Space Weather Highlights
13 October - 19 October 2025

SWPC PRF 2616
20 October 2025

Solar activity was at moderate levels with 28 total M-class flares. 25 of these flares were produced by Region 4246 (N24, L=290, class/area=Ekc/840 on 16 Oct), the largest of which was an M4.8/Sf at 15/0415 UTC. Several of the flares from this region were the source of partially Earth-directed CMEs as flanking ejecta impacted the near-Earth environment on 17-18 Oct. Region 4248 (N07, L=261, class/area=Eki/310 on 15 Oct) also produced an M2.0 flare at 14/1247 UTC. These regions were classified as beta-gamma-delta. The remaining regions during this highlight period produced C-class activity but were otherwise unremarkable.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 13-17 Oct due in response to an extended period of coronal hole high speed stream (CH HSS) influences. Normal to moderate levels were reached on 18-19 Oct.

Geomagnetic field activity reached G2 (Moderate) storm levels and periods of G1 (Minor) storm levels on 18 Oct, and an early period of G1 storm levels on 19 Oct due to influences from what was possibly combined CMEs that left the Sun between 13-15 Oct. G1 storm levels were also observed on 13 Oct due to CH HSS influences. An isolated active period was observed on 15 Oct due to declining CH HSS influence and . Quiet to unsettled levels were observed on 14, 16-17 Oct.

Space Weather Outlook
20 October - 15 November 2025

Solar activity is expected to be at moderate levels on 31 Oct - 15 Nov due to the return of Region 4246. Low levels are expected to prevail on 20 Oct - 30 Oct, and 14-15 Nov.

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 21-25 Oct, and 29 Oct - 15 Nov due to responses from recurent CH HSS influences .

Geomagnetic field activity is expected to reach G1-G2 (Minor-Moderate) storm levels on 28-30 Oct and 08-09, and 15 Nov due to recurrent CH HSS influences. Isolated active periods are expeced on 20, 31 Oct, and 07 Nov also due to recurrent CH HSS activity. Quiet to unsettled levels are expeced on the remaining days 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
13 October	141	122	680	C1.2	19	3	0	9	3	0	0	0
14 October	154	108	720	C1.6	21	3	0	27	3	0	0	0
15 October	162	106	760	C1.6	12	5	0	7	2	1	0	0
16 October	161	132	1470	C2.1	13	4	0	12	0	0	0	0
17 October	164	120	1380	C3.0	6	6	0	6	1	0	0	0
18 October	156	105	1230	C2.3	7	5	0	0	1	0	0	0
19 October	149	103	960	C1.7	7	2	0	0	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
13 October	2.6e+06	1.7e+04	1.4e+08
14 October	1.1e+07	1.8e+04	1.9e+08
15 October	1.2e+06	1.7e+04	1.1e+08
16 October	1.6e+06	1.7e+04	1.4e+08
17 October	1.2e+06	1.6e+04	6.8e+07
18 October	3.5e+06	1.6e+04	1.6e+07
19 October	3.2e+05	1.5e+04	1.6e+07

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
13 October	17	4-4-3-3-3-3-3-2	36	4-4-5-6-6-3-2-2	23	5-5-3-4-3-3-3-3
14 October	6	2-1-2-1-2-2-1-2	9	2-1-3-2-3-3-1-1	8	3-2-3-2-2-2-1-2
15 October	9	3-3-3-2-2-1-1-1	15	2-3-5-4-2-2-1-1	12	4-3-3-3-2-1-1-2
16 October	3	0-0-1-1-1-1-2-2	2	1-0-1-2-0-0-0-0	4	1-1-2-1-1-0-1-2
17 October	8	2-2-2-3-2-2-2-1	17	1-0-5-5-4-2-1-0	9	2-2-3-3-2-3-1-2
18 October	20	3-3-3-3-4-4-4-3	46	2-4-5-6-4-6-6-3	36	4-4-5-4-3-5-6-4
19 October	11	4-2-1-2-2-3-3-2	25	4-3-2-4-5-5-3-3	48	5-3-2-3-3-3-3-3

