Space Weather Highlights
24 April - 30 April 2023

SWPC PRF 2487
01 May 2023

Solar activity was at low to moderate levels during the period. Low levels were observed throughout the period from Regions 3282 (N11, L=024, class/area Eki/530 on 16 Apr), 3283 (S20, L=356, class/area Bxo/050 on 20 Apr), 3285 (S19, L=273, class/area Cao/240 on 27 Apr), 3288 (S23, L=267, class/area Ehc/420 on 30 Apr), 3289 (N20, L=213, class/area Dai/220 on 30 Apr) and 3293 (N13, L=141, class/area Cao/030 on 30 Apr).

Activity reached moderate levels due to an M1.8/Sn flare at 27/1114 UTC from Region 3288. New Region 3293 produced an M2.4/1f flare at 30/2028 UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached normal to moderate levels on 24-25 April and 30 April. High levels were observed on 26-29 April with a high flux reading of 12,967 pfu at 29/1645 UTC.

Geomagnetic field activity ranged from quiet to G4 (Severe) storm conditions during the period. The period began with G2 (Moderate), G3 (Strong) and G4 (Severe) storm conditions due to response from the full-halo CME that left the Sun on 21 Apr. These storm conditions were observed midday on 27 April as the CME effects were beginning to wane. The later half of 27 April through 28 April observed quiet to active levels due to waning CME effects. During 26-30 April, quiet to active levels were observed due to negative polarity CH HSS influence.

Space Weather Outlook
01 May - 27 May 2023

Solar activity is expected to remain at low levels with a chance for M-class (R1-R2, Minor-Moderate) flares on 01-13 May and 17-27 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 01-06 May, with normal to moderate levels on 07-27 May.

Geomagnetic field activity is expected to be at unsettled to active levels on 01-04, 06,07, 11-12 and 23-27 May, with G1 (Minor) storm conditions on 24 May, all due to CH HSS effects. Some weak CME effects are possible on 02-03 May. Mostly quiet levels are expected on 05, 08-10 and 13-22 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
24 April	134	88	540	B5.5	4	0	0	1	0	0	0	0
25 April	131	87	530	B6.6	3	0	0	6	0	0	0	0
26 April	137	81	480	B7.3	2	0	0	10	0	0	0	0
27 April	141	136	860	B5.3	10	1	0	8	0	0	0	0
28 April	150	111	850	B6.9	14	0	0	8	2	0	0	0
29 April	156	82	820	C1.4	9	0	0	10	2	0	0	0
30 April	154	105	850	C1.0	5	1	0	3	1	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
24 April	1.4e+07	2.6e+04	9.4e+06
25 April	1.1e+06	2.2e+04	1.3e+07
26 April	9.9e+05	2.2e+04	1.1e+08
27 April	3.1e+05	2.2e+04	9.3e+07
28 April	1.9e+05	2.2e+04	1.4e+08
29 April	3.7e+05	2.2e+04	4.0e+08
30 April	1.2e+05	2.3e+04	2.5e+08

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
24 April	39	5-6-5-6-3-3-2-3	58	6-6-7-6-5-3-1-3	76	7-8-7-6-4-3-2-3
25 April	7	2-2-2-1-2-1-3-2	12	2-0-1-1-5-3-3-2	10	3-2-1-1-3-2-3-2
26 April	12	3-3-2-2-2-3-3-3	31	3-4-4-5-6-4-3-2	15	3-3-2-3-3-3-4-3
27 April	20	4-4-3-3-4-3-4-2	35	4-4-5-5-5-5-3-3	23	4-4-3-3-4-4-3-3
28 April	16	3-4-2-3-3-3-3-3	34	3-5-4-6-4-5-3-3	19	3-4-3-3-3-4-3-4
29 April	18	3-3-4-4-4-3-2-2	40	3-4-6-6-5-5-3-2	20	3-3-4-4-4-3-3-3
30 April	8	2-3-3-2-2-1-1-1	13	2-4-5-1-2-2-1-1	15	3-3-3-2-2-2-1-2

