NURMIJÄRVI GEOPHYSICAL OBSERVATORY

MAGNETIC RESULTS 2009

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Abstract
The magnetic yearbook of the magnetic recordings at the Nurmijärvi observatory contains tables, figures of hourly, monthly, and yearly means of the magnetic field components X, Y and Z as well as magnetic activity indices (K, Ak) in 2009. Magnetic isolines describing the distribution of geomagnetic field components in Finland 2010.0 are shown by a series of maps.

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Contents

1 Introduction

This report presents magnetic measurements carried out at the Nurmijärvi (NUR) Geophysical Observatory between January 1 and December 31, 2009. The observatory is operated by the Finnish Meteorological Institute (FMI) and is part of the Observation Services 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 38,000 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°30.5′N	24°39.3′E
Geomagnetic	57°43.8′	113°28.8′
Corr.geomagnetic	56°49.2′	102°31.2′

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

L-value	3.3
Height	$105m$

The Nurmijärvi observatory is running two magnetometers, which are controlled usually once per week with absolute measurements. Another 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, rain and clouds. Helsinki University has the seismic station at the observatory. University of Leicester operates the radio transmitter for ionospheric research. The receiver is in United Kingdom. Nurmijärvi municipality needs the water level observations in the lake Sääksjärvi.

The Nurmijärvi observatory has a magnetic calibration and test laboratory for magnetometer and sight compass calibrations and for compass swing base measurements at airfields. FINAS (Finnish Accreditation Services) accredited the laboratory as the number K050 on 17th of August 2007.

3 Recording instruments

In the variation house the Danish suspended flux gate magnetometer (FGE-89) is the primary instrument. The Ukrainian LEMI-004 flux gate magnetometer is the second variometer. The sensors are directed in geographic North and East directions measuring the X, Y and Z components. The temperature in the variometer room

is kept at $18°C$. Analog voltages from the magnetometers are AD-converted in the variation room and the digital data are transferred through optical wires to the computers in the main observatory building. The Linux based software stores the data in three files as one-second, ten-seconds and one-minute averages. Timing is based on GPS time sheared through the local network. The standard one-minute values are averages over one minute periods starting and ending at a half minute (e.g. 59:30 - 00:30, 00:30 - 01:30, 01:30 - 02:30). The given time is the starting minute at the centre of the period (00, 01, 02 etc.).

Few hours of data was lost on 13th and 14th of June and another gap of 20 minutes exist on 26th of December.

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 non-magnetic Zeiss-Jena theodolite (010B) and of a flux-gate element mounted on its telescope. The absolute measurements were done on average once a week. The base line values as determined for the FGE are shown in Fig. 2.

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 $750nT$.

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 2007 was published in 2009 containing minute data, annual means and base line values from Nurmijärvi together with over a hundred of other magnetic observatories.

6 IMAGE and repeat stations

The IMAGE magnetometer network (Fig. 1) consisted at the end of 2009 of 30 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 in co-operation with the Sodankylä Geophysical Observatory of the Oulu University.

The data sampling intervals at the IMAGE stations were 1, 10 and 60 seconds. The IMAGE standard used the $10s$ values and they were averages over the seconds

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	
2006.5	12866	2283	51063	
New-old	-21	+19	+9	New absolute house
2007.5	12837	2333	51106	
2008.5	12831	2366	51139	
2009.5	12824	2400	51173	

Table 1: Annual mean values (all days) at the Oulujärvi station.

Year	X[nT]	Y[nT]	Z[nT]
2002,5	11255	1600	51313
2004,5	11237	1663	51392
2005,5	11228	1690	51429
2006,5	11229	1716	51459
2007,5	11225	1747	51496
2008,5	11217	1783	51529
2009,5	11210	1820	51560

Table 2: Annual mean values (all days) from the Pello IMAGE station.

00-10, 10-20, 20-30 etc. The time stamp given for the 10-second period was the first second of that period.

Most of the stations had ADSL or direct network connections and only OUJ was still operated through a GPRS modem. Data transmission from the stations was moved from the observatory to the Helsinki office of FMI. The data of the eleven stations were processed and inspected and were sent for IMAGE filing.

At Oulujärvi the absolute measurements were made in the new absolute house. In the table 1 are the annual mean values calculated for the old absolute house since 1993 and for the new absolute house since 2007. The coordinates of the station are (64°31′N, 27°14′E).

6.1 Pello IMAGE station

Pello (66°54.2′N, 24°04.7′E) close to the border with Sweden in Lapland has a tilt suspended FGE magnetometer and absolute measurements are made once or twice a year. The annual mean values for all days were calculted and are listed in table 2.

Year	D[°]	H[nT]	Z[nT]
2000,5	7,531	14578	49574
2002,5	7,763	14583	49655
2004,5	8,001	14580	49740
2005,5	8,118	14580	49778
2006,5	8,224	14583	49805
2007,5	8,357	14587	49839
2008,5	8,491	14596	49871
2009,5	8,624	14593	49900

Table 3: Reduced results from the Virolahti repeat station.

6.2 Virolahti repeat station

Virolahti (60°33.7′N, 27°33.4′E) in the South-East Finland is one of the old repeat stations in Finland started in 1947. The station was visited in 2009 and three measurements during one day were made. The table 3 shows results of the last 10 years. The annual mean value of quiet days at the Numijärvi observatory was used to reduce the measurements at Virolahti.

6.3 SAMNET stations

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

7 IMAGE Magnetometer Network

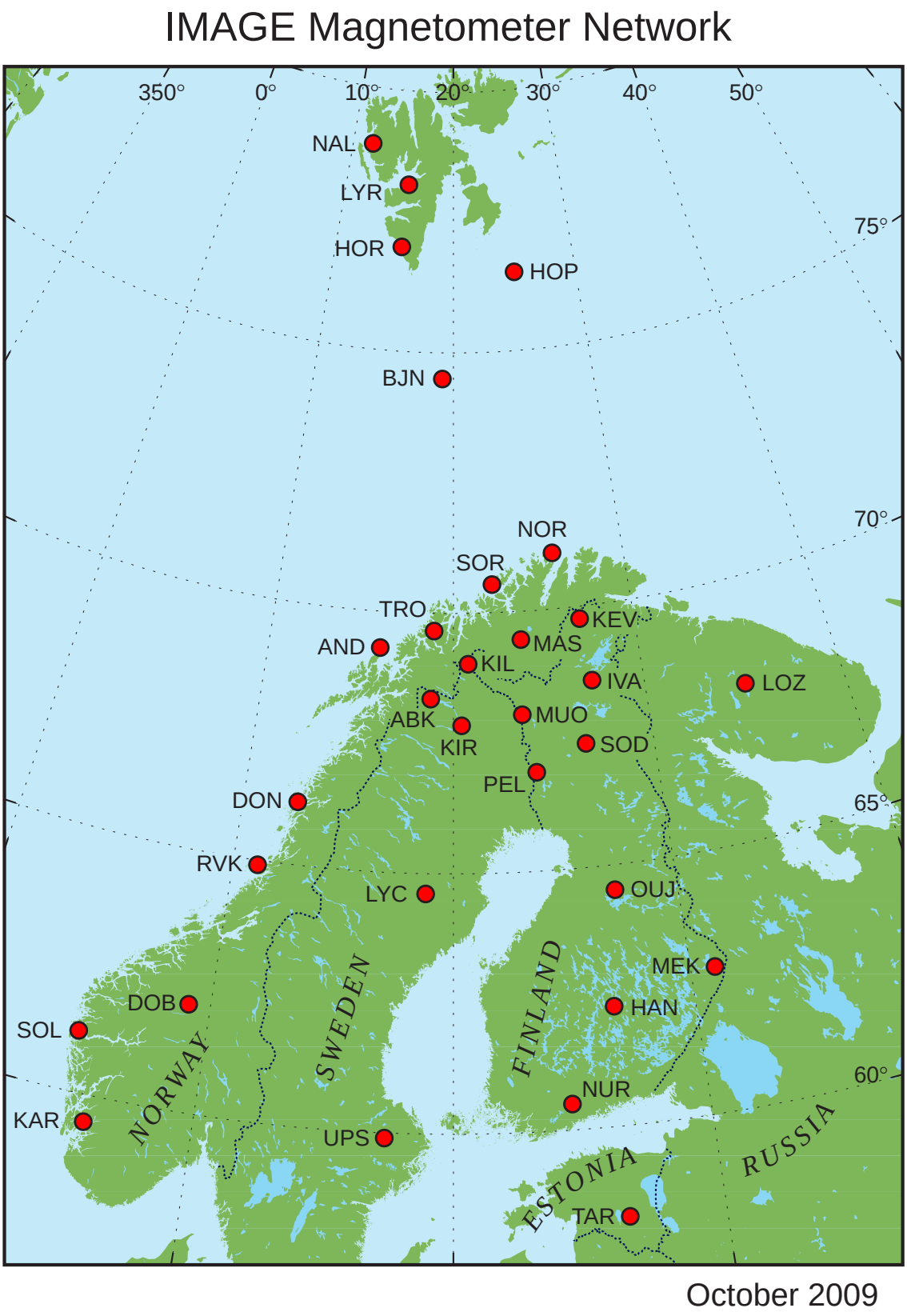
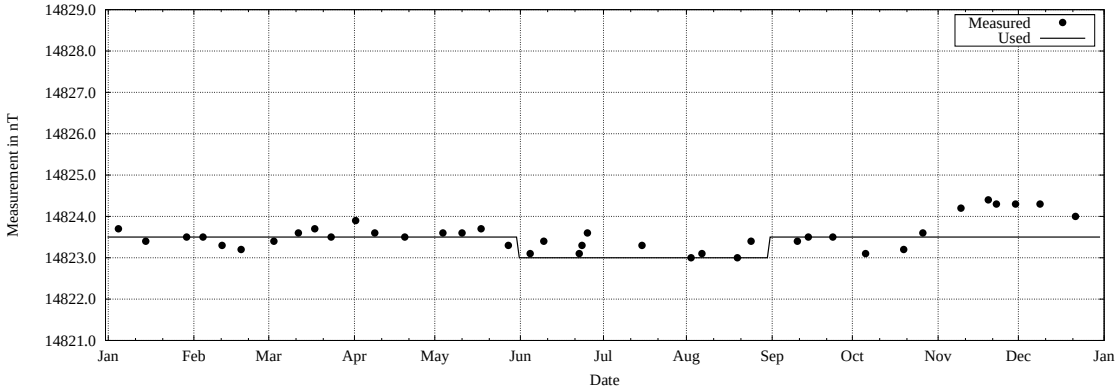
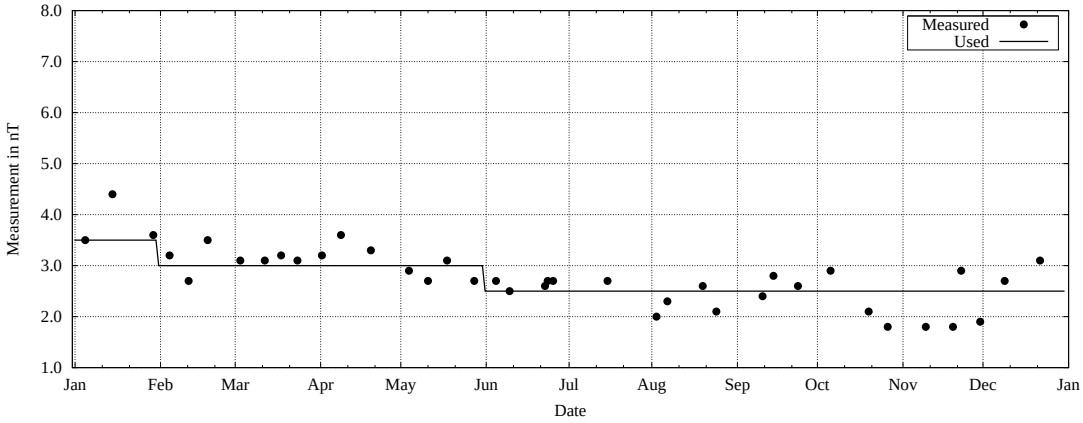


Figure 1: Map of IMAGE magnetometer network

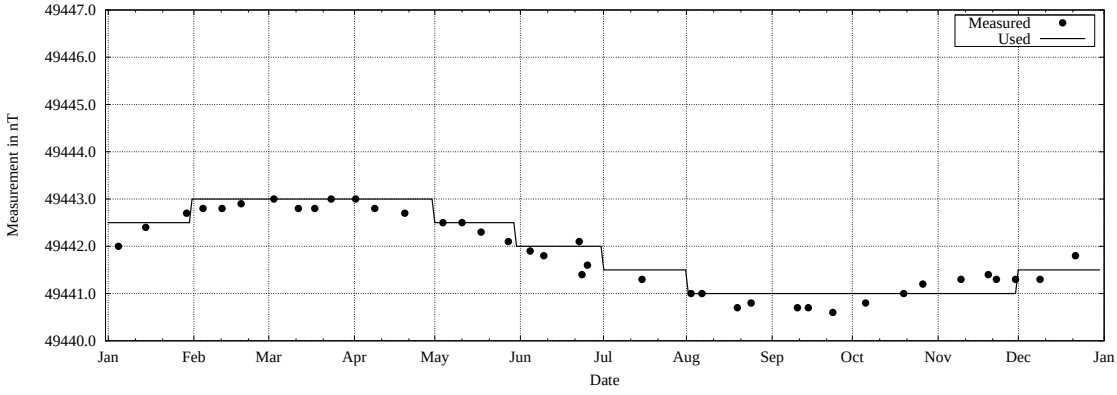
8 Baseline Measurements for FGE



(a) Baseline measurements for X component



(b) Baseline measurements for Y component



(c) Baseline measurements for Z component

Figure 2: Baseline measurements

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

Explanations of the tables:

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

Nurmijarvi Finland

January 2009 North component X in nT (X = 14800 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	77	77	77	81	79	82	84	71	76	74	72	65	64	68	70	66	76	76	73	76	76	76	84	79	75
2		76	76	78	82	85	84	82	81	79	78	77	76	77	79	75	79	77	67	69	66	72	71	82	82	77
3	D	76	76	75	89	89	85	88	89	89	65	51	69	78	81	80	78	69	68	79	80	79	82	87	77	78
4		81	76	78	79	80	81	82	80	78	76	72	73	77	76	75	74	65	62	60	70	78	79	78	78	75
5		77	79	80	81	84	84	84	82	76	72	71	75	80	84	80	68	68	65	65	67	73	90	78	79	77
6		79	80	78	87	86	83	85	80	75	73	70	75	74	75	74	67	69	73	77	78	79	79	82	82	77
7		82	81	81	82	86	84	86	83	77	76	76	79	83	85	84	81	77	75	78	81	80	81	82	83	81
8		82	82	82	83	86	87	88	87	79	77	75	80	84	86	85	77	77	86	86	84	85	85	84	87	83
9		91	83	84	85	82	80	81	76	71	71	75	80	77	82	87	87	89	88	85	80	74	78	82	80	81
10		76	75	83	86	86	90	83	80	77	73	70	78	87	88	86	85	83	82	80	80	79	78	79	74	81
11	Q	75	77	80	84	85	84	82	79	75	74	72	80	83	85	83	82	78	78	78	79	78	77	78	79	79
12	Q	79	79	79	81	82	81	80	76	73	75	78	79	84	86	86	85	85	86	86	85	82	83	85	84	82
13		83	84	84	83	90	96	92	85	85	80	79	83	89	92	91	89	87	84	81	80	79	82	80	78	85
14		77	80	78	83	84	84	87	89	85	79	71	71	68	73	76	77	74	71	79	70	71	71	73	79	77
15		78	77	77	78	85	88	89	88	82	78	76	74	79	84	87	87	86	76	60	69	70	70	69	73	78
16		73	74	76	82	82	83	82	80	77	75	73	76	82	84	84	79	79	81	83	81	82	82	80	79	80
17		81	81	81	81	82	83	81	81	78	76	72	75	82	83	82	84	82	78	76	75	76	81	81	81	80
18		78	77	78	79	80	81	82	81	82	80	79	82	86	87	86	83	82	82	78	83	86	86	86	83	82
19	D	84	81	85	78	83	83	83	82	78	77	78	80	87	89	89	86	82	72	68	65	76	65	74	72	79
20		75	76	78	77	80	82	79	79	78	75	74	78	82	83	83	84	84	83	83	79	81	70	74	77	79
21		79	78	80	81	82	84	83	82	82	78	81	84	86	82	80	78	68	62	69	80	82	78	77	77	79
22	Q	80	79	80	82	83	82	82	79	77	76	82	88	89	90	88	85	81	85	85	86	85	85	84	83	83
23	Q	83	84	83	84	85	85	85	84	82	79	79	83	86	86	86	86	84	83	83	83	83	85	82	82	84
24	Q	82	82	82	85	88	86	84	83	82	83	85	88	87	85	83	84	86	89	90	89	88	85	84	84	85
25		83	86	87	87	89	88	84	83	84	86	90	90	87	81	79	80	82	84	86	87	84	82	84	81	85
26	D	71	92	90	94	95	90	86	90	80	78	82	83	73	63	59	53	46	45	72	79	80	79	78	78	77
27		78	78	80	81	80	81	79	76	75	77	78	80	82	78	76	72	64	67	74	84	81	76	77	79	77
28		79	80	81	82	83	82	79	79	80	80	78	78	84	86	85	84	82	82	81	80	81	86	84	83	82
29		84	85	86	88	86	89	88	83	81	77	72	77	82	81	81	81	80	82	82	82	83	81	81	81	82
30		80	81	81	83	82	80	81	81	86	86	84	87	89	88	86	84	84	81	79	75	78	84	87	84	83
31	D	86	87	89	90	92	91	91	86	83	87	88	86	73	71	73	70	70	70	78	76	80	79	89	77	82
All		79	80	81	83	85	85	84	82	79	77	76	79	81	82	81	79	77	76	78	78	79	80	81	80	80
Quiet		80	80	81	83	84	84	83	80	78	78	78	82	86	86	86	85	84	83	84	84	84	83	83	82	83
Dist.		79	82	83	86	88	86	86	83	81	76	74	77	75	74	74	70	69	66	74	75	78	76	82	77	78

January 2009 East component Y in nT (Y = 1800 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	1	1	2	-2	-8	-2	-2	5	1	-1	-7	-9	-4	-9	-4	2	12	4	6	10	10	12	12	7	2
2		6	5	3	2	0	3	5	6	6	4	2	-1	0	2	4	-1	-1	2	4	26	18	11	-7	13	5
3	D	9	13	-4	-10	-9	-11	-3	2	-4	4	-6	-13	-6	-3	1	0	7	23	9	6	7	9	12	9	2
4		11	1	0	4	4	4	4	3	2	-2	-4	-5	-3	-1	1	1	8	28	19	11	8	6	6	4	5
5		4	1	0	-1	0	2	3	2	-1	2	-1	-5	-4	1	-2	7	7	8	16	11	10	26	15	1	4
6		1	1	-7	-7	1	0	1	3	4	3	0	-4	-2	-2	-2	8	8	5	7	7	6	5	4	3	2
7		3	1	-1	-1	3	3	4	5	3	-1	-6	-9	-7	-2	1	1	2	8	2	5	6	5	3	4	1
8		-1	0	1	3	3	3	5	5	4	1	-5	-11	-12	-9	-10	-4	5	0	1	3	4	6	11	11	1
9		5	4	4	3	3	4	5	5	0	-3	-10	-15	-13	-9	-2	1	2	2	3	20	21	8	5	7	2
10		3	-9	10	8	6	2	5	6	2	1	-4	-8	-7	-1	2	2	2	3	4	6	10	12	13	12	3
11	Q	5	4	1	0	2	4	5	6	3	0	-1	-3	-2	0	0	0	1	2	5	6	8	7	6	6	3
12	Q	5	4	3	3	4	4	6	9	8	3	0	-3	-3	-1	2	3	4	4	5	7	6	5	3	3	4
13		2	3	3	4	1	3	3	8	4	2	-2	-7	-6	-6	-3	-3	-4	-1	3	8	15	15	11	12	3
14		9	9	10	11	7	7	6	7	5	1	-3	-6	-6	-17	-3	3	6	8	19	11	13	17	18	12	6
15		7	0	5	4	8	2	-2	-4	0	3	-1	-8	-8	-7	-3	-1	0	1	15	22	26	35	30	11	6
16		10	6	6	3	5	5	8	10	9	8	4	-2	-5	-1	1	2	3	9	10	6	6	6	7	5	5
17		3	3	4	5	4	5	7	9	7	4	-1	-6	-4	0	0	1	1	0	6	10	11	9	7	5	4
18		7	6	7	7	7	8	8	9	5	1	-1	-5	-4	1	1	2	4	1	4	4	6	5	6	5	4
19	D	5	2	-20	12	12	11	9	10	11	2	0	-2	-2	2	0	-1	-2	12	20	12	26	23	11	5	6
20		-8	1	4	3	4	7	9	12	13	9	3	-2	-1	1	3	3	3	3	4	13	30	22	18	8	7
21		6	5	4	5	5	5	6	6	6	5	0	1	1	1	5	3	7	16	9	14	16	18	17	10	7
22	Q	5	4	3	4	5	4	6	7	7	4	-1	-3	-2	1	2	2	4	10	6	3	2	3	3	3	4
23	Q	3	2	3	3	3	4	6	7	8	6	-1	-3	-2	2	2	3	3	3	4	4	5	7	6	4	3
24	Q	4	4	2	3	5	4	7	10	10	7	2	3	5	5	3	2	1	1	2	3	4	5	5	7	4
25		7	13	10	5	2	3	5	4	2	1	1	5	7	6	4	2	1	2	3	3	3	7	14	15	5
26	D	5	9	8	3	2	2	5	4	-5	-7	-1	-5	-2	-9	-21	-5	-5	16	6	6	7	8	8	7	1
27		6	5	4	4	3	5	7	8	6	3	0	-1	2	5	4	3	7	7	11	15	31	25	6	6	7
28		5	4	2	2	4	7	10	11	12	10	5	-1	1	4	5	5	6	6	7	8	8	10	5	4	6
29		3	3	2	-1	-1	-4	0	-4	-2	-4	-2	-4	-2	2	6	6	8	8	9	9	6	6	6	5	2
30		6	6	5	4	6	5	6	3	2	0	2	0	1	3	3	5	6	6	9	10	18	9	3	2	5
31	D	3	4	4	2	-1	-1	-1	-3	-1	2	3	-2	9	11	0	4	5	11	31	21	11	10	11	12	6
All		4	4	2	3	3	3	5	5	4	2	-1	-4	-3	-1	0	2	3	7	8	10	12	11	9	7	4
Quiet		4	4	2	3	4	4	6	8	7	4	0	-2	-1	2	2	2	2	4	4	4	5	5	5	5	3
Dist.		5	6	-2	1	-1	0	2	3	1	0	-2	-6	-1	-2	-5	0	3	13	14	11	12	13	11	8	3

January 2009 Vertical component Z in nT (Z = 49800 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	20	22	22	22	21	20	21	23	25	24	25	28	34	34	33	34	33	30	31	29	27	25	17	16	26
2		23	25	26	25	24	25	25	24	25	26	25	25	26	27	28	27	28	31	34	33	28	17	0	3	24
3	D	6	7	8	9	11	16	19	18	21	27	37	34	32	29	30	30	35	40	33	29	28	27	15	16	23
4		16	20	22	24	25	25	26	24	24	26	28	31	31	31	30	30	35	36	38	34	31	27	26	25	28
5		24	24	25	26	26	26	26	24	25	27	28	29	31	30	29	33	34	37	42	38	33	20	16	21	28
6		25	25	23	20	22	24	25	26	27	28	28	31	33	33	33	35	35	34	32	30	28	27	26	24	28
7		23	23	24	24	24	25	25	24	25	26	27	27	30	29	27	27	29	30	30	29	27	27	26	22	26
8		22	24	25	25	25	25	25	24	24	24	26	28	30	29	28	31	34	30	28	27	26	26	23	18	26
9		14	18	22	22	22	23	25	25	25	25	24	24	29	31	30	28	27	26	26	30	28	28	26	25	25
10		24	13	13	16	19	21	23	25	26	26	26	29	29	27	26	25	25	26	27	28	27	27	24	24	24
11	Q	25	25	26	26	25	25	25	25	23	23	23	26	28	29	28	28	30	31	30	30	28	28	28	27	27
12	Q	27	27	26	26	26	26	27	27	26	25	24	25	27	26	26	26	26	26	26	26	26	26	25	24	26
13		24	24	22	22	21	21	21	23	23	23	23	24	25	26	26	26	27	29	31	33	33	31	27	26	25
14		27	26	24	23	24	24	25	25	26	27	27	28	32	35	35	31	31	32	30	29	29	27	22	13	27
15		9	13	18	22	22	22	21	21	22	23	24	26	30	30	28	26	26	31	42	40	31	27	25	27	25
16		26	28	29	29	27	27	28	27	26	25	24	26	29	29	28	28	29	29	27	27	27	27	27	26	27
17		26	26	26	26	26	26	27	27	27	26	25	26	29	30	29	29	29	32	36	37	36	32	30	29	29
18		29	28	27	28	28	27	27	28	27	26	24	28	29	27	26	26	28	28	30	30	29	28	27	26	28
19	D	26	23	-4	11	20	21	22	24	26	25	26	28	29	28	27	27	29	40	38	39	35	31	29	27	26
20		18	22	26	28	28	28	28	28	28	28	28	28	29	29	28	27	27	27	27	30	26	26	28	28	27
21		28	27	27	27	26	26	26	25	24	25	24	24	24	26	28	29	32	38	38	30	22	22	22	25	27
22	Q	26	26	27	26	26	27	27	26	26	24	23	26	27	26	26	26	26	28	27	26	25	25	25	25	26
23	Q	25	25	25	25	24	25	25	25	23	21	21	25	26	26	26	26	25	25	25	25	25	24	23	23	24
24	Q	24	24	24	24	23	24	25	26	25	23	21	21	22	23	24	24	24	24	23	23	23	24	24	23	24
25		23	22	22	22	22	23	23	22	22	22	23	22	23	24	25	26	26	25	25	24	24	25	24	22	23
26	D	19	12	18	20	19	21	23	23	21	23	25	26	32	42	49	60	85	72	46	35	31	29	29	28	33
27		28	28	28	27	27	28	29	28	27	26	26	27	27	27	28	30	35	36	34	27	12	18	23	26	27
28		27	27	27	27	27	27	27	26	24	22	24	27	26	27	27	27	26	27	27	27	27	25	24	24	26
29		25	25	24	24	24	23	22	21	21	22	24	27	29	29	29	28	28	27	27	27	26	26	26	26	25
30		26	26	26	25	25	25	24	23	23	24	26	23	22	23	24	25	26	27	28	30	28	26	24	25	25
31	D	26	25	24	23	22	20	20	22	23	23	23	23	28	30	31	33	33	35	32	28	28	26	20	17	26
All		23	23	23	23	24	24	24	24	24	25	25	26	28	29	29	29	31	32	31	30	28	26	24	23	26
Quiet		25	25	26	25	25	25	26	26	25	23	22	24	26	26	26	26	26	27	26	26	26	25	25	25	25
Dist.		19	18	14	17	19	19	21	22	23	24	27	28	31	33	34	37	43	43	36	32	30	28	22	21	27

Nurmijarvi Finland

February 2009 North component X in nT (X = 14800 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	79	77	82	80	77	78	77	73	78	82	84	81	79	80	81	81	80	81	82	82	81	80
2	Q	81	80	80	79	79	79	77	78	80	83	86	88	90	87	84	82	82	81	81	81	83	83	83	82	82
3		83	84	83	83	82	82	81	79	82	87	92	93	93	92	90	88	86	85	83	79	82	84	72	72	84
4	D	68	74	80	87	85	87	80	77	81	84	79	64	70	60	60	63	78	44	52	59	61	63	67	70	71
5		74	68	71	77	74	71	67	63	62	65	65	73	78	83	83	80	78	77	76	77	79	77	79	67	73
6		71	78	75	79	80	81	80	79	78	79	78	79	81	82	80	79	79	80	81	80	80	81	81	83	79
7		79	80	81	79	79	83	87	88	87	88	90	88	85	82	78	80	79	81	83	84	84	83	83	82	83
8	Q	81	82	83	83	81	81	84	87	89	90	91	91	88	86	83	81	81	82	83	83	84	83	81	80	84
9		77	80	81	83	83	82	81	82	85	87	88	89	90	86	81	79	79	80	82	83	81	81	82	81	83
10	Q	81	82	84	85	88	88	85	86	86	85	88	90	90	91	89	90	88	88	89	88	83	81	81	80	86
11		80	81	87	85	88	87	87	90	90	94	92	89	87	84	83	86	88	86	79	79	80	80	84	84	85
12		84	83	82	81	80	82	82	84	87	90	89	84	76	75	77	78	75	75	78	79	81	81	81	81	81
13		80	81	81	81	82	82	83	83	86	89	90	89	91	90	87	85	85	79	79	77	80	86	89	87	84
14	D	85	90	93	97	102	95	76	66	73	69	77	91	74	53	63	56	60	70	71	72	75	75	77	71	76
15	D	74	62	75	65	80	81	73	72	73	78	85	83	69	75	70	72	75	73	76	74	88	86	78	72	75
16		71	70	74	74	74	73	73	73	77	81	81	81	80	79	79	78	77	78	70	76	73	79	75	75	76
17	Q	76	76	76	76	74	73	72	68	67	69	72	76	81	83	83	82	80	80	81	81	81	80	80	78	77
18		76	77	80	80	83	85	83	83	81	81	83	84	84	80	79	80	79	78	76	78	79	76	85	85	81
19	Q	80	81	81	81	80	78	75	72	72	77	81	85	87	88	85	81	77	80	80	79	83	85	83	84	81
20		86	85	81	84	88	87	87	86	85	85	85	83	84	84	83	82	80	82	79	77	84	78	80	86	83
21		85	84	85	85	83	82	85	85	82	82	80	77	84	90	88	84	84	87	87	87	90	87	84	86	85
22		85	85	86	87	86	86	84	81	75	76	70	76	81	80	86	86	86	86	85	86	86	88	85	84	83
23		81	81	83	83	84	85	84	81	76	73	73	77	82	81	70	69	65	53	67	75	76	81	81	89	77
24	D	69	73	73	77	94	86	89	79	69	69	70	73	76	79	78	76	79	80	80	82	82	84	84	81	78
25		84	78	76	79	80	77	78	79	80	77	79	83	87	88	85	82	82	79	75	81	83	84	84	82	81
26		80	78	78	80	81	82	82	80	79	80	82	87	89	90	85	82	81	83	86	88	87	88	90	89	84
27	D	89	84	85	87	88	84	86	87	82	63	64	73	68	82	80	82	78	70	72	71	75	81	87	81	79
28		79	78	74	80	79	79	71	71	68	67	70	77	83	86	85	80	78	76	77	80	82	83	87	81	78
All		79	79	80	81	83	82	80	79	79	79	80	82	82	82	81	79	79	78	78	79	81	81	82	80	80
Quiet		80	80	81	81	80	80	79	78	79	81	83	86	87	87	85	83	82	82	83	82	83	82	82	81	82
Dist.		77	76	81	83	90	87	81	76	76	73	75	77	71	70	70	70	74	67	70	72	76	78	79	75	76

February 2009 East component Y in nT (Y = 1800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		7	7	8	6	2	6	1	1	1	0	0	-3	-3	1	3	4	5	5	5	6	8	8	10	9	4
2	Q	8	7	7	6	6	5	4	1	-2	-1	1	3	6	6	5	5	5	9	5	6	8	7	7	6	5
3		4	4	5	7	7	7	5	1	-4	-5	-2	2	4	4	2	2	3	3	2	4	6	10	42	38	6
4	D	34	10	7	11	9	7	5	-4	-6	-7	-4	-11	-13	-25	-35	-37	-31	8	36	22	14	19	22	15	2
5		15	8	14	13	10	9	11	11	6	0	1	2	1	5	4	5	3	4	4	3	6	17	28	18	8
6		10	10	17	15	12	10	8	9	10	9	8	7	5	5	5	4	5	5	6	7	7	8	10	11	8
7		7	6	7	6	3	6	4	3	1	2	2	3	2	1	1	3	1	4	5	7	7	7	7	7	4
8	Q	8	7	7	6	5	4	1	0	1	0	0	2	6	6	6	7	7	6	7	6	5	6	7	9	5
9		6	15	15	11	8	7	4	3	1	0	-1	2	6	7	6	6	6	5	5	4	6	6	1	7	6
10	Q	7	6	5	4	3	3	3	2	2	2	0	2	4	4	4	3	2	4	5	6	7	12	13	11	5
11		9	9	9	8	5	5	4	1	0	-2	0	2	3	4	6	6	6	7	13	11	12	13	7	5	6
12		4	4	4	4	3	4	3	2	2	2	1	1	-3	-5	-1	12	10	9	7	11	10	10	10	8	5
13		7	8	6	6	5	5	3	1	-1	-4	-6	-6	-2	2	3	2	2	14	10	12	13	9	11	13	5
14	D	14	11	13	8	7	4	2	-7	-33	-15	-16	-12	-28	-2	-21	6	40	8	12	12	11	22	3	-4	2
15	D	16	23	23	25	12	7	2	-6	-9	-5	-5	-13	6	6	9	18	20	9	18	17	30	18	21	11	11
16		10	5	11	10	10	9	6	2	-3	-5	-4	-2	0	-1	0	1	3	15	5	13	19	17	11	8	6
17	Q	7	8	10	10	10	10	10	9	5	0	-2	-4	-3	2	5	5	7	7	6	8	9	10	10	11	6
18		-2	5	10	9	9	8	6	3	1	-2	-3	-1	1	2	2	1	6	4	4	18	28	13	5	8	6
19	Q	10	9	8	8	7	8	8	7	5	1	-2	-4	-3	0	1	2	4	4	7	8	7	7	6	4	5
20		6	9	9	6	5	5	2	2	2	2	1	2	1	1	3	5	8	8	8	7	28	27	10	-5	6
21		7	11	10	8	8	6	6	6	4	2	-3	-1	-1	-1	-1	1	-3	0	1	3	5	6	8	7	4
22		8	8	7	7	8	8	9	10	9	1	2	-1	1	4	3	5	6	6	6	7	8	18	11	9	7
23		9	9	8	8	8	8	10	10	9	4	-2	-7	-11	-11	-11	-6	21	9	15	32	17	11	12	14	7
24	D	28	17	5	-1	14	11	7	7	5	2	1	-2	-1	2	5	10	7	7	8	7	8	9	9	9	7
25		9	11	16	21	16	10	7	7	2	0	-1	-2	-2	2	6	8	5	9	12	8	8	10	9	11	8
26		10	10	11	10	12	12	11	11	7	2	-1	-3	-1	2	7	8	8	7	7	6	6	7	5	6	7
27	D	6	12	10	9	11	9	7	5	-1	-3	-13	-19	-11	3	2	4	4	19	25	31	19	21	8	8	7
28		10	9	6	10	15	10	12	8	4	1	0	-2	-2	2	6	7	8	9	9	9	9	9	8	10	7
All		10	9	9	9	8	7	6	4	1	-1	-2	-2	-1	1	1	3	6	7	9	10	11	12	11	9	6
Quiet		8	7	7	7	6	6	5	4	2	0	-1	0	2	3	4	4	5	6	6	7	7	8	9	8	5
Dist.		20	15	12	11	11	8	5	-1	-9	-6	-7	-11	-9	-3	-8	0	8	10	20	17	16	18	13	8	6

