

Solar activity was very low. Region 2670 (S05, L=119, class/area Cso/160 on 02 Aug) continued its transit across the visible disk during the period as a simple Hsx/alpha spot group with no flaring activity observed. No Earth-directed coronal mass ejections were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels from 07-11 Aug with a peak flux of 11,301 pfu observed at 07/1440 UTC. Electron flux values decreased to normal to moderate levels on 12-13 Aug due to the arrival of a negative polarity coronal hole high speed stream (CH HSS).

Geomagnetic field activity ranged from quiet to unsettled levels during the period. Solar wind speed was in decline at the beginning of the period from a waning positive polarity CH HSS. Solar wind speeds declined from near 570 km/s early in the period to nominal levels by late on 08 Aug. Total field ranged from 2-6 nT through 10 Aug. On 11 Aug, total field and solar wind began to increase as a negative polarity CH HSS became geoeffective. Total field increased to a maximum of 12 nT at 12/0135 UTC while solar wind increased to around 650 km/s by 13/1750 UTC. The geomagnetic field responded with quiet levels from 07-10 Aug and quiet to unsettled levels from 11-12 Aug. Geomagnetic activity decreased to quiet levels again on 13 Aug.

Space Weather Outlook
14 August - 09 September 2017

Solar activity is expected to be at very low levels. A chance for C-class flare activity is possible from 14-28 Aug as a new active region rotates across the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels from 14-16, 18-30 Aug and again from 01-07 Sep due to CH HSS influence. Normal to moderate levels are expected on 17, 31 Aug and again on 08-09 Sep.

Geomagnetic field activity is expected to reach unsettled to active levels on 14, 16-22, 30-31 Aug and from 01-02 and 08-09 Sep with G1 (Minor) geomagnetic storm levels are likely on 17-18 and 31 Aug due to recurrent CH HSS activity.



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
07 August	73	11	140	A5.2	0	0	0	0	0	0	0	0
08 August	71	11	140	A3.9	0	0	0	0	0	0	0	0
09 August	72	11	130	A3.5	0	0	0	0	0	0	0	0
10 August	71	11	110	A3.3	0	0	0	0	0	0	0	0
11 August	70	11	110	A3.0	0	0	0	0	0	0	0	0
12 August	70	11	100	A2.7	0	0	0	0	0	0	0	0
13 August	68	11	110	A2.9	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	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
	07 August	2.7e+07	1.4e+04	3.7e+03	4.4e+08	
08 August	1.9e+07	1.5e+04	3.4e+03	5.3e+08		
09 August	1.8e+07	1.4e+04	3.4e+03	3.9e+08		
10 August	2.5e+07	1.5e+04	3.8e+03	3.2e+08		
11 August	2.0e+07	1.5e+04	3.6e+03	1.4e+08		
12 August	4.3e+07	1.5e+04	3.4e+03	2.6e+07		
13 August	3.5e+07	1.5e+04	3.4e+03	3.8e+07		

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	07 August	6	1-2-2-3-2-1-1-1	7	1-1-2-4-3-1-0-0	5
08 August	5	0-1-0-2-3-2-2-1	5	1-0-1-1-1-2-1-3	5	1-1-1-1-1-2-2-1
09 August	5	0-1-2-1-2-1-2-2	4	1-0-1-2-3-1-1-0	5	1-1-2-1-1-1-1-2
10 August	7	0-1-1-2-4-2-2-1	4	0-2-1-3-1-1-0-0	5	1-1-2-2-2-1-0-2
11 August	7	1-2-2-1-2-2-3-2	5	1-2-1-2-1-2-2-1	7	2-2-1-1-1-2-3-2
12 August	12	3-3-2-2-3-1-3-3	9	3-3-3-1-2-1-2-2	11	3-3-2-2-2-1-3-3
13 August	9	2-3-2-2-2-3-2-1	7	2-2-3-2-2-1-1-1	9	2-2-2-2-2-2-2-2

