

Space Weather Highlights
10 February - 16 February 2025

SWPC PRF 2581
17 February 2025

Solar activity reached moderate levels on 10-11 and 13-14 Feb, with low levels of activity observed on 12 and 15-16 Feb. In total, six M1 flares (R1-Minor) were observed throughout the week from Regions 3981 (N07, L=341, class/area=Esi/190 on 10 Feb), 3990 (S10, L=191, class/area=Dki/310 on 14 Feb), and 3992 (S06, L=243, class/area=Dai/210 on 13 Feb).

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels on 10 Feb, with high levels observed on 11-16 Feb.

Geomagnetic field activity reached G1 (Minor) levels on 10 and 14-15 Feb, and active levels on 11-13 and 16 Feb, due to negative polarity CH HSS influences.

Space Weather Outlook
17 February - 15 March 2025

Solar activity is expected to range from low to moderate levels throughout the period. There is a varying chance for R1-R2 (Minor-Moderate) events, and 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 likely to reach high levels on 18-19 and 23 Feb, and 10-15 Mar. Normal to moderate levels are likely to prevail throughout the remainder of the period.

Geomagnetic field activity is likely to reach G1 (Minor) levels on 28 Feb, 09 and 12-14 Mar, with active levels likely on 17-18 Feb, and on 01 and 15 Mar, due primarily to CH HSS influences. Quiet and quiet to unsettled conditions are expected 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
10 February	159	104	840	C1.2	5	1	0	2	0	0	0	0
11 February	153	91	690	C1.0	8	1	0	0	0	0	0	0
12 February	166	88	800	C1.0	3	0	0	0	0	0	0	0
13 February	173	112	1200	C1.0	7	1	0	10	0	0	0	0
14 February	179	111	1020	C1.0	4	3	0	5	2	0	0	0
15 February	184	153	1120	C1.0	9	0	0	2	0	0	0	0
16 February	185	271	1270	C1.1	9	0	0	1	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	>2MeV	
10 February	3.8e+05	1.7e+04	1.0e+07	
11 February	1.7e+05	1.7e+04	5.3e+07	
12 February	3.0e+05	1.7e+04	7.6e+07	
13 February	2.3e+05	1.7e+04	5.8e+07	
14 February	5.7e+05	1.7e+04	9.7e+07	
15 February	7.5e+05	1.7e+04	8.4e+07	
16 February	5.9e+05	1.7e+04	1.2e+08	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
10 February	17	4-1-3-4-3-3-3-3	31	4-2-5-5-4-5-4-3	24	5-2-4-4-3-4-3-4
11 February	10	3-2-2-3-2-3-2-2	21	3-3-3-4-4-5-3-2	17	4-3-3-3-2-3-3-3
12 February	12	3-3-2-3-3-2-3-2	23	3-3-3-5-4-5-2-2	17	3-4-3-3-3-3-3-3
13 February	19	3-4-3-4-3-2-3-4	37	2-4-5-6-6-4-3-3	23	3-4-4-4-4-3-4-4
14 February	20	4-4-3-3-4-3-3-3	44	4-5-5-3-6-6-4-4	27	5-4-4-3-5-3-4-4
15 February	20	2-3-3-4-4-4-3-4	55	3-3-3-7-5-7-5-3	28	4-4-3-5-3-5-4-4
16 February	14	2-3-3-3-3-2-2-4	28	2-3-5-6-3-4-3-3	15	3-4-3-3-3-3-3-4



Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
10 Feb 1147	EXTENDED WARNING: Geomagnetic K = 4	09/1430 - 10/2359
10 Feb 2205	WATCH: Geomagnetic Storm Category G1 predicted	
10 Feb 2336	EXTENDED WARNING: Geomagnetic K = 4	09/1430 - 11/1200
11 Feb 1134	EXTENDED WARNING: Geomagnetic K = 4	09/1430 - 12/1200
11 Feb 1421	ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
12 Feb 0951	EXTENDED WARNING: Geomagnetic K = 4	09/1430 - 13/0300
12 Feb 1151	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
13 Feb 0527	WARNING: Geomagnetic K = 4	13/0527 - 2359
13 Feb 0537	ALERT: Geomagnetic K = 4	
13 Feb 1409	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
13 Feb 1936	WATCH: Geomagnetic Storm Category G1 predicted	
13 Feb 1957	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 14/0600
13 Feb 2322	WARNING: Geomagnetic K = 5	13/2320 - 14/1500
13 Feb 2322	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 14/1800
14 Feb 0303	ALERT: Geomagnetic K = 5	
14 Feb 1247	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
14 Feb 1451	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 15/0600
14 Feb 1452	EXTENDED WARNING: Geomagnetic K = 5	13/2320 - 14/2359
14 Feb 1505	ALERT: Geomagnetic K = 5	
14 Feb 1946	WATCH: Geomagnetic Storm Category G1 predicted	
14 Feb 2151	ALERT: Type II Radio Emission	14/2107
15 Feb 0415	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 15/1800
15 Feb 0451	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
15 Feb 1009	WARNING: Geomagnetic K = 5	15/1015 - 1800
15 Feb 1030	ALERT: Geomagnetic K = 5	
15 Feb 1034	WARNING: Geomagnetic K = 6	15/1030 - 1500
15 Feb 1732	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 16/0600

