

Space Weather Highlights
11 September - 17 September 2023

SWPC PRF 2507
18 September 2023

Solar activity ranged from low to moderate (R1 - Minor) levels. Low levels were observed on 13 and 17 Sep while moderate levels were observed on 11-12 and 14-16 Sep. Regions 3423 (N16, L=281, class/area Ekc/420 on 11 Sep), 3425 (N23, L=246, class/area Dai/140 on 08 Sep) and 3429 (N11, L=207, class/area Dai/090 on 15 Sep) were responsible for the moderate levels activity. The largest event of the period was an M3.3/1b flare from Region 3429.

A filament eruption in the vicinity of Region 3423 (N15W72, Eko/beta) produced an M1 flare that began at 14/0640 UTC. The x-ray flare reached a peak of M1.4 at 14/0745 UTC due to a contributing flare from Region 3429 (N10E05, Eai/beta) which obscured the natural x-ray peak of the filament eruption. The filament eruption produced a CME signature, first visible in SOHO/LASCO C2 imagery at 14/0712 UTC. Analysis and model output suggested an Earth arrival early on 17 Sep.

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field activity ranged from quiet to G2 (Moderate) levels. Quiet levels were observed on 11 Sep through midday on 12 Sep. Unsettled to G2 (Moderate) levels were observed from midday on 12 Sep through 13 Sep due to CME and positive polarity CH HSS effects. Unsettled to active levels were observed on 14-15 Sep due to positive polarity CH HSS on 14 Sep and negative polarity CH HSS effects on 15 Sep. Mostly quiet levels were observed on 16 Sep. Unsettled to active levels were observed on 17 Sep due to transient effects from the 14 Sep CME.

Total field readings, through the period, generally averaged 4-7 nT with a peak to 21 nT midday to late on 12 Sep. The Bz component reached a maximum southward reading of -20 nT late on 12 Sep. Wind speeds ranged from lows near 340 km/s on 11-12 Sep to a high reading of 525 km/s midday to late on 14 Sep.

Space Weather Outlook
18 September - 14 October 2023

Solar activity is expected to be at low to moderate (R1-R2 / Minor to Moderate) levels throughout 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 low to moderate levels through the period.

Geomagnetic field activity is likely to be at G1-G2 (Minor to Moderate) levels on 19 Sep and



unsettled to active levels on 20 Sep, all due to CME effects. Unsettled to active levels are likely on 21, 23-24 and 28-30 Sep due to CH HSS activity. Mostly quiet levels are expected on 18, 25-27 Sep and 01-14 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
11 September	176	173	685	C1.5	8	3	0	29	3	0	0	0
12 September	154	141	605	C1.4	11	3	0	13	1	1	0	0
13 September	143	109	550	B7.8	5	0	0	2	0	0	0	0
14 September	145	110	570	C1.2	4	3	0	4	0	0	0	0
15 September	139	96	490	C1.0	9	1	0	11	1	0	0	0
16 September	140	88	330	C1.0	6	2	0	7	2	0	0	0
17 September	145	94	360	B9.2	1	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	>2MeV
	11 September	2.4e+05	1.8e+04
12 September	6.0e+05	1.8e+04	2.8e+06
13 September	4.5e+05	2.0e+04	1.3e+06
14 September	1.0e+06	2.4e+04	6.2e+06
15 September	2.8e+06	1.9e+04	3.9e+06
16 September	4.5e+05	1.8e+04	6.5e+06
17 September	1.5e+07	2.3e+04	2.5e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	11 September	8	2-1-2-2-3-2-2-2	5	2-1-1-2-2-1-1-1	7
12 September	17	2-1-1-3-5-4-2-4	38	1-1-0-3-6-7-5-3	25	2-1-1-3-5-6-3-4
13 September	17	4-4-3-3-3-3-2-3	28	3-3-3-6-5-5-1-1	17	5-4-3-3-3-3-2-3
14 September	13	4-2-3-2-2-2-3-3	16	3-2-3-3-1-2-5-3	18	4-3-3-2-2-2-4-4
15 September	7	2-2-1-1-2-2-1-3	7	2-2-0-0-2-3-1-3	7	3-2-1-0-2-2-1-3
16 September	5	1-1-1-1-2-1-2-2	3	1-0-1-0-0-2-2-2	7	2-1-1-1-1-1-3-3
17 September	14	3-3-3-3-3-2-3-3	17	3-3-4-4-4-2-2-2	18	3-4-3-3-3-3-3-3

