

Solar activity was low throughout the period. Region 2305 (S08, L=009 class/area Eki/410 on 27 Mar) produced the largest event of the period, a C8/1n at 25/0446 UTC as well as several low-level C-class flares during the week. Regions 2303 (N19, L=067 class/area Hsx/120 on 21 Mar), 2309 (N15, L=072 class/area Dao/080 on 28 Mar), 2310 (N05, L=358 class/area Cao/020 on 23 Mar) and 2312 (N08, L=348 class/area Cao/030 on 25 Mar) also produced C-class events during the period. A large eruptive prominence on the northeastern limb was observed in SDO/AIA 304 imagery lifting off from approximately 27/1039 UTC to 27/1539 UTC but was determined not to be geoeffective. An approximately five degree long filament, centered near S23E50, was observed in Gong H-alpha imagery lifting off the solar disk from 28/1543 UTC to 28/1610 UTC but the CME was directed well off the Sun-Earth line.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels from 23 Mar to 28 Mar. Normal to moderate levels were observed on 29 Mar.

Geomagnetic field activity was at unsettled to minor storm levels on 23 Mar due to elevated solar wind velocities and a slightly extended period of negative Bz. Quiet to active levels were observed on 24-25 Mar due to influence from a positive polarity coronal hole high speed stream (CH HSS). Quiet to unsettled conditions were dominant from 26-28 Mar. Quiet to active levels returned on 29 Mar due to a prolonged period of negative Bz.

Space Weather Outlook
30 March - 25 April 2015

Solar activity is expected to be at low levels from 30-31 Mar. Moderate levels are likely from 01-14 Apr with the return of Regions 2302 (N12, L=189) and 2297 (S17, L=196). Predominately low levels are expected from 15 April through the end 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 normal to moderate levels with the exception of 31 Mar - 01 Apr, 03-06 Apr, and 14-18 Apr due to effects from recurrent coronal hole high speed streams (CH HSS).

Geomagnetic field activity is expected to reach minor storm levels on 30-31 Mar due to effects from a southern polar CH HSS. Unsettled to active conditions are expected on 01 Apr as HSS effects subside. Mostly unsettled conditions are expected from 02-04 Apr with active conditions likely on 03 Apr. Quiet to unsettled conditions are expected from 05-11 Apr. Unsettled to active conditions are expected to return from 12-20 Apr due to effects from a negative CH HSS followed by a positive CH HSS with minor storms likely on 13-16 Apr and 18-19 Apr. Mostly quiet levels are expected from 21-24 Apr. Unsettled to active conditions are expected with minor



storms possible on 25 Apr due to CH HSS effects.



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
23 March	128	119	540	B4.7	3	0	0	2	0	0	0	0
24 March	133	127	580	B4.8	2	0	0	8	0	0	0	0
25 March	138	115	650	B5.4	8	0	0	8	1	0	0	0
26 March	136	103	590	B4.5	4	0	0	5	0	0	0	0
27 March	138	109	600	B5.0	5	0	0	8	0	0	0	0
28 March	146	82	580	B7.9	10	0	0	12	0	0	0	0
29 March	145	73	450	B9.1	8	0	0	16	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
	23 March	7.8e+05	9.7e+03	2.4e+03		2.1e+08
24 March	2.1e+06	2.0e+04	2.4e+03		3.0e+08	
25 March	2.4e+06	2.0e+04	2.4e+03		1.9e+08	
26 March	8.3e+05	1.2e+04	2.5e+03		1.3e+08	
27 March	6.2e+05	1.3e+04	2.2e+03		1.0e+08	
28 March	3.6e+05	1.3e+04	2.3e+03		2.2e+07	
29 March	2.5e+05	1.1e+04	2.4e+03		6.0e+06	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	23 March	16	4-4-2-3-3-3-2-3	31	3-4-3-5-5-6-2-2	21
24 March	9	2-1-2-2-3-3-2-2	15	2-1-0-4-4-5-2-1	12	2-2-2-2-3-4-2-2
25 March	10	2-2-2-3-3-2-3-2	20	2-2-3-6-3-3-3-1	13	2-2-3-4-3-2-3-2
26 March	7	1-1-2-1-2-2-2-3	5	2-1-2-0-2-2-1-2	8	2-1-2-1-2-2-2-3
27 March	7	2-2-1-2-3-2-1-2	14	2-3-2-3-4-4-2-1	9	3-3-2-2-3-1-1-2
28 March	9	0-1-3-2-2-3-2-3	6	0-2-3-3-1-1-1-1	9	0-2-3-3-2-2-2-3
29 March	11	3-3-3-2-3-1-2-2	14	4-3-3-3-4-2-1-1	14	4-3-3-3-3-1-2-2

