Space Weather Highlights
08 June - 14 June 2026

SWPC PRF 2650
15 June 2026

Solar activity was at low levels the entire period, with only C-class flares observed. There were five flares at or above the C5 level, with all but one originating from Region 4465 (N09, L=292, class/area=Dhi/255 on 11 Jun). These included: a C7.2 at 09/0249 UTC, a C6.7/1f at 11/0026 UTC, a C9.0 at 11/0828 UTC (the largest of the period), and finally a C5.2 flare at 12/0214 UTC. The only other flare greater than C5 was a C6.1 flare at 11/0044 UTC from Region 4456 (N17, L=63, class/area=Dai/80 on 08 Jun).

Additional activity included a type-II radio sweep at 09/1557 UTC, with an estimated velocity of 917 km/s, likely associated with low-level C-class flaring from Region 4463 (N16, L=339, class/area=Hsx/70 on 10 Jun). An associated CME was first observed in the NE quadrant of LASCO/C2 around 09/1630 UTC, which correlated to an eruption near (and south of) Region 4463. Analysis suggested glancing effects near-Earth on 13-14 June. A second type-II sweep (est. velocity = 1,127 km/s) was detected by the RSTN stations at 10/1715 UTC. An associated CME was first observed in the NE quadrant in LASCO/C2 imagery at 10/1800 UTC, with modeling and analysis indicating no Earth-directed component was likely. The third and final type-II sweep of the period was associated with the C6.7/1f flare from Region 4465 observed at 11/0002 UTC, and had an estimated velocity of 918 km/s. Additionally, a type-IV radio sweep and a partial halo CME were observed, with analysis indicating potential impact near-Earth starting early on 13 Jun.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 08-10 and 13-14 Jun, with a peak flux of 4,259 pfu at 09/1525 UTC. Flux levels were low to moderate on 11-12 Jun.

Geomagnetic field activity was at quiet to unsettled levels on 08-10 and 14 Jun under nominal conditions. Active to G1 (Minor) storm conditions were observed on 11 Jun with unsettled to active conditions observed on 12-13 Jun under negative polarity coronal hole high speed stream (CH HSS) influences, combined with weak CME effects, likely associated with the CME that left the Sun on 09 Jun.

Space Weather Outlook
15 June - 11 July 2026

Solar activity is expected to be at mostly low levels through 19 Jun, with increasing chances for M-class activity after 20 Jun with the anticipated return of Region 4455 (N14, L=88, class/area=Dki/360 on 03 Jun)

No proton events are expected at geosynchronous orbit, barring siginifcant flare activity.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on

15-17 Jun and 04-10 Jul. Normal to moderate levels are expected to prevail throughout the remainder of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels on 15, 17-24, and 26-30 Jun, as well as 01-02, 04-07, and 10-11 Jul. Active conditions are likely on 16, and 25 Jun and 03, 08, and 09 Jul under elevated CH HSS influence.

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
08 June	131	119	570	B7.9	8	0	0	3	0	0	0	0
09 June	130	120	760	B7.4	18	0	0	6	1	0	0	0
10 June	124	114	615	B6.3	4	0	0	1	0	0	0	0
11 June	127	81	485	B6.5	9	0	0	1	1	0	0	0
12 June	128	113	430	B5.4	3	0	0	2	0	0	0	0
13 June	122	41	350	B5.6	3	0	0	1	0	0	0	0
14 June	128	61	320	B4.8	3	0	0	2	0	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ^{2} -day -sr)		Electron Fluence (electrons/cm^2 -day -sr)
	>1 MeV	>10 MeV	>2MeV
08 June	9.7e+05	2.3e+04	6.0e+07
09 June	9.0e+05	2.0e+04	9.7e+07
10 June	1.4e+06	1.8e+04	3.6e+07
11 June	1.1e+06	1.7e+04	1.7e+07
12 June	2.4e+05	1.7e+04	1.6e+07
13 June	6.9e+05	1.7e+04	4.1e+07
14 June	2.5e+05	1.7e+04	5.2e+07

