Space Weather Highlights
17 March - 23 March 2025

SWPC PRF 2586
24 March 2025

Solar activity was at moderate levels (R1-Minor) on 17, 19 and 21 March. Region 4033 (N24, L=122, class/area Bxo/010 on 15 Mar) produced an M1.0/1f at 17/1933 UTC. This event produced a northerly vector CME with a possible weak Earth impact. Region 4031 (N16, L=165, class/area Eai/120 on 19 Mar) produced an M1.5/1n at 19/2040 UTC. Region 4028 (S17, L=141, class/area Dai/240 on 15 Mar) produced an M1.2/1n at 21/1558 UTC/ Associated with this event was a Type II sweep with an estimated velocity of 504 km/s. At about the same time as this flare, a fast shock signature CME off the SE appeared to have originated from the vicinity of Region 4034 (S12, L=112, class/area Cso/020 on 20 Mar).

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 17 and 18 March with a peak flux of 6,680 pfu at 17/1600 UTC. Low to moderate levels were observed on 19-23 March.

Geomagnetic field activity was at quiet to unsettled levels on 17-18 March and quiet to minor storm (G1-Minor) levels on 19 March. This activity was attributed to negative polarity CH HSS combined with CME effects. Quiet levels were observed on 20 March. Activity levels increased to unsettled to minor and moderate (G1-G2/Minor-Moderate) storm levels on 21-22 March. This activity was attributed to the 17 March CME and negative polarity CH HSS effects. Quiet to active levels were observed on 21 March due to waning CME effects.

During the highlight period, Bt peaked at 40 nT and Bz dipped south to -17 nT late on 21 March. Solar wind speeds generally peaked to 525 km/s mid to late on 19 March and again late on 22 March to early on 23 March.

Space Weather Outlook
24 March - 19 April 2025

Solar activity is expected to be at a chance for R1-R2 (Minor-Moderate) levels through the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 27-31 March and 06-14 April. Low to moderate levels are expected on 24-26 March, 01-05 April and 15-19 April.

Geomagnetic field activity is expected to be at active to G1-Minor levels on 24 March due to CME effects. G1-G2 (Minor-Moderate) levels on 25-26 March and unsettled to active levels on 27-29 March are forecasted due to positive polarity CH HSS influence. A combination of unsettled to G1-Minor levels are forecasted for 04-19 April due to negative polarity CH HSS

influence.

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
17 March	204	189	620	C1.2	11	1	0	4	3	0	0	0
18 March	184	191	740	C1.1	4	0	0	0	0	0	0	0
19 March	180	170	650	C1.2	4	1	0	4	1	0	0	0
20 March	170	139	530	C1.2	3	0	0	3	0	0	0	0
21 March	165	178	760	C1.1	2	1	0	1	1	0	0	0
22 March	178	177	710	C1.6	1	0	0	4	0	0	0	0
23 March	168	110	430	C1.3	6	0	0	3	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
17 March	7.7e+05	1.7e+04	1.7e+08
18 March	1.4e+05	1.7e+04	4.0e+07
19 March	4.9e+05	1.7e+04	1.4e+07
20 March	2.1e+06	2.0e+04	2.3e+07
21 March	7.6e+06	2.9e+04	1.0e+07
22 March	1.8e+06	2.0e+04	2.1e+06
23 March	4.0e+05	1.7e+04	9.2e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
17 March	14	3-3-3-2-4-2-3-2	23	3-3-4-3-5-5-2-2	16	3-3-3-2-3-3-4-3
18 March	13	3-3-2-2-4-3-2-2	18	2-4-3-3-5-3-2-2	12	3-3-2-2-3-3-2-2
19 March	19	2-4-4-3-4-4-3-2	42	2-4-7-4-4-5-5-3	23	2-4-4-3-3-4-5-3
20 March	5	1-2-2-1-2-1-1-1	7	2-2-2-3-3-1-1-0	6	2-2-2-2-2-1-1-2
21 March	16	3-3-2-2-3-3-4-4	16	3-3-2-3-3-3-4-3	25	3-3-2-2-3-4-5-5
22 March	20	4-4-2-3-4-3-3-4	33	4-3-3-3-6-6-3-3	33	6-5-3-3-4-4-3-5
23 March	9	3-1-3-1-3-2-2-2	15	3-2-5-3-3-2-2-1	27	4-2-3-2-2-1-2-1

