Space Weather Highlights **SWPC PRF 2529**
12 February - 18 February 2024 **19 February 2024**

Solar activity reached high levels on 12 and 16 Feb, and moderate levels on 14-15 Feb. The largest event of the period was an X2.5/1n flare at 16/0653 UTC from Region 3576 (S16, L=060, class/area=Fkc/660 on 14 Feb). Region 3576 was the largest and most active sunspot region of the period, and in addition to the X-flare, produced eight M-class flares throughout the week. Region 3582 (N06, L=035, class/area=Dai/240 on 13 Feb) produced an isolated M1 flare at 14/0310 UTC. No Earth-directed CMEs were observed this period.

The greater than 10 MeV proton flux reached S2 (Moderate) levels on 12-13 Feb, and S1 levels on 14 Feb, following a C6.9 flare at 12/0554 UTC from Region 3576. A peak flux of 118 pfu was observed at 13/0615 UTC. The greater than 10 MeV proton flux was elevated above background levels over 15-18 Feb, but remained below event thresholds.

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

Geomagnetic field activity was quiet on 12 Feb. Active levels were observed on 13 Feb, and unsettled levels were observed on 14 Feb, due to the arrival of multiple CMEs from 10-11 Feb. Quiet conditions were observed over 15-17 Feb, and quiet to unsettled conditions were observed on 18 Feb.

Space Weather Outlook
19 February - 16 March 2024

Solar activity is expected to be low with a varying chance for M-class flare activity throughout the period. Old Region 3575 (S37, L=177), which produced M-class flares last rotation and multiple CMEs during its transit of the far-side, is expected to return to the visible disk on 20 Feb.

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 throughout the outlook period.

Geomagnetic field activity is expected to be mostly quiet throughout the outlook period. Unsettled conditions are likely on 19-20 Feb due to the anticipated arrival of a CME from 16 Feb, and again on 26-27 Feb due to negative polarity CH HSS influences.

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
12 February	208	153	910	C1.7	8	4	0	7	1	1	0	0
13 February	195	122	1250	C1.4	6	0	0	2	0	0	0	0
14 February	184	123	1240	C1.5	18	2	0	13	0	0	0	0
15 February	178	151	1150	C1.5	19	1	0	5	0	0	0	0
16 February	169	97	600	C1.2	6	2	1	2	1	0	0	0
17 February	170	100	520	C1.6	6	0	0	3	0	0	0	0
18 February	157	84	690	C1.2	8	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
12 February	1.3e+07	4.0e+06	2.6e+06
13 February	2.7e+07	5.3e+06	2.0e+06
14 February	1.5e+07	1.7e+06	1.3e+06
15 February	5.7e+06	4.9e+05	1.5e+06
16 February	4.1e+06	3.0e+05	1.5e+06
17 February	2.3e+06	1.5e+05	1.2e+06
18 February	1.1e+06	8.2e+04	9.4e+05

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
12 February	4	1-1-2-0-1-2-1-1	2	2-1-1-0-0-0-0-0	4	2-1-2-0-0-1-1-1
13 February	8	1-2-1-2-3-3-2-2	17	1-1-0-4-5-5-2-1	10	2-2-2-2-2-4-2-3
14 February	6	2-3-1-1-1-2-1-2	3	2-2-1-2-1-0-0-0	7	3-3-1-1-1-1-1-2
15 February	3	1-0-0-1-1-2-2-1	2	1-0-0-1-1-0-1-0	4	1-1-1-1-1-1-2-1
16 February	3	1-0-0-1-2-2-0-1	1	0-0-0-1-1-1-0-0	4	1-1-1-2-2-1-0-1
17 February	4	1-1-0-0-2-2-1-2	3	1-0-0-2-2-0-0-1	4	1-1-0-1-2-1-1-2
18 February	4	3-1-0-2-1-0-1-0	6	2-1-1-4-2-0-0-0	18	3-2-1-2-1-0-1-0

