

Space Weather Highlights

07 July - 13 July 2025

SWPC PRF 2602
14 July 2025

Solar activity was ranged from low to moderate levels. R1 (Minor) events were observed on 08-09 Jul and 12 Jul. The largest was an M2.4 flare at 08/0417 UTC from Region 4136 (N19, L=022, class/area=Dai/220 on 11 Jul). Region 4140 (S15, L=348, class/area=Dao/130 on 12 Jul) produced a similarly powerful M2.3/1f flare at 12/0834 UTC. The other 15 numbered active regions on the visible disk were either quiet or only produced C-class activity. No Earth-directed CMEs were observed in available coronagraph imagery.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 09-10 Jul following elevated wind speeds from a coronal hole. The remainder of the summary period was at normal to moderate levels.

Geomagnetic field activity was varied from quiet to G1 (Minor) geomagnetic storm levels. G1 conditions were observed early on 07 Jul, with a slow decrease to active levels on 08 Jul and unsettled levels on 09 Jul due to influence from a negative polarity coronal hole. Active conditions were observed on 11 Jul and unsettled conditions on 12 Jul were in response to the onset of a positive polarity coronal hole. G1 conditions observed on 13 Jul followed a pronounced increase in solar wind speeds from a mildly elevated ~500 km/s on 12 Jul to a peak just over 700 km/s on 13 Jul.

Space Weather Outlook

14 July - 09 August 2025

Solar activity is likely to be at low levels, with a chance for R1-R2 (Minor-Moderate) radio blackouts, over next 27 days due to several complex active regions on the visible disk and the anticipated return of multiple active 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 reach high levels on 20-28 Jul and 05-06 Aug following activity from recurrent coronal holes. The remainder of the outlook is likely to be at normal to moderate levels.

Geomagnetic field activity is likely observed mild elevations, mostly in response to recurrent coronal hole features. Active conditions are likely on 14 Jul, 22-24 Jul, 02-04 Aug, and 07-09 Aug. Unsettled conditions are likely on 15-17 Jul, 25 Jul, and 01 Aug. The remaining days of the outlook period are expected to be mostly quiet.



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		
07 July	118	96	290	B7.7	9	0	0	1	0
08 July	115	88	290	B7.3	4	1	0	0	0
09 July	120	83	290	B7.7	3	1	0	1	0
10 July	129	72	340	C1.0	12	0	0	4	0
11 July	132	98	490	B9.2	11	0	0	23	1
12 July	139	93	700	C1.1	14	3	0	10	3
13 July	128	102	710	B7.6	16	0	0	3	0

Daily Particle Data

Date	Proton Fluence (protons/cm ² -day -sr)		>2MeV	Electron Fluence (electrons/cm ² -day -sr)	
	>1 MeV	>10 MeV		>2MeV	
07 July	7.8e+04	1.6e+04			1.1e+07
08 July	3.8e+04	1.7e+04			1.5e+07
09 July	5.0e+04	1.8e+04			4.4e+07
10 July	1.8e+06	1.8e+04			1.3e+08
11 July	1.1e+06	1.7e+04			2.3e+07
12 July	1.4e+05	1.7e+04			1.3e+07
13 July	1.7e+05	1.7e+04			1.6e+07

Daily Geomagnetic Data

Date	Middle Latitude		High Latitude		Estimated	
	A	K-indices	A	K-indices	A	K-indices
07 July	20	5-4-2-3-3-3-3-3	22	4-3-3-3-4-5-3-3	22	5-4-3-3-3-3-3-3
08 July	13	3-3-3-3-3-3-2-2	19	3-4-3-4-2-5-2-2	13	3-4-3-3-2-3-2-3
09 July	8	3-2-1-2-3-2-1-1	12	3-2-3-4-3-2-2-1	8	3-2-2-2-2-2-1-2
10 July	6	1-1-1-2-3-2-2-0	2	1-1-1-1-0-1-1-0	4	1-1-1-1-1-1-1-1
11 July	18	2-2-3-4-4-3-4-3	25	1-3-4-6-4-3-3-3	19	2-3-3-4-3-3-4-4
12 July	10	2-2-3-3-3-2-2-2	29	3-4-4-6-5-3-2-3	13	3-3-3-3-3-2-2-3
13 July	17	4-4-3-3-3-3-3-2	41	4-5-5-6-5-5-3-3	32	4-5-4-3-4-3-3-3

