

Solar activity was low. Region 1356 (N15, L=230, class/area Ehc/400 on 21 November) was the most region significant during the period. Region 1354 (S17, L=268, class/area Dai /220 on 20 November) began the period with a steady decline in area and complexity, ending as a simple Axx group. As Region 1354 declined, Region 1356 grew in spot count and magnetic complexity. It produced seven C-class x-ray flares and ten optical flares on the 22nd, the largest of which was a C4 at 22/0404Z. Several coronal mass ejections (CMEs) were observed throughout the week; however Type II radio emissions were only reported on 23/0847Z (1008 km/s) and 25/2154Z (931 km/s). The sole CME expected to threaten earth was a full halo event on 26/0710Z that originated from a filament eruption near N08W49 accompanied by a long duration C1 flare. The CME was first evident in LASCO C2 imagery at 26/0712Z and also easily seen in STEREO-A COR2 imagery. Its velocity was estimated to be 790 km/s.

A greater than 10 MeV proton flux greater than 10 pfu event began 26/1125Z associated with the filament eruption described in the solar summary. This event was still in progress at the time of this report and reached a maximum of 80 pfu at 27/0125Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels the entire period.

Geomagnetic field activity was generally quiet. Brief unsettled to minor storm periods were observed at high latitudes on 22 and 24 November associated with prolonged negative Bz.

Space Weather Outlook
30 November - 26 December 2011

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity due to the anticipated return of several active regions.

The current 10MeV proton event in progress is expected to end by prior to the beginning of the outlook period.

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

Geomagnetic field activity is expected to begin the forecast period at unsettled to active levels as a coronal hole high speed stream becomes geoeffective. Conditions should persist for a day or so before calming to mostly quiet levels from 01 December onward. Another coronal hole high speed stream is expected on 09 and 10 December, when activity may again increase to unsettled and active conditions. Mostly quiet conditions are anticipated once again from 11 - 23 December before the next coronal hole high speed stream is forecast to be geoeffective and produce unsettled to active conditions on 23 December. Mostly quiet conditions are forecast from 24 December through the end 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
21 November	141	101	780	B5.1	3	0	0	4	0	0	0	0
22 November	142	132	730	B4.8	8	0	0	12	0	0	0	0
23 November	140	123	670	B4.4	4	0	0	6	0	0	0	0
24 November	137	139	750	B3.9	3	0	0	1	0	0	0	0
25 November	135	171	700	B4.5	3	0	0	5	1	0	0	0
26 November	133	133	650	B3.9	5	0	0	2	0	0	0	0
27 November	135	123	630	B4.0	2	0	0	9	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
	21 November	1.7e+05	1.3e+04	3.1e+03		5.4e+06
22 November	2.7e+05	1.3e+04	3.0e+03		1.3e+06	
23 November	1.7e+05	1.3e+04	3.0e+03		1.1e+06	
24 November	2.3e+05	1.3e+04	3.0e+03		1.3e+06	
25 November	1.3e+05	1.3e+04	3.0e+03		1.1e+06	
26 November	9.4e+06	1.8e+06	3.5e+03		6.3e+06	
27 November	8.5e+07	3.6e+06	3.9e+03		1.5e+07	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	21 November	5	0-1-1-1-2-1-2-3	4	0-0-2-2-2-2-1-1	5
22 November	7	2-2-1-2-3-2-1-1	15	1-1-3-3-5-4-1-1	6	2-1-2-2-3-2-1-2
23 November	4	2-2-1-1-1-1-1-1	3	1-1-1-1-2-1-0-1	5	2-2-1-1-1-1-1-2
24 November	4	1-0-0-1-2-2-2-2	11	1-0-0-4-5-0-2-1	5	1-0-0-1-3-1-1-2
25 November	3	2-1-1-0-1-1-1-1	1	1-1-1-0-0-0-0-0	4	2-2-1-0-1-1-0-1
26 November	4	1-0-1-1-2-2-2-1	1	0-0-0-1-0-0-1-1	3	1-0-0-0-1-1-1-1
27 November	5	0-1-2-2-2-2-2-1	11	2-0-4-3-3-3-2-0	6	1-1-3-1-1-2-1-1

