

Solar activity was at high levels on 12-13 April due to the rapid growth and complexity of Region 4055 (N07 L=235, class/area Ekc/820 on 13 April). This region totalled 19 M-class flares during the highlight period. The largest was an M3.2 flare at 1851 UTC on 13 April. Region 4048 (S16 L=279, class/area Fkc/460 on 07 April) produced M-class activity as well. Other highlights included filament activity in the south central portion of the disk. Two filament eruptions were observed. The first was approximately 20 degrees long, centered near S20E20, and began erupting after ~12/2130 UTC. The second filament was approximately 12 degrees long, centered near S22W09, and began erupting after ~13/0500 UTC. CME signatures were observed in subsequent coronagraph imagery following each event. Initial analysis and modeling indicated a likely Earth-directed component, with anticipated arrival at Earth near midday on 16 Apr.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate to high levels on 07-13 Apr due to the influence of various CH HSSs.

Geomagnetic field activity reached G1 (Minor) storm levels on 08-09, and 12 April all due to influences from CH HSSs. Unsettled to active levels were observed on the remaining days in the highlight period.

### **Space Weather Outlook** **14 April - 10 May 2025**

Solar activity is expected to be at moderate to high levels on 27 April - 10 May with the return of Region 4055. Low to moderate levels are expected for the remainder of the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 14-15, and 23-28 April, 03-10 May due to the influences of recurrent CH HSS activity.

Geomagnetic field activity is expected to be at G2 (Moderate) storm levels on 16 April due to the anticipated arrival of a CME that left the Sun on 13 April. G2 storm levels are expected again on 02 May due to recurrent CH HSS influences. G1 (Minor) storm levels are expected on 17 April, 01 May, and 05-06 May, all due to recurrent CH HSS activity. Unsettled to active levels are expected on 14-15 April, 18 April, 22-23 April, 03-04 May, and 07-09 May, all due to recurrent CH HSS activity as well. Quiet to unsettled levels are expected for the remaining days in the outlook period.



### ***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
07 April	162	167	1140	C1.0	6	0	0	2	1	0	0	0
08 April	159	130	830	C1.0	5	1	0	4	1	0	0	0
09 April	167	113	680	C1.4	9	0	0	1	1	0	0	0
10 April	153	112	680	C3.1	7	0	0	6	0	0	0	0
11 April	170	120	760	C4.1	9	2	0	19	1	0	0	0
12 April	165	103	1110		15	7	0	8	3	0	0	0
13 April	164	80	1100		8	10	0	3	4	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	
07 April	1.0e+06	2.3e+04	5.6e+08	
08 April	7.2e+05	1.6e+04	2.9e+08	
09 April	9.1e+05	1.5e+04	1.3e+08	
10 April	3.7e+05	1.5e+04	1.3e+08	
11 April	3.6e+05	1.5e+04	1.4e+08	
12 April	4.3e+05	1.5e+04	5.7e+07	
13 April	4.1e+05	1.5e+04	3.4e+07	

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

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
07 April	10	2-2-2-2-3-2-3-3	13	3-3-2-3-3-3-3-2	13	3-3-2-2-2-2-4-3
08 April	20	2-4-3-3-5-3-3-3	30	3-3-5-3-6-5-3-2	24	3-4-4-2-5-4-4-4
09 April	20	4-3-3-4-4-3-3-3	44	5-4-6-6-5-5-3-2	22	5-3-4-4-4-3-3-3
10 April	11	3-2-3-2-2-1-2-4	30	5-5-6-4-2-2-2-3	17	4-3-4-2-2-2-3-4
11 April	14	3-2-2-2-4-2-3-4	22	5-3-3-4-4-3-3-3	18	4-3-2-2-3-2-3-4
12 April	13	2-2-3-3-3-3-3-3	32	3-2-5-4-5-5-5-3	20	3-3-3-3-3-4-4-5
13 April	14	4-4-2-2-3-2-3-2	18	4-3-4-4-4-2-2-2	27	4-4-3-2-3-2-3-2



