

Solar activity was very low for the highlight period. No spotted regions were present on the visible disk. There were no Earth-directed CMEs observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels on 24-29 Aug. High levels were observed on 30 Aug with a peak flux of 2,800 pfu observed at 30/1845 UTC.

Geomagnetic field activity was at quiet levels on 24-26 Aug under a nominal solar wind environment. Activity levels increased to unsettled on 27 Aug as a positive polarity CH HSS moved into a geoeffective position. G1 (minor) storm levels were observed on 28 Aug with unsettled to active conditions observed on 29-30 Aug, all due to positive polarity CH HSS influences. During this period of activity, solar wind speeds reached a peak of 530 km/s at 29/0631 UTC, total field reached a maximum of 11 nT on mid to late 28 Aug while the Bz component reached a maximum southward extent of -8 nT during that same time frame. Phi angle was in a mostly negative solar sector through about midday on 25 Aug when it switched to a predominately positive orientation through the remainder of the period.

Space Weather Outlook
31 August - 26 September 2020

Solar activity is expected to be very low for the outlook 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 to high levels on 31 Aug - 07 Sep and again on 26 Sep due to recurrent CH HSS influences. The remainder of the period is expected to be at normal to moderate levels.

Geomagnetic field activity is expected to be at unsettled to active levels on 31 Aug - 02 Sep, unsettled levels on 18-19 Sep and unsettled to active levels on 23-26 Sep, all due to recurrent CH HSS influences. The remainder of the outlook period is expected to be at quiet levels.



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 August	70	0	0	A0.0	0	0	0	0	0	0	0	0
25 August	71	0	0	A0.0	0	0	0	0	0	0	0	0
26 August	70	0	0	A0.0	0	0	0	0	0	0	0	0
27 August	70	0	0	A0.0	0	0	0	0	0	0	0	0
28 August	70	0	0	A0.0	0	0	0	0	0	0	0	0
29 August	70	0	0	A0.0	0	0	0	0	0	0	0	0
30 August	70	0	0	A1.2	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
	24 August	5.9e+04	4.7e+04
25 August	9.3e+04	4.6e+04	1.3e+06
26 August	1.2e+05	4.5e+04	1.2e+06
27 August	7.7e+04	4.5e+04	1.4e+06
28 August	3.2e+05	4.6e+04	1.6e+06
29 August	8.2e+04	4.6e+04	2.5e+07
30 August	9.0e+04	4.6e+04	9.9e+07

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	24 August	3	1-1-1-1-2-0-1-0	1	2-1-0-0-0-0-0-0	3
25 August	3	1-1-1-1-1-1-1-1	2	1-1-0-1-0-0-1-0	4	1-1-1-1-1-1-1-1
26 August	7	2-2-1-3-2-2-1-2	9	1-1-1-5-1-1-1-1	7	2-2-1-2-1-2-2-2
27 August	7	2-1-3-2-3-1-1-1	15	2-1-3-2-6-1-1-1	8	3-2-2-2-3-1-1-1
28 August	8	0-0-1-2-2-4-3-2	18	0-1-1-4-4-6-1-1	10	0-0-1-2-2-5-2-3
29 August	14	3-3-4-3-2-1-3-3	21	2-3-5-6-2-1-2-1	14	3-3-4-3-1-2-3-3
30 August	8	2-3-2-2-2-1-1-3	13	2-3-3-3-4-3-1-1	7	2-4-2-2-2-2-1-3



Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
26 Aug 1050	WARNING: Geomagnetic K = 4	26/1049 - 1500
27 Aug 1313	WARNING: Geomagnetic K = 4	27/1313 - 2359
28 Aug 1632	WARNING: Geomagnetic K = 4	28/1632 - 2359
28 Aug 1646	ALERT: Geomagnetic K = 4	28/1643
28 Aug 1800	ALERT: Geomagnetic K = 5	28/1759
28 Aug 1800	WARNING: Geomagnetic K = 5	28/1759 - 2359
28 Aug 2343	EXTENDED WARNING: Geomagnetic K = 4	28/1632 - 29/0600
29 Aug 0725	WARNING: Geomagnetic K = 4	29/0725 - 1500
29 Aug 0902	ALERT: Geomagnetic K = 4	29/0859
29 Aug 2000	WARNING: Geomagnetic K = 4	29/2000 - 30/0900
30 Aug 1727	ALERT: Electron 2MeV Integral Flux \geq 1000pfu	30/1325



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	Optical			Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD		

No Flares Observed



Region Summary

Location		Sunspot Characteristics					Flares							
Date	Lat CMD	Helio Lon	Area 10 ⁻⁶	Extent hemi.	Spot (helio) Class	Spot Count	Mag Class	X-ray			Optical			
							C	M	X	S	1	2	3	4

No Active Regions



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

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

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Current

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