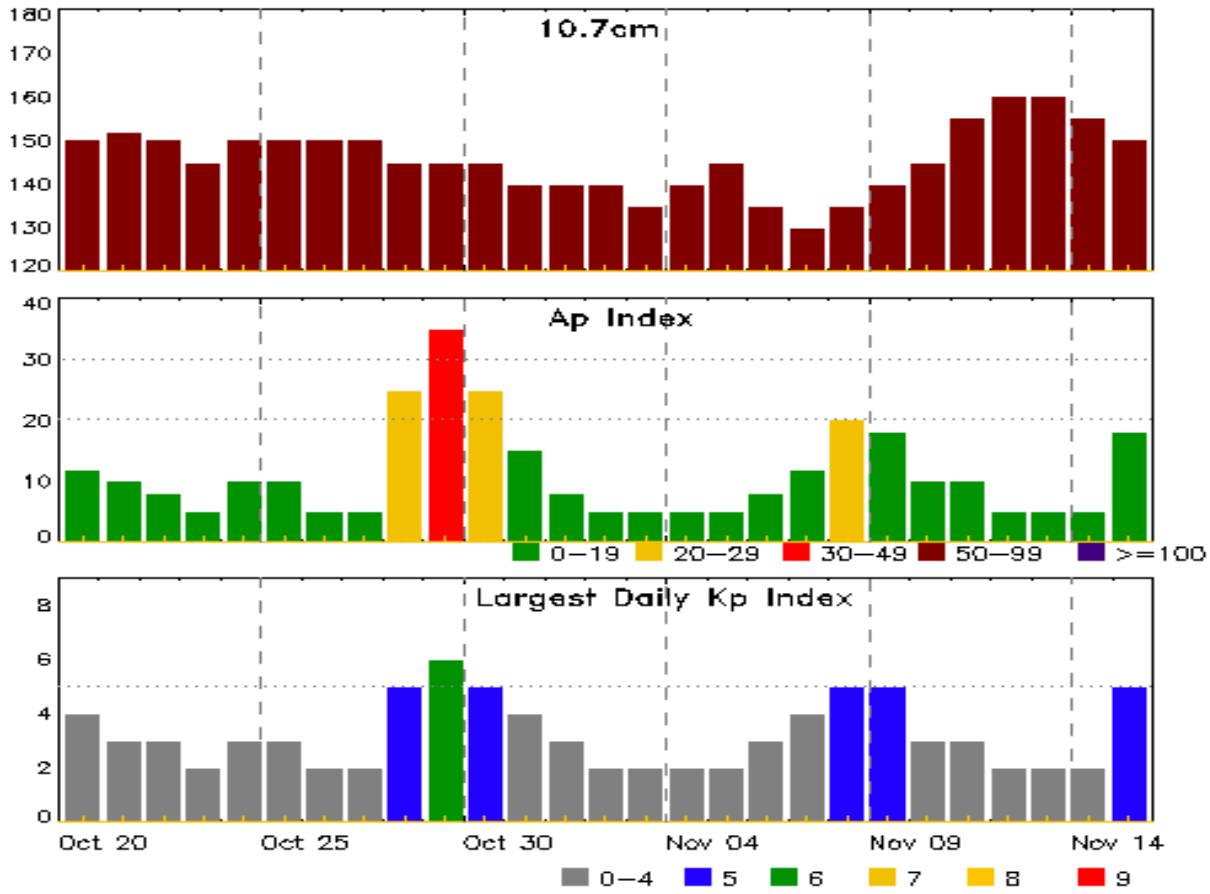
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
13 Oct 0000	EXTENDED WARNING: Geomagnetic K = 5	12/0334 - 13/1500
13 Oct 0257	ALERT: Geomagnetic K = 5	
13 Oct 0302	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
13 Oct 0507	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
13 Oct 0530	ALERT: Geomagnetic K = 5	
13 Oct 1726	ALERT: Type II Radio Emission	13/1303
13 Oct 1754	EXTENDED WARNING: Geomagnetic K = 4	11/0502 - 14/0300
13 Oct 2109	WATCH: Geomagnetic Storm Category G1 predicted	
14 Oct 0255	EXTENDED WARNING: Geomagnetic K = 4	11/0502 - 14/1500
14 Oct 0500	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
14 Oct 1740	SUMMARY: 10cm Radio Burst	14/1244 - 1246
14 Oct 1943	WATCH: Geomagnetic Storm Category G2 predicted	
15 Oct 0239	WARNING: Geomagnetic K = 4	15/0238 - 1500
15 Oct 0300	ALERT: Geomagnetic K = 4	
15 Oct 1041	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
15 Oct 1615	SUMMARY: 10cm Radio Burst	15/1521 - 1532
16 Oct 0930	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
17 Oct 1034	WARNING: Geomagnetic K = 4	17/1034 - 1800
17 Oct 1122	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	01/1325
17 Oct 1201	ALERT: Geomagnetic K = 4	
17 Oct 1756	EXTENDED WARNING: Geomagnetic K = 4	17/1034 - 18/1800
18 Oct 0237	WARNING: Geomagnetic K = 4	18/0237 - 1500
18 Oct 0242	ALERT: Geomagnetic K = 4	
18 Oct 0553	WARNING: Geomagnetic K = 5	18/0552 - 1500
18 Oct 0836	ALERT: Geomagnetic K = 5	

