

**Space Weather Highlights**  
**03 February - 09 February 2025**

**SWPC PRF 2580**  
**10 February 2025**

Solar activity reached high levels. Region 3981 (N07, L=341, class/area=Ekc/430 on 05 Feb) was the most active region on the disk. AR 3981 produced an M8.8 flare at 03/0358 UTC, the largest event of the period, in addition to several R1 and R2 events throughout the course of the week. No Earth-directed CMEs 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 throughout the week.

Geomagnetic field activity reached active levels on 08 Feb, and G1 (Minor) levels on 09 Feb, due to a SSBC followed by the onset of negative polarity CH HSS influences. Quiet and quiet to unsettled conditions were observed throughout the remainder of the period.

**Space Weather Outlook**  
**10 February - 08 March 2025**

Solar activity is likely to reach moderate to high levels throughout the period. R1-R2 (Minor-Moderate) events are likely, with a slight chance for R3 or greater events.

No proton events are expected at geosynchronous orbit, barring significant flare activity.

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

Geomagnetic field activity is expected to reach G1 (Minor) storm levels on 10, 13, and 28 Feb, and active levels are expected on 11-12 Feb, and 01 Mar due to CH HSS influences. Quiet and quiet to unsettled conditions are likely to prevail throughout the remainder of the period.



### **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		
03 February	220	153	890	C3.6	10	10	0	7	0
04 February	212	194	1215	C2.4	13	5	0	10	0
05 February	191	159	990	C1.6	17	2	0	12	1
06 February	188	169	760	C1.6	14	2	0	14	3
07 February	182	179	1120	C1.4	11	3	0	1	0
08 February	173	168	870	C1.5	14	1	0	7	0
09 February	163	142	685	C1.5	6	0	0	1	0

### **Daily Particle Data**

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		>2MeV	Electron Fluence (electrons/cm <sup>2</sup> -day -sr)	
	>1 MeV	>10 MeV		>2MeV	
03 February	1.7e+05	1.5e+04			6.4e+06
04 February	1.2e+05	1.6e+04			9.2e+06
05 February	1.1e+06	1.6e+04			1.1e+07
06 February	2.2e+05	1.6e+04			3.1e+06
07 February	1.1e+05	1.6e+04			3.7e+06
08 February	1.6e+05	1.6e+04			1.9e+06
09 February	9.1e+05	1.7e+04			3.0e+06

### **Daily Geomagnetic Data**

Date	Middle Latitude		High Latitude		Estimated	
	A	K-indices	A	K-indices	A	K-indices
03 February	4	1-0-0-1-3-2-1-1	0	1-0-0-0-0-0-0-0	4	2-1-1-1-1-1-0-1
04 February	4	1-1-1-1-2-2-2-0	5	0-0-1-4-1-0-0-1	5	1-1-2-2-1-1-1-1
05 February	6	1-2-0-1-2-3-2-1	4	0-0-0-2-2-3-1-0	6	1-2-1-2-2-3-1-2
06 February	9	2-3-2-0-3-3-2-2	11	1-1-1-3-5-2-1-1	9	2-3-2-1-3-2-2-1
07 February	2	0-1-0-1-1-2-1-0	0	0-0-1-0-0-0-0-0	4	1-0-1-1-1-1-1-1
08 February	9	0-3-3-2-3-2-2-1	30	0-1-6-5-6-4-1-0	11	1-3-4-3-3-2-2-1
09 February	14	1-2-2-2-3-3-4-4	28	1-1-3-3-5-6-5-3	5	1-2-2-2-3-4-5-4

