

Solar activity was at low levels all seven days of the period with moderate levels observed on 08 Jul and 10 Jul. At 08/2049 UTC, Region 3053 (N15, L=133, class/area Eko/700 on 08 Jul) produced an M2.5 long duration event with a 230 sfu Tenflare and non Earth-directed CME. At 10/2343 UTC, Region 3056 (S15, L=076, class/area Cro/060 on 10 Jul) produced an M1.3 flare.

Additional significant activity during the period included a C8.5 flare observed at 09/1348 UTC from Region 3047 (S19, L=243, class/area Cro/050 on 02 Jul) with a 828 km/s Type II Sweep and non Earth-directed CME. This event also enhanced the 10 MeV proton flux described in more detail below. Later on the 9th, at 2245 UTC, Region 3052 (N15, L=153, class/area Cro/060 on 07 Jul) produced a C4.6 flare with a non Earth-directed CME.

Overall, the period saw a total of 41 C-class and 2 M-class flares with a majority of the C-class activity originating from Regions 3053 and 3056. All CME activity during the period was analyzed and modeled as Earth misses.

The greater than 10 MeV proton flux at geosynchronous orbit reached enhanced levels of 4.98 pfu at 09/1805 UTC following the C8.5 flare from Region 3047 off the W limb. Levels decreased to background by the end of 10 Jul.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels through the period with a peak flux of 336 pfu observed at 05/1720 UTC..

Geomagnetic field activity was at quiet to G1 (Minor) storm levels during the period. Unsettled to G1 (Minor) storm levels were observed on 04 Jul due to effects from the 28 Jun CME. Quiet levels were observed on 05 Jul through midday on 07 Jul. By midday on 07 Jul through 08 Jul, unsettled to G1 (Minor) geomagnetic storm conditions were observed due to effects from late 04 Jul CME. Quiet to unsettled levels prevailed on 09-10 Jul.

## **Space Weather Outlook**

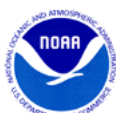
### **11 July - 06 August 2022**

Solar activity is expected to be at low levels, with a chance for R1 (Minor) radio blackouts on 11-17 Jul and 30-31 Jul and 01-06 Aug, due to potential flare activity from active and complex regions. Very low to low levels are expected to prevail on 18-29 Jul.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 15-20 Jul and 24-30 Jul due to CH HSS influence. Normal to moderate levels are expected on 11-14 Jul, 21-23 Jul, 31 Jul and 01-16 Aug.

Geomagnetic field activity is expected to be at unsettled levels on 11-14 Jul, 22-25 Jul and 03-04



Aug with active intervals likely on 12-14 Jul, 22-24 Jul and 03 Aug and G1 (Minor) geomagnetic storm levels likely on 13 Jul and 23 Jul, all due to recurrent CH HSS activity.



### *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 July	104	79	180	B3.3	5	0	0	2	1	0	0	0
05 July	115	92	331	B5.9	6	0	0	7	1	0	0	0
06 July	115	98	590	B4.8	2	0	0	2	0	0	0	0
07 July	121	88	1000	B4.8	1	0	0	5	0	0	0	0
08 July	130	81	1090	B5.2	6	1	0	2	0	0	0	0
09 July	137	89	1260	B8.2	7	0	0	17	1	0	0	0
10 July	153	113	1220	B9.9	16	1	0	21	2	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 July	6.2e+04	3.5e+04	1.3e+06
05 July	4.5e+04	3.6e+04	2.4e+06	
06 July	8.2e+04	3.6e+04	2.1e+06	
07 July	1.1e+05	3.5e+04	1.5e+06	
08 July	1.2e+05	3.5e+04	1.4e+06	
09 July	1.2e+06	1.3e+05	1.6e+06	
10 July	2.3e+06	9.3e+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 July	18	3-4-4-3-3-3-3-3	30	3-6-4-2-5-4-4-2	21
05 July	4	1-0-0-2-2-2-1-1	3	1-1-1-1-0-1-1-1	4	1-1-1-1-1-1-1-1
06 July	5	1-2-1-2-2-2-1-1	4	1-0-2-3-0-1-0-0	5	1-1-2-2-1-1-1-0
07 July	15	1-0-3-3-5-3-2-3	46	0-0-2-3-6-6-7-5	20	0-1-2-2-5-4-4-5
08 July	14	3-4-3-3-2-2-3-2	26	5-5-3-5-4-2-3-1	19	5-5-3-3-3-2-3-2
09 July	6	2-1-0-1-3-2-1-2	6	1-2-0-0-3-3-1-1	6	1-1-0-1-3-2-1-2
10 July	8	0-1-3-2-3-2-2-2	14	1-2-3-4-5-1-2-1	3	1-1-3-2-3-1-2-1