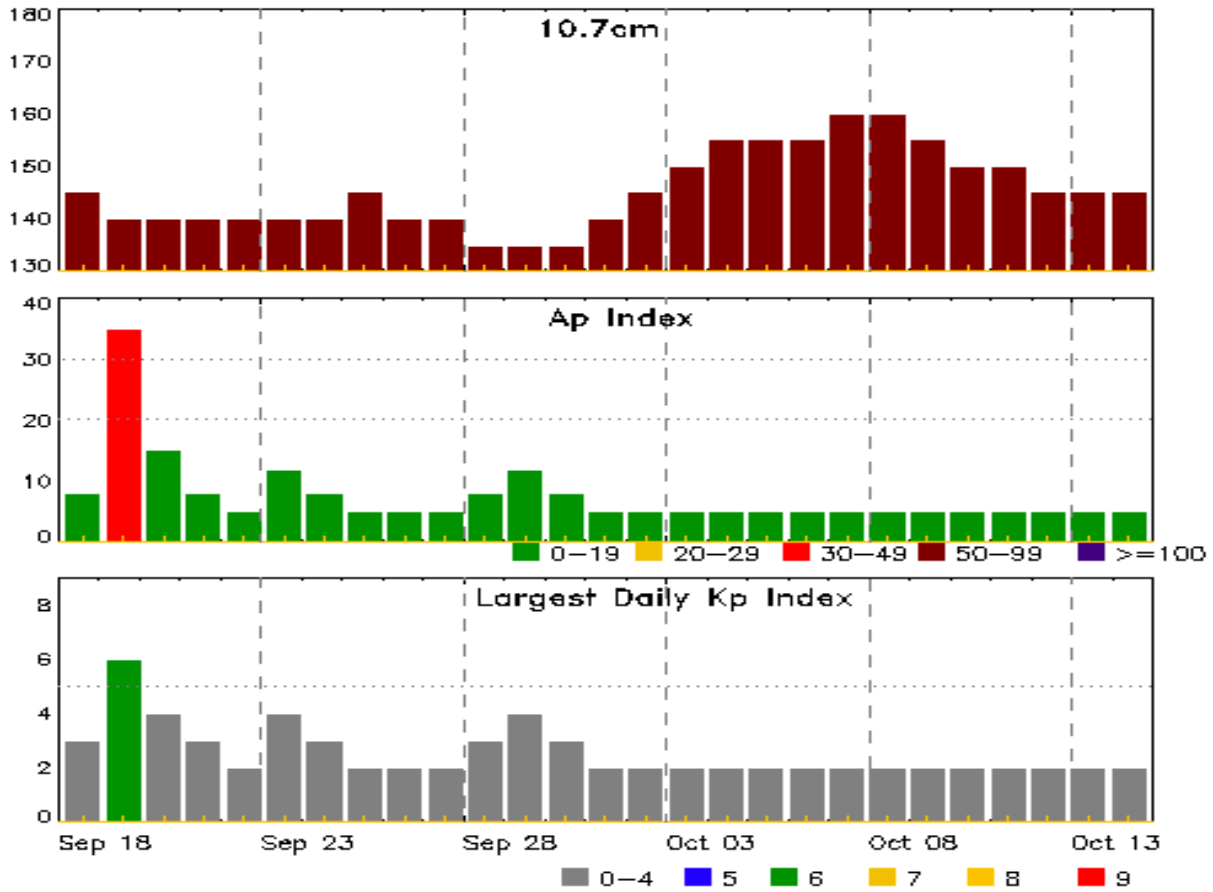


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
11 Sep 0213	ALERT: Type II Radio Emission	11/0120
12 Sep 1139	WARNING: Geomagnetic Sudden Impulse expected	12/1215 - 1245
12 Sep 1141	WARNING: Geomagnetic K = 4	12/1140 - 2100
12 Sep 1237	SUMMARY: Geomagnetic Sudden Impulse	12/1222
12 Sep 1251	ALERT: Geomagnetic K = 4	12/1249
12 Sep 1252	WARNING: Geomagnetic K = 5	12/1252 - 1800
12 Sep 1419	ALERT: Geomagnetic K = 5	12/1414
12 Sep 1434	WARNING: Geomagnetic K = 6	12/1433 - 2100
12 Sep 1436	EXTENDED WARNING: Geomagnetic K = 4	12/1140 - 13/0300
12 Sep 1437	EXTENDED WARNING: Geomagnetic K = 5	12/1252 - 2359
12 Sep 1648	ALERT: Geomagnetic K = 5	12/1628
12 Sep 1805	ALERT: Geomagnetic K = 6	12/1759
12 Sep 2102	WATCH: Geomagnetic Storm Category G1 predicted	
13 Sep 0201	EXTENDED WARNING: Geomagnetic K = 4	12/1140 - 13/1500
13 Sep 0201	WARNING: Geomagnetic K = 5	13/0200 - 1200
13 Sep 0207	ALERT: Geomagnetic K = 5	13/0206
14 Sep 0101	WARNING: Geomagnetic K = 4	14/0101 - 1200
14 Sep 0218	ALERT: Geomagnetic K = 4	14/0210
14 Sep 0226	WARNING: Geomagnetic K = 5	14/0225 - 0900
14 Sep 1900	WARNING: Geomagnetic K = 4	14/1900 - 15/0900
14 Sep 1943	ALERT: Geomagnetic K = 4	14/1943
15 Sep 2106	WATCH: Geomagnetic Storm Category G1 predicted	
17 Sep 0209	WARNING: Geomagnetic Sudden Impulse expected	17/0230 - 0315
