Space Weather Highlights
05 August - 11 August 2024

SWPC PRF 2554
12 August 2024

Solar activity was ranged from moderate to high levels. 34 events, which ranged from R1-R3 (Minor-Strong), were observed during the week. Region 3767 (S10, L=318, class/area=Dso/beta on 27 Jul) produced the strongest flare of the period, an X1.7/Sf at 05/1340 UTC. Two other regions produced X-class activity with an X1.1/2b at 05/1527 UTC from Region 3780 (S12, L=173, class/area=Fkc/1280 on 09 Aug) and an X1.3/2b flare at 08/1935 UTC from Region 3777 (S09, L=209, class/area=Ekc/460 on 09 Aug).

CME activity observed over 07-08 Aug from multiple sources were analyzed and considered likely to be Earth-directed with a transit time of 3-4 days. An additional CME associated with an M5 (R2-Moderate) flare at 10/0237 UTC produced a faint halo signature first observed in SOHO/LASCO C2 imagery at 10/0312 UTC. Analysis and modeling suggested arrival on 12 Aug.

The greater than 10 MeV proton flux observed at geosynchronous orbit became slightly enhanced over 05-06 Aug, but well below the 10 pfu (S1-Minor) threshold due to energetic activity on the Sun's farside.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal background levels.

Geomagnetic field activity ranged from quiet to G1 (Minor) storm levels. G1 conditions were observed on 11 Aug, likely due to the influence of passing CMEs that left the Sun over 07-08 Aug. Total magnetic field strength increased to ~11 nT on 10 Aug and increased to a peak of 21 nT on 11 Aug. Solar wind speeds steadily climbed during that time from ~350 km/s to just over 500 km/s at the end of 11 Aug. The Bz component was primarily oriented neutral or northward which resulted in a limited geomagnetic response. A brief period of -20 nT was observed during the final hour of 11 Aug. The remainder of the summary period was at quiet to unsettled levels.

Space Weather Outlook
12 August - 07 September 2024

Solar activity is expected to reach moderate (R2-Moderate) conditions, with a chance for R3-Strong events, over 12-18 Aug due to multiple complex regions on the visible disk. R1 (Minor) conditions remain likely on most days through the end of the outlook period due to the anticipated return of multiple complex regions from the Sun's farside.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal background to moderate levels throughout the outlook period.

Geomagnetic field activity is expected to reach G2 (Moderate) levels on 12 Aug due to the passing of multiple CMEs from 08 Aug and 10 Aug. As CME influence wanes, active conditions

over 14 Aug are likely to decrease to unsettled levels over 14-15 Aug. Unsettled conditions are again likely on 22-23 Aug in response to a recurrent CH HSS. The remainder of the outlook period is likely to be at quiet levels, excluding any CMEs that have yet to erupt with an Earth-directed component.

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
05 August	247	189	2200	C3.2	2	5	2	12	2	1	0	0
06 August	270	222	2520	C2.9	8	1	0	13	0	0	0	0
07 August	303	248	2725	C3.0	5	4	0	22	3	1	0	0
08 August	336	337	3230	C4.6	8	6	1	18	2	1	0	0
09 August	306	382	3260	C4.1	6	7	0	21	4	0	0	0
10 August	291	234	2630	C4.8	8	5	0	21	1	1	0	0
11 August	282	194	2500	C3.1	9	3	0	23	2	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
05 August	1.6e+06	7.2e+04	9.1e+05
06 August	1.5e+06	8.0e+04	1.3e+06
07 August	1.6e+06	1.8e+04	1.4e+06
08 August	1.8e+06	1.7e+04	1.5e+06
09 August	1.5e+06	1.7e+04	1.7e+06
10 August	1.1e+06	1.7e+04	1.6e+06
11 August	5.6e+05	1.6e+04	1.1e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
05 August	10	2-3-3-2-3-2-2-2	15	2-4-3-4-4-2-1-1	10	2-3-3-2-2-2-2-2
06 August	8	1-2-2-2-3-2-2-2	4	1-2-2-0-1-2-1-1	6	2-2-2-1-1-2-1-2
07 August	8	1-2-2-2-3-2-2-2	7	1-3-1-3-2-1-1-1	7	1-2-1-2-2-1-1-2
08 August	11	3-2-2-2-3-3-3-2	8	3-2-1-4-1-1-1-1	7	3-2-2-2-1-1-2-2
09 August	9	2-2-1-3-3-2-2-2	5	2-2-1-1-2-2-1-1	7	2-2-1-2-2-2-1-2
10 August	8	2-2-1-2-3-3-1-2	6	2-3-1-1-1-2-1-1	7	2-2-1-1-2-2-1-2
11 August	23	2-3-4-4-4-4-4-4	21	3-3-4-3-4-4-3-4	9	2-2-5-4-5-4-4-5

