Space Weather Highlights
21 October - 27 October 2024

SWPC PRF 2565
28 October 2024

Solar activity ranged from low to high. High levels were reached on 24 Oct, with the largest event of the reporting period, an X3.3 (R3-Strong) at 24/0357 UTC from Region 3869 (S17, L=195, class/area = Eki/460 on 24 Oct). Associated with this event were Type II and Type IV radio sweeps, a 10cm flare, and a partial halo CME. High levels were again reached on 26 Oct due to an X1.8 (R3) at 26/0719, from Region 3873 (S10, L=176, class/area = Dai/240 on 24 Oct), also with associated Type II, Type IV, 10cm flare, and partial halo CME. The associated CME was first observed in SOHO/LASCO C2 imagery at 26/0636. The event was modeled and analyzed, with output suggests potential arrival at Earth early on 28 Oct. Solar activity was moderate on 25 Oct, with a M1.1 (R1-Minor) at 25/0733 UTC, also from Region 3873, and on 27 Oct, with a M2.8 (R1) at 27/2324 UTC from Region 3878 (N18, L=141, class/area = Dso/80 on 27 Oct). The remainder of the summary period was at low levels.

Other activity included Region 3878 which rotated onto the visible disk on 27 Oct, but there were three M-flares on 26 Oct that appeared to occur in the vicinity of the region behind the limb. There is a large complex of sunspot regions in the south-east quadrant, including Regions 3869--3876, with flux emergence muddling the boundaries between individual regions.

The greater than 10 MeV protons flux increased above background level following R3 flare activity on 24 Oct. The S1 (Minor) threshold was reached on 26 Oct at 1910 UTC following another R3 event from Region 3873. They further increased to S2 (Moderate) threshold at 27/0850 UTC. Flux remained elevated above the S2 threshold for the remainder of the reporting period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal background to moderate levels throughout the reporting period.

Geomagnetic field activity ranged from quiet to active conditions. Active periods were observed on 24 Oct, due to influence from a positive CH with a possibly embedded transient, and on 26 Oct, due to influence from the CME associated with the X3.3 flare from Region 3869 on Oct 24. On 26 Oct, Bz was primarily northward but the total magnetic field reached 26 nT with wind speeds around 450-500 km/s. The remainder of the reporting period was at quiet to unsettled levels.

Space Weather Outlook
28 October - 23 November 2024

Solar activity is expected to be at moderate levels (R1/R2-Minor/Moderate), with the chance of high levels (R3-Strong), from 28 Oct to 6 Nov, as the southern complex of active regions rotates westward. The remainder of the outlook period is likely to reach moderate levels.

The greater than 10 MeV protons are expected to remain elevated at S2 through 28 Oct and S1

on 29 Oct, with the chance of additional events following activity from the southern spot complex as it rotates off the disk. No other proton events are expected at geosynchronous orbit in the remainder of the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be background to high levels due to potential passage of the CME associated with the X1.8 (R3) on 26 Oct.

Geomagnetic field activity is likely to reach G2 (Moderate) storm levels on 28 Oct and G1 (Minor) storm levels on 29 Oct due to anticipated influence of a CME that left the Sun on 26 Oct. Active levels are likely on 11-12 Nov, 15 Nov, and 20 Nov due to influence from recurrent CH HSSs, with Unsettled levels on 13 Nov, 16 Nov, and 18 Nov as the influences wane. The remainder of the outlook period is expected to be at mostly quiet levels.

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
21 October	164	168	880	C2.8	1	0	0	2	0	0	0	0
22 October	176	130	610	C2.4	3	0	0	3	0	0	0	0
23 October	185	104	610	C2.0	9	0	0	6	1	0	0	0
24 October	197	138	1300	C2.1	1	1	1	5	0	0	0	0
25 October	209	157	1140	C1.8	7	1	0	4	0	0	0	0
26 October	238	181	1220	C3.6	3	4	1	7	0	0	1	0
27 October	246	198	1330	C3.2	8	1	0	9	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	>2MeV
21 October	1.9e+05	1.4e+04	6.2e+06
22 October	1.6e+05	1.5e+04	3.2e+06
23 October	7.5e+04	1.6e+04	1.1e+06
24 October	2.3e+05	1.8e+04	1.6e+06
25 October	4.7e+05	2.9e+04	1.7e+06
26 October	1.5e+07	7.5e+05	3.3e+06
27 October	4.3e+08	1.2e+07	1.6e+06

