Space Weather Highlights
17 April - 23 April 2023

SWPC PRF 2486
24 April 2023

Solar activity was at low to moderate levels during the period. Low levels were observed on 17-20 Apr and 22-23 Apr from Regions 3272 (S21, L=102, class/area Eai/280 on 09 Apr), 3280 (S08, L=117, class/area Dsi/240 on 15 Apr), 3281 (S24, L=019, class/area Dko/350 on 14 Apr), 3282 (N11, L=024, class/area Eki/530 on 16 Apr), 3283 (S20, L=356, class/area Dro/080 on 19 Apr) and 3285 (S17, L=272, class/area Dao/180 on 22 Apr).

Solar activity reached moderate levels on 21 April due to an M1.7/2n (R1-Minor) flare from Region 3283 at 21/1812 UTC. Accompanying the flare were Type II (580 km/s) and Type IV radio sweeps. Subsequent SOHO LASCO C2 imagery observed a full-halo CME signature beginning after 23/1812 UTC.

The greater than 10 Mev protons exceeded the S1 (Minor) threshold at 23/1820 UTC with a peak value of 26.2 pfu. This increase was in response to the passage from a shock ahead of the 21 Apr CME.

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

Geomagnetic field activity ranged from quiet to G4 (Severe) storm conditions during the period. Quiet conditions were observed on 17 Apr through midday on 18 Apr. Unsettled to active conditions were observed on midday 18 Apr through a majority of 19 Apr due to weak CME effects. Quiet to isolated unsettled conditions were observed on 20 Apr through the first portion of 23 Apr.

Beginning about midday on 23 Apr, geomagnetic conditions rose sharply through the day from active to G4 (Severe) geomagetic storm conditions in response to the arrival of the full-halo CME that left the Sun on 21 Apr. A sudden impulse (48 nT) was observed at the Boulder magnetometer beginning at 23/1737 UTC. During this period of activity, total magnetic field strength increased from about 9 nT to 25 nT during the shock. The Bz component rotated south and maintained a far southward configuration to -22 nT through 23/2015 UTC at which point Bz rapidly rotated northward. Solar wind speeds rapidly increased from about 350 km/s to above 600 km/s by about 23/1945 UTC.

Space Weather Outlook
24 April - 20 May 2023

Solar activity is expected to remain at low levels with a chance for M-class (R1-R2, Minor-Moderate) flares, and a slight chance for X-class (R3-Strong), flares on 24-26 Apr and again on 07-20 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on

25-30 Apr and 01-06 May due to residual CME effects on 25-26 Apr followed by CH HSS influence.

Geomagnetic field activity is expected to reach G3 (Strong) levels early on 24 Apr due to CME effects. G1 (Minor) to G2 (Moderate) levels are expected through the remainder of 24 Apr due to CME effects. Unsettled to active levels are likely on 25-30 Apr and 01-04 May, 07 May and 11-12 May due to CH HSS effects. Mostly quiet levels are expected on 05-05 May, 08-10 May and 13-20 May.

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 April	167	162	890	C1.2	7	0	0	13	0	0	0	0
18 April	153	140	760	C1.0	8	0	0	6	0	0	0	0
19 April	147	113	770	C1.0	5	0	0	7	0	0	0	0
20 April	147	97	520	C1.0	9	0	0	6	0	0	0	0
21 April	151	114	630	B6.5	2	1	0	2	0	1	0	0
22 April	141	87	550	B7.7	4	0	0	2	0	0	0	0
23 April	135	86	540	B6.1	4	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 April	3.8e+04	2.3e+04	1.4e+06
18 April	3.4e+05	2.2e+04	1.5e+06
19 April	6.2e+04	2.2e+04	1.4e+06
20 April	6.8e+04	2.2e+04	1.4e+06
21 April	4.3e+04	2.3e+04	1.4e+06
22 April	4.5e+06	8.2e+04	2.5e+06
23 April	2.0e+08	1.9e+05	1.5e+06

