

Solar activity ranged from low to moderate levels during the period. Low levels were reached on 15-17 September and again on 19-21 September with moderate activity observed on 18 September. A majority of the early C-class activity was observed from Regions 2158 (N16, L=087, class/area Dkc/440 on 11 Sep) and 2164 (S14, L=049, class/area Dai/090 on 14 Sep). The largest of these C-class events was a C7 X-ray event observed at 17/1948 UTC from Region 2158.

By 18 September, activity increased to moderate levels. At 18/0709 UTC, Region 2169 (N05, L=290, class/area Cso/060 on 17 Sep) produced a C6/Sf which was immediately followed by an impulsive M1/Sn (R1-Minor) at 18/0841 UTC from the same region. Associated with this event were lower frequency radio emissions in the form of a Type II sweep and 245 MHz burst (16,000 sfu). An associated CME was not discernable in LASCO or STEREO imagery with the M1 event.

19-21 September saw a return to low levels with C-class activity observed from Regions 2164, 2166 (N13, L=352, class/area Dao/060 on 14 Sep), 2171 (S10, L=264, class/area Eai/160 on 21 Sep) and 2172 (S11, L=242, class/area Ekc/320 on 21 Sep). The largest event during this 3-day period was a long-duration C5/1f flare at 21/1153 UTC from Region 2166. This region had decayed to plage on 20 September. Associated with this event was a CME off the NW limb, detected by LASCO C2 imagery, first visible at 21/1236 UTC. Potential geo-effectiveness of this CME was ongoing at the time of this writing.

Other activity of note during the period was a N-S oriented, 38 degree long filament eruption along a channel centered near N25E12. The filament was observed lifting off in SDO/AIA 304 imagery from 20/2348-21/0427 UTC. No discernable CME was apparent in LASCO or STEREO imagery with the filament eruption.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was normal levels.

Geomagnetic field activity ranged from quiet to minor storm levels. Mostly quiet levels were observed from 15 September through late on 18 September. By 18/1800 UTC, field activity increased to unsettled levels for six hours and further increased to active to minor storming through 21/0900 UTC. The field relaxed to unsettled to active levels through 21/2100 UTC when it became predominately quiet through the balance of the summary period. This period of increased activity was attributed to a combination of transient and negative coronal hole high speed stream (CH HSS) effects.

During the summary period, solar wind parameters, as observed at the ACE spacecraft, reflected the geomagnetic activity described above. ACE wind speeds began the period in the 450 km/s range and gradually decreased to near 350 km/s through early on 19 September. Wind speeds then increased to about 500 km/s by late on the 19th and further increased to 550 km/s by



midday on 20 September and remained elevated through midday on the 21st. Speeds then declined to end the summary period near 425 km/s.

The interplanetary magnetic field (IMF) Bt and Bz component followed a similar trend. Bt varied weakly from 3-7 nT through about 19/0600 UTC when an increase to 10-18 nT was observed for the next 9 hours or so. Bt gradually relaxed to vary between 4-8 nT through the remainder of the period. The Bz component generally did not vary much beyond -5 to +8 nT through the summary period. The exception was a period between 19/0400-1700 UTC when Bz varied between -13 nT to +17 nT.

Phi angle measurements indicated a predominately negative (towards) orientation with positive (away) swings from about 18/1800 UTC - 19/1700 UTC and again from 21/0300 UTC - 21/1700 UTC.

Space Weather Outlook 22 September - 18 October 2014

Solar activity is expected to be at predominately low levels with a chance for M-class activity and a slight chance for X-class activity through the outlook period. Regions currently on the disk with the potential for major activity include Regions 2171 and 2172. Old Regions 2155 (S19, L=110), 2157 (S15, L=099) and 2158 (N16, L=089), producers of M and X-class activity on their previous transit, are all due to return on or about 28-29 September.

No proton events are expected at geosynchronous orbit in the absence of major solar activity.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be normal to moderate levels through 25 September. Moderate to high levels are expected from 26 September to 03 October followed by a return to mostly normal levels through 18 October.

Geomagnetic field activity is expected to be at predominately quiet levels through the outlook period. Quiet to unsettled levels are expected on 23-24 September due to a solar sector boundary crossing followed by a co-rotating interaction region. Activity levels are expected to increase to unsettled to active from 25-30 September due to a series of positive polarity, equatorial CH HSSs. Unsettled to active levels are expected on 15-17 October due to a negative polarity CH HSS.



