

**Space Weather Highlights**  
**02 September - 08 September 2024**

**SWPC PRF 2558**  
**09 September 2024**

Solar activity ranged from low to moderate levels. Low levels were observed on 06 Sep and moderate (R1-Minor) levels were observed on 02-05 Sep and 07-08 Sep. The strongest event of the reporting period was an M3.3 flare at 02/1602 UTC from Region 3813 (S24, L=149, class/area Fki/490 on 06 Sep). This region produced numerous M-class flares this period. R1-Minor flare activity was also produced from Regions 3806 (S11, L=212, class/area Ekc/480 on 31 Aug), 3807 (S16, L=264, class/area Eki/580 on 02 Sep) and 3815 (S28, L=138, class/area Eso/200 on 07 Sep).

A large CME was observed from a filament eruption, centered at approximately N16W22, at about 08/0000 UTC. Analysis and modelling of the subsequent CME suggested an Earth arrival by mid to late on 10 Sep.

No proton events were observed at geosynchronous orbit. However, proton flux levels became enhanced on 03-04 Sep, reaching a maximum peak of 6.29 pfu at 03/1245 UTC. This flux increase was associated with the long-duration M5.5 (R2-Moderate) flare observed from behind the SE limb midday on 01 Sep.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 02-03 Sep and 05-08 Sep. High levels of 1,310 pfu were reached at 04/1545 UTC.

Geomagnetic field activity ranged from quiet to active levels. Quiet to isolated unsettled levels were observed on 02-03 Sep and 05-08 Sep. Unsettled to active levels were observed on 04 Sep when a 01 Sep CME shock arrived at Earth. Total field reached 24 nT with a weak southward Bz signature. Solar wind speeds were at about 450 km/s during this arrival. Other than this activity, solar wind parameters were at mostly background levels.

**Space Weather Outlook**  
**09 September - 05 October 2024**

Solar activity is likely to be at moderate levels (R1-R2/Minor-Moderate), with a slight chance for X-class events (R3-Strong), throughout the outlook period. This is due to complex regions on the visible disk, as well as the anticipated return of complex regions.

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.

Geomagnetic field activity is expected to range from quiet to G1-G2 (Minor-Moderate) storm levels. Enhanced activity to G1-G2 (Minor-Moderate) levels are likely on 10-11 Sep due to anticipated CME activity. Quiet to unsettled activity is expected on 09 Sep, 17-18 Sep, 28-29 Sep and 05 Oct, with G1 (Minor) levels likely on 26-27 Sep, all due to anticipated recurrent CH



HSS occurrence. Mostly quiet levels are expected on 12-16 Sep, 19-25 Sep, 30 Sep and 01-04 Oct.



### **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					
02 September	238	200	1500	C4.1	6	5	0	3	0	0	0	0
03 September	242	133	1320	C2.6	9	2	0	7	1	0	0	0
04 September	262	151	1490	C3.2	10	6	0	10	1	0	0	0
05 September	241	167	1490	C3.2	16	6	0	5	0	0	0	0
06 September	249	188	1280	C2.4	13	0	0	3	1	0	0	0
07 September	222	179	1340	C2.7	7	1	0	11	2	0	0	0
08 September	228	176	1095	C2.0	3	1	0	2	1	0	0	0

### **Daily Particle Data**

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		>2MeV	Electron Fluence (electrons/cm <sup>2</sup> -day -sr)	
	>1 MeV	>10 MeV		>2MeV	
02 September	7.7e+05	2.5e+05			3.4e+06
03 September	5.1e+06	3.8e+05			1.3e+07
04 September	2.6e+07	3.3e+05			2.6e+07
05 September	9.2e+07	1.8e+05			3.6e+06
06 September	3.7e+07	1.2e+05			2.8e+06
07 September	1.4e+07	8.5e+04			4.8e+06
08 September	8.7e+06	6.2e+04			3.4e+06