### *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>
07 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	05/1225
07 Apr 2022	WARNING: Geomagnetic K = 4	07/2022 - 08/0600
07 Apr 2039	ALERT: Geomagnetic K = 4	
08 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	05/1225
08 Apr 0502	EXTENDED WARNING: Geomagnetic K = 4	07/2022 - 08/1500
08 Apr 0614	ALERT: Type II Radio Emission	08/0553
08 Apr 1436	WARNING: Geomagnetic K = 5	08/1436 - 2100
08 Apr 1441	EXTENDED WARNING: Geomagnetic K = 4	07/2022 - 08/2100
08 Apr 1501	ALERT: Geomagnetic K = 5	
08 Apr 2056	EXTENDED WARNING: Geomagnetic K = 4	07/2022 - 09/1200
08 Apr 2056	EXTENDED WARNING: Geomagnetic K = 5	08/1436 - 09/0900
09 Apr 0151	ALERT: Geomagnetic K = 5	
09 Apr 0521	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	05/1225
09 Apr 0838	EXTENDED WARNING: Geomagnetic K = 5	08/1436 - 09/1500
09 Apr 0839	EXTENDED WARNING: Geomagnetic K = 4	07/2022 - 09/1800
10 Apr 0108	WARNING: Geomagnetic K = 4	10/0107 - 0900
10 Apr 0141	ALERT: Geomagnetic K = 4	
10 Apr 0756	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	05/1225
10 Apr 0833	EXTENDED WARNING: Geomagnetic K = 4	10/0107 - 1500
10 Apr 2242	WARNING: Geomagnetic K = 4	10/2243 - 11/0600
10 Apr 2246	ALERT: Geomagnetic K = 4	
10 Apr 2259	WARNING: Geomagnetic K = 5	10/2300 - 11/0300
11 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	05/1225
11 Apr 0534	EXTENDED WARNING: Geomagnetic K = 4	10/2243 - 11/1800
11 Apr 1408	WATCH: Geomagnetic Storm Category G1 predicted	
11 Apr 1755	EXTENDED WARNING: Geomagnetic K = 4	10/2243 - 11/2359

