

Solar activity was very low to low this period. An impulsive C2.0/sn flare was observed at 24/0754 UTC from Region 969 (S05, L=187, class/area, Cso/110 on 25 August).

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field activity ranged from quiet to unsettled levels during most of the period. ACE solar wind data indicated a recurrent coronal hole wind stream occurred during 25 – 26 August. Late on 25 August, the field responded with unsettled to active conditions at all latitudes, while minor to major storm levels were observed at high latitudes mid-day on the 25th. A co-rotating interaction region (CIR) preceded the onset of the stream and was associated with a solar sector boundary shift (away [+] to toward [-]) as well as a short-lived density increase (peak 36.5 p/cc at 25/1115 UTC). The CIR was also associated with increased IMF Bt (peak 10.3 nT at 25/1438 UTC) and increased IMF Bz variability (minimum -8.1 nT at 25/1135 UTC and maximum +8.3 nT at 25/1216 UTC). The recurrent wind stream commenced mid-day on 26 August and reached a peak of 519.7 km/sec at 26/2307 UTC, and was still rising at the close of the summary period.

Space Weather Outlook
29 August – 24 September 2007

Solar activity is expected to be at very low levels.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels during 29 August – 10 September, and again on 24 September.

Quiet to unsettled conditions are expected during 29 August – 01 September. Activity is expected to increase to active to minor storm levels on 02 - 03 September due to a recurrent coronal hole high-speed stream. Activity is expected to decrease to quiet to unsettled levels during 04 – 05 September. Unsettled to active conditions are expected during 06 – 07 September as another recurrent high-speed stream disturbs the field. Activity is expected to decrease to quiet to unsettled levels through 21 September. Unsettled to active conditions are expected 22 – 24 September due to another recurrent high-speed stream.



Daily Solar Data

Date	Radio	Sun	Sunspot	X-ray	Flares							
	Flux	spot	Area	Background	X-ray Flux			Optical				
	10.7 cm	No.	(10 ⁻⁶ hemi.)		C	M	X	S	1	2	3	4
20 August	69	0	0	<A1.0	0	0	0	0	0	0	0	0
21 August	69	11	90	<A1.0	0	0	0	0	0	0	0	0
22 August	70	12	100	<A1.0	0	0	0	0	0	0	0	0
23 August	71	12	100	<A1.0	0	0	0	0	0	0	0	0
24 August	72	12	90	<A1.0	1	0	0	3	0	0	0	0
25 August	72	14	110	<A1.0	0	0	0	0	0	0	0	0
26 August	70	13	80	<A1.0	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	>100 MeV	>.6 MeV	>2MeV	>4 MeV
20 August	8.9E+5	1.8E+4	4.0E+3		2.3E+7	
21 August	8.1E+5	1.8E+4	4.0E+3		7.7E+6	
22 August	7.3E+5	1.8E+4	4.1E+3		6.2E+6	
23 August	8.3E+5	1.8E+4	4.3E+3		4.8E+6	
24 August	1.1E+6	1.8E+4	4.2E+3		6.5E+6	
25 August	8.1E+5	1.9E+4	4.2E+3		2.5E+6	
26 August	7.3E+5	1.7E+4	4.1E+3		1.1E+6	