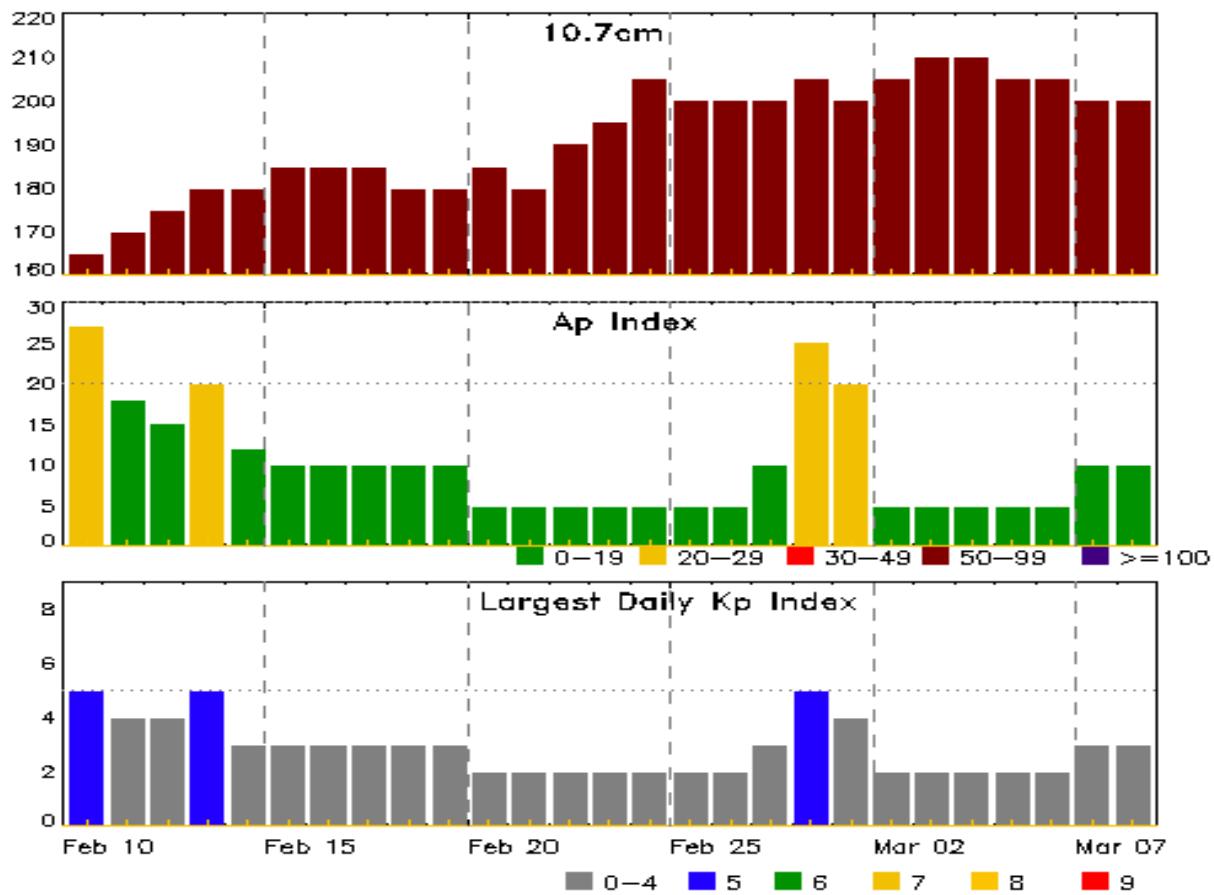


## ***Alerts and Warnings Issued***

<b>Date &amp; Time of Issue UTC</b>	<b>Type of Alert or Warning</b>	<b>Date &amp; Time of Event UTC</b>
03 Feb 0357	ALERT: X-ray Flux exceeded M5	03/0358
03 Feb 0412	SUMMARY: X-ray Event exceeded M5	03/0352 - 0404
03 Feb 0638	SUMMARY: 10cm Radio Burst	03/0550 - 0550
03 Feb 1318	ALERT: X-ray Flux exceeded M5	03/1315
03 Feb 1327	SUMMARY: X-ray Event exceeded M5	03/1307 - 1323
04 Feb 1123	ALERT: X-ray Flux exceeded M5	04/1121
05 Feb 0853	ALERT: Type II Radio Emission	05/0751
06 Feb 1101	ALERT: X-ray Flux exceeded M5	06/1113
06 Feb 1111	SUMMARY: 10cm Radio Burst	06/1058 - 1058
06 Feb 1249	SUMMARY: X-ray Event exceeded M5	06/1047 - 1116
07 Feb 0916	ALERT: X-ray Flux exceeded M5	07/0914
07 Feb 0944	SUMMARY: X-ray Event exceeded M5	07/0859 - 0936
07 Feb 1751	WATCH: Geomagnetic Storm Category G1 predicted	
08 Feb 0804	WARNING: Geomagnetic K = 4	08/0803 - 1500
08 Feb 0902	ALERT: Geomagnetic K = 4	
08 Feb 1452	EXTENDED WARNING: Geomagnetic K = 4	08/0803 - 2100
09 Feb 1430	WARNING: Geomagnetic K = 4	09/1430 - 10/1200
09 Feb 1704	ALERT: Geomagnetic K = 4	
09 Feb 2035	WARNING: Geomagnetic K = 5	09/2030 - 10/0600
09 Feb 2041	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
10 Feb	165	27	5	24 Feb	205	5	2
11	170	18	4	25	200	5	2
12	175	15	4	26	200	5	2
13	180	20	5	27	200	10	3
