

Solar activity ranged from low to high levels this period. R1 (Minor) and R2 (Moderate) radio blackouts were observed on 25 Nov, with an isolated R1 (Minor) event observed on 27 Nov. The largest event of the period was the M9.4 (R2) flare at 25/0742 UTC, produced by Region 3910 (N16, L=111, class/area Dko/250 on 28 Nov) when it was still just beyond the NE limb. This event had an associated 10cm radio burst (210 sfu) at 25/0734 UTC. Region 3910 also produced an M1.5 flare at 25/1707 UTC. Region 3906 (S16, L=158, class/area Dai/240 on 23 Nov) was responsible for three of the R1 events: an M1.1 at 25/0159 UTC, an M1.8 at 25/0453 UTC, and an M1.0 at 25/1636 UTC. Region 3901 (S08, L=218, class/area Dao/200) produced two R1 events: an M1.9/Sf flare at 25/2054 UTC and an M1.0 flare at 27/1246 UTC respectively. The M1.9/Sf had an associated Type II radio sweep with an estimated speed of 591 km/s. Region 3905 (S09, L=164, class/area Eso/120 on 23 Nov) produced an isolated M2.0 flare on 25 Nov at 1212 UTC. During the period, a total of 53 C-class and 7 M-flares were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity ranged from quiet to an isolated G1 (Minor) geomagnetic storm period. Unsettled levels were observed on 25, 26, 29 Nov and 01 Dec. On 25-26 Nov, the field was influenced by waning negative coronal hole high speed stream (CH HSS) effects. The unsettled periods on 29 Nov and the isolated period of G1 (Minor) geomagnetic storming on 30 Nov, were likely associated with arrival of the CME that left the Sun on 25 Nov. The isolated unsettled period on 01 Dec was likely associated with the possible interaction with the heliospheric current sheet. The solar wind environment saw a few minor enhancements during the highlight period. Total field mainly averaged between 5-7 nT, with isolated peaks near 14-16 nT, likely the result of the arrival of the aforementioned CME. The Bz component varied between +/-6 nT with a couple of southward deviations to -10 nT. The solar wind field was fairly consistent between 330-485 km/s. The phi angle was in a negative sector through early 29 Nov before oscillating between positive and negative orientations late on 29 Nov and again on 30 Nov before remaining in a positive sector through the rest of the highlight period.

### **Space Weather Outlook** **02 December - 28 December 2024**

Solar activity is expected to be at low levels (R1- Minor), with a chance for moderate levels (R2 - Moderate) from 02 Dec - 15 Dec, then be at low to moderate levels (R1/R2 - Minor/Moderate), with a chance for high levels (R3 - Strong) from 16 Dec - 28 Dec as several magnetically complex regions are due to return.

No proton events are expected at geosynchronous orbit. However, there is a chance for proton activity following significant solar flare activity during the outlook period.



The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels.

Geomagnetic field activity is likely to be at unsettled periods on 02 Dec (residual CME activity). Unsettled to active periods are likely on 10-14 Dec due to influence from recurrent positive coronal hole effects, and 16-20 Dec due to a recurrent negative coronal hole. Mostly quiet periods are likely on 03-09 Dec, 15 Dec, and 21-28 Dec.



### 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
25 November	220	140	1110	C2.9	7	7	0	9	0	1	0	0
26 November	222	163	1500	C2.0	7	0	0	4	0	0	0	0
27 November	225	141	1130	C1.8	11	1	0	1	0	0	0	0
28 November	214	149	1300	C1.8	4	0	0	1	0	0	0	0
29 November	220	162	1430	C1.5	9	0	0	3	0	0	0	0
30 November	204	103	1190	C1.6	12	0	0	2	1	0	0	0
01 December	186	83	1000	C1.4	5	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	
25 November	6.9e+04	1.6e+04	1.1e+06	
26 November	3.4e+04	1.5e+04	1.6e+06	
27 November	5.2e+04	1.5e+04	2.0e+06	
28 November	8.9e+04	1.5e+04	1.3e+06	
29 November	3.8e+05	1.4e+04	1.6e+06	
30 November	1.2e+05	1.3e+04	1.1e+06	
01 December	2.7e+05	1.4e+04	1.1e+06	

### Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
25 November	9	2-2-2-2-3-3-1-2	17	3-2-1-5-4-4-1-1	11	3-2-2-2-3-3-2-2
26 November	6	3-2-0-1-2-2-1-2	2	1-1-0-1-2-1-0-0	7	3-2-1-1-1-1-1-2
27 November	3	0-0-1-1-1-2-1-1	2	0-0-0-2-1-0-0-1	5	1-1-2-2-1-1-1-2
28 November	3	1-1-0-1-1-2-1-0	1	1-1-0-0-0-0-1-0	4	2-1-1-1-1-1-1-0
29 November	6	1-2-1-2-2-2-2-2	0	0-1-0-4-1-1-0-0	8	2-2-2-2-2-1-3-3
30 November	9	4-2-2-1-2-2-1-2	5	3-3-2-0-1-0-0-1	11	5-3-2-1-1-1-1-2
01 December	6	1-1-2-2-2-2-2-2	5	0-0-2-4-0-0-1-1	5	1-1-2-1-1-2-2-3

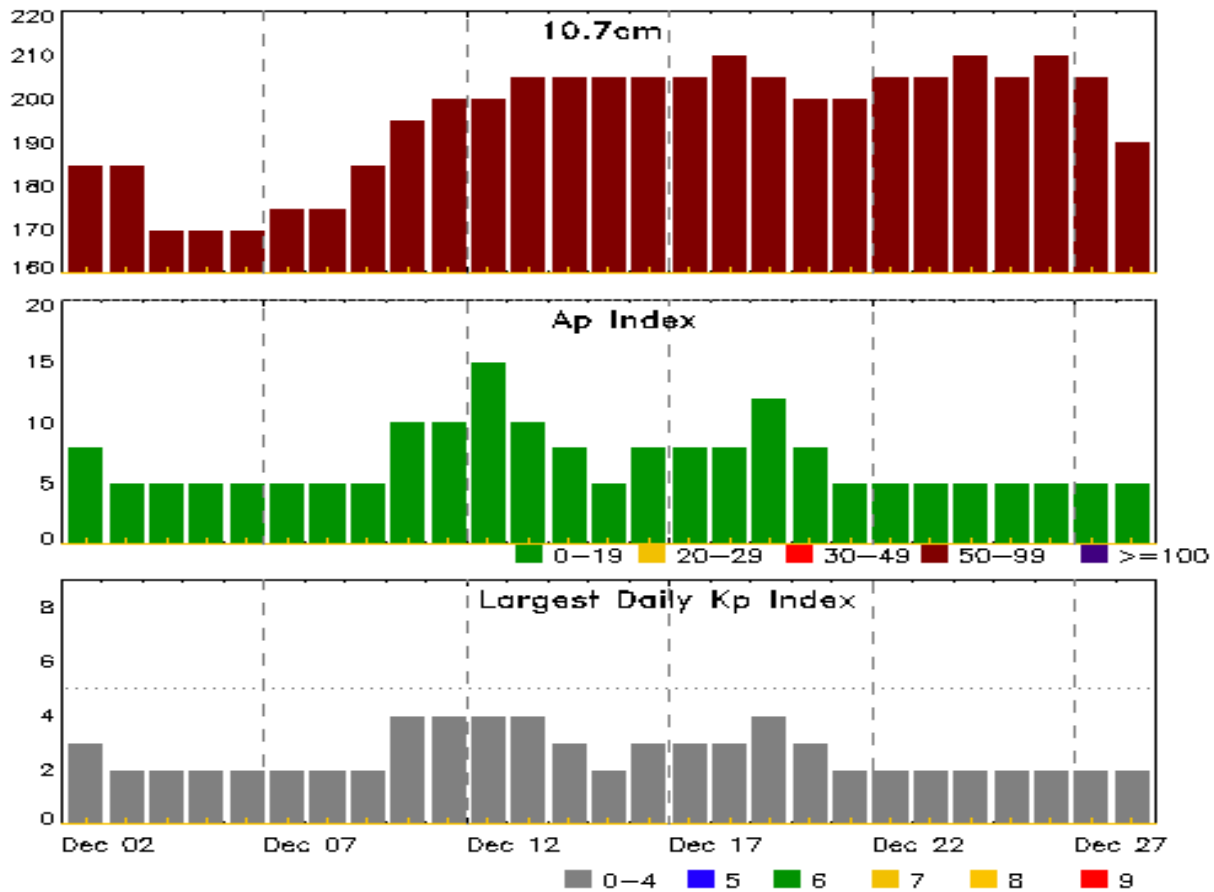


### *Alerts and Warnings Issued*

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
25 Nov 0738	ALERT: X-ray Flux exceeded M5	25/0736
25 Nov 0815	SUMMARY: X-ray Event exceeded M5	25/0724 - 0802
25 Nov 0821	SUMMARY: 10cm Radio Burst	25/0733 - 0736
25 Nov 2107	ALERT: Type II Radio Emission	25/2043
26 Nov 0013	ALERT: Type II Radio Emission	25/2200
26 Nov 1749	WATCH: Geomagnetic Storm Category G2 predicted	
29 Nov 1734	CANCELLATION: Geomagnetic Storm Category G2 predicted	
30 Nov 0115	WARNING: Geomagnetic K = 4	30/0112 - 1500
30 Nov 0124	ALERT: Geomagnetic K = 4	
30 Nov 0155	WARNING: Geomagnetic K = 5	30/0155 - 1500
30 Nov 0242	ALERT: Geomagnetic K = 5	



## 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
02 Dec	185	8	3	16 Dec	205	8	3
03	185	5	2	17	205	8	3
04	170	5	2	18	210	8	3
05	170	5	2	19	205	12	4
06	170	5	2	20	200	8	3
07	175	5	2	21	200	5	2
08	175	5	2	22	205	5	2
09	185	5	2	23	205	5	2
10	195	10	4	24	210	5	2