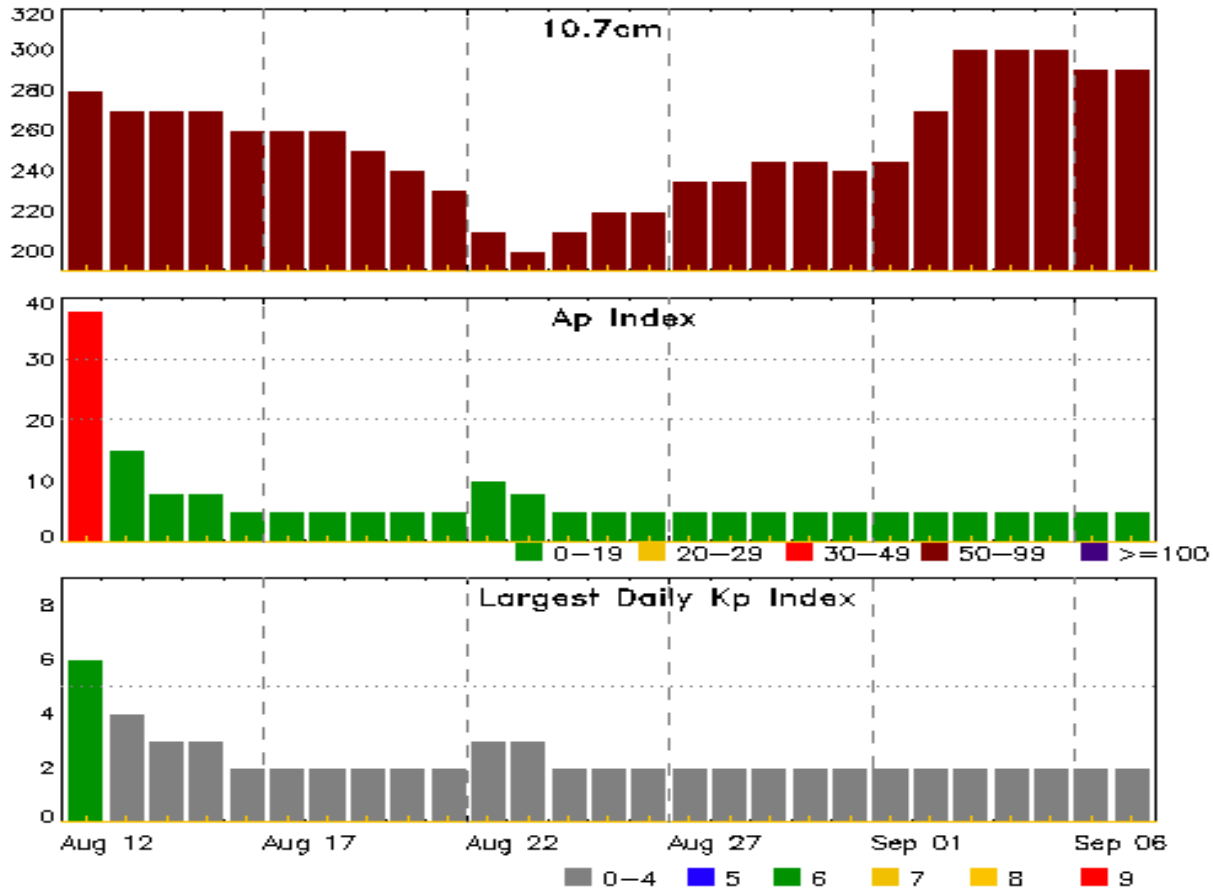
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
05 Aug 0315	ALERT: Type II Radio Emission	05/0230
05 Aug 0524	ALERT: X-ray Flux exceeded M5	05/0522
05 Aug 0551	SUMMARY: X-ray Event exceeded M5	05/0513 - 0527
05 Aug 0555	EXTENDED WARNING: Geomagnetic K = 4	04/0336 - 05/1800
05 Aug 0620	ALERT: Type II Radio Emission	05/0524
05 Aug 1334	ALERT: X-ray Flux exceeded M5	05/1331
05 Aug 1348	ALERT: Type II Radio Emission	05/1331
05 Aug 1357	SUMMARY: X-ray Event exceeded X1	05/1324 - 1354
05 Aug 1529	ALERT: X-ray Flux exceeded M5	05/1526
05 Aug 1542	SUMMARY: X-ray Event exceeded X1	05/1518 - 1532
05 Aug 1543	ALERT: Type II Radio Emission	05/1530
07 Aug 0238	SUMMARY: 10cm Radio Burst	07/0223 - 0226
07 Aug 0300	ALERT: Type II Radio Emission	07/0228
07 Aug 1422	ALERT: Type II Radio Emission	07/1352
07 Aug 1536	SUMMARY: 10cm Radio Burst	07/1346 - 1348
07 Aug 1902	ALERT: X-ray Flux exceeded M5	07/1856
07 Aug 1908	ALERT: Type II Radio Emission	07/1848
07 Aug 1911	SUMMARY: 10cm Radio Burst	07/1839 - 1849
07 Aug 1914	SUMMARY: X-ray Event exceeded M5	07/1831 - 1908
07 Aug 1945	WATCH: Geomagnetic Storm Category G2 predicted	
08 Aug 1809	WATCH: Geomagnetic Storm Category G2 predicted	
08 Aug 1928	ALERT: X-ray Flux exceeded M5	08/1925
08 Aug 1939	ALERT: Type II Radio Emission	08/1929
08 Aug 2003	SUMMARY: X-ray Event exceeded X1	08/1901 - 1957
08 Aug 2211	ALERT: Type II Radio Emission	08/1929
08 Aug 2211	ALERT: Type II Radio Emission	08/2005
09 Aug 1232	ALERT: Type II Radio Emission	09/1208
09 Aug 1235	SUMMARY: 10cm Radio Burst	09/1201 - 1201
09 Aug 1331	SUMMARY: 10cm Radio Burst	09/1201 - 1201