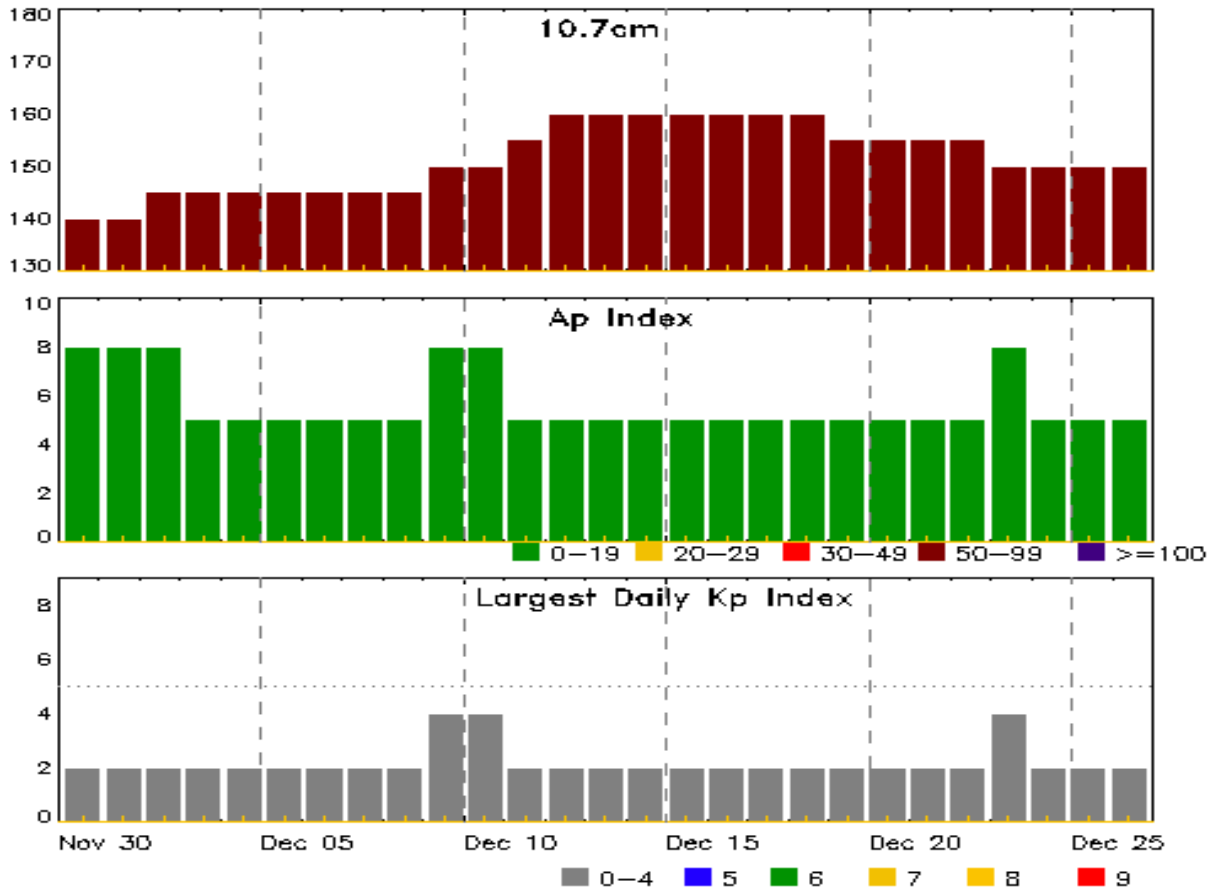


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
23 Nov 1057	ALERT: Type II Radio Emission	23/0847
25 Nov 2217	ALERT: Type II Radio Emission	25/2154
26 Nov 1119	WARNING: Proton 10MeV Integral Flux > 10pfu	26/1120 - 1800
26 Nov 1144	ALERT: Proton Event 10MeV Integral Flux >= 10pfu	26/1125
26 Nov 1718	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	26/1120 - 27/1200
27 Nov 0744	WARNING: Geomagnetic K = 4	27/0743 - 1500
27 Nov 1138	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	26/1120 - 28/0200
27 Nov 1451	EXTENDED WARNING: Geomagnetic K = 4	27/0743 - 28/0000
27 Nov 1723	CANCELLATION: Geomagnetic K = 4	