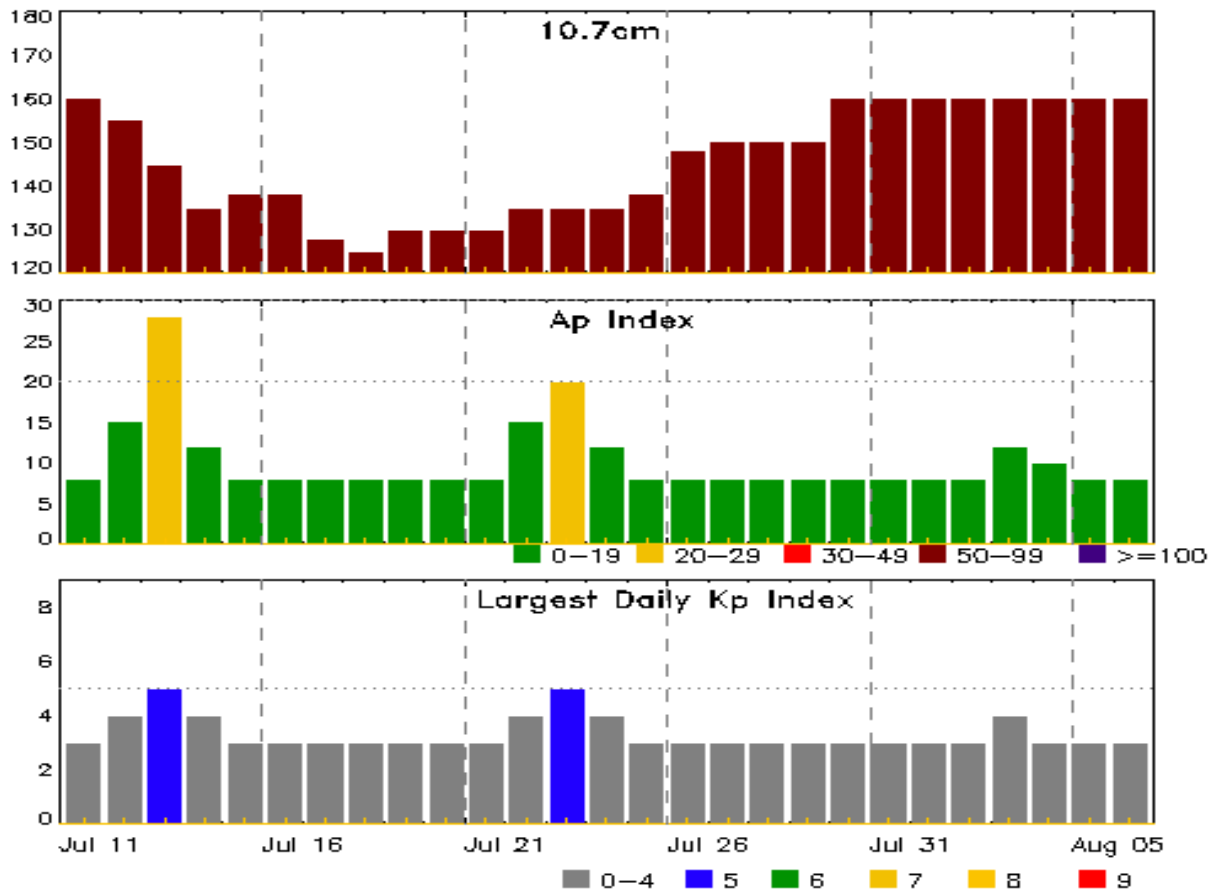


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
04 Jul 0437	WARNING: Geomagnetic K = 5	04/0437 - 0900
04 Jul 0601	ALERT: Geomagnetic K = 5	04/0559
04 Jul 1030	WATCH: Geomagnetic Storm Category G1 predicted	
04 Jul 1048	EXTENDED WARNING: Geomagnetic K = 4	03/2230 - 04/1800
04 Jul 1441	ALERT: Type II Radio Emission	04/1332
04 Jul 1443	ALERT: Type IV Radio Emission	04/1350
04 Jul 1755	EXTENDED WARNING: Geomagnetic K = 4	03/2230 - 04/2359
05 Jul 0441	ALERT: Type II Radio Emission	05/0416
07 Jul 1100	WARNING: Geomagnetic K = 4	07/1100 - 1800
07 Jul 1156	WARNING: Geomagnetic K = 5	07/1155 - 1500
07 Jul 1326	ALERT: Geomagnetic K = 4	07/1320
07 Jul 1356	ALERT: Geomagnetic K = 5	07/1355
07 Jul 1357	EXTENDED WARNING: Geomagnetic K = 5	07/1155 - 2100
07 Jul 1408	WARNING: Geomagnetic K = 6	07/1405 - 2100
07 Jul 1643	EXTENDED WARNING: Geomagnetic K = 4	07/1100 - 08/0600
07 Jul 2051	EXTENDED WARNING: Geomagnetic K = 5	07/1155 - 08/0600
08 Jul 0005	ALERT: Geomagnetic K = 5	07/2359
08 Jul 0306	ALERT: Geomagnetic K = 5	08/0259
08 Jul 0401	EXTENDED WARNING: Geomagnetic K = 4	07/1100 - 08/1500
08 Jul 0459	ALERT: Geomagnetic K = 5	08/0459
08 Jul 0554	EXTENDED WARNING: Geomagnetic K = 5	07/1155 - 08/1200
08 Jul 2129	SUMMARY: 10cm Radio Burst	08/2050 - 2101
09 Jul 1426	ALERT: Type II Radio Emission	09/1351
10 Jul 2150	SUMMARY: 10cm Radio Burst	10/2109 - 2109



## 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 Jul	160	8	3	25 Jul	138	8	3
12	155	15	4	26	148	8	3
13	145	28	5	27	150	8	3
14	135	12	4	28	150	8	3
15	138	8	3	29	150	8	3