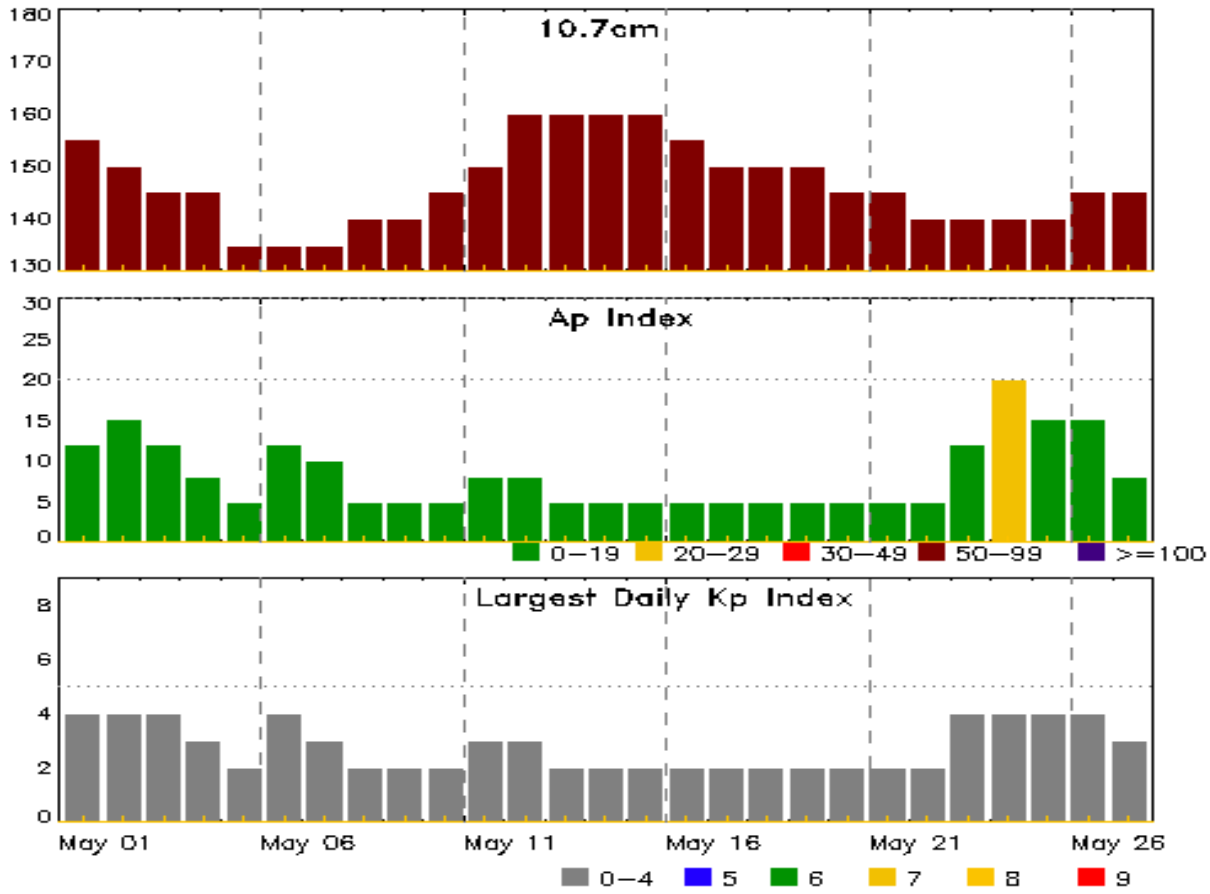
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
24 Apr 0107	ALERT: Geomagnetic K = 5	24/0101
24 Apr 0139	ALERT: Geomagnetic K = 6	24/0133
24 Apr 0213	ALERT: Geomagnetic K = 7	24/0207
24 Apr 0334	ALERT: Geomagnetic K = 5	24/0328
24 Apr 0350	ALERT: Geomagnetic K = 6	24/0344
24 Apr 0400	ALERT: Geomagnetic K = 7	24/0359
24 Apr 0446	EXTENDED WARNING: Geomagnetic K = 6	23/1830 - 24/1500
24 Apr 0446	EXTENDED WARNING: Geomagnetic K>= 7	23/1925 - 24/1200
24 Apr 0446	EXTENDED WARNING: Geomagnetic K = 5	23/1415 - 24/1800
24 Apr 0447	ALERT: Geomagnetic K = 8	24/0444
24 Apr 0639	ALERT: Geomagnetic K = 5	24/0635
24 Apr 0732	ALERT: Geomagnetic K = 6	24/0731
24 Apr 0902	ALERT: Geomagnetic K = 7	24/0859
24 Apr 1049	ALERT: Geomagnetic K = 5	24/1048
24 Apr 1130	ALERT: Geomagnetic K = 6	24/1130
24 Apr 1754	EXTENDED WARNING: Geomagnetic K = 5	23/1415 - 24/2359
24 Apr 1755	WATCH: Geomagnetic Storm Category G1 predicted	
24 Apr 1842	WARNING: Geomagnetic K = 4	24/1841 - 25/0600
25 Apr 1802	WATCH: Geomagnetic Storm Category G1 predicted	
25 Apr 2039	WARNING: Geomagnetic K = 4	25/2039 - 26/0300
26 Apr 0440	WARNING: Geomagnetic K = 4	26/0438 - 1200
26 Apr 1252	ALERT: Electron 2MeV Integral Flux >= 1000pfu	26/1235
26 Apr 1336	WARNING: Geomagnetic K = 4	26/1336 - 1800
26 Apr 1751	EXTENDED WARNING: Geomagnetic K = 4	26/1336 - 2359
26 Apr 2101	ALERT: Geomagnetic K = 4	26/2059
27 Apr 0316	ALERT: Geomagnetic K = 4	27/0256
27 Apr 0317	WARNING: Geomagnetic K = 4	27/0315 - 1200
27 Apr 0541	WARNING: Geomagnetic K = 5	27/0539 - 1200
27 Apr 1103	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 1800

