

Solar activity was at very low to low levels during the period. The week began with five C-class events on 20 January, four of which were produced by Region 1959 (S24, L=239, class/area Eai/220 on 21 January). The largest flare of that day, and the first six days of the period, however, was a C3/Sf produced by Region 1963 (S06, L=216, class/area Cso/060 on 21 January) at 20/2249 UTC. From 21-25 January, only five C1 to C2 class flares were observed while very low levels were observed on 23 January. January 26th brought an increase in activity when a C6 event was observed at 26/1013 UTC from Region 1960 (S15, L=238, class/area Hkx/270 on 22 January). A C3 x-ray event was observed earlier at 26/0616 UTC from behind the NE limb and shortly after, a C1 x-ray event was observed at 26/0838 UTC from behind the SE limb. Associated with the C1 event were Type II (839 km/s) and 10cm (200 sfu) radio signatures. The activity from behind the east limb appeared to originate in the vicinity of old Regions 1946 (N09, L=103) and 1944 (S09, L=101).

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels. Moderate levels were observed on 20 January.

The geomagnetic field was at quiet to unsettled levels. The period began with solar wind speeds near 300 km/s and total field measurements around 4 nT. Subsequently, the geomagnetic field was at quiet levels on 20 January. By 21 January, total field began to increase to a maximum of 487 km/s while the Bz component fluctuated between +/- 6 nT. Solar wind speed increased to a maximum of 605 km/s at 22/0846 UTC as a positive polarity coronal hole high speed stream became geoeffective. The geomagnetic field responded with quiet to unsettled conditions on 21 and 22 January. Solar wind speed declined to background levels by 24 January resulting in mostly quiet conditions with isolated unsettled levels from 23 January through the end of the period.

### **Space Weather Outlook** **27 January - 22 February 2014**

Solar activity is expected to be at low to moderate levels overall. Moderate to high levels are possible from 27 January through 09 February with the return of old Regions 1946 and 1944.

The greater than 10 MeV particle flux at geosynchronous orbit is expected to remain at background levels during the forecast period. The threat of a solar energetic particle event is expected to be greatest between 03-10 February as old Region 1944 crosses the central meridian into a more potentially geoeffective position.

The greater than 2 MeV particle flux at geosynchronous orbit is expected to be at low to moderate levels through most of the period, with the exception of 03-05 February when a chance for high levels are expected due to recurrence.



The geomagnetic field is expected to begin the period at quiet to unsettled levels, with a chance for active periods on 27-28 January, in response to a small coronal hole high speed stream. By 29 January, a return to mostly quiet conditions is expected. Recurrent high speed solar wind streams are expected to bring unsettled conditions with a chance for active levels on 07-08 February and 17-18 February. Mostly quiet conditions are expected to prevail for the remainder of the period in the absence of transient features.



### *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
20 January	137	131	850	B4.6	5	0	0	3	0	0	0	0
21 January	146	141	820	B5.0	2	0	0	1	0	0	0	0
22 January	143	144	670	B4.8	1	0	0	2	0	0	0	0
23 January	136	121	560	B3.6	0	0	0	0	0	0	0	0
24 January	136	150	680	B3.8	1	0	0	0	0	0	0	0
25 January	133	102	520	*	1	0	0	0	0	0	0	0
26 January	138	109	460	B7.9	3	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	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
	20 January	1.0e+06	1.1e+04	2.6e+03		1.1e+07
21 January	1.6e+06	1.2e+04	2.6e+03		2.9e+06	
22 January	4.0e+05	1.1e+04	2.2e+03		1.6e+06	
23 January	1.8e+05	1.1e+04	2.4e+03		2.5e+06	
24 January	2.6e+05	1.1e+04	2.6e+03		4.3e+06	
25 January	1.3e+05	1.0e+04	2.3e+03		1.5e+06	

