

Solar activity was very low throughout the highlight period, with only B-class flare activity. 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 reached high levels on 02 April due to CH HSS influence. Normal to moderate levels were observed during the rest of the highlight period.

Geomagnetic field activity was at quiet to unsettled levels during the highlight period, with only weak CH HSS influence.

Space Weather Outlook
05 April - 01 May 2021

Solar activity is expected to be very low 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 08-11, and 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 16 April, with active conditions on 17 April due to recurrent, negative-polarity CH HSS influence. Quiet to unsettled conditions 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
29 March	74	13	20	A2.4	0	0	0	0	0	0	0	0
30 March	80	0	0	A2.2	0	0	0	1	0	0	0	0
31 March	74	0	0	A1.7	0	0	0	0	0	0	0	0
01 April	78	0	0	A1.6	0	0	0	0	0	0	0	0
02 April	72	0	0	A1.4	0	0	0	0	0	0	0	0
03 April	73	12	20	A0.0	0	0	0	0	0	0	0	0
04 April	70	11	10	A0.0	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	
	29 March	5.7e+04	4.6e+04	1.1e+07
30 March	1.0e+05	4.6e+04	1.9e+07	
31 March	1.4e+05	4.6e+04	1.2e+07	
01 April	5.5e+04	4.6e+04	3.7e+06	
02 April	8.1e+04	4.5e+04	1.2e+07	
03 April	5.2e+04	4.4e+04	2.1e+06	
04 April	5.5e+04	4.5e+04	2.5e+06	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	29 March	3	1-2-1-1-1-1-1-0	1	0-0-1-1-0-0-0-0	4
30 March	4	0-1-1-1-1-1-2-2	0	0-0-0-0-0-0-0-1	3	0-1-1-1-1-1-1-2
31 March	7	1-2-2-1-2-3-1-2	15	1-2-4-4-4-3-2-1	10	3-3-2-3-2-3-2-3
01 April	8	3-3-2-2-1-2-1-2	8	2-3-4-2-0-1-1-0	8	3-3-2-2-0-1-2-2
02 April	4	1-1-1-0-1-2-2-2	7	1-1-0-2-2-4-2-0	6	2-1-1-1-1-3-2-1
03 April	2	1-1-0-1-1-1-0-1	2	1-1-1-1-1-0-0-0	4	2-2-1-1-1-0-1-1
04 April	2	1-0-1-0-1-1-0-0	1	0-0-1-1-1-0-0-0	4	1-0-1-0-1-1-0-1

