

Space Weather Highlights
09 October - 15 October 2023

SWPC PRF 2511
16 October 2023

Solar activity was at low to moderate levels. Region 3452 (N07, L=301, class/area=Eac/240 on 04 Oct) produced an M2.3/Sf flare (R1 - Minor) at 10/1217 UTC, the strongest of the period. Region 3451 (N17, L=304, class/area=Eki/270 on 10 Oct) also produced an M1.6 at 10/0209 UTC and an M1.1 at 12/0458 UTC. Both regions were near the W limb when they produced moderate activity. The other 16 numbered active regions were either quiet or only produced C-class flare activity.

Other activity included a Type II radio sweep at 09/0449 UTC from an eruptive event on the E limb. Additionally, three CMEs were observed on 14 Oct from a filament channel eruption around 14/0300 UTC from the NW quadrant, near Region 3466 (N09, L=212, class/area Cao/beta) around 14/1300 UTC, and another filament channel in the SW quadrant around 14/1600 UTC. Analysis and modeling of the events suggested the ejecta would pass close, but not on, the Sun-Earth line.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during the summary period.

Geomagnetic field activity ranged from quiet to active levels. A CIR ahead of a negative polarity CH HSS was observed on 13 Oct, which increased geomagnetic activity to active levels. Total magnetic field strength climbed to 24 nT while the Bz component briefly reached -15 nT, but was mostly oriented neutral or northward. Solar wind speeds reached a peak of ~540 km/s. The decline in solar wind parameters on 14 Oct caused a decrease to quiet to unsettled activity. A single period of unsettled was also observed on 09 Oct due to some sustained southward Bz (-6 nT). The remainder of the summary period was at quiet levels.

Space Weather Outlook
16 October - 11 November 2023

Solar activity is expected to be at low levels with a slight chance for M-class flares (R1-R2/Minor-Moderate) throughout the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 18-21 Oct, 28 Oct - 02 Nov, and 11 Nov due to multiple, recurrent CH HSSs. The remainder of the outlook period is like to reach moderate levels.

Geomagnetic field activity is expected to reach active levels on 17-18 Oct, 01 Nov, and 09 Nov and unsettled levels on 19-20 Oct, 27-31 Oct, and 10 Nov due to the anticipated influence of multiple, recurrent CH HSSs. Quiet conditions are expected for the remainder of the outlook



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
09 October	166	129	495	C1.1	16	0	0	23	1	0	0	0
10 October	164	120	560	C1.2	8	2	0	9	1	0	0	0
11 October	158	149	805	C1.0	8	0	0	6	0	0	0	0
12 October	157	126	580	C1.4	3	1	0	8	0	0	0	0
13 October	149	91	440	B8.1	5	0	0	11	0	0	0	0
14 October	148	100	490	B6.2	2	0	0	2	0	0	0	0
15 October	145	92	510	B5.7	3	0	0	4	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	
	09 October	4.5e+04	1.8e+04	3.4e+06
10 October	2.6e+04	1.9e+04	1.4e+06	
11 October	2.5e+04	1.8e+04	3.9e+06	
12 October	3.0e+04	1.9e+04	5.5e+06	
13 October	4.2e+05	1.9e+04	2.2e+06	
14 October	6.7e+05	1.9e+04	1.2e+06	
15 October	2.2e+05	1.9e+04	1.6e+06	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	09 October	0	0-0-0-0-0-0-0-0	14	0-0-4-4-4-3-3-1	8
10 October	0	0-0-0-0-0-0-0-0	4	1-2-1-3-0-0-0-0	4	1-2-2-2-0-1-1-0
11 October	3	0-0-0-0-0-0-1-2	2	0-0-1-2-1-0-0-0	4	1-1-1-1-1-1-1-1
12 October	3	0-1-1-1-2-1-0-1	0	0-0-0-0-0-0-0-0	4	1-1-1-1-1-1-1-1
13 October	11	0-1-3-2-3-3-3-2	15	0-3-3-3-4-4-3-1	13	1-3-3-3-3-4-3-2
14 October	6	1-1-1-3-2-1-2-1	5	1-1-1-3-1-0-2-1	8	2-2-2-3-2-1-3-1
15 October	2	0-0-1-1-1-1-1-1	1	0-0-0-1-1-0-0-0	3	1-0-1-1-1-1-1-2