Daily Geomagnetic Data

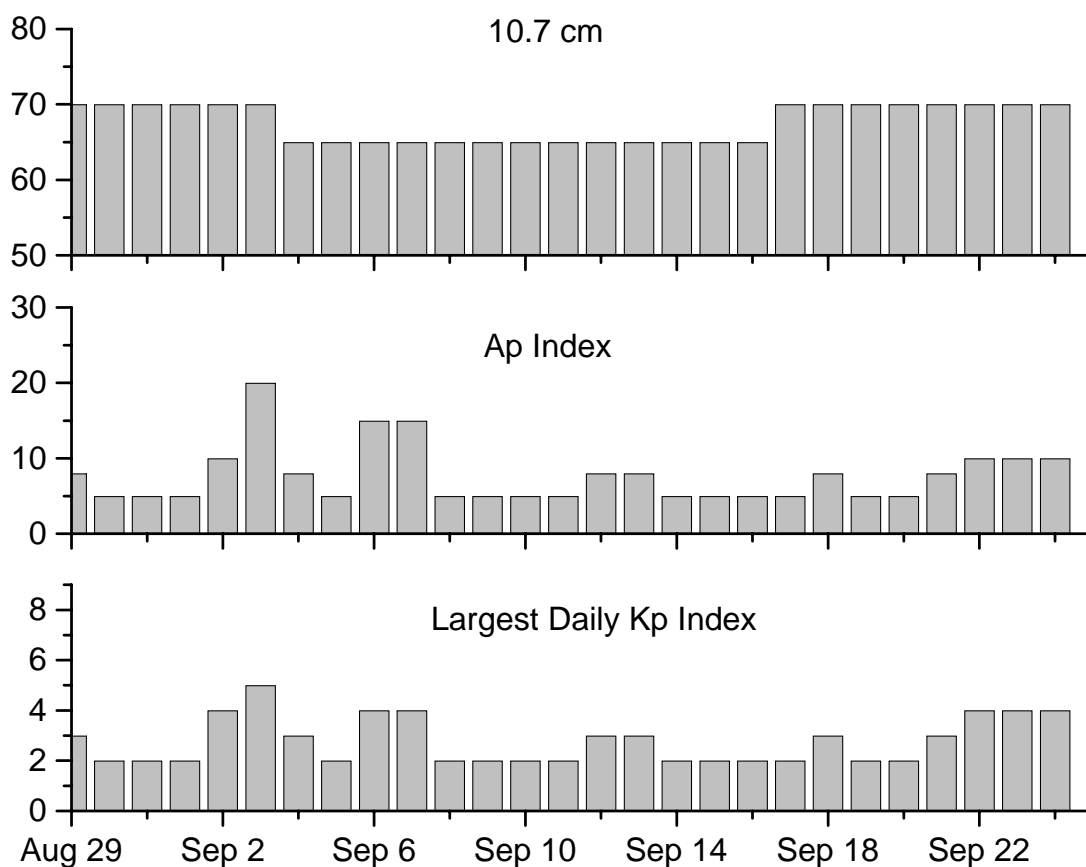
Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
20 August	2	1-0-1-1-1-1-0	1	1-1-0-1-0-0-0-0	2	1-0-0-0-1-0-1-1
21 August	3	2-1-0-0-2-1-1-1	2	1-1-0-1-1-0-1-1	4	2-1-0-1-2-1-0-1
22 August	2	0-1-0-1-2-1-1-0	6	0-0-0-3-3-3-1-0	4	0-1-0-1-2-1-1-1
23 August	1	0-0-0-1-1-0-1-0	1	0-0-0-1-1-0-0-0	2	0-0-0-1-1-0-0-1
24 August	1	0-1-0-0-1-0-0-0	0	0-0-0-0-0-0-1-0	2	0-1-0-0-0-0-1-1
25 August	6	1-0-1-2-2-1-3-2	18	1-1-1-5-6-1-1-1	8	2-1-1-2-3-2-3-2
26 August	10	1-1-1-1-3-2-4-3	8	1-1-1-2-3-3-2-2	10	1-1-1-1-2-2-4-3

Alerts and Warnings Issued

Date & Time of Issue	Type of Alert or Warning	Date & Time of Event UTC
<i>No Alerts Issued</i>		



Twenty-seven Day Outlook



Date	Radio Flux 10.7 cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7 cm	Planetary A Index	Largest Kp Index
29	70	8	3	12 Sep	65	8	3
30	70	5	2	13	65	8	3
31	70	5	2	14	65	5	2
01 Sep	70	5	2	15	65	5	2
02	70	10	4	16	65	5	2
03	70	20	5	17	70	5	2
04	65	8	3	18	70	8	3
05	65	5	2	19	70	5	2
06	65	15	4	20	70	5	2
07	65	15	4	21	70	8	3
08	65	5	2	22	70	10	4
09	65	5	2	23	70	10	4
10	65	5	2	24	70	10	4
11	65	5	2				



Energetic Events

Date	Time		X-ray		Optical Information			Peak		Sweep Freq	
	$\frac{1}{2}$		Integ		Imp/	Location	Rgn	Radio Flux		Intensity	
	Begin	Max	Max	Class	Flux	Brtns	Lat CMD	#	245	2695	II IV

No Events Observed

Flare List

Date	Time			Optical	Imp /	Location	Rgn
	Begin	Max	End	X-ray Class.			