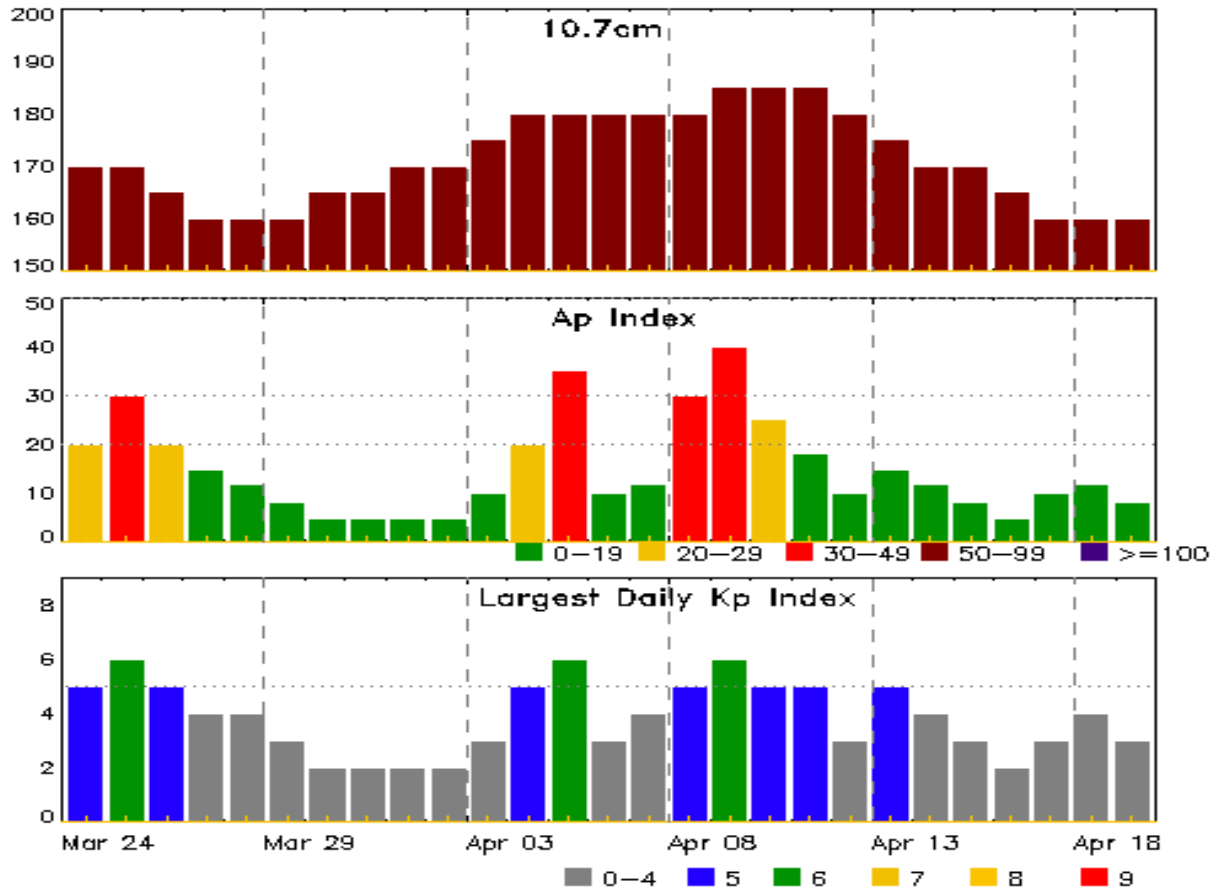
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
17 Mar 0348	WARNING: Geomagnetic K = 4	17/0345 - 1500
17 Mar 0521	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	10/1150
17 Mar 1448	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 2100
17 Mar 2054	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 18/0600
17 Mar 2102	ALERT: Geomagnetic K = 4	
18 Mar 0556	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 18/2359
18 Mar 0734	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	10/1150
18 Mar 2352	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 19/0600
19 Mar 0515	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 19/2359
19 Mar 0750	WARNING: Geomagnetic K = 5	19/0749 - 1800
19 Mar 2039	WARNING: Geomagnetic K = 5	19/2039 - 20/0300
19 Mar 2052	EXTENDED WARNING: Geomagnetic K = 4	17/0345 - 20/0600
19 Mar 2103	ALERT: Geomagnetic K = 5	
21 Mar 1612	ALERT: Type II Radio Emission	21/1557
21 Mar 1712	WARNING: Geomagnetic K = 4	21/1715 - 22/0900
21 Mar 1731	ALERT: Geomagnetic K = 4	
21 Mar 1733	WARNING: Geomagnetic K = 5	21/1732 - 22/0900
21 Mar 1855	ALERT: Geomagnetic K = 5	
21 Mar 1943	WARNING: Geomagnetic K = 6	21/1945 - 22/0600
21 Mar 2335	ALERT: Geomagnetic K = 5	
22 Mar 0139	ALERT: Geomagnetic K = 5	
22 Mar 0302	ALERT: Geomagnetic K = 6	
22 Mar 0313	WATCH: Geomagnetic Storm Category G3 predicted	
22 Mar 0337	ALERT: Geomagnetic K = 5	
22 Mar 0603	EXTENDED WARNING: Geomagnetic K = 4	21/1715 - 22/1500
22 Mar 1121	EXTENDED WARNING: Geomagnetic K = 4	21/1715 - 22/2100
22 Mar 1648	WARNING: Geomagnetic K = 5	22/1648 - 2359
22 Mar 1649	EXTENDED WARNING: Geomagnetic K = 4	21/1715 - 22/2359