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
27 Apr 1222	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	26/1235
27 Apr 1755	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 28/1200
28 Apr 1155	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 28/1800
28 Apr 1253	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	26/1235
28 Apr 1731	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 29/0900
29 Apr 0509	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	26/1235
29 Apr 0854	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 29/1800
29 Apr 1058	WARNING: Geomagnetic K = 5	29/1058 - 1800
29 Apr 1725	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 30/0900
29 Apr 2206	ALERT: Type IV Radio Emission	29/2026
30 Apr 0508	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	26/1235
30 Apr 0851	EXTENDED WARNING: Geomagnetic K = 4	27/0315 - 30/1500

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
01 May	155	12	4	15 May	160	5	2
02	150	15	4	16	155	5	2
03	145	12	4	17	150	5	2
04	145	8	3	18	150	5	2
05	135	5	2	19	150	5	2
06	135	12	4	20	145	5	2
07	135	10	3	21	145	5	2
08	140	5	2	22	140	5	2
09	140	5	2	23	140	12	4
10	145	5	2	24	140	20	4
11	150	8	3	25	140	15	4
12	160	8	3	26	145	15	4
13	160	5	2	27	145	8	3
14	160	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
27 Apr	1104	1114	1123	M1.8	0.009	SN	S23E04		3288			
30 Apr	1956	2028	2043	M2.4	0.038				3293			

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
24 Apr	1106	1116	1120	C2.2			3282
24 Apr	1259	1305	1310	C2.8			3283
24 Apr	1614	1622	1629	C1.1			3282
24 Apr	1719	1727	1731	C1.5			3285
24 Apr	1807	1808	1810		SF	N11W72	3282
25 Apr	0019	0021	0026		SF	S23E40	
25 Apr	0208	0209	0215		SF	S23E38	
25 Apr	0255	0300	0307	C1.0			
25 Apr	0553	0554	0601		SF	S23E37	
25 Apr	0648	0650	0654		SF	S24E36	
25 Apr	0705	0706	0711		SF	S20E34	
25 Apr	0758	0807	0813	C1.7	SF	S24E35	3288
25 Apr	0946	1005	1015	C1.2			
25 Apr	1712	1717	1722	B9.4			3288
26 Apr	B0813	U0815	A0846		SF	S24E35	3288
26 Apr	B1259	U1259	A1304		SF	N22E70	3289
26 Apr	1309	U1312	1318		SF	N23E73	3289
26 Apr	1410	1423	1431	C2.5	SF	N22E68	3289
26 Apr	1623	1623	1625		SF	S23E17	3288
26 Apr	1632	1639	1642		SF	S23E16	3288
26 Apr	2004	2018	2031		SF	N20E65	3289
26 Apr	2127	2128	2134		SF	N20E65	3289
26 Apr	2230	2232	2234		SF	N20E65	3289
26 Apr	2339	2340	2343		SF	N20E65	3289
26 Apr	2357	0004	0009	C2.7	SF	S23E12	3288
27 Apr	0041	0059	0109	C3.0			3289
27 Apr	0228	0249	0341	C2.5			3289
27 Apr	0812	0818	0824	B8.4			3288
27 Apr	0842	0853	0904	C1.1			3288