### **Daily Geomagnetic Data**

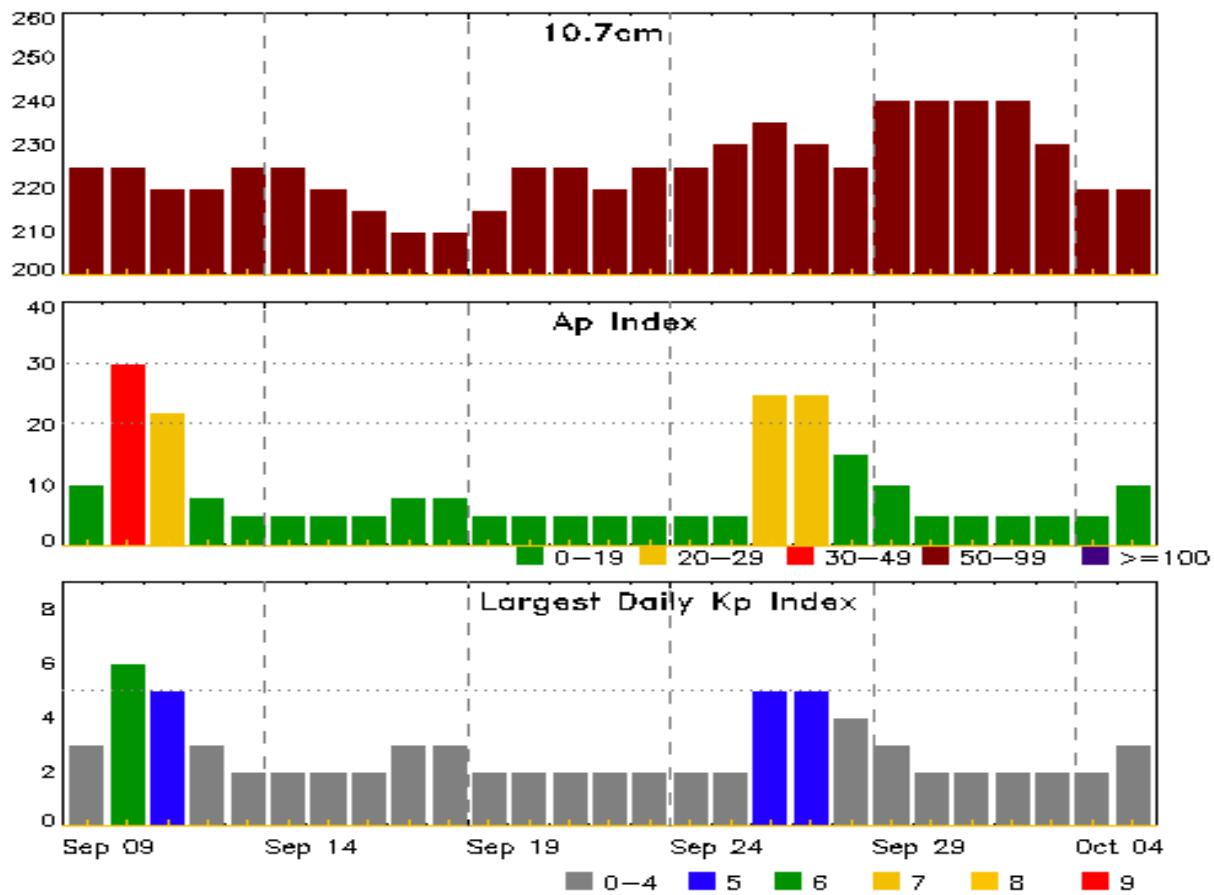
Date	Middle Latitude		High Latitude		Estimated	
	A	K-indices	A	K-indices	A	Planetary K-indices
02 September	7	2-1-2-2-3-2-2-1	12	3-2-2-3-3-4-2-0	8	2-2-2-2-2-3-2-1
03 September	10	1-2-2-3-3-3-2-2	8	1-2-3-4-2-1-1-0	7	2-2-2-2-2-2-1-2
04 September	16	1-1-2-4-5-4-2-2	9	0-1-1-3-4-3-1-1	13	1-1-2-4-4-3-2-2
05 September	8	2-2-1-2-3-2-2-2	4	1-2-1-2-1-0-1-2	7	2-2-1-2-2-1-1-2
06 September	8	1-0-2-3-3-2-2-2	7	1-0-2-2-4-1-1-1	8	1-1-2-3-3-1-1-2
07 September	9	2-2-2-2-3-3-2-1	6	2-2-0-1-3-1-2-1	7	3-2-2-2-3-2-2-1
08 September	19	2-2-1-2-3-3-6-3	5	2-2-1-1-2-1-2-1	12	3-2-1-2-3-2-3-2



### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
03 Sep 0842	ALERT: Type II Radio Emission	03/0753
03 Sep 1255	WARNING: Proton 10MeV Integral Flux > 10pfu	03/1255 - 04/1200
04 Sep 0304	SUMMARY: 10cm Radio Burst	04/0250 - 0251
04 Sep 1017	WARNING: Geomagnetic Sudden Impulse expected	04/1030 - 1100
04 Sep 1039	WARNING: Geomagnetic K = 4	04/1055 - 1800
04 Sep 1043	WARNING: Geomagnetic K = 5	04/1043 - 1800
04 Sep 1043	ALERT: Geomagnetic K = 4	
04 Sep 1100	SUMMARY: Geomagnetic Sudden Impulse	04/1030
04 Sep 1518	ALERT: Electron 2MeV Integral Flux >= 1000pfu	04/1455
04 Sep 1755	EXTENDED WARNING: Geomagnetic K = 4	04/1055 - 2359
08 Sep 0129	ALERT: Type II Radio Emission	08/0057
08 Sep 0753	WATCH: Geomagnetic Storm Category G2 predicted	

## Twenty-seven Day Outlook



Date	Radio Flux	Planetary	Largest	Date	Radio Flux	Planetary	Largest
	10.7cm	A Index	Kp Index		10.7cm	A Index	Kp Index
09 Sep	225	10	3	23 Sep	225	5	2
10	225	30	6	24	225	5	2
11	220	22	5	25	230	5	2
12	220	8	3	26	235	25	5
13	225	5	2	27	230	25	5
14	225	5	2	28	225	15	4
15	220	5	2	29	240	10	3
16	215	5	2	30	240	5	2
17	210	8	3	01 Oct	240	5	2
18	210	8	3	02	240	5	2
19	215	5	2	03	230	5	2
20	225	5	2	04	220	5	2
21	225	5	2	05	220	10	3
22	220	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 #	Radio Flux 245	2695	II	IV
02 Sep	0518	0529	0549	M1.9	0.026				3813	110		
02 Sep	1333	1343	1353	M2.9	0.032				3807			
02 Sep	1957	2011	2028	M1.4	0.005				3807			
02 Sep	2056	2102	2110	M1.8	0.011				3813			
02 Sep	2235	2301	2330	M1.5	0.039				3807			
03 Sep	0712	0722	0739	M1.4	0.016	SF	S20E57		3813			
03 Sep	1551	1602	1608	M3.3	0.023				3813			
04 Sep	0243	0255	0311	M1.4	0.018	SF	S22E49	3813		250		
04 Sep	0449	0456	0505	M1.2	0.011	SF	S17W62	3807				
04 Sep	0555	0601	0607	M1.0	0.003	SF	S12W12	3806				
04 Sep	0607	0611	0616	M1.0	0.002				3806			
04 Sep	1308	1321	1327	M1.0	0.008				3813			
04 Sep	1941	2000	2016	M1.2	0.023	1F	S13E21	3811				
05 Sep	0017	0020	0024	M1.0	0.002	SF	S15W70	3807				
05 Sep	0312	0325	0337	M1.1	0.014				3806			
05 Sep	0337	0344	0349	M1.0	0.003				3813			
05 Sep	0847	0856	0901	M2.8	0.013	SF	S16W72	3807				
05 Sep	0926	0942	0952	M1.6	0.020				3807			
05 Sep	1320	1325	1335	M1.3	0.009				3807			
07 Sep	0617	0749	0917	M1.6	0.120	1F	S27E34	3815				
08 Sep	1507	1530	1556	M1.5	0.031	1N	S18W30	3813				