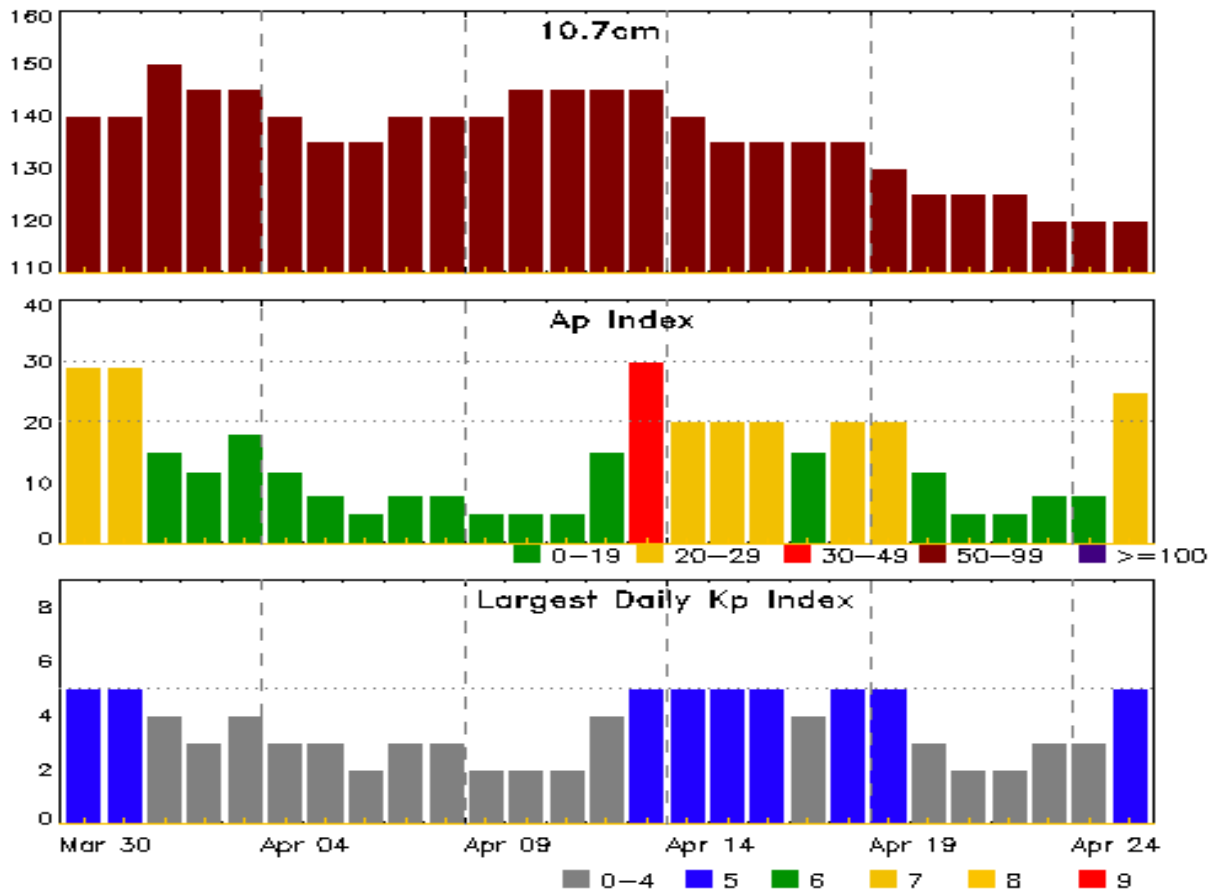


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
23 Mar 0355	EXTENDED WARNING: Geomagnetic K = 5	22/0625 - 23/1000
23 Mar 0501	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	18/1515
23 Mar 0943	EXTENDED WARNING: Geomagnetic K = 4	20/1700 - 24/0200
23 Mar 0954	EXTENDED WARNING: Geomagnetic K = 5	22/0625 - 23/2000
23 Mar 1647	WATCH: Geomagnetic Storm Category G1 predicted	
24 Mar 0155	EXTENDED WARNING: Geomagnetic K = 4	20/1700 - 24/1300
24 Mar 0943	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	18/1515
24 Mar 1623	WARNING: Geomagnetic K = 4	24/1623 - 2100
24 Mar 1657	ALERT: Geomagnetic K = 4	24/1651
25 Mar 1041	WARNING: Geomagnetic K = 4	25/1042 - 1600
25 Mar 1204	ALERT: Geomagnetic K = 4	25/1159
25 Mar 1502	EXTENDED WARNING: Geomagnetic K = 4	25/1042 - 2200
25 Mar 1706	WATCH: Geomagnetic Storm Category G1 predicted	
26 Mar 1000	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	18/1515
26 Mar 1521	WATCH: Geomagnetic Storm Category G1 predicted	
27 Mar 1227	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	18/1515
28 Mar 0647	WARNING: Geomagnetic K = 4	28/0650 - 2000
28 Mar 0704	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	18/1515
28 Mar 1957	EXTENDED WARNING: Geomagnetic K = 4	28/0650 - 29/2000
29 Mar 0242	ALERT: Geomagnetic K = 4	29/0241
29 Mar 1304	WATCH: Geomagnetic Storm Category G1 predicted	



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 Mar	140	29	5	13 Apr	145	30	5