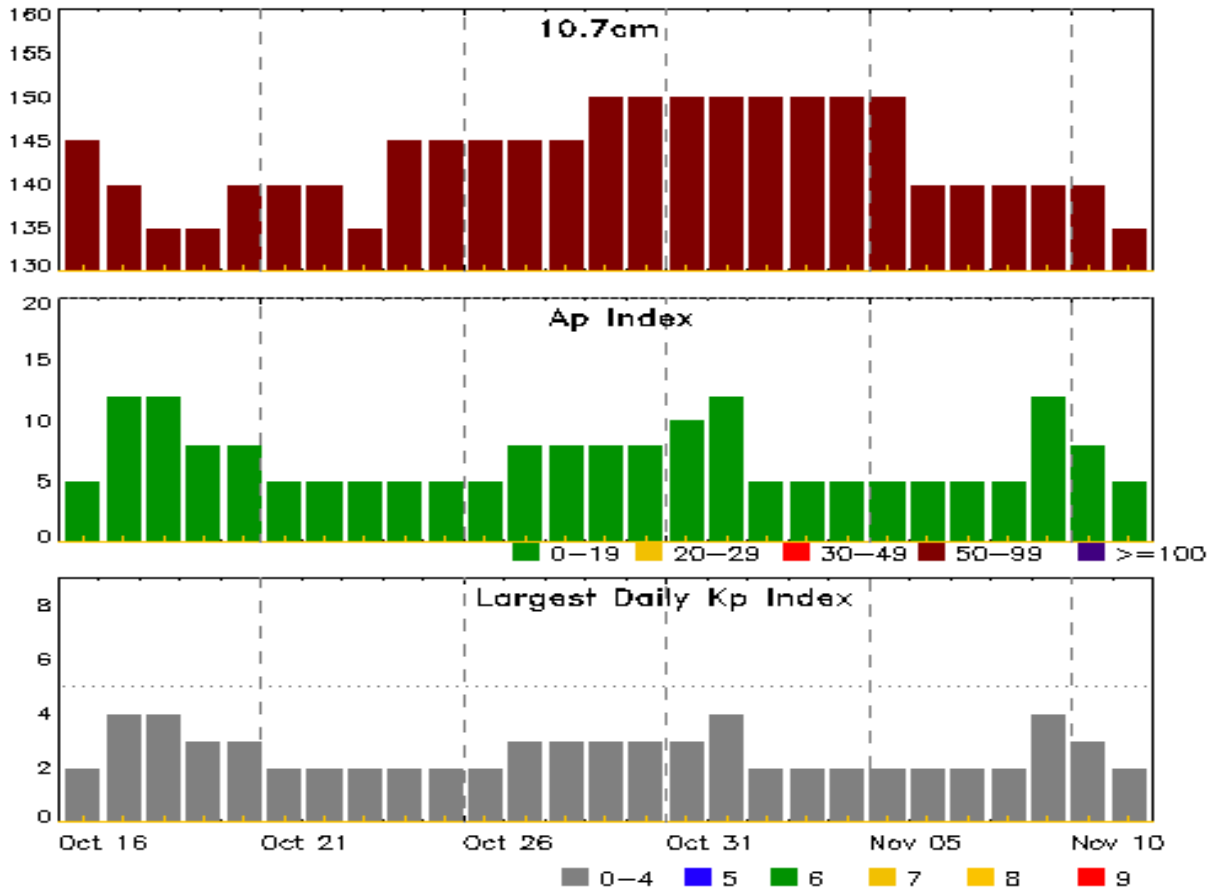


Alerts and Warnings Issued

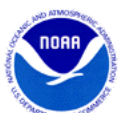
Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
09 Oct 0513	ALERT: Type II Radio Emission	09/0449
13 Oct 0633	WARNING: Geomagnetic K = 4	13/0635 - 1200
13 Oct 1155	EXTENDED WARNING: Geomagnetic K = 4	13/0635 - 2359
13 Oct 1746	ALERT: Geomagnetic K = 4	13/1740



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
16 Oct	145	5	2	30 Oct	150	8	3
17	140	12	4	31	150	10	3
18	135	12	4	01 Nov	150	12	4
19	135	8	3	02	150	5	2
20	140	8	3	03	150	5	2
21	140	5	2	04	150	5	2
22	140	5	2	05	150	5	2
23	135	5	2	06	140	5	2
24	145	5	2	07	140	5	2
25	145	5	2	08	140	5	2
26	145	5	2	09	140	12	4
27	145	8	3	10	140	8	3
28	145	8	3	11	135	5	2
29	150	8	3				