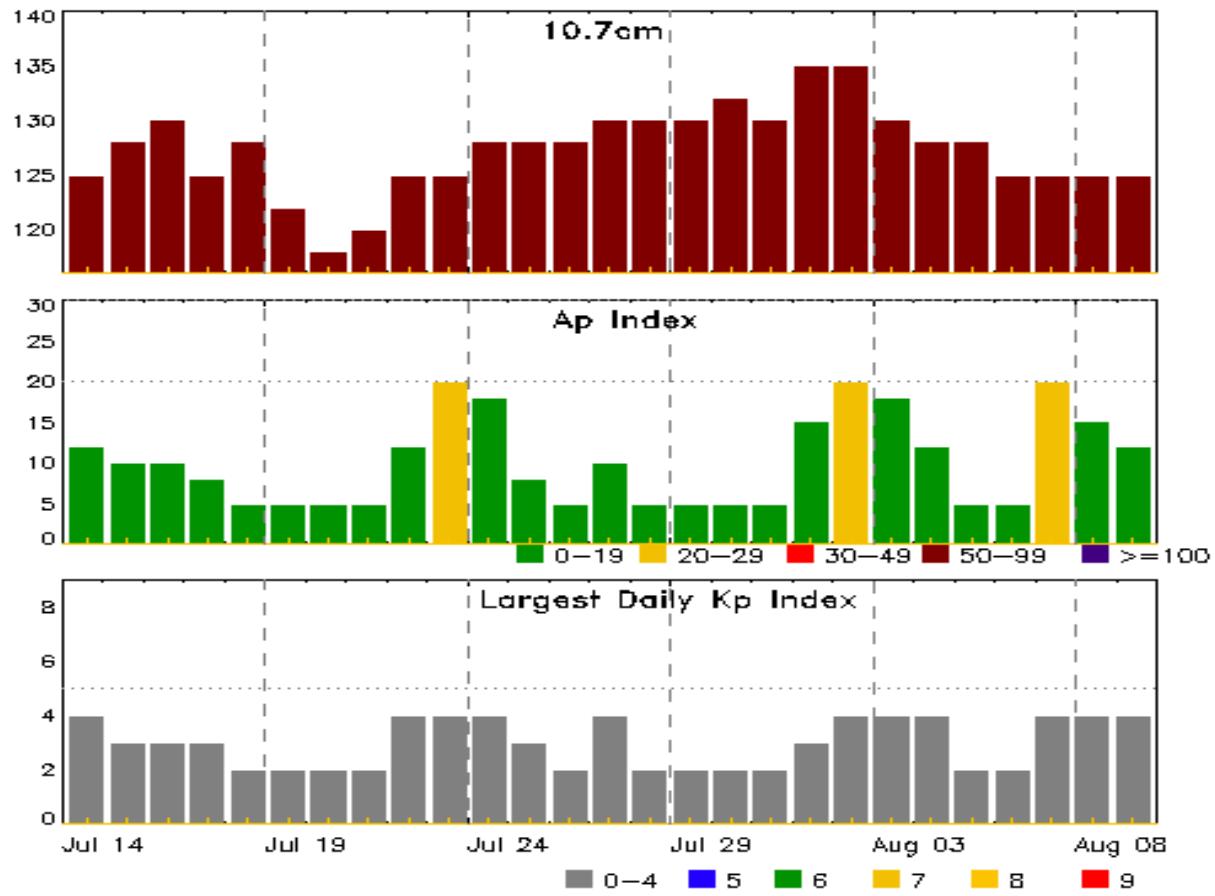


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
07 Jul 0125	ALERT: Geomagnetic K = 5	
07 Jul 0151	WARNING: Geomagnetic K = 6	07/0150 - 0600
07 Jul 0549	EXTENDED WARNING: Geomagnetic K = 5	06/2320 - 07/1200
07 Jul 0550	EXTENDED WARNING: Geomagnetic K = 4	04/2248 - 07/1800
07 Jul 2321	WARNING: Geomagnetic K = 4	07/2321 - 08/0600
08 Jul 0543	EXTENDED WARNING: Geomagnetic K = 4	07/2321 - 08/1500
08 Jul 0603	ALERT: Geomagnetic K = 4	
09 Jul 1433	ALERT: Electron 2MeV Integral Flux \geq 1000pfu	09/1425
10 Jul 1102	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	09/1425
11 Jul 0512	WARNING: Geomagnetic K = 4	11/0510 - 1500
11 Jul 1104	ALERT: Geomagnetic K = 4	
11 Jul 1108	WARNING: Geomagnetic K = 5	11/1108 - 1800
11 Jul 1108	EXTENDED WARNING: Geomagnetic K = 4	11/0510 - 2100
11 Jul 1755	EXTENDED WARNING: Geomagnetic K = 4	11/0510 - 12/0900
11 Jul 2043	WARNING: Geomagnetic K = 5	11/2040 - 12/1200
12 Jul 0831	EXTENDED WARNING: Geomagnetic K = 4	11/0510 - 12/2359
12 Jul 2355	EXTENDED WARNING: Geomagnetic K = 4	11/0510 - 13/1200
13 Jul 0419	WARNING: Geomagnetic K = 5	13/0418 - 1200
13 Jul 0433	ALERT: Geomagnetic K = 5	
13 Jul 1155	EXTENDED WARNING: Geomagnetic K = 4	11/0510 - 13/2359



Twenty-seven Day Outlook



Date	Radio Flux	Planetary	Largest	Date	Radio Flux	Planetary	Largest
	10.7cm	A Index	Kp Index		10.7cm	A Index	Kp Index
14 Jul	125	12	4	28 Jul	130	5	2
15	128	10	3	29	130	5	2
16	130	10	3	30	132	5	2
17	125	8	3	31	130	5	2
18	128	5	2	01 Aug	135	15	3