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
30 Nov	140	8	2	14 Dec	160	5	2
01 Dec	140	8	2	15	160	5	2
02	145	8	2	16	160	5	2
03	145	5	2	17	160	5	2
04	145	5	2	18	160	5	2
05	145	5	2	19	155	5	2
06	145	5	2	20	155	5	2
07	145	5	2	21	155	5	2
08	145	5	2	22	155	5	2
09	150	8	4	23	150	8	4
10	150	8	4	24	150	5	2
11	155	5	2	25	150	5	2
12	160	5	2	26	150	5	2
13	160	5	2				



Energetic Events

Date	Time			X-ray	Optical Information			Peak		Sweep Freq		
	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
									245	2695	II	IV

No Events Observed

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
21 Nov	0003	0010	0013	C3.1			
21 Nov	0232	0235	0239		SF	N16E70	1356
21 Nov	0439	0442	0446	B8.8			
21 Nov	0448	0453	0458	C1.8			1354
21 Nov	0623	0627	0629	B9.4			
21 Nov	0723	0725	0727		SF	N15E69	1356
21 Nov	0843	0846	0851		SF	N17E69	1356
21 Nov	1114	U1118	1132		SF	S24E10	1352
21 Nov	1556	1600	1607	B8.0			1356
21 Nov	1819	1828	1836	C1.3			1356
22 Nov	0033	0037	0039	C1.2	SF	S17E19	1354
22 Nov	0142	0145	0147	B7.3			1357
22 Nov	0359	0404	0407	C4.9			1356
22 Nov	0725	0729	0732	C1.9	SF	N12E46	1356
22 Nov	0857	0858	0908		SF	N16E52	1356
22 Nov	0949	0954	0956	C3.2	SF	N12E44	1356
22 Nov	1450	1453	1455	C1.0	SF	N12E42	1356
22 Nov	1706	1712	1719	C1.6	SF	N11E41	1356
22 Nov	1802	1803	1806		SF	S17W66	1346
22 Nov	1817	1825	1855		SF	N15E46	1356
22 Nov	2041	2041	2046		SF	N13E39	1356
22 Nov	2134	2138	2141	C1.0	SF	N12E40	1356
22 Nov	2226	2227	2240		SF	N12E38	1356
22 Nov	2254	2255	2303		SF	N15E48	1356
22 Nov	2311	2339	2347	C1.9			1356
23 Nov	0159	0159	0206		SF	N12E39	1356
23 Nov	0304	0311	0316	C2.0	SF	N11E35	1356
23 Nov	0328	0328	0332		SF	N12E37	1356
23 Nov	0356	0356	0402		SF	N16W43	1357
23 Nov	0523	0528	0535	C1.0			1357
23 Nov	0604	0609	0617	B9.1			1357



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
23 Nov	0720	0723	0728	C2.3	SF	N22E81	1358
23 Nov	1323	1328	1330	C2.6			1346
23 Nov	1352	1356	1401	B7.9			
23 Nov	1510	1526	1555		SF	N18W48	1357
23 Nov	1939	1943	1952	B7.8			
24 Nov	0248	0251	0255	B7.1			
24 Nov	1853	1856	1900	B5.3			1358
24 Nov	1909	1910	1913		SF	N17W49	1359
24 Nov	2012	2021	2039	C1.2			1357
24 Nov	2114	2118	2121	C1.2			
24 Nov	2308	2325	2329	C1.9			
25 Nov	0059	0100	0102		SF	N19E52	1358
25 Nov	0338	0345	0349	C3.3	SF	N16W55	1359
25 Nov	0558	0559	0602		SF	N20E52	1358
25 Nov	0641	0642	0646		SF	N19W71	1357
25 Nov	0932	0935	0938		SF	N19E48	1358
25 Nov	1714	1720	1725	C1.1			1356
25 Nov	2149	2158	2208	C2.4	1F	N17W62	1359
26 Nov	0526	0527	0533		SF	N18W87	1357
26 Nov	0609	0710	0756	C1.5			1357
26 Nov	1500	1515	1531	C1.3			1357
26 Nov	1614	1615	1617	C1.1			1354
26 Nov	1712	1719	1734	C1.0	SF	N18E33	1358
27 Nov	0942	1102	1135	C1.4	SF	N16W05	1356
27 Nov	1159	1203	1206	C1.1	SF	N19E21	1358
27 Nov	1519	1520	1523		SF	N07E77	
27 Nov	1624	1627	1632		SF	N07E79	
27 Nov	1730	1735	1740	B9.6	SF	N19E38	1361
27 Nov	1906	1908	1911		SF	N17W15	1356
27 Nov	1912	1916	1924	B9.3	SF	N07E74	
27 Nov	2102	2107	2118		SF	N07E74	1362
27 Nov	2303	2304	2307		SF	N06E70	1362