11	200	10	4	25	205	5	2
12	200	15	4	26	210	5	2
13	205	10	4	27	205	5	2
14	205	8	3	28	190	5	2
15	205	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		Intensity	
									245	2695	II	IV
25 Nov	0139	0159	0211	M1.1	0.015				3906			
25 Nov	0439	0453	0459	M1.8	0.012				3906			
25 Nov	0724	0742	0803	M9.4	0.130					260	210	
25 Nov	1201	1212	1217	M2.0	0.002	SF	S12E40	3905	130		120	
25 Nov	1607	1636	1658	M1.0	0.002				3906			
25 Nov	1658	1707	1716	M1.5	0.002				3910			
25 Nov	2024	2054	2123	M1.9	0.047	2F	S09W25	3901			36	
27 Nov	1227	1246	1249	M1.0	0.012				3901			

### ***Flare List***

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
25 Nov	0005	0009	0013	C3.4			3902
25 Nov	0017	0029	0040	C8.4			3906
25 Nov	0139	0159	0211	M1.1			3906
25 Nov	0322	0336	0352	C7.7			3898
25 Nov	0439	0453	0459	M1.8			3906
25 Nov	0724	0742	0803	M9.4			
25 Nov	0832	0833	0836		SF	S10E40	3905
25 Nov	0859	0901	1013		SF	S16E42	3906
25 Nov	1025	1045	1102		SF	S18E45	3906
25 Nov	1033	1035	1041		SF	S06E37	3905
25 Nov	1039	1039	1041		SF	S16W61	3898
25 Nov	1040	1047	1057	C5.4			3906
25 Nov	1119	U1121	A1141	M2.0	SF	S12E40	3905
25 Nov	1351	U1355	A1402		SF	S07E35	3905
25 Nov	1546	1559	1607	C5.8			3906
25 Nov	1607	1636	1658	M1.0			3906
25 Nov	1658	1707	1716	M1.5			3910
25 Nov	1911	1916	1922	C5.2			3906
25 Nov	1958	2005	2014	C4.7	SF	S06E30	3905
25 Nov	2024	2054	2123	M1.9	2F	S09W25	3901
25 Nov	2134	2135	2155		SF	S15E36	3906
26 Nov	0001	0008	0012	C7.3			3903
26 Nov	0012	0023	0036	C9.4			3906