### *Daily Geomagnetic Data*

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	20 January	4	0-0-1-1-2-2-2-1	3	0-0-3-2-1-0-0-0	3
21 January	6	2-1-1-1-2-2-2-2	11	0-0-2-4-4-3-2-1	8	3-1-2-2-2-2-2-2
22 January	8	1-1-3-3-2-2-1-2	19	0-0-3-6-5-2-1-0	9	2-2-3-3-2-1-2-3
23 January	5	2-1-2-1-1-2-2-1	3	1-1-2-2-1-1-0-0	6	3-2-2-1-1-1-2-1
24 January	3	2-1-0-0-1-2-1-0	2	1-1-0-1-0-0-1-0	5	3-2-1-1-1-1-1-1
25 January	0	3-2-1-1-1-0-0-0	0	0-0-0-1-2-0-0-0	6	3-2-2-1-1-0-0-0
26 January	3	0-2-2-1-0-1-1-1	4	0-1-2-3-0-1-1-0	6	2-3-2-1-0-2-1-1

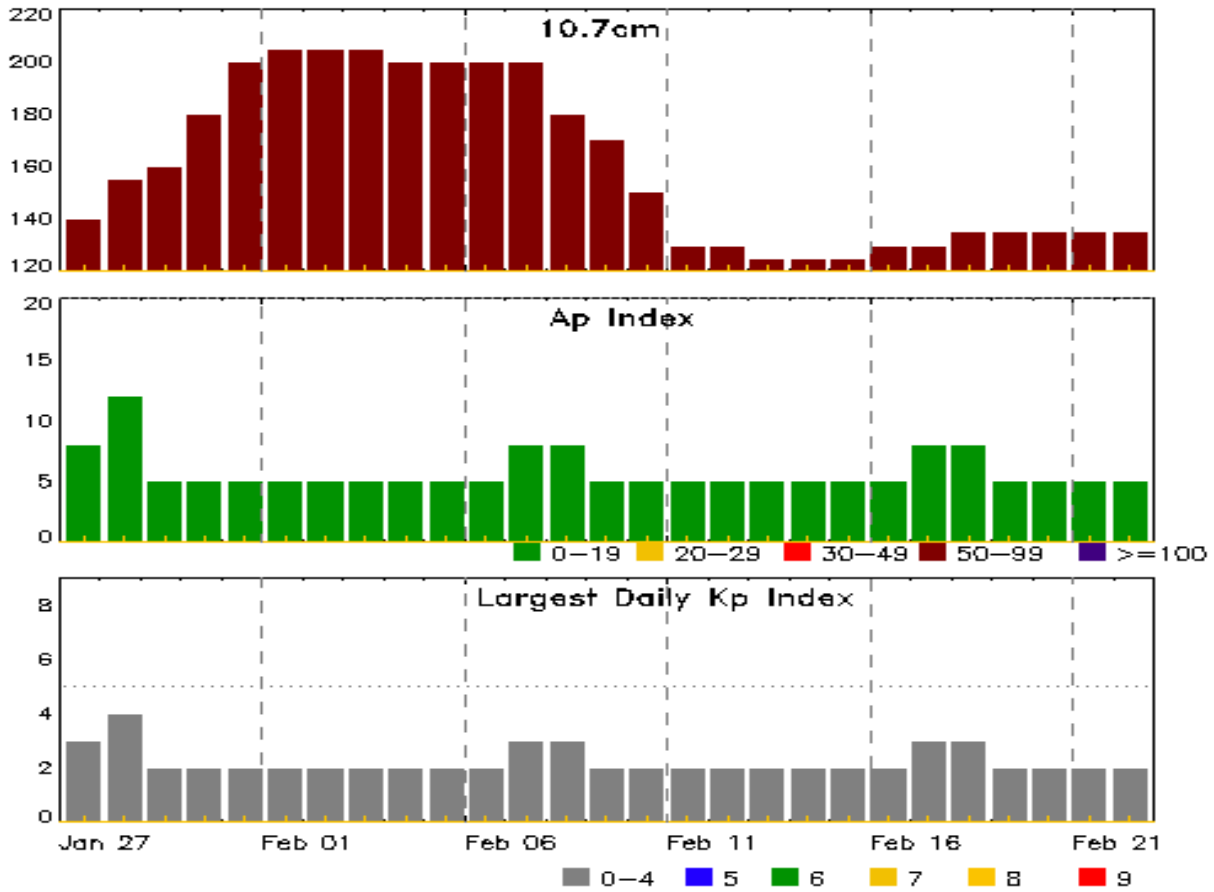


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
22 Jan 1137	WARNING: Geomagnetic K = 4	22/1136 - 1600
26 Jan 0857	ALERT: Type II Radio Emission	26/0834
26 Jan 0857	SUMMARY: 10cm Radio Burst	26/0830 - 0831
26 Jan 1108	ALERT: Type IV Radio Emission	26/1013



## 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
27 Jan	140	8	3	10 Feb	150	5	2
28	155	12	4	11	130	5	2
29	160	5	2	12	130	5	2
30	180	5	2	13	125	5	2
31	200	5	2	14	125	5	2
01 Feb	205	5	2	15	125	5	2
02	205	5	2	16	130	5	2
03	205	5	2	17	130	8	3
04	200	5	2	18	135	8	3
05	200	5	2	19	135	5	2
06	200	5	2	20	135	5	2
07	200	8	3	21	135	5	2
08	180	8	3	22	135	5	2
09	170	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 Location Lat CMD	Rgn #
	Begin	Max	End				
20 Jan	0208	0220	0238	C3.4	SF	S23E64	1959
20 Jan	0457	0503	0511	C1.4			1959
20 Jan	0621	0631	0648	C2.8	SF	S23E61	1959
20 Jan	1733	1800	1815	C1.3			1959