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
15 September	133	92	350	B5.7	4	0	0	9	0	0	0	0
16 September	133	85	290	B5.5	5	0	0	3	0	0	0	0
17 September	125	91	330	B6.1	7	0	0	5	0	0	0	0
18 September	120	75	230	B5.3	4	1	0	5	0	0	0	0
19 September	122	91	250	B4.8	4	0	0	2	0	0	0	0
20 September	119	75	300	B4.5	2	0	0	0	0	0	0	0
21 September	124	72	590	B4.9	3	0	0	0	1	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
	15 September	6.8e+05	2.5e+04	3.0e+03		1.1e+05
16 September	1.0e+06	1.9e+04	2.9e+03		1.1e+05	
17 September	2.8e+05	1.3e+04	2.9e+03		2.8e+04	
18 September	1.9e+05	1.1e+04	2.6e+03		4.4e+04	
19 September	7.5e+04	1.2e+04	2.8e+03		2.7e+04	
20 September	6.9e+04	1.2e+04	3.2e+03		2.5e+04	
21 September	3.7e+05	1.2e+04	3.1e+03		8.6e+04	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	15 September	2	0-0-0-1-2-1-1-1	1	0-0-0-0-0-1-1-1	3
16 September	7	1-2-2-2-2-2-2-2	3	2-1-1-2-0-0-1-1	7	2-2-2-2-1-1-2-2
17 September	4	2-0-0-1-2-1-2-2	2	1-1-0-0-0-1-1-2	6	3-1-0-0-1-2-2-2
18 September	7	2-1-1-1-2-2-2-3	2	2-0-0-0-0-0-2-1	8	3-1-1-1-1-2-3-3
19 September	23	4-5-4-3-4-3-3-2	32	3-5-5-4-5-4-4-3	22	4-5-4-3-3-4-3-2
20 September	4	1-1-1-1-2-2-0-1	6	2-1-1-2-3-1-1-1	6	2-2-1-1-2-1-1-1
21 September	7	1-3-2-2-2-2-2-1	3	1-2-1-1-0-1-1-1	7	2-3-2-1-1-1-2-1

