

Solar activity reached high levels on 03 Jun when Region 4455 (N14, L=88, class/area=Dki/360 on 03 Jun) produced an M9.3/Sf flare (accompanied by Type-II (253 km/s) and Type-IV sweeps, and a 360 sfu Tenflare) at 03/0136 UTC, followed by an M7.7/1b flare (accompanied by Type-II (313 km/s) and Type-IV radio sweeps, and a 540 sfu Tenflare with Castelli-U signature) at 03/0700 UTC, and finally an X1.0/1n flare (accompanied by a Type-IV sweep and a 180 sfu Tenflare) at 03/1128 UTC. The CMEs associated with the three significant flares from AR4455 on 03 Jun arrived at Earth on 05 Jun. Other activity included an M1.8/2n (accompanied by Type-II (838 km/s) and 190 sfu Tenflare) flare at 06/1401 UTC from Region 4461 (S20, L=09, class/area=Dao/70 on 02 Jun). The resulting partial-halo CME, first visible in LASCO C2 imagery at 06/1401 UTC, is anticipated to arrive at Earth around midday on 08 Jun.

The greater than 10 MeV proton flux became slightly enhanced after midday on 06 Jun following the M1.8/2n flare at 06/1401 UTC from Region 4461, but remained below event levels with a peak flux of 1.0 pfu observed at 06/1940 UTC. The greater than 10 MeV proton flux gradually returned to background levels on 07 Jun.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels on 01-05 Jun, with high levels observed on 06-07 Jun.

Geomagnetic field activity reached G1-G2 (Minor-Moderate) storm levels on 05 Jun, and active levels on 06 Jun, following the arrival and passage of the CMEs from 03 Jun. The shock arrival was observed beginning at around 05/0425 UTC, and in the hours following the total magnetic field strength (Bt) reached 20 nT, the Bz component reached as far southward as -17 nT, and solar wind speeds increased to a peak near 740 km/s. Quiet and quiet to unsettled levels under weak coronal hole high speed stream influences prevailed throughout the remainder of the period.

### **Space Weather Outlook** **08 June - 04 July 2026**

Solar activity is expected to be at predominately low levels through 04 Jul, with M-class flare probabilities ranging from a chance to likely levels throughout the period.

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 09-10, 13-18 Jun and 04 Jul. Normal to moderate levels are expected to prevail throughout the remainder of the period.

Geomagnetic field activity is likely to reach G1-G3 (Minor-Strong) storm levels on 08 Jun, with G1-G2 (Minor-Moderate) levels likely on 09 Jun, due to the anticipated arrival of the CME that



left the Sun on 06 Jun. Periods of active conditions are likely on 23-26 Jun due to recurrent CH HSS influences. Quiet and quiet to unsettled levels are expected to prevail throughout the remainder of the 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
01 June	132	146	675	B5.9	1	0	0	4	0	0	0	0
02 June	146	133	745	B9.3	12	3	0	11	1	1	0	0
03 June	147	141	920	B9.6	10	2	1	8	2	0	0	0
04 June	148	157	885	B9.4	8	0	0	2	0	0	0	0
05 June	141	145	760	B9.3	11	0	0	5	0	0	0	0
06 June	138	139	860	B9.9	5	1	0	7	0	1	0	0
07 June	134	124	630	B8.0	19	0	0	9	0	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	
	01 June	1.2e+05	1.9e+04	1.8e+07
02 June	5.5e+04	1.9e+04	2.1e+07	
03 June	2.2e+05	1.8e+04	2.4e+07	
04 June	1.1e+05	1.7e+04	1.6e+07	
05 June	2.0e+06	1.7e+04	1.7e+07	
06 June	5.0e+05	3.3e+04	3.7e+07	
07 June	1.2e+06	3.5e+04	1.0e+08	