19	122	5	2	02	135	20	4
20	118	5	2	03	130	18	4
21	120	5	2	04	128	12	4
22	125	12	4	05	128	5	2
23	125	20	4	06	125	5	2
24	128	18	4	07	125	20	4
25	128	8	3	08	125	15	4
26	128	5	2	09	125	12	4
27	130	10	4				

Energetic Events

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat	CMD #	Radio Flux 245	2695	II	IV
08 Jul	0342	0417	0437	M2.4	0.047					4136		
09 Jul	0410	0425	0438	M1.3	0.012					4136		
12 Jul	0353	0402	0409	M1.4	0.008					4140	190	
12 Jul	0829	0834	0842	M2.3	0.013	1F	S14E72			4140		
12 Jul	1154	1210	1216	M1.6	0.012	1F	S15E70			4140		

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat	Rgn #
07 Jul	0346	0354	0413	C1.5			
07 Jul	0546	0547	0550		SF	S22W65	4127
07 Jul	0611	0615	0620	B9.8			4127
07 Jul	0714	0722	0727	C1.0			4127
07 Jul	1052	1109	1113	C1.4			4127
07 Jul	1113	1120	1126	C1.6			4127
07 Jul	1410	1423	1438	C1.3			
07 Jul	1625	1634	1640	C1.8			4127
07 Jul	1909	1920	1929	C2.9			4136
07 Jul	2049	2110	2119	C3.5			4136
07 Jul	2119	2121	2123	C3.5			4136
08 Jul	0010	0018	0025	C1.9			4136
08 Jul	0148	0156	0201	C1.9			4136
08 Jul	0342	0417	0437	M2.4			4136
08 Jul	0600	0609	0614	C1.5			4136
08 Jul	1636	1644	1649	B9.8			4136
08 Jul	2027	2040	2045	C1.6			4136
09 Jul	0038	0053	0105	C2.4			4136
09 Jul	0353	0402	0406	B8.6			4136
09 Jul	0410	0425	0438	M1.3			4136
09 Jul	2201	2205	2209	C1.3	SF	S09E47	4135
09 Jul	2252	2301	2305	C1.7			
10 Jul	0238	0244	0250	C1.3			
10 Jul	0430	0436	0441	C1.3			4137
10 Jul	0431	U0431	0440		SF	N19E62	4136
10 Jul	B0539	U0540	A0544		SF	N25E68	4136



