		-5	-5	-4	-2	-1	-6	3	-12	-17	-22	-26	-26	-24	-31	-12	-4	-4	-3	-4	-3	3	-3	-2	0	-9
28		1	-4	-1	1	3	1	-5	-16	-23	-26	-27	-35	-26	-13	-7	-8	-5	0	-3	-5	-3	9	16	-7	-8
All		-14	-13	-13	-12	-10	-7	-7	-12	-17	-22	-26	-26	-20	-15	-13	-11	-11	-13	-15	-12	-13	-13	-14	-13	-14
Quiet		-8	-8	-8	-7	-5	-5	-5	-6	-11	-17	-20	-18	-13	-7	-4	-3	-4	-4	-6	-3	-2	-2	-3	-4	-7
Dist.		-38	-27	-32	-33	-19	-13	-16	-20	-21	-30	-36	-31	-22	-19	-26	-15	-17	-18	-17	-19	-30	-31	-47	-31	-25
									_							_	_			_			_			

February 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		52	73	79	78	78	79	82	85	86	83	72	66	67	72	75	85	81	82	82	82	81	82	78	78	77
2		74	74	77	77	74	76	81	80	81	74	74	67	63	67	69	75	79	109	79	120	118	79	77	76	80
3		72	68	75	84	55	71	70	75	81	79	74	65	66	68	73	76	78	92	89	79	78	80	85	80	76
4	Q	77	77	78	79	79	81	85	89	87	78	73	71	68	72	75	81	79	86	85	85	83	82	82	80	80
5	Q	77	77	77	75	78	82	84	86	84	81	72	65	64	65	71	72	74	74	76	81	81	77	75	75	76
6		76	77	76	81	75	86	87	89	82	85	71	62	59	61	67	70	68	67	75	92	100	102	116	114	81
7	D	101	80	97	85	94	91	93	92	91	82	70	58	51	32	51	43	59	71	95	225	135	149	117	126	91
8	D	112	100	119	92	73	81	70	81	88	94	85	73	57	66	81	67	91	95	149	111	107	120	77	94	91
9	D	92	67	77	69	28	48	59	89	84	80	74	67	52	92			88	76	92	96	89	103	92	142	(80)
10	D	96	102	91	96	83	82	89	91	95	88	79	72	78	72	104	67	73	102	90	129	88	87	73	78	88
11		81	84	79	68	66	80	87	92	93	88	77	83	70	58	72	77	76	73	90	137	103	73	93	89	83
12		81	75	82	79	85	85	89	95	95	91	78	69	64	65	69	73	75	72	92	77	80	80	80	79	80
13	Q	78	73	74	79	81	82	83	86	89	85	76	66	62	63	68	75	75	71	84	93	81	81	81	82	78
14		83	80	79	79	68	77	81	87	89	82	75	70	66	64	69	71	77	76	83	93	101	96	80	85	80
15	Q	82	80	78	77	78	79	81	83	84	78	71	66	63	63	70	73	73	73	73	76	83	84	79	79	76
16		81	69	80	83	83	85	83	86	84	77	65	46	42	39	48	32	28	70	105	84	84	106	123	109	75
17		91	87	86	86	83	84	86	89	89	86	79	66	65	64	67	68	60	67	70	76	80	99	96	105	80
18	D	112	198	188	108	106	100	84	56	71	68	69	67	62	56	49	78	77	74	94	110	101	92	92	78	91
19		79	84	84	85	85	82	73	79	70	61	62	49	67	62	60	67	79	111	114	98	85	98	90	86	80
20		93	90	85	86	89	84	71	82	85	80	74	71	65	66	60	87	69	59	74	103	86	88	110	99	81
21		90	110	99	97	86	83	86	85	80	75	70	64	66	63	63	65	69	74	73	78	80	81	85	86	80
22		82	81	80	82	79	81	82	85	84	78	71	69	66	66	70	73	76	84	74	76	81	82	83	81	78
23	Q	84	81	85	85	86	87	89	89	85	79	67	62	59	61	65	67	68	69	73	76	75	78	77	75	76
24		75	74	75	77	79	81	82	86	85	78	73	66	56	60	67	72	75	73	77	77	81	82	82	81	76
25		77	81	79	79	79	80	84	90	88	83	67	64	55	57	62	69	80	107	110	101	90	84	79	82	80
26		68	62	73	81	81	84	84	84	87	78	74	68	64	60	61	90	79	90	107	94	96	88	80	78	80
27		77	80	80	79	79	71	75	88	93	85	77	68	62	67	68	76	76	76	75	77	89	87	83	77	78
28		82	77	70	76	78	79	74	77	79	75	69	57	61	64	72	79	81	99	89	80	80	88	96	91	78
All		83	84	86	82	78	81	81	85	85	80	73	66	62	63	68	71	74	81	88	96	90	90	88	89	80
Quiet		79	78	78	79	80	82	84	86	86	80	72	66	63	65	69	74	74	74	78	82	80	81	79	78	77
Dist.		103	109	115	90	77	80	79	82	86	82	75	67	60	63	71	64	78	84	104	134	104	110	90	104	88

February 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		79	80	95	100	103	104	104	104	104	103	105	107	108	110	111	113	111	110	108	107	105	104	104	102	103
2		101	101	103	104	104	103	102	102	103	105	104	105	106	107	108	109	114	117	107	107	93	100	101	100	104
3		99	95	94	88	83	85	93	96	101	107	106	107	109	108	108	107	107	110	109	107	106	104	102	101	101
4	Q	102	102	103	103	103	103	104	104	102	101	102	104	104	106	106	107	107	109	108	107	105	102	98	100	104
5	Q	101	102	102	101	101	101	101	101	100	98	97	101	104	105	104	102	102	102	102	102	98	98	99	99	101
6		99	98	95	92	91	90	94	99	102	98	92	96	103	105	105	104	107	114	120	113	90	103	96	79	99
7	D	87	92	92	74	73	87	91	95	95	93	93	96	101	109	140	148	136	147	140	121	82	65	-37	37	94
8	D	67	91	81	71	87	92	90	97	95	97	105	110	118	136	153	144	139	160	129	116	117	69	30	72	103
9	D	79	67	78	86	85	87	92	103	107	103	112	118	120	142			130	134	123	112	115	70	42	41	(98)
10	D	65	77	72	75	82	92	100	104	110	112	113	115	122	132	135	116	118	113	111	96	94	104	95	98	102
11		103	102	101	91	96	99	101	106	103	101	107	117	115	118	114	111	110	112	123	122	110	94	94	100	106
12		95	95	98	101	103	105	106	105	104	102	101	103	105	109	109	108	109	109	111	107	107	105	104	103	104
13	Q	102	97	95	98	100	101	101	100	100	100	99	100	104	105	106	107	106	105	111	100	103	103	103	102	102
14		99	100	100	100	97	96	97	99	99	96	94	96	100	107	107	105	106	107	114	118	112	103	94	85	101
15	Q	94	98	100	100	100	101	100	98	94	91	92	92	96	100	103	104	103	102	103	103	100	92	96	98	98
16		98	95	94	96	99	97	98	100	99	97	95	97	101	119	131	131	165	212	170	139	122	111	70	92	114
17		103	105	103	102	104	104	105	105	102	101	101	103	103	105	107	106	106	109	107	107	109	109	114	90	105
18	D	-52	-191	-82	-4	61	91	92	89	98	99	102	106	115	123	138	206	140	127	130	125	114	111	109	102	81
19		101	106	108	108	108	106	99	101	104	106	103	115	132	131	129	126	118	128	113	117	113	104	106	84	111
20		55	81	102	104	105	103	99	101	102	103	105	106	111	114	116	131	123	133	131	129	124	129	117	107	110
21		89	87	86	85	96	99	100	102	103	105	107	111	114	115	117	117	119	116	115	114	113	112	108	106	106
22		108	107	107	106	104	103	103	103	100	97	99	103	106	108	109	108	110	112	114	116	113	111	109	107	107
23	Q	106	103	103	103	103	103	102	98	92	88	91	96	99	101	99	99	99	100	101	101	100	100	99	99	99
24		99	99	99	99	99	100	99	96	93	92	94	97	104	105	104	101	101	100	101	102	103	102	96	89	99
25		89	96	98	98	99	99	99	98	95	95	97	99	99	104	105	108	117	136	131	123	109	99	98	96	104
26		93	78	91	94	96	99	99	96	97	96	99	100	101	103	113	125	115	119	112	109	100	100	101	101	102
27		102	101	101	101	100	97	94	96	99	98	99	101	104	113	111	108	105	105	104	104	101	96	95	97	101
28		94	95	92	92	95	96	93	94	97	95	96	104	107	107	109	108	108	108	100	102	101	91	62	70	97
All		88	84	90	92	96	98	99	100	100	99	100	104	108	112	115	117	115	120	116	112	106	100	89	91	102
Quiet		101	100	100	101	101	102	101	100	98	96	96	99	101	103	104	104	103	103	105	103	101	99	99	99	101
Dist.		49	27	48	60	78	90	93	98	101	101	105	109	115	128	141	153	133	136	127	114	104	84	48	70	96

Nurmijärvi Finland $\label{eq:march-2005} \mbox{March 2005 North component X in nT (X = 14900 nT + tabular values)}$

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-9	-5	1	0	-3	0	-3	-13	-20	-31	-32	-29	-19	-9	-4	-6	-6	-1	-2	-9	-6	-5	-3	6	-9
2		-11	-16	-15	-5	-9	-5	-4	-12	-30	-30	-20	-25	-17	-13	-7	-14	-19	-9	-7	-5	-3	-6	-3	1	-12
3		-7	-8	-7	-5	-4	-6	-5	-8	-15	-17	-17	-16	-11	-11	-6	-10	-5	-2	-9	-1	0	-5	-3	-6	-8
4	Q	-5	-4	-6	-2	-1	-1	-3	-9	-14	-17	-17	-11	-7	-6	-2	-1	-1	2	1	1	2	2	3	1	-4
5		2	0	-3	0	5	-1	0	-3	-7	-13	-15	-19	-20	-15	-14	-13	-3	-10	-19	-11	-24	-33	-25	-32	-11
6	D	-10	0	-16	-12	-7	-9	-16	-20	-33	-24	-30	-14	-15	-2	4	-1	-18	-48	-32	-16	-30	-33	-21	-78	-20
7	D	-84	-66	-50	-20	-13	-21	-49	-33	-20	-20	-19	-32	-30	-11	-33	-18	4	-9	20	-36	-29	-25	-35	-13	-27
8	D	-18	-48	-20	-46	-12	-12	-31	-41	-37	-32	-24	-30	-26	-19	-17	-15	-14	6	-4	-21	-33	-12	-32	-19	-23
9	D	-22	-45	-40	-24	-10	-18	-8	-12	-24	-22	-27	-22	-17	-13	-14	-2	11	-16	-20	25	-6	-34	-16	-15	-16
10		-27	-4	-28	-25	-21	-6	-6	-22	-30	-39	-33	-25	-15	-15	-2	-24	-18	-14	-2	-11	-7	-5	-7	-12	-17
11		-14	-15	-16	-12	-6	-7	-10	-15	-24	-24	-28	-22	-14	-9	-5	-7	-8	-7	-6	-7	-6	-6	-3	-6	-12
12	Q	-9	-9	-12	-9	-6	-7	-12	-18	-27	-32	-31	-27	-21	-16	-13	-10	-8	-4	-5	-4	-5	-6	-8	0	-12
13		-4	-7	-4	-3	-4	-2	-4	-11	-15	-17	-14	-10	-5	-6	-4	-10	-1	2	-5	-6	-5	-5	5	-13	-6
14		-20	-29	-44	-20	-12	2	-7	-8	-19	-26	-33	-18	-5	-14	-36	-23	-14	-15	-18	-13	-13	-11	-13	-12	-17
15		-9	-13	-10	-10	-10	-11	-14	-19	-33	-43	-43	-32	-21	-12	-9	-8	-6	-5	-4	-5	-3	-2	4	-4	-13
16		-7	-7	-4	-2	1	1	-3	-8	-15	-23	-23	-14	-11	3	1	-13	-7	2	-8	-10	-11	-16	-12	-6	-8
17		1	-6	-11	-9	1	-2	-7	-19	-24	-29	-26	-30	-20	-10	-7	-7	1	1	-17	-6	-3	-5	-8	-13	-11
18		-12	-10	-10	-9	-8	-4	-8	-14	-25	-28	-26	-13	-5	-2	1	1	4	4	-25	-33	-22	-38	-24	-26	-14
19		-24	-22	-31	-21	-12	-15	-24	-27	-27	-29	-30	-22	-25	-13	-12	-13	-11	-10	-9	-8	-10	-8	-3	-7	-17
20	Q	-8	-9	-9	-6	-8	-7	-13	-18	-26	-30	-29	-22	-20	-14	-10	-10	-8	-5	-12	-16	-14	-15	-14	-11	-14
21		-11	-12	-13	-15	-13	-15	-22	-30	-36	-38	-32	-31	-30	-15	-5	-2	-6	-9	-6	-5	-12	-9	-1	-11	-16
22	Q	-11	-11	-11	-11	-10	-10	-13	-25	-35	-34	-32	-24	-15	-8	-1	0	2	2	0	0	2	0	-1	-2	-10
23	Q	-1	1	-1	0	1	-2	-9	-24	-34	-33	-29	-17	-4	4	6	6	-1	-5	2	-3	-3	7	5	5	-5
24		4	3	2	2	5	7	6	-1	-11	-15	-21	-15	-3	8	-10	-5	-1	3	4	4	-9	-7	4	2	-2
25	D	2	4	4	8	10	-7	-15	-24	-31	-37	-28	-17	-12	0	-14	-1	-13	-11	-20	-15	-10	-22	1	-20	-11
26		-13	-8	-4	-6	-16	-14	-24	-26	-38	-54	-42	-33	-30	-12	-19	-7	-9	4	-4	2	-4	-2	-2	-8	-15
27		-5	-13	-10	-8	-5	-5	-13	-30	-37	-42	-39	-31	-13	-12	-6	3	-10	3	-15	-20	-9	-10	-12	-20	-15
28		-13	-11	-6	-6	-5	-6	-10	-20	-32	-39	-36	-27	-18	-10	-5	-6	-4	-5	-3	-4	1	1	-7	-5	-12
29		-3	-2	-1	1	2	-1	-9	-18	-28	-31	-26	-19	-10	1	3	1	-1	2	4	6	6	11	10	8	-4
30		1	0	-2	-1	-6	-6	-8	-19	-25	-38	-36	-21	-22	-10	-8	-7	-8	-13	-10	-3	-2	-2	0	-3	-10
31		-2	-3	-4	-7	4	8	2	-13	-36	-34	-31	-26	-13	-6	0	-2	-5	5	3	-24	-9	13	6	-3	-7
All		-11	-12	-12	-9	-6	-6	-11	-18	-26	-30	-28	-22	-16	-9	-8	-7	-6	-5	-7	-8	-9	-9	-7	-10	-12
Quiet		-7	-6	-8	-6	-5	-5	-10	-19	-27	-29	-27	-20	-13	-8	-4	-3	-3	-2	-3	-5	-4	-2	-3	-1	-9
Dist.		-26	-31	-24	-19	-6	-13	-24	-26	-29	-27	-25	-23	-20	-9	-15	-7	-6	-16	-11	-12	-21	-25	-21	-29	-19

March 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		87	82	81	83	78	85	88	88	81	79	75	65	62	66	73	78	78	78	80	89	89	78	80	84	80
2		91	81	65	82	85	83	84	89	86	78	66	67	67	66	75	79	119	87	77	78	85	82	78	78	80
3		82	80	81	81	83	85	88	88	86	78	69	65	63	69	72	82	84	80	84	96	87	83	80	79	80
4	Q	76	75	79	81	82	86	89	91	87	76	65	59	59	64	67	73	75	75	76	77	80	78	78	79	76
5		78	80	82	82	84	80	79	82	85	82	68	62	55	49	52	71	71	57	69	89	103	121	169	129	82
6	D	100	123	128	99	101	100	107	78	62	63	60	58	54	59	46	83	116	84	140	152	116	124	61	112	93
7	D	121	89	101	106	101	80	79	74	75	68	68	53	72	57	64	83	129	117	133	126	94	93	105	108	92
8	D	83	117	117	76	71	96	80	70	81	87	77	71	70	74	79	82	99	114	103	101	72	120	75	73	87
9	D	71	70	87	78	84	66	86	86	86	80	71	57	59	56	59	85	118	97	83	114	125	122	91	63	83
10		108	98	97	82	95	92	89	94	93	83	71	58	52	72	73	116	94	78	87	84	78	83	76	80	85
11		76	75	82	86	82	85	90	96	92	87	76	66	66	70	76	83	84	84	82	81	81	81	80	83	81
12	Q	83	82	82	86	92	98	101	104	97	84	72	63	60	62	69	77	80	86	82	81	89	87	86	82	83
13		82	84	86	88	88	88	91	93	87	73	60	53	47	52	59	67	70	71	89	80	82	93	122	132	81
14		114	127	65	99	80	67	81	84	78	65	52	42	35	35	52	63	76	88	87	90	84	82	83	85	76
15		93	84	87	88	89	93	97	97	92	85	70	60	58	63	73	79	78	78	78	79	80	85	82	90	82
16		85	84	84	85	85	88	92	93	89	80	68	55	55	55	63	72	71	71	76	70	87	91	85	81	78
17		108	110	110	87	88	91	90	93	83	73	55	56	60	65	70	71	76	132	79	76	79	86	90	89	84
18		92	94	92	92	92	91	97	96	92	80	73	67	62	66	72	73	75	76	88	112	117	135	112	145	91
19		151	132	110	91	98	100	96	90	84	79	71	58	62	68	76	82	81	81	82	83	84	88	84	83	88
20	Q	82	83	84	83	85	93	99	102	96	85	73	60	55	56	66	71	77	79	86	86	87	93	96	95	82
21		92	92	94	94	95	99	102	98	94	85	72	60	59	61	64	73	71	77	79	81	83	84	96	84	83
22	Q	84	87	87	87	87	90	96	97	93	84	74	65	60	61	66	71	72	73	74	75	79	83	77	79	79
23	Q	79	80	82	84	87	92	96	94	83	66	57	53	53	56	63	66	64	63	71	82	88	73	76	79	74
24		77	81	83	85	88	89	92	89	84	74	62	54	51	51	67	69	72	73	74	79	103	87	79	80	77
25	D	81	83	84	83	79	56	59	71	58	69	61	54	54	51	58	67	83	105	99	112	116	89	73	94	76
26		85	86	88	89	78	84	87	87	90	87	67	50	58	56	70	82	85	105	91	98	99	92	82	76	82
27		79	86	88	90	89	93	97	98	95	80	68	63	56	68	78	77	95	132	102	104	96	96	88	84	88
28		79	80	78	80	83	94	100	103	98	87	70	60	58	62	71	79	85	84	83	83	86	88	87	80	81
29		81	80	81	81	84	93	101	102	94	80	63	55	55	61	74	81	81	78	79	78	80	84	88	76	80
30		89	92	92	82	85	78	91	85	86	74	56	44	46	53	63	75	82	105	88	86	88	84	82	80	79
31		81	77	79	72	77	97	104	104	100	84	69	55	49	55	65	73	79	94	119	115	91	88	88	87	83
All		89	89	88	86	86	87	91	91	87	78	67	58	57	60	67	77	84	87	88	91	91	92	88	89	82
Quiet		81	81	83	84	87	92	96	98	91	79	68	60	57	60	66	71	74	75	78	80	85	83	83	83	79
Dist.		91	96	104	88	87	80	82	76	72	73	67	58	62	59	61	80	109	103	111	121	105	109	81	90	86

March 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		89	94	95	94	95	96	94	93	91	94	104	104	102	103	103	105	103	103	103	105	103	95	52	61	95
2		75	88	88	88	92	96	97	98	97	101	104	112	115	112	115	116	124	109	107	104	104	102	101	96	102
3	_	97	99	100	100	100	102	102	99	96	94	94	98	102	105	106	107	105	104	106	100	97	98	98	98	100
4	Q	97	97	99	100	100	101	102	101	98	95	95	98	102	102	102	101	101	100	100	100	101	99	99	99	99
5		97	95	95	93	93	92	93	94	95	95	94	95	98	100	108	120	114	121	138	135	100	104	53	40	98
6	D	41	-18	27	61	88	99	97	95	97	101	101	111	102	105	129	214	234	201	138	96	76	60	-12	3	94
7	D	-15	2	10	34	62	69	82	93	98	99	104	115	132	146	146	144	134	120	71	80	64	58	40	49	81
8	D	27	15	47	27	51	70	85	96	110	107	110	111	112	123	118	117	120	112	107	98	58	66	59	78	84
9	D	89	61	65	56	57	62	76	84	92	97	100	106	115	116	118	136	124	125	122	85	61	86	88	33	90
10		14	35	39	68	87	92	90	94	98	99	100	102	114	128	130	143	124	115	106	106	100	93	91	98	94
11		98	94	92	102	103	104	107	108	109	108	105	107	109	109	108	107	106	106	105	105	104	103	98	99	104
12	Q	101	101	101	101	104	106	106	103	100	99	98	101	106	107	109	108	106	106	105	104	105	102	102	97	103
13		91	97	100	100	100	100	101	100	96	92	89	91	97	101	104	104	105	106	114	111	111	104	79	51	98
14		51	56	38	52	67	76	89	88	86	90	95	106	116	158	158	125	115	126	122	118	114	109	100	68	97
15		81	96	100	103	104	104	102	100	100	97	91	92	99	107	110	107	105	104	104	104	104	103	96	88	100
16		98	102	102	102	102	101	97	94	92	93	92	93	96	102	112	111	107	106	112	114	116	114	109	85	102
17		76	79	76	84	73	83	85	86	86	88	96	94	98	104	105	105	113	116	107	106	104	104	100	103	95
18		103	106	105	104	104	105	105	101	99	98	96	99	101	101	101	99	101	108	132	138	88	73	83	72	101
19		39	72	67	79	93	96	99	99	102	100	96	97	101	106	106	105	104	104	105	105	105	103	99	99	95
20	Q	101	102	103	104	105	107	107	104	101	97	96	99	102	107	111	109	109	110	114	112	111	108	105	103	105
21		101	102	103	104	105	106	104	101	98	95	95	104	116	109	107	108	110	111	109	109	108	109	101	102	105
22	Q	104	104	104	104	103	103	101	97	94	90	90	93	97	100	102	101	101	101	102	102	102	98	100	101	100
23	Q	101	101	101	100	100	101	100	96	90	87	88	92	94	98	100	101	104	109	113	113	103	92	92	99	99
24		100	101	101	101	101	99	96	94	92	91	91	89	91	102	104	103	101	101	101	103	106	101	101	101	99
25	D	100	100	100	99	98	95	97	102	101	96	93	95	97	112	115	121	151	133	129	107	104	67	46	69	101
26		91	101	103	101	101	100	104	104	101	105	107	120	120	125	132	124	118	111	102	104	87	92	97	96	106
27		97	95	102	103	105	104	104	104	105	101	98	101	106	122	117	113	122	118	113	106	66	79	84	86	102
28		97	101	101	102	104	107	106	103	98	94	93	95	100	105	108	107	107	105	104	104	103	92	93	98	101
29		100	101	101	102	103	106	105	102	97	94	92	94	97	101	104	105	103	101	101	101	101	98	85	64	98
30		72	82	86	94	97	97	100	103	102	102	102	102	104	109	111	112	115	120	114	110	106	102	100	101	102
31		101	101	100	101	104	106	105	102	100	98	92	91	96	102	107	109	110	112	100	100	104	83	78	93	100
All		81	83	85	89	94	96	98	98	97	97	97	100	104	110	113	116	116	114	110	106	97	93	84	82	98
Quiet		101	101	101	102	102	104	103	100	97	94	93	96	100	103	105	104	104	105	107	106	104	100	100	100	101
Dist.		48	32	50	55	71	79	87	94	99	100	102	108	112	120	125	146	152	138	113	93	73	67	44	46	90

Nurmijärvi Finland $\label{eq:april-2005} \mbox{Aprl 2005 North component X in nT (X = 14900 nT + tabular values)}$

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-2	-1	-1	1	0	1	-11	-18	-30	-34	-37	-26	-15	-5	-2	-2	1	4	4	-1	5	-7	-2	-3	-8
2		-4	-5	-2	-1	1	0	-4	-14	-23	-29	-34	-26	-20	-7	-3	-1	-2	7	6	7	6	5	8	3	-5
3		4	13	8	12	7	5	-5	-16	-27	-29	-30	-23	-15	-4	3	3	3	7	7	3	11	10	1	2	-2
4	D	3	1	0	0	6	9	-2	-16	-32	-30	-20	-3	1	4	12	21	-5	2	-15	-39	-71	-21	-73	-82	-15
5	D	-204	-72	-60	-109	-49	-59	-70	-54	-36	-36	-18	-9	5	-4	20	3	13	-5	-10	-1	-13	-13	-13	-32	-34
6		-11	-14	-19	-14	-9	-13	-22	-38	-46	-47	-40	-25	-13	-13	-18	-15	5	-4	-5	-7	-14	-17	-15	-7	-18
7		-8	-19	-13	-12	-4	-10	-28	-39	-48	-51	-41	-27	-17	-11	-3	-8	-15	-10	-8	-7	-7	-5	-5	-6	-17
3		-4	-8	-7	-4	-2	-5	-8	-21	-37	-42	-40	-32	-21	-6	-3	-3	-2	-3	2	6	1	1	-1	-3	-10
9		-3	-7	-8	-3	2	4	-5	-19	-34	-41	-40	-28	-16	-6	-2	2	4	6	6	10	10	9	10	5	-6
10	Q	2	3	2	5	8	8	-3	-20	-32	-37	-32	-26	-15	-2	4	-3	0	4	7	8	7	6	5	3	-4
11		3	1	2	1	4	1	-7	-22	-37	-43	-38	-28	-13	-1	11	7	14	32	12	-6	-30	2	-14	-22	-7
12	D	-31	-62	-36	-76	-41	-32	-39	-49	-59	-72	-59	-32	-40	-9	15	19	-9	-16	-9	14	-8	-25	-9	-17	-28
13	D	-13	-8	-13	-33	-35	-17	-21	-29	-43	-55	-43	-17	-5	-8	-4	18	27	-13	-31	-26	-28	-18	-11	-60	-20
14		-21	-20	-34	-20	-16	-28	-22	-29	-42	-51	-58	-50	-31	1	-11	-6	5	-10	-9	-4	-1	-10	-14	-12	-21
15		-17	-20	-18	-15	-9	-12	-17	-29	-40	-45	-44	-31	-14	2	-6	-6	5	5	-14	2	-9	-13	-10	-6	-15
16		-11	-4	-8	-9	-7	-9	-13	-23	-32	-38	-36	-26	-20	-11	-11	-9	1	5	-7	-3	-5	-6	-7	-8	-12
17		-6	-7	-8	-11	-5	-3	-13	-24	-32	-37	-32	-28	-25	-20	-10	-6	-4	2	3	4	1	3	2	-4	-11
18		-7	-8	-5	-3	-12	-22	-22	-23	-30	-36	-36	-23	-20	-6	1	5	-1	8	-5	1	1	15	-5	-13	-10
19		-10	-15	-12	-10	-11	-14	-22	-36	-33	-29	-29	-16	-12	9	-6	-5	6								(-14
20												-19	-40	-20	-32	-14	-9	-6	1	-4	-12	-14	-12	-9	-12	(-14
21	Q	-11	-10	-7	-4	-5	-12	-21	-28	-34	-34	-30	-26	-17	-10	-8	-6	-5	-4	-4	-4	0	2	2	1	-1
22		-1	-2	-7	1	2	-7	-19	-30	-31	-31	-28	-21	-12	6	-11	-6	-2	2	13	-6	-2	3	16	7	-1
23		4	3	3	5	5	2	-5	-14	-18	-21	-20	-16	-10	-6	-7	5	1	5	4	19	5	4	7	3	-:
24		-6	-7	-9	-14	-7	-12	-14	-19	-30	-30	-26	-18	-12	-3	-2	0	4	6	7	5	0	9	9	4	-1
25		3	2	-4	-3	-2	-13	-27	-21	-27	-32	-29	-28	-18	-16	-7	3	-2	2	1	1	0	0	1	1	-(
26	Q	-1	-1	0	-1	-2	-6	-10	-14	-19	-23	-27	-21	-13	-6	-5	-3	1	2	7	7	6	3	3	4	-5
27	Q	2	4	6	7	6	3	0	-4	-12	-23	-30	-25	-15	-11	-9	-1	3	4	6	4	4	3	3	2	-:
28	Q	1	3	6	8	9	5	-1	-8	-16	-23	-26	-23	-12	2	5	10	10	8	10	10	12	8	8	8	
29		8	8	10	12	11	3	-6	-17	-27	-26	-22	-24	-16	-19	8	12	15	26	20	15	-16	-12	-15	2	
30	D	-3	-37	-16	1	-10	-19	-21	-26	-39	-34	-35	-23	-1	11	-19	-4	27	22	22	-1	-12	-24	3	-9	-10
All		-12	-10	-9	-10	-6	-9	-16	-24	-33	-36	-33	-25	-15	-6	-3	1	3	3	0	0	-6	-3	-4	-9	-1
Quiet		-12	-10	1	3	3	0	-7	-15	-23	-28	-29	-24	-15	-6	-2	-1	2	3	5	5	-6	4	4	4	-1
Dist.		-49	-36	-25	-43	-26	-24	-30	-35	-42	-45	-35	-17	-8	-1	5	11	11	-2	-9	-11	-26	-20	-20	-40	-2