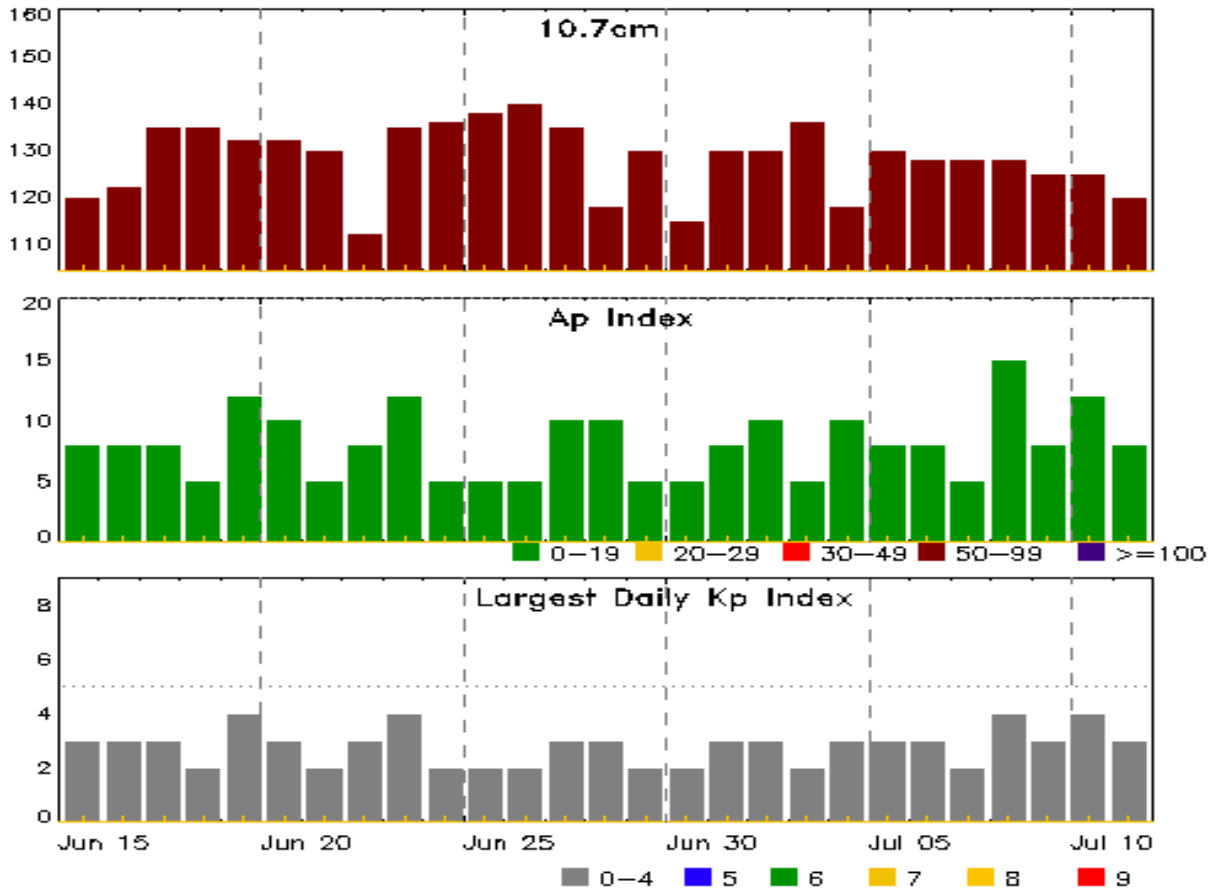
Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
08 June	9	1-3-3-2-3-1-1-2	19	3-3-5-4-4-2-2-1	8	1-2-3-3-2-1-1-2
09 June	10	2-2-1-2-3-3-2-3	15	2-2-2-2-4-5-2-2	11	2-2-2-2-3-3-3-3
10 June	7	2-1-1-3-2-2-2-2	18	2-2-2-4-6-2-1-1	7	2-1-1-3-3-1-1-2
11 June	16	2-2-3-3-3-3-4-4	22	1-3-4-6-3-1-3-3	18	1-2-3-3-2-2-5-4
12 June	13	3-3-3-3-3-2-2-3	30	4-5-5-4-5-4-2-2	16	3-4-4-3-3-2-2-3
13 June	15	3-3-3-2-3-3-4-2	27	3-4-3-5-5-5-2-2	13	3-3-3-3-3-2-4-2
14 June	0	0-0-0-0-0-0-0-0	9	2-2-2-4-2-2-2-1	9	2-2-1-2-2-2-1-1

