

Solar activity was at very low to moderate levels during the period. Moderate levels were reached on 09 Apr, with low levels observed on 06-08 Apr and 11-12 Apr. Very low levels occurred on 10 Apr.

Region 4409 (N02, L=158, class/area=Eai/190 on 07 Apr) was the most active region of the period, producing 11 C-class flares and the only M-class flare of the period, an impulsive M1.0/Sf at 09/0845 UTC. Region 4417 (S08, L=123, class/area=Dao/30 on 12 Apr) also contributed notable activity with 7 C-class flares after appearing quickly on 11 Apr near the West limb. Other activity included a C8.7/Sf flare from Region 4414 (N15, L=26, class/area=Dro/30 on 08 Apr) at 08/1543 UTC, which was associated with Type III radio emissions and a weak CME without any Earth-directed components.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels throughout the reporting period. Flux levels reached a peak value of 10,679 pfu at 09/1605 UTC.

Geomagnetic field activity ranged from quiet to active levels during the period. The beginning of the period (06-07 Apr) saw quiet to unsettled conditions as the influence of a negative polarity coronal hole high speed stream (-CH HSS) continued to wane. From 10-12 Apr, quiet to active levels were observed under the onset and influence of a positive polarity CH HSS (+CH HSS). Quiet conditions prevailed during all other days of the period under a nominal solar wind regime.

Space Weather Outlook

13 April - 09 May 2026

Solar activity is expected to be at low levels, with a varying chance for M-class (R1-R2/Minor-Moderate) flares and a slight chance for X-class (R3/Strong or greater) flares through 09 May.

No proton events are expected at geosynchronous orbit, barring any significant, non-recurrent solar activity.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 13-17 Apr, 19-24 Apr, 26-28 Apr, 30 Apr-05 May, and 08-09 May. Normal to moderate flux levels are expected on 18 Apr, 25 Apr, 29 Apr, and 06-07 May.

Geomagnetic field activity is anticipated to reach G1-G2 (Minor-Moderate) storm levels on 19 Apr and 29 Apr due to -CH HSS influences, and on 07 May due to +CH HSS influences. Active conditions are expected on 18 Apr, 20 Apr, and 30 Apr-01 May in response to -CH HSS effects, and on 15 Apr, 25 Apr, and 08 May due to +CH HSS effects. Mostly quiet to unsettled conditions are expected for all other days of the period.



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	
06 April	116	112	480	B4.7	1	0	0	0	0	0	0	0	0
07 April	109	110	520	B4.8	6	0	0	1	0	0	0	0	0
08 April	108	103	520	B6.4	5	0	0	2	0	0	0	0	0
09 April	98	79	330	B3.9	4	1	0	1	0	0	0	0	0
10 April	94	48	170	B3.1	0	0	0	2	0	0	0	0	0
11 April	93	42	180	B2.0	2	0	0	1	0	0	0	0	0
12 April	99	47	270	B2.2	6	0	0	0	0	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
	06 April	3.3e+06	2.1e+04
07 April	1.2e+06	2.1e+04	2.8e+08
08 April	6.4e+05	1.9e+04	3.4e+08
09 April	8.1e+05	1.8e+04	3.3e+08
10 April	8.4e+05	1.6e+04	3.4e+07
11 April	1.0e+06	1.7e+04	4.3e+07
12 April	5.1e+05	1.7e+04	6.1e+07

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	06 April	6	0-2-2-2-2-2-2-2	13	1-2-3-4-4-3-2-1	10
07 April	7	3-2-2-0-2-2-2-2	6	2-2-3-0-2-2-0-2	9	3-2-2-1-2-2-2-3
08 April	6	1-2-1-2-3-1-2-1	18	2-1-1-6-4-3-1-2	7	2-2-1-2-2-2-2-2
09 April	6	1-1-2-1-2-2-2-2	20	1-1-3-2-5-5-4-2	7	2-1-2-1-2-2-2-2
10 April	16	4-3-3-2-4-3-3-2	28	3-3-3-3-6-5-4-2	18	4-3-3-2-4-4-3-2
11 April	10	1-4-3-3-2-2-1-1	23	2-4-4-6-3-3-1-2	12	2-4-3-3-2-2-2-1
12 April	7	2-2-2-2-2-1-2-2	23	3-2-3-6-5-1-2-2	9	2-2-2-2-2-1-2-2