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
18 Oct 1727	WARNING: Geomagnetic K = 4	18/1726 - 19/2359
18 Oct 1728	ALERT: Geomagnetic K = 4	
18 Oct 1743	WARNING: Geomagnetic K = 5	18/1743 - 2359
18 Oct 1748	ALERT: Geomagnetic K = 5	
18 Oct 1947	ALERT: Geomagnetic K = 5	
18 Oct 1953	WARNING: Geomagnetic K = 6	18/1952 - 2359
18 Oct 2013	ALERT: Geomagnetic K = 6	
18 Oct 2339	EXTENDED WARNING: Geomagnetic K = 4	18/1726 - 19/1200
18 Oct 2340	EXTENDED WARNING: Geomagnetic K = 5	18/1743 - 19/0900
19 Oct 0050	ALERT: Geomagnetic K = 5	

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
20 Oct	150	12	4	03 Nov	135	5	2
21	152	10	3	04	140	5	2
22	150	8	3	05	145	5	2
23	145	5	2	06	135	8	3
24	150	10	3	07	130	12	4
25	150	10	3	08	135	20	5
26	150	5	2	09	140	18	5
27	150	5	2	10	145	10	3
28	145	25	5	11	155	10	3
29	145	35	6	12	160	5	2
30	145	25	5	13	160	5	2
31	140	15	4	14	155	5	2
01 Nov	140	8	3	15	150	18	5
02	140	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
13 Oct	0459	0526	0545	M1.9	0.035	1N	N22W17	4246	150			
13 Oct	0855	0919	0931	M2.7	0.032	1F	N22W17	4246				
13 Oct	1304	1318	1339	M1.2	0.021	1F	N23W20	4246				2
14 Oct	0035	0041	0044	M2.0	0.006	SF	N25W25	4246			100	
14 Oct	1238	1247	1256	M2.0	0.012	1N	N06W07	4248			160	
14 Oct	2028	2036	2045	M3.1	0.020			4246				
15 Oct	0349	0415	0436	M4.8	0.089	2N	N24W41	4246	110			
15 Oct	0705	0718	0726	M3.7	0.025	1N	N24W41	4246				
15 Oct	1401	1410	1441	M1.1	0.019			4246	230			
15 Oct	2155	2228	2305	M2.7	0.085			4246	120			
15 Oct	2337	2345	2352	M2.4	0.019	SF	N23W57	4246				
16 Oct	0017	0021	0024	M1.1	0.005	SF	N23W57	4246				
16 Oct	1353	1408	1422	M1.3	0.017	SF	N21W67	4246				
16 Oct	1900	1916	1936	M1.1	0.018	SF	N22W68	4246				
16 Oct	2312	2319	2328	M1.0	0.008	SF	N22W68	4246				
17 Oct	0115	0128	0140	M1.5	0.014	1F	N24W66	4246				
17 Oct	1227	1245	1301	M1.1	0.018			4246				
17 Oct	1422	1432	1436	M1.0	0.006	SF	N22W75	4246				
17 Oct	1614	1632	1647	M1.3	0.023			4246			130	
17 Oct	1647	1658	1708	M1.2	0.016			4246				
17 Oct	1855	1905	1912	M1.1	0.011	SF	N22W78	4246				
18 Oct	0023	0040	0049	M1.0	0.013			4246				
18 Oct	0226	0239	0247	M1.1	0.014			4246				
18 Oct	0632	0639	0644	M1.2	0.008			4246				
18 Oct	0649	0658	0704	M1.3	0.011			4246				
18 Oct	1037	1051	1059	M1.5	0.014			4246				
19 Oct	0146	0156	0204	M1.0	0.009			4246				
19 Oct	2003	2015	2026	M1.8	0.015			4246				