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	4			
Region 1341																		
05 Nov	N10E78		58	100	3	Hsx	1	A										
06 Nov	N08E66		56	120	3	Hsx	1	A										
07 Nov	N10E55		53	180	10	Cao	3	B										
08 Nov	N11E41		55	110	8	Dao	5	B										
09 Nov	N18E28		55	210	6	Dso	8	B										
10 Nov	N08E14		55	110	6	Cso	3	B	1				1					
11 Nov	N08E02		53	90	8	Cso	7	B										
12 Nov	N11W14		56	80	4	Cso	4	B										
13 Nov	N10W22		51	80	12	Cso	7	B	1									
14 Nov	N09W35		52	70	10	Dso	7	B										
15 Nov	N09W49		53	120	10	Dso	7	B										
16 Nov	N09W64		54	130	9	Dso	5	B										
17 Nov	N09W76		53	80	9	Dso	3	B										
18 Nov	N08W91		55	10	1	Axx	1	A										
										2	0	0	1	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 53

Region 1343																		
06 Nov	N29E76		46	60	4	Hsx	1	A										
07 Nov	N27E62		46	140	2	Hsx	1	A										
08 Nov	N28E49		47	90	2	Hsx	1	A										
09 Nov	N27E37		46	110	2	Hsx	1	A										
10 Nov	N27E23		46	180	2	Hsx	1	A										
11 Nov	N26E12		44	120	2	Hsx	1	A										
12 Nov	N27W01		44	140	2	Hsx	1	A										
13 Nov	N28W14		43	120	2	Hsx	1	A										
14 Nov	N28W26		43	70	2	Hsx	1	A										
15 Nov	N28W39		43	70	2	Hsx	1	A										
16 Nov	N28W51		42	90	2	Hsx	1	A										
17 Nov	N27W64		41	50	2	Hsx	1	A										
18 Nov	N28W76		40	50	1	Hsx	1	A										
19 Nov	N27W87		38	40	2	Hsx	1	A										
										0	0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 44



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 1346																		
12 Nov	S17E64	338	80	2	Hsx	1	A											
13 Nov	S21E57	331	110	12	Cso	2	B											
14 Nov	S18E40	337	110	8	Cso	3	B											
15 Nov	S18E27	337	120	4	Dso	5	B		1			1						
16 Nov	S18E10	339	140	5	Dso	6	B	5				3	1					
17 Nov	S18W03	339	60	4	Cso	3	B	2				1						
18 Nov	S17W17	341	80	5	Cso	7	B	1				3						
19 Nov	S18W29	340	60	5	Hsx	6	A											
20 Nov	S18W44	342	40	5	Cso	3	B											
21 Nov	S17W56	341	50	4	Cso	3	B											
22 Nov	S16W68	340	40	4	Cso	5	B						1					
23 Nov	S15W82	340	30	3	Cso	3	B	1										
								9	1	0	9	1	0	0	0	0		

Crossed West Limb.
 Absolute heliographic longitude: 339

Region 1347																		
13 Nov	N07E53	346	30	4	Cro	3	B	2				1						
14 Nov	N08E28	349	30	4	Cro	3	B	2				1						
15 Nov	N08E14	350	30	4	Hax	2	A					1						
16 Nov	N09E04	347	10	1	Axx	1	A											
17 Nov	N08W10	346	20		Hsx	1	A											
18 Nov	N08W24	348	10	1	Axx	1	A											
19 Nov	N06W37	347	10	2	Axx	3	A											
20 Nov	N06W50	348	plage															
21 Nov	N06W65	350	plage															
22 Nov	N06W80	352	plage															
								4	0	0	3	0	0	0	0	0		