16	138	8	3	30	160	8	3
17	128	8	3	31	160	8	3
18	125	8	3	01 Aug	160	8	3
19	130	8	3	02	160	8	3
20	130	8	3	03	160	12	4
21	130	8	3	04	160	10	3
22	135	15	4	05	160	8	3
23	135	20	5	06	160	8	3
24	135	12	4				



### *Energetic Events*

Date	Time		Class	X-ray	Optical Information			Peak		Sweep Freq	
	Begin	Max		Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
		Half Max					245	2695	II	IV	
08 Jul	2007	2049	2128	M2.5	0.079		3053	5100	230		
10 Jul	2330	2343	2352	M1.3	0.009		3056				

### *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
04 Jul	0133	0135	0139		SF	N28E43	
04 Jul	0244	0254	0307	B4.0			
04 Jul	0613	0623	0637	B5.3			3050
04 Jul	1146	1154	1205	C1.0			
04 Jul	1152	1153	1156	B8.8	SF	N18E35	3050
04 Jul	1221	1229	1235	C1.2			3050
04 Jul	1323	1333	1340	C5.1	1F	N19E36	3050
04 Jul	2107	2119	2142	B8.8			
04 Jul	2219	2226	2236	C1.0			
04 Jul	2236	2245	2250	C1.1			
05 Jul	0053	0117	0127	C1.5			3053
05 Jul	0332	0347	0359	C5.8			3053
05 Jul	0725	0728	0731		SF	N84E13	3053
05 Jul	0800	0802	0807		SF	N16E66	3052
05 Jul	0852	0903	0905	C1.3	SF	N18E24	3050
05 Jul	1047	1057	1106	C1.2			3053
05 Jul	1151	1154	1201	C2.4	SF	N13E81	3053
05 Jul	1226	1238	1250	C7.5	1F	N81E13	3053
05 Jul	1258	1259	1300		SF	N15E84	3053
05 Jul	1308	1310	1314		SF	N15E84	3053
05 Jul	1844	1854	1901	B8.1			
05 Jul	2126	2131	2137	B9.6	SF	N19E17	3050
06 Jul	0330	0337	0347	B7.5	SF	N17E13	3050
06 Jul	0350	0356	0405	C1.2			3053
06 Jul	0436	0443	0448	C1.1	SF	N14E76	3053
06 Jul	1112	1117	1125	B7.0			
07 Jul	0001	0005	0013		SF	N15E63	3053
07 Jul	0116	0129	0151	C1.5			3055
07 Jul	0349	0353	0354		SF	S17E74	



