

Solar and Geomagnetic Data for January 2006

Data from various Internet sources. Compilation by G0AEV.

Sunspot numbers (SEC)	Mean 26.7	Max 73 (23 rd)	Min 0 (13-14 th and 29 th -31 st)
Solar Flux (28 MHz)	Mean 83.5	Max 94 (21 st)	Min 77 (11-14 th)

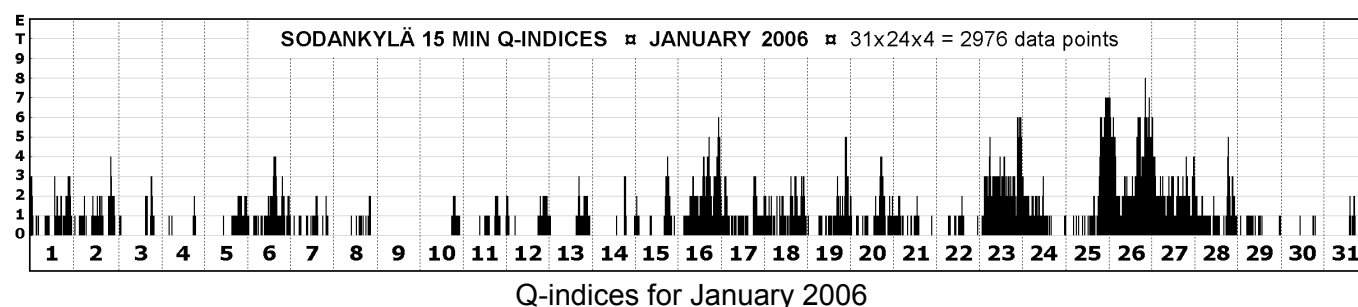
Solar data for January 2006 are presented in the table at the end of this section. Numbers in the 28 and 50 MHz columns of this table are the total daily "areas" worked/heard from the UK for each of several propagation modes and are a summary of the data presented in the first sections of this Report. On 28 MHz "areas" refer to the number of beacons reported via Es and F-layer; on 50 MHz the number of countries via Es, F-layer modes (including TEP), Aurora and Auroral E. F2 critical frequencies are for Chilton in Oxfordshire (data from RAL via SEC). SIDC spots are from SIDC, and other solar data from the joint USAF/NOAA daily summaries or directly from SEC.

Energetic Events.

Not only were there no M and X class X-ray solar events (which is normal for the solar minimum years), but SEC's summaries record only one C-class event (listed below). This is the mark of a quiet sun!

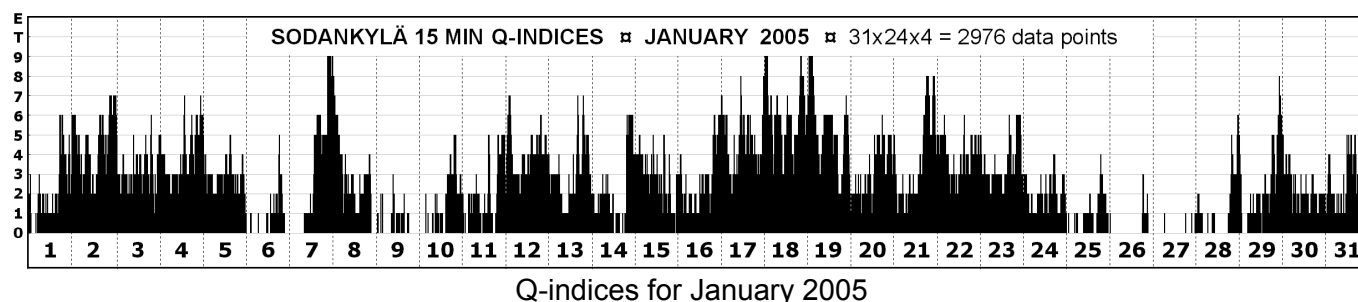
5th 0917-0926 C4.4 Sf

Q-indices from Sodankylä, Finland (Thanks to OH2LX)



The Q-indices from Finland show that January 2006 was a generally quiet month with 4th, 9th, 10th and 30th worthy of note as particularly quiet days. There were disturbances on 16th and 23rd with minor storming on the 26th. The 26th was the only day this month when the Kp index or the K-indices from the UK observatories reached 5. Interestingly, the only 6m aurora detected from the UK was on the 23rd not the 26th.

As a reminder of how quiet the geomagnetic field is now compared with this time last year, below is the Q-index graph from OH2LX fro January 2005.