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
26 Nov	0510	0517	0529	C3.5			3910
26 Nov	1049	1057	1102	C5.5			3906
26 Nov	1232	1239	1243	C7.3	SF	N16E81	3910
26 Nov	1328	1330	1337		SF	S16W30	
26 Nov	1605	1609	1614	C3.2	SF	S12E22	3906
26 Nov	1812	1820	1825	C4.3	SF	S12E21	3906
27 Nov	0218	0228	0238	C3.5			3901
27 Nov	0257	0302	0307	C3.2			3906
27 Nov	0824	0827	0829	C3.1			3910
27 Nov	0829	0836	0852	C3.2			3910
27 Nov	0852	0856	0905	C3.0			3911
27 Nov	1002	1020	1030	C9.5	SF	S17W41	3911
27 Nov	1130	1145	1155	C7.8			3905
27 Nov	1155	1205	1212	C7.6			3911
27 Nov	1227	1246	1249	M1.0			3901
27 Nov	1556	1602	1607	C3.0			3909
27 Nov	1757	1811	1838	C6.0			3910
27 Nov	2152	2200	2205	C3.4			3906
28 Nov	0239	0245	0256	C2.9			3912
28 Nov	0511	0514	0518	C7.0			3905
28 Nov	0628	0633	0639	C6.7			3912
28 Nov	B1205	U1205	A1213		SF	S19E03	3906
28 Nov	2240	2251	2300	C4.0			3906
29 Nov	0257	0301	0305	C5.3			3908
29 Nov	0440	0447	0451	C4.5			3908
29 Nov	0603	0612	0620	C3.1			3906
29 Nov	0758	0831	0848	C4.9			3912
29 Nov	B1518	1526	1533		SF	S08W35	3905
29 Nov	1743	1751	1801	C3.1	SF	S10W35	3905
29 Nov	1801	1808	1813	C2.7			3905
29 Nov	1859	1907	1915	C4.4	SF	N11E31	3910
29 Nov	2010	2016	2023	C2.9			3906
29 Nov	2023	2030	2038	C5.5			3906
30 Nov	0119	0129	0136	C3.5			3905
30 Nov	0305	0321	0338	C4.1			3906
30 Nov	0556	0600	0604	C5.6			3912
30 Nov	0726	0733	0742	C3.5			3911
30 Nov	0753	0758	0803	C2.6			3906



## *Flare List*

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
30 Nov	0837	0851	0859	C4.3			3906
30 Nov	0859	0906	0912	C9.3			
30 Nov	B0908	U0908	A0922		1F	S16W24	3906
30 Nov	1034	1045	1051	C5.3			
30 Nov	1444	1453	1505	C2.1			3912
30 Nov	1517	1524	1532	C3.0			3906
30 Nov	1609	1618	1625	C3.2	SF	S22W70	3907
30 Nov	1826	1828	1832		SF	S21W64	3907
30 Nov	2307	2323	2340	C3.7			3906
01 Dec	0443	0504	0525	C3.2			3911
01 Dec	0638	0644	0652	C3.6			3906
01 Dec	0739	0750	0803	C3.1			3906
01 Dec	1502	1508	1514	C2.0			3906
01 Dec	1611	1622	1628	C5.5			3906





### Region Summary

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 3893															
13 Nov	S19E62	287	30	1	Hsx	1	A								
14 Nov	S19E48	288	40	3	Cso	4	B								
15 Nov	S19E34	289	50	3	Cso	4	B		2		1				
16 Nov	S19E20	290	50	3	Cso	2	B								
17 Nov	S19E06	291	30	2	Hsx	1	A								
18 Nov	S19W05	288	30	2	Hsx	1	A								
19 Nov	S19W17	286	50	1	Hsx	1	A								
20 Nov	S19W31	288	20	1	Hrx	1	A								
21 Nov	S19W45	289	20	1	Hrx	1	A								
22 Nov	S19W59	290	10	1	Axx	1	A								
23 Nov	S19W74	291	plage												
24 Nov	S19W88	292	plage												
								0	2	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 288

### Region 3898

17 Nov	S15E19	278	50	6	Cao	5	B								
18 Nov	S16E02	281	10	5	Bxo	4	B								
19 Nov	S17W11	280	30	6	Cro	7	B				1				
20 Nov	S16W27	283	50	6	Cao	8	B	1							
21 Nov	S16W41	285	40	7	Dao	8	B								
22 Nov	S16W55	286	30	8	Cao	10	B								
23 Nov	S15W69	286	10	9	Cao	4	B	4			2				
24 Nov	S15W83	287	10	4	Bxo	3	B								
								5	0	0	3	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 281