### *Daily Geomagnetic Data*

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	01 June	9	2-1-2-1-3-3-3-1	23	2-1-3-3-5-6-3-1	9
02 June	7	3-1-1-1-2-2-2-2	7	2-3-2-2-2-1-1-1	7	2-2-2-1-2-1-2-2
03 June	11	3-2-1-2-2-3-3-3	9	4-3-2-1-1-1-2-2	10	3-2-2-2-2-2-2-3
04 June	7	3-2-1-2-2-2-1-2	6	3-3-1-0-2-1-1-1	6	3-3-1-1-2-1-1-2
05 June	24	1-4-2-2-4-5-5-4	41	1-3-2-4-6-7-4-4	36	1-3-2-2-5-6-5-5
06 June	19	5-3-4-3-3-2-2-3	31	4-4-4-6-5-4-1-2	17	4-4-4-3-3-2-2-2
07 June	8	2-2-2-3-2-2-1-2	23	3-2-2-6-3-5-2-2	12	3-2-2-3-2-2-1-2



### *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>
01 Jun 1754	WARNING: Geomagnetic K = 4	01/1753 - 02/0000
02 Jun 1654	SUMMARY: 10cm Radio Burst	02/1642 - 03/1643
02 Jun 1657	SUMMARY: 10cm Radio Burst	02/1642 - 1643
02 Jun 1718	ALERT: Type II Radio Emission	02/1652
03 Jun 0137	ALERT: X-ray Flux exceeded M5	03/0131
03 Jun 0142	ALERT: Type II Radio Emission	03/0057
03 Jun 0143	ALERT: Type IV Radio Emission	03/0122
03 Jun 0156	SUMMARY: X-ray Event exceeded M5	03/0122 - 04/0143
03 Jun 0215	SUMMARY: 10cm Radio Burst	03/0126 - 04/0131
03 Jun 0700	ALERT: X-ray Flux exceeded M5	03/0700
03 Jun 0710	SUMMARY: 10cm Radio Burst	03/0657 - 0658
03 Jun 0715	SUMMARY: X-ray Event exceeded M5	03/0648 - 0707
03 Jun 0717	SUMMARY: 10cm Radio Burst	03/0657 - 0700
03 Jun 0729	ALERT: Type II Radio Emission	03/0657
03 Jun 1141	ALERT: X-ray Flux exceeded M5	03/1141
03 Jun 1147	SUMMARY: 10cm Radio Burst	03/1121 - 04/1123
03 Jun 1159	SUMMARY: X-ray Event exceeded X1	03/1119 - 1135
03 Jun 1452	WATCH: Geomagnetic Storm Category G3 predicted	
03 Jun 2238	WARNING: Geomagnetic K = 4	03/2237 - 04/0600
05 Jun 0433	WARNING: Geomagnetic Sudden Impulse expected	05/0450 - 1515
05 Jun 0435	WARNING: Geomagnetic K = 4	05/0434 - 06/0300
05 Jun 0513	SUMMARY: Geomagnetic Sudden Impulse	05/0511
05 Jun 1230	WARNING: Geomagnetic K = 5	05/1228 - 2100
05 Jun 1258	ALERT: Geomagnetic K = 4	05/1253
05 Jun 1335	ALERT: Geomagnetic K = 5	05/1327
05 Jun 1441	WARNING: Geomagnetic K = 6	05/1437 - 2100
05 Jun 1621	ALERT: Geomagnetic K = 5	05/1620
05 Jun 1639	ALERT: Geomagnetic K = 6	05/1638
05 Jun 1716	WARNING: Geomagnetic K >= 7	05/1714 - 2359