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
22 Mar 2305	EXTENDED WARNING: Geomagnetic K = 4	21/1715 - 23/2359
22 Mar 2305	EXTENDED WARNING: Geomagnetic K = 5	22/1648 - 23/2359
22 Mar 2337	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
24 Mar	170	20	5	07 Apr	180	12	4
25	170	30	6	08	180	30	5
26	165	20	5	09	185	40	6
27	160	15	4	10	185	25	5
28	160	12	4	11	185	18	5
29	160	8	3	12	180	10	3
30	165	5	2	13	175	15	5
31	165	5	2	14	170	12	4
01 Apr	170	5	2	15	170	8	3
02	170	5	2	16	165	5	2
03	175	10	3	17	160	10	3
04	180	20	5	18	160	12	4
05	180	35	6	19	160	8	3
06	180	10	3				

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
17 Mar	1925	1933	1940	M1.0	0.009				4033			
19 Mar	2021	2040	2047	M1.5	0.010	1N	N14W36		4031			
21 Mar	1534	1558	1623	M1.2	0.023	1N	S19W31		4028		1	

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
17 Mar	0521	0542	0551	C7.8	1F	S18E31	4028
17 Mar	0637	0646	0654	C2.4			4034
17 Mar	0810	0817	0824	C2.9	SF	N03W54	4019
17 Mar	0939	0945	0949	C1.8	SF	N14W03	4031
17 Mar	1037	1100	1124	C2.1	SF	N13W31	4020
17 Mar	1423	1430	1436	C2.7	SF	S20E26	4028
17 Mar	1545	1604	1614	C6.6			4019
17 Mar	1552	1602	1649		1F	N06W57	4019
17 Mar	1614	1618	1623	C5.3			4019
17 Mar	1812	1819	1826	C2.0			
17 Mar	1904	1919	1925	C9.8	1F	N28E43	4033
17 Mar	1925	1933	1940	M1.0			4033
17 Mar	2238	2245	2253	C3.6			4034
18 Mar	0420	0426	0433	C3.0			4028
18 Mar	1209	1222	1235	C2.1			4025
18 Mar	1511	1517	1527	C1.7			
18 Mar	2104	2112	2121	C2.1			4028
19 Mar	1001	1025	1039	C2.0			4031
19 Mar	1116	1141	1205	C2.9	SF	S22E13	4030
19 Mar	1440	1440	1447		SF	S13E24	
19 Mar	1630	1639	1652	C2.8	SF	S16W04	4028
19 Mar	1735	1737	1743		SF	S05W43	4021
19 Mar	2021	2040	2047	M1.5	1N	N14W36	4031
19 Mar	2314	0006	0104	C6.0			4018
20 Mar	0335	0344	0350	C5.6			4031
20 Mar	0716	0727	0738	C2.5	SF	N08W68	4022
20 Mar	1649	1710	1750	C4.4	SF	N11W66	4025
20 Mar	2048	2049	2055		SF	N14W50	4031

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
21 Mar	1055	1108	1121	C2.1	SF	S15W04	4034
21 Mar	1534	1558	1623	M1.2	1N	S19W31	4028
21 Mar	2229	2236	2241	C2.2			4036
22 Mar	B1347	1401	1429		SF	N08W33	4036
22 Mar	1431	1433	1442		SF	N09W33	4036
22 Mar	1445	1449	1600		SF	N08W35	4036
22 Mar	1710	1717	1727	C5.0	SF	N14E13	4035
23 Mar	0040	0045	0049	C3.6			4028
23 Mar	0454	0500	0516	C3.4			4035
23 Mar	1022	1030	1038	C2.6			4031
23 Mar	1038	1042	1046	C2.9			4035
23 Mar	1418	1422	1433	C4.5			4028
23 Mar	1448	1458	1502		SF	N18W05	4035
23 Mar	1839	1839	1842		SF	N08W51	4036
23 Mar	1846	1852	1906		SF	S15W60	4028
23 Mar	2106	2114	2121	C2.5			4028