20 August	<i>No Flares Observed</i>						
21 August	<i>No Flares Observed</i>						
22 August	1129	1135	1143	B1.2			
23 August	<i>No Flares Observed</i>						
24 August	0750	0754	0810	C2.0	Sn	S06E41	969
	1153	1153	1157	B3.4	Sf	S03E45	969
	1934	1937	1940	B1.1			
	2329	2331	2334	B2.2	Sf	S04E36	969
25 August	<i>No Flares Observed</i>						
26 August	<i>No Flares Observed</i>						

Region Summary

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

Region 969

21 Aug S06E73	189	0090	07	Hsx	001	A									
22 Aug S06E61	187	0100	03	Hsx	002	A									
23 Aug S05E47	188	0100	02	Hax	002	A									
24 Aug S05E35	187	0090	02	Hax	002	A		1			3				
25 Aug S05E22	187	0110	04	Cso	004	B									
26 Aug S05E08	188	0080	04	Hhx	003	A									
								1	0	0	3	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 188

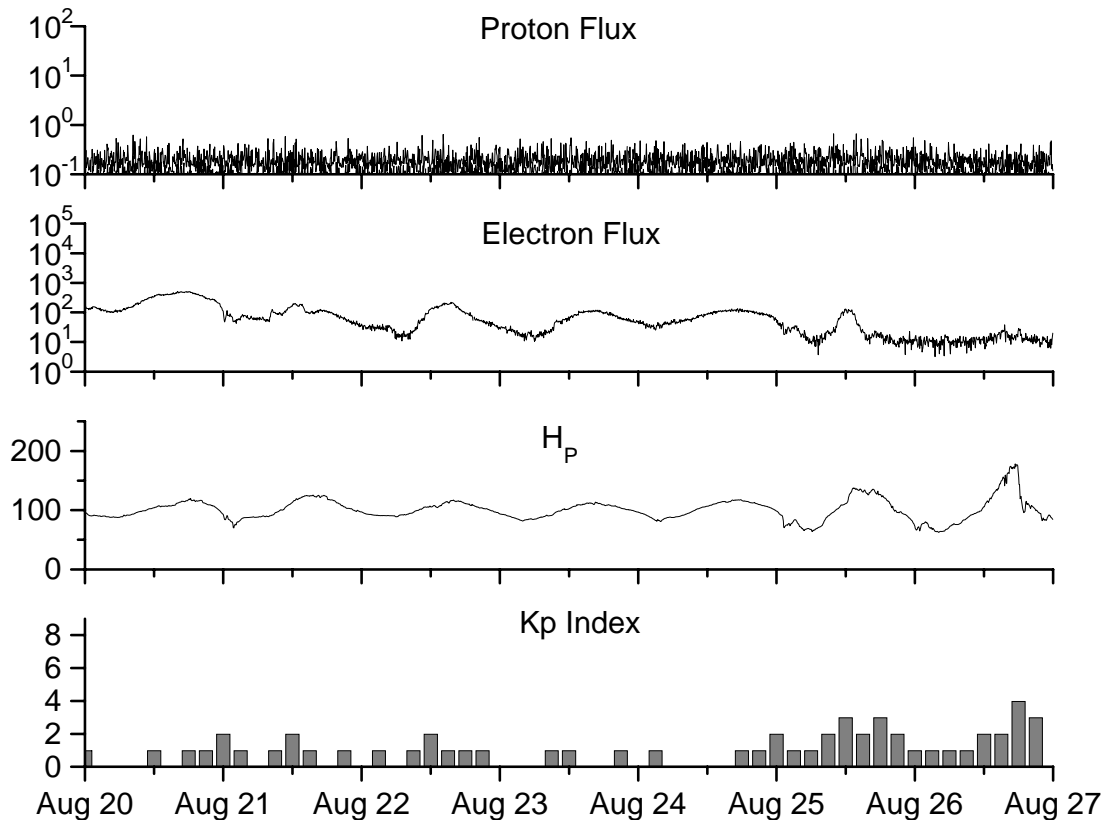


**Recent Solar Indices (preliminary)
of the observed monthly mean values**

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
2005									
August	65.6	36.4	0.55	45.4	27.5	90.7	89.3	16	12.2
September	39.2	22.1	0.56	42.9	25.9	90.8	87.8	21	11.8
October	13.0	8.5	0.65	42.6	25.5	76.7	87.4	7	11.6
November	32.2	18.0	0.56	42.1	24.9	86.3	86.7	8	11.1
December	62.6	41.2	0.66	40.1	23.0	90.8	85.4	7	10.4
2006									
January	28.0	15.4	0.55	37.2	20.8	83.8	84.0	6	9.9
February	5.3	4.7	0.89	33.4	18.7	76.6	82.6	6	9.2