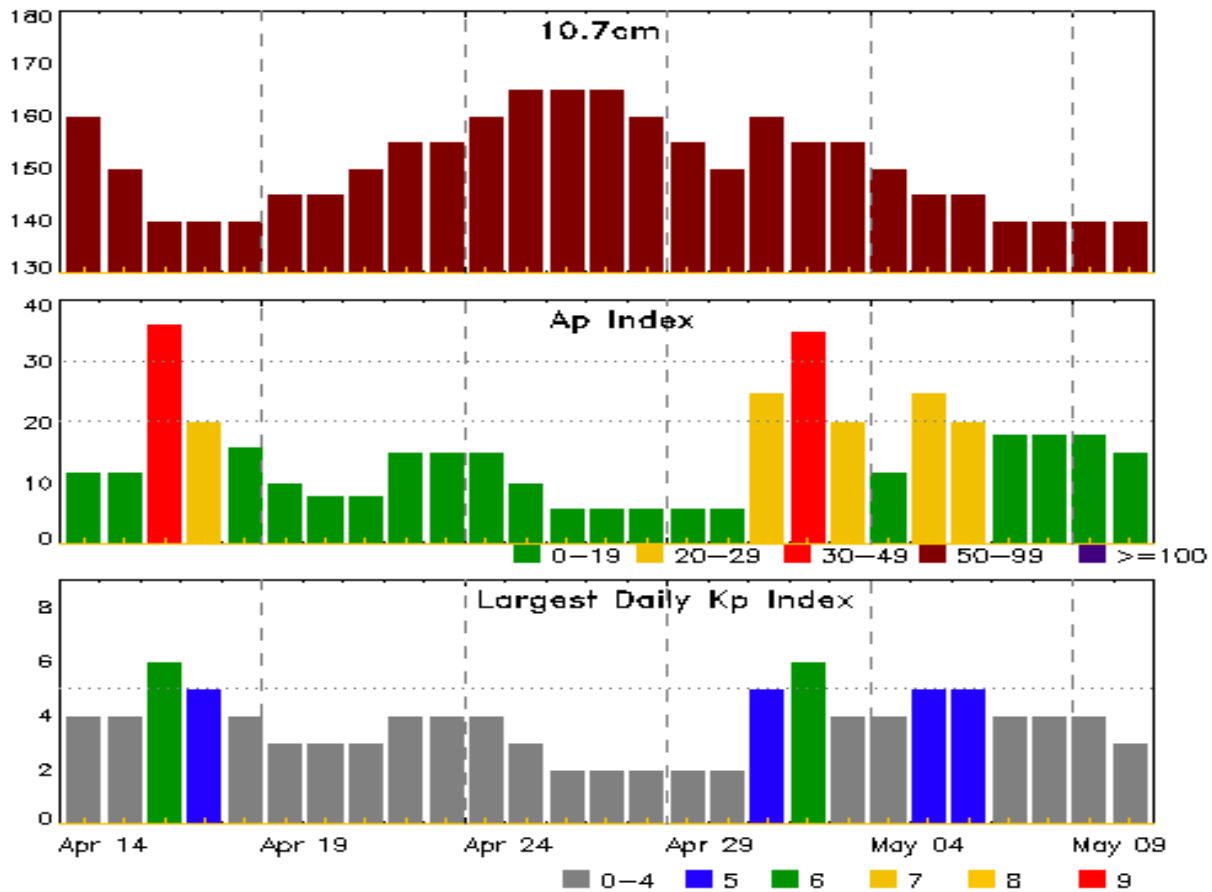


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
11 Apr 2341	EXTENDED WARNING: Geomagnetic K = 4	10/2243 - 12/1500
12 Apr 0703	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	05/1225
12 Apr 1636	WARNING: Geomagnetic K = 4	12/1636 - 13/0300
12 Apr 1746	ALERT: Geomagnetic K = 4	
12 Apr 2220	WARNING: Geomagnetic K = 5	12/2220 - 13/0600
12 Apr 2245	EXTENDED WARNING: Geomagnetic K = 4	12/1636 - 13/0900
13 Apr 0819	EXTENDED WARNING: Geomagnetic K = 4	12/1636 - 13/2359
13 Apr 2007	WATCH: Geomagnetic Storm Category G2 predicted	
13 Apr 2120	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	05/1225



## 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
14 Apr	160	12	4	28 Apr	160	6	2
15	150	12	4	29	155	6	2
16	140	36	6	30	150	6	2
17	140	20	5	01 May	160	25	5
18	140	16	4	02	155	35	6
19	145	10	3	03	155	20	4
20	145	8	3	04	150	12	4
21	150	8	3	05	145	25	5
22	155	15	4	06	145	20	5
23	155	15	4	07	140	18	4
24	160	15	4	08	140	18	4
25	165	10	3	09	140	18	4
26	165	6	2	10	140	15	3
27	165	6	2				



### ***Energetic Events***

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
									245	2695	II	IV
08 Apr	2208	2222	2236	M1.5	0.015		1B	S15W52	4048			
11 Apr	1640	1650	1701	M1.0	0.013				4055			
11 Apr	2208	2220	2233	M1.0	0.012		SF	N07W50	4055			
12 Apr	0441	0445	0455	M1.1	0.002				4055			
12 Apr	0536	0549	0555	M1.2	0.010		SF	N05W57	4055			
12 Apr	0711	0719	0722	M1.0	0.005		SF	N06W56	4055			
12 Apr	1105	1117	1125	M2.0	0.016				4055			
12 Apr	1135	1143	1145	M2.7	0.003				4055			
12 Apr	1233	1240	1252	M2.3	0.022				4055			
12 Apr	1500	1512	1519	M1.3	0.001		SF	N07W61	4055			
13 Apr	0121	0129	0137	M1.0	0.010				4055			
13 Apr	0401	0405	0425	M1.1	0.002				4055			
13 Apr	0425	0428	0431	M1.1	0.005				4055	170		
13 Apr	0448	0452	0454	M2.3	0.007		SF	N07W69	4055			
13 Apr	0638	0652	0721	M1.0	0.021		SF	N07W67	4055			
13 Apr	0943	0955	1003	M1.4	0.016		1F	N06W73	4055			
13 Apr	1003	1007	1010	M1.2	0.007				4055			
13 Apr	1528	1542	1556	M1.2	0.018				4055			
13 Apr	1838	1851	1900	M3.2	0.026				4055			
13 Apr	2155	2202	2211	M1.6	0.011		1F	N09W77	4055			