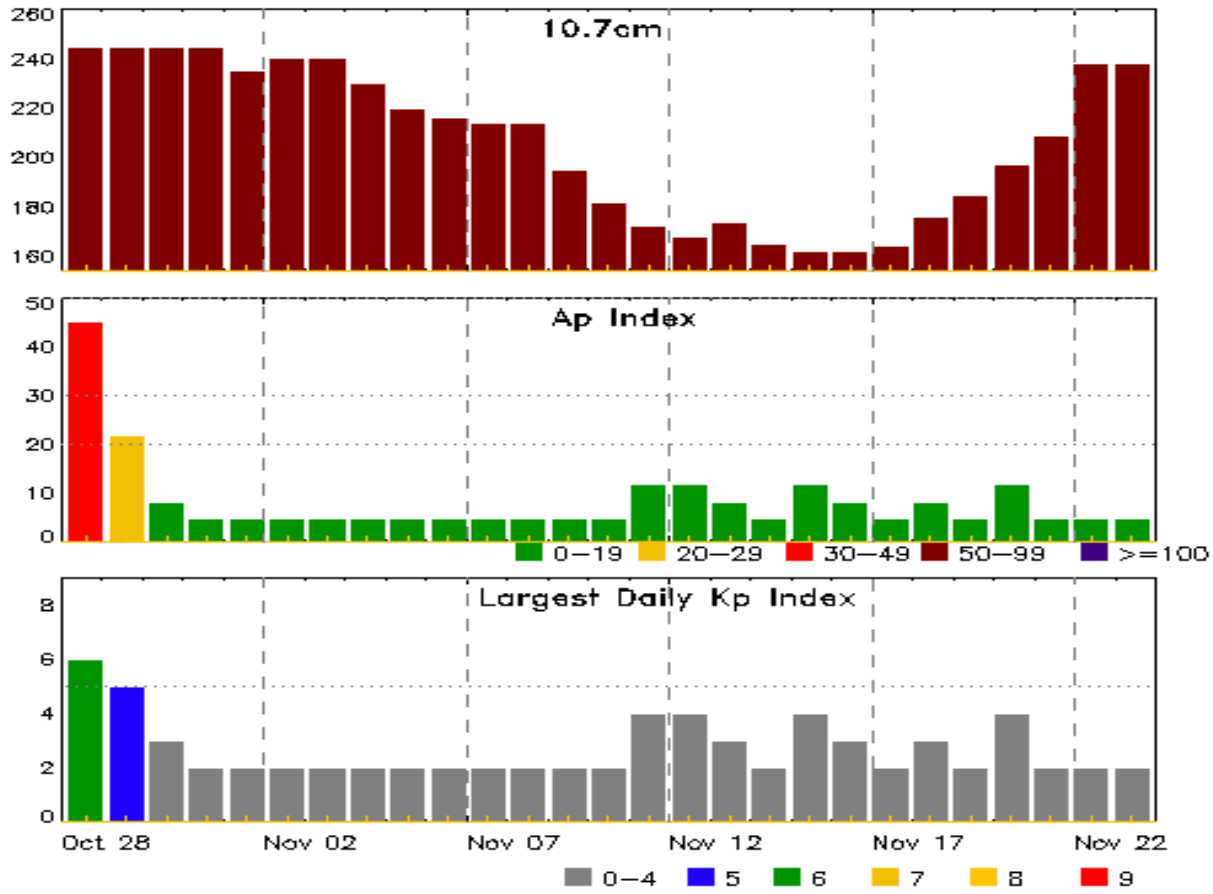
Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
21 October	3	0-0-1-1-2-1-1-1	3	0-0-2-2-0-2-1-0	5	1-0-2-2-1-2-1-2
22 October	7	2-2-2-2-2-2-1-2	25	1-2-5-5-4-5-3-2	8	2-2-2-3-2-2-2-2
23 October	7	1-2-1-2-3-2-2-1	15	1-1-1-5-5-1-2-1	9	2-3-2-3-3-1-2-2
24 October	10	2-4-3-1-2-2-2-1	11	1-4-3-3-3-2-1-0	13	3-4-4-2-1-2-2-2
25 October	2	1-0-0-0-1-2-1-0	1	1-0-0-0-0-0-0-1	3	2-1-1-1-0-1-1-1
26 October	11	1-1-1-2-3-3-3-4	9	0-0-0-2-4-3-3-2	14	2-1-2-2-3-3-4-4
27 October	8	3-1-1-2-2-3-2-2	14	1-2-2-4-3-4-3-2	15	3-2-1-3-2-3-3-3