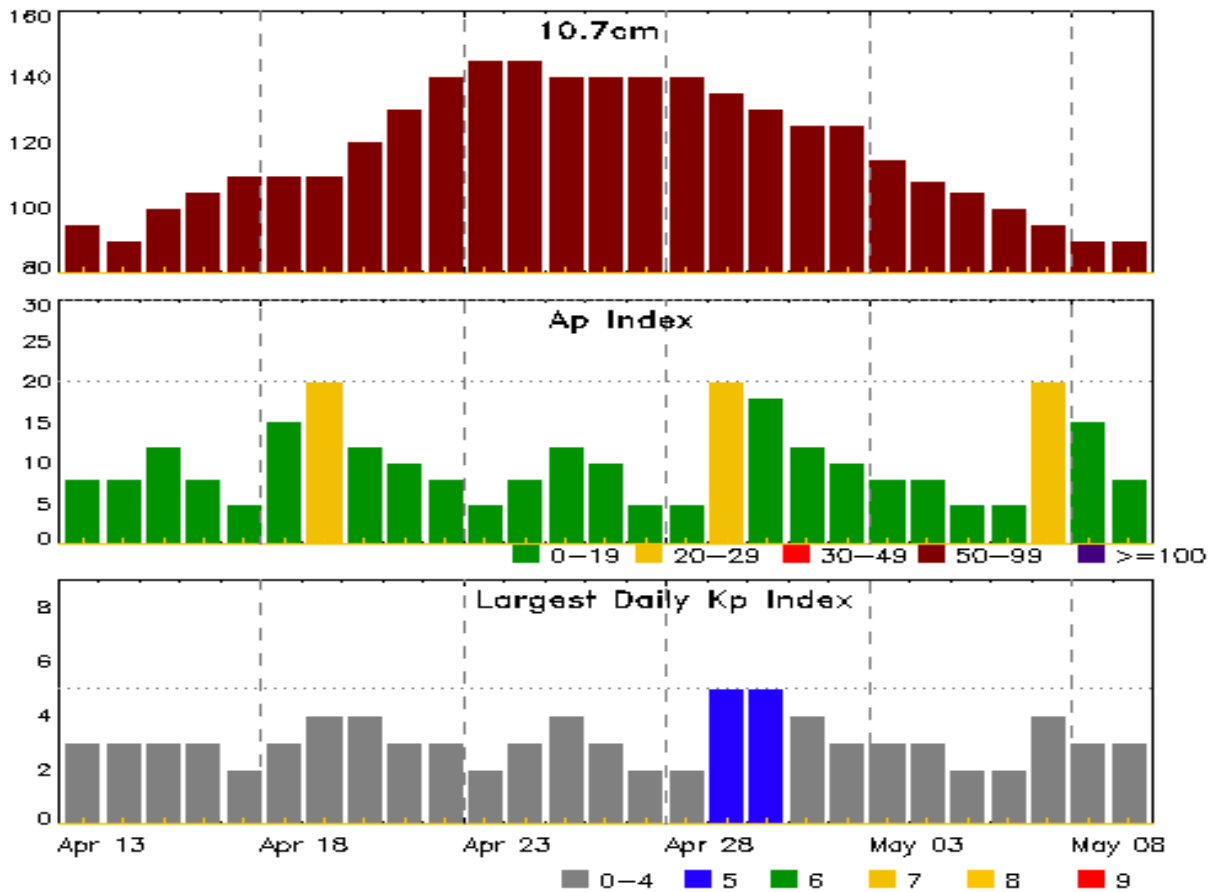


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
06 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
07 Apr 0124	WARNING: Geomagnetic K = 4	07/0124 - 1200
07 Apr 0500	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
08 Apr 0229	WATCH: Geomagnetic Storm Category G1 predicted	
08 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
09 Apr 0459	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
10 Apr 0143	WARNING: Geomagnetic K = 4	10/0145 - 1500
10 Apr 0208	ALERT: Geomagnetic K = 4	
10 Apr 1350	EXTENDED WARNING: Geomagnetic K = 4	10/0145 - 11/1800
10 Apr 1407	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
10 Apr 1426	WARNING: Geomagnetic K = 5	10/1425 - 11/0900
11 Apr 1306	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920
11 Apr 1756	EXTENDED WARNING: Geomagnetic K = 4	10/0145 - 12/1500
12 Apr 0945	CANCELLATION: Geomagnetic K = 4	
12 Apr 1317	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	03/0920



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
13 Apr	95	8	3	27 Apr	140	5	2
14	90	8	3	28	140	5	2
15	100	12	3	29	135	20	5
16	105	8	3	30	130	18	5
17	110	5	2	01 May	125	12	4
18	110	15	3	02	125	10	3
19	110	20	4	03	115	8	3
20	120	12	4	04	108	8	3
21	130	10	3	05	105	5	2
22	140	8	3	06	100	5	2
23	145	5	2	07	95	20	4
24	145	8	3	08	90	15	3
25	140	12	4	09	90	8	3
26	140	10	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
09 Apr	0823	0845	0905	M1.0	0.017	SF	N02W77		4409			

