

**Space Weather Highlights**  
**24 June - 30 June 2024**

**SWPC PRF 2548**  
**01 July 2024**

Solar activity reached moderate levels on 24-25 Jun. The largest flare was an M1.8 flare from Region 3712 (S26 L=170, class/area=Eao/220) at 24/0417 UTC. Other M1 flares were observed from Regions 3713 (S14 L=153, class/area=Ekc/360), 3720 (S06 L=54, class/area=Dai/150), and 3723 (S19 L=08, class/area=Fai/210). Solar activity was at low levels for 26-30 Jun, with only C-class flares observed. Other notable activity included an approximately 35 degree filament erupted late on 24 Jun, centered near S19W58.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was reached G4 (Severe) storm levels on 28 Jun due to the arrival of a CME that lifted off the Sun on 24 Jun. Total field strength reached 30 nT and the Bz component reached -22 nT. Solar wind speeds increased steadily from near 300 km/s to approximately 490 km/s. Active levels were reached early on 29 Jun due to continued CME influences. Quiet to unsettled levels were observed on 24-27 Jun, and 30 Jun.

**Space Weather Outlook**  
**01 July - 27 July 2024**

Solar activity is expected to be low levels, with occasional M-class flares for the duration of the 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 levels from 01-27 Jul.

Geomagnetic field activity is expected to be at unsettled to active levels on 01-03 Jul due to possible glancing influences from multiple CMEs. Unsettled to active levels are expected on 14-16 Jul due to influence from a recurrent, positive polarity coronal hole high speed stream (CH HSS). Quiet to unsettled levels are expected on 05-13 Jul and 17-27 Jul.



### **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					
24 June	199	141	1340	C3.8	5	5	0	13	2	0	0	0
25 June	194	129	780	C2.6	3	1	0	8	0	0	0	0
26 June	181	135	850	C1.5	2	0	0	3	0	0	0	0
27 June	183	146	820	C1.2	12	0	0	5	0	0	0	0
28 June	181	162	1320	C1.2	8	0	0	10	0	0	0	0
29 June	186	205	1250	C1.1	7	0	0	2	0	0	0	0
30 June	174	199	1150	C1.1	6	0	0	6	0	0	0	0

### **Daily Particle Data**

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		>2MeV	Electron Fluence (electrons/cm <sup>2</sup> -day -sr)	
	>1 MeV	>10 MeV		>2MeV	
24 June	1.6e+05	1.9e+04			1.5e+06
25 June	4.3e+06	1.8e+04			1.2e+06
26 June	1.9e+06	1.8e+04			1.2e+06
27 June	1.5e+06	1.7e+04			1.1e+06
28 June	1.4e+06	1.7e+04			1.0e+06
29 June	2.0e+05	1.7e+04			1.0e+06
30 June	7.4e+05	1.9e+04			1.2e+06