Crossed West Limb.
 Absolute heliographic longitude: 347



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares																
	Lat CMD	Lon	Helio 10 ⁶ hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
Region 1349																							
14 Nov	N15W02	19	10	3	Bxo	3	B																
15 Nov	N15W16	20	20	4	Cro	8	B																
16 Nov	N17W29	19	10	5	Bxo	3	B																
17 Nov	N17W43	21	plage																				
18 Nov	N17W57	21	plage																				
19 Nov	N15W67	18	10	3	Bxo	2	B																
20 Nov	N15W81	19	plage																				

Crossed West Limb.
 Absolute heliographic longitude: 19

Region 1350																							
14 Nov	N26E67	310	40	7	Dso	3	B																
15 Nov	N26E53	311	170	8	Dso	5	B																
16 Nov	N26E42	308	140	7	Dso	4	B																
17 Nov	N26E29	307	80	7	Dso	2	B																
18 Nov	N26E16	308	70	8	Dso	7	B																
19 Nov	N25E03	308	40	7	Cso	4	B																
20 Nov	N25W11	309	plage																				
21 Nov	N25W25	310	plage																				
22 Nov	N25W39	311	plage																				
23 Nov	N25W53	311	plage																				
24 Nov	N25W67	312	plage																				
25 Nov	N25W81	313	plage																				

Crossed West Limb.
 Absolute heliographic longitude: 308



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical			
			Lon	10 ⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3
Region 1351															
14 Nov	S23E51	326	20	4	Bxo	5	B								
15 Nov	S24E37	327	10	4	Bxo	2	B					1			
16 Nov	S24E23	328	plage												
17 Nov	S24E09	329	plage												
18 Nov	S23W04	328	10	3	Axx	4	A								
19 Nov	S24W17	328	10	1	Hrx	2	A								
20 Nov	S24W31	329	plage												
21 Nov	S24W45	330	plage												
22 Nov	S24W59	331	plage												
23 Nov	S24W73	331	plage												
24 Nov	S24W87	332	plage												
								0	0	0	1	0	0	0	0

Crossed West Limb.
 Absolute heliographic longitude: 328

Region 1352															
16 Nov	S23E65	285	150	7	Cso	1	B								
17 Nov	S24E53	283	140	12	Eso	3	B	1				2			
18 Nov	S23E41	283	170	11	Eso	4	B								
19 Nov	S24E26	285	110	12	Cso	6	B								
20 Nov	S25E15	282	120	9	Dso	7	B								
21 Nov	S24W00	284	70	3	Cso	3	B					1			
22 Nov	S25W13	285	70	3	Cso	4	B								
23 Nov	S25W27	285	60	2	Hsx	1	A								
24 Nov	S26W39	284	70	3	Hsx	1	A								
25 Nov	S24W52	283	30	1	Hsx	1	A								
26 Nov	S23W65	283	40	1	Hsx	1	A								
27 Nov	S23W77	283	40		Hsx	1	A								
								1	0	0	3	0	0	0	0

Still on Disk.
 Absolute heliographic longitude: 284



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 1353																							
17 Nov	N08E76	261	30	2	Hsx	1	A																
18 Nov	N07E57	266	30	1	Hrx	1	A	1					2										
19 Nov	N07E44	266	40	2	Hsx	1	A																
20 Nov	N07E32	265	20	3	Hsx	2	A																
21 Nov	N07E17	268	20	1	Cro	3	B																
22 Nov	N08E05	267	10	3	Axx	1	A																
23 Nov	N08W10	267	10	2	Axx	2	A																
24 Nov	N07W23	267	10	2	Axx	1	A																
25 Nov	N08W35	266	10	2	Hsx	1	A																
26 Nov	N08W49	267	20	2	Cro	2	B	1															
27 Nov	N08W62	267	10		Cro	3	B																
								2	0	0		2	0	0	0	0	0						

Still on Disk.

