

Solar activity has been at very low to moderate levels during the period. Activity began at low levels on 06 June, when Region 1226 (S21, L=036, Eki/360 on 29 May) produced two C-class flares, a C1 flare at 06/0135Z and a C1 flare at 06/0950Z. A 12-degree long filament, centered near N25W34, erupted during the period. SDO/AIA 193 imagery revealed material movement along a large filament channel, first visible at 06/0441Z, which continued through about 06/0900Z. Activity increased to moderate levels on 07 June as Region 1226 produced a M2/2N. Associated with this event was a Type II radio sweep, a Type IV Radio Sweep, a Tenflare of 710 sfu, and a full halo asymmetric CME with an estimated plane of sky speed of 1155 km/s. Discrete radio emissions included 1415 MHz - 15400 MHz. Activity decreased to very low levels on 08 June. Activity increased to low levels during 09-10 June as Region 1226 produced two C-class flares, a C1/Sf at 09/0321Z and a C4/Sf at 09/0348Z. Region 1234 (S16, L=245, Bxo/010 on 09 June) also produced a C1 flare at 09/1028. From around the west limb, Region 1226 produced a final C2 flare at 10/1751Z. Activity decreased to very low levels for the remainder of the period.

The 10 MeV proton flux exceeded 10 pfu, beginning at 07 June/0820Z, reaching maximum at 07/1820Z, and ending at 08/1710Z. The maximum 10 MeV flux was 73 pfu. The 100 MeV proton flux exceeded 1 pfu, beginning at 07/0720Z, reaching maximum at 07/1025Z, and ending at 08/0210Z. The maximum 100 MeV flux was 4 pfu.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 06-08 June. Fluxes increased to moderate to high levels during 09-10 June. Flux levels decreased to moderate levels during 11-12 June.

The geomagnetic field ranged from quiet to minor storm levels during the period. Activity on 06 June began at unsettled to active levels, with an isolated minor storm at high latitudes, due to the continued effects of a coronal hole high speed stream (CH HSS) and the arrival the 02 June CME. On 07 June, solar wind speeds, as measured by the ACE spacecraft, increased from 380 km/s to around 480 km/s, following a density spike. These characteristic appear to be the arrival of another CH HSS. From 07- 09 June, activity stayed at quiet to active levels with an isolated minor storm period from 08/0000-0300Z as effects of the CH HSS continued. On 10 June, quiet to unsettled levels were observed with an isolated minor storm period at high latitudes as measurements by the ACE spacecraft indicate the likely arrival of the CME from 07 June. Quiet to active levels were observed from 11-12 June, as a solar sector boundary crossing was observed, preceding another CH HSS.

Space Weather Outlook

15 June - 11 July 2011

Solar activity is expected to be at very low levels with a slight chance for C-class flares during 15-20 June. Activity is expected to increase to low to moderate levels, with a slight chance for M-class flares during 22 June - 04 July, as old Region 1226 returns. Very low to low levels are



expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 15-18 June. Normal to moderate levels are expected from 19 - 22 June. An increase to high levels from 23 - 27 June is forecast. Normal to moderate levels are expected for the remainder of the period.