20 Jan	2139	2249	2357	C3.6	SF	S07E67	1963
21 Jan	1329	1332	1334	B9.1			
21 Jan	1420	1423	1426	B9.2			1955
21 Jan	1656	1718	1752	C2.9			
21 Jan	2230	2236	2242	C1.2	SF	S25E39	1959
22 Jan	1012	1016	1024	B8.2	SF	S14W10	1955
22 Jan	1739	1743	1746	B8.3			1959
22 Jan	1857	1905	1917	C1.3	SF	S15W16	1955
23 Jan	0157	0202	0208	B7.8			
23 Jan	0245	0254	0259	B8.4			
24 Jan	0433	0442	0455	B6.1			1955
24 Jan	0516	0519	0522	B6.0			1957
24 Jan	0958	1037	1041	B9.2			
24 Jan	2336	2344	2349	C1.5			1960
25 Jan	0225	0232	0239	C1.0			
25 Jan	1335	1341	1348	B7.0			1957
26 Jan	0518	0616	0641	C3.2			
26 Jan	0826	0838	0933	C1.5			
26 Jan	1005	1013	1019	C6.1			1960



## 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	4								
<b>Region 1949</b>																							
08 Jan	S15E70	14	80	2	Hsx	1	A																
09 Jan	S15E56	14	150	2	Hsx	1	A																
10 Jan	S16E42	16	180	3	Hax	2	A																
11 Jan	S15E30	15	140	4	Hsx	3	A																
12 Jan	S16E17	13	180	3	Hax	2	A																
13 Jan	S16E03	15	160	4	Hax	3	A																
14 Jan	S16W08	13	110	3	Hax	2	A																
15 Jan	S17W22	13	150	3	Hax	4	A																
16 Jan	S17W34	12	110	3	Hax	2	A																
17 Jan	S17W46	11	100	3	Hax	2	A																
18 Jan	S15W61	12	80	3	Hax	3	A																
19 Jan	S16W73	11	90	2	Hax	2	A																
20 Jan	S15W84	9	20	4	Hax	2	A																
									0	0	0	0	0	0	0	0	0	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 15