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
10 Jul	0637	0642	0646	C3.8			
10 Jul	0738	0749	0754	C1.7			4136
10 Jul	1140	1204	1224	C4.3			
10 Jul	1321	1328	1330	C3.4			
10 Jul	1603	1606	1619		SF	N20E57	4136
10 Jul	1702	1703	1708		SF	N20E55	4136
10 Jul	1708	1711	1714	C4.2			4140
10 Jul	1757	1804	1807	C3.9			4140
10 Jul	1927	1936	1939	C8.9			4140
10 Jul	2023	2030	2032	C2.7			4140
10 Jul	2035	2042	2049	C2.5			4134
10 Jul	2204	2212	2215	C2.1			4140
11 Jul	0137	0144	0150	C1.3			4140
11 Jul	B0542	U0544	A0613		SF	N28W04	
11 Jul	B0722	U0722	A0728		SF	N28W05	
11 Jul	0910	0911	0917		SF	N21E33	
11 Jul	0923	0930	0932	C1.7	SF	S15W61	4127
11 Jul	0951	0958	1004	C1.2	SF	N22E32	4139
11 Jul	1008	1009	1011		SF	N22E30	
11 Jul	1115	1122	1127	C2.0			4139
11 Jul	1115	1117	1121		SF	N28W07	4138
11 Jul	1121	1122	1126		SF	N22E29	4139
11 Jul	1151	1155	1200	C1.7			4140
11 Jul	1157	1159	1201		SF	N27W07	4138
11 Jul	1254	1255	1256		SF	S15W63	
11 Jul	1308	1314	1319	C2.2			4140
11 Jul	1336	1348	1358		SF	N27W08	4138
11 Jul	1410	1420	1430	C5.2	SF	S13E84	4140
11 Jul	1424	1424	1433		SF	N28W08	4138
11 Jul	1509	1513	1521	C3.5			4140
11 Jul	1509	1517	1526		SF	N28W08	4138
11 Jul	1513	1517	1525		SF	N27W08	4138
11 Jul	1535	1537	1537		SF	N28W08	4138
11 Jul	1619	1619	1625		SF	S15E86	4140
11 Jul	1701	1709	1711	C8.0	SF	N28W09	4138
11 Jul	1720	1722	1728		SF	S15E82	4140
11 Jul	1727	1728	1731		SF	N28W09	4138
11 Jul	1734	1739	1740		SF	N28W09	4138