## ***Flare List***

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat	CMD #
02 Sep	0303	0315	0330	C6.3			3807
02 Sep	0518	0529	0549	M1.9			3813
02 Sep	1121	1129	1135	C6.7			
02 Sep	1333	1343	1353	M2.9			3807
02 Sep	1539	1545	1552	C6.6	SF	S09E10	3806
02 Sep	1925	1930	1934	C9.0			3813
02 Sep	1945	1951	1957	C8.0			3807
02 Sep	1957	2011	2028	M1.4			3807
02 Sep	2056	2102	2110	M1.8			3813
02 Sep	2215	2225	2232	C6.4			3807



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
02 Sep	2235	2301	2330	M1.5			3807
02 Sep	B2307	U2309	2316		SF	S19W48	3807
02 Sep	B2307	2309	2320		SF	S12E52	3811
03 Sep	0109	0116	0123	C7.8			3813
03 Sep	0209	0220	0229	C6.9			3807
03 Sep	0712	0722	0739	M1.4			3813
03 Sep	0719	0719	0721		SF	S17W49	3807
03 Sep	0720	0721	0726		SF	S20E57	3813
03 Sep	0953	1000	1007	C5.5			3807
03 Sep	1040	1050	1055	C8.7			3807
03 Sep	1138	1146	1150	C4.6			3807
03 Sep	1314	1318	1324		SF	S19W52	3807
03 Sep	1342	1405	1459		1N	S18W54	3807
03 Sep	1551	1602	1608	M3.3			3813
03 Sep	1744	1754	1800	C7.5	SN	S15W10	3806
03 Sep	1749	1800	1849		SF	S13E35	3811
03 Sep	1822	1823	1826		SF	S21E56	3813
03 Sep	1919	1923	1933	C5.9	SF	S26E55	3813
03 Sep	2010	2022	2032	C6.6			3806
03 Sep	2355	0002	0008	C6.4			3813
04 Sep	0008	0013	0017	C5.4			3813
04 Sep	0126	0144	0156	C8.2	SF	S10W06	3806
04 Sep	0243	0255	0311	M1.4	SF	S22E49	3813
04 Sep	0449	0456	0505	M1.2	SF	S17W62	3807
04 Sep	0454	0455	0459		SF	S19E47	3813
04 Sep	0555	0601	0607	M1.0	SF	S12W12	3806
04 Sep	0607	0611	0616	M1.0			3806
04 Sep	0934	0940	0944	C5.0			3807
04 Sep	1123	1128	1133	C4.4			3807
04 Sep	1215	1224	1229	C8.8			3807
04 Sep	1308	1321	1327	M1.0			3813
04 Sep	1348	1350	1353		SF	S11E24	3811
04 Sep	1349	1355	1400		SF	S17W60	3807
04 Sep	1520	1525	1533	C4.7			3813
04 Sep	1808	1810	1820		SF	S09E11	
04 Sep	1844	1846	1850		SF	S09W06	3808
04 Sep	1852	1904	1907	C7.0			3811
04 Sep	1852	1859	1927		SF	S21E40	3813



