

Solar activity was at moderate levels throughout the week. Region 4168 (N05, L=103, class/area=Eki/350 on 08 Aug) produced a total of fourteen M-class flares (R1-Minor events) this period, the largest being an M4.4/1b at 05/1553 UTC. The M4.4 flare was accompanied by Type-II (865 km/s) and IV radio sweeps, a 200 sfu Tenflare, and a CME first visible in LASCO coronagraph imagery at around 05/1700 UTC. This CME likely arrived at Earth on 08 Aug embedded with positive polarity CH HSS influence. No other Earth-directed CMEs resulted from the activity observed over 04-10 Aug.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels over 04-09 Aug, and increased to high levels on 10 Aug.

Geomagnetic field activity was quiet to unsettled on 04-05 Aug in response to waning negative polarity CH HSS influence. Quiet conditions and a nominal solar wind environment prevailed over 06-07 Aug. Periods of G1 (Minor) storming were observed on 08 Aug due to the onset of CIR and positive polarity CH HSS influence, and likely the embedded 05 Aug CME. Periods of G1-G2 (Minor-Moderate) storming were observed on 09 Aug due to continued positive polarity CH HSS influence. Unsettled to active levels were observed over 10 Aug as CH HSS influence weakened slightly.

### **Space Weather Outlook** **11 August - 06 September 2025**

Solar activity is expected to be at predominately low levels with M-class flare (R1-R2/Minor-Moderate events) activity likely over 11 Aug-06 Sep.

No proton events are expected at geosynchronous orbit, barring significant flare activity.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 11-17, 21-22, 27-28 Aug, and on 06 Sep. Normal to moderate levels are expected to prevail throughout the remainder of the period.

Geomagnetic field activity is expected to reach active levels on 11 Aug due to waning positive polarity CH HSS influence. Periods of G1 (Minor) storming are likely on 18-20 Aug, with periods of active conditions likely on 22 Aug, due to negative polarity CH HSS influence. Active conditions are likely again on 28 Aug in response to anticipated negative polarity CH HSS influence. Periods of G2 (Moderate) storming are likely on 05 Sep, with active levels likely on 04 and 06 Sep, due to positive polarity CH HSS influence.



### ***Daily Solar Data***

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10 <sup>-6</sup> hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
04 August	142	86	610	B9.0	7	2	0	7	1	0	0	0
05 August	157	120	820	C1.2	8	2	0	15	3	0	0	0
06 August	158	154	1010	C1.6	17	1	0	44	1	0	0	0
07 August	151	150	780	C1.5	5	2	0	21	3	0	0	0
08 August	148	177	1010	C1.1	10	2	0	12	1	0	0	0
09 August	140	137	680	C1.1	15	2	0	9	1	0	0	0
10 August	153	155	660	C1.7	3	3	0	12	1	0	0	0

### ***Daily Particle Data***

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		Electron Fluence (electrons/cm <sup>2</sup> -day -sr)	
	>1 MeV	>10 MeV	>2MeV	
04 August	6.6e+05	1.7e+04	3.0e+07	
05 August	2.6e+05	1.8e+04	2.4e+07	
06 August	2.2e+05	1.8e+04	3.1e+07	
07 August	3.5e+05	1.8e+04	3.6e+07	
08 August	1.3e+06	1.8e+04	1.7e+07	
09 August	1.3e+06	1.7e+04	1.4e+07	
10 August	3.4e+05	1.9e+04	9.1e+07	

### ***Daily Geomagnetic Data***

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
04 August	7	1-1-2-2-3-2-2-2	11	1-1-3-3-4-3-2-1	8	1-2-3-2-2-2-2-2
05 August	10	3-2-1-2-3-2-3-2	11	2-3-0-2-4-3-2-2	10	3-3-1-1-2-2-3-2
06 August	9	2-2-1-2-3-3-1-3	4	2-1-1-1-1-2-1-1	6	2-2-1-1-2-2-1-2
07 August	6	1-2-1-3-2-2-1-1	3	2-2-1-1-0-0-0-0	4	1-1-1-1-1-0-0-1
08 August	18	1-2-2-3-4-4-4-4	25	0-2-2-5-5-5-4-3	22	1-1-2-3-5-4-5-4
09 August	27	5-4-4-4-4-4-3-3	55	5-5-7-5-5-6-3-3	47	5-5-5-5-5-6-4-3
10 August	17	3-2-4-4-4-2-3-2	48	3-4-6-7-5-5-3-2	22	4-2-4-4-4-3-4-3

