

Solar activity was at low levels on 28 Jul - 02 Aug and moderate (R1-Minor) levels on 03 Aug. The largest flare of the period was an M2.9/2b event observed from Region 4168 (N05, L-103, class/area Dai/060 on 03 Aug) at 03/1357 UTC. The region also produced numerous C-class events. Numerous C-class activity was observed from Regions 4153 (S30, L=217, class/area Dai/210 on 25 Jul), 4155 (S10, L=192, class/area Dai/070 on 26 Jul) and 4167 (N10, L=170, class/area Dki/430 on 03 Aug). No Earth-directed CME activity was observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 28 Jul, 31 Jul and 01 Aug with a maximum flux of 1,870 pfu observed at 28/1520 UTC. Normal to moderate levels were observed on 29-30 Jul and 02-03 Aug.

Geomagnetic field activity was at quiet to unsettled levels the entire highlight period. A single active period was observed late on 03 Aug. A majority of the unsettled periods was due to weak negative polarity CH HSS influence. Solar wind speeds were at mostly 400 km/s from 28 Jul through midday on 30 Jul and 475-500 km/s from midday 30 Jul through 03 Aug with a peak velocity observed at 600 km/s late on 03 Aug.

### **Space Weather Outlook** **04 August - 30 August 2025**

Solar activity is expected to be at mostly low levels with a chance for M-class (R1-R2, Minor-Moderate) flares for 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 high levels on 12-18 Aug and 21-28 Aug all due to recurrent CH HSS influences. Normal to moderate levels are expected on 04-11 Aug, 18-19 Aug and 29-30 Aug.

Geomagnetic field activity is expected to be at active to G1 (Minor) storm levels on 11-15 Aug, 18-22 Aug and 25-30 Aug due to recurrent CH HSS effects. Quiet to unsettled levels are expected on the remaining days of 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
28 July	145	134	458	B8.3	1	0	0	3	0	0	0	0
29 July	152	112	330	B9.9	4	0	0	3	0	0	0	0
30 July	149	131	530	B9.8	12	0	0	8	0	0	0	0
31 July	145	138	560	B8.1	7	0	0	4	0	0	0	0
01 August	146	129	420	B9.2	15	0	0	3	0	0	0	0
02 August	146	132	680	B8.6	10	0	0	14	0	0	0	0
03 August	146	118	810	C1.0	17	1	0	3	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	
28 July	8.3e+05	1.6e+04	7.4e+07	
29 July	4.7e+05	1.6e+04	2.7e+07	
30 July	3.4e+05	1.6e+04	2.6e+07	
31 July	3.5e+05	1.6e+04	3.4e+07	
01 August	5.8e+05	1.7e+04	4.1e+07	
02 August	3.0e+05	1.7e+04	2.6e+07	
03 August	4.8e+05	1.7e+04	3.0e+07	

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

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
28 July	8	0-1-1-2-3-3-2-3	6	1-2-1-0-3-2-1-2	7	1-1-1-2-2-2-2-3
29 July	9	2-2-2-3-2-3-2-2	13	2-3-4-5-2-0-0-1	8	3-2-2-2-1-1-1-2
30 July	9	2-1-2-3-3-2-3-1	7	2-2-1-1-3-2-2-1	8	3-2-1-2-2-3-2-1
31 July	10	3-2-2-2-3-2-2-3	12	2-2-2-4-4-2-2-1	11	3-3-2-2-3-2-3-2
01 August	13	3-3-2-3-3-2-3-3	19	3-3-2-3-6-2-2-2	13	3-3-3-3-3-2-3-3
02 August	9	3-2-1-2-2-3-2-2	7	2-2-2-1-2-2-2-2	9	3-2-2-1-1-2-3-3
03 August	9	2-2-1-2-2-3-3-2	6	2-2-1-0-2-2-3-1	7	2-2-1-2-1-3-4-2