Energetic Events

Date	Time			X-ray	Optical Information			Peak		Sweep Freq	
	Begin	Max	Half	Class	Imp/ Flux	Location	Rgn	Radio Flux		Intensity	
			Max					245	2695	II	IV
10 Oct	0155	0209	0222	M1.6	0.018				3451		
10 Oct	1208	1217	1229	M2.3	0.020	SF	N09W69		3452		
12 Oct	0450	0458	0505	M1.1	0.008				3451		

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
09 Oct	0306	0314	0332	C2.1			3451
09 Oct	0408	0412	0417	C1.7			
09 Oct	0421	0428	0439	C1.8	SF	N18W49	3451
09 Oct	0439	0449	0502	C1.5			
09 Oct	0522	0531	0540	C4.4	SF	N18W49	3451
09 Oct	0624	0627	0629		SF	N20W48	3451
09 Oct	0656	0707	0711	C1.8			
09 Oct	0711	0717	0734	C2.3			
09 Oct	0756	0812	0815	C2.7	1F	N16W51	3451
09 Oct	0815	0826	0834	C3.6			3451
09 Oct	0834	0838	0843	C6.4			3451
09 Oct	0923	0923	0925		SF	N14W53	3451
09 Oct	0923	0925	0927		SF	S10E21	3460
09 Oct	0931	0931	0937		SF	S10E21	3460
09 Oct	1037	1038	1040		SF	S10E19	3460
09 Oct	1128	1143	1157	C7.6	SF	N14W51	3451
09 Oct	1136	1152	1205		SF	N11W55	3452
09 Oct	1139	1208	1232		SF	S09E18	3460
09 Oct	1258	1305	1307		SF	S14E05	3457
09 Oct	1301	1304	1313		SF	S11E18	3460
09 Oct	1429	1438	1454	C2.0	SF	S10E17	3460
09 Oct	1557	1605	1613	C1.7	SF	S10E16	3460
09 Oct	1640	1640	1643		SF	N16W58	3451
09 Oct	1807	1807	1818		SF	N08E23	3459
09 Oct	1821	1823	1835		SF	S08E13	3460
09 Oct	1852	1911	1928	C9.2	SF	N15W59	3451
09 Oct	2105	2106	2113		SF	S09E15	3460
09 Oct	2131	2149	2211	C2.8	SF	N14W61	3451



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
09 Oct	2217	2218	2222		SF	N15W63		3451
09 Oct	2223	2223	2226		SF	N15W63		3451
09 Oct	2247	2249	2325	C3.6	SF	S09E14		3460
10 Oct	0136	0142	0145	C4.1				3460
10 Oct	0145	0151	0155	C4.6				3451
10 Oct	0155	0209	0222	M1.6				3451
10 Oct	0632	0639	0647	C2.0	SF	N16W64		3451
10 Oct	1032	1045	1051	C2.7				
10 Oct	1148	1200	1208	C6.0	SF	N13W66		3451
10 Oct	1208	1217	1229	M2.3	SF	N09W69		3452
10 Oct	1320	1320	1330		SF	N20E46		3462
10 Oct	1344	1354	1402	C3.4				3464
10 Oct	1543	1554	1601	C2.9	1N	N05E71		3464
10 Oct	1621	1631	1645		SF	N05E71		3464
10 Oct	1643	1653	1700	C2.4	SF	N04E71		3464
10 Oct	1751	1808	1815		SF	N05E68		3464
10 Oct	2034	2034	2038		SF	S09W08		3460
10 Oct	2111	2117	2208		SF	S11W05		3460
11 Oct	0049	0101	0106	C2.8				3464
11 Oct	0106	0112	0116	C2.8				3460
11 Oct	0929	0937	0947	C7.2	SF	N17W78		3451
11 Oct	1220	1227	1231	C1.9	SF	N03E58		3464
11 Oct	1419	1440	1450	C4.9	SF	N13W85		3451
11 Oct	1452	1452	1456		SF	N13W80		3451
11 Oct	1616	1626	1651	C1.9	SF	S11W75		3454
11 Oct	1941	1950	2013	C3.4				3451
11 Oct	2157	2158	2200		SF	N06E50		3464
11 Oct	2203	2212	2216	C6.6				3451
12 Oct	0307	0347	0640	C9.7				3460
12 Oct	0450	0458	0505	M1.1				3451
12 Oct	0552	0606	0609		SF	S12W73		3454
12 Oct	0556	0559	0612		SF	N06E45		3464
12 Oct	0640	0647	0653	C2.2				
12 Oct	0743	0743	0755		SF	S11W79		3454
12 Oct	0838	0838	0842		SF	S11W79		3454
12 Oct	1016	1016	1023		SF	N05E43		3464
12 Oct	1207	1207	1213		SF	N05E42		3464
12 Oct	1218	1219	1241		SF	N06E41		3464