February 2009 Vertical component Z in nT (Z = 49800 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		23	25	26	25	23	24	24	25	26	27	27	28	28	27	27	27	28	27	27	28	27	27	24	25	26
2	Q	26	26	26	26	26	26	25	24	26	28	28	28	27	26	26	27	27	28	27	27	27	27	26	26	27
3		26	25	26	26	26	26	25	24	25	27	29	30	29	28	27	27	27	27	27	29	30	32	17	11	26
4	D	17	34	36	32	30	30	30	29	27	29	30	33	37	48	68	112	200	177	116	66	48	37	29	21	55
5		12	0	21	29	29	32	35	34	33	33	35	34	34	34	32	31	32	33	33	34	34	35	24	29	30
6		28	20	26	26	27	27	28	29	29	29	28	27	27	29	30	30	30	30	30	30	30	30	29	26	28
7		28	29	28	28	26	25	23	21	20	21	22	24	25	25	29	32	32	32	30	29	29	28	27	27	27
8	Q	28	27	27	26	26	26	24	23	21	20	20	23	24	24	26	28	28	28	28	28	27	27	28	28	26
9		24	26	27	27	26	26	26	25	25	27	27	28	27	26	25	28	29	29	29	29	29	29	26	27	27
10	Q	28	27	27	27	26	26	25	25	25	25	25	26	26	26	26	26	26	26	26	27	28	30	28	28	27
11		27	26	23	25	25	25	24	21	21	21	21	21	23	24	26	26	26	26	30	29	30	30	28	27	25
12		27	26	26	26	26	26	26	24	25	25	25	26	25	27	30	34	33	34	33	32	30	29	28	27	28
13		28	28	27	27	28	27	27	25	24	23	21	22	24	23	23	25	26	29	30	33	31	29	27	26	26
14	D	26	26	23	22	19	16	20	21	20	27	26	30	43	61	63	70	53	38	35	35	32	29	1	-6	31
15	D	11	13	15	12	6	16	21	22	21	22	26	31	45	44	47	48	39	35	35	33	27	10	15	21	26
16		27	28	29	30	30	29	28	27	28	29	31	33	32	32	33	32	34	36	38	37	36	32	31	31	31
17	Q	31	31	30	30	30	30	30	31	31	33	34	34	33	32	31	31	31	31	31	31	31	31	30	29	31
18		26	26	28	28	28	28	27	26	28	29	28	27	27	28	30	31	33	33	35	35	32	31	28	23	29
19	Q	28	29	28	28	29	29	29	28	27	25	23	23	24	27	29	30	32	31	30	31	30	28	28	28	28
20		26	26	27	26	25	25	25	24	23	23	24	24	25	26	26	28	30	30	31	34	26	24	26	21	26
21		24	26	27	26	26	25	25	24	23	23	25	25	25	25	24	26	26	27	28	28	27	27	27	26	
22		27	27	27	27	26	26	25	26	25	24	23	26	28	31	30	28	28	27	28	28	28	25	26	26	27
23		27	27	27	27	26	26	26	26	26	25	22	23	26	30	35	41	53	58	49	41	31	29	25	6	31
24	D	7	19	22	16	6	17	21	20	23	24	26	29	32	34	34	33	32	32	31	30	30	29	29	28	25
25		23	17	20	23	23	24	24	22	22	23	26	29	28	28	28	28	28	30	32	31	30	29	28	27	26
26		27	28	28	28	28	27	26	24	24	24	24	26	27	28	28	28	29	29	29	28	28	28	27	27	
27	D	27	26	26	25	24	24	25	23	22	24	30	37	51	48	39	35	34	40	36	38	31	21	15	20	30
28		26	29	27	25	26	27	27	27	27	27	30	30	31	31	31	30	31	31	32	31	31	28	24	28	29
All		24	25	26	26	25	26	26	25	25	25	26	28	30	31	32	35	38	37	35	32	30	28	25	24	28
Quiet		28	28	28	27	27	27	27	26	26	26	26	27	27	27	28	28	29	29	28	29	29	29	28	28	28
Dist.		18	23	24	22	17	21	23	23	23	25	27	32	42	47	50	59	72	65	51	40	33	25	18	17	33

Nurmijarvi Finland

March 2009 North component X in nT (X = 14800 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		81	78	77	81	86	86	83	81	76	73	74	81	86	87	87	85	82	81	78	80	81	82	82	82	81
2	Q	83	82	82	81	79	80	81	77	71	70	71	75	80	86	86	84	84	83	84	84	85	87	86	85	81
3		85	83	83	84	85	84	89	90	81	82	86	81	86	91	88	78	69	71	82	91	81	83	91	83	84
4		81	82	81	74	84	83	84	80	76	76	77	75	73	80	87	81	81	82	82	82	91	97	76	80	81
5		76	78	79	76	81	85	79	77	71	68	73	79	85	87	86	84	83	81	82	81	83	83	83	85	80
6	Q	82	84	86	86	85	83	81	78	76	75	78	82	82	83	84	84	84	86	88	89	87	85	84	84	83
7	Q	83	82	82	82	82	81	79	74	70	69	74	78	83	88	89	88	88	87	86	86	87	87	85	84	82
8	D	80	83	84	89	89	89	88	81	65	65	73	77	73	88	86	69	65	70	79	82	82	81	82	80	79
9	Q	81	79	80	80	79	81	80	75	71	69	73	79	84	87	85	81	82	82	83	83	83	83	83	83	80
10		83	82	81	81	80	80	80	76	71	68	73	79	86	89	88	81	74	71	79	83	85	87	88	86	80
11		85	82	84	87	86	87	86	77	70	67	71	77	84	89	88	86	87	86	86	89	75	90	82	85	83
12		80	77	81	83	78	78	77	69	67	69	72	78	83	90	93	93	91	92	94	97	102	101	99	98	85
13	D	91	82	91	68	80	83	76	62	58	72	71	70	77	75	76	78	77	67	72	77	75	81	78	74	75
14	D	77	72	73	80	80	78	75	72	65	64	53	59	72	77	81	84	79	72	69	78	82	91	87	86	75
15	D	70	71	75	76	85	74	82	76	66	59	62	67	70	78	81	80	81	82	81	82	81	83	83	85	76
16		84	77	79	79	79	81	83	83	78	75	76	74	74	78	81	81	83	85	81	85	88	88	87	85	81
17		86	84	82	83	85	86	86	83	78	74	74	73	78	83	89	87	85	86	87	87	92	89	90	83	84
18	Q	83	82	82	83	85	85	87	81	73	70	71	74	76	80	85	86	88	90	91	93	94	92	91	90	84
19		90	92	90	89	90	91	88	76	64	60	67	77	81	87	89	88	88	88	87	87	95	87	92	87	85
20		86	86	86	86	89	90	90	81	74	70	72	79	88	92	91	88	80	66	75	82	83	85	90	88	83
21		89	88	89	91	97	97	96	86	76	73	75	71	57	58	74	82	79	77	78	70	52	52	68	76	77
22		77	77	77	75	80	81	78	70	66	63	65	73	75	81	83	82	81	82	83	82	86	85	84	76	78
23		77	74	77	82	83	83	78	71	66	65	68	73	80	84	87	85	85	85	88	90	90	89	87	87	81
24		88	88	87	82	77	87	81	63	60	62	64	70	80	88	71	75	80	83	81	84	85	86	96	90	80
25	D	83	78	68	69	88	87	80	74	62	51	58	69	79	86	87	85	83	85	83	82	86	91	91	85	79
26		83	81	84	86	88	75	79	73	69	64	65	69	75	82	78	80	81	84	85	86	86	87	84	82	79
27		82	84	84	84	85	88	86	79	68	61	60	65	75	83	85	82	81	80	86	72	74	82	84	88	79
28		82	82	83	84	87	90	87	78	69	64	61	59	70	81	84	85	85	87	88	88	93	87	89	91	81
29		88	87	86	86	88	89	86	82	69	61	62	65	75	82	85	86	88	86	89	89	91	91	90	89	83
30		90	87	87	87	87	87	88	83	77	73	69	67	71	78	83	80	84	86	87	95	94	90	87	86	84
31		85	86	85	86	90	92	89	84	74	67	65	64	71	74	84	87	87	86	88	90	89	89	89	88	83
All		83	82	82	82	84	84	83	77	70	68	69	73	78	83	84	83	82	82	83	85	85	86	86	85	81
Quiet		82	82	82	82	82	82	81	77	72	71	73	78	81	85	86	85	85	86	86	87	87	87	86	85	82
Dist.		80	77	78	76	84	82	80	73	63	62	63	69	74	81	82	79	77	75	77	80	81	85	84	82	77

March 2009 East component Y in nT (Y = 1800 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	11	8	16	13	12	11	10	6	-1	-6	-4	-2	2	6	8	8	8	8	9	10	11	9	10	7
2	Q	10	11	11	11	12	13	17	17	13	6	-1	-5	-4	-2	4	6	5	7	7	7	8	9	9	10	8
3		11	11	11	12	12	12	12	11	7	0	-9	-4	-1	0	1	4	4	5	10	41	13	11	8	13	8
4		13	8	10	4	5	7	10	8	0	-6	-6	-7	-8	-6	-2	0	9	3	2	5	28	35	21	18	6
5		18	16	22	7	5	10	16	19	15	6	-1	-4	-2	1	6	8	9	7	9	8	8	9	9	5	9
6	Q	1	2	11	14	11	9	10	11	11	6	1	-4	-3	0	4	8	7	6	6	7	7	9	11	10	6
7	Q	9	9	10	10	12	12	14	16	14	9	1	-5	-5	-2	3	7	7	6	8	9	9	8	8	8	7
8	D	2	5	10	13	12	12	13	14	7	-8	-18	-23	-15	-8	-1	6	11	39	12	7	9	10	11	9	5
9	Q	10	12	13	14	15	15	18	19	15	7	-2	-5	-3	2	8	12	10	10	11	11	10	10	9	10	10
10		11	11	11	14	14	15	20	22	18	9	-3	-6	-9	-9	-3	2	2	8	8	11	11	10	9	10	8
11		11	12	11	13	13	13	17	20	18	10	-1	-7	-10	-11	-5	0	1	4	10	32	16	25	43	28	11
12		20	23	23	34	22	19	18	17	12	2	-5	-9	-7	-5	3	7	5	4	3	3	1	5	11	5	9
13	D	21	68	69	40	31	23	18	13	8	1	-6	-13	-9	-10	-7	17	32	23	27	24	24	9	9	16	18
14	D	13	22	12	15	13	10	8	9	16	4	-4	-2	-7	-7	-2	5	22	29	11	14	16	19	6	8	10
15	D	22	11	16	15	13	9	9	13	11	4	2	-7	-7	-4	3	10	10	8	8	10	11	11	14	8	8
16		9	11	16	15	13	13	18	21	20	10	0	-4	-4	-2	2	8	8	8	8	12	9	8	8	9	9
17		8	12	15	16	13	11	15	19	19	13	3	-6	-8	-5	-1	6	4	19	7	9	9	15	6	3	8
18	Q	12	17	16	15	14	13	15	17	15	9	-3	-10	-11	-7	0	5	5	2	5	9	8	8	8	7	7
19		7	7	13	12	13	15	20	24	20	10	-3	-16	-15	-7	2	8	8	7	7	7	10	10	8	7	7
20		8	12	15	14	14	17	22	25	21	11	-1	-8	-9	-4	2	9	13	8	15	7	18	17	8	8	10
21		10	13	14	13	12	16	21	23	20	8	-12	-24	-35	-14	5	8	9	10	22	27	34	59	55	15	13
22		13	15	15	3	11	22	27	27	22	13	4	-2	-5	-2	5	10	10	9	9	10	13	17	11	15	11
23		17	16	15	16	14	16	21	23	19	10	-1	-8	-11	-7	0	9	10	9	9	7	7	7	8	8	9
24		10	10	13	10	3	4	7	10	4	-9	-13	-20	-17	-15	-7	6	10	12	14	14	21	14	7	15	4
25	D	4	22	18	-7	6	7	20	24	21	20	12	0	-6	-3	2	11	15	13	15	14	13	12	13	13	11
26		12	7	11	14	14	11	6	13	17	10	4	-5	-7	-7	2	6	8	12	22	15	16	17	18	12	10
27		10	14	14	14	14	17	22	25	25	19	7	-6	-11	-10	-4	5	7	17	44	30	24	18	10	3	13
28		10	12	13	13	13	16	21	24	21	15	1	-12	-17	-13	-4	2	7	9	11	17	25	28	18	10	10
29		10	12	12	13	13	15	19	25	26	18	2	-14	-23	-21	-10	-1	7	9	11	12	11	12	12	13	8
30		12	11	11	12	11	14	19	23	21	13	1	-9	-14	-12	-5	3	7	8	13	18	20	13	12	11	9
31		12	11	12	12	12	15	20	24	23	15	-1	-13	-20	-16	-8	-1	6	7	9	10	12	12	12	13	7
All		11	14	15	13	13	13	16	18	16	7	-2	-8	-10	-7	0	6	9	10	12	13	14	15	13	11	9
Quiet		8	10	12	13	13	12	15	16	13	7	-1	-6	-5	-2	4	8	7	6	7	8	8	8	9	9	8
Dist.		12	26	25	15	15	12	14	15	12	4	-3	-9	-9	-6	-1	10	18	23	15	14	15	12	11	11	10

March 2009 Vertical component Z in nT (Z = 49800 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		29	28	26	27	26	26	27	27	24	23	24	25	27	28	29	29	30	30	30	30	30	29	29	29	28
2	Q	29	29	29	28	28	29	30	27	25	24	26	28	28	28	29	29	28	29	29	29	29	28	28	28	28
3		28	28	28	28	28	29	28	23	18	16	19	23	26	25	26	30	38	39	37	26	25	25	5	19	26
4		25	27	27	24	20	22	21	19	21	20	19	22	25	29	31	33	34	34	35	36	32	7	14	16	25
5		26	30	28	26	25	25	29	28	27	26	26	28	29	31	30	29	29	30	31	30	30	29	29	26	28
6	Q	23	22	24	26	26	27	27	26	25	22	22	24	26	28	31	30	28	28	28	28	28	28	28	28	26
7	Q	28	28	28	27	27	28	29	26	23	20	20	23	25	26	26	27	27	28	29	29	28	28	28	27	26
8	D	23	21	18	19	23	25	25	22	18	17	19	26	32	30	35	37	41	44	32	31	31	31	29	29	27
9	Q	28	30	30	30	29	29	29	27	24	21	21	24	27	28	31	31	30	30	30	30	29	29	29	29	28
10		29	29	28	28	29	29	28	27	25	23	22	18	19	26	31	33	38	40	37	34	32	31	30	30	29
11		29	29	29	28	28	29	29	29	27	24	20	21	25	29	32	30	29	30	33	27	33	28	14	15	27
12		24	27	20	13	22	26	26	27	28	25	24	25	28	31	32	30	27	27	27	26	25	24	22	4	25
13	D	-32	-36	-59	-14	12	16	20	22	23	22	21	25	30	36	41	55	47	49	49	41	32	9	6	21	18
14	D	24	17	25	28	28	28	28	29	31	29	30	34	33	35	36	37	46	43	43	39	34	21	16	-11	29
15	D	-1	15	19	26	25	24	27	22	22	26	24	27	32	32	33	36	33	32	32	32	32	32	30	19	26
16		15	19	26	28	28	29	31	30	27	24	25	24	27	32	34	34	33	33	33	33	31	30	30	30	29
17		27	25	26	27	27	27	28	24	21	19	19	20	25	28	30	31	30	32	29	30	27	21	21	21	26
18	Q	26	28	28	28	27	28	27	25	24	24	25	26	26	29	31	30	29	29	29	28	25	24	26	27	27
19		25	23	25	26	26	26	27	26	22	16	16	21	26	29	31	29	28	29	29	29	27	25	24	26	26
20		21	25	27	27	27	27	27	28	25	22	23	26	27	29	31	34	38	43	42	37	35	30	29	31	30
21		31	30	29	28	27	27	25	24	22	17	19	27	41	54	54	43	38	36	36	35	19	-4	9	26	29
22		30	33	31	26	24	32	33	30	27	25	23	23	27	32	34	33	32	32	32	32	32	25	16	25	29
23		28	30	30	31	31	31	32	29	27	26	24	23	25	29	33	34	32	31	31	30	30	30	30	30	29
24		30	30	30	30	27	26	24	23	20	16	19	22	27	39	49	46	38	35	35	34	33	32	21	15	29
25	D	6	10	14	15	15	20	24	27	28	30	34	30	29	32	33	35	35	33	33	33	33	26	18	23	26
26		29	29	25	25	23	25	26	27	29	25	23	22	23	29	34	36	35	36	36	29	29	28	24	25	28
27		28	29	30	31	31	32	32	30	28	25	21	19	22	28	35	39	41	48	30	36	35	33	32	24	31
28		25	29	30	31	32	34	33	32	28	27	22	21	25	30	33	33	32	31	32	33	24	21	23	25	29
29		27	29	29	29	28	29	29	27	27	27	24	22	23	28	31	32	33	32	32	32	31	30	29	29	29
30		29	29	29	29	29	30	30	26	25	23	20	21	25	31	34	33	33	32	33	31	24	28	28	29	28
31		30	29	29	29	29	32	32	30	27	24	24	21	26	34	36	36	34	32	31	31	31	31	30	30	30
All		23	24	24	25	26	27	28	26	25	23	22	24	27	31	33	34	34	34	33	32	30	25	23	23	27
Quiet		27	27	28	28	28	28	28	26	24	22	23	25	26	28	29	29	29	29	29	29	28	27	28	28	27
Dist.		4	5	4	15	20	23	25	24	24	25	26	29	31	33	36	40	40	40	38	35	32	24	20	16	25

Nurmijarvi Finland

April 2009 North component X in nT (X = 14800 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		86	90	89	90	90	93	93	86	75	70	67	65	72	79	85	85	85	87	89	92	98	96	101	87	85
2	Q	88	90	89	90	91	90	86	78	70	66	66	69	76	81	86	81	81	81	85	85	85	89	92	91	83
3		90	90	90	90	90	88	85	79	73	70	64	66	76	86	90	86	89	89	81	85	87	86	87	86	83
4	Q	85	84	84	86	87	86	81	76	70	67	68	73	81	85	90	90	89	91	94	95	94	93	94	92	85
5		90	89	86	87	91	88	82	78	73	71	68	74	83	88	89	87	87	89	84	89	90	88	86	86	84
6		86	86	85	85	86	86	82	75	67	65	67	74	84	92	95	90	85	88	92	93	91	91	90	90	84
7	Q	89	89	87	86	86	86	81	75	69	66	62	69	79	85	88	91	91	87	88	88	87	88	87	88	83
8		89	89	88	89	90	89	85	75	66	67	73	78	86	96	94	92	93	100	99	97	99	88	90	93	88
9	D	95	95	91	89	85	79	70	69	66	54	49	56	74	85	95	97	89	93	74	65	73	77	77	83	78
10	D	77	75	70	73	80	80	75	68	53	52	51	58	74	83	83	73	80	85	86	108	85	87	89	84	76
11	D	79	64	80	86	81	79	74	68	63	58	52	63	80	89	91	84	79	76	80	83	91	93	85	76	77
12	D	77	78	77	80	81	79	76	68	60	55	54	63	74	85	90	88	91	88	76	79	89	96	84	92	78
13		90	79	84	84	83	84	83	74	64	55	53	60	68	77	83	85	85	85	81	82	82	86	84	87	78
14		82	81	81	80	80	82	82	76	68	58	55	59	69	78	82	83	82	84	88	89	89	87	84	85	78
15		78	80	82	87	87	90	85	79	71	62	58	63	67	78	81	85	86	88	89	94	91	83	86	85	81
16		83	82	81	82	83	84	83	76	68	66	63	67	74	76	84	70	85	76	89	94	93	95	102	98	81
17		85	82	84	87	88	84	82	71	67	63	65	67	64	82	78	78	87	89	88	89	90	100	89	91	81
18	D	89	89	88	83	87	71	72	73	66	60	58	66	75	82	82	80	86	82	85	84	87	84	85	87	79
19		83	79	79	72	79	82	75	73	69	65	63	66	72	83	87	86	90	90	91	88	90	89	88	90	80
20		86	83	82	86	82	74	68	71	67	64	66	70	81	85	81	83	87	88	87	87	89	88	89	89	81
21		87	86	86	86	84	82	77	75	72	61	66	74	80	86	83	83	81	83	89	87	90	90	88	86	82
22		86	83	82	83	84	81	77	74	69	65	70	75	79	83	86	85	83	84	88	90	89	91	96	90	82
23	Q	86	86	86	85	82	79	77	72	68	68	68	74	85	90	88	87	83	86	90	94	95	95	92	92	84
24		92	98	93	90	88	83	79	82	84	84	83	84	83	95	95	89	85	85	82	89	93	90	90	91	88
25		90	89	89	88	85	83	79	75	69	62	57	63	76	89	85	86	84	86	91	91	92	97	87	84	82
26		86	87	85	87	88	86	81	75	66	62	56	68	81	90	90	86	86	88	93	95	95	94	93	90	84
27		86	80	79	82	83	81	74	68	60	59	66	77	90	94	90	84	83	86	90	94	92	89	88	88	82
28		90	89	88	88	85	80	76	73	66	64	72	80	88	92	92	91	90	91	91	96	95	95	94	93	86
29		93	92	92	91	88	82	78	75	72	67	66	65	70	82	88	90	87	85	89	93	93	94	93	92	84
30	Q	88	87	85	83	81	80	78	76	71	65	63	68	75	83	86	92	89	88	89	89	88	88	88	89	82
All		86	85	85	85	85	83	79	74	68	64	63	68	77	85	87	86	86	87	87	89	90	90	89	88	82
Quiet		87	87	86	86	85	84	80	75	70	66	65	71	79	85	87	88	87	87	89	90	90	90	91	90	83
Dist.		83	80	81	82	83	78	73	69	62	56	53	61	75	85	88	84	85	85	80	84	85	88	84	84	78

April 2009 East component Y in nT (Y = 1800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		14	15	15	15	14	16	22	26	25	19	9	-2	-8	-10	-5	-1	4	5	6	7	10	15	25	29	11
2	Q	17	14	14	13	12	15	21	25	24	17	5	-9	-20	-16	-7	3	9	9	15	20	17	15	12	11	10
3		11	13	15	15	16	18	20	22	21	13	2	-10	-16	-14	-4	5	9	11	16	12	12	13	14	13	9
4	Q	14	15	15	15	18	21	24	25	20	10	-2	-13	-18	-13	-4	3	5	5	6	7	9	11	11	12	8
5		13	12	17	13	18	19	22	24	18	9	-1	-11	-14	-9	-1	4	7	10	13	12	11	11	11	11	9
6		11	13	16	16	17	21	24	24	20	12	-1	-12	-15	-12	-3	7	14	9	7	8	9	10	10	10	9
7	Q	11	11	12	14	16	20	26	25	18	7	-5	-13	-15	-8	-1	5	9	10	10	10	10	10	12	11	9
8		11	12	14	16	19	23	29	28	20	6	-12	-22	-21	-15	-5	3	5	2	4	15	28	31	14	10	9
9	D	12	17	4	33	26	32	28	26	18	4	-8	-15	-16	-10	-6	-5	2	42	43	36	25	20	-5	11	13
10	D	18	24	18	18	22	25	28	27	20	8	-3	-14	-17	-6	0	10	12	15	26	50	22	13	12	9	14
11	D	16	-3	12	29	28	28	26	24	23	14	3	-5	-12	-8	-3	8	19	15	10	15	16	12	14	-2	12
12	D	-8	5	20	29	31	29	26	26	19	5	-6	-15	-15	-6	1	5	8	10	15	19	21	27	25	5	12
13		1	19	15	23	25	25	24	28	25	16	6	-7	-11	-6	0	6	11	13	16	16	16	14	13	11	13
14		14	14	18	22	25	27	31	30	24	16	4	-6	-14	-10	-2	4	10	13	14	14	14	15	12	14	13
15		19	21	26	31	29	27	29	30	26	18	5	-10	-13	-9	-3	3	8	11	11	17	20	17	19	18	15
16		20	22	27	29	29	27	23	19	17	6	-3	-14	-22	-21	-21	-20	-8	10	10	12	12	11	14	21	8
17		15	20	23	25	24	26	25	23	15	5	-6	-17	-12	-7	3	12	12	12	8	9	11	15	15	12	11
18	D	15	16	18	17	14	8	3	8	20	15	7	-3	-7	-2	5	23	23	17	14	11	12	12	17	15	12
19		15	13	19	19	25	29	26	23	22	17	5	-8	-9	-1	1	3	7	9	10	15	15	12	10	10	12
20		15	15	11	25	29	31	26	21	14	6	-4	-10	-7	1	7	11	11	12	11	12	11	12	13	15	12
21		17	18	21	25	27	28	28	27	22	14	4	-7	-8	1	8	13	17	16	14	14	16	13	14	12	15
22		15	19	19	24	27	28	27	23	15	4	-6	-15	-11	-2	5	10	13	11	12	13	14	14	17	16	12
23	Q	16	16	19	25	28	30	30	29	23	12	1	-6	-7	-1	4	8	10	9	10	11	12	13	14	15	13
24		15	15	19	25	28	32	31	24	20	13	-1	-14	-14	-8	-1	5	15	20	15	19	19	16	14	14	13
25		13	15	17	22	25	28	29	26	20	8	-7	-19	-19	-10	-2	9	12	10	13	15	15	14	22	16	11
26		13	17	19	22	24	26	26	26	16	2	-9	-18	-19	-12	-3	6	12	11	10	11	14	15	14	18	10
27		16	13	11	17	26	25	26	22	12	2	-5	-13	-15	-6	4	11	14	15	13	19	19	15	15	16	11
28		14	15	19	25	30	32	33	29	16	0	-13	-20	-17	-8	-1	5	10	12	12	18	14	14	16	16	11
29		15	15	20	28	31	32	33	30	20	6	-2	-9	-13	-5	2	8	13	13	13	11	12	13	14	15	13
30	Q	14	12	21	29	33	33	30	28	19	11	-1	-10	-12	-7	-1	6	13	17	15	14	14	15	15	13	13
All		13	15	17	22	24	25	26	25	20	10	-1	-11	-14	-8	-1	6	10	13	13	15	15	14	14	13	11
Quiet		14	14	16	19	22	24	26	26	21	11	0	-10	-14	-9	-2	5	9	10	11	12	13	13	13	12	11
Dist.		11	12	15	25	24	24	22	22	20	9	-1	-10	-13	-6	-1	8	13	20	21	26	19	16	13	8	12

April 2009 Vertical component Z in nT (Z = 49800 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		30	30	30	29	28	28	29	30	30	26	18	19	26	32	34	33	32	30	30	31	30	23	22	20	28
2	Q	26	28	28	28	28	30	31	29	27	24	20	20	25	32	37	39	39	37	36	33	31	30	30	30	30
3		30	30	30	29	30	30	29	26	23	21	19	19	22	28	33	32	33	33	34	33	32	31	31	30	29
4	Q	30	30	31	30	31	32	32	30	26	20	15	14	20	28	31	31	30	29	29	29	30	30	29	28	28
5		28	28	28	28	28	28	27	25	20	17	14	19	26	31	32	30	29	30	31	30	30	29	29	29	27
6		28	29	30	30	30	31	30	27	23	19	18	20	22	28	33	36	35	31	29	29	29	29	29	29	28
7	Q	29	30	30	30	30	30	29	28	25	19	16	21	29	33	34	34	32	31	31	31	31	30	30	30	29
8		30	30	31	31	32	34	33	30	25	20	15	20	29	33	33	32	28	27	26	30	25	19	25	28	28
9	D	28	27	19	15	22	25	28	31	27	22	19	21	28	32	35	46	58	65	44	41	42	34	21	20	31
10	D	27	30	30	30	32	32	32	29	29	27	27	25	32	41	42	44	43	47	45	16	23	30	29	22	32
11	D	13	-5	11	20	28	30	31	32	32	30	30	31	32	38	45	54	56	48	42	39	32	20	25	15	30
12	D	1	10	20	24	27	31	33	34	31	27	26	30	35	38	36	34	35	38	42	43	24	12	20	15	28
13		2	11	21	25	28	32	34	35	32	27	22	22	31	36	36	37	37	37	38	36	35	33	32	28	29
14		27	31	33	34	32	31	32	31	29	27	26	25	32	35	36	38	39	38	36	35	33	32	30	25	32
15		25	25	27	29	27	27	29	26	25	24	24	26	31	34	32	34	36	36	35	34	27	30	28	27	29
16		28	29	29	29	28	27	26	25	23	19	18	22	30	34	40	38	39	42	39	35	33	32	26	13	29
17		15	27	33	33	33	32	30	28	26	25	23	28	31	37	42	44	41	38	35	33	33	21	24	29	31
18	D	31	32	33	30	27	24	24	25	30	28	26	28	34	40	41	47	44	41	38	36	34	34	32	32	33
19		33	33	33	31	29	30	31	28	25	25	24	24	30	34	36	34	33	34	35	36	34	34	30	28	31
20		31	32	32	32	33	32	32	31	29	28	27	25	28	34	33	33	35	36	36	35	34	33	34	33	32
21		33	34	35	35	33	32	34	32	28	24	21	22	27	33	35	36	34	34	34	34	31	29	28	30	31
22		32	33	35	34	33	34	38	37	32	27	25	26	32	33	31	32	32	31	32	33	33	32	27	26	32
23	Q	30	33	35	36	35	35	34	29	22	18	18	20	28	31	31	33	32	32	32	32	32	31	32	32	30
24		32	31	32	33	31	32	32	28	22	18	15	17	22	30	35	35	40	41	39	36	32	31	32	32	30
25		32	33	34	34	33	33	31	27	23	18	14	19	28	35	40	46	43	38	37	35	34	21	21	27	31
26		30	33	35	36	34	32	29	29	28	24	20	21	28	33	35	35	33	32	32	32	32	31	30	24	30
27		21	23	28	28	30	32	33	31	29	27	23	23	30	36	35	36	34	33	33	33	32	32	32	32	30
28		32	33	36	37	37	35	29	24	23	20	17	20	26	28	29	31	32	32	33	34	31	31	31	30	30
29		31	32	34	34	34	33	32	28	23	23	23	23	27	31	33	36	38	37	36	34	33	33	32	32	31
30	Q	31	29	31	34	34	33	31	26	23	17	15	21	27	31	34	38	39	38	35	34	33	33	32	32	30
All		27	28	30	30	30	31	31	29	26	23	21	22	28	33	35	37	37	36	35	33	31	29	28	27	30
Quiet		29	30	31	32	32	32	31	28	25	20	17	19	26	31	33	35	35	33	33	32	31	31	31	30	29
Dist.		20	19	22	24	27	28	30	30	30	27	26	27	32	38	39	45	47	48	42	35	31	26	25	21	31

Nurmijarvi Finland

May 2009 North component X in nT (X = 14800 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		90	89	88	87	86	84	79	73	71	65	64	71	79	80	81	79	88	93	91	91	91	92	91	87	83
2		86	85	84	84	87	89	84	82	77	74	75	78	82	80	85	88	93	95	97	98	95	97	93	91	87
3		92	88	90	91	89	84	80	77	73	66	69	74	82	82	85	87	89	91	93	93	92	93	92	89	85
4		89	88	87	87	84	82	79	75	70	69	72	74	81	79	79	79	87	89	90	91	90	88	87	87	83
5	Q	86	86	87	86	82	78	76	77	78	72	71	73	81	85	87	79	86	94	97	99	100	98	97	100	86
6	D	99	93	89	92	92	89	84	74	67	65	68	82	97	98	80	86	96	99	96	95	97	91	90	73	87
7	D	89	78	81	82	78	70	68	64	56	55	64	71	85	94	96	95	93	92	95	97	95	95	101	97	83
8	D	74	76	93	84	82	59	58	54	64	61	61	80	91	92	90	83	87	89	91	85	84	85	89	86	79
9		85	83	82	81	79	75	73	65	59	58	62	72	89	101	92	84	87	84	86	85	84	82	80	80	79
10		81	77	78	80	78	74	69	64	63	62	70	81	89	101	95	85	85	89	91	88	89	87	86	85	81
11		81	83	83	83	78	73	67	65	62	60	69	79	85	98	87	84	90	89	88	87	85	82	81	80	80
12	Q	80	83	83	81	77	74	70	69	65	57	59	70	81	89	95	93	91	91	90	92	94	93	88	86	81
13		85	86	87	84	81	75	71	67	63	63	60	69	81	86	91	97	95	88	93	94	90	87	88	89	82
14	D	89	89	87	84	82	82	81	74	71	71	69	82	71	88	90	90	101	114	103	89	78	78	78	81	84
15		83	88	91	87	86	84	82	79	78	73	66	68	73	77	83	88	90	92	92	90	90	89	88	87	83
16		87	89	91	89	85	82	77	72	71	68	69	65	69	75	85	86	89	95	98	102	95	91	86	82	83
17	Q	83	85	85	84	80	75	71	66	61	58	61	71	79	82	81	83	84	88	89	90	88	88	90	88	80
18		87	83	82	82	82	80	78	76	75	76	77	81	86	90	90	92	93	92	95	97	97	96	94	97	87
19		89	91	86	83	77	79	73	63	56	58	66	73	78	76	79	87	89	91	94	97	87	85	87	87	81
20		88	93	99	94	91	87	79	73	65	62	61	72	89	99	99	96	88	87	98	100	101	100	97	96	88
21		99	97	95	90	84	78	70	67	73	76	81	82	79	74	80	82	88	93	95	97	96	93	92	91	85
22		91	90	92	89	81	76	69	67	65	63	87	95	105	93	92	82	92	90	95	94	93	92	89	87	86
23		87	89	90	88	83	76	69	64	59	59	66	72	83	93	93	93	100	109	101	98	95	99	90	89	85
24		85	90	89	86	74	68	64	56	51	57	70	77	89	88	88	92	88	93	98	95	94	90	89	87	82
25	Q	89	90	91	88	84	76	65	55	49	51	63	80	89	94	94	90	88	89	92	94	95	92	89	86	82
26		88	93	94	91	84	77	72	68	65	61	62	75	84	94	95	96	93	95	98	99	95	93	90	87	85
27	Q	89	91	91	86	81	76	73	67	65	62	67	72	80	88	91	95	96	97	94	93	93	92	92	89	84
28	D	90	91	90	88	82	81	79	76	69	65	63	63	78	86	93	97	87	89	89	90	90	88	87	86	83
29		87	87	88	90	86	87	84	79	73	70	68	69	89	93	89	94	92	80	93	89	86	81	83	82	84
30		81	85	80	79	85	81	80	76	70	64	58	63	69	79	80	84	90	97	102	92	91	91	90	91	82
31		90	88	88	89	87	86	84	76	70	63	66	63	69	75	80	86	94	100	96	93	91	90	86	83	83
All		87	87	88	86	83	79	74	70	66	64	67	74	83	87	88	88	91	93	94	93	92	90	89	87	83
Quiet		85	87	87	85	81	76	71	67	63	60	64	73	82	88	89	88	89	92	93	93	94	92	91	90	82
Dist.		88	85	88	86	83	76	74	68	65	63	65	75	84	92	90	90	93	96	95	91	89	87	89	85	83