### **Daily Geomagnetic Data**

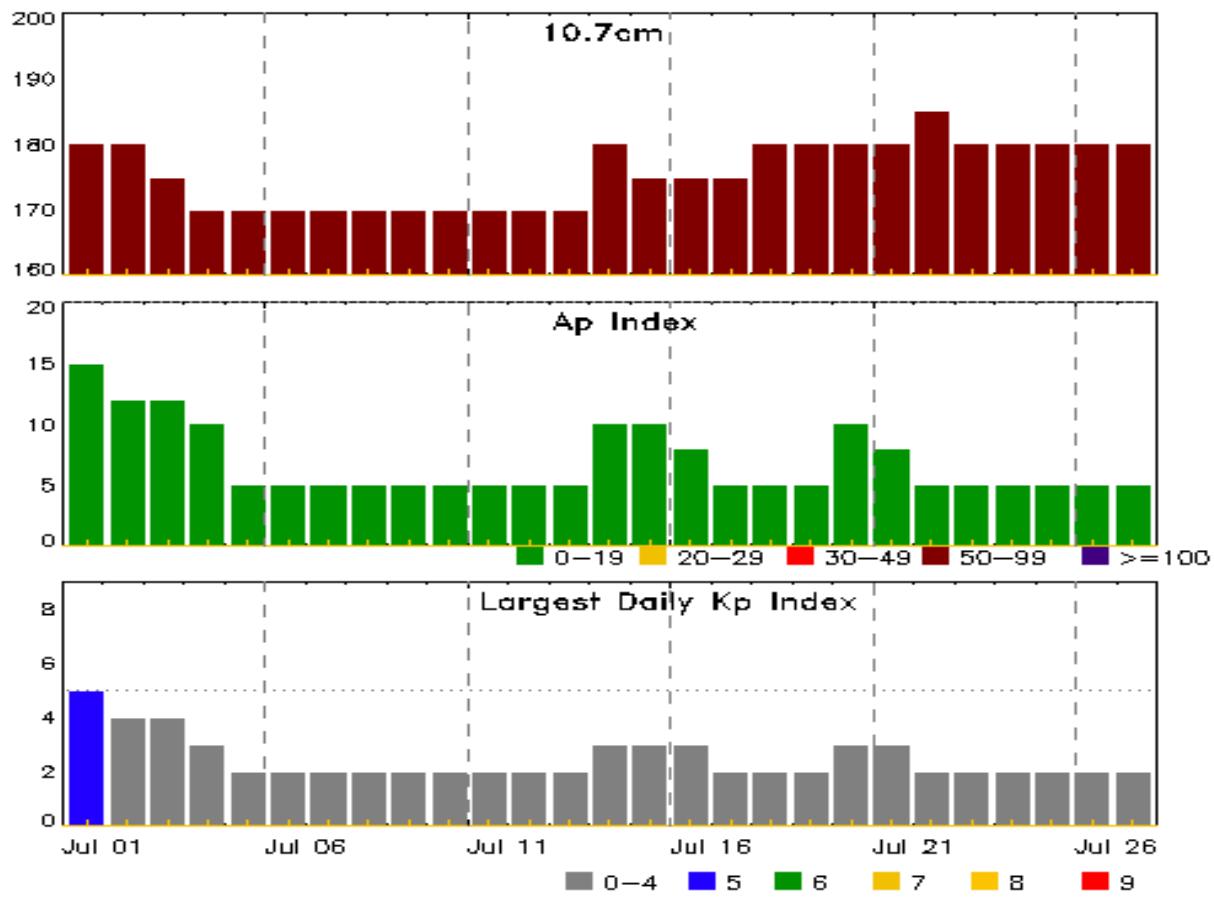
Date	Middle Latitude		High Latitude		Estimated	
	A	K-indices	A	K-indices	A	Planetary K-indices
24 June	7	2-0-0-2-3-3-2-2	2	2-1-1-0-0-1-0-1	5	2-1-1-1-1-1-2
25 June	9	1-1-3-3-2-3-2-1	13	2-2-5-3-2-3-1-1	9	2-1-3-3-2-3-2-2
26 June	8	1-1-2-3-3-2-2-1	12	1-1-2-4-4-3-2-1	9	2-2-3-3-3-2-2-2
27 June	11	2-2-1-2-3-3-3-3	6	2-1-1-0-3-2-2-2	9	2-2-1-2-2-2-3-3
28 June	32	3-4-3-5-6-4-4-3	36	4-4-4-6-5-4-4-4	59	4-4-4-6-8-5-5-4
29 June	11	3-2-2-3-3-2-3-2	19	4-2-2-4-4-4-3-3	14	4-3-2-3-2-3-3-3
30 June	10	2-3-1-2-3-3-2-2	17	3-2-2-3-4-5-2-2	12	3-3-2-2-3-3-2-2