17 Sep 0237	WARNING: Geomagnetic K = 4	17/0235 - 1800
17 Sep 0246	SUMMARY: Geomagnetic Sudden Impulse	17/0232
17 Sep 0603	ALERT: Geomagnetic K = 4	17/0559
17 Sep 1224	WATCH: Geomagnetic Storm Category G2 predicted	
17 Sep 1643	ALERT: Type II Radio Emission	17/1612



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
18 Sep	145	8	3	02 Oct	145	5	2
19	140	35	6	03	150	5	2
20	140	15	4	04	155	5	2
21	140	8	3	05	155	5	2
22	140	5	2	06	155	5	2
23	140	12	4	07	160	5	2
24	140	8	3	08	160	5	2
25	145	5	2	09	155	5	2
26	140	5	2	10	150	5	2
27	140	5	2	11	150	5	2
28	135	8	3	12	145	5	2
29	135	12	4	13	145	5	2
30	135	8	3	14	145	5	2
01 Oct	140	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
11 Sep	0108	0128	0157	M1.3	0.029	1F	N08E62		3429	100	2	
11 Sep	0358	0407	0415	M1.1	0.008	SN	S09E59		3431			
11 Sep	1438	1449	1459	M1.1	0.009	SN	S04E50		3431			
12 Sep	0418	0426	0431	M1.9	0.007	1B	N22E03		3425			
12 Sep	0431	0442	0447	M1.8	0.018							
12 Sep	0647	0707	0719	M2.5	0.001	2N	N17W31		3423			
14 Sep	0640	0745	0839	M1.4	0.065				3429			
14 Sep	1923	1931	1940	M1.9	0.011	SN	N12E09		3429	460		
14 Sep	2117	2126	2132	M2.5	0.013	SN	N12E08		3429			
15 Sep	2219	2229	2234	M1.7	0.006	1F	N12W08		3429			
16 Sep	0038	0050	0057	M2.9	0.015	1N	N11W09		3429			
16 Sep	0530	0538	0551	M3.3	0.032	1B	N11W11		3429			