The geomagnetic field is expected to decrease to mostly quiet levels during 15-21 June. Activity is expected to increase to quiet to unsettled levels, with isolated active levels on 22 - 25 June, due to a CH HSS. Activity is expected to decrease to predominantly quiet levels from 26 June - 01 July. Activity is expected to increase to quiet to unsettled levels, with isolated active levels from 02 - 03 July, as another CH HSS becomes geoeffective. Activity is expected to decrease to predominantly quiet levels from 04 - 07 July. Activity is expected to increase to quiet to unsettled levels on 08-09 July as a CH HSS moves into a geoeffective position. Predominantly quiet levels are expected 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
06 June	100	67	220	B2.0	2	0	0	4	0	0	0	0
07 June	96	58	160	B1.6	0	1	0	1	0	1	0	0
08 June	90	45	90	B1.3	0	0	0	1	0	0	0	0
09 June	88	46	50	B1.2	3	0	0	4	0	0	0	0
10 June	87	35	40	B1.2	1	0	0	0	0	0	0	0
11 June	85	37	30	B1.2	0	0	0	0	0	0	0	0
12 June	85	16	10	B1.7	0	0	0	1	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
	06 June	1.8e+06	2.8e+05	5.5e+03		1.1e+07
07 June	1.1e+07	2.5e+06	1.5e+05		1.7e+07	
08 June	2.3e+07	1.5e+06	2.8e+04		1.0e+07	
09 June	7.0e+06	3.5e+05	4.0e+03		4.4e+07	
10 June	1.9e+06	1.5e+05	3.0e+03		7.5e+07	
11 June	8.6e+05	1.6e+05	3.2e+03		5.8e+06	
12 June	1.6e+06	2.7e+05	3.8e+03		1.2e+07	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	06 June	5	2-1-2-1-2-1-1-1	14	2-3-5-4-1-1-1-1	7
07 June	8	1-0-1-1-1-2-3-4	7	2-1-0-1-1-2-3-3	9	1-0-1-1-1-2-4-3
08 June	9	4-3-2-1-2-1-1-2	14	3-4-2-2-4-3-1-2	14	5-4-2-2-3-2-1-2
09 June	7	1-3-2-2-1-1-3-2	19	3-4-3-5-4-2-1-2	11	3-3-2-2-2-2-3-3
10 June	7	2-0-1-2-2-1-3-3	12	2-1-1-5-3-1-2-2	8	2-0-1-3-2-1-2-3
11 June	10	2-3-2-3-3-1-2-2	14	2-4-4-2-4-1-2-1	11	3-4-2-2-3-2-2-2
12 June	5	0-1-1-2-2-2-2-1	14	1-1-3-5-4-2-2-1	9	1-1-1-2-3-3-3-2



