

**Space Weather Highlights
24 -30 November 1997**

Solar activity ranged from low to high. Low to moderate activity prevailed during 24 - 26 November. An optically uncorrelated M1 X-ray flare occurred at 24/1950UT. This flare was probably associated with the return old Region 8103 which rotated into view on 26 November as a moderate-sized E-type sunspot group, subsequently assigned as Region 8113 (N20, L = 309, class/area Fsc/0940 on 30 November). The region also produced an M2/SF flare at 26/1837UT while exhibiting moderate growth in size and magnetic complexity (mixed polarities were present within the dominant leader spot). Activity rose to high levels during 27 - 29 November as Region 8113 produced three major flares. The first was an X2/2B at 27/1317UT with an associated 350 SFU Tenflare and a major Type II radio sweep. The second was an M6/2B at 28/0503UT accompanied by a 170 SFU Tenflare. The third major flare was an M6/2N at 29/2244UT. All in all, radio emissions were not particularly impressive during these major flares. Activity dropped to low levels on 30 November with Region 8113 producing a few C-class subflares while gradually declining in size and magnetic complexity.

Solar wind data were received from the WIND spacecraft a few hours per day. Velocities decreased from 600 - 350 km/sec during 24 - 25 November, then varied between 300 - 350 km/sec through 29 November. Velocities increased to around 450 km/sec on the final day of the period. Densities were in the 03 - 10 p/cc range during most of the time, but became enhanced on 30 November, peaking near 20 p/cc. Bz varied from minus 05 to plus 05 nT (GSM). Solar sector orientation was mostly toward (phi angle near 315 degrees) through 27 November, but was not discernible during the remainder of the period.

There were no significant proton enhancements observed at geosynchronous altitude.

The greater than 2 MeV electron flux at geosynchronous altitude was high during most of the period.

The geomagnetic field was quiet to unsettled during 24 November, declining to quiet levels for the remainder of the period.

**Space Weather Forecast
03 - 29 December 1997**

Solar activity is expected to range from low to moderate. Region 8113 is capable of producing M-class flares until it crosses the West limb on 09 December. This region is also capable of isolated major flare activity as well. Mostly low activity is expected during 10 - 22 December. Chances for moderate activity increase after 22 December with the expected return of (old) Region 8113.

No significant proton enhancements are expected at geosynchronous altitude.

The greater than 2 MeV electron flux at geosynchronous altitude is expected to be at normal to moderate levels.

The geomagnetic field is expected to be quiet to unsettled during most of the period.



Daily Solar Data

Date	Radio Flux 10.7 cm	Sun spot No. (10^6 hemi.)	Sunspot Area	X-ray Background	X-ray Flux			Flares				
					C	M	X	S	Optical			
								S	1	2	3	4
24 November	103	61	320	B2.0	2	1	0	1	1	0	0	0
25 November	102	58	260	B3.6	9	0	0	1	0	0	0	0
26 November	108	43	360	B4.3	5	1	0	7	0	0	0	0
27 November	111	44	620	B3.9	6	0	1	4	0	1	0	0
28 November	116	40	680	B6.6	6	2	0	9	1	1	0	0
29 November	112	48	720	B5.0	3	1	0	5	0	1	0	0
30 November	112	56	940	B4.6	3	0	0	6	1	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ² -day-sr)			Electron Fluence (electrons/cm ² -day-sr)		
	>1MeV	>10MeV	>100MeV	>.6MeV	>2MeV	>4MeV
24 November	1.6E+6	1.5E+4	3.2E+3		2.1E+8	
25 November	9.6E+5	1.5E+4	3.4E+3		2.3E+8	
26 November	1.4E+6	1.5E+4	3.3E+3		2.4E+8	
27 November	1.6E+6	1.8E+4	4.8E+3		2.1E+8	
28 November	1.9E+6	1.8E+4	5.0E+3		1.8E+8	
29 November	3.8E+6	1.9E+4	5.5E+3		1.9E+8	
30 November	3.1E+6	2.0E+4	5.5E+3		9.3E+7	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
24 November	6	2-3-2-1-2-1-1-1	6	1-0-1-4-2-2-2-0	7	2-3-1-2-2-2-2-2
25 November	3	1-1-1-1-1-1-1-1	0	0-0-0-0-0-0-0-0	3	1-0-0-0-1-1-1-1
26 November	4	1-1-1-1-2-1-1-1	0	0-0-0-0-1-0-0-0	3	1-0-0-0-1-1-1-2
27 November	2	1-1-0-0-1-0-1-0	0	0-0-0-0-0-0-0-0	2	0-1-0-0-1-1-2-0
28 November	2	1-1-1-0-0-1-1-1	0	0-0-0-0-0-0-0-0	2	1-1-0-0-0-0-1-1
29 November	1	0-0-0-0-0-1-1-1	0	0-0-0-0-0-0-0-0	2	0-0-0-0-0-1-1-1
30 November	6	1-2-2-2-2-1-2-1	0	0-0-0-0-1-0-0-0	4	1-1-1-1-2-1-1-1

