Space Weather Highlights **SWPC PRF 2567**
04 November - 10 November 2024 **11 November 2024**

Solar activity ranged from low to high levels this period. R1 (Minor) radio blackouts were observed on 04-10 Nov, R2 (Moderate) radio blackouts were observed on 04, 06 and 10 Nov and R3 (Strong) radio blackouts were observed on 06 Nov. Regions 3883 (S06, L=076, class/area Fkc/420 on 08 Nov) and 3889 (S10, L=005, class/area Fko/480 on 10 Nov) produced a majority of the activity this period.

Region 3883 produced an M5.5 flare at 04/1508 UTC. Region 3887 (N16, L=151, class/area Dsi/140 on 06 Nov) produced an M5.8/Sf flare at 06/0850 UTC. Region 3889 produced an M5.3/1f flare at 06/1438 UTC and an M9.4/2b flare at 10/1206 UTC. The M9.4 flare had an associated Type II Sweep with an estimated 928 km/s velocity and a 400 pfu Tenflare. The largest flare of the period was an X2.3/Sf at 06/1340 UTC with an associated Type II Sweep with an estimated 205 km/s velocity. During the period, a total of 52 C-class, 39 M-class and 1 X-class flares were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was was at normal to moderate levels on 04-06 Nov and 08-10 Nov and reached high levels on 07 Nov.

Geomagnetic field activity ranged from quiet to minor storm (R1-Minor) levels. Brief periods of active levels were observed early on 04 Nov, followed by quiet to unsettled levels through late on 08 Nov. Active to minor storm levels were observed late on 08 Nov through 10 Nov, possibly due to weak CME effects, transitioning into positive polarity CH HSS effects. During the period, wind parameters were at mostly nominal levels through midday on 07 Nov. On midday 07 Nov, a weak shock was observed were total field increased to 16 nT and bt dropped to -12 nT. During the summary period, wind speeds varied from a low of about 350 km/s to a high of about 465 km/s.

Space Weather Outlook
11 November - 07 December 2024

Solar activity is expected to be at moderate levels (R1/R2 - Minor/Moderate), with a chance for high levels (R3-Strong) from 11 Nov - 07 Dec. The disk is expected to feature numerous complex regions throughout the outlook period.

No proton events are expected at geosynchronous orbit. However, there is a chance for proton activity following significant solar flare activity during the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels.

Geomagnetic field activity is likely to be at unsettled to active periods on 11-16 Nov, 18 Nov, 20

Nov, 26-27 Nov, 30 Nov-03 Dec and 06-07 Dec, all due to influence from recurrent CH HSS effects. Mostly quiet periods are likely on 17 Nov, 19 Nov, 21-24 Nov, 28-29 Nov and 04-05 Dec.

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
04 November	242	191	1810	C3.6	6	11	0	8	0	0	0	0
05 November	245	149	1450	C4.0	7	5	0	15	1	1	0	0
06 November	260	155	1650	C4.6	7	13	1	10	2	0	0	0
07 November	239	164	1900	C3.0	6	7	0	11	4	0	0	0
08 November	231	167	1680	C2.2	13	1	0	15	1	0	0	0
09 November	221	176	1630	C2.3	8	1	0	26	2	0	0	0
10 November	231	121	1420	C1.9	7	3	0	5	3	2	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
04 November	1.8e+06	4.9e+04	1.6e+06
05 November	6.5e+05	1.4e+04	1.8e+06
06 November	3.3e+06	1.4e+04	1.9e+06
07 November	2.8e+06	1.4e+04	1.5e+07
08 November	3.2e+06	1.4e+04	1.0e+06
09 November	1.0e+06	1.4e+04	1.2e+06
10 November	2.1e+05	1.4e+04	1.5e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
04 November	11	3-4-2-2-3-1-1-2	20	3-3-5-5-3-3-1-1	14	4-4-3-2-2-2-1-3
05 November	10	2-1-3-2-3-3-2-2	19	1-0-4-5-5-3-2-2	11	3-2-3-3-3-3-2-3
06 November	9	3-3-2-2-3-2-1-1	24	3-2-6-5-4-2-1-1	10	3-3-2-2-2-2-2-2
07 November	7	1-1-2-2-1-3-2-2	11	1-1-3-5-2-2-1-1	9	1-1-2-2-1-3-3-3
08 November	7	1-0-2-1-2-1-3-3	7	1-1-1-3-2-0-3-2	11	2-1-1-2-2-1-4-4
09 November	24	4-3-3-5-4-4-3-3	48	2-3-4-6-6-6-6-3	32	4-4-4-5-5-4-4-4
10 November	15	4-3-2-1-4-3-3-2	35	4-2-3-5-6-5-5-2	27	4-4-2-2-4-4-5-3