Alerts and Warnings Issued

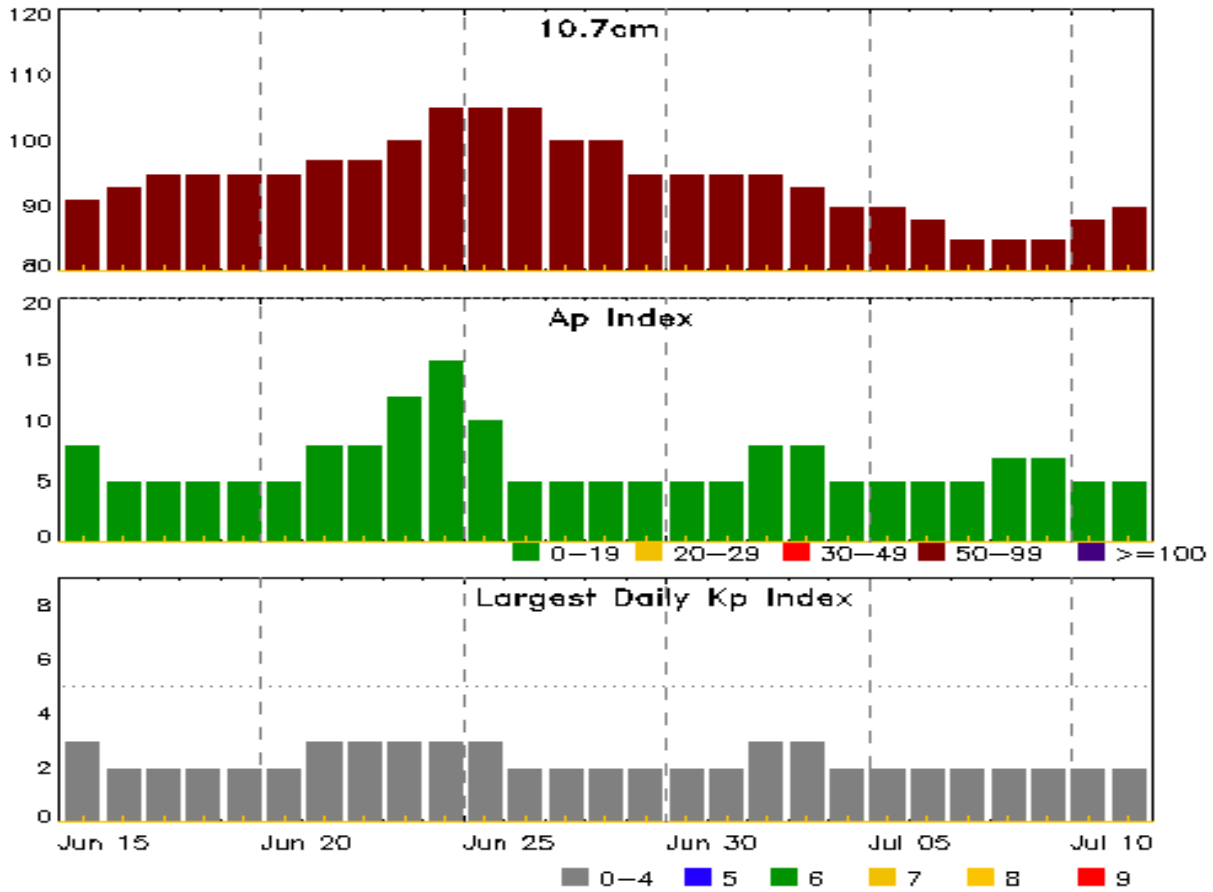
Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
07 Jun 0651	ALERT: Type II Radio Emission	07/0625
07 Jun 0652	ALERT: Type IV Radio Emission	07/0626
07 Jun 0656	SUMMARY: 10cm Radio Burst	07/0623 - 0645
07 Jun 0743	WARNING: Proton 100MeV Integral Flux > 1pfu	07/0742 - 1500
07 Jun 0745	WARNING: Proton 10MeV Integral Flux > 10pfu	07/0744 - 1500
07 Jun 0746	ALERT: Proton Event 100MeV Integral Flux > 1pfu	07/0735
07 Jun 0813	ALERT: Proton Event 10MeV Integral Flux >= 10pfu	07/0805
07 Jun 1001	WARNING: Geomagnetic Sudden Impulse expected	07/1000 - 1200
07 Jun 1016	SUMMARY: Geomagnetic Sudden Impulse	07/1014
07 Jun 1458	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	07/0744 - 09/0000
07 Jun 1459	EXTENDED WARNING: Proton 100MeV Integral Flux > 1pfu	07/0742 - 08/0300
07 Jun 2159	WATCH: Geomagnetic A >= 20	09/
07 Jun 2309	WARNING: Geomagnetic K = 4	07/2345 - 08/0545
07 Jun 2327	ALERT: Geomagnetic K = 4	07/2326
08 Jun 0531	SUMMARY: Proton Event 100MeV Integral Flux > 1pfu	07/0720 - 08/0210
08 Jun 0532	EXTENDED WARNING: Geomagnetic K = 4	07/2345 - 08/1215
08 Jun 1606	CANCELLATION: Geomagnetic A >= 20	
08 Jun 2120	CANCELLATION: Proton 10MeV Integral Flux > 10pfu	
08 Jun 2122	SUMMARY: Proton Event 10MeV Integral Flux >= 10pfu	07/0820 - 08/1710
09 Jun 1426	ALERT: Electron 2MeV Integral Flux >= 1000pfu	09/1410
09 Jun 1958	WARNING: Geomagnetic K = 4	09/2015 - 10/0600
09 Jun 2304	ALERT: Geomagnetic K = 4	09/2302
10 Jun 0835	WARNING: Geomagnetic Sudden Impulse expected	10/0845 - 0915
10 Jun 0912	SUMMARY: Geomagnetic Sudden Impulse	10/0855
10 Jun 1114	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	09/1410



11 Jun 0509	WARNING: Geomagnetic K = 4	11/0510 - 1500
11 Jun 0512	ALERT: Geomagnetic K = 4	11/0511
12 Jun 1307	WARNING: Geomagnetic K = 4	12/1310 - 13/0000
12 Jun 1350	ALERT: Geomagnetic K = 4	12/1348



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
15 Jun	91	8	3	29 Jun	95	5	2
16	93	5	2	30	95	5	2
17	95	5	2	01 Jul	95	5	2
18	95	5	2	02	95	8	3
19	95	5	2	03	93	8	3
20	95	5	2	04	90	5	2
21	97	8	3	05	90	5	2
22	97	8	3	06	88	5	2
23	100	12	3	07	85	5	2
24	105	15	3	08	85	7	2
25	105	10	3	09	85	7	2
26	105	5	2	10	88	5	2
27	100	5	2	11	90	5	2
28	100	5	2				



Energetic Events

Date	Time			X-ray	Optical Information			Peak		Sweep Freq		
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV
07 Jun	0616	0641	0659	M2.5	0.044	2N	S21W54	1226	6400	710	2	2

