Space Weather Highlights
23 January - 29 January 2023

SWPC PRF 2474
30 January 2023

Solar activity was moderate. Region 3192 (N16, L=115, class/area, Fki/420 on 18 Jan) produced all of the M-class flares during the period. The largest was an M4.6/Sf flare at 25/1011 UTC. Additional events from Region 3192 included an M1.3/Sf flare at 25/1701 UTC, an M2.0 flare at 25/2235 UTC, and an M2.8 flare at 26/1306 UTC. Region 3192 rotated around the west limb on 26 January. There was a combined total of four M-class flares during the period, all at the R1 (Minor) level, and all from Region 3192.

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field activity was at quiet to unsettled levels. Unsettled levels were observed on 23, 25-28 January, with quiet conditions on 24 and 29 January. Slightly enhanced field conditions were influenced by multiple, positive-polarity CH HSSs.

Space Weather Outlook
30 January - 25 February 2023

Solar activity is expected to be low, with a slight chance for M-class flare activity (R1-R2) on 30 Jan - 02 Feb. Solar activity is likely to reach moderate levels with the return of Region 3184 (S13, L=180) on 03 Feb and remain there throughout the rest of the outlook period, due to the flare potential of numerous returning M and X-class producing regions.

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 30-31 January in response to recent CH HSS influence. The remainder of the outlook period is expected to be at moderate levels.

Geomagnetic field activity is expected to range from quiet to active levels. Active conditions are likely on 02-03, 07-10 February. Unsettled levels are likely on 04, 12-13, 18, and 22-24 February. Increased geomagnetic activity is in response to multiple, recurrent CH HSSs. The remainder of the outlook period is expected to be mostly quiet.

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
23 January	189	144	1240		6	0	0	5	0	0	0	0
24 January	180	127	1380		9	0	0	15	0	0	0	0
25 January	172	136	1320		7	3	0	15	1	0	0	0
26 January	151	104	280		10	1	0	7	0	0	0	0
27 January	145	84	170		3	0	0	4	0	0	0	0
28 January	138	76	120		4	0	0	2	0	0	0	0
29 January	137	80	160		2	0	0	0	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
23 January	1.5e+05	2.5e+04	9.3e+06
24 January	8.8e+04	2.5e+04	1.1e+07
25 January	4.4e+05	2.5e+04	1.1e+07
26 January	3.8e+05	2.5e+04	6.2e+06
27 January	1.5e+05	2.5e+04	7.4e+06
28 January	1.9e+05	2.5e+04	1.3e+07
29 January	3.8e+05	2.5e+04	1.9e+07