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
08 Jun 0516	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	07/1143
08 Jun 2117	CANCELLATION: Geomagnetic Storm Category G3 predicted	
09 Jun 1141	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	07/1143
09 Jun 1624	CANCELLATION: Type II Radio Emission	
09 Jun 1624	ALERT: Type II Radio Emission	09/1557
09 Jun 1624	ALERT: Type II Radio Emission	09/1557
09 Jun 1625	ALERT: Type II Radio Emission	09/1557
09 Jun 1629	ALERT: Type II Radio Emission	09/1557
09 Jun 2022	WARNING: Geomagnetic K = 4	09/2020 - 2359
10 Jun 1738	ALERT: Type II Radio Emission	10/1715
11 Jun 0040	ALERT: Type IV Radio Emission	11/0028
11 Jun 0040	ALERT: Type II Radio Emission	11/0013
11 Jun 1849	WARNING: Geomagnetic K = 4	11/1849 - 12/2359
11 Jun 1857	ALERT: Geomagnetic K = 4	11/1855
11 Jun 2015	WARNING: Geomagnetic K = 5	11/2014 - 12/0300
11 Jun 2029	WATCH: Geomagnetic Storm Category G2 predicted	
11 Jun 2040	ALERT: Geomagnetic K = 5	11/2040
13 Jun 0127	WARNING: Geomagnetic K = 4	13/0126 - 2359
13 Jun 1333	ALERT: Electron 2MeV Integral Flux >= 1000pfu	13/1332
13 Jun 2101	ALERT: Geomagnetic K = 4	13/2059
13 Jun 2356	EXTENDED WARNING: Geomagnetic K = 4	13/0126 - 14/0600
14 Jun 0830	CANCELLATION: Geomagnetic Storm Category G2 predicted	
14 Jun 1328	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	13/1332

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
15 Jun	120	8	3	29 Jun	130	5	2
16	122	8	3	30	115	5	2
17	135	8	3	01 Jul	130	8	3
18	135	5	2	02	130	10	3
19	132	12	4	03	136	5	2
20	132	10	3	04	118	10	3
21	130	5	2	05	130	8	3
22	112	8	3	06	128	8	3
23	135	12	4	07	128	5	2
24	136	5	2	08	128	15	4
25	138	5	2	09	125	8	3
26	140	5	2	10	125	12	4
27	135	10	3	11	120	8	3
28	118	10	3				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV

No Events Observed

Flare List

	Time				Optical		
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
08 Jun	0214	0228	0236	C3.1			4465
08 Jun	0236	0249	0257	C7.2			4465
08 Jun	0413	0421	0428	C1.6			
08 Jun	0500	0510	0514	C4.5	SF	N10E81	4465
08 Jun	0631	0638	0643	C1.5	SF	N14E03	4462
08 Jun	0821	0829	0832	C1.3			4458
08 Jun	1233	1241	1248	C1.5			4456
08 Jun	1651	1652	1655		SF	N18W53	4456
08 Jun	1729	1733	1738	C1.3			4464
09 Jun	0032	0040	0045	C1.3			4464
09 Jun	0054	0103	0106	C1.3			4465
09 Jun	0153	0204	0212	C1.4			4465
09 Jun	0232	0236	0241	C1.7			4465
09 Jun	0416	0423	0428	C4.5	SF	N10E66	4465
09 Jun	0522	0528	0532	C1.3			4465
09 Jun	0551	0558	0601	C1.4			4465
09 Jun	0601	0606	0609	C2.6	SF	N10E66	4465
09 Jun	0628	0700	0702	C3.2			4455
09 Jun	0904	0911	0914	C1.5	SF	N10E64	4465
09 Jun	0939	0946	0950	C1.3			4465
09 Jun	1247	1302	1323	C1.2	SF	S11E20	4464
09 Jun	1323	1334	1340	C1.3			4465
09 Jun	1603	1604	1608		SF	N16E59	4465
09 Jun	1902	1918	1925	C2.3	1F	S21W16	4461
09 Jun	1935	1943	1951	C1.6	SF	N07W15	4466
09 Jun	2010	2013	2017	C1.4			4465
09 Jun	2059	2110	2117	C1.9			4466
09 Jun	2117	2133	2136	C2.0			4464
10 Jun	0051	0059	0101	C2.6			4465
10 Jun	0128	0133	0136	C1.0			4465
10 Jun	0506	0516	0529		SF	N04W20	4466

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
10 Jun	1250	1259	1306	B8.7			4456
10 Jun	1317	1326	1335	C1.5			4456
10 Jun	2236	2243	2250	B9.2			4464
10 Jun	2330	0002	0037	C6.7	1F	N09E38	4465
11 Jun	0037	0044	0046	C6.1			4456
11 Jun	0428	0441	0504	C1.0			4465
11 Jun	0638	0647	0656	C1.2			4456
11 Jun	0800	0807	0811	C1.5			4465
11 Jun	0822	0828	0832	C9.0			4465
11 Jun	1124	1136	1144	C1.3			4456
11 Jun	1706	1714	1722	C1.1			4465
11 Jun	1943	1945	1955		SF	N09E36	4465
11 Jun	2005	2018	2041	C1.1			
11 Jun	2132	2140	2147	C1.5			4465
12 Jun	0204	0214	0218	C5.2			4465
12 Jun	0225	0235	0245	C2.0			
12 Jun	1212	1218	1223	C1.0	SF	N05W52	4466
12 Jun	1612	1613	1615		SF	N04W53	4466
13 Jun	0200	0218	0240	C1.8			4464
13 Jun	0644	0653	0703	C1.0			
13 Jun	1240	1309	1346	C2.5	SF	S21W70	4461
14 Jun	0848	0855	0905	C1.5			4466
14 Jun	1040	1051	1059	B9.1	SF	N05W04	4465
14 Jun	1214	1222	1231	B9.9			
14 Jun	1231	1236	1239	C1.0			
14 Jun	1251	1302	1308	C1.2	SF	S14W51	4464