May 2009 East component Y in nT (Y = 1800 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	17	23	30	33	31	29	25	18	6	-6	-14	-13	-5	3	8	12	13	11	12	16	16	15	18	13
2		18	21	26	33	32	33	29	18	11	1	-9	-13	-11	-1	5	7	9	10	11	10	12	16	14	7	12
3		11	17	25	31	36	35	36	33	24	12	1	-4	-3	2	7	13	15	15	14	14	15	15	15	17	16
4		16	17	21	24	27	29	30	25	14	-1	-6	-5	-4	1	10	18	18	17	17	17	16	16	16	17	15
5	Q	17	19	21	27	31	32	28	21	12	1	-8	-11	-9	-3	2	7	9	12	13	13	13	14	14	16	12
6	D	17	21	23	28	35	36	38	33	20	4	-10	-19	-20	-14	-1	3	11	27	20	15	24	18	16	-2	13
7	D	12	28	22	33	39	43	35	23	8	-5	-14	-17	-12	-7	5	11	17	14	11	14	16	7	26	24	14
8	D	29	20	32	45	44	45	28	22	17	5	-2	-13	-17	-6	4	10	16	19	19	21	16	14	6	18	16
9		18	20	23	29	34	33	31	25	17	2	-13	-24	-16	-7	3	17	22	19	17	18	16	21	15	10	14
10		13	23	29	40	37	34	28	22	16	7	-4	-15	-14	-2	2	8	11	11	11	17	12	11	17	18	14
11		10	3	25	39	39	35	27	19	7	-3	-10	-15	-8	0	6	11	18	23	17	14	14	17	17	21	14
12	Q	21	25	31	35	36	36	33	28	18	8	1	-7	-6	0	4	9	18	15	11	11	12	20	18	20	17
13		20	26	30	34	33	34	28	22	14	1	-13	-21	-19	-9	-1	2	7	12	10	12	15	17	17	15	12
14	D	16	16	25	27	35	38	36	29	10	-6	-16	-23	-12	-5	7	16	15	14	35	30	32	28	24	19	16
15		21	26	32	32	32	34	37	34	28	19	4	-6	-7	-5	0	9	14	17	16	16	16	15	18	17	17
16		17	19	21	27	31	38	41	33	24	12	2	-4	-7	-4	0	6	11	13	16	19	20	18	26	22	17
17	Q	16	23	25	32	37	36	33	31	26	15	3	-2	-2	0	5	8	11	12	14	17	18	18	18	17	17
18		17	21	19	26	28	25	27	26	18	12	0	-13	-18	-12	-4	3	8	10	10	15	16	15	17	12	12
19		19	24	36	41	42	38	36	26	12	0	-12	-19	-15	-6	9	16	19	18	16	20	19	15	17	19	16
20		21	22	27	36	42	38	37	32	20	9	-5	-14	-12	-4	3	11	16	16	9	11	13	16	16	17	16
21		17	20	26	29	35	37	35	25	13	4	-5	-9	-5	-2	4	9	14	14	14	14	15	16	17	17	15
22		20	23	28	33	36	33	28	21	11	-1	-7	-10	-11	-4	2	7	8	17	19	11	13	14	16	19	14
23		21	25	30	33	37	42	41	38	24	12	2	-4	-4	2	7	12	15	15	15	14	17	26	20	21	19
24		21	24	33	41	43	40	37	26	11	-6	-17	-17	-10	1	10	17	18	15	14	14	17	19	19	19	16
25	Q	22	24	28	34	36	39	43	39	22	-1	-18	-23	-15	-2	5	12	17	18	16	15	14	19	18	18	16
26		23	26	31	36	40	40	35	24	16	2	-12	-14	-10	-5	2	6	12	15	13	14	16	19	21	24	16
27	Q	24	26	30	37	39	39	42	38	28	14	4	-3	-6	-4	1	6	10	14	17	18	15	17	21	22	19
28	D	24	25	29	33	37	45	46	38	19	4	-9	-24	-26	-13	-3	6	16	19	15	15	17	17	19	23	15
29		22	28	34	41	42	36	37	34	30	15	-3	-11	-7	-3	4	8	14	19	12	15	13	15	15	16	18
30		17	21	27	24	28	32	37	38	30	16	2	-7	-7	-4	1	6	10	14	22	20	17	20	20	21	17
31		21	22	24	27	30	34	43	44	39	29	14	2	-6	-7	-2	6	17	19	21	23	21	20	17	20	20
All		19	22	27	33	36	36	35	29	18	6	-5	-12	-11	-4	3	9	14	16	15	16	16	17	18	17	15
Quiet		20	23	27	33	36	37	36	31	21	8	-3	-9	-7	-2	3	8	13	14	14	15	14	18	18	18	16
Dist.		19	22	26	33	38	41	37	29	15	0	-10	-19	-17	-9	2	9	15	19	20	19	21	17	18	16	15

May 2009 Vertical component Z in nT (Z = 49800 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		31	32	34	34	31	30	28	24	20	16	14	16	26	35	41	40	37	35	33	32	32	31	27	28	29
2		31	32	32	31	30	30	30	29	25	20	18	22	28	29	31	34	34	33	32	31	31	30	29	27	29
3		21	27	33	34	34	32	28	22	17	17	19	16	22	27	30	34	33	33	32	31	32	32	31	32	28
4		32	32	33	35	33	30	28	21	18	16	14	21	30	34	38	39	37	34	32	32	32	32	32	32	30
5	Q	32	34	35	35	34	34	30	26	22	19	17	18	22	27	31	34	34	32	31	31	31	30	30	30	29
6	D	30	31	30	26	25	27	27	23	18	16	16	18	21	29	35	35	40	45	39	35	31	30	23	9	27
7	D	7	12	24	26	28	29	30	31	25	18	22	28	34	39	42	46	48	43	38	38	35	19	13	-5	28
8	D	-10	-26	-15	9	15	17	23	27	29	26	26	26	34	45	46	45	45	45	44	42	36	25	21	28	25
9		34	36	37	36	35	35	33	29	25	20	20	22	26	31	39	47	45	39	38	37	35	32	31	26	33
10		23	26	32	35	36	35	36	34	28	22	14	19	29	42	45	42	39	38	36	37	35	29	33	34	33
11		30	25	30	34	33	33	33	28	25	25	28	28	32	41	39	39	45	45	41	38	37	36	36	36	34
12	Q	36	36	37	37	35	32	31	27	21	18	18	21	28	34	37	37	39	37	35	35	35	33	33	31	32
13		31	32	32	32	32	32	31	27	21	15	7	12	24	27	29	32	35	37	36	34	34	34	34	34	29
14	D	35	35	36	36	31	33	34	29	22	17	14	16	27	33	35	35	36	39	46	43	41	39	35	32	32
15		33	35	35	32	31	34	35	32	27	25	25	23	27	31	36	40	42	41	38	36	35	35	35	35	33
16		35	36	37	36	35	35	34	26	22	20	17	19	23	29	35	37	39	38	37	34	30	30	27	29	31
17	Q	31	33	36	36	34	36	32	26	20	22	24	25	25	28	27	25	29	34	35	34	34	34	34	33	30
18		34	34	33	32	30	30	32	32	24	18	20	20	23	26	32	35	34	34	34	34	33	33	32	28	30
19		26	27	30	33	32	32	32	26	23	22	18	18	21	25	33	39	37	36	35	33	31	33	35	34	29
20		33	34	36	35	31	29	33	30	24	26	28	26	29	34	36	37	37	35	32	32	33	32	32	33	32
21		33	33	34	34	32	32	35	33	24	19	21	27	33	31	32	31	32	33	33	33	33	33	33	34	31
22		35	36	36	37	36	36	35	34	29	24	21	22	32	39	46	47	48	50	42	37	36	35	35	37	36
23		38	39	38	38	37	35	31	26	25	25	28	33	35	40	42	40	40	41	40	39	37	22	22	30	34
24		33	34	36	35	36	35	36	34	28	25	27	33	41	40	38	38	39	38	38	37	37	34	34	35	35
25	Q	37	38	37	35	32	35	37	34	31	25	24	31	35	36	38	41	38	36	35	35	35	35	35	34	35
26		37	40	41	40	37	32	30	32	30	27	26	30	32	33	35	38	39	39	37	36	36	35	35	36	35
27	Q	36	37	39	38	34	33	33	30	26	22	25	27	27	30	36	38	37	36	37	36	35	35	33	33	33
28	D	34	35	34	33	33	32	26	22	17	21	23	29	40	42	42	44	45	45	39	37	36	36	36	36	34
29		36	37	38	35	33	34	34	31	27	25	25	29	39	46	50	52	52	47	41	39	38	37	36	35	37
30		35	36	36	33	30	32	33	29	25	26	27	30	30	31	34	36	38	40	43	41	40	38	37	37	34
31		37	37	37	40	38	37	37	33	27	27	29	32	31	35	38	42	45	44	43	40	37	35	35	36	
All		30	31	33	34	32	32	32	29	24	21	21	24	29	34	37	39	39	39	37	36	35	32	31	31	32
Quiet		35	36	37	36	34	34	33	29	24	21	21	24	27	31	34	35	35	35	34	34	34	33	33	32	32
Dist.		19	17	22	26	26	28	28	27	22	20	20	24	31	37	40	41	43	43	41	39	36	30	26	20	29

Nurmijarvi Finland

June 2009 North component X in nT (X = 14800 nT + tabular values)

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

June 2009 East component Y in nT (Y = 1800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	20	20	23	27	34	39	39	33	25	12	3	0	1	5	10	14	17	18	17	18	20	19	19	19	19
2		20	22	26	34	45	51	51	42	31	13	-6	-13	-8	1	11	19	22	20	16	14	15	16	16	18	20
3		19	26	31	35	38	36	31	26	22	9	-7	-13	-15	-8	-1	6	9	14	16	12	18	18	21	25	15
4		26	31	39	48	49	35	40	31	23	12	-2	-8	-7	-5	1	7	14	20	15	13	15	22	26	19	19
5		24	29	33	40	47	39	33	29	20	5	-15	-19	-17	-13	3	14	21	19	17	16	16	17	20	24	17
6		25	28	35	44	44	44	37	31	25	13	-1	-8	-11	-7	1	8	12	16	16	21	24	30	26	27	20
7		28	32	34	40	40	40	40	34	26	10	-8	-13	-19	-21	-14	-1	10	11	15	19	16	17	19	28	16
8		32	33	37	36	38	35	36	35	27	16	4	-4	-5	-5	-1	7	14	15	17	22	19	18	19	22	20
9	Q	24	28	30	32	36	41	44	45	39	25	7	-6	-11	-10	-5	1	8	13	14	14	15	16	16	18	18
10		23	26	31	35	39	43	44	35	30	21	4	-7	-14	-10	-3	6	15	15	12	13	15	15	18	20	18
11		20	28	32	40	41	40	42	38	29	20	12	6	-2	-4	4	9	11	14	13	11	10	16	16	17	19
12	Q	21	26	34	38	41	43	44	42	33	20	4	-8	-11	-7	-1	7	13	14	17	16	15	15	17	20	19
13		22	25	25	29	32	35	33	35	30	19	8	-4	-7	-7	-5	1	11	13	12						(16)
14								40	42	36	21	4	-6	-9	-7	-1	9	16	18	17	21	15	15	23	25	(16)
15		24	25	31	41	41	35	39	33	23	12	-2	-12	-15	-12	-9	1	10	16	16	16	16	17	18	19	16
16		21	23	26	34	40	45	45	37	28	21	7	-4	-8	-10	-6	7	15	17	17	15	17	17	17	19	18
17	Q	20	22	30	35	38	31	31	25	19	13	8	5	5	9	12	16	16	17	16	15	15	15	16	18	19
18		20	23	30	37	35	37	40	38	32	22	13	11	10	9	13	16	13	12	13	12	15	13	11	14	20
19		23	26	34	40	45	43	38	31	17	7	-1	-5	-2	-2	3	10	14	16	17	15	15	17	17	18	18
20		21	26	33	43	48	49	46	35	25	11	-3	-15	-16	-9	0	9	10	9	11	11	11	19	18	17	17
21	D	16	20	26	34	30	39	41	33	21	6	-3	-11	-10	-12	-6	7	13	16	16	17	21	21	21	23	16
22	Q	27	28	33	34	35	39	42	39	29	14	1	-8	-8	4	12	18	22	23	22	20	19	20	20	22	21
23		23	27	34	40	44	44	42	30	20	5	-9	-15	-14	-8	1	6	9	9	9	8	10	11	19	21	15
24	D	24	43	52	53	54	53	46	47	37	23	5	-10	-12	-12	-7	-6	-6	-7	-8	-2	23	26	32	19	19
25	D	22	36	41	43	44	48	43	37	31	21	6	-6	-15	-15	5	1	0	11	22	16	18	26	9	15	19
26		32	31	25	35	39	46	50	48	43	33	17	0	-6	-2	6	16	21	23	23	20	19	22	22	24	24
27		25	30	32	34	34	34	39	36	25	15	5	1	-2	-4	-5	5	6	6	11	13	16	19	23	24	18
28	D	29	24	34	35	37	36	37	40	32	24	14	8	2	-1	-2	-1	18	18	18	33	81	50	54	82	29
29	D	45	35	43	38	39	43	45	45	36	25	14	6	-3	-4	5	10	14	19	14	15	17	20	23	27	24
30		30	33	34	37	39	37	36	32	28	21	10	1	-1	4	7	12	18	26	19	21	19	21	28	29	23
All		24	28	33	38	40	41	40	36	28	16	3	-5	-8	-5	1	8	13	15	15	16	19	19	21	23	19
Quiet		22	25	30	33	37	39	40	37	29	17	4	-3	-5	0	6	11	15	17	17	17	17	17	18	19	19
Dist.		27	32	39	40	41	44	42	40	31	20	7	-3	-8	-9	-1	2	8	11	12	16	32	28	27	33	21

June 2009 Vertical component Z in nT (Z = 49800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	37	38	38	38	37	38	39	38	35	28	25	26	30	32	32	38	39	39	39	39	39	37	36	37	36
2		37	37	38	35	34	30	30	31	29	21	18	23	28	32	35	37	36	34	33	33	34	35	34	34	32
3		33	32	34	34	32	32	33	30	23	14	15	23	26	33	39	40	39	37	38	37	37	36	32	32	32
4		35	36	34	32	28	23	22	19	17	17	19	21	25	41	45	45	44	44	40	39	37	34	29	18	31
5		22	30	30	29	27	26	28	31	31	31	31	39	42	48	57	61	53	48	45	41	39	38	38	36	38
6		35	40	39	37	36	36	36	31	29	23	22	29	35	35	37	39	40	40	40	41	39	36	37	37	35
7		39	40	39	37	37	37	39	41	37	31	26	29	36	42	49	49	45	43	43	42	39	36	34	30	38
8		32	35	34	33	34	36	36	34	30	30	31	31	32	35	38	42	45	45	42	40	37	37	36	37	36
9	Q	37	38	38	39	37	35	32	31	30	30	28	31	34	36	38	41	43	42	39	37	35	35	35	35	36
10		37	38	36	35	36	38	36	34	29	27	27	30	33	40	42	45	47	44	41	39	38	37	37	37	37
11		37	38	37	35	34	33	31	30	29	27	21	24	29	36	38	40	41	42	40	39	38	38	37	37	35
12	Q	37	39	38	38	38	35	37	36	35	34	30	31	33	35	40	41	41	41	40	37	36	36	36	36	37
13		36	36	34	34	34	34	29	19	18	16	19	24	29	33	39	43	47	46	43						(32)
14								29	27	28	28	26	28	33	36	41	43	43	46	45	41	37	37	37	39	(36)
15		40	39	37	35	34	32	33	35	32	22	24	32	31	28	33	36	39	40	39	39	39	37	37	37	35
16		38	38	38	39	40	40	39	35	32	26	22	28	37	36	33	37	38	35	36	35	36	36	37	37	35
17	Q	38	38	39	39	36	31	31	32	33	29	26	28	32	33	38	40	41	38	37	37	36	36	36	36	35
18		37	37	39	39	37	35	37	37	31	26	21	22	28	35	38	35	39	36	38	38	38	37	37	38	35
19		36	37	38	37	37	35	32	31	28	26	25	28	31	36	40	42	43	41	39	37	36	36	36	37	35
20		38	39	38	38	37	35	31	28	24	21	22	28	31	37	42	44	43	39	35	33	34	36	35	36	34
21	D	38	37	35	32	28	27	27	24	21	25	30	30	40	42	40	44	47	44	40	38	35	34	36	37	35
22	Q	37	37	36	36	38	42	43	43	40	38	38	40	41	40	43	44	42	40	37	36	36	36	37	37	39
23		38	39	38	38	37	35	32	28	21	17	13	19	26	31	36	38	38	38	36	34	34	33	33	30	32
24	D	19	20	20	21	19	18	17	25	24	20	17	17	18	26	29	34	36	35	36	34	37	37	34	31	26
25	D	31	39	40	39	36	33	29	29	30	27	26	23	26	41	51	46	46	48	48	42	39	32	18	9	35
26		26	34	34	36	39	42	44	43	38	31	29	33	41	44	46	46	44	45	41	38	37	37	37	38	39
27		39	40	39	38	37	35	34	34	32	32	34	32	33	32	33	42	42	40	39	37	36	32	33	34	36
28	D	36	34	33	31	34	35	32	29	26	25	30	36	39	39	45	49	62	59	57	49	4	-8	-5	-7	32
29	D	19	-2	-5	-4	14	26	29	32	34	34	32	33	34	43	55	58	57	51	47	44	43	42	41	40	33
30		40	41	40	38	36	38	37	35	31	31	29	29	36	41	40	43	52	54	50	49	46	44	41	43	40
All		35	35	35	34	34	33	33	32	29	26	25	28	32	36	40	43	44	42	41	39	36	35	34	33	35
Quiet		37	38	38	38	37	36	36	36	35	32	29	31	34	35	38	41	41	40	38	37	36	36	36	36	36
Dist.		28	26	25	24	26	28	27	28	27	26	27	28	31	38	44	46	50	48	45	41	32	27	25	22	32

Nurmijarvi Finland

July 2009 North component X in nT (X = 14800 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		82	83	81	78	78	79	75	66	55	55	57	67	77	85	85	91	94	94	89	88	87	86	83	82	79
2	Q	82	84	85	81	73	69	67	66	59	60	62	70	83	91	90	90	83	82	83	87	88	86	84	85	79
3		84	85	89	85	77	71	63	54	54	63	74	81	85	91	87	81	82	83	88	91	93	92	89	83	80
4		81	83	84	82	80	76	76	77	70	62	64	75	82	81	83	100	99	99	94	95	97	99	92	92	84
5		93	93	85	84	84	84	80	68	62	63	66	72	80	84	89	92	94	98	101	103	106	88	88	92	85
6		95	94	85	80	82	77	73	72	68	66	69	72	85	93	89	84	93	94	95	95	88	89	82	79	83
7		78	77	81	86	81	72	68	61	58	52	52	66	84	95	105	104	87	97	95	96	93	89	90	89	82
8		92	91	90	86	82	77	74	69	61	50	54	62	77	89	96	99	98	95	95	95	92	88	83	80	82
9		86	82	86	84	77	71	63	56	52	55	56	65	76	80	84	91	96	100	112	104	100	96	98	98	82
10	D	104	101	104	100	92	84	82	76	67	61	66	63	81	85	95	101	90	94	91	91	89	89	92	81	87
11		81	83	84	87	83	76	67	58	52	50	49	64	79	92	94	95	94	93	93	93	91	89	89	87	80
12		87	88	87	84	81	72	65	62	65	66	65	63	69	81	87	101	100	96	95	95	93	92	88	85	82
13	D	85	86	86	87	86	82	78	73	68	65	64	79	106	116	108	94	87	106	99	100	109	105	97	104	90
14	D	98	70	69	79	80	82	81	76	71	68	72	69	81	78	88	90	86	80	85	89	88	94	87	82	81
15		82	83	82	82	81	73	74	78	71	70	65	67	75	86	99	93	87	89	86	85	84	83	81	81	81
16		80	81	84	84	80	73	64	63	57	49	51	61	73	81	89	95	97	93	89	87	85	84	81	80	78
17	Q	84	87	88	86	80	73	68	67	64	62	63	68	72	78	81	87	91	89	89	89	88	86	86	85	80
18	Q	85	87	89	87	84	82	84	82	70	63	70	79	84	81	85	92	92	92	94	92	91	90	90	89	85
19	Q	89	91	91	89	86	83	79	73	67	67	72	73	76	84	89	92	92	91	92	94	91	89	90	89	85
20		89	92	96	97	92	82	75	66	61	53	64	74	92	101	108	100	84	79	80	84	83	83	82	82	83
21		84	86	90	92	88	84	75	66	66	71	73	75	84	93	99	97	96	90	90	93	98	93	89	87	86
22	D	85	88	81	51	32	19	60	54	22	22	54	46	51	66	70	80	86	78	81	81	66	63	63	65	61
23	D	63	68	70	68	61	54	50	56	64	56	58	59	63	69	84	99	97	86	89	84	81	88	85	75	72
24		77	70	77	83	79	72	61	46	40	35	40	50	65	84	99	95	91	88	83	83	82	82	80	80	73
25		77	76	71	69	74	73	66	60	54	50	48	57	64	76	81	90	92	89	84	81	80	79	81	76	73
26	Q	76	79	78	78	75	69	64	58	54	50	50	52	66	73	81	89	90	86	88	83	81	80	79	77	73
27		77	76	82	82	79	73	66	59	51	49	53	52	68	78	85	86	85	85	91	89	83	80	76	76	74
28		78	80	78	78	80	77	72	68	65	59	62	72	79	79	82	79	81	88	85	86	84	83	79	81	77
29		80	80	80	81	80	77	72	72	68	61	59	64	68	75	84	83	85	85	86	86	84	84	84	83	78
30		81	81	82	82	81	77	72	68	67	64	60	61	72	81	89	92	104	100	94	91	91	92	90	87	82
31		84	84	83	84	80	75	66	58	50	48	59	71	81	83	92	82	82	85	86	86	83	77	74	76	76
All		84	83	84	82	79	74	70	65	60	57	60	66	77	84	90	92	91	90	90	90	89	87	85	83	80
Quiet		83	85	86	84	80	75	72	69	63	60	63	68	76	81	85	90	90	88	89	89	88	86	86	85	80
Dist.		87	82	82	77	70	64	70	67	58	54	63	63	76	83	89	93	89	89	89	89	86	88	85	81	78

July 2009 East component Y in nT (Y = 1800 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		30	32	37	39	44	45	50	45	36	32	20	10	6	7	8	13	17	22	21	21	21	22	26	27	26
2	Q	24	28	30	34	38	42	46	40	34	25	8	-2	-1	2	10	18	23	24	23	22	21	20	20	24	23
3		24	31	37	46	51	47	44	38	25	10	-1	-5	-2	7	16	23	22	20	19	19	21	23	31	30	24
4		32	36	41	43	42	44	45	37	26	20	5	-9	-11	-6	3	8	15	18	15	16	16	23	23	25	21
5		25	27	30	32	34	42	49	45	30	14	1	-4	-8	-3	9	15	16	18	16	20	16	26	20	22	21
6		25	30	39	45	41	44	43	37	30	21	9	-4	-8	3	12	17	21	23	22	22	23	26	26	30	24
7		32	38	44	50	46	43	44	43	33	12	-2	-9	-9	-2	3	6	9	9	12	14	16	17	20	25	21
8		27	29	33	40	42	40	35	33	31	14	1	-8	-6	1	8	13	13	13	14	12	13	13	18	24	19
9		26	45	51	50	50	46	43	36	25	9	-4	-14	-8	-3	3	5	9	15	13	17	16	16	18	31	21
10	D	27	47	40	43	37	41	44	40	30	18	0	-10	-10	-5	2	10	25	26	24	23	20	20	25	25	23
11		32	39	44	46	48	47	43	39	36	29	14	1	-5	-3	2	8	15	19	20	22	20	22	25	26	24
12		27	30	35	38	43	46	45	39	29	18	8	4	1	-2	-2	11	20	21	21	21	21	21	20	23	23
13	D	20	29	38	44	44	46	50	47	31	11	-5	-16	-14	-6	6	7	12	13	16	14	22	28	17	25	20
14	D	20	17	20	41	50	53	50	46	37	28	15	5	2	1	9	18	21	24	21	20	22	21	33	29	25
15		31	31	36	36	39	41	43	43	41	34	20	4	-6	-4	5	16	19	20	21	22	21	23	22	24	24
16		27	26	32	38	45	47	48	43	32	23	12	4	4	8	12	13	17	19	21	22	24	24	24	26	25
17	Q	29	31	32	34	38	40	41	40	33	25	20	12	9	13	14	13	16	17	18	18	18	19	20	22	24
18	Q	25	30	35	38	41	45	46	46	38	25	17	4	9	19	19	18	16	15	16	18	19	19	18	18	25
19	Q	21	25	31	34	37	39	42	48	38	28	17	6	1	3	7	14	20	21	20	18	17	20	20	21	23
20		25	29	34	38	39	37	41	39	29	9	-7	-14	-11	-4	-2	14	19	31	22	21	22	24	27	29	20
21		32	36	40	49	50	45	42	37	24	14	7	-1	-1	5	12	17	23	29	28	20	22	25	25	26	25
22	D	29	41	55	-5	-14	35	62	58	37	6	9	-3	-3	3	16	23	35	35	38	45	30	29	32	40	26
23	D	40	39	42	44	49	55	54	43	38	28	14	3	-6	-6	3	25	33	20	17	23	35	27	37	31	29
24		29	31	32	43	50	52	48	39	30	12	0	-6	-4	1	16	30	30	26	18	18	20	26	26	26	25
25		33	41	37	41	45	48	50	51	45	31	14	-1	-3	3	10	17	22	23	20	19	21	25	32	33	27
26	Q	31	36	38	44	44	42	41	37	29	20	11	5	6	8	14	21	24	24	23	23	27	27	27	28	26
27		31	30	36	41	43	45	43	50	44	28	13	7	1	2	8	13	18	19	18	25	28	30	31	30	26
28		29	34	33	39	40	33	31	32	28	15	1	-5	-6	-3	7	15	17	19	21	21	21	23	25	27	21
29		32	33	37	43	49	49	49	47	41	32	24	15	10	7	8	17	23	26	26	24	23	25	27	28	29
30		28	31	31	38	40	39	39	37	34	27	15	0	-5	-5	-3	1	9	19	23	21	21	22	25	28	21
31		31	34	36	39	43	48	54	49	30	15	10	2	-4	0	7	13	18	21	21	22	23	34	35	34	26
All		28	33	37	40	42	44	45	42	33	20	9	-1	-3	1	8	15	19	21	20	21	21	23	25	27	24
Quiet		26	30	33	37	40	42	43	42	34	25	15	5	5	9	13	17	20	20	20	20	20	21	21	23	24
Dist.		27	35	39	33	33	46	52	47	35	18	7	-4	-6	-3	7	17	25	24	23	25	26	25	29	30	24

July 2009 Vertical component Z in nT (Z = 49800 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		44	44	43	43	43	39	38	36	35	30	30	36	38	42	42	42	39	40	40	40	41	40	39	39	39
2	Q	37	39	40	39	37	36	38	37	34	32	36	40	43	47	48	49	46	44	41	42	41	40	40	41	40
3		41	43	43	43	41	37	39	39	39	35	35	41	46	45	44	43	41	38	39	40	40	38	33	32	40
4		34	35	33	31	34	38	39	37	33	30	32	35	42	49	48	48	49	47	44	43	41	39	37	38	39
5		40	40	38	36	33	31	31	32	29	27	26	29	32	33	35	37	38	38	39	41	37	35	40	40	35
6		40	41	41	42	40	39	37	39	38	35	33	35	40	41	46	47	47	46	43	42	41	33	34	34	40
7		36	38	39	37	33	32	28	24	23	27	29	32	36	36	40	46	48	47	45	42	41	41	42	42	37
8		42	42	42	39	36	34	36	33	30	38	39	44	46	48	53	58	55	48	45	44	43	40	39	40	42
9		33	31	38	39	40	38	40	39	39	37	32	35	41	43	46	47	45	46	47	46	44	41	37	37	40
10	D	27	29	36	33	34	34	35	36	37	34	31	34	42	41	42	39	41	45	44	43	41	39	30	25	36
11		31	36	39	39	36	35	37	34	31	34	34	33	33	36	42	46	44	42	41	41	40	40	38	37	38
12		37	38	38	39	38	35	33	26	23	27	31	38	41	43	39	44	43	43	42	40	40	38	36	37	37
13	D	36	36	38	37	33	30	28	32	38	36	29	25	33	40	53	61	57	57	46	45	36	26	27	22	38
14	D	16	-4	-8	11	31	36	35	35	32	33	37	48	59	63	59	57	54	49	46	45	34	30	30	36	
15		33	38	37	40	40	39	37	34	31	30	29	31	32	38	46	51	50	46	43	42	42	42	40	41	39
16		42	44	43	42	40	39	39	38	39	33	31	35	41	46	47	47	46	45	44	44	42	41	40	41	41
17	Q	43	44	44	42	40	40	40	38	34	29	25	30	33	34	37	40	41	43	44	42	41	41	41	41	39
18	Q	42	44	45	46	43	42	39	38	38	38	38	38	37	34	35	38	41	41	40	40	40	40	40	40	40
19	Q	40	42	43	43	41	38	34	33	33	27	26	29	34	36	36	38	40	42	41	39	39	40	40	40	37
20		40	42	43	43	40	38	34	33	35	31	28	35	47	58	74	83	72	62	48	44	42	42	42	42	46
21		43	44	46	44	40	39	39	37	36	29	26	30	40	47	52	55	56	56	54	51	49	39	38	36	43
22	D	34	27	7	-43	-86	-59	-11	28	28	36	43	47	55	56	56	62	69	64	62	48	48	49	49	46	30
23	D	50	53	53	52	47	43	41	37	33	31	35	41	47	51	57	63	57	52	51	51	48	41	36	40	46
24		45	45	50	54	50	47	46	45	47	46	48	50	52	51	60	64	62	58	51	48	47	47	46	40	50
25		39	40	40	46	47	49	48	47	41	37	35	43	57	60	54	54	52	51	48	47	47	47	46	46	47
26	Q	47	48	51	52	51	51	50	47	45	42	37	37	45	52	55	54	54	51	50	48	47	46	46	46	48
27		46	46	47	47	46	44	43	41	41	39	35	36	41	45	48	51	54	51	47	48	47	46	45	46	45
28		46	47	46	43	41	42	43	41	40	39	39	43	44	41	46	50	52	50	48	47	46	44	44	45	44
29		46	46	46	45	43	42	43	41	37	37	40	40	42	42	44	51	53	51	48	46	45	45	45	45	44
30		45	46	48	47	44	47	48	45	43	42	38	37	39	41	44	46	48	50	50	47	45	44	44	44	45
31		44	45	46	45	41	38	35	33	33	29	27	31	45	51	62	60	55	48	45	45	45	47	44	42	43
All		39	40	40	39	36	36	37	37	35	34	33	36	42	45	48	51	50	48	46	44	43	41	40	39	41
Quiet		42	43	45	45	42	41	40	39	37	34	32	35	39	41	42	44	44	44	43	42	42	41	41	42	41
Dist.		33	28	25	18	12	17	26	34	34	34	34	37	45	50	54	57	56	54	50	47	44	38	34	33	37

Nurmijarvi Finland

August 2009 North component X in nT (X = 14800 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		78	78	78	78	75	71	67	63	61	62	67	77	71	77	81	87	89	85	86	89	88	86	82	83	77
2		86	85	85	81	77	71	66	63	60	61	68	77	80	84	84	85	85	83	87	89	90	95	99	93	81
3		85	79	78	83	81	70	61	63	58	55	63	73	71	79	80	80	83	85	90	86	86	85	82	84	77
4		84	85	85	81	79	80	76	70	68	65	63	73	76	89	86	86	82	86	90	88	84	80	80	81	80
5		83	82	88	86	84	77	67	58	51	53	61	70	77	82	86	90	89	92	96	96	96	93	95	94	81
6	D	94	103	102	95	82	77	47	55	55	52	47	53	64	75	75	72	87	89	88	88	82	79	77	75	76
7		79	77	75	71	74	70	60	51	51	50	54	56	64	73	78	81	83	90	89	91	90	87	78	78	73
8		76	79	83	84	82	74	66	57	45	43	56	66	73	81	84	86	86	86	88	89	88	87	87	88	76
9		88	88	92	87	75	70	71	62	58	56	56	60	70	80	88	90	89	84	87	86	82	88	79	76	78
10		76	78	80	79	77	74	66	55	46	45	51	58	69	77	86	87	84	88	84	91	90	92	89	87	75
11		86	85	87	86	79	72	68	67	67	64	67	74	79	83	89	91	95	90	89	88	89	92	84	83	81
12		85	84	87	86	81	76	74	69	59	60	56	69	66	75	86	96	93	94	89	88	90	84	80	80	79
13		79	78	82	83	77	66	59	60	67	68	61	63	69	76	78	83	88	87	87	88	89	87	83	82	77
14		86	83	82	83	78	73	60	52	46	51	62	70	76	87	91	86	79	82	84	85	84	83	84	84	76
15	Q	84	85	86	85	80	73	68	64	59	63	68	76	83	86	88	84	84	86	88	85	85	86	85	84	80
16	Q	84	84	84	82	77	74	72	67	62	58	63	74	82	86	87	81	80	84	88	90	88	87	85	87	79
17	Q	86	86	86	83	81	79	75	73	69	64	66	74	81	83	86	89	90	94	96	93	88	88	86	85	82
18		86	89	90	87	82	73	69	63	59	54	57	63	75	83	87	88	86	86	88	87	91	88	84	82	79
19	D	87	84	85	83	79	75	73	71	68	68	73	77	72	60	82	87	72	81	86	82	81	76	78	73	77
20	D	79	81	76	57	78	71	62	54	53	51	51	52	73	78	84	81	82	85	89	86	87	85	89	81	73
21	D	77	79	73	74	70	66	59	55	38	50	63	75	84	98	80	69	75	77	80	85	83	81	78	82	73
22		78	82	82	78	64	64	68	59	54	53	53	61	69	76	86	89	87	83	89	88	82	80	80	80	74
23		79	80	81	76	73	57	56	61	67	59	59	66	74	83	81	83	84	82	84	83	82	81	82	80	75
24	Q	80	79	79	79	77	74	71	63	51	46	51	63	77	85	87	90	84	85	84	86	84	83	82	82	76
25		82	83	83	83	80	77	71	65	60	55	56	68	79	85	89	79	76	84	87	85	85	84	83	84	78
26		82	89	86	82	73	71	62	54	48	49	60	70	80	85	85	80	79	79	82	82	81	81	82	82	75
27		81	79	78	76	72	74	75	72	64	62	57	64	76	86	90	95	77	79	75	77	82	74	78	78	76
28		78	78	76	75	75	73	70	62	55	55	59	66	77	87	89	83	78	81	85	85	85	85	84	84	76
29	Q	82	81	82	83	83	77	71	69	67	58	64	74	80	83	88	88	87	83	85	87	87	86	87	87	80
30	D	86	88	89	88	80	72	60	44	44	39	65	79	81	81	99	116	64	61	74	74	73	73	60	78	74
31		68	69	69	72	72	70	70	65	59	53	56	65	79	84	84	83	73	74	77	84	82	80	79	79	73
All		82	82	83	81	77	72	66	61	57	56	60	68	75	81	85	86	83	84	86	86	86	84	83	82	77
Quiet		83	83	83	82	79	75	71	67	61	58	62	72	81	84	87	86	85	86	88	88	87	86	85	85	79
Dist.		85	87	85	79	78	72	60	56	52	52	60	67	75	78	84	85	76	78	83	83	81	79	76	78	75