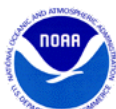
### ***Flare List***

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
07 Apr	0641	0648	0653	C2.7	SF	S17W26	4048
07 Apr	1456	1505	1509	C3.0			4048
07 Apr	1501	1531	1623		1N	S17W34	4048
07 Apr	1509	1523	1528	C3.4			4048
07 Apr	1528	1536	1546	C5.3			4048
07 Apr	1741	1747	1751	C2.3			4048
07 Apr	2005	2017	2031	C2.4	SF	S16W39	4048
08 Apr	0502	0514	0525	C2.4	SF	S15W43	4048
08 Apr	0541	0603	0624	C3.0	SF	N11E54	4057
08 Apr	0828	0830	0832		SF	S18W39	4048
08 Apr	1401	1407	1410	C1.7	SF	S17W45	4048



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
08 Apr	1939	1946	1953	C2.7			
08 Apr	2045	2058	2107	C3.2			
08 Apr	2208	2222	2236	M1.5	1B	S15W52	4048
09 Apr	0102	0109	0117	C1.9			4048
09 Apr	0131	0143	0153	C3.8			
09 Apr	0516	0527	0534	C3.3			4048
09 Apr	0832	0845	0857	C2.2	SF	N13E44	
09 Apr	0933	0949	1002	C2.5			4055
09 Apr	1053	1103	1115	C2.2			4055
09 Apr	1216	1231	1244	C2.7			4055
09 Apr	1456	1505	1510	C2.1			
09 Apr	1722	1730	1737	C9.0	1N	N07W18	4055
10 Apr	0446	0450	0454	C2.3			4060
10 Apr	0624	0628	0632	C3.2	SF	N07W26	4055
10 Apr	0638	0643	0648	C3.1	SF	N07W26	4055
10 Apr	0741	0752	0802	C5.3			4060
10 Apr	0814	0818	0822	C2.7	SF	N07W24	4055
10 Apr	1022	1029	1046	C1.5			
10 Apr	1447	1448	1500		SF	N06W31	4055
10 Apr	1638	1651	1708	C3.7			4045
10 Apr	1935	1940	2021		SF	N08W33	4055
10 Apr	2022	2025	2028		SF	N08W36	4055
11 Apr	0023	0029	0046		SF	N09W37	4055
11 Apr	0226	0229	0236		SF	N05W40	4055
11 Apr	0646	0649	0652		SF	N08W38	4055
11 Apr	0703	0714	0727	C4.4	SF	N05W42	4055
11 Apr	0820	0828	0835	C3.7	SF	N07W42	4055
11 Apr	0905	0905	0909		SF	N07W43	4055
11 Apr	0947	0956	1000	C2.4	SF	N07W43	4055
11 Apr	1152	1215	1238	C7.2			4055
11 Apr	1156	1215	1234		SF	N07W44	4055
11 Apr	1156	1201	1209		SF	N09E60	4060
11 Apr	1218	1219	1230		SF	N12E60	4060
11 Apr	B1319	1319	1326		SF	N08W46	4055
11 Apr	1327	1338	1352	C4.1	SF	N08W46	4055
11 Apr	1505	1505	1507		SF	N08W48	4055
11 Apr	1518	1527	1536		SF	N08W48	4055
11 Apr	1614	1625	1632	C7.4	1F	N08W48	4055