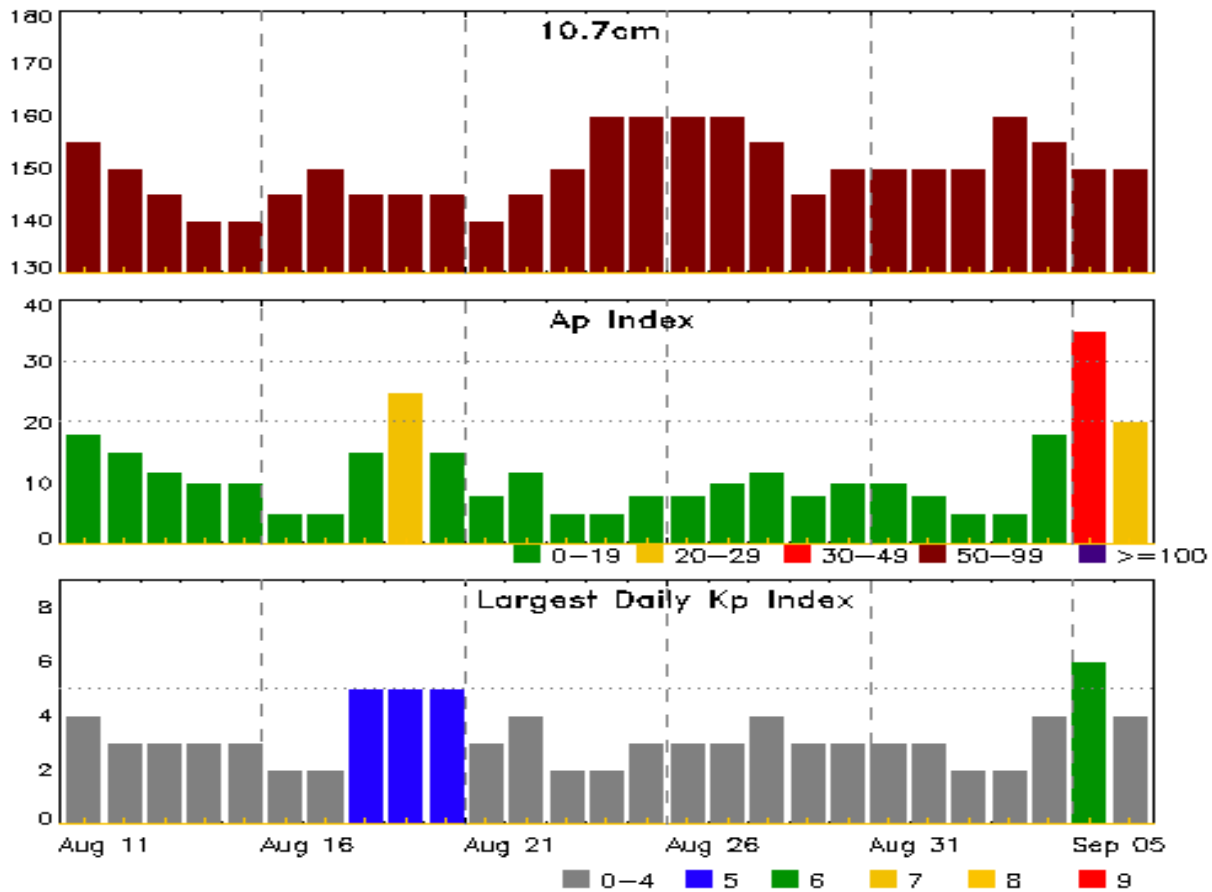


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
05 Aug 1636	ALERT: Type II Radio Emission	05/1558
05 Aug 1636	ALERT: Type IV Radio Emission	05/1558
05 Aug 2040	SUMMARY: 10cm Radio Burst	05/1550 - 1553
06 Aug 1844	WATCH: Geomagnetic Storm Category G3 predicted	
06 Aug 1846	CANCELLATION: Geomagnetic Storm Category G3 predicted	
06 Aug 1847	WATCH: Geomagnetic Storm Category G2 predicted	
07 Aug 1158	ALERT: Type IV Radio Emission	07/1136
08 Aug 1415	WARNING: Geomagnetic K = 4	08/1415 - 09/1200
08 Aug 1422	ALERT: Geomagnetic K = 4	
08 Aug 1429	WARNING: Geomagnetic K = 5	08/1430 - 09/0900
08 Aug 1500	ALERT: Geomagnetic K = 5	
08 Aug 2006	ALERT: Geomagnetic K = 5	
09 Aug 0230	ALERT: Geomagnetic K = 5	
09 Aug 0459	ALERT: Geomagnetic K = 5	
09 Aug 0821	ALERT: Geomagnetic K = 5	
09 Aug 0840	EXTENDED WARNING: Geomagnetic K = 4	08/1415 - 10/0300
09 Aug 0840	EXTENDED WARNING: Geomagnetic K = 5	08/1430 - 09/2359
09 Aug 1054	ALERT: Geomagnetic K = 5	
09 Aug 1330	ALERT: Geomagnetic K = 5	
09 Aug 1601	ALERT: Geomagnetic K = 5	
09 Aug 1628	WARNING: Geomagnetic K = 6	09/1628 - 2359
09 Aug 1652	ALERT: Geomagnetic K = 6	
10 Aug 0219	EXTENDED WARNING: Geomagnetic K = 4	08/1415 - 10/1500
10 Aug 0748	WARNING: Geomagnetic K = 5	10/0747 - 1500
10 Aug 1206	ALERT: Electron 2MeV Integral Flux $\geq 1000$ pfu	10/1145
10 Aug 1503	EXTENDED WARNING: Geomagnetic K = 4	08/1415 - 11/1200



## 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 Aug	155	18	4	25 Aug	160	8	3
12	150	15	3	26	160	8	3
13	145	12	3	27	160	10	3
14	140	10	3	28	155	12	4
15	140	10	3	29	145	8	3
16	145	5	2	30	150	10	3
17	150	5	2	31	150	10	3