## ***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>
25 Jun 1628	WARNING: Geomagnetic K = 4	25/1630 - 2200
26 Jun 1032	WARNING: Geomagnetic K = 4	26/1032 - 1800
26 Jun 1106	WATCH: Geomagnetic Storm Category G1 predicted	
27 Jun 2154	WARNING: Geomagnetic K = 4	27/2153 - 28/0600
28 Jun 0151	WARNING: Geomagnetic K = 5	28/0150 - 0600
28 Jun 0221	ALERT: Geomagnetic K = 4	
28 Jun 0555	EXTENDED WARNING: Geomagnetic K = 4	27/2153 - 28/1500
28 Jun 0555	EXTENDED WARNING: Geomagnetic K = 5	28/0150 - 1500
28 Jun 0926	WARNING: Geomagnetic Sudden Impulse expected	28/1005 - 1035
28 Jun 1125	ALERT: Geomagnetic K = 5	
28 Jun 1136	EXTENDED WARNING: Geomagnetic K = 4	27/2153 - 28/2100
28 Jun 1136	EXTENDED WARNING: Geomagnetic K = 5	28/0150 - 2100
28 Jun 1136	WARNING: Geomagnetic K = 6	28/1135 - 1800
28 Jun 1147	ALERT: Geomagnetic K = 6	
28 Jun 1221	ALERT: Geomagnetic K = 5	
28 Jun 1311	ALERT: Geomagnetic K = 6	
28 Jun 1324	WARNING: Geomagnetic K>= 7	28/1325 - 2100
28 Jun 1328	ALERT: Geomagnetic K = 7	
28 Jun 1335	EXTENDED WARNING: Geomagnetic K = 6	28/1135 - 2100
28 Jun 1418	ALERT: Geomagnetic K = 8	
28 Jun 1522	ALERT: Geomagnetic K = 5	
28 Jun 1915	ALERT: Geomagnetic K = 5	
28 Jun 2054	EXTENDED WARNING: Geomagnetic K = 4	27/2153 - 29/0900
28 Jun 2054	EXTENDED WARNING: Geomagnetic K = 5	28/0150 - 29/0600
29 Jun 0859	EXTENDED WARNING: Geomagnetic K = 4	27/2153 - 29/1800
30 Jun 1714	WARNING: Geomagnetic K = 4	30/1710 - 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
01 Jul	180	15	5	15 Jul	175	10	3
02	180	12	4	16	175	8	3
03	175	12	4	17	175	5	2
04	170	10	3	18	180	5	2
05	170	5	2	19	180	5	2
06	170	5	2	20	180	10	3
07	170	5	2	21	180	8	3
08	170	5	2	22	185	5	2
09	170	5	2	23	180	5	2
10	170	5	2	24	180	5	2
11	170	5	2	25	180	5	2
12	170	5	2	26	180	5	2
13	170	5	2	27	180	5	2
14	180	10	3				

### *Energetic Events*

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat	Rgn #	Radio Flux 245	2695	II	IV
24 Jun	0408	0417	0423	M1.3	0.008					3712		
24 Jun	0445	0452	0456	M1.8	0.010					3712		
24 Jun	1109	1113	1115	M1.1	0.004	1F	S05E18			3720		
24 Jun	1144	1148	1153	M1.5	0.007					3713		150
24 Jun	1902	1910	1914	M1.1	0.005					3713		
25 Jun	1226	1245	1306	M1.0	0.019	SF	S18E58			3723		

### *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat	Rgn #
24 Jun	0103	0104	0107		SF	S13W77	3713
24 Jun	0408	0417	0423	M1.3			3712
24 Jun	0445	0452	0456	M1.8			3712
24 Jun	0549	0626	0722		SF	S04E21	3720
24 Jun	0650	0653	0659		SF	S17E71	3723
24 Jun	0819	0821	0826		SF	S05E20	3720
24 Jun	0822	0824	0833		SF	S14W77	3713
24 Jun	0955	0956	1007		SF	S05E20	3720
24 Jun	1014	1022	1030		SF	S15W80	3713
24 Jun	1106	1112	1130	M1.1	1F	S05E18	3720
24 Jun	1144	1148	1153	M1.5			3713
24 Jun	1319	1324	1329	C8.6			3713
24 Jun	1355	1357	1402	C7.5	1N	S05E18	3720
24 Jun	1359	1400	1402		SF	S15W80	3713
24 Jun	1554	1554	1602		SF	S14W82	3713
24 Jun	1606	1610	1614	C8.3			3713
24 Jun	1643	1645	1654		SF	S14W79	3713
24 Jun	1645	1646	1650		SF	S05E17	3720
24 Jun	1701	1713	1726	C7.8			3723
24 Jun	1902	1910	1914	M1.1			3713
24 Jun	1923	1926	1935	C5.8			3716
24 Jun	2051	2051	2058		SF	S13E05	3719
24 Jun	2128	2130	2140		SF	S20E66	3723
25 Jun	1226	1245	1306	M1.0	SF	S18E58	3723
25 Jun	1915	1925	1935	C5.6	SN	S19E46	3723