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
13 Oct	0002	0013	0017	C6.4	SF	N05E14	4248
13 Oct	0011	0044	0148	C9.3	SF	N23W12	4246
13 Oct	0353	0402	0404	C2.3	SF	N04E13	4248
13 Oct	0404	0413	0419	C5.8			4248
13 Oct	0447	0453	0457		SF	N23W14	4246
13 Oct	0448	0526	0713	M1.9	1N	N22W17	4246
13 Oct	0642	0646	0649	C4.1			4246
13 Oct	0649	0654	0700	C7.6			4246
13 Oct	0721	0730	0736	C5.7	SF	N04E11	4248
13 Oct	0739	0747	0757	C9.8	SF	N21W18	4246
13 Oct	0855	0919	0931	M2.7	1F	N22W17	4246
13 Oct	1032	1047	1055	C9.5			4248
13 Oct	B1057	U1058	A1104		SF	N04E08	4248
13 Oct	1253	1302	1304	C3.5			4246
13 Oct	1304	1318	1339	M1.2	1F	N23W20	4246
13 Oct	1536	1543	1556	C2.6	SF	N22W24	4246
13 Oct	1558	1602	1605	C3.3			4246
13 Oct	1639	1653	1659	C7.2			4246
13 Oct	1712	1717	1720	C2.1			4246
13 Oct	1804	1814	1826	C3.0			4246
13 Oct	1848	1859	1901	C6.1			4246
13 Oct	1901	1908	1913	C8.0			4246
13 Oct	2048	2055	2114	C1.6			4246
13 Oct	2114	2121	2127	C1.5			4246
13 Oct	2355	2355	2357		SF	N23W26	4246
14 Oct	0035	0041	0044	M2.0	SF	N25W25	4246
14 Oct	0258	0304	0319	C4.2	SN	N26W32	4246
14 Oct	0326	0336	0340	C2.5			4246
14 Oct	0332	0332	0403		SF	N06W01	4248
14 Oct	0345	0351	0356		SF	N24W28	4246
14 Oct	0403	0414	0424	C3.4	SF	N24W28	4246
14 Oct	0427	0432	0455		SF	N24W31	4246
14 Oct	0444	0451	0459		SF	N06W03	4248
14 Oct	0456	0456	0503		SF	N24W31	4246
14 Oct	0512	0512	0517		SF	N24W31	4246
14 Oct	0530	0532	0536		SF	N05W01	4248
14 Oct	0537	0547	0602	C3.9	SF	N25W31	4246
14 Oct	B0639	U0700	0726		SF	N23W30	4246

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
14 Oct	0735	0736	0738		SF	N22W32	4246
14 Oct	B0822	U0823	A0827		SF	N22W32	4246
14 Oct	0836	0846	0855	C6.0	SF	N23W32	4246
14 Oct	0948	0956	1002	C3.2	SF	N23W34	4246
14 Oct	B1018	U1018	A1020		SF	N23W34	4246
14 Oct	B1050	U1108	A1118	C3.3	SF	N22W34	4246
14 Oct	B1154	U1154	1159		SF	N05W07	4248
14 Oct	1216	1222	1227	C2.7			4246
14 Oct	1217	1246	1334		1N	N06W07	4248
14 Oct	1221	1221	1227		SF	N22W34	4246
14 Oct	1238	1247	1256	M2.0			4248
14 Oct	1244	1244	1256		SF	N23W32	4246
14 Oct	1318	1323	1326	C8.2	SF	N23W37	4246
14 Oct	1359	1404	1420		SF	N21W40	4246
14 Oct	1448	1455	1504	C3.6	SF	S12W74	4247
14 Oct	1523	1540	1549	C5.0			4246
14 Oct	1635	1640	1646	C3.2			4246
14 Oct	1657	1711	1732	C3.7			4248
14 Oct	1732	1743	1746	C3.8			4246
14 Oct	1746	1753	1757	C6.5			4246
14 Oct	B1756	1827	1835		1F	N22W39	4246
14 Oct	1853	1856	1856		SF	N23W40	4246
14 Oct	1926	1943	1955	C7.0	SF	N23W40	4246
14 Oct	2028	2036	2045	M3.1			4246
14 Oct	B2102	2149	A2126		SF	N21W43	4246
14 Oct	2132	2143	2204	C7.8			4246
14 Oct	2204	2207	2209	C6.3			4246
14 Oct	2206	2207	2212		1F	N21W42	4246
14 Oct	2251	2257	2301	C3.4	SF	N24W37	4246
14 Oct	2329	2342	2353	C4.3			4246
14 Oct	2356	0005	0016	C5.3			4246
15 Oct	B0000	0145	0247	C7.7	1F	N24W41	4246
15 Oct	0257	0410	0605		2N	N24W41	4246
15 Oct	0310	0314	0317	C5.6			4246
15 Oct	0341	0345	0347	C9.1			4246
15 Oct	0349	0415	0436	M4.8			4246
15 Oct	0705	0718	0726	M3.7	1N	N24W41	4246
15 Oct	B0750	U0750	A0758		SF	N21W43	4246