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
07 Jul	0436	0438	0446		SF	N14E61	3053
07 Jul	B0507	U0508	A0526		SF	S17E72	
07 Jul	0849	0850	0858		SF	S17E70	3055
08 Jul	0055	0110	0135	C1.4			3055
08 Jul	0327	0338	0358	C1.0	SF	N13E50	3053
08 Jul	0803	0808	0815	B7.2			3051
08 Jul	1116	1125	1129	C1.5			3052
08 Jul	1322	1348	1404	C1.2			3055
08 Jul	1404	1421	1426	C1.3	SF	N27W18	3051
08 Jul	1903	1908	1916	C1.6			3053
08 Jul	2007	2049	2128	M2.5			3053
09 Jul	0056	0059	0111		SF	S16E47	3055
09 Jul	0402	0402	0405		SF	S16E47	3055
09 Jul	0450	0452	0453		SF	N16E32	3053
09 Jul	0451	0453	0501		SF	N19E52	3055
09 Jul	0522	0525	0530		SF	S18E46	3055
09 Jul	0530	0531	0532		SF	N16E32	3053
09 Jul	0534	0535	0536		SF	S18E46	3055
09 Jul	0541	0542	0545		1F	N16E32	3053
09 Jul	0553	0554	0555		SF	S18E45	3055
09 Jul	0606	0607	0609		SF	S18E45	3055
09 Jul	0640	0641	0642		SF	N28W26	3051
09 Jul	0641	0650	0658	C1.5	SF	N28W26	3051
09 Jul	0838	0839	0840		SF	N15E35	3053
09 Jul	0842	0844	0846		SF	N13E34	3053
09 Jul	0919	0926	0930	C1.4			3053
09 Jul	1056	1106	1114	C1.5	SF	S19E43	3055
09 Jul	1131	1137	1141	C1.7	SF	N29W27	3051
09 Jul	1204	1205	1206		SF	S18E40	3055
09 Jul	1329	1348	1405	C8.5			3047
09 Jul	1616	1618	1621		SF	N29W29	
09 Jul	2056	2103	2107	C5.1			3051
09 Jul	2226	2245	2300	C4.6			3052
10 Jul	0320	0329	0339		SF	S16E32	3055
10 Jul	0433	0439	0443	C1.6	SF	N28W36	3051
10 Jul	0446	0454	0504	C1.6	SF	N28W36	3051
10 Jul	0757	0759	0809		SF	S17E29	3055
10 Jul	0820	0827	0829		SF	S17E29	3055



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
10 Jul	0913	0914	0918		SF	S18E28	3055
10 Jul	0916	0924	0928	C2.9			3051
10 Jul	0919	0920	0922		SF	S18E28	3055
10 Jul	0922	0925	0934		SF	N29W39	3051
10 Jul	0924	0926	0929		SF	S18E28	3055
10 Jul	1149	1153	1158	C2.5	SF	S19E73	3056
10 Jul	1202	1203	1204		SF	S19E73	
10 Jul	1206	1253	1311		SF	S19E73	
10 Jul	1317	1327	1355	C2.8	1F	S19E72	3056
10 Jul	1355	1403	1409	C4.1	1F	S19E70	3056
10 Jul	1427	1430	1435		SF	S18E27	3055
10 Jul	1439	1440	1441		SF	S19E71	3055
10 Jul	1506	1513	1524	C2.7			3056
10 Jul	1530	1531	1537		SF	S18E26	3055
10 Jul	1541	1542	1554		SF	S18E26	3055
10 Jul	1551	1641	1651		SF	S19E69	3055
10 Jul	1602	1603	1604		SF	N15E20	3053
10 Jul	1653	1702	1714		SF	S19E69	3056
10 Jul	1659	1725	1734		SF	N15E12	3053
10 Jul	1716	1740	1747	C2.6	SF	S19E68	3056
10 Jul	1805	1811	1815	C4.2			3056
10 Jul	1921	1930	1937	C2.0			3056
10 Jul	2019	2026	2036	C2.0			3056
10 Jul	2042	2045	2049	C2.2			3056
10 Jul	2105	2113	2119	C1.8			3056
10 Jul	2119	2125	2130	C2.0			3056
10 Jul	2158	2202	2208	C2.9			3056
10 Jul	2208	2216	2220	C3.4			3056
10 Jul	2330	2343	2352	M1.3			3056