18	145	15	5	01 Sep	150	8	3
19	145	25	5	02	150	5	2
20	145	15	5	03	160	5	2
21	140	8	3	04	155	18	4
22	145	12	4	05	150	35	6
23	150	5	2	06	150	20	4
24	160	5	2				

### ***Energetic Events***

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV
04 Aug	0452	0457	0505	M2.0	0.015			4168				
04 Aug	0505	0515	0521	M1.4	0.014			4168				
05 Aug	0200	0212	0226	M1.1	0.011			4168				
05 Aug	1546	1553	1558	M4.4	0.019	1B	N04W07	4168	46000		200	3
06 Aug	1656	1702	1706	M1.0	0.005			4168			120	
07 Aug	0225	0232	0244	M2.2	0.020			4168				
07 Aug	1040	1131	1153	M3.9	0.092			4168				
08 Aug	0329	0353	0401	M2.8	0.022	SF	N03W43	4168				
08 Aug	1856	1910	1917	M1.0	0.010	SF	N06W53	4168				
09 Aug	1610	1621	1628	M1.6	0.012	1F	N04W64	4168				
09 Aug	1633	1640	1644	M1.7	0.010	SF	N03W63	4168				
10 Aug	0246	0312	0342	M1.7	0.037	SF	N04W67	4168				
10 Aug	1457	1507	1510	M2.2	0.008	SF	N02W80	4168				
10 Aug	2251	2304	2315	M1.7	0.017			4168	120			

### ***Flare List***

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
04 Aug	0016	0022	0028	C2.2			
04 Aug	0124	0130	0134	C8.7	SN	N05E16	4168
04 Aug	0314	0320	0322	C2.8	SF	N05E14	4168
04 Aug	0452	0457	0505	M2.0			4168
04 Aug	0505	0515	0521	M1.4			4168
04 Aug	B0505	U0507	0557		1F	N04E15	4168
04 Aug	1031	1053	1131	C5.1			
04 Aug	1412	1412	1415		SF	N05E13	4168
04 Aug	1456	1505	1513	C1.8	SF	N08W60	4167
04 Aug	B1659	U1713	A1719		SF	N04E10	4168
04 Aug	1915	1920	1926	C1.8	SF	N05E05	4168
04 Aug	2135	2135	2138		SF	N05E09	4168
04 Aug	2357	0018	0031	C2.7	SF	N05E04	4168
05 Aug	0200	0212	0226	M1.1			4168
05 Aug	B0646	U0705	A0829	C2.7	1F	N03E00	4168
05 Aug	0659	0706	0721	C3.2	SF	N04W00	4168
05 Aug	1330	U1332	1336		SF	N05W03	4168