January 2006	28 Areas			-- 50 Areas --			2800			- Spots -			Max			X-ray			Min foF2			-- Particle Fluences --		
	Es	F	Es	DX	A	AE	Flux	SEC	SIDC	Kp	Ap	Aa	b.gnd	MHz	Hour	MHz	Hour	MHz	Hour	2MEV Elec	1MEV Prot	10MEV Prot		
01-Jan	5	5	8	0	0	0	87	41	25	2	4	14	A5.8	6.8	13	2.2	05	3.0E+08	2.0E+06	1.3E+04				
02-Jan	1	3	0	0	0	0	85	37	24	2	5	17	A4.9	7.2	09	2.1	07	5.6E+07	1.1E+06	1.4E+04				
03-Jan	1	2	4	0	0	0	85	39	19	2	3	8	A3.6	6.6	14	2.4	07	6.1E+07	9.7E+05	1.4E+04				
04-Jan	1	1	0	0	0	0	84	25	17	1	2	5	A3.5	6.5	14	2.0	21	5.9E+07	1.1E+06	1.5E+04				
05-Jan	1	0	0	0	0	0	83	23	15	2	3	7	A3.3	6.4	11	1.9	07	5.8E+07	1.3E+06	1.5E+04				
06-Jan	0	3	0	0	0	0	82	24	15	3	6	14	A2.8	7.2	10	2.0	07	1.9E+07	8.4E+05	1.6E+04				
07-Jan	4	0	5	0	0	0	79	11	8	2	5	12	A2.1	6.4	12	2.3	07	9.9E+06	6.2E+05	1.6E+04				
08-Jan	0	1	0	0	0	0	78	11	7	2	4	8	A1.4	6.1	12	2.2	19	1.0E+07	5.1E+05	1.6E+04				
09-Jan	3	0	1	0	0	0	78	11	8	1	2	4	<A1	6.3	11	2.0	07	7.3E+06	6.1E+05	1.5E+04				
10-Jan	0	0	0	0	0	0	78	11	8	1	5	5	<A1	5.3	10	2.4	19	1.1E+07	7.0E+05	1.5E+04				
11-Jan	0	0	0	0	0	0	77	12	8	1	2	7	<A1	5.9	12	2.1	05	9.3E+06	7.9E+05	1.5E+04				
12-Jan	0	0	0	0	0	0	77	12	8	1	3	8	<A1	6.1	11	2.4	19	2.5E+06	5.4E+05	1.6E+04				
13-Jan	0	0	0	0	0	0	77	0	0	1	2	6	<A1	5.9	11	1.9	07	3.4E+06	5.9E+05	1.5E+04				
14-Jan	0	0	0	0	0	0	77	0	8	1	3	8	<A1	6.2	10	2.2	20	1.8E+06	5.8E+05	1.4E+04				
15-Jan	1	0	0	0	0	0	81	32	20	2	4	11	A1.7	6.1	09	1.9	04	2.8E+06	7.5E+05	1.6E+04				
16-Jan	0	1	0	0	0	0	84	42	24	4	14	32	A3.0	7.2	12	2.1	07	1.3E+06	6.5E+05	1.5E+04				
17-Jan	0	0	0	0	0	0	83	36	22	3	8	18	A3.0	6.0	11	2.3	06	2.2E+06	3.4E+05	1.4E+04				
18-Jan	0	0	0	0	0	0	86	50	28	2	5	24	A2.9	7.0	13	1.8	06	5.0E+06	7.6E+05	1.4E+04				
19-Jan	0	0	0	0	0	0	89	48	24	3	7	16	A5.5	6.2	14	2.3	20	1.1E+07	6.4E+05	1.5E+04				
20-Jan	0	0	0	0	0	0	91	33	16	3	6	16	A5.0	6.4	14	1.9	19	1.9E+07	8.3E+05	1.5E+04				
21-Jan	1	0	0	0	0	0	94	28	19	2	4	8	A9.8	6.0	13	2.4	20	6.8E+06	4.4E+05	1.5E+04				
22-Jan	0	0	0	0	0	0	93	60	31	3	6	14	A7.8	5.9	12	1.8	05	6.6E+06	5.3E+05	1.6E+04				
23-Jan	0	3	0	0	1	0	92	73	37	4	15	28	A6.2	7.8	14	1.9	05	9.8E+05	5.3E+05	1.6E+04				
24-Jan	0	0	0	0	0	0	93	62	30	4	7	11	B1.0	5.9	12	1.9	06	7.7E+06	2.1E+06	1.5E+04				
25-Jan	0	0	0	0	0	0	89	42	19	3	7	18	A8.2	6.7	14	2.9	00	6.4E+06	2.1E+06	1.4E+04				
26-Jan	0	2	0	0	0	0	87	24	14	6	29	53	A7.4	6.4	12	1.8	06	4.2E+06	2.3E+06	1.4E+04				
27-Jan	0	0	0	0	0	0	84	29	9	3	8	21	A6.5	5.5	15	1.7	05	1.6E+08	3.0E+06	1.4E+04				
28-Jan	1	0	0	0	0	0	80	11	7	2	6	13	A6.6	6.1	12	1.8	02	3.2E+08	1.8E+06	1.4E+04				
29-Jan	1	1	6	0	0	0	80	0	7	1	3	5	A4.6	6.4	14	2.1	20	4.1E+08	2.3E+06	1.4E+04				
30-Jan	0	0	0	0	0	0	79	0	0	1	1	5	A1.2	6.8	12	1.8	05	3.8E+08	2.9E+06	1.4E+04				
31-Jan	1	0	0	0	0	0	78	0	0	1	2	4	<A1	6.2	15	1.9	05	2.4E+08	4.3E+06	1.4E+04				
Sum	21	22	24	0	1	0	83.5	26.7	15.4	2.2	5.7	13.5	A3.9	6.4	12	2.1	07	7.1E+07	1.2E+06	1.5E+04				
Average	0.7	0.7	0.8	0.0	0.0	0.0	83.5	26.7	15.4	2.2	5.7	13.5	A3.9	6.4	12	2.1	07	7.1E+07	1.2E+06	1.5E+04				
Maximum	5	5	8	0	1	0	94	73	37	6	29	53	B1.0	7.8	15	2.9	07	4.1E+08	4.3E+06	1.6E+04				
Minimum	0	0	0	0	0	0	77	0	0	1	1	4	<A1	5.3	09	1.7	21	9.8E+05	3.4E+05	1.3E+04				