Space Weather Highlights
03 July - 09 July 2023

SWPC PRF 2497
10 July 2023

Solar activity reached moderate levels (R1-Minor) on 03-07 Jul and declined to low levels on 08-09 Jul. Region 3354 (N16, L=168, class/area Fkc/1150 on 02 Jul) produced an M1.4/Sf at 04/1235 UTC and an M1.0/Sf at 06/1049 UTC. Region 3358 (S13, L=068, class/area Dai/100 on 03 Jul) produced an M1.3/1n at 03/0653 UTC. Region 3361 (N24, L=042, class/area Ekc/260 on 08 Jul) produced an M1.0/Sf on 05/1858 UTC. Region 3359 (S21, L=072, class/area Dao/240 on 06 Jul) produced the largest event of the period, an M4.0/2b at 07/0629 UTC. This event also produced a 190 sfu Tenflare. During the period, no Earth-directed CMEs were detected.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 03-05 Jul with a peak flux of 3,560 pfu observed at 05/1650 UTC. Normal to moderate levels were observed on 06-09 Jul.

Geomagnetic field activity was at quiet levels on 03 Jul to midday on 05 Jul. Quiet to unsettled levels were observed on midday 05 Jul to 07 Jul, with isolated active intervals midday on 07 Jul to early on 08 Jul. This activity was the result of weak transient activity coupled with positive polarity CH HSS. The majority of 08 Jul through 09 Jul observed quiet conditions.

Space Weather Outlook
10 July - 05 August 2023

Solar activity is expected to be at low to R1-R2 (Minor-Moderate) levels throughout the forecast 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 throughout the forecast period.

Geomagnetic field activity is expected to reach unsettled levels on 10-11 Jul and 03-04 Aug due to positive polarity CH HSS influence. Unsettled to active levels are expected on 13-14 Jul due to negative polarity CH HSS influence. Mostly quiet levels are expected on 12, 15-31 Jul, 01-02 and 05 Aug.

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
03 July	173	117	1400	C2.0	14	1	0	29	2	0	0	0
04 July	167	121	1310	C1.3	9	1	0	8	0	0	0	0
05 July	154	101	270	C1.6	10	1	0	6	1	0	0	0
06 July	158	149	980	C1.3	7	1	0	14	1	0	0	0
07 July	161	167	910	C1.2	4	1	0	24	0	1	0	0
08 July	161	197	830	C1.0	9	0	0	6	1	0	0	0
09 July	179	183	950	C1.3	8	0	0	23	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
03 July	6.8e+04	2.1e+04	1.5e+08
04 July	4.3e+04	2.1e+04	1.5e+08
05 July	1.6e+05	2.1e+04	1.4e+08
06 July	6.1e+04	2.0e+04	1.6e+07
07 July	8.9e+04	2.0e+04	1.3e+07
08 July	4.2e+04	2.1e+04	3.1e+07
09 July	2.8e+04	2.1e+04	4.2e+07