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
06 Apr	0508	0515	0529	C1.0			4409
06 Apr	0809	0817	0819	B7.3			4409
07 Apr	0118	0125	0133	B7.2			4409
07 Apr	0420	0427	0429	B8.5			4409
07 Apr	1332	1356	1419	C2.3	SF	N02W55	4409
07 Apr	1536	1544	1546	C1.2			4409
07 Apr	1815	1832	1847	C5.7			4409
07 Apr	2040	2052	2100	C1.3			4409
07 Apr	2153	2156	2200	B7.7			4409
07 Apr	2204	2212	2225	C1.1			4409
07 Apr	2310	2320	2326	C2.4			4414
08 Apr	0038	0048	0054	C1.0			4409
08 Apr	0457	0501	0512	C1.3			4414
08 Apr	0551	0556	0600	B8.8			4406
08 Apr	1222	1233	1239	C1.3			4414
08 Apr	1531	1543	1550	C8.7	SF	N13E67	4414
08 Apr	2338	2350	2358	C1.4	SF	N14E62	4414
09 Apr	0057	0105	0110	C1.4			4409
09 Apr	0219	0223	0227	B9.6			4409
09 Apr	0440	0443	0447	B8.1			4414
09 Apr	0521	0528	0536	C1.3			4409
09 Apr	0614	0624	0628	B9.8			4409
09 Apr	0628	0631	0640	C1.0			4409
09 Apr	0727	0733	0741	B7.5			4409
09 Apr	0748	0754	0800	B8.7			4409
09 Apr	0807	0814	0820	C1.4			4409
09 Apr	0823	0845	0905	M1.0	SF	N02W77	4409
10 Apr	0258	0308	0317	B5.4			4409
10 Apr	0413	0425	0503	B6.0			4409
10 Apr	0914	0924	0930	B7.3			4409



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
10 Apr	1239	1247	1254	B7.6			4414
10 Apr	1539	1549	1554	B6.4	SF	N17E47	4414
10 Apr	1605	1605	1609		SF	N17E47	4414
11 Apr	0415	0427	0439	B5.4			4409
11 Apr	1008	1024	1039	C1.1	SF	N20E09	4416
11 Apr	1909	1915	1924	B3.4			4416
11 Apr	2053	2100	2103	B5.8			4417
11 Apr	2315	2324	2330	C1.9			4417
12 Apr	0014	0018	0022	B5.3			4417
12 Apr	0047	0101	0105	C1.9			4417
12 Apr	0140	0149	0154	B5.6			4417
12 Apr	0217	0220	0223	C1.5			4417
12 Apr	0309	0318	0322	C1.0			4417
12 Apr	0323	0327	0330	B9.7			4417
12 Apr	0455	0508	0511	C2.4			4417
12 Apr	0613	0617	0623	B4.9			4417
12 Apr	0731	0738	0741	C2.4			4417
12 Apr	0829	0838	0841	C1.5			4417
12 Apr	1201	1207	1213	B4.2			4417
12 Apr	1448	1456	1505	B7.2			4417
12 Apr	1724	1730	1734	B3.0			4417
12 Apr	1833	1842	1848	B4.8			4417
12 Apr	1955	1958	2006	B4.6			4417



Region Summary

Date	Location		Sunspot Characteristics					Flares															
	Lat CMD	Lon	Helio 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical												
								C	M	X	S	1	2	3	4								
Region 4403																							
24 Mar	N16E82	205	plage										1										
25 Mar	N16E67	205	110	3	Hsx	1	A						3										
26 Mar	N15E54	205	110	3	Hsx	1	A			1					1								
27 Mar	N16E40	206	120	3	Hsx	2	A						2		1								
28 Mar	N16E27	206	120	3	Hsx	3	A																
29 Mar	N16E14	206	70	3	Hsx	2	A																
30 Mar	N16E01	206	70	3	Hax	2	A																
31 Mar	N15W12	206	70	4	Hsx	2	A						2										
01 Apr	N15W26	206	70	3	Hsx	2	A						1										
02 Apr	N15W39	206	60	4	Hax	3	A																
03 Apr	N15W53	207	50	5	Cso	2	B																
04 Apr	N15W66	207	20	5	Hrx	1	A																
05 Apr	N15W79	207	10	1	Axx	1	A																
								9	1	0		1	1	0	0	0							