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
15 Oct	0818	0831	0837	C3.8			
15 Oct	0943	0954	1002	C3.4			4246
15 Oct	1020	1022	1033	C4.8	SF	N22W43	4246
15 Oct	1214	1219	1223	C3.4	SF	N22W45	4246
15 Oct	1300	1307	1310	C2.4			4246
15 Oct	1338	1345	1352	C2.7			4246
15 Oct	1401	1410	1441	M1.1			4246
15 Oct	1802	1807	1809	C8.3	SF	N20W48	4246
15 Oct	1855	1855	1900		SF	N21W52	4246
15 Oct	1934	1939	1945	C5.1			4246
15 Oct	1945	1949	1952	C5.1			4246
15 Oct	2155	2228	2305	M2.7			4246
15 Oct	2337	2345	2352	M2.4	SF	N23W57	4246
15 Oct	B2350	2350	2353		SF	N09W24	4248
16 Oct	B0000	0020	0029	M1.1	SF	N23W57	4246
16 Oct	0312	0331	0332		SF	N24W53	4246
16 Oct	0441	0446	0502	C5.2			4246
16 Oct	0623	0629	0638		SF	N25W58	4246
16 Oct	0636	0643	0647	C5.5			4246
16 Oct	0724	0731	0736	C4.6			4246
16 Oct	0756	0801	0813	C5.1	SF	N23W57	4246
16 Oct	0844	0849	0851	C3.3			4246
16 Oct	0941	0949	0953	C3.5			4246
16 Oct	0953	1005	1014	C5.3			4246
16 Oct	1141	1203	1225	C8.4			4246
16 Oct	1303	1308	1312	C6.0			4246
16 Oct	1353	1408	1422	M1.3	SF	N21W67	4246
16 Oct	1559	1606	1608	C4.7			4246
16 Oct	1824	1824	1826		SF	S13E12	4252
16 Oct	1900	1916	1936	M1.1	SF	N22W68	4246
16 Oct	1930	1939	1941		SF	N22W64	4246
16 Oct	1952	1952	1956		SF	N24W64	4246
16 Oct	2026	2035	2040	C4.4			4246
16 Oct	2040	2043	2046	C5.8	SF	N23W62	4246
16 Oct	2238	2254	2302	C5.5	SF	N22W68	4246
16 Oct	2312	2319	2328	M1.0	SF	N22W68	4246
17 Oct	0115	0128	0140	M1.5	1F	N24W66	4246
17 Oct	0548	0554	0557	C8.0			4248