<b>Region 1950</b>																							
10 Jan	N16E31	26	30	4	Cao	4	B	1															
11 Jan	N16E18	27	30	6	Dro	5	B	2															
12 Jan	N17E02	28	10	2	Bxo	2	B																
13 Jan	N17W12	30	plage																				
14 Jan	N17W23	28	10	6	Bxo	5	B																
15 Jan	N16W37	28	10	7	Cro	5	B																
16 Jan	N16W51	29	10	2	Axx	2	A																
17 Jan	N16W65	31	plage																				
18 Jan	N16W79	31	plage																				
									3	0	0	0	0	0	0	0	0	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 28



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares																
	Lat CMD	Lon	Helio 10 <sup>6</sup> hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
<b>Region 1952</b>																							
11 Jan	S33E75	330	40	2	Hax	1	A																
12 Jan	S31E60	331	110	6	Dso	2	B																
13 Jan	S31E46	332	120	11	Cso	6	B						2										
14 Jan	S31E35	329	70	13	Cso	4	B																
15 Jan	S32E27	326	110	12	Eso	3	B																
16 Jan	S31E13	325	60	12	Cso	3	B																
17 Jan	S33W01	326	60	6	Cso	3	B																
18 Jan	S32W16	328	50	2	Hax	1	A																
19 Jan	S32W29	327	50	2	Hsx	2	A																
20 Jan	S32W42	327	30	2	Hsx	1	A																
21 Jan	S32W52	325	50	2	Hsx	1	A																
22 Jan	S31W66	325	30	2	Hsx	1	A																
23 Jan	S33W79	326	30	2	Hsx	1	A																
24 Jan	S31W90	323	30	1	Hsx	1	A																
								0	0	0	2	0	0	0	0	0							

Crossed West Limb.  
 Absolute heliographic longitude: 326

<b>Region 1954</b>																							
14 Jan	N07W01	5	10	2	Bxo	3	B																
15 Jan	N07W15	6	10	2	Axx	3	A																
16 Jan	N07W30	9	plage																				
17 Jan	N07W45	11	plage																				
18 Jan	N08W52	8	10		Axx	1	A																
19 Jan	N08W65	5	plage																				
20 Jan	N08W79	5	plage																				
								0	0	0	0	0	0	0	0	0							

Crossed West Limb.  
 Absolute heliographic longitude: 5





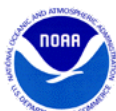
**Region Summary - continued**

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	4							
<b>Region 1955</b>																							
16 Jan	S14E54		283	70	2	Hsx	1	A															
17 Jan	S15E42		282	70	4	Hsx	1	A															
18 Jan	S14E36		279	60	5	Hax	3	A															
19 Jan	S14E23		276	60	6	Hax	2	A															
20 Jan	S14E09		276	40	3	Hax	1	A															
21 Jan	S14W04		277	50	2	Hax	2	A															
22 Jan	S13W17		277	40	3	Cao	2	B	1				2										
23 Jan	S14W31		278	20	2	Cao	2	B															
24 Jan	S12W45		277	20	2	Cao	4	B															
25 Jan	S13W60		280	20	1	Hax	2	A															
26 Jan	S14W72		279	20	1	Hrx	1	A															
									1	0	0		2	0	0	0	0	0					

Still on Disk.  
Absolute heliographic longitude: 277

<b>Region 1956</b>																							
17 Jan	S15E37		289	10	1	Axx	2	A															
18 Jan	S15E22		289	plage					1				2										
19 Jan	S15E08		291	plage																			
20 Jan	S15W06		292	plage																			
21 Jan	S15W20		293	plage																			
22 Jan	S15W34		294	plage																			
23 Jan	S15W48		295	plage																			
24 Jan	S15W62		295	plage																			
25 Jan	S15W76		296	plage																			
26 Jan	S15W90		297	plage																			
									1	0	0		2	0	0	0	0	0					