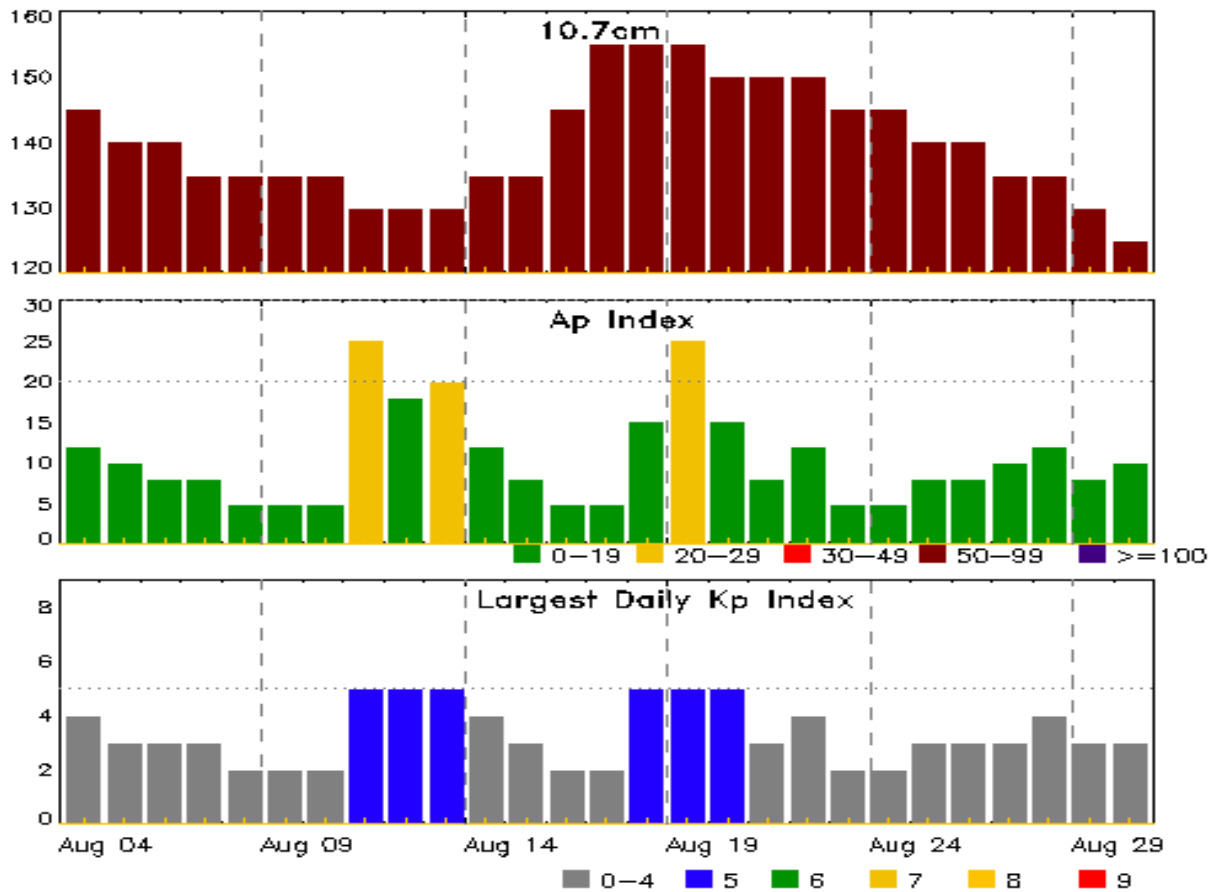


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
28 Jul 0846	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	24/1320
31 Jul 1652	ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	31/1635
01 Aug 1331	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	31/1635
01 Aug 1344	WARNING: Geomagnetic K = 4	01/1345 - 2100
01 Aug 2052	EXTENDED WARNING: Geomagnetic K = 4	01/1345 - 02/0300
03 Aug 1947	WARNING: Geomagnetic K = 4	03/1945 - 04/0600
03 Aug 1955	ALERT: Geomagnetic K = 4	