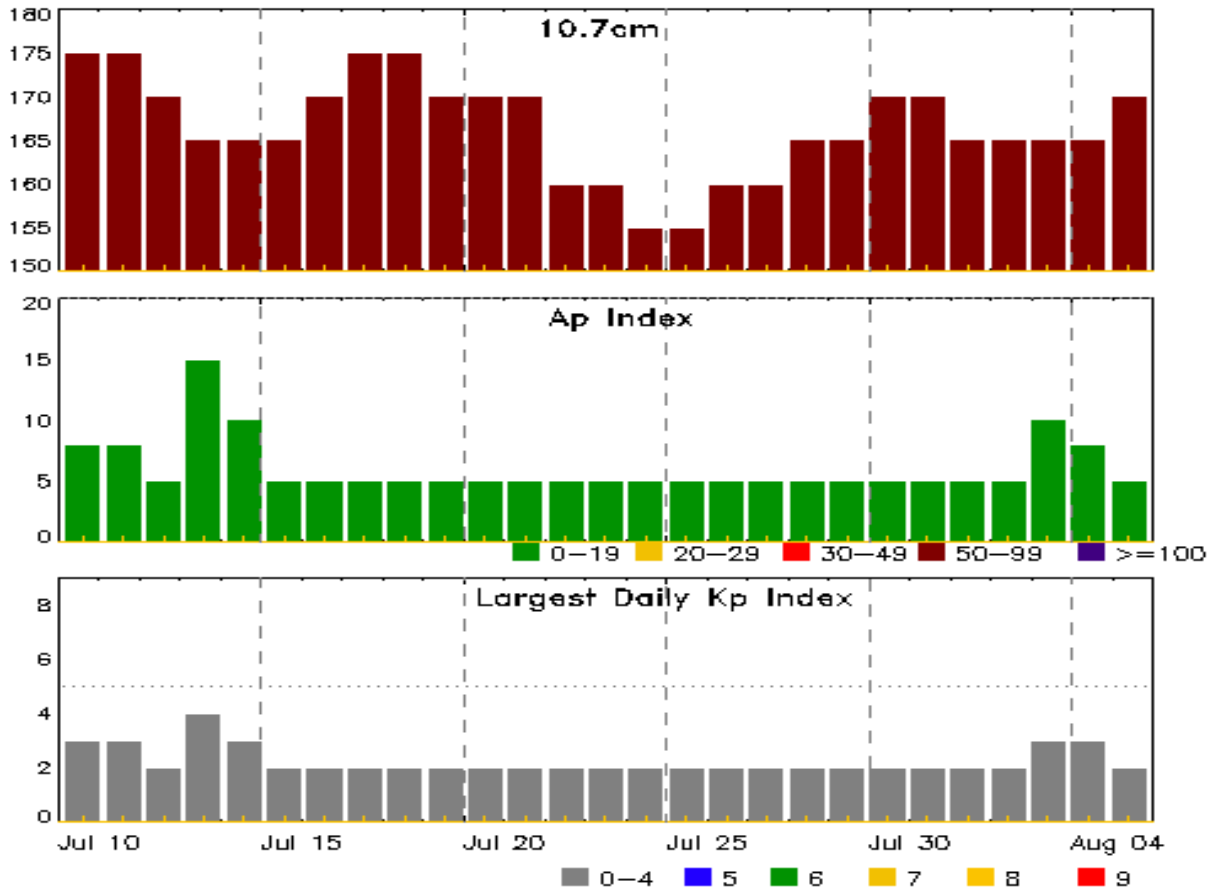
Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
03 July	7	1-1-2-2-3-2-2-1	3	2-1-1-1-0-1-1-1	5	2-1-1-1-1-1-1-1
04 July	5	1-1-1-2-2-2-2-1	2	0-2-1-1-0-0-0-0	4	1-1-1-1-1-1-1-1
05 July	9	1-1-1-2-3-3-2-3	3	2-1-0-0-0-2-1-2	7	2-1-1-1-2-3-2-3
06 July	11	3-2-2-3-3-2-2-3	18	2-2-2-5-5-3-2-2	11	2-2-2-3-3-2-2-3
07 July	16	3-2-3-4-3-3-3-3	40	3-3-5-6-6-5-3-3	18	3-3-4-4-3-3-3-3
08 July	6	3-2-1-1-2-2-1-1	8	4-2-2-1-1-1-2-1	8	4-2-1-1-1-1-1-1
09 July	4	0-0-0-2-2-2-2-2	4	0-0-0-3-2-1-1-1	4	1-1-0-1-1-1-1-1

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
03 Jul 0012	SUMMARY: X-ray Event exceeded X1	02/2254 - 2358
03 Jul 0837	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	27/1250
03 Jul 1916	ALERT: Type II Radio Emission	03/1833
03 Jul 2122	ALERT: Type II Radio Emission	03/2059
03 Jul 2148	ALERT: Type II Radio Emission	03/2131
04 Jul 0459	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	27/1250
04 Jul 1902	WATCH: Geomagnetic Storm Category G1 predicted	
05 Jul 0521	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	27/1250
06 Jul 2232	WARNING: Geomagnetic K = 4	06/2230 - 07/1800
07 Jul 0658	SUMMARY: 10cm Radio Burst	07/0627 - 0628
07 Jul 0903	ALERT: Geomagnetic K = 4	07/0857
07 Jul 1154	ALERT: Type II Radio Emission	07/1001
07 Jul 1755	EXTENDED WARNING: Geomagnetic K = 4	06/2230 - 08/0900
07 Jul 2256	ALERT: Type II Radio Emission	07/2226

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
10 Jul	175	8	3	24 Jul	155	5	2
11	175	8	3	25	155	5	2
12	170	5	2	26	160	5	2
13	165	15	4	27	160	5	2
14	165	10	3	28	165	5	2
15	165	5	2	29	165	5	2
16	170	5	2	30	170	5	2
17	175	5	2	31	170	5	2
18	175	5	2	01 Aug	165	5	2
19	170	5	2	02	165	5	2
20	170	5	2	03	165	10	3
21	170	5	2	04	165	8	3
22	160	5	2	05	170	5	2
23	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
03 Jul	0643	0653	0659	M1.3	0.007				3358				
04 Jul	1220	1235	1255	M1.4	0.021	SF	N16	W82	3354				
05 Jul	1836	1858	1921	M1.0	0.001	SF	N24	E35	3361				
06 Jul	1032	1049	1107	M1.0	0.016	SF	S14	E00	3359				
07 Jul	0617	0629	0638	M4.0	0.023	2B	S22	W15	3359	830	190		

