

Solar activity was low to high. Activity began at moderate levels on 31 October with two M1 flares. The first, which was associated with a coronal mass ejection (CME), occurred at 31/1508 UTC and the second was a long duration flare at 31/1808 UTC, both from regions that had not yet rotated onto the visible disk. Low level activity occurred on 01 November from newly visible Regions 1338 (S14, L=121, class/area Ehi/375 on 03 November) and 1339 (N19, L=102, class/area Fkc/1540 on 04 November). Moderate level activity returned on 02 November due to an M4/Sn long duration flare at 02/2201 UTC from Region 1339. On 03 November, activity increased to high levels when beta-gamma-delta magnetic configuration Region 1339 produced an X1/2b flare at 03/2027 UTC associated with a 620 sfu Tenflare. In addition, the Region produced two M-class flares, an M2/Sf at 03/1111 UTC and an M2/1n at 03/2336 UTC. Activity returned to moderate levels for the remainder of the period with Region 1339 producing six M-class events between 04 - 06 November, the largest flare being an M3/1f at 05/0334 UTC.

A greater than 10 MeV proton enhancement began at about 04/0100 UTC, peaked at 3.6 pfu at 04/0905 UTC and decayed to background levels by midday on 05 November. The source of this enhancement was unknown. Proton flux gradually returned to background levels during the remainder of the period.

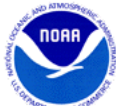
The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 31 October - 02 November and normal to moderate levels 03 - 06 November.

The geomagnetic field ranged from quiet to severe storm levels. On 31 October, an active period was observed near the time solar wind speed at ACE peaked at 450 km/s due to the effects of a favorably positioned coronal hole high speed stream (CH HSS). On 01 November at approximately 0817 UTC, a shock arrival was observed at the ACE spacecraft and a sudden impulse (SI) of 18 nT was observed on the Boulder magnetometer at 01/0907 UTC. This transient passage brought geomagnetic activity up to severe storm levels at high latitudes and active to minor storm levels at mid latitudes. Persistent effects from the coronal transient carried over into 02 November with quiet to active levels and minor to major storm periods at high latitudes. Quiet activity prevailed on 03 - 06 November.

Space Weather Outlook **09 November - 05 December 2011**

Solar activity is expected to be at predominately low levels through the period. M-class activity is likely from 07 - 14 November with a slight chance for X-class activity all due to the complex nature of Region 1339. M-class probabilities decrease to a slight chance from 15 - 23 November, with a less than 10 percent chance for X-class activity after Region 1339 departs the visible disk on 14 November. Region 1339 is projected to return on 24 November, raising M-class probabilities for the remainder of the period.

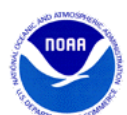
A slight chance for a proton event exists from 07 - 14 November due to the complex nature of Region 1339. Proton event probabilities decrease after Region 1339 departs the visible disk on 14 November. Probabilities will increase slightly on 24 November when Region 1339 is



projected to return if it remains as magnetically complex as it is this rotation.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the entire forecast period.

The geomagnetic field is expected to be generally quiet levels for the majority of the period. Quiet to unsettled levels are expected from 11 - 12 November due to a small, recurrent CH HSS and a weak CME observed on 08 November in association with a disappearing filament. Mostly quiet conditions are expected from 13 - 25 November. Quiet to unsettled conditions are expected on 26 - 27 November due to a recurrent CH HSS followed by a return to quiet levels for the remainder of the period.



Daily Solar Data

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10 ⁻⁶ hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
31 October	138	112	620	B8.8	4	2	0	0	0	0	0	0
01 November	139	141	890	B9.2	6	0	0	0	0	0	0	0
02 November	154	121	1140	C1.0	7	1	0	8	0	0	0	0
03 November	160	161	2005	B8.9	13	2	1	10	1	1	0	0
04 November	164	100	1910	B8.8	6	1	0	4	0	0	0	0
05 November	172	135	1870	B8.1	4	3	0	1	2	0	0	0
06 November	177	144	1940	B8.4	9	2	0	8	0	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ² -day -sr)			Electron Fluence (electrons/cm ² -day -sr)		
	>1 MeV	>10 MeV	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
	31 October	2.8e+05	1.2e+04	2.8e+03		7.3e+05
01 November	3.3e+05	1.2e+04	2.9e+03		1.1e+06	
02 November	1.3e+05	1.2e+04	2.9e+03		2.5e+06	
03 November	1.7e+05	1.2e+04	3.3e+03		8.5e+06	
04 November	5.1e+05	1.4e+05	6.5e+03		1.6e+07	
05 November	4.6e+05	9.5e+04	4.4e+03		9.4e+06	
06 November	3.5e+05	3.4e+04	3.0e+03		1.4e+07	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	31 October	9	4-1-1-1-2-2-2-3	6	1-0-1-3-3-1-1-2	8
01 November	14	4-2-3-4-3-2-2-2	49	3-2-6-7-5-6-3-1	21	4-2-4-5-4-3-3-2
02 November	7	2-2-2-3-2-2-1-1	27	1-2-5-5-6-4-1-0	11	3-3-2-4-3-2-1-2
03 November	3	1-1-0-1-1-1-2-0	1	1-0-0-1-0-0-0-0	3	1-1-0-0-0-1-2-1
04 November	3	0-0-1-1-2-2-1-1	8	0-0-1-4-4-1-1-0	4	0-0-1-1-1-1-1-2
05 November	3	1-1-1-1-1-1-1-0	5	2-1-2-2-3-0-0-0	4	2-1-1-1-1-0-0-1
06 November	3	0-0-0-1-2-2-1-2	0	0-0-0-0-0-1-0-0	3	1-0-0-0-1-2-1-2