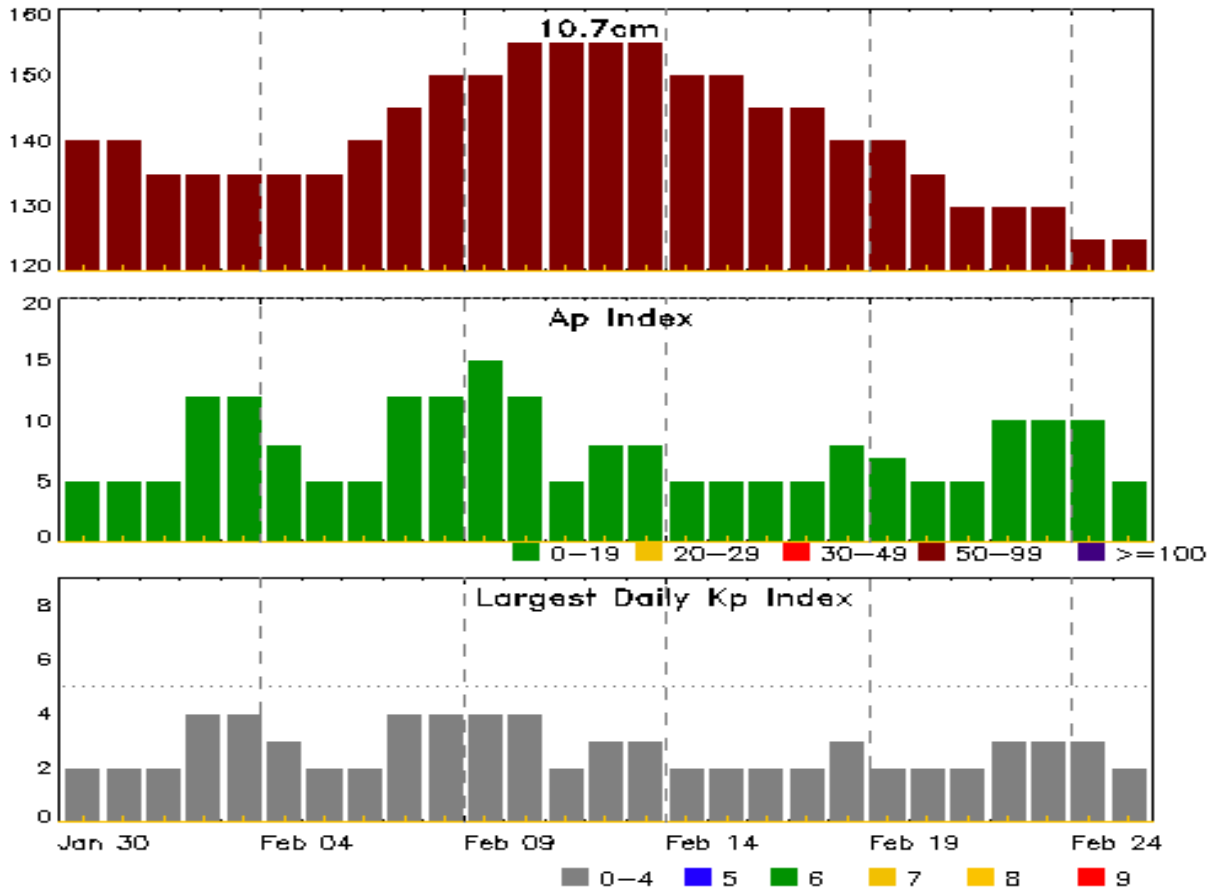
Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
23 January	5	0-2-0-0-3-2-1-2	12	0-1-0-0-5-4-2-2	7	1-2-1-1-3-2-2-3
24 January	3	1-0-1-1-2-2-1-0	4	1-0-0-3-2-2-0-0	4	1-1-1-1-2-1-1-0
25 January	5	0-1-0-2-3-2-2-1	20	0-0-0-4-5-6-2-0	7	1-1-0-2-3-3-2-1
26 January	9	1-2-3-2-3-3-2-1	16	1-1-3-4-5-3-3-0	11	2-3-3-2-3-3-2-1
27 January	6	0-0-2-2-2-3-2-2	16	0-0-2-5-4-4-3-2	9	1-1-2-3-3-3-2-3
28 January	8	3-2-2-1-2-3-2-1	11	2-1-2-3-4-3-2-1	10	3-3-2-1-2-2-3-2
29 January	5	1-0-2-1-2-2-2-1	3	1-0-1-1-2-2-0-0	4	1-0-2-2-1-2-1-1

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
24 Jan 0441	ALERT: Type II Radio Emission	24/0324
26 Jan 0326	ALERT: Type II Radio Emission	26/0247
26 Jan 1839	WARNING: Geomagnetic K = 4	26/1840 - 27/0300

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
30 Jan	140	5	2	13 Feb	155	8	3
31	140	5	2	14	150	5	2
01 Feb	135	5	2	15	150	5	2
02	135	12	4	16	145	5	2
03	135	12	4	17	145	5	2
04	135	8	3	18	140	8	3
05	135	5	2	19	140	7	2
06	140	5	2	20	135	5	2
07	145	12	4	21	130	5	2
08	150	12	4	22	130	10	3
09	150	15	4	23	130	10	3
10	155	12	4	24	125	10	3
11	155	5	2	25	125	5	2
12	155	8	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
25 Jan	0937	1011	1049	M4.6	0.150	SF	N13W78		3192			
25 Jan	1642	1701	1713	M1.3	0.019	SF	N17W77		3192			
25 Jan	2223	2235	2244	M2.0	0.014				3192			
26 Jan	1253	1306	1315	M2.8	0.021				3192			