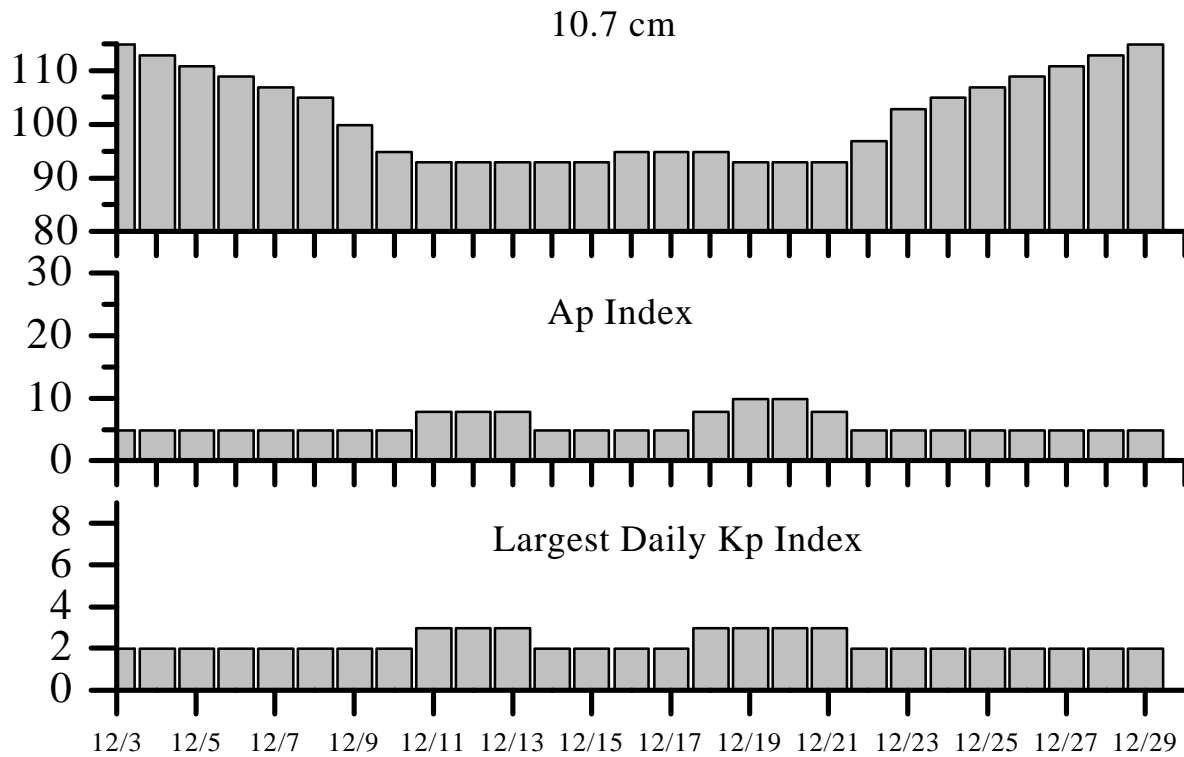


Alerts and Warnings Issued

Date and Time of Issue (UT)	Type of Alert or Warning	Date and Time of Event (UT)
24 Nov 0010	A \geq 30 Observed	24 Nov 0008
24 Nov 0529	>2MeV Electron Event \geq 1000 pfu	24 Nov 0515
25 Nov 0022	3- 245 MHz Radio Bursts	24 Nov
25 Nov 1955	2695MHz Radio Burst 0140 s.f.u.	25 Nov 1945
26 Nov 0006	>2MeV Electron Event in Progress \geq 1000pfu	25 Nov
27 Nov 0009	>2MeV Electron Event in Progress \geq 1000pfu	26 Nov
27 Nov 1324	X-ray event X2/2B	27 Nov 1317
27 Nov 1427	2695MHz Radio Burst 350 s.f.u.	27 Nov 1323
27 Nov 1436	Type II Radio Emission	27 Nov 1321
28 Nov 0031	>2MeV Electron Event in Progress \geq 1000pfu	27 Nov
28 Nov 0525	2695MHz Radio Burst 170 s.f.u.	28 Nov 0500
28 Nov 0548	X-Ray event M6.8	28 Nov 0503
29 Nov 0012	>2MeV Electron Event in Progress \geq 1000pfu	28 Nov
29 Nov 0016	2-245 MHz Radio Bursts	28 Nov
29 Nov 2307	2695MHz Radio Burst 140 s.f.u.	29 Nov 2232
29 Nov 2340	X-ray event M6.4	29 Nov 2244
30 Nov 0311	>2MeV Electron Event in Progress \geq 1000pfu	29 Nov



Twenty-seven Day Outlook



Date	Radio Flux 10.7 cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7 cm	Planetary A Index	Largest Kp Index
03 Dec	115	5	2	17	95	5	2
04	113	5	2	18	95	8	3
05	111	5	2	19	93	10	3
06	109	5	2	20	93	10	3
07	107	5	2	21	93	8	3
08	105	5	2	22	97	5	2
09	100	5	2	23	103	5	2
10	95	8	3	24	105	5	2
11	93	8	3	25	107	5	2
12	93	8	3	26	109	5	2
13	93	5	2	27	111	5	2
14	93	5	2	28	113	5	2
15	93	5	2	29	115	5	2
16	93	5	2				