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
24 Oct 0344	ALERT: X-ray Flux exceeded M5	24/0341
24 Oct 0406	ALERT: Type II Radio Emission	24/0346
24 Oct 0407	ALERT: Type IV Radio Emission	24/0346
24 Oct 0433	SUMMARY: X-ray Event exceeded X1	24/0330 - 0428
24 Oct 0512	WARNING: Geomagnetic K = 4	24/0512 - 1200
24 Oct 0529	ALERT: Geomagnetic K = 4	
24 Oct 0553	WARNING: Geomagnetic K = 5	24/0553 - 0900
24 Oct 0654	SUMMARY: 10cm Radio Burst	24/0338 - 0350
24 Oct 1702	WATCH: Geomagnetic Storm Category G1 predicted	
26 Oct 0617	ALERT: X-ray Flux exceeded M5	26/0613
26 Oct 0717	ALERT: Type II Radio Emission	26/0629
26 Oct 0723	SUMMARY: 10cm Radio Burst	26/0618 - 0623
26 Oct 0725	ALERT: Type IV Radio Emission	26/0629
26 Oct 0811	SUMMARY: X-ray Event exceeded X1	26/0557 - 0756
26 Oct 1539	WARNING: Geomagnetic K = 4	26/1538 - 27/0300
26 Oct 1638	WARNING: Proton 10MeV Integral Flux > 10pfu	26/1638 - 27/0600
26 Oct 1903	WATCH: Geomagnetic Storm Category G1 predicted	
26 Oct 1929	ALERT: Proton Event 10MeV Integral Flux >= 10pfu	26/1910
26 Oct 2039	ALERT: Geomagnetic K = 4	
27 Oct 0204	EXTENDED WARNING: Geomagnetic K = 4	26/1538 - 27/1500
27 Oct 0555	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	26/1638 - 27/2359
27 Oct 0902	ALERT: Proton Event 10MeV Integral Flux >= 100pfu	27/0835
27 Oct 1220	WATCH: Geomagnetic Storm Category G2 predicted	
27 Oct 1455	EXTENDED WARNING: Geomagnetic K = 4	26/1538 - 28/0900
27 Oct 2355	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	26/1638 - 28/2359

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
28 Oct	245	45	6	11 Nov	172	12	4
29	245	22	5	12	168	12	4
30	245	8	3	13	174	8	3
31	245	5	2	14	165	5	2
01 Nov	235	5	2	15	162	12	4
02	240	5	2	16	162	8	3
03	240	5	2	17	164	5	2
04	230	5	2	18	176	8	3
05	220	5	2	19	185	5	2
06	216	5	2	20	197	12	4
07	214	5	2	21	209	5	2
08	214	5	2	22	238	5	2
09	195	5	2	23	238	5	2
10	182	5	2				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV
24 Oct	0330	0357	0428	X3.3	0.710	SF	S05E86	3869	1600	5900	1	2
24 Oct	1022	1029	1034	M1.2	0.003	SF	S15E87	3869				
25 Oct	0723	0733	0738	M1.1	0.005	SF	S10E75	3873				
26 Oct	0557	0623	0632	M9.5	0.140	3N	S11E56	3873		270		
26 Oct	0632	0719	0756	X1.8	0.890			3873	1800	4200	2	3
26 Oct	1136	1150	1157	M2.2	0.026							
26 Oct	1158	1206	1213	M2.8	0.025							
26 Oct	1404	1416	1430	M1.6	0.022							
27 Oct	2305	2324	2344	M2.8	0.039			3878	29	25		

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
21 Oct	B0840	U1001	B1139	C6.2			
21 Oct	1421	1424	1428		SF	S13W54	3859
21 Oct	2046	2047	2052		SF	S14W58	3859
22 Oct	1204	1211	1219	C5.1	SF	S11E25	3863
22 Oct	1448	1455	1505	C3.7	SF	S07W52	3860
22 Oct	1653	1700	1710	C4.2			
22 Oct	2058	2101	2106		SF	S11E47	3866
23 Oct	0007	0026	0043	C5.1			
23 Oct	1019	1022	1028	C3.5			3866
23 Oct	1041	1046	1052	C4.0			3869
23 Oct	1112	1120	1126	C4.6			3866
23 Oct	1137	1212	1306	C7.8	1F	S10E16	3863
23 Oct	B1228	U1228	A1235		SF	S13W54	3859
23 Oct	B1310	U1311	A1318		SF	S11E39	3866
23 Oct	B1321	U1322	A1327		SF	S13W77	3859
23 Oct	1708	1720	1729	C5.1			
23 Oct	2029	2032	2037		SF	S11E35	3866
23 Oct	2102	2110	2118	C5.4	SN	S16E67	3869
23 Oct	2244	2246	2250	C5.4	SN	S11E63	3869
23 Oct	2324	2333	2339	C4.2			3869
24 Oct	0330	0357	0428	X3.3	SF	S05E86	3869
24 Oct	0639	0640	0642		SF	S10W02	3863