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
23 Jan	0610	0615	0622	C2.9			
23 Jan	0730	0734	0745	C5.0	SF	S13W50	3190
23 Jan	0928	0937	0946	C3.2	SF	S25W61	3194
23 Jan	1123	1130	1138	C3.4	SF	S13W55	3190
23 Jan	1237	1242	1247		SF	N17W06	
23 Jan	1331	1333	1337		SF	S25W64	3194
23 Jan	1832	1841	1906	C3.7			3194
23 Jan	2252	2259	2303	C3.5			
24 Jan	B0332	0332	0341		SF	N24E04	3198
24 Jan	0411	0426	0440	C6.6			3194
24 Jan	0523	0524	0527		SF	N11W67	3191
24 Jan	0533	0547	0619	C4.0	SF	S24W68	3194
24 Jan	0613	0615	0626		SF	S16W56	3190
24 Jan	0653	0655	0701	C2.4	SF	N12W62	3191
24 Jan	0658	0701	0703		SF	S24W68	3194
24 Jan	0707	0707	0713		SF	N14W60	3191
24 Jan	0824	0830	0836	C2.7			
24 Jan	1318	1322	1326	C2.5	SF	N15W66	3192
24 Jan	1334	1342	1348	C3.7	SF	N18W71	3192
24 Jan	1359	1435	1508	C9.4	SF	N19W62	3192
24 Jan	1446	1446	1451		SF	S25W81	3194
24 Jan	1508	1515	1519	C8.6			
24 Jan	1643	1649	1654	C3.2			3190
24 Jan	1718	1721	1728		SF	S26W81	3194
24 Jan	1801	1809	1823		SF	N23W03	3198
24 Jan	2017	2017	2027		SF	N14W68	3192
24 Jan	2109	2111	2127		SF	N23W06	3198

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
25 Jan	0131	0138	0146	C3.6			3192
25 Jan	0146	0149	0153	C4.2			
25 Jan	0147	0148	0155		SF	N13W74	3192
25 Jan	0232	0233	0240		SF	S13W77	3190
25 Jan	0252	0321	0424		SF	S25W88	3194
25 Jan	0253	0305	0325		SF	N16W71	3192
25 Jan	0345	0359	0402		SF	S13W77	3190
25 Jan	0416	0417	0421		SF	N16W71	3192
25 Jan	0443	0453	0505	C9.6	1F	N14W74	3192
25 Jan	0539	0608	0621		SF	N17W73	3192
25 Jan	0739	0740	0743		SF	N17W73	3192
25 Jan	0759	0804	0811	C5.8			3192
25 Jan	0821	0827	0835	C7.2			3196
25 Jan	0937	1011	1049	M4.6	SF	N13W78	3192
25 Jan	1444	1454	1507	C6.1			3192
25 Jan	1642	1701	1713	M1.3	SF	N17W77	3192
25 Jan	1718	1719	1722		SF	S13W83	3190
25 Jan	1820	1820	1828		SF	N24W17	3198
25 Jan	1931	1935	1948		SF	N12W48	3196
25 Jan	2152	2157	2211	C4.8	SF	N19W75	3192
25 Jan	2223	2235	2244	M2.0			3192
25 Jan	2337	2340	2342		SF	N24W19	3198
26 Jan	0244	0248	0254	C2.8	SF	N23E24	3200
26 Jan	0338	0339	0341		SF	N13W78	3192
26 Jan	0419	0425	0435	C3.0	SF	N16W06	3199
26 Jan	0645	0653	0701	C2.6			3200
26 Jan	0724	0733	0737	C6.8	SN	N16W06	3199
26 Jan	1236	1240	1244	C4.6			3194
26 Jan	1253	1306	1315	M2.8			3192
26 Jan	1432	1438	1442	C3.2			3190
26 Jan	1451	1502	1519	C4.7			3192
26 Jan	1559	1600	1603		SF	N17W16	3199
26 Jan	1806	1815	1826	C3.5			3192
26 Jan	1908	1914	1920	C2.8	SF	N18W16	3199
26 Jan	1910	1910	1912		SF	N11W62	3202
26 Jan	2318	2330	2339	C3.1			
27 Jan	0121	0136	0157	C2.8			
27 Jan	0609	0612	0615		SF	N26W36	3198