Still on Disk.  
Absolute heliographic longitude: 292



**Region Summary - continued**

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	4		
<b>Region 1957</b>																	
17 Jan	N12E48	277	30	4	Cro	2	B										
18 Jan	N12E36	275	30	6	Cro	7	B										
19 Jan	N12E21	277	30	8	Cri	9	B										
20 Jan	N12E07	277	30	8	Dro	8	B										
21 Jan	N11W06	278	60	8	Dai	12	BG										
22 Jan	N11W19	278	90	7	Dai	14	BG										
23 Jan	N11W32	279	80	8	Dai	12	BG										
24 Jan	N12W46	278	170	12	Eai	26	B										
25 Jan	N11W61	281	70	8	Cao	6	BG										
26 Jan	N10W75	282	30	5	Cao	4	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.  
 Absolute heliographic longitude: 278

<b>Region 1958</b>																	
17 Jan	S07E77	249	10	2	Hax	1	A										
18 Jan	S08E63	248	30	1	Hax	1	A										
19 Jan	S08E50	248	40	2	Hax	1	A										
20 Jan	S07E36	249	50	2	Cso	1	B										
21 Jan	S08E22	249	50	3	Cso	4	B										
22 Jan	S08E09	250	30	2	Hax	2	A										
23 Jan	S08W05	252	10	2	Hrx	2	A										
24 Jan	S07W18	250	10	1	Hrx	1	A										
25 Jan	S07W31	251	10	3	Bxo	3	B										
26 Jan	S08W45	252	10	3	Bxo	2	B										
								0	0	0	0	0	0	0	0	0	0

Still on Disk.  
 Absolute heliographic longitude: 252



**Region Summary - continued**

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	4								
<b>Region 1959</b>																							
13 Jan	S26E0*	246	plage										3										
16 Jan	S26E93	246	plage										3										
17 Jan	S26E79	246	plage										10										
18 Jan	S25E68	243	70	2	Cao	3	B	6					1										
19 Jan	S24E58	240	110	7	Dai	4	B	2					1										
20 Jan	S24E47	238	190	11	Eai	7	BG	4					2										
21 Jan	S24E33	239	220	12	Eai	14	BG	1					1										
22 Jan	S23E20	238	120	13	Eao	11	BG																
23 Jan	S24E09	238	160	12	Cao	5	BG																
24 Jan	S23W05	238	180	11	Eao	11	B																
25 Jan	S23W20	240	170	10	Dsi	11	B																
26 Jan	S24W33	239	180	9	Dso	7	B																
								29	0	0	5	0	0	0	0	0							

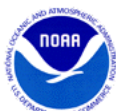
Still on Disk.  
Absolute heliographic longitude: 238

<b>Region 1960</b>																							
18 Jan	S14E77	235	140	3	Hax	2	A																
19 Jan	S14E62	236	150	3	Hax	1	A																
20 Jan	S15E49	236	200	3	Hax	1	A																
21 Jan	S15E36	236	260	3	Hkx	2	A																
22 Jan	S15E22	238	270	4	Hkx	2	A																
23 Jan	S16E10	237	200	3	Hax	1	A																
24 Jan	S16W03	236	220	4	Cao	6	B	1															
25 Jan	S16W17	237	230	4	Cao	6	B																
26 Jan	S15W31	238	200	4	Cao	8	B	1															
								2	0	0	0	0	0	0	0	0	0						

Still on Disk.  
Absolute heliographic longitude: 236

<b>Region 1961</b>																							
20 Jan	S12W34	320	40	4	Dao	6	B																
21 Jan	S12W48	321	60	6	Dao	10	B																
22 Jan	S11W62	321	50	5	Dso	5	B																
23 Jan	S11W76	323	30	5	Cso	3	B																
24 Jan	S06W91	323	30	1	Hsx	1	A																
								0	0	0	0	0	0	0	0	0	0						