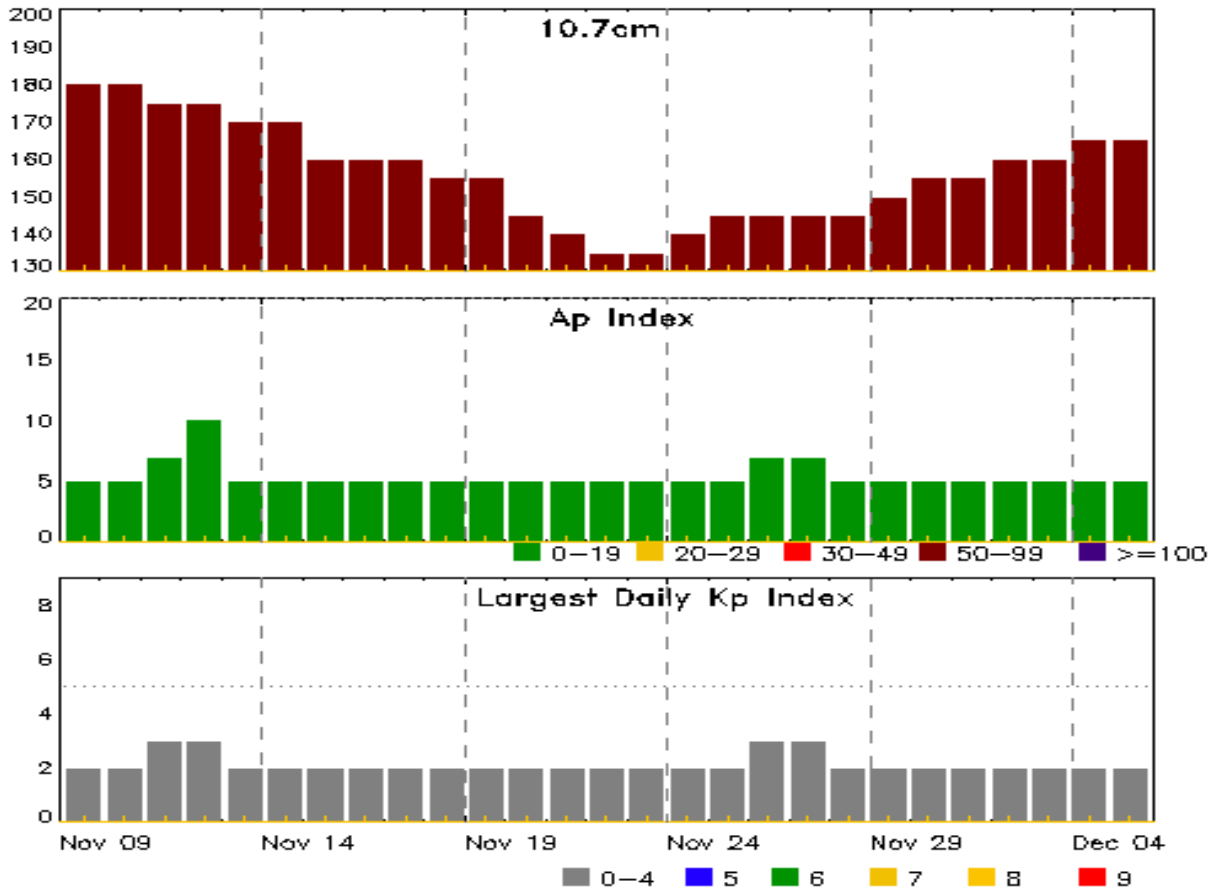


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
01 Nov 0029	WARNING: Geomagnetic K = 4	01/0028 - 0900
01 Nov 0105	ALERT: Geomagnetic K = 4	01/0103
01 Nov 0829	WARNING: Geomagnetic Sudden Impulse expected	01/0830 - 1045
01 Nov 0855	EXTENDED WARNING: Geomagnetic K = 4	01/0028 - 1200
01 Nov 1040	SUMMARY: Geomagnetic Sudden Impulse	01/0907
01 Nov 1059	WARNING: Geomagnetic K = 5	01/1059 - 1600
01 Nov 1059	EXTENDED WARNING: Geomagnetic K = 4	01/0028 - 1800
01 Nov 1103	ALERT: Geomagnetic K = 5	01/1100
01 Nov 1103	ALERT: Geomagnetic K = 5	01/1100
01 Nov 1757	EXTENDED WARNING: Geomagnetic K = 4	01/0028 - 2359
02 Nov 0932	WARNING: Geomagnetic K = 4	02/0932 - 1600
02 Nov 0933	ALERT: Geomagnetic K = 4	02/0932
03 Nov 2022	ALERT: X-ray Flux exceeded M5	03/2021
03 Nov 2043	SUMMARY: 10cm Radio Burst	03/2016 - 2032
03 Nov 2058	SUMMARY: X-ray Event exceeded X1	03/2016 - 2032
04 Nov 2331	WARNING: Geomagnetic K = 4	05/0230 - 0600
06 Nov 0740	ALERT: Type II Radio Emission	06/0617



Twenty-seven Day Outlook



Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
09 Nov	180	5	2	23 Nov	135	5	2
10	180	5	2	24	140	5	2
11	175	7	3	25	145	5	2
12	175	10	3	26	145	7	3
13	170	5	2	27	145	7	3
14	170	5	2	28	145	5	2
15	160	5	2	29	150	5	2
16	160	5	2	30	155	5	2
17	160	5	2	01 Dec	155	5	2
18	155	5	2	02	160	5	2
19	155	5	2	03	160	5	2
20	145	5	2	04	165	5	2
21	140	5	2	05	165	5	2
22	135	5	2				



Energetic Events

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location	Rgn #	Radio Flux 245	Radio Flux 2695	Intensity II	Intensity IV
31 Oct	1455	1508	1527	M1.1	0.015							
31 Oct	1721	1808	1850	M1.4	0.050							
02 Nov	2152	2201	2219	M4.3	0.045	SN	N20E73	1339				
03 Nov	1058	1111	1120	M2.5	0.020	SF	N22E69	1339			54	
03 Nov	2016	2027	2032	X1.9	0.100	2B	N22E63	1339			620	
03 Nov	2328	2336	2344	M2.1	0.014	1N	N19E61	1339				
04 Nov	2031	2040	2046	M1.0	0.006	SF	N18E46	1339				
05 Nov	0308	0335	0358	M3.7	0.082	1F	N20E45	1339				
05 Nov	1110	1121	1142	M1.1	0.017	SN	N21E42	1339				
05 Nov	2031	2038	2054	M1.8	0.016	1N	N21E34	1339				
06 Nov	0046	0103	0124	M1.2	0.018	SF	N21E35	1339				
06 Nov	0614	0635	0641	M1.4	0.010	SN	N21E31	1339	110			1

Flare List

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
31 Oct	0050	0110	0129	C2.3			1330
31 Oct	0514	0521	0525	C2.7			1334
31 Oct	0754	0759	0810	C1.3			1324
31 Oct	1455	1508	1527	M1.1			
31 Oct	1721	1808	1850	M1.4			
31 Oct	2316	2322	2328	C5.2			1338
01 Nov	0022	0028	0033	C2.7			
01 Nov	0626	0629	0633	C1.9			1339
01 Nov	1022	1032	1041	C4.3			1338
01 Nov	1820	1826	1836	C4.1			
01 Nov	1955	2008	2019	C2.7			
01 Nov	2132	2152	2223	C4.7			1339
02 Nov	0245	0252	0302	C5.1			
02 Nov	0646	0650	0659	C2.2			1339
02 Nov	0813	0814	0820		SF	N21E74	1339
02 Nov	0831	0843	0854	C3.4			1339
02 Nov	0859	0901	0907		SF	N21E79	1339
02 Nov	1039	1048	1055	C3.2			1339
02 Nov	1220	1223	1225	C1.6			1339