14	180	12	3	28	205	25	5
15	185	10	3	01 Mar	200	20	4
16	185	10	3	02	205	5	2
17	185	10	3	03	210	5	2
18	180	10	3	04	210	5	2
19	180	10	3	05	205	5	2
20	185	5	2	06	205	5	2
21	180	5	2	07	200	10	3
22	190	5	2	08	200	10	3
23	195	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 #	Radio Flux 245	2695	II	IV
03 Feb	0334	0347	0352	M1.0	0.005				3981			
03 Feb	0352	0358	0404	M8.8	0.041				3981			
03 Feb	0426	0432	0437	M1.0	0.003							
03 Feb	0537	0547	0554	M3.1	0.019				3981		220	
03 Feb	0732	0744	0752	M2.5	0.019				3981			
03 Feb	0909	0913	0917	M1.4	0.002	SF	N05E20		3981			
03 Feb	1307	1318	1323	M6.1	0.002				3981			
03 Feb	1825	1836	1845	M4.3	0.002	2B	N07E15		3981			
03 Feb	2104	2112	2116	M1.4	0.002	SN	N06E15		3981			
03 Feb	2314	2328	2333	M1.4	0.007				3981			
04 Feb	0043	0050	0107	M1.2	0.003				3981			
04 Feb	0135	0148	0203	M2.6	0.028				3981			
04 Feb	0507	0518	0526	M1.2	0.009				3977	290		
04 Feb	1109	1121	1126	M4.7	0.015				3981			
04 Feb	1254	1313	1322	M3.2	0.002				3977	120	200	
05 Feb	0312	0315	0322	M1.2	0.005				3981		110	
05 Feb	0744	0750	0757	M2.7	0.012				3977	4000	170	2
06 Feb	1047	1104	1116	M7.6	0.065	1B	N06W12		3981		330	
06 Feb	2312	2327	2339	M2.3	0.023	1N	N14W38		3978			
07 Feb	0618	0630	0641	M1.6	0.004				3981			
07 Feb	0712	0721	0737	M3.2	0.032				3981	270		
07 Feb	0859	0921	0936	M7.5	0.095				3981			
08 Feb	0857	0927	0941	M2.0	0.033				3981			