Crossed West Limb.  
Absolute heliographic longitude: 320



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	Lon	Helio 10 <sup>6</sup> hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical						
									C	M	X	S	1	2	3	4		
<b>Region 1962</b>																		
20 Jan	S37E05	280	20		5	Cro	3	B										
21 Jan	S37W09	282	plage															
22 Jan	S37W23	283	plage															
23 Jan	S37W37	284	plage															
24 Jan	S37W51	284	plage															
25 Jan	S37W65	285	plage															
26 Jan	S37W79	286	plage															
										0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 280

<b>Region 1963</b>																		
20 Jan	S06E71	216	plage							1			1					
21 Jan	S06E56	216	60	7	Cso	4	B											
22 Jan	S06E44	214	10	4	Bxo	3	B											
23 Jan	S06E34	213	10	3	Axx	3	A											
24 Jan	S07E18	214	10	2	Axx	8	A											
25 Jan	S07E03	217	plage															
26 Jan	S06W10	217	plage															
										1	0	0	1	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 217

<b>Region 1964</b>																		
21 Jan	S13E52	220	10	4	Bxo	2	B											
22 Jan	S13E40	219	10	2	Axx	2	A											
23 Jan	S13E26	221	plage															
24 Jan	S13E12	221	plage															
25 Jan	S13W02	222	plage															
26 Jan	S14W14	221	0	1	Axx	1	A											
										0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 222



### *Region Summary - continued*

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 1965*

22 Jan	S15E59	199	20	2	Hrx	2	A										
23 Jan	S15E46	201	20	3	Hrx	2	A										
24 Jan	S16E31	201	10	2	Axx	2	A										
25 Jan	S15E17	203	0	1	Axx	1	A										
26 Jan	S15E03	202	10	1	Axx	1	A										
									0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 202

#### *Region 1966*

25 Jan	S12E27	193	20	2	Cro	3	B										
26 Jan	S12E13	194	10	3	Bxo	5	B										
									0	0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 194