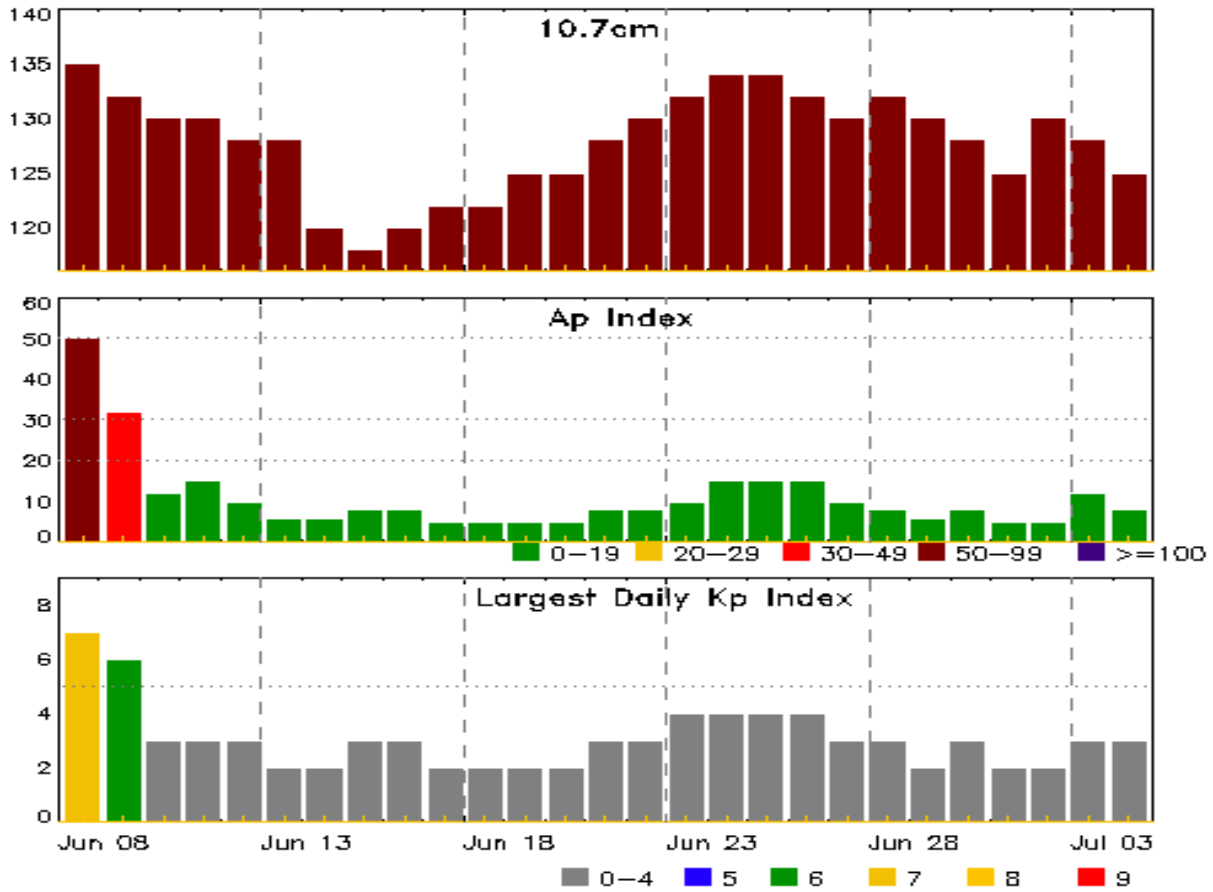


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
05 Jun 1719	EXTENDED WARNING: Geomagnetic K = 5	05/1228 - 06/0600
05 Jun 1721	EXTENDED WARNING: Geomagnetic K = 6	05/1437 - 06/0300
05 Jun 1852	WATCH: Geomagnetic Storm Category G2 predicted	
05 Jun 1854	EXTENDED WARNING: Geomagnetic K = 4	05/0434 - 06/0900
05 Jun 2009	ALERT: Geomagnetic K = 5	05/2002
05 Jun 2325	ALERT: Geomagnetic K = 5	05/2324
06 Jun 0435	EXTENDED WARNING: Geomagnetic K = 5	05/1228 - 06/1500
06 Jun 0435	EXTENDED WARNING: Geomagnetic K = 4	05/0434 - 06/1800
06 Jun 1414	SUMMARY: 10cm Radio Burst	06/1344 - 1359
06 Jun 1415	ALERT: Type II Radio Emission	06/1347
06 Jun 1655	ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	06/1640
06 Jun 2211	WATCH: Geomagnetic Storm Category G3 predicted	
07 Jun 1146	ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	07/1143



## 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
08 Jun	135	50	7	22 Jun	130	8	3
09	132	32	6	23	132	10	4
10	130	12	3	24	134	15	4
11	130	15	3	25	134	15	4
12	128	10	3	26	132	15	4
13	128	6	2	27	130	10	3
14	120	6	2	28	132	8	3
15	118	8	3	29	130	6	2
16	120	8	3	30	128	8	3
17	122	5	2	01 Jul	125	5	2
18	122	5	2	02	130	5	2
19	125	5	2	03	128	12	3
20	125	5	2	04	125	8	3
21	128	8	3				