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
17 April	6	1-1-2-2-2-2-2-2	7	2-1-2-2-2-3-1-1	6	2-1-2-2-1-2-1-1
18 April	9	1-1-1-1-3-3-3-3	6	0-1-0-0-2-3-3-2	13	1-1-1-1-4-4-4-3
19 April	9	2-1-2-3-3-2-2-2	40	1-1-1-7-6-6-2-1	12	3-1-2-4-4-3-2-1
20 April	5	1-1-1-2-2-2-1-2	3	1-1-1-0-1-2-1-1	5	1-1-2-1-2-2-1-2
21 April	8	2-1-1-2-2-3-2-3	13	2-2-2-5-2-3-2-2	9	3-1-2-2-2-3-3-2
22 April	6	1-3-2-1-2-1-1-2	6	3-3-1-1-0-1-1-1	7	2-3-2-1-1-1-1-2
23 April	32	2-1-2-3-5-3-6-6	76	3-2-2-6-6-7-7-7	9	2-2-2-4-5-5-8-8

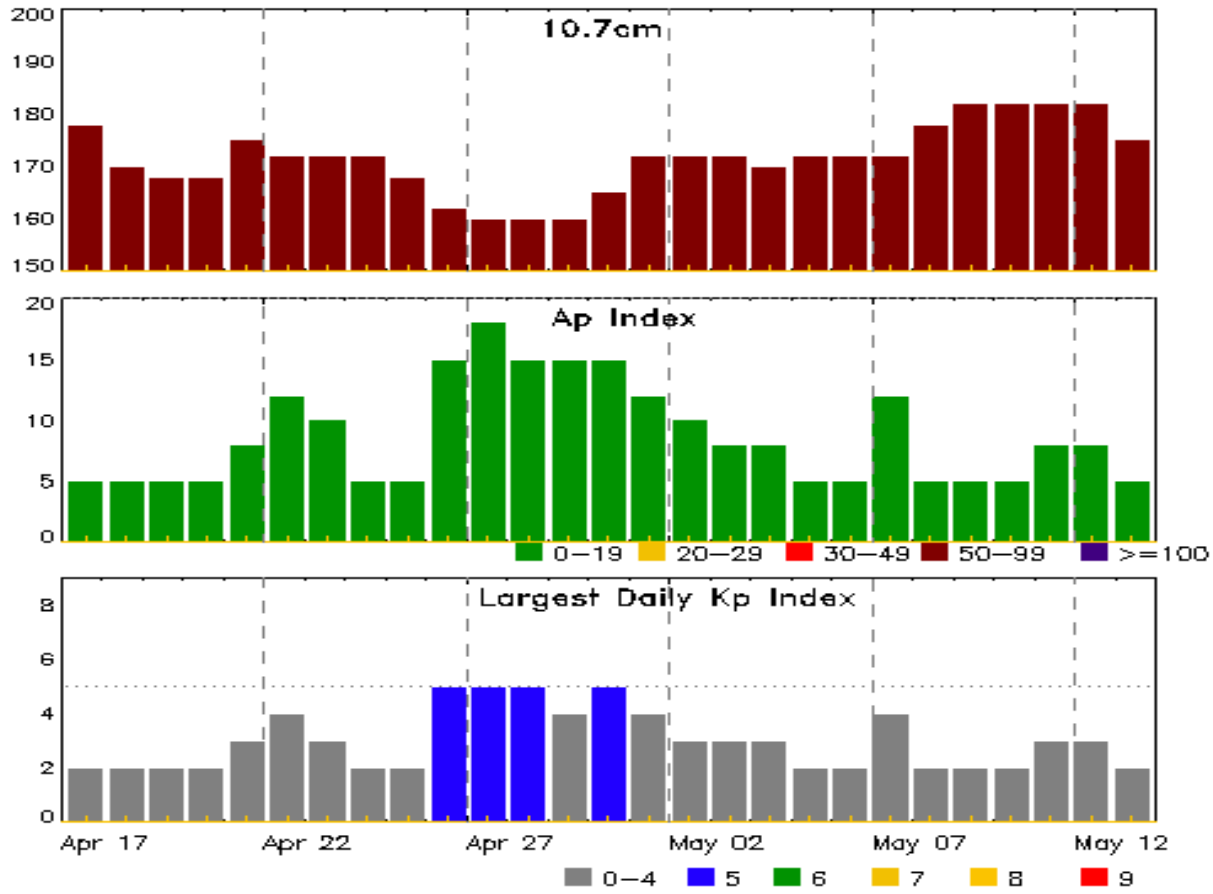
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
18 Apr 1414	WARNING: Geomagnetic K = 4	18/1415 - 2100
18 Apr 1500	ALERT: Geomagnetic K = 4	18/1459
18 Apr 1607	SUMMARY: Geomagnetic Sudden Impulse	18/1401
18 Apr 1625	WARNING: Geomagnetic K = 5	18/1624 - 19/0300
18 Apr 1704	EXTENDED WARNING: Geomagnetic K = 4	18/1415 - 19/0900
18 Apr 2110	WATCH: Geomagnetic Storm Category G1 predicted	
19 Apr 1056	WARNING: Geomagnetic K = 4	19/1055 - 2359
19 Apr 1116	ALERT: Geomagnetic K = 4	19/1115
20 Apr 2012	WATCH: Geomagnetic Storm Category G1 predicted	
20 Apr 2020	WATCH: Geomagnetic Storm Category G1 predicted	
21 Apr 1818	ALERT: Type II Radio Emission	21/1756
21 Apr 1824	ALERT: Type IV Radio Emission	21/1759
22 Apr 1243	WATCH: Geomagnetic Storm Category G2 predicted	
23 Apr 1036	WARNING: Geomagnetic K = 4	23/1035 - 1500
23 Apr 1128	ALERT: Geomagnetic K = 4	23/1128
23 Apr 1349	EXTENDED WARNING: Geomagnetic K = 4	23/1035 - 24/0900
23 Apr 1416	WARNING: Geomagnetic K = 5	23/1415 - 24/0600
23 Apr 1428	ALERT: Geomagnetic K = 5	23/1425
23 Apr 1719	WARNING: Geomagnetic Sudden Impulse expected	23/1745 - 1830
23 Apr 1800	ALERT: Geomagnetic K = 5	23/1759
23 Apr 1828	ALERT: Proton Event 10MeV Integral Flux >= 10pfu	23/1815
23 Apr 1829	WARNING: Geomagnetic K = 6	23/1830 - 24/0600
23 Apr 1831	WARNING: Proton 10MeV Integral Flux > 10pfu	23/1815 - 24/0900
23 Apr 1834	SUMMARY: Geomagnetic Sudden Impulse	23/1737
23 Apr 1856	ALERT: Geomagnetic K = 6	23/1855
23 Apr 1926	WARNING: Geomagnetic K>= 7	23/1925 - 24/0600
23 Apr 1929	ALERT: Geomagnetic K = 7	23/1929
23 Apr 1945	ALERT: Geomagnetic K = 8	23/1944
23 Apr 2112	ALERT: Geomagnetic K = 5	23/2111