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
03 Feb	0334	0347	0352	M1.0			3981
03 Feb	0352	0358	0404	M8.8			3981
03 Feb	0426	0432	0437	M1.0			
03 Feb	0537	0547	0554	M3.1			3981
03 Feb	0732	0744	0752	M2.5			3981
03 Feb	B0846	U0905	A1011	M1.4	SF	N05E20	3981
03 Feb	B0954	U0955	A1010		SF	N18E06	3982
03 Feb	B1051	U1315	A1407		2B	N05E19	3981
03 Feb	1058	1103	1115	C7.1	SF	N15W07	3977
03 Feb	B1109	U1112	A1115		SF	S10W84	3979
03 Feb	1141	1147	1200	C9.5			3981
03 Feb	1238	1244	1248	C7.2			3977
03 Feb	1307	1318	1323	M6.1			3981
03 Feb	1541	1545	1550	C6.5			3981
03 Feb	1614	1627	1634		SF	N07E16	3981
03 Feb	1657	1702	1707	C5.0			3981
03 Feb	1714	1725	1737	C9.4			3981
03 Feb	1825	1836	1845	M4.3	2B	N07E15	3981
03 Feb	1858	1901	1912	C8.3			3981
03 Feb	2036	2042	2048	C4.5			3981
03 Feb	2104	2112	2116	M1.4	SN	N06E15	3981
03 Feb	2124	2135	2144	C5.9	SF	N13E02	3978
03 Feb	2314	2328	2333	M1.4			3981
03 Feb	2350	2359	0007	C5.2			
04 Feb	0007	0022	0028	C7.2			3976
04 Feb	0043	0050	0107	M1.2			3981
04 Feb	0135	0148	0203	M2.6			3981
04 Feb	0246	0252	0257	C8.5			3978
04 Feb	0331	0340	0345	C7.9			3976
04 Feb	0507	0518	0526	M1.2			3977
04 Feb	0819	0827	0839	C4.1			3981
04 Feb	0839	0847	0856	C6.0			3981
04 Feb	1003	1009	1017	C3.6			3977
04 Feb	1027	1036	1058	C5.7			3981
04 Feb	1109	1121	1126	M4.7			3981
04 Feb	1254	1313	1322	M3.2			3977
04 Feb	B1334	U1343	A1343		SF	S02E03	3981
04 Feb	1442	1449	1454	C4.2			3981



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
04 Feb	1533	1536	1540	C3.1			3981
04 Feb	1630	1630	1635		SF	N12W14	3978
04 Feb	1638	1639	1648		SF	N11W13	3981
04 Feb	1651	1652	1655		SF	N11W13	3984
04 Feb	1714	1717	1725		SF	N05E01	3981
04 Feb	1747	1754	1802	C2.6	SF	N05E03	3981
04 Feb	1855	1909	1918	C3.9	SF	N07E03	3981
04 Feb	2036	2036	2040		SF	N07E02	3981
04 Feb	2048	2051	2056		SF	N07E04	3981
04 Feb	2107	2112	2116	C4.3	SF	N07E04	3981
04 Feb	2354	0004	0014	C5.9			3981
05 Feb	0101	0109	0114	C7.9			3977
05 Feb	0312	0315	0322	M1.2			3981
05 Feb	0709	0715	0723	C2.6			3976
05 Feb	0744	0750	0757	M2.7			3977
05 Feb	B0821	U0822	0824		SF	N10W23	3976
05 Feb	B0827	U0833	A0851		SF	N12W12	3981
05 Feb	1150	1153	1157	C4.0	SF	N06W04	3981
05 Feb	1218	1225	1239		SF	N15W32	3976
05 Feb	1226	1227	1231		SF	N22W25	3977
05 Feb	1356	1403	1408	C2.1			3976
05 Feb	1440	1446	1454	C1.9			3977
05 Feb	1503	1511	1513	C4.1			3981
05 Feb	1508	1521	1603	C9.3	1F	N10W13	3981
05 Feb	1614	1620	1631	C4.6	SF	N12W35	3976
05 Feb	1621	1627	1653		SF	N07W09	3981
05 Feb	1712	1726	1746	C3.7	SF	N09W12	3981
05 Feb	1732	1733	1736		SF	N19W38	3977
05 Feb	1825	1828	1832	C4.4	SN	N19W38	3977
05 Feb	1902	1908	1914	C1.9			3984
05 Feb	1952	2001	2018	C1.8			3977
05 Feb	2018	2024	2029	C1.8			3984
05 Feb	2159	2204	2208	C2.7	SN	N20W40	3977
05 Feb	2213	2219	2223	C1.8			3981
05 Feb	2223	2242	2252	C2.3			3981
05 Feb	2326	2340	2350	C4.1	SF	N16W38	3977
06 Feb	0029	0044	0102	C3.6			3978
06 Feb	0418	0432	0448	C3.8			3981