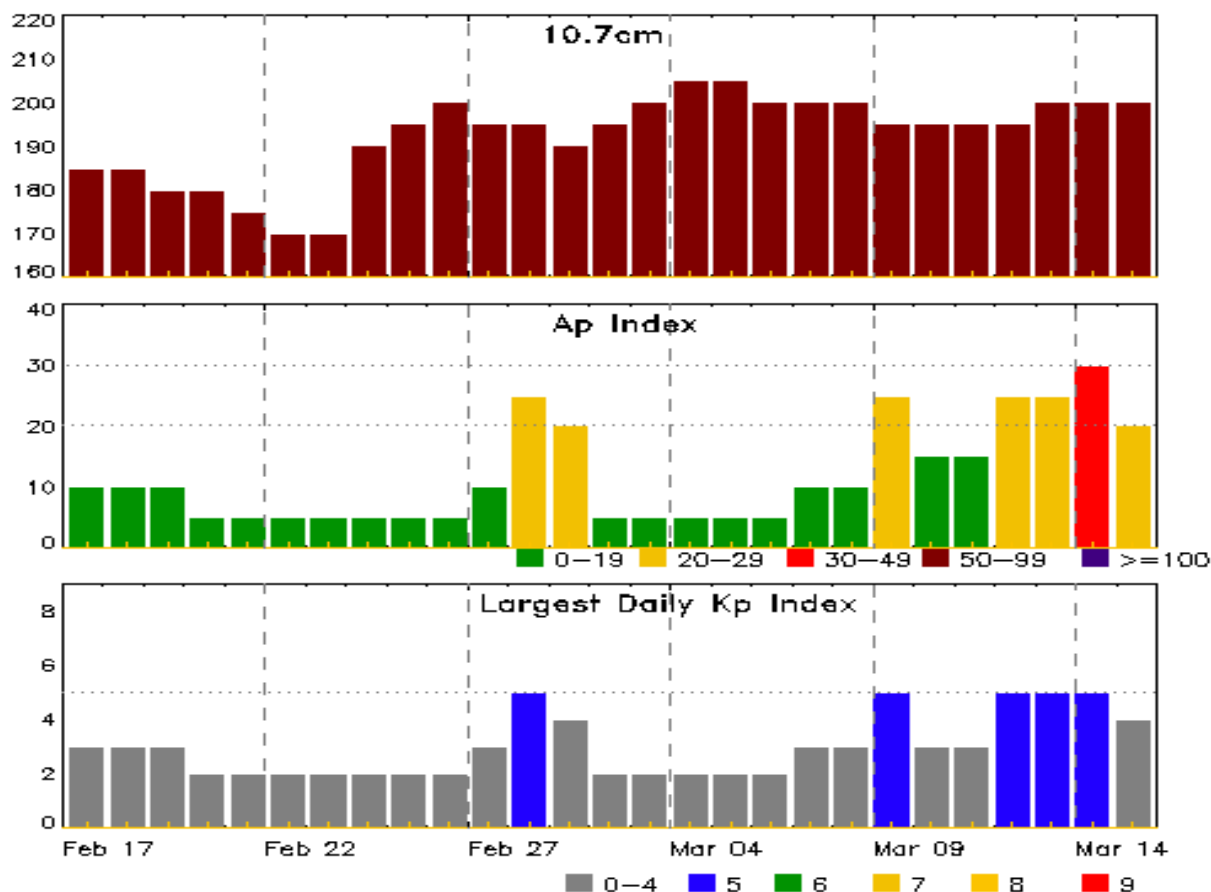


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
15 Feb 1733	EXTENDED WARNING: Geomagnetic K = 5	15/1015 - 2359
15 Feb 1822	ALERT: Geomagnetic K = 5	
15 Feb 2115	WATCH: Geomagnetic Storm Category G1 predicted	
16 Feb 0418	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 16/1500
16 Feb 0437	CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu	11/1405
16 Feb 1422	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 16/2359
16 Feb 2020	EXTENDED WARNING: Geomagnetic K = 4	13/0527 - 17/0600



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
17 Feb	185	10	3	03 Mar	200	5	2
18	185	10	3	04	205	5	2
19	180	10	3	05	205	5	2
20	180	5	2	06	200	5	2
21	175	5	2	07	200	10	3
22	170	5	2	08	200	10	3
23	170	5	2	09	195	25	5
24	190	5	2	10	195	15	3
25	195	5	2	11	195	15	3
26	200	5	2	12	195	25	5
27	195	10	3	13	200	25	5
28	195	25	5	14	200	30	5
01 Mar	190	20	4	15	200	20	4
02	195	5	2				



Energetic Events

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV
10 Feb	0030	0046	0102	M1.0	0.012				3981			
11 Feb	0522	0535	0547	M1.6	0.016				3981			
13 Feb	1105	1109	1113	M1.0	0.003				3992	2300		
14 Feb	0213	0228	0243	M1.2	0.013							
14 Feb	0948	1006	1019	M1.2	0.014	1F	S11E23	3990	120			
14 Feb	2045	2057	2105	M1.8	0.012				3990	1000	130	

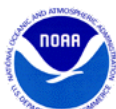
Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location	Rgn
						Lat CMD	#
10 Feb	0030	0046	0102	M1.0			3981
10 Feb	0658	0702	0708	C2.8	SF	N04W68	3981
10 Feb	0916	0924	0932	C3.1			3981
10 Feb	1105	1114	1120	C3.6			3981
10 Feb	1227	1235	1240	C2.9	SF	N05W73	3981
10 Feb	2101	2104	2108	C2.1			
11 Feb	0446	0456	0503	C2.9			3981
11 Feb	0522	0535	0547	M1.6			3981
11 Feb	0612	0619	0623	C6.6			
11 Feb	1028	1042	1104	C2.3			3981
11 Feb	1210	1217	1226	C2.2			3981
11 Feb	1328	1405	1444	C7.6			3981
11 Feb	1517	1523	1530	C3.3			3981
11 Feb	1805	1825	1843	C7.2			3991
11 Feb	2217	2246	2331	C3.2			3990
12 Feb	1237	1247	1258	C3.9			3992
12 Feb	2009	2017	2025	C1.7			3990
12 Feb	2200	2220	2246	C2.0			3992
13 Feb	0311	0318	0322	C1.4			
13 Feb	0720	0735	0746	C2.6			3990
13 Feb	0958	1004	1013	C2.0			3990
13 Feb	1105	1109	1113	M1.0			3992
13 Feb	1201	1209	1213	C3.3			3992
13 Feb	1233	1237	1241	C3.2			3992
13 Feb	1610	1614	1617		SF	S06W23	3992