### *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 245	Radio Flux 2695	Intensity II	Intensity IV
02 Jun	0442	0445	0447	M1.2	0.003			4461				
02 Jun	0951	1005	1019	M1.2	0.013	1N	N11E01	4455				
02 Jun	1631	1650	1656	M3.3	0.023	2B	N56W29	4455	140	150	2	
03 Jun	0122	0136	0143	M9.3	0.066	SF	N13W11	4455	55000	360		
03 Jun	0649	0700	0707	M7.7	0.037	1B	N14W13	4455	880	540	3	
03 Jun	1119	1128	1135	X1.0	0.064	1N	N13W15	4455	640	250		1
06 Jun	1340	1401	1428	M1.8	0.041	2N	S21E24	4461	220	190	3	

### *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
01 Jun	0511	0519	0525	C1.5	SF	S10W31	4449
01 Jun	1727	1750	1824		SF	S01E24	
01 Jun	1823	1836	1859		SF	S01E24	
01 Jun	2239	2248	2257		SF	N15E05	4455
02 Jun	0228	0233	0237	C1.1			
02 Jun	0240	0250	0259	C1.8			
02 Jun	0411	0423	0435	C1.4			
02 Jun	0442	0445	0447	M1.2			4461
02 Jun	0500	0504	0514		SF	N12E04	4455
02 Jun	0646	0659	0705	C3.1	SF	N14E01	4455
02 Jun	0751	0755	0759	C1.2			4461
02 Jun	0821	0829	0831	C1.4			4455
02 Jun	0831	0844	0857	C3.7			4455
02 Jun	0835	0841	0908		SF	N11E02	4455
02 Jun	0908	0910	0919		SF	N11E02	4455
02 Jun	0951	1005	1019	M1.2	1N	N11E01	4455
02 Jun	1057	1102	1105	C4.3			4461
02 Jun	1130	1132	1141		SF	N11E00	4455
02 Jun	1227	1240	1241		SF	N11W00	4455
02 Jun	1353	1358	1401	C2.3			4461
02 Jun	1423	1426	1429		SF	N14W04	4455
02 Jun	1445	1455	1512		SF	N14W04	4455
02 Jun	1458	1459	1506		SF	S06E11	4458
02 Jun	1623	1643	1720		2B	N56W29	4455



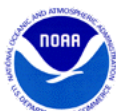
## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
02 Jun	1623	1625	1629		SF	S06E10	4458
02 Jun	1631	1650	1656	M3.3			4455
02 Jun	1807	1813	1818	C2.9	SF	N11W06	4455
02 Jun	1835	1841	1845	C2.4			4455
02 Jun	2024	2039	2049	C4.2			
03 Jun	0022	0046	0056	C4.0			
03 Jun	0111	0115	0118	C2.0			
03 Jun	0122	0136	0143	M9.3	SF	N13W11	4455
03 Jun	0324	0334	0341	C1.8			4449
03 Jun	B0431	U0432	0441		SF	N13W11	4455
03 Jun	0450	0455	0459	C2.1	SN	N14W12	4455
03 Jun	0548	0550	0551		SF	N16W13	4455
03 Jun	0616	0616	0629		SF	S06W57	4449
03 Jun	0649	0700	0707	M7.7	1B	N14W13	4455
03 Jun	1049	1050	1051		SF	N13W15	4455
03 Jun	1053	1059	1108	C2.4			4455
03 Jun	1119	1128	1135	X1.0	1N	N13W15	4455
03 Jun	1221	1229	1235	C1.4			4455
03 Jun	1527	1536	1545	C1.7			4455
03 Jun	1746	1746	1750		SF	S10W54	4457
03 Jun	1921	1926	1932	C1.5	SF	N15W21	4455
03 Jun	2046	2052	2055	C1.8			4455
03 Jun	2327	2343	0000	C5.1			4459
04 Jun	0154	0200	0205	C1.8			4458
04 Jun	0341	0357	0406	C2.6	SF	S08W59	4457
04 Jun	0616	0623	0630	C1.2			4461
04 Jun	0631	0638	0640	C1.5			4446
04 Jun	1250	1258	1309	C1.5	SF	N12W30	4455
04 Jun	1553	1558	1606	C1.6			4452
04 Jun	1625	1635	1644	C1.8			4452
04 Jun	2337	2342	2345	C1.5			4457
05 Jun	0001	0008	0013	C1.4			4457
05 Jun	0154	0208	0217	C1.5			4459
05 Jun	0217	0221	0224	C1.4			4457
05 Jun	1005	U1005	A1026		SF	S06W27	4458
05 Jun	1137	1137	1142		SF	S11W84	4457
05 Jun	1140	1147	1151	C1.7	SF	N19E43	4462
05 Jun	1151	1154	1156	C1.9			4457