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical	
	Begin	Max	End			Location Lat CMD	Rgn #
02 Nov	1310	1310	1321		SF	N21E71	1339
02 Nov	B1538	1549	1617	C2.7	SF	N22E77	1339
02 Nov	1710	1721	1750	C7.8	SF	N22E74	1339
02 Nov	1955	1958	2001		SF	N21E73	1339
02 Nov	2006	2011	2013		SF	N24E79	1339
02 Nov	2152	2201	2219	M4.3	SN	N20E73	1339
03 Nov	0005	0018	0027	C4.4			1339
03 Nov	0124	0130	0135	C3.4			1339
03 Nov	0318	0325	0336	C2.9			1339
03 Nov	B0634	0634	0641		SF	N20E69	1339
03 Nov	0711	0715	0726	C3.2			1339
03 Nov	0938	0944	0950	C2.1			1339
03 Nov	1003	1011	1017	C3.4			1339
03 Nov	1058	1111	1120	M2.5	SF	N22E69	1339
03 Nov	1242	1243	1250		SF	N21E68	1339
03 Nov	1403	1408	1414	C1.5			1339
03 Nov	1448	1454	1500	C3.8	SF	S15E53	1338
03 Nov	1757	1809	1821	C2.2			
03 Nov	1825	1828	1836		SF	S13E53	1338
03 Nov	1845	1848	1926	C4.5	SF	N22E63	1339
03 Nov	1927	1928	1938		SF	N19E57	1339
03 Nov	1945	1947	1951		SF	N21E61	1339
03 Nov	2016	2027	2032	X1.9	2B	N22E63	1339
03 Nov	2053	2100	2122		SF	N13E17	1336
03 Nov	2151	U2200	A2228	C5.4	SF	N21E61	1339
03 Nov	2216	2335	A2359		1N	N19E61	1339
03 Nov	2228	2235	2244	C5.8			1339
03 Nov	2256	2313	2324	C9.2			1339
03 Nov	2328	2336	2344	M2.1			1339
04 Nov	B0000	0009	0013	C3.8	SF	N19E61	1339
04 Nov	0026	0101	0143	C5.4			
04 Nov	0322	0353	0416	C8.6			
04 Nov	1050	1055	1101	C1.8			
04 Nov	1730	1733	1736		SF	N18E50	1339
04 Nov	1802	U1805	1813		SF	N16E49	1339
04 Nov	1925	1933	1947	C2.9			1339
04 Nov	2031	2040	2046	M1.0	SF	N18E46	1339
04 Nov	2225	2243	2306	C4.6			1339



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
05 Nov	0057	0100	0102	C1.8			1339
05 Nov	0308	0334	0411	M3.7	1F	N20E45	1339
05 Nov	0920	0924	0930	C1.3			1339
05 Nov	1002	1009	1016	C1.5			1339
05 Nov	B1025	U1120	A1237	M1.1	SN	N21E42	1339
05 Nov	1511	1535	1554	C4.2			1339
05 Nov	2031	2038	2054	M1.8	1N	N21E34	1339
06 Nov	0008	0013	0018	C1.5			
06 Nov	0046	0103	0124	M1.2	SF	N21E35	1339
06 Nov	0421	0426	0432	C1.6			
06 Nov	0604	0607	0610	C1.5			
06 Nov	0614	0635	0641	M1.4	SN	N21E31	1339
06 Nov	0804	0816	0839	C2.3	SF	S15E11	1338
06 Nov	0952	0956	0959	C8.8	SN	N21E28	1339
06 Nov	1430	1447	1503	C5.3			1339
06 Nov	1635	1640	1644	B9.8			1339
06 Nov	1717	1736	1742	C2.0	SF	S13E08	1338
06 Nov	1840	1843	1857		SF	S13E08	1338
06 Nov	1952	1958	2030	C1.2	SF	S14E05	1338
06 Nov	2149	2154	2207	C1.7	SF	S15E05	1338



Region Summary

Date	Location		Sunspot Characteristics				Flares							
	Lat CMD	Lon	Helio 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
								C	M	X	S	1	2	3

Region 1323

17 Oct	N23E52	333	10	1	Axx	2	A										
18 Oct	N24E41	331	20	7	Cso	2	B										
19 Oct	N24E27	333	plage														
20 Oct	N24E14	333	plage														
21 Oct	N24W00	334	plage														
22 Oct	N25W11	331	10	1	Axx	1	A										
23 Oct	N25W25	332	plage														
24 Oct	N25W39	333	plage														
25 Oct	N25W53	334	plage														
26 Oct	N25W67	335	plage														
27 Oct	N25W81	335	plage														
									0	0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 334

Region 1324

17 Oct	N11E80	306	90	3	Hax	2	A	1									
18 Oct	N11E64	308	110	12	Eai	12	B										
19 Oct	N12E55	305	340	16	Fkc	26	BG	4			6						
20 Oct	N11E40	305	360	14	Ekc	27	BG	1			2						
21 Oct	N10E27	306	290	12	Eac	34	BG	1			1						
22 Oct	N10E14	306	280	15	Eac	28	BG	1			1						
23 Oct	N12W00	307	150	15	Eai	26	BG	1			2						
24 Oct	N12W13	307	140	15	Eai	31	BG										
25 Oct	N12W26	307	140	14	Eai	30	BG										
26 Oct	N12W38	306	30	7	Dso	16	B	1									
27 Oct	N12W52	306	50	6	Cso	3	B										
28 Oct	N12W62	303	70	6	Dso	7	B	2			2						
29 Oct	N12W72	300	70	3	Hsx	1	A	2									
30 Oct	N13W83	297	20	3	Cso	2	B										
									14	0	0	14	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 307



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			
Region 1325																		
19 Oct	N16E82	278	90	3	Hax	1	A											
20 Oct	N14E67	279	270	8	Dko	4	B											
21 Oct	N15E54	279	260	7	Dko	6	B											
22 Oct	N15E43	277	180	7	Dai	8	B	2				4						
23 Oct	N15E29	278	180	7	Dao	8	B											
24 Oct	N16E16	278	150	7	Dso	11	B											
25 Oct	N15E03	278	100	8	Dso	11	B											
26 Oct	N17W12	280	30	5	Cso	6	B											
27 Oct	N17W26	280	10	1	Axx	1	A											
28 Oct	N16W40	280	10	1	Axx	1	A											
29 Oct	N17W52	279	10	1	Axx	1	A	1				1						
30 Oct	N17W66	281	plage															
								3	0	0	5	0	0	0	0	0		

Died on Disk.