Energetic Events

Date	Time (UT)			X-ray		Optical Information			Peak		Sweep Freq		
	Begin	Max	½	Class	Integ	Imp	Location		Rgn	Radio Flux		Intensity	
			Max		Flux		Brtns	Lat		CMD	#	245	2695
24 Nov	1930	1950	2010	M1.6	.027								
26 Nov	1831	1837	1840	M2.0	.005	SF	N16E75	8113	380	054			
27 Nov	1259	1317	1320	X2.6	.070	2B	N17E63	8113	48000	350	3		
28 Nov	0453	0503	0523	M6.8	.070	2B	N15E61	8113	180	170			
28 Nov	1954	2009	2017	M1.1	.011								
29 Nov	2228	2244	2253	M6.4	.050	2N	N15E38	8113		140			

Flare List

Date	Time			X-ray Class.	Imp / Brtns	Optical Location		Rgn #
	Begin	Max	End			Lat	CMD	
24 November	0002	0003	0008	B4.9	SF	N23W49	8108	
	0249	0254	0301	B4.9				
	0358	0401	0418	C3.4	1F	N23W51	8108	
	1242	1242	1257	B6.1	SF	N21W58	8108	
	1849	1859	1917	C1.4				
25 November	1930	1950	2010	M1.6				
	0230	0254	0305	C2.1				
	0327	0337	0347	C3.9				
	0527	0543	0557	C5.0				
	0814	0818	0823	C1.1				
	1050	1103	1120	C2.3				
	1249	1249	1255		SF	N20W73	8108	
	1438	1445	1456	C1.1				
26 November	1936	1952	1959	C9.3				
	2217	2224	2232	C1.3				
	2258	2306	2321	C1.1				
	0032	0035	0038	B8.8				
	0148	0150	0154		SF	N13E90	8113	
	0226	0227	0231		SF	N13E90	8113	
	0242	0311	0319	C1.8				
	0412	0417	0429	C3.6				
	0442	0443	0444	C4.7	SF	N13E85	8113	
	0749	0754	0759	C1.3				
26 November	1040	1045	1047	B8.3				
	B1754	1810	1819	C1.3	SF	N16E74	8113	
	1828	1835	1844	M2.0	SF	N16E75	8113	
	1917	1920	1922		SF	N17E76	8113	
	2210	2213	2224		SF	N18E79	8113	



Flare List – continued.

Date	Time			X-ray Class.	Optical		Rgn #
	Begin	Max	End		Imp / Brtns	Location Lat CMD	
27 November	0115	0115	0119	B8.4	SF	N19E75	8113
	0201	0203	0205	C1.3			
	0324	0330	0335	C1.1			
	0642	0645	0648		SF	N12E67	8113
	1025	1035	1044	C1.4			
	1148	1153	1200	C1.0			
	1302	1317	1338	X2.6	2B	N17E63	8113
	1501	1507	1519	C2.3			
	1613	1626	1639	C3.8	SF	N18E70	8113
	1956	1958	2004		SF	N15E59	8113
28 November	0019	0025	0045	C5.1	1F	N13E55	8113
	0456	0506	0633	M6.8	2B	N15E61	8113
	1136	1207	1315	C3.4	SF	S15E18	8112
	1156	1159	1209		SF	N23E60	8113
	1320	1320	1325		SF	S16E07	8112
	1444	1447	1450	B9.4			
	1513	1514	1520	C2.2	SF	N19E54	8113
	1541	1542	1549	C1.6	SF	N19E54	8113
	1740	1740	1744		SF	N19E53	8113
	1750	1752	1808		SF	N19E53	8113
	B1814	U1816	A1856	C1.9	SF	N19E54	8113
	1920	1933	1951	C2.4	SF	N19E52	8113
	1954	2009	2017	M1.1			
29 November	0009	0013	0017	B7.7			
	0506	0508	0520	C3.2	SF	N15E49	8113
	0923	0929	0953	C5.0	SF	N19E47	8113
	1732	1734	1748		SF	N19E38	8113
	1931	1934	1950	C1.2	SF	N15E33	8113
	2016	2017	2021		SF	N19E39	8113
	2233	2242	2358	M6.4	2N	N15E38	8113
30 November	0333	0334	0339	B5.2	SF	N17E38	8113
	0558	0609	0614	B8.1			
	0653	0655	0707	C2.9	1F	N18E32	8113
	0708	0710	0718	C2.6	SF	N18E32	8113
	1240	1240	1259	B6.9	SF	N18E28	8113
	1403	1404	1410	B5.5	SF	N17E22	8113
	1834	1834	1840		SF	N16E20	8113
	1910	1912	1923	B4.1	SF	N16E19	8113
	2045	2051	2100	C4.0			



Region Summary

Date	Location		Sunspot Characteristics				Flares											
	(° Lat ° CMD)	Helio	Area (10 ⁶ hemi)	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical							
		Lon						C	M	X	S	1	2	3	4			
<i>Region 8108</i>																		
13 Nov	N21E78	117	0090	03	HAX	002	A											
14 Nov	N19E67	114	0290	11	EAO	009	B	2	7									
15 Nov	N20E58	110	0400	15	EAO	012	BG	1	1	1	1							
16 Nov	N21E42	114	0360	13	EAI	026	BG	1				3						
17 Nov	N21E29	114	0420	14	EKO	036	BGD					8						
18 Nov	N19E16	114	0350	13	EKI	034	BG					2						
19 Nov	N19E03	113	0260	13	EAO	025	BGD					1						
20 Nov	N19W11	114	0260	14	EKO	031	BG					3						
21 Nov	N19W22	112	0330	13	EAI	028	BGD	4				13						
22 Nov	N19W38	115	0370	12	EAI	026	BGD					1						
23 Nov	N19W52	116	0280	13	EAI	018	BG	2				5						
24 Nov	N20W66	117	0240	11	EAO	012	B	1				2	1					
25 Nov	N19W79	116	0140	10	DSO	004	B					1						
26 Nov	N18W92	116	0020	03	BXO	002	B											
								11	1	0	47	2	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 113