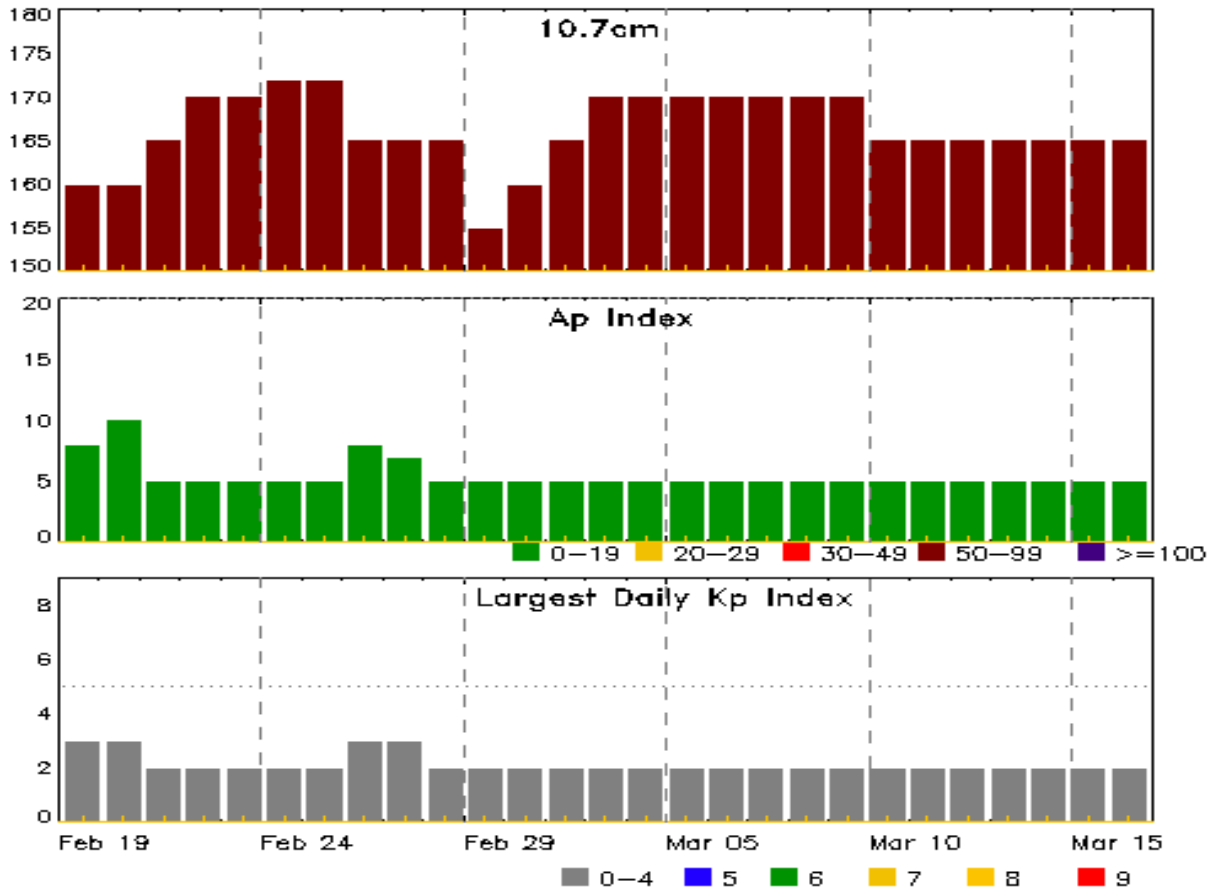
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
12 Feb 0347	ALERT: X-ray Flux exceeded M5	12/0346
12 Feb 0410	SUMMARY: X-ray Event exceeded M5	12/0323 - 0353
12 Feb 0727	ALERT: Type IV Radio Emission	12/0635
12 Feb 0813	WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 2359
12 Feb 0822	ALERT: Proton Event 10MeV Integral Flux >= 10pfu	12/0805
12 Feb 0827	SUMMARY: Proton Event 10MeV Integral Flux >= 10pfu	09/1530 - 11/1805
12 Feb 1040	ALERT: Proton Event 10MeV Integral Flux >= 100pfu	12/1020
12 Feb 1101	WARNING: Proton 100MeV Integral Flux > 1pfu	12/1050 - 2359
12 Feb 1522	CANCELLATION: Proton Event 10MeV Integral Flux >= 100pfu	
12 Feb 2110	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 13/1800
12 Feb 2111	EXTENDED WARNING: Proton 100MeV Integral Flux > 1pfu	12/1050 - 13/1200
13 Feb 0603	ALERT: Proton Event 10MeV Integral Flux >= 100pfu	13/0545
13 Feb 1642	WARNING: Geomagnetic K = 4	13/1641 - 14/0300
13 Feb 1743	ALERT: Geomagnetic K = 4	
13 Feb 1755	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 14/1200
13 Feb 2153	SUMMARY: Proton Event 10MeV Integral Flux >= 100pfu	13/0545 - 0640
14 Feb 0435	ALERT: Type II Radio Emission	14/0355
14 Feb 0435	ALERT: Type IV Radio Emission	14/0400
14 Feb 0542	WARNING: Geomagnetic K = 4	14/0542 - 1200
14 Feb 1123	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 15/1200
14 Feb 1123	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 15/1200
15 Feb 0311	ALERT: Type II Radio Emission	15/0230
15 Feb 0312	ALERT: Type II Radio Emission	15/0236
15 Feb 1147	EXTENDED WARNING: Proton 10MeV Integral Flux > 10pfu	12/0810 - 15/2359
15 Feb 1401	ALERT: Type II Radio Emission	15/0910