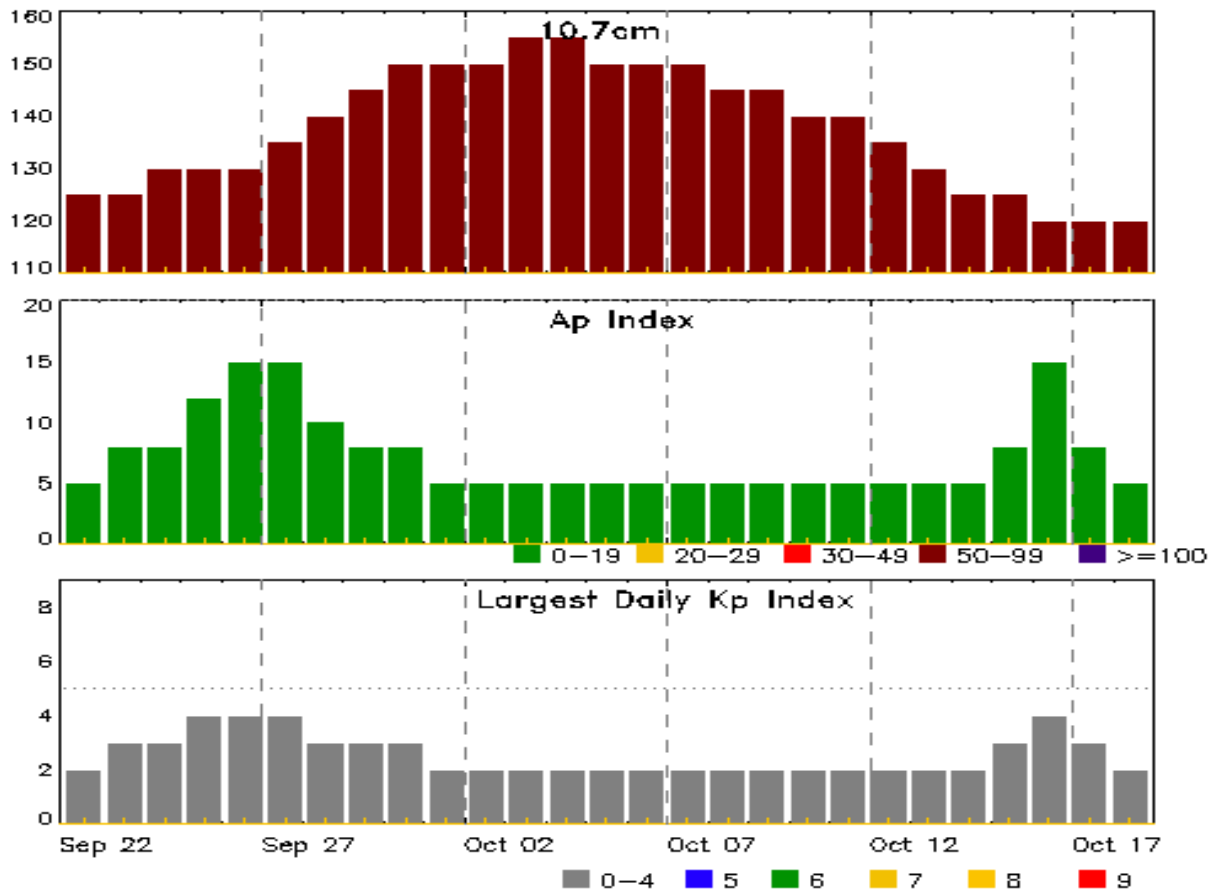


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
18 Sep 0909	ALERT: Type II Radio Emission	18/0842
19 Sep 0153	WARNING: Geomagnetic K = 4	19/0150 - 1100
19 Sep 0215	ALERT: Geomagnetic K = 4	19/0209
19 Sep 0522	WARNING: Geomagnetic K = 5	19/0520 - 1300
19 Sep 0550	ALERT: Geomagnetic K = 5	19/0548
19 Sep 0756	EXTENDED WARNING: Geomagnetic K = 4	19/0150 - 1600
19 Sep 1540	WARNING: Geomagnetic K = 5	19/1540 - 20/0500
19 Sep 1540	EXTENDED WARNING: Geomagnetic K = 4	19/0150 - 20/0800
19 Sep 2114	CANCELLATION: Geomagnetic K = 5	
21 Sep 0532	WARNING: Geomagnetic K = 4	21/0532 - 1400



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
22 Sep	125	5	2	06 Oct	150	5	2
23	125	8	3	07	150	5	2
24	130	8	3	08	145	5	2
25	130	12	4	09	145	5	2
26	130	15	4	10	140	5	2
27	135	15	4	11	140	5	2
28	140	10	3	12	135	5	2
29	145	8	3	13	130	5	2
30	150	8	3	14	125	5	2
01 Oct	150	5	2	15	125	8	3
02	150	5	2	16	120	15	4
03	155	5	2	17	120	8	3
04	155	5	2	18	120	5	2
05	150	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 245	Radio Flux 2695	Intensity II	Intensity IV
18 Sep	0837	0841	0853	M1.2	0.004	SN	N08E70	2169	16000	72	2	

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
15 Sep	0020	0027	0035	C3.1	SF	S12W63	2157
15 Sep	0052	0056	0102		SF	N16W52	2158
15 Sep	0204	0224	0246	C2.9	SF	N16W52	2158
15 Sep	1310	1314	1318	B8.7	SF	N12W59	2158
15 Sep	1339	1339	1347		SF	S19W34	2163
15 Sep	1349	1350	1414		SF	N12W55	2158
15 Sep	1418	1421	1424		SF	N15E46	2166
15 Sep	1503	1520	1524	B8.1			
15 Sep	1811	1815	1817	C2.2	SF	N17W61	2158
15 Sep	2044	2051	2059	C2.3	SF	N11E43	2166
16 Sep	0012	0014	0018		SF	N17W61	2158
16 Sep	B0853	U0853	0900		SF	N15W68	2158
16 Sep	B0858	U0859	0905		SF	S19W45	2163
16 Sep	1538	1545	1547	C1.4			2158
16 Sep	1657	1702	1707	C1.6			
16 Sep	1906	1927	1934	C2.1			2158
16 Sep	2037	2043	2047	C2.0			2158
16 Sep	2351	2358	0008	C1.8			2164
17 Sep	0054	0056	0057		SF	S12W37	2164
17 Sep	0105	0110	0114	C1.2	SF	S12W37	2164
17 Sep	0132	0142	0150	C1.3	SF	S12W38	2164
17 Sep	0329	0334	0344	C2.6	SF	S15W40	2164
17 Sep	0727	0731	0734	C1.2			2164
17 Sep	0806	0812	0819	C1.4			2158
17 Sep	0941	U0944	A0948		SF	N12W81	2158
17 Sep	1926	1948	2013	C7.5			2158
17 Sep	2110	2139	2148	C3.5			2164
18 Sep	0106	0112	0120	C1.4			2168
18 Sep	0702	0709	0712	C6.4	SF	N05E70	2169
18 Sep	0837	0841	0853	M1.2	SN	N08E70	2169