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 4018												
05 Mar	S20E75	239	120	1	Hsx	1	A								
06 Mar	S20E64	237	120	4	Cao	3	B								
07 Mar	S21E52	236	120	6	Cao	3	B	1							
08 Mar	S20E39	235	120	3	Cso	3	B								
09 Mar	S20E25	236	100	2	Hsx	1	A								
10 Mar	S20E14	234	100	2	Cso	3	B								
11 Mar	S20E01	234	100	4	Cso	6	B								
12 Mar	S21W09	231	110	9	Cso	9	B								
13 Mar	S21W24	232	100	3	Hsx	3	A	2							
14 Mar	S20W38	233	60	2	Hsx	1	A								
15 Mar	S19W52	234	90	2	Hsx	1	A								
16 Mar	S20W66	235	70	2	Hsx	1	A								
17 Mar	S19W78	235	50	2	Hsx	1	A								
18 Mar	S19W92	235	30	1	Hsx	1	A								
								3	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 234

			Region 4019												
07 Mar	N07E70	218	30	2	Hsx	1	A								
08 Mar	N07E58	216	70	3	Hsx	1	A								
09 Mar	N07E43	218	70	3	Hsx	1	A								
10 Mar	N07E31	217	150	9	Dai	8	BGD	2							
11 Mar	N07E18	217	180	9	Dac	9	BD								
12 Mar	N06E04	218	210	8	Dac	15	BD								
13 Mar	N06W09	217	200	7	Dac	16	BD	4			1	1			
14 Mar	N05W23	218	100	6	Dac	16	BD								
15 Mar	N06W37	219	100	5	Dai	19	BGD	1							
16 Mar	N05W51	220	120	3	Dai	6	B	4			3				
17 Mar	N06W65	221	40	3	Cao	6	B	3			1	1			
18 Mar	N04W78	221	40	3	Cao	6	B								
19 Mar	N04W93	222	plage												
								14	0	0	5	2	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 218

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 4020													
09 Mar	N18E53	208	50	3	Hsx	1	A								
10 Mar	N18E50	198	50	3	Hsx	1	A								
11 Mar	N19E36	199	50	3	Hsx	1	A								
12 Mar	N19E23	199	50	2	Hsx	1	A								
13 Mar	N19E11	197	50	2	Hsx	1	A								
14 Mar	N19W03	198	40	1	Hsx	1	A								
15 Mar	N20W15	197	70	1	Hsx	1	A								
16 Mar	N19W28	197	30	2	Hax	1	A								
17 Mar	N19W42	198	20	2	Hax	1	A	1			1				
18 Mar	N19W54	197	20	1	Hax	1	A								
19 Mar	N19W66	195	10	1	Axx	1	A								
20 Mar	N19W80	196	plage												
								1	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 198

		Region 4021													
10 Mar	S06E71	176	50	4	Cso	2	B								
11 Mar	S06E57	178	80	5	Cao	6	B				3				
12 Mar	S06E42	180	100	5	Cai	7	BD								
13 Mar	S06E29	179	100	5	Cai	7	BD	1							
14 Mar	S05E15	180	80	2	Hsx	4	A								
15 Mar	S05E03	179	90	3	Cso	3	B								
16 Mar	S05W11	180	110	4	Dso	7	B	1			1				
17 Mar	S06W24	180	120	5	Cso	7	B								
18 Mar	S05W39	182	120	5	Cso	6	B								
19 Mar	S05W50	179	100	3	Cso	2	B				1				
20 Mar	S04W62	178	90	1	Hsx	3	A								
21 Mar	S05W77	180	120	2	Hsx	1	A								
22 Mar	S06W90	180	100	2	Hsx	1	A								
								2	0	0	5	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 179