Absolute heliographic longitude: 278

Region 1327

20 Oct	S22E10	336	10	4	Bxi	5	B											
21 Oct	S21W03	336	100	6	Dao	8	B											
22 Oct	S21W15	335	130	8	Dao	11	B											
23 Oct	S21W29	336	130	8	Dao	11	B											
24 Oct	S20W41	335	200	8	Dso	5	B											
25 Oct	S21W54	335	80	5	Cso	4	B											
26 Oct	S20W67	335	60	11	Cso	3	B											
27 Oct	S20W81	335	60	5	Hsx	1	A											
								0	0	0	0	0	0	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 336



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		
Region 1328																	
20 Oct	N18E23	322	10	1	Bxo	1	B										
21 Oct	N17E07	325	40	4	Dao	6	B										
22 Oct	N17W06	326	10	3	Bxo	3	B										
23 Oct	N17W20	327	plage														
24 Oct	N17W34	328	plage														
25 Oct	N17W48	329	plage														
26 Oct	N17W62	330	plage														
27 Oct	N17W76	330	plage														
								0	0	0	0	0	0	0	0	0	0

Died on Disk.

Absolute heliographic longitude: 326

Region 1330																	
22 Oct	N04E66	254	210	5	Dso	5	B										
23 Oct	N08E60	247	210	13	Eao	5	B	2									
24 Oct	N08E45	249	560	14	Eko	13	BG										
25 Oct	N08E31	250	450	14	Eho	12	BG	1									
26 Oct	N09E18	250	500	14	Eko	15	BG										
27 Oct	N08E05	249	460	15	Eko	9	BG										
28 Oct	N04W09	249	450	14	Eho	18	BG										
29 Oct	N07W22	249	400	16	Fho	18	BG										
30 Oct	N08W35	249	380	15	Ehi	16	BG	2			1						
31 Oct	N07W51	252	400	14	Eko	12	BG	1									
01 Nov	N06W65	253	350	10	Dko	7	B										
02 Nov	N05W82	256	210	5	Cso	2	B										
03 Nov	N08W95	256	50	4	Dso	2	B										
								6	0	0	1	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 249



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		
Region 1332																	
24 Oct	N32E77	217	30	2	Hsx	1	A										
25 Oct	N31E62	219	60	2	Hsx	1	A										
26 Oct	N31E49	219	40	2	Hsx	1	A										
27 Oct	N31E35	219	30	2	Hax	1	A										
28 Oct	N31E22	218	40	2	Hsx	2	A										
29 Oct	N31E10	217	30	1	Hsx	1	A										
30 Oct	N30W02	216	20	1	Hsx	1	A										
31 Oct	N31W13	215	20	1	Hsx	1	A										
01 Nov	N31W27	215	10	1	Axx	1	A										
02 Nov	N30W40	215	10	1	Axx	1	A										
03 Nov	N31W53	215	20	1	Hrx	1	A										
04 Nov	N31W67	216	plage														
05 Nov	N31W81	217	plage														
								0	0	0	0	0	0	0	0	0	0

Crossed West Limb.
 Absolute heliographic longitude: 216

Region 1333																	
27 Oct	N16E12	242	90	6	Dai	10	B	1									
28 Oct	N15W02	243	50	6	Dso	13	B	1									
29 Oct	N15W17	244	20	3	Cro	2	B										
30 Oct	N15W32	246	10	2	Cro	2	B										
31 Oct	N10W45	245	10	2	Axx	2	A										
01 Nov	N09W59	246	30	6	Cro	7	B										
02 Nov	N10W71	245	10	6	Bxo	3	B										
03 Nov	N10W85	247	plage														
								2	0	0	0	0	0	0	0	0	0

Crossed West Limb.
 Absolute heliographic longitude: 243



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								
Region 1334																							
30 Oct	N13E25	188	70	6	Cso	9	B	6				1											
31 Oct	N12E11	189	110	7	Cao	11	B	1															
01 Nov	N12W03	190	120	8	Dso	9	B																
02 Nov	N11W17	191	80	7	Cso	6	B																
03 Nov	N12W34	195	70	3	Cso	3	B																
04 Nov	N12W47	195	70	2	Hsx	2	A																
05 Nov	N12W61	196	60	1	Hsx	1	A																
06 Nov	N12W73	195	40	3	Hax	2	A																
								7	0	0		1	0	0	0	0	0	0					

Still on Disk.

Absolute heliographic longitude: 190

Region 1335

31 Oct	N19E16	184	10	4	Bxo	2	B														
01 Nov	N18E02	185	10	5	Bxo	3	B														
02 Nov	N17W11	185	10	3	Bxo	5	B														
03 Nov	N12W26	187	10	2	Bxo	3	B														
04 Nov	N12W40	189	plage																		
								0	0	0		0	0	0	0	0	0	0			

Died on Disk.

Absolute heliographic longitude: 185

Region 1336

31 Oct	N14E55	145	10	1	Axx	1	A														
01 Nov	N13E39	148	40	4	Cso	6	B														
02 Nov	N13E25	150	plage																		
03 Nov	N11E12	149	20	3	Cso	8	B					1									
04 Nov	N11W02	151	plage																		
05 Nov	N11W16	152	plage																		
06 Nov	N11W30	153	plage																		
								0	0	0		1	0	0	0	0	0	0			

Still on Disk.