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
04 Sep	1907	1924	1941	C9.2			3806
04 Sep	1941	2000	2016	M1.2	1F	S13E21	3811
04 Sep	2254	2301	2308	C5.9			3801
04 Sep	2359	0011	0017	C8.0			3813
05 Sep	0017	0020	0024	M1.0	SF	S15W70	3807
05 Sep	0157	0208	0217	C9.2	SF	S16W72	3807
05 Sep	0312	0325	0337	M1.1			3806
05 Sep	0337	0344	0349	M1.0			3813
05 Sep	0422	0430	0439	C5.7			3807
05 Sep	0439	0451	0456	C6.3			
05 Sep	0532	0539	0543	C6.2			3814
05 Sep	0543	0550	0556	C6.3			3811
05 Sep	0748	0755	0802	C6.6	SF	S22E37	3813
05 Sep	0814	0821	0830	C7.6	SF	S16W72	3807
05 Sep	0847	0856	0901	M2.8	SF	S16W72	3807
05 Sep	0926	0942	0952	M1.6			3807
05 Sep	1246	1249	1254	C5.1			3807
05 Sep	1300	1308	1320	C6.1			3807
05 Sep	1320	1325	1335	M1.3			3807
05 Sep	1403	1418	1434	C7.8			3806
05 Sep	1448	1450	1454	C7.8			3807
05 Sep	1602	1608	1614	C4.4			3807
05 Sep	1754	1759	1805	C4.2			3807
05 Sep	1831	1839	1851	C6.5			3807
05 Sep	2048	2057	2102	C4.7			3807
05 Sep	2331	2343	2348	C6.6			3807
06 Sep	0040	0046	0054	C4.4			3807
06 Sep	0054	0102	0113	C4.8			3807
06 Sep	0214	0217	0224	C5.8			3807
06 Sep	0239	0248	0257	C6.1			3807
06 Sep	0411	0420	0547	C5.3			3806
06 Sep	0547	0556	0614	C7.8			3807
06 Sep	B0601	U0609	0726		1F	S13W37	3806
06 Sep	0646	0653	0704	C5.4			3806
06 Sep	0753	0759	0803	C7.5	SF	S20W81	3807
06 Sep	1357	1403	1407	C6.2	SF	S10W53	3806
06 Sep	1550	1632	1723	C7.0			
06 Sep	1908	1919	1931	C8.0	SF	S12W54	3806



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
06 Sep	2019	2027	2036	C6.1			3813
06 Sep	2044	2051	2116	C7.3			3806
07 Sep	0040	0046	0051	C5.1			3807
07 Sep	0317	0327	0339	C5.9			3806
07 Sep	0617	0749	0917	M1.6	1F	S27E34	3815
07 Sep	B0659	U0702	A0718		SF	S18E02	3813
07 Sep	0741	0743	0744		SF	S29E14	3815
07 Sep	0745	0748	0750		SF	S29E14	3815
07 Sep	B0856	U0857	0916		SF	S08W14	3811
07 Sep	1217	U1224	1256		SF	S07W15	3811
07 Sep	1218	U1219	1230		SF	N20E54	3814
07 Sep	1405	1410	1425	C4.9	SF	S08W53	3806
07 Sep	1605	1615	1629	C5.0	SF	S11W56	3806
07 Sep	1719	1720	1725		SF	S09W11	3811
07 Sep	1726	1727	1736		SF	S09W11	3811
07 Sep	1739	1742	1746	C4.4	SF	S17W02	3813
07 Sep	2107	2117	2140	C7.2	1F	S14W64	3806
07 Sep	2220	2225	2231	C3.3			3808
08 Sep	0358	0431	0449	C3.5			
08 Sep	1507	1530	1556	M1.5	1N	S18W30	3813
08 Sep	2214	2218	2224	C4.7	SF	N17E26	3814
08 Sep	2301	2313	2327	C5.0	SF	S09W36	3811