Flare List

	Time				Optical		
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
27 Jan	0727	0748	0807	C5.2			
27 Jan	1440	1440	1443		SF	N12W69	3202
27 Jan	1934	1947	1955		SF	N21W00	3200
27 Jan	2132	2139	2148	C1.4	SF	N14W76	3202
28 Jan	0103	0103	0107		SF	N23W20	
28 Jan	0733	0831	0857	C2.9			3202
28 Jan	0857	0900	0904	C2.8			3202
28 Jan	1150	1201	1221	C3.3	SF	N20W10	3200
28 Jan	1332	1411	1437	C1.5			3204
29 Jan	0001	0012	0021	C2.3			
29 Jan	1204	1208	1213	C1.0			3206

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 3186												
10 Jan	N25E65	168	100	2	Dso	5	BD	7	2	1	8		1		
11 Jan	N24E51	169	150	9	Dai	9	BD	1	2		7	1			
12 Jan	N24E38	169	320	13	Ekc	19	BG	3			12	1			
13 Jan	N25E24	170	500	13	Eki	18	BGD	1	1		3	1			
14 Jan	N25E10	171	410	12	Eki	12	BGD								
15 Jan	N25W03	170	450	11	Eko	10	BGD								
16 Jan	N25W15	168	440	13	Eho	14	BG								
17 Jan	N25W29	170	430	13	Eho	11	B								
18 Jan	N24W41	169	350	12	Eho	5	B	1			1				
19 Jan	N25W55	170	320	11	Eho	4	B	1							
20 Jan	N24W67	169	230	13	Eso	4	B								
21 Jan	N24W81	170	60	2	Hsx	1	A								
22 Jan	N24W95	170	plage												
								14	5	1	31	3	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 170

			Region 3188												
12 Jan	S23E58	149	20	6	Dro	3	B								
13 Jan	S23E45	149	20	6	Dro	4	B				2				
14 Jan	S23E33	148	30	5	Dri	5	B				1				
15 Jan	S24E21	146	30	5	Dri	8	B				1				
16 Jan	S24E09	145	30	8	Dro	10	B								
17 Jan	S24W05	146	10	7	Bxo	7	B								
18 Jan	S24W16	144	10	3	Bxo	3	B								
19 Jan	S23W18	141	plage												
20 Jan	S23W37	139	plage												
21 Jan	S23W51	139	plage												
22 Jan	S23W65	140	plage												
23 Jan	S23W79	141	plage												
								0	0	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 146

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 3190												
13 Jan	S13E70	124	180	6	Hsx	1	A								
14 Jan	S12E58	123	510	11	Eko	11	B								
15 Jan	S12E45	122	520	11	Eko	11	B	1	1		4		1		
16 Jan	S14E34	120	880	14	Ehi	21	BGD	1			4				
17 Jan	S14E20	121	900	14	Eki	20	BG	1	1		2				
18 Jan	S15E09	119	950	12	Eki	17	BG	2	1		3				
19 Jan	S15W04	119	860	13	Eki	13	BG	2			2				
20 Jan	S15W18	120	710	15	Eki	14	BG	3			3				
21 Jan	S15W31	120	680	13	Eki	17	BGD				2				
22 Jan	S16W43	118	720	12	Eki	18	BGD		1						
23 Jan	S14W57	121	720	12	Ekc	14	BGD	2			2				
24 Jan	S14W78	124	880	9	Dkc	6	BGD	1			1				
25 Jan	S13W92	127	900	12	Eko	4	BGD		2		3				
								13	6	0	26	0	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 119

			Region 3191												
13 Jan	N12E71	123	90	4	Cso	3	B	1							
14 Jan	N11E55	126	150	7	Dai	9	B		1		4				
15 Jan	N12E40	127	170	9	Dac	11	BG	1	1		5				
16 Jan	N12E22	130	360	9	Dkc	13	B	1			2				
17 Jan	N11E08	133	320	9	Dsi	13	B								
18 Jan	N11W04	131	230	9	Dsi	8	B								
19 Jan	N11W15	130	220	9	Dao	8	B								
20 Jan	N12W30	132	220	9	Dao	8	B								
21 Jan	N12W44	133	140	7	Dao	6	B								
22 Jan	N12W57	132	50	4	Cao	3	B	2			2				
23 Jan	N10W71	132	40	2	Cao	2	B								
24 Jan	N10W85	134	plage					1			3				
								6	2	0	16	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 131