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
15 Feb 2333	CANCELLATION: Proton 10MeV Integral Flux > 10pfu	
15 Feb 2335	SUMMARY: Proton Event 10MeV Integral Flux >= 100pfu	12/0805 - 14/2000
16 Feb 0655	ALERT: X-ray Flux exceeded M5	16/0651
16 Feb 0705	ALERT: Type II Radio Emission	16/0653
16 Feb 0710	SUMMARY: X-ray Event exceeded X1	16/0642 - 0658
16 Feb 0717	SUMMARY: 10cm Radio Burst	16/0651 - 0656
16 Feb 0718	ALERT: Type IV Radio Emission	16/0653
16 Feb 0807	WARNING: Proton 10MeV Integral Flux > 10pfu	16/0806 - 17/1200
16 Feb 0807	WARNING: Proton 100MeV Integral Flux > 1pfu	16/0806 - 17/1200
16 Feb 1730	CANCELLATION: Proton 100MeV Integral Flux > 1pfu	
16 Feb 1730	CANCELLATION: Proton 10MeV Integral Flux > 10pfu	
17 Feb 1812	ALERT: Type II Radio Emission	17/1329

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
19 Feb	160	8	3	04 Mar	170	5	2
20	160	10	3	05	170	5	2
21	165	5	2	06	170	5	2
22	170	5	2	07	170	5	2
23	170	5	2	08	170	5	2
24	172	5	2	09	170	5	2
25	172	5	2	10	165	5	2
26	165	8	3	11	165	5	2
27	165	7	3	12	165	5	2
28	165	5	2	13	165	5	2
29	155	5	2	14	165	5	2
01 Mar	160	5	2	15	165	5	2
02	165	5	2	16	165	5	2
03	170	5	2				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV
12 Feb	0323	0348	0353	M6.5	0.028	2B	S17W26	3576	1000			
12 Feb	1250	1308	1321	M1.1	0.014			3576				
12 Feb	1531	1548	1603	M1.4	0.020	1F	S12W34	3576				
12 Feb	2035	2117	2151	M2.6	0.093							
14 Feb	0302	0310	0323	M1.0	0.009			3582				
14 Feb	0726	0735	0742	M1.0	0.006	SF	S19W58	3576				
15 Feb	1650	1707	1721	M1.8	0.021			3576				
16 Feb	0239	0251	0257	M1.5	0.008			3576				
16 Feb	0642	0653	0658	X2.5	0.084	1N	S16W80	3576		420	3	2
16 Feb	2157	2209	2216	M3.0	0.016			3576				