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
06 Feb	0721	0728	0738	C2.3			3976
06 Feb	0812	0840	0905	C4.6	SF	N05W14	3981
06 Feb	0905	0910	0914	C3.6			3981
06 Feb	1015	1015	1018		SF	N05W15	3981
06 Feb	1047	1104	1116	M7.6	1B	N06W12	3981
06 Feb	1304	1314	1330	C4.8	SF	N12W27	3981
06 Feb	1310	1311	1324		SF	N12W40	3976
06 Feb	1335	1341	1352		SF	N05W24	3981
06 Feb	1345	1345	1401		SF	N18W41	3977
06 Feb	1418	1433	1437	C5.4			3984
06 Feb	1419	1438	1522		SF	N05W23	3981
06 Feb	1432	1432	1434		SF	N11W27	3984
06 Feb	1437	1444	1448	C5.5			3981
06 Feb	1452	1452	1512		SF	N06W25	3981
06 Feb	1505	1505	1514		SF	N17W48	3977
06 Feb	1524	1524	1525		SF	N15W44	3976
06 Feb	1643	1650	1654	C3.6			3981
06 Feb	1748	1750	1759		SF	N06W28	3981
06 Feb	1821	1830	1839	C2.3			3981
06 Feb	1915	1920	1925	C2.6	SF	N15W38	3978
06 Feb	1931	1940	1950	C4.2	SF	N06W28	3981
06 Feb	2139	2147	2157	C2.3			3976
06 Feb	2225	2235	2245	C9.3	1F	N16W50	3976
06 Feb	2311	2321	2350	M2.3	1N	N14W38	3978
07 Feb	0111	0117	0124	C3.8			3977
07 Feb	0216	0221	0230	C3.9			3977
07 Feb	0336	0341	0345	C2.2			3981
07 Feb	0419	0431	0438	C3.2			3978
07 Feb	0618	0630	0641	M1.6			3981
07 Feb	0712	0721	0737	M3.2			3981
07 Feb	0859	0921	0936	M7.5			3981
07 Feb	1206	1213	1221	C9.1			3981
07 Feb	1403	1413	1438	C3.0			3981
07 Feb	1524	1534	1545	C2.5	SF	N09W41	3981
07 Feb	1702	1709	1716	C2.1			3986
07 Feb	1716	1719	1724	C2.1			3986
07 Feb	1737	1746	1754	C2.2			3981
07 Feb	2303	2313	2317	C2.9			3978



## Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/Brtns	Location Lat CMD	Rgn #
08 Feb	0033	0053	0108	C4.9			3981
08 Feb	0244	0249	0253	C1.9			3977
08 Feb	0342	0355	0408	C2.9			3981
08 Feb	0502	0509	0513	C3.5			3981
08 Feb	0803	0812	0816	C2.0	SF	N05W44	3981
08 Feb	0820	0827	0832	C3.9	SF	N17W73	3976
08 Feb	0857	0927	0941	M2.0			3981
08 Feb	B0944	U0947	A0958		SF	N05W44	3981
08 Feb	1058	1102	1106	C7.8	SF	N14W61	3984
08 Feb	1121	1125	1134	C3.2			3984
08 Feb	1243	1254	1258	C8.0			3984
08 Feb	1539	1543	1547	C2.3			3984
08 Feb	1547	1553	1557	C3.7			3984
08 Feb	1551	1551	1554		SF	N15W63	3984
08 Feb	1615	1615	1622		SF	N10W54	3981
08 Feb	1825	1828	1832	C2.6			3984
08 Feb	2008	2016	2026	C2.2			3981
08 Feb	2157	2205	2210	C3.3	SF	N15W64	3978
09 Feb	0049	0101	0111	C4.5			3977
09 Feb	0233	0249	0306	C4.4			3981
09 Feb	0705	0712	0718	C2.8			3978
09 Feb	1400	1413	1426	C4.1			3981
09 Feb	1938	1938	1954		SF	S11E34	3987
09 Feb	2018	2025	2030	C3.9			3977
09 Feb	2052	2059	2110	C3.1			3981



## *Region Summary*

Location		Sunspot Characteristics						Flares						
Date	Lat	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical			
		Lon	$10^{-6}$ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3
<b><i>Region 3974</i></b>														
26 Jan	S18E72	22	70	2	Hax	2	A							
27 Jan	S17E61	20	90	5	Cao	12	B							
28 Jan	S17E48	20	90	5	Dai	13	BD							
29 Jan	S17E34	21	90	4	Dac	15	BD							
30 Jan	S17E20	22	120	4	Dac	15	B							
31 Jan	S17E06	23	110	4	Cao	9	B							
01 Feb	S17W08	23	110	4	Cao	9	B							
02 Feb	S17W20	22	90	6	Cao	9	B							
03 Feb	S17W34	23	10	5	Bxo	9	B							
04 Feb	S17W47	23	10	3	Bxo	2	B							
05 Feb	S17W60	23	10	3	Axx	2	A							
06 Feb	S16W74	24	plage											
07 Feb	S15W89	25	10	1	Axx	1	A	0	0	0	0	0	0	0

## Crossed West Limb.

Absolute heliographic longitude: 23

Region 3976

27 Jan	N13E82	1	125	10	Dai	8	B	2	1						
28 Jan	N13E69	12	130	10	Dac	16	B	3							
29 Jan	N13E56	359	130	10	Dac	30	BG	4							
30 Jan	N13E42	360	150	10	Dac	30	BGD	8		1					
31 Jan	N13E28	1	230	11	Eac	33	BGD	9	1		9				
01 Feb	N13E14	1	230	11	Eac	33	BGD	3							
02 Feb	N13E02	1	260	11	Ekc	21	BG	2							
03 Feb	N13W12	1	260	11	Eki	21	BG								
04 Feb	N12W24	1	260	11	Eki	25	BG	2							
05 Feb	N12W38	1	80	9	Dai	6	B	3		3					
06 Feb	N12W51	1	60	10	Csi	6	B	3		2	1				
07 Feb	N11W68	4	80	2	Hsx	1	A								
08 Feb	N11W82	5	80	2	Hsx	1	A	1		1					
09 Feb	N11W96	6	80	2	Hsx	1	A								
								40	2	0	16	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 1

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

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio	Lon	Area $10^6$	Extent hemi.	Spot Class	Spot Count	Mag Class	X-ray			Optical			
										C	M	X	S	1	2	3
<b>Region 3977</b>																
27 Jan	N18E79		2	40	3	Cao	2	B								
28 Jan	N19E67		1	50	5	Cao	11	BG				1				
29 Jan	N19E56		359	100	9	Dac	16	BG				1				
30 Jan	N19E42		360	110	9	Cao	16	B								
31 Jan	N19E28		1	110	9	Cao	16	BG	4	1		3				
01 Feb	N19E14		1	110	9	Cao	16	BG	4	1						
02 Feb	N19W00		2	120	9	Cao	12	BG	2	2		1				
03 Feb	N19W14		3	120	9	Dai	12	BG	2			1				
04 Feb	N18W27		3	150	11	Eai	22	BG	1	2						
05 Feb	N18W41		4	120	10	Dai	9	BG	6	1		5				
06 Feb	N18W54		4	60	6	Cao	7	B				2				
07 Feb	N18W68		4	10	2	Axx	1	A	2							
08 Feb	N18W82		5	10	2	Axx	1	A	1							
09 Feb	N18W96		6	10	2	Axx	1	A	2				0	0	0	0
									24	9	0	12	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 2