<i>Region 8109</i>																			
16 Nov	S18E66	090	0010	01	HRX	001	A												
17 Nov	S18E51	092	0030	06	CRO	006	B					1							
18 Nov	S19E38	092	0030	06	CSO	006	B					1							
19 Nov	S19E25	091	0030	08	DSO	006	B												
20 Nov	S19E11	092	0050	09	CSO	006	B												
21 Nov	S19E00	090	0030	08	CRO	004	B												
22 Nov	S19W18	095	0010	07	BXO	004	B					1							
23 Nov	S18W30	094	0030	10	CRO	006	B												
24 Nov	S18W47	098	0020	03	CRO	003	B												
25 Nov	S21W60	097	0010	00	AXX	001	A												
26 Nov	S21W73	097	0000	00		000													
27 Nov	S22W82	093	0000	00	AXX	001	A												
								0	0	0	3	0	0	0	0	0			

Crossed West Limb.

Absolute heliographic longitude: 90



Region Summary- continued.

Date	Location		Sunspot Characteristics					Flares						
	(° Lat ° CMD)	Helio Lon	Area (10 ⁶ hemi)	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
							C	M	X	S	1	2	3	4
<i>Region 8110</i>														
18 Nov	N27E54	076	0000	00	AXX	001	A							
19 Nov	N28E39	077	0000	00	AXX	001	A							
20 Nov	N28E26	077												
								0	0	0	0	0	0	0
Died on Disk.														
Absolute heliographic longitude: 077														
<i>Region 8111</i>														
22 Nov	N23E74	003	0030	04	CSO	002	B							
23 Nov	N24E61	003	0040	08	CRO	005	B							
24 Nov	N24E48	003	0060	07	DSO	005	B							
25 Nov	N23E35	002	0010	00	AXX	001	A							
26 Nov	N22E20	004	0010	01	AXX	001	A							
27 Nov	N22E06	005	0010	01	AXX	001	A							
28 Nov	N21W06	004	0000	00	AXX	001	A							
29 Nov	N22W19	004	0010	00	AXX	001	A							
30 Nov	N20W33	004	0010	01										
								0	0	0	0	0	0	0
Still on Disk.														
Absolute heliographic longitude: 005														
<i>Region 8112</i>														
23 Nov	S17E59	005	0000	00	AXX	001	A							
24 Nov	S20E46	005	0000	01	AXX	001	A							
25 Nov	S16E33	004	0000	00	AXX	001	A							
26 Nov	S16E20	004												
27 Nov	S16E07	004												
28 Nov	S16W06	004						1			2			
29 Nov	S16W19	004												
30 Nov	S16W32	004												
								1	0	0	2	0	0	0
Still on Disk.														
Absolute heliographic longitude: 004														
<i>Region 8113</i>														
25 Nov	N19E87	307	0100	02	HAX	001	A							
26 Nov	N20E77	307	0330	13	EKO	010	B	2	1		7			
27 Nov	N20E60	311	0610	14	EKO	012	B	1		1	4		1	
28 Nov	N20E48	310	0680	14	EKO	019	BGD	5	1		7	1	1	
29 Nov	N20E36	309	0710	14	EHO	027	BG	3	1		5		1	
30 Nov	N22E21	310	0940	17	FSC	046	BGD	2	6		1			
								13	3	1	29	2	3	0