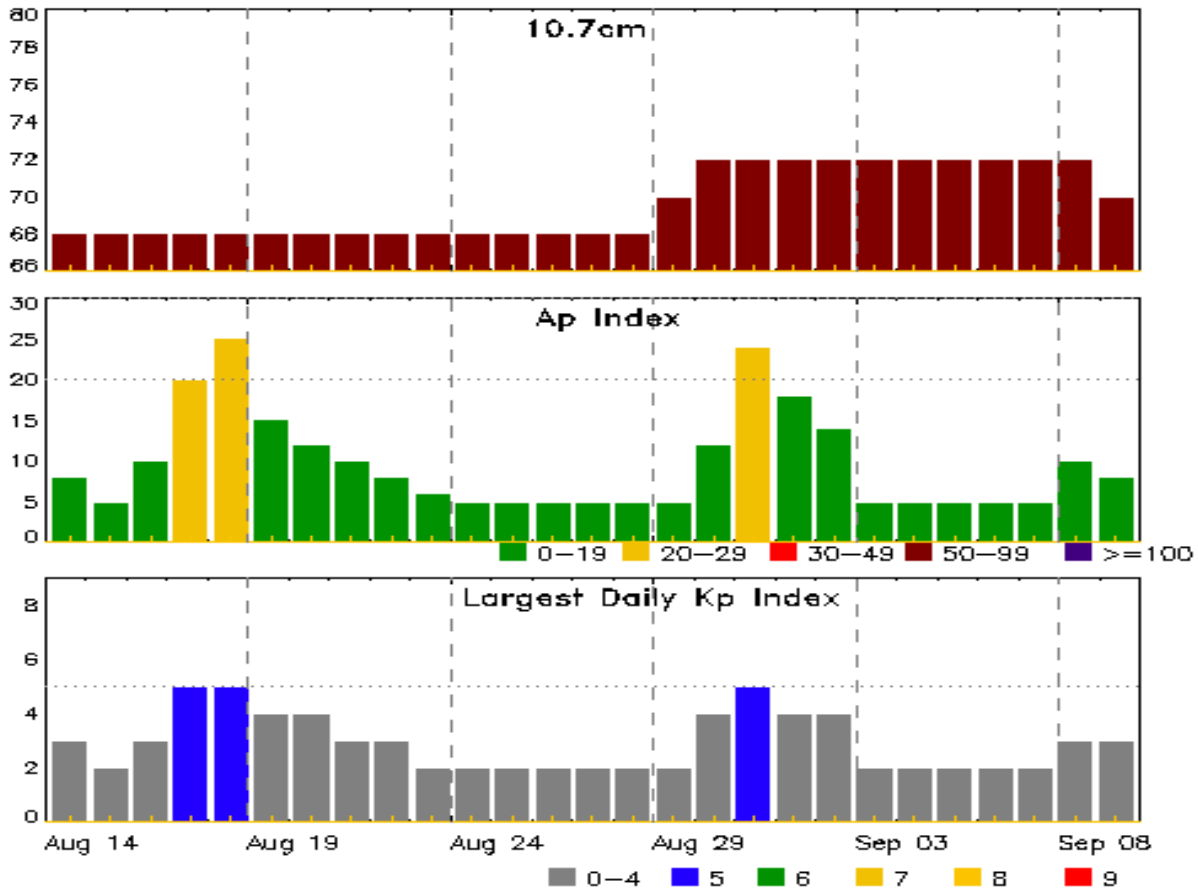


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
07 Aug 0503	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	05/1405
08 Aug 0500	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	05/1405
09 Aug 0501	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	05/1405
10 Aug 0500	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	05/1405
11 Aug 0851	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	05/1405
12 Aug 0135	WARNING: Geomagnetic K = 4	12/0135 - 1500
12 Aug 1455	EXTENDED WARNING: Geomagnetic K = 4	12/0135 - 2359
12 Aug 2355	EXTENDED WARNING: Geomagnetic K = 4	12/0135 - 13/0900