## **Region 3978**

28 Jan	N11E80	12	100	4	Hax	1	A									
29 Jan	N11E66	349	100	4	Hax	2	A	3								
30 Jan	N11E52	350	130	4	Cao	2	B	1								
31 Jan	N11E38	351	180	4	Dao	6	BG		1			1				
01 Feb	N11E24	351	180	4	Dai	6	BG	1								
02 Feb	N11E12	350	200	8	Dai	10	BG									
03 Feb	N11W02	351	200	8	Dai	10	BG	1			1					
04 Feb	N12W15	351	250	8	Dko	12	BG	1			1					
05 Feb	N12W29	352	200	6	Dao	7	B									
06 Feb	N11W41	351	50	3	Hax	4	A	2	1		1	1				
07 Feb	N14W53	349	280	5	Cko	6	BG	2								
08 Feb	N14W67	350	280	5	Cko	6	BG	1			1					
09 Feb	N11W80	350	30	1	Hrx	1	A	1								
									13	2	0	4	2	0	0	0

Still on Disk.

Absolute heliographic longitude: 351



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

Date	Location		Sunspot Characteristics					Flares							
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag Class	X-ray			Optical			
			Lon	$10^{-6}$ hemi.	(helio)	Class	Count		C	M	X	S	1	2	3
<b>Region 3979</b>															
29 Jan	S10W13		68	40	4	Dro	5	B							
30 Jan	S10W27		69	30	4	Cso	5	B							
31 Jan	S10W41		70	plage											
01 Feb	S10W55		70	10	2	Bxo	2	B							
02 Feb	S10W69		71	10	2	Bxo	2	B							
03 Feb	S10W83		72	10	2	Bxo	2	B							1
									0	0	0	1	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 68

## **Region 3980**

30 Jan	S10E61		341	10	6	Cao	5	B							
31 Jan	S10E47		342	10	6	Cao	5	B							1
01 Feb	S10E33		342	10	6	Dro	5	B							
02 Feb	S10E19		343	10	1	Axx	1	A							
03 Feb	S10E05		344	10	1	Axx	1	A							
04 Feb	S11W10		346	plage											
05 Feb	S11W24		347	plage											
06 Feb	S12W36		346	10	2	Bxo	3	B							
07 Feb	S12W51		347	plage											
08 Feb	S12W65		348	plage											
09 Feb	S12W79		349	plage											
									0	0	0	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 344



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

Date	Lat	CMD	Location		Sunspot Characteristics					Flares								
			Helio	Lon	Area $10^{-6}$ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical					
										C	M	X	S	1	2	3	4	
<b>Region 3981</b>																		
30 Jan	N05E66		336		10		1	Hsx	1	A								
31 Jan	N05E51		338		10		1	Hsx	1	A								
01 Feb	N05E36		341		10		5	Dso	4	B								
02 Feb	N05E24		338		190		9	Dsi	15	BGD	10	4			1			
03 Feb	N05E09		340		250		11	Ekc	15	BGD	6	9		3		2		
04 Feb	N07W03		339		400		14	Ekc	20	BGD	9	3		8				
05 Feb	N07W18		341		430		14	Ekc	32	BGD	6	1		4	1			
06 Feb	N08W31		341		410		15	Ekc	37	BGD	8	1		8	1			
07 Feb	N08W42		338		420		12	Ekc	40	BD	5	3		1				
08 Feb	N08W56		339		200		11	Eac	40	BD	5	1		3				
09 Feb	N07W69		339		190		13	Esi	8	BG	3							
											52	22	0	27	3	2	0	0

Still on Disk.