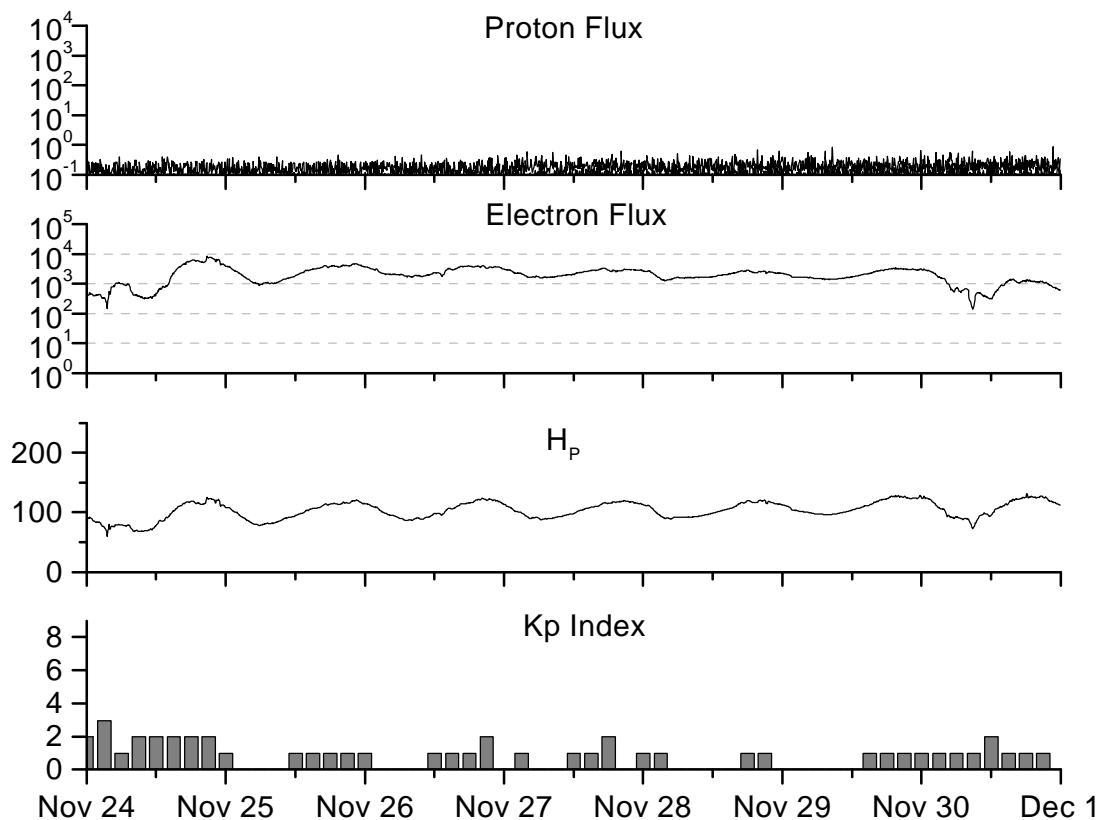
**Recent Solar Indices (preliminary)
of the observed monthly mean values**

Month	Sunspot Numbers				Radio Flux		Geomagnetic		
	Observed values SWO	values RI	Ratio RI/SWO	Smooth values SWO	values RI	Penticton 10.7 cm	Smooth Value	Planetary Ap	Smooth Value
1995									
December	16.2	10.0	0.62	17.6	10.8	72.6	72.8	09	10.0
1996									
January	17.6	11.5	0.65	16.8	10.4	74.5	72.4	09	09.8
February	09.1	04.4	0.48	16.2	10.1	71.5	72.2	10	09.8
March	12.1	09.2	0.76	15.4	09.7	72.7	72.1	11	09.9
April	08.5	04.8	0.56	13.6	08.5	69.3	71.6	11	09.7
May	11.8	05.5	0.47	12.9	08.0	72.1	71.4	07	09.5
June	18.8	11.8	0.63	13.5	08.5	69.6	71.8	05	09.4
July	13.2	08.2	0.62	13.4	08.4	71.2	72.0	07	09.3
August	20.5	14.4	0.70	13.1	08.3	72.4	72.1	09	09.4
September	02.9	01.6	0.55	13.3	08.4	69.4	72.3	15	09.3
October	02.3	00.9	0.39	14.0	08.8	69.2	72.6	13	09.1
November	26.7	17.9	0.67	15.4	09.8	78.7	73.0	08	09.1
December	21.1	13.3	0.63	16.2	10.4	77.8	73.3	07	09.3
1997									
January	09.0	05.7	0.63	16.5	10.5*	74.0	73.4	09	09.3*
February	11.3	07.6	0.67	17.4	11.0*	73.8	73.7	11	09.2*
March	14.4	08.7	0.60	20.4	13.5*	73.5	75.1*	08	09.0*
April	24.5	15.5	0.63	24.0	16.5*	74.5	76.8*	10	08.6*
May	28.6	18.5	0.65	26.4	18.4*	74.6	78.4*	08	08.6*
June	22.1	12.7	0.57			71.7		07	
July	17.0	10.5*	0.62*			71.1		06*	
August	36.7	24.7*	0.67*			79.0		08*	
September	52.8	51.3*	0.88*			96.2*		10*	
October	33.6	23.3*	0.69*			85.0*		10*	
November	53.5	39.3*	0.73*			99.5*		10*	

*Preliminary estimates.

The lowest smoothed sunspot indices number for Cycle 22, RI = 0.9, occurred October 1996. The highest smoothed sunspot number for Cycle 22, RI=158.5, occurred July 1989. ** From June 1991 onward, the 10.7 cm radio flux data source is Penticton, B.C. Canada. Prior to that, it was Ottawa.





Weekly Geosynchronous Satellite Environment Summary

Week Beginning 24 November 1997

Protons plot contains the five-minute averaged integral proton flux (protons/ cm^2 -sec-sr) as measured by GOES-9 (W135) for each of three energy thresholds: greater than 10, 50, and 100 MeV.

Electrons plot contains the five-minute averaged integral electron flux (electrons/ cm^2 -sec-sr) with energies greater than 2 MeV at GOES-9.