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
14 Aug	68	8	3	28 Aug	68	5	2
15	68	5	2	29	70	5	2
16	68	10	3	30	72	12	4
17	68	20	5	31	72	24	5
18	68	25	5	01 Sep	72	18	4
19	68	15	4	02	72	14	4
20	68	12	4	03	72	5	2
21	68	10	3	04	72	5	2
22	68	8	3	05	72	5	2
23	68	6	2	06	72	5	2
24	68	5	2	07	72	5	2
25	68	5	2	08	72	10	3
26	68	5	2	09	70	8	3
27	68	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	Optical			Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD		

No Flares Observed



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							
Region 2670																							
02 Aug	S05E58	119	160	4	Cso	2	B																
03 Aug	S05E45	119	150	5	Hsx	3	A															1	
04 Aug	S04E32	119	150	8	Hsx	3	A																
05 Aug	S06E20	118	150	8	Hsx	3	A															1	
06 Aug	S05E04	120	140	7	Hsx	3	A																
07 Aug	S06W09	121	140	2	Hsx	1	A																
08 Aug	S05W21	120	140	2	Hsx	1	A																
09 Aug	S06W33	119	130	2	Hsx	1	A																
10 Aug	S07W47	119	110	2	Hsx	1	A																
11 Aug	S07W59	118	110	2	Hsx	1	A																
12 Aug	S07W72	117	100	2	Hsx	1	A																
13 Aug	S07W85	117	110	1	Hsx	1	A																
													0	0	0	2	0	0	0	0	0		

Still on Disk.