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
06 Jun	0128	0135	0141	C1.2			1226
06 Jun	0524	0600	0625	B6.7			1228
06 Jun	0851	0858	0903	B3.6	SF	S21W44	1226
06 Jun	0942	0950	0954	C1.0			1226
06 Jun	1315	1320	1328	B6.7	SF	N19W31	1228
06 Jun	1341	1346	1348		SF	N19W31	1228
06 Jun	1428	1436	1439	B8.8			1228
06 Jun	1502	1506	1510	B6.1	SF	N20W30	1228
06 Jun	1923	1926	1930	B3.1			1226
06 Jun	2112	2119	2133	B3.7			1226
07 Jun	0616	0641	0659	M2.5	2N	S21W54	1226
07 Jun	1055	1102	1105		SF	N17W39	1228
08 Jun	1348	1353	1358	B3.0			
08 Jun	1637	1645	1651	B6.9	SF	S24W68	1226
09 Jun	0307	0321	0335	C1.8	SF	S24W75	1226
09 Jun	0340	0348	0358	C4.1	SF	S26W78	1226
09 Jun	0756	0758	0803		SF	S17E70	1234
09 Jun	0846	0908	0915		SF	S16E67	1234
09 Jun	1020	1028	1031	C1.0			1234
10 Jun	0324	0328	0332	B2.0			1234
10 Jun	1539	1544	1547	B2.3			1228
10 Jun	1739	1751	1810	C2.9			1226
10 Jun	2219	2228	2235	B4.1			
11 Jun	0715	0720	0723	B2.8			1234
11 Jun	0839	0849	0858	B2.9			1234
11 Jun	1913	1923	1929	B4.0			
11 Jun	2249	2253	2300	B3.4			1234
12 Jun	0040	0115	0149	B4.6	SF	N12W57	1232
12 Jun	1703	1714	1722	B8.6			1232



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 1225

27 May	N18E55	60	20	1	Hsx	1	A											
28 May	N17E43	60	60	2	Hsx	1	A											
29 May	N17E30	60	40	2	Hsx	1	A											
30 May	N17E18	59	40	2	Hsx	1	A											
31 May	N16E04	60	30	2	Hsx	1	A											
01 Jun	N16W09	59	20	1	Hsx	1	A											
02 Jun	N16W21	58	10	1	Axx	1	A											
03 Jun	N17W35	58	10	1	Axx	1	A											
04 Jun	N17W49	59	10	1	Hsx	1	A											
05 Jun	N17W63	61	plage															
06 Jun	N17W77	61	plage															
								0	0	0	0	0	0	0	0	0		

Died on Disk.

Absolute heliographic longitude: 60

Region 1226

27 May	S18E74	42	20	1	Hsx	1	A	5			1							
28 May	S19E65	38	270	11	Eai	9	BD	13	1		10							
29 May	S21E54	36	360	11	Eki	12	BD	4	1		6	1						
30 May	S21E42	35	360	10	Dki	11	BG	2			4							
31 May	S22E27	37	330	9	Dkc	18	B	1										
01 Jun	S22E14	36	150	9	Csi	15	B	3			2	1						
02 Jun	S22W00	37	210	6	Dsi	13	B	2			2	1						
03 Jun	S22W14	37	340	7	Dkc	21	B	2			2							
04 Jun	S21W26	36	140	8	Dsi	17	B				1							
05 Jun	S21W38	35	100	9	Dao	10	B											
06 Jun	S22W52	36	80	10	Dao	8	B	2			1							
07 Jun	S21W64	35	20	8	Bxo	3	B		1					1				
08 Jun	S20W81	38	10	1	Axx	1	A				1							
09 Jun	S20W95	40	plage					2			2							
								36	3	0	32	3	1	0	0			

Crossed West Limb.

Absolute heliographic longitude: 37



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 1227																	
29 May	S19E69		21	80	3	Cso	3	B	1				3				
30 May	S18E54		23	170	8	Dsi	6	BG	1				1				
31 May	S18E40		24	190	8	Dsi	7	BG	1				1				
01 Jun	S19E26		23	100	8	Dso	7	BG					1				
02 Jun	S19E13		23	80	9	Dso	4	B	2				1		1		
03 Jun	S19W00		22	120	10	Cso	4	B									
04 Jun	S19W14		24	60	10	Cso	7	B									
05 Jun	S22W26		22	30	10	Dso	5	B									
06 Jun	S21W35		19	30	2	Hsx	1	A									
07 Jun	S21W49		20	30	2	Cso	3	B									
08 Jun	S21W62		19	20	1	Hsx	1	A									
09 Jun	S20W76		20	10		Axx	1	A									
10 Jun	S20W88		19	10	1	Axx	1	A									
									5	0	0	7	0	1	0	0	

Crossed West Limb.