31	140	29	5	14	140	20	5
01 Apr	150	15	4	15	135	20	5
02	145	12	3	16	135	20	5
03	145	18	4	17	135	15	4
04	140	12	3	18	135	20	5
05	135	8	3	19	130	20	5
06	135	5	2	20	125	12	3
07	140	8	3	21	125	5	2
08	140	8	3	22	125	5	2
09	140	5	2	23	120	8	3
10	145	5	2	24	120	8	3
11	145	5	2	25	120	25	5
12	145	15	4				



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				
23 Mar	0720	0724	0728	B8.8			
23 Mar	0849	0911	0920	C3.6			
23 Mar	1712	1717	1722	C1.1			
23 Mar	1743	1747	1756	B8.6	SF	S09E50	2305
23 Mar	2002	2006	2011	C1.4			
23 Mar	2302	2313	2315	B9.1			
23 Mar	2349	2349	2353		SF	S07E52	2305
24 Mar	0155	0158	0206	B9.4	SF	N08E67	2312
24 Mar	0214	0215	0218		SF	N08E67	2312
24 Mar	0331	0334	0337		SF	N08E65	2312
24 Mar	0430	0434	0441		SF	N08E65	2312
24 Mar	0431	0432	0436		SF	S09E42	2305
24 Mar	0548	0554	0601	C1.5			
24 Mar	0705	0705	0708		SF	S25E76	
24 Mar	0913	0913	0925		SF	S25E74	
24 Mar	1621	1624	1626	C1.0			
24 Mar	2343	2345	2347		SF	N17E63	2313
25 Mar	0134	0144	0153	C2.6	SF	S08E24	2305
25 Mar	0202	0210	0217		SF	S08E24	2305
25 Mar	0320	0324	0328	C1.3			2305
25 Mar	B0339	0339	0405		SF	S10E29	2305
25 Mar	0436	0446	0511	C8.7	1N	S10E31	2305
25 Mar	0709	0710	0717		SF	N04E35	2310
25 Mar	0720	0727	0730	C1.8	SF	S11E27	2305
25 Mar	0823	0829	0832	C3.2			2305
25 Mar	1338	1404	1423	C1.0			2305
25 Mar	1350	1350	1358		SF	S09E24	2305
25 Mar	1418	1421	1442		SF	S09E24	2305
25 Mar	1450	1453	1458		SF	N06E33	2310
25 Mar	1630	1645	1701	C3.3			2305
25 Mar	1813	1818	1820	C1.1			2305