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
12 Feb	0135	0140	0145	C5.9	SF	S17W26	3576
12 Feb	0145	0151	0157	C6.3			3576
12 Feb	0323	0348	0353	M6.5	2B	S17W26	3576
12 Feb	0543	0554	0610	C6.9	SF	S17W26	3576
12 Feb	0711	0715	0728	C2.1			3583
12 Feb	1056	1112	1120	C3.8			
12 Feb	1120	1126	1131	C3.8			
12 Feb	1234	1241	1250	C4.0			3583
12 Feb	1250	1308	1321	M1.1			3576
12 Feb	1422	1429	1435	C4.5			
12 Feb	1531	1548	1603	M1.4	1F	S12W34	3576
12 Feb	1652	1653	1711		SF	N08E19	3583
12 Feb	1919	1920	1922		SF	N10E13	3583
12 Feb	2035	2117	2151	M2.6			
12 Feb	2039	2045	2047		SF	S12W37	3576
12 Feb	2041	2042	2047		SF	N09E17	3583
12 Feb	2201	2202	2239		SF	S13W35	3576
13 Feb	0132	0138	0145	C4.9	SF	N12E24	3583
13 Feb	0728	0759	0816	C5.0			
13 Feb	1212	1219	1223	C3.1			3583
13 Feb	1305	1312	1329	C1.8			3576

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
13 Feb	1656	1706	1714	C3.1			3576
13 Feb	1949	1957	2009	C3.3	SF	S14W44	3576
14 Feb	0047	0059	0126	C2.5			
14 Feb	0126	0131	0135	C2.2			
14 Feb	0207	0211	0215	C2.5			3583
14 Feb	0302	0310	0323	M1.0			3582
14 Feb	0612	0626	0637	C3.0	SF	S11E30	3584
14 Feb	0649	0654	0659	C3.6			3576
14 Feb	0726	0735	0742	M1.0	SF	S19W58	3576
14 Feb	0837	0844	0900	C2.4	SF	S14E28	3584
14 Feb	0916	0926	0931	C2.6			3576
14 Feb	0954	1006	1012	C4.6	SF	S18W59	3576
14 Feb	1025	1029	1034	C2.8			3576
14 Feb	1157	1158	1208		SF	S14E28	3584
14 Feb	1250	1252	1254		SF	S16W54	3576
14 Feb	1359	1359	1402		SF	S16W54	3576
14 Feb	1406	1406	1440	C3.8	SF	S14E27	3584
14 Feb	1449	1454	1459	C2.6			3576
14 Feb	1515	1519	1523	C3.4	SN	S16W60	3576
14 Feb	1601	1607	1615	C3.0	SF	S16W60	3576
14 Feb	1704	1707	1714		SF	S11W59	3576
14 Feb	1753	1756	1803	C7.5			3576
14 Feb	1755	1756	1805		SF	S16W62	3576
14 Feb	2020	2028	2034	C2.5			3576
14 Feb	2133	2147	2154	C2.3			3576
14 Feb	2221	2230	2235	C2.3	SF	S13W65	3576
14 Feb	2319	2327	2334	C2.2			3576
15 Feb	0008	0018	0044	C2.8			3576
15 Feb	0044	0051	0059	C3.8			3576
15 Feb	0226	0235	0241	C2.9			3576
15 Feb	0334	0340	0344	C2.4			3576
15 Feb	0512	0520	0529	C2.1			3576
15 Feb	0529	0533	0536	C3.1			3576
15 Feb	0536	0540	0544	C4.0			3587
15 Feb	0742	0811	0833	C5.1			3586
15 Feb	0835	0836	0838		SF	S16W72	3576
15 Feb	0951	0958	1002	C2.4			3576
15 Feb	1008	1024	1053	C4.5			3576