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
17 Oct	1014	1020	1030	C6.7			4246
17 Oct	1030	1037	1042	C6.5			4246
17 Oct	1042	1046	1049	C7.2			4246
17 Oct	1202	1206	1217	C6.1			4246
17 Oct	1227	1245	1301	M1.1			4246
17 Oct	1422	1432	1436	M1.0	SF	N22W75	4246
17 Oct	1614	1632	1647	M1.3			4246
17 Oct	1647	1658	1708	M1.2			4246
17 Oct	1847	1847	1850		SF	S14E55	4256
17 Oct	1855	1905	1912	M1.1	SF	N22W78	4246
17 Oct	2103	2109	2122		SF	S14E56	4256
17 Oct	2108	2109	2112		SF	N22W78	4246
17 Oct	2156	2202	2224		SF	S14E56	4256
17 Oct	2321	2330	2336	C9.0			4256
18 Oct	0023	0040	0049	M1.0			4246
18 Oct	0205	0209	0214	C2.9			4246
18 Oct	0218	0224	0226	C9.5			4246
18 Oct	0226	0239	0247	M1.1			4246
18 Oct	0543	0605	0619	C9.9			4246
18 Oct	0632	0639	0644	M1.2			4246
18 Oct	0649	0658	0704	M1.3			4246
18 Oct	0712	0714	0717		1F	N09W62	4248
18 Oct	0735	0748	0755	C6.0			4246
18 Oct	1037	1051	1059	M1.5			4246
18 Oct	1732	1737	1751	C3.0			4246
18 Oct	2118	2126	2133	C3.1			4246
18 Oct	2140	2154	2201	C8.0			4246
19 Oct	0146	0156	0204	M1.0			4246
19 Oct	0428	0434	0439	C2.8			4246
19 Oct	0749	0802	0815	C4.7			4246
19 Oct	1226	1242	1304	C2.6			4256
19 Oct	1334	1342	1346	C2.9			4246
19 Oct	1608	1613	1619	C2.4			4246
19 Oct	1815	1822	1827	C3.7			4246
19 Oct	2003	2015	2026	M1.8			4246
19 Oct	2244	2252	2306	C3.0			

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 4243													
03 Oct	N18E55	337	10	2	Bxo	4	B								
04 Oct	N18E41	338	10	2	Bxo	4	B								
05 Oct	N18E27	339	20	3	Cro	3	B								
06 Oct	N19E13	340	20	4	Cro	3	B								
07 Oct	N19W01	341	10	1	Axx	1	A								
08 Oct	N19W16	342	10	1	Axx	1	A								
09 Oct	N19W30	343	plage												
10 Oct	N19W44	344	plage												
11 Oct	N19W58	345	plage												
12 Oct	N19W72	346	plage												
13 Oct	N19W87	347	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 341

		Region 4244													
05 Oct	S21E64	302	10	1	Axx	3	A								
06 Oct	S21E49	304	10	1	Axx	1	A								
07 Oct	S21E35	305	plage												
08 Oct	S21E20	306	plage												
09 Oct	S21E06	307	plage												
10 Oct	S21W08	308	plage												
11 Oct	S21W22	309	plage												
12 Oct	S21W36	310	plage												
13 Oct	S21W50	310	plage												
14 Oct	S21W64	311	plage												
15 Oct	S21W78	312	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 307

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 4246												
06 Oct	N24E66	287	10	1	Axx	1	A								
07 Oct	N24E53	287	plage												
08 Oct	N24E38	288	plage												
09 Oct	N24E24	289	plage												
10 Oct	N23E09	290	10	3	Bxo	3	B	3			3				
11 Oct	N22W03	290	50	7	Dai	12	B	1			2				
12 Oct	N24W16	290	180	7	Dai	15	BG	13			3	1			
13 Oct	N22W30	290	250	12	Ekc	27	BGD	14	3		5	3			
14 Oct	N22W43	290	260	12	Ekc	27	BGD	19	2		22	2			
15 Oct	N22W56	290	300	14	Ekc	32	BGD	11	5		6	2	1		
16 Oct	N24W69	290	840	14	Ekc	30	BGD	13	4		11				
17 Oct	N24W81	289	700	11	Ekc	16	BGD	4	6		3	1			
18 Oct	N25W93	288	300	8	Dki	5	B	7	5						
								85	25	0	55	9	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 290

			Region 4247												
07 Oct	S11E15	325	20	3	Dro	9	B								
08 Oct	S11W00	326	30	4	Dro	7	B								
09 Oct	S11W13	325	80	5	Dso	8	B								
10 Oct	S10W25	325	30	4	Dro	4	B								
11 Oct	S12W38	325	30	3	Cro	6	B	2			1				
12 Oct	S12W52	326	60	5	Dai	10	B								
13 Oct	S12W64	324	10	2	Bxo	5	B								
14 Oct	S12W78	325	plage					1			1				
								3	0	0	2	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 326