### *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

#### *Region 3899*

17 Nov	S13E60	237	10	5	Bxo	3	B								
18 Nov	S13E43	240	30	5	Cao	4	B								
19 Nov	S12E27	242	30	2	Hax	1	A								
20 Nov	S13E12	245	30	1	Hsx	1	A								
21 Nov	S12W02	246	30	1	Hax	1	A								
22 Nov	S12W16	247	20	1	Hsx	1	A								
23 Nov	S11W30	247	10	1	Hsx	1	A								
24 Nov	S11W41	245	10	1	Hsx	1	A								
25 Nov	S10W55	246	10	1	Axx	1	A								
26 Nov	S10W69	247	plage												
27 Nov	S10W83	248	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 246

#### *Region 3900*

18 Nov	N24E62	221	30	4	Cso	2	B	1							
19 Nov	N22E47	222	30	1	Cro	1	B								
20 Nov	N22E34	223	20	1	Hax	1	A								
21 Nov	N22E20	224	10	2	Bxo	2	B								
22 Nov	N22E06	225	10	2	Cao	2	B								
23 Nov	N22W08	225	10	2	Bxo	2	B								
24 Nov	N22W22	226	plage												
25 Nov	N22W36	227	plage												
26 Nov	N22W50	228	plage												
27 Nov	N22W64	229	plage												
28 Nov	N22W78	230	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 225



### *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
<i>Region 3901</i>															
18 Nov	S07E63	220	180	6	Dai	5	BG	6	7		3	1			
19 Nov	S08E51	218	200	6	Dao	3	BG	5			2				
20 Nov	S07E35	221	180	6	Dao	10	BG	2							
21 Nov	S07E21	223	190	6	Dai	12	BG	3			1				
22 Nov	S08E07	224	150	7	Cao	8	BG	2			2				
23 Nov	S07W07	224	90	5	Cao	5	BG		1		1		1		
24 Nov	S07W16	221	90	8	Cao	10	BG								
25 Nov	S08W31	222	80	6	Cao	6	BG		1				1		
26 Nov	S09W46	224	100	3	Hax	1	A								
27 Nov	S09W58	223	40	1	Hax	1	A	1	1						
28 Nov	S09W72	224	40	2	Hsx	1	A								
29 Nov	S09W85	223	60	3	Hsx	2	A								
								19	10	0	9	1	2	0	0

Crossed West Limb.

Absolute heliographic longitude: 224

### **Region 3902**

20 Nov	S17E70	187	70	11	Cso	2	B								
21 Nov	S16E56	188	70	2	Hsx	1	A								
22 Nov	S16E42	189	70	2	Hsx	1	A								
23 Nov	S16E28	189	60	2	Hsx	1	A								
24 Nov	S16E22	182	60	2	Hsx	1	A								
25 Nov	S18E08	183	60	2	Hsx	1	A	1							
26 Nov	S17W03	181	40	2	Hsx	1	A								
27 Nov	S16W16	181	40	2	Hsx	1	A								
28 Nov	S16W31	180	40	2	Hsx	1	A								
29 Nov	S16W43	181	40	2	Hsx	1	A								
30 Nov	S16W57	182	10	1	Hsx	1	A								
01 Dec	S16W71	183	plage												
								1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 181



### *Region Summary - continued*

	Location	Sunspot Characteristics						Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 3903															
21 Nov	S11W17	261	20	4	Cai	6	BG								
22 Nov	S11W31	262	50	7	Dao	6	BG								
23 Nov	S11W45	262	40	8	Dao	5	BG								
24 Nov	S11W60	264	30	8	Dao	5	BG								
25 Nov	S10W74	265	30	5	Dao	4	BG								
26 Nov	S10W88	266	30	5	Dao	4	BG	1							
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 261

<b>Region 3905</b>															
21 Nov	S09E78	164	60	9	Dao	3	B	1							
22 Nov	S09E64	166	80	10	Dao	6	BG	3	1		3	1			
23 Nov	S09E53	164	120	12	Eso	8	BG								
24 Nov	S09E40	164	250	12	Eko	8	BGD								
25 Nov	S10E26	165	330	12	Eki	15	BGD	1	1		5				
26 Nov	S09E12	166	450	12	Eki	19	BG								
27 Nov	S09W03	168	320	14	Eko	15	BG	1							
28 Nov	S09W16	167	380	14	Eko	17	BG	1							
29 Nov	S09W30	168	400	14	Eko	17	BG	2			2				
30 Nov	S09W44	169	300	14	Eki	10	B	1							
01 Dec	S09W58	170	200	14	Eso	6	B								
								10	2	0	10	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 168