Absolute heliographic longitude: 267

Region 1354

17 Nov	S15E73	265	130	10	Dao	6	B						2								
18 Nov	S15E56	267	210	8	Dso	8	B	1					3								
19 Nov	S17E44	267	220	10	Dsi	12	B	3					1								
20 Nov	S17E30	268	220	10	Dai	12	BG	6					2	2							
21 Nov	S16E17	268	80	8	Dso	7	BG	1													
22 Nov	S17E05	267	50	4	Cao	10	B	1					1								
23 Nov	S17W09	267	40	4	Cso	7	B														
24 Nov	S17W23	268	40	4	Dao	8	B														
25 Nov	S15W36	267	25	6	Cso	5	B														
26 Nov	S16W50	268	0		Axx	1	A	1													
27 Nov	S16W64	270	plage																		
								13	0	0		9	2	0	0	0	0				

Still on Disk.

Absolute heliographic longitude: 267



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares								
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
			Lon	10 ⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 1355																
18 Nov	N14E73	251	60	3	Cao	3	B						1			
19 Nov	N14E58	253	90	2	Hsx	1	A	1					3			
20 Nov	N14E44	254	90	2	Hsx	1	A									
21 Nov	N15E32	253	140	4	Cao	5	B									
22 Nov	N14E19	253	130	4	Dso	12	B									
23 Nov	N14E06	252	100	4	Cso	10	B									
24 Nov	N10W06	250	120	7	Cso	12	B									
25 Nov	N14W20	251	80	2	Hsx	2	A									
26 Nov	N14W34	252	80	2	Hsx	1	A									
27 Nov	N14W47	252	70	2	Hsx	3	A									
								1	0	0		4	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 252

Region 1356

19 Nov	N14E81	229	60	5	Hsx	1	A									
20 Nov	N14E63	234	110	2	Hsx	1	A	1					1			
21 Nov	N15E55	230	400	11	Ehc	6	B	1					3			
22 Nov	N15E42	230	340	17	Fki	9	BG	7					10			
23 Nov	N15E28	230	300	13	Eao	11	BG	1					3			
24 Nov	N15E16	229	310	13	Ehi	16	BG									
25 Nov	N16E03	228	220	14	Esi	23	B	1								
26 Nov	N16W10	228	190	12	Eso	5	B									
27 Nov	N16W23	228	170	13	Eso	7	B	1					2			
								12	0	0		19	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 228

Region 1357

20 Nov	N17W18	316	20	5	Dro	5	B	1					1			
21 Nov	N17W30	315	20	7	Cro	4	B									
22 Nov	N17W41	313	40	6	Cao	10	B									
23 Nov	N18W55	313	40	6	Dso	8	B	1					2			
24 Nov	N17W68	313	60	7	Dai	7	B	1								
25 Nov	N18W83	314	60	7	Dso	6	B						1			
								3	0	0		4	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 316



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares								
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
			Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 1358																
22 Nov	N20E80		192	50	1	Hsx	1	A								
23 Nov	N19E63		195	90	2	Hsx	1	A	1			1				
24 Nov	N19E53		192	120	8	Dsi	7	B								
25 Nov	N20E41		190	170	11	Eai	19	B				3				
26 Nov	N20E28		190	220	11	Eao	9	B	1			1				
27 Nov	N20E15		190	210	11	Eai	16	B	1			1				
									3	0	0	6	0	0	0	0

Still on Disk.
 Absolute heliographic longitude: 190

Region 1359																
24 Nov	N16W52		297	20	4	Cao	7	B				1				
25 Nov	N16W65		296	50	6	Dao	7	B	2			1	1			
26 Nov	N17W79		297	10	7	Cao	2	B								
									2	0	0	2	1	0	0	0

Crossed West Limb.
 Absolute heliographic longitude: 297

Region 1360																
25 Nov	N17E17		213	50	2	Cao	6	B								
26 Nov	N17E03		215	20	4	Cro	4	B								
27 Nov	N17W10		215	10	5	Cro	3	B								
									0	0	0	0	0	0	0	0

Still on Disk.
 Absolute heliographic longitude: 215

Region 1361																
25 Nov	N19E59		172	5		Axx	1	A								
26 Nov	N19E46		172	10	3	Cao	2	B								
27 Nov	N19E34		171	30	2	Dao	7	B				1				
									0	0	0	1	0	0	0	0