Aprl 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		84	83	83	85	89	98	99	100	100	91	76	62	55	53	61	71	73	75	78	87	89	85	84	85	81
2		85	82	88	90	92	97	101	101	95	81	70	62	57	55	61	70	82	74	73	74	77	80	82	85	80
3		85	89	96	92	92	98	98	98	90	79	67	56	52	56	64	77	80	73	75	70	73	73	85	84	79
4	D	94	96	97	96	90	97	98	97	88	74	63	46	42	50	56	69	78	129	176	119	92	144	161	150	96
5	D	139	112	117	113	81	111	88	67	86	78	81	70	78	81	102	91	117	104	97	91	93	67	114	98	95
6		91	94	96	92	101	108	115	109	96	79	61	56	52	48	57	76	91	81	88	99	106	97	67	77	85
7		88	91	86	86	93	104	109	105	94	80	62	55	52	54	73	76	80	82	81	82	83	85	83	83	82
8		80	88	80	89	93	100	109	107	99	84	65	52	52	59	69	77	81	81	82	95	90	84	83	84	83
9		83	80	79	83	90	100	107	105	96	80	64	49	46	52	63	71	75	76	76	79	83	82	82	83	79
10	Q	84	83	84	88	91	99	105	105	95	82	65	52	48	57	69	78	81	80	80	80	79	80	81	84	80
11		84	85	85	86	89	100	106	105	97	83	63	49	44	47	49	55	55	59	59	78	104	120	109	138	81
12	D	105	107	83	100	77	80	103	103	96	88	61	40	42	43	59	88	74	78	82	150	97	91	116	98	86
13	D	73	87	93	102	89	72	72	90	79	80	77	54	81	70	57	72	148	113	105	87	60	94	125	111	87
14		98	89	92	92	99	95	93	88	89	83	67	49	56	73	73	77	99	83	76	79	110	101	88	94	85
15		95	82	92	93	91	95	96	96	89	82	72	60	62	64	69	83	83	93	93	87	90	91	85	72	84
16		84	83	86	93	96	100	102	101	95	84	72	58	55	60	66	75	82	85	96	84	84	86	90	85	83
17		83	83	81	83	88	102	108	106	101	91	72	54	52	56	64	73	81	84	88	89	89	92	93	90	83
18		88	88	90	90	86	92	90	98	90	75	60	44	46	54	61	67	82	90	88	85	84	94	109	102	82
19		94	96	107	113	109	102	96	95	84	76	62	49	48	49	61	68	71								(81)
20												61	49	48	55	68	85	76	84	90	115	102	91	82	79	(77)
21	Q	78	75	84	97	100	105	105	99	90	80	70	66	65	68	76	81	86	90	87	84	82	80	82	75	84
22		64	71	87	101	111	116	108	100	89	79	71	66	62	66	85	80	81	82	89	96	85	86	88	92	86
23		88	90	94	98	105	108	108	99	88	78	69	58	58	66	75	77	88	90	88	91	98	87	84	85	86
24		84	73	82	89	100	105	106	97	85	77	67	61	61	66	70	75	81	79	96	92	89	81	82	81	82
25		91	95	92	88	97	98	93	91	85	75	60	50	53	62	67	75	82	86	93	87	83	83	77	75	81
26	Q	86	89	92	96	96	95	95	90	85	76	63	49	49	57	66	73	78	80	82	86	92	88	85	86	81
27	Q	87	88	90	94	94	94	95	97	94	84	67	51	49	57	66	76	83	86	84	84	81	83	83	84	81
28	Q.	85	86	89	92	97	101	104	105	102	92	77	66	62	64	72	80	81	82	81	80	93	86	82	84	85
29	-	86	86	91	95	102	106	106	102	89	79	65	52	46	50	55	69	76	72	69	74	100	105	108	99	83
30	D	93	93	132	117	115	118	110	105	88	72	60	49	45	54	57	59	93	97	95	98	105	92	127	106	91
All		88	88	91	94	95	100	101	99	92	81	67	54	54	58	66	75	84	85	88	90	89	90	94	91	84
Quiet		84	84	88	93	96	99	101	99	93	83	69	57	55	61	70	78	81	83	83	83	86	83	82	82	82
Dist.		101	99	105	105	90	96	94	92	87	79	68	52	57	60	66	76	102	104	111	109	89	98	129	113	91

 Apr
l 2005 Vertical component Z in n
T (Z = 49600 nT + tabular values)

			-																							
Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		99	100	100	100	102	103	100	100	100	97	91	90	94	98	100	103	102	101	102	104	99	100	101	100	99
2		101	99	99	100	101	102	100	98	96	91	91	92	93	99	101	103	105	102	100	100	101	101	100	99	99
3		99	92	92	93	95	96	93	90	90	88	86	89	95	100	102	107	106	103	105	105	103	100	100	97	97
4	D	91	97	99	98	98	97	93	89	87	86	87	91	97	100	109	125	142	139	68	76	-19	-24	6	-67	78
5	D	-158	-88	-52	-31	26	54	69	80	99	113	124	128	139	139	154	132	130	128	123	98	104	47	41	3	67
6		30	67	69	87	98	106	105	106	104	101	102	115	122	121	120	125	120	115	116	113	102	93	66	72	99
7		81	92	98	95	96	102	102	103	102	101	102	106	106	110	121	120	116	111	108	106	106	105	103	103	104
8		99	95	94	97	103	107	104	101	98	96	96	100	105	106	106	107	108	107	106	99	99	100	101	103	102
9		103	101	99	99	102	105	104	101	97	95	90	88	93	100	105	105	103	102	102	103	102	101	100	100	100
10	Q	102	102	103	103	105	107	107	103	100	96	94	96	101	106	107	106	104	102	102	102	102	101	101	101	102
11		101	102	102	103	103	108	106	99	95	91	86	87	95	100	103	105	102	108	126	128	107	109	85	37	99
12	D	69	42	50	34	55	67	91	103	110	115	118	126	139	142	159	154	146	143	134	94	69	75	60	66	98
13	D	95	109	110	101	73	80	92	104	106	121	121	123	171	161	140	162	186	150	141	123	68	86	59	32	113
14		66	95	94	111	100	104	107	105	110	118	118	119	127	143	128	125	133	116	112	110	107	89	89	84	109
15		88	93	93	97	100	107	111	111	109	108	102	102	108	122	130	133	127	136	124	99	103	103	104	80	108
16		71	85	84	89	97	104	107	112	111	106	98	100	107	110	112	111	111	114	117	111	106	94	101	104	103
17		106	106	106	104	102	103	103	105	105	100	92	93	100	104	105	108	109	108	108	106	105	102	98	95	103
18		97	99	102	103	99	101	104	106	104	92	85	93	105	111	109	115	120	119	113	110	108	94	72	75	101
19		89	92	92	95	93	96	103	105	98	92	85	84	90	104	104	104	106								(96)
20												97	109	136	140	150	145	118	117	120	114	107	101	103	101	(118)
21	Q	99	102	109	111	111	110	108	105	100	96	93	92	99	106	110	110	109	109	107	107	106	105	105	105	105
22		99	87	88	97	102	106	103	99	98	97	96	98	103	116	122	115	109	107	112	112	109	106	98	95	103
23		102	105	107	106	104	104	104	102	100	97	93	93	100	104	105	107	112	115	112	101	97	100	102	102	103
24		99	85	82	87	97	105	105	102	100	101	94	92	98	102	110	111	113	108	110	107	105	99	91	83	99
25		85	95	97	99	100	99	101	101	96	89	86	94	102	105	106	113	115	112	112	107	104	103	99	93	101
26	Q	100	103	105	105	102	102	103	99	97	95	90	92	98	101	103	104	104	104	104	104	101	101	101	102	101
27	Q	103	103	104	103	99	98	99	99	98	94	87	87	91	95	101	108	109	109	108	105	103	103	103	103	101
28	Q	103	104	106	106	105	105	101	98	96	94	93	92	97	99	105	110	109	107	105	104	103	99	101	101	102
29		102	102	103	102	100	99	96	93	90	89	87	89	97	101	109	122	128	127	128	117	104	114	104	105	105
30	D	106	29	9	45	89	103	105	101	98	97	98	101	129	139	138	141	137	115	103	100	94	68	43	69	94
All		84	86	88	91	95	99	101	101	100	98	96	99	108	113	116	118	118	115	111	106	97	92	87	81	100
Quiet		101	103	105	106	105	104	104	101	98	95	91	92	97	101	105	108	107	106	105	104	103	102	102	103	102
Dist.		41	38	43	49	68	80	90	95	100	106	110	113	135	136	140	143	148	135	114	98	63	50	42	21	90

Nurmijärvi Finland $\label{eq:may 2005 North component X in nT (X = 14900 nT + tabular values)}$

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	-25	-34	-46	-23	-29	-45	-24	-27	-35	-52	-42	-28	-8	-2	6	31	15	15	6	-14	-16	-10	-8	-6	-17
2		-18	-17	-10	-10	-12	-19	-21	-20	-21	-27	-24	-14	-10	-5	10	12	-3	2	7	10	-1	1	-1	-4	-8
3		-10	-22	-14	-4	-8	-19	-23	-25	-30	-36	-33	-30	-12	13	10	16	1	6	1	-3	-3	-5	-10	-8	-10
4		-13	-15	-21	-19	-17	-27	-25	-24	-24	-21	-14	-7	-1	-5	-10	5	4	4	4	1	8	-4	-5	-5	-10
5	Q	-5	-5	-5	-6	-6	-11	-17	-23	-28	-33	-14	-7	-4	2	1	1	13	8	10	6	7	5	7	5	-4
6		4	4	0	-2	-9	-16	-23	-28	-29	-27	-18	-12	-6	5	-2	9	9	19	16	22	22	11	8	14	-1
7		9	8	9	8	3	-3	-11	-20	-23	-20	-15	-10	-15	13	-6	-3	5	13	28	33	15	11	-17	-35	-1
8	D	-44	-88	-134	-99	-55	-71	-86	-87	-61	-44	-30	44	41	456	316	180	212	53	25	-22	-58	-37	-17	-49	14
9		-48	-66	-63	-39	-26	-21	-22	-32	-46	-50	-52	-42	-29	-25	-23	-21	-5	-13	-12	-14	2	-13	-40	-53	-31
10		-17	-17	-18	-26	-23	-30	-40	-31	-34	-36	-32	-20	-18	-7	-11	-15	-14	-15	-10	-4	-7	-14	-13	-20	-20
11		-14	-10	-6	-7	-10	-14	-20	-32	-38	-39	-43	-36	-13	-21	15	10	2	7	28	-3	-6	-14	-32	-24	-13
12		-10	-4	-4	-15	-18	-11	-18	-36	-52	-44	-34	-20	-17	0	14	16	5	1	18	10	-3	-8	-35	-11	-12
13		-36	-33	-37	-18	-22	-20	-40	-58	-56	-52	-57	-33	-14	9	33	6	6	11	-1	-7	-5	-14	-12	-13	-19
14		-11	-9	-10	-6	-6	-13	-22	-30	-39	-33	-31	-21	-13	-6	-6	-6	-3	10	13	-8	-12	-12	-14	-14	-12
15	D	-14	-12	-1	16	11	14	-339	-351	-204	-96	-52	-54	-57	-88	-68	-47	-25	1	5	4	-33	-39	-50	-80	-65
16	D	-47	-70	-59	-86	-128	-238	-172	-62	-47	-57	-17	-22	-7	28	61	37	33	-8	-29	-33	-40	-61	-53	-55	-47
17		-63	-44	-49	-71	-89	-84	-73	-59	-47	-36	-30	-12	-10	-24	-18	-7	46	5	-20	-22	-36	-49	-49	-39	-37
18		-36	-43	-41	-29	-33	-47	-47	-54	-50	-45	-38	-22	-17	-4	-13	-4	-10	-8	-13	-18	-17	-17	-20	-16	-27
19		-16	-16	-12	-14	-18	-24	-37	-26	-29	-28	-33	-33	-3	-4	-1	4	-3	-6	-13	-6	-3	-4	-2	-6	-14
20		-11	-12	-3	1	-11	-84	-76	-76	-67	-45	-30	-36	-30	-26	-19	-14	-6	-3	3	-3	-8	-1	-21	-36	-26
21		-25	-17	-15	-34	-30	-62	-64	-56	-51	-57	-46	-19	-9	-4	25	21	-13	-7	-8	-22	-6	-29	-20	-23	-24
22		-26	-50	-48	-15	-17	-22	-22	-34	-43	-44	-49	-22	-23	-7	1	3	-1	-3	-7	-8	-6	-10	-12	-10	-20
23		-9	-3	-1	-4	-11	-19	-34	-44	-52	-48	-39	-26	-5	26	25	16	6	0	-6	-6	-10	-9	-9	-7	-11
24	Q	-8	-2	-1	-1	-3	-9	-20	-37	-53	-57	-45	-31	-18	-7	-7	-1	4	8	8	9	1	1	9	6	-11
25	Q	-2	2	7	7	3	-6	-19	-30	-32	-33	-30	-25	-13	-6	-4	5	13	6	7	4	-2	-4	-4	-3	-7
26	Q	-2	1	4	7	5	-2	-10	-24	-35	-43	-42	-33	-21	-9	-3	2	4	8	8	7	4	2	0	1	-7
27	Q	3	6	6	6	3	-4	-9	-21	-36	-36	-34	-28	-21	-8	-7	-1	7	11	10	9	8	5	5	4	-5
28		4	5	6	4	1	1	1	-2	-13	-37	-42	-21	-13	0	5	25	58	32	30	-9	-45	-31	-17	-22	-3
29		-22	-3	-1	-11	-33	-41	-45	-53	-51	-44	-38	-31	-12	2	16	18	39	43	37	27	16	30	16	-51	-8
30	D	-30	-9	4	-28	-20	-30	-53	-143	-142	-85	-55	39	178	302	384	178	26	43	-49	-108	-70	-103	-38	-28	7
31		-51	-56	-55	-54	-36	-35	-39	-46	-50	-59	-59	-35	-37	3	-13	-18	-10	-12	9	-1	2	0	-7	-15	-28
All		-19	-20	-20	-18	-21	-33	-47	-51	-49	-44	-36	-21	-8	19	23	15	13	7	3	-5	-10	-14	-15	-19	-15
Quiet		-3	0	2	3	1	-6	-15	-27	-37	-40	-33	-25	-15	-5	-4	1	8	8	9	7	3	2	3	3	-7
Dist.		-32	-43	-47	-44	-44	-74	-135	-134	-98	-67	-39	-4	29	139	140	76	52	21	-8	-35	-44	-50	-33	-44	-22

May 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	105	72	75	75	98	103	95	90	75	71	62	56	69	64	69	82	89	92	84	106	92	80	86	87	82
2		85	87	91	96	101	100	100	97	86	74	64	53	52	59	73	78	80	82	84	93	88	87	85	88	83
3		75	73	91	109	108	107	94	92	86	73	57	48	54	69	83	89	85	97	91	85	102	97	88	84	85
4		80	85	93	92	99	101	90	85	77	68	60	55	58	66	73	85	87	90	88	87	90	94	87	85	82
5	Q	85	93	102	107	112	110	100	90	80	69	55	49	54	58	65	74	76	82	88	81	80	82	82	84	82
6		88	92	99	106	108	109	104	97	86	70	58	53	61	63	70	71	75	80	78	76	73	85	79	81	82
7		83	88	99	105	111	113	107	98	86	73	59	46	47	53	61	70	78	80	84	91	87	79	98	109	84
8	D	119	123	72	94	109	131	93	81	75	69	51	23	-13	-102	-5	-2	36	61	77	161	105	92	118	105	70
9		100	105	117	112	112	115	111	106	98	86	75	66	66	74	82	87	92	94	94	91	92	100	116	98	95
10		106	96	75	80	87	101	103	104	100	93	83	69	66	67	73	81	85	88	89	92	99	103	95	91	89
11		94	99	102	107	109	111	118	114	97	86	73	65	60	67	69	71	80	80	118	100	88	105	105	90	92
12		92	95	107	108	87	99	101	101	87	78	75	65	64	68	68	75	90	85	78	103	103	115	116	115	91
13		112	130	96	90	95	100	91	79	89	77	63	61	61	62	61	80	77	90	81	82	83	87	81	89	84
14		93	95	97	111	115	112	105	99	89	78	67	58	61	73	81	84	82	83	87	97	86	85	86	87	88
15	D	84	83	61	78	101	124	217	218	171	101	87	88	84	95	99	94	86	68	70	109	142	143	127	113	110
16	D	139	119	110	94	82	60	95	106	105	91	82	82	74	70	73	78	85	91	89	90	94	104	110	105	93
17		103	105	92	66	56	89	108	103	105	103	95	89	94	86	84	84	101	95	105	111	113	106	101	92	95
18		99	98	80	97	92	98	97	95	89	85	84	82	91	83	76	86	91	89	88	87	90	86	86	90	89
19		91	89	100	106	110	107	100	97	94	84	78	73	72	78	80	84	88	90	91	86	82	84	87	91	89
20		94	93	100	108	113	88	102	92	67	59	67	58	71	80	80	79	82	81	80	84	86	87	105	114	86
21		117	109	119	108	94	89	85	85	89	81	66	61	61	67	79	73	87	87	92	95	95	98	88	86	88
22		73	65	78	108	107	108	107	101	92	84	76	72	77	81	79	81	86	85	84	85	88	89	95	92	87
23		84	92	101	109	106	105	104	100	91	74	60	58	59	55	66	87	93	98	90	84	84	84	83	84	86
24	Q	89	96	104	112	115	111	106	98	86	73	59	50	53	62	75	82	89	92	91	87	84	82	85	88	86
25	Q	89	96	106	111	117	116	109	95	83	73	62	55	59	65	72	81	86	90	86	85	85	86	89	90	87
26	Q	91	94	100	107	109	111	115	107	95	83	69	58	58	61	69	79	86	86	85	83	83	82	85	88	87
27	Q	89	93	100	106	112	112	106	101	91	77	65	58	55	60	68	76	82	81	80	81	83	84	86	88	85
28		89	95	101	109	117	114	110	102	87	68	50	41	41	43	50	54	60	71	93	129	147	107	91	88	86
29		93	111	127	132	118	115	117	95	74	75	66	60	58	57	60	63	62	56	55	65	85	85	89	129	85
30	D	142	117	117	116	118	122	114	101	79	92	82	57	50	16	9	73	63	39	69	131	93	159	109	81	90
31		76	101	100	85	114	130	123	111	98	86	76	61	60	64	87	80	77	85	85	85	92	94	93	86	90
All		95	96	97	101	104	107	107	101	90	79	69	60	61	60	69	76	81	83	86	94	93	95	95	93	87
Quiet		89	94	102	108	113	112	107	98	87	75	62	54	56	61	70	78	84	86	86	83	83	83	85	87	85
Dist.		118	102	87	91	101	108	123	119	101	85	73	62	53	29	49	65	72	70	78	119	105	116	110	98	89

May 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	72	39	42	59	75	81	91	98	103	105	117	118	136	132	144	147	145	133	100	103	106	95	90	94	101
2		96	103	111	106	109	109	107	104	99	97	99	99	106	114	123	119	114	111	108	102	102	99	87	89	105
3		86	81	79	88	91	91	89	92	90	89	98	102	110	123	125	123	119	125	115	108	101	95	99	101	101
4	_	98	94	95	97	96	98	97	95	91	89	90	98	104	108	108	113	112	114	113	110	104	100	103	103	101
5	Q	102	102	103	103	99	95	93	95	91	86	87	91	96	105	107	107	109	109	108	105	104	104	104	103	100
6		104	106	107	106	102	99	97	93	84	79	84	89	96	97	94	97	100	104	103	103	102	100	100	97	98
7		95	100	104	105	105	101	98	93	88	86	85	89	97	106	110	113	113	111	114	105	89	71	56	29	94
8	D	-56	-140	-132	-38	30	75	73	80	91	96	103	138	229	258	168	231	172	220	210	115	86	113	93	109	97
9		110	84	95	111	123	127	126	121	119	120	118	116	115	117	120	122	130	130	123	118	99	82	63	36	109
10		50	56	49	57	71	84	94	103	109	109	105	106	110	114	118	119	119	119	118	116	114	108	104	109	98
11		114	115	115	116	114	112	110	108	106	108	103	101	107	113	120	130	134	131	126	105	105	54	64	70	108
12		78	100	113	100	91	95	100	102	102	104	109	109	107	111	116	129	139	128	123	110	100	83	74	78	104
13		57	25	34	78	91	106	109	112	118	118	111	112	113	118	135	153	145	137	117	113	109	110	108	111	106
14		114	116	114	112	110	109	109	108	104	102	102	103	112	118	118	119	116	118	122	122	114	111	112	111	112
15	D	106	103	80	26	49	65	123	103	152	174	138	138	138	149	151	147	144	142	156	166	154	72	23	54	115
16	D	57	35	26	41	46	-28	68	138	143	144	161	165	159	172	168	159	141	134	134	131	128	112	100	97	110
17		71	71	83	78	69	94	118	142	151	144	133	154	172	161	156	148	167	145	142	131	112	81	54	64	118
18		81	67	66	81	95	105	118	118	114	115	117	126	147	162	163	170	147	131	127	127	126	122	123	123	120
19		123	125	126	124	120	118	119	121	118	118	119	118	132	130	124	129	131	130	128	122	119	117	117	116	123
20		113	110	112	105	101	90	102	99	116	132	119	116	124	130	130	127	126	123	121	119	119	116	108	104	115
21		105	109	100	79	71	74	84	92	98	105	116	137	151	163	171	179	177	157	147	109	66	104	113	109	117
22		96	84	73	95	104	103	104	106	105	108	107	122	137	141	141	139	132	123	119	118	119	115	116	113	113
23		109	109	116	117	116	119	116	114	111	107	108	111	119	134	148	163	154	141	129	124	121	118	116	116	122
24	Q	117	122	124	122	116	113	114	115	111	106	106	108	110	112	115	118	120	121	118	117	115	115	111	98	114
25	Q	104	114	115	115	114	114	113	112	110	110	108	112	116	116	116	118	119	119	118	116	115	114	115	115	114
26	Q	116	117	115	114	113	115	110	107	105	103	105	105	108	113	116	115	116	115	115	114	114	113	114	114	112
27	Q	114	116	115	115	114	113	115	115	108	103	101	106	105	113	118	119	119	116	112	110	111	111	111	112	112
28		113	114	111	110	110	105	102	96	94	90	89	89	91	94	102	110	126	141	156	117	59	92	104	91	104
29		60	75	92	100	94	90	95	98	103	106	100	102	109	111	112	113	115	121	126	122	113	103	87	63	100
30	D	64	65	61	83	104	119	115	116	155	180	204	246	308	303	342	198	172	199	146	53	30	-3	97	110	145
31		79	54	64	49	84	115	123	125	126	120	112	109	116	150	160	141	132	129	131	126	124	120	108	58	111
All		89	83	84	89	94	97	104	107	110	111	111	117	128	135	137	136	132	131	127	115	106	98	96	93	110
Quiet		111	114	115	114	111	110	109	109	105	101	101	104	107	112	114	115	117	116	114	112	112	111	111	108	111
Dist.		49	20	16	34	61	62	94	107	129	140	145	161	194	203	195	176	155	166	149	114	101	78	81	93	113

Nurmijärvi Finland June 2005 North component X in n
T $({\rm X}=14900~{\rm nT+tabular\ values})$

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	-13	-9	-9	-21	-25	-33	-45	-59	-50	-42	-23	-22	-13	-12	-11	-16	-8	-4	-2	-1	-6	-8	-8	-19
2		-9	-8	-15	-8	-6	-12	-25	-35	-35	-37	-30	-28	-18	-15	-4	8	4	9	12	7	0	3	6	-4	-10
3		-7	-1	1	1	-3	-20	-34	-39	-42	-35	-26	-20	-11	5	3	-3	3	-6	4	-2	2	-4	-2	-1	-10
4	D	2	-1	-8	-6	-7	-9	-14	-25	-36	-39	-29	-30	11	11	41	35	46	3	29	0	-27	-6	-28	-5	-4
5		-20	-14	-12	-13	-12	-25	-53	-54	-54	-48	-46	-20	-6	-10	-12	6	4	12	26	-1	-11	-8	-18	-20	-17
6		-27	-9	-31	-28	-8	-19	-36	-48	-49	-49	-48	-35	-22	-11	-10	-5	6	18	18	11	3	-9	-25	-16	-18
7		-24	-26	-22	-47	-44	-43	-40	-34	-42	-49	-45	-35	-14	-17	-6	-12	-7	0	2	-5	0	0	-16	-15	-23
8		-16	-17	-18	-16	-16	-24	-35	-47	-51	-50	-45	-37	-21	-18	-9	-1	9	7	6	6	1	-2	-4	-8	-17
9		-7	-5	1	4	3	-3	-12	-22	-33	-41	-44	-28	-15	4	20	12	4	0	6	8	4	2	-2	-6	-6
10	Q	-3	0	6	6	2	-6	-19	-33	-46	-50	-40	-27	-14	-7	-4	3	3	9	15	12	7	3	-1	-4	-8
11		-4	-3	-1	4	-2	-4	-11	-24	-29	-33	-26	-27	-8	6	16	18	14	7	12	15	10	6	2	-2	-3
12	D	3	10	7	5	-1	-13	-31	-22	-9	0	1	-8	2	42	51	19	52	84	74	-88	-138	-200	-430	-281	-36
13	D	-96	-115	-70	-94	-108	-123	-93	-59	-60	-57	-37	-7	32	8	14	14	6	2	5	-4	-6		-12	-10	(-38)
14		-13	-10	-5	-8	-18	-25	-31	-31	-33	-38	-34	-32	-24	-4	11	-1	2	2	27	30	-4	-15	14	16	-9
15		8	17	20	1	-19	-6	-16	-43	-59	-55	-43	-27	-3	-7	-10		8	11	11			3	2	3	(-10)
16	D	1	2	1	1	-2	-6	-7	-5	-11	-21	-39	-25	-52	-28	41	9	21	39	26	13	9	10	1	-19	-2
17		-27	-51	-70	-37	-16	-17	-26	-33	-32	-34	-31	-21	-23	-19	11	13	13	-2	15	-2	-3	-8	-8	-6	-17
18		-2	-4	-2	-3	-11	-8	-11	-20	-23	-21	-20	-23	-18	-8	-12	0	9	4	8	10	0	-8	-12	-9	-8
19		-8	-4	-8	-8	-10	-13	-13	-15	-26	-36	-27	-19	-11	-3	-13	21	3	5	7	6	2	-3	-3	-1	-7
20	Q	-2	-2	1	0	-2	-10	-18	-29	-29	-29	-24	-10	-20	-6	-1	9	13	11	6	6	2	-2	-3	-2	-6
21	Q	-2	0	0	1	0	-5	-12	-17	-21	-24	-23	-23	-14	-7	-2	4	1	3	11	11	15	15	14	14	-3
22		16	14	14	14	7	-2	-11	-15	-18	-24	-16	-16	-6	0	4	8	9	11	17	19	13	6	-3	6	2
23	D	-14	-3	2	-25	14	8	-34	-103	-122	-72	-61	-26	12	-38	0	19	-9	6	0	-2	-29	-15	-11	-17	-22
24		-5	-34	-39	-44	-31	-34	-34	-44	-54	-45	-37	-29	-17	-22	-16	-18	-16	-9	-5	-6	-7	-8	-6	-8	-24
25		-11	-12	-16	3	-5	-13	-24	-33	-40	-39	-34	-21	-17	-8	-7	-1	34	32	20	10	0	-8	-21	-29	-10
26		-16	-15	-16	-25	-26	-18	-16	-17	-36	-39	-33	-10	-8	10	10	9	8	10	0	-3	-4	-6	-6	-8	-11
27	Q	-9	-10	-10	-9	-11	-15	-18	-24	-35	-41	-42	-31	-17	-2	-7	-3	10	11	15	17	16	9	6	2	-8
28	Q	2	2	4	2	-5	-5	-7	-11	-18	-23	-23	-14	-10	-12	-9	-2	-4	5	14	17	12	8	6	4	-3
29		6	-1	6	6	0	-6	-9	-11	-22	-32	-40	-33	-8	8	-5	-3	8	7	8	9	9	8	8	7	-3
30		8	8	10	9	-1	-3	-9	-14	-16	-12	-14	-22	-13	2	8	2	16	15	13	19	15	13	7	14	2
All		-10	-10	-9	-11	-12	-17	-24	-32	-38	-37	-33	-23	-12	-5	3	5	8	10	13	4	-4	-8	-18	-14	-11
Quiet		-3	-2	0	0	-3	-8	-15	-23	-30	-33	-30	-21	-15	-7	-4	2	5	8	12	13	10	7	5	3	-5
Dist.		-21	-21	-13	-24	-21	-29	-36	-43	-48	-38	-33	-19	1	-1	29	19	23	27	27	-16	-38	-53	-96	-67	-20