## Flare List

Date	Time			Optical				
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #	
25 Jun	2003	2013	2033	C3.3	SF	S19E48	3723	
25 Jun	2042	2055	2059		SF	S19E48	3723	
25 Jun	2150	2152	2154		SF	S14E27	3724	
25 Jun	2158	2204	2211	C3.7			3727	
25 Jun	2218	2218	2222		SF	N25E31	3721	
25 Jun	2222	2230	2311		SF	S11W05	3719	
25 Jun	2223	2230	2311		SF	S06W06	3720	
26 Jun	0008	0012	0017	C4.7			3727	
26 Jun	0021	0022	0024		SF	S10E26	3724	
26 Jun	1320	1321	A1400		SF	S19E37	3723	
26 Jun	1442	1530	1558	C6.2	SF	S26E45	3723	
27 Jun	0109	0118	0125		C3.1		3723	
27 Jun	0221	0230	0237	C2.9			3723	
27 Jun	0321	0345	0356		C2.5		3729	
27 Jun	0356	0428	0444	C4.8	SF	S02E65	3729	
27 Jun	0947	0955	1007		C2.0		3727	
27 Jun	1431	1438	1443	C3.1	SF	S19E25	3723	
27 Jun	1542	1550	1557		C2.1		3723	
27 Jun	1622	1625	1629		SF	S17E42	3727	
27 Jun	1702	1712	1719	C2.0	SF	S18W42	3719	
27 Jun	1935	1935	1940		SF	S24E31	3728	
27 Jun	1946	1954	2010	C2.4			3728	
27 Jun	2136	2140	2143		C2.7		3723	
27 Jun	2143	2153	2201	C4.0			3727	
27 Jun	2338	2347	2351		C6.6		3730	
28 Jun	0154	0208	0223	C3.9				
28 Jun	0223	0227	0231		C3.7		3728	
28 Jun	0433	0433	0445		SF	S06E54	3729	
28 Jun	0625	0630	0639	C2.0			3727	
28 Jun	0626	0628	0639			S19E29	3728	
28 Jun	0918	0925	0932	C1.8				
28 Jun	0932	0935	0939		C1.8			
28 Jun	1135	1142	1147	C2.3			3728	
28 Jun	B1405	1405	1409		SF	S18E12	3723	
28 Jun	1412	1413	1421		SF	S20E16	3723	
28 Jun	1426	1440	1448	C3.2				
28 Jun	1426	1426	1430		SF	S17E34	3727	
28 Jun	1532	1533	1540		SF	S17E11	3723	



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
28 Jun	1630	1632	1639		SF	S17E09	3723
28 Jun	1704	1704	1711		SF	S05E25	3727
28 Jun	1836	1845	1852	C2.3	SF	S17E08	3723
28 Jun	2052	2053	2054		SF	S25E19	3728
29 Jun	0602	0611	0620	C2.4			3734
29 Jun	0851	0852	0856		SF	S19E19	3728
29 Jun	1308	1313	1322	C2.3			3728
29 Jun	1509	1515	1520	C1.8	SF	N12E75	3734
29 Jun	1520	1529	1532	C5.6			3734
29 Jun	1532	1538	1546	C5.9			3734
29 Jun	2240	2243	2248	C2.2			3734
29 Jun	2359	0014	0036	C2.1			3734
30 Jun	0407	0416	0428	C2.2			3723
30 Jun	0428	0434	0439	C1.9			3731
30 Jun	0548	0618	0639	C3.8	SF	N11E70	3734
30 Jun	0807	0809	0817		SF	N05E24	3733
30 Jun	0954	0956	1002		SF	N05E24	3733
30 Jun	1048	1053	1055		SF	N05E24	3733
30 Jun	1301	1303	1322		SF	S18W33	3724
30 Jun	2056	2103	2110	C2.8	SF	S19W05	3727
30 Jun	2221	2228	2237	C2.2			
30 Jun	2329	2339	2355	C2.2			