Absolute heliographic longitude: 339

## **Region 3982**

02 Feb	N22E19		343		30		5	Cao	6	B							
03 Feb	N22E05		344		30		5	Cao	3	B			1				
04 Feb	N21W08		344		10		4	Bxo	3	B							
05 Feb	N21W22		345		plage												
06 Feb	N21W36		346		plage												
07 Feb	N21W51		347		plage												
08 Feb	N21W65		348		plage												
09 Feb	N21W79		349		plage									0	0	0	0

Still on Disk.

Absolute heliographic longitude: 344

## **Region 3983**

04 Feb	N06E61		275		40		2	Hsx	1	A							
05 Feb	N06E47		275		40		2	Hsx	1	A							
06 Feb	N06E33		277		30		2	Hsx	1	A							
07 Feb	N06E18		278		40		2	Cao	2	B							
08 Feb	N06E04		279		40		2	Cso	2	B							
09 Feb	N06W07		277		40		10	Cso	3	B				0	0	0	0

Still on Disk.

Absolute heliographic longitude: 279



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

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

### ***Region 3984***

04 Feb	N16W15	351	85	9	Dai	15	BG							1			
05 Feb	N16W27	350	50	8	Cai	7	B						2				
06 Feb	N15W41	351	50	7	Cai	7	B						1				1
07 Feb	N15W52	348	60	9	Dao	8	B										
08 Feb	N15W66	349	60	9	Dao	8	B						6				2
09 Feb	N10W85	350	50	2	Cao	8	B										
										9	0	0	4	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 351

### ***Region 3985***

04 Feb	N22E23	313	10	6	Bxo	4	B										
05 Feb	N22E06	317	10	6	Bxo	4	B										
06 Feb	N23W09	319	10	4	Bxo	2	B										
07 Feb	N23W23	319	20	4	Dro	3	B										
08 Feb	N23W37	320	5	5	Bxo	3	B										
09 Feb	N23W52	322	5	1	Axx	1	A						0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 317

### ***Region 3986***

05 Feb	N05E69	254	50	3	Hsx	1	A										
06 Feb	N06E56	254	50	2	Hsx	1	A										
07 Feb	N06E42	254	170	3	Hsx	1	A						2				
08 Feb	N06E27	256	170	3	Hsx	1	A										
09 Feb	N06E15	255	140	3	Hsx	2	A						2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 255

### ***Region 3987***

06 Feb	S09E65	245	30	2	Hsx	1	A										
07 Feb	S09E50	246	20	2	Hrx	2	A										
08 Feb	S09E36	247	20	2	Hrx	2	A										
09 Feb	S09E24	246	10	3	Hrx	3	A						1	0	0	0	0
													0	0	0	1	0

Still on Disk.

Absolute heliographic longitude: 246



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

Date	Lat	CMD	Location		Sunspot Characteristics					Flares						
			Helio Lon	$10^6$ hemi. (helio)	Area Extent Class	Spot Count	Spot Class	Mag	X-ray			Optical				
									C	M	X	S	1	2	3	4
<b>Region 3988</b>																
07 Feb	S20W09		305		10	4	Bxo	4	B				0	0	0	0
08 Feb	S19W23		306		5	3	Bxo	4	B				0	0	0	0
09 Feb	S18W37		307		10	5	Cro	3	BG				0	0	0	0

Still on Disk.

Absolute heliographic longitude: 305

## ***Region 3989***

09 Feb	N18E64		206	120	2	Hsx	1	A	0	0	0	0	0	0	0	0
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Still on Disk.

Absolute heliographic longitude: 206



## ***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.  
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