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
13 Feb	1626	1626	1627		SF	S06W23	3992
13 Feb	1645	1647	1648		SF	S06W23	3992
13 Feb	1649	1649	1652		SF	S06W23	3992
13 Feb	1845	1854	1900	C1.9			3989
13 Feb	2034	2037	2041		SF	S12E30	3990
13 Feb	2042	2048	2052		SF	S12E30	3990
13 Feb	2100	2101	2103		SF	S05W25	3992
13 Feb	2122	2126	2131		SF	S12E30	3990
13 Feb	2216	2243	2310	C9.0			3990
13 Feb	2224	2225	2225		SF	S12E33	3990
13 Feb	2230	2231	2310		SF	S09E32	3990
14 Feb	0027	0038	0048	C4.3			3989
14 Feb	0213	0228	0243	M1.2			
14 Feb	0731	0745	0750	C6.6			3994
14 Feb	0948	1006	1019	M1.2	1F	S11E23	3990
14 Feb	B1031	U1033	A1053		SF	S11E23	3990
14 Feb	B1123	U1125	A1132		SF	S20E03	3994
14 Feb	1144	U1145	A1147		SF	S21E05	3994
14 Feb	1351	1353	1356		SF	S18E85	
14 Feb	1408	1417	1421	C4.8	1N	S21E02	3994
14 Feb	B1454	U1456	A1501		SF	S12E18	3990
14 Feb	2045	2057	2105	M1.8			3990
14 Feb	2227	2236	2252	C1.6			3997
15 Feb	0022	0031	0034	C2.3			3997
15 Feb	0034	0039	0043	C3.1			3996
15 Feb	0536	0543	0547	C1.5			3990
15 Feb	0720	0723	0727	C2.8			3996
15 Feb	1217	1221	1227	C1.6			3996
15 Feb	1354	1359	1410	C2.4			3996
15 Feb	1622	1622	1627		SF	S05W52	3987
15 Feb	1922	1936	1948	C3.6			3983
15 Feb	2054	2103	2111	C2.0			3992
15 Feb	2206	2215	2236		SF	N02E42	3997
15 Feb	2356	0005	0011	C3.9			3998
16 Feb	0523	0534	0546	C1.9			3993
16 Feb	0550	0554	0559	C1.9			3998
16 Feb	0608	0612	0618	C1.9			3992
16 Feb	0857	0905	0913	C2.1			3996



Flare List

Date	Time			Optical			Rgn #
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	
16 Feb	1731	1739	1748	C2.2			3998
16 Feb	1832	1838	1847	C6.1	SF	S12E75	3998
16 Feb	1922	1931	1935	C2.0			3992
16 Feb	1942	1949	1954	C1.8			3992
16 Feb	2025	2029	2035	C1.9			3997



Region Summary

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	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 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

Crossed West Limb.

Absolute heliographic longitude: 1

Region 3977

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							
								24	9	0	12	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 2



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	Helio	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
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							
10 Feb	N11W94	351	30	1	Hrx	1	A								
								13	2	0	4	2	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 351

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	0

Crossed West Limb.

Absolute heliographic longitude: 344



Region Summary - continued

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 3981															
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							
10 Feb	N07W84	341	190	13	Esi	8	BG	4	1		2				
								56	23	0	29	3	2	0	0

Crossed West Limb.

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	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 344



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	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 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								
10 Feb	N06W22	279	80	10	Dso	4	B								
11 Feb	N06W37	281	60	4	Dao	5	B								
12 Feb	N06W52	283	20	3	Dro	4	B								
13 Feb	N06W66	283	10	2	Axx	1	A								
14 Feb	N06W80	284	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 279

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

Crossed West Limb.

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								
10 Feb	N23W66	323	plage												
11 Feb	N23W80	324	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 317



Region Summary - continued

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 3986															
05 Feb	N05E69	254	50	3	Hsx	1	A	2							
06 Feb	N06E56	254	50	2	Hsx	1	A								
07 Feb	N06E42	254	170	3	Hsx	1	A								
08 Feb	N06E27	256	170	3	Hsx	1	A								
09 Feb	N06E15	255	140	3	Hsx	2	A								
10 Feb	N06W00	257	140	3	Hsx	2	A								
11 Feb	N06W15	259	150	3	Hsx	2	A								
12 Feb	N06W30	261	140	3	Hsx	2	A								
13 Feb	N06W44	261	120	2	Hsx	1	A								
14 Feb	N06W51	255	70	3	Hsx	1	A								
15 Feb	N06W62	253	80	2	Hsx	1	A								
16 Feb	N05W76	254	90	3	Hsx	1	A								
								2	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 257