Flare List

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
11 Sep	0022	0040	0052	C3.6			3421
11 Sep	0038	0040	0043		SF	N22E17	3425
11 Sep	0108	0128	0157	M1.3	1F	N08E62	3429
11 Sep	0218	0226	0232		SF	N08E62	3429
11 Sep	0238	0238	0240		SF	S09E59	3431
11 Sep	0358	0407	0415	M1.1	SN	S09E59	3431
11 Sep	0412	0412	0414		SF	S23W65	
11 Sep	0534	0534	0540	C7.1	SF	S23W66	3431
11 Sep	0553	0601	0924	C9.3	1N	S04E55	3431
11 Sep	0602	0604	0617		SF	N14W49	3428
11 Sep	0610	0617	0625	C6.8			3431
11 Sep	0625	0630	0634		SF	N14W81	3421
11 Sep	0645	0649	0705		SF	N16W20	3423
11 Sep	0711	0722	0742		SF	S22W65	
11 Sep	0754	0756	0801		SF	S08E55	3431
11 Sep	0805	0805	0813		SF	S22W65	
11 Sep	0826	0839	0907		SF	N13E56	3429
11 Sep	0843	0844	0849		SF	S08E54	3431
11 Sep	0908	0911	0923		SF	N13E56	3429



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
11 Sep	1025	1037	1048	C7.4			3423
11 Sep	1121	1127	1136	C3.7	1F	S04E53	3431
11 Sep	1129	1129	1137		SF	N17W22	3423
11 Sep	1208	1208	1211		SF	N14E55	3429
11 Sep	1213	1215	1219		SF	N14E55	3429
11 Sep	1303	1304	1317		SF	N14E55	3429
11 Sep	1316	1316	1320		SF	N17W26	3423
11 Sep	1320	1321	1323		SF	N14E55	3429
11 Sep	1429	1431	1432		SF	N18W26	3423
11 Sep	1438	1449	1459	M1.1	SN	S04E50	3431
11 Sep	1706	1706	1710		SF	N17W27	3423
11 Sep	1716	1735	1746	C5.5	SN	N21E09	3425
11 Sep	1823	1824	1832		SF	N23E07	3425
11 Sep	1832	1843	1852		SF	N15W21	3423
11 Sep	1833	1839	1842		SF	N22E07	3425
11 Sep	1845	1848	1856		SF	N22E07	3425
11 Sep	2107	2114	2124	C8.2			3425
12 Sep	0040	0040	0042		SF	N17W28	3423
12 Sep	0104	0113	0119		SF	S09E46	3431
12 Sep	0121	0128	0138	C3.7			
12 Sep	0208	0215	0223	C3.8			
12 Sep	0345	0345	0348		SF	N18W33	3423
12 Sep	0418	0426	0431	M1.9	1B	N22E03	3425
12 Sep	0431	0442	0447	M1.8			
12 Sep	0523	0523	0532		SF	N25E04	3425
12 Sep	0536	0539	0554	C4.5	SF	S06E45	3431
12 Sep	0647	0707	0719	M2.5	2N	N17W31	3423
12 Sep	0758	0806	0820	C7.3			
12 Sep	0858	0858	0900		SF	N18W31	3423
12 Sep	1106	1112	1117	C3.6	SF	N24W01	3425
12 Sep	1132	1137	1142	C3.1	SF	N17W34	3423
12 Sep	1202	1203	1207		SF	N24W02	3425
12 Sep	1211	1219	1223		SF	N24W02	3425
12 Sep	1323	1410	1426		SF	N23W04	3425
12 Sep	1339	1339	1344		SF	S16W12	3430
12 Sep	1507	1524	1535	C4.7	SF	N23W06	3425
12 Sep	1558	1611	1626	C2.9			
12 Sep	1931	1938	1944	C1.6			