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
26 Mar	0006	0021	0038	C2.8			2305
26 Mar	0437	0445	0456	B9.0	SF	S07E21	2305
26 Mar	0512	0512	0525		SF	S07E21	2305
26 Mar	0545	0552	0555		SF	S08E19	2305
26 Mar	0808	0811	0813	B7.0			2305
26 Mar	0926	0935	0943	B7.0			
26 Mar	1052	1100	1108	B6.5			2312
26 Mar	1130	1138	1146	B6.0			2312
26 Mar	1157	1205	1213	B7.7			2312
26 Mar	1419	1432	1434	B8.5			2305
26 Mar	1518	1521	1523	C1.1			2305
26 Mar	1605	1613	1622	B9.3			2303
26 Mar	1905	1921	1934	C1.4	SF	S08E10	2305
26 Mar	2337	2351	0004	C1.2			2305
26 Mar	2338	2339	2345		SF	N17W54	2303
27 Mar	B0000	0001	0057		SF	S08E19	2305
27 Mar	0630	0636	0641	C1.0			2303
27 Mar	0919	0920	0923		SF	N12W72	2309
27 Mar	1237	1243	1246	C1.6			2309
27 Mar	1324	1335	1342		SF	N15W66	2309
27 Mar	1419	1420	1424		SF	N15W66	2309
27 Mar	1430	1435	1437	C1.1	SF	N15W82	2309
27 Mar	1506	1509	1512	C1.8	SF	N15W81	2309
27 Mar	1632	1636	1638	C1.3	SF	N16W82	2309
27 Mar	1930	1932	1941		SF	S03W23	
28 Mar	0448	0526	0548	C2.2			2305
28 Mar	0645	0655	0704	C1.5			2310
28 Mar	0757	0812	0829	C2.0			2305
28 Mar	1027	1043	1049	C1.0			2312
28 Mar	1127	1134	1144	C1.1	SF	N15W67	2303
28 Mar	B1225	U1229	A1229	C2.0	SF	N04W06	2310
28 Mar	1318	1426	1457	C1.2	SF	N17W68	2303
28 Mar	1506	1511	1520	C1.3	SF	N10E06	2312
28 Mar	1510	1728	1754		SF	N18W71	2303
28 Mar	B1601	U1605	A1622	C2.4	SF	N15W69	2303
28 Mar	1644	1646	1648		SF	N10E06	2312
28 Mar	1758	1808	1810		SF	N18W71	2303
28 Mar	1818	1831	1842		SF	N18W71	2303



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
28 Mar	1844	1850	1851		SF	N18W71		2303
28 Mar	2013	2043	2046	C1.8	SF	N18W71		2303
28 Mar	2215	2217	2220		SF	N18W72		2303
29 Mar	0042	0048	0051		SF	N18W73		2303
29 Mar	B0531	U0533	0535		SF	N15W80		2303
29 Mar	0603	0628	0634		SF	N15W77		2303
29 Mar	0648	0653	0704	C3.0	SF	N15W77		2303
29 Mar	0724	0728	0732		SF	N15W77		2303
29 Mar	0858	0858	0900		SF	N15W80		2303
29 Mar	0907	0917	0929		SF	N15W80		2303
29 Mar	0930	0934	0938		SF	N15W85		2303
29 Mar	1005	1005	1013		SF	N15W84		2303
29 Mar	1037	1042	1044	C2.3				2303
29 Mar	1048	1049	1051		SF	N14W79		2303
29 Mar	1128	1132	1136	C1.5				2315
29 Mar	1216	1219	1227		SF	N14W82		2303
29 Mar	1318	1323	1331	C2.7	SF	N15W84		2303
29 Mar	1350	1350	1428	C1.8	SF	N18W85		2303
29 Mar	1520	1524	1530	C3.2	SF	N15W84		2303
29 Mar	1542	1543	1545		SF	N15W86		2303
29 Mar	1552	1556	1558		SF	N18W85		2303
29 Mar	1739	1743	1746	C1.4				
29 Mar	1845	1942	2021	C1.6				2305