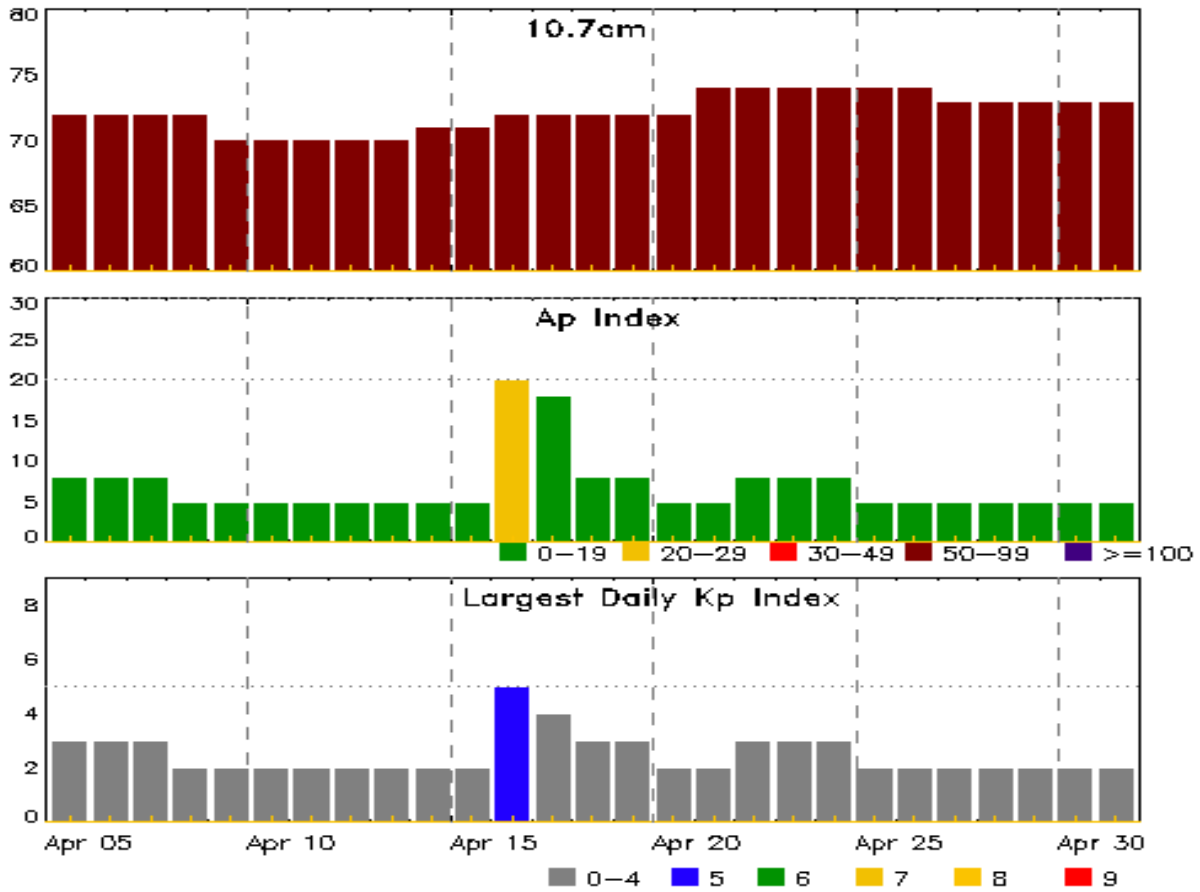


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
29 Mar 1053	CANCELLATION: Geomagnetic Storm Category G1 predicted	
01 Apr 0118	WARNING: Geomagnetic K = 4	01/0118 - 0900
02 Apr 1741	ALERT: Electron 2MeV Integral Flux \geq 1000pfu	02/1715



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
05 Apr	72	8	3	19 Apr	72	8	3
06	72	8	3	20	72	5	2
07	72	8	3	21	74	5	2
08	72	5	2	22	74	8	3
09	70	5	2	23	74	8	3
10	70	5	2	24	74	8	3
11	70	5	2	25	74	5	2
12	70	5	2	26	74	5	2
13	70	5	2	27	73	5	2
14	71	5	2	28	73	5	2
15	71	5	2	29	73	5	2
16	72	20	5	30	73	5	2
17	72	18	4	01 May	73	5	2
18	72	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

No Events Observed

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD	Rgn #	
30 Mar	1946	2005	2018	B7.4	SF	N23W53		2811
30 Mar	2054	2102	2111	B1.0				2811



Region Summary

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 2811																		
21 Mar	N21E58	248	10	1	Bxo	2	B											
22 Mar	N20E47	246	40	6	Bxo	2	B					2						
23 Mar	N19E33	245	50	6	Cao	5	B											
24 Mar	N20E21	245	10	8	Bxo	5	B											
25 Mar	N19E05	248	20	5	Bxo	3	B											
26 Mar	N20W07	248	10	3	Bxo	3	B											
27 Mar	N20W21	248	plage															
28 Mar	N20W34	248	plage															
29 Mar	N20W48	249	plage															
30 Mar	N20W62	250	plage									1						
31 Mar	N20W76	251	plage															
01 Apr	N20W90	251	plage															
								0	0	0	3	0	0	0	0	0		

Crossed West Limb.
Absolute heliographic longitude: 248

Region 2812																		
22 Mar	N21E67	226	0	1	Hrx	1	A											
23 Mar	N21E53	225	30	1	Hsx	1	A											
24 Mar	N21E41	224	30	1	Hsx	1	A											
25 Mar	N21E27	227	30	2	Hsx	1	A					1						
26 Mar	N21E15	226	30	1	Hax	1	A											
27 Mar	N21E01	226	30	1	Hax	1	A											
28 Mar	N21W12	226	10	1	Hrx	1	A											
29 Mar	N22W22	223	20	3	Bxo	3	B											
30 Mar	N23W36	224	plage															
31 Mar	N23W50	225	plage															
01 Apr	N23W64	225	plage															
02 Apr	N23W78	225	plage															
								0	0	0	1	0	0	0	0	0		

Crossed West Limb.
Absolute heliographic longitude: 226

Region 2813																		
03 Apr	N21W22	156	plage	3		2												
04 Apr	N21W37	159	10	1	Axx	1	A											
								0	0	0	0	0	0	0	0	0		

Still on Disk.
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

The Weekly has been published continuously since 1951 and is available online since 1997.

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

Current

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