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
15 Feb	1109	1113	1117	C3.3			3576
15 Feb	1139	1142	1151	C2.7	SF	S16W78	3576
15 Feb	1209	1216	1221	C2.6			3576
15 Feb	1247	1250	1255	C2.7	SF	S16W78	3576
15 Feb	1446	1456	1513	C4.3	SF	N07W23	3583
15 Feb	1513	1520	1525	C4.7	SF	S16W80	3576
15 Feb	1650	1707	1721	M1.8			3576
15 Feb	1808	1813	1821	C8.1			3576
15 Feb	2235	2242	2248	C2.6			3576
15 Feb	2353	0027	0053	C3.9			3588
16 Feb	0158	0204	0209	C3.2			3576
16 Feb	0239	0251	0257	M1.5			3576
16 Feb	0642	0653	0658	X2.5	1N	S16W80	3576
16 Feb	0706	0707	0711		SF	S21W84	3576
16 Feb	0908	0908	0917		SF	S19E35	3587
16 Feb	1615	1636	1656	C6.1			3586
16 Feb	1819	1831	1841	C8.9			3576
16 Feb	1841	1846	1851	C8.2			3576
16 Feb	2013	2023	2037	C3.5			3576
16 Feb	2157	2209	2216	M3.0			3576
16 Feb	2346	2356	0008	C2.7			3576
17 Feb	0319	0323	0327	C2.3			3576
17 Feb	0544	0559	0627	C5.2			3583
17 Feb	0937	1035	1106	C5.5	SF	N07W49	3583
17 Feb	1224	1236	1254	C2.9			
17 Feb	1340	1344	1348		SF	N08W54	3583
17 Feb	1407	1408	1412		SF	S14W18	3584
17 Feb	1743	1820	1822	C7.4			3576
17 Feb	1822	1834	1841	C7.9			3584
18 Feb	0009	0016	0027	C2.7			3583
18 Feb	0230	0242	0250	C3.5	SF	N08W61	3590
18 Feb	0250	0253	0257	C3.8			3590
18 Feb	0335	0405	0418	C5.0			3583
18 Feb	0418	0421	0425	C4.6			3590
18 Feb	1159	1208	1212	C2.6			3583
18 Feb	2328	2334	2342	C1.7			3583
18 Feb	2342	2351	2355	C1.7			

Region Summary

	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 3484													
08 Nov	S18W16	221	10	2	Axx	2	A								
09 Nov	S19W19	218	plage								1				
10 Nov	S14W34	214	30	4	Bxo	6	B								
11 Nov	S14W49	215	40	7	Bxi	8	B	1							
12 Nov	S15W62	215	80	6	Cai	8	B	2			2				
13 Nov	S15W76	216	70	7	Cao	3	B	5			5				
14 Nov	S15W89	216	30	6	Cao	3	B	3							
								11	0	0	8	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 221

		Region 3571													
01 Feb	S16E61	105	90	3	Hsx	2	A	5			1				
02 Feb	S17E49	103	110	3	Hsx	2	A	5	1			1			
03 Feb	S18E37	103	120	2	Hsx	2	A				1				
04 Feb	S17E23	104	130	2	Cso	3	B								
05 Feb	S17E08	105	100	3	Hsx	3	A								
06 Feb	S17W05	105	110	4	Hsx	5	A								
07 Feb	S17W17	104	120	3	Hax	5	A								
08 Feb	S19W28	102	80	2	Hax	2	A								
09 Feb	S18W43	103	70	3	Hax	2	A								
10 Feb	S17W54	104	80	5	Hsx	3	A								
11 Feb	S17W68	102	60	5	Hsx	3	A								
12 Feb	S17W82	103	30	4	Cso	2	B								
								10	1	0	2	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 105