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 2299

12 Mar	S07E60	137	10	2	Cro	3	B	2									
13 Mar	S07E47	136	10	5	Bxo	4	B										
14 Mar	S05E32	139	10	1	Axx	1	A										
15 Mar	S05E19	138	10	1	Axx	1	A										
16 Mar	S04E05	139	0	1	Axx	1	A										
17 Mar	S04W10	141	plage														
18 Mar	S04W25	143	plage														
19 Mar	S04W38	143	10	3	Bxo	2	B										
20 Mar	S04W53	144	plage														
21 Mar	S04W68	146	plage														
22 Mar	S04W82	147	plage														
								2	0	0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 139

Region 2303

17 Mar	N19E65	66	400	2	Hkx	1	A										
18 Mar	N19E51	67	100	2	Hax	1	A										
19 Mar	N18E39	65	70	3	Hax	2	A										
20 Mar	N19E25	66	110	2	Hsx	2	A										
21 Mar	N19E11	67	120	2	Hsx	1	A										
22 Mar	N20W02	67	100	3	Cso	4	B										
23 Mar	N20W15	66	90	2	Cso	3	B										
24 Mar	N19W30	69	100	5	Cao	7	B										
25 Mar	N20W42	67	80	8	Cao	4	B										
26 Mar	N20W54	66	70	2	Hsx	2	A					1					
27 Mar	N18W66	65	50	5	Cao	1	B	1									
28 Mar	N18W78	63	50	6	Dao	3	B	4					9				
29 Mar	N18W92	65	50	6	Dao	4	B	5					16				
								10	0	0	26	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 67



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 2304																					
19 Mar	N17W31	135	10	2	Cro	3	B														
20 Mar	N16W45	136	10	4	Bxo	5	B														
21 Mar	N16W59	137	plage																		
22 Mar	N16W73	138	plage																		
23 Mar	N16W87	139	plage																		

Crossed West Limb.
Absolute heliographic longitude: 135

Region 2305																					
21 Mar	S08E67	11	120	4	Dao	5	B														
22 Mar	S08E58	7	220	11	Eac	10	BG														
23 Mar	S08E44	8	310	11	Ekc	15	BG						2								
24 Mar	S08E32	7	340	13	Ekc	15	BGD						1								
25 Mar	S08E19	7	400	15	Ekc	26	BGD	8					6	1							
26 Mar	S08E05	7	390	14	Cki	16	BG	4					4								
27 Mar	S09W10	9	410	13	Eki	17	BG						1								
28 Mar	S08W19	4	410	14	Eki	22	BG	2													
29 Mar	S10W36	9	340	10	Dho	7	B	1													
								15	0	0	14	1	0	0	0	0					

Still on Disk.
Absolute heliographic longitude: 7

Region 2306																					
21 Mar	S17W52	130	20	3	Cro	4	B														
22 Mar	S18W66	131	10	2	Bxo	2	B														
23 Mar	S18W80	132	plage																		

Crossed West Limb.
Absolute heliographic longitude: 130



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 2307

22 Mar	S18E24	41	20	4	Cro	5	B										
23 Mar	S18E09	43	20	6	Cro	3	B										
24 Mar	S19W04	43	10	3	Bxo	3	B										
25 Mar	S18W17	43	20	4	Cro	6	B										
26 Mar	S18W29	41	30	4	Cro	5	B										
27 Mar	S19W39	38	10	1	Bxo	3	B										
28 Mar	S19W53	38	plage														
29 Mar	S19W67	40	plage														
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 43

Region 2308

22 Mar	N17W46	111	20	4	Cao	4	B										
23 Mar	N17W59	111	40	7	Cao	5	B										
24 Mar	N16W75	114	50	4	Hax	1	A										
25 Mar	N15W88	114	50	2	Hsx	1	A										
								0	0	0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 111

Region 2309

22 Mar	N11W11	76	10	4	Bxo	3	B										
23 Mar	N15W24	76	20	3	Cro	3	B										
24 Mar	N14W36	75	0	1	Axx	1	A										
25 Mar	N14W50	76	plage														
26 Mar	N14W64	76	plage														
27 Mar	N14W79	78	60	6	Dao	2	B	4				6					
28 Mar	N15W87	72	80	5	Dao	4	B										
								4	0	0	6	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 76