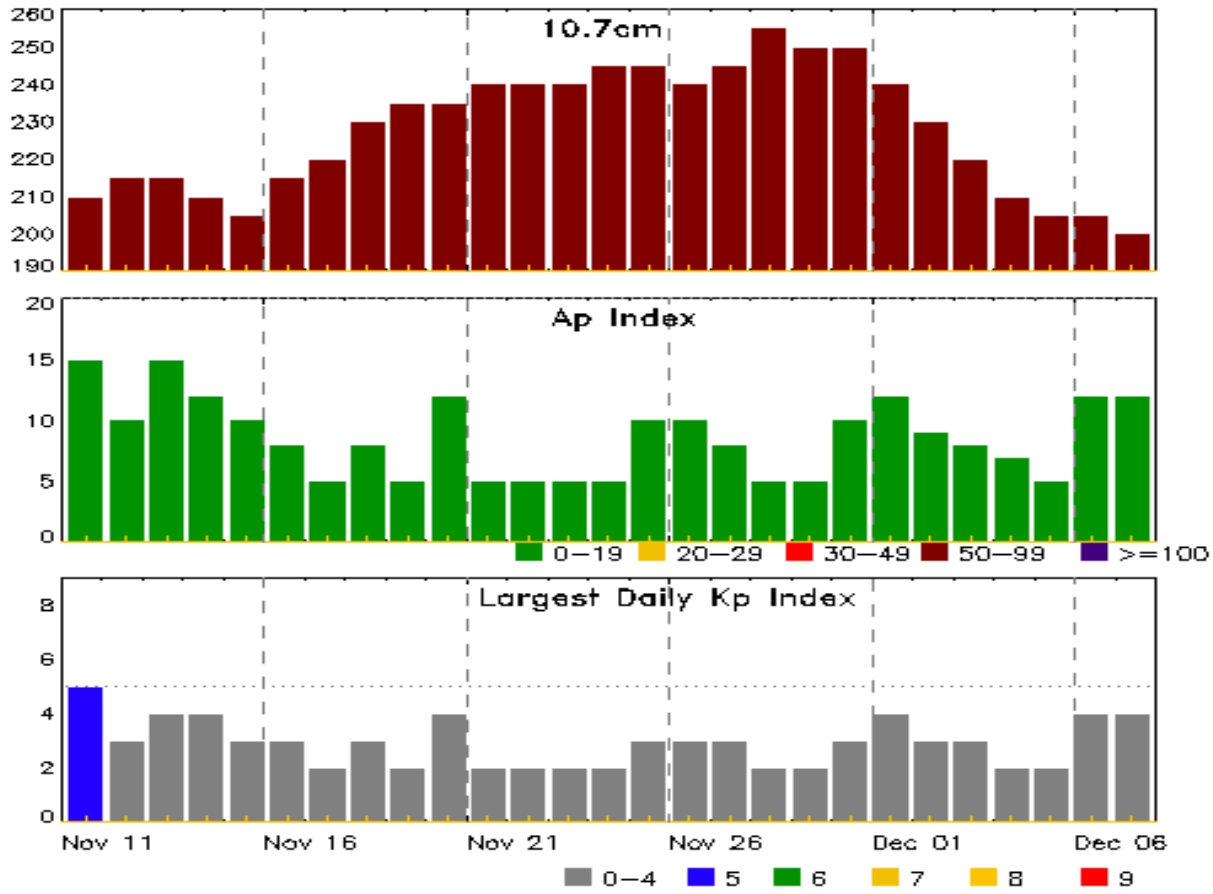
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
04 Nov 0222	ALERT: Type II Radio Emission	04/0128
04 Nov 0224	ALERT: Type IV Radio Emission	04/0134
04 Nov 1541	ALERT: X-ray Flux exceeded M5	04/1537
04 Nov 1600	SUMMARY: X-ray Event exceeded M5	04/1526 - 1541
04 Nov 1927	WATCH: Geomagnetic Storm Category G1 predicted	
05 Nov 1601	ALERT: Type II Radio Emission	05/1528
06 Nov 0238	WARNING: Geomagnetic K = 4	06/0238 - 07/1200
06 Nov 0241	CANCELLATION: Geomagnetic K = 4	
06 Nov 0242	WARNING: Geomagnetic K = 4	06/0241 - 1200
06 Nov 0851	ALERT: X-ray Flux exceeded M5	06/0849
06 Nov 0909	SUMMARY: X-ray Event exceeded M5	06/0848 - 0854
06 Nov 1341	ALERT: X-ray Flux exceeded M5	06/1339
06 Nov 1353	SUMMARY: X-ray Event exceeded X1	06/1324 - 1346
06 Nov 1404	ALERT: Type II Radio Emission	06/1350
06 Nov 1435	ALERT: X-ray Flux exceeded M5	06/1433
06 Nov 1450	SUMMARY: X-ray Event exceeded M5	06/1427 - 1445
07 Nov 0814	ALERT: Type II Radio Emission	07/0535
07 Nov 1603	ALERT: Electron 2MeV Integral Flux >= 1000pfu	07/1535
08 Nov 1940	WARNING: Geomagnetic K = 4	08/1940 - 09/1200
08 Nov 2012	ALERT: Geomagnetic K = 4	
09 Nov 0156	WARNING: Geomagnetic K = 5	09/0156 - 1200
09 Nov 1107	EXTENDED WARNING: Geomagnetic K = 4	08/1940 - 09/2359
09 Nov 1146	ALERT: Geomagnetic K = 5	
09 Nov 1146	EXTENDED WARNING: Geomagnetic K = 5	09/0156 - 2100
09 Nov 1338	ALERT: Geomagnetic K = 5	
09 Nov 2320	EXTENDED WARNING: Geomagnetic K = 4	08/1940 - 10/1200
10 Nov 1146	EXTENDED WARNING: Geomagnetic K = 4	08/1940 - 10/2359
10 Nov 1207	ALERT: X-ray Flux exceeded M5	10/1203

