

**Space Weather Highlights**  
**17 August - 23 August 2020**

**SWPC PRF 2347**  
**24 August 2020**

Solar activity was very low for the highlight period. The largest flare was a B3.9 on 19 Aug from Region 2772 (N18, L=296, class/area Cro/30 on 19 Aug). 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 for the highlight period.

Geomagnetic field activity was at quiet to unsettled levels during the period with weak influences from coronal hole high speed streams.

**Space Weather Outlook**  
**24 August - 19 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 02 - 09 Sep due to recurrent coronal hole high speed stream influences. The remainder of the period is expected to be at normal to moderate levels.

Geomagnetic field activity is expected to be at unsettled levels on 24 - 26 Aug, 28 Aug - 02 Sep due to recurrent coronal hole high speed stream 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 <sup>-6</sup> hemi.)	X-ray Background Flux	Flares								
					X-ray			Optical					
					C	M	X	S	1	2	3	4	
17 August	71	0	0	A0.0	0	0	0	0	0	0	0	0	0
18 August	71	12	10	A0.0	0	0	0	1	0	0	0	0	0
19 August	71	15	30	A1.4	0	0	0	1	0	0	0	0	0
20 August	70	13	10	A0.0	0	0	0	1	0	0	0	0	0
21 August	71	0	0	A0.0	0	0	0	0	0	0	0	0	0
22 August	70	0	0	A0.0	0	0	0	0	0	0	0	0	0
23 August	71	0	0	A0.0	0	0	0	0	0	0	0	0	0

### *Daily Particle Data*

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		Electron Fluence (electrons/cm <sup>2</sup> -day -sr)
	>1 MeV	>10 MeV	>2MeV
	17 August	2.1e+05	4.6e+04
18 August	1.7e+05	4.6e+04	2.7e+06
19 August	5.9e+04	4.6e+04	1.5e+06
20 August	1.0e+05	4.7e+04	1.4e+06
21 August	1.1e+05	4.7e+04	1.4e+06
22 August	6.1e+04	4.6e+04	1.1e+06
23 August	6.4e+04	4.6e+04	1.3e+06

### *Daily Geomagnetic Data*

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	17 August	3	1-0-1-2-2-0-1-1	1	1-1-0-1-0-0-0-0	3
18 August	7	2-2-1-1-3-1-1-3	9	2-0-1-4-4-1-0-1	7	2-2-2-2-2-1-1-3
19 August	9	3-3-0-2-3-2-2-1	3	1-3-1-0-0-0-1-0	6	3-2-1-1-1-1-1-1
20 August	4	1-1-1-1-3-0-1-1	3	0-1-0-0-1-0-3-0	3	1-1-0-1-1-0-1-1
21 August	5	1-0-1-2-3-1-2-1	0	1-0-0-0-0-0-0-0	4	1-1-1-1-1-1-2-1
22 August	13	1-2-2-2-5-2-2-3	8	1-1-3-4-2-0-1-1	8	1-2-2-2-2-2-2-3
23 August	7	2-2-1-2-3-2-1-2	8	1-2-2-1-4-2-1-1	9	2-2-2-2-2-1-1-3