June 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		89	89	107	120	120	119	113	108	100	85	67	57	62	71	85	88	90	92	89	86	83	87	86	88	91
2		88	92	96	106	118	116	107	94	85	70	57	56	59	68	78	83	83	82	82	81	87	82	93	104	86
3		95	90	105	114	117	115	110	105	91	83	67	59	58	66	79	87	88	85	84	82	86	86	87	90	89
4	D	93	96	91	106	112	113	115	112	98	79	60	44	32	31	39	58	50	72	76	123	112	99	91	93	83
5		125	100	127	112	120	117	121	103	83	70	57	50	54	65	76	79	90	95	103	88	85	56	76	98	90
6		96	109	105	92	119	121	124	114	101	89	76	67	63	70	78	84	88	89	86	86	90	88	77	108	93
7		112	100	104	100	95	101	121	110	104	91	74	59	63	65	71	83	86	88	86	88	88	103	98	93	91
8		103	99	91	103	113	115	116	106	92	77	68	60	54	55	63	74	82	87	92	92	89	87	87	83	87
9		91	101	113	117	119	121	118	113	102	82	62	51	50	55	68	83	87	88	86	85	90	89	89	94	90
10	Q	96	104	110	113	113	115	117	115	103	87	64	48	44	50	63	73	80	83	88	93	85	83	85	87	87
11		93	97	104	107	113	113	111	102	91	74	48	38	38	47	60	71	79	80	77	75	86	81	83	95	82
12	D	102	101	111	119	120	122	124	105	88	79	73	63	63	62	68	67	56	52	158	193	206	221	259	207	117
13	D	164	151	94	69	86	58	50	66	77	74	69	73	92	75	84	87	83	90	114	91	86		89	97	(88)
14		104	111	106	108	113	113	107	108	103	88	71	55	53	56	64	71	79	81	75	77	85	85	85	88	87
15		102	104	104	118	103	101	101	104	86	71	62	52	62	55	68		72	76	80			86	89	94	(85)
16	D	97	100	104	107	112	115	120	116	103	91	89	71	66	69	63	64	76	73	72	85	86	79	80	68	88
17		90	77	71	97	100	125	124	118	106	95	82	71	65	69	75	79	90	82	87	98	89	90	88	87	90
18		91	97	100	102	101	109	116	111	110	98	85	75	68	67	78	79	80	86	87	95	103	96	94	97	93
19		100	98	94	96	97	100	104	108	102	89	82	72	66	68	70	76	87	82	80	85	87	83	84	91	88
20	Q	94	99	101	101	103	104	106	99	87	72	57	50	57	64	73	81	88	89	86	84	84	84	87	87	85
21	Q	90	93	97	105	109	113	115	109	101	91	80	70	70	71	76	83	86	86	85	84	83	84	86	86	90
22		92	98	109	111	110	105	105	104	94	79	61	54	53	57	62	68	76	77	78	86	82	88	91	118	86
23	D	109	131	121	84	84	71	74	124	54	67	51	27	12	36	41	56	74	71	105	107	111	112	108	113	81
24		110	93	109	131	123	123	123	119	106	93	77	73	63	65	77	85	91	94	92	88	89	88	84	81	95
25		88	101	102	95	109	107	124	120	106	89	74	67	65	64	69	76	80	76	92	85	99	108	101	79	91
26		85	105	108	97	102	106	117	117	108	95	82	70	70	69	79	86	85	87	88	83	82	81	81	90	91
27	Q	95	100	100	105	110	110	112	110	102	91	77	66	61	64	69	71	72	75	77	78	96	92	91	91	88
28	Q	94	97	104	107	105	111	115	113	103	91	79	71	65	70	77	80	81	82	85	83	79	81	80	79	89
29		89	98	105	109	112	111	112	113	106	92	73	59	60	66	76	83	80	82	81	79	80	82	86	90	88
30		86	92	99	113	113	116	117	114	105	95	83	75	70	66	68	74	75	80	77	79	84	86	90	96	90
All		99	101	103	105	109	109	111	109	97	84	70	60	59	62	70	77	80	82	88	91	93	92	94	96	89
Quiet		94	98	102	106	108	111	113	109	99	86	71	61	59	64	72	78	81	83	84	84	85	85	86	86	88
Dist.		113	116	104	97	103	96	96	104	84	78	68	56	53	55	59	66	68	72	105	120	120	128	125	116	92

June 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		48	69	89	105	115	119	118	117	109	107	105	110	117	120	122	124	126	128	123	122	120	118	116	118	111
2		119	120	117	116	114	115	112	110	110	107	107	112	110	111	115	113	115	116	117	117	117	117	107	99	113
3	_	110	109	114	113	111	112	113	110	104	102	101	107	114	117	118	123	123	121	120	119	116	115	116	117	114
4	D	116	115	111	108	105	107	109	111	110	102	100	102	106	103	116	129	139	152	137	55	36	100	87	50	104
5		68	85	76	90	106	112	114	122	121	122	115	120	125	127	127	131	138	138	122	115	112	82	81	71	109
6		72	101	99	83	97	104	110	114	113	111	110	111	113	118	120	116	116	121	118	118	113	95	56	75	104
7		73	61	78	57	77	89	101	114	123	122	115	121	134	127	128	130	125	122	116	117	116	111	108	106	107
8		103	108	107	107	111	109	112	114	112	104	98	100	104	109	111	115	120	120	118	116	114	114	113	111	110
9		109	113	115	115	113	110	108	107	106	102	100	104	108	117	126	131	127	120	115	114	115	111	109	108	113
10	Q	112	113	116	114	110	111	115	115	110	104	103	105	111	115	122	122	120	120	117	115	111	111	111	111	113
11		111	110	112	112	113	115	117	113	113	110	110	108	108	111	116	118	121	121	119	114	114	110	108	110	113
12	D	111	112	110	110	107	107	107	101	91	94	100	107	110	122	145	156	149	147	88	-25	-11	-140	-131	-124	73
13	D	-146	-156	-56	-6	24	43	63	94	111	125	131	147	184	173	163	142	141	153	156	128	122		119	121	(86)
14		118	117	121	119	120	116	114	117	118	116	115	113	113	117	124	124	124	119	120	124	96	79	105	105	115
15		109	111	115	100	94	88	90	101	114	118	127	131	148	157	150		127	121	118			118	117	118	(118)
16	D	118	119	120	119	114	112	111	108	105	101	119	132	131	137	148	155	152	143	138	131	127	100	97	83	122
17		80	22	5	38	68	102	116	115	115	115	115	119	123	127	134	143	153	140	138	132	123	120	119	119	108
18		120	121	121	116	110	110	112	111	112	108	109	112	119	121	123	123	122	123	122	120	112	110	116	118	116
19		117	117	113	110	109	110	110	107	104	99	104	110	113	113	114	124	130	128	121	120	118	115	115	116	114
20	Q	116	118	117	112	108	108	108	105	105	104	103	110	109	114	116	120	122	121	118	116	115	114	114	115	113
21	Q	117	119	118	115	114	114	114	113	110	106	107	107	107	111	114	118	119	117	113	112	112	111	111	111	113
22		112	113	112	107	102	105	104	100	99	100	99	94	101	104	110	108	108	109	112	112	110	108	99	76	104
23	D	63	58	74	37	13	29	48	75	92	107	112	106	166	164	145	172	152	146	147	88	105	95	109	118	101
24		118	60	68	83	112	124	128	123	119	113	112	122	120	117	119	122	123	121	117	116	117	118	116	103	112
25		95	81	58	62	86	99	104	103	102	105	107	112	117	120	116	120	131	115	121	120	113	107	106	99	104
26		97	105	97	95	108	111	114	114	114	114	111	114	117	124	137	137	132	128	124	120	117	110	102	108	115
27	Q	114	114	116	116	115	117	117	116	115	105	98	99	102	110	115	114	118	118	119	118	114	108	111	114	113
28	Q	115	116	117	114	111	113	113	113	109	103	103	108	113	116	118	119	115	116	120	121	118	116	115	114	114
29		105	104	111	113	110	110	108	105	101	103	105	107	110	116	119	119	118	118	115	114	115	115	114	115	111
30		114	115	111	113	111	110	110	106	103	104	107	111	113	117	125	126	127	124	119	117	115	114	111	108	114
All		95	92	96	96	100	104	107	109	109	108	108	112	119	122	125	127	128	126	122	111	108	100	99	97	109
Quiet		115	116	117	114	112	113	113	112	110	104	103	106	108	113	117	118	119	118	117	116	114	112	112	113	113
Dist.		53	50	72	73	72	79	88	98	102	106	112	119	139	140	143	151	147	148	133	76	76	39	56	49	97

Nurmijärvi Finland July 2005 North component X in n
T (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		15	11	9	15	11	6	-10	-22	-29	-26	-17	-12	3	7	22	9	49	32	53	36	5	10	-9	-11	7
2		-10	-19	-2	2	-7	-15	-19	-16	-30	-32	-31	-21	-9	-2	0	-4	4	19	27	25	6	3	11	-9	-5
3		-8	-13	-19	-6	-8	-9	-18	-31	-52	-55	-42	-19	-4	15	-3	-6	-6	1	3	8	8	3	2	0	-11
4		0	-2	0	-3	-7	-8	-11	-23	-26	-27	-22	-17	-10	-4	1	0	5	8	14	15	9	7	7	1	-4
5	Q	-3	1	2	-1	-11	-18	-24	-33	-37	-40	-28	-12	-1	2	-1	-3	2	8	13	14	12	8	7	5	-6
6	Q	1	3	4	5	7	0	-14	-22	-29	-30	-29	-22	-8	11	14	19	20	15	8	11	10	7	6	7	0
7		4	7	8	0	-4	-11	-16	-16	-19	-16	-17	-12	-1	-8	-1	27	9	15	15	16	10	1	-1	-7	-1
8	Q	-7	-7	-1	10	7	1	-7	-13	-19	-25	-24	-16	2	-1	6	9	12	17	22	23	17	18	9	1	1
9	D	3	6	15	18	18	15	-1	-17	-21	-40	-39	-26	-10	25	83	109	55	22	10	6	-31	-33	-22	-43	4
10	D	-50	-6	2	-30	3	11	-20	-23	0	-14	-18	33	45	91	285	295	161	69	32	-75	-142	-290	-91	-59	9
11		-51	-36	-15	-22	-31	-32	-67	-81	-44	-42	-39	-31	-13	8	1	13	3	11	4	-24	-24	-22	-23	-28	-24
12	D	-27	-25	-20	-134	-143	-89	-41	-25	-34	-33	-32	-43	-28	91	219	39	8	-6	-21	-15	-15	-14	-11	-9	-17
13	D	-13	-9	-6	-10	-13	-14	-14	-27	-62	-87	-39	-66	1	40	14	38	28	40	-1	-15	-14	-5	-10	-22	-11
14		-14	-10	-10	-15	-19	-20	-18	-27	-39	-46	-46	-39	-9	14	5	10	-2	-8	-12	-11	-9	-5	-9	-13	-15
15		-11	-11	-6	-1	-1	-10	-18	-24	-31	-33	-34	-31	-14	-5	-7	4	1	5	9	4	2	-6	-13	-11	-10
16		-10	-17	3	8	8	10	-2	-12	-14	-22	-28	-30	-26	-16	-5	11	20	21	13	14	5	1	-2	-3	-3
17		1	6	17	13	13	10	-5	-14	-26	-56	-82	-70	-11	-1	29	-18	-12	8	2	6	5	9	5	-39	-9
18		-50	-36	-21	-82	-68	-51	-63	-61	-53	-55	-46	-39	-33	-9	-8	-2	1	8	6	-3	-14	-35	-19	-7	-31
19		-12	-20	-21	1	1	-9	-22	-31	-28	-26	-25	-18	-8	-11	-12	-15	-6	-1	6	7	9	-7	-2	-19	-11
20		-13	2	-2	-3	-10	-19	-28	-29	-28	-28	-25	11	26	-43	-9	16	2	5	10	9	-5	0	-1	-20	-8
21		-78	-52	-55	-73	-17	-11	-33	-39	-51	-38	-28	-22	-13	-2	3	-2	21	11	3	5	-7	-9	-12	-21	-22
22		-16	-24	-8	-7	-21	-31	-29	-40	-47	-38	-30	-27	-10	-8	-11	-19	2	25	7	6	4	-4	-6	-6	-14
23		-14	-9	-8	-10	-20	-23	-28	-32	-31	-30	-29	-31	-27	-22	-12	-2	11	0	0	-1	0	-2	-6	-4	-14
24	Q	-6	-5	-5	-5	-8	-14	-20	-27	-34	-35	-32	-27	-24	-11	2	20	17	20	10	5	2	1	-2	-3	-8
25	Q	-3	-4	-7	-6	-6	-7	-10	-17	-20	-21	-22	-26	-23	-12	-3	1	3	10	15	14	11	9	3	5	-5
26		3	0	1	0	-2	-8	-15	-19	-21	-24	-21	-11	-6	-1	1	10	15	10	15	20	14	15	14	12	0
27		8	3	7	3	0	-9	-24	-25	-28	-27	-26	-30	-15	4	-8	9	11	12	9	16	17	-4	6	-12	-4
28	D	-8	-6	-5	-10	-86	-8	-13	-23	-31	-36	-45	-26	17	28	-2	7	13	-1	6	-1	-10	-15	-8	-15	-12
29		-22	3	-8	-10	-13	-11	-21	-24	-27	-27	-11	-4	-26	-18	-1	20	10	40	6	0	-1	2	-3	-8	-7
30		-15	-34	-35	-8	-27	-35	-30	-31	-37	-31	-26	-20	-11	4	8	-6	-10	-4	9	0	-1	0	1	-7	-15
31		-3	3	6	-4	-15	-16	-16	-13	-12	-24	-23	-16	-8	26	-14	-2	0	2	2	3	-1	3	4	-20	-6
All		-13	-10	-6	-12	-15	-14	-21	-27	-31	-34	-31	-23	-8	6	19	19	14	13	10	4	-4	-12	-6	-12	-8
Quiet		-4	-2	-1	1	-2	-8	-15	-22	-28	-30	-27	-21	-11	-2	4	9	11	14	14	13	10	8	5	3	-3
Dist.		-19	-8	-3	-33	-44	-17	-18	-23	-29	-42	-35	-26	5	55	120	98	53	25	5	-20	-42	-71	-29	-30	-5

July 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		95	87	95	112	120	121	123	114	104	91	72	62	54	57	54	58	52	58	57	71	91	99	100	99	85
2		113	105	107	120	122	128	124	122	112	98	83	66	60	60	69	81	89	91	107	93	82	94	104	104	97
3		107	110	103	113	117	113	117	117	105	88	75	63	55	59	71	78	81	81	82	82	83	86	81	81	90
4		89	100	99	109	111	115	118	107	95	77	67	59	58	62	70	78	84	82	82	84	86	88	89	94	88
5	Q	100	95	101	109	117	116	117	109	95	77	60	47	47	60	70	79	84	84	83	83	84	87	91	89	87
6	Q	89	97	103	104	105	109	117	121	113	94	74	54	44	47	57	66	78	85	81	79	79	82	89	95	86
7		93	96	99	104	105	110	111	103	91	75	61	53	45	42	54	65	84	82	82	80	80	76	89	94	82
8	Q	101	106	118	115	113	115	117	114	101	87	70	61	52	48	53	61	73	79	80	81	83	90	95	97	88
9	D	102	107	111	112	116	116	124	127	108	82	60	38	30	28	30	55	68	79	94	122	104	96	126	110	89
10	D	119	131	110	69	69	93	113	85	100	92	78	65	73	76	58	21	59	92	88	127	160	180	141	115	96
11		137	137	107	93	109	113	101	90	91	83	72	65	51	65	66	71	82	81	82	145	102	96	106	110	94
12	D	107	108	70	67	32	36	81	104	109	104	100	122	87	90	135	94	87	94	88	83	84	87	90	93	90
13	D	99	103	104	112	111	110	112	99	105	88	72	48	32	61	56	66	77	121	91	79	79	91	82	83	87
14		89	102	108	101	92	109	119	115	104	95	79	62	63	68	81	87	92	91	90	89	88	86	91	97	92
15		99	103	105	111	117	116	111	107	103	96	85	74	64	67	72	80	87	90	87	97	94	90	89	95	93
16		89	87	104	94	103	107	101	97	94	87	77	70	71	73	75	78	84	88	81	82	87	91	94	99	88
17		102	103	114	116	114	114	115	102	99	107	65	63	68	61	55	62	75	68	88	93	90	88	87	107	90
18		143	143	137	95	94	84	110	115	91	88	90	88	79	83	73	74	80	83	87	95	121	123	111	107	100
19		103	97	101	116	123	118	117	109	102	91	80	72	65	65	72	83	87	90	88	88	90	109	120	110	96
20		121	113	108	110	116	113	112	110	104	89	72	52	32	47	51	53	78	76	88	121	95	87	89	93	89
21		118	155	122	89	82	112	98	108	94	81	79	69	61	61	72	80	83	93	90	105	106	95	123	104	95
22		103	87	105	118	123	118	121	114	102	87	69	58	58	66	75	80	82	113	87	95	76	85	91	90	92
23		88	99	105	111	111	112	113	107	101	89	79	71	67	67	71	78	93	87	88	87	86	86	89	83	90
24	Q	94	98	103	107	108	110	112	112	105	95	86	77	74	75	75	75	76	76	84	92	85	86	91	95	91
25	Q	97	101	106	116	122	123	125	119	108	97	87	81	76	78	79	79	78	79	81	82	82	87	91	89	94
26		101	100	105	107	109	105	100	94	89	80	70	62	56	60	63	67	72	75	74	73	78	80	85	91	83
27		93	104	119	122	121	119	107	100	98	86	74	68	72	72	83	85	89	89	91	76	84	137	111	106	96
28	D	115	108	109	120	76	75	109	105	109	97	79	72	52	54	77	64	72	82	106	80	82	111	102	116	91
29		122	122	121	121	119	113	110	105	104	93	69	66	60	55	57	69	74	66	84	85	81	93	106	88	91
30		110	92	76	110	120	105	103	95	88	85	74	65	65	65	78	85	87	85	85	86	88	91	92	87	88
31		93	100	107	114	114	103	96	97	95	87	79	68	61	65	75	79	85	87	87	85	89	89	93	131	91
All		104	106	106	107	107	108	111	107	101	89	75	66	59	62	69	72	80	85	86	91	90	96	98	98	91
Quiet		96	100	106	110	113	114	118	115	104	90	75	64	59	61	67	72	78	80	82	83	83	86	91	93	89
Dist.		108	111	101	96	81	86	108	104	106	92	78	69	55	62	71	60	73	93	93	98	102	113	108	103	91

July 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		108	107	106	103	101	97	96	92	87	91	94	98	108	115	114	111	126	138	135	137	121	102	78	70	106
2		72	45	60	96	110	113	113	107	104	103	103	109	113	114	121	124	122	126	128	116	112	100	73	81	103
3		92	91	97	103	107	114	114	111	106	101	102	111	121	130	128	125	121	116	113	112	112	112	107	95	110
4		102	106	107	108	112	116	117	111	108	107	104	107	113	114	118	118	119	116	114	113	113	109	102	100	111
5	Q	106	111	110	111	112	106	101	102	98	102	104	112	117	116	114	110	110	112	114	113	112	111	110	108	109
6	Q	103	107	107	108	113	115	112	105	101	97	95	96	95	100	107	114	121	121	114	111	110	110	105	105	107
7		109	112	114	111	108	107	108	104	102	102	106	114	122	119	116	122	128	124	120	117	115	106	98	105	112
8	Q	106	106	105	104	104	106	104	103	100	97	95	94	99	104	111	113	113	112	109	109	109	108	106	106	105
9	D	107	109	109	105	103	99	93	91	91	94	102	113	127	157	228	219	220	195	177	77	104	88	34	35	120
10	D	12	51	92	74	57	93	97	108	109	106	101	127	187	253	382	374	301	247	180	51	-30	-111	-109	8	115
11		13	40	91	117	111	114	109	109	116	116	122	129	143	172	156	161	157	153	144	127	96	106	99	84	116
12	D	84	40	-20	-43	-26	12	69	108	120	129	135	159	191	225	287	195	162	156	134	128	123	123	124	123	114
13	D	123	124	123	121	119	115	108	110	115	122	131	136	161	201	176	183	165	151	120	124	122	114	90	99	131
14		109	117	118	112	103	110	123	123	120	116	116	120	135	140	145	141	132	124	120	121	121	119	116	119	122
15		120	120	120	120	119	118	115	118	118	111	109	110	117	120	124	130	130	130	127	127	112	110	110	117	119
16		111	102	92	79	82	86	93	101	106	108	104	101	106	113	120	124	130	135	128	123	118	117	114	111	108
17		110	115	114	112	110	106	105	104	104	112	119	119	119	117	141	141	135	137	136	129	120	116	81	-25	112
18		-13	-54	-45	-33	-1	52	76	105	119	115	120	124	127	147	138	138	135	134	137	138	123	93	67	81	84
19		103	102	96	109	111	113	118	120	121	117	109	107	115	120	123	121	120	118	118	119	120	122	105	88	113
20		76	102	113	116	112	110	107	108	105	101	98	109	138	150	135	135	156	140	145	124	113	120	116	81	117
21		-1	-17	23	30	59	90	96	108	106	115	124	115	115	119	123	123	134	134	129	124	102	89	93	97	93
22		96	98	111	118	116	116	116	109	100	103	105	107	119	131	145	143	142	136	125	119	87	85	107	112	114
23		114	117	116	120	116	117	116	114	108	103	103	108	118	123	124	125	126	119	119	117	116	116	115	109	116
24	Q	113	117	118	118	117	116	111	106	108	102	98	102	107	113	117	118	119	117	119	118	117	116	116	117	113
25	Q	116	116	114	114	112	107	104	104	102	99	98	100	104	107	111	110	108	113	116	116	114	114	113	103	109
26		105	110	115	116	113	113	111	110	111	108	103	100	109	113	115	120	126	125	121	119	117	114	114	112	113
27		109	105	109	110	109	106	111	110	105	105	99	99	108	123	123	128	128	131	128	121	108	69	77	48	107
28	D	73	77	84	71	58	68	87	101	107	110	111	113	135	179	197	158	145	136	131	118	113	110	92	97	111
29		81	95	106	112	110	110	104	102	98	97	103	125	115	113	117	130	145	125	115	125	118	101	95	86	110
30		93	66	53	90	103	107	112	110	115	115	114	112	116	118	122	123	120	117	120	121	121	120	119	110	109
31		102	105	112	114	112	109	107	106	105	99	98	98	100	121	121	123	120	117	116	115	116	116	107	84	109
All		89	88	93	95	97	102	105	107	107	107	107	112	123	135	145	142	139	134	127	117	109	101	93	89	111
Quiet		109	111	111	111	112	110	107	104	102	100	98	101	105	108	112	113	114	115	114	113	112	112	110	108	109
Dist.		80	80	78	66	62	77	91	104	108	112	116	129	160	203	254	226	199	177	148	99	86	65	46	73	118

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		-28	-41	-15	-3	-7	-10	-13	-26	-40	-59	-21	-24	-1	5	19	17	2	15	11	5	5	1	-4	-9	-9
2		-17	-8	-11	-20	-15	-9	-11	-19	-19	-11	-26	-31	-13	-20	5	9	7	12	9	2	7	4	3	1	-7
3		3	-3	-6	-21	-25	-13	-6	-17	-25	-25	-25	-23	-15	0	-6	1	12	20	26	2	-7	-6	-3	-4	-7
4		-14	-19	-11	6	3	-1	-14	-39	-37	-40	-43	-29	-15	-8	6	16	4	-9	-9	-8	-5	-2	3	2	-11
5		-2	-2	-2	-3	-6	-13	-21	-29	-35	-32	-21	-10	-15	-20	-5	5	32	27	17	7	1	2	8	-2	-5
6	D	-8	-22	-20	-29	-28	-33	-21	-32	-47	-55	-36	-15	-38	-17	-1	35	36	-8	4	-20	-27	-7	-20	-23	-18
7		-13	-8	-10	-29	-28	-31	-54	-45	-61	-58	-56	-23	-19	-7	6	-7	9	11	15	-1	-11	-10	-5	-13	-19
8		-8	-11	-12	-5	-5	-14	-19	-31	-36	-40	-36	-28	-15	6	0	-12	-4	-3	0	1	6	2	-1	-1	-11
9		0	-10	-7	-12	-4	-6	-14	-21	-27	-34	-39	-29	-24	-15	3	7	0	14	2	-1	-1	-12	5	-14	-10
10		-10	-14	-15	-3	-3	-7	-12	-28	-64	-54	-38	-29	-42	6	5	-31	-19	-15	-10	-6	-7	-9	-10	-10	-18
11	Q	-11	-11	-10	-11	-13	-16	-22	-32	-38	-40	-42	-31	-20	-14	-4	-2	0	0	0	1	2	-2	-4	-7	-14
12	Q	-9	-11	-10	-8	-8	-8	-11	-20	-31	-34	-33	-25	-15	-6	4	11	6	4	5	4	1	4	13	5	-7
13	D	1	7	6	17	12	12	8	-3	-9	-15	-16	-8	0	4	5	9	7	7	7	15	3	-3	-35	-3	1
14		-12	-10	-38	-25	0	0	-6	-17	-25	-35	-31	-16	-9	-8	-1	-1	-3	2	0	1	5	-2	2	-7	-10
15		-8	-5	-5	-8	-6	-1	-2	-9	-19	-24	-20	-11	-7	-11	0	4	16	8	16	10	13	15	10	2	-2
16		6	-5	7	-1	-22	1	5	-7	-24	-45	-39	-38	-7	-21	-12	-2	1	3	4	9	4	-3	-3	2	-8
17		-15	-2	-11	-14	-19	-25	-23	-21	-27	-33	-24	-21	-6	-12	-7	11	-8	1	1	3	13	10	1	-15	-10
18		-26	-7	-5	-6	-20	-27	-27	-26	-34	-40	-32	-27	-8	-2	4	6	13	11	5	-4	2	5	-2	-6	-11
19		-10	-13	-4	-3	-7	-18	-26	-28	-28	-33	-27	-11	0	2	6	5	0	-1	1	4	15	4	-3	-4	-7
20	Q	-4	-3	-4	-2	-9	-18	-29	-38	-48	-48	-35	-20	-6	5	7	3	3	2	5	5	-1	-1	1	1	-10
21		2	3	3	0	-4	-9	-13	-19	-23	-29	-31	-24	-3	-3	11	15	15	8	11	6	4	8	7	-7	-3
22		-12	-11	2	7	-1	2	-5	-22	-37	-38	-29	-29	-27	-11	-6	3	-6	2	4	5	4	3	4	4	-8
23		-2	0	1	-2	-4	-12	-18	-29	-38	-30	-24	-22	-10	-17	-8	5	-14	-10	4	1	6	4	6	-5	-9
24	D	0	4	3	-1	4	-3	-23	-44	-40	-20	33	213	189	140	-26	139	-17	-17	23	-135	-69	-78	-66	-45	7
25	D	-60	-104	-92	-47	-57	-86	-92	-90	-78	-73	-63	-42	-26	-6	-18	54	1	-11	-18	-32	-33	-36	-25	-30	-44
26		-38	-45	-53	-35	-32	-44	-52	-57	-50	-49	-51	-44	-32	-24	-25	-23	-25	-21	-14	-14	-19	-21	-17	-18	-33
27		-28	-41	-29	-20	-15	-18	-24	-31	-49	-48	-44	-31	-27	-23	-18	-16	-19	-14	-12	-12	-15	-15	-15	-15	-24
28	Q	-14	-19	-21	-18	-20	-25	-31	-36	-41	-40	-34	-27	-13	-5	-4	-8	-7	-11	-5	-5	-11	-19	-19	-13	-19
29		-4	-27	-20	-17	-19	-34	-34	-32	-31	-27	-25	-23	-17	-14	-12	-12	-16	-15	-12	-10	-9	-9	-9	-10	-18
30	Q	-12	-13	-13	-14	-16	-17	-21	-25	-30	-34	-36	-30	-19	-14	-10	-11	-11	-11	-8	7	0	-6	-8	-5	-15
31	D	-4	-10	-12	-12	-13	-15	-21	-37	-40	-38	-21	-26	19	64	125	316	293	75	-14	-89	-115	-311	-106	-44	-1
All		-12	-15	-13	-11	-12	-16	-21	-29	-36	-38	-31	-17	-8	-2	1	18	10	2	2	-8	-8	-16	-9	-9	-12
Quiet		-10	-11	-12	-11	-13	-17	-23	-30	-38	-39	-36	-26	-14	-7	-1	-1	-2	-3	-1	2	-2	-5	-3	-4	-13
Dist.		-14	-25	-23	-15	-16	-25	-30	-41	-43	-40	-21	25	29	37	17	111	64	9	0	-52	-48	-87	-50	-29	-11