August 2009 East component Y in nT (Y = 1800 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		33	33	37	41	50	54	54	44	34	21	10	-1	-2	6	14	18	29	26	21	19	22	24	27	29	27
2		31	34	37	42	45	45	45	45	39	28	15	6	5	8	15	21	24	26	23	22	24	23	22	40	28
3		43	45	55	51	45	41	37	35	30	19	8	3	6	12	21	23	25	25	26	30	22	27	26	29	29
4		30	31	36	40	41	43	41	36	26	18	8	2	7	14	18	22	24	24	25	28	31	27	24	25	26
5		26	36	41	41	47	46	40	33	20	6	-3	-11	-6	-1	7	16	23	23	20	20	20	24	26	28	22
6	D	30	32	39	51	61	73	66	29	30	22	13	1	-3	0	10	19	22	24	30	39	48	32	31	24	30
7		25	35	38	41	46	48	53	50	41	21	0	-10	-6	4	15	20	24	26	27	33	40	42	41	24	28
8		32	34	37	46	54	56	53	46	35	19	4	-3	0	8	15	22	29	29	26	27	29	27	28	30	28
9		31	28	33	40	45	49	52	42	33	25	11	0	3	2	9	18	25	29	27	32	28	30	28	29	27
10		13	30	41	47	52	55	54	50	39	24	13	5	1	8	19	25	27	24	25	21	23	23	26	27	28
11		30	32	35	42	44	44	44	37	26	15	5	2	4	7	14	20	26	26	23	23	26	41	30	25	26
12		26	30	36	43	41	40	41	39	32	23	13	7	3	6	13	18	23	24	21	24	27	34	28	19	25
13		34	28	38	49	53	51	43	40	35	27	18	10	4	3	8	17	24	26	29	26	25	25	27	24	28
14		22	28	35	44	46	48	48	38	28	18	8	-2	4	14	24	31	32	27	24	23	24	27	29	27	27
15	Q	29	31	35	41	45	46	39	32	20	10	6	4	2	6	13	23	28	25	23	23	23	24	27	29	24
16	Q	30	29	36	42	45	44	44	37	29	21	10	2	4	14	24	31	32	29	25	25	25	31	31	28	28
17	Q	30	30	34	44	47	46	40	34	26	15	4	-2	-3	6	13	17	17	16	18	21	27	31	31	30	24
18		32	30	33	38	42	40	38	36	30	19	8	3	4	12	18	25	27	25	23	24	24	32	39	30	26
19	D	30	32	35	40	45	47	47	41	32	17	-5	-12	-15	-15	-14	11	22	24	23	29	32	34	30	26	22
20	D	9	37	45	39	56	55	48	39	32	19	4	0	-1	4	14	23	26	23	23	30	24	32	21	33	26
21	D	35	34	36	42	50	54	51	43	27	11	-1	-9	-9	-2	17	26	27	29	28	35	27	29	28	24	26
22		30	38	40	45	43	37	43	41	30	11	-6	-5	-1	8	22	31	29	24	32	34	27	27	29	32	27
23		31	37	38	43	45	43	31	28	24	14	10	7	6	11	20	27	28	31	27	25	28	29	29	28	27
24	Q	25	32	34	39	46	47	48	44	34	19	5	-2	2	9	19	24	27	27	28	29	29	29	30	30	27
25		30	33	34	40	44	48	49	43	33	22	12	5	2	5	14	22	25	27	28	27	30	29	34	34	28
26		38	36	45	45	49	50	52	38	22	12	4	2	4	11	22	31	30	26	25	27	28	29	31	31	29
27		31	33	38	44	48	46	46	37	30	19	8	-3	-2	2	6	11	20	23	37	36	62	38	32	34	28
28		35	36	35	40	47	44	42	40	35	27	20	12	11	16	21	26	28	25	23	26	28	30	28	29	29
29	Q	32	33	33	37	41	41	41	37	34	23	11	4	0	9	20	24	25	26	26	26	29	29	29	30	27
30	D	29	32	36	37	45	53	52	36	23	10	11	5	5	12	10	45	75	27	17	63	81	34	19	29	33
31		38	40	39	46	46	49	46	40	29	22	14	9	15	25	32	36	36	35	30	31	28	28	29	30	32
All		30	33	37	42	47	48	46	39	30	18	8	1	1	7	15	23	28	26	25	28	30	30	29	28	27
Quiet		29	31	34	41	45	45	42	37	28	18	7	1	1	9	18	24	26	25	24	25	27	29	29	29	26
Dist.		27	33	38	42	51	56	53	37	29	16	5	-3	-5	0	7	25	34	25	24	39	42	32	26	27	28

August 2009 Vertical component Z in nT (Z = 49800 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		43	45	46	47	43	39	37	35	32	29	30	31	38	45	51	55	56	49	46	44	44	44	44	43	42
2		41	43	45	45	43	45	42	40	38	37	41	41	42	47	50	48	46	45	45	43	43	42	35	24	42
3		24	25	29	38	38	36	32	33	38	41	39	42	45	48	51	51	47	47	48	49	41	43	45	46	41
4		46	45	46	46	44	44	45	41	37	37	38	39	41	46	51	51	50	48	47	48	46	46	46	43	45
5		36	35	42	44	41	41	39	37	32	27	27	32	41	47	47	47	46	44	42	42	42	42	42	42	40
6	D	42	42	42	41	39	36	34	27	30	29	29	38	44	48	61	64	59	57	54	51	43	45	44	42	43
7		42	45	48	48	48	47	43	38	38	38	38	39	46	53	58	60	56	53	52	53	39	29	20	29	44
8		41	46	47	45	45	45	46	48	46	42	38	39	41	47	51	53	51	48	46	47	47	45	45	45	45
9		45	46	47	45	37	34	30	31	33	36	38	41	48	50	55	55	53	50	49	48	46	38	41	42	43
10		36	42	48	48	44	43	42	40	41	39	39	37	43	48	49	49	48	46	46	46	45	43	43	42	44
11		44	46	47	46	44	44	44	40	36	35	40	41	43	48	50	49	52	53	52	51	48	39	39	41	45
12		41	45	48	47	43	44	44	43	41	35	33	34	44	54	53	51	49	48	46	47	45	41	36	32	44
13		35	42	47	48	45	43	43	37	37	35	35	40	46	52	57	57	55	51	49	47	46	45	43	44	45
14		41	43	48	50	48	47	45	41	36	36	36	40	47	52	53	50	47	45	46	46	46	46	45	43	45
15	Q	40	45	48	47	47	49	47	45	43	37	32	32	39	47	50	51	49	46	46	46	46	45	45	45	45
16	Q	46	46	47	48	45	44	43	38	33	35	35	38	47	51	51	48	47	45	44	44	45	44	44	43	44
17	Q	43	44	46	47	44	43	41	38	36	32	28	34	39	42	45	46	44	42	43	44	46	44	44	44	42
18		44	44	45	46	43	44	45	42	38	35	35	36	40	45	48	49	47	45	44	44	44	42	41	43	43
19	D	42	44	47	47	46	46	45	41	36	31	34	43	54	67	82	94	90	71	64	67	51	50	46	33	53
20	D	23	42	43	23	31	41	40	33	35	35	37	40	47	55	55	50	47	46	47	49	48	41	32	39	41
21	D	45	45	46	48	48	49	47	42	38	39	40	40	42	51	59	65	57	53	50	47	46	45	40	32	47
22		40	46	48	46	40	36	36	36	30	32	39	46	54	56	56	55	50	47	49	43	44	46	47	47	44
23		47	47	47	48	45	45	45	43	43	43	45	49	52	54	53	52	50	50	48	47	47	47	45	45	47
24	Q	44	46	49	51	50	50	48	46	43	41	40	43	46	50	51	50	49	47	46	46	46	46	46	46	47
25		47	46	48	50	50	50	49	48	46	39	35	37	44	51	54	55	51	47	46	46	46	45	44	44	47
26		43	42	42	46	45	45	45	45	43	38	37	43	51	56	54	50	47	45	46	47	47	47	47	46	46
27		46	45	47	49	49	47	44	44	40	38	37	40	48	54	55	65	68	73	68	52	47	44	46	49	50
28		49	49	49	51	51	49	47	45	45	43	43	45	47	50	50	50	50	48	47	47	47	47	45	43	47
29	Q	45	46	48	49	51	52	51	47	43	43	41	41	43	48	47	48	48	46	45	46	46	46	46	45	46
30	D	45	45	45	45	45	42	37	38	38	30	38	43	50	53	59	96	92	78	62	56	38	43	29	31	49
31		42	50	53	52	50	48	50	49	46	44	44	46	54	55	56	56	56	55	53	50	43	47	48	49	50
All		41	44	46	46	45	44	43	40	38	36	37	40	45	51	54	55	53	50	49	48	45	44	42	41	45
Quiet		44	45	47	48	47	48	46	43	40	38	35	37	43	48	49	48	47	45	45	45	45	45	45	45	44
Dist.		39	44	45	41	42	43	40	36	35	33	36	41	47	55	63	74	69	61	55	54	45	45	38	36	46

Nurmijarvi Finland

September 2009 North component X in nT (X = 14800 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		80	80	83	81	79	75	68	62	56	56	62	70	73	79	80	83	81	82	85	87	87	85	86	85	77
2		81	80	78	79	76	70	65	59	56	57	64	74	84	88	90	84	80	83	84	83	84	86	82	82	77
3		82	82	84	83	77	69	60	48	45	46	56	66	78	84	81	86	91	96	89	93	97	92	82	85	77
4	D	86	82	82	86	95	90	79	66	60	46	59	68	76	79	77	77	78	81	82	83	87	85	80	79	78
5		79	76	77	77	73	67	62	56	52	52	59	71	79	84	85	84	82	82	84	85	83	85	84	84	75
6		83	82	82	79	73	72	68	62	53	54	61	68	75	83	81	84	83	84	87	88	91	85	85	82	77
7		82	81	80	80	80	79	71	58	48	47	53	63	73	82	86	83	81	82	86	87	86	86	86	86	76
8		86	82	81	80	79	79	73	65	56	56	63	71	79	82	85	87	86	87	89	88	87	85	86	88	79
9		86	82	84	83	82	78	71	65	60	57	59	68	75	83	87	86	85	84	85	85	86	86	86	85	79
10		85	82	81	81	80	78	74	68	62	60	64	70	73	80	83	84	83	83	77	83	86	87	86	85	78
11		85	84	83	79	78	79	78	74	67	62	63	68	77	79	81	78	83	85	82	71	76	77	84	85	77
12		84	83	81	79	75	73	72	68	63	63	65	66	71	77	77	77	77	79	83	82	83	84	84	85	76
13		83	83	79	81	81	78	72	65	63	60	62	70	80	88	82	75	79	66	73	81	82	78	80	77	76
14		84	85	77	75	73	71	73	65	60	57	62	75	80	87	83	84	79	73	72	75	79	80	91	80	76
15		82	81	83	80	77	69	67	58	53	61	67	78	85	89	82	69	74	81	83	84	83	80	81	82	76
16		78	75	80	77	79	74	68	55	49	58	72	79	79	78	76	74	76	84	83	85	85	86	86	85	76
17	D	79	76	74	80	81	79	69	62	58	60	63	71	77	81	81	83	82	80	80	83	86	82	81	79	76
18		76	70	68	78	80	77	71	64	54	53	56	67	76	79	82	84	81	81	83	83	82	82	81	81	75
19	Q	81	82	80	79	76	71	64	55	48	48	56	69	77	81	80	77	78	80	82	82	84	87	86	86	75
20		84	82	81	81	81	79	75	66	61	61	66	76	83	81	84	87	89	89	93	93	91	81	76	85	80
21	D	80	76	83	81	82	79	73	64	48	33	51	70	80	68	76	73	75	77	77	77	77	76	76	75	72
22		75	75	77	77	77	76	73	64	53	52	55	59	62	72	74	73	76	77	76	80	80	79	80	81	72
23	Q	78	76	74	74	74	72	67	63	60	60	62	67	73	76	78	77	76	78	79	80	80	80	80	80	74
24	Q	79	77	76	75	74	73	70	65	60	59	60	66	74	81	79	76	78	81	84	83	81	84	85	85	75
25	Q	84	82	80	79	81	85	82	77	68	61	59	64	70	75	79	77	79	80	85	85	83	84	84	85	78
26		84	83	82	83	85	87	83	76	68	62	61	62	70	75	79	86	90	89	90	90	86	96	81	86	81
27	D	84	87	87	82	90	91	85	74	59	53	50	55	62	69	78	74	75	74	77	81	82	90	91	80	76
28	D	75	82	88	87	89	92	84	64	49	50	60	67	69	71	72	72	77	80	81	76	76	71	84	81	75
29	Q	80	79	78	79	80	78	72	65	57	50	54	63	67	71	74	77	79	80	82	83	81	79	79	78	73
30		79	80	83	84	87	84	79	74	64	62	64	70	76	77	82	82	83	87	87	79	76	71	77	74	77
All		81	80	80	80	80	78	72	64	57	55	60	68	75	79	80	80	80	81	83	83	84	83	83	82	76
Quiet		80	79	78	77	77	76	71	65	59	55	58	66	72	77	78	77	78	80	82	83	82	83	83	83	75
Dist.		81	81	83	83	88	86	78	66	55	48	57	66	73	74	77	76	77	78	79	80	81	81	82	79	75

September 2009 East component Y in nT (Y = 1800 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		32	32	36	40	43	43	40	33	25	13	3	-1	5	19	31	34	35	31	27	25	26	27	28	26	27
2		25	31	36	45	46	45	42	35	24	11	0	-2	3	15	28	39	40	32	25	27	27	26	28	29	27
3		32	34	37	45	49	50	46	36	23	9	3	-2	3	16	29	34	26	24	23	36	32	29	37	30	28
4	D	37	40	43	45	53	46	40	36	27	21	11	2	5	13	24	31	31	36	34	34	29	32	31	34	31
5		35	35	36	41	44	45	44	39	30	19	11	9	14	21	28	31	30	26	25	31	29	28	30	33	30
6		35	36	37	40	41	44	44	38	27	14	4	4	7	16	23	25	24	22	24	25	28	35	34	34	28
7		35	37	37	36	37	43	47	42	29	11	-1	-3	2	10	22	31	30	28	29	26	28	29	31	32	27
8		34	38	36	39	41	44	44	40	27	13	5	4	7	14	20	24	22	21	23	24	29	30	31	29	27
9		32	42	40	42	43	47	48	45	36	25	16	8	9	13	18	22	24	24	26	27	29	31	32	32	30
10		35	39	39	40	43	46	47	43	37	27	18	10	9	11	15	23	29	27	30	29	29	29	29	30	30
11		31	32	33	33	36	39	43	41	34	25	14	4	-1	5	16	24	27	32	36	44	47	43	33	31	29
12		31	32	33	37	40	40	37	36	32	27	20	14	15	16	20	25	29	25	26	27	30	29	30	31	28
13		34	34	32	32	39	43	41	34	27	21	16	9	9	9	9	10	12	12	25	27	30	49	38	40	26
14		26	50	41	38	41	42	40	39	31	20	15	7	9	16	23	25	35	34	28	25	32	32	26	33	29
15		34	36	36	37	39	34	33	28	21	15	8	7	13	16	22	26	23	26	27	29	35	35	33	45	27
16		42	38	40	41	38	37	35	31	18	14	10	9	14	21	27	29	26	24	29	28	28	35	34	32	28
17	D	33	24	30	33	44	34	29	27	27	20	11	8	13	20	27	31	27	25	26	27	32	41	32	36	27
18		36	32	29	40	46	50	50	44	34	20	14	9	7	14	24	29	27	27	28	32	29	31	33	35	30
19	Q	34	34	35	36	39	42	42	38	28	16	4	2	6	15	26	33	32	30	30	30	29	28	29	31	28
20		34	36	37	38	41	42	39	35	28	20	10	3	6	15	25	27	24	24	23	24	32	49	47	35	29
21	D	43	31	45	44	46	44	43	37	23	9	8	9	6	17	27	31	30	31	42	33	32	33	34	35	31
22		36	38	40	39	38	39	40	35	26	20	16	10	9	12	20	30	30	33	32	31	33	33	35	36	30
23	Q	36	37	39	38	39	39	39	38	36	29	19	12	13	19	26	30	29	30	31	33	33	33	33	33	31
24	Q	34	34	35	37	40	43	44	41	34	26	15	8	5	7	15	21	25	26	29	33	33	32	32	32	28
25	Q	32	33	34	36	34	35	39	39	36	30	21	12	8	7	12	20	26	29	30	32	33	34	32	32	28
26		32	32	32	33	36	39	43	47	46	38	25	15	8	9	14	19	22	22	26	37	31	52	42	35	31
27	D	32	31	35	14	25	33	38	40	35	21	14	3	3	8	13	17	24	27	31	33	36	27	32	45	26
28	D	25	27	38	42	38	38	38	42	34	21	14	9	13	18	24	24	27	28	34	45	43	44	47	36	31
29	Q	35	35	36	37	38	41	44	42	35	27	17	12	12	17	25	27	25	29	31	31	33	34	34	37	31
30		36	35	37	37	36	41	43	38	33	24	20	18	17	21	22	25	26	27	27	27	36	47	43	42	32
All		34	35	36	38	40	42	41	38	30	20	12	7	8	14	22	26	27	27	28	30	32	35	34	34	29
Quiet		34	35	36	37	38	40	42	40	34	25	15	9	9	13	21	26	28	29	30	32	32	32	32	33	29
Dist.		34	31	38	35	41	39	38	36	29	18	11	6	8	15	23	27	28	29	33	34	34	35	35	37	29

September 2009 Vertical component Z in nT (Z = 49800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		49	49	50	50	50	49	48	46	41	38	39	43	49	54	55	54	50	47	47	46	46	47	47	45	47
2		42	45	49	50	50	48	46	44	44	43	43	44	47	50	53	52	48	45	46	47	47	46	45	46	47
3		47	48	49	51	51	50	48	44	44	45	45	45	48	53	53	50	44	45	47	48	41	40	43	47	47
4	D	47	47	47	47	41	39	37	38	38	37	36	37	45	54	57	56	51	51	50	48	45	44	46	47	45
5		48	48	48	49	48	48	47	44	40	43	44	43	47	50	49	47	45	45	47	48	47	47	47	47	47
6		46	47	47	48	48	48	48	43	37	35	32	36	46	51	49	47	45	45	46	46	45	44	45	46	45
7		46	46	46	45	46	48	47	43	39	35	33	36	43	48	47	46	43	43	45	45	46	46	45	43	44
8		43	44	46	45	45	47	46	42	40	39	40	46	46	47	46	47	45	45	46	47	46	47	47	43	45
9		37	41	43	44	45	45	45	41	38	39	37	38	43	45	46	44	44	45	45	46	46	46	45	45	43
10		44	44	44	45	45	45	45	43	40	37	35	35	38	42	43	45	48	48	50	49	47	46	46	46	44
11		46	46	46	47	47	47	43	39	37	38	40	43	49	55	62	61	56	54	53	54	48	47	48	48	48
12		48	48	48	48	49	47	46	44	42	38	36	39	46	53	53	50	48	47	48	48	49	48	47	46	46
13		46	46	45	43	43	44	43	42	44	43	45	44	42	47	49	55	65	77	72	63	55	55	52	50	50
14		29	25	37	45	48	52	51	50	44	41	40	44	49	52	51	50	55	58	57	58	55	51	40	43	47
15		46	48	48	48	49	49	49	46	43	40	41	48	51	57	58	60	51	49	48	49	50	49	42	32	48
16		36	46	47	47	47	47	47	45	42	40	38	43	46	47	48	47	46	47	49	49	48	48	47	47	46
17	D	46	42	40	39	42	45	45	45	43	46	44	45	49	52	50	49	48	49	50	50	45	44	46	45	46
18		48	47	45	47	50	51	50	50	49	48	48	49	52	54	52	49	46	47	48	48	48	48	49	48	49
19	Q	48	47	48	50	52	53	50	47	46	46	45	46	48	50	51	49	47	47	48	47	47	46	47	47	48
20		47	47	47	48	49	49	49	47	47	41	35	37	44	47	46	44	43	44	45	45	47	46	47	49	45
21	D	45	32	39	45	47	48	48	48	49	50	44	47	53	58	61	55	52	53	54	52	51	50	50	50	49
22		50	50	49	50	50	50	49	47	46	47	47	50	52	52	53	54	53	54	53	52	51	50	48	47	50
23	Q	47	48	48	49	50	50	50	45	42	42	43	46	49	51	50	50	49	49	50	50	50	49	49	49	48
24	Q	49	49	49	50	50	49	48	46	46	45	44	46	47	46	47	48	48	48	49	49	49	49	48	48	48
25	Q	47	47	47	47	47	47	46	45	45	42	40	41	42	44	47	48	49	49	49	49	48	48	47	47	46
26		47	47	46	47	47	48	46	44	40	39	39	38	41	46	49	48	47	47	48	48	48	43	26	37	44
27	D	44	45	43	36	33	35	39	39	35	36	39	45	47	52	58	57	56	58	57	55	54	39	30	37	45
28	D	38	35	37	40	43	44	41	42	45	46	39	41	45	49	54	51	51	51	52	54	51	46	38	35	45
29	Q	46	48	48	48	49	51	51	51	50	46	42	41	44	50	53	50	49	49	48	48	49	49	49	49	48
30		49	49	48	48	48	48	45	44	42	41	38	38	40	43	46	46	47	47	48	51	54	52	49	50	46
All		45	45	46	46	47	47	46	44	43	41	40	42	46	50	51	50	49	49	50	50	48	47	45	45	46
Quiet		47	48	48	49	50	50	49	47	46	44	43	44	46	48	49	49	48	49	49	49	49	48	48	48	48
Dist.		44	40	41	41	41	42	42	42	42	43	40	43	48	53	56	54	51	52	53	52	49	45	42	43	46

Nurmijarvi Finland

October 2009 North component X in nT (X = 14800 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		76	73	75	76	76	75	72	67	58	53	56	63	68	75	76	80	80	82	82	81	79	79	81	79	73
2		78	78	79	77	77	77	71	63	56	54	58	67	76	76	79	80	81	81	80	82	81	82	82	81	75
3	Q	83	81	82	81	80	77	72	66	60	57	60	64	69	75	78	81	83	84	86	85	83	85	86	84	77
4		83	83	84	84	90	91	87	84	74	70	76	73	74	81	84	87	87	90	90	86	84	81	80	77	82
5		77	78	78	81	84	82	79	71	62	56	56	60	70	76	78	79	78	82	84	84	84	83	84	82	76
6		80	81	81	82	85	83	78	68	57	50	51	57	64	72	77	79	81	82	82	82	82	81	83	81	75
7		80	81	82	83	84	85	82	74	61	50	53	60	69	76	81	81	81	79	81	80	84	85	82	81	77
8		80	78	80	85	87	85	84	72	56	48	49	59	70	79	83	83	84	85	85	84	82	82	84	82	77
9		83	84	85	87	89	91	86	75	56	45	47	61	70	73	73	73	73	76	72	71	74	77	78	79	74
10	Q	79	80	81	82	85	87	83	70	59	56	59	64	71	75	76	76	76	77	79	80	82	81	81	81	76
11	D	85	88	90	95	99	107	103	74	66	59	56	63	71	76	81	81	85	83	83	78	76	79	82	79	81
12		80	79	80	80	81	83	79	69	61	56	56	60	67	73	78	80	82	83	82	79	81	82	83	81	76
13		81	81	80	82	83	82	77	66	55	52	54	62	71	77	78	79	81	79	72	74	79	76	79	77	74
14	Q	78	79	81	83	84	85	81	69	57	56	63	71	78	81	80	80	80	80	82	82	82	81	80	80	77
15		80	80	80	82	83	82	76	64	67	64	69	75	82	87	86	86	86	76	62	70	84	84	80	80	78
16		80	73	80	79	77	78	76	66	56	53	59	67	74	78	79	78	79	78	78	77	78	79	80	79	74
17	Q	78	78	78	79	80	78	73	63	51	44	48	58	70	78	80	81	81	81	82	82	82	82	82	82	74
18		81	82	83	83	84	84	79	68	59	57	62	68	73	75	75	75	76	76	77	80	81	82	82	82	76
19		82	82	80	82	83	81	78	69	64	64	68	75	79	83	82	74	80	84	83	82	82	83	81	81	78
20	Q	81	81	80	80	81	81	76	68	60	58	62	69	76	79	79	78	79	80	81	81	80	81	80	80	76
21		79	79	80	80	80	79	76	70	65	64	67	74	83	85	84	83	82	83	84	83	83	84	84	82	79
22	D	85	78	90	86	92	91	77	71	61	57	60	55	66	78	80	79	79	80	79	61	59	44	23	26	69
23	D	52	55	77	70	81	75	66	62	60	39	41	57	67	70	65	64	65	67	72	72	72	72	73	71	65
24	D	71	71	70	71	73	73	69	66	58	59	61	65	73	74	70	68	78	85	80	75	64	55	65	63	69
25		60	74	76	76	73	76	74	69	60	52	53	54	56	62	65	64	63	70	72	73	75	73	74	74	67
26		72	72	74	74	75	75	74	67	56	54	58	65	72	75	74	74	73	74	79	77	83	77	74	75	72
27		75	75	76	75	77	77	72	60	52	51	57	64	70	69	74	75	75	77	78	77	80	76	76	77	72
28		77	76	77	80	81	81	79	70	60	54	54	62	67	69	68	69	72	74	75	76	74	79	78	77	72
29		78	78	79	80	83	85	78	68	63	65	71	75	81	86	83	83	83	83	84	77	79	73	76	74	78
30	D	74	81	76	76	76	62	58	41	31	42	53	61	66	66	66	67	67	69	68	73	73	75	78	72	66
31		74	73	74	77	77	76	72	65	59	57	62	68	73	74	76	74	74	70	69	68	75	79	72	72	71
All		77	78	80	80	82	81	77	68	59	55	58	64	71	76	77	77	78	79	79	78	79	78	77	76	74
Quiet		80	80	80	81	82	81	77	67	58	54	58	65	73	77	79	79	80	80	82	82	82	82	82	81	76
Dist.		73	75	81	80	84	82	74	63	55	51	54	60	69	73	72	72	75	77	76	72	69	65	64	62	70

October 2009 East component Y in nT (Y = 1800 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		44	46	45	42	42	41	41	37	33	27	21	17	17	20	25	28	28	29	29	29	31	33	36	37	32
2		38	35	40	36	35	37	39	39	36	29	22	17	15	18	23	27	29	30	31	32	33	33	33	34	31
3	Q	31	33	33	34	37	40	43	43	40	33	25	19	16	16	22	26	27	28	29	34	32	31	33	34	31
4		34	33	34	36	34	40	42	38	34	27	17	16	15	14	18	22	24	26	27	30	34	36	37	36	29
5		34	32	33	33	35	40	44	46	43	34	25	17	15	19	25	29	31	32	31	32	33	36	40	37	32
6		33	31	32	34	35	37	46	51	47	38	29	21	16	18	24	28	29	30	32	32	33	34	36	34	33
7		32	31	31	32	35	39	46	53	50	41	24	13	7	11	19	25	27	34	37	38	35	33	32	31	31
8		32	34	34	35	38	40	46	49	44	34	23	15	14	16	22	27	28	29	30	30	33	49	38	34	32
9		32	32	32	32	33	35	43	48	45	31	19	8	6	12	20	25	28	29	34	40	41	42	36	37	31
10	Q	32	35	35	35	37	41	45	48	45	33	21	15	12	17	26	29	30	30	30	32	36	38	34	34	32
11	D	33	34	32	31	33	33	38	40	30	28	22	12	7	12	19	21	21	24	28	34	37	35	42	34	28
12		35	35	34	35	34	36	41	45	42	37	26	19	16	20	26	29	30	31	29	31	33	35	34	34	32
13		33	32	32	33	34	37	42	45	40	26	14	10	10	19	26	30	30	27	28	33	39	37	42	35	31
14	Q	33	32	33	34	35	37	40	43	40	30	21	18	18	24	30	32	32	33	33	34	33	33	33	33	32
15		33	32	33	33	35	38	43	43	34	23	15	11	8	16	23	25	26	30	50	37	37	38	36	36	31
16		36	30	30	34	36	37	41	46	43	32	20	14	15	21	29	31	32	31	31	33	34	34	34	35	32
17	Q	34	34	34	34	36	40	45	49	44	37	26	18	18	26	33	33	33	32	33	33	33	34	34	33	34
18		33	33	33	34	35	40	45	46	42	30	19	14	17	24	28	30	31	32	35	34	34	34	35	34	32
19		33	34	34	33	35	38	42	43	34	25	18	15	18	24	27	26	29	30	30	34	34	34	34	34	31
20	Q	34	35	34	35	37	40	46	47	40	31	22	19	22	28	31	31	31	32	33	35	35	34	35	35	33
21		36	36	35	36	36	39	42	42	35	22	14	15	20	26	30	29	29	30	31	32	32	32	33	34	31
22	D	32	26	29	35	33	33	24	25	25	22	6	-2	10	21	26	28	31	32	31	58	59	92	117	91	37
23	D	76	65	54	46	49	45	44	40	28	24	8	16	17	23	23	27	31	31	34	36	39	44	40	37	37
24	D	36	37	36	36	38	41	44	46	44	32	22	19	20	27	35	36	30	29	29	75	83	57	49	32	39
25		23	36	43	41	40	42	42	43	43	37	28	20	23	26	45	33	38	35	37	37	37	37	36	37	36
26		36	35	37	36	36	36	39	44	43	34	31	23	25	29	34	35	34	39	45	46	49	49	48	46	38
27		38	36	36	37	39	40	42	45	41	34	23	18	22	28	32	33	35	36	38	40	43	38	38	36	35
28		37	35	34	34	36	37	42	43	37	28	20	20	21	25	30	32	35	36	36	38	39	39	37	36	34
29		35	35	34	35	37	39	41	42	36	25	16	14	18	22	26	27	30	30	28	29	36	41	51	61	33
30	D	55	56	57	38	41	28	27	40	26	26	13	16	21	30	35	36	38	39	46	42	39	38	37	37	36
31		38	39	38	38	39	42	46	49	43	32	22	18	23	30	33	35	34	37	44	42	48	46	42	37	37
All		36	36	36	35	37	38	42	44	39	30	20	16	16	21	27	29	30	31	34	37	38	39	40	38	33
Quiet		33	34	34	35	36	39	44	46	42	33	23	18	17	22	28	30	31	31	32	34	34	34	34	34	32
Dist.		46	44	42	37	39	36	36	38	31	26	14	12	15	23	28	30	30	31	34	49	51	53	57	46	35

October 2009 Vertical component Z in nT (Z = 49800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		50	50	49	49	47	47	46	45	46	46	42	41	45	47	49	49	49	49	49	50	50	50	48	48	47
2		48	47	45	47	48	49	50	49	47	44	40	36	40	47	50	50	49	49	49	48	48	48	48	48	47
3	Q	46	47	47	48	49	49	47	43	40	39	38	39	41	46	49	48	47	47	47	48	49	48	47	47	46
4		47	46	44	45	45	44	44	42	41	39	35	36	39	42	46	47	47	47	47	48	49	49	48	48	44
5		48	47	47	48	48	48	48	48	48	48	46	45	47	50	51	50	51	50	49	48	48	48	46	46	48
6		46	47	47	47	48	48	48	47	46	44	41	42	44	49	51	50	49	49	49	49	49	49	47	47	47
7		47	47	47	48	49	50	51	49	49	49	47	47	48	52	53	50	50	51	51	50	49	47	46	45	49
8		44	46	47	48	48	49	49	49	48	46	45	45	48	50	51	49	48	48	48	49	50	47	45	46	48
9		47	47	47	47	47	48	49	49	47	47	45	44	50	55	57	55	56	55	56	56	53	50	47	46	50
10	Q	46	47	48	48	49	49	49	47	46	45	46	49	53	56	56	53	52	52	51	51	49	48	48	48	49
11	D	48	46	45	44	44	44	43	44	44	47	46	43	45	49	51	50	50	51	52	53	53	50	46	46	47
12		47	48	48	48	48	48	49	50	48	46	46	47	50	52	52	50	49	49	49	50	50	49	48	48	49
13		47	45	46	47	48	50	50	49	46	44	43	44	49	52	51	49	49	50	54	55	52	51	50	49	49
14	Q	49	49	49	49	49	50	51	51	50	48	45	44	48	50	49	49	48	48	48	48	48	48	48	48	49
15		48	47	48	48	48	50	52	48	44	44	44	44	46	47	47	46	47	53	64	59	51	42	46	48	48
16		48	47	45	48	48	50	51	50	47	44	43	45	50	51	51	49	49	50	50	51	50	50	49	49	49
17	Q	49	49	49	49	50	51	53	50	44	42	43	45	50	52	51	49	49	49	49	48	48	48	47	48	48
18		48	48	48	48	48	50	50	47	45	42	41	44	48	51	52	52	51	52	51	50	49	49	48	48	48
19		48	47	47	48	48	48	49	46	43	42	42	43	47	50	49	50	50	48	48	49	48	48	48	48	47
20	Q	47	45	45	47	48	49	49	49	46	46	45	49	51	51	49	48	48	48	48	48	48	48	48	48	48
21		48	48	48	48	49	50	50	48	45	44	43	45	49	49	47	47	47	47	47	47	47	47	47	47	47
22	D	45	37	31	35	39	38	42	45	46	48	46	54	54	52	51	50	50	50	52	68	69	30	-16	-1	42
23	D	-11	-18	7	30	41	44	49	51	50	50	53	52	55	56	58	59	59	57	55	55	55	54	52	53	44
24	D	51	52	52	52	53	53	52	49	47	46	48	52	54	56	56	56	54	52	52	58	25	32	39	32	49
25		2	20	37	44	48	50	51	52	53	52	50	55	60	64	66	63	61	58	56	55	53	52	51	52	50
26		52	52	52	52	52	53	55	55	52	48	48	52	54	55	55	55	56	51	48	49	42	39	41	51	
27		43	46	48	49	50	52	54	54	51	48	48	50	54	56	55	54	53	53	53	52	50	50	51	51	51
28		51	51	50	50	50	50	51	52	50	50	52	58	58	58	57	58	57	56	55	54	54	51	50	51	53
29		51	51	50	50	51	52	51	50	47	45	44	46	49	50	49	49	50	51	51	53	56	55	57	54	51
30	D	49	45	36	37	40	47	52	55	55	56	55	53	57	59	58	58	58	57	58	55	55	54	51	51	52
31		51	52	52	53	53	53	54	54	51	49	48	51	54	56	54	54	54	54	55	55	53	47	46	45	52
All		44	44	45	47	48	49	50	49	47	46	45	46	50	52	52	51	51	51	51	52	50	48	46	46	48
Quiet		48	47	48	48	49	50	50	48	45	44	43	45	49	51	51	49	49	49	49	49	48	48	48	48	48
Dist.		36	32	34	40	43	45	47	49	49	49	50	51	53	54	55	54	54	54	54	58	51	44	34	36	47