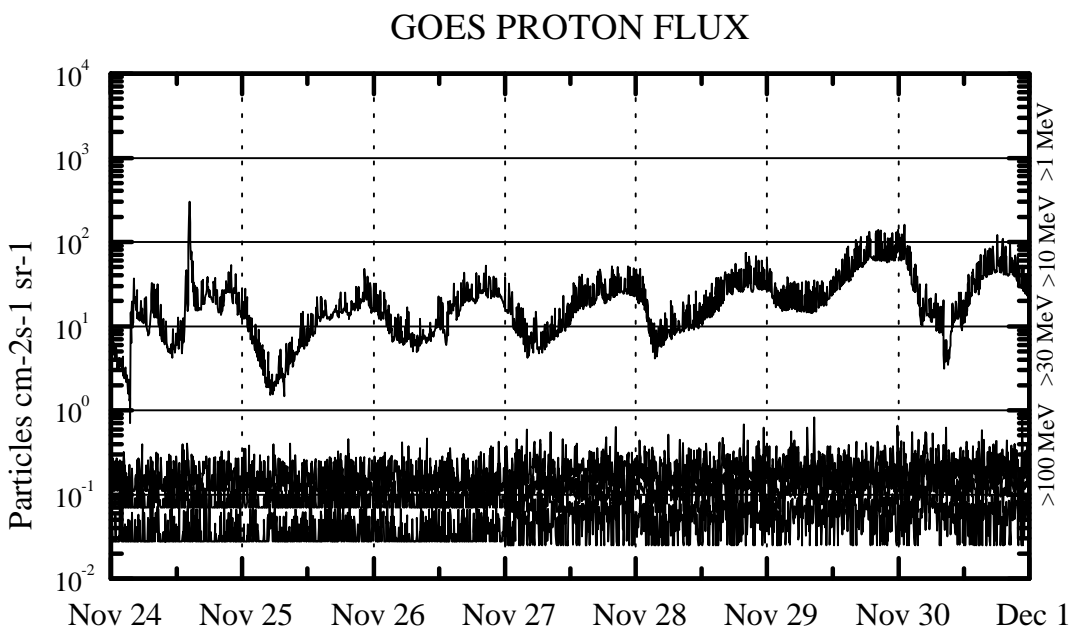
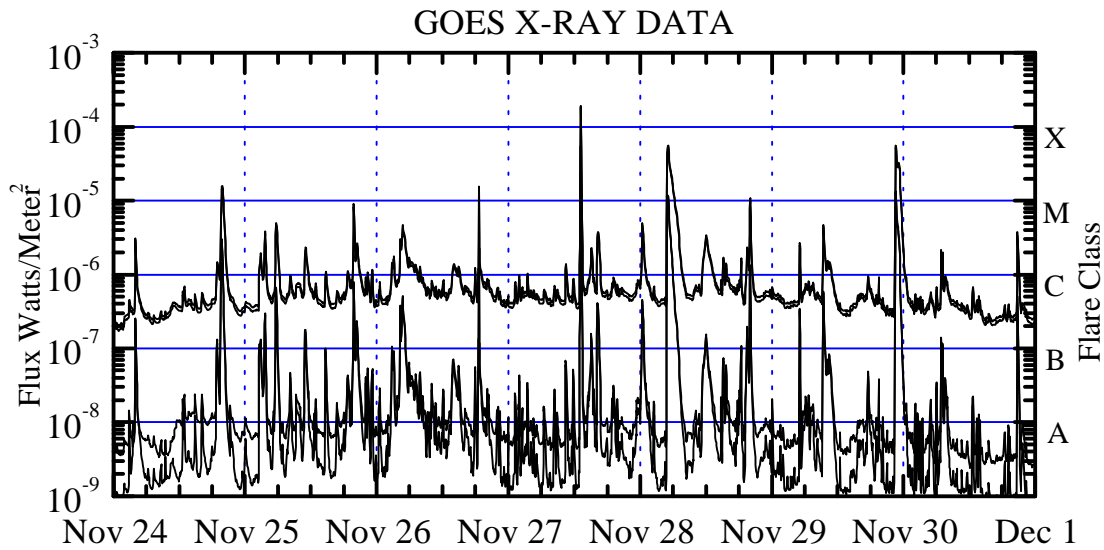
H_p plot contains the five minute averaged magnetic field H component in nanoteslas (nT) as measured by GOES-9. The H component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

K_p plot contains the estimated planetary 3-hour K-index (derived by the USAF 55th Space Weather Squadron) in real time from magnetometers at Meanook, Canada; Sitka, AK; Glenlea, Canada; St. Johns, Canada; Ottawa, Canada; Newport, WA; Fredericksburg, VA; Boulder, CO; Fresno, CA and Heartland, UK. These data are made available through cooperation from the Geological Survey of Canada (GSC) and the US Geological Survey. These may differ from the final K_p values derived from a more extensive network of magnetometers.

The data included here are those now available in real time at the SWO and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton

and electron fluxes and K_p are "global" parameters that are applicable to a first order approximation over large areas. H_{parallel} is subject to a more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.