August 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		130	106	106	124	120	115	122	121	109	86	57	46	41	50	53	59	80	90	85	79	88	85	94	105	90
2		105	106	109	112	109	110	109	98	85	72	64	61	53	66	68	73	78	81	85	89	89	93	95	97	88
3		100	105	97	98	89	92	100	106	108	97	81	73	65	67	77	83	89	102	106	99	99	83	95	112	93
4		102	100	96	102	98	109	116	105	97	91	79	64	50	51	66	78	91	92	88	90	99	93	93	95	89
5		95	97	102	107	111	113	113	111	94	73	58	56	57	64	76	83	81	87	105	104	95	89	104	107	91
6	D	96	129	119	96	95	115	111	118	113	82	81	60	61	70	79	102	109	101	103	115	121	99	106	108	100
7		94	107	102	95	101	105	92	94	94	87	81	75	72	82	90	95	97	96	114	100	99	88	93	91	93
8		93	84	95	108	109	101	99	91	90	82	72	63	63	65	76	82	91	92	90	89	86	91	92	86	87
9		89	84	91	98	108	118	119	112	101	89	76	69	67	70	78	82	88	93	100	94	90	88	95	96	91
10		96	105	95	109	117	120	116	108	105	105	95	93	65	61	95	87	90	88	88	88	86	88	90	97	95
11	Q	96	96	101	108	110	111	112	109	100	86	74	69	71	76	78	83	84	86	86	88	88	92	98	96	91
12	Q	98	105	107	110	112	115	114	109	102	93	84	74	71	69	70	75	79	82	86	89	93	89	92	104	93
13	D	104	102	104	97	101	105	112	110	102	92	82	69	56	57	61	67	80	83	80	90	101	102	85	114	90
14		113	110	100	91	115	116	110	108	99	87	77	68	67	72	76	79	85	88	89	91	90	106	109	101	94
15		102	101	102	106	108	109	111	105	97	87	71	64	62	65	69	74	75	80	82	82	86	100	124	101	90
16		96	99	100	110	82	99	123	124	111	93	75	67	48	73	74	73	84	90	94	97	98	80	91	95	91
17		91	96	106	106	107	112	116	117	105	92	73	62	52	57	66	71	101	93	89	94	105	101	102	101	92
18		70	87	108	117	115	119	111	107	101	92	77	68	60	64	83	87	90	108	102	96	99	109	93	98	94
19		88	85	104	111	114	113	105	101	89	78	72	70	72	77	83	92	89	88	87	91	93	99	92	95	91
20	Q	98	100	100	109	112	117	118	113	100	82	66	56	61	73	82	87	89	88	91	97	91	91	92	94	92
21		93	91	98	105	109	112	111	104	94	78	60	49	50	56	61	68	81	100	116	97	103	117	109	90	90
22		87	88	88	92	96	124	127	117	101	80	61	47	46	55	72	79	89	92	89	90	94	93	90	81	87
23		92	98	103	106	110	111	109	103	98	84	65	56	59	64	81	94	105	98	106	89	83	87	89	86	91
24	D	87	109	100	103	111	113	118	100	50	104	295	76	16	12	36	26	74	56	59	97	140	114	140	163	96
25	D	139	130	114	126	141	134	113	107	102	86	74	69	67	71	71	111	101	101	107	99	87	87	83	96	101
26		94	94	93	104	127	122	112	100	104	97	82	72	72	79	89	98	100	99	100	99	103	97	93	104	97
27		113	93	95	118	119	126	129	124	110	99	83	71	70	76	86	92	92	95	96	98	97	98	99	102	99
28	Q	104	115	121	127	123	119	119	115	107	95	79	73	72	74	79	86	89	90	89	90	100	118	110	108	100
29	•	124	123	108	131	123	119	100	97	98	92	77	66	66	71	78	85	89	89	94	96	98	100	102	104	97
30	Q	103	105	106	109	112	111	109	105	98	90	76	66	63	66	74	83	88	89	90	88	94	108	113	107	94
31	D	105	107	112	117	115	121	116	100	90	72	53	48	38	36	48	-5	51	69	185	130	112	119	134	125	92
All		100	102	103	108	110	114	113	108	98	88	81	65	59	64	73	78	87	90	96	95	97	97	100	102	93
Quiet		100	104	107	112	114	114	114	110	101	89	76	68	67	72	76	83	86	87	88	90	93	100	101	102	94
Dist.		106	115	110	108	112	117	114	107	91	87	117	65	48	49	59	60	83	82	107	106	112	104	110	121	95

August 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		87	86	93	106	111	111	113	111	108	103	97	95	110	127	135	142	145	132	122	120	117	108	89	99	111
2		111	116	110	103	97	94	94	96	102	103	100	105	107	111	110	114	115	115	115	115	113	114	115	113	108
3		107	111	111	107	103	102	105	107	103	94	90	97	105	117	125	126	128	136	126	120	116	98	88	87	109
4		99	92	79	88	96	103	108	111	115	117	115	117	132	141	136	145	146	138	130	123	118	115	98	93	115
5		106	116	119	119	116	113	111	108	109	103	100	104	116	123	128	129	133	137	144	122	119	118	110	99	117
6	D	48	43	75	89	88	98	105	108	114	125	121	130	135	144	149	171	182	165	154	137	94	89	93	91	115
7		56	59	77	84	104	105	103	103	106	111	118	117	121	125	135	130	128	126	130	120	117	113	85	106	107
8		110	105	103	112	112	114	116	115	114	115	119	122	128	138	140	133	125	121	120	119	118	115	100	107	118
9		108	113	114	114	113	115	115	108	105	108	111	115	119	120	127	134	133	139	138	128	117	96	88	90	115
10		101	109	110	112	113	114	109	105	111	125	143	164	164	188	205	169	143	134	129	124	122	121	118	118	131
11	Q	120	119	119	120	117	115	117	117	120	116	113	109	111	113	118	123	121	121	120	119	118	119	117	115	117
12	Q	115	116	118	119	117	115	113	113	109	107	109	113	117	119	118	115	117	119	120	120	121	117	109	76	114
13	D	100	105	103	92	96	103	103	108	108	105	104	104	109	113	116	116	121	118	116	117	85	79	45	64	101
14		94	107	97	96	104	109	107	113	112	109	102	103	114	119	119	118	114	113	114	114	114	113	110	107	109
15		111	114	116	116	115	116	122	123	118	102	93	96	106	113	115	115	115	113	117	115	114	113	103	109	112
16		106	110	114	112	98	96	102	101	100	104	109	108	128	152	147	135	127	127	124	119	116	72	68	86	111
17		76	98	102	112	113	116	123	120	115	113	113	114	121	124	121	134	145	134	127	123	103	81	82	87	112
18		79	97	111	115	115	118	120	113	110	113	111	112	120	128	139	133	131	133	115	117	115	105	108	107	115
19		109	108	116	119	120	121	121	117	112	112	111	107	110	117	123	126	119	117	117	116	107	100	106	112	114
20	Q	114	115	117	118	117	117	116	110	104	105	108	112	117	120	121	118	117	114	116	116	115	115	115	114	115
21		114	114	117	117	116	113	111	108	100	93	89	89	98	105	109	110	113	123	125	110	108	103	89	90	107
22		100	109	112	113	112	114	110	106	105	103	100	107	117	130	134	131	125	119	116	117	117	116	114	96	113
23		90	105	113	116	117	115	115	112	109	106	108	113	126	139	146	150	143	132	128	120	118	115	115	111	119
24	D	87	82	98	107	108	106	105	116	112	126	193	253	242	275	207	316	278	206	200	90	72	45	121	124	153
25	D	89	65	108	127	132	131	128	136	142	142	144	148	161	162	150	171	153	149	135	131	131	124	112	127	133
26		125	114	99	102	115	121	125	126	126	124	121	121	125	132	133	131	127	127	128	130	132	129	122	119	123
27		119	109	101	110	115	119	119	116	115	115	115	119	124	130	133	131	128	129	128	126	125	125	125	123	121
28	Q	113	107	114	118	119	122	121	121	119	117	117	119	122	124	121	122	124	123	123	124	128	123	125	118	120
29		94	96	99	96	100	105	107	109	110	111	109	114	122	124	121	125	127	126	125	123	123	123	123	123	114
30	Q	122	122	123	122	121	120	122	123	121	117	113	112	116	119	122	123	122	120	122	122	122	122	120	124	120
31	D	124	123	122	123	121	118	115	112	111	106	110	113	137	179	289	359	236	196	153	108	94	-118	-15	94	130
All		101	103	107	110	111	112	113	113	112	111	113	118	125	134	138	145	138	132	128	119	114	100	100	104	117
Quiet		117	116	118	119	118	118	118	117	115	112	112	113	117	119	120	120	120	119	120	120	121	119	117	110	117
Dist.		89	83	101	108	109	111	111	116	117	121	134	150	157	175	182	227	194	167	152	117	95	44	71	100	126

Nurmijärvi Finland $\label{eq:component X in nT (X = 14900 nT + tabular values)}$ September 2005 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		-37	-55	-58	-46	-60	-43	-41	-46	-49	-50	-50	-42	-53	-40	-22	-18	-24	-21	-18	-15	-20	-12	-18	-15	-35
2	D	-18	-25	-30	-25	-40	-39	-25	-31	-54	-51	-41	-33	-33	-35	-9	-7	28	4	-57	-51	1	-9	-13	-17	-25
3		-51	-104	-103	-44	-60	-60	-30	-42	-50	-99	-63	-41	-10	36	0	-30	-30	-29	-24	-18	-17	-16	-21	-28	-39
4		-17	-28	-48	-39	-35	-40	-63	-49	-57	-85	-56	-11	-21	-12	-13	-4	-21	-19	-23	-22	-25	-17	-19	-25	-31
5		-26	-46	-20	-19	-26	-32	-32	-36	-48	-53	-41	-26	-18	-19	-12	-10	-24	-20	-13	-13	-2	-15	-14	-13	-24
6		-10	-31	-13	-6	-14	-17	-24	-37	-44	-40	-48	-47	-25	-2	-16	-11	-25	-12	-13	-12	-13	-11	-10	-11	-21
7		-9	-13	-26	-21	-6	-10	-15	-23	-27	-27	-31	-29	-20	-7	-3	-6	-10	-10	-4	-5	-5	-4	-4	-4	-13
8	Q	-7	-6	-15	-21	-18	-19	-20	-26	-28	-32	-28	-19	-13	-3	-3	-4	-11	-3	-7	-8	-3	-1	0	-5	-12
9		-11	-8	-9	-13	-15	-17	-17	-22	-26	-26	-25	-26	-13	-1	61	21	28	-6	-13	5	5	-9	-18	-27	-8
10		-33	-17	-12	-14	-16	-19	-42	-44	-41	-33	-29	-31	-25	1	20	34	60	24	2	-26	-44	-77	-61	-79	-21
11	D	-68	-72	-31	-122	-77	-70	-165	-92	-99	-83	-59	36	80	199	69	43	-38	13	-49	-69	-97	-102	-62	-94	-42
12	D	-45	-67	-80	-64	-88	-62	-106	-121	-90	-49	-63	-42	-43	-36	12	18	2	-8	-4	-16	-72	-55	-70	44	-46
13	D	-71	-65	-84	-51	-60	-60	-61	-79	-84	-75	-27	-11	26	96	-17	-46	-43	-36	-30	-15	-20	-27	-24	-29	-37
14		-35	-33	-31	-32	-39	-58	-65	-70	-69	-60	-59	-48	-46	-12	-25	-23	-24	-17	-24	-10	-23	-26	-28	-33	-37
15	D	-54	-32	-31	-30	-30	-26	-28	-38	-54	-53	-26	-21	14	45	50	129	-20	-17	-20	-28	-69	-57	-47	-36	-20
16		-40	-46	-64	-40	-38	-41	-49	-57	-57	-47	-45	-39	-19	-1	-22	-16	-29	-28	-8	-28	-39	-27	-22	-22	-34
17		-21	-23	-24	-26	-30	-23	-28	-40	-45	-42	-41	-16	-5	-16	-13	8	-24	-29	-20	-25	-26	-23	-36	-28	-25
18		-22	-21	-25	-29	-24	-26	-29	-45	-59	-57	-42	-32	-37	-18	-20	-26	-24	-17	-14	-21	-15	-14	-18	-19	-27
19		-20	-23	-20	-18	-19	-24	-31	-42	-48	-51	-44	-33	-21	-19	-18	-20	-15	-22	-21	-12	-17	-18	-16	-19	-25
20	Q	-18	-17	-18	-16	-19	-28	-35	-42	-53	-49	-47	-35	-18	-17	-12	-12	-19	-16	-14	-17	-19	-17	-16	-20	-24
21	Q	-17	-16	-12	-12	-11	-14	-22	-35	-47	-49	-45	-31	-21	-18	-18	-17	-13	-15	-16	-14	-14	-14	-14	-11	-21
22		-12	-12	-14	-17	-12	-15	-19	-34	-41	-43	-43	-30	-21	-19	-10	-13	-25	-21	-18	-23	-11	-10	-10	-11	-20
23		-13	-11	-14	-15	-20	-23	-20	-32	-36	-38	-33	-27	-20	-20	-16	-15	-14	-11	-12	-10	-15	-17	-11	-9	-19
24	Q	-7	-16	-15	-12	-9	-12	-17	-22	-27	-30	-27	-22	-21	-13	-12	-11	-8	-8	-7	-7	-4	-5	-8	-8	-14
25	Q	-9	-9	-10	-10	-10	-12	-16	-20	-27	-32	-30	-18	-24	-24	-10	-8	-5	-6	-4	-1	-2	-2	-2	-5	-12
26		-4	-24	-26	-13	-5	-5	-12	-14	-27	-39	-41	-42	-47	-39	-15	-16	-16	-13	-15	-21	-11	-12	-14	-5	-20
27		-7	-14	-22	-12	-26	-20	-16	-23	-42	-49	-52	-46		-27	-24	-21	-22	-16	-9	-3	2	-4	7	4	(-19)
28		-9	-22	-10	0	3	-14	-19	-28	-34	-38	-39	-24	-32	-25	-29	-25	-23	-9	-9	-8	-9	-9	-7	-8	-18
29		-10	-17	-8	-8	1	-4	-10	-14	-20	-27	-26	-24	-22	-30	-26	-18	-20	-24	-18	-12	-8	-7	-8	-7	-15
30		-5	-7	-8	-6	-5	-5	-11	-15	-18	-26	-26	-23	-12	-13	-28	-26	-13	-6	-5	-4	-8	-3	-4	-7	-12
All		-24	-29	-29	-26	-27	-28	-36	-40	-47	-48	-41	-28	-18	-3	-6	-5	-14	-13	-16	-17	-20	-21	-20	-18	-24
Quiet		-12	-13	-14	-14	-14	-17	-22	-29	-36	-38	-35	-25	-19	-15	-11	-11	-11	-10	-10	-10	-8	-8	-8	-10	-17
Dist.		-51	-52	-51	-58	-59	-51	-77	-72	-76	-62	-43	-14	9	54	21	27	-14	-9	-32	-36	-51	-50	-43	-26	-34
		- 71	02	01	00	33	JI	- ''	12	10	02	10	1-1	9	94	21	21	1.1	-3	32	30	- 01	00	10	20	-04

September 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		108	108	108	120	110	106	103	99	95	89	80	75	68	78	89	95	96	94	93	96	102	113	100	98	97
2	D	102	95	95	104	100	92	98	98	103	85	67	64	66	71	79	81	93	154	116	102	93	100	99	92	94
3		93	38	82	85	97	75	109	114	101	90	77	75	81	86	105	90	94	95	95	97	100	100	83	73	89
4		101	109	109	76	72	78	95	95	105	85	69	92	88	96	104	122	113	135	127	106	107	80	106	97	99
5		96	80	108	117	117	111	108	103	93	82	69	68	68	84	100	104	124	109	99	100	107	95	96	95	97
6		107	115	123	122	122	120	117	114	103	87	72	65	64	73	82	98	104	102	102	99	98	93	96	90	99
7		94	101	87	89	102	107	99	97	88	81	72	77	81	80	87	94	95	97	98	95	96	98	99	97	92
8	Q	93	89	109	115	116	117	113	104	94	90	83	82	83	83	87	92	104	99	95	102	111	96	98	96	98
9		100	102	103	101	106	113	115	108	98	86	67	67	67	69	86	62	70	88	77	77	103	141	129	119	94
10		114	111	114	114	121	123	128	105	101	88	74	64	68	64	57	63	138	125	95	110	116	154	131	89	103
11	D	93	71	147	148	171	186	130	98	121	127	120	92	105	117	110	142	113	132	98	128	129	131	134	117	123
12	D	124	128	114	115	95	119	101	108	109	113	101	78	75	76	70	137	112	100	120	205	169	145	144	136	116
13	D	153	135	97	89	82	81	96	90	95	82	119	112	91	115	116	103	104	103	107	101	98	103	105	102	103
14		115	122	126	115	113	102	97	97	79	90	79	77	90	82	109	99	96	107	88	95	104	109	111	113	101
15	D	113	105	116	111	101	101	99	99	92	75	62	65	57	51	92	92	92	82	93	101	96	149	134	117	96
16		107	108	96	105	116	116	100	98	97	99	88	83	89	113	108	113	100	103	103	118	125	122	104	102	105
17		103	101	100	97	96	107	111	110	101	89	82	76	81	96	99	139	112	107	109	105	103	99	98	107	101
18		101	96	98	93	101	104	107	111	93	81	83	80	80	90	99	102	103	105	119	108	106	110	101	98	99
19		97	85	102	110	111	112	109	106	98	88	79	78	80	86	95	103	111	103	113	114	107	105	102	98	100
20	Q	100	96	97	101	108	110	110	98	98	86	75	73	81	92	101	104	102	101	102	108	98	91	91	95	97
21	Q	97	96	101	104	107	111	111	107	97	87	76	73	77	83	90	97	97	94	95	97	97	98	97	95	95
22		90	90	95	97	105	113	115	109	97	90	81	73	69	73	82	93	86	87	91	98	96	96	98	97	93
23		100	94	102	107	97	95	100	107	97	93	85	82	80	82	83	88	92	95	98	105	117	109	102	95	96
24	Q	104	113	113	112	111	108	108	107	104	98	89	79	82	78	81	86	90	91	92	93	94	96	100	100	97
25	Q	101	101	103	103	107	111	114	113	105	96	81	62	55	65	76	79	81	84	89	92	96	97	96	99	92
26		101	92	83	98	112	117	115	114	109	96	81	69	56	64	67	73	82	87	107	113	128	167	129	105	99
27		104	103	85	86	100	90	105	110	107	102	87	81		69	76	85	91	98	103	101	98	100	96	112	(95)
28		105	102	99	103	105	105	96	100	94	83	81	74	80	74	91	97	103	124	105	97	96	100	99	105	97
29		105	94	95	99	99	105	109	107	100	93	87	83	81	78	85	95	100	115	99	97	93	96	98	99	96
30		100	102	100	98	97	102	105	102	95	91	84	77	74	71	93	84	85	86	90	92	108	127	109	97	95
All		104	99	104	104	106	108	107	104	99	91	82	76	76	81	90	97	99	103	101	105	106	111	106	101	98
Quiet		99	99	105	107	110	111	111	106	100	91	81	74	76	80	87	92	95	94	94	98	99	96	96	97	96
Dist.		117	107	114	113	110	116	105	98	104	96	94	82	79	86	94	111	103	114	107	127	117	126	123	113	106

September 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mea
	_	125	107	126	106	117	112	115	119	123	125	130	145	150	144	142	140	134	133	131	132	135	129	114	112	12
	D	118	123	119	121	114	106	106	110	120	127	127	140	151	155	159	180	224	241	117	22	115	140	129	113	1
1		94	9	5	63	78	100	115	123	129	137	150	159	173	201	193	154	138	134	132	131	131	130	108	59	1
		88	111	106	69	71	83	101	131	144	142	148	178	173	170	180	173	156	152	137	126	118	100	108	111	1
5		108	96	114	124	124	122	125	126	126	127	123	129	141	147	146	143	149	139	133	131	111	118	125	122	1
i		89	79	92	101	113	119	121	123	121	120	123	124	132	146	147	156	150	144	141	134	129	127	122	120	1
•		119	124	119	111	122	120	120	119	121	123	124	131	134	133	132	129	126	124	125	126	126	126	126	125	1
3	Q	122	107	97	114	122	122	123	122	124	123	122	120	122	128	128	131	136	133	134	136	128	122	121	121	1
9		123	125	125	127	125	125	122	119	116	113	117	122	125	135	157	177	210	244	178	154	163	125	102	110	1
10		108	122	129	133	132	127	122	119	121	120	120	123	125	133	150	186	255	203	201	136	113	76	73	4	1
1	D	-21	-68	-22	-97	-14	51	41	100	160	206	241	294	304	339	247	238	173	158	93	79	-4	10	63	26	1
12	D	45	13	25	69	88	118	124	153	145	196	146	138	134	140	171	247	205	191	95	76	68	105	33	0	1
13	D	34	63	59	89	83	99	129	137	150	154	212	224	241	303	187	145	138	138	141	122	114	134	134	97	1
14		92	97	122	131	130	127	139	154	151	152	156	158	146	157	186	174	165	155	133	115	91	121	124	109	1
15	D	89	124	125	129	127	129	133	133	131	134	130	144	155	216	304	278	217	156	151	108	-24	39	76	105	1
16		112	119	98	95	102	119	126	135	148	160	166	170	170	181	168	161	151	148	128	127	112	119	125	134	1
17		134	135	136	135	130	133	135	136	133	132	134	139	155	160	160	185	167	151	141	124	134	134	108	118	
18		131	130	132	128	125	128	132	134	138	136	145	150	144	153	154	146	141	140	138	134	133	127	126	128	1
19		128	120	123	129	133	133	135	137	137	133	130	128	130	135	138	141	145	144	141	131	126	126	127	131	1
20	Q	132	131	130	130	130	129	128	127	127	128	128	129	138	140	143	142	140	138	136	131	132	133	131	129	1
21	Q	129	130	131	132	133	133	132	130	130	129	126	127	131	137	142	138	135	134	134	132	131	131	130	130	1
22	•	127	123	125	127	129	131	130	127	127	126	125	127	130	134	144	157	161	157	153	151	140	135	133	131	1
23		129	126	129	129	128	123	122	126	129	128	125	124	127	132	131	130	130	130	131	132	129	130	127	123	1
24	Q	113	115	119	121	122	124	125	125	125	123	121	120	117	120	124	125	127	128	128	128	128	127	127	127	1
25	Q	126	126	125	126	127	126	126	124	121	117	114	122	125	122	125	126	127	128	127	127	127	126	126	124	1
26		123	113	88	100	106	112	117	120	119	117	119	126	133	136	144	143	141	143	145	104	69	87	98	117	1
27		121	118	113	106	115	121	124	125	126	129	130	129		138	141	142	142	141	138	134	131	128	98	77	(1:
28		101	113	114	117	118	119	121	123	129	128	122	126	132	140	151	154	157	149	128	130	129	128	126	125	` 1
29		125	123	118	119	121	122	121	120	119	118	123	128	133	135	134	136	139	139	134	131	129	127	127	127	1
30		126	125	125	124	123	124	125	123	121	121	122	121	126	139	167	141	132	129	129	128	130	114	111	107	1
All		106	103	105	107	112	118	121	127	130	134	137	143	148	158	160	160	157	151	136	122	113	116	113	105	1
Quiet		125	122	121	125	127	127	127	126	125	124	122	124	127	129	132	132	133	132	132	131	129	128	127	126	1
Dist.		53	51	61	62	79	100	106	127	141	163	171	188	197	230	213	217	191	177	119	81	54	85	87	68	