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
18 Sep	1222	1224	1234		SF	N08E67	2169
18 Sep	1444	1444	1455		SF	S07E87	
18 Sep	1554	1558	1600	B9.0			
18 Sep	B1606	U1610	A1615		SF	S14E26	
18 Sep	1725	1730	1732	C3.4			2169
18 Sep	2111	2119	2130	C1.0			2158
19 Sep	0002	0007	0013	C1.2	SF	N13W09	2166
19 Sep	0917	0919	0926		SF	S09E76	
19 Sep	1349	1352	1356	C1.4			2164
19 Sep	1701	1706	1709	C1.0			2164
19 Sep	1727	1832	1858	C3.3			2171
20 Sep	1243	1254	1306	C1.1			2171
20 Sep	1708	1714	1723	C1.1			2172
21 Sep	0144	0151	0158	C1.2			2172
21 Sep	0707	0714	0725	C2.0			2172
21 Sep	1128	1145	1303	C5.2	1F	N11W40	2166



Region Summary

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 1257

17 Jul	N19W56	217	50	4	Dai	12	B					19					
18 Jul	N20W69	217	120	4	Dsi	12	B					1					
19 Jul	N20W83	218	240	10	Dso	3	B										
								0	0	0	20	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 217

Region 2155

03 Sep	S20E75	116	90	2	Hax		A	1	1								
04 Sep	S20E59	109	170	4	Dao	3	B	1									
05 Sep	S20E47	108	120	2	Dao	6	B	1			1						
06 Sep	S20E33	109	120	3	Dao	5	B										
07 Sep	S20E19	109	120	3	Cao	6	B										
08 Sep	S19E06	109	100	3	Cao	4	B										
09 Sep	S21W08	110	60	5	Dac	9	B										
10 Sep	S21W22	111	60	5	Cai	10	B										
11 Sep	S19W34	109	30	4	Bxo	5	B				2						
12 Sep	S19W48	108	10	3	Bxo	3	B										
13 Sep	S19W61	110	10	5	Bxo	2	B				1						
14 Sep	S19W75	111	plage														
15 Sep	S19W89	112	plage														
								3	1	0	4	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 109



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 2156

04 Sep	N15E56	112	10	4	Bxo	2	B											
05 Sep	N15E42	113	plage															
06 Sep	N15E28	114	plage															
07 Sep	N15E14	114	plage															
08 Sep	N15W00	115	plage															
09 Sep	N15W14	116	plage															
10 Sep	N15W28	117	plage															
11 Sep	N15W42	117	plage															
12 Sep	N15W56	118	plage															
13 Sep	N15W70	119	plage															
14 Sep	N15W84	120	plage															
								0	0	0	0	0	0	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 115

Region 2157

04 Sep	S13E68	100	200	5	Dai	12	B	3			1							
05 Sep	S14E58	97	520	10	Dkc	14	BGD	4				1						
06 Sep	S14E44	98	540	12	Ekc	17	BGD	5	1		6	1						
07 Sep	S14E31	97	420	14	Ekc	27	BGD	5			6							
08 Sep	S14E17	98	450	12	Ekc	37	BGD	3			2							
09 Sep	S14E03	99	480	13	Ekc	39	BGD	1			1	1						
10 Sep	S14W11	100	460	13	Ekc	45	BGD	1			9							
11 Sep	S14W24	99	260	13	Ekc	34	BGD	1			2							
12 Sep	S14W38	99	250	13	Ekc	53	BG	3				1						
13 Sep	S14W51	100	220	13	Eai	26	BG	4			2							
14 Sep	S15W63	99	180	9	Dai	17	BG	1	1		1			1				
15 Sep	S15W74	97	50	4	Cai	5	BG	1			1							
16 Sep	S15W88	97	50	4	Cai	5	B											
								32	2	0	31	4	1	0	0			

Crossed West Limb.