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
12 Oct	1746	1752	1759	C2.3	SF	N08E38		3464
13 Oct	0540	0541	0543		SF	S09W30		3460
13 Oct	0552	0603	0615	C1.5				3460
13 Oct	0829	0829	0831		SF	N06E30		3464
13 Oct	0902	0909	0918	C1.2	SF	N08E49		3465
13 Oct	0956	0957	1000		SF	N10W11		3466
13 Oct	1019	1020	1030		SF	N10W12		3466
13 Oct	1242	1243	1247		SF	S12W38		3460
13 Oct	1435	1440	1446		SF	S12W39		3460
13 Oct	1521	1522	1527		SF	S12W39		3460
13 Oct	1547	1555	1600	C1.7				3467
13 Oct	1600	1609	1613	C1.7				3467
13 Oct	1709	1713	1717		SF	S11W42		3460
13 Oct	1907	1909	1911		SF	N11W18		3466
13 Oct	1925	1934	1942	C1.4	SF	N09E45		3465
14 Oct	0503	0515	0527	C9.8	SN	S11W44		3460
14 Oct	0659	0659	0707		SF	N12E43		3465
14 Oct	1604	1632	1637	C3.5				3467
15 Oct	0231	0249	0314	C2.4				3467
15 Oct	0611	0619	0625	B9.6	SF	S18W09		3463
15 Oct	1244	1250	1255		SF	N03E01		3464
15 Oct	1622	1633	1648	C3.9	SF	N09W02		3464
15 Oct	1935	1949	2007	C1.8				
15 Oct	2327	2328	2330		SF	S15W56		3460



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 3450																							
27 Sep	S18E66	334	30	2	Cro	2	B	1															
28 Sep	S19E58	329	70	10	Dai	8	B	6	1			3											
29 Sep	S19E43	330	140	11	Eai	13	BG					3											
30 Sep	S19E31	329	170	11	Eai	12	BG	2				2	1										
01 Oct	S19E18	329	180	12	Eai	20	BG	6				7											
02 Oct	S18E04	329	220	11	Eac	25	BG	6				6											
03 Oct	S19W10	330	140	13	Eai	19	BG	10				6											
04 Oct	S23W23	331	110	13	Eso	13	B	2				2											
05 Oct	S18W38	332	90	12	Eao	13	B																
06 Oct	S19W55	336	10	2	Axx	2	A	1															
07 Oct	S19W67	335	10	1	Axx	1	A	1				2											
08 Oct	S19W81	336	plage																				
								35	1	0	31	1	0	0	0								

Crossed West Limb.
 Absolute heliographic longitude: 329

Region 3451																							
30 Sep	N14E60	300	80	7	Dai	8	BD	7	1			11	1										
01 Oct	N16E48	299	50	6	Dri	7	BD	2				7											
02 Oct	N17E34	299	30	5	Dri	7	B	1				1											
03 Oct	N16E22	298	50	6	Dso	8	B																
04 Oct	N12E08	300	70	9	Dso	8	B																
05 Oct	N17W07	301	140	10	Dai	18	BG	8				7											
06 Oct	N16W20	301	160	10	Dai	17	BG					1											
07 Oct	N16W33	301	180	12	Eai	22	BG	3				3											
08 Oct	N16W46	301	240	11	Eai	21	BD	2				7											
09 Oct	N17W60	302	240	11	Eai	14	BD	9				10	1										
10 Oct	N17W75	304	270	11	Eki	5	BG	3	2			2											
11 Oct	N16W86	301	270	11	Eki	3	BG	4				3											
								39	3	0	52	2	0	0	0								

Crossed West Limb.
 Absolute heliographic longitude: 301



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 3452																
30 Sep	N12E62	298		plage							1					
01 Oct	N11E47	300	120	8	Dai	12	B	2	1			5				
02 Oct	N11E33	300	240	10	Dai	12	B	1				2				
03 Oct	N11E19	300	150	11	Eai	16	B	3				5				
04 Oct	N07E07	301	240	13	Eac	36	B	2				1				
05 Oct	N11W08	302	220	12	Eai	28	BG	1								
06 Oct	N10W24	305	180	12	Esi	12	BG	1				2				
07 Oct	N11W36	304	180	11	Eai	16	B	3				3				
08 Oct	N10W50	305	150	12	Eao	12	B	1								
09 Oct	N09W64	306	70	11	Eao	8	B					1				
10 Oct	N09W80	308	5	1	Axx	1	A					1				
11 Oct	N09W94	309	5	1	Axx	1	A									
								15	1	0	20	0	0	0	0	