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
09 Aug 2008	WATCH: Geomagnetic Storm Category G2 predicted	
09 Aug 2135	ALERT: Type II Radio Emission	09/2124
10 Aug 0239	ALERT: X-ray Flux exceeded M5	10/0234
10 Aug 0254	SUMMARY: 10cm Radio Burst	10/0228 - 0231
10 Aug 0308	SUMMARY: X-ray Event exceeded M5	10/0214 - 0252
11 Aug 0721	WARNING: Geomagnetic K = 4	11/0720 - 1800
11 Aug 0729	ALERT: Geomagnetic K = 4	
11 Aug 0744	WARNING: Geomagnetic K = 5	11/0745 - 1500
11 Aug 0835	ALERT: Geomagnetic K = 5	
11 Aug 1409	ALERT: Geomagnetic K = 5	
11 Aug 1409	EXTENDED WARNING: Geomagnetic K = 5	11/0745 - 2100
11 Aug 1409	EXTENDED WARNING: Geomagnetic K = 4	11/0720 - 12/0300
11 Aug 2046	EXTENDED WARNING: Geomagnetic K = 4	11/0720 - 12/1200
11 Aug 2046	EXTENDED WARNING: Geomagnetic K = 5	11/0745 - 12/0300
11 Aug 2359	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
12 Aug	280	38	6	26 Aug	220	5	2
13	270	15	4	27	235	5	2
14	270	8	3	28	235	5	2
15	270	8	3	29	245	5	2
16	260	5	2	30	245	5	2
17	260	5	2	31	240	5	2
18	260	5	2	01 Sep	245	5	2
19	250	5	2	02	270	5	2
20	240	5	2	03	300	5	2
21	230	5	2	04	300	5	2
22	210	10	3	05	300	5	2
23	200	8	3	06	290	5	2
24	210	5	2	07	290	5	2
25	220	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
05 Aug	0222	0231	0235	M1.1	0.005	SF	S11E63	3780	170		2	
05 Aug	0513	0523	0527	M6.1	0.018	1N	S11E62	3780	4500	240	3	
05 Aug	0949	1001	1009	M1.7	0.012							
05 Aug	1324	1340	1354	X1.7	0.190	SF	N00E00	3767			2	
05 Aug	1518	1527	1532	X1.1	0.040	2B	S08E55	3780		140	2	
05 Aug	1756	1802	1809	M1.0	0.006							
05 Aug	1820	1837	1842	M1.2	0.011	1F	S12E60	3780	540			
06 Aug	0250	0303	0308	M1.1	0.008			3781				
07 Aug	0221	0230	0238	M1.8	0.014	1N	S08W18	3774	13000	270	2	
07 Aug	0452	0457	0501	M1.1	0.004	1N	N13E53	3781				
07 Aug	1330	1350	1358	M4.5	0.032			3774		450	2	
07 Aug	1831	1854	1908	M5.0	0.067	2B	S07W07	3777	620	290	2	
08 Aug	0049	0106	0115	M2.1	0.022	SF	S13W03	3777	3200			
08 Aug	0327	0441	0509	M1.3	0.055	SF	S03W15	3777	530			
08 Aug	1124	1142	1152	M1.6	0.003	1N	S08W19	3777				
08 Aug	1256	1300	1304	M1.0	0.005	SF	N14E35	3781				
08 Aug	1336	1343	1352	M1.5	0.011	SF	N15E34	3781				
08 Aug	1901	1935	1957	X1.3	0.210	2B	S03W23	3777	110	100	2	
08 Aug	2246	2251	2256	M1.2	0.005			3780				
09 Aug	1041	1117	1124	M1.2	0.022	SF	S09W28	3777				
09 Aug	1156	1206	1213	M1.4	0.011	1F	S08E08	3780		380	2	
09 Aug	1238	1243	1251	M1.0	0.010	SF	N15E22	3780				
09 Aug	1251	1259	1303	M1.0	0.007			3780				
09 Aug	2027	2037	2100	M1.0	0.016	SF	S09W55	3774				
09 Aug	2110	2123	2150	M4.5	0.067			3774		150	2	
09 Aug	2343	2350	2355	M1.1	0.006	SN	S12E02	3780				1
10 Aug	0052	0102	0107	M1.3	0.005			3780	2400	110		
10 Aug	0214	0237	0252	M5.3	0.072	2N	S10E01	3780	560	320		
10 Aug	0403	0411	0421	M1.6	0.014	SF	S13W03	3780				
10 Aug	1405	1439	1510	M1.3	0.042	SF	S13W04	3780				
10 Aug	1511	1516	1520	M1.2	0.006	SN	N02E34	3782				
11 Aug	0022	0031	0046	M1.0	0.014			3780				
11 Aug	0523	0528	0537	M1.6	0.009	1N	S14W16	3780				
11 Aug	1957	2018	2036	M1.6	0.030	1F	S09W58	3777				