## Region Summary

Date	Lat	CMD	Location		Sunspot Characteristics				Flares						
			Helio	Lon	Area $10^{-6}$	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray			Optical		
										C	M	X	S	1	2
														3	4
<b>Region 3799</b>															
21 Aug	S09E59		319		110		8	Cso	14	B	1				
22 Aug	S09E48		316		130		9	Cao	7	B	2				4
23 Aug	S10E35		316		280		7	Dki	13	BG	1				2
24 Aug	S10E22		316		400		10	Dki	18	BG	2				2
25 Aug	S10E10		315		350		10	Dki	14	BG					
26 Aug	S10W04		316		360		11	Eki	17	BG					
27 Aug	S10W18		316		350		11	Eki	11	BG					
28 Aug	S11W30		315		320		11	Cko	11	BG					
29 Aug	S11W42		314		320		6	Cko	5	BG					
30 Aug	S11W56		315		270		6	Cko	4	B					
31 Aug	S11W73		319		280		4	Cko	5	B					
01 Sep	S11W86		318		220		4	Hsx	1	A	1				1
											7	0	0	9	0
											0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 316

## Region 3801

22 Aug	N07E62		301		60		3	Cso	2	B	4			2	1
23 Aug	N07E51		300		140		5	Cso	4	BG	5	3		8	1
24 Aug	N07E39		299		110		4	Cso	6	BG				1	
25 Aug	N08E27		298		80		3	Cso	5	BG				1	
26 Aug	N08E13		299		130		10	Dso	11	BG					
27 Aug	N09W01		299		120		4	Cso	5	B	1				
28 Aug	N08W16		301		120		4	Cso	3	B	1				
29 Aug	N08W24		296		120		9	Cso	6	B	2			3	
30 Aug	N07W39		298		100		4	Cao	4	B					
31 Aug	N08W55		301		40		3	Cao	4	B					
01 Sep	N08W68		300		30		3	Bxo	2	B				0	0
02 Sep	N09W83		302		10		1	Axx	1	A				0	0
											13	3	0	15	2
											0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 299

## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area $10^6$	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
<b>Region 3803</b>																
26 Aug	N12E69		243		50		4	Dao	4	B						
27 Aug	N12E57		241		60		4	Dao	7	B						
28 Aug	N13E44		241		70		5	Dao	8	B						
29 Aug	N14E30		242		90		7	Cso	7	B						
30 Aug	N13E18		241		10		1	Axx	1	A	1					
31 Aug	N14E06		240		40		4	Cao	5	B						
01 Sep	N14W08		240		20		4	Bxo	4	B						
02 Sep	N15W23		242		10		1	Axx	1	A						
03 Sep	N16W37		242		10		1	Axx	1	A						
04 Sep	N16W51		244		plage											
05 Sep	N16W65		245		plage											
06 Sep	N16W79		245		plage											
										1	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 240

## **Region 3804**

26 Aug	S25E63		249		30		1	Hsx	1	A						
27 Aug	S25E49		249		40		2	Hsx	1	A						
28 Aug	S25E36		249		40		1	Hsx	1	A						
29 Aug	S25E24		248		100		3	Hsx	1	A						
30 Aug	S26E11		248		50		3	Hsx	1	A						
31 Aug	S24W02		248		50		3	Hsx	1	A						
01 Sep	S24W14		246		20		2	Hsx	1	A						
02 Sep	S24W28		247		10		1	Axx	1	A						
03 Sep	S24W42		247		plage						0	0	0	0	0	0
04 Sep	S24W56		249		plage											
05 Sep	S24W70		250		plage											
06 Sep	S24W84		250		plage											

Crossed West Limb.

Absolute heliographic longitude: 248



## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area $10^6$	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
<b>Region 3805</b>																
28 Aug	N08E35		250		10		1	Axx	1	A						
29 Aug	N08E21		257		plage											
30 Aug	N08E07		252		plage							1		1	1	
31 Aug	N08W07		253		plage											
01 Sep	N08W21		253		plage											
02 Sep	N08W35		254		plage											
03 Sep	N08W49		254		plage											
04 Sep	N08W63		256		plage											
05 Sep	N08W77		257		plage											
										1	0	0	1	1	0	0

Died on Disk.