## *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
05 Jun	1320	1325	1335	C1.5	SF	N14E16		4459
05 Jun	1452	1503	1510	C4.1	SF	N12W47		4455
05 Jun	1510	1513	1515	C4.0				4457
05 Jun	1815	1822	1828	C1.4				4459
05 Jun	1832	1854	1916	C3.9				4459
05 Jun	2218	2245	2259	C4.7				4462
06 Jun	0352	0359	0410	C2.1				4456
06 Jun	0410	0416	0420	C1.7				4455
06 Jun	0623	0630	0639	C3.1	SF	N18W24		4456
06 Jun	1149	1157	1203	C1.9	SF	N18W27		4456
06 Jun	1304	1318	1329	C8.8	SF	N18W28		4456
06 Jun	1340	1401	1428	M1.8	2N	S21E24		4461
06 Jun	1435	1446	1451		SF	N18W29		4456
06 Jun	1705	1708	1715		SF	S06W46		4458
06 Jun	1851	1933	2002		SF	N15W33		4456
06 Jun	2002	2012	2029		SF	N15W33		4456
07 Jun	0145	0153	0200	C2.0				4456
07 Jun	0221	0230	0238	C1.9				4456
07 Jun	0238	0243	0246	C1.9				4456
07 Jun	0410	0419	0425	C3.3				4456
07 Jun	0527	0533	0536	C1.7				4456
07 Jun	0541	0549	0559	C2.5				4456
07 Jun	0636	0644	0648	C1.7				4456
07 Jun	0755	0801	0808	C1.5	SF	N18W39		4456
07 Jun	0816	0826	0830	C2.4				4456
07 Jun	0917	0928	0939	C1.6	SF	N18W40		4456
07 Jun	1321	1330	1342	C1.4	SF	S12E43		4464
07 Jun	1342	1345	1348	C1.5				4464
07 Jun	1350	1358	1405	C2.1	SF	S12E44		4464
07 Jun	1541	1558	1609	C1.7				4464
07 Jun	1617	1618	1621		SF	S11E43		4464
07 Jun	1640	1651	1702	C1.6				4459
07 Jun	1640	1651	1702	C1.7	SF	N16W10		4459
07 Jun	1646	1650	1653		SF	N15W12		4459
07 Jun	1743	1753	1803	C1.3				4462
07 Jun	1854	1902	1906	C1.2	SF	N12E04		4462
07 Jun	1927	1933	1947	C1.2				4455
07 Jun	2116	2116	2122		SF	N13E02		4462



## Region Summary

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 4444</b>																		
21 May	S21E65	175	60	3	Hsx	1	A											
22 May	S20E53	173	120	3	Cso	4	B	1										
23 May	S19E38	175	130	6	Dso	5	B					1						
24 May	S21E29	171	100	3	Hsx	1	A											
25 May	S21E16	171	90	2	Hsx	1	A											
26 May	S21E05	169	100	3	Hsx	2	A											
27 May	S21W09	169	90	2	Hsx	1	A											
28 May	S21W22	169	90	2	Hsx	1	A											
29 May	S21W35	169	90	2	Hsx	1	A											
30 May	S21W48	169	70	2	Hsx	1	A											
31 May	S21W62	169	70	2	Hsx	1	A											
01 Jun	S22W73	167	50	2	Hsx	1	A											
02 Jun	S22W85	166	60	3	Hsx	1	A											
								1	0	0	1	0	0	0	0	0		