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 3574												
01 Feb	N15E70	96	90	2	Dao	2	B								
02 Feb	N15E58	94	90	5	Dso	2	B								
03 Feb	N15E44	96	90	6	Dso	2	B								
04 Feb	N16E32	95	60	5	Cso	3	B								
05 Feb	N16E17	96	30	5	Cao	2	B								
06 Feb	N17E03	97	30	6	Cso	3	B								
07 Feb	N17W08	95	20	5	Cro	3	B								
08 Feb	N16W22	96	20	2	Hsx	2	A	1							
09 Feb	N17W33	93	10	2	Axx	2	A								
10 Feb	N16W46	94	10	1	Axx	1	A								
11 Feb	N16W60	94	plage												
12 Feb	N16W74	95	plage												
13 Feb	N16W88	96	plage												
								1	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 97

			Region 3576												
03 Feb	S17E82	58	200	6	Dac	3	B	11							
04 Feb	S16E72	55	700	14	Ekc	18	BD	11	6		7				
05 Feb	S15E57	56	610	11	Ekc	13	BD	6	2		7	1			
06 Feb	S16E46	54	540	16	Fki	41	BGD	1			9	1			
07 Feb	S16E33	54	670	16	Fkc	37	BGD	2	1			2			
08 Feb	S16E17	57	670	16	Fkc	44	BGD	7	3		10	2	1		
09 Feb	S16E05	56	710	16	Fkc	27	BGD	6	2		6	1			
10 Feb	S16W09	57	730	18	Fkc	36	BGD	11	2		4	1			
11 Feb	S16W23	57	740	19	Fkc	44	BGD	2			3				
12 Feb	S17W37	58	420	20	Fkc	40	BGD	3	3		4	1	1		
13 Feb	S17W51	59	600	15	Eki	19	BGD	3			1				
14 Feb	S16W65	60	660	18	Fkc	18	BGD	12	1		9				
15 Feb	S16W82	64	510	17	Fkc	12	BG	15	1		4				
								90	21	0	64	9	2	0	0

Crossed West Limb.
Absolute heliographic longitude: 56

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 3577												
05 Feb	N25E20	93	5	3	Bxo	3	B								
06 Feb	N25E06	94	10	6	Bxo	4	B								
07 Feb	N25W07	94	10	5	Bxo	4	B				1				
08 Feb	N25W18	92	10	2	Hsx	1	A								
09 Feb	N22W29	90	10	1	Axx	1	A								
10 Feb	N22W43	91	plage												
11 Feb	N22W57	91	plage												
12 Feb	N22W71	92	plage												
13 Feb	N22W85	93	plage												
								0	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 94

			Region 3578												
05 Feb	S03E67	46	5	1	Axx	1	A								
06 Feb	S05E53	47	20	5	Cro	3	B	1							
07 Feb	S05E40	47	30	4	Cro	4	B								
08 Feb	S04E26	48	20	4	Cso	3	B								
09 Feb	S04E11	50	plage												
10 Feb	S04W04	52	plage												
11 Feb	S04W19	53	plage												
12 Feb	S04W33	54	plage												
13 Feb	S04W47	55	plage												
14 Feb	S04W61	56	plage												
15 Feb	S04W76	58	plage												
								1	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 52

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 3579												
07 Feb	S14E60	27	50	2	Hax	1	A								
08 Feb	S12E37	37	30	5	Cro	3	B								
09 Feb	S11E17	44	20	1	Hsx	1	A								
10 Feb	S10E04	44	20	1	Hsx	1	A								
11 Feb	S09W10	44	20	1	Hsx	1	A								
12 Feb	S09W24	45	10	1	Axx	1	A								
13 Feb	S09W38	46	plage												
14 Feb	S09W52	47	plage												
15 Feb	S09W66	48	plage												
16 Feb	S09W80	49	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 44

			Region 3580												
08 Feb	N23W50	124	30	2	Hax	2	A								
09 Feb	N21W66	127	10	1	Axx	1	A								
10 Feb	N21W78	126	10	1	Axx	1	A								
11 Feb	N21W92	126	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 124