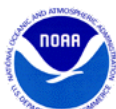
## *Flare List*

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
05 Aug	1401	1402	1422		SF	N05W02	4168
05 Aug	1405	1436	1500		SF	N08W75	4167
05 Aug	1417	1429	1432		SF	N09W74	4167
05 Aug	1433	1433	1444		SF	N09W74	4167
05 Aug	1440	1441	1443		SF	N05W03	4168
05 Aug	1445	1446	1452		SF	N09W74	4167
05 Aug	1533	1535	1539		SF	N20E64	4169
05 Aug	1546	1553	1558	M4.4	1B	N04W07	4168
05 Aug	1608	1609	1619		SF	N09W74	4167
05 Aug	1625	1627	1633		SF	N09W74	4167
05 Aug	1643	1653	1706		SF	N09W74	4167
05 Aug	1704	1718	1729	C4.4	SF	N03W06	4168
05 Aug	1933	1939	1945	C4.4			4167
05 Aug	2041	2102	2153	C4.6	1F	N03W07	4168
05 Aug	2152	2158	2200	C2.0			4168
05 Aug	2245	2252	2255	C1.9			4168
05 Aug	2313	2321	2326	C2.2	SF	N08E66	
06 Aug	0026	0231	0234		SF	N06W11	4168
06 Aug	0054	0058	0107	C1.7			4168
06 Aug	0109	0116	0122	C2.1			4168
06 Aug	0219	0230	0236	C2.0			
06 Aug	0313	0324	0330	C3.0	SF	N06W11	4168
06 Aug	0403	0403	0406		SF	N06W12	4168
06 Aug	0407	0413	0422	C2.9	SF	N06W12	4168
06 Aug	0532	0536	0539	C1.8	SF	N05W13	4168
06 Aug	0542	0548	0555		SF	N03W12	4168
06 Aug	0600	0612	0625	C5.2	SF	N05W18	4168
06 Aug	0609	0611	0613		SF	N09W84	4167
06 Aug	0742	0756	0805	C6.0			4167
06 Aug	0744	0744	0747		SF	N04W13	4168
06 Aug	0751	0753	0759		SF	N05W13	4168
06 Aug	0850	0902	0912	C2.5			
06 Aug	0919	0922	0926		SF	N06W14	4168
06 Aug	B1000	1002	A1007		SF	N03W12	4168
06 Aug	B1016	U1016	A1019		SF	N03W14	4168
06 Aug	1038	1044	1053	C4.3	SF	N03W14	4168
06 Aug	1052	1102	1124		SF	N05W17	4168
06 Aug	1055	1056	1057	C3.8	SF	N10E61	4172



## *Flare List*

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
06 Aug	1109	1116	1116		SF	N10E61	4172
06 Aug	1124	1124	1127		SF	N10E61	4172
06 Aug	1125	1125	1130		SF	N05W17	4168
06 Aug	1127	1128	1129		SF	N10E61	4172
06 Aug	1138	1150	1158	C8.5	SF	N04W15	4168
06 Aug	1148	1148	1152		SF	N09E60	4172
06 Aug	1219	1220	1222		SF	N03W13	4168
06 Aug	1315	1317	1318		SF	N10E61	4172
06 Aug	1318	1324	1328		SF	N10E61	4172
06 Aug	1319	1328	1332	C9.6			4168
06 Aug	1321	1321	1323		SF	N05W17	4168
06 Aug	1325	1328	1345		SN	N04W17	4168
06 Aug	1325	1328	1345		1N	N03W16	4168
06 Aug	1337	1341	1345		SF	N10E61	4172
06 Aug	1347	1349	1351		SF	N10E61	4172
06 Aug	1349	1357	1418		SF	N03W16	4168
06 Aug	1352	1354	1419		SF	N04W17	4168
06 Aug	1405	1407	1407		SF	N10E61	4172
06 Aug	1420	1431	1435		SF	N05W18	4168
06 Aug	1444	1453	1500	C2.9	SF	S16W49	4170
06 Aug	1500	U1603	A1617		SF	N05W19	4168
06 Aug	1553	1602	1607	C3.7			4172
06 Aug	1554	1555	1556		SF	N10E58	4172
06 Aug	1559	1602	1609		SF	N03W19	4168
06 Aug	1604	1604	1608		SF	N10E58	4172
06 Aug	1646	1646	1654		SF	N08E56	4172
06 Aug	1649	1701	1722		SN	N05W19	4168
06 Aug	1656	1702	1706	M1.0			4168
06 Aug	1712	1714	1717		SF	S16W49	4170
06 Aug	1715	1721	1728		SF	N08E56	4172
06 Aug	1725	1726	1732		SF	N21E52	4169
06 Aug	2103	2111	2123	C4.1			4172
06 Aug	2320	2320	A2359		SF	N17E44	4169
06 Aug	2356	0004	0011	C3.9	SF	N17E44	4169
07 Aug	0116	0140	0154	C5.0	SF	N19E50	4169
07 Aug	0209	0217	0222	C9.1	SN	N04W30	4168
07 Aug	0225	0232	0244	M2.2			4168
07 Aug	0225	0225	0251		1N	N04W30	4168