Absolute heliographic longitude: 252

## **Region 3806**

28 Aug	S10E68		217	100	5	Dao	3	B	3							
29 Aug	S10E56		216	380	7	Dkc	8	B	2				1			
30 Aug	S11E40		219	450	24	Fkc	11	BGD	2	2			1			
31 Aug	S11E34		212	480	13	Ekc	25	BG	4	3			3			
01 Sep	S11E20		212	380	12	Ekc	22	BG	1				1			
02 Sep	S11E06		213	330	12	Ekc	48	BG					1			
03 Sep	S10W09		214	240	11	Eai	24	BG	2				1			
04 Sep	S12W23		216	250	11	Ekc	34	BGD	2	2			2			
05 Sep	S12W37		217	280	11	Ekc	39	BGD	1	1						
06 Sep	S11W53		219	170	8	Dai	20	BGD	5				2	1		
07 Sep	S08W67		220	90	8	Dsi	10	BG	4				2	1		
08 Sep	S08W81		221	90	8	Cso	10	B					26	8	0	14
										2	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 213

## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares				
			Helio	Lon	Area $10^6$ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray	Optical			
										C	M	X	S	1
										1	2	3	4	
<b>Region 3807</b>														
30 Aug	S18W04		263		70	6	Dsi	10	BG	3			1	
31 Aug	S16W18		264		320	11	Eki	20	BG	1			3	
01 Sep	S16W31		263		550	12	Eki	15	BG		1		6	
02 Sep	S16W45		264		580	12	Eki	26	BG	4	3		1	
03 Sep	S15W57		262		510	15	Ekc	14	BGD	4			2	1
04 Sep	S15W72		265		340	15	Eki	11	BG	3	1		2	
05 Sep	S15W86		266		330	15	Eki	10	BG	11	4		4	
										26	9	0	19	1
										0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 263

## **Region 3808**

30 Aug	S08E60		199		60	4	Dao	4	B					
31 Aug	S09E44		202		60	6	Cao	2	B	1				
01 Sep	S10E31		201		90	7	Cao	3	B					
02 Sep	S11E16		203		80	8	Cso	4	B					
03 Sep	S08E02		203		60	4	Cso	4	B					
04 Sep	S10W13		206		80	5	Cso	10	B			1		
05 Sep	S10W27		207		90	5	Dsi	10	B					
06 Sep	S10W44		210		90	3	Dao	8	B					
07 Sep	S09W58		211		60	3	Cao	4	B	1				
08 Sep	S09W72		212		60	3	Cao	4	B					
										2	0	0	1	0
										0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 203

## **Region 3809**

31 Aug	S20E39		207		20	2	Hsx	1	A					
01 Sep	S21E26		206		10	1	Axx	1	A					
02 Sep	S21E12		207		plage									
03 Sep	S21W02		207		plage									
04 Sep	S21W16		209		plage									
05 Sep	S21W30		210		plage									
06 Sep	S21W44		210		plage									
07 Sep	S21W58		211		plage									
08 Sep	S21W72		212		plage									
										0	0	0	0	0
										0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 207



## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area $10^6$	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
<b>Region 3810</b>																
31 Aug	N16E35		210		10		3	Bxo	3	B						
01 Sep	N16E24		208		20		3	Bxo	3	B						
02 Sep	N16E10		209		10		3	Bxo	3	B						
03 Sep	N16W04		209		10		1	Axx	1	A						
04 Sep	N16W18		211		plage											
05 Sep	N16W32		212		plage											
06 Sep	N16W46		212		plage											
07 Sep	N16W60		213		plage											
08 Sep	N16W74		214		plage											
										0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 209

## **Region 3811**

31 Aug	S09E73		173		120		5	Hsx	1	A						
01 Sep	S10E56		176		220		8	Cso	4	B						
02 Sep	S10E42		177		220		8	Cso	6	B					1	
03 Sep	S10E28		177		220		5	Cao	6	B					1	
04 Sep	S11E18		175		290		4	Dki	11	B	1	1		1	1	
05 Sep	S11E04		176		240		10	Dsi	12	B	1					
06 Sep	S09W13		179		290		11	Ehi	21	BG						
07 Sep	S10W22		175		250		6	Cho	9	BG				4		
08 Sep	S10W36		176		240		6	Dso	9	BG	1			1		
											3	1	0	8	1	0

Still on Disk.