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				
10 Feb	S09E10	247	10	3	Bxo	2	B								
11 Feb	S09W04	248	10	6	Bxo	6	B								
12 Feb	S09W18	249	plage												
13 Feb	S09W33	250	plage												
14 Feb	S07W47	251	plage												
15 Feb	S07W61	252	plage								1				
16 Feb	S07W75	253	plage												
								0	0	0	2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 248



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	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 3988

07 Feb	S20W09	305	10	4	Bxo	4	B								
08 Feb	S19W23	306	5	3	Bxo	4	B								
09 Feb	S18W37	307	10	5	Cro	3	BG								
10 Feb	S18W51	308	10	5	Bxo	3	B								
11 Feb	S18W65	309	10	3	Axx	3	A								
12 Feb	S18W79	310	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 305

Region 3989

09 Feb	N18E64	206	120	2	Hsx	1	A								
10 Feb	N18E50	207	160	2	Hsx	1	A								
11 Feb	N18E36	208	170	3	Hsx	1	A								
12 Feb	N18E22	209	200	3	Hsx	1	A								
13 Feb	N18E07	210	250	3	Hhx	1	A	1							
14 Feb	N18W00	204	250	3	Hhx	1	A	1							
15 Feb	N18W14	205	270	3	Hhx	1	A								
16 Feb	N18W28	206	270	3	Hhx	1	A								
								2	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 204

Region 3990

10 Feb	S09E68	189	220	3	Cao	3	B								
11 Feb	S09E54	190	260	6	Dko	3	BG	1							
12 Feb	S09E40	191	260	7	Dko	7	BG	1							
13 Feb	S09E26	191	310	9	Cki	7	BG	3			5				
14 Feb	S10E13	191	310	7	Dki	8	BG		2		2	1			
15 Feb	S09W00	191	310	13	Cki	18	BG	1							
16 Feb	S08W14	192	280	14	Cki	42	BG								
								6	2	0	7	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 191



Region Summary - continued

Location		Sunspot Characteristics						Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 3991															
11 Feb	S12E70	174	30	1	Hsx	1	A	1							
12 Feb	S12E58	173	30	7	Cso	3	B								
13 Feb	S12E44	173	20	2	Hrx	2	A								
14 Feb	S12E31	173	20	1	Hrx	1	A								
15 Feb	S13E17	174	10	2	Axx	2	A								
16 Feb	S13E03	175	20	4	Cro	6	B								
								1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 175

<i>Region 3992</i>															
12 Feb	S06W11	242	150	6	Dai	11	BG	2							
13 Feb	S06W26	243	210	9	Dai	16	BG	2	1		5				
14 Feb	S07W40	244	90	12	Eai	11	BG								
15 Feb	S05W54	245	60	11	Eao	7	BG	1							
16 Feb	S05W67	245	70	14	Eao	5	BG	3							
								8	1	0	5	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 242

<i>Region 3993</i>															
13 Feb	N15E74	143	250	5	Hhx	1	A								
14 Feb	N15E61	143	220	4	Hhx	1	A								
15 Feb	N16E47	144	220	4	Hsx	2	A								
16 Feb	N15E34	144	210	4	Hsx	3	A	1							
								1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 144

<i>Region 3994</i>															
13 Feb	S21E10	207	30	4	Dro	3	B								
14 Feb	S19W04	208	30	3	Dao	3	B	2			2	1			
15 Feb	S19W18	209	30	5	Cro	6	B								
16 Feb	S21W32	208	40	5	Cao	9	B								
								2	0	0	2	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 208



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	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 3995

14 Feb	S22W30	234	30	3	Cro	5	B								
15 Feb	S22W44	235	20	5	Cso	2	B								
16 Feb	S23W58	236	40	2	Cao	2	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 234

Region 3996

15 Feb	S11E65	126	90	11	Eso	9	B	4							
16 Feb	S17E51	127	100	11	Eai	17	BG	1							
								5	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 127

Region 3997

14 Feb	N03E57	149	plage					1							
15 Feb	N03E42	149	30	6	Cao	5	B	1			1				
16 Feb	N03E28	150	40	6	Cai	56	B	1							
								3	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 150

Region 3998

15 Feb	S14E81	111	plage					1							
16 Feb	S14E66	112	90	6	Cao	4	B	3			1				
								4	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 112

Region 3999

16 Feb	N05E53	125	20	4	Cro	5	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 125



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