Nurmijarvi Finland

November 2009 North component X in nT (X = 14800 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		75	75	76	83	85	84	80	74	67	65	67	72	76	77	78	78	78	79	80	80	78	78	78	77	77
2		78	79	79	80	80	81	79	72	72	73	68	74	79	84	83	81	82	77	78	79	80	79	78	77	78
3	Q	76	75	76	77	77	77	75	71	65	60	61	66	72	75	77	78	78	77	78	75	76	79	78	77	74
4		76	76	76	77	79	78	76	71	65	64	67	71	78	80	78	79	82	84	84	84	84	84	82	82	77
5	Q	83	83	82	79	81	83	83	79	75	71	69	73	80	84	84	85	85	84	83	83	83	82	81	81	81
6	Q	80	78	79	80	79	81	79	75	70	67	66	71	78	82	82	83	83	83	83	83	83	82	81	81	79
7		80	80	81	82	83	82	80	75	70	68	70	76	82	84	83	83	83	82	82	81	80	80	87	80	80
8	D	85	82	85	90	91	90	90	84	81	79	75	71	75	72	73	59	57	60	57	46	52	70	74	71	74
9		71	71	72	75	75	73	73	71	62	57	62	68	74	75	74	74	72	74	76	77	77	76	77	74	72
10		74	71	74	77	80	77	74	70	66	65	68	73	76	77	77	77	78	79	79	79	77	72	74	73	74
11		71	73	75	76	77	76	77	74	72	70	69	71	73	76	77	77	78	79	79	80	79	77	77	77	75
12		78	78	77	79	79	78	78	74	69	67	70	76	79	78	81	80	81	81	81	82	80	81	74	82	78
13		76	79	80	81	81	80	78	73	69	68	70	74	79	80	80	82	81	78	71	73	76	82	81	80	77
14		81	78	79	82	84	83	81	83	71	65	67	66	73	73	75	73	70	69	74	76	74	68	60	65	74
15	D	74	69	69	70	70	71	68	68	67	71	73	75	76	72	69	61	58	59	69	72	74	72	72	72	70
16		72	71	71	73	73	74	71	67	64	63	67	71	74	73	71	73	72	71	74	72	77	76	76	76	72
17		72	70	73	74	76	75	73	68	65	64	66	72	77	78	78	78	78	78	78	79	79	78	77	77	74
18		77	77	80	83	86	86	82	76	71	68	71	75	77	77	77	79	81	81	81	82	82	81	78	77	79
19		77	77	78	79	80	76	76	73	67	62	65	70	74	79	79	79	81	85	87	87	85	80	89	77	78
20		70	73	73	74	76	75	74	71	69	70	73	77	80	82	80	79	79	78	77	82	82	82	81	79	77
21	D	79	74	75	80	86	83	82	76	63	65	74	75	71	73	77	78	78	80	78	76	83	77	70	69	76
22		69	75	73	75	75	77	73	68	69	69	69	71	75	77	73	70	71	73	77	82	76	76	75	73	73
23	Q	72	72	73	75	76	77	77	75	72	69	68	70	75	77	80	79	79	80	79	79	76	75	75	73	75
24	D	73	74	77	79	78	79	80	82	80	77	81	82	82	68	82	77	70	66	84	65	67	71	90	73	77
25	D	69	71	68	69	78	78	78	73	70	66	68	65	67	71	67	64	66	70	72	72	75	71	76	73	71
26		69	74	75	73	75	75	74	74	72	77	69	73	73	65	61	51	48	51	53	70	70	71	72	72	68
27		72	72	72	73	72	73	73	74	74	74	77	79	77	77	76	76	75	74	75	74	76	75	74	74	75
28		75	75	77	78	78	78	77	75	74	76	76	80	80	78	76	74	72	74	73	74	72	78	76	76	76
29	Q	76	77	76	77	77	77	76	74	73	74	73	74	78	79	79	77	76	77	79	79	80	80	78	77	77
30		74	73	74	77	79	79	78	77	74	70	68	68	71	71	72	74	75	76	76	78	78	77	76	76	75
All		75	75	76	78	79	79	77	74	70	68	70	73	76	76	77	75	75	75	77	77	77	77	77	76	75
Quiet		77	77	77	78	78	79	78	75	71	68	67	71	77	79	80	80	80	80	81	80	79	79	78	78	77
Dist.		76	74	75	78	81	80	80	76	72	72	74	74	74	71	74	68	66	67	72	66	70	72	76	72	73

November 2009 East component Y in nT (Y = 1800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		38	38	33	34	37	39	41	43	40	34	26	22	23	28	30	32	34	34	34	34	36	36	36	36	34
2		36	36	36	36	36	37	37	38	33	28	22	17	20	26	28	32	32	34	35	34	35	36	38	37	32
3	Q	38	38	36	37	38	39	42	46	46	40	33	28	29	32	34	35	35	37	38	43	39	38	37	37	37
4		37	37	37	37	38	39	42	44	40	32	22	20	23	27	30	33	33	34	34	34	36	36	37	36	34
5	Q	35	35	36	36	37	37	41	43	42	36	28	22	25	29	32	33	34	34	35	36	36	37	36	36	35
6	Q	35	35	35	35	36	38	39	42	40	35	28	23	25	30	32	33	34	35	35	36	36	37	37	36	34
7		37	37	36	36	36	37	38	40	38	32	27	25	27	31	32	33	33	34	34	35	36	41	37	35	34
8	D	31	35	33	34	33	32	36	40	34	26	21	19	13	16	26	8	23	32	53	81	74	55	44	43	35
9		41	37	36	37	39	39	39	35	34	32	26	20	25	28	29	30	32	34	35	37	39	41	41	43	34
10		41	42	39	37	37	37	39	41	38	32	28	25	27	31	32	33	33	34	35	36	42	44	43	41	36
11		40	34	39	39	39	39	39	41	38	32	27	25	28	32	33	34	35	36	37	38	40	40	38	36	36
12		36	35	35	34	36	38	39	40	37	34	29	26	27	30	33	34	35	35	36	37	38	43	46	41	36
13		39	36	36	36	35	37	40	41	39	33	27	24	27	31	33	33	33	35	47	42	39	43	40	37	36
14		37	40	34	34	35	37	41	41	40	29	24	26	24	21	25	22	27	32	40	40	40	62	62	58	36
15	D	63	55	49	47	43	39	39	39	34	27	25	25	23	24	19	48	27	30	36	35	41	41	41	41	37
16		41	41	40	39	39	39	41	42	39	34	29	27	28	32	34	35	36	36	46	42	38	40	43	42	38
17		42	38	37	38	38	39	41	43	40	35	30	27	30	34	35	35	35	36	36	38	39	39	40	40	37
18		40	38	37	36	36	37	39	40	38	32	27	23	26	30	33	35	35	36	37	37	37	39	43	45	36
19		40	38	38	39	40	39	39	41	40	34	27	24	24	29	32	33	34	34	33	35	36	41	42	57	36
20		47	43	41	40	40	40	40	39	35	31	26	25	27	30	33	34	34	38	40	38	38	38	40	41	37
21	D	37	56	53	47	43	39	38	38	41	39	32	25	28	34	33	34	36	37	38	48	56	59	52	50	41
22		47	43	44	40	40	40	41	40	41	37	31	28	29	30	32	52	42	37	41	47	42	42	40	40	39
23	Q	39	38	40	39	39	40	41	41	39	35	32	30	32	35	36	37	38	39	39	41	40	42	42	40	38
24	D	39	37	36	36	37	39	39	38	36	32	30	28	28	32	30	29	42	59	103	51	46	37	52	42	41
25	D	48	42	43	35	30	38	38	33	36	36	31	32	38	36	38	38	40	39	42	42	43	44	44	41	39
26		33	35	42	39	40	38	37	33	33	26	27	24	26	24	24	33	30	33	45	50	55	45	40	40	35
27		40	39	37	37	41	40	39	36	34	34	33	34	36	37	38	37	37	40	41	40	40	39	39	40	38
28		39	38	39	39	39	38	38	36	33	31	30	30	33	36	36	37	42	39	42	43	42	44	38	37	37
29	Q	37	37	38	38	38	39	39	40	39	36	33	32	33	36	37	39	37	39	38	39	40	41	39	40	38
30		39	39	39	40	39	39	40	41	40	36	31	28	29	33	36	37	39	40	40	40	40	40	40	40	38
All		40	39	38	38	38	38	39	40	38	33	28	25	27	30	32	34	35	36	41	41	41	42	42	41	36
Quiet		37	37	37	37	38	39	41	42	41	36	31	27	29	32	34	35	36	37	37	39	38	39	38	38	36
Dist.		43	45	43	40	37	37	38	37	36	32	28	26	26	28	29	32	33	39	54	52	52	47	47	43	39

November 2009 Vertical component Z in nT (Z = 49800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		46	48	50	50	49	51	51	52	49	48	49	50	52	52	52	52	52	51	51	51	52	52	52	51	51
2		51	51	50	50	50	50	49	48	45	43	45	49	52	53	51	51	51	53	53	53	52	52	52	51	50
3	Q	51	51	50	51	52	52	52	52	52	50	49	53	53	53	52	52	52	52	52	52	52	52	51	51	52
4		51	51	51	51	51	51	53	53	51	49	48	50	52	52	52	52	51	50	50	50	50	50	50	50	51
5	Q	49	49	49	49	50	49	49	49	48	47	47	49	50	50	49	49	49	49	49	49	49	49	49	49	49
6	Q	49	49	49	49	49	49	49	50	49	49	46	48	51	51	50	50	50	50	50	50	50	50	49	49	49
7		49	49	49	49	49	49	49	47	47	46	47	49	49	48	49	49	49	49	49	50	50	49	45	45	48
8	D	44	45	46	45	45	46	46	46	43	41	43	46	49	53	56	72	77	76	75	69	64	63	57	56	54
9		53	52	53	53	52	52	52	49	47	49	49	50	51	52	53	54	56	56	55	54	54	54	52	52	52
10		51	52	52	52	51	52	52	52	49	46	47	50	53	53	53	53	53	52	52	53	54	54	53	52	52
11		52	51	51	51	51	51	52	52	51	51	51	51	52	52	52	52	52	52	52	52	52	52	52	51	52
12		51	51	51	51	51	51	52	51	50	50	51	52	52	52	52	51	51	51	51	51	51	51	49	46	51
13		48	50	50	50	50	51	51	51	50	47	48	50	51	51	51	51	52	52	55	55	53	52	50	50	51
14		50	49	50	49	49	49	50	48	47	48	50	54	54	55	58	59	64	67	65	60	58	57	53	52	54
15	D	43	48	51	52	52	52	52	51	50	48	50	52	54	56	59	72	69	76	69	62	57	55	55	54	56
16		54	54	54	54	54	54	55	56	54	52	53	53	55	56	56	57	57	57	56	55	54	54	52	50	54
17		50	51	53	54	54	54	55	56	55	55	56	57	57	56	55	55	54	54	54	54	53	53	53	52	54
18		52	52	51	51	50	50	50	52	53	52	53	53	54	54	54	54	53	53	52	52	51	51	51	48	52
19		49	50	51	51	51	51	52	52	52	52	52	53	55	55	54	54	53	52	52	53	52	52	37	36	51
20		46	51	52	52	52	52	52	53	53	53	54	54	54	54	53	53	54	54	55	53	52	52	51	51	53
21	D	45	30	37	45	46	47	49	50	52	54	55	55	56	57	56	55	55	54	54	56	43	29	42	48	49
22		46	37	44	49	51	51	52	52	51	52	54	55	55	56	59	56	57	57	54	54	53	52	52	52	52
23	Q	52	53	53	53	53	53	53	52	53	53	55	56	56	55	54	53	53	53	53	54	54	54	54	53	54
24	D	53	53	53	52	52	52	52	51	50	51	53	53	54	57	55	55	62	67	49	50	56	45	25	24	51
25	D	38	47	48	50	51	53	53	51	54	55	55	57	62	59	59	60	60	59	58	57	55	52	48	46	54
26		48	49	50	52	53	53	53	52	53	54	58	62	61	62	66	72	83	90	84	71	66	62	59	58	61
27		57	56	55	54	54	55	54	53	53	55	56	57	56	55	56	56	56	56	55	55	55	55	55	54	55
28		54	54	54	53	53	53	52	51	52	54	55	55	54	54	55	56	58	56	56	56	56	54	54	54	54
29	Q	54	54	54	53	53	53	53	53	53	54	55	56	57	56	55	55	55	55	54	54	53	51	51	50	54
30		52	52	53	53	53	53	54	53	53	53	55	58	58	58	58	57	57	56	56	55	54	53	53	53	55
All		50	50	50	51	51	51	52	51	51	50	51	53	54	54	54	56	56	57	56	55	54	52	50	50	52
Quiet		51	51	51	51	51	51	51	51	51	50	50	52	53	53	52	52	52	52	52	52	51	51	51	50	51
Dist.		45	44	47	49	49	50	50	50	50	50	51	53	55	56	57	63	65	66	61	59	55	49	45	46	53

Nurmijarvi Finland

December 2009 North component X in nT (X = 14800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	77	78	78	79	80	80	79	76	74	75	76	78	80	81	81	80	80	80	80	80	80	79	79	79	79
2		80	80	81	82	84	85	83	84	84	81	80	84	83	83	82	82	82	82	82	81	80	78	78	79	82
3	Q	78	78	78	78	78	79	79	79	79	79	78	80	81	80	79	78	78	77	78	78	77	78	77	78	78
4	Q	78	78	78	80	81	82	81	79	79	77	77	79	82	82	81	80	79	79	79	80	82	81	80	79	80
5	D	80	80	80	81	81	81	80	86	86	84	82	82	87	83	84	81	82	80	75	69	60	74	73	76	80
6		81	75	73	76	76	75	75	78	78	74	73	78	80	79	78	78	78	78	76	76	76	76	76	74	77
7		77	76	76	78	79	80	78	77	77	76	79	81	83	82	81	78	77	74	76	76	73	73	74	73	77
8		74	75	75	76	77	76	76	77	77	78	81	82	82	82	80	80	79	79	78	79	79	79	76	74	78
9		76	77	78	79	79	78	75	74	73	73	77	82	84	83	82	81	81	80	79	78	78	78	78	78	78
10		78	78	79	79	79	80	79	79	78	73	73	80	84	82	81	80	78	75	75	74	77	79	80	78	78
11	Q	79	78	77	79	80	80	79	78	77	74	76	82	84	82	82	81	80	81	80	80	79	78	77	74	79
12		74	75	77	77	79	79	80	82	81	79	81	87	88	86	83	82	82	85	84	85	83	78	78	82	81
13		83	83	83	84	85	87	87	86	82	76	76	77	78	72	68	68	66	66	66	66	66	72	72	71	76
14	D	77	76	78	79	79	80	90	82	76	67	70	75	78	78	77	77	79	82	81	78	79	80	78	77	78
15		77	77	76	77	79	79	77	77	78	76	77	82	86	86	84	82	82	81	78	79	75	77	77	74	79
16	D	72	71	74	82	78	76	76	76	74	73	75	80	84	83	81	78	66	67	75	75	72	72	73	74	75
17		73	76	76	75	77	78	75	73	71	71	77	80	83	84	83	84	84	81	76	73	75	76	75	77	77
18		76	75	75	75	75	76	76	74	70	72	79	82	82	80	80	80	81	79	78	78	78	77	76	74	77
19		74	73	74	74	75	75	75	74	74	74	75	81	83	82	79	77	78	77	80	79	78	76	74	74	76
20		76	73	73	74	76	76	76	75	75	76	77	80	85	86	84	81	78	68	74	77	78	76	75	74	77
21		75	75	76	77	78	80	78	76	73	71	74	78	84	85	84	83	83	82	81	76	75	71	75	76	78
22		75	76	76	79	80	80	78	75	74	72	74	79	85	84	82	79	79	81	80	77	86	74	71	73	78
23		73	74	77	78	80	80	84	80	79	76	75	81	85	86	84	83	83	80	78	75	73	67	70	72	78
24		70	74	75	78	79	82	77	74	72	70	70	74	76	77	78	77	76	76	75	75	75	75	77	75	75
25	D	75	77	77	77	79	79	78	77	76	75	75	79	85	84	82	84	86	85	79	67	69	76	79	82	78
26	D	74	76	77	80	83	77	76		73	66	66	71	77	77	78	78	71	69	71	73	73	76	75	75	(74)
27		76	76	75	77	77	77	76	74	72	71	71	75	77	73	74	70	72	71	76	78	78	77	76	77	75
28		77	78	78	78	78	76	75	71	68	69	73	79	83	84	83	81	80	76	76	74	76	76	75	74	77
29		73	73	74	76	78	77	75	71	65	62	64	72	79	81	80	78	77	77	76	76	76	76	77	77	75
30	Q	77	77	78	78	78	78	77	73	70	68	70	78	81	82	82	81	81	80	79	81	81	81	79	80	78
31		80	80	81	81	82	84	82	80	77	77	78	80	80	80	82	81	80	78	77	74	72	76	77	77	79
All		76	76	77	78	79	79	78	77	76	74	75	79	82	82	80	79	79	78	77	76	76	76	76	76	78
Quiet		78	78	78	79	80	80	79	77	76	75	75	79	82	81	81	80	80	80	79	80	80	80	78	78	79
Dist.		75	76	77	80	80	79	80	80	77	73	73	77	82	81	80	80	77	77	76	72	71	76	76	77	77

December 2009 East component Y in nT (Y = 1800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	39	38	39	39	40	40	41	40	39	35	31	29	31	34	37	37	38	37	38	39	39	41	40	39	37
2		38	37	36	36	36	38	38	37	36	33	30	29	32	34	36	37	38	38	38	39	39	41	41	40	37
3	Q	39	39	39	38	38	38	39	38	36	35	35	34	37	39	39	39	37	37	38	39	39	40	40	39	38
4	Q	39	39	39	39	38	38	39	38	36	36	33	32	34	35	36	36	36	37	38	40	41	39	39	39	37
5	D	38	37	37	37	38	38	39	36	34	33	30	30	29	30	29	32	33	33	42	61	53	44	49	48	38
6		44	47	39	39	42	40	41	40	37	36	33	34	35	38	39	38	39	39	39	40	42	43	42	43	40
7		36	41	42	40	39	39	38	36	33	29	28	31	33	35	37	37	36	35	46	39	47	46	42	42	38
8		41	40	41	40	39	40	39	38	36	34	32	32	35	37	38	38	38	39	38	39	40	41	40	41	38
9		39	40	40	40	40	40	40	38	35	30	26	28	33	34	35	37	37	38	39	40	40	40	40	39	37
10		39	38	38	38	38	39	40	41	40	37	30	30	35	38	38	39	37	40	41	41	44	40	39	38	38
11	Q	37	37	37	37	38	39	41	42	41	37	32	32	35	37	39	39	39	39	40	40	41	42	42	41	39
12		41	39	39	40	41	42	41	40	36	32	27	30	34	33	35	36	37	38	39	38	38	41	39	38	37
13		38	38	37	36	37	37	37	35	36	32	29	30	34	36	36	37	39	39	42	44	51	48	52	44	38
14	D	37	41	38	37	39	38	30	32	33	35	27	28	30	35	37	38	37	37	39	40	41	40	40	40	36
15		40	39	39	40	39	40	40	38	37	35	32	31	34	36	36	37	37	37	37	47	39	41	43	45	38
16	D	44	45	39	39	42	42	40	37	37	31	26	24	27	30	35	34	38	38	38	42	44	45	43	42	38
17		42	42	43	41	42	41	41	40	37	32	31	28	32	33	36	35	33	37	39	41	42	40	41	42	38
18		42	42	41	40	40	41	42	41	37	32	34	32	34	37	39	40	39	41	40	40	41	41	43	44	39
19		42	42	44	41	40	41	41	40	38	34	30	29	35	38	38	37	38	40	41	42	43	48	45	44	40
20		42	45	44	43	44	43	42	39	36	33	31	31	34	35	38	38	37	39	37	41	42	43	43	44	39
21		43	40	42	44	40	40	40	39	37	35	31	31	34	38	39	40	40	40	41	45	55	46	41	38	40
22		38	37	37	40	40	40	41	41	38	35	31	30	33	37	38	37	39	39	40	41	55	47	40	38	39
23		39	41	40	40	39	36	37	37	33	29	25	26	31	36	37	38	37	37	40	50	45	47	47	40	38
24		40	39	41	40	42	40	40	39	37	34	31	31	35	38	41	42	43	42	42	42	42	43	42	41	40
25	D	40	40	40	41	41	42	44	44	43	39	31	29	32	32	34	34	33	33	35	47	44	42	50	40	39
26	D	44	41	37	34	41	41	42		41	41	36	34	36	38	40	40	41	46	42	44	45	45	42	40	(40)
27		39	39	39	40	40	41	43	42	40	36	37	33	32	38	40	42	44	44	44	43	43	42	42	41	40
28		41	40	41	42	42	43	44	42	40	36	35	32	34	38	40	41	42	43	43	44	46	45	44	44	41
29		43	43	42	42	42	43	44	46	45	43	38	32	34	38	40	41	42	42	43	44	44	44	43	41	42
30	Q	41	40	41	41	42	43	45	47	45	40	36	33	35	38	40	41	41	41	41	41	42	42	42	41	41
31		40	39	39	38	37	40	42	43	41	38	37	34	35	38	38	38	38	39	41	43	45	44	42	41	40
All		40	40	40	39	40	40	40	39	38	35	31	31	33	36	37	38	38	39	40	42	43	43	42	41	39
Quiet		39	38	39	39	39	40	41	41	39	37	33	32	34	37	38	38	38	38	39	40	40	41	40	40	38
Dist.		40	41	38	38	40	40	39	37	38	36	30	29	31	33	35	35	36	37	39	47	45	43	45	42	38

December 2009 Vertical component Z in nT (Z = 49800 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	54	53	53	53	53	53	53	53	52	49	51	54	55	55	54	54	54	54	54	54	54	53	53	53	53
2		53	52	52	52	52	52	51	51	51	48	46	48	50	52	52	52	53	53	53	53	53	53	53	52	51
3	Q	52	52	53	53	53	52	51	51	51	51	51	52	53	54	54	54	54	54	54	53	53	52	53	53	53
4	Q	53	53	53	53	52	52	52	51	51	52	54	55	55	54	54	53	53	53	53	53	52	51	51	51	53
5	D	51	51	51	51	52	52	51	48	47	47	50	53	53	52	51	52	52	54	58	62	63	62	58	54	53
6		47	50	48	49	51	53	54	53	53	53	54	56	55	54	54	55	55	55	56	56	56	55	54	53	53
7		49	47	50	52	52	52	52	51	51	52	54	55	54	53	53	54	55	57	59	57	59	57	55	55	53
8		54	54	54	53	53	53	53	52	51	51	52	54	54	54	54	53	53	53	53	54	53	53	53	53	53
9		53	53	53	53	53	53	52	52	52	52	54	56	55	55	55	54	55	55	54	54	54	53	53	53	54
10		53	53	52	52	52	53	53	52	52	51	52	55	54	54	54	54	54	55	55	55	55	54	53	53	53
11	Q	53	52	52	52	52	53	52	52	52	51	52	53	53	53	53	53	53	53	54	54	54	54	54	54	53
12		54	54	53	53	53	53	52	51	50	50	51	52	52	51	52	52	53	52	51	51	51	53	53	52	52
13		51	51	50	50	51	51	51	50	49	48	50	52	53	53	56	57	59	60	60	60	58	53	50	50	53
14	D	48	50	52	53	52	53	52	52	53	53	51	53	54	54	56	56	55	54	53	54	54	53	53	54	53
15		53	53	53	53	54	53	53	53	53	51	51	52	53	52	52	52	53	53	54	55	54	55	54	54	53
16	D	54	55	53	48	50	53	53	53	54	54	54	54	54	54	55	56	60	63	59	58	58	58	57	57	55
17		56	55	54	54	54	54	54	55	55	54	54	54	54	54	54	53	53	54	55	57	56	55	55	55	54
18		55	54	54	54	54	54	54	53	54	54	53	53	54	54	54	54	54	55	55	55	54	54	54	54	54
19		53	52	53	54	54	54	55	54	54	53	54	54	55	55	55	56	56	57	56	55	55	56	55	55	55
20		52	52	54	54	54	54	54	54	54	54	55	56	56	54	54	55	56	60	60	57	56	55	55	54	55
21		54	53	52	52	53	53	54	54	54	55	56	57	57	55	54	54	54	53	53	54	53	53	52	53	54
22		53	53	53	53	53	54	54	54	55	56	57	58	57	55	55	55	55	55	54	55	53	48	52	52	54
23		53	55	54	53	53	54	54	55	56	56	56	56	56	55	54	54	54	54	55	56	55	54	52	53	54
24		54	54	54	54	55	54	54	55	55	55	57	58	58	57	57	57	56	56	56	55	55	55	54	54	55
25	D	54	54	54	54	54	54	54	54	54	54	54	55	55	54	54	54	53	53	54	61	60	55	46	39	54
26	D	49	52	51	51	50	52	53		53	55	56	57	59	58	57	56	58	61	60	58	57	55	54	55	(55)
27		55	55	55	55	54	55	56	56	57	57	58	59	61	60	60	60	60	61	59	57	56	55	55	55	57
28		55	55	55	55	55	55	55	55	55	55	57	57	57	56	56	55	56	56	57	57	57	56	56	55	56
29		55	55	56	56	56	56	57	59	58	57	58	59	58	56	56	56	56	56	56	56	56	55	55	54	56
30	Q	54	54	54	55	55	55	56	56	56	55	55	56	56	56	55	55	55	54	55	54	54	54	54	53	55
31		53	53	53	53	53	54	54	53	52	51	52	53	54	55	54	54	54	54	54	55	56	55	55	54	54
All		53	53	53	53	53	53	53	53	53	53	53	55	55	55	54	54	55	55	55	56	55	54	53	53	54
Quiet		53	53	53	53	53	53	53	52	52	53	54	54	54	54	54	54	54	54	54	54	53	53	53	53	53
Dist.		51	52	52	52	52	53	53	52	52	52	53	54	55	54	55	55	56	57	57	59	58	57	54	52	54

10 Hourly Means minus Monthly Means

10.1 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	-1	0	1	3	4	5	4	2	-1	-3	-4	-1	1	2	1	-1	-3	-4	-3	-2	-1	-1	1	0	14880
February	-1	-1	0	1	2	2	0	-1	-1	-1	0	2	2	2	0	-1	-1	-3	-2	-1	0	1	1	0	14880
March	2	1	1	1	4	4	2	-4	-11	-13	-11	-8	-3	2	4	2	1	1	2	4	4	5	5	4	14881
April	4	3	3	3	3	1	-3	-8	-14	-18	-19	-14	-5	3	5	4	4	5	5	7	8	8	7	6	14882
May	4	4	4	3	-1	-5	-9	-14	-17	-19	-16	-9	-1	4	5	5	7	9	11	10	8	7	6	4	14883
June	4	5	6	5	2	-3	-9	-17	-21	-23	-21	-15	-5	5	9	10	12	12	13	12	8	6	4	3	14885
July	4	4	4	3	-1	-6	-9	-14	-20	-23	-19	-14	-3	4	10	12	11	11	11	10	9	7	5	4	14880
August	5	5	6	4	0	-5	-11	-16	-20	-21	-17	-9	-2	4	8	9	6	7	9	9	9	7	6	5	14877
September	5	4	4	4	4	1	-4	-12	-19	-21	-16	-8	-1	3	4	4	4	5	6	7	7	7	7	6	14876
October	3	4	5	6	8	7	3	-7	-16	-20	-16	-10	-3	2	3	3	4	5	4	3	4	3	3	2	14874
November	0	0	1	2	4	3	2	-1	-5	-7	-6	-3	1	1	1	0	0	0	1	1	2	2	2	0	14875
December	-1	-1	-1	0	1	1	1	0	-2	-4	-3	2	5	4	3	2	1	0	0	-1	-2	-1	-2	-2	14878
Winter	-1	-1	0	2	3	3	2	0	-2	-4	-3	0	2	2	1	0	-1	-2	-1	-1	0	0	1	0	14878
Equinox	4	3	3	3	4	3	0	-7	-15	-18	-16	-10	-3	2	4	3	3	4	5	5	6	6	6	5	14878
Summer	4	5	5	4	0	-5	-10	-15	-20	-22	-18	-12	-3	5	8	9	9	10	11	10	8	7	5	4	14881
Year	2	2	3	3	3	0	-3	-8	-12	-15	-12	-7	-1	3	4	4	4	4	5	5	5	4	4	3	14879

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	0	0	-1	-1	-1	-1	1	1	0	-2	-5	-8	-7	-5	-4	-2	-1	3	4	6	8	7	5	3	1804
February	4	3	4	3	2	1	0	-2	-5	-6	-8	-8	-7	-5	-5	-2	0	1	3	5	6	6	5	4	1806
March	2	5	6	5	4	4	7	9	7	-1	-11	-17	-19	-15	-9	-3	0	2	3	4	5	6	4	2	1809
April	2	3	6	10	12	14	14	13	8	-2	-13	-23	-25	-19	-12	-6	-1	1	2	4	4	3	3	2	1811
May	3	6	12	17	20	21	19	13	3	-9	-21	-27	-26	-19	-12	-6	-2	0	0	0	1	2	2	2	1815
June	5	9	14	19	21	22	21	17	9	-3	-16	-24	-27	-24	-18	-11	-6	-4	-4	-3	0	1	2	4	1819
July	5	9	13	16	18	20	22	18	9	-3	-15	-25	-26	-22	-16	-9	-5	-3	-3	-3	-2	-1	1	3	1824
August	3	6	10	15	20	21	19	12	3	-9	-19	-26	-26	-20	-12	-4	1	-1	-2	1	3	3	2	1	1827
September	5	6	8	9	12	13	13	9	1	-9	-17	-22	-21	-14	-7	-2	-2	-2	0	2	3	6	5	5	1829
October	3	3	3	2	4	5	9	11	6	-3	-13	-17	-17	-12	-6	-4	-3	-2	1	4	6	7	7	5	1833
November	3	3	2	1	1	2	3	3	1	-4	-9	-11	-9	-6	-5	-3	-2	0	4	4	5	6	5	4	1836
December	1	2	1	1	1	1	2	1	-1	-4	-7	-8	-5	-3	-1	-1	0	0	1	4	5	4	4	2	1839
Winter	2	2	1	1	1	1	1	1	-1	-4	-7	-9	-7	-5	-4	-2	-1	1	3	5	6	6	5	3	1821
Equinox	3	4	6	7	8	9	11	11	6	-4	-13	-20	-20	-15	-9	-4	-1	0	1	3	4	5	5	3	1820
Summer	4	7	12	17	20	21	20	15	6	-6	-18	-26	-26	-21	-14	-8	-3	-2	-2	-1	0	1	2	3	1821
Year	3	5	6	8	10	10	11	9	4	-4	-13	-18	-18	-14	-9	-4	-2	0	1	2	3	4	4	3	1821

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	-3	-3	-4	-3	-3	-2	-2	-2	-2	-1	-1	0	2	3	3	3	5	6	5	4	2	0	-3	-3	49826
February	-4	-4	-2	-3	-4	-3	-3	-3	-4	-3	-2	-1	1	3	4	6	9	8	6	4	2	0	-3	-5	49828
March	-4	-3	-3	-2	-1	0	0	-1	-3	-5	-5	-3	0	3	6	7	6	7	6	4	2	-2	-4	-4	49827
April	-3	-2	0	0	1	1	1	-1	-4	-7	-9	-8	-2	3	5	7	7	7	5	3	1	-1	-2	-3	49830
May	-1	-1	1	2	1	0	0	-3	-8	-10	-11	-8	-3	2	5	7	8	7	5	4	3	1	0	-1	49832
June	0	0	0	-1	-1	-1	-2	-3	-6	-9	-10	-7	-2	2	6	8	9	8	6	4	1	0	-1	-2	49835
July	-1	-1	-1	-2	-5	-5	-4	-4	-5	-7	-7	-4	1	4	7	10	9	8	5	4	2	0	-1	-2	49841
August	-3	-1	1	1	0	-1	-2	-5	-7	-8	-8	-5	0	6	9	11	8	6	4	3	0	-1	-3	-4	49845
September	-2	-1	-1	0	1	1	0	-2	-4	-5	-6	-4	0	3	5	4	2	3	3	3	2	0	-1	-1	49846
October	-4	-4	-3	-2	-1	0	1	1	-1	-2	-3	-2	1	4	4	3	3	3	3	4	2	-1	-3	-2	49848
November	-3	-3	-2	-1	-1	-1	-1	-1	-2	-2	-1	0	2	2	2	3	4	5	3	2	1	0	-2	-3	49852
December	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	1	1	1	1	1	1	1	2	2	1	0	0	-1	49854
Winter	-3	-3	-2	-2	-2	-2	-1	-2	-2	-2	-1	0	2	2	2	3	5	5	4	3	1	0	-2	-3	49840
Equinox	-3	-3	-2	-1	0	0	1	-1	-3	-5	-6	-4	0	3	5	5	5	5	4	4	2	-1	-2	-3	49838
Summer	-2	-1	0	0	-1	-2	-2	-4	-6	-9	-9	-6	-1	3	7	9	9	7	5	4	2	0	-1	-2	49838
Year	-3	-2	-1	-1	-1	-1	-1	-2	-4	-5	-5	-3	0	3	5	6	6	6	4	3	2	0	-2	-3	49839