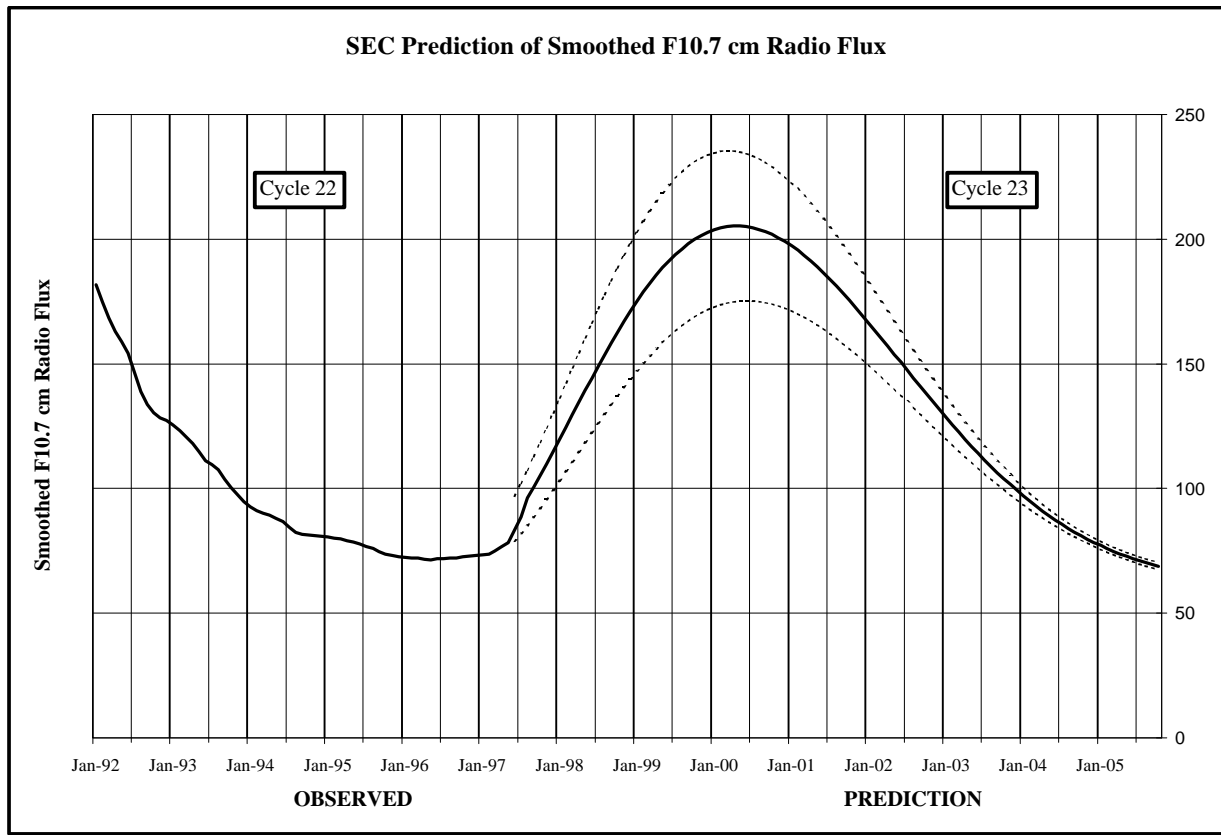


Weekly GOES Satellite X-ray and Proton Plots

Proton plot contains the five minute averaged integral proton flux (protons/cm²-sec-sr) as measured by GOES-9 (W135) for each of the energy thresholds: >1, >10, >30 and >100 MeV. P10 event threshold is 10 pfu (protons/cm²-sec-sr) at greater than 10 MeV.

X-ray plot contains five minute averaged x-ray flux (watts/m²) as measured by GOES 8 and 9 in two wavelength bands, .05 - .4 and .1 - .8 nm. The letters A, B, C, M and X refer to x-ray event levels for the .1 - .8 nm band.