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
05 Aug	0100	0103	0107	C7.0			3780
05 Aug	0119	0124	0128	C5.4			3774
05 Aug	0222	0231	0235	M1.1	SF	S11E63	3780
05 Aug	0513	0523	0527	M6.1	1N	S11E62	3780
05 Aug	B0531	U0532	0537		SF	S10E75	3780
05 Aug	0553	0555	0628		SF	S23W02	3772
05 Aug	0855	0858	0905		SF	S08E58	3780
05 Aug	0949	1001	1009	M1.7			
05 Aug	1149	1157	1210		SF	S03E12	3774
05 Aug	1324	1340	1354	X1.7	SF	N00E00	3767
05 Aug	1357	1357	1410		SF	S11E64	3780
05 Aug	1517	1526	1541	X1.1	2B	S08E55	3780
05 Aug	1618	1619	1623		SF	S10E64	3780
05 Aug	1756	1802	1809	M1.0			
05 Aug	1820	1837	1842	M1.2			3780
05 Aug	1824	1826	1853		SF	S06E09	3774
05 Aug	1836	1836	1857		1F	S12E60	3780
05 Aug	1922	1924	1926		SF	S10E03	3774
05 Aug	1958	2003	2007		SF	S10E02	3774
05 Aug	2305	2305	2314		SF	S10E01	3774
06 Aug	0103	0113	0120	C7.8	SF	N17W07	3775
06 Aug	0250	0303	0308	M1.1			3781
06 Aug	0412	0418	0426	C3.9	SF	N11E60	3781
06 Aug	0613	0617	0623	C4.2	SF	S08E47	3780
06 Aug	0701	0708	0715	C4.9			3781
06 Aug	0736	0737	0738		SF	S08E55	3780
06 Aug	B0925	U0927	0941		SF	S05W02	3774
06 Aug	1124	1135	1147	C8.1	SF	S03W02	3774
06 Aug	1407	1445	1448	C6.8	SF	S05W02	3774
06 Aug	1443	1445	1453		SF	S06E41	3780
06 Aug	1611	1615	1620	C5.8	SF	S11E47	3780
06 Aug	1628	1629	1637		SF	S09E12	3777
06 Aug	1818	1826	1832		SF	S09W12	3774
06 Aug	1839	1854	1907		SF	S09W12	3774
06 Aug	1957	1958	2010		SF	S12E46	3780
06 Aug	2038	2045	2053	C4.8			
07 Aug	0155	0201	0206	C8.5			
07 Aug	0200	0201	0204		SF	N05W75	3774

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
07 Aug	0209	0209	0210		SF	N08W81	
07 Aug	0221	0230	0238	M1.8	1N	S08W18	3774
07 Aug	0225	0228	0259		SF	S21W33	3772
07 Aug	0250	0251	0300		SN	N14E56	3781
07 Aug	0310	0311	0318		1N	S02W13	3774
07 Aug	0314	0325	0334	C7.9	SF	S02W13	3774
07 Aug	0452	0457	0501	M1.1	1N	N13E53	3781
07 Aug	0529	0530	0600		SF	S03W01	3777
07 Aug	0534	0534	0540		SF	N17W23	3775
07 Aug	0633	0635	0709		SF	S04W12	3774
07 Aug	0815	0820	0828		SF	S14E40	3780
07 Aug	B0930	U0931	0943		SF	S11E47	3780
07 Aug	1008	1011	1026		SF	S23W37	3772
07 Aug	1032	1039	1044	C5.3	SF	N15E51	3781
07 Aug	1126	1128	1132		SF	S11E05	3777
07 Aug	1140	1141	1148		SF	S13E39	3780
07 Aug	1217	1225	1235	C4.5	SF	S13E39	3780
07 Aug	1222	1224	1242		SF	S03W24	3774
07 Aug	1330	1350	1358	M4.5			3774
07 Aug	1458	1505	1519	C7.4			3780
07 Aug	1502	1505	1535		SF	S22W37	3772
07 Aug	1503	1505	1544		SF	S12E38	3780
07 Aug	1718	1719	1727		SF	S15E39	3780
07 Aug	1817	1819	1820		SF	S10W04	3777
07 Aug	1831	1854	1908	M5.0	2B	S07W07	3777
07 Aug	1921	1922	1927		SF	S09W21	3774
07 Aug	2026	2028	2037		SF	S08W22	3774
08 Aug	0012	0034	0049	C7.9	SF	N11E41	3781
08 Aug	0049	0106	0115	M2.1	SF	S13W03	3777
08 Aug	0238	0245	0253	C8.0	SF	S14E28	3780
08 Aug	0327	0441	0509	M1.3	SF	S03W15	3777
08 Aug	B0453	U0509	0613		SF	S08W12	3777
08 Aug	0630	0635	0640	C9.1	SF	S09W30	3774
08 Aug	0709	0719	0730	C7.4	SF	N14E39	3781
08 Aug	0821	0831	0837	C7.7	SF	S13E24	3780
08 Aug	0953	0957	1001		SF	S11W34	3774
08 Aug	1106	1108	1111		SF	S10W09	3777
08 Aug	1124	1142	1152	M1.6	1N	S08W19	3777