## Region Summary

Date	Location		Sunspot Characteristics				Flares																
	Lat CMD	Lon	Helio 10 <sup>-6</sup> hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
<b>Region 3040</b>																							
21 Jun	S13E68	324	60	2	Hsx	1	A																
22 Jun	S13E55	325	140	5	Cso	3	B	3				5											
23 Jun	S12E41	324	130	6	Cso	4	B																
24 Jun	S13E27	325	160	6	Cso	6	B																
25 Jun	S12E16	323	130	8	Cso	5	B	2				4											
26 Jun	S14E02	323	150	5	Cso	8	B	3				8											
27 Jun	S13W11	325	160	4	Cao	9	B	1				2											
28 Jun	S12W25	324	120	6	Cao	8	B					2											
29 Jun	S12W39	325	30	4	Dso	3	B																
30 Jun	S13W50	323	70	4	Dso	4	B																
01 Jul	S13W62	323	120	7	Dso	7	B														1		
02 Jul	S13W77	324	120	6	Cso	5	B																
03 Jul	S13W91	325	plage							1		1											
								10	0	0	0	22	0	0	0	0	0	0	0	0	1		

Crossed West Limb.  
Absolute heliographic longitude: 323

<b>Region 3042</b>																							
28 Jun	N09W22	321	20	3	Cro	4	B																
29 Jun	N08W35	321	30	2	Cro	3	B																
30 Jun	S02W49	322	10	2	Bxo	2	B																
01 Jul	S02W62	321	plage																				
02 Jul	S02W76	323	plage																				
03 Jul	S02W90	324	plage																				
								0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Crossed West Limb.  
Absolute heliographic longitude: 321



### *Region Summary - continued*

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

#### ***Region 3043***

28 Jun	S13E21	278	10	5	Bxo	4	B										
29 Jun	S14E09	277	10	1	Axx	1	A										
30 Jun	S14W05	279	plage														
01 Jul	S14W19	280	plage														
02 Jul	S14W33	280	plage														
03 Jul	S15W43	277	plage														
04 Jul	S15W57	278	plage														
05 Jul	S15W71	279	plage														
06 Jul	S15W85	279	plage														
										0	0	0	0	0	0	0	0

Crossed West Limb.  
Absolute heliographic longitude: 279

#### ***Region 3044***

28 Jun	S19E12	287	10	4	Bxo	2	B										
29 Jun	S21E01	286	10	1	Axx	1	A										
30 Jun	S21W13	287	plage														
01 Jul	S21W27	288	plage														
02 Jul	S21W41	288	plage														
03 Jul	S21W55	289	plage														
04 Jul	S21W69	290	plage														
05 Jul	S21W83	291	plage														
										0	0	0	0	0	0	0	0

Crossed West Limb.  
Absolute heliographic longitude: 286

#### ***Region 3045***

30 Jun	S12E38	234	10	3	Bxo	4	B										
01 Jul	S11E12	249	10	1	Axx	1	A										
02 Jul	S12W00	247	plage														
03 Jul	S12W13	247	plage														
04 Jul	S15W23	244	20	2	Axx	1	A										
05 Jul	S20W33	241	1	6	Axx	4	A										
06 Jul	S20W47	241	plage														
										0	0	0	0	0	0	0	0

Died on Disk.  
Absolute heliographic longitude: 247



**Region Summary - continued**

Date	Location		Sunspot Characteristics				Flares																
	Lat CMD	Lon	Helio 10 <sup>6</sup> hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
<b>Region 3046</b>																							
01 Jul	N17E64	197	80	3	Hsx	1	A																
02 Jul	N17E49	198	130	2	Hsx	1	A																
03 Jul	N17E36	198	160	9	Dso	6	B						1										
04 Jul	N18E21	200	70	5	Hsx	1	A																
05 Jul	N18E09	199	70	2	Hsx	1	A																
06 Jul	N16W05	199	240	2	Hsx	2	A																
07 Jul	N16W18	199	90	2	Hax	2	A																
08 Jul	N17W31	199	60	2	Hsx	3	A																
09 Jul	N17W43	197	40	2	Hsx	2	A																
10 Jul	N18W56	197	30	2	Hrx	2	A																
										0	0	0	1	0	0	0	0	0					

Still on Disk.

Absolute heliographic longitude: 199

<b>Region 3047</b>																							
02 Jul	S19E04	243	50	5	Cro	8	B																
03 Jul	S19W08	242	30	5	Cro	5	B																
04 Jul	S20W21	242	30	7	Bxo	9	B																
05 Jul	S20W35	243	10	7	Bxo	6	B																
06 Jul	S20W45	240	30	6	Dso	5	B																
07 Jul	S20W59	240	plage																				
08 Jul	S20W73	241	plage																				
09 Jul	S20W87	242	plage										1										
										1	0	0	0	0	0	0	0	0					

Crossed West Limb.