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	-7	-7	-7	-7	-8	-14	-35	-42	-44	-41	-42	-36	-32	-20	-19	-13	-12	-12	11	-16	-14	-10	-10	-18
2	D	-18	-33	-17	3	-16	-5	-15	-25	-43	-40	-33	-24	-24	-19	-21	-33	-23	-9	-14	-10	-10	-7	-17	-5	-19
3		-16	-14	-11	-9	-17	-17	-18	-27	-30	-30	-27	-33	-23	-20	-19	-15	-13	-9	-9	-10	-6	-5	-8	-8	-16
4		-8	-13	-13	-14	-11	-11	-18	-25	-36	-37	-28	-27	-30		-20	-17	-12	-10	-9	-9	-6	-10	-9	-9	(-16)
5		-9	-10	-9	-7	-4	-8	-15	-28	-42	-42	-41	-25	-18	-18	-14	-13	-10	-9	-9	-8	-2	-8	-4	-4	-15
6		-8	-12	-8	-8	-2	0	-6	-18	-33	-40	-41	-33	-17	-16	-10	-9	-10	-13	-18	-11	-4	-5	-5	-7	-14
7		-10	-8	-1	-1	5	10	8	-3	-13	-30	-37	-28	-14	-7	-15	-9	2	-6	-8	-17	-12	-33	-59	-40	-14
8	D	-50	-31	-13	-11	-13	-17	-28	-47	-37	-51	-61	-40	-30	-26	-21	-26	-16	-10	-15	16	-22	-18	-4	-15	-24
9		-14	-21	-19	-14	-13	-13	-15	-20	-24	-26	-29	-32	-23	-17	-18	-14	-12	-11	-8	11	-17	-13	-8	-13	-16
10		-9	-9	-14	-13	-7	-10	-27	-24	-30	-45	-37	-32	-17	-14	-13	-10	-10	-10	-9	-13	-10	-9	-2	-11	-16
11		-11	-21	-13	-15	-13	-15	-19	-27	-32	-34	-33	-24	-20	-19	-19	-12	-16	-16	-10	-5	-14	-6	-10	-13	-17
12	Q	-12	-12	-11	-9	-8	-7	-9	-18	-27	-34	-34	-28	-21	-16	-10	-9	-8	-7	-6	-6	-7	-3	-7	-7	-13
13		-7	-8	-8	-5	-3	-2	-9	-22	-32	-37	-38	-31	-24	-15	-10	-8	-9	-11	-7	-10	-13	-12	-8	-13	-14
14	Q	-13	-12	-10	-9	-1	-1	-6	-21	-35	-45	-45	-35	-25	-14	-9	-7	-4	-4	-4	-4	-3	-3	-3	-4	-13
15	Q	-5	-5	-2	0	2	2	-6	-17	-30	-37	-34	-22	-12	-7	-7	-6	-6	-5	-3	-2	-2	-1	-2	-1	-9
16		-2	-4	-5	-4	-4	0	-11	-26	-33	-38	-39	-31	-27	-25	-26	-35	-38	-27	-29	-22	-17	-11	-16	-23	-21
17	D	-24	-15	-20	-20	-6	-15	-32	-34	-40	-43	-34	-31	-28	-34	-31	-33	-33			-18	-16	-11	-12	-12	(-25)
18		-13	-12	-12	-17	-7	-6	-15	-25	-32	-33	-30	-24	-29	-18	-12	-13	-20	-12	-9	-9	-9	-10	-8	-10	-16
19		-11	-7	-11	-4	-3	-4	-10	-23	-35	-39	-29	-23	-20	-24	-20	-24	-24	-20	-20	-16	-11	-17	-16	-16	-18
20	Q	-15	-12	-13	-11	-8	-6	-8	-18	-29	-34	-36	-26	-18	-12	-11	-13	-11	-8	-6	-7	-6	-5	-5	-6	-13
21		-8	-8	-7	-5	-4	-3	-6	-12	-21	-25	-23	-17	-9	-7	-6	-5	-3	-2	-1	0	2	7	8	6	-6
22		-7	-3	-15	-11	-7	2	-2	-11	-20	-26	-27	-24	-18	-12	-8	-7	-6	-3	-1	-3	-8	-4	-5	-3	-9
23	Q	-8	-7	-7	-3	-2	-1	-1	-5	-12	-19	-23	-20	-13	-7	-6	-7	-4	-4	-3	-4	-4	-5	-5	-6	-7
24		-4	-4	-5	-2	3	5	4	-2	-10	-18	-19	-16	-12	-10	-12	-20	-12	-1	-5	-5	-9	-3	0	5	-6
25	D	3	2	-12	39	10	14	-4	-25	-38	-46	-44	-39	-31	-23	-28	-28	-12	-39	-33	-39	-30	-59	-9	-11	-20
26		-16	-16	-14	-11	-7	-9	-14	-20	-39	-34	-33	-31	-23	-17	-16	-15	-11	-15	-8	-21	-15	-15	-11	-15	-18
27		-20	-16	-10	-9	-7	-8	-10	-17	-24	-27	-29	-17	-9	-6	-25	-23	-31	0	-18	-17	-13	-13	-12	-13	-15
28		-13	-11	-9	-8	-7	-5	-10	-22	-37	-46	-37	-27	-24	-19	-19	-19	-17	-13	-6	-5	-13	-9	-11	-7	-16
29		-10	-9	-7	-6	-3	-4	-11	-21	-30	-30	-25	-17	-10	-6	-4	-5	-12	-12	-16	-15	-9	-7	-8	-7	-12
30		-9	-8	-6	-2	2	2	0	-9	-21	-26	-23	-20	-9	-10	-11	-9	-11	-8	-11	-2	-8	-6	-11	-13	-10
31	D	-12	-12	-11	-2	5	6	5	-4	-9	-20	-17	-19	-22	-18	-24	-12	-11	-26	-56	-91	-64	-83	-38	-36	-24
All		-12	-11	-10	-6	-5	-4	-10	-20	-29	-35	-33	-27	-20	-16	-16	-15	-13	-11	-12	-11	-12	-13	-10	-10	-15
Quiet		-10	-9	-9	-6	-4	-3	-6	-16	-26	-34	-34	-26	-18	-11	-9	-8	-7	-6	-4	-5	-4	-3	-4	-5	-11
Dist.		-20	-18	-15	2	-4	-3	-15	-27	-33	-40	-38	-30	-27	-24	-25	-27	-19	-21	-29	-29	-28	-35	-16	-16	-22

October 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		100	107	116	109	102	99	99	100	84	79	76	76	77	89	104	111	102	98	100	120	104	111	90	111	98
2	D	124	79	75	108	109	102	102	102	105	92	84	82	79	90	97	99	105	109	91	93	97	99	107	96	97
3		114	107	110	106	105	104	102	106	100	97	87	87	86	87	93	95	94	95	97	98	99	95	103	102	99
4		96	103	103	103	104	107	108	108	103	93	79	76	75		87	94	96	97	102	98	100	103	98	97	(97)
5		98	94	101	105	106	110	112	109	101	87	85	75	76	80	87	92	92	92	92	97	103	101	99	105	96
6		105	103	104	103	101	105	109	109	103	89	80	75	73	78	89	94	94	104	107	97	98	96	97	98	96
7		99	96	100	102	102	104	108	109	103	90	81	78	65	57	63	81	83	84	124	104	110	139	179	130	100
8	D	123	117	110	113	118	122	118	104	108	92	91	85	77	77	80	80	85	95	99	157	110	101	85	95	102
9		110	96	95	102	103	106	107	108	105	99	87	85	79	78	85	91	94	97	97	117	111	108	95	116	99
10		113	106	96	97	101	111	109	101	102	97	95	79	81	77	83	91	92	95	95	99	100	100	105	101	97
11		128	98	110	107	106	110	110	112	107	97	86	78	73	78	88	98	118	107	101	103	105	97	97	103	101
12	Q	101	100	100	102	103	105	109	112	110	102	90	82	78	83	89	92	93	95	97	97	98	101	99	95	97
13		97	99	98	100	101	104	110	111	108	95	85	76	77	86	93	94	96	102	116	125	122	109	106	103	101
14	Q	101	99	101	100	100	107	113	114	107	95	79	73	76	83	91	92	93	95	96	96	97	98	98	99	96
15	Q	99	98	97	97	98	101	107	111	109	98	83	73	75	83	91	92	93	94	95	95	96	97	97	97	95
16		97	98	99	97	99	104	108	108	108	93	78	71	66	66	76	83	93	106	125	117	111	105	108	155	99
17	D	116	93	84	71	60	95	93	95	91	85	82	70	77	79	91	114	100			107	106	104	100	99	(91)
18		100	100	100	92	94	102	103	103	101	96	88	80	80	88	94	99	107	96	98	105	118	107	103	100	98
19		100	97	100	99	99	97	98	95	90	82	74	71	72	86	100	99	94	96	103	103	111	114	111	109	96
20	Q	88	98	102	102	105	106	108	107	106	97	88	80	81	87	93	95	100	96	97	98	99	100	98	101	97
21		100	99	99	99	101	103	107	109	106	99	89	82	81	86	91	92	92	92	93	94	95	94	95	96	95
22		108	125	118	108	100	102	104	107	106	99	93	87	85	86	89	90	90	92	92	95	104	100	103	111	100
23	Q	107	104	102	101	101	103	107	111	110	102	95	87	81	83	87	90	89	93	95	96	98	99	101	102	98
24		100	99	98	96	98	100	102	105	106	99	93	83	80	80	76	75	89	94	98	125	108	100	97	94	96
25	D	94	96	75	57	104	94	98	98	96	85	79	75	71	75	82	83	146	114	130	134	142	148	113	116	100
26		108	103	95	96	93	94	100	107	113	109	96	88	87	90	95	102	98	130	136	119	116	95	97	104	103
27		86	90	97	102	100	103	107	109	105	95	91	83	82	89	102	99	98	136	113	106	104	102	100	98	100
28		99	99	98	99	100	100	103	104	99	91	82	86	93	96	96	93	96	104	108	116	109	105	96	95	98
29		99	99	98	98	99	100	104	106	104	96	87	85	85	90	94	94	95	102	102	119	110	103	101	100	99
30		99	99	92	93	100	104	109	111	106	98	84	85	81	81	85	84	86	90	99	129	128	127	120	105	100
31	D	104	101	101	99	99	98	100	103	99	95	86	86	87	76	69	65	55	98	141	161	171	140	136	137	104
All		104	100	99	99	100	103	106	106	103	94	86	80	79	82	88	92	95	100	105	110	109	106	104	105	98
Quiet		99	100	100	100	101	104	109	111	108	99	87	79	78	84	90	92	94	95	96	96	98	99	98	99	97
Dist.		112	97	89	90	98	102	102	100	100	90	84	80	78	79	84	88	98	104	115	130	125	118	108	109	99

October 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		91	102	111	118	121	123	121	126	133	130	134	138	141	139	144	140	134	132	132	118	109	107	79	85	121
2	D	80	76	75	88	103	117	118	122	128	129	133	137	140	148	157	165	159	132	131	130	129	119	98	98	121
3		105	120	121	121	122	126	126	127	126	126	128	129	130	131	132	132	130	128	127	127	123	112	120	122	125
4		118	121	123	125	126	125	126	126	123	118	117	120	124		132	132	130	130	130	128	126	124	125	124	(125)
5		124	122	122	123	124	125	126	125	124	122	122	124	128	130	132	130	131	130	129	128	125	124	121	116	125
6		114	121	122	123	125	125	126	126	125	127	128	128	130	133	132	129	129	132	133	130	126	126	125	123	127
7		123	123	121	122	122	121	120	118	119	121	120	119	124	131	138	129	130	137	152	150	138	114	53	81	122
8	D	72	68	103	126	126	123	123	128	136	136	144	140	138	139	140	145	142	138	140	110	109	94	77	107	121
9		120	111	115	119	122	126	127	127	125	125	125	125	128	130	133	132	131	130	130	108	117	118	94	110	122
10		118	120	119	121	123	124	124	123	123	123	125	129	129	129	129	128	127	128	127	128	128	127	116	87	123
11		73	93	104	116	121	127	127	126	120	117	119	124	130	132	131	132	132	130	129	121	124	118	119	122	120
12	Q	124	124	124	124	124	124	126	127	127	126	124	123	128	131	130	126	126	126	126	125	125	124	123	123	125
13		122	123	123	123	124	125	126	124	120	117	117	120	126	127	128	126	128	130	131	116	116	119	119	119	123
14	Q	121	123	125	124	123	125	127	126	124	121	123	126	129	130	128	125	125	124	124	124	124	124	123	122	125
15	Q	122	122	122	122	122	123	125	124	121	118	116	117	121	124	124	123	123	123	124	123	123	123	122	122	122
16		122	121	122	121	120	120	122	124	121	119	121	126	133	138	146	161	162	150	143	138	130	127	115	80	128
17	D	102	113	111	104	102	111	125	129	127	129	130	137	147	155	180	166	154			135	132	127	127	128	(130)
18		127	127	127	125	123	125	126	127	126	124	121	124	129	129	129	132	134	130	129	129	122	122	123	125	127
19		125	122	118	113	111	114	119	121	121	121	122	125	134	139	150	149	142	137	134	131	126	120	118	115	126
20	Q	114	117	122	124	125	126	127	126	124	122	121	124	128	130	129	127	128	127	126	126	125	124	121	121	124
21		123	123	123	124	124	125	126	125	121	117	116	119	123	124	124	123	123	123	123	123	122	121	120	113	122
22		71	92	107	116	115	116	116	117	117	118	120	119	122	126	126	125	125	125	125	127	128	125	125	122	118
23	Q	123	124	123	122	121	122	122	121	119	118	120	121	124	125	125	125	124	126	125	125	125	124	123	122	123
24		121	121	120	120	119	119	119	120	119	118	119	120	122	126	129	135	135	129	129	131	123	123	121	119	123
25	D	116	112	107	84	88	100	108	116	119	123	138	136	136	140	138	157	163	157	161	146	116	87	73	101	122
26		119	122	124	125	122	121	123	127	131	136	131	130	131	132	136	137	135	145	124	127	121	115	120	115	127
27		104	94	116	123	124	126	128	128	127	126	125	125	128	133	142	148	158	142	121	130	127	127	125	123	127
28		125	125	125	125	125	126	127	125	124	126	127	130	137	136	137	136	135	134	126	120	123	121	117	116	127
29		121	123	124	124	123	124	126	125	124	124	124	127	127	127	125	126	128	130	131	130	124	122	123	123	125
30		122	121	117	115	117	120	121	120	118	115	116	118	122	124	124	126	127	127	131	124	115	104	111	118	120
31	D	121	124	124	123	121	120	120	120	118	117	122	128	136	152	170	206	254	257	226	137	57	92	95	109	140
All		112	114	117	119	120	122	123	124	123	123	124	126	130	133	136	138	139	136	134	127	121	118	112	113	124
Quiet		121	122	123	123	123	124	125	125	123	121	121	122	126	128	127	125	125	125	125	125	124	124	122	122	124
Dist.		98	98	104	105	108	114	119	123	125	127	133	136	139	147	157	168	174	171	164	132	108	104	94	108	127

Nurmijārvi Finland $\label{eq:November 2005 North component X in nT (X = 14900 nT + tabular values)}$

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

November 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		113	97	108	101	102	102	106	105	103	97	87	87	92	86	87	91	113	132	115	118	117	117	117	97	104
2		100	109	110	104	103	103	104	108	106	100	92	91	88	90	91	92	90	90	91	90	132	154	134	112	104
3	D	113	94	112	109	96	72	88	103	107	102	88	87	85	78	94	110	134	153	104	130	126	124	91	90	104
4	D	118	113	97	104	102	80	96	91	99	101	80	82	87	89	79	100	105	95	170	121	114	109	97	104	101
5		104	104	101	100	96	97	101	108	101	94	89	88	90	92	95	108	93	98	100	103	103	115	114	80	99
6	D	104	90	105	106	106	106	105	104	93	88	90	88	90	91	92	93	102	148	124	106	114	110	96	116	103
7		101	99	99	103	107	106	105	104	107	98	88	90	89	92	97	97	95	101	105	106	108	112	113	110	101
8	Q	107	104	102	103	102	103	104	106	104	100	93		89	93	95	97	99	97	106	102	105	105	104	101	(101)
9		95	89	95	100	100	102	104	107	107	98	93	88	88	91	94	94	95	96	99	101	103	102	100	104	98
10	Q	102	100	99	99	99	101	102	103	101	96	93	89	88	92	94	95	96	96	96	99	106	111	108	102	99
11		100	101	100	101	101	102	101	102	103	97	91	92	87	91	94	91	97	112	122	110	104	110	103	101	101
12		103	105	103	99	93	100	95	100	101	94	89	86	80	88	96	95	122	143	113	112	110	127	114	108	103
13	D	103	104	96	76	89	105	107	105	101	103	94	89	86	90	74	71	94	113	110	114	128	144	131	110	102
14		104	103	89	98	103	98	102	100	96	88	90	86	85	94	100	96	100	101	105	112	121	134	114	102	101
15		101	100	102	103	101	100	100	99	98	96	89	85	91					103	104	109	105	111	111	103	(101)
16	Q	102	100	101	101	102	106	107	105	102	97	92	92	90	94	98	100	100	106	100	101	101	103	104	95	100
17	Q	101	101	101	102	102	103	102	100	93	92	88	89	92	95	97	98	98	99	100	100	100	101	101	100	98
18		97	97	97	99	99	99	100	96	88	85	84	85	86	89	92	91	94	99	107	97	99	100	100	101	95
19		102	101	102	99	99	99	101	103	101	93	90	88	88	91	89	83	87	87	97	106	165	152	123	110	102
20		105	103	104	104	103	100	98	91	93	89	87	91	94	94	97	98	95	111	111	105	107	95	110	109	100
21		113	107	108	103	96	102	102	103	103	100	97	94	93	95	98	96	98	104	109	107	106	102	100	95	101
22		91	102	102	102	101	100	100	99	98	89	83	80	70	72	73	83	92	123	121	123	129	128	114	101	99
23		100	96	99	104	102	95	90	95	98	93	86	81	82	89	100	103	110	122	113	114	122	125	125	109	102
24		106	100	97	101	102	100	92	99	97	100	101	94	85	80	86	94	112	107	139	162	142	130	126	125	107
25		127	94	89	92	94	92	94	93	81	90	91	93	100	107	100	123	104	103	104	113	111	115	115	102	101
26		94	93	101	101	102	101	101	98	95	90	89	93	86	96	101	102	119	107	108	109	110	111	109	107	101
27	O	101	99	100	99	98	101	103	103	98	92	90	90	92	95	99	100	101	99	110	102	101	101	109	106	100
28	~	102	98	98	100	100	101	100	96	92	88	88								97	100	104	116	131	125	(102)
29		123	112	108	105	105	104		99	96	91	92	91	91	96	97	95	96	93	94	99	99	100	117	95	(100)
30	D	107	110	104	100	98	101	100	98	99																(102)
	_			,-			-																			/
All		105	101	101	101	100	99	100	101	99	95	90	88	88	91	93	96	102	108	110	109	114	116	111	104	101
Quiet		103	101	101	101	101	103	104	103	100	95	91	90	90	94	97	98	99	99	102	101	103	104	105	101	99
Dist.		109	102	103	99	98	93	99	100	100	99	88	86	87	87	85	94	109	127	127	118	120	122	104	105	102

November 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		104	107	117	127	132	133	136	137	136	132	132	135	138	145	141	141	152	149	150	147	139	128	110	104	132
2		116	124	125	126	129	129	129	127	126	126	127	127	128	130	129	128	128	128	128	132	153	121	120	112	127
3	D	110	113	113	115	109	106	113	120	117	117	123	132	137	146	153	151	162	153	143	105	108	114	66	94	122
4	D	117	118	122	124	121	117	124	123	123	123	128	136	139	140	137	142	138	136	126	105	124	125	114	108	125
5		115	117	125	128	130	126	127	132	128	127	127	129	130	133	136	139	134	134	133	133	130	122	123	105	128
6	D	98	81	83	97	111	119	124	128	127	130	134	136	135	133	134	137	142	147	132	130	129	103	92	97	120
7		108	108	115	123	125	126	128	126	126	126	128	128	130	131	132	130	130	131	130	125	128	122	120	121	125
8	Q	124	126	126	127	127	127	128	127	125	127	128		129	129	128	128	129	128	130	129	129	127	123	121	(127)
9		118	114	119	122	123	124	125	127	123	120	121	124	125	125	126	126	126	127	128	127	126	124	123	123	124
10	Q	123	124	124	124	124	125	125	124	124	124	126	126	127	126	125	125	125	126	129	133	129	126	123	125	126
11		126	125	124	123	125	124	122	120	120	122	125	125	126	128	129	132	135	139	138	133	128	123	122	119	126
12		106	108	118	119	121	123	122	123	125	127	133	138	146	153	144	137	146	144	143	138	131	104	112	118	128
13	D	119	115	111	105	108	113	120	124	127	133	137	147	159	163	180	202	198	164	150	146	134	106	84	100	135
14		115	117	108	107	112	117	121	123	125	127	133	134	137	139	142	139	138	136	134	134	125	121	119	118	126
15		125	128	129	130	127	128	126	126	128	132	133	134	138					133	131	131	128	124	120	122	(129)
16	Q	125	126	126	127	127	127	126	124	123	125	129	129	128	128	128	129	129	129	128	127	127	126	125	118	126
17	Q	118	122	123	124	125	125	124	123	122	123	126	126	127	128	127	127	126	126	126	126	125	125	124	123	125
18		124	124	124	124	124	124	124	124	123	122	122	123	125	125	126	128	130	133	136	128	125	124	123	122	125
19		122	122	122	123	123	122	123	124	124	123	124	124	123	122	121	124	165	192	153	145	144	94	109	121	129
20		130	132	131	129	128	126	126	127	128	128	128	131	128	129	130	130	131	143	140	137	131	118	121	116	129
21		116	125	125	124	122	123	126	127	127	126	126	125	127	129	130	132	133	136	138	132	128	126	125	119	127
22		117	121	122	123	123	123	122	122	123	125	126	127	131	139	149	156	159	156	157	149	138	129	125	124	133
23		124	127	128	126	127	125	122	123	127	133	132	134	139	148	152	142	139	140	137	131	126	116	106	101	129
24		95	99	111	118	122	122	122	125	127	128	130	133	133	138	144	153	158	153	145	126	115	113	91	62	123
25		85	89	93	100	112	118	121	121	125	131	130	133	136	139	136	142	134	134	134	131	127	109	115	113	121
26		116	121	124	126	126	125	124	125	125	126	127	130	133	134	132	132	138	138	136	133	130	128	124	120	128
27	Q	125	126	126	126	126	125	124	124	122	122	122	123	126	126	126	127	127	128	129	127	127	120	115	120	125
28		122	123	124	123	123	123	122	122	119	121	121								126	126	130	130	124	107	(123)
29		118	122	124	124	125	125		123	123	121	121	122	126	127	126	126	126	126	129	130	132	135	138	90	(124)
30	D	112	118	118	119	123	122	121	119	118																(119)
All		116	117	119	121	123	123	124	125	125	126	128	130	132	134	136	137	140	140	136	131	129	120	115	112	127
Quiet		123	125	125	125	126	126	125	124	123	124	126	126	127	127	127	127	127	127	128	128	127	125	122	121	126
Dist.		111	109	109	112	114	115	120	123	122	126	130	138	143	145	151	158	160	150	138	122	124	112	89	100	126

Nurmijärvi Finland $\label{eq:component X in nT (X = 14900 nT + tabular values)}$ December 2005 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																		-15	-13	-7	-4				(-10)
2									-14	-17	-19	-21	-17	-26	-11	-12	-12	-10	-11	-10	-2	-24	-3	-8	-13	(-13)
3		-21	-31	-24	-16	-16	-13	-12	-12	-10	-12	-14	-17			-13	2	-12	-26	-9	-7	0	-31	-31	-32	(-16)
4		-22	-19	-17	-15	-14	-14	-13	-14	-15	-17	-15	-12	-13	-14	-9	-13	-18	-11	-10	9	-15	-16	-14	-15	-14
5		-15	-15	-15	-16	-16	-16	-16	-16	-14	-12	-15	-15	-13	-11	-11	-12	-11	-11	-9	-10	-9	-10	-10	-12	-13
6	Q	-11	-12	-11	-10	-8	-6	-7	-10	-15	-17	-15	-12	-13	-11	-7	-7	-7	-9	-12	-11	-12	-7	-10	-13	-11
7	Q	-13	-14	-13	-11	-10	-12	-14	-16	-17	-17	-15	-13	-8	-6	-6	-7	-7	-6	-7	-7	-9	-8	-9	-11	-11
8	Q	-11	-12	-12	-12	-10	-8	-10	-13	-14	-15	-12	-8	-4	-2	-1	0	-1	-3	-7	-11	-15	-16	-16	-16	-10
9		-19	-12	-13	-12	-8	-6	-6	-9	-12	-14	-13	-8	-5	-3	-4	-5	-4	-3	-2	2	-6	-25	-55	-21	-11
10		-13	-17	-6	-19	5	3	-15	-15	-19	-20	-17	-17	-18	-17	-15	-22	-26	-22	-42	-49	-42	-31	-33	-6	-20
11	D	-23	-35	-13	-3	-2	-1	-11	-10	-17	-32	-47	-26	-19	-23	-30	-55	-84	-83	-80	-47	-41	-43	-46	-39	-34
12		-37	-26	-24	-34	-28	-21	-24	-25	-24	-25	-24	-24	-24	-24	-36	-35	-44	-32	-33	-41	-51	-32	-13	-21	-29
13		-24	-21	-20	-22	-19	-16	-15	-16	-24	-24	-22	-18	-20	-34	-17	-14	-13	-13	-13	-21	-21	-19	-18	-17	-19
14		-18	-17	-15	-11	-9	-11	-13	-15	-13	-15	-12	-12	-12	-14	-15	-15	-15	-15	-16	-15	-12	-11	-12	-14	-14
15	Q	-12	-12	-14	-10	-8	-11	-12	-13	-14	-17	-13	-7	-7	-9	-10	-11	-11	-10	-10	-11	-13	-14	-12	-15	-11
16		-13	-11	-9	-9	7	6	-4	0	-7	-11	-14	-7	-4	-13	-14	-17	-23	-20	-17	-9	-15	-11	-11	-11	-10
17		-12	-11	-10	-8	-6	-5	-5	-3	-4	-8	-11	-17	-18	-12	-10	-10	-9	-12	-8	-8	-7	-4	-3	-5	-9
18		-8	-10	-6	-6	-3	1	1	-3	-5	-6	-11	-5	-1	-2	-3	-2	-2	0	-1	-3	-4	1	-1	-5	-3
19		-8	-8	-9	-10	-6	-5	-4	-4	-1	0	-4	-2	-9	-9	-3	4	7	-9	-23	-8	-28	-16	-18	-8	-8
20	D	-16	-29	-16	6	-5	-6	-12	-18	-22	-21	-16	-14	-27	-22	-15	-21	-28	-33	-21	-27	-7	-35	-28	-21	-19
21		-19	-16	-15	-14	-12	-14	-11	-18	-18	-21	-20	-12	-25	-27	-20	-44	-36	-25	-26	-18	-19	-15	-16	-21	-20
22		-19	-19	-14	-11	-9	-8	-10	-11	-13	-17	-14	-8	-9	-11	-12	-12	-11	-11	-14	-14	-15	-10	-13	-13	-12
23	Q	-14	-12	-10	-10	-8	-8	-10	-12	-12	-13	-11	-5	-3	-5	-7	-8	-9	-8	-7	-7	-7	-8	-9	-10	-9
24		-11	-10	-9	-8	-7	-6	-7	-10	-11	-8	-4	-5	-6	-16	-15	-17	-19	-20	-18	-15	-10	-17	-18	-16	-12
25		-13	-13	-15	-15	-10	-4	-2	-9	-15	-10	-10	-10	-20	-18	-23	-26	-27	-24	-18	-17	-15	-14	-9	-13	-15
26		-13	-13	-11	-10	-10	-9	-12	-14	-20	-17	-15	-11	-9	-13	-22	-24	-21	-20	-4	-17	-17	-14	-6	-1	-13
27	D	-28	-10	-12	-9	-7	-10	-13	-15	-14	-12	-4	4	5	9	13	2	-27	-41	10	-16	-26	-25	-1	-29	-11
28	D	-36	-45	-33	-20	-23	-22	-28	-20	-21	-31	-25	-21	-19	-25	-23	-20	-28	-16	-10	-20	-29	-29	-31	-49	-26
29		-18	-24	-22	-21	-19	-21	-23	-20	-27	-23	-23	-22	-21	-19	-21	-17	-22	-17	-18	-17	-16	-9	-17	-23	-20
30		-19	-21	-13	-13	-20	-12	-11	-8	-10	-17	-24	-20	-16	-14	-15	-15	-16	-16	-8	-16	-17	-7	-13	-28	-15
31		-22	-11	-13	-16	-13	-11	-10	-8	-12	-18	-21	-19	-16	-6	-3	-15	-36	-31	-30	-20	-27	-21	-30	-29	-18
All		-17	-17	-14	-13	-10	-9	-11	-12	-15	-16	-16	-13	-13	-13	-13	-15	-19	-18	-16	-15	-17	-17	-17	-18	-15
Quiet		-12	-12	-12	-11	-9	-9	-10	-13	-14	-16	-13	-9	-7	-7	-6	-7	-7	-7	-9	-10	-11	-11	-11	-13	-10
Dist.		-26	-30	-19	-7	-9	-10	-16	-16	-18	-24	-23	-14	-15	-15	-13	-24	-42	-38	-23	-23	-21	-33	-26	-34	-22