## 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
<b>Region 3712</b>																	
12 Jun	S24E52		172		180	6	Dao	11	B	1			4				
13 Jun	S24E38		173		240	9	Dac	18	BG	1			7				
14 Jun	S24E25		171		300	11	Ekc	23	BGD	12	1		3	1			
15 Jun	S25E14		170		850	12	Ekc	18	BGD	23	1		29				
16 Jun	S26E01		169		1000	14	Ekc	31	BGD	20			16	5			
17 Jun	S26W12		170		1100	14	Ekc	40	BGD	6	2		14	1			
18 Jun	S26W26		170		1150	14	Ekc	40	BGD	9	2		6	1			
19 Jun	S24W39		170		1160	14	Ekc	21	BGD	2			7				
20 Jun	S24W52		170		1050	15	Ekc	15	BGD				2	1			
21 Jun	S26W65		170		750	15	Ekc	9	BG	2			2				
22 Jun	S25W77		168		720	15	Ekc	9	BG	3			4				
23 Jun	S25W90		168		220	11	Eao	4	BG	2	1		2				
										81	7	0	96	9	0	0	
													0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 169

## Region 3713

12 Jun	S13E68		156		150	8	Dso	3	B	2			1			
13 Jun	S13E54		157		170	8	Dso	9	B	2	1		1	1		
14 Jun	S11E37		159		100	6	Dso	7	BG	1			2			
15 Jun	S14E29		155		130	10	Dso	10	BG	1			1	1		
16 Jun	S15E15		155		200	11	Eso	18	BG	1			1			
17 Jun	S16E01		157		150	11	Eso	15	BG	1			7			
18 Jun	S16W13		157		170	11	Esi	20	BG	1			2	1		
19 Jun	S15W27		158		460	12	Ekc	49	BGD	3			6			
20 Jun	S14W39		157		740	11	Ekc	29	BGD	1			3			
21 Jun	S14W53		158		950	11	Ekc	24	BGD	5			4			
22 Jun	S14W65		156		910	11	Ekc	24	BGD	1			2			
23 Jun	S14W78		156		440	13	Ekc	11	BGD				7			
24 Jun	S14W88		153		360	12	Ekc	6	BG	2	2		6			
										21	3	0	43	3	0	0
													0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 157

## ***Region Summary - continued***

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
<b>Region 3716</b>																
12 Jun	N10E62		162		20		3	Cro	3	B						
13 Jun	N10E48		163		60		3	Dao	5	B						
14 Jun	N11E34		162		80		5	Dso	5	B						
15 Jun	N10E23		161		140		8	Dsi	19	B						4
16 Jun	N09E09		161		180		9	Dac	20	B	1					4
17 Jun	N10W05		163		480		10	Dkc	35	BG						1
18 Jun	N10W19		163		310		10	Dki	24	BG						
19 Jun	N10W32		163		370		10	Dki	25	BG						11
20 Jun	N10W46		164		430		12	Ekc	22	BG	2					2
21 Jun	N10W59		164		500		12	Ekc	14	BG	1					5
22 Jun	N10W72		163		450		12	Ekc	10	BG	1	1				3
23 Jun	N10W85		163		230		12	Eao	6	B	1	1				1
24 Jun	N09W95		160		200		11	Eao	4	B	1					
											7	2	0	30	2	0
														0	0	0

Crossed West Limb.

Absolute heliographic longitude: 163

## **Region 3718**

19 Jun	N15E13		118		20		3	Cro	3	B	1					1
20 Jun	N14W00		118		20		1	Hrx	1	A						
21 Jun	N12W13		118		plage											
22 Jun	N12W27		118		plage											
23 Jun	N12W41		119		plage											
24 Jun	N12W55		120		plage											
25 Jun	N12W69		121		plage											
26 Jun	N12W83		121		plage											
											1	0	0	1	0	0
														0	0	0

Crossed West Limb.