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
10 Nov 1225	SUMMARY: 10cm Radio Burst	10/1203 - 1205
10 Nov 1227	SUMMARY: X-ray Event exceeded M5	10/1151 - 1214
10 Nov 1228	ALERT: Type II Radio Emission	10/1207
10 Nov 1446	WARNING: Geomagnetic K = 5	10/1445 - 2359
10 Nov 1910	ALERT: Geomagnetic K = 5	
10 Nov 1940	WARNING: Geomagnetic K = 6	10/1935 - 2359
10 Nov 2034	SUMMARY: 10cm Radio Burst	10/2015 - 2019
10 Nov 2307	EXTENDED WARNING: Geomagnetic K = 4	08/1940 - 11/2359

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
11 Nov	210	15	5	25 Nov	245	10	3
12	215	10	3	26	240	10	3
13	215	15	4	27	245	8	3
14	210	12	4	28	255	5	2
15	205	10	3	29	250	5	2
16	215	8	3	30	250	10	3
17	220	5	2	01 Dec	240	12	4
18	230	8	3	02	230	9	3
19	235	5	2	03	220	8	3
20	235	12	4	04	210	7	2
21	240	5	2	05	205	5	2
22	240	5	2	06	205	12	4
23	240	5	2	07	200	12	4
24	245	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
04 Nov	0052	0057	0102	M1.5	0.007			3883	16	40		
04 Nov	0105	0140	0203	M3.8	0.087			3883			1	1
04 Nov	0338	0345	0353	M1.1	0.009			3886				
04 Nov	0406	0415	0423	M1.0	0.008			3883				
04 Nov	0431	0434	0438	M1.4	0.003	SF	N17W11	3878				
04 Nov	0702	0708	0721	M1.3	0.011	SN	S09E43	3883				
04 Nov	0829	0840	0847	M1.2	0.010	SF	S07E42	3883				
04 Nov	1007	1017	1025	M1.6	0.004	SN	S07E41	3883				
04 Nov	1405	1428	1450	M1.1	0.022			3883	100			
04 Nov	1500	1508	1512	M1.3	0.003			3883				
04 Nov	1538	1541	1545	M5.5	0.034			3883	650			
05 Nov	0635	0654	0708	M2.6	0.032							
05 Nov	0911	0923	0949	M1.0	0.018	SF	S07E28	3883				
05 Nov	1328	1339	1354	M1.2	0.015			3883				
05 Nov	1358	1419	1427	M2.9	0.004	2N	S06E24	3883				
05 Nov	1505	1526	1543	M4.1	0.062			3872			1	
06 Nov	0228	0238	0246	M1.1	0.010			3883				
06 Nov	0302	0309	0314	M1.2	0.007			3883	200			
06 Nov	0736	0804	0823	M2.9	0.004	SN	S06E23	3883	160			
06 Nov	0848	0850	0854	M5.8	0.016	SF	N15W59	3878				
06 Nov	1156	1204	1210	M1.5	0.010	SF	S07E17	3883				
06 Nov	1256	1302	1311	M1.2	0.010			3889				
06 Nov	1324	1340	1346	X2.3	0.080			3883	450	120		
06 Nov	1427	1438	1445	M5.3	0.049			3889				
06 Nov	1710	1718	1723	M1.2	0.009			3889				
06 Nov	1853	1859	1913	M1.1	0.013			3889	180			
06 Nov	2035	2042	2052	M1.3	0.012			3889	1000			
06 Nov	2243	2305	2310	M1.1	0.016			3889				
06 Nov	2310	2316	2321	M1.1	0.005			3889	170			
06 Nov	2342	0004	0016	M1.6	0.027			3889	190			
07 Nov	0115	0127	0139	M2.5	0.024	SF	S10E80	3889				
07 Nov	0352	0420	0432	M2.5	0.003	1N	S06E15	3883	190			
07 Nov	0720	0726	0736	M1.3	0.004	1F	S09E06	3883	3700			
07 Nov	0736	0743	0746	M1.6	0.007			3889				
07 Nov	0746	0754	0801	M2.7	0.022			3889				
07 Nov	1153	1202	1211	M1.4	0.011	1F	S09E76	3889				
07 Nov	1449	1506	1520	M2.3	0.002	1F	S07W00	3883	120			
08 Nov	0253	0301	0312	M1.5	0.012	1N	S07W05	3883				