Absolute heliographic longitude: 120

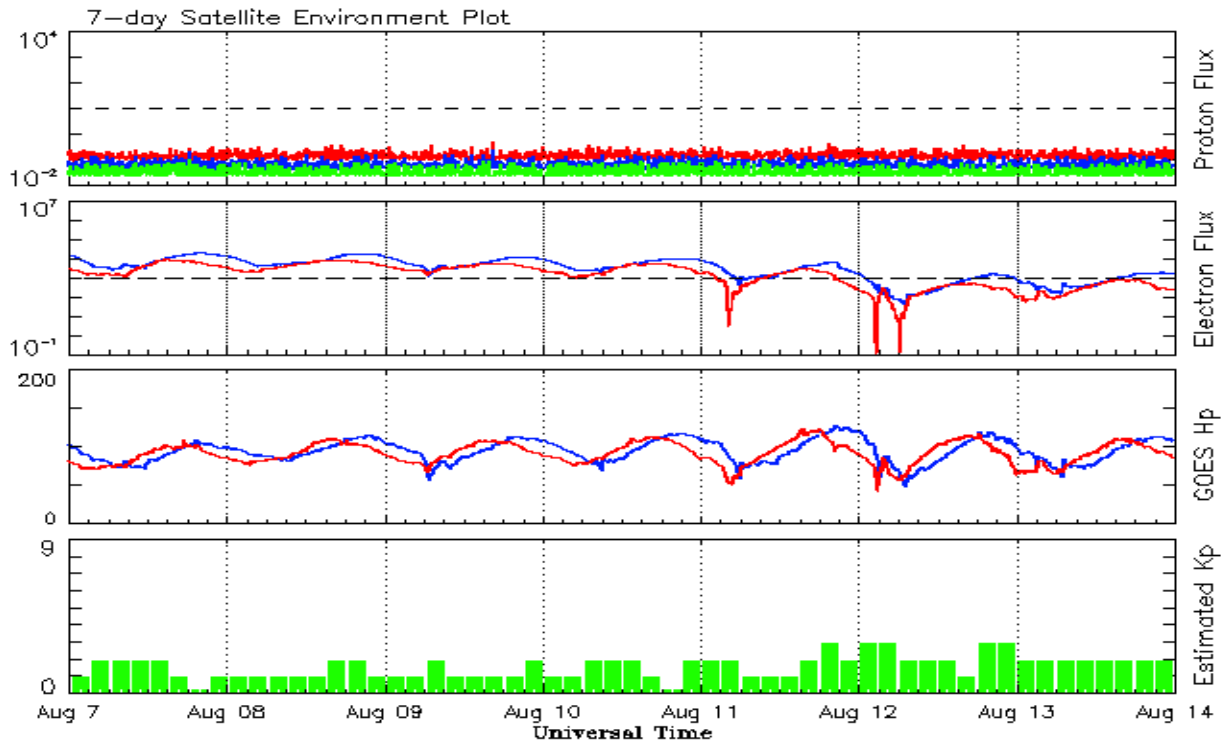


Recent Solar Indices (preliminary)
Observed monthly mean values

Month	Sunspot Numbers					Radio Flux		Geomagnetic		
	Observed values		Ratio	Smooth values		Penticton	Smooth	Planetary	Smooth	
	SEC	RI	RI/SEC	SEC	RI	10.7 cm	Value	Ap	Value	
2015										
August	61.6	38.6	0.63	65.5	39.8	106.2	113.3	16	13.1	
September	72.5	47.2	0.65	64.0	39.5	102.1	110.8	16	12.8	
October	59.5	38.2	0.62	61.8	38.6	104.1	107.9	15	12.5	
November	61.8	37.3	0.61	59.0	36.7	109.6	105.3	13	12.5	
December	54.1	34.8	0.64	55.1	34.7	112.8	102.5	15	12.5	
2016										
January	50.4	34.2	0.67	51.4	32.6	103.5	99.9	10	12.3	
February	56.0	33.8	0.61	49.6	31.5	103.5	98.1	10	12.0	
March	40.9	32.5	0.80	47.7	30.2	91.6	96.6	11	11.8	
April	39.2	22.7	0.58	45.0	28.7	93.4	95.3	10	11.8	
May	48.9	30.9	0.64	42.1	26.9	93.1	93.2	12	11.7	
June	19.3	12.3	0.65	39.0	24.9	81.9	90.4	9	11.4	
July	36.8	19.4	0.53	36.5	23.1	85.9	87.7	10	11.2	
August	50.4	30.1	0.60	34.2	21.6	85.0	85.5	10	11.2	
September	37.4	26.8	0.72	32.1	19.9	87.8	83.7	16	11.3	
October	30.0	20.0	0.67	31.1	18.9	86.1	82.5	16	11.6	
November	22.4	12.8	0.57	29.4	17.9	78.7	81.1	10	11.6	
December	17.6	11.1	0.64	28.1	17.1	75.1	80.0	10	11.4	
2017										
January	28.1	15.7	0.55	27.3	16.7	77.4	79.4	10	11.3	
February	22.0	15.8	0.71			76.9		10		
March	25.4	10.6	0.42			74.6		15		
April	30.4	19.6	0.64			80.9		13		
May	18.1	11.3	0.62			73.5		9		
June	18.0	11.6	0.64			74.8		7		
July	18.8	11.0	0.59			77.7		9		

Note: Values are final except for the most recent 6 months which are considered preliminary.
Cycle 24 started in Dec 2008 with an RI=1.7.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 07 August 2017*

The proton flux plot contains the five-minute averaged integral proton flux (protons/cm²-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