*Alerts and Warnings Issued*

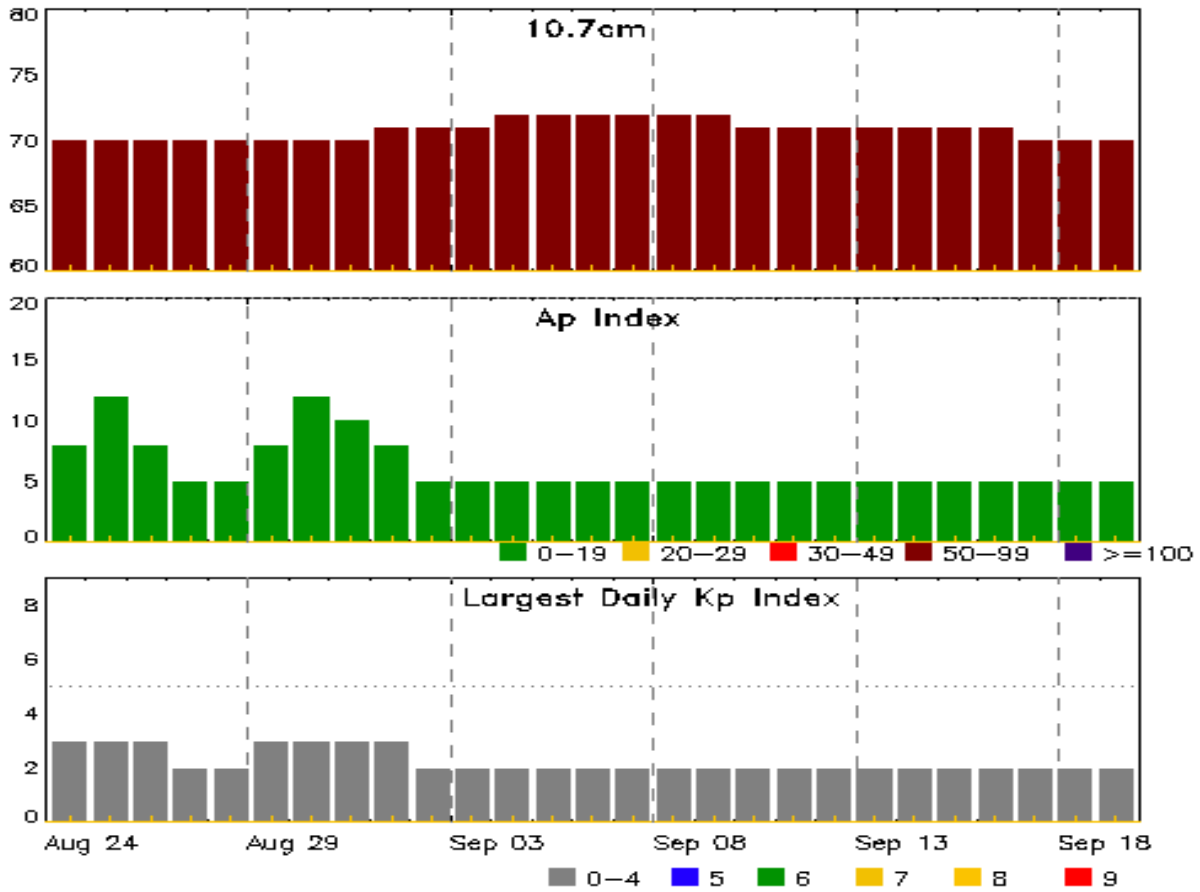
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<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
No Alerts or Warnings Issued		

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## 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
24 Aug	70	8	3	07 Sep	72	5	2
25	70	12	3	08	72	5	2
26	70	8	3	09	72	5	2
27	70	5	2	10	71	5	2
28	70	5	2	11	71	5	2
29	70	8	3	12	71	5	2
30	70	12	3	13	71	5	2
31	70	10	3	14	71	5	2
01 Sep	71	8	3	15	71	5	2
02	71	5	2	16	71	5	2
03	71	5	2	17	70	5	2
04	72	5	2	18	70	5	2
05	72	5	2	19	70	5	2
06	72	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 #	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 #	
18 Aug	1341	1344	1347		SF	N17W27		
19 Aug	0511	0529	0539	B2.3				
19 Aug	0539	0554	0559	B2.3				
19 Aug	0559	0608	0613	B2.4				
19 Aug	2236	2248	2301	B3.9	SF	N18W42	2772	
20 Aug	0623	0630	0637	B1.2	SF	N18W51	2772	
21 Aug	0158	0211	0229	B1.6				



## Region Summary

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

### Region 2771

12 Aug	S18E43	297	10		Bxo	3	B										
13 Aug	S18E31	296	10	1	Axx	1	A										
14 Aug	S18E17	297	plage														
15 Aug	S18E03	297	plage														
16 Aug	S18W11	298	plage														
17 Aug	S18W25	299	plage														
18 Aug	S18W38	299	plage														
19 Aug	S18W52	300	plage														
20 Aug	S18W66	300	plage														
21 Aug	S18W80	301	plage														
									0	0	0	0	0	0	0	0	0

Crossed West Limb.

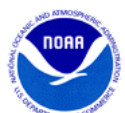
Absolute heliographic longitude: 297

### Region 2772

18 Aug	N18W36	296	10	1	Bxo	2	B										
19 Aug	N18W47	295	30	5	Cro	5	B				1						
20 Aug	N17W63	297	10	6	Bxo	3	B				1						
21 Aug	N17W77	298	plage														
22 Aug	N17W91	299	plage														
									0	0	0	2	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 296



## ***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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