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
09 Nov	2044	2050	2054	M1.2	0.004	SN	S08E36	3889				
10 Nov	0004	0015	0023	M4.2	0.025	1B	S08E33	3889				
10 Nov	1151	1206	1214	M9.4	0.002	2B	S08E26	3889	62000	400	3	
10 Nov	2009	2021	2034	M4.9	0.040	2N	S12E30	3889		370		

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
04 Nov	0052	0057	0102	M1.5			3883
04 Nov	0105	0140	0203	M3.8			3883
04 Nov	0338	0345	0353	M1.1			3886
04 Nov	0406	0415	0423	M1.0			3883
04 Nov	0431	0434	0438	M1.4	SF	N17W11	3878
04 Nov	0444	0451	0500	C7.1			3876
04 Nov	0525	0528	0528		SF	S07E44	3883
04 Nov	0631	0639	0648	C7.8			3886
04 Nov	0702	0708	0721	M1.3	SN	S09E43	3883
04 Nov	0820	0821	0825		SF	N17W14	3878
04 Nov	0829	0840	0847	M1.2	SF	S07E42	3883
04 Nov	0856	0856	0857		SF	S08E42	3883
04 Nov	0921	0928	0938	C6.4	SF	S07E43	3883
04 Nov	1007	1017	1025	M1.6	SN	S07E41	3883
04 Nov	1103	1109	1113	C9.5			3883
04 Nov	1146	1155	1204	C6.6			3885
04 Nov	1405	1428	1450	M1.1			3883
04 Nov	1500	1508	1512	M1.3			3883
04 Nov	1538	1541	1545	M5.5			3883
04 Nov	1926	1933	1940	C4.7			3876
05 Nov	0115	0120	0129	C7.8	SF	S06E33	3883
05 Nov	0411	0417	0421	C8.7			3883
05 Nov	0435	0443	0501	C7.4	SF	N14W29	3878
05 Nov	0635	0654	0708	M2.6			
05 Nov	0744	0746	0747		SF	S06E26	3883
05 Nov	0820	0829	0837	C8.0	SF	S06E25	3883
05 Nov	0911	0923	0949	M1.0	SF	S07E28	3883

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
05 Nov	1123	1128	1145	C7.2			3886
05 Nov	1201	1207	1211	C6.7			3883
05 Nov	1328	1339	1354	M1.2			3883
05 Nov	1358	1419	1427	M2.9	2N	S06E24	3883
05 Nov	1402	1403	1408		SF	N16W50	3878
05 Nov	1416	1420	1542		SF	N17W35	3878
05 Nov	1505	1526	1543	M4.1			3872
05 Nov	1542	1542	1555		SF	N16W42	3878
05 Nov	1556	1616	1704		SF	N16W42	3878
05 Nov	1641	1643	1645		SF	S10E60	3886
05 Nov	1701	2240	2346		1N	S06E27	3883
05 Nov	1738	1739	1741		SF	N14W54	3878
05 Nov	2041	2044	2050		SF	N16W46	3878
05 Nov	2051	2056	2128		SF	N15W56	3878
05 Nov	2052	2105	2114		SF	S07E55	3886
05 Nov	2138	2148	2151		SF	N15W47	3878
05 Nov	2229	2242	2251	C9.6			3883
06 Nov	0122	0126	0131	C6.0			3883
06 Nov	0228	0238	0246	M1.1			3883
06 Nov	0302	0309	0314	M1.2			3883
06 Nov	0357	0408	0427	C7.9			
06 Nov	0654	0706	0713	C7.5			3883
06 Nov	0713	0729	0736	C8.9			3883
06 Nov	0736	0804	0823	M2.9			3883
06 Nov	0753	0755	0755		SF	S06E29	3883
06 Nov	0756	0804	0838		SN	S06E23	3883
06 Nov	0848	0850	0901	M5.8	SF	N15W59	3887
06 Nov	1017	U1028	A1120		SF	N13W64	3887
06 Nov	1028	U1040	A1145		SF	S07E17	3883
06 Nov	1156	1204	1210	M1.5	SF	S07E17	3883
06 Nov	1225	1231	1235	C7.1			3883
06 Nov	1246	1253	1256	C7.4			3889
06 Nov	1256	1302	1311	M1.2			3889
06 Nov	1324	1340	1346	X2.3			3883
06 Nov	1343	1347	1400		SF	N13W64	3887
06 Nov	1405	1409	1417		SF	S12E34	3884
06 Nov	1427	1438	1445	M5.3			3889
06 Nov	1429	1436	1646		1F	S05E09	