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
27 Apr	0914	0921	0937	C1.0			3288
27 Apr	1029	1031	1034	C1.3	SF	S23E04	3288
27 Apr	1104	1114	1123	M1.8	SN	S23E04	3288
27 Apr	1602	1616	1627	C1.7			3288
27 Apr	1603	U1611	A1613		SF	N23E57	3289
27 Apr	B1613	U1616	A1620		SF	S23E01	3288
27 Apr	1651	1657	1709		SF	N20E53	3289
27 Apr	1827	1834	1838	C1.0	SF	S23E02	3288
27 Apr	1913	1922	1925	B8.9	SF	N20E52	3289
27 Apr	1943	1948	1959	C2.4			3288
27 Apr	2234	2244	2255	C1.0			3288
27 Apr	2311	2326	2340	C2.4			3288
28 Apr	0038	0108	0111	C4.9			3288
28 Apr	0111	0122	0130	C6.6			3285
28 Apr	0521	0527	0536	C2.8	SF	S23W04	3288
28 Apr	0536	0544	0550	C2.9			3285
28 Apr	0855	0859	0908		SF	S23W08	3288
28 Apr	0909	0918	0924	C1.5	SF	S23W09	3288
28 Apr	1228	1228	1248		SF	S23W09	3288
28 Apr	1523	1600	1615	C6.8	1N	N20E40	3289
28 Apr	1535	1553	1608		SF	S21W17	3288
28 Apr	1717	1728	1734	C2.6	SF	S24W21	3288
28 Apr	1734	1744	1754	C2.7			3288
28 Apr	1813	1818	1822	C4.2	SF	S24W12	3288
28 Apr	1914	1921	1936	C3.1	SF	S24W12	3288
28 Apr	1953	2001	2016	C2.6			3288
28 Apr	2016	2033	2049	C4.2			3285
28 Apr	2109	2145	2224	C7.1			3288
28 Apr	2317	2330	A2359	C6.1	1F	S20W19	3288
29 Apr	B0000	0000	0027		1F	S20W19	3288
29 Apr	0348	0403	0415	C2.9	SF	S20W19	3288
29 Apr	0610	0617	0625	C1.9	SF	S21W22	3288
29 Apr	0622	0623	0625		SF	S21W22	3288
29 Apr	0831	0840	0847	C4.4	SF	S24W20	3288
29 Apr	1004	1017	1032	C8.8	1N	S20W25	3288
29 Apr	1107	1107	1114		SF	S20W25	3288
29 Apr	1244	1252	1305	C2.1			3288
29 Apr	1315	1324	1332	C5.1	SF	S20W27	3288

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
29 Apr	1346	1407	1440	C6.0	SF	N19E34	3289
29 Apr	1419	1419	1422		SF	S20W25	3288
29 Apr	1903	1929	1949	C4.4	SF	S18W29	3288
29 Apr	1949	1958	2008	C4.3			3288
29 Apr	2301	2303	2309		SF	S19W36	3288
30 Apr	0210	0217	0222	C3.9			3288
30 Apr	0837	0849	0905	C7.3			3288
30 Apr	1428	1438	1607	C3.6	SF	S20W40	3288
30 Apr	1641	1651	1656	C2.6	SF	N18W50	3293
30 Apr	1743	1746	1749		SF	N13E79	
30 Apr	1956	2028	2043	M2.4			3293
30 Apr	2005	2012	2017		1F	N14E81	
30 Apr	2126	2136	2144	C5.0			3293

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 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												
24 Apr	S21W89	32	plage												
								15	1	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 188

			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				
24 Apr	S19W92	35	10	1	Axx	1	A								
								17	0	0	23	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 40

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				
24 Apr	S24W71	14	plage												
25 Apr	S24W85	14	plage												
								15	0	0	14	0	0	0	0