## *Flare List*

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
11 Apr	1634	1638	1640	C6.8			4055
11 Apr	1640	1650	1701	M1.0			4055
11 Apr	1843	1851	1902	C6.8	SF	N08W48	4055
11 Apr	1854	1859	1911	C6.8			4055
11 Apr	2127	2128	2130		SF	N07W48	4055
11 Apr	2147	2147	2149		SF	N07W50	4055
11 Apr	2208	2210	2232	M1.0	SF	N07W50	4055
11 Apr	2257	2307	2312		SF	N07W49	4055
12 Apr	0009	0011	0015		SF	N07W51	4055
12 Apr	0035	0040	0056	C5.6	SF	N11E51	4060
12 Apr	0131	0138	0140	C4.0			
12 Apr	0221	0230	0237	C4.0			
12 Apr	0258	0306	0314	C3.8			
12 Apr	0314	0323	0326	C3.7			
12 Apr	0333	0339	0342	C8.2			
12 Apr	0441	0445	0455	M1.1			4055
12 Apr	0443	0445	0450	C9.5	SF	N05W54	4055
12 Apr	0536	0549	0555	M1.2	SF	N05W57	4055
12 Apr	0711	0719	0722	M1.0	SF	N06W56	4055
12 Apr	0734	0747	0757	C8.4			4055
12 Apr	0757	0802	0809	C7.6			4055
12 Apr	0927	1142	1324		1N	N07W57	4055
12 Apr	0952	1002	1010	C4.8			4055
12 Apr	1010	1019	1021	C5.8			4055
12 Apr	1021	1026	1034	C9.2			4055
12 Apr	1105	1117	1125	M2.0			4055
12 Apr	1135	1143	1145	M2.7			4055
12 Apr	1233	1240	1252	M2.3			4055
12 Apr	1325	1530	1919	C4.6	1F	N08W63	4054
12 Apr	1500	1512	1519	M1.3	SF	N07W61	4055
12 Apr	1920	1935	2046		SF	N08W63	4055
12 Apr	1941	1944	1947	C5.5			4055
12 Apr	2044	2054	2117	C6.1			4055
12 Apr	2125	2129	2139		SF	N10E40	4060
12 Apr	2302	2307	2313		1F	S13W79	4054
13 Apr	B0000	0005	0100		1F	N08W69	4055
13 Apr	0121	0129	0137	M1.0			4055
13 Apr	0235	0241	0248	C6.5			4054





## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
13 Apr	0327	0333	0337	C6.5			4055
13 Apr	0401	0405	0425	M1.1			4055
13 Apr	0425	0428	0431	M1.1			4055
13 Apr	0448	0452	0454	M2.3	SF	N07W69	4055
13 Apr	B0636	U0651	A0722	M1.0	SF	N07W67	4055
13 Apr	0809	0816	0836	C7.6			4055
13 Apr	B0940	U1008	A1049	M1.4	1F	N06W73	4055
13 Apr	1003	1007	1010	M1.2			4055
13 Apr	1349	1401	1414	C8.5			4055
13 Apr	1458	1523	1528	C6.3			4060
13 Apr	1528	1542	1556	M1.2			4055
13 Apr	1831	1835	1838	C6.8	1N	N08W76	4055
13 Apr	1838	1851	1900	M3.2			4055
13 Apr	1955	2008	2010		SF	N07W79	4055
13 Apr	2037	2042	2051	C4.8			4055
13 Apr	2142	2149	2154	C4.8			4055
13 Apr	2155	2202	2211	M1.6	1F	N09W77	4055

### ***Region Summary***

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 4044															
27 Mar	N21E48	336	10	4	Bxo	2	B								
28 Mar	N22E34	337	20	5	Cro	3	B								
29 Mar	N21E21	337	30	7	Cro	6	B								
30 Mar	N21E08	336	50	5	Dao	8	B								
31 Mar	N20W04	335	40	5	Dao	9	B								
01 Apr	N20W17	335	40	6	Dso	6	B	3			1				
02 Apr	N20W30	335	120	6	Dao	11	B								
03 Apr	N20W44	336	110	6	Dao	4	B								
04 Apr	N22W57	335	150	5	Dao	5	B								
05 Apr	N22W69	334	130	3	Dao	4	B								
06 Apr	N21W82	334	110	6	Dao	3	B								
07 Apr	N21W96	335	110	6	Dao	3	B								
								3	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 335

<b><i>Region 4045</i></b>															
27 Mar	S16E77	307	30	2	Hsx	1	A								
28 Mar	S15E63	308	30	2	Hsx	1	A								
29 Mar	S16E50	308	20	2	Hax	2	A								
30 Mar	S15E37	307	20	2	Hrx	2	A								
31 Mar	S15E23	308	10	3	Axx	4	A								
01 Apr	S14E09	309	10	4	Axx	7	A								
02 Apr	S14W04	309	10	3	Axx	5	A	1							
03 Apr	S14W18	310	30	3	Cao	6	B	2			2				
04 Apr	S13W32	310	20	3	Cso	3	B								
05 Apr	S13W46	311	plage												
06 Apr	S13W60	312	10	5	Bxo	2	B	2			3				
07 Apr	S13W73	312	10	1	Axx	1	A								
08 Apr	S13W87	313	plage												
								5	0	0	5	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 309