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
06 Nov	1429	1429	1556		1F	S11E38	
06 Nov	1438	1438	1440		SF	N13W64	3887
06 Nov	1710	1718	1723	M1.2			3889
06 Nov	1853	1859	1913	M1.1			3889
06 Nov	2035	2042	2052	M1.3			3889
06 Nov	2220	2229	2243	C5.5			3889
06 Nov	2243	2305	2310	M1.1			3889
06 Nov	2310	2316	2321	M1.1			3889
06 Nov	2341	2347	A2359		SN	S06E15	3883
06 Nov	2342	0004	0016	M1.6			3889
07 Nov	0000	U0000	0008		SF	S06E15	3883
07 Nov	0115	0127	0139	M2.5	SF	S10E80	3889
07 Nov	0203	0209	0214	C7.5	SF	N16W66	3887
07 Nov	0300	0300	0305		SN	N16W66	3887
07 Nov	0352	0420	0432	M2.5	1N	S06E15	3883
07 Nov	0458	0500	0506		SF	S06E15	3883
07 Nov	0702	0713	0725		SF	S06E37	3886
07 Nov	0720	U0723	0740	M1.3	1F	S09E06	3883
07 Nov	0729	0729	0738		SF	N16W65	3887
07 Nov	0736	0743	0746	M1.6			3889
07 Nov	0746	0754	0801	M2.7			3889
07 Nov	0809	0809	0820		SF	S09E03	3883
07 Nov	1046	1051	1055	C4.7			3886
07 Nov	1111	1118	1122	C5.6	SF	S08E01	3883
07 Nov	1153	1202	1211	M1.4	1F	S09E76	3889
07 Nov	1322	1323	1344		SF	S07E01	3883
07 Nov	1347	1351	1356		SF	S07E01	3883
07 Nov	1437	U1505	A1507	M2.3	1F	S07W00	3883
07 Nov	1818	1825	1830	C4.7			3886
07 Nov	1958	2009	2025	C4.4			3889
07 Nov	2128	2134	2139	C6.7			3889
08 Nov	0017	0032	0050	C5.4	SF	S06W09	3883
08 Nov	0057	0106	0116	C6.1	SF	S06W09	3883
08 Nov	0225	0234	0242	C6.2	SF	S06W09	3883
08 Nov	0253	0301	0312	M1.5	1N	S07W05	3883
08 Nov	0327	0327	0334	C5.8	SF	S08E22	3886
08 Nov	0334	0341	0345		SF	S08E23	3886
08 Nov	0445	0448	0453	C3.1	SF	S08E23	3886