Absolute heliographic longitude: 22

Region 1228																	
29 May	N17E67		23	120	4	Hsx	1	A					1				
30 May	N17E55		22	110	2	Hsx	1	A									
31 May	N17E50		14	100	8	Cso	8	B									
01 Jun	N17E31		18	90	8	Cso	6	B	1								
02 Jun	N17E20		17	130	8	Cso	8	B									
03 Jun	N18E05		18	150	8	Dao	10	B									
04 Jun	N17W08		18	100	8	Dao	6	B									
05 Jun	N18W21		18	60	8	Dso	5	B									
06 Jun	N18W35		19	70	8	Cso	4	B					3				
07 Jun	N17W47		18	60	8	Dao	8	B					1				
08 Jun	N17W64		21	10	3	Axx	2	A									
09 Jun	N17W79		23	0	2	Axx	1	A									
									1	0	0	5	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 18



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

Region 1229

30 May	N16E38	39	30	4	Cao	4	B						1				
31 May	N16E24	40	40	6	Cso	6	B										
01 Jun	N16E10	41	30	5	Bxo	5	B										
02 Jun	N15W04	41	30	6	Bxo	4	B										
03 Jun	N17W20	43	10	1	Axx	1	A										
04 Jun	N18W35	45	10	1	Axx	1	A										
05 Jun	N18W49	47	plage														
06 Jun	N18W63	47	plage														
07 Jun	N18W77	48	plage														
										0	0	0	1	0	0	0	0

Died on Disk.

Absolute heliographic longitude: 41

Region 1230

31 May	N19E58	6	30	2	Bxo	3	B										
01 Jun	N19E44	6	10	2	Bxo	2	B										
02 Jun	N18E31	6	20	4	Bxo	3	B										
03 Jun	N19E15	8	10	2	Axx	2	A										
04 Jun	N20E06	4	0		Axx	1	A										
05 Jun	N20W08	6	plage														
06 Jun	N20W22	6	plage														
07 Jun	N20W36	7	plage														
08 Jun	N20W50	8	plage														
09 Jun	N20W64	9	plage														
10 Jun	N20W78	9	plage														
										0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 4



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

Region 1231

01 Jun	N09E68	341	40	7	Hsx	1	A										
02 Jun	N08E50	343	90	9	Cro	4	B										
03 Jun	N10E33	349	10	3	Bxo	2	B										
04 Jun	N09E20	350	0		Axx	1	A										
05 Jun	N09E06	352	plage														
06 Jun	N09W08	352	plage														
07 Jun	N09W22	353	plage														
08 Jun	N09W36	354	plage														
09 Jun	N09W50	355	plage														
10 Jun	N09W64	355	plage														
11 Jun	N09W78	356	plage														
									0	0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 352

Region 1232

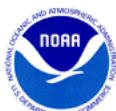
02 Jun	N10E61	336	80	2	Hsx	1	A	1									
03 Jun	N10E46	336	70	2	Hsx	1	A										
04 Jun	N09E33	337	70	2	Hsx	2	A										
05 Jun	N09E20	337	40	2	Hsx	3	A										
06 Jun	N08E07	337	40	4	Cso	3	B										
07 Jun	N08W06	338	50	3	Cso	4	B										
08 Jun	N09W19	336	50	2	Hsx	1	A										
09 Jun	N09W33	337	30	1	Hax	2	A										
10 Jun	N09W46	337	20	1	Hrx	1	A										
11 Jun	N08W60	337	10	1	Axx	1	A										
12 Jun	N08W73	338	plage									1					
									1	0	0	1	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 338

Region 1233

05 Jun	S18W29	26	0	1	Axx	1	A										
06 Jun	S18W43	27	0	1	Axx	1	A										
07 Jun	S21W49	19	plage														
08 Jun	S21W61	18	plage														
09 Jun	S18W75	19	plage														
									0	0	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 26