December 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D																		107	115	107	128				(114)
2									95	96	96	94	94	101	98	94	102	95	94	130	127	111	99	91	118	(102)
3		103	87	89	107	103	103	104	102	100	98	93	94			100	121	118	104	108	119	130	116	112	113	(106)
4		101	101	105	108	106	105	106	102	100	96	93	92	94	102	99	96	106	105	111	121	122	106	106	107	104
5		100	105	107	105	105	105	106	104	100	95	94	94	96	100	102	104	103	106	104	105	105	104	103	103	102
6	Q	103	103	103	102	103	103	103	101	100	93	92	89	88	96	100	101	101	101	106	103	105	108	109	104	101
7	Q	102	102	103	103	103	103	102	100	98	94	90	90	95	98	101	102	102	102	103	104	104	107	104	102	101
8	Q	103	102	102	103	104	104	104	102	99	95	91	91	94	99	100	99	99	99	107	105	104	115	112	108	102
9		104	101	103	101	102	103	104	105	103	98	93	91	90	93	94	97	100	99	100	99	102	142	149	112	103
10		103	94	91	99	93	97	92	94	103	101	97	95	93	98	99	100	105	104	133	170	136	113	129	117	107
11	D	115	97	104	104	107	99	96	98	109	111	99	97	105	108	108	127	169	132	195	133	124	151	138	106	118
12		85	97	105	91	94	102	103	105	106	104	99	101	102	104	111	119	111	107	126	145	127	111	114	109	107
13		108	108	104	101	103	105	107	109	107	102	98	95	99	110	99	104	104	104	103	110	125	116	109	109	106
14		106	107	104	103	103	103	103	103	98	102	98	97	101	104	104	102	103	104	106	106	106	107	105	104	103
15	Q	101	103	104	102	102	103	104	103	99	98	95	92	98	101	102	103	103	103	104	104	104	106	110	107	102
16		106	103	101	91	95	99	103	99	96	97	94	91	94	99	97	99	125	107	109	106	108	109	104	102	101
17		101	100	100	99	99	101	102	100	99	97	94	94	89	96	99	99	99	107	102	103	105	104	104	101	100
18		101	98	96	97	95	97	98	101	100	97	97	95	95	96	95	95	94	96	98	101	104	102	102	101	98
19		100	98	98	98	97	100	101	102	101	100	96	94	98	93	94	96	95	96	112	178	123	105	104	105	103
20	D	115	114	98	115	105	100	100	100	99	100	99	97	97	98	102	102	114	137	114	123	172	125	111	103	110
21		101	99	100	103	102	95	96	96	97	97	97	98	99	108	100	117	115	111	121	119	110	102	101	95	103
22		86	104	115	104	101	100	100	100	102	100	99	97	100	103	102	102	102	102	104	107	107	107	103	102	102
23	Q	102	102	102	101	102	104	106	105	101	95	90	91	97	101	102	102	101	102	103	103	103	103	103	104	101
24		105	103	103	102	102	103	104	103	101	97	92	92	95	98	100	96	102	103	103	108	125	110	108	97	102
25		100	107	107	106	109	104	103	100	99	88	85	85	87	79	86	97	107	113	107	107	108	107	102	101	100
26		102	104	104	103	104	105	107	106	103	98	94	95	96	96	98	92	97	106	117	136	117	108	128	145	107
27	D	87	108	106	102	101	103	107	107	105	101	94	91	90	95	94	80	86	104	117	169	119	155	211	116	110
28	D	123	107	92	104	105	104	111	109	104	108	107	101	94	108	98	117	95	104	125	131	125	126	155	128	112
29		102	120	109	108	104	105	104	105	98	110	115	105	98	97	103	106	101	122	116	112	110	106	115	111	107
30		105	102	97	104	97	98	109	109	109	105	106	99	97	97	102	103	102	116	128	114	115	129	136	131	109
31		104	108	110	102	105	106	105	108	109	104	100	93	92	93	92	89	115	95	97	116	112	144	142	122	107
All		103	103	102	102	102	102	103	102	101	99	96	94	96	99	99	102	106	106	114	119	116	115	117	109	104
Quiet		102	102	103	102	102	103	104	102	99	95	92	91	94	99	101	101	101	101	105	104	104	108	108	105	101
Dist.		110	106	100	106	104	101	104	104	104	105	100	96	97	102	100	106	116	117	133	132	134	139	154	113	112

December 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mea
	D																		134	134	133	132				(13)
									122	122	123	124	127	133	132	130	130	129	131	138	125	127	117	105	116	(12
		109	91	99	117	126	128	129	127	127	127	127	131			135	140	126	135	132	131	122	124	116	117	(12
		121	124	126	125	126	125	124	124	125	126	126	128	128	131	128	129	133	130	129	112	111	122	124	123	1
		124	126	126	125	126	127	126	126	127	127	125	127	128	129	128	128	127	128	127	127	126	125	125	125	1
	Q	125	124	124	124	124	124	125	124	125	126	127	128	130	132	129	128	126	128	130	130	129	126	125	126	
	Q	126	126	126	125	125	125	125	126	126	125	126	129	129	128	126	126	125	125	125	125	125	124	123	123	
	Q	124	124	124	124	124	124	125	126	127	127	129	131	130	128	126	124	123	124	126	127	130	130	128	125	
		125	125	124	125	125	125	124	124	123	124	124	125	126	126	126	125	125	124	123	122	123	129	121	106	
		114	113	102	101	99	106	113	119	121	123	124	127	128	130	130	132	136	132	137	134	118	115	99	74	
	D	104	110	105	107	106	110	114	118	124	129	141	143	142	138	140	168	188	136	125	157	140	121	112	116	
		116	115	121	123	120	128	129	131	133	132	131	134	135	136	141	143	151	144	145	140	130	119	118	114	
		125	128	129	129	131	131	132	133	132	130	130	134	137	142	138	134	131	130	130	133	133	123	128	129	
		130	129	129	129	128	128	127	126	124	124	124	126	129	131	130	130	130	130	130	130	129	128	127	127	
	Q	126	124	125	126	126	126	127	126	125	124	124	126	128	127	127	127	128	128	127	127	127	127	125	126	
		125	125	124	123	117	117	119	120	121	121	123	126	128	131	131	132	137	132	133	131	130	126	124	124	
		125	125	124	125	125	125	125	123	122	120	122	127	131	131	129	128	127	129	127	126	126	124	123	122	
		119	116	117	120	122	123	123	122	120	118	120	123	123	123	123	124	124	124	123	124	124	123	121	121	
		121	122	121	121	123	123	123	122	121	120	119	122	124	124	126	125	123	124	130	128	117	123	119	108	
	D	96	109	99	92	100	114	119	124	126	126	127	129	133	136	133	134	139	145	137	130	104	113	123	121	
		124	125	125	126	126	125	124	125	127	128	129	132	136	144	136	155	148	143	138	134	128	128	127	122	
		103	113	121	124	124	125	126	127	127	126	125	127	128	128	128	128	127	127	129	130	128	126	126	127	
	Q	127	126	126	125	126	126	126	126	126	125	124	126	126	125	125	125	126	126	126	125	125	125	125	125	
		125	125	124	124	124	124	124	124	124	124	122	124	127	129	130	132	136	138	138	138	133	128	129	127	
		125	125	126	125	125	124	122	122	124	124	127	131	136	142	145	147	147	142	136	132	130	127	122	122	
		124	126	126	126	126	127	128	128	128	130	130	131	131	130	134	138	141	141	128	116	128	127	122	84	
	D	77	104	119	122	123	124	126	127	126	125	125	124	124	123	121	124	150	198	188	131	144	149	119	118	
	D	125	120	95	113	123	126	133	136	135	135	136	135	137	146	141	149	152	151	134	117	149	138	132	107	
		98	123	127	127	127	128	126	131	133	137	135	133	136	137	137	137	138	142	136	140	135	119	126	127	
		123	121	122	120	127	127	130	128	129	130	131	132	133	133	133	133	133	138	130	130	132	123	115	118	
		113	109	118	123	125	126	126	125	125	125	125	128	130	130	128	131	150	155	163	162	155	141	117	128	
1		118	120	120	121	122	124	125	125	126	126	127	129	131	132	131	134	136	136	134	131	129	126	122	118	
niet		125	125	125	125	125	125	125	126	126	126	126	128	129	128	127	126	126	126	127	127	127	126	125	125	
st.		101	111	104	108	113	119	123	126	128	129	132	133	134	136	134	144	157	153	143	134	134	130	121	115	

12 Hourly Means minus Monthly Means

12.1 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	-10	-11	-3	-3	0	4	7	2	-3	-2	-4	0	4	6	8	3	16	15	2	2	-1	-9	-13	-10	14876
February	0	1	1	2	5	8	7	2	-3	-8	-12	-11	-6	-1	1	4	3	1	0	2	1	1	1	1	14886
March	1	0	0	3	7	6	1	-6	-14	-18	-16	-10	-4	4	4	5	6	7	5	4	3	3	5	2	14888
Aprl	-1	1	2	1	5	2	-5	-13	-22	-26	-22	-14	-4	5	8	11	14	14	11	11	5	7	7	2	14889
May	-4	-5	-5	-3	-5	-17	-31	-36	-34	-29	-21	-5	8	35	38	30	29	23	19	10	6	2	1	-4	14885
June	2	1	2	1	-1	-5	-13	-20	-26	-26	-22	-12	0	6	15	17	20	21	25	15	8	4	-7	-2	14889
July	-5	-2	2	-4	-7	-6	-13	-19	-23	-26	-23	-15	0	14	27	27	22	21	18	12	4	-3	2	-4	14892
August	0	-3	-2	1	-1	-4	-9	-18	-25	-27	-20	-5	4	10	13	29	22	14	14	4	4	-4	2	2	14888
September	0	-5	-6	-2	-3	-4	-12	-17	-23	-24	-17	-4	6	21	18	19	10	11	8	7	4	3	4	6	14876
October	4	4	5	9	10	11	5	-5	-14	-19	-18	-12	-5	-1	0	0	2	4	3	4	3	2	5	5	14885
November	0	-1	2	4	6	8	6	0	-5	-7	-6	-4	-2	-1	-1	-2	-3	-3	-1	1	2	2	2	1	14884
December	-3	-3	1	2	5	6	3	2	0	-1	-1	2	2	2	2	0	-4	-4	-1	0	-2	-2	-2	-3	14885
Winter	-3	-4	0	1	4	6	6	2	-3	-4	-5	-3	-1	2	3	1	3	2	0	1	0	-2	-3	-3	14883
Equinox	1	0	0	3	5	4	-3	-10	-18	-22	-18	-10	-2	7	7	9	8	9	7	6	4	4	5	4	14884
Summer	-2	-2	-1	-1	-3	-8	-17	-23	-27	-27	-21	-10	3	16	23	26	23	20	19	10	5	-1	0	-2	14888
Year	-1	-2	0	1	2	1	-5	-11	-16	-18	-15	-8	0	9	11	12	12	11	8	6	3	0	1	0	14885

East Component Y in nT

Last compone																									
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	7	2	-4	-13	-15	-10	-7	1	-2	-2	-7	-12	-11	-7	-4	0	2	5	4	12	11	19	17	14	1685
February	3	4	5	2	-2	0	1	5	5	0	-8	-15	-18	-17	-13	-9	-7	1	8	16	10	10	8	9	1680
March	7	7	6	4	4	5	9	9	5	-4	-15	-24	-25	-22	-15	-5	2	5	6	9	9	10	6	7	1682
Aprl	5	4	8	10	11	16	17	15	8	-3	-17	-29	-30	-25	-17	-9	0	1	4	6	6	6	10	8	1684
May	8	9	10	14	17	20	20	14	3	-8	-19	-27	-27	-27	-19	-11	-6	-4	-2	7	6	8	7	6	1687
June	10	12	14	16	20	20	22	19	7	-5	-19	-29	-31	-27	-19	-12	-9	-7	-1	2	4	3	4	7	1689
July	14	16	15	16	16	17	21	17	10	-1	-15	-25	-32	-28	-22	-18	-11	-6	-5	0	0	5	7	8	1691
August	7	9	10	15	17	21	20	15	6	-5	-12	-28	-34	-29	-19	-14	-5	-3	3	2	4	4	7	9	1693
September	6	1	5	6	8	9	9	6	0	-8	-17	-22	-22	-17	-8	-2	1	5	2	7	8	12	8	3	1698
October	5	2	1	1	2	5	7	8	5	-4	-13	-18	-20	-16	-10	-6	-3	2	6	12	11	8	6	7	1698
November	4	0	0	0	-1	-2	-1	0	-2	-6	-11	-13	-13	-10	-8	-5	1	8	9	8	13	15	10	3	1701
December	-2	-2	-3	-2	-3	-3	-2	-2	-3	-5	-9	-10	-9	-6	-5	-2	1	2	9	14	11	10	13	5	1705
Winter	3	1	0	-4	-5	-3	-2	1	-1	-3	-9	-12	-13	-10	-7	-4	-1	4	8	13	11	14	12	8	1693
Equinox	6	4	5	5	6	9	11	9	4	-5	-15	-23	-24	-20	-13	-5	0	3	5	9	8	9	7	6	1691
Summer	10	11	12	16	18	20	21	16	7	-5	-16	-27	-31	-28	-20	-14	-8	-5	-1	3	3	5	7	7	1690
Year	6	5	6	6	6	8	10	9	4	-4	-13	-21	-23	-20	-13	-8	-3	1	4	8	8	9	9	7	1691

Vertical Component Z in nT

3.5 .1 /77		_						_	_																
Month/Hour	1	2	3	4	5	6	-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-32	-35	-28	-23	-16	-5	-1	3	3	7	8	12	18	21	21	25	30	24	18	9	4	-11	-21	-32	49702
February	-14	-18	-12	-10	-6	-4	-3	-2	-2	-3	-2	2	6	10	13	15	13	18	14	10	4	-2	-13	-11	49702
March	-17	-16	-13	-9	-5	-2	0	0	-1	-2	-2	2	6	12	15	17	18	15	11	8	-1	-5	-14	-17	49698
Aprl	-16	-14	-12	-9	-5	-1	1	1	0	-2	-4	-1	8	13	16	18	18	15	11	6	-3	-8	-13	-19	49700
May	-21	-27	-25	-21	-15	-13	-5	-3	1	2	2	8	19	26	27	26	23	22	17	5	-4	-11	-14	-16	49710
June	-15	-17	-13	-13	-9	-5	-2	0	0	-1	-1	3	10	13	16	18	19	17	12	1	-2	-9	-10	-12	49709
July	-22	-22	-18	-16	-14	-9	-6	-4	-4	-4	-4	1	12	24	34	31	28	23	17	6	-2	-10	-18	-22	49711
August	-16	-14	-10	-7	-6	-5	-4	-4	-5	-5	-4	1	8	18	22	28	21	16	11	3	-3	-17	-17	-13	49717
September	-22	-26	-24	-22	-16	-11	-7	-2	2	6	8	15	20	30	31	32	29	23	7	-6	-15	-13	-16	-23	49728
October	-12	-10	-7	-6	-5	-3	-1	0	-1	-2	0	2	6	9	12	14	14	12	10	3	-3	-7	-12	-11	49724
November	-11	-9	-7	-5	-4	-3	-2	-2	-2	-1	1	4	6	8	9	11	14	13	9	4	3	-6	-11	-15	49726
December	-9	-7	-7	-6	-4	-3	-2	-1	-1	-1	0	2	4	5	4	7	9	9	7	4	2	-1	-5	-9	49727
Winter	-17	-17	-14	-11	-8	-4	-2	0	0	1	2	5	8	11	12	15	17	16	12	7	3	-5	-12	-17	49714
Equinox	-17	-16	-14	-11	-8	-4	-2	0	0	0	1	4	9	16	18	20	20	16	10	3	-6	-8	-14	-17	49713
Summer	-18	-20	-17	-14	-11	-8	-4	-3	-2	-2	-2	3	12	20	25	26	23	19	14	4	-3	-12	-15	-16	49712
Year	-17	-18	-15	-12	-9	-5	-3	-1	-1	0	0	4	10	16	18	20	20	17	12	4	-2	-8	-14	-17	49713

12.2 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	-3	-4	-3	-1	1	2	2	0	-4	-7	-7	-5	0	3	4	1	2	2	1	6	3	2	3	3	14886
February	-1	-1	0	0	2	2	2	1	-4	-10	-12	-11	-6	0	3	4	3	3	1	4	5	6	4	4	14893
March	2	3	1	4	5	4	-1	-10	-18	-20	-18	-11	-4	1	5	6	6	7	6	5	6	7	6	8	14891
Aprl	3	4	6	8	8	4	-2	-10	-18	-23	-24	-20	-10	-1	2	4	6	8	10	10	10	9	9	8	14895
May	4	7	9	9	7	1	-8	-20	-30	-34	-26	-18	-9	1	3	8	15	15	15	14	10	8	10	9	14893
June	3	3	5	5	2	-3	-9	-17	-24	-28	-25	-15	-9	-1	1	8	10	13	18	18	16	12	10	8	14895
July	0	1	2	4	1	-4	-11	-19	-25	-27	-24	-17	-7	1	7	13	14	17	17	17	14	12	8	6	14897
August	3	1	1	2	0	-4	-10	-17	-25	-26	-23	-13	-2	6	11	11	11	10	12	15	11	8	10	9	14887
September	5	4	3	3	3	-1	-6	-12	-20	-22	-19	-8	-3	2	6	6	5	7	7	7	8	9	9	7	14883
October	1	2	3	5	8	8	5	-5	-15	-22	-23	-15	-7	0	3	3	4	6	7	7	7	8	7	6	14889
November	-2	-2	0	2	3	5	2	-4	-8	-8	-6	-2	2	3	2	1	2	2	1	1	1	3	1	1	14889
December	-2	-2	-2	0	1	1	0	-3	-4	-6	-3	1	3	4	4	4	3	3	1	1	-1	0	-1	-3	14890
Winter	-2	-2	-1	0	2	3	1	-1	-5	-8	-7	-4	0	2	3	3	3	2	1	3	2	3	2	1	14889
Equinox	3	3	3	5	6	4	-1	-9	-18	-22	-21	-13	-6	0	4	5	6	7	7	7	8	8	8	7	14890
Summer	2	3	4	5	3	-3	-10	-18	-26	-29	-24	-16	-7	2	6	10	12	14	15	16	13	10	9	8	14893
Year	1	1	2	3	3	1	-3	-10	-16	-19	-18	-11	-4	2	4	6	7	8	8	9	7	7	6	6	14891

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	2	1	0	0	2	3	5	5	3	0	-4	-8	-10	-7	-7	-6	-4	-4	-1	9	9	7	3	1	1678
February	2	1	1	2	3	5	7	9	9	3	-5	-11	-14	-12	-8	-3	-3	-3	1	5	3	4	2	1	1677
March	2	3	4	5	8	13	17	19	12	0	-11	-19	-22	-19	-13	-7	-5	-4	-1	1	6	4	4	4	1679
Aprl	2	2	6	11	14	17	19	17	11	1	-14	-25	-28	-22	-12	-4	-1	1	1	1	3	1	0	0	1682
May	4	9	17	23	27	27	22	13	2	-11	-23	-31	-30	-24	-15	-7	-1	1	1	-2	-2	-2	0	2	1685
June	6	11	15	18	20	23	25	21	11	-1	-16	-27	-28	-24	-16	-10	-6	-5	-3	-3	-3	-3	-2	-2	1688
July	7	10	17	21	24	25	28	26	15	1	-14	-25	-31	-28	-23	-17	-11	-9	-7	-6	-7	-3	2	4	1689
August	6	10	13	19	20	20	20	16	7	-5	-18	-26	-26	-22	-17	-11	-8	-7	-6	-3	-1	6	7	8	1694
September	3	3	9	11	14	16	15	10	4	-4	-15	-22	-20	-15	-9	-4	-1	-2	-1	3	3	0	1	1	1696
October	3	3	4	4	5	8	12	14	12	2	-10	-18	-18	-13	-6	-4	-3	-2	-1	0	1	2	2	2	1697
November	3	1	1	2	1	3	4	4	0	-4	-8	-10	-9	-6	-3	-1	-1	0	3	1	3	5	6	1	1699
December	1	1	2	1	1	2	3	1	-2	-6	-10	-11	-7	-2	0	0	0	0	3	3	3	7	6	4	1701
Winter	2	1	1	1	2	3	5	5	2	-2	-7	-10	-10	-7	-4	-3	-2	-2	2	5	5	6	4	2	1689
Equinox	2	3	6	8	10	13	16	15	10	0	-12	-21	-22	-17	-10	-5	-2	-2	-1	1	3	2	2	2	1688
Summer	6	10	15	20	23	24	24	19	9	-4	-18	-27	-29	-25	-18	-11	-7	-5	-4	-4	-3	-1	2	3	1689
Year	3	5	7	10	12	13	15	13	7	-2	-12	-20	-20	-16	-11	-6	-4	-3	-1	1	2	2	3	2	1689

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	-5	-2	-1	0	1	0	0	-1	-2	-1	-1	0	2	2	2	2	2	2	3	2	-1	-1	-1	-2	49706
February	0	-1	0	0	1	1	1	-1	-3	-5	-5	-2	0	2	3	3	2	3	4	2	0	-2	-2	-2	49701
March	-1	0	0	0	1	2	2	-1	-5	-8	-8	-5	-1	2	3	3	3	4	5	5	3	-1	-2	-2	49701
Aprl	-1	1	3	4	3	2	2	-1	-4	-7	-11	-10	-5	-1	3	6	5	4	3	2	1	0	0	1	49702
May	0	3	4	3	0	-1	-2	-2	-6	-9	-9	-6	-3	1	4	5	6	6	3	2	1	1	0	-2	49711
June	2	3	4	1	-1	0	0	-1	-3	-9	-10	-7	-5	0	4	5	6	5	4	3	1	-1	-1	0	49713
July	0	3	2	2	3	1	-2	-5	-7	-9	-11	-8	-4	-1	3	4	5	6	6	5	4	3	1	-1	49709
August	0	-1	1	2	1	0	0	0	-3	-5	-5	-4	-1	2	3	3	3	2	3	3	4	2	0	-8	49717
September	-3	-5	-7	-2	0	0	0	-1	-2	-3	-5	-4	0	2	5	5	6	5	5	4	2	1	0	-1	49727
October	-3	-2	-1	-1	-1	0	1	1	-1	-3	-3	-2	2	4	4	2	1	1	1	1	1	0	-1	-2	49724
November	-3	-1	0	0	0	0	0	-1	-2	-1	0	1	2	2	1	2	2	2	3	3	2	-1	-4	-4	49726
December	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	2	3	2	1	0	0	0	1	1	1	0	-1	-1	49726
Winter	-2	-1	-1	0	0	0	0	-1	-2	-2	-1	-1	2	2	2	2	1	2	3	2	1	-1	-2	-2	49715
Equinox	-2	-2	-1	0	1	1	1	-1	-3	-5	-7	-5	-1	2	4	4	4	4	4	3	2	0	-1	-1	49714
Summer	0	2	3	2	1	0	-1	-2	-5	-8	-9	-6	-3	1	3	4	5	5	4	3	2	1	0	-3	49712
Year	-1	0	0	1	0	0	0	-1	-3	-5	-6	-4	-1	1	3	3	3	3	3	3	2	0	-1	-2	49714

12.3 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	-16	-40	-1	-10	-11	1	10	-3	-17	0	6	28	29	24	30	26	103	81	5	4	-28	-64	-105	-53	14862
February	-12	-2	-7	-7	7	12	10	5	5	-4	-11	-6	3	7	0	10	9	7	8	7	-4	-5	-22	-6	14875
March	-7	-11	-5	1	13	6	-4	-6	-9	-7	-6	-4	-1	10	5	12	14	4	8	7	-2	-6	-1	-9	14881
Aprl	-28	-14	-3	-22	-5	-2	-9	-13	-20	-24	-13	5	14	20	26	33	32	20	13	11	-5	1	1	-18	14878
May	-10	-21	-26	-22	-23	-52	-113	-113	-76	-45	-18	17	51	161	161	97	74	42	13	-13	-22	-29	-12	-22	14878
June	-1	-1	7	-4	-1	-9	-15	-23	-28	-18	-13	1	21	19	49	39	43	47	47	4	-18	-33	-76	-47	14880
July	-14	-3	2	-28	-39	-12	-12	-18	-24	-37	-29	-20	11	60	125	103	58	30	11	-15	-37	-66	-23	-24	14895
August	-3	-14	-12	-3	-5	-14	-19	-30	-32	-29	-10	36	40	48	28	122	75	20	11	-41	-37	-76	-39	-18	14889
September	-17	-18	-17	-24	-25	-17	-43	-38	-42	-28	-9	20	43	88	55	61	20	25	2	-2	-17	-16	-9	8	14866
October	2	5	8	24	18	19	8	-5	-11	-17	-15	-8	-5	-2	-2	-4	3	1	-7	-6	-6	-13	6	7	14878
November	3	-5	6	1	7	9	12	6	-2	-9	-7	-8	-10	-1	-4	-9	-9	-1	-1	4	0	7	3	0	14880
December	-4	-8	3	15	12	12	6	6	3	-2	-1	8	7	7	8	-2	-20	-16	-1	-1	0	-11	-5	-13	14878
Winter	-7	-14	0	-1	4	9	10	4	-3	-4	-3	6	8	10	9	7	25	19	3	3	-8	-20	-36	-19	14873
Equinox	-12	-10	-4	-5	0	1	-12	-16	-21	-19	-11	3	13	29	21	26	17	13	5	3	-8	-8	-1	-3	14876
Summer	-7	-10	-7	-14	-17	-22	-40	-46	-40	-32	-17	8	31	72	91	90	63	35	21	-16	-29	-51	-37	-28	14885
Year	-9	-11	-4	-7	-4	-4	-15	-20	-22	-19	-11	6	17	38	42	43	35	22	10	-4	-15	-27	-24	-17	14878

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	-10	-10	-12	-35	-42	-17	-11	13	-2	8	-5	-9	-5	-3	0	-2	-5	33	6	8	-3	44	38	21	1694
February	14	21	26	2	-11	-8	-10	-7	-2	-6	-13	-21	-28	-25	-17	-25	-11	-5	16	46	15	22	2	15	1688
March	5	10	17	2	1	-6	-4	-10	-14	-13	-19	-28	-24	-27	-25	-6	23	17	25	35	19	23	-5	4	1686
Aprl	10	8	14	14	-1	5	3	1	-4	-12	-22	-39	-33	-31	-25	-15	11	13	20	18	-1	7	38	22	1691
May	29	14	-2	2	13	19	34	30	12	-4	-16	-27	-36	-60	-40	-24	-17	-19	-11	31	16	27	21	9	1689
June	22	24	13	6	11	4	5	13	-7	-13	-23	-36	-38	-37	-32	-25	-23	-20	13	28	29	36	34	24	1691
July	18	21	10	6	-10	-5	17	13	16	2	-13	-21	-36	-29	-19	-30	-18	3	3	8	11	22	18	13	1691
August	11	20	15	12	17	22	19	12	-4	-8	22	-31	-48	-46	-36	-35	-13	-13	11	11	17	9	14	26	1695
September	11	0	7	7	3	9	-2	-8	-2	-10	-13	-24	-28	-20	-13	5	-4	8	0	21	10	19	17	6	1706
October	13	-2	-10	-9	-1	3	3	1	1	-9	-15	-19	-21	-20	-15	-11	-1	5	16	31	26	19	9	10	1699
November	7	0	1	-3	-4	-10	-3	-2	-3	-4	-14	-16	-15	-15	-18	-9	7	25	25	15	18	19	1	3	1702
December	-2	-6	-13	-6	-8	-11	-9	-9	-8	-8	-13	-16	-16	-10	-12	-6	3	4	21	20	21	27	41	1	1713
Winter	2	2	1	-11	-17	-12	-8	-1	-3	-2	-11	-16	-17	-14	-11	-9	-2	14	17	23	13	28	20	11	1698
Equinox	10	4	7	3	1	3	0	-4	-5	-11	-17	-28	-27	-25	-19	-7	7	11	15	26	13	17	15	10	1696
Summer	20	20	9	6	8	10	19	17	4	-6	-8	-29	-39	-43	-32	-29	-18	-12	4	19	18	23	22	18	1692
Year	11	9	6	0	-3	1	4	4	-1	-7	-12	-24	-28	-28	-21	-15	-4	4	12	23	15	23	19	13	1695

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	-48	-112	-104	-67	-51	-12	3	21	16	31	37	49	62	59	60	63	87	77	39	-15	-6	-53	-72	-64	49698
February	-46	-68	-47	-35	-18	-6	-2	2	6	5	9	14	20	33	46	58	37	41	31	18	9	-12	-48	-26	49695
March	-41	-58	-40	-35	-19	-11	-2	4	10	10	12	18	22	31	35	56	63	48	23	3	-17	-23	-46	-43	49690
Aprl	-49	-52	-47	-41	-22	-10	0	6	10	16	20	23	45	46	50	53	58	45	24	8	-27	-40	-48	-69	49690
May	-65	-93	-98	-79	-52	-51	-19	-6	15	27	31	48	81	90	81	63	41	52	36	0	-13	-36	-33	-21	49713
June	-45	-47	-26	-24	-25	-18	-10	1	5	9	15	22	42	43	46	54	50	51	36	-21	-21	-58	-41	-48	49697
July	-38	-38	-41	-53	-56	-41	-28	-15	-10	-6	-2	11	42	85	136	108	80	59	30	-19	-32	-54	-72	-46	49718
August	-37	-43	-25	-19	-18	-15	-15	-10	-9	-6	8	23	31	48	56	100	68	41	25	-10	-31	-83	-55	-26	49726
September	-73	-75	-65	-64	-47	-26	-20	0	15	37	45	62	71	104	87	91	65	51	-7	-45	-72	-41	-39	-58	49726
October	-29	-28	-23	-22	-19	-13	-8	-4	-1	0	6	9	13	20	30	41	48	44	38	5	-18	-23	-33	-18	49727
November	-14	-16	-16	-13	-10	-10	-5	-2	-2	1	5	13	18	20	26	33	35	25	13	-3	-1	-13	-36	-25	49725
December	-28	-17	-24	-20	-15	-10	-5	-2	0	1	4	5	6	8	6	16	29	25	15	6	6	2	-7	-13	49728
Winter	-34	-55	-49	-34	-24	-9	-2	5	5	10	14	21	28	31	36	44	48	43	26	2	3	-21	-43	-34	49711
Equinox	-48	-53	-44	-40	-26	-15	-7	2	9	16	21	28	38	50	51	61	58	46	18	-7	-34	-31	-41	-47	49708
Summer	-46	-55	-47	-44	-38	-31	-18	-8	0	6	13	26	49	66	80	81	60	51	32	-12	-24	-57	-50	-35	49714
Year	-43	-55	-47	-39	-29	-18	-9	0	5	11	16	25	38	50	57	63	56	47	25	-6	-19	-37	-45	-39	49711