10.2 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	-2	-2	1	2	1	0	-2	-5	-5	-5	0	3	3	3	2	1	1	2	2	1	1	0	0	14883
February	-2	-2	-1	-1	-1	-2	-3	-4	-3	-1	2	4	5	5	3	1	0	0	1	0	1	0	0	-1	14882
March	0	0	0	0	0	0	-1	-5	-10	-11	-9	-4	-1	3	4	3	3	4	4	5	5	4	4	3	14882
April	4	4	3	3	2	1	-3	-8	-13	-17	-18	-13	-4	2	4	5	3	3	6	7	7	7	7	7	14883
May	3	4	5	3	-2	-7	-12	-16	-19	-23	-18	-9	0	5	7	5	6	9	10	11	11	10	9	7	14882
June	4	5	7	5	2	-1	-8	-16	-21	-23	-21	-15	-5	3	5	6	7	9	11	12	10	9	9	8	14884
July	3	5	6	4	0	-5	-8	-11	-17	-20	-17	-12	-4	1	5	10	9	8	9	9	8	6	5	5	14880
August	4	3	4	3	0	-4	-8	-12	-18	-22	-17	-7	1	5	8	7	5	7	9	9	7	6	5	6	14879
September	5	4	3	2	2	1	-4	-10	-16	-19	-17	-9	-3	2	3	2	3	5	7	8	7	8	8	8	14875
October	4	4	4	5	6	6	1	-9	-18	-22	-18	-11	-3	2	3	3	4	5	6	6	6	6	6	5	14876
November	0	0	0	1	1	2	1	-2	-6	-9	-10	-6	0	2	3	3	3	3	4	3	2	2	1	1	14877
December	-1	-1	-1	0	1	1	0	-2	-3	-4	-3	1	3	2	2	1	1	1	1	1	1	1	0	-1	14879
Winter	-1	-1	-1	0	1	1	0	-2	-4	-5	-4	0	3	3	3	2	1	1	2	1	1	1	0	0	14880
Equinox	3	3	3	2	3	2	-1	-8	-14	-17	-15	-9	-3	2	3	3	3	4	6	6	6	6	6	6	14879
Summer	3	5	6	4	0	-4	-9	-14	-19	-22	-18	-11	-2	3	6	7	7	8	10	10	9	8	7	6	14882
Year	2	2	2	2	1	-1	-4	-8	-13	-15	-12	-7	-1	3	4	4	4	5	6	6	5	5	4	4	14880

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	1	0	-1	-1	0	1	2	4	4	1	-4	-5	-4	-2	-2	-2	-1	0	1	1	1	2	1	1	1803
February	3	2	2	2	1	1	0	-1	-3	-5	-6	-5	-3	-2	-1	-1	0	1	1	2	2	3	4	3	1805
March	1	2	5	5	5	5	7	9	6	0	-8	-13	-13	-9	-4	0	-1	-2	0	1	1	1	1	1	1808
April	4	3	6	9	11	13	16	16	10	0	-11	-21	-25	-20	-12	-6	-2	-1	0	2	2	2	2	2	1811
May	4	7	11	17	20	20	20	15	5	-8	-19	-25	-24	-18	-13	-8	-3	-2	-2	-1	-2	1	2	2	1816
June	3	6	11	14	18	20	21	18	10	-2	-15	-23	-24	-19	-13	-8	-4	-2	-2	-2	-2	-2	-1	0	1819
July	2	6	9	13	15	17	19	18	10	0	-10	-19	-19	-15	-11	-7	-4	-4	-4	-5	-4	-3	-3	-1	1824
August	3	5	8	15	19	19	16	11	3	-8	-19	-25	-25	-17	-8	-2	0	-1	-2	-1	1	3	4	3	1826
September	5	6	7	8	9	11	12	10	5	-4	-14	-20	-20	-16	-9	-3	-2	-1	1	3	3	3	3	4	1829
October	1	1	2	2	4	7	12	14	10	0	-9	-14	-15	-10	-4	-2	-2	-1	-1	1	1	2	1	1	1832
November	0	0	0	1	1	2	4	6	5	0	-6	-9	-8	-4	-2	-1	-1	0	1	2	2	2	2	1	1836
December	1	0	1	0	1	1	3	2	1	-2	-5	-7	-4	-2	0	0	0	0	0	1	2	2	2	1	1838
Winter	1	1	0	1	1	1	2	3	2	-1	-5	-7	-5	-2	-1	-1	-1	0	1	2	2	3	2	2	1821
Equinox	2	3	5	6	7	9	12	12	8	-1	-11	-17	-18	-14	-7	-3	-1	-1	0	2	2	2	2	2	1820
Summer	3	6	10	15	18	19	19	16	7	-5	-16	-23	-23	-17	-11	-6	-3	-2	-3	-2	-2	0	0	1	1821
Year	2	3	5	7	9	10	11	10	5	-2	-10	-16	-15	-11	-7	-3	-2	-1	-1	0	1	1	1	2	1821

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	0	0	0	0	0	0	0	0	-1	-2	-3	-1	1	1	1	1	1	1	1	1	0	0	0	-1	49825
February	0	1	0	0	0	0	-1	-1	-2	-1	-2	-1	-1	0	0	1	1	1	1	1	1	1	1	0	49828
March	0	0	1	1	0	1	1	-1	-3	-5	-4	-2	-1	1	2	2	2	1	2	1	1	0	0	1	49827
April	0	0	1	2	2	3	2	-1	-5	-10	-13	-10	-4	2	4	5	5	4	3	2	2	1	1	1	49829
May	3	4	5	4	2	2	1	-3	-8	-11	-10	-8	-4	-1	2	3	4	3	3	3	2	2	1	0	49832
June	1	2	2	2	1	0	0	0	-2	-5	-7	-5	-2	-1	1	4	5	4	2	1	0	0	0	0	49836
July	1	3	4	4	2	0	-1	-2	-4	-7	-8	-6	-2	0	1	3	4	3	2	1	1	1	1	1	49841
August	-1	1	3	4	3	3	2	-2	-5	-7	-9	-7	-2	3	4	4	3	0	0	1	1	0	0	0	49844
September	0	0	0	1	2	2	1	-1	-2	-3	-5	-4	-2	0	2	2	1	1	1	1	1	1	0	0	49848
October	0	-1	0	0	1	2	2	0	-3	-4	-5	-3	1	3	3	1	1	1	1	1	0	0	0	0	49848
November	0	0	-1	0	0	0	0	0	-1	-1	-1	1	2	2	1	0	0	0	0	0	0	0	-1	-1	49851
December	0	0	0	0	0	0	-1	-1	-1	-1	-1	1	1	1	1	1	0	1	1	0	0	0	-1	0	49853
Winter	0	0	0	0	0	0	0	-1	-1	-1	-2	0	1	1	1	1	1	1	1	1	0	0	0	-1	49839
Equinox	0	0	0	1	1	2	2	-1	-3	-6	-7	-5	-1	2	3	3	2	2	2	1	1	1	0	0	49838
Summer	1	2	3	3	2	1	0	-2	-5	-7	-9	-6	-3	0	2	4	4	3	2	1	1	1	0	0	49838
Year	0	1	1	1	1	1	1	-1	-3	-5	-6	-4	-1	1	2	2	2	2	1	1	1	0	0	0	49839

10.3 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	1	4	5	8	9	8	8	5	3	-2	-4	-1	-3	-4	-4	-8	-9	-12	-4	-3	0	-2	4	-1	14878
February	1	0	5	7	14	11	5	0	0	-3	-1	1	-5	-6	-6	-6	-2	-9	-6	-4	0	2	3	-1	14876
March	3	0	1	-1	7	5	3	-4	-14	-15	-13	-8	-3	4	5	2	0	-2	0	3	4	8	7	5	14877
April	6	2	3	4	5	0	-5	-9	-16	-22	-25	-17	-2	7	11	6	7	7	2	6	7	10	6	6	14878
May	5	2	5	2	0	-7	-10	-15	-18	-20	-18	-8	1	8	6	7	9	13	12	8	5	4	6	1	14883
June	2	4	7	6	5	-2	-8	-18	-22	-26	-23	-15	-6	11	13	17	21	19	18	13	0	-4	-7	-8	14886
July	9	4	4	-1	-8	-14	-8	-11	-20	-24	-16	-15	-2	5	11	15	11	11	11	11	8	10	7	3	14878
August	10	12	10	5	3	-2	-15	-19	-23	-22	-15	-7	0	4	9	10	1	4	9	9	7	4	2	3	14875
September	6	5	7	8	12	11	3	-9	-21	-27	-19	-9	-3	-2	1	1	2	3	4	5	6	5	7	3	14875
October	3	5	11	10	14	12	4	-7	-15	-19	-16	-10	-1	3	2	2	5	7	6	2	-1	-5	-6	-8	14870
November	3	1	1	4	7	7	6	3	-1	-2	1	0	1	-2	0	-5	-8	-6	-1	-7	-3	-1	3	-2	14873
December	-2	-1	0	2	3	1	3	3	0	-4	-4	0	5	4	3	3	0	0	-1	-5	-7	-2	-2	0	14877
Winter	1	1	3	5	8	7	6	3	0	-3	-2	0	-1	-2	-2	-4	-5	-7	-3	-5	-2	-1	2	-1	14876
Equinox	4	3	6	5	10	7	1	-7	-16	-21	-18	-11	-2	3	5	3	3	4	3	4	4	5	4	2	14875
Summer	7	6	7	3	0	-6	-10	-16	-21	-23	-18	-11	-2	7	10	12	11	12	12	10	5	3	2	0	14881
Year	4	3	5	5	6	2	-1	-7	-12	-15	-13	-7	-2	3	4	4	3	3	4	3	2	2	3	0	14877

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	1	2	-6	-2	-4	-4	-2	0	-3	-3	-6	-10	-5	-5	-8	-4	0	10	11	8	9	9	7	4	1803
February	14	9	6	5	5	2	-1	-7	-14	-12	-13	-17	-15	-9	-14	-5	2	5	14	12	11	12	7	2	1806
March	2	15	15	5	4	2	3	4	2	-6	-13	-19	-19	-17	-11	-1	7	12	4	3	4	2	0	0	1810
April	-2	-1	2	13	12	12	10	10	8	-3	-14	-23	-26	-19	-13	-4	0	8	9	14	7	4	0	-5	1812
May	4	7	11	18	23	26	22	14	0	-15	-25	-34	-32	-24	-13	-6	0	4	5	4	6	2	3	1	1815
June	6	10	18	19	19	22	21	19	10	-2	-14	-24	-29	-30	-22	-19	-13	-10	-9	-6	11	7	6	12	1821
July	3	10	15	9	9	21	28	22	10	-6	-18	-29	-31	-27	-17	-8	0	-1	-1	0	1	0	5	5	1824
August	-1	6	10	14	24	29	25	10	1	-12	-23	-31	-32	-28	-20	-3	7	-2	-3	12	15	4	-2	-1	1828
September	5	2	9	6	12	10	9	7	0	-11	-18	-23	-21	-14	-6	-2	-1	0	4	5	5	6	6	8	1829
October	11	8	7	2	3	1	0	3	-5	-9	-21	-23	-20	-13	-8	-5	-5	-4	-2	14	16	18	22	11	1835
November	5	6	4	1	-1	-1	-1	-1	-2	-7	-11	-13	-13	-10	-10	-7	-5	1	16	13	13	9	8	5	1839
December	2	3	0	0	2	2	1	-1	-1	-2	-8	-9	-7	-5	-3	-3	-2	-1	1	9	7	5	7	4	1838
Winter	6	5	1	1	0	0	-1	-3	-5	-6	-9	-12	-10	-7	-9	-5	-1	4	10	10	10	9	7	4	1821
Equinox	4	6	8	6	8	6	6	6	1	-7	-16	-22	-22	-16	-10	-3	0	4	4	9	8	7	7	4	1822
Summer	3	8	13	15	19	25	24	16	5	-9	-20	-29	-31	-27	-18	-9	-2	-2	-2	2	8	3	3	4	1822
Year	4	7	8	7	9	10	10	7	0	-7	-15	-21	-21	-17	-12	-6	-1	2	4	7	9	7	6	4	1822

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	-7	-9	-13	-10	-8	-7	-6	-5	-4	-2	1	1	4	6	7	10	16	17	9	5	3	1	-5	-6	49827
February	-16	-10	-9	-12	-16	-13	-10	-10	-11	-8	-6	-1	8	14	17	26	38	31	18	7	0	-8	-15	-16	49833
March	-21	-20	-22	-11	-5	-3	-1	-1	-1	-1	0	3	6	8	11	15	15	15	12	10	7	-2	-6	-9	49825
April	-11	-12	-8	-7	-4	-2	-1	-1	-1	-4	-5	-4	2	7	9	14	16	17	11	4	0	-5	-5	-10	49831
May	-10	-12	-8	-3	-3	-2	-1	-3	-7	-10	-9	-6	2	8	11	12	13	14	12	9	6	0	-4	-9	49829
June	-4	-6	-7	-8	-6	-4	-5	-4	-5	-6	-5	-4	-1	6	12	14	18	16	13	9	0	-5	-7	-10	49832
July	-5	-9	-12	-19	-25	-20	-12	-4	-3	-3	-3	0	8	12	17	20	19	17	13	9	6	0	-3	-5	49837
August	-7	-3	-2	-6	-5	-4	-6	-10	-11	-14	-11	-6	1	8	16	27	23	15	9	7	-1	-2	-8	-11	49846
September	-2	-6	-5	-4	-5	-4	-4	-4	-4	-3	-5	-3	2	7	10	8	6	7	7	6	3	-1	-4	-3	49846
October	-11	-15	-13	-7	-4	-2	0	2	2	3	3	4	6	7	8	8	7	7	7	11	4	-3	-13	-11	49847
November	-8	-8	-6	-4	-4	-3	-2	-3	-3	-3	-2	0	2	4	4	10	12	14	8	6	2	-4	-7	-7	49853
December	-3	-2	-2	-2	-2	-1	-1	-2	-2	-2	-1	0	1	0	1	1	2	3	3	5	4	3	0	-2	49854
Winter	-8	-7	-7	-7	-8	-6	-5	-6	-5	-4	-2	0	4	6	7	12	17	16	10	6	3	-2	-7	-8	49842
Equinox	-11	-13	-12	-7	-4	-3	-1	-1	-1	-1	-2	0	4	7	9	11	11	11	9	8	4	-3	-7	-8	49837
Summer	-6	-8	-7	-9	-10	-8	-6	-5	-7	-8	-7	-4	2	9	14	18	18	15	12	9	3	-1	-6	-9	49836
Year	-9	-9	-9	-8	-7	-5	-4	-4	-4	-4	-4	-1	3	7	10	14	15	14	10	7	3	-2	-6	-8	49838

11 Monthly and Annual Means

All days

	Z	H	D	F	X	Y	I
January	49826	14989	6° 54.7′	52032	14880	1804	73° 15.4′
February	49828	14989	6° 55.2′	52034	14880	1806	73° 15.5′
March	49827	14990	6° 55.8′	52033	14881	1809	73° 15.4′
April	49830	14992	6° 56.4′	52036	14882	1811	73° 15.3′
May	49832	14994	6° 57.2′	52039	14883	1815	73° 15.3′
June	49835	14996	6° 58.0′	52042	14885	1819	73° 15.2′
July	49841	14991	6° 59.3′	52046	14880	1824	73° 15.6′
August	49845	14989	7° 00.1′	52050	14877	1827	73° 15.8′
September	49846	14988	7° 00.5′	52051	14876	1829	73° 15.9′
October	49848	14987	7° 01.5′	52052	14874	1833	73° 16.0′
November	49852	14988	7° 02.3′	52057	14875	1836	73° 16.0′
December	49854	14991	7° 02.7′	52059	14878	1839	73° 15.9′
Winter	49840	14989	6° 58.8′	52046	14878	1821	73° 15.7′
Equinox	49838	14989	6° 58.6′	52043	14878	1820	73° 15.6′
Summer	49838	14992	6° 58.7′	52044	14881	1821	73° 15.5′
Year	49839	14990	6° 58.7′	52044	14879	1821	73° 15.6′

5 Quiet days

	Z	H	D	F	X	Y	I
January	49825	14991	6° 54.6′	52032	14883	1803	73° 15.3′
February	49828	14991	6° 55.0′	52034	14882	1805	73° 15.3′
March	49827	14991	6° 55.5′	52034	14882	1808	73° 15.3′
April	49829	14993	6° 56.2′	52036	14883	1811	73° 15.3′
May	49832	14993	6° 57.4′	52038	14882	1816	73° 15.3′
June	49836	14995	6° 58.1′	52043	14884	1819	73° 15.3′
July	49841	14992	6° 59.3′	52047	14880	1824	73° 15.6′
August	49844	14991	6° 59.8′	52050	14879	1826	73° 15.7′
September	49848	14987	7° 00.6′	52052	14875	1829	73° 16.0′
October	49848	14988	7° 01.3′	52053	14876	1832	73° 15.9′
November	49851	14990	7° 02.2′	52056	14877	1836	73° 15.9′
December	49853	14992	7° 02.6′	52059	14879	1838	73° 15.8′
Winter	49839	14991	6° 58.6′	52045	14880	1821	73° 15.6′
Equinox	49838	14990	6° 58.4′	52043	14879	1820	73° 15.6′
Summer	49838	14993	6° 58.6′	52045	14882	1821	73° 15.4′
Year	49839	14991	6° 58.5′	52044	14880	1821	73° 15.5′

5 Disturbed days

	Z	H	D	F	X	Y	I
January	49827	14987	6° 54.7′	52032	14878	1803	73° 15.6′
February	49833	14985	6° 55.2′	52037	14876	1806	73° 15.8′
March	49825	14987	6° 56.3′	52030	14877	1810	73° 15.6′
April	49831	14988	6° 56.7′	52036	14878	1812	73° 15.6′
May	49829	14994	6° 57.2′	52036	14883	1815	73° 15.2′
June	49832	14997	6° 58.6′	52040	14886	1821	73° 15.0′
July	49837	14990	6° 59.5′	52043	14878	1824	73° 15.6′
August	49846	14986	7° 00.3′	52051	14875	1828	73° 16.0′
September	49846	14987	7° 00.6′	52050	14875	1829	73° 15.9′
October	49847	14983	7° 02.2′	52050	14870	1835	73° 16.2′
November	49853	14986	7° 02.8′	52057	14873	1839	73° 16.1′
December	49854	14990	7° 02.6′	52059	14877	1838	73° 15.9′
Winter	49842	14987	6° 58.8′	52046	14876	1821	73° 15.8′
Equinox	49837	14986	6° 58.9′	52042	14875	1822	73° 15.8′
Summer	49836	14992	6° 58.9′	52042	14881	1822	73° 15.5′
Year	49838	14988	6° 58.9′	52043	14877	1822	73° 15.7′

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

12.1 H-Component

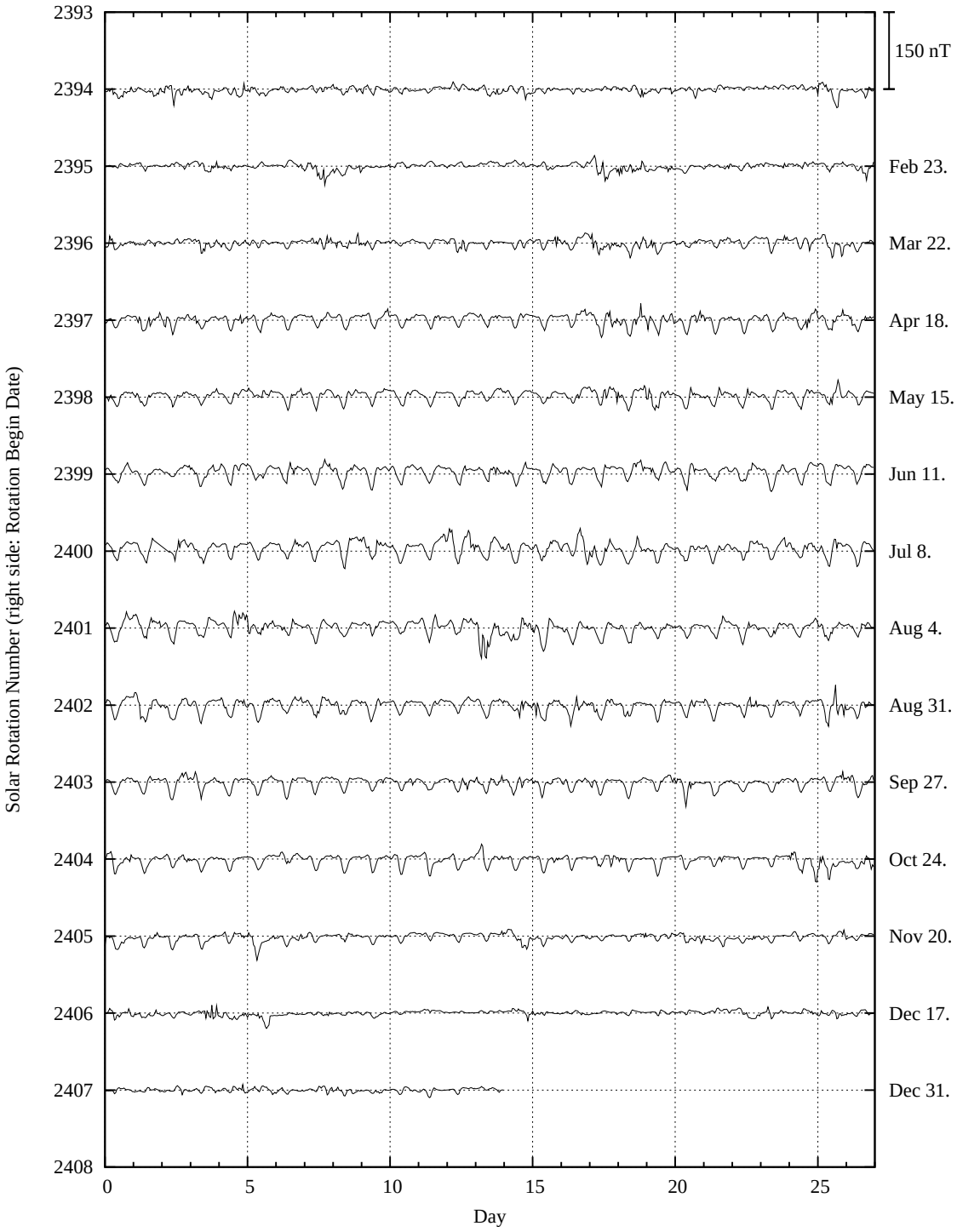


Figure 3: Hourly means of H sequenced in Bartels' solar rotation cycles.

12.2 D-Component

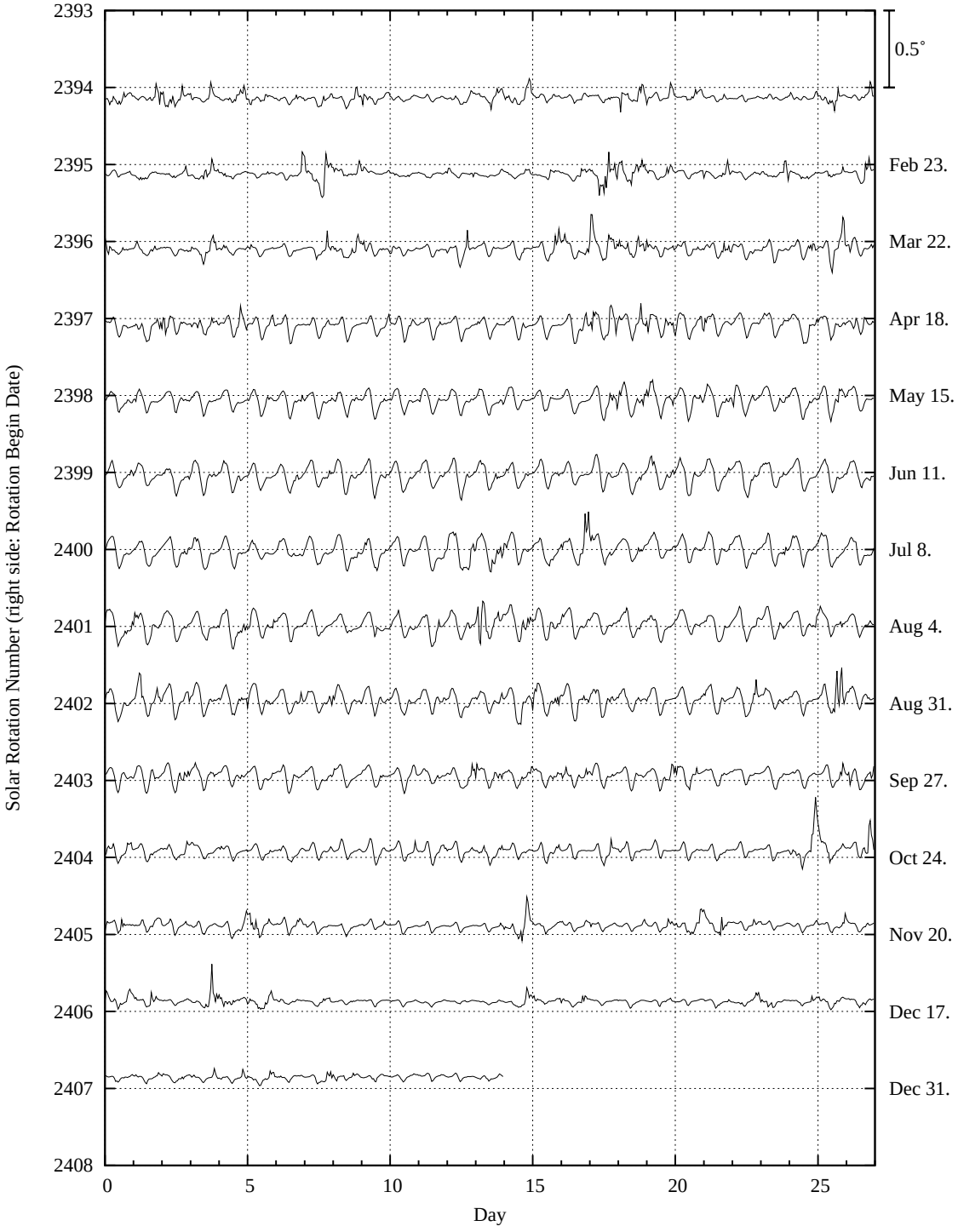


Figure 4: Hourly means of D sequenced in Bartels' solar rotation cycles.

12.3 Z-Component

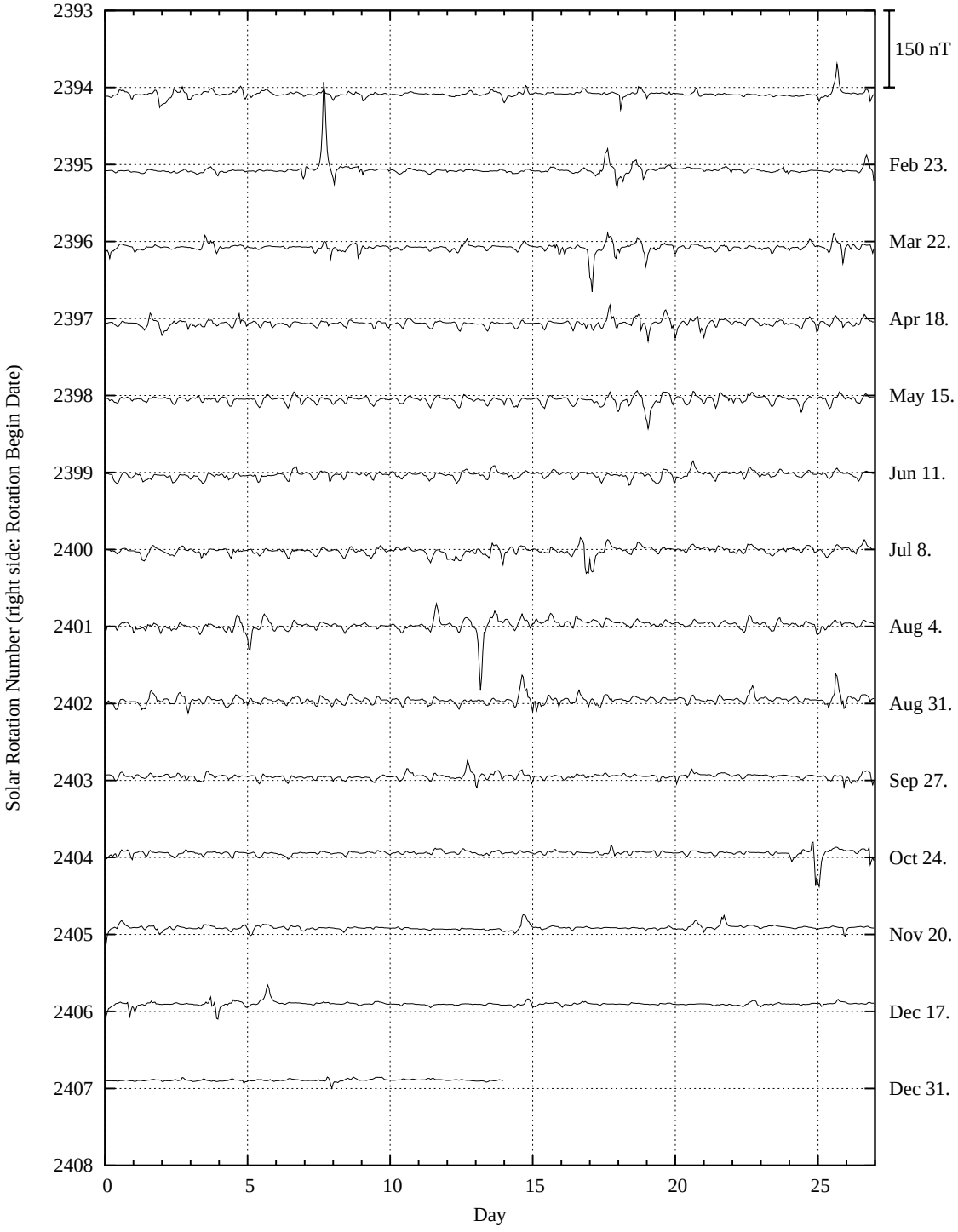


Figure 5: Hourly means of Z sequenced in Bartels' solar rotation cycles.