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
24 Oct	0719	0720	0725		SF	S15E65	3869
24 Oct	0752	U0752	0757		SF	S12E60	3869
24 Oct	1022	1029	1034	M1.2	SF	S15E87	3869
24 Oct	1242	1250	1258	C6.4			3869
25 Oct	0255	0302	0309	C2.6			3869
25 Oct	0513	0518	0531	C3.5			3869
25 Oct	0652	0659	0705	C2.8			3866
25 Oct	0723	0733	0738	M1.1	SF	S10E75	3873
25 Oct	1026	1035	1044	C3.5			3860
25 Oct	1145	1149	1153	C2.9			3872
25 Oct	1157	1202	1205		SF	S18E45	3869
25 Oct	1722	1727	1731	C2.7			3873
25 Oct	1853	1858	1904	C3.2	SF	S15E41	3869
25 Oct	2015	2017	2025		SF	N26E22	3874
26 Oct	0211	0219	0225	C4.5	SF	S19E54	3872
26 Oct	0358	0409	0413	C4.0			3873
26 Oct	0632	0719	0756	X1.8			3873
26 Oct	0557	0623	0632	M9.5	3N	S11E56	3873
26 Oct	B0915	U0919	A1028		SF	S14E52	3872
26 Oct	1136	1150	1157	M2.2			
26 Oct	1158	1206	1213	M2.8			
26 Oct	B1315	U1352	A1406		SF	S10E50	3872
26 Oct	1404	1416	1430	M1.6			
26 Oct	1809	1811	1825		SF	S08E54	3873
26 Oct	1925	1927	1933		SF	N27E10	3874
26 Oct	2024	2026	2036		SF	S18E43	3872
26 Oct	2037	2037	2049		SF	S23W57	3870
26 Oct	2228	2238	2258	C9.7			
27 Oct	0316	0324	0333	C8.3	SF	N15E26	3869
27 Oct	0518	0532	0549	C7.6			3872
27 Oct	1004	U1009	1052		SF	S05E17	3876
27 Oct	1125	1132	1138	C4.3	SF	N13E86	
27 Oct	1232	1242	1257	C7.9	SF	N15E85	3876
27 Oct	1303	1325	1406	C7.1	1N	S16E22	3869
27 Oct	1323	1326	1331	C9.8			3878
27 Oct	1338	1341	1344		SF	N15E85	
27 Oct	1357	1358	1400		SF	S06E17	3876
27 Oct	1521	1534	1608	C7.4	SF	N24W03	3874

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
27 Oct	1937	1950	1959		SF	N24W03	3874
27 Oct	2008	2018	2029	C4.9	SF	N16E83	3878
27 Oct	2305	2324	2344	M2.8			3878

Region Summary

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3856												
13 Oct	N09E37	1	10	3	Bxo	1	B								
14 Oct	N09E23	2	10	1	Axx	1	A	1			1				
15 Oct	N09E09	3	10	1	Axx	1	A	1			1				
16 Oct	N10W05	3	150	7	Dai	18	BGD	4			4				
17 Oct	N10W19	4	190	8	Dac	12	BGD	2	1						
18 Oct	N10W33	5	150	8	Dai	5	BG	1							
19 Oct	N10W47	6	150	7	Dso	4	BG	1							
20 Oct	N10W61	7	150	9	Dso	4	B								
21 Oct	N10W73	6	120	7	Dso	4	B								
22 Oct	N10W90	9	60	6	Dao	2	B								
								10	1	0	6	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 3