Absolute heliographic longitude: 151



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares										
	Lat CMD	Lon	Area 10 ⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical						
								C	M	X	S	1	2	3	4		
Region 1337																	
31 Oct	N17E66	134	40	3	Hsx	1	A										
01 Nov	N17E51	136	10	3	Bxo	2	B										
02 Nov	N17E38	136	10	2	Bxo	3	B										
03 Nov	N17E26	135	40	5	Dso	7	B										
04 Nov	N18E14	134	10	4	Bxo	3	B										
05 Nov	N18W00	135	0	4	Bxo	3	B										
06 Nov	N18W14	137	plage														
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 135

Region 1338																	
31 Oct	S12E83	118	plage					1									
01 Nov	S12E69	118	120	5	Dao	2	B	1									
02 Nov	S14E54	120	230	7	Dao	5	B										
03 Nov	S14E40	121	375	11	Ehi	20	BG	1			2						
04 Nov	S14E28	120	240	9	Dso	10	B										
05 Nov	S14E14	120	220	10	Dso	8	B										
06 Nov	S14E02	120	240	10	Dso	9	B	4			5						
								7	0	0	7	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 120

Region 1339																	
01 Nov	N22E71	117	180	9	Dao	2	B	2									
02 Nov	N18E63	111	560	8	Dkc	4	BG	6	1		8						
03 Nov	N18E57	104	1400	13	Ekc	25	BGD	11	2	1	7	1	1				
04 Nov	N19E45	102	1540	17	Fkc	33	BGD	3	1		4						
05 Nov	N19E31	103	1250	15	Ekc	31	BGD	4	3		1	2					
06 Nov	N20E20	102	1230	16	Fkc	42	BGD	2	2		3						
								28	9	1	23	3	1	0	0		

Still on Disk.

Absolute heliographic longitude: 102

Region 1340																	
05 Nov	S09E61	73	80	1	Hsx	1	A										
06 Nov	S09E49	73	80	2	Cao	1	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 73



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares							
	Lat CMD	Lon	Area 10 ⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
								C	M	X	S	1	2	3

Region 1341

05 Nov	N10E78	58	100	3	Hsx	1	A										
06 Nov	N08E66	56	120	3	Hsx	1	A										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 56

Region 1342

05 Nov	N18E76	60	110	10	Dso	8	B										
06 Nov	N18E62	60	120	8	Dao	6	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 60

Region 1343

06 Nov	N29E76	46	60	4	Hsx	1	A										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 46

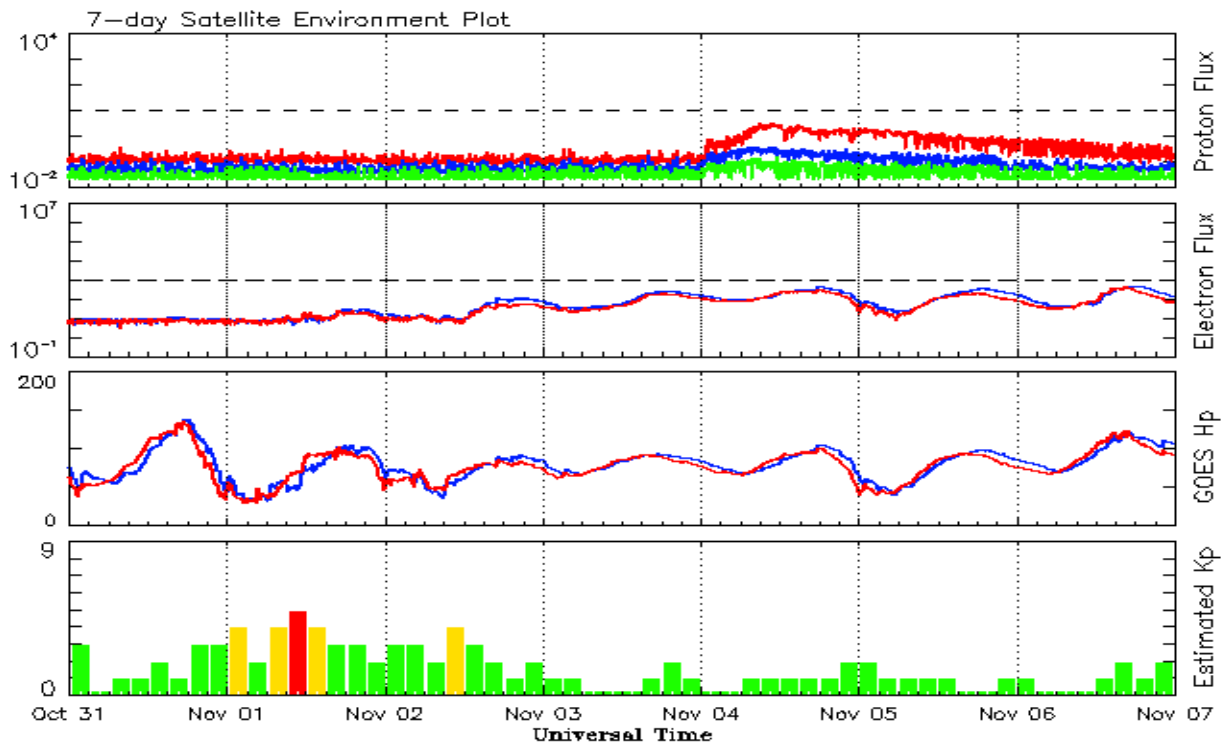


Recent Solar Indices (preliminary)
Observed monthly mean values

Month	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed values		Ratio	Smooth values		Penticton	Smooth	Planetary	Smooth
	SEC	RI	RI/SEC	SEC	RI	10.7 cm	Value	Ap	Value
2009									
November	7.7	4.1	0.55	12.4	7.6	73.6	74.5	3	4.5
December	15.7	10.8	0.68	13.6	8.3	76.8	74.9	2	4.8
2010									
January	21.3	13.2	0.62	14.8	9.3	81.1	75.5	3	5.0
February	31.0	18.8	0.60	16.7	10.6	84.7	76.5	5	5.1
March	24.7	15.4	0.62	19.1	12.3	83.3	77.5	5	5.3
April	11.2	8.0	0.71	21.4	14.0	75.9	78.3	10	5.5
May	19.9	8.7	0.44	23.8	15.5	73.8	79.0	8	5.7
June	17.9	13.6	0.75	25.2	16.4	72.6	79.7	7	5.8
July	23.1	16.1	0.70	25.9	16.7	79.9	80.1	5	6.0
August	28.2	19.6	0.70	27.3	17.4	79.7	80.7	8	6.2
September	35.6	25.2	0.71	30.6	19.6	81.1	82.4	5	6.3
October	35.0	23.5	0.67	35.9	23.2	81.6	85.3	6	6.4
November	36.1	21.5	0.60	40.5	26.5	82.5	87.7	5	6.4
December	22.0	14.4	0.66	43.8	28.8	84.3	89.6	4	6.5
2011									
January	32.1	18.8	0.59	47.2	30.9	83.7	91.2	6	6.7
February	53.2	29.6	0.55	50.6	33.4	94.5	92.7	6	6.8
March	81.0	55.8	0.69	55.2	36.9	115.3	95.8	7	7.2
April	81.7	54.4	0.67	61.8	41.8	112.6	100.4	9	7.5
May	61.4	41.5	0.68			95.9		9	
June	55.5	37.0	0.67			95.8		8	
July	67.0	43.9	0.66			94.2		9	
August	66.1	50.6	0.77			101.7		8	
September	106.4	78.0	0.73			134.5		13	
October	123.5	88.0	0.71			137.2		7	