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
08 Aug	1134	1134	1145		SF	S12E28	3780
08 Aug	1139	1143	1155		SF	N15E36	3781
08 Aug	1205	1209	1229		1F	N14E35	3781
08 Aug	1216	1321	1328		SF	S05W16	3777
08 Aug	1256	1300	1304	M1.0	SF	N14E35	3781
08 Aug	B1317	1338	1337		SF	N15E34	3781
08 Aug	B1317	1347	1420		SF	S09W13	3777
08 Aug	1336	1343	1352	M1.5			3777
08 Aug	1718	1725	1735	C6.4	SF	S10E27	3780
08 Aug	1735	1744	1751	C6.5			
08 Aug	1753	1754	1754		SF	S08E15	3780
08 Aug	1839	1844	1848	C6.1			
08 Aug	1901	1935	1957	X1.3	2B	S03W23	3777
08 Aug	2246	2251	2256	M1.2			3780
09 Aug	0018	0023	0032		SF	S08E12	3780
09 Aug	0414	0418	0425	C5.2			
09 Aug	0527	0545	0556	C8.3	SF	S08W25	3777
09 Aug	0729	0730	0736		SF	S11E08	3780
09 Aug	B1002	U1002	A1047		SF	S14E12	3780
09 Aug	B1002	U1002	A1047		SF	S05W42	3774
09 Aug	1041	1117	1124	M1.2	SF	S09W28	3777
09 Aug	1111	U1119	1129		SF	S14E09	3780
09 Aug	1156	1206	1213	M1.4	1F	S08E08	3780
09 Aug	1221	1315	1330		SF	S08E11	3780
09 Aug	1238	1243	1251	M1.0	SF	N15E22	3780
09 Aug	1251	1259	1303	M1.0			3780
09 Aug	B1322	1550	1807		1N	S09E08	3780
09 Aug	1356	1357	1412		SF	N14E21	3781
09 Aug	1414	1420	1424	C7.6	SF	N15E22	3781
09 Aug	B1435	U1435	1447		SF	N15E22	3781
09 Aug	1436	1445	1449	C7.5			3777
09 Aug	1440	1445	1457		SF	S11E07	3780
09 Aug	1446	1503	1532		SF	S07W30	3777
09 Aug	1508	1510	1516		SF	N17E16	3781
09 Aug	1538	1548	1556	C7.2			3780
09 Aug	1541	1547	1605		1N	S05E08	3780
09 Aug	1630	1630	1635		SF	N13E66	3784
09 Aug	1713	1714	1723		SF	S10W52	3774

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
09 Aug	1743	1749	1753	C7.1	SF	S05W35	3777
09 Aug	1748	1749	1758		SF	N16E20	3781
09 Aug	1933	1939	2004		1F	S05W37	3777
09 Aug	2027	2037	2100	M1.0	SF	S09W55	3774
09 Aug	2110	2123	2150	M4.5			3774
09 Aug	2343	2348	2359	M1.1	SN	S12E02	3780
10 Aug	0029	0031	0035		SF	N11E64	3784
10 Aug	0052	0102	0107	M1.3			3780
10 Aug	0214	0237	0252	M5.3	2N	S10E01	3780
10 Aug	0225	0227	0235		SF	S00E42	3782
10 Aug	0403	0411	0421	M1.6	SF	S13W03	3780
10 Aug	0719	0726	0731	C8.9	SF	S05E08	3780
10 Aug	0849	0857	0904	C8.2	SF	N00E37	3782
10 Aug	0907	0911	0921		SF	S05W01	3780
10 Aug	0950	0954	0959	C6.1	SF	S12W03	3780
10 Aug	1041	1048	1100		SF	S10W03	3780
10 Aug	1056	1059	1118		SF	N01E36	3782
10 Aug	1131	1132	1135		SF	S12W04	3780
10 Aug	1152	1155	1208		SF	S13W03	3780
10 Aug	1219	1233	1246		SF	S10W03	3780
10 Aug	1405	1439	1510	M1.3	SF	S13W04	3780
10 Aug	1511	1516	1520	M1.2	SN	N02E34	3782
10 Aug	1515	1516	1520		SF	S13W04	3780
10 Aug	1653	1700	1711	C6.9	SF	S07W50	3777
10 Aug	1657	1700	1714		SF	S14W59	3774
10 Aug	1720	1720	1731		SF	N02E33	3782
10 Aug	1948	1953	2001	C9.8	SF	S14W09	3780
10 Aug	2032	2039	2043	C6.7	SF	S13W10	3780
10 Aug	2043	2047	2053	C9.7			3780
10 Aug	2127	2140	2219		1F	S08W47	3777
10 Aug	2250	2257	2303	C6.7	SF	S10W12	3780
11 Aug	0022	0031	0046	M1.0			3780
11 Aug	0248	0255	0300	C6.8	SF	S12W11	3780
11 Aug	0356	0405	0410	C6.7			3777
11 Aug	0410	0417	0424	C8.1			3777
11 Aug	0515	0516	0518		SF	S09W71	3774
11 Aug	0523	0528	0537	M1.6	1N	S14W16	3780
11 Aug	0637	0639	0646		SF	S22E11	