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 3192												
13 Jan	N19E75	119	100	4	Dso	2	B	1			1				
14 Jan	N19E61	120	160	8	Dsi	8	B				2				
15 Jan	N19E49	118	210	10	Dac	13	BG								
16 Jan	N19E40	114	400	18	Fki	13	BG				1				
17 Jan	N19E26	115	380	17	Fki	13	B	3			1	1			
18 Jan	N16E13	115	420	18	Fki	17	BG	2			6				
19 Jan	N16W01	116	350	16	Fki	21	BG	3			4				
20 Jan	N16W15	117	330	19	Fki	32	BG	2			3				
21 Jan	N16W29	118	270	18	Fki	29	BG	3			3				
22 Jan	N16W42	117	170	9	Dai	16	BG	3			1	1			
23 Jan	N15W56	119	130	4	Cao	5	B								
24 Jan	N16W70	121	130	5	Cao	4	B	3			4				
25 Jan	N15W86	121	90	8	Cao	4	B	5	1		8	1			
								25	1	0	34	3	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 116

			Region 3194												
15 Jan	S22E37	130	20	4	Cro	7	B								
16 Jan	S23E23	131	10	7	Bxo	7	B								
17 Jan	S23E10	131	0	6	Bxo	4	B								
18 Jan	S23W04	132	0	2	Bxo	2	B								
19 Jan	S23W18	133	10	3	Bxo	2	B								
20 Jan	S24W31	133	40	5	Cao	4	B								
21 Jan	S25W44	133	80	6	Cao	15	B	1			1				
22 Jan	S24W57	132	130	5	Dai	13	BGD	1	1		4	1			
23 Jan	S25W70	131	140	8	Dao	8	B	2			2				
24 Jan	S24W84	132	120	5	Dao	4	B	2			4				
								6	1	0	11	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 132

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 3195												
17 Jan	N11E04	137	30	5	Dro	8	B								
18 Jan	N20W09	137	30	6	Cro	5	B								
19 Jan	N21W24	139	10	7	Bxo	3	B								
20 Jan	N21W36	138	10	6	Bxo	4	B								
21 Jan	N21W50	139	plage												
22 Jan	N21W64	139	plage												
23 Jan	N21W78	140	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 137

			Region 3196												
18 Jan	N12E44	84	30	3	Dro	2	B	1							
19 Jan	N12E31	84	20	5	Dro	3	B	1	3		3				
20 Jan	N12E16	86	10	5	Bxo	4	B								
21 Jan	N12E02	87	10	1	Axx	1	A								
22 Jan	N12W12	87	10	4	Bxo	2	B								
23 Jan	N13W22	84	20	3	Cso	4	B								
24 Jan	N15W34	82	10	5	Cso	2	B								
25 Jan	N15W45	80	50	3	Cso	2	B	1			1				
26 Jan	N17W58	80	60	1	Cso	2	B								
27 Jan	N17W71	80	20	2	Cso	3	B								
28 Jan	N17W84	80	plage												
								3	3	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 87

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 3197												
19 Jan	N24E46	69	10	4	Bxo	4	B								
20 Jan	N24E32	70	10	4	Bxo	4	B								
21 Jan	N24E18	71	10	4	Cro	8	B								
22 Jan	N24E04	71	10	4	Cro	8	B								
23 Jan	N24W10	72	10	4	Axx	4	A								
24 Jan	N20W24	72	60	8	Dao	5	B								
25 Jan	N20W32	94	30	5	Cro	3	B								
26 Jan	N20W45	68	10	6	Bxo	2	B								
27 Jan	N20W59	68	plage												
28 Jan	N20W73	69	plage												
29 Jan	N20W87	70	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 71