Note: Values are final except for the most recent 6 months which are considered preliminary.
Cycle 24 started in Dec 2008 with an RI=1.7.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 31 October 2011*

The proton flux plot contains the five-minute averaged integral proton flux (protons/cm²-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

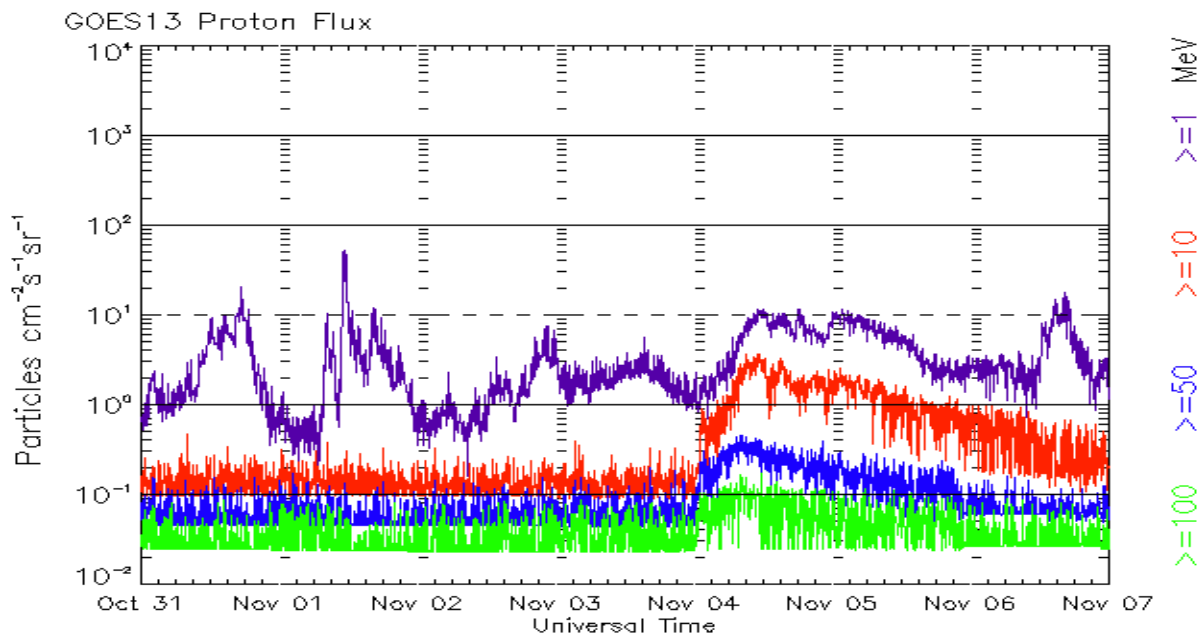
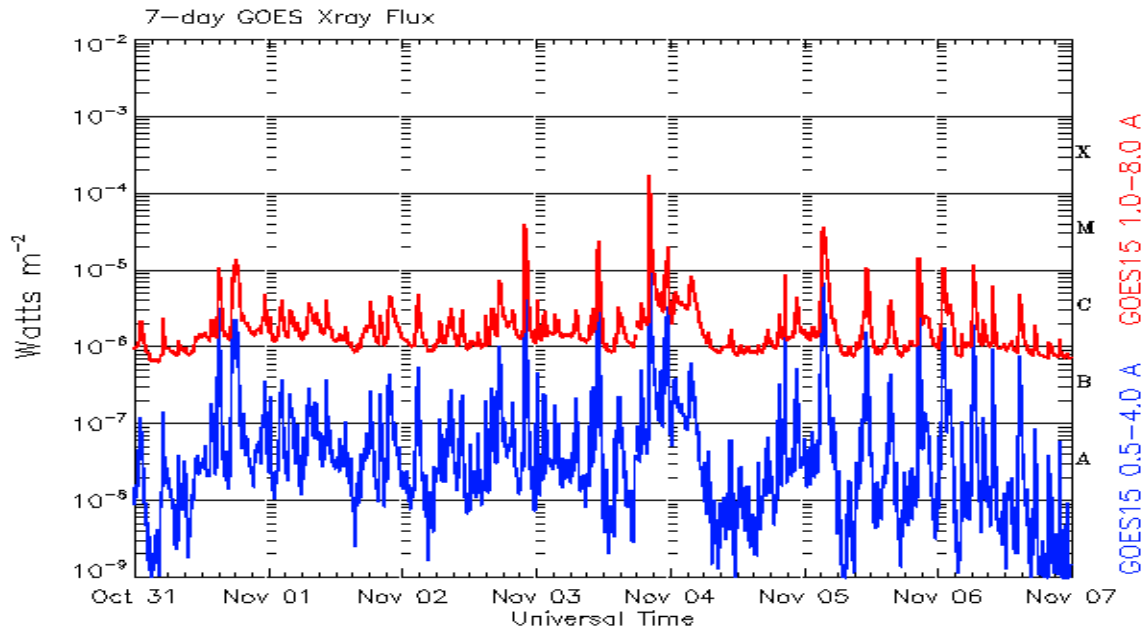
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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

Kp plot contains the estimated planetary 3-hour K-index (derived by the Air Force Weather Agency) 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 Hartland, UK. These data are made available through cooperation from the Geological Survey of Canada (GSC), British Geological Survey (BGS) and the US Geological Survey. These may differ from the final Kp values derived from a more extensive network of magnetometers.