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
11 Jul	1806	1818	1841		SF	N28W09	4138
11 Jul	1952	1952	1954		SF	N17E36	4136
11 Jul	2110	2122	2132	C1.7	1F	N27W12	4138
11 Jul	2350	0002	0005	C2.2			
12 Jul	0059	0102	0111	C1.8	SF	N21E21	4139
12 Jul	0204	0214	0219	C2.3			
12 Jul	0256	0308	0313	C2.1			4140
12 Jul	0313	0323	0326	C2.0			
12 Jul	0332	0339	0343	C4.1			4140
12 Jul	0353	0402	0409	M1.4			4140
12 Jul	0457	0649	0723		SF	N28W17	4138
12 Jul	0605	0606	0610		SF	S14E73	4140
12 Jul	0642	0653	0703	C3.9	SF	S14E73	4140
12 Jul	0726	0729	0737		SF	N28W19	4138
12 Jul	0738	0747	0803		SF	N28W19	4138
12 Jul	0814	0820	0823	C4.8	SF	S14E72	4140
12 Jul	0829	0834	0842	M2.3	1F	S14E72	4140
12 Jul	1154	1210	1216	M1.6	1F	S15E70	4140
12 Jul	1243	1248	1252	C3.4	SF	S15E70	4140
12 Jul	1417	1421	1424	C2.7	SF	S15E70	4140
12 Jul	1442	1507	1532	C5.3			4134
12 Jul	1748	1757	1801	C1.6			4140
12 Jul	1815	1835	1850	C7.0	1F	N20E25	4136
12 Jul	2104	2108	2112	C1.5			4140
12 Jul	2146	2202	2210	C5.5	SF	S14E66	4140
13 Jul	0045	0050	0056	C1.2			4140
13 Jul	0152	0212	0222	C1.5			4140
13 Jul	0222	0230	0233	C1.5			4140
13 Jul	0346	0402	0408	C9.0			4140
13 Jul	0520	0528	0537	C1.6			4140
13 Jul	0547	0555	0600	C3.1	SF	S13E59	4140
13 Jul	0634	0637	0643	C1.5	SF	S13E59	4140
13 Jul	0643	0647	0651	C2.4			4140
13 Jul	0657	0704	0707	C1.7			4140
13 Jul	0921	0928	0936	B9.9	SF	N18W66	4137
13 Jul	1015	1020	1024	C1.2			4140
13 Jul	1124	1134	1148	C1.7			4140
13 Jul	1640	1648	1654	C1.0			



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
13 Jul	1800	1809	1811	C2.9			4140
13 Jul	2144	2150	2159	C8.9			
13 Jul	2312	2317	2319	C2.7			
13 Jul	2344	2359	0012	C2.5			4142



Region Summary

Date	Lat	CMD	Location		Sunspot Characteristics				Flares			
			Helio	Lon	Area 10^{-6}	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray	Optical	
										C	M	X
										S	1	2
										3	4	
			Region 4122									
25 Jun	N13E55		219		10	5	Bxi	11	B	1		
26 Jun	N13E41		220		50	6	Dai	11	B	1	4	
27 Jun	N13E28		220		100	6	Dai	11	B	2	3	
28 Jun	N13E15		219		140	8	Dai	10	B			
29 Jun	N13E03		218		100	8	Dso	10	B			
30 Jun	N12W11		219		80	9	Dso	11	B	1	1	
01 Jul	N13W25		220		80	9	Cso	7	B			
02 Jul	N12W40		221		70	3	Hsx	2	A			
03 Jul	N12W54		222		70	3	Hsx	2	A	1		
04 Jul	N12W67		222		100	2	Hsx	1	A			
05 Jul	N11W80		222		60	2	Hsx	1	A			
06 Jul	N12W93		222		50	1	Hsx	1	A			
										6	0	0
										8	0	0
										0	0	0
										0	0	0

Crossed West Limb.

Absolute heliographic longitude: 218

Region 4124

27 Jun	S14E51		197		10	4	Bxo	3	B			
28 Jun	S15E37		197		10	4	Bxo	2	B			
29 Jun	S16E23		198		20	1	Hsx	1	A			
30 Jun	S14E10		198		10	3	Bxo	2	B			
01 Jul	S14W06		201		10	3	Axx	2	A			
02 Jul	S14W20		201		10	1	Axx	1	A			
03 Jul	S14W34		202		plage							
04 Jul	S14W48		203		plage							
05 Jul	S14W62		204		plage							1
06 Jul	S14W76		205		plage							
07 Jul	S14W90		205		plage					0	0	0
										1	0	0
										0	0	0

Crossed West Limb.