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

Region 1234

09 Jun	S16E59	245	10	5	Bxo	2	B	1				2					
10 Jun	S16E43	247	10	4	Bxo	3	B										
11 Jun	S16E32	245	10	6	Bxo	5	B										
12 Jun	S15E18	246	10	8	Bxo	6	B										
								1	0	0	2	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 246

Region 1235

11 Jun	N14E27	250	10	1	Axx	1	A										
12 Jun	N14E13	251	plage														
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 251

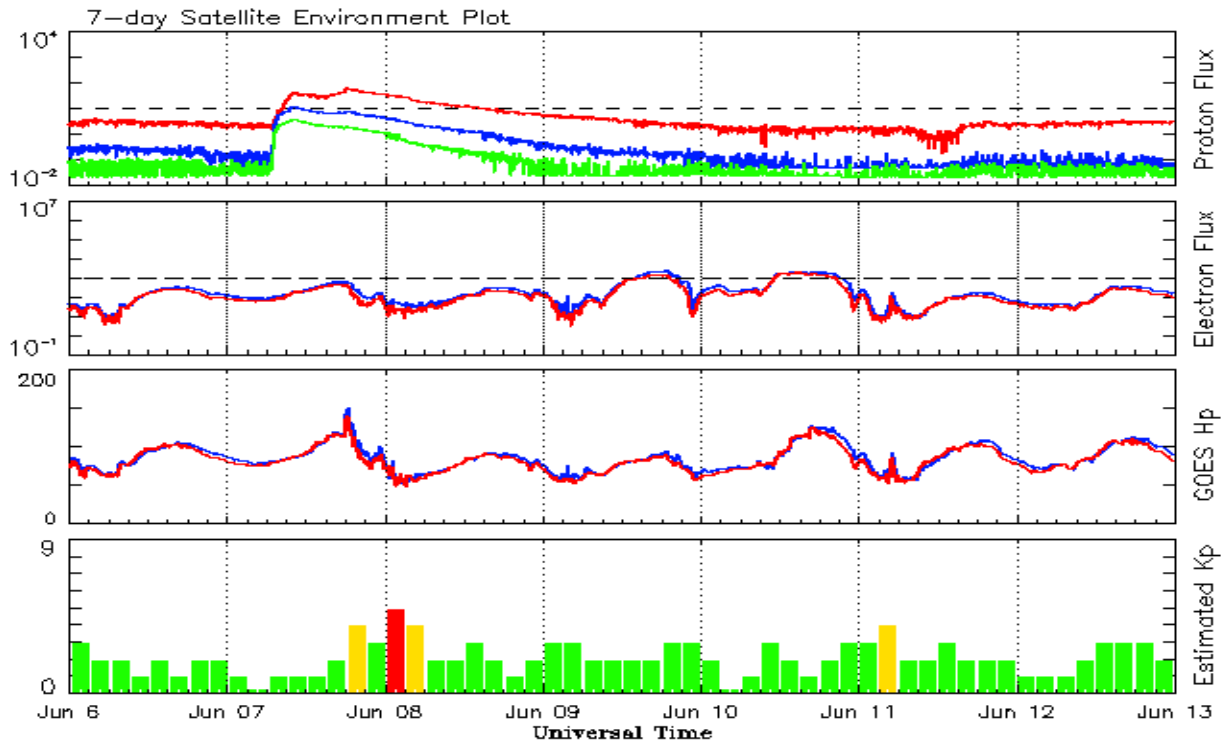


Recent Solar Indices (preliminary)
Observed monthly mean values

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									
June	6.6	2.9	0.39	4.4	2.7	68.6	70.2	4	4.0
July	5.0	3.2	0.70	5.8	3.6	68.2	71.0	4	3.9
August	0.3	0.0	0.00	7.7	4.8	67.4	72.1	5	3.8
September	6.6	4.3	0.64	9.9	6.2	70.5	73.3	4	3.8
October	7.0	4.8	0.66	11.3	7.1	72.3	74.1	3	4.1
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			84.3		4	
2011									
January	32.1	19.0	0.59			83.7		6	
February	53.2	29.4	0.55			94.5		6	
March	81.0	56.2	0.69			115.3		7	
April	81.7	54.4	0.67			112.6		9	
May	61.4	41.6	0.68			95.9		9	

Note: Values are final except for the most recent 6 months which are considered preliminary. Cycle 23 started in May 1996 with an RI=8.0. Cycle 23 maximum was April 2000 with an RI=120.8. Solar minimum for Cycle 23 was December 2008.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 06 June 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.