			Region 3198												
19 Jan	N27E58	57	30	5	Cao	6	B								
20 Jan	N27E45	57	30	5	Cao	6	B								
21 Jan	N27E31	58	30	5	Cso	6	B								
22 Jan	N27E17	58	30	5	Cso	3	B								
23 Jan	N27E03	59	30	5	Cso	3	B								
24 Jan	N26W10	58	60	3	Cso	1	B				3				
25 Jan	N25W24	59	70	1	Hsx	1	A				2				
26 Jan	N26W37	59	50	1	Hsx	1	A								
27 Jan	N26W50	59	20	2	Hsx	1	A				1				
28 Jan	N26W63	59	20	1	Hrx	1	A								
29 Jan	N26W75	58	10	1	Axx	1	A								
								0	0	0	6	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 59

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 3199												
20 Jan	N15E61	40	40	5	Cao	5	B								
21 Jan	N15E47	42	90	5	Dai	10	B	1			2				
22 Jan	N15E33	42	90	5	Dai	10	B								
23 Jan	N16E20	40	80	7	Dai	12	B								
24 Jan	N16E05	42	60	8	Cao	12	B								
25 Jan	N18W08	43	40	7	Cao	6	B								
26 Jan	N16W23	45	10	5	Axx	1	A	3			4				
27 Jan	N16W36	48	10	1	Axx	1	A								
28 Jan	N16W50	46	plage												
29 Jan	N16W64	47	10	1	Axx	1	A								
								4	0	0	6	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 42

			Region 3200												
22 Jan	N21E60	15	40	5	Cao	3	B								
23 Jan	N21E47	13	70	2	Cao	2	B								
24 Jan	N23E35	13	40	2	Cao	2	B								
25 Jan	N21E22	13	50	8	Cao	7	B								
26 Jan	N16E12	11	30	4	Cao	6	B	2			1				
27 Jan	N21W01	10	10	3	Bxo	2	B				1				
28 Jan	N21W15	11	10	6	Axx	1	A	1			1				
29 Jan	N21W28	11	plage												
								3	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 10

			Region 3201												
24 Jan	N25E58	350	20	1	Hsx	1	A								
25 Jan	N24E44	351	70	1	Hsx	1	A								
26 Jan	N24E30	352	60	2	Hsx	1	A								
27 Jan	N25E17	352	60	2	Hsx	1	A								
28 Jan	N23E04	352	60	2	Hsx	1	A								
29 Jan	N24W10	353	30	2	Hsx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 352

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 3202												
25 Jan	N13W47	79	10	8	Cao	5	B								
26 Jan	N11W65	88	40	7	Cao	5	B				1				
27 Jan	N11W78	87	40	7	Cao	3	B	1			2				
								1	0	0	3	0	0	0	0
Crossed West Limb. Absolute heliographic longitude: 79															
			Region 3203												
25 Jan	N16E32	4	10	8	Bxo	3	B								
26 Jan	N16E16	7	20	3	Cro	6	B								
27 Jan	N16E03	6	10	3	Bxo	3	B								
28 Jan	N17W10	6	10	3	Bxo	6	B								
29 Jan	N17W24	7	plage												
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 6															
			Region 3204												
28 Jan	N24W33	29	10	3	Bxo	3	B	1							
29 Jan	N25W46	29	60	6	Dao	7	B								
								1	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 29															
			Region 3205												
28 Jan	S24W36	32	10	3	Bxo	4	B								
29 Jan	S24W48	31	40	6	Cao	5	B								
								0	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 32															
			Region 3206												
29 Jan	S22E59	284	10	4	Bxo	4	B	1							
								1	0	0	0	0	0	0	0
Still on Disk. Absolute heliographic longitude: 284															

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

The Weekly has been published continuously since 1951 and is available online since 1997.

https://www.swpc.noaa.gov/products/weekly-highlights-and-27-day-forecast -- Current

ftp://ftp.swpc.noaa.gov/pub/warehouse -- Online archive from 1997

https://www.ngdc.noaa.gov/stp/satellite/goes-r.html -- NCEI GOES data textarchive

https://www.swpc.noaa.gov/products/solar-cycle-progression -- Solar Cycle Progression web site

https://www.swpc.noaa.gov/content/contact-us -- Contact and Copyright information

https://www.swpc.noaa.gov/sites/default/files/images/u2/Usr_guide.pdf -- User Guide