Absolute heliographic longitude: 243



**Region Summary - continued**

Date	Location		Sunspot Characteristics					Flares									
	Lat CMD	Lon	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical					
			10 <sup>-6</sup>	hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4	
<b>Region 3048</b>																	
29 Jun	S08E78	212		plage												1	
02 Jul	S08E36	211	20		3	Bxo	3	B									
03 Jul	S08E22	212		plage													
04 Jul	S08E08	213		plage													
05 Jul	S08W06	214		plage													
06 Jul	S13W20	213	10			Axx	1	A									
07 Jul	S13W34	215		plage													
08 Jul	S13W48	216		plage													
09 Jul	S13W62	217		plage													
10 Jul	S13W76	218		plage													
										0	0	0	1	0	0	0	0

Still on Disk.  
Absolute heliographic longitude: 214

<b>Region 3049</b>																	
03 Jul	S12E49	185	10		1	Axx	1	A									
04 Jul	S12E35	186	10		1	Axx	1	A									
05 Jul	S12E21	187	10		1	Axx	1	A									
06 Jul	S12E07	187		plage													
07 Jul	S12W07	188		plage													
08 Jul	S12W21	189		plage													
09 Jul	S12W35	190		plage													
10 Jul	S12W49	191		plage													
										0	0	0	0	0	0	0	0

Still on Disk.  
Absolute heliographic longitude: 187

<b>Region 3050</b>																
04 Jul	N18E30	191	20		3	Bxo	4	B	2			1	1			
05 Jul	N18E16	192		plage					1			2				
06 Jul	N18E02	192		plage								1				
07 Jul	N18W12	193		plage												
08 Jul	N18W26	194		plage												
09 Jul	N18W40	195		plage												
10 Jul	N18W54	196		plage												
									3	0	0	4	1	0	0	0

Still on Disk.  
Absolute heliographic longitude: 192



### *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			
<b>Region 3051</b>																		
04 Jul	N27E24	197	30	4	Cro	3	B											
05 Jul	N27E13	195	30	5	Cro	3	B											
06 Jul	N27W00	194	30	6	Cro	4	B											
07 Jul	N28W13	194	30	6	Cro	3	B											
08 Jul	N28W26	194	80	6	Cao	5	B	1				1						
09 Jul	N28W39	193	100	6	Cao	6	B	3				2						
10 Jul	N28W50	191	60	4	Cro	5	B	3				1						
								7	0	0		4	0	0	0	0	0	

Still on Disk.  
 Absolute heliographic longitude: 194

<b>Region 3052</b>																		
05 Jul	N15E56	151	30	4	Cro	6	B					1						
06 Jul	N15E40	153	30	5	Cro	9	B											
07 Jul	N15E28	153	60	6	Cro	7	B											
08 Jul	N15E14	154	20	1	Hrx	2	A	1										
09 Jul	N15W01	155	20	1	Hrx	2	A	1										
10 Jul	N15W15	156	20	1	Hax	1	A											
								2	0	0		1	0	0	0	0	0	

Still on Disk.  
 Absolute heliographic longitude: 155

<b>Region 3053</b>																		
05 Jul	N14E72	136	180	2	Hsx	1	A	5				4	1					
06 Jul	N15E59	134	240	8	Dso	5	B	2				1						
07 Jul	N14E47	134	680	12	Eko	11	B					2						
08 Jul	N15E35	133	700	12	Eko	13	B	2	1			1						
09 Jul	N15E20	134	650	13	Eki	18	B	1				4	1					
10 Jul	N15E07	134	420	14	Eki	18	B					2						
								10	1	0		14	2	0	0	0	0	

Still on Disk.  
 Absolute heliographic longitude: 134



### *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

#### *Region 3054*

06 Jul	N21W27	221	10	2	Cso	2	B										
07 Jul	N21W40	221	10	1	Hrx	1	A										
08 Jul	N21W54	222	plage														
09 Jul	N21W68	223	plage														
10 Jul	N21W82	224	plage														
								0	0	0	0	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 221

#### *Region 3055*

07 Jul	S18E60	121	130	7	Dao	4	B	1			1						
08 Jul	S17E46	122	230	9	Dai	8	B	2									
09 Jul	S17E33	122	450	11	Eko	11	B	1			9						
10 Jul	S17E20	121	630	12	Ekc	22	B				11						
								4	0	0	21	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 121

#### *Region 3056*

10 Jul	S15E65	76	60	4	Cro	5	B	13	1		2						
								13	1	0	2	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 76



## ***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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