Crossed West Limb.  
 Absolute heliographic longitude: 169

<b>Region 4445</b>																		
23 May	N07E48	164	20	1	Hrx	1	A											
24 May	N07E37	163	20	1	Hsx	1	A											
25 May	N07E26	161	20	4	Cro	3	B											
26 May	N07E11	162	10	2	Axx	3	A											
27 May	N07W02	162	5	1	Axx	1	A											
28 May	N07W15	162	5	1	Axx	1	A											
29 May	N07W29	163	plage															
30 May	N07W43	164	plage															
31 May	N07W58	165	plage															
01 Jun	N07W73	167	plage															
02 Jun	N07W88	169	plage															
								0	0	0	0	0	0	0	0	0	0	

Crossed West Limb.  
 Absolute heliographic longitude: 162



### *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 4446</b>																							
23 May	S13E75	138	170	9	Dao	2	B	7															
24 May	S13E59	141	280	9	Dko	3	B	3															
25 May	S14E45	142	220	4	Hax	3	A																
26 May	S16E43	130	400	23	Fho	16	BG	3															
27 May	S16E30	131	400	24	Fko	17	BG	1															
28 May	S16E16	131	300	24	Fko	12	BG																
29 May	S16E03	131	290	5	Cko	13	BG																
30 May	S15W21	142	250	5	Cho	8	B	3													1		
31 May	S15W35	142	250	6	Cho	8	B	2					6										
01 Jun	S15W48	142	180	4	Cso	5	B																
02 Jun	S15W60	141	130	3	Cso	2	B																
03 Jun	S14W74	142	130	5	Cso	4	B																
04 Jun	S14W88	143	130	6	Cso	3	B	1															
								20	0	0	0	6	1	0	0	0	0						

Crossed West Limb.

Absolute heliographic longitude: 131

### **Region 4447**

24 May	S17E23	177	120	6	Dao	14	B	1					1								
25 May	S17E11	175	150	6	Dso	5	B	2					2								
26 May	S16W02	175	160	7	Dsi	13	B														
27 May	S17W14	175	145	7	Dsi	13	B														
28 May	S17W28	175	140	6	Dsi	8	B	1					1								
29 May	S17W41	175	90	6	Cso	3	B														
30 May	S17W55	176	80	2	Hsx	1	A														
31 May	S17W69	176	100	2	Hsx	1	A	1													
01 Jun	S17W82	177	60	2	Hsx	1	A														
								5	0	0	0	4	0	0	0	0	0				

Crossed West Limb.

Absolute heliographic longitude: 175



### *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 4448</b>																		
25 May	S07E55	132	75	8	Dao	4	B											
26 May	S08E42	132	80	8	Dao	10	B	1				1						
27 May	S07E28	132	70	8	Cao	6	B											
28 May	S06E13	134	10	5	Bxo	7	B											
29 May	S05W00	133	0	1	Axx	2	A											
30 May	S05W12	133	plage															
31 May	S05W27	134	plage															
01 Jun	S05W42	136	plage															
02 Jun	S05W57	138	plage															
03 Jun	S05W71	138	plage															
04 Jun	S05W85	139	plage															
								1	0	0	1	0	0	0	0	0		

Crossed West Limb.  
 Absolute heliographic longitude: 133

<b>Region 4449</b>																		
25 May	S10E50	137	80	3	Dao	3	B											
26 May	S11E37	136	70	4	Hsx	4	A											
27 May	S10E23	138	65	2	Hax	2	A											
28 May	S10E11	136	40	3	Cao	2	B											
29 May	S10W02	136	40	4	Cso	5	B	1			1							
30 May	S09W16	137	40	6	Cso	5	B	2			1	1						
31 May	S09W30	137	30	2	Hsx	1	A	3			3							
01 Jun	S09W43	137	20	4	Cro	6	B	1			1							
02 Jun	S08W56	137	plage															
03 Jun	S08W70	137	plage					1			1							
04 Jun	S08W84	138	plage															
								8	0	0	7	1	0	0	0	0		

Crossed West Limb.  
 Absolute heliographic longitude: 136



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares								
	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