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 4022												
11 Mar	N08E47	188	20	3	Cro	4	B								
12 Mar	N08E33	189	30	6	Dro	6	B								
13 Mar	N08E19	189	30	6	Dro	6	B								
14 Mar	N08E05	190	20	8	Dai	9	B	1							
15 Mar	N06W09	191	70	7	Dai	9	B								
16 Mar	N05W23	192	70	6	Dao	9	B				1				
17 Mar	N06W38	194	30	5	Dao	6	B								
18 Mar	N05W52	195	50	4	Cao	2	B								
19 Mar	N05W65	194	30	4	Cao	4	B								
20 Mar	N05W78	194	10	2	Axx	2	A	1			1				
21 Mar	N05W91	195	plage												
								2	0	0	2	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 190

			Region 4023												
11 Mar	N25E58	177	30	2	Hsx	1	A								
12 Mar	N25E45	177	30	2	Hsx	1	A								
13 Mar	N25E32	176	30	2	Hsx	1	A								
14 Mar	N25E18	177	30	2	Hsx	1	A								
15 Mar	N21E04	178	30	2	Hrx	1	A								
16 Mar	N25W07	176	20	1	Hrx	1	A								
17 Mar	N25W19	175	10	1	Axx	1	A								
18 Mar	N25W33	176	10	1	Axx	1	A								
19 Mar	N25W45	174	10	1	Axx	1	A								
20 Mar	N25W59	175	plage												
21 Mar	N25W72	176	plage												
22 Mar	N25W87	177	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 178

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 4025												
12 Mar	N10E44	178	10	5	Bxi	7	B								
13 Mar	N10E28	180	30	5	Dro	7	B								
14 Mar	N11E14	181	60	5	Cao	7	B	2							
15 Mar	N12E02	180	50	7	Cao	6	B								
16 Mar	N11W12	181	50	6	Dso	10	BG								
17 Mar	N11W26	182	90	7	Dsi	12	BG								
18 Mar	N10W42	185	180	11	Eai	10	BG	1							
19 Mar	N11W52	181	160	8	Dso	8	B								
20 Mar	N10W64	180	90	8	Cso	4	B	1			1				
21 Mar	N09W77	178	120	2	Hsx	1	A								
22 Mar	N10W90	180	plage												
								4	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 180

			Region 4026												
12 Mar	S20E50	172	10	3	Bxo	3	B								
13 Mar	S20E37	171	10	4	Bxo	3	B								
14 Mar	S19E23	172	10	2	Axx	1	A								
15 Mar	S19E09	173	plage												
16 Mar	S19W05	174	plage												
17 Mar	S19W19	175	plage												
18 Mar	S19W33	176	plage												
19 Mar	S20W42	171	30	4	Cro	4	B								
20 Mar	S20W55	171	20	4	Cro	5	B								
21 Mar	S20W68	171	30	6	Bxo	6	B								
22 Mar	S20W82	172	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 174

			Region 4027												
12 Mar	N11W21	243	10	4	Bxo	3	B	1							
13 Mar	N11W36	244	10	1	Axx	1	A	1							
14 Mar	N11W50	245	10	1	Axx	1	A								
15 Mar	N11W64	246	plage												
16 Mar	N11W78	247	plage												
								2	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 243

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 4028												
13 Mar	S17E65	143	120	3	Dai	4	B	1							
14 Mar	S18E57	138	110	9	Dao	6	BG	3							
15 Mar	S17E41	141	240	6	Dai	3	BG	4			1				
16 Mar	S18E27	142	110	7	Dsi	12	BG	2			2				
17 Mar	S18E16	140	100	7	Dai	17	BG	2			1	1			
18 Mar	S17E03	140	60	6	Dai	11	BG	2							
19 Mar	S17W10	139	70	6	Dai	13	B	1			1				
20 Mar	S17W24	140	60	6	Cai	10	B								
21 Mar	S16W38	141	80	7	Cai	10	B		1			1			
22 Mar	S16W52	142	40	3	Cri	6	B								
23 Mar	S16W66	143	30	2	Bxo	4	B	3			1				
								35	1	0	6	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 140

			Region 4029												
15 Mar	S14E34	148	10	1	Axx	1	A								
16 Mar	S15E20	149	plage					1			1				
17 Mar	S15E06	150	plage												
18 Mar	S15W08	151	plage												
19 Mar	S15W22	151	plage												
20 Mar	S15W36	152	plage												
21 Mar	S15W50	153	plage												
22 Mar	S15W64	154	plage												
23 Mar	S15W78	155	plage												
								1	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 150