Region Summary - continued

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 2310																		
23 Mar	N05E54	358	20	1	Cao	5	B											
24 Mar	N06E41	358	20	3	Cao	4	B											
25 Mar	N06E27	359	20	2	Cao	2	B					2						
26 Mar	N05E14	358	10	1	Axx	2	A											
27 Mar	N04E01	358	10	1	Bxo	2	B											
28 Mar	N04W11	356	plage					2				1						
29 Mar	N04W24	357	plage															
								2	0	0		3	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 358

Region 2311																		
23 Mar	N11W47	98	30	2	Hrx	3	A											
24 Mar	N11W60	99	0	1	Axx	2	A											
25 Mar	N11W74	100	plage															
26 Mar	N11W88	100	plage															
								0	0	0		0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 98

Region 2312																		
23 Mar	N08E68	343	10	2	Axx	2	A											
24 Mar	N08E54	345	30	3	Cao	3	B					4						
25 Mar	N08E38	348	30	2	Cao	5	B											
26 Mar	N08E26	346	20	3	Cro	4	B											
27 Mar	N08E12	347	10		Axx	1	A											
28 Mar	N08W02	348	plage					2				2						
29 Mar	N08W15	348	plage															
								2	0	0		6	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 348



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 2313																					
24 Mar	N18E63	336	30	2	Hsx	1	A					1									
25 Mar	N17E50	336	50	2	Hsx	1	A														
26 Mar	N17E38	334	50	2	Hax	1	A														
27 Mar	N17E26	333	30	1	Hsx	1	A														
28 Mar	N17E11	334	30	1	Hax	1	A														
29 Mar	N17W01	334	10	1	Hrx	1	A														
										0	0	0	1	0	0	0	0	0	0		

Still on Disk.
 Absolute heliographic longitude: 334

Region 2314																					
26 Mar	S23E66	306	20	3	Cro	3	B														
27 Mar	S21E54	305	20	2	Cro	2	B														
28 Mar	S21E40	305	plage																		
29 Mar	S21E27	306	plage																		
										0	0	0	0	0	0	0	0	0	0		

Still on Disk.
 Absolute heliographic longitude: 306

Region 2315																					
28 Mar	S19W16	360	10	2	Cao	2	B														
29 Mar	S20W29	2	30	5	Dro	8	B	1													
								1	0	0	0	0	0	0	0	0	0	0	0		

Still on Disk.
 Absolute heliographic longitude: 360

Region 2316																					
29 Mar	S21E44	289	20	6	Bxo	3	B														
										0	0	0	0	0	0	0	0	0	0		