### *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 4046															
28 Mar	N05E69	302	270	5	Cho	3	B		1	1	1				
29 Mar	N05E56	302	270	4	Cho	3	B	1							
30 Mar	N05E43	301	270	5	Dho	6	BG	2			2				
31 Mar	N05E31	300	260	6	Dho	9	BG	2			3				
01 Apr	N05E20	298	250	9	Cho	6	BG	1	1		3				
02 Apr	N05E07	298	250	8	Cho	4	B								
03 Apr	N05W07	299	250	8	Cho	4	B								
04 Apr	N06W23	301	160	3	Hsx	1	A								
05 Apr	N06W35	300	230	3	Hsx	1	A								
06 Apr	N06W49	301	200	3	Hsx	1	A								
07 Apr	N07W63	302	200	3	Hsx	1	A								
08 Apr	N07W76	302	160	2	Hsx	1	A								
09 Apr	N07W92	304	110	3	Hsx	1	A								
								6	2	1	9	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 298

<b>Region 4048</b>															
28 Mar	S15E91	281	plage							1					
29 Mar	S15E77	281	110	4	Dao	5	B	14	1						
30 Mar	S15E63	281	300	12	Eki	10	BG	5	6		7	2			
31 Mar	S16E53	278	440	14	Ekc	32	BGD	18	1		6				
01 Apr	S16E40	278	450	14	Ekc	29	BGD	5	1		2				
02 Apr	S16E27	278	470	17	Fkc	31	BG	8			2	1			
03 Apr	S16E14	278	450	17	Fkc	23	BG	2			1				
04 Apr	S16W02	280	530	16	Fkc	32	BG	1			1				
05 Apr	S16W15	280	500	18	Fkc	28	BG	6	1		2				
06 Apr	S16W28	280	480	18	Fkc	22	BG	2			1				
07 Apr	S16W40	279	460	21	Fkc	39	BG	6			2	1			
08 Apr	S16W54	280	320	20	Fac	34	BG	2	1		3	1			
09 Apr	S16W67	279	240	21	Fac	12	BG	2							
10 Apr	S16W79	278	180	20	Fao	12	B								
11 Apr	S18W93	279	30	10	Cao	2	B								
								71	12	0	27	5	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 280



### *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 4049															
31 Mar	S31E27	304	20	2	Cro	4	B								
01 Apr	S31E15	303	50	7	Cso	8	B	1				3			
02 Apr	S30E01	304	70	8	Dso	7	B	1							
03 Apr	S30W12	304	40	9	Dso	8	B								
04 Apr	S28W27	305	60	8	Dao	8	B								
05 Apr	S28W42	307	80	8	Dao	6	B								
06 Apr	S30W55	307	70	9	Dao	6	B								
07 Apr	S30W63	302	30	11	Eao	3	B								
08 Apr	S31W76	302	10	12	Bxo	2	B								
09 Apr	S31W90	302	plage												
								2	0	0	3	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 304

#### **Region 4050**

02 Apr	N27W02	307	10	2	Bxo	8	B	1							
03 Apr	N27W15	307	10	2	Bxo	4	B								
04 Apr	N28W25	304	10	4	Dso	3	B								
05 Apr	N31W37	302	10	4	Dao	3	B								
06 Apr	N27W52	304	30	5	Cao	4	B								
07 Apr	N28W66	305	plage												
08 Apr	N28W80	306	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 307

#### **Region 4051**

04 Apr	S08W57	335	10	1	Cro	3	B								
05 Apr	S08W70	334	10	5	Cao	4	B	1							
06 Apr	S08W84	336	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 335



### *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 4052*

04 Apr	S21W35	313	10	5	Cro	4	B	1							
05 Apr	S21W49	314	10	5	Cso	4	B								
06 Apr	S21W62	314	plage												
07 Apr	S21W76	315	plage												
08 Apr	S21W90	316	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 313