Crossed West Limb.
 Absolute heliographic longitude: 301

Region 3453																
01 Oct	N12E11	336	20	4	Cro	6	B									
02 Oct	N13W02	335	60	5	Cao	4	B	1								
03 Oct	N10W17	336	50	6	Dao	5	B					2				
04 Oct	N07W29	337	50	6	Cao	5	B	2				1				
05 Oct	N11W44	338	10	2	Bxo	4	B									
06 Oct	N10W58	339	10	2	Axx	3	A									
07 Oct	N10W72	340			plage											
08 Oct	N10W86	341			plage											
								3	0	0	3	0	0	0	0	

Crossed West Limb.
 Absolute heliographic longitude: 335



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 3454																							
01 Oct	S12E64	283	20	1	Hrx	1	A																
02 Oct	S12E50	283	30	2	Cro	3	B	1															
03 Oct	S13E38	281	20	4	Bxo	3	B	1															
04 Oct	S16E26	282	30	5	Cro	6	B																
05 Oct	S14E11	283	10	3	Bxo	4	B																
06 Oct	S12W01	282	20	6	Bxo	6	B					1											
07 Oct	S11W13	281	30	6	Cso	8	B					1											
08 Oct	S11W27	282	30	5	Cso	4	B																
09 Oct	S11W41	283	40	7	Cso	5	B																
10 Oct	S11W57	285	30	4	Cso	2	B																
11 Oct	S11W71	286	50	3	Cso	1	B	1				1											
12 Oct	S11W85	287	40	2	Hsx	1	A					3											
								3	0	0		6	0	0	0	0							

Crossed West Limb.
Absolute heliographic longitude: 282

Region 3455																							
02 Oct	N25E58	274	20		Cro	1	B		1				1										
03 Oct	N25E47	273	10	4	Axx	4	A																
04 Oct	N21E34	274	plage																				
05 Oct	N25E19	275	plage																				
06 Oct	N25E05	276	plage																				
07 Oct	N27W07	274	plage																				
08 Oct	N27W21	276	plage																				
09 Oct	N27W35	277	plage																				
10 Oct	N27W49	277	plage																				
11 Oct	N27W63	278	plage																				
12 Oct	N27W77	279	plage																				
									0	1	0		0	1	0	0							

Died on Disk.
Absolute heliographic longitude: 276



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 3456																		
03 Oct	S31W06	326	10	2	Bxo	2	B											
04 Oct	S31W19	327	10	3	Axx	1	A											
05 Oct	S31W34	328	10	1	Axx	1	A											
06 Oct	S31W48	329	plage															
07 Oct	S31W62	330	plage															
08 Oct	S31W76	331	plage															
09 Oct	S31W90	332	plage															
									0	0	0	0	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 326

Region 3457																		
04 Oct	S11E62	246	30	1	Hrx	1	A											
05 Oct	S10E47	247	30	1	Hrx	1	A	1			2							
06 Oct	S12E38	243	20	1	Hrx	1	A											
07 Oct	S11E24	244	20	1	Hrx	1	A											
08 Oct	S11E11	244	20	1	Hrx	1	A											
09 Oct	S11W03	245	5	1	Axx	1	A				1							
10 Oct	S11W17	245	plage															
11 Oct	S11W31	246	plage															
12 Oct	S11W45	247	plage															
13 Oct	S11W59	248	plage															
14 Oct	S11W73	249	plage															
15 Oct	S11W87	249	plage															
									1	0	0	3	0	0	0	0	0	

Still on Disk.
Absolute heliographic longitude: 245

Region 3458																		
05 Oct	N15E03	291	10	2	Bxo	7	B											
06 Oct	N15W11	292	10	1	Axx	1	A											
07 Oct	N15W23	291	10	1	Axx	1	A											
08 Oct	N15W37	292	10	2	Bxo	2	B											
09 Oct	N15W51	293	plage															
10 Oct	N15W65	293	plage															
11 Oct	N15W79	294	plage															
									0	0	0	0	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 291



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 3459																							
05 Oct	N10E65	229	10	1	Axx	2	A																
06 Oct	N08E60	221	20	5	Cro	5	B																
07 Oct	N07E44	224	20	3	Cro	3	B																
08 Oct	N07E31	224	10	1	Axx	1	A																
09 Oct	N07E17	225	plage										1										
10 Oct	N07E02	226	plage																				
11 Oct	N07W12	227	plage																				
12 Oct	N07W26	228	plage																				
13 Oct	N07W41	230	plage																				
14 Oct	N07W56	232	plage																				
15 Oct	N07W71	233	plage																				
													0	0	0	1	0	0	0	0	0		

Still on Disk.