Still on Disk.
 Absolute heliographic longitude: 289

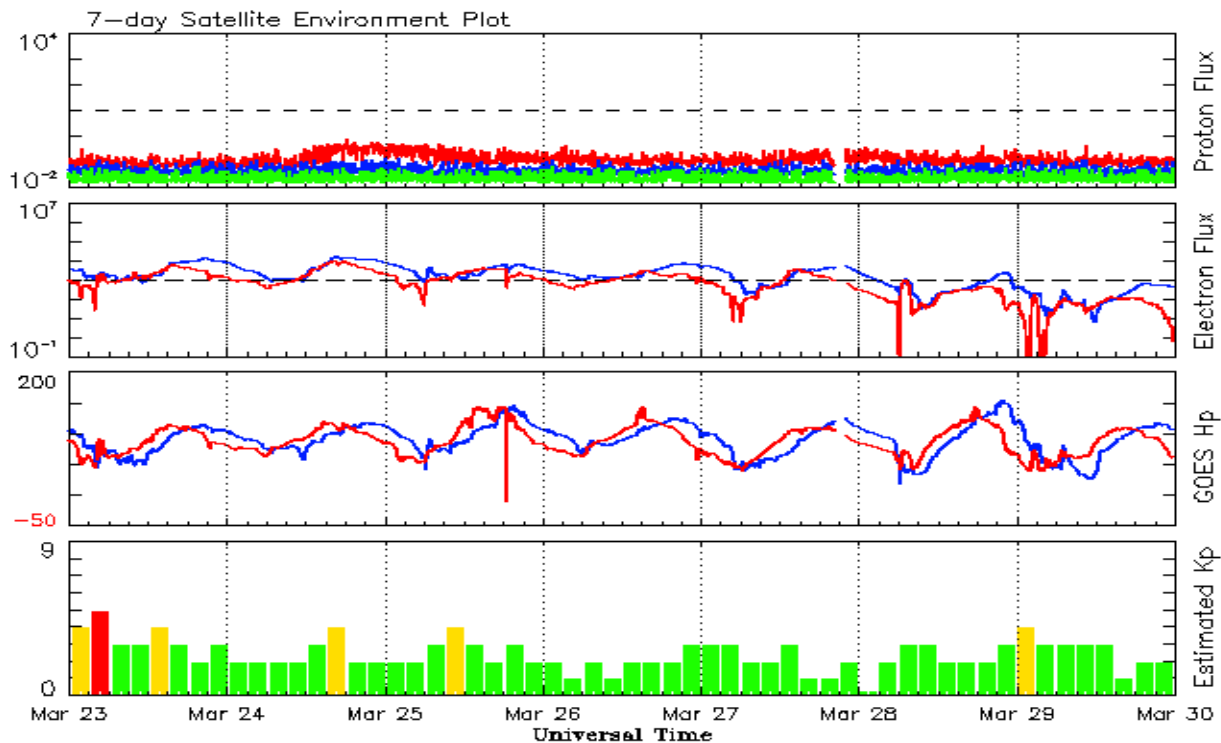


Recent Solar Indices (preliminary)
Observed monthly mean values

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
2013									
March	81.0	57.9	0.71	85.7	57.6	111.2	117.1	9	7.4
April	112.8	72.4	0.64	86.7	57.9	125.0	116.6	5	7.2
May	125.5	78.7	0.63	90.5	59.9	131.3	118.1	10	7.0
June	80.1	52.5	0.66	94.4	62.6	110.2	120.9	13	7.1
July	86.1	57.0	0.66	97.9	65.5	115.6	123.9	9	7.3
August	90.2	66.0	0.73	103.7	68.9	114.7	127.9	9	7.6
September	55.0	37.0	0.67	111.0	73.0	102.7	132.3	5	7.8
October	127.1	85.6	0.67	114.3	74.9	132.3	134.7	7	7.8
November	125.7	77.6	0.62	114.6	75.3	148.4	135.4	5	7.9
December	118.2	90.3	0.76	115.4	75.9	147.7	135.9	5	7.5
2014									
January	125.9	81.8	0.65	117.7	77.3	158.6	137.3	6	7.1
February	174.6	102.3	0.59	119.5	78.3	170.3	138.6	12	6.9
March	141.1	91.9	0.65	123.2	80.8	149.9	140.8	6	7.2
April	130.5	84.7	0.65	124.8	81.9	144.3	143.5	9	7.5
May	116.8	75.2	0.64	122.3	80.5	130.0	144.7	7	7.9
June	107.7	71.0	0.66	121.4	79.7	122.2	145.5	7	8.4
July	113.6	72.4	0.64	120.4	78.6	137.3	145.2	5	8.8
August	106.2	74.6	0.70	115.1	75.6	124.7	142.8	9	8.9
September	127.4	87.6	0.69			146.1		11	
October	92.0	60.6	0.66			153.7		10	
November	101.8	70.1	0.69			155.3		10	
December	120.0	78.0	0.65			158.7		12	
2015									
January	101.2	67.0	0.66			141.7		10	
February	70.6	44.8	0.63			128.8		10	

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 23 March 2015*

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.