Crossed West Limb.
 Absolute heliographic longitude: 206

Region 4404																							
27 Mar	N15E63	183	50	7	Cso	3	B																
28 Mar	N14E46	187	50	2	Hsx	1	A						2										
29 Mar	N14E33	187	30	2	Hsx	1	A																
30 Mar	N15E21	186	30	5	Hsx	5	A																
31 Mar	N15E06	188	50	3	Csi	3	B																
01 Apr	N15W07	187	60	4	Csi	8	B																
02 Apr	N13W21	188	40	3	Cso	5	B						1						1				
03 Apr	N13W34	188	40	2	Cso	3	B																
04 Apr	N13W47	188	40	4	Cso	3	B																
05 Apr	N13W60	188	50	2	Hsx	1	A																
06 Apr	N13W73	187	50	2	Hsx	1	A																
07 Apr	N13W86	187	50	2	Cso	2	B																
								2	1	0		0	0	1	0	0							

Crossed West Limb.
 Absolute heliographic longitude: 188



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares															
	Lat CMD	Lon	Helio 10 ⁶ hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
Region 4405																							
26 Mar	S24E82	178	plage										1										
27 Mar	S25E66	180	270	11	Eho	9	B						6										
28 Mar	S26E55	178	330	11	Ehi	8	BG	1	1														
29 Mar	S27E44	176	180	13	Eao	8	BG	1															
30 Mar	S27E32	175	170	12	Eao	11	BG	1		1													
31 Mar	S27E18	175	200	11	Esi	11	BG	3															
01 Apr	S27E05	175	210	12	Eac	11	BG																
02 Apr	S27W07	174	220	14	Eai	15	B	1															
03 Apr	S27W20	174	180	15	Eao	12	B							1									
04 Apr	S28W33	174	200	16	Fao	10	B																
05 Apr	S28W46	174	150	14	Eao	10	B																
06 Apr	S28W60	174	120	15	Eso	4	B																
07 Apr	S28W72	173	120	16	Cso	3	B																
08 Apr	S28W85	173	100	17	Hsx	1	A																
													14	1	1	1	0	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 175

Region 4406																							
27 Mar	N09E62	184	70	2	Hsx	1	A																
28 Mar	N09E52	181	80	2	Hsx	1	A																
29 Mar	N09E38	182	50	2	Hsx	1	A																
30 Mar	N08E25	182	50	2	Hsx	1	A																
31 Mar	N08E12	182	50	2	Hsx	1	A																
01 Apr	N08W02	182	50	2	Hsx	1	A																
02 Apr	N07W15	182	50	2	Hsx	1	A																
03 Apr	N07W29	183	60	2	Hsx	1	A																
04 Apr	N07W41	182	50	2	Hsx	1	A																
05 Apr	N07W55	183	40	2	Hsx	1	A																
06 Apr	N07W68	182	40	2	Hsx	1	A																
07 Apr	N07W81	182	30	2	Hrx	1	A																
08 Apr	N07W94	183	30	2	Hrx	1	A																
													0	0	0	0	0	0	0	0	0	0	

Crossed West Limb.
Absolute heliographic longitude: 182



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares										
	Lat CMD	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 4407																	
28 Mar	N17E56	177	40	1	Hsx	1	A										
29 Mar	N18E45	175	10	2	Bxo	4	B	1									
30 Mar	N17E31	176	10	1	Axx	1	A	1									
31 Mar	N17E17	176	10	1	Axx	1	A										
01 Apr	N17E03	177	plage														
02 Apr	N17W11	178	plage														
03 Apr	N17W25	179	plage														
04 Apr	N17W39	180	plage														
05 Apr	N17W53	181	plage														
06 Apr	N17W67	181	plage														
07 Apr	N17W81	182	plage														
								2	0	0	0	0	0	0	0	0	

Crossed West Limb.
 Absolute heliographic longitude: 177

Region 4408																	
29 Mar	N09E64	156	50	2	Hsx	1	A										
30 Mar	N08E51	156	40	2	Hsx	1	A										
31 Mar	N08E38	156	40	2	Hsx	1	A										
01 Apr	N08E24	156	40	2	Hsx	1	A										
02 Apr	N08E11	157	40	2	Hsx	1	A										
03 Apr	N08W02	156	70	2	Hsx	1	A										
04 Apr	N08W15	156	50	2	Hsx	1	A										
05 Apr	N08W28	156	60	2	Hsx	1	A										
06 Apr	N08W42	156	60	2	Hsx	1	A										
07 Apr	N08W56	157	60	2	Hsx	1	A										
08 Apr	N08W68	156	50	2	Cso	3	B										
09 Apr	N08W81	156	30	2	Hsx	1	A										
								0	0	0	0	0	0	0	0	0	