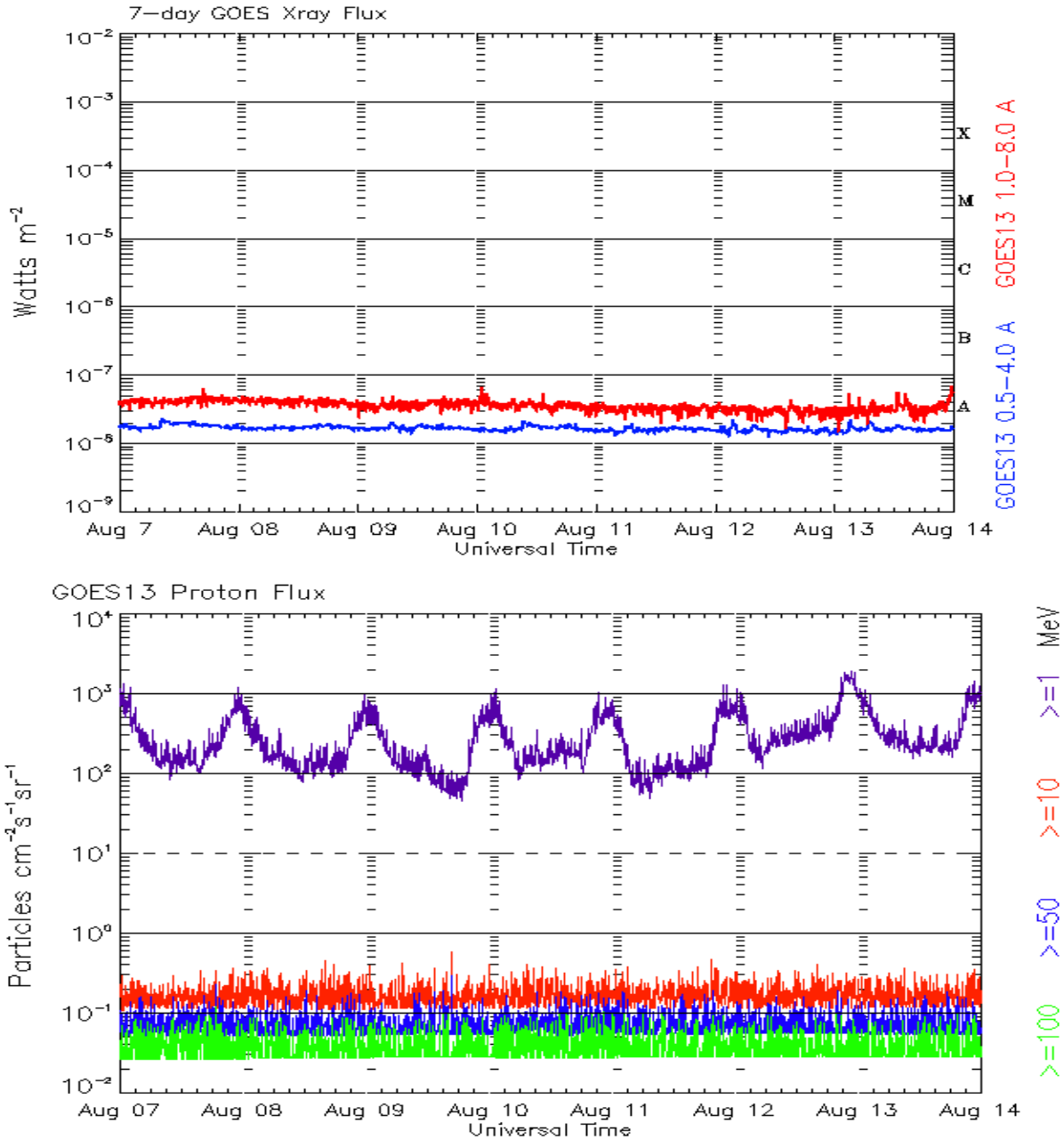
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

The Hp plot contains the five minute averaged Hp magnetic field component in nanoteslas (nT) as by the SWPC Primary GOES satellite. The Hp component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

The data included here are those now available in real time at the SWPC and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton and electron fluxes and Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.

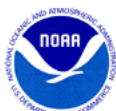




*Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 07 August 2017*

The x-ray plots contains five-minute averages x-ray flux (Watt/m²) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged intergral flux units (pfu = protons/cm² -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1, >10, >30, and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.



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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.

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