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
07 Aug	0320	0325	0337		SF	N04W26	4168
07 Aug	0320	0329	0337		SF	N08E53	4172
07 Aug	0339	0404	0409		SF	N08E53	4172
07 Aug	0504	0507	0510		SF	N04W26	4168
07 Aug	0551	0558	0607		SF	N09E50	4172
07 Aug	B0553	U0553	0600		SF	N04W30	4168
07 Aug	0601	0602	0606		SF	N04W30	4168
07 Aug	0619	0620	0623		SF	N08E49	4172
07 Aug	0716	0723	0724		SF	N04W28	4168
07 Aug	0800	0800	0805		SF	N10E49	4172
07 Aug	0919	0919	0927		SF	N05W26	4168
07 Aug	0947	0958	1005	C4.6	SF	N08E48	4172
07 Aug	1040	1131	1153	M3.9			4168
07 Aug	1054	1128	1311		1N	N03W31	4168
07 Aug	1340	1340	1347		SF	N08E44	4172
07 Aug	1435	1446	1456	C6.5	SF	N03W36	4168
07 Aug	1502	1507	1510		SF	N03W36	4168
07 Aug	1603	1603	1605		SF	N04W32	4168
07 Aug	1747	1748	1755		SF	S14W62	4170
07 Aug	2026	2039	2058	C8.5	1N	N05W39	4168
07 Aug	2212	2214	2216		SF	S16W70	4170
08 Aug	0031	0042	0120	C7.2	SF	N06W39	4168
08 Aug	0303	0311	0320	C2.3			
08 Aug	0329	0353	0401	M2.8	SF	N03W43	4168
08 Aug	0542	0543	0544		SF	S20W75	4164
08 Aug	0832	0850	0856	C2.4	SF	N03W42	4168
08 Aug	0856	0901	0908	C2.5			
08 Aug	1415	1435	1508	C8.1	1F	N09W39	4168
08 Aug	1534	1535	1536		SF	N09W39	4168
08 Aug	1622	1629	1632		SF	N04W48	4168
08 Aug	1638	1657	1707	C9.8	SF	S16W74	4170
08 Aug	1734	1735	1736		SF	N07W53	4168
08 Aug	1743	1800	1806	C6.8			4168
08 Aug	1746	1754	1818		SF	N06W49	4168
08 Aug	1806	1809	1811	C7.8			4168
08 Aug	1854	1909	1925		SF	S16W55	4173
08 Aug	1856	1910	1917	M1.0	SF	N06W53	4168
08 Aug	2107	2108	2110		SF	N06W51	4168