Absolute heliographic longitude: 99



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 2158																		
04 Sep	N16E83	85	100	3	Hax	2	A											
05 Sep	N15E68	87	300	5	Cko	4	B											
06 Sep	N15E54	88	310	5	Dkc	7	BD											
07 Sep	N16E40	88	380	7	Dkc	10	BD					1						
08 Sep	N15E28	87	380	7	Dkc	10	BGD	1	1			10	1					
09 Sep	N15E14	88	420	7	Dkc	25	BGD					2						
10 Sep	N15W00	89	400	7	Dkc	22	BG			1		2		1				
11 Sep	N16W12	87	440	6	Dkc	23	BG					1						
12 Sep	N16W26	88	400	6	Dkc	20	BG	2				4						
13 Sep	N16W39	88	180	6	Cai	29	B	1				1						
14 Sep	N16W53	89	200	4	Dai	13	BG											
15 Sep	N16W66	89	170	4	Dsi	7	BG	2				5						
16 Sep	N16W81	90	110	3	Cao	2	BG	3				2						
17 Sep	N15W93	88	90	6	Cao	2	B	2				1						
								11	1	1		29	1	1	0	0		

Crossed West Limb.

Absolute heliographic longitude: 89

Region 2159																		
05 Sep	S19E74	81	30	2	Cao	6	B											
06 Sep	S20E60	82	30	2	Cro	5	B					1						
07 Sep	S20E49	79	20	5	Cro	5	B	1										
08 Sep	S21E36	79	30	4	Cro	3	B					2						
09 Sep	S21E22	80	10	4	Bxo	5	B											
10 Sep	S21E08	81	10	2	Axx	3	A											
11 Sep	S21W09	84	10	1	Axx	2	A											
12 Sep	S21W23	85	plage															
13 Sep	S21W37	86	plage															
14 Sep	S21W51	87	plage															
15 Sep	S21W65	88	plage															
16 Sep	S21W79	88	plage															
								1	0	0		3	0	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 81



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 2163																							
07 Sep	S16E65		63	50	7	Cao	5	B															
08 Sep	S17E51		64	50	7	Cao	5	B															
09 Sep	S17E37		65	110	8	Dao	6	B															
10 Sep	S17E23		66	90	9	Dao	6	B															
11 Sep	S17E10		65	50	5	Cao	2	B	1														
12 Sep	S16W02		64	60	8	Cao	2	B															
13 Sep	S16W17		66	30	5	Hax	3	A															
14 Sep	S16W32		68	10	2	Hrx	3	A															
15 Sep	S15W44		67	10	2	Bxo	3	B														1	
16 Sep	S15W58		67	10	2	Bxo	3	B														1	
17 Sep	S15W72		68	plage																			
18 Sep	S15W86		69	plage																			
									1	0	0	2	0	0	0	0	0						

Crossed West Limb.
 Absolute heliographic longitude: 64

Region 2164																							
11 Sep	S13E28		47	20	1	Cro	2	B															
12 Sep	S13E14		48	20	1	Cro	3	B															
13 Sep	S13E02		47	40	8	Dsi	16	B														1	
14 Sep	S14W13		49	90	9	Dai	15	BG															
15 Sep	S14W26		49	80	10	Dai	9	BG															
16 Sep	S13W40		49	80	11	Eao	5	B	1														
17 Sep	S13W53		48	70	10	Dac	6	B	5													4	
18 Sep	S13W66		48	90	10	Dao	8	B															
19 Sep	S12W81		50	60	10	Cao	3	B	2														
									8	0	0	5	0	0	0	0	0						