Still on Disk.
 Absolute heliographic longitude: 171

Region 1362																
27 Nov	N08E76		130	90	2	Cso	3	B				2				
									0	0	0	2	0	0	0	0

Still on Disk.
 Absolute heliographic longitude: 130

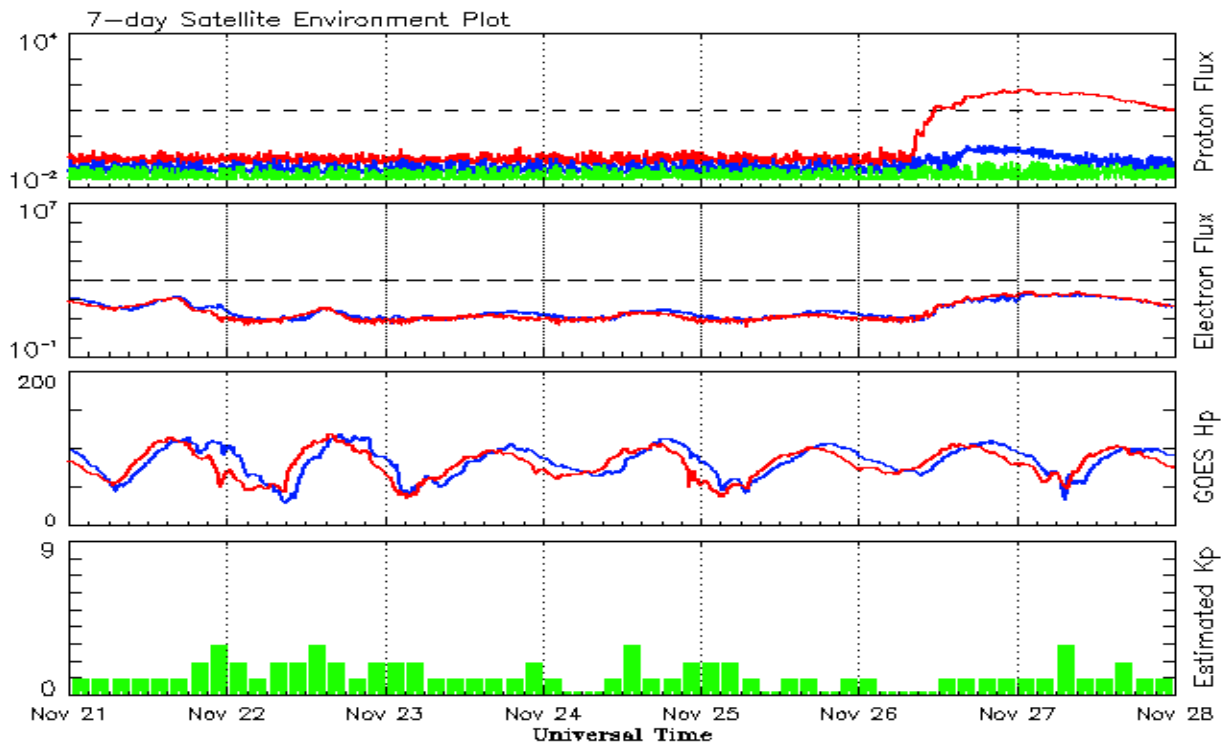


Recent Solar Indices (preliminary)
Observed monthly mean values

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	61.5	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	116.8	88.0	0.75			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 21 November 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.