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
12 Sep	1945	2009	2017	C4.6			3429
12 Sep	2150	2200	2207	C5.6			3423
13 Sep	0029	0031	0038		SF	N18W42	3423
13 Sep	0804	0810	0817	C5.5	SF	N17W46	3423
13 Sep	1455	1502	1508	C1.9			3429
13 Sep	1508	1517	1521	C1.8			3429
13 Sep	1636	1641	1645	C1.2			3423
13 Sep	1755	1804	1810	C1.3			3423
14 Sep	0548	0600	0611	C1.5			3429
14 Sep	0640	0745	0839	M1.4			3429
14 Sep	1232	1233	1244		SF	N11E13	3429
14 Sep	1517	1531	1541	C4.6			3429
14 Sep	B1837	1837	1847	C2.9	SF	N24W35	3425
14 Sep	1908	1913	1917	C2.0			3429
14 Sep	1923	1931	1940	M1.9	SN	N12E09	3429
14 Sep	2117	2126	2132	M2.5	SN	N12E08	3429
15 Sep	0029	0030	0032		SF	N12E03	3429
15 Sep	0040	0046	0050	C7.4			3429
15 Sep	0050	0057	0102	C6.9			3429
15 Sep	0240	0250	0255	C2.3			3429
15 Sep	0255	0309	0317	C7.4			3429
15 Sep	0550	0604	0611	C7.0			3429
15 Sep	0759	0802	0806		SF	N14E03	3429
15 Sep	0852	0859	0905	C1.9	SF	N14E03	3429
15 Sep	0929	0931	0932		SF	N12E01	3429
15 Sep	0933	0934	0936		SF	N12E01	3429
15 Sep	0937	0938	0949		SF	N12E01	3429
15 Sep	1000	1018	1021	C2.2	SF	N11W00	3429
15 Sep	1309	1317	1322	C2.1	SF	N11W02	3429
15 Sep	1449	1454	1459		SF	N12W05	3429
15 Sep	1954	1956	2001		SF	N24W49	3425
15 Sep	2114	2116	2119		SF	N12W07	3429
15 Sep	2219	2229	2234	M1.7	1F	N12W08	3429
15 Sep	2335	2342	2347	C2.0			3429
16 Sep	0038	0050	0057	M2.9	1N	N11W09	3429
16 Sep	0323	0331	0337	C1.4			3429
16 Sep	0509	0524	0530	C5.0			
16 Sep	0530	0538	0551	M3.3	1B	N11W11	3429



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
16 Sep	0706	0711	0716	C2.1	SF	N12W10		3429
16 Sep	0736	0740	0744	C2.6				3429
16 Sep	1029	1030	1035		SF	N11W14		3429
16 Sep	1125	1126	1129		SF	N17W79		3424
16 Sep	1146	1149	1152		SF	N11W15		3429
16 Sep	1156	1205	1213	C2.1				3429
16 Sep	1313	1319	1333	C1.9				3429
16 Sep	1353	1401	1415		SF	N12W17		3429
16 Sep	1508	1511	1523		SF	N11W19		3429
16 Sep	1555	1557	1618		SN	N09W17		3429
17 Sep	1029	1032	1036		SF	N22W58		3425
17 Sep	1555	1604	1610	C3.5				3435



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	4			
Region 3418																		
30 Aug	N22E63	345	30	10	Hsx	1	A											
31 Aug	N22E50	346	30	1	Hsx	1	A											
01 Sep	N22E37	346	20	2	Hsx	1	A											
02 Sep	N21E24	346	10	1	Hsx	1	A											
03 Sep	N21E10	347	10	1	Hsx	1	A											
04 Sep	N21W04	348	10	1	Hrx	1	A					1						
05 Sep	N21W18	348	5	1	Axx	1	A											
06 Sep	N21W32	349	10	1	Axx	1	A											
07 Sep	N20W39	343	10	1	Bxo	2	B											
08 Sep	N19W52	343	10	3	Bxo	5	B											
09 Sep	N19W66	343	10	7	Bxi	8	B	1				1						
10 Sep	N19W80	344	20	5	Cro	5	B	1				3						
11 Sep	N20W93	344	20	2	Hrx	1	A											
								2	0	0	5	0	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 348