Crossed West Limb.
 Absolute heliographic longitude: 47



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 2165																				
11 Sep	S08E63	12	20	4	Cao	3	B													
12 Sep	S08E49	13	20	9	Cro	4	B													
13 Sep	S08E37	12	10	9	Bxo	2	B													
14 Sep	S08E19	12	plage																	
15 Sep	S08E05	15	plage																	
16 Sep	S08W03	12	10	2	Bxo	3	B													
17 Sep	S08W16	11	10	4	Bxo	2	B													
18 Sep	S08W30	13	plage																	
19 Sep	S08W44	14	plage																	
20 Sep	S08W58	15	plage																	
21 Sep	S08W72	15	plage																	
									0	0	0	0	0	0	0	0	0	0		

Still on Disk.

Absolute heliographic longitude: 12

Region 2166																				
11 Sep	N12E80	356	plage							2										
12 Sep	N12E66	356	30	1	Axx	2	A													
13 Sep	N13E61	348	30	11	Cro	5	B	1												
14 Sep	N13E44	352	60	10	Dao	11	B					2								
15 Sep	N12E28	355	40	7	Cao	7	B	1				2								
16 Sep	N12E13	356	30	3	Cao	7	BG													
17 Sep	N12W00	355	30	3	Cao	7	B													
18 Sep	N13W14	356	30	5	Cao	9	B													
19 Sep	N11W27	355	20	2	Dso	4	B	1				1								
20 Sep	N11W41	358	plage																	
21 Sep	N11W55	358	plage					1				1								
								4	2	0	5	1	0	0	0	0				

Still on Disk.

Absolute heliographic longitude: 355



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 2167																	
14 Sep	N07E50	346	10		Axx	1	A										
15 Sep	N08E39	344	0	1	Axx	1	A										
16 Sep	N08E25	344	plage														
17 Sep	N08E11	345	plage														
18 Sep	N08W03	346	plage														
19 Sep	N09W15	343	10	1	Axx	2	A										
20 Sep	N09W28	345	plage														
21 Sep	N09W42	345	plage														
								0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 346

Region 2168																	
17 Sep	S22E44	311	10	1	Bxo	1	B										
18 Sep	S21E30	313	20	5	Cao	5	B	1									
19 Sep	S22E17	313	20	4	Cso	7	B										
20 Sep	S22E04	313	10	1	Axx	2	A										
21 Sep	S22W10	313	plage														
								1	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 313

Region 2169																	
17 Sep	N05E66	290	60	2	Cso	1	B										
18 Sep	N05E53	289	50	6	Cao	2	B	2	1			3					
19 Sep	N05E42	288	30	8	Cso	2	B										
20 Sep	N05E26	291	30	2	Hax	2	A										
21 Sep	N05E14	289	40	7	Cao	2	B										
								2	1	0	3	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 289



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 2170

17 Sep	N07E64	290	60	3	Hsx	2	A										
18 Sep	N10E51	291	40	1	Hax	1	A										
19 Sep	N09E40	290	30	2	Hax	1	A										
20 Sep	N11E27	290	50	2	Hax	2	A										
21 Sep	N11E13	290	50	2	Hax	1	A										
								0	0	0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 290

Region 2171

19 Sep	S09E65	263	80	6	Dso	2	B	1									
20 Sep	S10E53	264	160	8	Dao	7	B	1									
21 Sep	S10E39	264	160	11	Eai	8	BG										
								2	0	0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 264

Region 2172

20 Sep	S09E75	242	30	1	Hrx	1	A	1									
21 Sep	S11E63	240	320	11	Ekc	10	BD	2									
								3	0	0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 240

Region 2173

20 Sep	S15E65	252	20	1	Hrx	1	A										
21 Sep	S15E51	252	20	1	Hrx	1	A										
								0	0	0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 252