## Twenty-seven Day Outlook



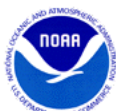
Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
04 Aug	145	12	4	18 Aug	155	15	5
05	140	10	3	19	155	25	5
06	140	8	3	20	150	15	5
07	135	8	3	21	150	8	3
08	135	5	2	22	150	12	4
09	135	5	2	23	145	5	2
10	135	5	2	24	145	5	2
11	130	25	5	25	140	8	3
12	130	18	5	26	140	8	3
13	130	20	5	27	135	10	3
14	135	12	4	28	135	12	4
15	135	8	3	29	130	8	3
16	145	5	2	30	125	10	3
17	155	5	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
03 Aug	1350	1357		1401	M2.9	0.011			4168			

### ***Flare List***

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
28 Jul	0315	0321	0324	C1.5				4153
28 Jul	0701	0702	0703		SF	S13E77		4161
28 Jul	0841	0844	0847		SF	N14W05		
28 Jul	1547	1548	1550		SF	S16W04		4154
29 Jul	0500	0511	0521	C3.1	SF	S09E04		4155
29 Jul	B1045	U1045	1058		SF	S08W41		4159
29 Jul	1336	1345	1354	C1.7	SF	S08W01		4155
29 Jul	2159	2205	2207	C3.7				
29 Jul	2340	2345	2347	C2.2				
30 Jul	0049	0055	0109	C1.9				4155
30 Jul	0203	0217	0236	C2.9				4157
30 Jul	0258	0306	0309	C2.6				
30 Jul	0322	0330	0332	C2.7				4155
30 Jul	0517	0524	0526	C1.6				4155
30 Jul	0557	0616	0618	C4.7	SF	S10W10		4155
30 Jul	0626	0627	0631		SF	S09W12		4155
30 Jul	0654	0656	0657		SF	S07W12		4155
30 Jul	0659	0704	0719		SF	S07W12		4155
30 Jul	0821	0828	0838	C1.5				
30 Jul	1025	1032	1034	C3.4	SF	S09W17		4155
30 Jul	1120	1129	1138	C2.2	SF	S10W14		4155
30 Jul	1728	1736	1741	C1.3				4165
30 Jul	1923	1943	1952	C2.1	SF	S15E38		4161
30 Jul	1952	1958	2001	C2.1				
30 Jul	2256	2256	2259		SF	N23W27		
31 Jul	0236	0242	0246	C1.4				4154
31 Jul	1011	1020	1025	C1.4				4153
31 Jul	1434	1453	1511	C1.5				4153
31 Jul	1530	1543	1553	C1.7	SF	S07W33		4155
31 Jul	1829	1852	1903	C1.6				4153



## *Flare List*

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
31 Jul	1947	1951	2000	C1.3			
31 Jul	2107	2108	2109		SF	S31W61	4153
31 Jul	2118	2122	2147		SF	N11W06	4167
31 Jul	2155	2159	2204	C1.9	SF	N10W09	4167
01 Aug	0145	0149	0152	C1.6	SF	N11W09	4167
01 Aug	0152	0154	0202	C2.0			4167
01 Aug	0242	0245	0250	C1.7	SF	N11W09	4167
01 Aug	0323	0339	0354	C2.4			4149
01 Aug	0432	0447	0451	C1.5			
01 Aug	0451	0501	0511	C1.7			4155
01 Aug	0645	0654	0714	C1.4			4157
01 Aug	0914	0940	1012	C1.7			4167
01 Aug	1212	1239	1251	C3.4			4153
01 Aug	1312	1339	1356	C2.5			4153
01 Aug	1404	1431	1441	C2.3			4153
01 Aug	1441	1448	1539	C2.4			4153
01 Aug	1634	1649	1700	C2.0			4153
01 Aug	1805	1817	1824	C3.4	SF	S11W45	4155
01 Aug	2125	2134	2141	C2.3			4167
02 Aug	0028	0029	0034		SF	N11W24	4167
02 Aug	0614	0617	0620	C1.1			4167
02 Aug	1059	1109	1119	C3.6			4153
02 Aug	1212	1220	1223	C1.6			4153
02 Aug	1331	1335	1338		SF	N09W32	4167
02 Aug	1449	1500	1510	C2.9	SF	N09W32	4167
02 Aug	1510	1515	1517	C2.7			4167
02 Aug	1514	1516	1521		SF	N05E36	4167
02 Aug	1551	1557	1609	C1.4			4167
02 Aug	1620	1622	1624		SF	N09W33	4167
02 Aug	1726	1740	1748	C2.4	SF	N09W33	4167
02 Aug	1757	1801	1803	C3.1	SF	N05E35	4168
02 Aug	1830	1836	1841	C1.8			4167
02 Aug	1835	1837	1842		SF	N11W30	4167
02 Aug	1859	1917	1925	C3.5	SF	N09W34	4167
02 Aug	2003	2004	2008		SF	N06E34	4168
02 Aug	2011	2017	2023		SF	N09W36	4167
02 Aug	2117	2134	2135		SF	N09W36	4167
02 Aug	2203	2305	2327		SF	N09W37	4167