The data included here are those now available in real time at the SWPC 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 Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to 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
Week Beginning 31 October 2011*

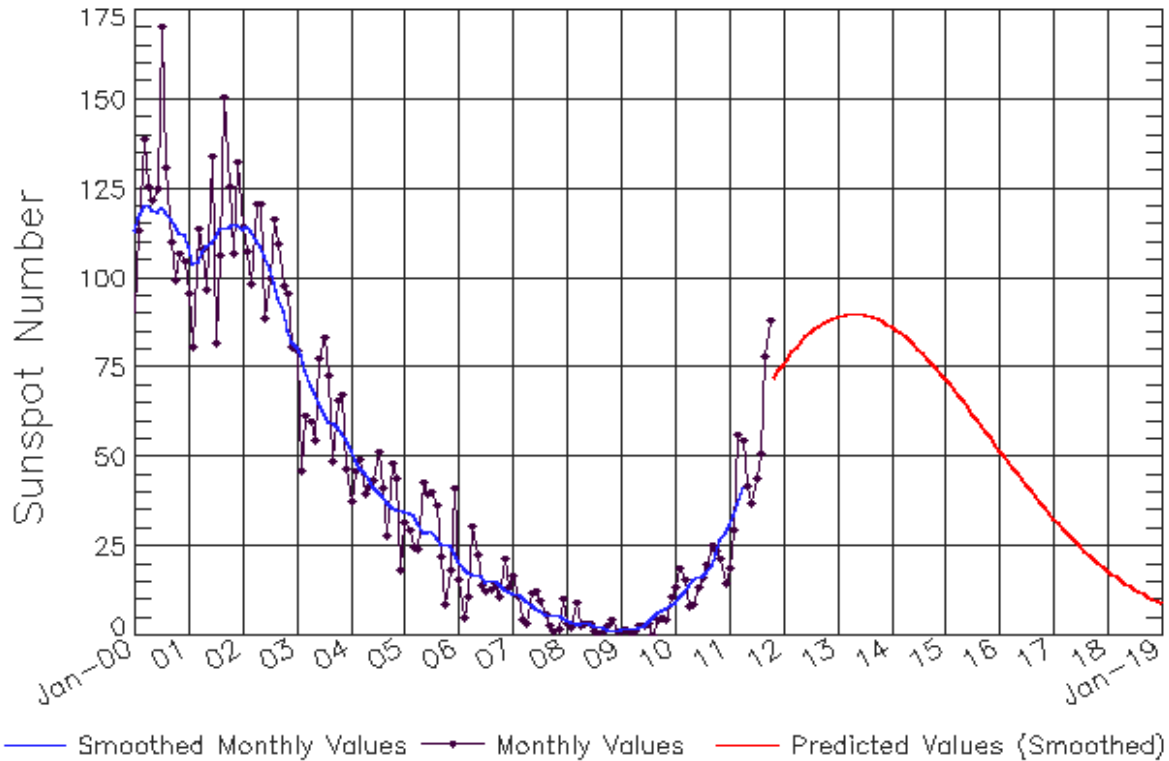
The x-ray plots contains five-minute averages x-ray flux ($Watt/m^2$) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged intergral flux units (pfu = protons/ cm^2 -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1, >10, >30, and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.



ISES Solar Cycle Sunspot Number Progression

Observed data through Oct 2011



Updated 2011 Nov 8

NOAA/SWPC Boulder, CO USA

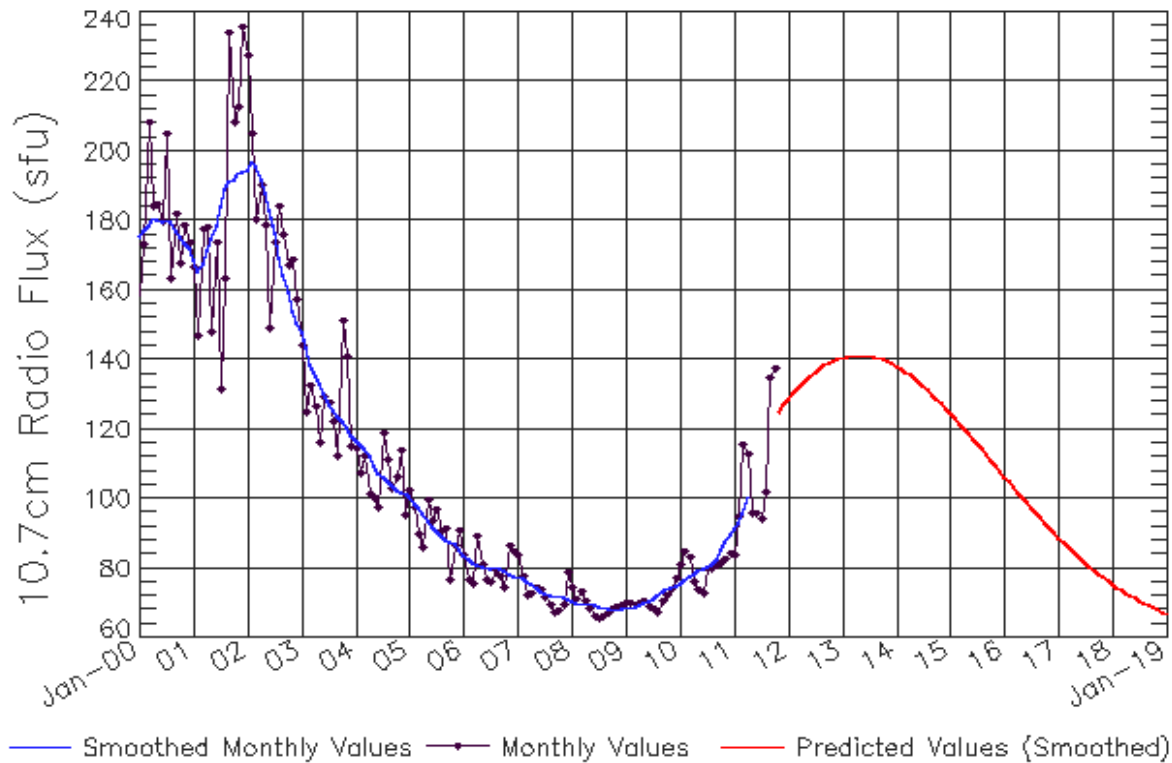
Smoothed Sunspot Number Prediction

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	9 (***)	11 (***)	12 (***)	14 (***)	16 (***)	16 (***)	17 (***)	17 (***)	20 (***)	23 (***)	27 (***)	29 (***)
2011	31 (***)	33 (***)	37 (***)	42 (***)	47 (1)	51 (2)	56 (3)	60 (5)	63 (5)	66 (6)	68 (7)	72 (7)
2012	76 (8)	79 (9)	81 (9)	81 (10)	82 (10)	84 (10)	85 (10)	86 (10)	87 (10)	88 (10)	88 (10)	89 (10)
2013	89 (10)	90 (10)	90 (10)	90 (10)	90 (10)	90 (10)	90 (10)	89 (10)	89 (10)	89 (10)	88 (10)	87 (10)
2014	86 (10)	86 (10)	85 (10)	84 (10)	83 (10)	81 (10)	80 (10)	79 (10)	78 (10)	76 (10)	75 (10)	73 (10)
2015	72 (10)	70 (10)	69 (10)	67 (10)	65 (10)	64 (10)	62 (10)	60 (10)	59 (10)	57 (10)	55 (10)	54 (10)
2016	52 (10)	50 (10)	49 (10)	47 (10)	45 (10)	44 (10)	42 (10)	40 (10)	39 (10)	37 (10)	36 (10)	34 (10)
2017	33 (10)	31 (10)	30 (10)	29 (10)	27 (10)	26 (10)	25 (10)	24 (10)	23 (10)	21 (10)	20 (10)	19 (10)
2018	18 (10)	17 (10)	16 (10)	15 (10)	15 (10)	14 (10)	13 (10)	12 (10)	12 (10)	11 (10)	10 (10)	10 (10)
2019	9 (10)	8 (10)	8 (10)	7 (10)	7 (10)	6 (10)	6 (10)	6 (10)	5 (10)	5 (10)	4 (10)	4 (10)