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 4248												
09 Oct	N08E64	251	20	3	Cao	5	B								
10 Oct	N08E47	253	50	10	Dso	6	BG								
11 Oct	N07E29	257	50	6	Dso	7	B	1			1				
12 Oct	N06E15	259	150	8	Dai	21	BG	1			1				
13 Oct	N07E01	259	290	11	Eko	14	BGD	5			4				
14 Oct	N07W13	260	300	12	Eki	16	BGD	1	1		4	1			
15 Oct	N07W27	261	310	12	Eki	20	BGD				1				
16 Oct	N07W41	262	360	12	Eki	18	BG								
17 Oct	N07W54	262	380	11	Eki	10	BG	1							
18 Oct	N07W66	261	380	10	Dki	7	B					1			
19 Oct	N06W81	262	380	10	Dko	5	B								
								9	1	0	11	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 259

			Region 4249												
09 Oct	S18E64	249	10	2	Bxo	3	B	1							
10 Oct	S20E50	250	10	2	Axx	2	A								
11 Oct	S20E35	251	10	1	Axx	1	A								
12 Oct	S20E21	253	plage												
13 Oct	S20E06	254	plage												
14 Oct	S20W08	255	plage												
15 Oct	S20W22	256	plage												
16 Oct	S20W36	257	plage												
17 Oct	S20W50	258	plage												
18 Oct	S20W64	259	plage												
19 Oct	S20W78	259	plage												
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 254

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 4250												
11 Oct	N07E31	255	40	5	Dai	8	B								
12 Oct	N06E20	254	40	4	Dso	4	B	1							
13 Oct	N07E06	254	20	4	Cro	3	B								
14 Oct	N07W07	254	20	4	Cro	2	B								
15 Oct	N07W21	255	10	1	Hrx	1	A								
16 Oct	N05W34	255	10	1	Axx	1	A								
17 Oct	N04W45	253	10	1	Axx	1	A								
								1	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 254

			Region 4251												
12 Oct	N19E40	234	10	1	Hrx	1	A								
13 Oct	N19E26	234	10	1	Hrx	1	A								
14 Oct	N19E12	235	10	1	Axx	1	A								
15 Oct	N19W02	235	plage												
16 Oct	N19W15	236	plage												
17 Oct	N19W29	237	plage												
18 Oct	N19W43	238	plage												
19 Oct	N19W57	238	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 235

			Region 4252												
12 Oct	S13E66	208	60	2	Hsx	1	A								
13 Oct	S13E51	209	90	3	Hsx	1	A								
14 Oct	S13E38	209	90	3	Hsx	1	A								
15 Oct	S13E28	206	100	4	Cao	2	B								
16 Oct	S13E14	207	150	4	Cso	5	B				1				
17 Oct	S13E01	207	100	4	Cso	3	B								
18 Oct	S12W14	209	160	5	Cso	6	B								
19 Oct	S13W28	209	150	7	Cso	5	B								
								0	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 207

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 4253												
12 Oct	S17W10	282	10	2	Cro	3	B								
13 Oct	S17W24	284	10	1	Axx	1	A								
14 Oct	S17W38	285	plage												
15 Oct	S17W52	286	plage												
16 Oct	S17W66	287	plage												
17 Oct	S17W80	288	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 282

			Region 4254												
14 Oct	N10E74	173	40	2	Hsx	1	A								
15 Oct	N10E60	174	40	2	Hsx	1	A								
16 Oct	N10E46	175	60	2	Hsx	1	A								
17 Oct	N11E33	175	60	1	Hsx	1	A								
18 Oct	N10E20	175	90	2	Hsx	1	A								
19 Oct	N10E06	175	90	2	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 175

			Region 4255												
16 Oct	S08E38	183	10	5	Bxo	2	B								
17 Oct	S08E26	182	10	4	Bxo	2	B								
18 Oct	S08E12	183	plage												
19 Oct	S08W02	183	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 183

			Region 4256												
16 Oct	S16E66	155	40	7	Dao	5	B								
17 Oct	S15E52	156	60	6	Cso	6	B	1			3				
18 Oct	S15E40	155	140	6	Dao	6	B								
19 Oct	S15E26	155	100	6	Cao	4	B	1							
								2	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 155

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 4257												
17 Oct	S08E75	133	60	2	Hsx	1	A								
18 Oct	S10E60	135	150	5	Hsx	2	A								
19 Oct	S10E48	133	210	7	Cao	4	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 133

			Region 4258												
18 Oct	S16W40	235	10	4	Bxo	8	B								
19 Oct	S14W55	236	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 235

			Region 4259												
19 Oct	S20E49	132	10	3	Bxo	2	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 132

			Region 4260												
19 Oct	S10E61	120	10	1	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 120

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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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