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
11 Aug	0653	0659	0706	C4.2	SF	S08W52	3777
11 Aug	0709	0709	0714		SF	S05W12	3780
11 Aug	0712	0713	0723		SF	S00E25	3782
11 Aug	0736	0739	0743		SF	S07W14	3780
11 Aug	0801	0801	0804		SF	S10W49	3777
11 Aug	0833	0841	0848	C4.4	SF	S13W10	3780
11 Aug	0848	0853	0857	C4.7			3780
11 Aug	0939	0942	0945		SF	S10W51	3777
11 Aug	1108	1108	1131		SF	S13W15	3780
11 Aug	1154	1155	1157		SF	S09W67	3777
11 Aug	1204	1204	1206		SF	S09W67	3777
11 Aug	1210	1229	1246		SF	S11W49	3777
11 Aug	1259	1312	1341		SF	S11W51	3777
11 Aug	1513	1513	1520		SF	S13W17	3780
11 Aug	1608	1608	1615		SF	N14E42	3784
11 Aug	1622	1623	1629		SF	S07E69	
11 Aug	1648	1652	1656	C5.0	SF	S09W54	3777
11 Aug	1754	1755	1759		SF	N02E19	3782
11 Aug	1756	1757	1802		SF	S10W55	3777
11 Aug	1825	1831	1837	C5.3	SF	S03W75	3774
11 Aug	1957	2018	2036	M1.6	1F	S09W58	3777
11 Aug	2229	2235	2242	C4.7			
11 Aug	2340	2341	A2359		SF	S11W22	3780

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 3269												
02 Apr	S25E42	191	10	1	Axx	2	A								
03 Apr	S25E28	192	plage												
04 Apr	S25E14	193	plage												
05 Apr	S25W00	194	plage												
06 Apr	S25W14	194	plage												
07 Apr	S25W28	195	plage												
08 Apr	S25W41	195	plage								1				
09 Apr	S25W54	195	plage												
10 Apr	S25W68	195	plage												
11 Apr	S25W82	196	plage												
								0	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 194

			Region 3765												
23 Jul	S11E74	327	120	2	Hsx	1	A								
24 Jul	S12E59	329	110	2	Hsx	1	A								
25 Jul	S11E45	330	60	2	Hsx	1	A				1				
26 Jul	S12E33	331	120	3	Hsx	1	A								
27 Jul	S12E20	328	180	7	Dso	11	BG	1	1		4		1		
28 Jul	S11E07	328	380	7	Dkc	15	BGD						1		
29 Jul	S11W07	329	460	8	Dkc	19	BGD	2			2	2			
30 Jul	S11W21	330	480	8	Dkc	29	BGD				1				
31 Jul	S11W33	328	450	11	Ekc	28	BGD				1				
01 Aug	S11W47	329	450	11	Ekc	28	BGD		2		8				
02 Aug	S11W61	330	450	11	Ekc	28	BGD	3	2		5				
03 Aug	S11W76	332	140	6	Dai	7	BG	1			3				
04 Aug	S13W92	334	60	9	Hsx	1	A								
								7	5	0	25	2	2	0	0

Crossed West Limb.
Absolute heliographic longitude: 328

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 3767												
25 Jul	S09E57	318	60	4	Cao	5	B								
26 Jul	S10E47	319	160	9	Dso	9	B				1				
27 Jul	S10E30	318	220	10	Dso	10	B	2	1		4	2			
28 Jul	S11E19	316	200	7	Dsi	10	BGD	1			5				
29 Jul	S09E04	318	140	7	Dai	15	B	3			3				
30 Jul	S09W10	319	120	7	Cao	15	B								
31 Jul	S09W24	319	130	6	Dai	15	BD		1		4	1			
01 Aug	S09W38	320	130	6	Dai	15	BD				2				
02 Aug	S09W52	321	130	6	Dai	15	BD								
03 Aug	S09W65	321	200	5	Dai	13	BG								
04 Aug	S09W78	320	80	2	Hsx	1	A	1							
								7	2	0	19	3	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 318