Flare List

Date	Time			X-ray	Optical		
	Begin	Max	End	Class	Imp/ Brtns	Location Lat CMD	Rgn #
08 Nov	0627	0631	0638	C3.8	SF	S07W08	3883
08 Nov	0721	0745	0811	C5.2	SF	S06W11	3883
08 Nov	1026	1042	1109	C5.7	SF	N14W84	3887
08 Nov	B1045	U1059	A1123		SF	S11E13	3886
08 Nov	1117	1124	1128	C5.9			3889
08 Nov	1240	1243	1247	C4.0			3889
08 Nov	1249	1258	1309	C5.3	SF	S10E20	3886
08 Nov	1541	1544	1548		SF	S04W11	3883
08 Nov	1836	1918	1935	C4.7			3883
08 Nov	1923	1924	1927		SF	S07W67	3881
08 Nov	2223	2223	2225		SF	S07W70	3881
08 Nov	2341	2347	2353		SF	S09E47	3889
08 Nov	2354	0008	0014	C7.4	SF	S09E47	3889
09 Nov	0130	0131	0133		SF	S08E05	3886
09 Nov	0226	0231	0235	C5.9	SN	S09E46	3889
09 Nov	0400	0404	0408	C3.4			3883
09 Nov	0751	0753	0755		SF	S05W19	3883
09 Nov	0826	0828	0831		SF	S07E43	3889
09 Nov	0849	0859	0903	C5.4	SF	S08W23	3883
09 Nov	0934	0942	0948	C5.4	1N	S07E05	3886
09 Nov	1023	1035	1045	C6.7			3883
09 Nov	1027	U1029	A1107		1F	S06E41	3889
09 Nov	1028	U1133	A1215		SF	S03W24	3883
09 Nov	1115	U1119	A1206		SF	S12E07	3886
09 Nov	1215	1220	1226	C7.3	SF	S08W24	3883
09 Nov	1244	1252	1309	C4.2	SF	S12E06	3886
09 Nov	1404	1405	1406		SF	S08W25	3883
09 Nov	1412	1412	1414		SF	S08W75	3881
09 Nov	1444	1444	1449		SF	S06E02	3886
09 Nov	1507	1509	1512		SF	S12W04	3886
09 Nov	1525	1525	1542		SF	S07W26	3883
09 Nov	1537	1537	1545		SF	S12E52	3889
09 Nov	1558	1558	1604		SF	S12E05	3886
09 Nov	1602	1608	1609		SF	S09W75	3881
09 Nov	1634	1636	1642		SF	S12E04	3886
09 Nov	1919	1936	1954	C5.4	SF	S08E36	3889
09 Nov	1943	1943	1950		SF	S09W77	3881
09 Nov	2013	2016	2017		SF	S10W78	3881

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
09 Nov	2038	2042	2048		SF	S10W78	3881
09 Nov	2044	2050	2054	M1.2	SN	S08E36	3889
09 Nov	2118	2120	2126		SF	S08E36	3889
09 Nov	2254	2254	2257		SF	S10W79	3881
10 Nov	0004	0015	0023	M4.2	1B	S08E33	3889
10 Nov	0111	0118	0125	C4.3			3890
10 Nov	0438	0447	0457	C4.0	SF	S13E45	3889
10 Nov	0528	0534	0548	C3.2	SF	S08E31	3889
10 Nov	0657	0701	0854		1F	S08E40	3889
10 Nov	1001	1003	1009		SF	S06E31	3889
10 Nov	1047	1050	1056		SF	S13W17	3886
10 Nov	1151	1206	1214	M9.4	2B	S08E26	3889
10 Nov	B1328	U1332	A1346		SF	S07E35	3889
10 Nov	1418	1439	1502	C5.7			3884
10 Nov	1527	1535	1603		1F	S11W16	3886
10 Nov	1551	1558	1606	C6.7			3889
10 Nov	1927	1935	1948	C3.0			3889
10 Nov	2009	2021	2034	M4.9	2N	S12E30	3889
10 Nov	2231	2253	2325	C8.4			3881

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 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			
28 Oct	S15W00	200	270	12	Eki	45	BGD	1	1						
29 Oct	S16W12	200	280	13	Ekc	27	BGD								
30 Oct	S16W26	200	290	11	Ekc	19	BGD								
31 Oct	S18W33	194	260	9	Dkc	12	BGD								
01 Nov	S18W45	192	260	12	Eki	14	BG								
02 Nov	S18W60	194	230	12	Eai	12	BGD		1		3				
03 Nov	S18W74	195	210	10	Dai	10	BG		2		1				
04 Nov	S18W88	196	200	9	Dsi	10	BG								
								11	5	1	13	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 200

			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												
28 Oct	S09W09	209	plage												
29 Oct	S09W23	210	plage												
30 Oct	S09W37	211	plage												
31 Oct	S09W51	212	plage												
01 Nov	S09W62	209	180	8	Dsi	10	B								
02 Nov	S09W76	210	180	9	Dao	8	BG								
03 Nov	S09W89	210	180	9	Dao	2	BG				1				
								0	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 208

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 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							
28 Oct	S17E14	186	390	12	Eko	16	BGD								
29 Oct	S16E02	185	380	5	Dko	6	B								
30 Oct	S16W12	186	320	5	Dko	4	B				1				
31 Oct	S17W24	185	270	6	Dko	6	B				1				
01 Nov	S17W36	183	220	5	Hax	2	A				1				
02 Nov	S17W51	185	180	3	Hax	5	A								
03 Nov	S16W62	183	130	3	Hax	4	A								
04 Nov	S16W76	184	120	3	Dai	5	B								
05 Nov	S15W90	185	80	3	Dai	4	B		1						
								3	1	0	7	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 185