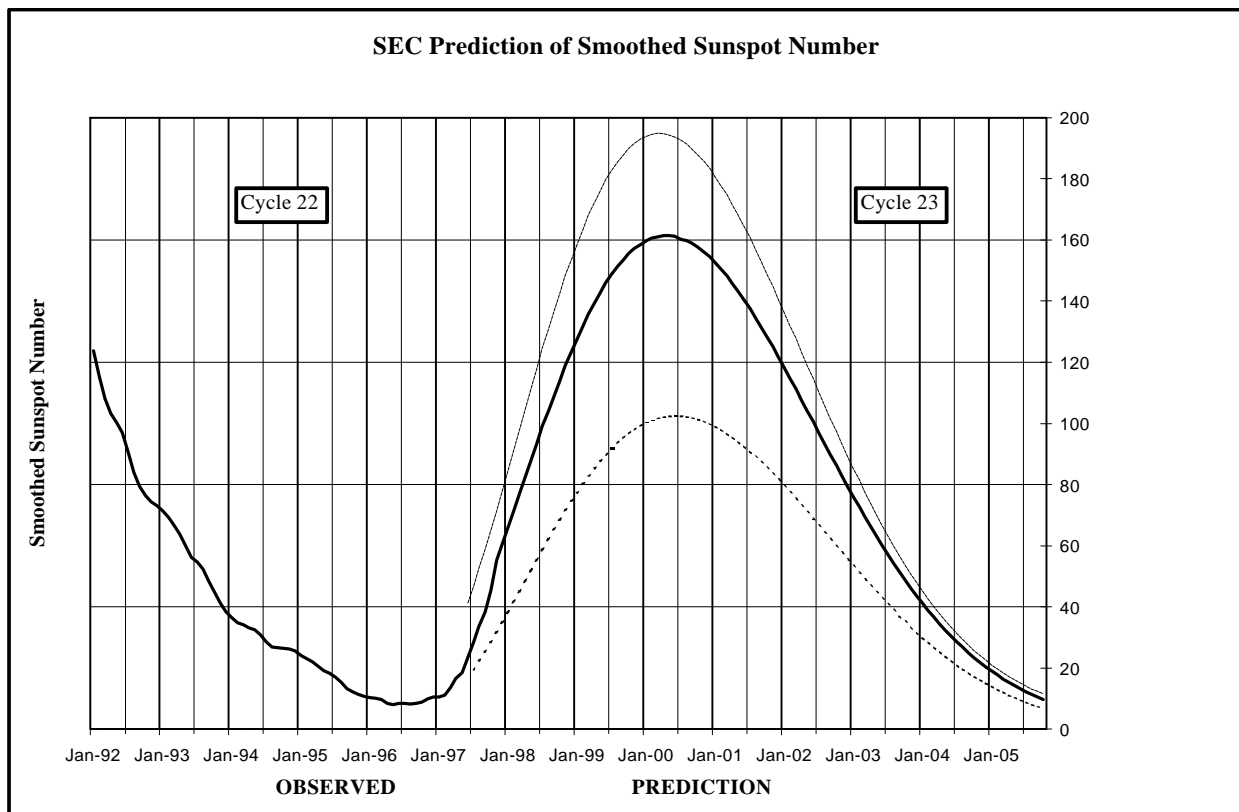




SEC Prediction of Smoothed F10.7cm Radio Flux

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1996	72 (***)	72 (***)	72 (***)	72 (***)	71 (***)	72 (***)	72 (***)	72 (***)	72 (***)	73 (***)	73 (***)	73 (***)
1997	73 (***)	74 (***)	75 (***)	77 (***)	78 (***)	84 (13)	89 (14)	95 (15)	102 (15)	110 (16)	119 (17)	124 (18)
1998	129 (18)	134 (19)	139 (20)	144 (20)	149 (21)	153 (21)	158 (22)	162 (22)	167 (23)	171 (23)	175 (23)	178 (24)
1999	182 (24)	185 (25)	188 (25)	191 (25)	193 (25)	196 (26)	198 (26)	199 (26)	201 (27)	202 (27)	203 (28)	204 (28)
2000	205 (30)	205 (30)	205 (30)	205 (30)	204 (30)	203 (28)	202 (27)	201 (27)	200 (26)	199 (26)	197 (26)	195 (26)
2001	193 (25)	292 (25)	188 (25)	186 (25)	183 (24)	181 (24)	178 (24)	175 (24)	172 (23)	169 (23)	166 (23)	163 (22)
2002	160 (22)	156 (22)	153 (21)	150 (21)	147 (21)	144 (21)	140 (20)	137 (20)	134 (19)	131 (19)	128 (18)	125 (18)
2003	122 (17)	119 (17)	116 (17)	114 (16)	111 (16)	108 (15)	106 (15)	103 (14)	101 (14)	99 (14)	97 (13)	95 (13)
2004	92 (12)	91 (12)	89 (12)	87 (11)	85 (11)	84 (11)	82 (10)	81 (10)	79 (10)	78 (9)	77 (9)	75 (9)
2005	74 (8)	73 (8)	72 (7)	71 (7)	71 (7)	70 (7)	69 (6)	68 (6)	68 (6)	67 (***)	** (***)	**





SEC Prediction of Smoothed Sunspot Number

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1996	10 (***)	10 (***)	10 (***)	9 (***)	8 (***)	9 (***)	9 (***)	8 (***)	9 (***)	9 (***)	10 (***)	11 (***)
1997	11 (***)	11 (***)	14 (***)	17 (***)	18 (***)	24 (15)	29 (16)	34 (17)	39 (18)	46 (19)	54 (20)	65 (20)
1998	74 (21)	82 (22)	88 (22)	93 (23)	99 (24)	103 (24)	109 (25)	113 (25)	119 (26)	123 (26)	128 (27)	131 (27)
1999	136 (27)	139 (28)	142 (28)	146 (29)	148 (29)	151 (29)	153 (29)	154 (29)	156 (29)	157 (29)	158 (29)	159 (29)
2000	160 (30)	160 (30)	160 (30)	160 (30)	159 (29)	158 (29)	157 (29)	156 (29)	155 (29)	154 (29)	152 (29)	150 (28)
2001	148 (28)	146 (28)	142 (28)	140 (27)	137 (27)	134 (27)	131 (27)	128 (26)	124 (26)	121 (26)	118 (25)	114 (25)
2002	111 (24)	107 (24)	103 (24)	100 (23)	97 (23)	93 (22)	89 (22)	86 (21)	82 (21)	79 (21)	76 (20)	72 (20)
2003	69 (19)	66 (19)	62 (18)	60 (18)	57 (17)	53 (17)	51 (17)	48 (16)	46 (16)	43 (15)	41 (15)	39 (14)
2004	36 (14)	34 (14)	32 (13)	30 (13)	28 (12)	27 (12)	24 (11)	23 (11)	21 (11)	20 (10)	19 (10)	17 (9)
2005	16 (9)	14 (9)	13 (8)	12 (8)	12 (8)	11 (8)	10 (7)	9 (7)	9 (7)	8 (6)	** (***)	** (***)