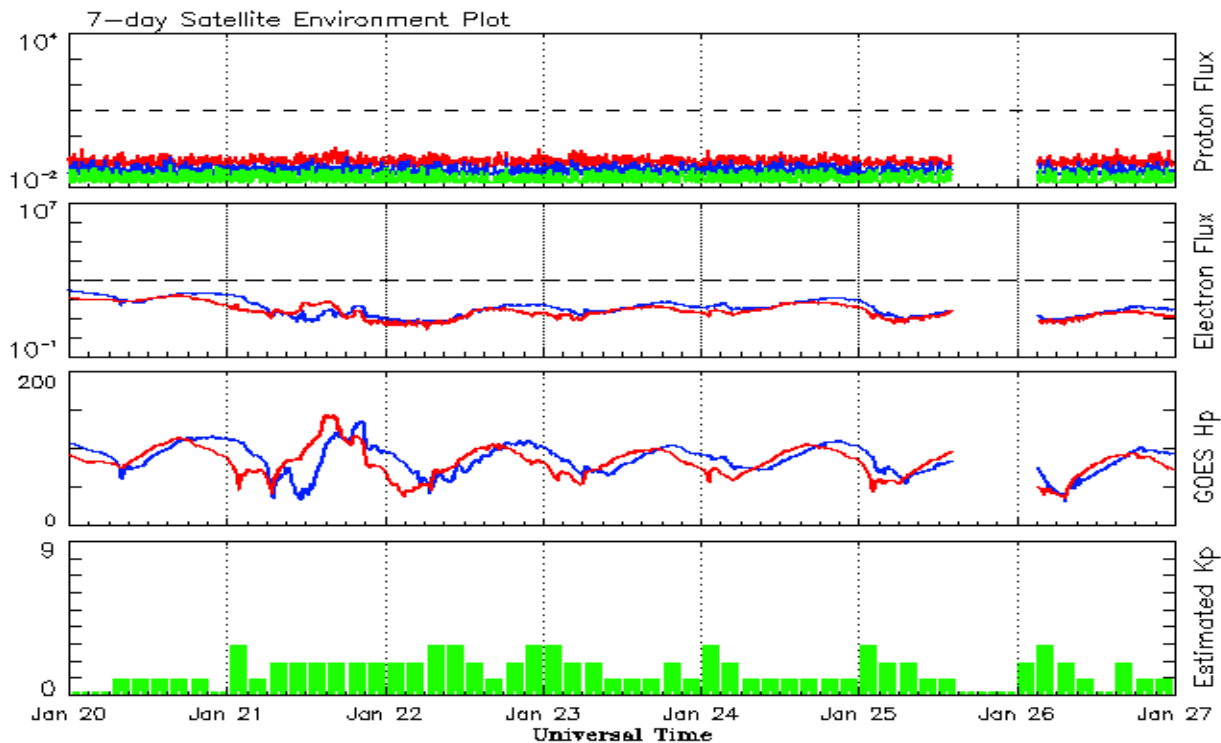


**Recent Solar Indices (preliminary)**  
**Observed monthly mean values**

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
<b>2012</b>									
January	91.3	58.3	0.64	92.0	65.5	133.1	124.4	6	8.3
February	50.1	32.9	0.66	94.2	66.9	106.7	126.7	7	8.4
March	77.9	64.3	0.82	94.1	66.8	115.1	126.8	14	8.1
April	84.4	55.2	0.65	91.3	64.6	113.1	125.8	9	8.0
May	99.5	69.0	0.69	87.7	61.7	121.5	123.8	8	8.2
June	88.6	64.5	0.73	83.9	58.9	120.5	121.1	10	8.3
July	99.6	66.5	0.67	82.4	57.8	135.6	119.5	13	8.3
August	85.8	63.0	0.74	83.1	58.2	115.7	119.2	7	8.1
September	84.0	61.4	0.73	83.7	58.1	123.2	118.9	8	7.8
October	73.5	53.3	0.73	85.0	58.6	123.3	119.2	9	7.4
November	89.2	61.8	0.69	87.3	59.7	120.9	120.1	6	7.3
December	60.4	40.8	0.68	88.0	59.6	108.4	120.1	3	7.5
<b>2013</b>									
January	99.8	62.9	0.63	87.1	58.7	127.1	118.9	4	7.5
February	60.0	38.1	0.63	86.7	58.4	104.4	118.0	5	7.4
March	81.0	57.9	0.71	85.7	57.5	111.2	117.1	9	7.4
April	112.8	72.4	0.64	86.7	57.9	125.0	116.6	5	7.2
May	125.5	78.7	0.63	90.5	59.9	131.3	118.1	10	7.0
June	80.1	52.5	0.66	94.4	62.6	110.2	120.9	13	7.1
July	86.1	57.0	0.66			115.6		9	
August	90.2	66.0	0.73			114.7		9	
September	55.0	36.9	0.67			102.7		5	
October	127.1	85.6	0.67			132.3		7	
November	125.7	77.6	0.62			148.4		5	
December	118.2	90.3	0.76			147.7		5	

**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 20 January 2014*

The proton flux plot contains the five-minute averaged integral proton flux (protons/cm<sup>2</sup>-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.