Region Summary

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 4455												
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							
08 Jun	N15W90	92	110	3	Hsx	1	A								
								25	5	1	23	3	1	0	0

Crossed West Limb.
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				
08 Jun	N17W61	63	80	8	Dai	10	B	1			1				
09 Jun	N18W73	61	60	11	Eso	3	B								
10 Jun	N18W87	62	60	11	Eso	3	B	1							
								14	0	0	9	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 67

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 4458												
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								
08 Jun	S05W76	78	100	6	Dao	2	B	1							
09 Jun	S06W87	75	60	2	Hax	1	A								
								2	0	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 74

			Region 4459												
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				
08 Jun	N14W29	31	30	4	Hsx	2	A								
09 Jun	N14W42	30	20	3	Hsx	2	A								
10 Jun	N14W56	31	10	3	Hrx	1	A								
11 Jun	N14W70	32	plage												
12 Jun	N14W84	33	plage												
								6	0	0	3	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 33

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			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								
08 Jun	S21W09	11	plage												
09 Jun	S21W23	11	plage					1				1			
10 Jun	S21W37	12	plage												
11 Jun	S21W51	13	plage												
12 Jun	S21W65	14	plage												
13 Jun	S21W79	14	plage					1			1				
								7	2	0	1	1	1	0	0

Crossed West Limb.
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				
08 Jun	N15W07	9	60	9	Dsi	10	B	1			1				
09 Jun	N16W21	9	70	8	Dsi	10	B								
10 Jun	N16W35	10	40	8	Dsi	10	B								
11 Jun	N15W50	12	20	7	Dro	5	B								
12 Jun	N16W65	13	10	2	Axx	42	A								
13 Jun	N16W76	11	plage												
14 Jun	N16W90	12	plage												
								5	0	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 10

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			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								
08 Jun	N17E24	338	40	2	Hsx	1	A								
09 Jun	N16E10	338	70	1	Hsx	1	A								
10 Jun	N16W04	339	70	1	Hsx	1	A								
11 Jun	N17W15	337	60	3	Hsx	2	A								
12 Jun	N17W29	337	30	1	Hsx	1	A								
13 Jun	N17W41	336	50	3	Hax	1	A								
14 Jun	N17W55	337	30	2	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 339

			Region 4464												
06 Jun	S12E52	336	50	5	Dao	4	B								
07 Jun	S12E38	337	60	6	Dai	5	B	2			3				
08 Jun	S12E24	338	80	6	Dac	9	BG	1							
09 Jun	S12E11	337	250	11	Ehi	15	B	3			1				
10 Jun	S12W03	338	180	9	Dsi	15	B								
11 Jun	S12W16	338	120	10	Dsi	8	B								
12 Jun	S13W29	338	180	10	Dao	8	B								
13 Jun	S13W44	339	180	10	Dao	8	B	1							
14 Jun	S14W56	338	120	9	Dao	5	B	1			1				
								8	0	0	5	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 338

			Region 4465												
08 Jun	N11E70	292	70	6	Dao	4	B	3			1				
09 Jun	N09E54	294	220	6	Dsi	6	BG	11			4				
10 Jun	N09E40	295	240	6	Dsi	10	BG	3							
11 Jun	N09E30	292	255	9	Dhi	10	BG	5			1	1			
12 Jun	N09E14	294	190	9	Cao	10	B	1							
13 Jun	N08E04	291	120	4	Cao	2	B								
14 Jun	N08W11	293	150	9	Cai	10	B				1				
								23	0	0	7	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 291

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 4466												
09 Jun	N06W16	4	10	1	Bxo	2	B	2			1				
10 Jun	N06W31	6	15	4	Dao	4	B				1				
11 Jun	N06W47	9	30	3	Cro	6	B								
12 Jun	N06W59	8	20	2	Cro	2	B	1			2				
13 Jun	N06W74	9	plage												
14 Jun	N06W89	11	plage					1							
								4	0	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 4

			Region 4467												
10 Jun	S08W09	344	plage												
11 Jun	S08W23	345	plage												
12 Jun	S08W37	346	plage												
13 Jun	S08W51	346	plage												
14 Jun	S08W65	347	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 344

			Region 4468												
14 Jun	N10E39	243	20	3	Cro	5	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 243

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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