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
02 Aug	2328	2328	2351		SF	N09W39	4167
03 Aug	0112	0119	0125	C1.7			4168
03 Aug	0201	0211	0216	C2.5			4153
03 Aug	0232	0245	0257	C4.3			4168
03 Aug	0420	0436	0446	C1.5			4168
03 Aug	0449	0455	0507	C1.4			4167
03 Aug	0508	0513	0520	C1.3			
03 Aug	0530	0536	0543	C1.2			4153
03 Aug	0623	0630	0634	C1.5			4168
03 Aug	0711	0721	0730	C1.8			
03 Aug	0800	0821	0845	C2.4			4155
03 Aug	0856	0911	0917	C2.6	SF	N10W43	4167
03 Aug	0917	0929	0935	C3.5			4167
03 Aug	1227	1255	1310	C1.6			4168
03 Aug	1337	1347	1350	C2.6			4168
03 Aug	1350	1357	1401	M2.9			4168
03 Aug	1352	1357	1424		1B	N05E23	4168
03 Aug	1503	1510	1517	C1.9			4153
03 Aug	1703	1714	1727	C3.5			4153
03 Aug	1929	1936	1939	C2.3	SF	N06E21	4168
03 Aug	2056	2057	2104		SF	N06E18	4168
03 Aug	2136	2137	2140		SF	N12W53	4167
03 Aug	2143	2156	2210	C6.8			4157



## 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 4149

19 Jul	N17E70	246	150	9	Dso	3	B								
20 Jul	N17E57	246	220	8	Dao	4	B	2			4				
21 Jul	N17E44	246	230	11	Esi	8	BG								
22 Jul	N17E30	247	250	11	Ehi	10	BG								
23 Jul	N18E17	247	260	13	Ehi	8	B								
24 Jul	N17E02	248	260	13	Ehi	12	BG	2							
25 Jul	N17W10	247	280	12	Eko	20	BG	1			1				
26 Jul	N17W20	244	280	12	Eko	4	B	2			1				
27 Jul	N15W37	248	150	10	Dso	5	B								
28 Jul	N16W51	248	80	10	Cso	3	B								
29 Jul	N16W64	248	80	10	Cso	2	B								
30 Jul	N16W81	252	70	1	Hsx	1	A								
31 Jul	N16W95	253	70	1	Hsx	1	A								
								7	0	0	6	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 248





### *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
<i>Region 4150</i>															
19 Jul	S15E65	251	80	6	Cao	2	B								
20 Jul	S15E56	247	130	7	Cao	4	B								
21 Jul	S14E43	247	110	8	Dso	10	B								
22 Jul	S14E29	248	70	7	Dso	6	B	1				1			
23 Jul	S13E15	249	70	8	Cao	5	B	1				2			
24 Jul	S13W00	250	50	5	Hsx	2	A								
25 Jul	S13W13	250	60	1	Cso	1	B								
26 Jul	S15W25	249	50	7	Cso	2	B								
27 Jul	S17W42	253	50	1	Hsx	1	A								
28 Jul	S14W56	253	40	2	Hsx	1	A								
29 Jul	S14W69	253	30	2	Hsx	1	A								
30 Jul	S15W83	254	30	1	Hsx	1	A								
								2	0	0	3	0	0	0	0

Crossed West Limb.