			Region 3857												
14 Oct	S09E66	319	30	6	Cao	3	B								
15 Oct	S09E52	320	90	6	Cao	3	B								
16 Oct	S07E38	320	100	9	Dso	2	B								
17 Oct	S07E25	320	130	10	Dao	6	BG								
18 Oct	S07E13	319	100	10	Dao	6	BG								
19 Oct	S07W02	321	70	9	Dso	8	B								
20 Oct	S07W15	321	30	11	Ero	5	B								
21 Oct	S06W26	319	30	9	Cao	4	B								
22 Oct	S05W43	322	20	2	Hrx	2	A								
23 Oct	S05W58	324	plage												
24 Oct	S05W73	326	plage												
25 Oct	S05W88	328	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 321

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3858												
14 Oct	S15E61	324	20	6	Cao	3	B								
15 Oct	S15E47	325	40	5	Cao	3	B								
16 Oct	S15E33	325	20	1	Hax	2	A								
17 Oct	S15E20	325	10	4	Bxo	4	B								
18 Oct	S15E07	325	20	2	Hax	2	A								
19 Oct	S15W07	326	plage												
20 Oct	S15W21	327	plage												
21 Oct	S15W35	327	plage												
22 Oct	S15W49	328	plage												
23 Oct	S15W63	329	plage												
24 Oct	S15W77	330	plage												
								0	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 325

			Region 3859												
15 Oct	S14E25	346	40	3	Dso	5	B								
16 Oct	S12E11	347	60	5	Dao	5	B								
17 Oct	S12W01	346	110	7	Dao	10	B								
18 Oct	S12W14	346	140	6	Dai	7	B								
19 Oct	S12W28	347	160	7	Dai	9	BG	3							
20 Oct	S12W41	347	210	8	Dai	12	BG	1							
21 Oct	S12W54	347	220	8	Csi	17	B				2				
22 Oct	S12W69	348	120	8	Cao	8	B								
23 Oct	S12W82	347	40	7	Cao	4	B				2				
								4	0	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 346

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3860												
17 Oct	S07E15	330	70	6	Dai	6	B	3							
18 Oct	S07E02	330	20	1	Hax	1	A	1							
19 Oct	S07W13	332	40	7	Cso	6	B	1							
20 Oct	S07W27	333	40	4	Cso	3	B								
21 Oct	S06W42	334	30	3	Cso	2	B								
22 Oct	S06W56	335	20	1	Hrx	1	A	1			1				
23 Oct	S06W70	336	10	1	Axx	1	A								
24 Oct	S06W85	338	10	1	Cro	2	B								
								6	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 330

			Region 3861												
18 Oct	S05W38	10	10	1	Axx	1	A								
19 Oct	S05W53	12	plage												
20 Oct	S05W68	14	plage												
21 Oct	S05W83	15	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 10

			Region 3862												
18 Oct	S18E71	261	10	1	Axx	1	A								
19 Oct	S18E57	262	10	1	Axx	1	A								
20 Oct	S18E43	263	20	2	Hrx	1	A								
21 Oct	S16E24	269	10	1	Axx	2	A								
22 Oct	S15E11	268	10	1	Axx	1	A								
23 Oct	S15W03	269	plage												
24 Oct	S15W17	270	plage												
25 Oct	S15W31	271	plage												
26 Oct	S15W45	272	plage												
27 Oct	S15W59	272	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 269

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3863												
18 Oct	S02E69	263	60	1	Hsx	1	A								
19 Oct	S02E54	265	70	4	Cso	2	B	1							
20 Oct	S02E41	265	120	8	Csi	6	B	2			2				
21 Oct	S08E31	262	220	7	Dai	16	BD								
22 Oct	S09E19	260	130	7	Dai	10	BG	1			1				
23 Oct	S09E07	259	100	8	Dao	6	BG	1				1			
24 Oct	S08W09	262	110	3	Dso	4	B				1				
25 Oct	S08W23	263	90	3	Cso	4	B								
26 Oct	S08W37	263	120	5	Dai	11	B								
27 Oct	S08W49	262	80	5	Dso	5	B								
								5	0	0	4	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 259

			Region 3864												
20 Oct	N25E48	258	10	1	Axx	1	A								
21 Oct	N25E33	260	10	1	Axx	1	A								
22 Oct	N25E19	260	plage												
23 Oct	N25E05	261	plage												
24 Oct	N25W09	262	plage												
25 Oct	N25W23	263	plage												
26 Oct	N25W37	264	plage												
27 Oct	N25W51	264	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 261