Absolute heliographic longitude: 226

Region 3460

07 Oct	S11E35	233	10	2	Axx	2	A	1	1												
08 Oct	S10E23	232	80	7	Dai	15	BG	3					6								
09 Oct	S09E09	233	120	9	Dai	18	BG	3					10								
10 Oct	S10W06	234	140	9	Dai	18	BGD	1					2								
11 Oct	S10W20	235	110	10	Dai	11	BG	1													
12 Oct	S11W31	233	120	10	Dao	11	BG	1													
13 Oct	S10W44	233	90	9	Dao	9	BG	1					5								
14 Oct	S10W57	233	90	9	Dao	5	BG	1					1								
15 Oct	S10W70	232	90	6	Cao	5	B						1								
													12	1	0	25	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 234



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 3461																	
08 Oct	N12E40	215	20	1	Bxo	2	B										
09 Oct	N11E26	216	5	1	Axx	1	A										
10 Oct	N12E11	217	5	1	Axx	1	A										
11 Oct	N11W02	217	20	3	Cro	3	B										
12 Oct	N13W16	218	10	2	Bxo	2	B										
13 Oct	N13W30	219	plage														
14 Oct	N13W44	220	plage														
15 Oct	N13W58	220	plage														
									0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 217

Region 3462																	
08 Oct	N22E62	193	10	1	Axx	1	A										
09 Oct	N19E48	194	5	1	Axx	1	A										
10 Oct	N18E35	193	40	3	Cao	6	B				1						
11 Oct	N23E22	193	70	4	Dao	8	B										
12 Oct	N19E10	192	50	5	Cao	8	B										
13 Oct	N19W02	191	20	2	Hrx	2	A										
14 Oct	N20W13	189	10	1	Axx	1	A										
15 Oct	N20W27	189	plage														
									0	0	0	1	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 191

Region 3463																	
09 Oct	S17E62	180	10	2	Hrx	1	A										
10 Oct	S17E47	181	40	3	Cao	3	B										
11 Oct	S17E33	182	50	4	Dai	7	B										
12 Oct	S17E20	182	70	4	Dai	12	B										
13 Oct	S17E07	182	40	5	Cao	6	B										
14 Oct	S17W05	181	20	5	Cro	5	B										
15 Oct	S18W17	179	10	7	Bxo	4	B					1					
									0	0	0	1	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 181



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 3464																
10 Oct	N04E63	165	30	3	Cro	4	B	3			3	1				
11 Oct	N04E50	165	80	4	Cao	6	BG	2			2					
12 Oct	N04E36	166	90	7	Cao	6	BG	1			5					
13 Oct	N04E22	167	70	7	Cao	8	B				1					
14 Oct	N04E09	167	80	7	Cao	5	B									
15 Oct	N04W06	168	100	4	Cao	5	B	1			2					
								7	0	0	13	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 168

Region 3465																
11 Oct	N10E69	146	120	4	Dso	3	B									
12 Oct	N10E56	146	180	3	Hsx	3	A									
13 Oct	N10E43	146	200	3	Hsx	3	A	2			2					
14 Oct	N10E30	146	220	3	Hax	3	A				1					
15 Oct	N10E15	147	240	3	Hax	6	A									
								2	0	0	3	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 147

Region 3466																
11 Oct	N09E05	210	30	4	Cro	6	B									
12 Oct	N09W09	211	20	4	Cao	3	B									
13 Oct	N09W22	211	20	4	Cao	3	B				3					
14 Oct	N09W36	212	30	4	Cao	6	B									
15 Oct	N08W49	211	30	6	Cao	7	B									
								0	0	0	3	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 210

Region 3467																
13 Oct	N12E82	108	plage					2								
14 Oct	N12E66	110	40	6	Cao	5	B	1								
15 Oct	N13E53	109	40	7	Cao	5	B	1								
								4	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 109



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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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