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
23 Apr 2122	ALERT: Geomagnetic K = 6	23/2121
23 Apr 2130	CANCELLATION: Proton 10MeV Integral Flux > 10pfu	
23 Apr 2138	SUMMARY: Proton Event 10MeV Integral Flux >= 10pfu	23/1815 - 1840
23 Apr 2149	ALERT: Geomagnetic K = 7	23/2148
23 Apr 2224	EXTENDED WARNING: Geomagnetic K = 5	23/1415 - 24/1200
23 Apr 2224	EXTENDED WARNING: Geomagnetic K = 6	23/1830 - 24/1200
23 Apr 2224	EXTENDED WARNING: Geomagnetic K = 4	23/1035 - 24/1800
23 Apr 2339	ALERT: Geomagnetic K = 8	23/2334

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 Apr	135	47	8	08 May	150	5	2
25	130	15	5	09	155	5	2
26	125	8	3	10	160	5	2
27	120	10	3	11	165	8	3
28	120	15	4	12	170	8	3
29	125	10	3	13	170	5	2
30	130	8	3	14	165	5	2
01 May	135	12	3	15	160	5	2
02	140	10	3	16	155	5	2
03	140	8	3	17	150	5	2
04	140	8	3	18	145	5	2
05	140	5	2	19	140	5	2
06	140	5	2	20	135	5	2
07	145	12	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
21 Apr	1744	1812	1844	M1.7	0.039	2N	S22W11	3283	110		3	2