March	21.3	10.8	0.51	31.0	17.4	75.5	81.6	8	8.4
April	55.2	30.2	0.55	30.6	17.1	89.0	80.9	11	7.9
May	39.6	22.2	0.56	30.7	17.3	81.0	80.8	8	7.9
June	37.7	13.9	0.37	28.9	16.3	80.1	80.6	9	8.3
July	22.6	12.2	0.54	27.2	15.3	75.8	80.3	7	8.7
August	22.8	12.9	0.57	27.6	15.6	79.0	80.3	9	8.7
September	25.2	14.5	0.58	27.7	15.6	77.8	80.2	8	8.7
October	15.7	10.4	0.66	25.2	14.2	74.3	79.4	8	8.6
November	31.5	21.5	0.68	22.3	12.7	86.4	78.5	9	8.5
December	22.2	13.6	0.61	20.7	12.1	84.3	77.9	15	8.5
2007									
January	26.6	16.9	0.64	19.7	12.0	83.5	77.5	6	8.4
February	17.2	10.6	0.62			77.8		6	
March	9.7	4.8	0.49			72.3		7	
April	6.9	3.7	0.54			72.4		9	
May	19.4	11.7	0.60			74.5		8	
June	20.0	12.0	0.60			73.7		7	
July	15.6	10.0	0.64			71.6		7	

NOTE: All smoothed values after September 2002 and monthly values after March 2003 are preliminary estimates. The lowest smoothed sunspot index number for Cycle 22, RI = 8.0, occurred in May 1996. The highest smoothed sunspot number for Cycle 23, RI= 120.8, occurred April 2000. *After June 1991, the 10.7 cm radio flux data source is Penticton, B.C. Canada. Prior to that, it was Ottawa.





Weekly Geosynchronous Satellite Environment Summary
Week Beginning 20 August 2007

Protons plot contains the five-minute averaged integral proton flux (protons/cm²–sec –sr) as measured by GOES-11 (W135) for each of three energy thresholds: greater than 10, 50, and 100 MeV.