			Region 3769												
26 Jul	N22E78	283	100	4	Hsx	1	A								
27 Jul	N23E60	285	100	9	Hsx	1	A								
28 Jul	N23E49	286	100	4	Hsx	1	A								
29 Jul	N20E35	287	80	3	Cso	1	B								
30 Jul	N22E22	287	80	3	Hsx	3	A				2				
31 Jul	N22E10	285	80	2	Hsx	1	A				1				
01 Aug	N22W04	286	80	2	Hsx	1	A								
02 Aug	N22W18	287	80	2	Hsx	1	A								
03 Aug	N22W29	285	100	2	Hsx	1	A								
04 Aug	N23W42	284	110	2	Hsx	3	A	1				1			
05 Aug	N23W55	284	130	3	Hsx	1	A								
06 Aug	N23W69	285	100	2	Hsx	1	A								
07 Aug	N23W83	286	90	2	Hsx	2	A								
								1	0	0	3	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 286

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 3770													
28 Jul	N07E08	326	200	8	Dai	10	BG	1			2				
29 Jul	N07W05	327	240	7	Dai	15	BD	1			5				
30 Jul	N07W19	328	260	8	Dho	12	BD				5				
31 Jul	N07W30	325	340	8	Dho	12	BD	2			3				
01 Aug	N07W45	327	310	8	Dho	12	BD	1	1		1				
02 Aug	N07W60	329	270	8	Dho	10	BD								
03 Aug	N07W75	331	260	8	Dho	5	BD	2	4		4				
04 Aug	N08W86	328	130	13	Cso	2	B								
								7	5	0	20	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 327

		Region 3772													
29 Jul	S25E73	250	plage						2						
30 Jul	S25E59	250	170	9	Dai	9	B		1		4		1		
31 Jul	S25E48	247	240	12	Eai	12	B	1	1		13	3			
01 Aug	S25E34	248	240	12	Eac	12	BGD	1	1		10	1			
02 Aug	S25E20	249	350	13	Ekc	12	BGD	2	2		5				
03 Aug	S25E06	250	380	14	Ekc	23	BGD				1				
04 Aug	S25W07	249	420	14	Ekc	21	BGD				1				
05 Aug	S25W20	249	330	14	Eki	17	BGD				1				
06 Aug	S25W34	250	320	14	Eko	12	BGD								
07 Aug	S25W45	248	350	14	Eko	8	BG				3				
08 Aug	S25W58	248	310	15	Cko	13	BG								
09 Aug	S25W72	248	230	15	Hsx	8	A								
10 Aug	S24W90	253	100	4	Hsx	1	A								
								4	7	0	38	4	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 250

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 3774												
31 Jul	S06E70	225	250	12	Eki	2	BG		4		1				
01 Aug	S06E55	227	250	12	Eki	2	BG	1	4		7				
02 Aug	S06E40	229	250	12	Eki	2	BG	1			3				
03 Aug	S05E27	229	350	11	Ekc	19	BG	1	1		1		1		
04 Aug	S10E14	228	370	14	Ekc	31	BGD								
05 Aug	S07E03	226	400	14	Ekc	28	BG	1			5				
06 Aug	S07W10	226	440	14	Ekc	46	BG	2			5				
07 Aug	S07W24	227	450	13	Ekc	47	BGD	1	2		6	2			
08 Aug	S07W38	228	400	12	Ekc	47	BGD	1			2				
09 Aug	S07W53	229	260	12	Eki	51	BG		1		3				
10 Aug	S76W64	227	170	10	Dai	24	B				1				
11 Aug	S06W76	226	140	10	Cao	8	B	1			2				
								9	12	0	36	2	1	0	0

Still on Disk.
Absolute heliographic longitude: 226

			Region 3775												
31 Jul	N17E60	234	40	4	Cso	4	B								
01 Aug	N17E46	236	40	4	Cso	4	B								
02 Aug	N17E32	237	40	6	Dac	6	BG		1		1				
03 Aug	N17E18	238	120	8	Dai	12	BG		1						
04 Aug	N18E05	237	120	8	Dai	10	BG								
05 Aug	N18W07	236	60	9	Dai	15	BG								
06 Aug	N18W21	237	40	9	Cso	6	BG	1			1				
07 Aug	N18W34	236	40	9	Cso	8	B				1				
08 Aug	N17W48	238	70	4	Csi	10	B								
09 Aug	N17W62	238	30	3	Cao	4	B								
10 Aug	N18W72	235	10	1	Axx	1	A								
11 Aug	N18W86	236	plage												
								1	2	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 237