ISES Solar Cycle F10.7cm Radio Flux Progression

Observed data through Oct 2011



Updated 2011 Nov 8

NOAA/SWPC Boulder, CO USA

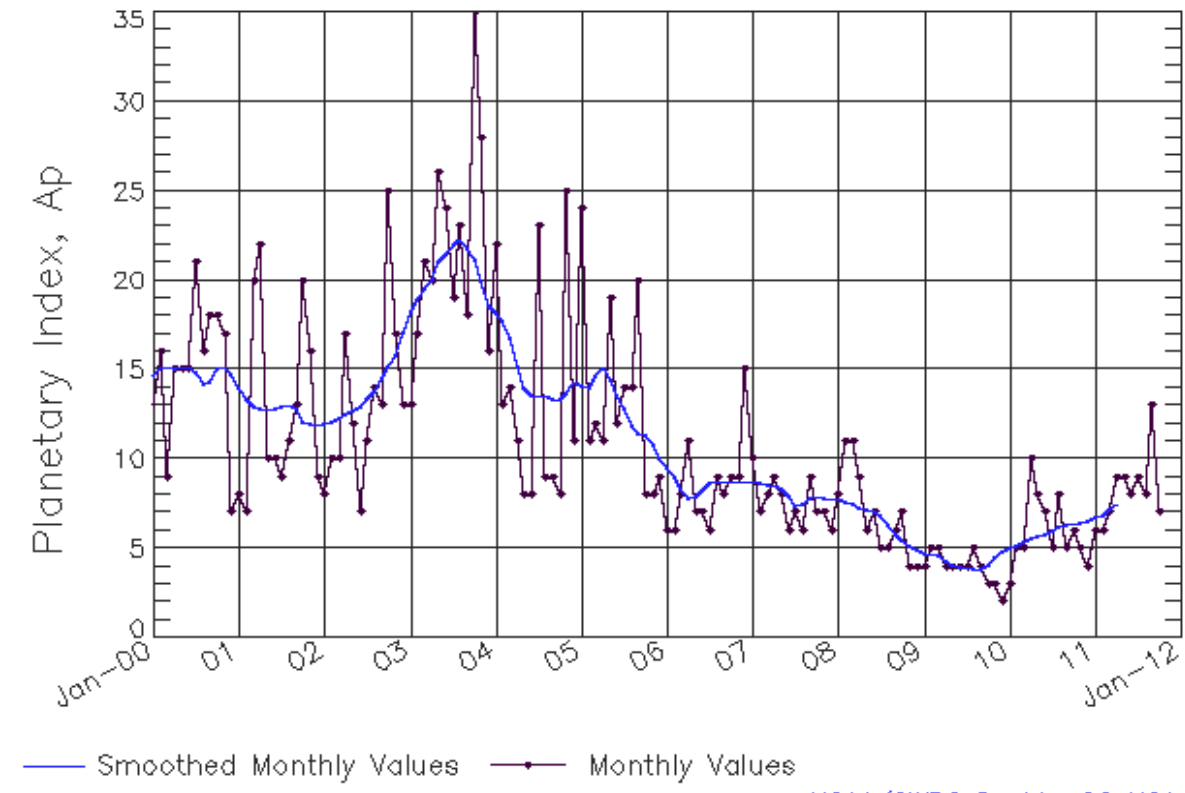
Smoothed F10.7cm Radio Flux Prediction

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	76 (**)	77 (**)	78 (**)	78 (**)	79 (**)	80 (**)	80 (**)	81 (**)	82 (**)	85 (**)	88 (**)	90 (**)
2011	91 (**)	93 (**)	96 (**)	100 (**)	105 (1)	108 (1)	112 (2)	115 (3)	117 (4)	119 (4)	121 (5)	124 (6)
2012	128 (7)	131 (8)	133 (8)	133 (9)	134 (9)	135 (9)	136 (9)	137 (9)	138 (9)	139 (9)	140 (9)	140 (9)
2013	141 (9)	141 (9)	141 (9)	141 (9)	141 (9)	141 (9)	141 (9)	141 (9)	140 (9)	140 (9)	139 (9)	139 (9)
2014	138 (9)	137 (9)	136 (9)	136 (9)	135 (9)	134 (9)	132 (9)	131 (9)	130 (9)	129 (9)	127 (9)	126 (9)
2015	125 (9)	123 (9)	122 (9)	120 (9)	119 (9)	117 (9)	116 (9)	114 (9)	113 (9)	111 (9)	110 (9)	108 (9)
2016	106 (9)	105 (9)	103 (9)	102 (9)	100 (9)	99 (9)	97 (9)	96 (9)	94 (9)	93 (9)	92 (9)	90 (9)
2017	89 (9)	88 (9)	86 (9)	85 (9)	84 (9)	83 (9)	82 (9)	80 (9)	79 (9)	78 (9)	77 (9)	76 (9)
2018	75 (9)	75 (9)	74 (9)	73 (9)	72 (9)	71 (9)	71 (9)	70 (9)	69 (9)	69 (9)	68 (9)	67 (9)
2019	67 (9)	66 (9)	66 (9)	65 (9)	65 (9)	65 (9)	64 (9)	64 (9)	63 (9)	63 (9)	63 (9)	63 (9)



ISES Solar Cycle Ap Progression

Observed data through Oct 2011



Updated 2011 Nov 8

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Solar Cycle Comparison charts are temporarily unavailable.



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Notice: The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

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<http://spaceweather.gov/SolarCycle/> -- Solar Cycle Progression web site

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http://spaceweather.gov/weekly/Usr_guide.pdf -- User Guide