Absolute heliographic longitude: 201



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical			
			Lon	10^6 hemi.	(helio)	Class	Count		C	M	X	S	1	2	3
Region 4125															
27 Jun	N21E76		172	50	2	Hsx	1	A							
28 Jun	N21E61		173	50	4	Hsx	1	A							
29 Jun	N21E46		175	40	2	Hsx	1	A							
30 Jun	N21E32		176	40	2	Hsx	1	A							
01 Jul	N21E18		177	40	2	Hsx	1	A							
02 Jul	N21E06		175	40	2	Hsx	1	A							1
03 Jul	N21W08		176	40	2	Hsx	1	A							
04 Jul	N22W19		174	70	2	Hsx	1	A							
05 Jul	N22W32		174	40	2	Hsx	1	A							
06 Jul	N22W45		174	30	1	Hsx	1	A							
07 Jul	N22W59		174	30	1	Hsx	1	A							
08 Jul	N23W72		174	40	1	Hsx	1	A							
09 Jul	N23W85		174	20	1	Hsx	1	A							
									0	0	0	1	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 175

Region 4127

29 Jun	S18E34		187	30	4	Cro	7	B							
30 Jun	S18E20		188	30	5	Cro	7	B							
01 Jul	S18E05		190	20	7	Bxi	7	B							
02 Jul	S18W09		190	40	6	Dai	10	B							
03 Jul	S19W22		190	80	9	Dac	16	B							
04 Jul	S19W33		188	100	7	Dao	10	B							
05 Jul	S19W47		189	50	8	Cso	6	B							
06 Jul	S19W59		188	50	8	Dai	5	B	2						3
07 Jul	S20W72		187	80	8	Dai	5	B	4						1
08 Jul	S19W85		187	90	7	Dao	3	B							
									6	0	0	4	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 190

Region Summary - continued

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area 10^{-6} hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
Region 4128																
29 Jun	S05E40		181		30		5	Dao	5	B						
30 Jun	S04E26		182		40		6	Dao	5	B		1				
01 Jul	S04E12		183		40		7	Dao	4	B						
02 Jul	S05W02		183		30		8	Cao	3	B						
03 Jul	S06W14		183		30		8	Cro	3	B						
04 Jul	S05W26		183		plage											
05 Jul	S05W41		183		plage											
06 Jul	S05W56		185		plage											
07 Jul	S05W71		186		20		5	Bxo	4	B						
08 Jul	S05W73		175		10		3	Bxo	2	B						
09 Jul	S05W88		177		plage								1	0	0	0
														0	0	0

Crossed West Limb.

Absolute heliographic longitude: 183

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area 10^{-6} hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
Region 4129																
30 Jun	N02E38		170		30		6	Cri	8	BG		1				
01 Jul	N02E24		171		10		4	Cri	9	BG						
02 Jul	N02E09		172		30		5	Cri	7	B						
03 Jul	N02W04		171		30		7	Cri	10	B						
04 Jul	N02W16		171		60		6	Dso	11	B		1				
05 Jul	N03W29		171		50		5	Dao	7	B						
06 Jul	N02W43		172		30		6	Dao	4	B						
07 Jul	N02W57		172		30		6	Bxo	3	B						
08 Jul	N04W70		172		10		3	Bxo	2	B						
09 Jul	N04W85		174		plage								2	0	0	0
													0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 171



Region Summary - continued

Date	Lat	CMD	Location		Sunspot Characteristics					Flares										
			Helio Lon	10^6 hemi. (helio)	Area Extent Class	Spot Count	Spot Class	Mag	X-ray			Optical								
									C	M	X	S	1	2	3	4				
Region 4130																				
30 Jun	S12E68		140	5	1	Axx	1	A	4											
01 Jul	S12E54		141	plage																
02 Jul	S12E39		142	plage																
03 Jul	S12E25		143	plage																
04 Jul	S10E20		140	10	3	Bxo	3	B	2			3								
05 Jul	S11E03		139	10	4	Cro	4	B	2			3								
06 Jul	S11W11		140	40	3	Dai	5	B				1								
07 Jul	S10W24		139	40	2	Cao	3	B												
08 Jul	S10W37		139	20	2	Cao	3	B												
09 Jul	S09W51		140	10	1	Bxo	2	B												
10 Jul	S10W65		141	10	1	Axx	1	A												
11 Jul	S10W79		141	plage									8	0	0	7	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 139

Region 4131

01 Jul	N08W15		210	20	5	Dro	3	B											
02 Jul	N08W30		211	20	5	Cro	2	B											
03 Jul	N08W44		212	10	1	Axx	1	A											
04 Jul	N08W58		213	plage									0	0	0	0	0	0	0
05 Jul	N08W72		214	plage									0	0	0	0	0	0	0
06 Jul	N08W86		215	plage									0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 210