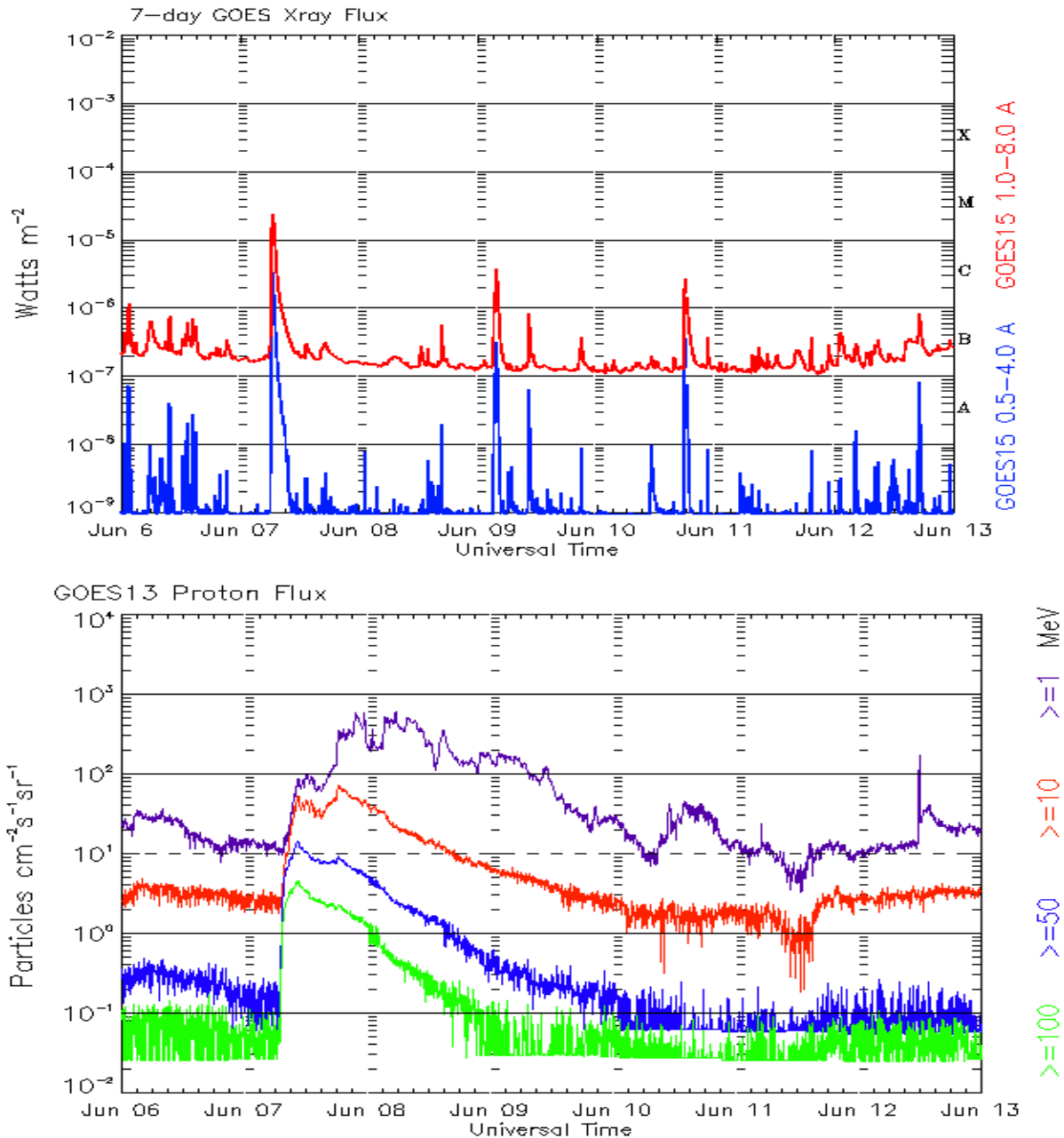
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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 06 June 2011*

The x-ray plots contains five-minute averages x-ray flux (Watt/m²) 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/cm² -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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