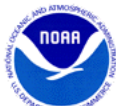
Absolute heliographic longitude: 250

### **Region 4152**

21 Jul	N09E63	227	10	1	Axx	1	A								
22 Jul	N09E48	229	20	1	Hrx	1	A								
23 Jul	N09E34	230	10	1	Axx	1	A								
24 Jul	N09E19	231	10	1	Axx	1	A								
25 Jul	N09E05	232	plage												
26 Jul	N09W09	233	plage												
27 Jul	N09W23	234	plage												
28 Jul	N09W38	235	plage												
29 Jul	N09W52	236	plage												
30 Jul	N09W66	237	plage												
31 Jul	N09W80	238	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 232



### *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 4153															
22 Jul	S29E56	221	30	4	Dao	3	B	3							
23 Jul	S29E43	221	80	6	Dai	7	B				1				
24 Jul	S28E32	218	180	11	Eai	8	BG								
25 Jul	S30E20	217	210	8	Dai	15	BG	1							
26 Jul	S30E07	216	140	8	Dao	9	BG								
27 Jul	S28W07	217	160	10	Dao	8	B								
28 Jul	S29W21	218	130	12	Eso	5	B	1							
29 Jul	S30W34	218	80	12	Eso	7	B								
30 Jul	S29W47	218	120	11	Eao	7	B								
31 Jul	S29W61	219	120	11	Eao	7	B	3			1				
01 Aug	S27W73	222	70	8	Cao	6	B	5							
								13	0	0	2	0	0	0	0

Died on Disk.

Absolute heliographic longitude: 216

### **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

Still on Disk.

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
<i>Region 4155</i>															
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

Still on Disk.

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

Still on Disk.

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	

Still on Disk.

Absolute heliographic longitude: 197

### **Region 4158**

24 Jul	S17W46	296	20	2	Cro	4	B								
25 Jul	S15W61	298	10	2	Cao	3	B								
26 Jul	S15W75	299	20	3	Cao	2	B								
27 Jul	S15W89	300	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 296

### **Region 4159**

26 Jul	S08W10	234	20	3	Cso	3	B								
27 Jul	S08W24	235	plage												
28 Jul	S08W39	236	plage												
29 Jul	S08W53	237	plage								1				
30 Jul	S08W67	238	plage												
31 Jul	S08W81	239	plage												
								0	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 234



### *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 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												
								2	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 179

#### *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								
								3	0	0	2	0	0	0	0

Still on Disk.

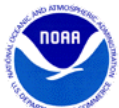
Absolute heliographic longitude: 131

#### *Region 4162*

28 Jul	N17W13	210	10	3	Axx	2	A								
29 Jul	N17W27	211	plage												
30 Jul	N17W41	212	plage												
31 Jul	N17W55	213	plage												
01 Aug	N17W69	218	plage												
02 Aug	N17W83	214	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 210



### *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 4163*

28 Jul	N24W09	206	10	3	Bxo	4	B								
29 Jul	N24W23	207	plage												
30 Jul	N24W37	208	plage												
31 Jul	N24W51	209	plage												
01 Aug	N24W65	214	plage												
02 Aug	N24W79	210	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 206

#### *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												
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 153

#### *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								
								1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 102



### *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 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

Still on Disk.

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				
								16	0	0	18	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 167

#### ***Region 4168***

02 Aug	N06E29	102	60	5	Cai	7	BG	1			2				
03 Aug	N05E15	103	60	7	Dai	15	BGD	6	1		1	1			
								7	1	0	3	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 103



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

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce  
NOAA / National Weather Service  
Space Weather Prediction Center  
325 Broadway, Boulder CO 80305

**Notice:** The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

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