			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								
28 Oct	S12E22	178	100	7	Cai	15	B								
29 Oct	S12E10	177	70	5	Hrx	10	A		1			1			
30 Oct	S11W04	178	40	6	Hax	9	A								
31 Oct	S12W15	176	40	3	Cao	4	B								
01 Nov	S10W30	177	30	2	Hax	1	A								
02 Nov	S10W45	179	20	1	Hax	1	A								
03 Nov	S10W56	177	20	1	Hax	2	A								
04 Nov	S09W70	178	20	1	Hrx	1	A								
05 Nov	S09W84	179	plage												
								2	3	1	2	1	0	1	0

Crossed West Limb.
Absolute heliographic longitude: 178

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 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								
28 Oct	N27W10	210	20	6	Cro	7	B								
29 Oct	N29W19	207	10	3	Bxo	3	B								
30 Oct	N28W29	203	30	5	Cri	13	B				2				
31 Oct	N28W41	202	150	7	Dai	15	B		1		5	1			
01 Nov	N28W53	200	170	9	Dai	13	BG				3				
02 Nov	N27W69	203	130	11	Dsi	12	B				2				
03 Nov	N28W85	206	110	11	Eso	6	B	1			1				
								1	1	0	13	1	0	0	0

Crossed West Limb.
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				
28 Oct	S05W06	206	240	9	Dai	30	BG	2			2				
29 Oct	S05W18	205	290	9	Dkc	25	BGD								
30 Oct	S05W33	207	340	11	Ekc	25	BG	3			3	1			
31 Oct	S06W46	207	260	10	Dki	18	BG	7	2		10	1	1		
01 Nov	S06W60	207	180	9	Dao	7	BG	4	2		14	2			
02 Nov	S05W75	209	130	9	Dao	5	B		1		8				
03 Nov	S04W90	211	120	9	Dao	2	B								
								17	5	0	40	4	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 206

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 3877												
27 Oct	S15E52	161	10	1	Axx	1	A								
28 Oct	S65E38	162	10	1	Axx	1	A								
29 Oct	S15E23	164	10	1	Axx	1	A								
30 Oct	S16E09	165	10	1	Axx	1	A								
31 Oct	S16W04	165	10	1	Axx	1	A								
01 Nov	S17W18	165	10	1	Axx	1	A	1							
02 Nov	S17W32	166	plage												
03 Nov	S17W46	167	plage												
04 Nov	S17W60	168	plage												
05 Nov	S17W74	169	plage												
06 Nov	S17W88	170	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 165

			Region 3878												
27 Oct	N18E72	141	80	3	Dso	4	B	2	1						
28 Oct	N17E58	142	200	13	Eai	15	BG	8	2		4	1			
29 Oct	N16E51	136	290	13	Eki	8	BG	4			1				
30 Oct	N16E37	137	350	12	Eki	15	BGD	2	1		4		1		
31 Oct	N16E23	138	400	11	Eki	11	BGD	2	4	1	5	1		1	
01 Nov	N16E10	137	400	13	Eko	16	BG		2		7	1			
02 Nov	N16W03	137	400	13	Eko	15	BGD	1			3				
03 Nov	N16W16	137	320	12	Eko	18	BGD	1	1		4	2			
04 Nov	N16W30	138	240	12	Eai	15	B		1		2				
05 Nov	N16W43	138	140	9	Dso	4	BG	1			9				
06 Nov	N16W54	136	150	5	Dao	4	B				1				
07 Nov	N16W66	134	130	3	Hax	3	A								
08 Nov	N16W80	135	100	3	Hax	2	A								
								21	12	1	40	5	1	1	0

Crossed West Limb.
Absolute heliographic longitude: 137

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 3879												
29 Oct	N14E74	113	450	5	Hkx	1	A								
30 Oct	N15E60	114	450	5	Hhx	1	A								
31 Oct	N15E50	111	570	4	Hhx	1	A								
01 Nov	N15E36	111	480	5	Hhx	1	A				1				
02 Nov	N15E23	111	500	5	Hhx	1	A								
03 Nov	N15E10	111	500	6	Hhx	1	A								
04 Nov	N15W04	112	500	6	Hhx	1	A								
05 Nov	N15W17	112	440	5	Hhx	1	A								
06 Nov	N16W30	112	440	5	Hhx	1	A								
07 Nov	N15W44	112	450	6	Cho	3	B								
08 Nov	N15W58	113	450	5	Hhx	2	A								
09 Nov	N15W72	114	430	5	Hhx	2	A								
10 Nov	N15W86	115	430	5	Hhx	2	A								
								0	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 112

			Region 3880												
31 Oct	S13E55	106	10	1	Axx	1	A								
01 Nov	S13E41	106	10	1	Axx	2	A								
02 Nov	S14E30	104	20	3	Bxo	4	B								
03 Nov	S14E16	105	plage												
04 Nov	S14E02	106	plage												
05 Nov	S14W12	107	plage												
06 Nov	S14W26	108	plage												
07 Nov	S14W40	108	plage												
08 Nov	S14W54	109	plage												
09 Nov	S14W68	110	plage												
10 Nov	S14W82	111	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 106