### *Region Summary - continued*

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 3906															
22 Nov	S16E73	158	160	9	Dao	11	B	1	1		1				
23 Nov	S16E59	158	240	10	Dai	11	BG	4				1			
24 Nov	S16E47	157	500	11	Ekc	15	BGD	6			3				
25 Nov	S17E33	158	550	11	Ekc	16	BGD	4	3		3				
26 Nov	S16E19	159	520	13	Eki	16	BGD	4			2				
27 Nov	S16E07	158	400	12	Eki	26	BGD	2							
28 Nov	S16W07	159	420	14	Eki	22	BGD	1			1				
29 Nov	S16W21	159	500	12	Eki	36	BG	3							
30 Nov	S16W35	160	450	11	Eko	16	BG	5				1			
01 Dec	S16W49	161	450	11	Eko	15	BG	4							
								34	4	0	10	2	0	0	0

Still on Disk.

Absolute heliographic longitude: 158

### **Region 3907**

23 Nov	S21E15	202	25	7	Cro	11	B								
24 Nov	S21E01	203	25	7	Cro	11	B								
25 Nov	S21W13	204	30	6	Cro	4	BG								
26 Nov	S22W24	202	60	6	Dao	5	BD								
27 Nov	S22W35	199	40	10	Dao	6	BD								
28 Nov	S20W51	202	20	7	Dao	4	B								
29 Nov	S21W63	201	10	4	Bxo	3	B								
30 Nov	S22W77	201	plage					1			2				
								1	0	0	2	0	0	0	0

Died on Disk.

Absolute heliographic longitude: 203



### *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

#### *Region 3908*

23 Nov	N14E79	152	plage					2	1						
24 Nov	N14E65	139	40	6	Bxo	6	B	1			1				
25 Nov	N13E54	137	10	1	Axx	1	A								
26 Nov	N13E40	138	10	1	Axx	1	A								
27 Nov	N13E26	139	10	3	Bxo	3	B								
28 Nov	N13E13	139	10	3	Bxo	3	B								
29 Nov	N13W00	138	10	10	Bxo	3	B	2							
30 Nov	N13W14	139	plage												
01 Dec	N13W28	140	plage												
								5	1	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 138

#### *Region 3909*

24 Nov	N25W04	208	10	4	Bxo	4	B								
25 Nov	N25W18	209	10	3	Bxo	2	B								
26 Nov	N25W32	210	10	3	Bxo	2	B								
27 Nov	N25W46	211	plage					1							
28 Nov	N25W60	212	plage												
29 Nov	N25W74	212	plage												
30 Nov	N25W88	213	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 208

#### *Region 3910*

25 Nov	N16E83	108	plage						1						
26 Nov	N16E69	108	250	8	Dko	6	B	2			1				
27 Nov	N17E55	110	250	7	Dko	1	BG	3							
28 Nov	N16E42	111	250	6	Dko	6	BG								
29 Nov	N16E28	110	250	5	Cko	6	B	1			1				
30 Nov	N16E14	111	230	4	Cso	3	B								
01 Dec	N16W00	112	220	4	Hsx	1	A								
								6	1	0	2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 112



### ***Region Summary - continued***

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 3911															
26 Nov	S14W33	213	30	5	Cro	8	B								
27 Nov	S14W47	212	30	5	Cro	8	B	3			1				
28 Nov	S14W62	213	30	3	Cso	3	B								
29 Nov	S16W74	212	40	2	Cso	2	B								
30 Nov	S16W88	213	10	1	Cso	2	B	1							
								4	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 213

### ***Region 3912***

28 Nov	S04E66	87	110	11	Eso	2	B	2							
29 Nov	S04E50	88	120	9	Dso	2	B	1							
30 Nov	S04E36	89	190	13	Eso	11	BG	2							
01 Dec	S05E41	71	90	11	Esi	9	BG								
								5	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 89

### ***Region 3913***

01 Dec	S06E24	88	40	3	Cro	2	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 88

## ***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

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