

Space Weather Highlights
05 April - 11 April 2021

SWPC PRF 2380
12 April 2021

Solar activity was very low throughout the period with only B-class flare activity observed. No Earth-directed CMEs were observed in available imagery.

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field activity was at quiet levels on 05-06 April and 08-11 April. Unsettled to G1 (Minor) storm conditions were observed on 07 April due to positive polarity CH HSS effects.

Space Weather Outlook
12 April - 08 May 2021

Solar activity is expected to be at very low levels during the outlook period.

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 17-22 April due to recurrent CH HSS effects. Normal to moderate levels are expected to prevail throughout the remainder of the outlook period.

Geomagnetic field activity is likely to reach G1 (Minor) geomagnetic storm levels on 17 Apr due to recurrent, negative polarity CH HSS influence. Mostly quiet to unsettled levels are expected throughout the remainder of the outlook 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	
05 April	72	11	5	A0.0	0	0	0	0	0	0	0	0	0
06 April	74	11	0	A0.0	0	0	0	0	0	0	0	0	0
07 April	76	0	0	A0.0	0	0	0	0	0	0	0	0	0
08 April	74	0	0	A1.1	0	0	0	0	0	0	0	0	0
09 April	78	0	0	A0.0	0	0	0	0	0	0	0	0	0
10 April	70	0	0	A1.0	0	0	0	0	0	0	0	0	0
11 April	73	0	0	A1.6	0	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
	05 April	8.7e+04	4.5e+04
06 April	8.7e+04	4.4e+04	1.9e+06
07 April	4.3e+05	4.3e+04	1.6e+06
08 April	5.5e+04	4.3e+04	1.5e+06
09 April	6.3e+04	4.3e+04	1.6e+06
10 April	6.3e+04	4.4e+04	1.4e+06
11 April	5.8e+04	4.3e+04	1.4e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	05 April	5	1-1-1-1-3-2-1-1	4	0-0-0-0-4-1-0-0	5
06 April	3	0-1-0-0-1-0-2-2	0	0-0-0-0-0-0-1-0	3	0-0-0-0-1-0-1-1
07 April	15	1-2-3-4-4-4-2-2	35	1-1-3-6-6-6-3-1	17	1-2-3-4-4-5-3-2
08 April	3	0-1-0-1-2-1-2-1	4	1-0-0-3-2-0-1-0	5	1-1-0-2-2-1-2-1
09 April	2	0-2-0-0-1-1-0-1	2	1-1-0-2-1-0-0-0	3	0-2-0-1-1-1-0-0
10 April	3	0-0-0-1-2-2-1-2	4	0-0-1-2-2-3-1-0	5	1-1-1-1-1-2-1-2
11 April	5	2-2-2-1-1-1-2-1	6	1-2-4-2-0-0-1-1	7	2-2-2-1-1-1-2-2