13 K-Indices

13.1 Monthly Tables of K-Indices

January

Day	K								Ak
1	1	2	2	2	2	2	1	2	6
2	0	0	0	0	1	2	3	3	5
3	2	2	2	3	2	3	1	2	9
4	2	0	0	1	1	3	2	1	5
5	1	1	1	1	1	2	2	3	6
6	1	1	0	1	1	2	0	0	2
7	0	0	0	0	0	1	0	1	1
8	0	0	0	1	2	2	1	1	3
9	2	1	0	1	2	2	3	1	6
10	2	1	1	1	1	0	0	1	3
11	0	0	0	1	0	0	0	0	0
12	0	0	0	0	0	0	1	0	0
13	1	1	1	0	1	1	2	2	4
14	2	1	1	1	2	1	3	2	6
15	2	1	1	1	0	1	2	2	4
16	1	2	0	1	0	1	1	0	2
17	0	0	0	0	0	1	1	1	1
18	0	0	0	0	0	1	1	1	1
19	4	1	1	0	1	2	2	2	7
20	2	1	1	0	1	0	3	1	4
21	0	0	0	1	1	2	2	1	3
22	0	0	0	0	1	1	1	0	1
23	0	0	0	1	0	0	0	1	1
24	0	0	0	0	0	0	0	1	0
25	1	0	0	0	1	0	0	2	2
26	3	2	2	2	3	3	2	0	9
27	0	0	0	0	0	1	2	2	2
28	0	0	0	0	0	1	0	2	1
29	0	1	2	1	1	0	1	0	2
30	0	1	1	1	0	0	2	2	3
31	1	1	1	2	3	1	3	2	7
Mean									3.4

February

Day	K								Ak
1	1	1	1	1	0	0	0	1	2
2	0	0	0	1	1	1	0	0	1
3	0	0	0	0	0	0	2	4	4
4	3	1	1	3	2	4	3	3	13
5	3	1	1	1	1	0	1	3	6
6	2	0	0	0	0	0	0	1	1
7	0	1	0	0	1	0	0	0	1
8	0	0	0	0	0	0	0	1	0
9	1	0	0	0	1	0	0	2	2
10	0	0	0	0	1	0	0	1	1
11	2	0	0	1	1	1	1	1	3
12	0	0	0	1	1	2	1	0	2
13	0	0	0	0	0	2	2	1	2
14	1	1	3	3	3	4	2	4	14
15	3	3	1	2	3	3	3	2	12
16	1	0	0	0	1	3	1	1	3
17	0	0	0	0	0	0	0	1	0
18	2	0	0	0	0	1	2	2	3
19	0	0	0	0	0	2	1	1	2
20	1	1	0	0	1	1	4	3	7
21	0	0	0	1	1	1	1	1	2
22	0	0	1	1	1	0	1	2	2
23	0	0	0	1	2	3	2	3	6
24	3	3	2	1	1	1	1	1	7
25	2	1	1	1	1	1	1	0	3
26	0	1	0	1	1	1	0	1	2
27	2	1	2	3	3	3	2	3	11
28	2	2	2	1	0	0	1	2	4
Mean									4.1

March

Day	K								Ak
1	1	1	1	1	1	1	0	0	2
2	0	0	0	1	0	0	0	0	0
3	0	0	2	3	2	2	3	3	8
4	1	1	1	2	2	2	3	3	8
5	2	2	1	0	0	0	1	1	3
6	2	1	0	2	1	0	0	1	3
7	0	0	0	0	0	0	1	1	1
8	2	1	2	2	3	3	1	1	8
9	1	0	1	1	1	0	1	0	2
10	0	0	0	0	2	2	2	0	3
11	0	0	1	0	0	0	3	3	4
12	3	2	1	2	1	1	1	3	7
13	5	3	3	3	2	3	2	3	17
14	2	1	2	2	2	3	2	3	9
15	2	2	2	1	2	2	0	2	6
16	2	0	1	2	1	2	2	0	4
17	1	1	0	1	2	3	2	2	6
18	1	0	0	1	0	0	1	1	2
19	2	1	0	1	2	1	2	2	5
20	2	0	1	0	0	2	3	3	6
21	0	1	2	2	2	2	3	4	9
22	1	2	1	1	0	0	2	2	4
23	1	0	0	0	0	0	1	1	1
24	1	2	2	2	3	2	2	2	8
25	3	3	2	2	1	1	1	2	8
26	1	2	2	2	2	2	2	2	7
27	1	0	0	1	1	4	4	2	9
28	1	0	0	1	1	0	2	2	3
29	1	0	1	1	1	1	1	1	3
30	1	1	1	2	2	1	2	1	5
31	0	0	1	2	1	0	0	0	2
Mean									5.3

April

Day	K								Ak
1	0	0	1	1	1	0	2	2	3
2	1	0	0	1	2	1	1	0	2
3	0	0	0	0	1	2	1	0	2
4	0	0	0	1	1	0	0	0	1
5	1	2	2	2	2	2	1	1	6
6	1	1	1	2	1	2	0	0	3
7	0	1	1	1	1	1	0	0	2
8	0	1	2	3	3	2	3	3	10
9	2	3	2	2	2	4	2	3	12
10	2	1	1	2	2	2	4	2	9
11	3	2	2	2	2	3	2	3	10
12	3	1	1	1	1	1	3	3	8
13	3	1	1	1	1	0	1	1	4
14	0	1	0	0	1	1	0	1	2
15	1	1	1	1	2	1	2	1	4
16	1	0	1	1	3	3	1	2	6
17	1	1	1	2	3	2	1	2	6
18	1	3	2	1	2	2	1	2	7
19	1	2	2	1	2	1	2	1	5
20	2	2	1	1	2	2	1	0	5
21	1	1	3	2	2	1	1	1	6
22	1	1	1	2	2	0	0	2	4
23	0	0	1	1	1	1	1	0	2
24	2	1	2	2	3	2	2	1	7
25	1	0	1	2	2	2	1	2	5
26	1	1	0	1	1	0	0	1	2
27	2	2	0	1	1	1	1	0	3
28	0	1	1	1	2	1	1	0	3
29	0	0	1	2	2	2	1	0	3
30	1	1	0	1	1	1	0	0	2
Mean									4.8

May

Day	K								Ak
1	0	1	1	2	1	1	1	1	3
2	0	1	1	1	2	1	1	2	4
3	2	0	1	1	2	2	0	1	4
4	1	1	1	1	1	1	0	0	2
5	0	0	2	1	1	1	0	1	2
6	2	1	0	2	2	2	2	3	7
7	2	1	1	2	1	2	2	3	7
8	4	2	2	3	2	2	2	2	11
9	0	1	2	2	2	2	1	2	5
10	2	1	0	1	2	1	2	1	4
11	2	2	1	1	2	2	1	1	5
12	0	0	0	1	1	1	0	2	2
13	1	1	1	2	1	2	1	0	4
14	1	1	1	3	3	3	3	2	10
15	1	0	0	1	1	1	0	0	2
16	1	0	1	2	2	2	2	1	5
17	1	1	0	0	0	0	0	0	1
18	1	1	1	0	1	1	1	2	3
19	1	1	0	0	1	2	1	0	2
20	1	1	2	2	2	2	3	1	7
21	2	1	2	1	2	1	0	1	4
22	0	1	2	3	2	2	2	0	6
23	1	0	1	2	1	2	2	2	5
24	1	1	1	2	1	2	1	1	4
25	0	0	0	1	0	0	0	1	1
26	0	0	1	1	2	1	1	0	2
27	0	0	0	1	0	0	1	1	1
28	0	2	3	3	3	2	1	0	8
29	1	1	1	2	2	3	1	1	6
30	1	1	0	1	1	1	2	0	3
31	0	0	2	1	1	2	1	1	3
Mean									4.3

June

Day	K								Ak
1	1	1	0	0	1	1	1	0	2
2	0	0	0	2	2	1	1	1	3
3	1	0	0	2	2	3	2	2	6
4	1	2	1	2	2	1	1	2	5
5	0	1	1	2	2	2	0	1	4
6	1	0	1	1	1	1	1	1	3
7	0	1	0	3	3	2	2	2	7
8	1	1	0	0	1	1	1	0	2
9	0	0	0	1	1	1	0	1	2
10	2	1	2	2	2	1	0	0	4
11	1	1	0	2	1	2	0	1	3
12	1	0	1	1	2	0	0	0	2
13	0	1	1	1	2	2			4
14			0	2	3	2	2	2	7
15	1	1	1	1	2	1	1	1	4
16	0	0	1	2	3	2	1	0	4
17	0	1	1	1	1	1	0	0	2
18	1	1	1	1	1	2	1	2	4
19	1	0	0	1	1	1	0	0	2
20	0	1	2	2	2	2	2	2	6
21	2	2	2	2	4	2	1	0	8
22	1	1	1	1	2	1	0	0	3
23	1	1	1	2	1	1	1	3	5
24	3	3	3	2	3	3	4	3	16
25	2	2	2	2	3	2	2	3	9
26	2	1	1	1	1	1	1	1	4
27	1	0	1	2	3	3	2	1	7
28	2	1	1	1	3	3	4	4	13
29	3	2	2	2	2	2	0	0	6
30	0	1	1	2	1	2	1	1	4
Mean									5.0

July

Day	K								Ak
1	1	1	1	2	1	1	0	1	3
2	1	1	1	1	1	1	1	0	3
3	1	1	1	1	2	1	1	2	4
4	1	1	1	1	2	2	1	1	4
5	1	1	1	1	0	1	2	2	4
6	1	2	0	1	1	1	1	1	3
7	1	1	0	2	2	3	1	1	5
8	1	0	1	1	2	2	1	1	4
9	2	1	0	1	1	2	2	2	5
10	2	2	1	3	3	3	1	2	9
11	0	1	1	1	1	1	1	1	3
12	1	0	1	1	2	1	0	1	3
13	1	1	0	2	4	4	2	3	11
14	4	2	2	2	3	1	1	2	10
15	1	2	1	2	2	2	1	0	5
16	1	0	1	1	1	0	1	0	2
17	0	0	0	0	0	0	0	0	0
18	0	1	1	1	1	1	0	0	2
19	0	0	1	0	1	0	0	0	1
20	1	2	1	3	3	3	1	0	8
21	1	1	1	2	1	2	2	1	5
22	3	5	4	4	2	2	2	2	18
23	1	1	2	2	2	3	3	2	8
24	2	1	2	2	2	2	1	1	6
25	2	2	0	2	2	1	1	1	5
26	1	1	0	1	2	1	0	0	2
27	1	1	1	2	2	1	1	1	4
28	1	1	1	1	2	1	0	1	3
29	1	1	1	1	2	1	0	0	3
30	0	0	0	3	2	2	2	1	5
31	0	1	2	2	2	1	1	2	5
Mean									4.9

August

Day	K								Ak
1	0	1	1	3	2	2	0	1	5
2	0	1	0	1	1	1	1	2	3
3	2	2	2	2	2	2	2	1	7
4	1	1	1	1	2	2	1	1	4
5	2	1	1	3	3	1	0	1	6
6	2	2	3	2	3	2	2	2	9
7	2	1	1	2	2	3	2	3	8
8	1	1	0	1	2	1	1	1	3
9	2	2	2	2	2	1	2	2	7
10	2	0	0	1	1	2	1	1	3
11	0	0	1	1	0	1	2	2	3
12	1	1	1	2	3	1	1	2	6
13	2	0	1	1	2	1	1	1	4
14	1	0	1	1	1	1	0	2	3
15	1	0	1	0	1	0	1	0	2
16	0	1	0	1	1	0	0	1	2
17	0	0	0	1	2	2	1	1	3
18	1	1	0	1	1	2	2	2	4
19	1	0	1	2	3	3	2	3	8
20	3	3	2	3	2	1	2	3	11
21	1	1	2	2	3	3	2	2	8
22	1	2	1	1	2	1	2	1	5
23	1	2	2	2	1	1	1	1	5
24	1	1	1	1	1	1	0	0	2
25	1	1	1	1	1	1	0	1	3
26	2	1	1	1	0	1	1	0	3
27	1	2	1	2	2	3	3	1	8
28	1	1	1	1	1	1	1	1	3
29	0	0	1	1	1	1	0	0	2
30	2	1	2	2	3	5	4	3	16
31	2	1	2	2	2	2	2	0	6
Mean									5.2

September

Day	K								Ak
1	1	0	0	1	2	1	1	1	3
2	1	1	0	1	2	1	0	1	3
3	0	0	1	1	1	3	2	2	5
4	2	2	2	2	2	2	2	1	7
5	1	1	1	1	0	1	1	0	2
6	0	1	1	3	2	1	1	0	4
7	0	0	0	1	1	1	0	0	1
8	1	0	0	0	0	1	1	1	2
9	2	0	0	1	1	0	1	0	2
10	1	0	0	1	2	1	1	0	2
11	0	0	0	0	2	2	2	1	3
12	0	0	0	0	1	1	0	0	1
13	1	0	0	1	1	2	2	2	4
14	3	1	1	1	1	2	2	2	6
15	1	1	1	1	2	2	1	3	6
16	1	1	2	1	1	1	1	1	4
17	2	2	2	1	1	1	2	2	6
18	2	1	0	1	1	0	1	0	2
19	0	0	0	0	0	0	1	0	0
20	0	0	1	1	2	2	2	3	5
21	3	1	1	2	2	1	2	0	6
22	0	0	1	1	2	1	0	1	2
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	1	1	1	0	1
25	0	0	0	1	1	0	1	0	1
26	0	0	0	1	2	1	2	3	4
27	2	3	1	1	2	1	2	3	8
28	2	1	2	2	1	1	2	3	7
29	0	0	0	1	1	0	0	0	1
30	1	2	1	1	2	1	2	2	5
Mean									3.4

October

Day	K								Ak
1	1	0	0	0	0	0	0	1	1
2	1	0	0	1	1	0	0	0	1
3	1	0	0	1	0	0	1	0	1
4	0	1	1	3	2	1	0	0	4
5	0	0	0	1	1	1	0	1	2
6	0	0	1	0	1	0	0	0	1
7	0	0	0	1	0	1	1	0	1
8	0	1	0	0	0	0	1	2	2
9	0	0	0	1	0	0	1	1	1
10	0	0	0	0	0	0	0	1	0
11	1	2	3	2	2	2	1	2	7
12	0	0	1	0	1	0	1	0	1
13	1	0	1	1	0	0	2	2	3
14	0	0	0	0	0	0	0	0	0
15	0	0	2	2	2	2	3	1	6
16	2	1	0	1	1	0	0	0	2
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	1	1	0	0	1
19	0	0	1	0	2	1	0	0	2
20	1	0	0	0	0	0	0	0	0
21	0	0	0	0	2	1	0	0	1
22	3	2	1	3	2	2	3	4	12
23	3	2	2	2	2	1	1	1	7
24	1	0	1	1	2	2	5	3	11
25	3	1	1	1	3	1	0	0	5
26	0	0	1	1	0	2	2	2	3
27	1	0	0	1	1	0	2	0	2
28	0	0	1	1	0	0	1	1	2
29	0	1	0	1	2	2	3	3	6
30	2	2	2	2	1	2	2	1	6
31	0	0	0	1	1	1	2	2	3
Mean									3.0

November

Day	K								Ak
1	0	1	1	1	0	1	1	0	2
2	0	0	2	1	1	1	0	0	2
3	0	0	0	0	0	0	1	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	1	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	2	1
8	2	1	1	3	2	2	3	2	8
9	1	1	1	1	0	0	0	1	2
10	0	0	0	0	0	0	1	1	1
11	1	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	2	1
13	0	0	0	0	0	0	2	1	1
14	1	1	1	2	2	2	2	2	6
15	2	0	1	1	2	3	1	1	5
16	0	0	0	0	0	0	2	0	1
17	1	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	1	0
19	0	0	0	0	0	1	1	2	2
20	1	0	0	0	1	0	1	0	1
21	3	2	2	2	1	1	3	2	8
22	2	1	2	1	1	3	2	0	6
23	0	0	0	0	0	0	0	0	0
24	0	0	0	1	3	5	4	3	14
25	2	2	1	1	1	0	1	2	4
26	2	1	1	2	1	2	2	1	5
27	0	0	0	0	0	1	1	0	1
28	0	0	0	1	1	1	1	1	2
29	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
Mean									2.4

December

Day	K								Ak
1	0	0	0	0	0	0	0	0	0
2	0	0	0	1	1	0	0	0	1
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	1	0	1	1	3	2	4
6	2	1	1	1	0	0	1	0	2
7	2	0	0	0	1	2	2	1	3
8	0	0	0	0	0	0	0	1	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	1	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	1	1	1	1
13	0	0	0	0	1	0	1	2	2
14	2	1	1	1	0	1	1	0	3
15	0	0	0	0	0	0	2	1	1
16	1	1	1	1	1	2	1	1	4
17	0	0	0	1	1	1	1	0	2
18	0	0	0	1	2	1	1	0	2
19	1	1	0	0	0	0	0	1	1
20	1	0	0	0	1	1	0	0	1
21	1	0	0	0	0	0	2	1	2
22	0	0	0	0	0	0	2	2	2
23	0	0	1	1	1	0	2	1	2
24	0	1	1	0	0	0	0	1	1
25	0	0	0	1	2	1	2	2	3
26	1	1		0	1	2	0	0	3
27	0	0	0	1	1	1	0	0	1
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0
Mean									1.3

13.2 K-Indices Sequenced in Bartels Solar Rotation Number

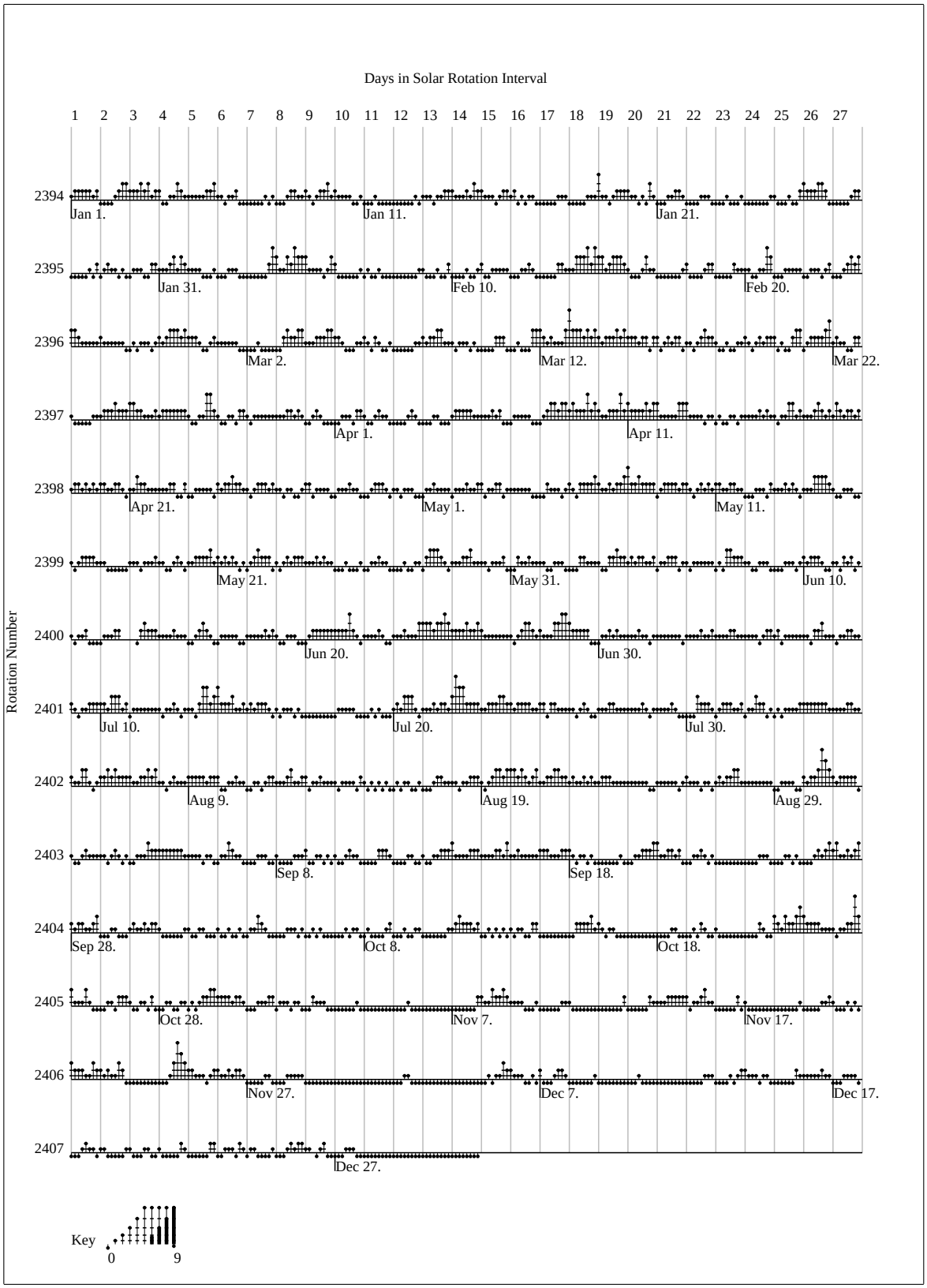


Figure 6: K-indices sequenced in Bartels solar rotation number

13.3 Ak-Indices

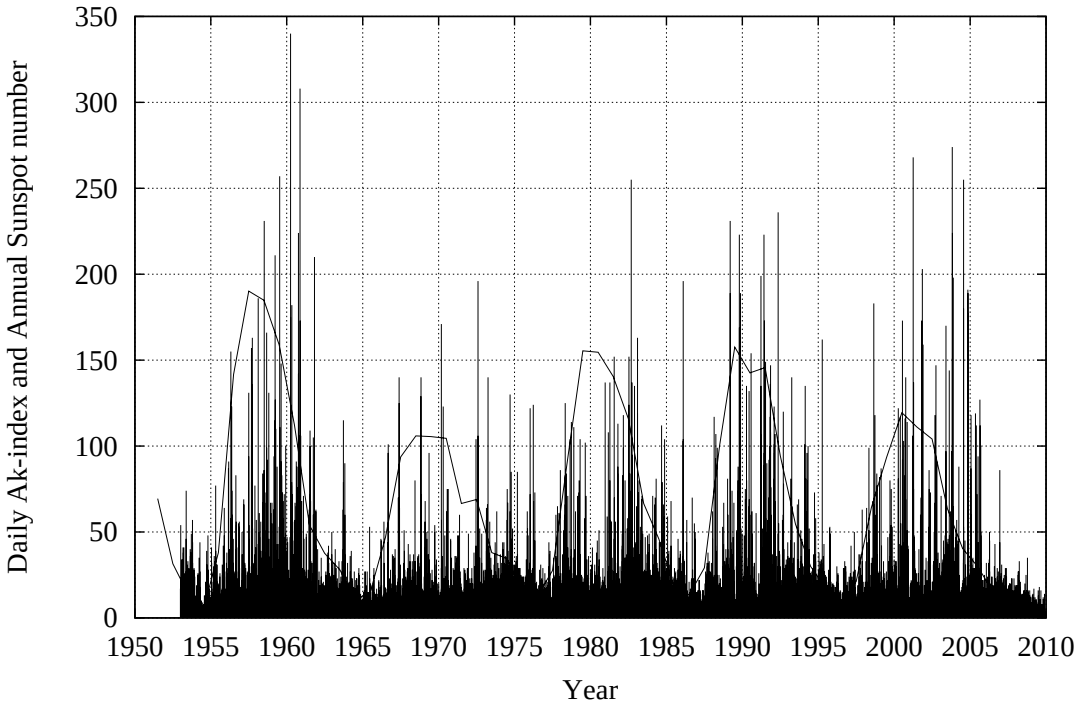


Figure 7: Daily Ak-indices (vertical lines) and sunspots (solid line)

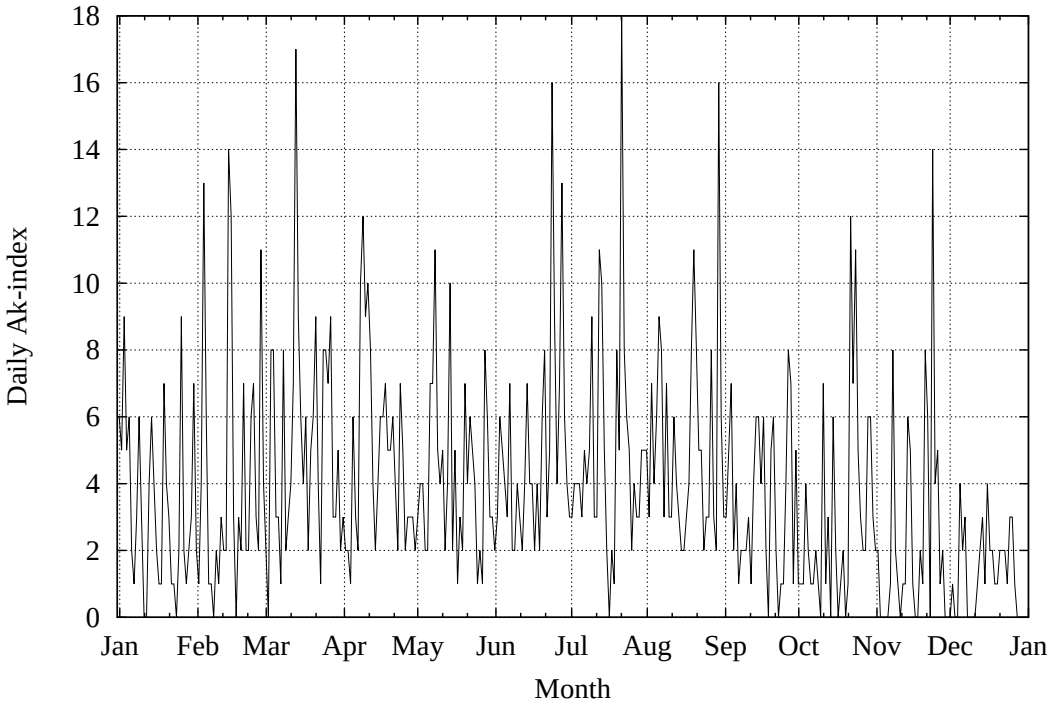


Figure 8: Daily Ak-indices

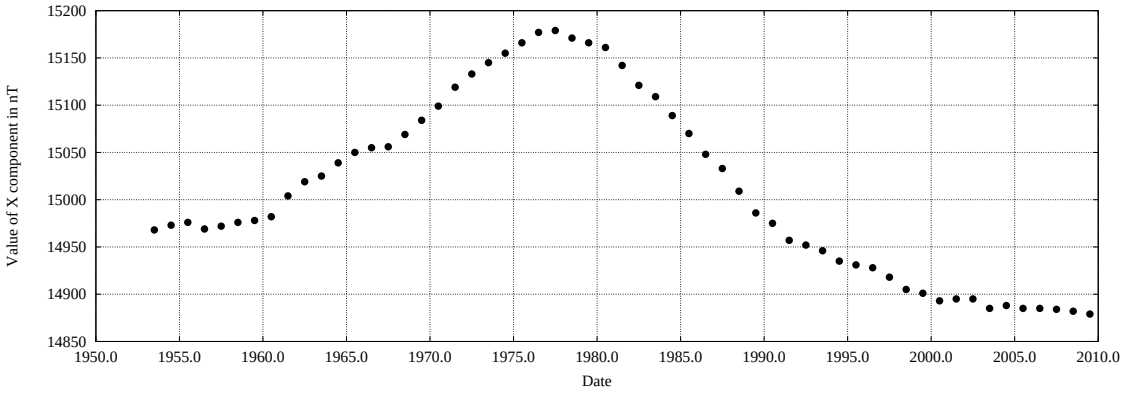
13.4 Table of Annual Ak-indices

m/M denotes sunspot minimum/maximum

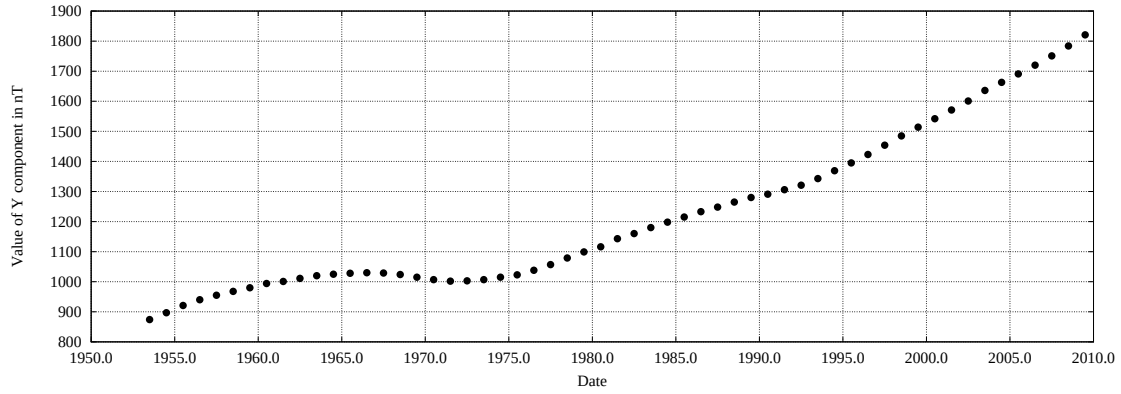
Year	Ak
1953	11
1954m	8
1955	9
1956	14
1957M	16
1958	18
1959	21
1960	22
1961	12
1962	10
1963	10
1964m	8
1965	6
1966	8
1967	10
1968M	11
1969	10
1970	10
1971	9
1972	10
1973	13
1974	15
1975	11
1976m	10
1977	9
1978	13
1979M	12
1980	9
1981	13

Year	Ak
1982	19
1983	15
1984	14
1985	10
1986m	10
1987	8
1988	11
1989M	16
1990	13
1991	21
1992	15
1993	13
1994	16
1995	11
1996m	9
1997	8
1998	12
1999	12
2000M	15
2001	14
2002	13
2003	22
2004	14
2005	14
2006	8
2007	7
2008m	7
2009	4

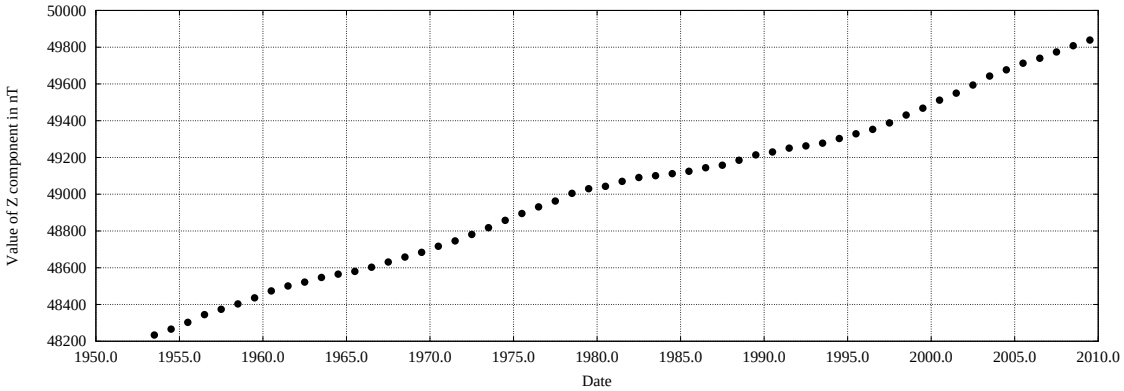
14 Annual Means



(a) Annual means for X component

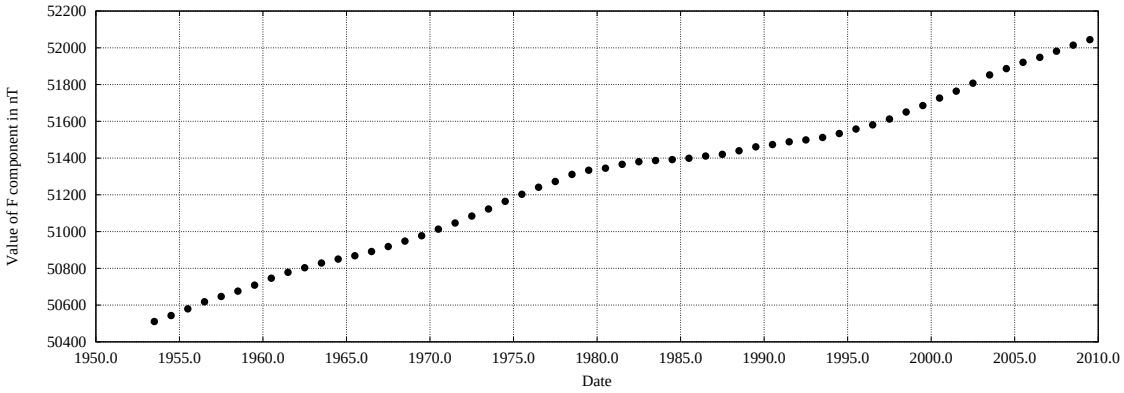


(b) Annual means for Y component

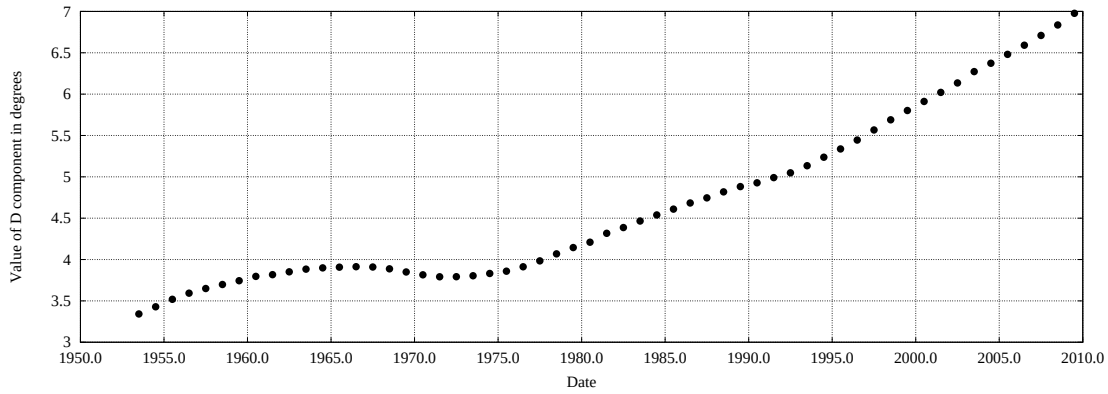


(c) Annual means for Z component

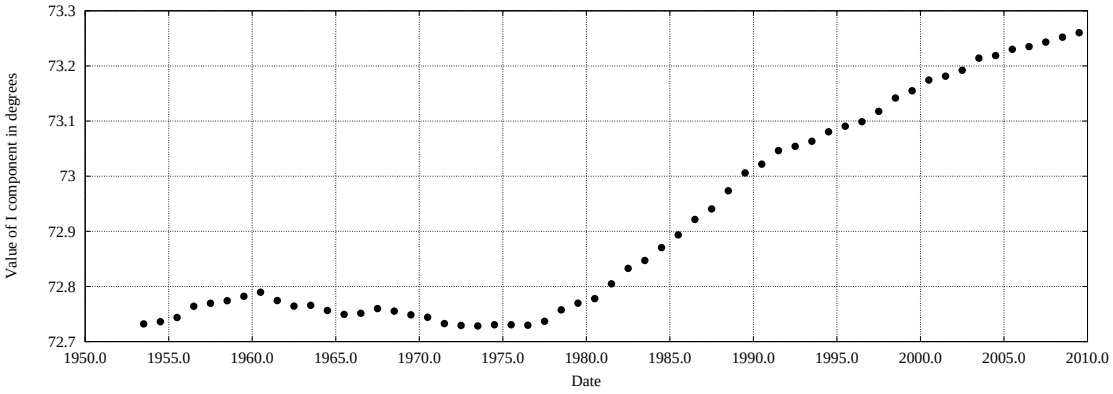
Figure 9: Figures of annual means of X, Y, and Z