## *Flare List*

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
08 Aug	2119	2127	2132	C1.9			4161
08 Aug	2211	2219	2223	C4.9			
09 Aug	0105	0105	0109		SF	N06W51	4168
09 Aug	0116	0128	0147	C3.0			4168
09 Aug	0225	0228	0238		SF	N06W50	4168
09 Aug	0257	0303	0306	C5.3			4168
09 Aug	0313	0318	0322	C4.6			4172
09 Aug	0626	0630	0635	C3.8	SF	N05W59	4168
09 Aug	0647	0702	0709	C9.2	SF	N04W57	4168
09 Aug	0803	0810	0821	C4.5			4168
09 Aug	B0931	U0931	1015		SF	N04W57	4168
09 Aug	1040	1050	1053	C6.1	SF	N04W56	4168
09 Aug	1134	1146	1152	C3.3			
09 Aug	1215	1219	1222	C2.3			
09 Aug	1247	1250	1253	C2.5			
09 Aug	1307	1315	1320	C4.1			
09 Aug	1524	1524	1527		SF	S21W67	4173
09 Aug	1548	1551	1609	C4.6	SF	N04W60	4168
09 Aug	1610	1621	1628	M1.6	1F	N04W64	4168
09 Aug	1633	1640	1644	M1.7	SF	N03W63	4168
09 Aug	1726	1730	1735	C3.8			4168
09 Aug	1837	1849	1857	C2.8			4168
09 Aug	2154	2200	2210	C1.5			
10 Aug	0246	0312	0342	M1.7	SF	N04W67	4168
10 Aug	0629	0639	0659		SF	N07E07	4172
10 Aug	0635	0640	0652		SF	N08E05	4172
10 Aug	0702	0711	0724	C3.5	SF	N08E05	4172
10 Aug	0738	0744	0748	C2.6	SF	N02W73	4168
10 Aug	0758	0759	0805		SF	N07E05	4172
10 Aug	0813	0814	0833		SF	N08E06	4172
10 Aug	0903	0905	0921		SF	N09W24	4178
10 Aug	1158	1211	1224	C8.8			4168
10 Aug	1258	1258	1301		SF	N09W26	4178
10 Aug	1457	1507	1510	M2.2	SF	N02W80	4168
10 Aug	1550	1552	1559		SF	N09W28	4178
10 Aug	1736	1740	1754		1F	N10W29	4178
10 Aug	B1901	1904	1919		SF	N08W02	4172
10 Aug	2251	2304	2315	M1.7			4168



## Region Summary

Location		Sunspot Characteristics					Flares							
Date	Lat CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical			
	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4

### Region 1464

19 Apr	N23E01	107	10	3	Bxo	2	B								
20 Apr	N23W13	108	10	3	Bxo	2	B								
21 Apr	N23W27	109	plage												
22 Apr	N23W41	110	plage												
23 Apr	N23W55	110	plage												
24 Apr	N23W69	111	plage												
25 Apr	N23W83	112	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 107

### Region 4154

23 Jul	S15E62	202	90	11	Eao	3	B								
24 Jul	S13E45	205	40	2	Hsx	2	A								
25 Jul	S14E32	205	60	2	Hax	4	A	1							
26 Jul	S19E18	206	50	2	Hax	3	A								
27 Jul	S12E05	207	30	3	Cao	3	B								
28 Jul	S14W10	207	50	3	Cso	3	B				1				
29 Jul	S15W24	208	30	2	Hax	1	A								
30 Jul	S15W36	207	40	3	Hsx	3	A								
31 Jul	S15W50	208	40	3	Hsx	3	A	1							
01 Aug	S13W64	213	30	2	Hsx	1	A								
02 Aug	S13W79	210	20	1	Hsx	1	A								
03 Aug	S15W89	207	60	1	Hsx	1	A								
								2	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 207



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 4155															
24 Jul	S09E62	188	50	6	Cai	5	B	1							
25 Jul	S10E46	191	10	3	Cai	7	B	2			1				
26 Jul	S10E32	192	70	5	Dai	10	B								
27 Jul	S08E19	192	60	11	Eai	15	B	1			1				
28 Jul	S09E04	193	20	10	Cri	8	B								
29 Jul	S09W10	194	30	10	Dri	15	B	2			2				
30 Jul	S09W24	195	30	10	Cri	16	B	6			6				
31 Jul	S09W38	196	30	10	Cri	16	B	1			1				
01 Aug	S09W51	200	10	8	Bxo	9	B	2			1				
02 Aug	S08W66	197	10	5	Cro	4	B								
03 Aug	S08W80	198	10	5	Bxo	4	B	1							
								16	0	0	12	0	0	0	0

Crossed West Limb.

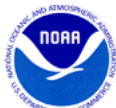
Absolute heliographic longitude: 193

### **Region 4156**

24 Jul	N11E61	189	20	2	Hrx	1	A								
25 Jul	N09E51	186	0		Hrx	1	A								
26 Jul	N09E36	188	10	1	Hax	1	A								
27 Jul	N08E19	192	10	1	Axx	1	A								
28 Jul	N12E04	193	plage												
29 Jul	N12W10	194	plage												
30 Jul	N12W24	195	plage												
31 Jul	N12W38	196	plage												
01 Aug	N12W52	201	plage												
02 Aug	N12W66	197	plage												
03 Aug	N12W80	198	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 193