Absolute heliographic longitude: 118



## ***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	Class	C	M	X	S	1	2	3
<b>Region 3719</b>															
19 Jun	S12E68	63	20	3	Cro	7	B								
20 Jun	S13E55	63	70	8	Dao	6	B	3	2			3	2		
21 Jun	S13E41	64	90	8	Dao	5	B								
22 Jun	S14E24	67	150	9	Dso	10	B								
23 Jun	S15E11	67	230	10	Dao	14	B	1				3			
24 Jun	S14E02	63	250	9	Cki	14	B					1			
25 Jun	S14W12	64	150	10	Dso	13	B					1			
26 Jun	S15W25	63	170	8	Cso	7	B								
27 Jun	S15W39	64	140	4	Cso	3	B	1				1			
28 Jun	S16W55	67	240	4	Cso	3	B								
29 Jun	S16W69	68	240	4	Cso	4	B								
30 Jun	S16W81	67	220	4	Cso	2	B					5	2	0	9
												2	0	9	2
												0	0	0	0

Still on Disk.

Absolute heliographic longitude: 63

## **Region 3720**

19 Jun	S04E77	54	30	3	Dao	5	B								
20 Jun	S05E62	55	60	9	Dao	5	B								
21 Jun	S05E49	56	80	4	Cao	8	B	2				3			
22 Jun	S05E36	55	120	8	Dai	13	B	1	1			11	2		
23 Jun	S05E23	55	140	9	Dai	13	B	1							
24 Jun	S06E11	54	150	8	Dai	15	BG	1	1			4	2		
25 Jun	S06W03	55	130	8	Dai	15	BG					1			
26 Jun	S06W16	54	130	8	Dai	18	B								
27 Jun	S06W30	55	90	8	Dao	6	B								
28 Jun	S05W43	55	80	8	Dao	5	B								
29 Jun	S05W56	55	30	8	Cro	3	B								
30 Jun	S05W67	53	30	4	Bxo	3	B					5	2	0	19
												4	0	0	0

Still on Disk.

Absolute heliographic longitude: 55

## ***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
<b>Region 3721</b>																	
21 Jun	N27E59		46	20	1	Hsx	1	A									
22 Jun	N26E59		32	90	1	Hsx	1	A									
23 Jun	N26E50		28	100	3	Hsx	1	A	1								
24 Jun	N25E38		26	100	4	Hax	1	A									
25 Jun	N25E24		28	100	3	Hax	2	A				1					
26 Jun	N25E11		27	100	3	Hax	2	A									
27 Jun	N25W02		27	90	3	Hax	2	A									
28 Jun	N26W15		27	110	3	Hax	3	A									
29 Jun	N26W28		27	90	3	Hax	3	A									
30 Jun	N26W41		27	60	2	Hax	3	A									
										1	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 27

## **Region 3722**

21 Jun	S09E59		162	30	3	Dso	2	B									
22 Jun	S13E62		29	110	4	Dso	2	B	1								
23 Jun	S14E50		28	60	3	Hsx	1	A	1								
24 Jun	S12E34		29	50	2	Hsx	1	A									
25 Jun	S12E22		30	50	2	Hsx	1	A									
26 Jun	S12E09		29	60	2	Hsx	1	A									
27 Jun	S12W05		30	60	2	Hsx	1	A									
28 Jun	S11W17		29	90	2	Hsx	1	A									
29 Jun	S11W30		29	90	2	Hsx	1	A									
30 Jun	S11W43		29	80	2	Hsx	1	A									
										2	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 30



## ***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
<b>Region 3723</b>														
23 Jun	S18E67		11	150	8	Dao	5	B	1	1			1	1
24 Jun	S19E54		11	180	9	Dso	7	B	1				2	
25 Jun	S19E44		8	210	17	Fai	12	BGD	2	1			4	
26 Jun	S19E30		8	170	17	Fai	7	BGD	1				2	
27 Jun	S19E21		6	110	9	Dao	10	BG	5				1	
28 Jun	S20E07		5	50	6	Cro	6	B	1				5	
29 Jun	S20W07		6	20	4	Bxo	4	B						
30 Jun	S20W21		7	10	1	Bxo	2	B	1					
										12	2	0	15	1
										0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 5

### **Region 3724**

23 Jun	S11E48		30	60	3	Hsx	1	A						
24 Jun	S14E35		28	50	2	Hsx	1	A						
25 Jun	S14E22		30	50	2	Hsx	1	A					1	
26 Jun	S14E08		30	50	2	Hsx	1	A					1	
27 Jun	S14W04		29	50	2	Hsx	1	A						
28 Jun	S14W17		29	80	2	Hsx	1	A						
29 Jun	S15W30		29	80	2	Hsx	1	A						
30 Jun	S15W43		29	60	1	Hsx	1	A					1	
										0	0	0	3	0
										0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 29