Region 3420																		
03 Sep	S20E16	341	30	3	Cso	4	B											
04 Sep	S20E02	342	20	3	Cro	1	B											
05 Sep	S19W12	342	10	2	Axx	3	A	1				1						
06 Sep	S22W25	341	10	4	Axx	3	A											
07 Sep	S22W38	342	plage															
08 Sep	S22W52	343	plage															
09 Sep	S22W66	343	plage															
10 Sep	S22W80	344	plage															
								1	0	0	0	1	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 342



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 3421																		
03 Sep	N15E14	343	20	3	Bxo	5	B											
04 Sep	N15W00	344	20	8	Dai	9	B	3				3						
05 Sep	N14W14	344	140	9	Dai	15	B	3	3			5	3					
06 Sep	N14W26	342	220	10	Dai	19	B	5				6	1					
07 Sep	N15W39	343	220	11	Eai	23	BG	1				2						
08 Sep	N14W53	343	170	12	Eai	17	B	1				5						
09 Sep	N11W64	340	100	11	Eai	12	B	8				8	2					
10 Sep	N13W78	342	60	15	Eao	11	B					4						
11 Sep	N15W91	342	10	10	Bxo	4	B	1				1						
								22	3	0	34	6	0	0	0	0		

Crossed West Limb.
 Absolute heliographic longitude: 344

Region 3422																		
04 Sep	N13E22	322	30	5	Cro	6	B	1				1						
05 Sep	N13E07	323	30	6	Dro	5	B					2						
06 Sep	N14W05	321	20	4	Hsx	4	A											
07 Sep	N14W19	323	5	1	Axx	1	A	2				1						
08 Sep	N14W33	324	plage															
09 Sep	N14W47	324	plage															
10 Sep	N14W61	325	plage															
11 Sep	N14W75	326	plage															
12 Sep	N14W89	327	plage															
								3	0	0	4	0	0	0	0	0		

Crossed West Limb.
 Absolute heliographic longitude: 321



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 3423																	
04 Sep	N16E61	283	10	5	Bxo	6	B					2					
05 Sep	N16E46	284	90	5	Dao	8	B										
06 Sep	N16E36	281	245	5	Dao	14	B					2					
07 Sep	N17E22	282	240	8	Dao	15	B	2				6					
08 Sep	N16E10	280	280	11	Eki	23	B										
09 Sep	N12W03	279	380	11	Ekc	32	B	1				1					
10 Sep	N16W16	279	380	13	Ekc	21	BG	5				9					
11 Sep	N16W30	281	420	13	Ekc	21	BG	1				6					
12 Sep	N16W44	282	340	12	Ekc	15	BG	2	1			4		1			
13 Sep	N16W58	283	280	13	Eko	9	B	3				2					
14 Sep	N15W72	283	260	14	Eko	6	B										
15 Sep	N16W84	282	220	12	Eao	6	B										
								14	1	0	32	0	1	0	0		

Crossed West Limb.
 Absolute heliographic longitude: 279

Region 3424																	
05 Sep	N16E74	256	10	1	Bxo	2	B	1									
06 Sep	N17E61	255	40	2	Cso	2	B										
07 Sep	N17E48	255	30	3	Cro	3	B										
08 Sep	N16E35	255	10	4	Cro	2	B										
09 Sep	N17E22	255	plage														
10 Sep	N17E08	256	plage														
11 Sep	N17W06	257	plage														
12 Sep	N17W20	258	plage														
13 Sep	N17W34	259	plage														
14 Sep	N17W48	259	plage														
15 Sep	N17W62	260	plage														
16 Sep	N17W76	261	plage									1					
17 Sep	N17W90	262	plage														
								1	0	0	1	0	0	0	0	0	