#### *Region 4053*

04 Apr	S09W19	297	10	3	Cro	2	B								
05 Apr	S09W33	298	10	3	Bxo	2	B								
06 Apr	S09W47	299	plage												
07 Apr	S09W61	300	plage												
08 Apr	S09W75	301	plage												
09 Apr	S09W89	301	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

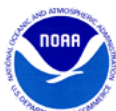
Absolute heliographic longitude: 297

#### *Region 4054*

05 Apr	S13E10	255	20	3	Cao	6	B								
06 Apr	S12W03	255	110	5	Dao	9	BG				1				
07 Apr	S13W16	255	240	6	Dai	19	B								
08 Apr	S12W30	256	240	6	Dso	13	B								
09 Apr	S12W44	256	180	8	Dao	4	B								
10 Apr	S12W57	256	150	8	Dso	4	B								
11 Apr	S14W70	256	100	7	Dso	6	B								
12 Apr	S15W84	257	90	4	Cso	4	B	1			1				
								1	0	0	1	1	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 255



### 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 4055															
05 Apr	N09E34	231	10	5	Cro	2	B								
06 Apr	N09E21	231	10	2	Axx	2	A								
07 Apr	N08E07	232	20	5	Cao	8	B								
08 Apr	N08W07	233	30	6	Cro	7	B								
09 Apr	N08W22	234	30	8	Cro	9	BG	4					1		
10 Apr	N08W36	235	120	8	Dai	14	BG	3				6			
11 Apr	N08W51	237	360	11	Dkc	15	BGD	9	2			17	1		
12 Apr	N04W64	237	740	12	Ekc	17	BGD	8	7			6	2		
13 Apr	N07W75	235	820	13	Ekc	14	BGD	6	10			3	4		
								30	19	0	32	8	0	0	0

Still on Disk.

Absolute heliographic longitude: 232

#### Region 4056

06 Apr	S05E69	183	50	2	Hsx	1	A								
07 Apr	S07E58	181	60	1	Hsx	1	A								
08 Apr	S07E45	181	60	2	Hsx	1	A								
09 Apr	S07E31	181	70	2	Hsx	1	A								
10 Apr	S07E17	182	70	2	Hsx	1	A								
11 Apr	S06E04	182	50	2	Hsx	1	A								
12 Apr	S08W09	182	60	2	Cso	3	B								
13 Apr	S08W24	184	60	2	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 182

#### Region 4057

07 Apr	N07E54	185	10	1	Axx	2	A								
08 Apr	N08E41	185	10	1	Axx	2	A	1			1				
09 Apr	N08E27	185	10		Axx	1	A								
10 Apr	N08E13	186	plage												
11 Apr	N09W00	186	plage												
12 Apr	N09W12	185	plage												
13 Apr	N09W26	186	plage												
								1	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 186



### *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 4058*

09 Apr	N18W25	237	30	5	Dao	4	B								
10 Apr	N18W40	239	50	8	Dao	8	B								
11 Apr	N17W53	239	60	8	Cso	7	B								
12 Apr	N13W65	238	70	6	Dao	7	B								
13 Apr	N17W79	239	50	2	Cao	4	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 237

#### *Region 4059*

09 Apr	N11E55	157	10	1	Hrx	1	A								
10 Apr	N11E39	160	10	1	Cro	1	B								
11 Apr	N13E27	159	10	3	Bxo	2	B								
12 Apr	N13E13	160	plage												
13 Apr	N13W01	161	plage												
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 161

#### *Region 4060*

10 Apr	N07E57	142	100	6	Dao	2	B	2							
11 Apr	N07E50	136	140	6	Cao	4	B				2				
12 Apr	N09E34	139	130	4	Dso	7	B	1			2				
13 Apr	N09E21	139	140	7	Dao	6	BG	1							
								4	0	0	4	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 139

#### *Region 4061*

11 Apr	N17E10	176	10	3	Bxo	3	B								
12 Apr	N17W04	177	20	3	Dso	5	B								
13 Apr	N19W15	175	30	4	Cso	5	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 177



## ***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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