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 4030												
14 Mar	S16E65	130	plage						1						
15 Mar	S16E59	123	90	12	Eso	5	BG	2							
16 Mar	S17E38	131	80	2	Hsx	1	A	1							
17 Mar	S17E26	130	70	2	Hsx	1	A								
18 Mar	S17E13	130	90	2	Hsx	1	A								
19 Mar	S17E01	128	60	2	Hsx	1	A	1			1				
20 Mar	S17W13	129	60	2	Hsx	1	A								
21 Mar	S18W25	128	110	2	Hsx	1	A								
22 Mar	S18W39	129	100	2	Hsx	1	A								
23 Mar	S18W52	129	80	2	Hsx	1	A								
								4	1	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 128

			Region 4031												
15 Mar	N17E18	164	10	3	Bxo	2	B								
16 Mar	N17E04	165	60	5	Dai	6	B								
17 Mar	N15W10	166	60	9	Dai	12	BG	1			1				
18 Mar	N16W24	167	100	12	Eai	11	BG								
19 Mar	N16W36	165	120	11	Eai	11	BG	1	1			1			
20 Mar	N17W48	164	100	10	Cai	12	B	1			1				
21 Mar	N16W66	169	120	7	Cao	5	B								
22 Mar	N17W79	169	80	4	Cao	4	B								
23 Mar	N17W93	170	plage					1							
								4	1	0	2	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 165

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 4032												
15 Mar	N27E36	146	10	1	Axx	1	A								
16 Mar	N28E22	147	10	1	Axx	1	A								
17 Mar	N28E08	148	plage												
18 Mar	N28W06	149	plage												
19 Mar	N28W20	149	plage												
20 Mar	N28W34	150	plage												
21 Mar	N28W48	151	plage												
22 Mar	N28W62	152	plage												
23 Mar	N28W76	153	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 149

			Region 4033												
15 Mar	N24E60	122	10	3	Bxo	3	B								
16 Mar	N25E47	122	10	1	Axx	2	A								
17 Mar	N24E37	119	10	2	Axx	2	A	1	1			1			
18 Mar	N29E24	119	10	1	Axx	1	A								
19 Mar	N29E10	119	plage												
20 Mar	N29W04	120	plage												
21 Mar	N19W19	122	10	2	Axx	2	A								
22 Mar	N19W33	123	plage												
23 Mar	N19W47	124	plage												
								1	1	0	0	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 120

			Region 4034												
16 Mar	S16E51	118	10	5	Bxo	3	B								
17 Mar	S14E46	110	20	4	Cro	3	B	2							
18 Mar	S13E30	113	10	6	Bxo	5	B								
19 Mar	S13E16	113	10	6	Bxi	11	B								
20 Mar	S12E04	112	20	5	Cso	8	B								
21 Mar	S12W09	112	20	6	Cro	4	B	1			1				
22 Mar	S11W21	111	10	1	Axx	1	A								
23 Mar	S11W35	112	plage												
								3	0	0	1	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^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 4035												
18 Mar	N15E53	90	20	3	Dro	5	B								
19 Mar	N15E46	83	50	7	Dao	4	B								
20 Mar	N15E32	84	80	8	Dso	4	B								
21 Mar	N15E18	85	80	8	Dao	6	B								
22 Mar	N15E05	85	80	8	Dro	7	B	1			1				
23 Mar	N15W09	86	40	9	Cro	6	B	2			1				
								3	0	0	2	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 85

			Region 4036												
21 Mar	N06W24	127	20	3	Dro	4	B	1							
22 Mar	N07W39	129	220	8	Dac	15	BG				3				
23 Mar	N07W52	129	230	9	Dai	12	BG				1				
								1	0	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 127

			Region 4037												
21 Mar	N19W19	122	10	3	Cro	2	B								
22 Mar	N19W34	124	10	5	Bxo	4	B								
23 Mar	N17W48	125	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 122

			Region 4038												
21 Mar	S15E60	43	10	1	Axx	2	A								
22 Mar	S15E47	43	10	7	Bxo	2	B								
23 Mar	S14E34	43	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 43

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 4039												
21 Mar	N09E70	33	30	3	Cro	4	B								
22 Mar	N09E53	37	10	3	Bxo	3	B								
23 Mar	N09E37	40	10	2	Bxo	3	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 40

			Region 4040												
22 Mar	S08E61	29	30	1	Hax	1	A								
23 Mar	S08E46	31	20	1	Axx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 31

			Region 4041												
22 Mar	N16E63	27	10	1	Axx	1	A								
23 Mar	N17E49	28	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 28

			Region 4042												
22 Mar	S12E69	21	10	1	Axx	1	A								
23 Mar	S12E54	23	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 23

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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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