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 4157															
24 Jul	S19E55	195	50	2	Hsx	1	A								
25 Jul	S19E40	197	50	1	Hsx	2	A								
26 Jul	S19E26	198	30	1	Hsx	1	A								
27 Jul	S19E15	196	50	1	Hsx	1	A								
28 Jul	S19W00	197	30	2	Hsx	1	A								
29 Jul	S21W14	198	30	2	Hsx	1	A								
30 Jul	S21W28	199	40	2	Hax	1	A	1							
31 Jul	S21W42	200	40	2	Hax	1	A								
01 Aug	S19W52	201	30	1	Hax	1	A	1							
02 Aug	S20W67	198	10	1	Hrx	1	A								
03 Aug	S21W79	197	10	1	Hrx	1	A	1							
								3	0	0	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 197

### **Region 4160**

26 Jul	S08E47	175	20	1	Hrx	1	A	1			1				
27 Jul	S08E34	177	30	1	Hsx	1	A	1							
28 Jul	S08E19	178	8	1	Axx	1	A								
29 Jul	S08E05	179	plage												
30 Jul	S08W09	180	plage												
31 Jul	S08W23	181	plage												
01 Aug	S08W37	186	plage												
02 Aug	S08W51	182	plage												
03 Aug	S08W65	183	plage												
04 Aug	S08W79	184	plage												
								2	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 179



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 4161															
27 Jul	S13E75	136	120	3	Hsx	1	A	2							
28 Jul	S12E67	130	80	10	Dao	6	B				1				
29 Jul	S13E54	130	40	12	Eso	4	B								
30 Jul	S12E39	132	110	11	Eso	6	B	1			1				
31 Jul	S12E25	133	110	11	Eso	4	B								
01 Aug	S13E14	135	60	13	Eso	6	B								
02 Aug	S13W00	131	80	11	Eso	4	B								
03 Aug	S12W15	133	70	10	Cso	4	B								
04 Aug	S13W32	136	50	5	Cso	3	B								
05 Aug	S14W44	136	40	7	Cso	6	B								
06 Aug	S14W58	136	30	3	Cso	4	B								
07 Aug	S13W72	137	20	3	Cso	2	B								
08 Aug	S15W86	138	60	2	Cso	1	B	1							
								4	0	0	2	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 131

### **Region 4164**

29 Jul	S21E38	146	10	1	Axx	1	A								
30 Jul	S21E24	147	plage												
31 Jul	S21E10	148	plage												
01 Aug	S21W04	153	plage												
02 Aug	S21W18	149	plage												
03 Aug	S21W32	150	plage												
04 Aug	S21W46	151	plage												
05 Aug	S21W60	152	plage												
06 Aug	S21W75	153	plage												
07 Aug	S21W89	154	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 153



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 4165															
30 Jul	N12E72	99	80	6	Cao	2	B	1							
31 Jul	N12E58	100	80	6	Cso	2	B								
01 Aug	N12E45	104	100	7	Cso	4	B								
02 Aug	N12E31	100	210	2	Hsx	4	A								
03 Aug	N12E16	102	170	2	Cso	4	B								
04 Aug	N12E04	100	110	3	Hax	2	A								
05 Aug	N12W09	101	220	4	Dso	8	B								
06 Aug	N12W23	101	230	3	Dao	6	B								
07 Aug	N12W37	102	100	4	Cao	8	B								
08 Aug	N11W51	103	150	3	Hsx	2	A								
09 Aug	N11W64	103	90	2	Hsx	3	A								
10 Aug	N12W76	102	120	2	Hsx	2	A								
								1	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 100

#### **Region 4166**

30 Jul	N24W26	197	10	3	Bxo	4	B								
31 Jul	N24W40	198	30	5	Dso	4	B								
01 Aug	N24W52	201	50	6	Dao	7	B								
02 Aug	N25W66	197	20	4	Dao	4	B								
03 Aug	N25W80	198	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 197

#### **Region 4167**

31 Jul	N10W09	167	40	5	Cai	10	B	1			2				
01 Aug	N10W24	173	70	7	Dai	15	BG	5			2				
02 Aug	N12W38	169	270	8	Dai	27	BG	7			12				
03 Aug	N10W52	170	430	8	Dki	19	BGD	3			2				
04 Aug	N11W64	168	280	11	Ehi	14	BG	1			1				
05 Aug	N11W77	169	250	12	Ehi	11	BG	1			7				
06 Aug	N11W92	170	250	12	Ehi	11	BG	1			1				
								19	0	0	27	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 167