			Region 3865												
20 Oct	S22E62	244	30	2	Hsx	1	A								
21 Oct	S22E51	242	20	3	Cso	3	B								
22 Oct	S22E38	241	30	3	Cso	4	B								
23 Oct	S22E23	243	10	1	Hsx	1	A								
24 Oct	S22E11	242	20	1	Hax	1	A								
25 Oct	S22W02	242	20	1	Hrx	1	A								
26 Oct	S22W16	242	20	1	Hsx	1	A								
27 Oct	S22W30	243	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 242

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3866												
21 Oct	S12E58	235	30	5	Cai	6	B								
22 Oct	S12E45	234	40	6	Cao	11	B				1				
23 Oct	S12E32	234	20	7	Bxi	11	B	2			2				
24 Oct	S12E18	235	10	7	Bxo	7	B								
25 Oct	S12E06	234	10	5	Bxo	3	B	1							
26 Oct	S12W08	234	10	4	Bxo	2	B								
27 Oct	S12W22	235	10	2	Bxo	2	B								
								3	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 234

			Region 3867												
21 Oct	S23E32	261	10	3	Bxo	2	B								
22 Oct	S15E18	261	plage												
23 Oct	S15E04	262	plage												
24 Oct	S15W10	263	plage												
25 Oct	S15W24	264	plage												
26 Oct	S15W38	265	plage												
27 Oct	S15W52	265	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 262

			Region 3868												
21 Oct	S11E75	218	180	3	Hsx	1	A								
22 Oct	S12E61	218	180	3	Hsx	1	A								
23 Oct	S11E47	218	180	3	Hsx	2	A								
24 Oct	S11E33	220	150	3	Hsx	1	A								
25 Oct	S11E20	220	150	2	Hsx	1	A								
26 Oct	S11E06	220	150	2	Hsx	1	A								
27 Oct	S11W08	221	150	2	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 220

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3869												
23 Oct	S17E71	203	250	15	Ehi	9	BG	4			2				
24 Oct	S17E58	195	460	15	Eki	11	BG	1	1	1	4				
25 Oct	S17E43	197	410	10	Dki	8	BG	3			2				
26 Oct	S17E28	198	410	12	Eki	15	BG								
27 Oct	S16E14	199	350	12	Eki	15	BG	2			1	1			
								10	1	1	9	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 199

			Region 3870												
24 Oct	S22W38	291	10	1	Axx	1	A								
25 Oct	S22W52	292	plage												
26 Oct	S22W66	292	40	7	Cao	5	B				1				
27 Oct	S19W78	291	40	7	Dao	2	B								
								0	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 291

			Region 3871												
24 Oct	S10E46	207	10	1	Hax	1	A								
25 Oct	S09E33	207	10	1	Axx	1	A								
26 Oct	S09E19	208	plage												
27 Oct	S09E05	208	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 208

			Region 3872												
24 Oct	S15E58	195	280	9	Dhi	7	BG								
25 Oct	S15E44	196	280	9	Dki	10	BGD	1							
26 Oct	S18E40	186	280	9	Dki	10	BGD	1			4				
27 Oct	S17E28	185	300	9	Dki	12	BGD	1							
								3	0	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 185

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3873												
24 Oct	S10E77	176	240	5	Dai	3	B								
25 Oct	S10E63	177	120	6	Dai	5	B	1	1		1				
26 Oct	S10E49	177	120	6	Dai	5	BG	1	1	1	1			1	
27 Oct	S10E36	177	90	6	Cao	5	B								
								2	2	1	2	0	0	1	0

Still on Disk.
Absolute heliographic longitude: 177

			Region 3874												
25 Oct	N27E20	220	20	3	Cro	6	B				1				
26 Oct	N27E06	220	30	4	Cao	10	B				1				
27 Oct	N27W06	219	70	7	Dai	10	B	1			2				
								1	0	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 220

			Region 3875												
25 Oct	N29E31	209	10	3	Bxo	3	B								
26 Oct	N29E17	209	20	4	Cao	6	B								
27 Oct	N28E04	209	30	6	Cro	7	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 209

			Region 3876												
25 Oct	S01E35	205	20	4	Cro	5	B								
26 Oct	S01E20	206	20	4	Dai	5	B								
27 Oct	S01E08	205	120	7	Dsi	14	B	1			3				
								1	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 205

			Region 3877												
27 Oct	S15E52	161	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 161

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Region 3878													
27 Oct	N18E72	141	80	3	Dso	4	B	2	1						
								2	1	0	0	0	0	0	0

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Absolute heliographic longitude: 141

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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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