Absolute heliographic longitude: 176

## **Region 3812**

02 Sep	N14E32		186		10		2	Bxo	2	B						
03 Sep	N14E18		187		plage											
04 Sep	N14E04		189		plage											
05 Sep	N14W10		190		plage											
06 Sep	N14W24		190		plage											
07 Sep	N14W38		191		plage											
08 Sep	N14W52		192		plage											
											0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 189

## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares							
			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
<b>Region 3813</b>																	
01 Sep	S22E72		160		plage									2			
02 Sep	S22E58		160	240		10	Dac	8	BG	1	2						
03 Sep	S22E44		161	270		11	Ekc	13	BG	3	2			3			
04 Sep	S23E35		158	350		12	Ekc	24	BG	3	2			3			
05 Sep	S23E21		159	370		25	Fkc	35	BG	1	1			1			
06 Sep	S24E17		149	490		22	Fki	34	BG	1				2			
07 Sep	S25E03		150	430		26	Fki	20	BG	1					2		
08 Sep	S22W11		151	220		11	Esi	10	BG			1		1	0	0	
										10	10	0	9	1	0	0	

Still on Disk.

Absolute heliographic longitude: 150

## **Region 3814**

04 Sep	N16E75		117	180	2	Hax	1	A								
05 Sep	N16E61		119	180	3	Hsx	1	A	1							
06 Sep	N13E52		114	190	3	Cao	1	B								
07 Sep	N15E38		115	240	3	Cso	5	B					1			
08 Sep	N15E24		116	230	5	Dso	10	BG	1			1		0	0	0
									2	0	0	2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 116

## **Region 3815**

06 Sep	S30E23		143	40	12	Eko	31	BG								
07 Sep	S28E15		138	200	16	Eso	16	BG	1			2	1			
08 Sep	S27E01		139	170	7	Cso	5	B		0	1	0	2	1	0	0
									0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 139

## **Region 3816**

06 Sep	S11E20		146	10	2	Bxo	3	B								
07 Sep	S12E04		149	5	1	Axx	1	A								
08 Sep	S12W10		150	5	1	Cro	1	B		0	0	0	0	0	0	0
									0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 149



## ***Region Summary - continued***

Date	Lat	CMD	Location		Sunspot Characteristics					Flares							
			Helio Lon	$10^6$ hemi. (helio)	Area Extent Class	Spot Count	Spot Class	Mag	X-ray			Optical					
									C	M	X	S	1	2	3	4	
<b>Region 3817</b>																	
07 Sep	S14E37		116	5		1	Axx	1	A								
08 Sep	S14E23		117	plage						0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 117

### ***Region 3818***

07 Sep	S13W34		187	20	5	Cao	3	B								
08 Sep	S12W49		189	20	2	Cro	3	B	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 187

### ***Region 3819***

07 Sep	S12E41		112	40	6	Cao	10	B								
08 Sep	S30E06		134	10	3	Csi	8	B	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 134

### ***Region 3820***

08 Sep	S22W10		150	20	1	Hsx	1	A	0	0	0	0	0	0	0	0
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Still on Disk.

Absolute heliographic longitude: 150

### ***Region 3821***

08 Sep	N14W37		177	30	4	Cso	5	B	0	0	0	0	0	0	0	0
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Still on Disk.

Absolute heliographic longitude: 177

## ***Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)***

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce  
NOAA / National Weather Service  
Space Weather Prediction Center  
325 Broadway, Boulder CO 80305

**Notice:** The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned.  
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