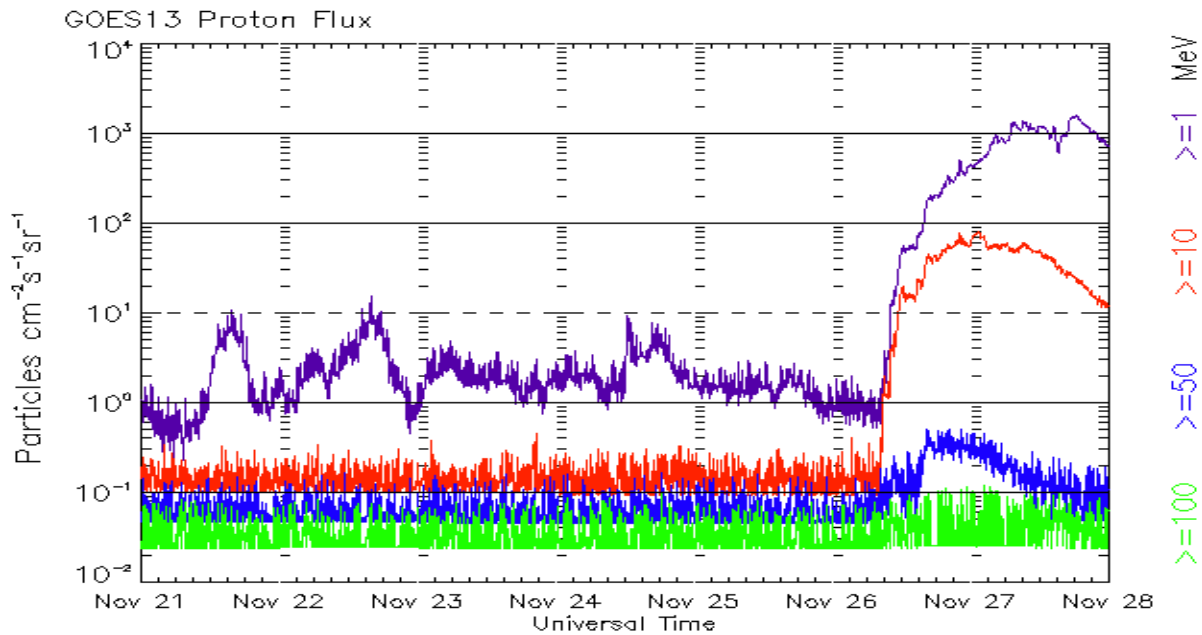
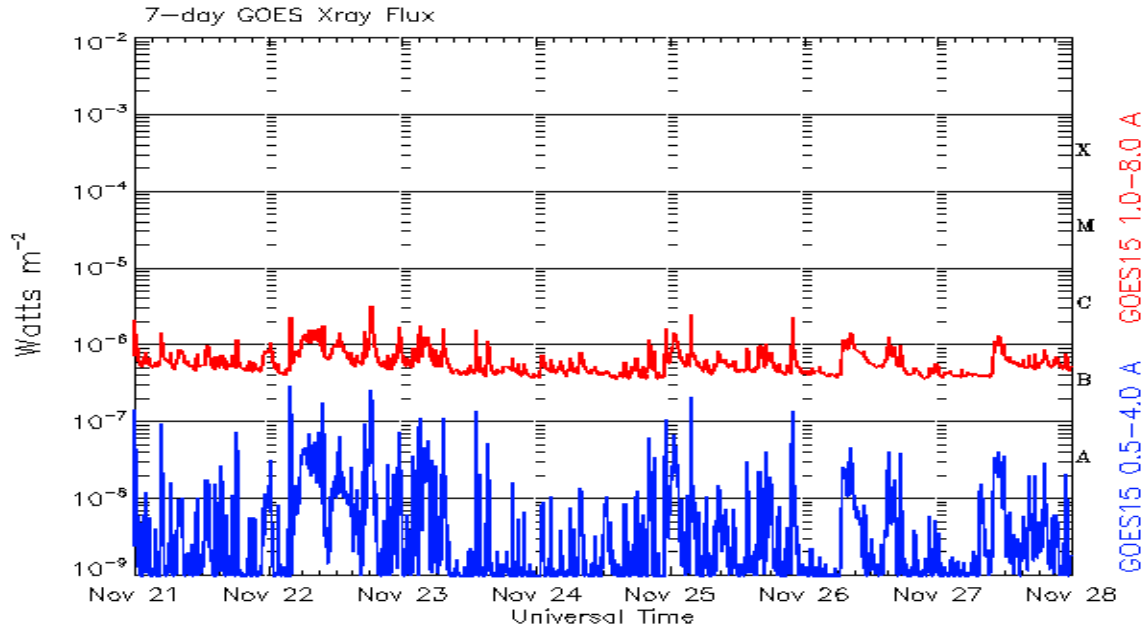
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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 21 November 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.



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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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