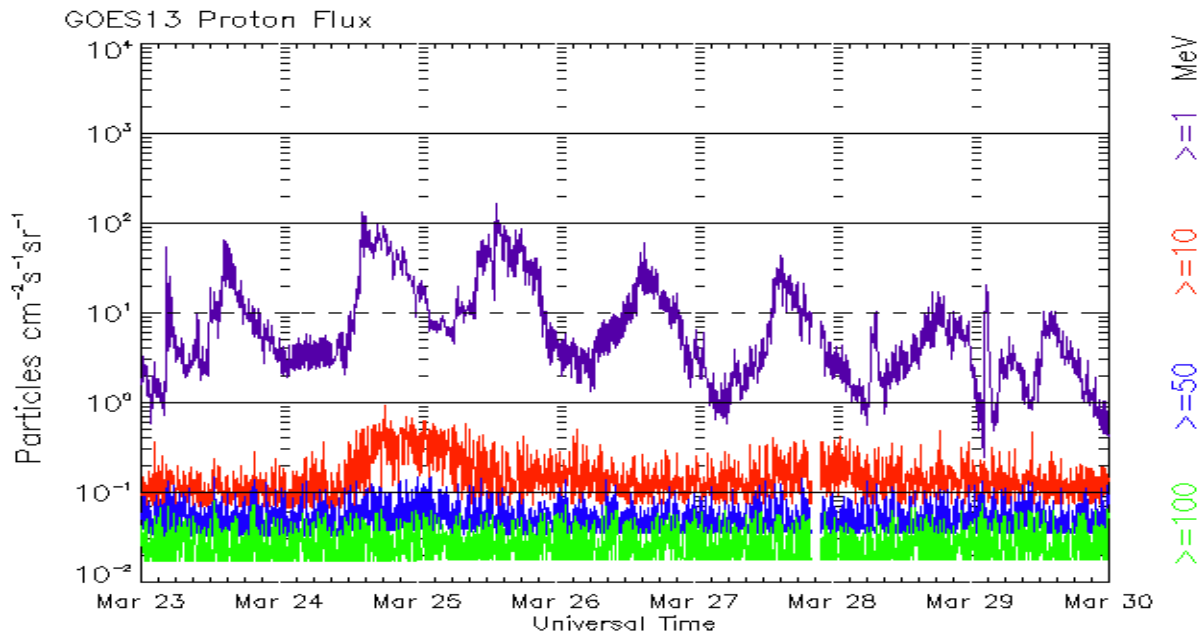
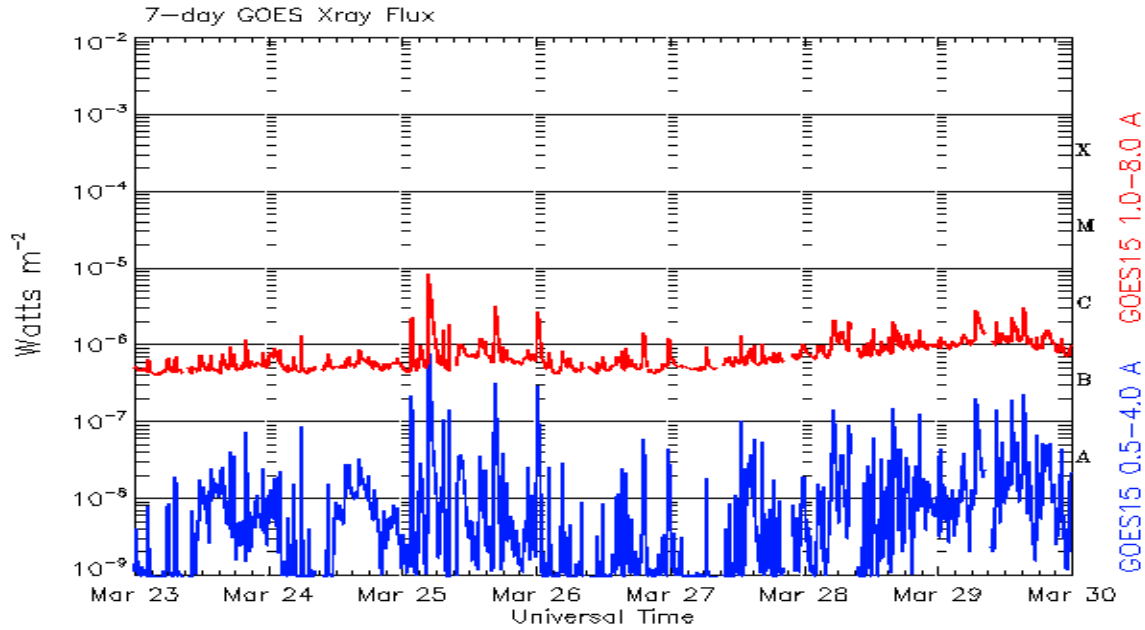
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

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 23 March 2015*

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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