#### ***Region 4450***

25 May	N10E49	138	10	1	Bxo	5	B										
26 May	N09E36	137	5	5	Bxo	4	B										
27 May	N10E21	140	plage														
28 May	N10E08	139	plage														
29 May	N10W06	140	plage														
30 May	N10W20	141	plage														
31 May	N10W34	141	plage														
01 Jun	N10W48	142	plage														
02 Jun	N10W62	143	plage														
03 Jun	N10W76	143	plage														
04 Jun	N10W90	144	plage														
								0	0	0	0	0	0	0	0	0	0

Crossed West Limb.  
 Absolute heliographic longitude: 140

#### ***Region 4451***

25 May	S16E65	122	30	3	Cro	3	B										
29 May	S17E12	121	plage														
30 May	S17W01	122	plage														
31 May	S17W15	122	plage														
01 Jun	S17W29	123	plage														
02 Jun	S17W43	124	plage														
03 Jun	S17W57	124	plage														
04 Jun	S17W71	125	plage														
05 Jun	S17W85	126	plage														
								0	0	0	0	0	0	0	0	0	0

Crossed West Limb.  
 Absolute heliographic longitude: 122



**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 4452</b>																				
26 May	N09W07	181	30	3	Cro	3	B													
27 May	N09W21	181	60	5	Cai	9	B													
28 May	N09W34	181	100	6	Dai	14	BG	1				1								
29 May	N10W48	182	90	8	Dai	14	BG													
30 May	N10W61	182	70	7	Dai	9	BG													
31 May	N10W75	182	30	7	Dri	4	B	2				1								
01 Jun	N10W89	183	10	2	Bxo	2	B													
								3	0	0		2	0	0	0	0	0			

Crossed West Limb.  
Absolute heliographic longitude: 181

<b>Region 4454</b>																				
27 May	S15E61	99	10	1	Axx	1	A	1												
28 May	S15E48	99	15	1	Hrx	1	A													
29 May	S15E34	100	10	1	Hrx	1	A													
30 May	S15E20	101	10	1	Hrx	1	A													
31 May	S14E06	101	10	1	Hrx	1	A													
01 Jun	S15W07	101	5	1	Axx	1	A													
02 Jun	S15W21	102	plage																	
03 Jun	S15W35	102	plage																	
04 Jun	S15W49	103	plage																	
05 Jun	S15W63	104	plage																	
06 Jun	S15W77	105	plage																	
								1	0	0		0	0	0	0	0	0			

Died on Disk.  
Absolute heliographic longitude: 101



**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 4455</b>																							
27 May	N14E78	82	450	5	Hax	2	A	1															
28 May	N15E65	82	380	10	Dho	3	B	2					1										
29 May	N15E52	83	370	11	Eko	5	B	5	1				4										
30 May	N15E38	83	300	10	Dho	10	B																
31 May	N15E24	83	320	11	Cko	6	B	2															
01 Jun	N15E11	83	300	10	Cko	10	B						1										
02 Jun	N13W05	86	300	7	Cko	12	B	5	2				9	1	1								
03 Jun	N14W21	88	360	8	Dki	17	BGD	6	2	1			6	2									
04 Jun	N15W34	88	325	7	Dki	14	BG	1					1										
05 Jun	N15W48	89	250	6	Dhi	9	B	1					1										
06 Jun	N15W61	89	250	4	Cho	4	BG	1															
07 Jun	N15W75	90	110	3	Hsx	1	A	1															
								25	5	1		23	3	1	0	0							

Still on Disk.

Absolute heliographic longitude: 86

**Region 4456**

30 May	N14E56	65	10	7	Bxo	3	B														
31 May	N14E42	65	plage																		
01 Jun	N14E28	66	plage																		
02 Jun	N14E14	67	plage																		
03 Jun	N14E01	67	plage																		
04 Jun	N14W13	67	plage																		
05 Jun	N18W21	63	30	5	Cri	10	BG														
06 Jun	N18W34	62	80	7	Dai	15	BGD	4					6								
07 Jun	N17W48	63	70	8	Dai	14	BG	8					2								
								12	0	0		8	0	0	0	0	0				

Still on Disk.