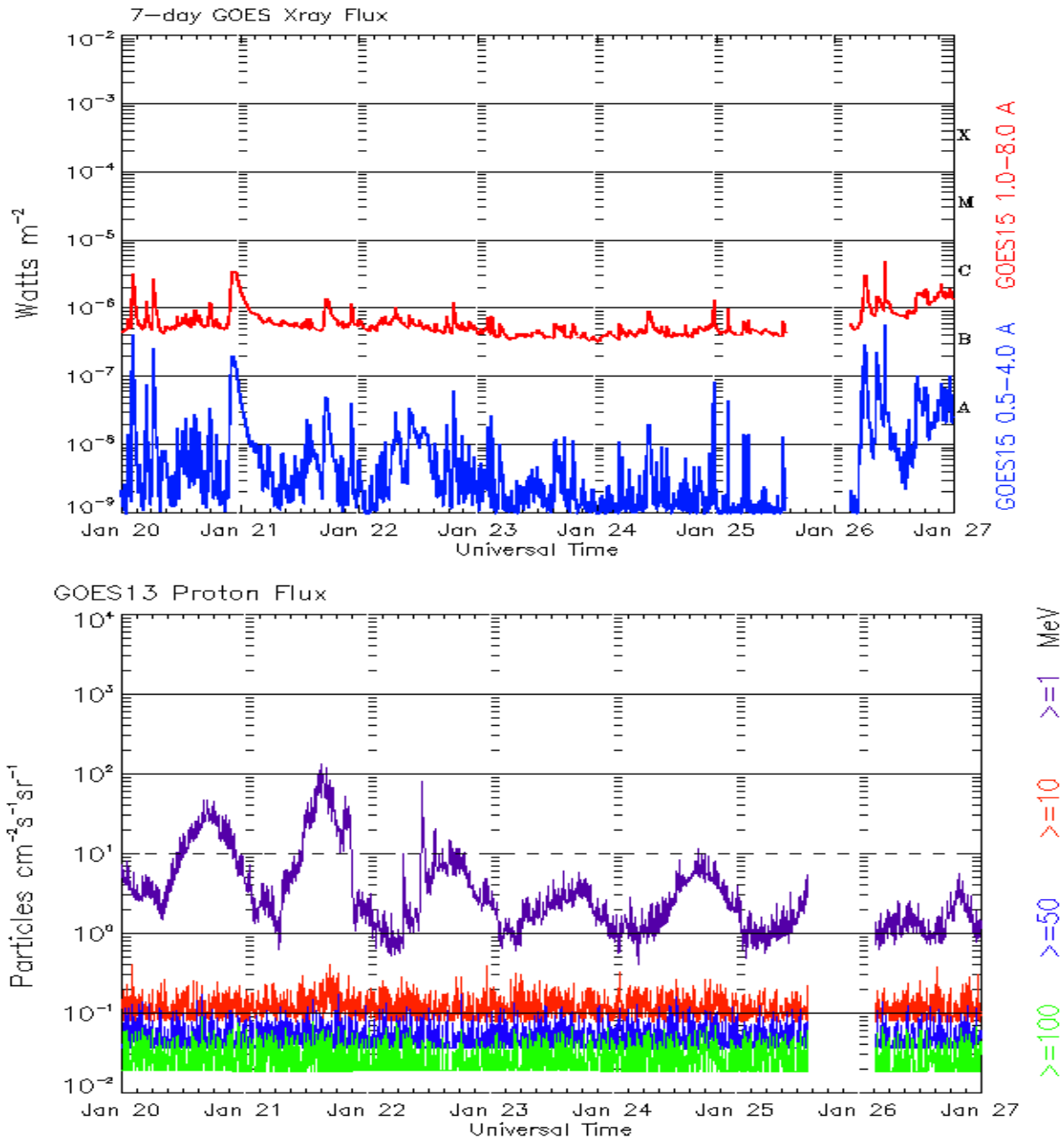
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm<sup>2</sup>-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

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 20 January 2014*

The x-ray plots contains five-minute averages x-ray flux (Watt/m<sup>2</sup>) 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/cm<sup>2</sup> -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.





## ***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](mailto:SWPC.Webmaster@noaa.gov)

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

<http://spaceweather.gov/weekly/> -- Current and previous year

<http://spaceweather.gov/ftpmenu/warehouse.html> -- Online archive from 1997

<http://spaceweather.gov/ftpmenu/> -- Some content as ascii text

<http://spaceweather.gov/SolarCycle/> -- Solar Cycle Progression web site

<http://spaceweather.gov/contacts.html> -- Contact and Copyright information

[http://spaceweather.gov/weekly/Usr\\_guide.pdf](http://spaceweather.gov/weekly/Usr_guide.pdf) -- User Guide