			Region 3581												
08 Feb	S20E68	46	60	2	Hsx	1	A								
09 Feb	S21E58	3	80	2	Hsx	1	A								
10 Feb	S21E44	4	100	1	Hsx	1	A								
11 Feb	S21E31	2	80	1	Hsx	2	A								
12 Feb	S21E18	2	50	2	Hsx	2	A								
13 Feb	S21E05	3	50	3	Hsx	1	A								
14 Feb	S21W07	2	60	2	Hsx	1	A								
15 Feb	S22W20	2	50	2	Hsx	1	A								
16 Feb	S22W33	2	40	1	Hsx	1	A								
17 Feb	S21W46	1	30	1	Hsx	1	A								
18 Feb	S21W59	1	20	1	Hsx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 3

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 3582												
10 Feb	N06E14	34	40	4	Cao	6	B	1							
11 Feb	N06E01	33	60	7	Cao	9	B	1							
12 Feb	N07W13	34	120	8	Dai	15	B								
13 Feb	N06W27	35	240	9	Dai	19	B								
14 Feb	N06W40	35	170	11	Eai	13	B		1						
15 Feb	N07W53	35	140	11	Eai	12	B								
16 Feb	N07W65	34	60	11	Cai	7	B								
17 Feb	N06W78	33	30	10	Cro	2	B								
								2	1	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 33

			Region 3583												
10 Feb	N09E42	6	20	4	Cro	6	B								
11 Feb	N09E29	5	110	7	Dso	14	B	3			2				
12 Feb	N09E15	6	250	9	Dki	22	BG	2			3				
13 Feb	N09E01	7	270	11	Eki	19	BG	2			1				
14 Feb	N09W13	8	260	13	Eho	13	B	1							
15 Feb	N09W26	8	270	14	Eso	10	B	1			1				
16 Feb	N09W40	9	290	16	Fko	9	B								
17 Feb	N09W53	8	270	16	Fki	11	B	2			2				
18 Feb	N09W67	9	250	17	Fki	11	B	4							
								15	0	0	9	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 7

			Region 3584												
10 Feb	S15E71	337	20	1	Hsx	1	A								
11 Feb	S15E57	337	20	1	Hsx	1	A								
12 Feb	S15E43	338	30	1	Hsx	1	A								
13 Feb	S13E30	338	40	4	Cao	3	B								
14 Feb	S13E16	339	20	3	Hsx	3	A	3			4				
15 Feb	S15E07	335	20	1	Hrx	1	A								
16 Feb	S15W07	336	10	1	Axx	1	A								
17 Feb	S14W21	336	20	6	Cro	6	B	1			1				
18 Feb	S15W33	335	20	4	Bxo	6	B								
								4	0	0	5	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 335

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 3585												
13 Feb	N14E61	307	50	2	Hax	1	A								
14 Feb	N15E47	308	20	2	Cro	4	B								
15 Feb	N13E33	309	10	4	Bxo	3	B								
16 Feb	N13E19	310	plage												
17 Feb	N13E05	310	plage												
18 Feb	N13W09	311	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 310

			Region 3586												
14 Feb	N29E68	287	50	3	Hsx	1	A								
15 Feb	N27E57	285	100	2	Hsx	1	A	1							
16 Feb	N27E45	284	160	2	Hsx	1	A	1							
17 Feb	N27E33	282	150	2	Hsx	1	A								
18 Feb	N27E20	282	140	2	Hsx	2	A								
								2	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 282

			Region 3587												
15 Feb	S21E37	305	20	2	Cro	5	B	1							
16 Feb	S22E23	306	20	3	Bxo	4	B				1				
17 Feb	S21E10	305	10	5	Bxo	6	B								
18 Feb	S20W02	304	10	5	Bxo	3	B								
								1	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 304

			Region 3588												
15 Feb	S03E30	312	10	5	Bxo	2	B	1							
16 Feb	S03E15	314	plage												
17 Feb	S03W00	315	plage												
18 Feb	S03W15	317	plage												
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 315

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 3589													
15 Feb	S08W52	34	20	3	Bxi	4	B								
16 Feb	S07W65	34	20	5	Bxo	4	B								
17 Feb	S07W78	33	10	5	Bxo	3	B								
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 34

		Region 3590													
18 Feb	N19E78	224	250	4	Hhx	1	A	3			1				
								3	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 224

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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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