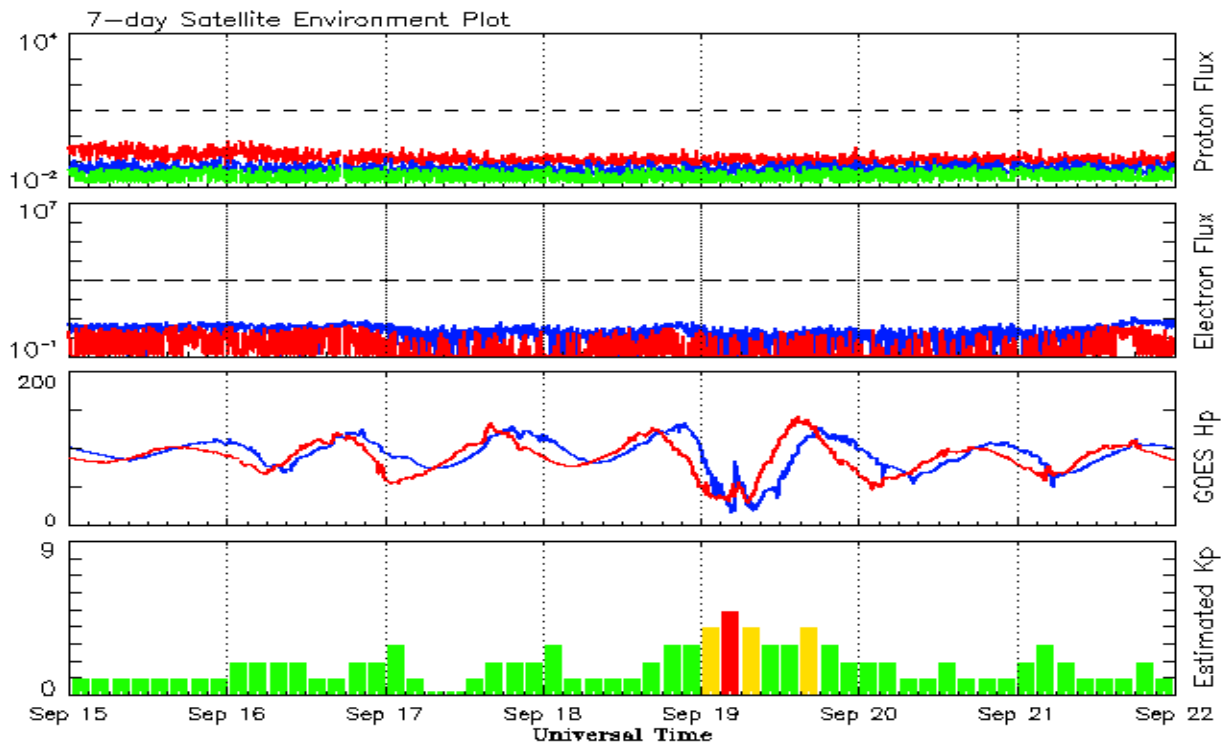


Recent Solar Indices (preliminary)
Observed monthly mean values

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
2012									
September	84.0	61.4	0.73	83.7	58.1	123.2	118.9	8	7.8
October	73.5	53.3	0.73	85.0	58.6	123.3	119.2	9	7.4
November	89.2	61.8	0.69	87.3	59.7	120.9	120.1	6	7.3
December	60.4	40.8	0.68	88.0	59.6	108.4	120.1	3	7.5
2013									
January	99.8	62.9	0.63	87.1	58.7	127.1	118.9	4	7.5
February	60.0	38.1	0.63	86.7	58.4	104.4	118.0	5	7.4
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	78.4	170.3	138.6	12	6.9
March	141.1	91.9	0.65			149.9		6	
April	130.5	84.7	0.65			144.3		9	
May	116.8	75.2	0.64			130.0		7	
June	107.7	71.0	0.66			122.2		7	
July	113.6	72.5	0.64			137.3		5	
August	106.2	74.7	0.70			124.7		9	

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 15 September 2014*

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.