Flare List

	Time				Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #	
17 Apr	0000	0014	0015		SF	S06W69	3280	
17 Apr	B0000	0000	0022		SF	S11W33	3280	
17 Apr	0034	0034	0037		SF	S11W33	3280	
17 Apr	0040	0043	0044		SF	S10W70	3280	
17 Apr	0053	0059	0103	C2.2	SF	N10E18	3282	
17 Apr	0234	0234	0236		SF	S10W70	3280	
17 Apr	0321	0331	0340	C2.2			3281	
17 Apr	0408	0416	0429	C4.1	SF	S10W70	3280	
17 Apr	0621	0633	0639	C7.0			3281	
17 Apr	0731	0740	0750	C2.1			3279	
17 Apr	0828	0837	0847	C2.3			3280	
17 Apr	1417	1431	1440	C6.9	SF	N13E17	3282	
17 Apr	1531	1532	1534		SF	S08W71	3280	
17 Apr	1548	1548	1552		SF	S17W01	3279	
17 Apr	1645	1645	1644		SF	N13E14	3282	
17 Apr	1825	1841	1841		SF	N13E14	3282	
17 Apr	1914	1917	1926		SF	N13E14	3282	
18 Apr	0356	0403	0407	C1.5	SF	S10W70	3280	
18 Apr	0524	0530	0534	C2.4			3280	
18 Apr	0633	0634	0648		SF	S13W84	3280	
18 Apr	0745	0748	0754		SF	S08W84	3280	
18 Apr	0927	0933	0937	C1.9			3280	
18 Apr	1136	1136	1143		SF	S18E27	3283	
18 Apr	1427	1435	1454	C2.4			3280	
18 Apr	1521	1529	1536	C4.8			3280	
18 Apr	1708	1711	1721		SF	S22E23	3283	
18 Apr	1800	1813	1827	C3.2	SF	S22E22	3283	
18 Apr	1907	1917	1924	C1.9				
18 Apr	2245	2256	2317	C2.9				
19 Apr	0420	0430	0438	C2.3			3272	

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
19 Apr	0748	0748	0751		SF	N12W08	3282
19 Apr	0811	0841	0912	C3.9			3272
19 Apr	1013	1013	1015		SF	N12W08	3282
19 Apr	1307	1318	1324	C2.3	SF	N13W14	3282
19 Apr	1554	1608	1624	C2.7	SF	N11W13	3282
19 Apr	1626	1638	1644	C3.4			3282
19 Apr	1827	1828	1835		SF	S24W02	3281
19 Apr	2014	2015	2022		SF	S24W03	3281
19 Apr	2331	2348	0014	C2.6	SF	S21E13	3283
20 Apr	0112	0119	0130	C2.2			
20 Apr	0304	0312	0317	C2.2			3284
20 Apr	0716	0725	0733	C1.8			3281
20 Apr	0737	0743	0751	C2.5	SF	S22W10	3281
20 Apr	0903	U0923	A0936	C3.6	SF	S21W08	3281
20 Apr	1047	1055	1107	C2.4	SF	S22W12	3281
20 Apr	1214	1224	1231	C2.3	SF	S21E02	3283
20 Apr	B1241	U1242	A1302		SF	N14W27	3282
20 Apr	B1305	U1311	A1326		SF	N14W27	3282
20 Apr	1605	1623	1633	C3.3			
20 Apr	2223	2230	2237	C2.3	SN	S24W19	3281
20 Apr	2320	2327	2334	C1.2			3281
21 Apr	0207	0214	0218	C1.1			
21 Apr	0559	0604	0611	B9.4			
21 Apr	0659	0707	0714	B9.7			
21 Apr	1744	1812	1844	M1.7	2N	S22W11	3283
21 Apr	2113	2122	2143		SF	S19W48	3279
21 Apr	2212	2223	2230	C4.0	SN	S18W49	3279
22 Apr	0134	0148	0156	C4.8			3279
22 Apr	0331	0331	0332		SF	S21W53	3279
22 Apr	0651	0702	0710	C2.0			3279
22 Apr	1001	1007	1022	C1.2			3285
22 Apr	1552	1601	1618	C2.0	SF	S22W23	3283
23 Apr	0233	0247	0258	C1.1			
23 Apr	0451	0457	0501	B9.8	SF	S21W53	3279
23 Apr	0524	0525	0528		SF	S21W48	3281
23 Apr	0633	0640	0644	C2.2	SF	S21W53	3279
23 Apr	1706	1711	1715	C1.1			3282
23 Apr	2033	2038	2043	C1.0			3282