13 Monthly and Annual Means

All days

	Z	Н	D	F	X	Y	I
January	49702	14972	6° 27.7′	51908	14876	1685	73° 14.2′
February	49702	14980	$6^{\circ}\ 26.4'$	51910	14886	1680	$73^{\circ} \ 13.6'$
March	49698	14983	$6^{\circ}\ 26.8'$	51908	14888	1682	$73^{\circ} \ 13.4'$
Aprl	49700	14984	$6^{\circ} 27.1'$	51910	14889	1684	73° 13.3′
May	49710	14980	$6^{\circ} 28.0'$	51918	14885	1687	73° 13.8′
June	49709	14984	$6^{\circ} 28.4'$	51918	14889	1689	73° 13.5′
July	49711	14988	$6^{\circ} 28.6'$	51921	14892	1691	73° 13.3′
August	49717	14984	$6^{\circ}\ 29.2'$	51926	14888	1693	$73^{\circ} \ 13.6'$
September	49728	14973	$6^{\circ} 30.8'$	51934	14876	1698	$73^{\circ} 14.6'$
October	49724	14981	$6^{\circ} \ 30.5'$	51932	14885	1698	73° 14.0′
November	49726	14981	$6^{\circ} \ 31.2'$	51934	14884	1701	$73^{\circ}\ 14.1'$
December	49727	14983	$6^{\circ} \ 32.0'$	51935	14885	1705	$73^{\circ} 14.0'$
Winter	49714	14979	$6^{\circ}\ 29.3'$	51922	14883	1693	73° 14.0′
Equinox	49713	14980	$6^{\circ}\ 28.8'$	51921	14884	1691	73° 13.8′
Summer	49712	14984	$6^{\circ} 28.5'$	51921	14888	1690	73° 13.6′
Year	49713	14981	$6^{\circ} 28.9'$	51921	14885	1691	73° 13.8′

5 Quiet days

	Z	Н	D	F	X	Y	Ι
January	49706	14980	6° 25.9′	51914	14886	1678	73° 13.7′
February	49701	14987	$6^{\circ}\ 25.5'$	51911	14893	1677	$73^{\circ} \ 13.2'$
March	49701	14985	$6^{\circ} 26.0'$	51911	14891	1679	73° 13.3′
Aprl	49702	14990	$6^{\circ} 26.6'$	51913	14895	1682	73° 13.0′
May	49711	14988	$6^{\circ}\ 27.3'$	51921	14893	1685	73° 13.3′
June	49713	14990	$6^{\circ}\ 27.9'$	51924	14895	1688	73° 13.2′
July	49709	14992	$6^{\circ} 28.2'$	51920	14897	1689	73° 13.0′
August	49717	14983	$6^{\circ}\ 29.5'$	51926	14887	1694	73° 13.7′
September	49727	14980	$6^{\circ} \ 30.0'$	51934	14883	1696	$73^{\circ} 14.1'$
October	49724	14985	6° 30.0′	51933	14889	1697	73° 13.7′
November	49726	14986	$6^{\circ} \ 30.7'$	51935	14889	1699	73° 13.7′
December	49726	14987	$6^{\circ} \ 31.1'$	51935	14890	1701	73° 13.7′
Winter	49715	14985	$6^{\circ} 28.3'$	51924	14889	1689	73° 13.6′
Equinox	49714	14985	$6^{\circ} 28.1'$	51923	14890	1688	$73^{\circ} \ 13.5'$
Summer	49712	14988	$6^{\circ} 28.2'$	51923	14893	1689	73° 13.3′
Year	49714	14986	6° 28.2′	51923	14891	1689	73° 13.5′

5 Disturbed days

	Z	Н	D	F	X	Y	I
January	49698	14958	6° 30.0′	51901	14862	1694	73° 14.9′
February	49695	14970	$6^{\circ} 28.5'$	51901	14875	1688	$73^{\circ} \ 14.1'$
March	49690	14976	$6^{\circ}\ 27.9'$	51898	14881	1686	73° 13.7′
Aprl	49690	14974	$6^{\circ} 29.0'$	51897	14878	1691	73° 13.8′
May	49713	14974	$6^{\circ} 28.6'$	51920	14878	1689	$73^{\circ} 14.2'$
June	49697	14976	$6^{\circ} 29.1'$	51905	14880	1691	$73^{\circ} \ 13.8'$
July	49718	14990	$6^{\circ} 28.5'$	51929	14895	1691	73° 13.3′
August	49726	14985	$6^{\circ} 29.8'$	51935	14889	1695	73° 13.8′
September	49726	14964	$6^{\circ} \ 32.9'$	51929	14866	1706	$73^{\circ}\ 15.1'$
October	49727	14974	$6^{\circ} \ 30.9'$	51932	14878	1699	73° 14.5′
November	49725	14977	6° 31.6′	51932	14880	1702	$73^{\circ} \ 14.3'$
December	49728	14976	$6^{\circ} 34.0'$	51934	14878	1713	$73^{\circ} \ 14.4'$
Winter	49711	14970	$6^{\circ} \ 30.9'$	51916	14873	1698	73° 14.4′
Equinox	49708	14972	$6^{\circ} \ 30.2'$	51914	14876	1696	$73^{\circ} \ 14.3'$
Summer	49714	14981	$6^{\circ} 29.0'$	51922	14885	1692	$73^{\circ} \ 13.8'$
Year	49711	14975	$6^{\circ} 30.0'$	51917	14878	1695	$73^{\circ} \ 14.2'$

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

14.1 H-Component

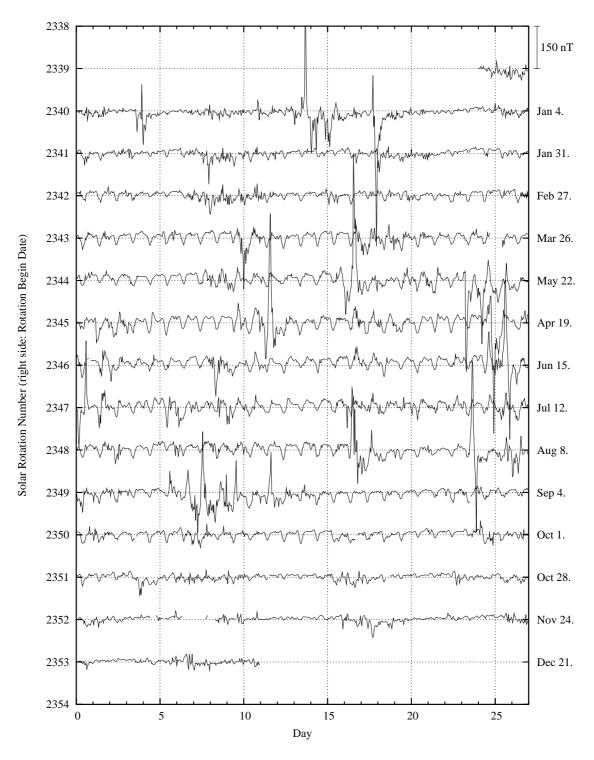


Figure 8: Hourly means of H sequenced in Bartels' solar rotation cycles.

14.2 D-Component

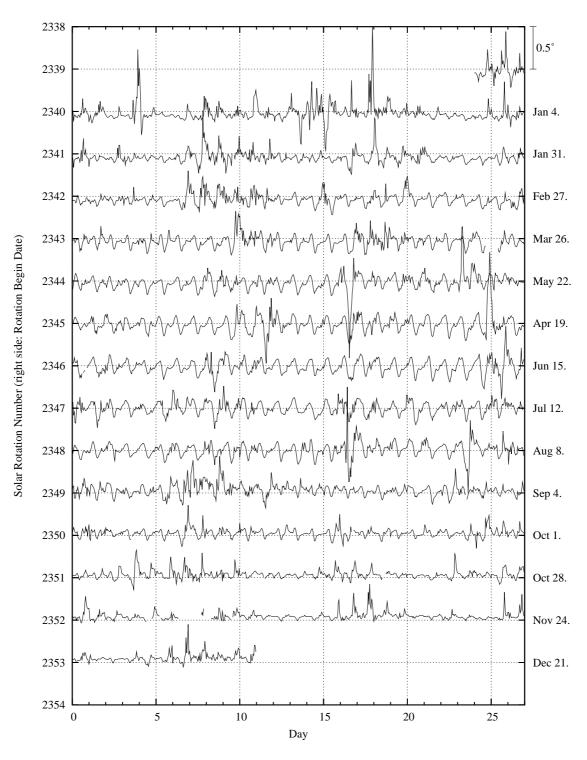


Figure 9: Hourly means of D sequenced in Bartels' solar rotation cycles.

14.3 Z-Component

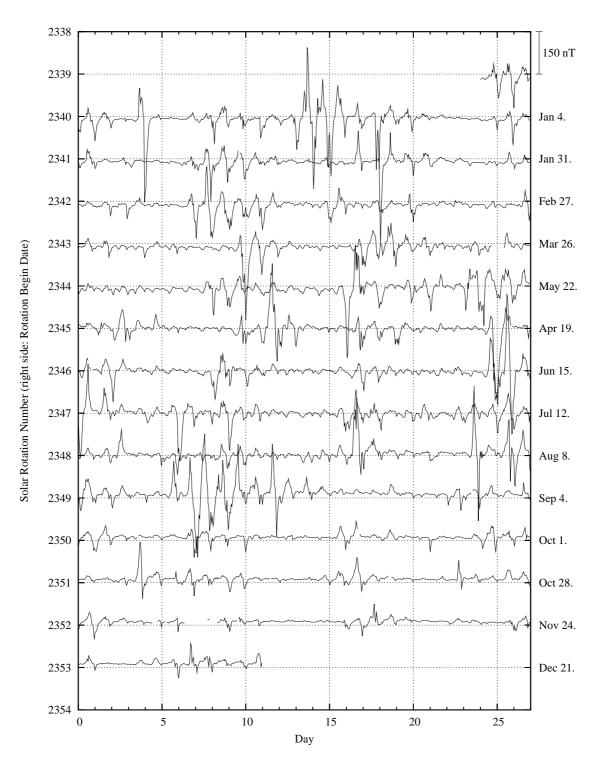


Figure 10: Hourly means of Z sequenced in Bartels' solar rotation cycles.

15 K-Indices

15.1 Monthly Tables of K-Indices

January	February	March
Day K Ak 1 2 2 2 2 4 4 3 13 2 4 4 4 3 2 6 4 6 36 3 3 3 2 3 3 4 4 2 16 4 4 3 3 3 4 3 3 16 5 3 2 3 3 4 3 3 16 6 1 1 1 0 1 1 4 1 6 6 7 0 0 0 1 4 5 4 8 43 8 6 5 3 3 2 3 3 2 2 3 2 6 9 0 0 0 3 1 1 1 0 3 1 1 1 0 3 2	Day K Ak 1 3 0 1 1 1 2 1 1 5 2 0 1 1 1 2 4 4 2 10 2 3 2 3 2 1 1 2 1 2 7 3 3 4 2 10 2 3 4 4 2 10 1 5 6 0 0 0 2 2 2 1 1 3 3 7 6 6 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 6 3 1 7 8 3 2 2 4 3 6 6 3 1 7 8 9 3 4 3 3 3 4 5 23 9 9<	Day K Ak 2 1 2 3 1 5 5 1 1 1 1 1 0 1 0 2 2 1 1 0 1 0 2 2 3 4 5 5 1 1 1 1 1 0 1 0 2 2 2 3 4 5 5 1 1 1 1 1 0 2 4 3 3 3 3 2 2 4 4 3 4 3 4 3 2 1 1 0 0 1 1 2 2 4 2 1 1
28 1 1 1 1 1 0 1 4 3 7 29 3 2 2 3 3 3 5 4 19 30 3 3 2 2 3 3 3 2 2 11 31 3 2 2 2 5 4 4 1 18 Mean 23.4	28 2 2 2 3 2 3 2 3 10 2 3 3 3 3 3 3 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Aprl K Ak 1 0 1 2 1 2 1 2 2 5 2 1 0 1 1 1 0 1 2 1 2 2 5 6 2 9 5 6 1 1 1 1 0 1 2 2 3 3 3 4 2 9 6 5 3 3 3 4 2 9 6 3 2 1 2 2 2 0 1 6 8 2 0 1 1 0 1 1 0 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 <th>Day K Ak 1 4 3 3 3 4 3 4 2 19 2 2 2 1 2 3 2 2 2 8 2 3 2 2 2 1 4 3 2 14 3 4 2 2 0 1 2 2 2 1 5 4 5 5 1 1 0 2 2 2 1 0 4 5 6 1 0 0 1 3 2 2 2 5 6 7 1 1 1 2 2 3 3 1 13 8 5 14 4 6 9 8 6 5 119 8 9 3 3 1 13 13 13 13 13 13</th> <th>1 2 1 2 1 2 2 2 2 3 7 3 2 2 1 2 2 1 9 4 2 2 2 2 1 4 5 4 20 5 3 3 2 1 2 2 1 4 18 6 3 3 2 1 2 2 1 4 11 7 3 3 2 3 4 2 2 2 13 8 2 1 1 1 1 1 1 4</th>	Day K Ak 1 4 3 3 3 4 3 4 2 19 2 2 2 1 2 3 2 2 2 8 2 3 2 2 2 1 4 3 2 14 3 4 2 2 0 1 2 2 2 1 5 4 5 5 1 1 0 2 2 2 1 0 4 5 6 1 0 0 1 3 2 2 2 5 6 7 1 1 1 2 2 3 3 1 13 8 5 14 4 6 9 8 6 5 119 8 9 3 3 1 13 13 13 13 13 13	1 2 1 2 1 2 2 2 2 3 7 3 2 2 1 2 2 1 9 4 2 2 2 2 1 4 5 4 20 5 3 3 2 1 2 2 1 4 18 6 3 3 2 1 2 2 1 4 11 7 3 3 2 3 4 2 2 2 13 8 2 1 1 1 1 1 1 4

July											Augus	t									Septen	nbe	r								
Day					Κ					Ak	Day					K				Ak	Day					Κ					Ak
1	2	2	2	1		3	5	4	3	16	1	3	2	3	4	3	3	2	3	15	1	4	3	2	2		3	2	1	3	12
2	3	2	3	3		2	3	3	3	13	2	2	2	2	3	3	3			10	2	2	2	3	3		5	5	6	3	29
3	2	2	2	2		3	1	1	2	7	3	2	2	2	2	3	3		4	13	3	5	5	4	4		5	2	2	3	28
4	1	1	1	2		1	1	1	2	4	4	2	2	3	2	3	2		2	9	4	3	3	4	5		4	4	3	4	25
5	1	1	1	3		3	1	0	1	6	5	1	1	1	2	2	3	3	3	9	5	3	2	2	3		2	3	3	2	11
6	1	1	1	1		2	2	1	2	5	6	3	3	3	4	4	4		3	20	6	3	2	2	2		3	3	1	2	10
7	1	2	1	1		3	3	2	2	8	7	4	3	3	3	3	3		3	17	7	3	3	1	2		1	0	1	0	6
8	2	1	1	1		2	2	1	2	5	8	2	1	1	1	3	2		2	6	8	2	1	1	2		2	2	2	1	6
9	2	2	2	5		6	5	5	4	34	9	2	1	2	2	2	3			10	9	1	2	1	2		5	4	4	4	19
10	4	4	3	6		8	7	6	7	94	10	2	1	3	4	4	3	1	1	13	10	2	2	3	4		4	5	5	5	28
11	3	3	4	4		3	3	5	2	21	11	1	0	1	2	2	1	1	1	4	11	6	6	7	6		8	6	5	5	100
12	4	5	3	5		7	5	3	2	44	12	1	1	0	1	2	2	2	3	6	12	4	3	6	4		4	5	6	6	48
13	2	2	4	5		5	5	3	4	28	13	2	2	2	4	4	2		4	17	13	4	3	4	5		6	3	4	3	32
14	2	3	2	1		3	1	0	1	7	14	3	3	1	2	2	1		2	8	14	2	2	3	3		3	3	4	2	14
15	1	1	0	2		2	2	2	2	5	15	0	1	1	2	3	2	2	3	7	15	3	2	3	5		5	7	6	5	50
16	3	2	2	1		2	3	2	1	8	16	3	3	2	3	4	3	2	3	15	16	3	2	3	3		4	3	4	3	17
17	2	2	3	4		4	4	3	4	19	17	3	2	2	3	4	3	3	3	15	17	1	2	1	3		3	4	3	3	13
18	4	4	3	2		3	2	3	4	18	18	3	2	3	3	3	4	. 3	2	15	18	1	2	2	3		3	2	2	1	8
19	3	1	1	2		2	2	1	3	8	19	2	1	1	2	3	1	2	2	7	19	2	1	1	2		2	2	2	1	6
20	3	2	2	4		5	3	4	3	20	20	1	1	1	1	2	1	. 2	0	4	20	1	1	1	2		1	1	1	1	4
21	4	5	3	2		3	4	3	3	21	21	1	1	1	1	3	5	3	3	13	21	1	0	0	1		1	1	0	0	2
22	3	2	2	3		4	4	3	2	15	22	2	3	2	2	3	3	1	3	11	22	1	1	1	1		1	2	2	1	4
23	2	1	1	1		1	3	0	2	5	23	2	1	2	3	3	3	3	2	11	23	2	2	2	1		1	1	2	2	6
24	0	0	1	2		2	2	2	1	4	24	3	2	5	9	8	7	7	4	127	24	2	0	0	0		1	1	1	0	2
25	1	1	1	1		2	1	1	2	4	25	5	3	2	3	5	5	3	3	26	25	0	0	1	3		2	2	0	2	5
26	1	1	1	1		1	2	2	2	5	26	2	2	2	2	1	2	2	2	7	26	3	2	2	3		3	2	4	4	15
27	2	2	1	2		4	3	4	4	15	27	3	1	2	2	2	1	. 0	1	6	27	3	3	2	1		2	2	2	4	11
28	3	5	2	3		4	3	3	4	21	28	1	1	1	2	1	1	. 2	3	6	28	2	2	2	2		2	4	2	2	10
29	3	3	2	3		4	4	3	3	17	29	3	2	2	1	1	1	. 0	1	5	29	2	2	1	3		2	3	1	1	8
30	4	3	3	2		2	1	2	2	11	30	0	0	0	1	1	0	3	2	4	30	1	1	1	1		3	2	3	4	10
31	1	1	2	2		4	2	2	4	11	31	1	2	2	3	6	9	7	8	112											
Mean										16.1	Mean									17.7	Mean										18.0

1	Mean										10.1	Mean										11.1	Mean										18.0
1	Octobe	r										Novem	ber										Decem	ber									
1	Day					K					Ak	Day					K					Ak	Day					K	_				Ak
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		3	2	2	2		2	2	4	3			3	1	1	2		2	4	2	3		v						_		3		
3														1												2	2		3	2		3	11
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$															3							-		3	2								14
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		2		1	2		1			1				3								16											5
7 1 1 2 2 2 4 4 11 7 3 1 2 1 1 1 2 2 6 8 1 0 1 1 1 2 2 6 8 1 0 1 1 1 2 2 2 2 1 4 3 11 9 2 0 1 1 0		1	0	0	1		1			2										3	3	11		2		0	1					0	2
8 3 3 4 3 3 2 5 3 20 9 2 0 1 1 0 1 2 1 3 1 1 0 0 1 1 2 2 2 2 2 1 1 1 1 1 2 1 2 3 2 2 2 2 1 0 1 3 1 4 4 3 1 2 1 1 2 1 2 2 1 1 2 3 3 2 4 1 1 1 2 3 3 2 4 1 1 1 2 3 3 2 2 1 3 3 1 4 2 3 3 1	6	1	0	0	1		1	2	2	0	3	6	4	2	3	2		2	4	4	4	18	6	0	0	0	1		1	1	1	2	2
9	7	1	1	2	2		2	2	4	4	11	7	3	1	2	1		1	1	2	2	6	7	0	0	0	0		0	0	0	1	0
10	8	3	3		3		3	2	5	3	20	8	1	0	1	1		0	1		1		8	0	0	0	0		0	0	2	2	2
11	9	3	2	2	2		2	1	4	3	11	9	2	0	1	1		0	0	1	1	2	9	1	0	0	0		1		2	4	5
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13 1 2 3 4 8 1 1 1 1 2 3 4 8 1 1 1 1 2 3 4 8 16 0	11	3	1	1	1		2	3	2	2	8	11	1	2	1	1		1	3	3	2	7	11	3	2	2	2		2	6	5	4	25
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	12	0	1	0	0		1	0	0	2	2	12	2	2	1	2		2	4	4	3	13	12	3	2	2	1		2	2	4	3	11
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	13	1	1	1	1		0	1	3	1	4	13	2	3	1	2		3	3	2	4	12	13	1	1	1	1		2	1	3	2	6
16 0 1 1 1 2 3 4 8 16 0 0 0 1 0 2 1 2 1 2 3 2 1 7 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td <td>14</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>2</td> <td>14</td> <td>3</td> <td>3</td> <td>1</td> <td>2</td> <td></td> <td>2</td> <td>1</td> <td>3</td> <td>3</td> <td>10</td> <td>14</td> <td>0</td> <td>1</td> <td>2</td> <td>1</td> <td></td> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>2</td>	14	1	1	1	1		0	0	0	1	2	14	3	3	1	2		2	1	3	3	10	14	0	1	2	1		1	0	0	1	2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	15	0	0	1	0		0	0	0	1	1	15	1	1	1	1				1	2	4	15	1	1	0	1		0	0	0	1	2
18 0 1 1 1 2 2 2 1 4 18 0 0 0 0 1 2 2 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td <td>16</td> <td>0</td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> <td>16</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td></td> <td>0</td> <td>2</td> <td>1</td> <td>2</td> <td>3</td> <td>16</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td></td> <td>2</td> <td>3</td> <td>2</td> <td>1</td> <td>7</td>	16	0	1	1	1		1	2	3	4	8	16	0	0	0	1		0	2	1	2	3	16	1	2	1	2		2	3	2	1	7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	17	3	3	2	2					1	12	17	1		1	0		0			0			0		0	1		2		0	1	3
20 2 0 1				1	1						4	-	0	0	0	0				2	0		18	1	0	1	1		1		0		2
21 0 0 0 1 0 0 0 3 2 2 2 2 1 1 1 1 1 1 1 4 4 2 2 2 3 1 1 1 1 1 1 4 4 2 2 2 3 1 1 1 1 1 1 1 1 4 4 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1											-	-																					11
22 4 2 1 1 0 2 1 7 22 2 0 1 1 1 2 1 7 22 2 0 1 1 1 1 0 0 1 1 1 1 0 0 1 1 1 1 0 0 1 1 1 1 0 0 1 1 1 1 0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>20</td> <td>2</td> <td>0</td> <td>1</td> <td>1</td> <td></td> <td>0</td> <td>1</td> <td>1</td> <td>1</td> <td>3</td> <td>20</td> <td>1</td> <td>2</td> <td>2</td> <td>2</td> <td></td> <td>1</td> <td>2</td> <td>2</td> <td>3</td> <td>7</td> <td>20</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td></td> <td>3</td> <td>3</td> <td>4</td> <td>3</td> <td>15</td>	20	2	0	1	1		0	1	1	1	3	20	1	2	2	2		1	2	2	3	7	20	3	3	2	2		3	3	4	3	15
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	22	4	2	1	1		1	0	2	1	7	22	2	0	1	1		2	3	2	3	7	22	3	1	1	1		0	0	1	1	4
25 4 4 2 3 2 4 4 4 21 25 3 2 2 2 2 2 3 1 2 2 0 1 1 1 2 2 0 1 1 1 2 2 0 1 1 1 2 2 0 1 1 1 2 2 3 3 3 5 1		1	0	0	1		1		1	0	2	23	1	2	2	1					3	7		0	0	0	0		0	0	0	0	0
26	24	1	0	0	1		1	2	3	1	4	24	2	1	2	2		2	3	3	3	10	24	0	0	0	1		2	1	3	3	5
27 3 1 1 3 4 2 1 11 27 0 1 0 0 1 2 2 3 1 0 1 1 2 2 3 2 2 3 6 5 22 28 1 0 1 1 2 2 4 2 3 3 2 2 3 3 5 17 29 0 0 1 1 1 5 12 2 3 3 2 2 3 3 3 5 17 30 1 1 0 1 1 1 5 12 2 3 3 2 2 3 3 3 5 17 31 0 1 1 1 3 3 6 5 22 31 0 1 1 1 3 3 6 5 22 31 3 1 1 1 3 4 4 13	25	4	4	2	3		2	4	4	4	21	25	3	2	2	2		2	3	2	3	10	25	2	1	1	1		2	2	0	1	4
28 1 0 1 2 2 2 3 2 6 29 1 0 1 1 5 1 1 2 2 4 2 2 3 3 2 2 3 3 3 5 1 1 30 1 1 0 1 1 1 3 3 6 5 22 3 3 3 5 1 3 3 2 2 3 3 3 2 2 3		2	1	2	2			5	4	3	16	-	2	0	1	2		1	2		2	5	26	0	0	0	0		1		4	4	8
29 0 0 1 1 2 3 1 4 30 1 1 0 1 1 3 3 6 30 2 1 2 1 1 5 12 29 4 2 3 2 2 3 1 1 1 2 3 4 4 13		3										-		_		0		0	1														22
30 1 1 0 1 1 1 3 3 6 3 3 9 31 0 1 1 1 3 4 6 5 22 2 1 2 3 4 4 13											6				1																		17
31 0 1 1 1 3 4 6 5 22										_						1		0	1	1	5	12											14
	30				1		1	1	3	3	6	30	2	1	2								30	2	2	1	2		1	3	3	3	9
Mean 7.8 Mean 7.8 Mean 7.8	-	0	1	1	1		3	4	6	5														3	1	1	1		2	3	4	4	13
	Mean										7.8	Mean										7.8	Mean										7.8

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

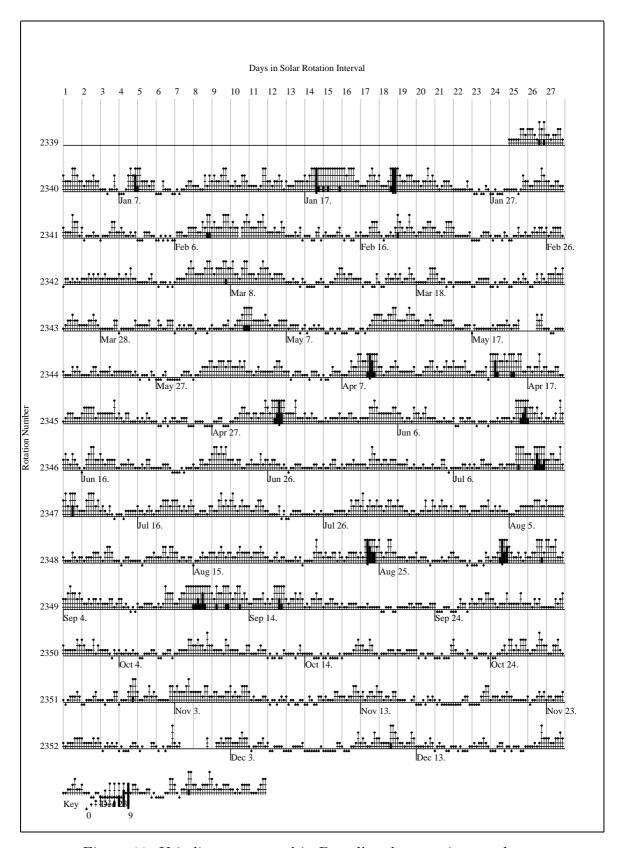


Figure 11: K-indices sequenced in Bartel's solar rotation number

15.3 Ak-Indices

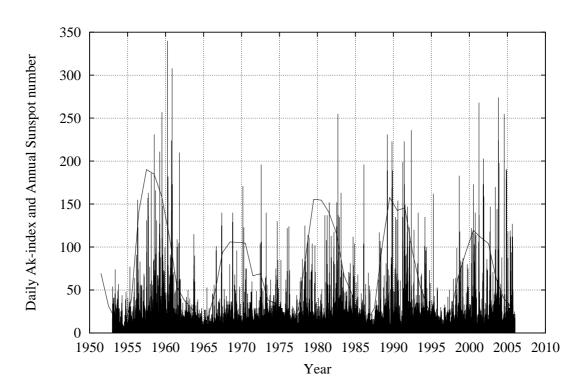


Figure 12: Daily Ak-indices (vertical lines) and sunspots (solid line)