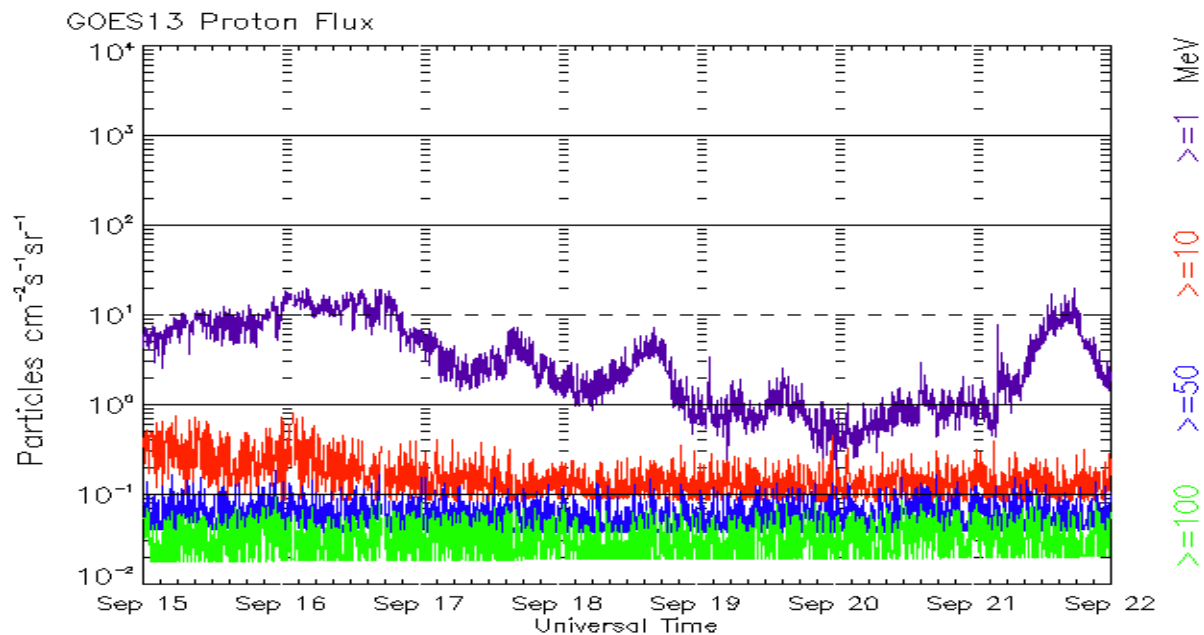
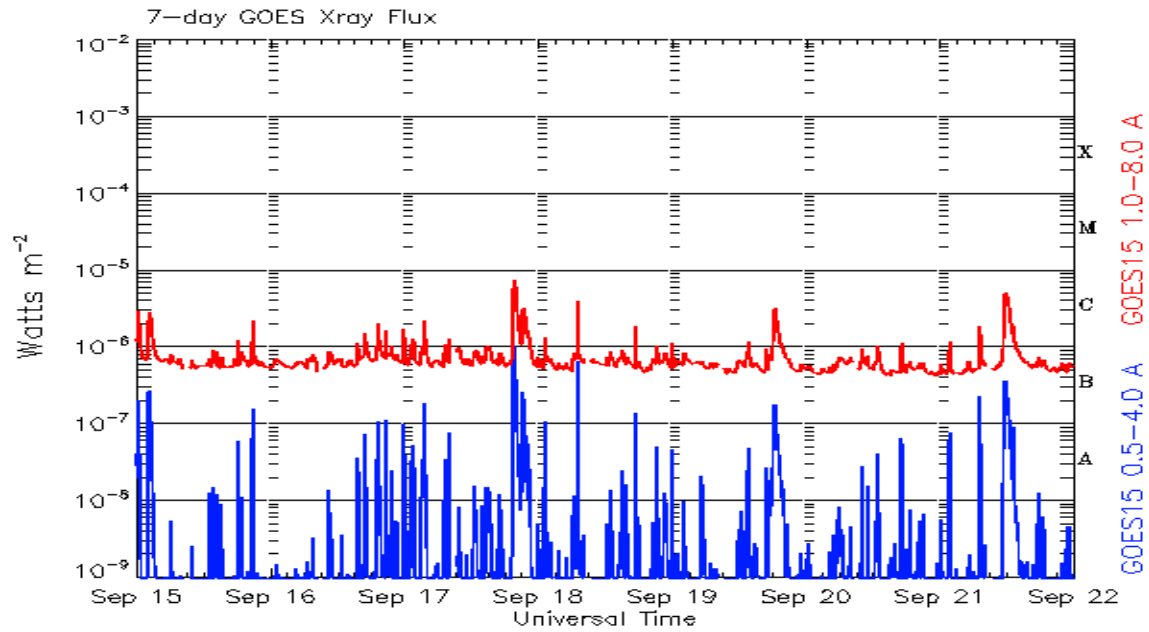
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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.

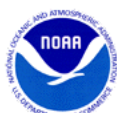




Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 15 September 2014

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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