Absolute heliographic longitude: 67



### *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 4457</b>																							
30 May	S10W00	121	20	8	Cro	5	B	1				1											
31 May	S09W14	121	20	4	Cro	8	B	2				2											
01 Jun	S09W27	121	10	5	Bxo	7	B																
02 Jun	S08W40	121	10	6	Bxo	5	B																
03 Jun	S08W55	123	10	4	Bxo	3	B					1											
04 Jun	S09W72	127	15	6	Cro	6	B	2				1											
05 Jun	S09W87	128	40	8	Cso	6	B	4				1											
								9	0	0		6	0	0	0	0							

Crossed West Limb.  
Absolute heliographic longitude: 121

<b>Region 4458</b>																							
01 Jun	S04E20	75	30	4	Cro	6	B																
02 Jun	S04E07	74	50	6	Dsi	7	B					2											
03 Jun	S05W08	76	100	7	Dai	12	B																
04 Jun	S05W21	76	130	8	Dai	14	BG	1															
05 Jun	S05W35	76	220	8	Dai	17	BD					1											
06 Jun	S05W49	77	250	6	Dhi	8	B					1											
07 Jun	S05W62	77	230	7	Dso	5	B																
								1	0	0		4	0	0	0	0							

Still on Disk.  
Absolute heliographic longitude: 74

<b>Region 4459</b>																							
01 Jun	N14E63	32	10	5	Bxo	7	B																
02 Jun	N14E21	30	25	7	Cso	3	B																
03 Jun	N14E36	32	120	8	Dai	9	BG	1															
04 Jun	N14E22	33	130	8	Dai	16	BG																
05 Jun	N14E08	33	80	8	Dsi	10	B	4				1											
06 Jun	N14W04	33	80	8	Dsi	8	B																
07 Jun	N14W18	33	40	8	Cso	6	B	1				2											
								6	0	0		3	0	0	0	0							

Still on Disk.  
Absolute heliographic longitude: 33



### *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 4460*

02 Jun	N22W59	140	30	5	Dro	4	B											
03 Jun	S22W74	142	90	8	Dso	6	B											
04 Jun	S22W88	142	90	9	Dso	4	B											
								0	0	0	0	0	0	0	0	0	0	0

Crossed West Limb.  
Absolute heliographic longitude: 140

#### *Region 4461*

02 Jun	S20E72	9	70	6	Dao	3	B	3	1									
03 Jun	S21E59	8	50	4	Cai	4	BG											
04 Jun	S21E45	9	25	4	Cri	8	B	1										
05 Jun	S21E31	10	20	3	Cro	4	B											
06 Jun	S21E18	10	20	4	Cro	3	B		1					1				
07 Jun	S21E05	10	10	3	Bxo	2	B											
								5	2	0	0	0	0	1	0	0		

Still on Disk.  
Absolute heliographic longitude: 10

#### *Region 4462*

02 Jun	N17E75	6	70	5	Dao	6	B											
03 Jun	N17E60	7	60	6	Dao	6	B											
04 Jun	N17E47	8	40	7	Dao	12	B											
05 Jun	N17E32	9	70	7	Dai	8	B	2				1						
06 Jun	N16E19	9	90	8	Dai	16	B											
07 Jun	N15E05	10	70	8	Dsi	10	B	2				2						
								4	0	0	3	0	0	0	0	0		

Still on Disk.  
Absolute heliographic longitude: 10

#### *Region 4463*

05 Jun	N16E63	338	50	2	Hsx	1	A											
06 Jun	N17E51	337	40	2	Hsx	1	A											
07 Jun	N17E37	338	40	2	Hsx	1	A											
								0	0	0	0	0	0	0	0	0	0	0

Still on Disk.  
Absolute heliographic longitude: 338



**Region Summary - continued**

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	Helio Lon	Area 10 <sup>-6</sup>	Extent hemi.	Spot (helio) Class	Spot Count	Mag Class	X-ray			Optical							
								C	M	X	S	1	2	3	4			
<b>Region 4464</b>																		
06 Jun	S12E52	336	50	5	Dao	4	B											
07 Jun	S12E38	337	60	6	Dai	5	B	2				3						
								2	0	0		3	0	0	0	0	0	

Still on Disk.

Absolute heliographic longitude: 337



## ***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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