Crossed West Limb.
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							
24 Apr	N12W83	26	270	15	Eko	6	B	2			1				
								22	2	0	33	3	0	0	0

Crossed West Limb.
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								
24 Apr	S23W56	359	10	1	Axx	1	A	1							
25 Apr	S23W70	359	10	1	Axx	1	A								
								5	1	0	6	0	1	0	0

Crossed West Limb.
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								
24 Apr	S08W25	328	10	1	Axx	1	A								
25 Apr	S08W39	328	10	1	Axx	1	A								
26 Apr	S08W53	329	plage												
27 Apr	S08W67	330	plage												
28 Apr	S08W81	331	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 328

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 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								
24 Apr	S18E33	270	220	10	Dao	7	B	1							
25 Apr	S18E19	270	220	10	Dao	7	B								
26 Apr	S17E05	271	120	6	Cso	4	B								
27 Apr	S19W10	273	240	7	Cao	5	B								
28 Apr	S18W23	273	220	7	Cao	5	B	3							
29 Apr	S17W37	273	170	4	Cao	5	B								
30 Apr	S17W50	273	140	6	Cao	7	B								
								5	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 271

			Region 3286												
24 Apr	S11E40	263	10	1	Axx	1	A								
25 Apr	S11E26	263	10	1	Axx	1	A								
26 Apr	S11E12	264	10	1	Axx	2	A								
27 Apr	S11W02	265	10	5	Bxo	3	B								
28 Apr	S11W14	264	10	3	Bxo	4	B								
29 Apr	S11W28	265	plage												
30 Apr	S11W42	265	10	1	Axx	1	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 265

			Region 3287												
24 Apr	S25E63	239	10	1	Axx	1	A								
25 Apr	S25E49	240	10	1	Axx	1	A								
26 Apr	S25E35	241	plage												
27 Apr	S25E21	242	plage												
28 Apr	S25E07	243	plage												
29 Apr	S25W07	244	plage												
30 Apr	S25W21	244	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
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 3288												
25 Apr	S22E24	265	180	7	Dso	4	B	1			1				
26 Apr	S22E10	266	140	8	Dso	5	B	1			3				
27 Apr	S23W07	269	380	11	Eki	29	BGD	8	1		5				
28 Apr	S23W19	269	390	13	Ehi	23	BGD	10			8	1			
29 Apr	S23W31	268	400	12	Ehi	13	BGD	8			9	2			
30 Apr	S23W44	267	420	14	Ehc	19	BGD	3			1				
								31	1	0	27	3	0	0	0
Still on Disk. Absolute heliographic longitude: 269															
			Region 3289												
25 Apr	N20E67	222	90	1	Hax	2	A								
26 Apr	N20E58	219	150	6	Dso	3	B	1			7				
27 Apr	N20E51	216	180	3	Dao	5	B	2			3				
28 Apr	N20E37	213	180	4	Dsi	10	B	1				1			
29 Apr	N20E24	213	200	5	Dai	7	B	1			1				
30 Apr	N20E10	213	220	5	Dai	8	B								
								5	0	0	11	1	0	0	0
Still on Disk. Absolute heliographic longitude: 213															
			Region 3290												
26 Apr	N24W45	321	40	5	Dro	3	B								
27 Apr	N24W59	322	10	5	Bxo	3	B								
28 Apr	N24W73	323	plage												
29 Apr	N24W87	324	plage												
								0	0	0	0	0	0	0	0
Crossed West Limb. Absolute heliographic longitude: 321															
			Region 3291												
26 Apr	N09E12	264	20	3	Bxo	4	B								
27 Apr	N09W02	265	30	5	Cro	20	B								
28 Apr	N08W15	265	30	5	Cro	8	B								
29 Apr	N08W29	266	30	6	Cri	6	B								
30 Apr	N08W43	266	30	6	Cro	8	B								
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 265															

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 3292													
27 Apr	N14E62	201	10	1	Hrx	1	A								
28 Apr	N15E43	204	20	1	Hrx	1	A								
29 Apr	N14E29	205	20	1	Hrx	1	A								
30 Apr	N14E16	207	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 207

		Region 3293													
30 Apr	N13E82	141	30	3	Cao	2	B	2	1						
								2	1	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 141

Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce
NOAA / National Weather Service
Space Weather Prediction Center
325 Broadway, Boulder CO 80305

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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