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 3776												
01 Aug	N10E34	247	30	5	Cro	4	B								
02 Aug	N10E20	249	30	7	Cro	4	B								
03 Aug	N10E06	250	10	1	Axx	1	A								
04 Aug	N09W07	249	plage												
05 Aug	N09W21	250	plage												
06 Aug	N09W35	251	plage												
07 Aug	N09W49	252	plage												
08 Aug	N09W63	253	plage												
09 Aug	N09W77	253	plage												
								0	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 250

			Region 3777												
02 Aug	S09E61	207	10	1	Axx	1	A				1				
03 Aug	S09E48	208	20	5	Cso	7	B		1		1				
04 Aug	S10E35	207	70	10	Cao	2	B								
05 Aug	S09E21	208	130	10	Dao	10	B								
06 Aug	S09E07	209	210	11	Eai	20	BG				1				
07 Aug	S09W06	209	310	11	Eki	17	BGD		1		3		1		
08 Aug	S09W19	209	400	14	Ekc	45	BGD		4	1	6	1	1		
09 Aug	S09W33	209	460	14	Ekc	56	BG	3	1		4	1			
10 Aug	S08W47	210	320	14	Fkc	26	BG	1			1	1			
11 Aug	S10W60	210	300	11	Ekc	15	BG	4	1		9	1			
								8	8	1	26	4	2	0	0

Still on Disk.
Absolute heliographic longitude: 209

			Region 3778												
02 Aug	S18W49	317	10	4	Bxo	3	B								
03 Aug	S18W61	317	plage												
04 Aug	S18W75	317	plage												
05 Aug	S18W89	318	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 317

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 3779												
04 Aug	S01E24	218	70	2	Dao	4	B								
05 Aug	S15E10	219	60	4	Dao	3	B								
06 Aug	S15W04	220	30	4	Cro	8	B								
07 Aug	S13W21	223	5	2	Axx	1	A								
08 Aug	S13W35	225	plage												
09 Aug	S13W49	225	plage						1						
10 Aug	S13W63	226	plage												
11 Aug	S13W77	227	plage												
								0	1	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 220

			Region 3780												
04 Aug	S10E71	171	190	5	Dai	7	B	1	2		2				
05 Aug	S13E58	171	930	22	Fkc	33	BGD	1	3	1	5	2	1		
06 Aug	S13E44	172	1220	22	Fkc	44	BGD	2			5				
07 Aug	S09E27	175	1210	23	Fkc	67	BGD	2			6				
08 Aug	S12E17	172	1250	26	Fkc	103	BGD	3	1		5				
09 Aug	S12E03	173	1280	26	Fkc	128	BG	1	3		8	3			
10 Aug	S10W09	172	1200	26	Fkc	64	BGD	6	4		13		1		
11 Aug	S11W20	170	1100	25	Fki	20	BGD	3	2		7	1			
								19	15	1	51	6	2	0	0

Still on Disk.
Absolute heliographic longitude: 173

			Region 3781												
04 Aug	N15E80	163	210	3	Hax	2	A	1	2						
05 Aug	N13E67	162	160	6	Dso	2	B								
06 Aug	N13E53	163	160	4	Dao	5	BG	2	1		1				
07 Aug	N13E38	165	170	7	Dso	5	BD	1	1		2	1			
08 Aug	N14E26	164	160	6	Dsc	5	BGD	2	1		5	1			
09 Aug	N14E12	164	220	6	Dso	14	BG	1	1		5				
10 Aug	N14W01	164	160	5	Cso	4	B								
11 Aug	N14W13	163	150	6	Cso	4	B								
								7	6	0	13	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 164

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 3782												
07 Aug	N02E64	137	100	16	Fao	3	B								
08 Aug	N03E57	133	260	14	Eki	12	BG								
09 Aug	N03E42	134	220	11	Eai	11	BG								
10 Aug	N03E28	135	190	15	Eai	14	B	1	1		5				
11 Aug	N02E16	134	100	10	Cao	10	B				2				
								1	1	0	7	0	0	0	0
Still on Disk. Absolute heliographic longitude: 134															
			Region 3783												
08 Aug	N09E17	173	80	5	Dai	11	B								
09 Aug	N09E03	173	110	6	Dai	15	B								
10 Aug	N10W10	173	20	6	Cro	4	B								
11 Aug	N10W23	173	20	6	Cro	3	B								
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 173															
			Region 3784												
08 Aug	N16E73	116	300	4	Hhx	1	A								
09 Aug	N15E61	115	450	4	Cko	5	B				1				
10 Aug	N15E48	115	460	4	Cki	6	BD				1				
11 Aug	N15E35	115	460	4	Dki	5	BGD				1				
								0	0	0	3	0	0	0	0
Still on Disk. Absolute heliographic longitude: 115															
			Region 3785												
11 Aug	S11E49	101	30	5	Cao	5	B								
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 101															
			Region 3786												
11 Aug	S23E01	149	30	5	Cao	4	B								
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 149															

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 3787													
11 Aug	N16W00	150	30	2	Cao	3	B	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 150

		Region 3788													
11 Aug	S06E64	86	140	3	Cao	7	B	0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 86

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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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