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 4168															
02 Aug	N06E29	102	60	5	Cai	7	BG	1			2				
03 Aug	N05E15	103	60	7	Dai	15	BGD	7	1		2	1			
04 Aug	N05E03	100	90	11	Eac	13	BGD	4	2		6	1			
05 Aug	N06W09	101	170	9	Dac	21	BGD	6	2		6	3			
06 Aug	N05W23	101	250	11	Ekc	22	BGD	9	1		25	1			
07 Aug	N05W37	102	260	11	Eki	23	BGD	3	2		10	3			
08 Aug	N05W51	103	350	11	Eki	17	BGD	5	2		9	1			
09 Aug	N05W64	103	320	11	Eko	11	BG	9	2		8	1			
10 Aug	N05W78	104	220	11	Eao	5	BG	2	3		3				
								46	15	0	71	11	0	0	0

Still on Disk.

Absolute heliographic longitude: 100

#### **Region 4169**

04 Aug	N22E66	37	80	6	Cao	4	B								
05 Aug	N23E55	37	70	3	Cao	4	B				1				
06 Aug	N23E46	32	80	2	Cao	3	B	1			2				
07 Aug	N22E32	33	70	3	Cao	4	B	1			2				
08 Aug	N23E18	34	110	3	Cso	7	B								
09 Aug	N12E04	35	80	2	Hsx	2	A								
10 Aug	N23W08	34	80	2	Hsx	2	A								
								2	0	0	5	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 35

#### **Region 4170**

05 Aug	S15W38	129	70	4	Dao	10	BG								
06 Aug	S17W54	132	90	7	Dao	8	BG	1			2				
07 Aug	S17W68	133	140	7	Dso	4	B				2				
08 Aug	S16W82	134	80	7	Dso	4	B	1			1				
								2	0	0	5	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 129



### *Region Summary - continued*

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	Helio Lon	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
								C	M	X	S	1	2	3	4

#### **Region 4171**

06 Aug	N19E65	13	50	1	Hsx	1	A								
07 Aug	N19E51	14	40	2	Hsx	1	A								
08 Aug	N18E37	15	30	2	Hsx	1	A								
09 Aug	N19E26	13	20	1	Hsx	1	A								
10 Aug	N19E12	14	40	1	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 14

#### **Region 4172**

06 Aug	N08E52	26	20	3	Cro	7	BG	3			14				
07 Aug	N09E38	27	130	9	Dai	12	BG	1			7				
08 Aug	N08E25	27	140	11	Eai	14	BG								
09 Aug	N09E10	29	80	12	Eai	10	B	1							
10 Aug	N09W04	30	80	14	Eai	14	BG	1			6				
								6	0	0	27	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 30

#### **Region 4173**

06 Aug	S16W25	103	10	3	Bxo	2	B								
07 Aug	S18W42	107	10	3	Bxo	4	B								
08 Aug	S18W56	108	20	5	Dro	3	B				1				
09 Aug	S18W70	109	20	5	Dro	3	B				1				
10 Aug	S18W84	110	20	5	Dro	3	B								
								0	0	0	2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 103

#### **Region 4174**

07 Aug	S07W17	82	10	2	Bxo	2	B								
08 Aug	S08W31	83	10	1	Hrx	1	A								
09 Aug	S08W45	84	plage												
10 Aug	S08W59	85	30	2	Cro	4	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 82





### *Region Summary - continued*

Location		Sunspot Characteristics					Flares							
Date	Lat CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical			
	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4

#### *Region 4175*

08 Aug	N12E59	353	20	1	Hrx	2	A								
09 Aug	N12E47	352	30	1	Hsx	1	A								
10 Aug	N12E35	351	30	1	Hsx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 351

#### *Region 4176*

08 Aug	N26E45	7	20	3	Dro	4	B								
09 Aug	N26E31	8	10	1	Axx	1	A								
10 Aug	N26E17	9	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 9

#### *Region 4177*

08 Aug	N05E59	353	20	2	Hrx	1	A								
09 Aug	N06E48	351	20	1	Hsx	1	A								
10 Aug	N05E36	350	10	1	Hsx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 350

#### *Region 4178*

09 Aug	N09W18	57	10	3	Dro	4	B								
10 Aug	N09W33	59	20	6	Dai	9	B				3	1			
								0	0	0	3	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 57



## ***Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)***

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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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