Region Summary - continued

Date	Lat	CMD	Location		Sunspot Characteristics				Flares								
			Helio	Lon	Area 10^{-6} hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray		Optical	S	1	2	3	4
Region 4132																	
01 Jul	S18E57		138		20		2	Hrx	2	A							
02 Jul	S17E42		139		10		2	Axx	2	A	1						1
03 Jul	S17E28		140		10		2	Bxo	3	B							
04 Jul	S18E17		138		plage												
05 Jul	S18E03		139		10		2	Bxo	3	B							
06 Jul	S17W07		139		plage												
07 Jul	S17W21		136		plage												
08 Jul	S17W35		137		plage												
09 Jul	S17W49		138		plage												
10 Jul	S17W63		139		plage												
11 Jul	S17W77		139		plage												
											1	0	0	1	0	0	0

Died on Disk.

Absolute heliographic longitude: 139

Region 4134

06 Jul	S23W15		144		30		4	Dao	5	B	1						1
07 Jul	S23W28		143		40		6	Dro	4	B							
08 Jul	S22W42		144		30		6	Cro	4	B							
09 Jul	S22W59		148		10		2	Bxo	2	B							
10 Jul	S21W73		149		10		1	Axx	1	A	1						
11 Jul	S21W86		148		plage							2	0	0	1	0	0

Crossed West Limb.

Absolute heliographic longitude: 144

Region 4135

07 Jul	S09E69		45		50		6	Dai	6	B							
08 Jul	S08E56		46		90		5	Dao	3	B							
09 Jul	S08E43		46		70		5	Dao	5	BG	1						1
10 Jul	S09E29		47		60		6	Cso	4	B							
11 Jul	S08E15		47		60		2	Hsx	2	A							
12 Jul	S08E01		48		50		1	Hsx	1	A							
13 Jul	S09W12		48		60		2	Hsx	1	A			1	0	0	1	0

Still on Disk.

Absolute heliographic longitude: 48



Region Summary - continued

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

Region 4136

09 Jul	N19E64	25	150	7	Dai	7	BG	1	1							
10 Jul	N19E53	23	180	10	Dai	9	BG	1							4	
11 Jul	N19E40	22	220	9	Dai	12	BGD								1	
12 Jul	N19E27	22	200	9	Dao	8	BD	1							1	
13 Jul	N19E13	23	190	9	Dao	4	B	10	2	0	5	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 23

Region 4137

09 Jul	N19W22	111	30	3	Cro	6	B									
10 Jul	N18W34	110	80	4	Dao	7	B	1								
11 Jul	N18W47	109	80	8	Dai	8	B									
12 Jul	N18W61	110	60	8	Cso	5	B									
13 Jul	N19W74	110	40	7	Cso	4	B	1	0	0	1	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 111

Region 4138

11 Jul	N28W13	74	80	7	Dai	10	B	2				11	1			
12 Jul	N28W26	75	200	9	Dai	8	B					3				
13 Jul	N29W39	75	200	10	Dao	8	B	2	0	0	14	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 74

Region 4139

11 Jul	N22E22	40	20	4	Cro	3	B	2				1				
12 Jul	N22E10	39	60	6	Dai	5	B	1				1				
13 Jul	N22W04	40	100	7	Dai	6	B	3	0	0	2	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 40



Region Summary - continued

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

Region 4140

10 Jul	S15E87	349	plage							5				
11 Jul	S15E73	349	30	4	Cao	3	B	5			3			
12 Jul	S15E61	348	130	10	Dao	6	B	9	3		6	2		
13 Jul	S15E46	350	90	8	Cao	6	B	12			2			

Still on Disk.

Absolute heliographic longitude: 350

Region 4141

13 Jul	S13W76	112	30	3	Cao	3	B	0	0	0	0	0	0	0
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Still on Disk.

Absolute heliographic longitude: 112



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