### **Region 3725**

23 Jun	N18E41		37	90	5	Dai	4	BD						
24 Jun	N18E27		38	plage										
25 Jun	N18E13		39	plage										
26 Jun	N18W01		39	plage										
27 Jun	N18W15		40	plage										
28 Jun	N18W29		41	plage										
29 Jun	N18W43		42	plage										
30 Jun	N18W57		43	plage										
										0	0	0	0	0
										0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 39

## ***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
<b>Region 3726</b>																
23 Jun	S02E57		57	30	3	Cao	6	B								
24 Jun	S04E51		13	0	6	Bxo	2	B								
25 Jun	S04E35		17	plage												
26 Jun	S04E20		18	plage												
27 Jun	S04E05		20	plage												
28 Jun	S04W10		22	plage												
29 Jun	S04W25		24	plage												
30 Jun	S04W40		26	plage												
										0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 20

<b>Region 3727</b>															
25 Jun	S18E59	353	80	2	Hsx	1	A	1							
26 Jun	S18E46	352	100	3	Cso	3	B	1							
27 Jun	S18E32	353	110	5	Cso	7	B	2	1						
28 Jun	S18E20	352	230	4	Hsx	2	A	1	2						
29 Jun	S18E09	350	220	5	Cso	6	B								
30 Jun	S19W02	348	220	6	Cao	5	B	1	1						
								6	0	0	4	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 348

<b>Region 3728</b>															
25 Jun	S25E55	357	10	2	Bxo	4	B								
26 Jun	S27E42	356	10	2	Bxo	2	B								
27 Jun	S27E28	357	30	3	Cao	4	B	1	1						
28 Jun	S27E17	355	100	5	Dso	5	B	2	2						
29 Jun	S27E04	355	80	5	Dao	7	B	1	1						
30 Jun	S27W09	355	60	5	Dao	5	B								
								4	0	0	4	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 355



## ***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
<b>Region 3729</b>																	
26 Jun	S03E65		333		60	5	Dso	4	B								
27 Jun	S03E52		333		110	10	Dai	7	B	2				1			
28 Jun	S04E42		330		240	14	Eao	8	B					1			
29 Jun	S05E29		330		220	14	Eao	10	B								
30 Jun	S04E14		332		200	14	Eai	12	B				2	0	0	0	
														0	0	0	

Still on Disk.

Absolute heliographic longitude: 332

### ***Region 3730***

27 Jun	S18E09		16		30	5	Cso	5	B	1						
28 Jun	S18W05		17		50	5	Cao	5	B							
29 Jun	S18W20		19		20	4	Cro	4	B							
30 Jun	S18W33		19		10	1	Axx	1	A				1	0	0	0
													0	0	0	0

Still on Disk.

Absolute heliographic longitude: 17

### ***Region 3731***

28 Jun	S16E49		323		10	1	Axx	1	A							
29 Jun	S16E35		324		10	1	Axx	1	A							
30 Jun	S16E21		325		10	1	Axx	1	A	1			1	0	0	0
													0	0	0	0

Still on Disk.

Absolute heliographic longitude: 325

### ***Region 3732***

28 Jun	S19E14		358		40	2	Hax	2	A							
29 Jun	S19E02		357		40	2	Hax	2	A				0	0	0	0
30 Jun	S19W11		357		30	3	Cao	4	B				0	0	0	0
													0	0	0	0

Still on Disk.

Absolute heliographic longitude: 357

## ***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
<b>Region 3733</b>																
29 Jun	N05E28		331	30	5	Cao	5	B								
30 Jun	N05E14		332	40	7	Dao	4	B	0	0	0	3	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 332

### ***Region 3734***

29 Jun	N08E70		289	60	7	Cao	3	B	6							
30 Jun	N08E59		287	60	9	Dao	4	B	1	7	0	0	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 287

### ***Region 3735***

29 Jun	N17E75		284	20	2	Hsx	1	A								
30 Jun	N17E62		284	60	2	Hsx	1	A	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 284



## ***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.  
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