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 3272												
05 Apr	S20E86	107	plage					6							
06 Apr	S21E72	107	40	5	Cso	1	B	4	1						
07 Apr	S22E63	104	180	11	Eai	12	BG	5			3				
08 Apr	S21E50	104	230	14	Eai	26	BG	10	1		8	1			
09 Apr	S21E38	102	280	14	Eai	24	BG	8			6				
10 Apr	S22E24	102	265	13	Ekc	31	BG	10			5				
11 Apr	S21E10	102	250	16	Fkc	36	BG	4	1		4	2			
12 Apr	S22W02	103	250	16	Fkc	32	BG	1			3				
13 Apr	S22W14	102	150	15	Eai	22	B	2			2				
14 Apr	S23W29	103	60	12	Cao	12	B								
15 Apr	S23W41	102	30	11	Cro	6	B	2							
16 Apr	S22W55	103	30	10	Cro	6	B								
17 Apr	S22W71	106	10	4	Bxo	4	B								
18 Apr	S21W88	109	10	1	Axx	2	A								
19 Apr	S24W88	96	10	1	Axx	2	A	2							
								54	3	0	31	3	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 103

			Region 3273												
09 Apr	N10E27	113	50	4	Cao	8	B	2			1				
10 Apr	N10E13	114	120	6	Dso	6	B				1				
11 Apr	N09W01	114	100	7	Dsi	12	B	1			1				
12 Apr	N10W14	114	90	7	Cso	11	B								
13 Apr	N09W29	117	70	2	Cso	3	B								
14 Apr	N09W43	117	30	1	Hsx	1	A								
15 Apr	N09W56	117	20	1	Hrx	1	A								
16 Apr	N08W69	117	10	1	Axx	1	A								
17 Apr	N10W80	114	plage												
								3	0	0	3	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 114

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 3274												
10 Apr	S07W02	128	10	5	Axx	1	A								
11 Apr	S07W17	131	plage								1				
12 Apr	S07W32	133	plage												
13 Apr	S07W47	135	plage												
14 Apr	S07W60	135	plage												
15 Apr	S07W73	135	plage												
16 Apr	S07W86	135	plage												
								0	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 128

			Region 3275												
10 Apr	N21E61	65	40	4	Hsx	1	A								
11 Apr	N20E48	65	50	1	Hsx	1	A								
12 Apr	N19E35	65	40	1	Hsx	1	A								
13 Apr	N19E22	66	50	1	Hsx	1	A								
14 Apr	N19E08	66	30	1	Hax	1	A								
15 Apr	N19W04	65	20	1	Hax	1	A								
16 Apr	N19W17	65	20	1	Hax	1	A								
17 Apr	N19W32	67	10		Axx	1	A								
18 Apr	N18W44	66	10	1	Axx	1	A								
19 Apr	N18W58	67	plage												
20 Apr	N18W72	68	plage												
21 Apr	N13W85	66	10	3	Bxo	2	B								
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 65

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 3276												
10 Apr	S22E75	52	20	5	Dao	3	B	11	1						
11 Apr	S20E63	50	80	7	Dao	3	B	3			1				
12 Apr	S21E52	54	20	1	Hsx	1	A	1			2				
13 Apr	S22E34	54	20	1	Hsx	1	A								
14 Apr	S22E21	53	10	1	Axx	1	A								
15 Apr	S22E08	53	10	1	Bxo	2	B				1				
16 Apr	S23W06	54	20	3	Bxi	5	B								
17 Apr	S22W19	53	10	5	Axx	4	A								
18 Apr	S21W32	53	10	2	Axx	3	A								
19 Apr	S21W00	188	30	6	Axx	7	A								
20 Apr	S21W33	28	10	1	Axx	1	A								
21 Apr	S21W47	29	plage												
22 Apr	S21W61	30	plage												
23 Apr	S21W75	31	plage												
								15	1	0	4	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 188

			Region 3277												
11 Apr	N10E20	92	10	1	Cro	1	B								
12 Apr	N10E08	92	20	6	Bxo	3	B								
13 Apr	N10W06	94	plage												
14 Apr	N10W19	94	plage												
15 Apr	N10W32	94	plage												
16 Apr	N10W45	94	plage												
17 Apr	N10W58	94	plage												
18 Apr	N10W72	94	plage												
19 Apr	N10W86	95	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 94

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 3278												
12 Apr	N13W34	134	10	2	Bxo	2	B								
13 Apr	N12W46	134	10	1	Axx	1	A								
14 Apr	N12W59	134	plage												
15 Apr	N12W72	134	plage												
16 Apr	N12W85	134	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 134