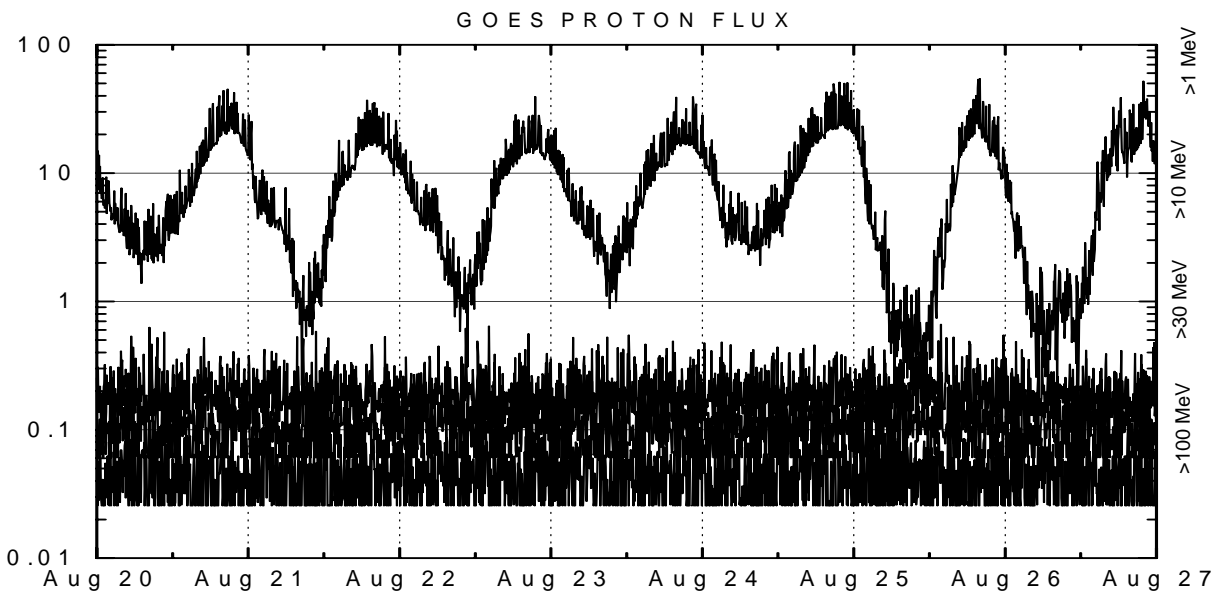
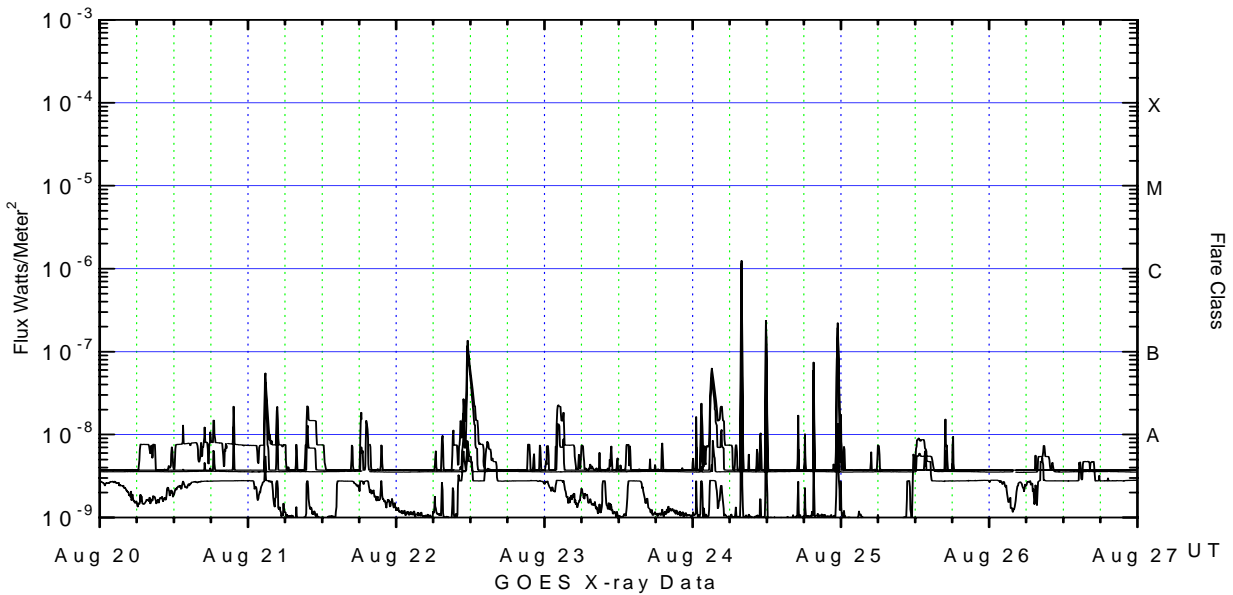
Electrons plot contains the five-minute averaged integral electron flux (electrons/cm²–sec –sr) with energies greater than 2 MeV at GOES-12 (W075).

H_P plot contains the five minute averaged magnetic field H - component in nanoteslas (nT) as measured by GOES-12. The H component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

Kp plot contains the estimated planetary 3-hour K-index (derived by the Air Force Weather Agency) in real time from magnetometers at Meanook, Canada; Sitka, AK; Glenlea, Canada; St. Johns, Canada; Ottawa, Canada; Newport, WA; Fredericksburg, VA; Boulder, CO; Fresno, CA and Hartland, UK. These data are made available through cooperation from the Geological Survey of Canada (GSC), British Geological Survey (BGS) and the US Geological Survey. These may differ from the final Kp values derived from a more extensive network of magnetometers.

The data included here are those now available in real time at the SEC 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

X-ray plot contains five-minute averaged x-ray flux (watts/m^2) as measured by GOES 10 (W060) and GOES 11 (W135) in two wavelength bands, .05 - .4 and .1 - .8 nm. The letters A, B, C, M and X refer to x-ray event levels for the .1 - .8 nm band.

Proton plot contains the five-minute averaged integral proton flux ($\text{protons/cm}^2\text{-sec-sr}$) as measured by GOES-11 (W135) for each of the energy thresholds: >1, >10, >30 and >100 MeV. P10 event threshold is 10 pfu ($\text{protons/cm}^2\text{-sec-sr}$) at greater than 10 MeV.