(a) Annual means for F component



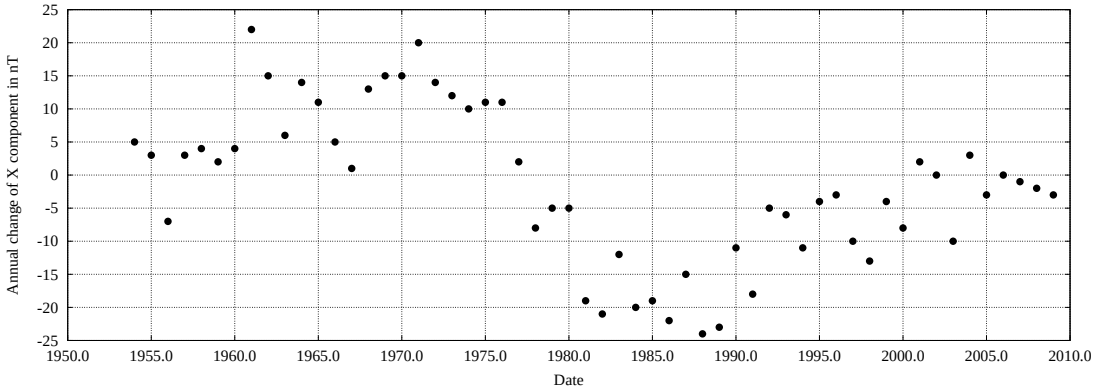
(b) Annual means for D component



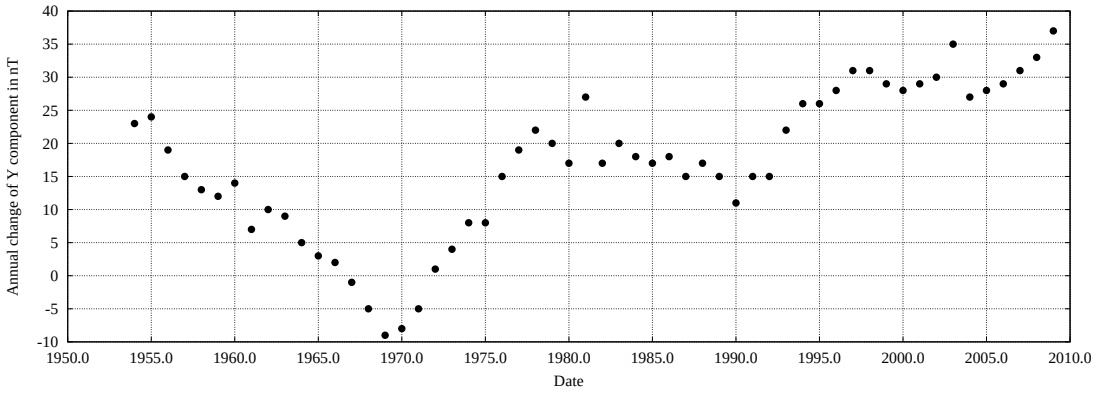
(c) Annual means for I component

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

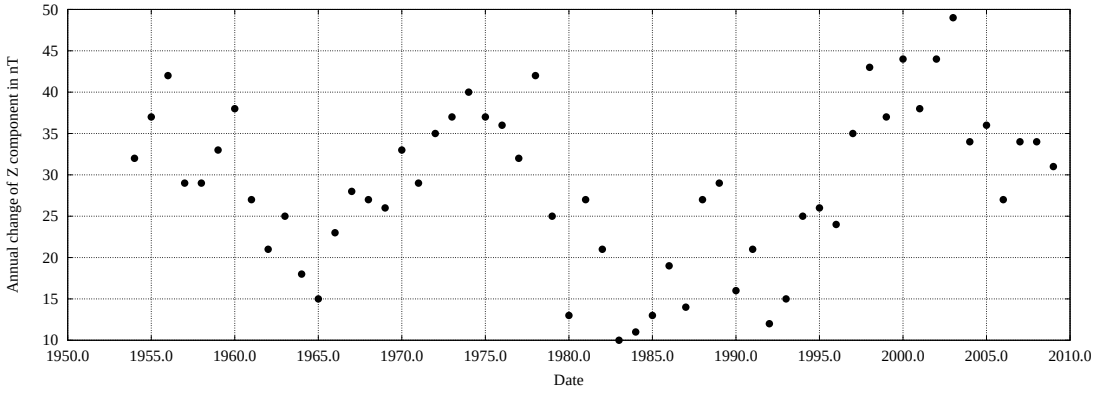
15 Secular Variation



(a) Annual change of X component

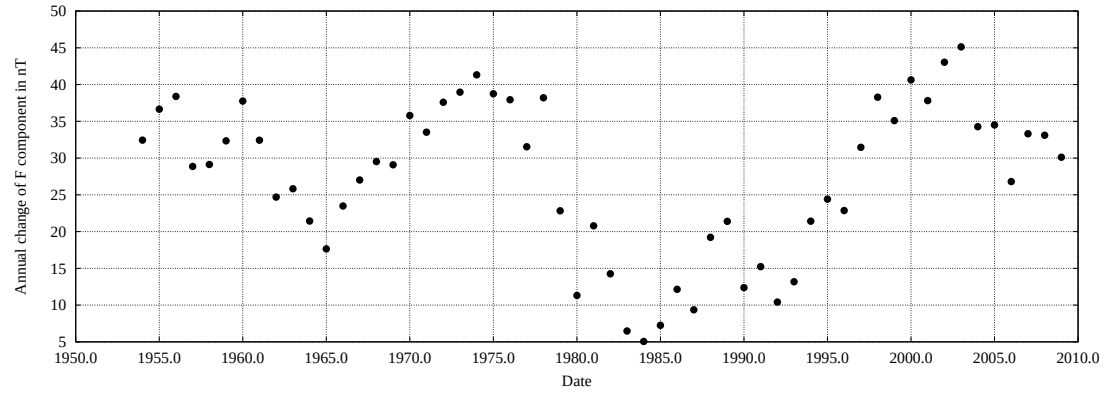


(b) Annual change of Y component

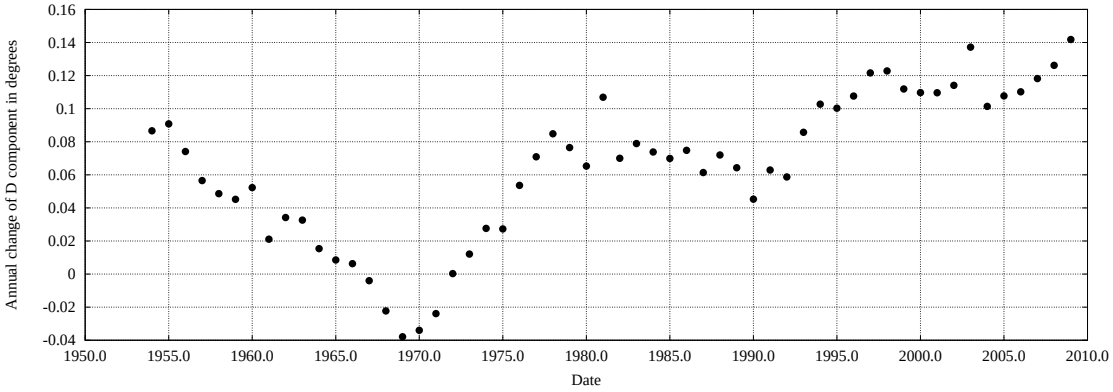


(c) Annual change of Z component

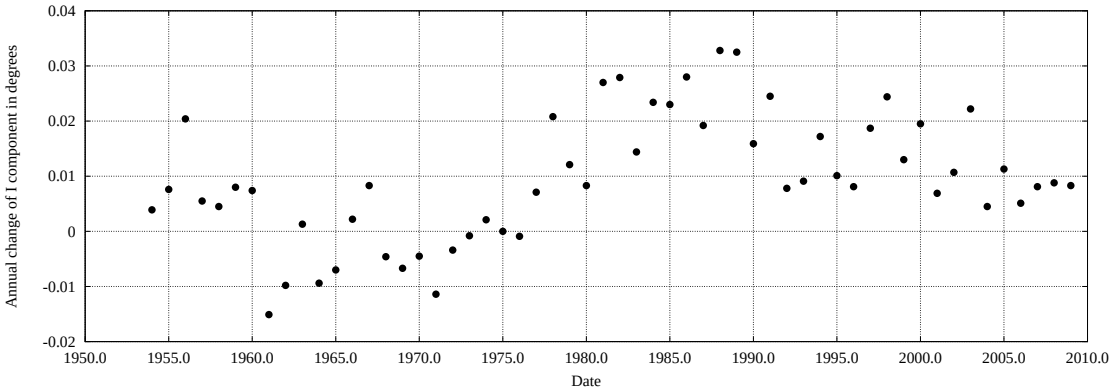
Figure 11: Annual change of components X, Y, and Z



(a) Annual change of F component



(b) Annual change of D component



(c) Annual change of I component

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

16 Tables of Annual Means

16.1 All Days

Year	X	Y	Z	D	H	F	I
1953	14968	874	48234	3° 20.5′	14993	50511	72° 43.9′
1954	14973	897	48266	3° 25.7′	15000	50543	72° 44.2′
1955	14976	921	48303	3° 31.1′	15004	50580	72° 44.6′
1956	14969	940	48345	3° 35.6′	14998	50618	72° 45.8′
1957	14972	955	48374	3° 39.0′	15002	50647	72° 46.2′
1958	14976	968	48403	3° 41.9′	15007	50676	72° 46.4′
1959	14978	980	48436	3° 44.6′	15010	50708	72° 46.9′
1960	14982	994	48474	3° 47.7′	15015	50746	72° 47.4′
1961	15004	1001	48501	3° 49.0′	15037	50779	72° 46.5′
1962	15019	1011	48522	3° 51.1′	15053	50803	72° 45.9′
1963	15025	1020	48547	3° 53.0′	15060	50829	72° 45.9′
1964	15039	1025	48565	3° 53.9′	15074	50851	72° 45.4′
1965	15050	1028	48580	3° 54.5′	15085	50868	72° 45.0′
1966	15055	1030	48603	3° 54.8′	15090	50892	72° 45.1′
1967	15056	1029	48631	3° 54.6′	15091	50919	72° 45.6′
1968	15069	1024	48658	3° 53.3′	15104	50948	72° 45.3′
1969	15084	1015	48684	3° 51.0′	15118	50977	72° 44.9′
1970	15099	1007	48717	3° 48.9′	15133	51013	72° 44.6′
1971	15119	1002	48746	3° 47.5′	15152	51047	72° 44.0′
1972	15133	1003	48781	3° 47.5′	15166	51084	72° 43.8′
1973	15145	1007	48818	3° 48.2′	15178	51123	72° 43.7′
1974	15155	1015	48858	3° 49.9′	15189	51165	72° 43.8′
1975	15166	1023	48895	3° 51.5′	15200	51203	72° 43.8′
1976	15177	1038	48931	3° 54.8′	15212	51241	72° 43.8′
1977	15179	1057	48963	3° 59.0′	15216	51273	72° 44.2′
1978	15171	1079	49005	4° 04.1′	15209	51311	72° 45.5′
1979	15166	1099	49030	4° 08.7′	15206	51334	72° 46.2′
1980	15161	1116	49043	4° 12.6′	15202	51345	72° 46.7′
1981	15142	1143	49070	4° 19.0′	15185	51366	72° 48.3′
1982	15121	1160	49091	4° 23.2′	15165	51380	72° 50.0′
1983	15109	1180	49101	4° 27.9′	15155	51387	72° 50.8′
1984	15089	1198	49112	4° 32.4′	15136	51392	72° 52.2′
1985	15070	1215	49125	4° 36.6′	15119	51399	72° 53.6′
1986	15048	1233	49144	4° 41.1′	15098	51411	72° 55.3′
1987	15033	1248	49158	4° 44.7′	15085	51420	72° 56.4′
1988	15009	1265	49185	4° 49.1′	15062	51440	72° 58.4′
1989	14986	1280	49214	4° 52.9′	15041	51461	73° 00.4′
1990	14975	1291	49230	4° 55.6′	15031	51473	73° 01.3′
1991	14957	1306	49251	4° 59.4′	15014	51489	73° 02.8′
1992	14952	1321	49263	5° 02.9′	15010	51499	73° 03.3′
1993	14946	1343	49278	5° 08.1′	15006	51512	73° 03.8′
1994	14935	1369	49303	5° 14.2′	14998	51534	73° 04.8′
1995	14931	1395	49329	5° 20.3′	14996	51558	73° 05.4′
1996	14928	1423	49353	5° 26.7′	14996	51581	73° 05.9′
1997	14918	1454	49388	5° 34.0′	14989	51612	73° 07.1′
1998	14905	1485	49431	5° 41.4′	14979	51651	73° 08.5′
1999	14901	1514	49468	5° 48.1′	14978	51686	73° 09.3′
2000	14893	1542	49512	5° 54.7′	14973	51726	73° 10.5′
2001	14895	1571	49550	6° 01.2′	14978	51764	73° 10.9′
2002	14895	1601	49594	6° 08.1′	14981	51807	73° 11.5′
2003	14885	1636	49643	6° 16.3′	14975	51852	73° 12.9′
2004	14888	1663	49677	6° 22.4′	14981	51887	73° 13.1′
2005	14885	1691	49713	6° 28.9′	14981	51921	73° 13.8′
2006	14885	1720	49740	6° 35.5′	14984	51948	73° 14.1′
2007	14884	1751	49774	6° 42.6′	14987	51981	73° 14.6′
2008	14882	1784	49808	6° 50.1′	14989	52014	73° 15.1′
2009	14879	1821	49839	6° 58.7′	14990	52044	73° 15.6′

16.2 Quiet Days

Year	X	Y	Z	D	H	F	I
1953	14975	872	48235	3° 20.0′	15000	50514	72° 43.5′
1954	14977	895	48266	3° 25.2′	15004	50544	72° 43.9′
1955	14980	919	48302	3° 30.6′	15008	50580	72° 44.4′
1956	14978	936	48343	3° 34.6′	15007	50619	72° 45.2′
1957	14978	951	48372	3° 38.0′	15008	50647	72° 45.8′
1958	14984	965	48400	3° 41.1′	15015	50676	72° 45.9′
1959	14986	976	48433	3° 43.6′	15018	50708	72° 46.4′
1960	14993	989	48474	3° 46.4′	15026	50749	72° 46.7′
1961	15010	998	48501	3° 48.2′	15043	50780	72° 46.1′
1962	15022	1009	48523	3° 50.6′	15056	50805	72° 45.7′
1963	15032	1018	48547	3° 52.5′	15066	50831	72° 45.5′
1964	15042	1024	48566	3° 53.7′	15077	50852	72° 45.2′
1965	15051	1027	48581	3° 54.2′	15086	50869	72° 44.9′
1966	15059	1028	48602	3° 54.3′	15094	50892	72° 44.8′
1967	15062	1028	48630	3° 54.3′	15097	50920	72° 45.2′
1968	15073	1022	48657	3° 52.7′	15108	50948	72° 45.1′
1969	15089	1013	48684	3° 50.4′	15123	50979	72° 44.6′
1970	15104	1005	48715	3° 48.4′	15137	51013	72° 44.3′
1971	15124	1001	48746	3° 47.2′	15157	51048	72° 43.6′
1972	15139	1001	48780	3° 47.0′	15172	51085	72° 43.4′
1973	15151	1004	48819	3° 47.5′	15184	51126	72° 43.4′
1974	15162	1012	48859	3° 49.1′	15196	51167	72° 43.4′
1975	15171	1020	48896	3° 50.8′	15205	51206	72° 43.5′
1976	15182	1035	48930	3° 54.0′	15217	51242	72° 43.5′
1977	15184	1054	48963	3° 58.2′	15221	51274	72° 43.9′
1978	15178	1075	49003	4° 03.1′	15216	51311	72° 45.0′
1979	15171	1096	49028	4° 07.9′	15211	51333	72° 45.8′
1980	15163	1115	49042	4° 12.3′	15204	51345	72° 46.5′
1981	15148	1140	49067	4° 18.2′	15191	51365	72° 47.9′
1982	15128	1157	49090	4° 22.4′	15172	51381	72° 49.5′
1983	15115	1176	49101	4° 26.9′	15161	51388	72° 50.5′
1984	15095	1195	49113	4° 31.6′	15142	51394	72° 51.9′
1985	15076	1212	49125	4° 35.8′	15125	51401	72° 53.2′
1986	15055	1230	49144	4° 40.2′	15105	51413	72° 54.9′
1987	15037	1246	49158	4° 44.2′	15089	51422	72° 56.2′
1988	15014	1262	49182	4° 48.3′	15067	51438	72° 58.1′
1989	14995	1276	49213	4° 51.8′	15049	51463	72° 59.8′
1990	14982	1288	49227	4° 54.8′	15037	51472	73° 00.8′
1991	14965	1302	49248	4° 58.3′	15022	51488	73° 02.2′
1992	14959	1318	49261	5° 02.1′	15017	51499	73° 02.8′
1993	14952	1341	49277	5° 07.5′	15012	51513	73° 03.4′
1994	14944	1365	49304	5° 13.1′	15006	51537	73° 04.3′
1995	14937	1392	49328	5° 19.4′	15002	51559	73° 05.1′
1996	14934	1421	49353	5° 26.1′	15001	51583	73° 05.6′
1997	14923	1452	49388	5° 33.4′	14993	51614	73° 06.7′
1998	14910	1484	49431	5° 41.0′	14984	51652	73° 08.2′
1999	14905	1512	49467	5° 47.5′	14981	51686	73° 09.0′
2000	14900	1540	49510	5° 54.1′	14979	51726	73° 10.0′
2001	14901	1569	49548	6° 00.6′	14983	51764	73° 10.5′
2002	14901	1599	49593	6° 07.5′	14987	51808	73° 11.1′
2003	14896	1632	49644	6° 15.1′	14985	51856	73° 12.2′
2004	14894	1660	49677	6° 21.6′	14986	51888	73° 12.8′
2005	14891	1689	49714	6° 28.3′	14986	51924	73° 13.5′
2006	14889	1718	49740	6° 34.9′	14988	51949	73° 13.9′
2007	14887	1749	49774	6° 42.0′	14989	51982	73° 14.4′
2008	14885	1783	49808	6° 49.8′	14991	52015	73° 14.9′
2009	14880	1821	49839	6° 58.6′	14991	52045	73° 15.6′

16.3 Disturbed Days

Year	X	Y	Z	D	H	F	I
1953	14959	879	48230	3° 21.8′	14985	50504	72° 44.4′
1954	14968	899	48264	3° 26.2′	14995	50540	72° 44.4′
1955	14967	924	48301	3° 32.0′	14995	50575	72° 45.2′
1956	14952	945	48344	3° 37.0′	14982	50612	72° 46.9′
1957	14959	961	48376	3° 40.5′	14990	50645	72° 47.0′
1958	14958	974	48407	3° 43.5′	14990	50675	72° 47.7′
1959	14963	986	48439	3° 46.2′	14995	50707	72° 47.9′
1960	14960	1004	48468	3° 50.4′	14994	50734	72° 48.6′
1961	14992	1005	48498	3° 50.1′	15026	50772	72° 47.2′
1962	15013	1013	48522	3° 51.6′	15047	50802	72° 46.3′
1963	15014	1025	48543	3° 54.3′	15049	50822	72° 46.6′
1964	15035	1027	48564	3° 54.5′	15070	50848	72° 45.6′
1965	15044	1030	48580	3° 55.0′	15079	50866	72° 45.3′
1966	15046	1033	48602	3° 55.7′	15081	50888	72° 45.6′
1967	15042	1034	48630	3° 55.9′	15077	50914	72° 46.5′
1968	15061	1028	48659	3° 54.3′	15096	50947	72° 45.8′
1969	15074	1019	48684	3° 52.0′	15108	50974	72° 45.5′
1970	15089	1011	48721	3° 50.0′	15123	51014	72° 45.4′
1971	15111	1006	48746	3° 48.5′	15144	51044	72° 44.5′
1972	15122	1007	48780	3° 48.6′	15155	51080	72° 44.4′
1973	15133	1013	48816	3° 49.8′	15167	51118	72° 44.4′
1974	15147	1019	48857	3° 50.9′	15181	51161	72° 44.3′
1975	15157	1027	48892	3° 52.6′	15192	51198	72° 44.3′
1976	15166	1042	48931	3° 55.8′	15202	51238	72° 44.5′
1977	15169	1061	48962	4° 00.1′	15206	51269	72° 44.8′
1978	15158	1086	49006	4° 05.9′	15197	51308	72° 46.3′
1979	15158	1103	49031	4° 09.7′	15198	51332	72° 46.7′
1980	15153	1120	49046	4° 13.6′	15194	51346	72° 47.2′
1981	15133	1146	49073	4° 19.8′	15176	51366	72° 48.9′
1982	15106	1166	49089	4° 24.8′	15151	51374	72° 50.9′
1983	15099	1184	49099	4° 29.0′	15145	51382	72° 51.4′
1984	15078	1203	49108	4° 33.7′	15126	51385	72° 52.8′
1985	15061	1219	49124	4° 37.6′	15110	51395	72° 54.1′
1986	15037	1237	49141	4° 42.2′	15088	51405	72° 55.9′
1987	15027	1250	49161	4° 45.3′	15079	51422	72° 56.9′
1988	15001	1268	49186	4° 49.9′	15054	51438	72° 58.9′
1989	14968	1287	49212	4° 54.9′	15023	51454	73° 01.4′
1990	14964	1296	49232	4° 57.0′	15020	51472	73° 02.0′
1991	14942	1313	49257	5° 01.3′	15000	51490	73° 03.8′
1992	14943	1324	49264	5° 03.8′	15002	51497	73° 03.8′
1993	14937	1348	49277	5° 09.4′	14998	51509	73° 04.3′
1994	14924	1373	49300	5° 15.4′	14987	51528	73° 05.5′
1995	14924	1398	49328	5° 21.1′	14989	51555	73° 05.9′
1996	14923	1425	49350	5° 27.3′	14991	51577	73° 06.2′
1997	14909	1457	49388	5° 34.9′	14980	51610	73° 07.6′
1998	14893	1489	49431	5° 42.6′	14967	51647	73° 09.3′
1999	14891	1517	49468	5° 49.0′	14968	51683	73° 09.9′
2000	14878	1547	49514	5° 56.2′	14958	51724	73° 11.4′
2001	14880	1576	49554	6° 02.8′	14963	51764	73° 11.9′
2002	14886	1604	49594	6° 09.0′	14972	51805	73° 12.1′
2003	14866	1643	49641	6° 18.4′	14957	51845	73° 14.0′
2004	14875	1669	49675	6° 24.1′	14968	51881	73° 13.9′
2005	14879	1696	49711	6° 30.2′	14975	51918	73° 14.1′
2006	14878	1722	49738	6° 36.1′	14977	51944	73° 14.5′
2007	14880	1754	49773	6° 43.4′	14983	51979	73° 14.8′
2008	14879	1787	49807	6° 50.9′	14986	52013	73° 15.3′
2009	14877	1822	49838	6° 58.9′	14988	52043	73° 15.7′

17 Earth's Magnetic Field Maps of Finland 2010.0

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

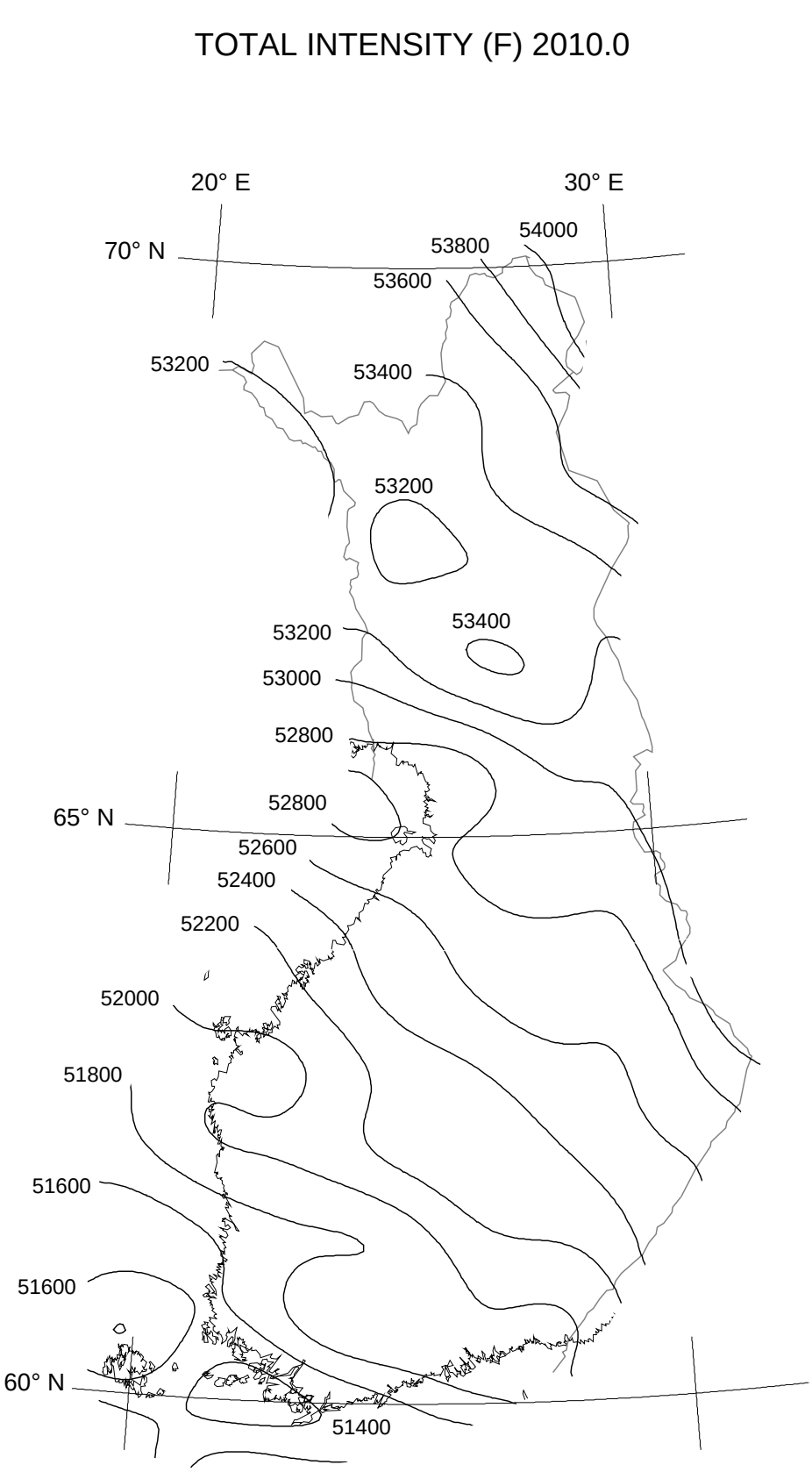


Figure 13: Total intensity F 2010.0 in nT

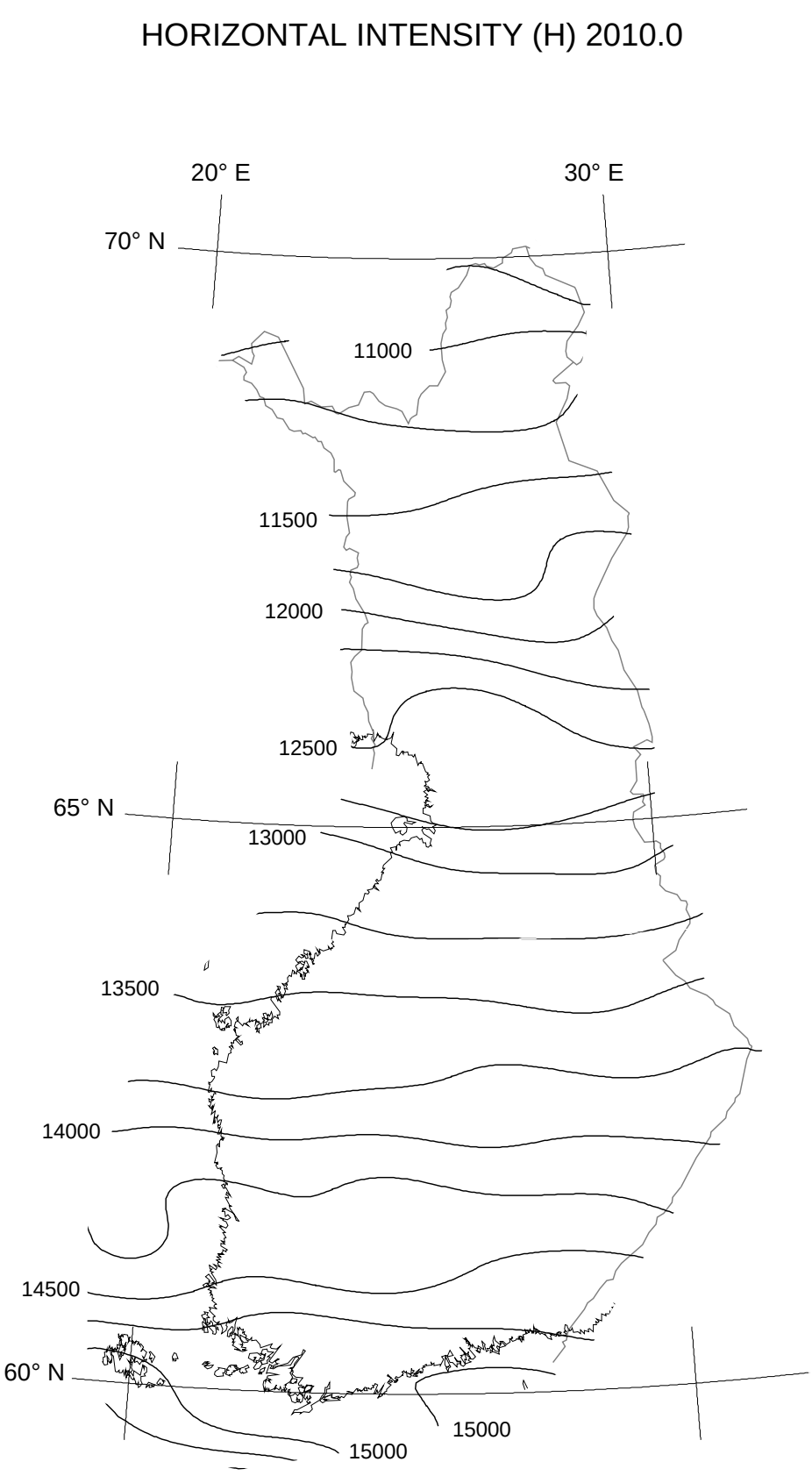


Figure 14: Horizontal intensity H 2010.0 in nT

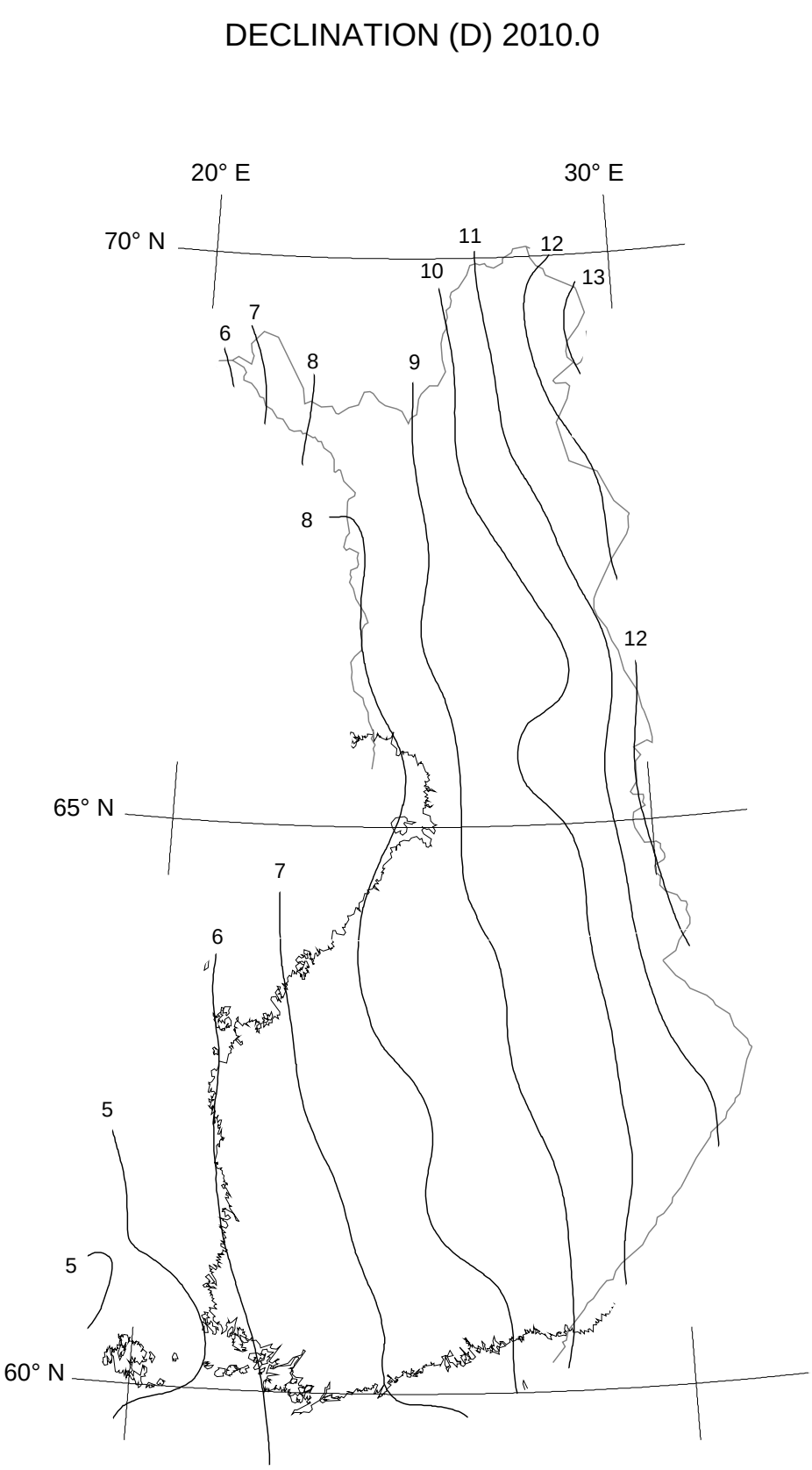


Figure 15: Declination D 2010.0 in degreees

INCLINATION (I) 2010.0

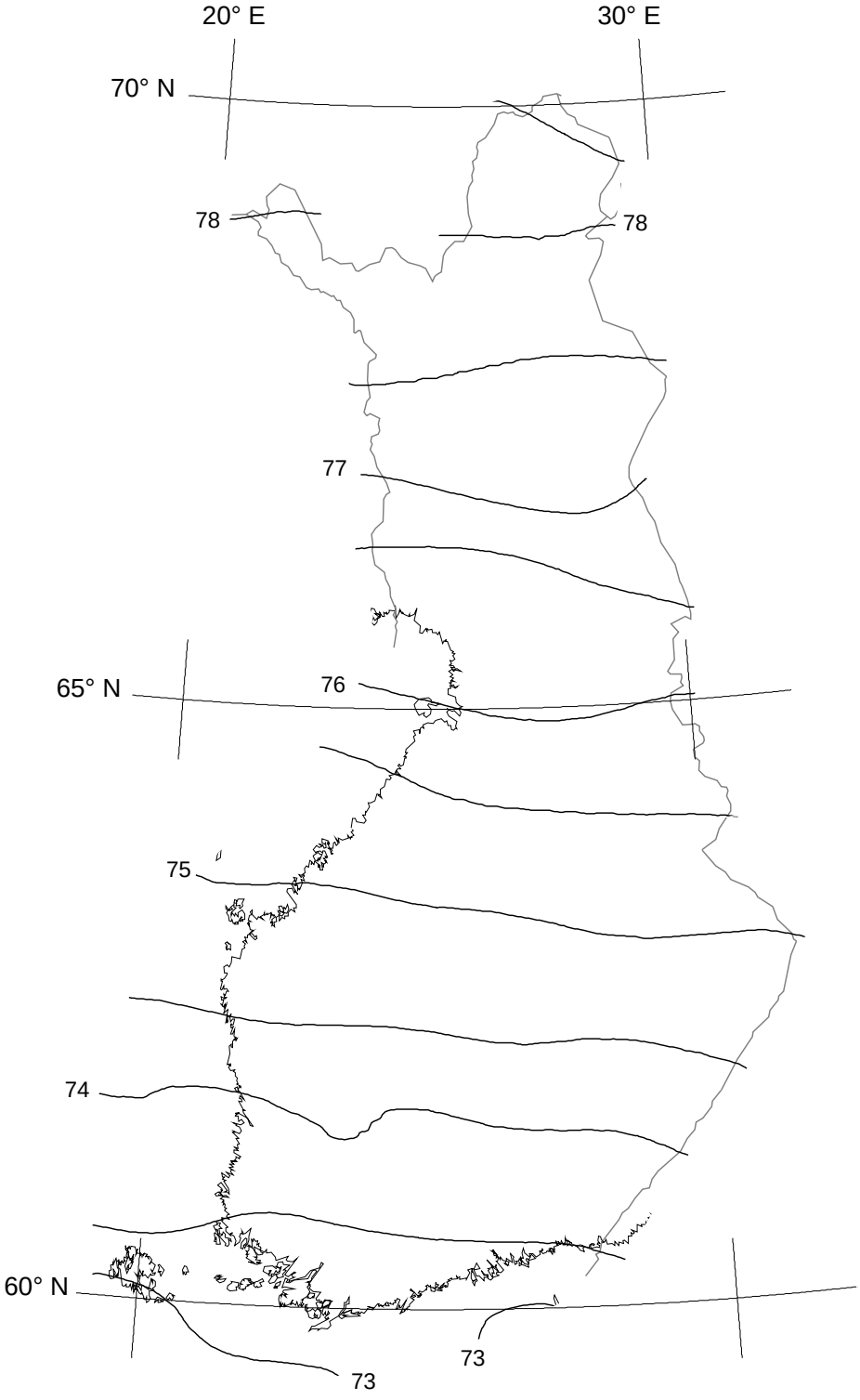


Figure 16: Inclination I 2010.0 in degrees