Crossed West Limb.
 Absolute heliographic longitude: 156



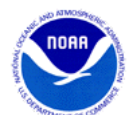
Region Summary - continued

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	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 4409																		
30 Mar	N02E54	153	10	2	Bxo	2	B											
31 Mar	N02E39	154	20	4	Dro	4	B											
01 Apr	N02E24	156	30	4	Dri	8	B	7										
02 Apr	N02E13	155	40	9	Dai	15	BG	6			4							
03 Apr	N02W01	155	140	11	Eai	16	BG	12	1		11	1						
04 Apr	N02W15	156	170	11	Eai	26	BG	13	4		6	1						
05 Apr	N02W28	156	170	11	Eac	26	B	12			1							
06 Apr	N02W43	157	190	11	Eai	25	B	1										
07 Apr	N02W57	158	190	12	Eai	15	BG	5			1							
08 Apr	N01W71	159	180	11	Esi	20	BD	1										
09 Apr	N01W85	160	170	11	Esi	20	BD	4	1		1							
								61	6	0	24	2	0	0	0			

Crossed West Limb.
 Absolute heliographic longitude: 155

Region 4411																		
03 Apr	S05E46	108	10	1	Axx	2	A											
04 Apr	S06E33	108	10	1	Axx	1	A											
05 Apr	S06E18	110	plage															
06 Apr	S06E05	109	10	2	Bxo	2	B											
07 Apr	S06W09	110	plage															
08 Apr	S06W23	111	plage															
09 Apr	S06W36	111	plage															
10 Apr	S06W51	113	plage															
11 Apr	S06W66	114	plage															
12 Apr	S06W81	116	plage															
								0	0	0	0	0	0	0	0	0		

Still on Disk.
 Absolute heliographic longitude: 109



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	4
Region 4412																
05 Apr	N10E08	120	10	2	Bxo	2	B	3								
06 Apr	N10W04	118	10	4	Bxi	8	B									
07 Apr	N10W17	118	10	4	Bxo	3	B									
08 Apr	N11W29	117	plage													
09 Apr	N11W43	118	plage													
10 Apr	N11W57	119	plage													
11 Apr	N11W71	119	plage													
12 Apr	N11W85	120	plage													
								3	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 118

Region 4413																
07 Apr	N08W60	161	30	5	Cri	4	BG									
08 Apr	N08W74	162	30	6	Cri	4	BG									
09 Apr	N07W90	165	20	3	Cri	4	B									
								0	0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 161

Region 4414																
07 Apr	N12E76	25	30	2	Hsx	1	A	1								
08 Apr	N15E62	26	30	3	Dro	3	B	4			2					
09 Apr	N15E50	25	30	5	Cri	3	B									
10 Apr	N15E37	25	20	3	Cro	2	B				2					
11 Apr	N15E25	23	10	3	Bxo	2	B									
12 Apr	N15E11	24	plage													
								5	0	0	4	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 24



Region Summary - continued

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

Region 4415

08 Apr	S18E74	14	100	2	Hsx	1	A											
09 Apr	S18E60	14	80	2	Hsx	1	A											
10 Apr	S18E47	15	100	3	Hsx	1	A											
11 Apr	S18E34	14	100	3	Hsx	1	A											
12 Apr	S18E18	17	100	6	Cso	4	B											
								0	0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 17

Region 4416

10 Apr	N19E13	49	20	2	Dro	4	B											
11 Apr	N19E01	47	70	5	Dai	9	B	1				1						
12 Apr	N19W11	47	140	7	Dai	10	B											
								1	0	0	1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 47

Region 4417

11 Apr	S08W73	122	plage					1										
12 Apr	S08W88	123	30	4	Dao	3	B	6										
								7	0	0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 122



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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<https://www.swpc.noaa.gov/products/weekly-highlights-and-27-day-forecast> --

Current

<ftp://ftp.swpc.noaa.gov/pub/warehouse> -- Online archive from 1997

<https://www.ngdc.noaa.gov/stp/satellite/goes-r.html> -- NCEI GOES data
textarchive

<https://www.swpc.noaa.gov/products/solar-cycle-progression> -- Solar Cycle
Progression web site

<https://www.swpc.noaa.gov/content/contact-us> -- Contact and Copyright
information

https://www.swpc.noaa.gov/sites/default/files/images/u2/Usr_guide.pdf -- User
Guide