Still on Disk.
 Absolute heliographic longitude: 257



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 3425																							
06 Sep	N23E70	247	40	5	Cso	7	B						2										
07 Sep	N23E56	248	60	7	Dao	8	B	2	1				5	1									
08 Sep	N23E43	246	140	8	Dai	15	BG	6					7										
09 Sep	N20E27	249	120	10	Dai	13	B						2										
10 Sep	N23E14	250	110	11	Eai	13	B	1					4										
11 Sep	N25E01	250	100	12	Eai	24	B	2					5										
12 Sep	N24W13	251	90	12	Eai	24	BG	2	1				6	1									
13 Sep	N23W27	252	70	11	Eao	17	B																
14 Sep	N23W41	252	70	11	Eao	16	B	1					1										
15 Sep	N23W53	251	40	10	Cso	8	B						1										
16 Sep	N24W65	250	30	9	Cro	6	B																
17 Sep	N23W75	247	20	10	Cao	6	B						1										
								14	2	0		34	2	0	0	0	0						

Still on Disk.

Absolute heliographic longitude: 250

Region 3426

07 Sep	S16E15	289	10	1	Bxo	2	B															
08 Sep	S14W00	290	plage																			
09 Sep	S14W14	291	plage										1									
10 Sep	S14W28	292	plage																			
11 Sep	S14W42	293	plage																			
12 Sep	S14W56	294	plage																			
13 Sep	S14W70	295	plage																			
14 Sep	S14W84	295	plage																			
								0	0	0		1	0	0	0	0	0					

Crossed West Limb.

Absolute heliographic longitude: 290



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 3430																							
10 Sep	S16E09	255	10	3	Bxo	4	B																
11 Sep	S16W05	256	30	3	Cro	7	B																
12 Sep	S17W19	257	30	6	Dro	7	B					1											
13 Sep	S17W33	258	50	8	Dao	10	B																
14 Sep	S17W47	258	50	8	Dso	10	B																
15 Sep	S18W60	258	30	8	Cso	5	B																
16 Sep	S17W74	259	30	1	Hrx	1	A																
17 Sep	S17W88	260	plage																				
												0	0	0	1	0	0	0	0	0			

Still on Disk.

Absolute heliographic longitude: 256

Region 3431																							
10 Sep	S08E60	203	30	2	Dao	6	B	1															
11 Sep	S07E47	204	50	3	Dao	5	BD	4	2			6	2										
12 Sep	S07E33	205	30	3	Cro	5	B	1				2											
13 Sep	S08E19	206	20	3	Hrx	4	A																
14 Sep	S08E05	206	20	3	Hrx	2	A																
15 Sep	S08W09	207	plage																				
16 Sep	S08W23	208	plage																				
17 Sep	S14W38	209	0		Axx	1	A																
												6	2	0	8	2	0	0	0	0			

Still on Disk.

Absolute heliographic longitude: 206

Region 3432																							
11 Sep	S24W74	325	10	3	Bxo	3	B																
12 Sep	S22W88	326	10	2	Bxo	2	B																
												0	0	0	0	0	0	0	0	0			

Crossed West Limb.

Absolute heliographic longitude: 325



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 3433																	
12 Sep	N28E67	171	70	2	Hsx	1	A										
13 Sep	N28E53	172	80	2	Hsx	1	A										
14 Sep	N28E40	170	90	2	Hsx	1	A										
15 Sep	N28E28	170	90	2	Hsx	1	A										
16 Sep	N28E10	175	80	2	Hsx	1	A										
17 Sep	N28W04	176	90	3	Cao	3	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 176

Region 3434																	
15 Sep	N08W01	199	20	3	Hsx	3	A										
16 Sep	N08W14	199	10	2	Axx	2	A										
17 Sep	N08W28	200	plage														
								0	0	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 199

Region 3435																	
16 Sep	N10E69	116	90	2	Dso	2	B										
17 Sep	N10E60	113	110	8	Dao	3	B	1									
								1	0	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 113

Region 3436																	
17 Sep	N19W22	194	80	5	Cao	8	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 194



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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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