			Region 3279												
12 Apr	S20E60	41	150	5	Dai	7	B	5			6				
13 Apr	S20E51	37	230	13	Eai	11	B	6			10				
14 Apr	S21E38	36	180	12	Eai	22	B				1				
15 Apr	S20E24	38	140	14	Cai	18	B	1							
16 Apr	S20E11	37	180	14	Dsi	10	B								
17 Apr	S19W05	40	80	16	Fao	15	B	1			1				
18 Apr	S19W16	37	100	15	Eao	14	B								
19 Apr	S19W28	36	40	9	Cro	7	B								
20 Apr	S19W39	34	10	1	Hax	1	A								
21 Apr	S22W50	31	10	1	Axx	1	A	1			2				
22 Apr	S19W64	33	20	3	Cro	4	B	2			1				
23 Apr	S19W78	34	20	5	Cro	3	B	1			2				
								17	0	0	23	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 40

			Region 3280												
13 Apr	S09W27	115	80	8	Dai	17	B	1							
14 Apr	S09W41	115	180	8	Dai	20	BG	2			5				
15 Apr	S08W56	117	240	9	Dsi	14	BG	6			3	1			
16 Apr	S07W71	119	200	9	Csi	8	BG	2			7				
17 Apr	S08W80	114	160	5	Cso	3	BG	2			7				
								13	0	0	22	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 115

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 3281												
13 Apr	S23E71	17	220	9	Dao	5	B	2							
14 Apr	S24E55	19	350	10	Dko	8	B	2			1				
15 Apr	S24E44	17	310	12	Dko	12	BG	2			6				
16 Apr	S24E32	16	300	11	Eki	12	BG	1			1				
17 Apr	S22E14	20	160	10	Eki	16	BG	2							
18 Apr	S22E03	17	120	11	Eai	16	B								
19 Apr	S21W10	18	60	10	Cao	10	B				2				
20 Apr	S22W22	17	60	9	Bxo	6	B	6			3				
21 Apr	S21W35	17	30	12	Cro	7	B								
22 Apr	S22W48	17	10	10	Cro	3	B								
23 Apr	S24W58	14	10	3	Axx	2	A				1				
								15	0	0	14	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 17

			Region 3282												
13 Apr	N11E66	22	60	4	Cao	3	B	1			1				
14 Apr	N11E52	22	280	8	Dko	8	B	8	2		6	2			
15 Apr	N11E38	23	400	10	Dki	17	B	5			13	1			
16 Apr	N11E24	24	530	12	Eki	17	B				1				
17 Apr	N11E11	23	390	14	Eki	21	BG	2			5				
18 Apr	N11W03	24	410	15	Eki	16	B								
19 Apr	N12W16	25	530	16	Fho	11	B	2			4				
20 Apr	N12W28	23	380	16	Fhi	23	B				2				
21 Apr	N11W42	23	410	16	Fki	19	BG								
22 Apr	N12W56	25	320	17	Fki	12	BG								
23 Apr	N12W70	26	300	16	Fki	8	BG	2							
								20	2	0	32	3	0	0	0

Still on Disk.
Absolute heliographic longitude: 24

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 3283												
16 Apr	S22E48	1	50	4	Cri	5	B								
17 Apr	S20E37	237	40	4	Cro	6	B								
18 Apr	S21E22	119	40	5	Cro	5	B	1			3				
19 Apr	S21E07	2	20	2	Bxo	3	B	1			1				
20 Apr	S20W01	356	50	5	Bxo	4	B	1			1				
21 Apr	S22W14	359	20	5	Cro	10	B		1				1		
22 Apr	S22W28	357	10	5	Bxo	4	B	1			1				
23 Apr	S22W41	358	10	7	Bxo	4	B								
								4	1	0	6	0	1	0	0

Still on Disk.
Absolute heliographic longitude: 356

			Region 3284												
17 Apr	S08E71	324	30	3	Cao	2	B								
18 Apr	S08E56	324	60	6	Dao	3	B								
19 Apr	S08E42	327	80	8	Dro	3	B								
20 Apr	S08E30	324	10	6	Axx	2	A								
21 Apr	S00E14	326	10	1	Hrx	1	A								
22 Apr	S08E01	328	10	1	Axx	1	A								
23 Apr	S08W13	329	10	1	Axx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 328

			Region 3285												
21 Apr	S17E69	272	140	4	Dso	4	B								
22 Apr	S17E57	272	180	8	Dao	3	B	1							
23 Apr	S17E44	272	190	9	Dao	7	B								
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 272

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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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