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 3881												
01 Nov	S09E26	121	50	4	Dai	5	B								
02 Nov	S09E12	122	200	7	Dao	12	B				2				
03 Nov	S09W01	122	240	8	Dai	15	BG	3			5				
04 Nov	S09W15	123	240	8	Dao	10	BG								
05 Nov	S09W28	123	180	8	Dso	9	B								
06 Nov	S09W41	123	170	8	Dso	7	B								
07 Nov	S09W57	125	130	7	Dao	4	B								
08 Nov	S09W71	126	120	7	Dso	7	BD				2				
09 Nov	S09W85	127	80	6	Cso	5	B				6				
								3	0	0	15	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 122

			Region 3882												
02 Nov	N23W55	189	20	2	Bxo	4	B								
03 Nov	N23W69	190	plage												
04 Nov	N23W83	191	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 189

			Region 3883												
02 Nov	S06E66	68	60	7	Cao	6	B								
03 Nov	S06E51	70	160	12	Eai	20	BGD	1	1		4				
04 Nov	S06E37	71	260	12	Eki	30	GD	2	9		6				
05 Nov	S06E21	68	270	13	Eki	22	BGD	5	3		4	1	1		
06 Nov	S06E07	75	360	14	Ekc	24	BGD	4	4	1	5				
07 Nov	S07W07	75	400	16	Fkc	23	BGD	1	3		6	3			
08 Nov	S06W21	76	420	16	Fkc	35	BD	6	1		6	1			
09 Nov	S06W35	77	380	16	Fki	30	BGD	4			6				
10 Nov	S06W49	78	360	16	Fki	20	BG								
								23	21	1	37	5	1	0	0

Still on Disk.
Absolute heliographic longitude: 75

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 3884												
02 Nov	S06E76	58	60	2	Hsx	1	A								
03 Nov	S06E65	56	70	3	Cso	2	B								
04 Nov	S07E51	57	50	2	Cso	2	B								
05 Nov	S07E39	56	60	1	Hsx	1	A								
06 Nov	S07E25	57	50	2	Hsx	1	A				1				
07 Nov	S07E11	56	40	1	Hsx	1	A								
08 Nov	S07W03	58	20	1	Hsx	1	A								
09 Nov	S07W17	59	20	1	Hsx	1	A								
10 Nov	S07W31	60	20	1	Hsx	1	A	1							
								1	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 58

			Region 3885												
03 Nov	S10W43	169	50	5	Dro	6	B								
04 Nov	S10W58	166	30	7	Dro	5	B	1							
05 Nov	S10W71	166	30	4	Cao	4	B								
06 Nov	S10W85	167	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 169

			Region 3886												
03 Nov	S05E76	45	90	6	Dao	2	B								
04 Nov	S05E62	46	150	11	Eao	12	BG	1	1						
05 Nov	S07E51	44	250	12	Eki	24	BG	1			2				
06 Nov	S08E37	45	320	12	Eki	28	BG								
07 Nov	S08E23	45	370	17	Fki	36	BGD	2			1				
08 Nov	S08E09	46	170	14	Eai	32	B	3			5				
09 Nov	S06W05	47	110	14	Eai	18	B	2			7	1			
10 Nov	S06W19	48	100	14	Eao	12	B				1	1			
								9	1	0	16	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 47

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 3887												
06 Nov	N16W69	151	140	7	Dsi	8	B		1		3				
07 Nov	N16W84	152	130	8	Dao	4	B	1			3				
								1	1	0	6	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 151

			Region 3888												
06 Nov	N04W51	133	20	3	Bxo	2	B								
07 Nov	N04W66	134	plage												
08 Nov	N04W80	135	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 133

			Region 3889												
06 Nov	S10E80	1	plage					2	8						
07 Nov	S10E66	2	250	13	Ekc	10	BD	2	4						
08 Nov	S10E52	3	400	13	Eko	18	BGD	3			1				
09 Nov	S10E38	4	450	14	Eko	20	BGD	2	1		7	1			
10 Nov	S10E24	5	480	19	Fko	20	BGD	4	3		4	2	2		
								13	16	0	12	3	2	0	0

Still on Disk.
Absolute heliographic longitude: 5

			Region 3890												
09 Nov	S13E02	44	60	8	Cro	18	B								
10 Nov	S13W12	42	30	6	Bxo	6	B	1							
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 44

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. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

The Weekly has been published continuously since 1951 and is available online since 1997.

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