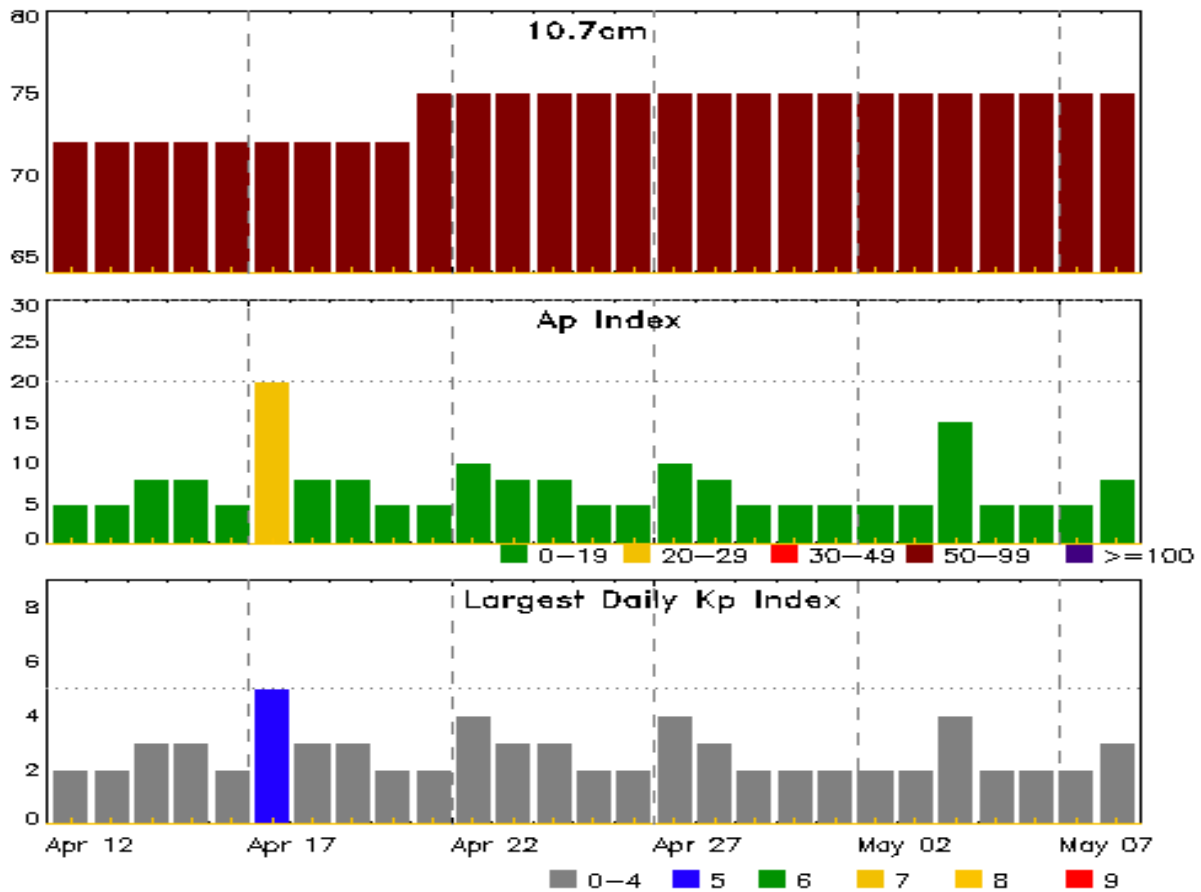


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
07 Apr 0929	WARNING: Geomagnetic K = 4	07/0930 - 1500
07 Apr 1029	ALERT: Geomagnetic K = 4	07/1029
07 Apr 1439	EXTENDED WARNING: Geomagnetic K = 4	07/0930 - 2100
07 Apr 1626	WARNING: Geomagnetic K = 5	07/1626 - 2100
07 Apr 1800	ALERT: Geomagnetic K = 5	07/1759
07 Apr 2046	EXTENDED WARNING: Geomagnetic K = 4	07/0930 - 08/0300
08 Apr 0248	EXTENDED WARNING: Geomagnetic K = 4	07/0930 - 08/0900



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
12 Apr	72	5	2	26 Apr	75	5	2
13	72	5	2	27	75	10	4
14	72	8	3	28	75	8	3
15	72	8	3	29	75	5	2
16	72	5	2	30	75	5	2
17	72	20	5	01 May	75	5	2
18	72	8	3	02	75	5	2
19	72	8	3	03	75	5	2
20	72	5	2	04	75	15	4
21	75	5	2	05	75	5	2
22	75	10	4	06	75	5	2
23	75	8	3	07	75	5	2
24	75	8	3	08	75	8	3
25	75	5	2				



Energetic Events

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

No Events Observed

Flare List

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
06 Apr	1243	1245	1247	A1.2			



Region Summary

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						
<i>Region 2813</i>																						
03 Apr	N21W22	156	plage		3		2															
04 Apr	N21W37	159	10		1	Axx	1	A														
05 Apr	N20W50	158	5		1	Axx	1	A														
06 Apr	N20W65	160	0			Axx	1	A														
07 Apr	N20W79	161	plage																			
08 Apr	N20W93	162	plage																			
										0	0	0	0	0	0	0	0	0	0	0	0	

Crossed West Limb.
 Absolute heliographic longitude: 156



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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