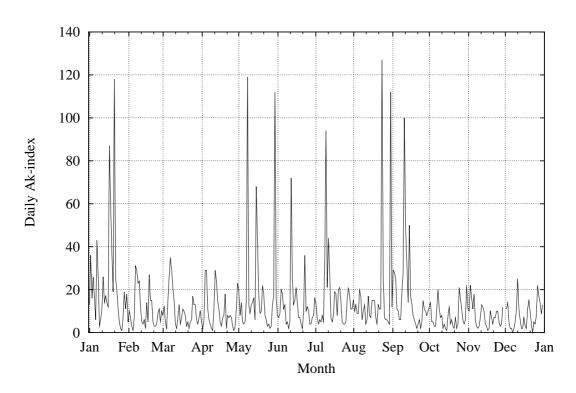


Figure 13: Daily Ak-indices

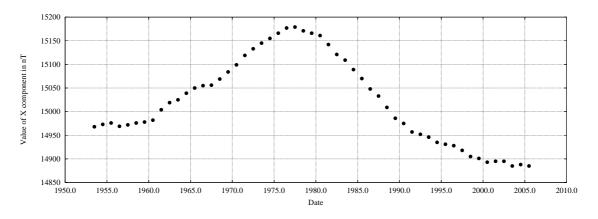
15.4 Table of Annual Ak-indices

 $\rm m/M$ denotes sunspot minimum/maximum

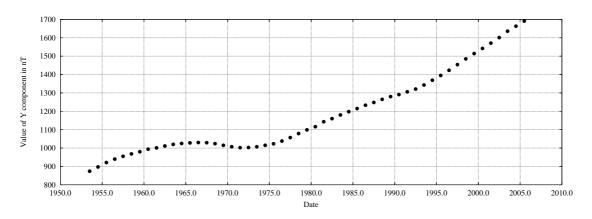
Year	Ak
1953	11
1954m	8
1955	9
1956	14
1957M	16
1958	18
1959	21
1960	22
1961	12
1962	10
1963	10
1964m	8
1965	6
1966	8
1967	10
1968M	11
1969	10
1970	10
1971	9
1972	10
1973	13
1974	15
1975	11
1976m	10
1977	9
1978	13
1979M	12

Year	Ak
1980	9
1981	13
1982	19
1983	15
1984	14
1985	10
1986m	10
1987	8
1988	11
1989M	16
1990	13
1991	21
1992	15
1993	13
1994	16
1995	11
$1996 \mathrm{m}$	9
1997	8
1998	12
1999	12
2000M	15
2001	14
2002	13
2003	22
2004	14
2005	14

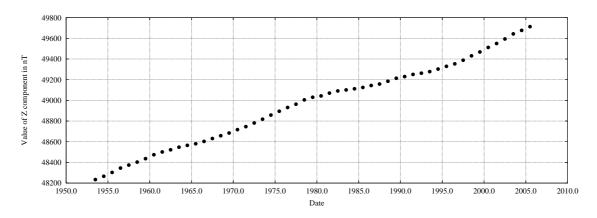
16 Annual Means



(a) Annual means for X component

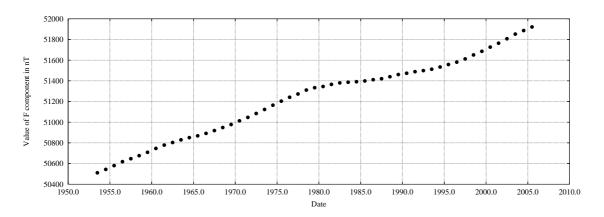


(b) Annual means for Y component

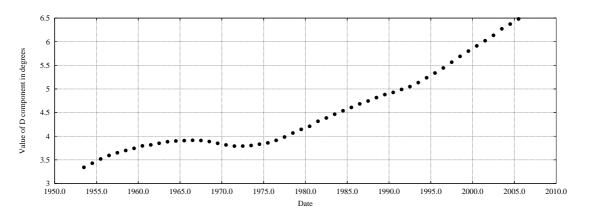


(c) Annual means for Z component

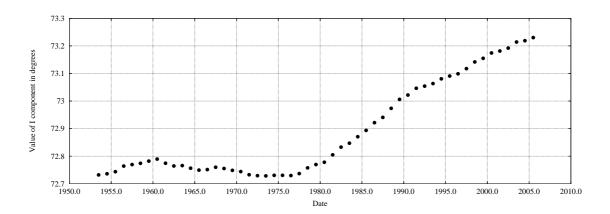
Figure 14: Figures of annual means of X, Y, and Z



(a) Annual means for F component



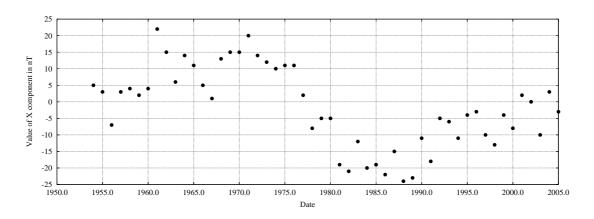
(b) Annual means for D component



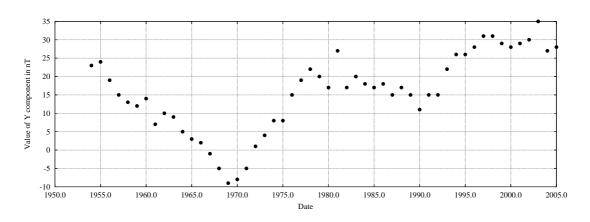
(c) Annual means for I component

Figure 15: Figures of annual means of F, D, and I

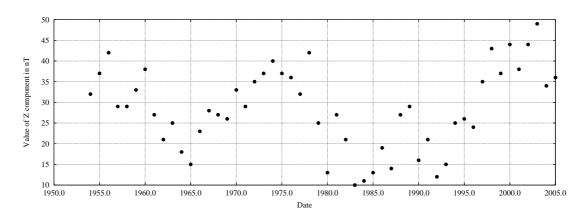
17 Secular Variation



(a) Annual change of X component

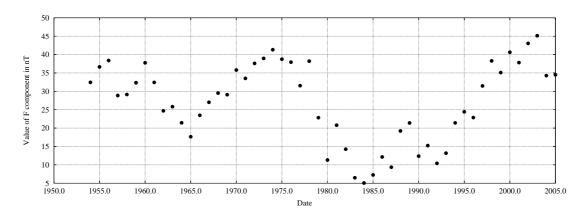


(b) Annual change of Y component

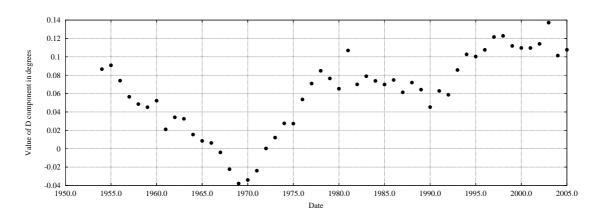


(c) Annual change of Z component

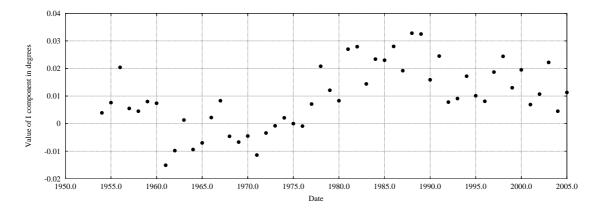
Figure 16: Annual change of components $X,\,Y,\,\mathrm{and}\,\,X$



(a) Annual change of F component



(b) Annual change of D component



(c) Annual change of I component

Figure 17: Annual change of components F, D, and I

18 Tables of Annual Means

18.1 All Days

37	v	3.7	77	D.	TT		т
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	$3^{\circ} \ 35.6'$	14998	50618	$72^{\circ} \ 45.8'$
1957	14972	955	48374	3° 39.0′	15002	50647	$72^{\circ} \ 46.2'$
1958	14976	968	48403	$3^{\circ} 41.9'$	15007	50676	$72^{\circ}\ 46.4'$
1959	14978	980	48436	$3^{\circ} 44.6'$	15010	50708	$72^{\circ} \ 46.9'$
1960	14982	994	48474	$3^{\circ} 47.7'$	15015	50746	$72^{\circ} 47.4'$
1961	15004	1001	48501	$3^{\circ} 49.0'$	15037	50779	$72^{\circ} \ 46.5'$
1962	15019	1011	48522	$3^{\circ} 51.1'$	15053	50803	$72^{\circ} \ 45.9'$
1963	15025	1020	48547	3° 53.0′	15060	50829	$72^{\circ} \ 45.9'$
1964	15039	1025	48565	$3^{\circ} 53.9'$	15074	50851	$72^{\circ} \ 45.4'$
1965	15050	1028	48580	$3^{\circ} 54.5'$	15085	50868	$72^{\circ} \ 45.0'$
1966	15055	1030	48603	3° 54.8′	15090	50892	$72^{\circ} \ 45.1'$
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	15177	1056 1057	48963	3° 59.0′	15212 15216	51241 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	$72^{\circ} 50.0'$
1983	15109	1180	49101	$4^{\circ} 27.9'$	15155	51387	$72^{\circ} 50.8'$
1984	15089	1198	49112	$4^{\circ} \ 32.4'$	15136	51392	$72^{\circ} 52.2'$
1985	15070	1215	49125	$4^{\circ} \ 36.6'$	15119	51399	$72^{\circ} 53.6'$
1986	15048	1233	49144	4° 41.1′	15098	51411	$72^{\circ} 55.3'$
1987	15033	1248	49158	$4^{\circ} \ 44.7'$	15085	51420	$72^{\circ} 56.4'$
1988	15009	1265	49185	$4^{\circ} \ 49.1'$	15062	51440	$72^{\circ} 58.4'$
1989	14986	1280	49214	$4^{\circ} 52.9'$	15041	51461	$73^{\circ}\ 00.4'$
1990	14975	1291	49230	$4^{\circ} 55.6'$	15031	51473	$73^{\circ} \ 01.3'$
1991	14957	1306	49251	$4^{\circ} 59.4'$	15014	51489	73° 02.8′
1992	14952	1321	49263	$5^{\circ} \ 02.9'$	15010	51499	$73^{\circ}\ 03.3'$
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′
2005	14885	1691	49713	6° 28.9′	14981	51921	73° 13.8′
_000	1 1000	1001	10110	0 -0.0	11001	01011	. 5 10.0

18.2 Quiet Days

1953	Year	X	Y	Z	D	Н	F	I
1955	1953	14975	872	48235	3° 20.0′	15000	50514	$72^{\circ} \ 43.5'$
1956	1954	14977	895	48266	$3^{\circ} \ 25.2'$	15004	50544	$72^{\circ} \ 43.9'$
1957	1955	14980	919	48302	$3^{\circ} \ 30.6'$	15008	50580	$72^{\circ} \ 44.4'$
1958	1956	14978	936	48343	$3^{\circ} 34.6'$	15007	50619	$72^{\circ} \ 45.2'$
1959	1957	14978	951	48372	$3^{\circ} \ 38.0'$	15008	50647	$72^{\circ} \ 45.8'$
1959	1958	14984	965	48400	3° 41.1′	15015	50676	72° 45.9′
1960	1959	14986	976	48433		15018		
1961	1960	14993		48474		15026	50749	$72^{\circ} \ 46.7'$
1962		15010		48501	3° 48.2′	15043	50780	
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° 44.9' 1967 15062 1028 48630 3° 54.3' 15097 50920 72° 44.5' 1968 15073 1022 48657 3° 52.7' 15108 50948 72° 45.2' 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° 43.4' 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° 43.5' 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° 53.2' 1985 15076 1212 49125 4° 35.8' 15125 51401 72° 53.2' 1986 15055 1230 49144 4° 40.2' 15105 51413 72° 45.9' 1987 15037 1246 49188 4° 44.2' 15089 51422 72° 56.2' 1988 15014 1262 49182 4° 48.3' 15067 51438 72° 45.5' 1990 14982 1288 49227 4° 54.8' 15037 51472 73° 00.8' 1991 14965 1302 49248 4° 58.3' 15022 51488 73° 02.8' 1993 14952 1341 49277 5° 07.5' 5002 51559 73° 05.1' 1996 14934 1421 49353 5° 26.1' 15001 51533	1962	15022	1009	48523	$3^{\circ} 50.6'$	15056	50805	$72^{\circ} 45.7'$
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° 44.5' 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' 1974 15162 1012 48859 3° 49.1' 15196 51167 72° 43.4' 1974 15162 1012 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° 43.5' 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' 1984 15095 1195 49113 4° 31.6' 15142 51344 72° 59.5' 1987 15037 1246 49158 4° 44.2' 15089 51422 72° 59.2' 1987 14985 1276 49123 4° 48.3' 15047 51438 72° 59.5' 1989 14995 1276 49134 4° 40.2' 15105 51413 72° 59.2' 1992 14959 1318 49261 5° 02.1' 15007 51438 72° 59.8' 1990 14982 1288 49227 4° 48.3' 15047 51483 72° 59.8' 1990 14982 1288 49227 4° 54.8' 15047 51438 72° 50.5' 1991 14965 1302 49248 4° 58.3' 15022 51488 73° 02.8' 1991 14965 1302 49248 4° 58.3' 15022 51488 73° 02.8' 1991 14965 1302 49248 4° 58.3' 15002 51539 73° 05.1' 1996 14934 1421 49353 5° 26.1' 15001 51533 73° 06.5' 1997 14923 1452 49388 5° 34.1' 14993 5164 73° 08.2' 1999 14905 1512 49467 5° 47.5' 149	1963	15032	1018	48547	3° 52.5′	15066	50831	72° 45.5′
1965	1964	15042	1024	48566		15077	50852	72° 45.2′
1966			1027		$3^{\circ} 54.2'$	15086	50869	
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 51048 72° 43.6′ 1971 15124 1001 48746 3° 47.2′ 15157 51048 72° 43.4′ 1972 15139 1001 48780 3° 47.0′ 15172 51085 72° 43.4′ 1973 15151 1004 48819 3° 47.5′ 15184 51167 72° 43.4′ 1974 15162 1012 48896 3° 49.1′ 15196 51167 72° 43.4′ 1975 15171 1020 48896 3° 54.0′ 15217 51242 72° 43.5′ 1977 15184 1054 48963 3° 54.0′ 15217 51242								
1969	1967	15062	1028	48630		15097	50920	$72^{\circ} 45.2'$
1969	1968	15073	1022	48657	3° 52.7′	15108	50948	72° 45.1′
1970								
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' 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° 43.5' 1978 15178 1075 49003 4° 03.1' 15216 51311 72° 45.0' 1979 15171 1096 49028 4° 07.9' 15211 51333 72° 45.0' 1981 15148 1140 49067 4° 18.2' 15191 51365 72° 47.9' 1982 15128 1157 49090 4° 22.4' 15172 51381								
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' 15216 51311 72° 45.0' 1981 15163 1115 49042 4° 12.3' 15204 51345 72° 45.9' 1981 15148 1140 49067 4° 18.2' 15191 51365								
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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	1974			48859			51167	72° 43.4′
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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° 0.2' 15105 51413								
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' 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								
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' 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	1978	15178	1075	49003	4° 03.1′	15216	51311	72° 45.0′
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 14952 1288 49227 4° 54.8' 15037 51472								
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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′ 15089 51422 72° 56.2′ 1987 15037 1246 49182 4° 48.3′ 15067 51438 72° 58.1′ 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		15148	1140	49067			51365	
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 49182 4° 48.3′ 15067 51438 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° 07.5′ 15012 51513 73° 03.4′ 1993 14952 1341 49277 5° 07.5′ 15012 51513	1982	15128	1157	49090		15172	51381	
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 49182 4° 48.3′ 15067 51438 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° 07.5′ 15012 51513 73° 03.4′ 1993 14952 1341 49277 5° 07.5′ 15012 51513	1983	15115	1176	49101	4° 26.9′	15161	51388	72° 50.5′
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° 07.5' 15012 51513 73° 03.4' 1993 14952 1341 49277 5° 07.5' 15012 51513 73° 04.3' 1995 14937 1392 49328 5° 19.4' 15006 51537								
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° 07.5' 15017 51499 73° 02.8' 1993 14952 1341 49277 5° 07.5' 15012 51513 73° 04.3' 1994 14944 1365 49304 5° 13.1' 15006 51537 73° 04.3' 1995 14937 1392 49328 5° 19.4' 15002 51559				49125				
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		15055	1230	49144	4° 40.2′	15105		$72^{\circ} 54.9'$
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′	1987	15037		49158	$4^{\circ} \ 44.2'$		51422	$72^{\circ} 56.2'$
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	1988	15014	1262	49182	4° 48.3′	15067	51438	72° 58.1′
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			-					
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′ 2002 14901 1569 49548 6° 00.6′								
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' 2002 14901 1569 49548 6° 00.6' 14983 51764 73° 10.5' 2003 14896 1632 49644 6° 15.1'	1991							
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'								$73^{\circ}\ 02.8'$
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'	1993	14952	1341	49277	5° 07.5′	15012	51513	73° 03.4′
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 5188 73° 12.8'			_					73° 04.3′
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'								
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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′	1997	14923	1452	49388	$5^{\circ} 33.4'$	14993	51614	$73^{\circ} \ 06.7'$
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′	1998	14910	1484	49431	5° 41.0′	14984	51652	73° 08.2′
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′					$5^{\circ} 47.5'$			
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′	2000	14900	1540	49510		14979	51726	
2003 14896 1632 49644 6° 15.1′ 14985 51856 73° 12.2′ 2004 14894 1660 49677 6° 21.6′ 14986 51888 73° 12.8′	2001	14901		49548	$6^{\circ}~00.6'$	14983	51764	$73^{\circ} \ 10.5'$
2004 14894 1660 49677 6° 21.6′ 14986 51888 73° 12.8′	2002	14901	1599	49593	$6^{\circ}~07.5'$	14987	51808	$73^{\circ} 11.1'$
2004 14894 1660 49677 6° 21.6′ 14986 51888 73° 12.8′	2003	14896	1632	49644	$6^{\circ}\ 15.1'$	14985	51856	73° 12.2′
2000 11001 1000 10111 0 20.0 11000 01021 10 10.0	2005	14891	1689	49714	6° 28.3′	14986	51924	73° 13.5′

18.3 Disturbed Days

Year	X	Y	Z	D	Н	F	Ι
1953	14959	879	48230	3° 21.8′	14985	50504	72° 44.4′
1954	14968	899	48264	$3^{\circ} \ 26.2'$	14995	50540	$72^{\circ} \ 44.4'$
1955	14967	924	48301	$3^{\circ} \ 32.0'$	14995	50575	$72^{\circ} \ 45.2'$
1956	14952	945	48344	$3^{\circ} \ 37.0'$	14982	50612	$72^{\circ} \ 46.9'$
1957	14959	961	48376	$3^{\circ} \ 40.5'$	14990	50645	$72^{\circ} \ 47.0'$
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	1004	48498	3° 50.1′	15026	50772	72° 47.2′
1962	15013	1003	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	$72^{\circ} \ 45.6'$
1965	15044	1030	48580	3° 55.0′	15079	50866	$72^{\circ} \ 45.3'$
1966	15046	1033	48602	3° 55.7′	15081	50888	$72^{\circ} \ 45.6'$
1967	15042	1034	48630	$3^{\circ} 55.9'$	15077	50914	$72^{\circ} \ 46.5'$
1968	15061	1028	48659	$3^{\circ} 54.3'$	15096	50947	$72^{\circ} 45.8'$
1969	15074	1019	48684	$3^{\circ} 52.0'$	15108	50974	$72^{\circ} \ 45.5'$
1970	15089	1011	48721	$3^{\circ} 50.0'$	15123	51014	$72^{\circ} \ 45.4'$
1971	15111	1006	48746	$3^{\circ} \ 48.5'$	15144	51044	$72^{\circ} \ 44.5'$
1972	15122	1007	48780	$3^{\circ} 48.6'$	15155	51080	$72^{\circ} \ 44.4'$
1973	15133	1013	48816	3° 49.8′	15167	51118	$72^{\circ} \ 44.4'$
1974	15147	1019	48857	$3^{\circ} 50.9'$	15181	51161	$72^{\circ} \ 44.3'$
1975	15157	1027	48892	$3^{\circ} 52.6'$	15192	51198	$72^{\circ} \ 44.3'$
1976	15166	1042	48931	$3^{\circ} 55.8'$	15202	51238	$72^{\circ} \ 44.5'$
1977	15169	1061	48962	$4^{\circ} \ 00.1'$	15206	51269	$72^{\circ} \ 44.8'$
1978	15158	1086	49006	4° 05.9′	15197	51308	$72^{\circ} \ 46.3'$
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 14968	$\frac{1268}{1287}$	49186 49212	4° 49.9′ 4° 54.9′	15054 15023	51438 51454	72° 58.9′ 73° 01.4′
1989 1990	14968 14964	1287 1296	49212	4° 54.9′ 4° 57.0′	15023	51454 51472	73° 01.4° 73° 02.0′
1990	14904 14942	1313	49252 49257	4 57.0 5° 01.3′	15020	51472	73° 03.8′
1991	14942	1313 1324	49264	5° 03.8′	15000	51490	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	$6^{\circ} 24.1'$	14968	51881	73° 13.9′
2005	14879	1696	49711	6° 30.2′	14975	51918	73° 14.1′

19 Earth's Magnetic Field Maps of Finland 2006.0

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)

TOTAL INTENSITY (F) 2006.0

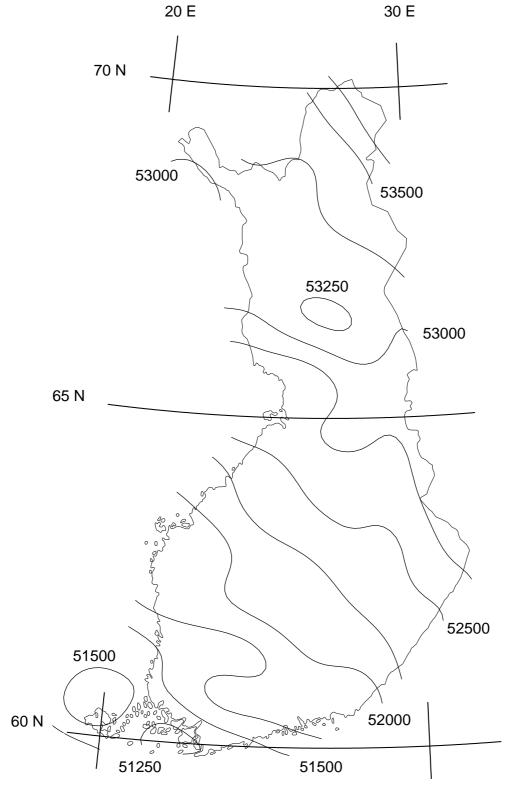


Figure 18: Total intensity F 2006.0 in nT $\,$

HORIZONTAL INTENSITY (H) 2006.0

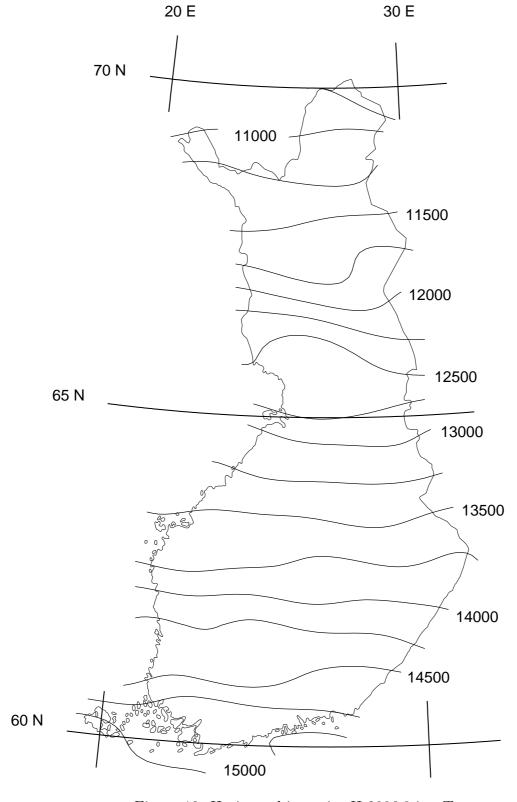


Figure 19: Horizontal intensity H 2006.0 in nT $\,$

DECLINATION (D) 2006.0

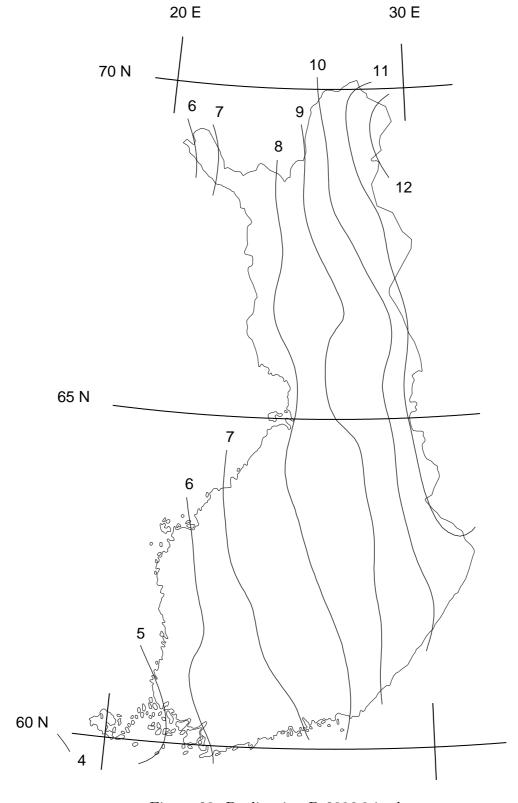


Figure 20: Declination D 2006.0 in degreees

INCLINATION (I) 2006.0

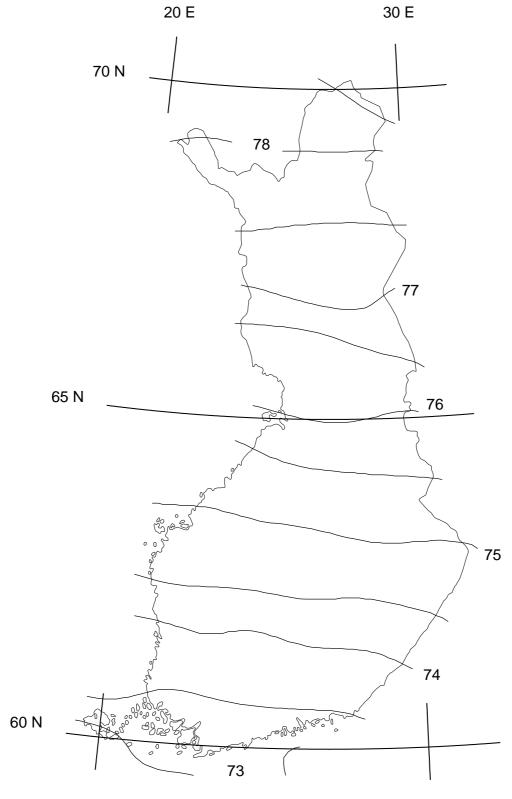


Figure 21: Inclination I 2006.0 in degrees

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The series Magnetic Results is ceased in 2006. New issues of the Nurmijärvi yearbooks will hereafter appear in the FMI series Reports.

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