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
03 Jul	0055	0058	0107		SF	N16W56	3354
03 Jul	0256	0303	0307	C3.1			3358
03 Jul	0415	0422	0429	C2.8			3354
03 Jul	0440	0522	0553		SF	N15W60	3354
03 Jul	0450	0500	0524		SF	S14E41	3358
03 Jul	0459	0704	0719		SF	N23E41	3360
03 Jul	0523	0531	0537	C2.5	SF	S15E42	3358
03 Jul	0535	0535	0544		SF	S21E39	3359
03 Jul	0555	0613	0621		SF	N15W60	3354
03 Jul	0619	0625	0632	C3.0			3358
03 Jul	0624	0632	0640		SF	S21E38	3359
03 Jul	0629	0650	0738		1N	S16E41	3358
03 Jul	0633	0634	0642		SF	N16W61	3354
03 Jul	0643	0653	0659	M1.3			3358
03 Jul	0646	0646	0653		SF	N16W61	3354
03 Jul	0705	0705	0707		SF	N16W62	3354
03 Jul	0714	0717	0726		SF	N16W62	3354
03 Jul	0743	0748	0804	C3.2	SF	S15E40	3358
03 Jul	0809	0812	0822		SF	S16E41	3358
03 Jul	1002	1002	1006		SF	S21E36	3359
03 Jul	1042	1043	1053		SF	S13E38	3358
03 Jul	1119	1122	1134		SF	S16E39	3358
03 Jul	1151	1209	1222	C3.7	SF	S23E35	3359
03 Jul	1227	1236	1248	C4.6	SF	S14E37	3358
03 Jul	1300	1308	1401		SF	N24E36	3360
03 Jul	1406	1408	1410		SF	S20E35	3359

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
03 Jul	1440	1448	1454	C3.5	SF	N23E37	3360
03 Jul	1516	1521	1525	C5.0	SF	N24E35	3360
03 Jul	1557	1602	1607		SF	S11E35	3358
03 Jul	1614	1614	1623		SF	N23E36	3360
03 Jul	1644	1645	1648		SF	N24E36	3360
03 Jul	1718	1720	1724		SF	S15E34	3358
03 Jul	1804	1805	1816	C5.0	SF	N21E34	3360
03 Jul	2015	2020	2024		SF	S19E29	3359
03 Jul	2043	2055	2102	C3.9			3360
03 Jul	2102	2112	2122	C8.9	1F	N22E33	3360
03 Jul	2309	2311	2315	C2.9			3360
03 Jul	2345	2353	2357	C4.3	SF	N15W73	3354
04 Jul	0023	0028	0032	C4.2			3360
04 Jul	0156	0201	0208	C2.7			3354
04 Jul	0222	0227	0231	C2.9			3360
04 Jul	0455	0456	0517		SF	N17W79	3354
04 Jul	0636	0641	0645	C7.2	SN	N24E28	3360
04 Jul	0808	0815	0823	C3.0	SF	S13E24	3358
04 Jul	0947	0948	0949		SF	S14E29	3358
04 Jul	1220	1235	1255	M1.4	SF	N16W82	3354
04 Jul	1418	1430	1446		SF	N25E49	3361
04 Jul	1516	1517	1520		SF	S14E27	3358
04 Jul	1908	1928	1945	C8.0			3354
04 Jul	2121	2133	2152	C5.2			3359
04 Jul	2204	2212	2219	C4.8			3354
04 Jul	2327	2339	2354	C6.0	SF	N23E47	3361
05 Jul	0134	0141	0154	C2.5	1F	S21E18	3359
05 Jul	0220	0224	0228	C2.6			3354
05 Jul	0322	0328	0333	C3.9			3354
05 Jul	0404	0412	0420	C3.4	SF	N16W80	3354
05 Jul	0611	U0617	0624		SF	N25E20	3360
05 Jul	0833	0843	0856	C2.7			3354
05 Jul	1033	1043	1049	C7.5	SF	N15W87	3354
05 Jul	1055	1100	1104	C8.1			
05 Jul	1341	1350	1358	C2.5			
05 Jul	1540	1550	1557	C6.2	SF	S21E07	3359
05 Jul	1606	1611	1616	C5.4			
05 Jul	1802	1814	1815	C4.3	SF	N23E34	3361

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
05 Jul	1833	1834	1840	M1.0	SF	N24E35	3361
05 Jul	2239	2246	2254	C2.2			3360
06 Jul	0240	0245	0258	C1.9			
06 Jul	0312	0325	0331	C2.3	SF	N23E30	3361
06 Jul	0436	0445	0453	C8.9	1N	N23E06	3360
06 Jul	0506	0507	0508		SF	N23E06	3360
06 Jul	0511	0511	0514		SF	N23E31	3361
06 Jul	0542	0548	0742		SF	S20E03	3359
06 Jul	0725	0727	0731		SF	N24E30	3361
06 Jul	0815	0826	0833	C3.5			
06 Jul	0945	0946	0950		SF	S14E01	3359
06 Jul	1004	1006	1010	C3.3	SF	N24E28	3361
06 Jul	1032	1049	1107	M1.0	SF	S14E00	3359
06 Jul	1204	1211	1221	C2.6	SF	S21W04	3359
06 Jul	1213	1240	1341		SF	N24E26	3361
06 Jul	B1319	1440	1522		SF	N25E20	3361
06 Jul	1405	1407	1409		SF	S13W01	3359
06 Jul	1538	1540	1547		SF	N26E63	
06 Jul	2021	2021	2023		SF	N22W03	3360
06 Jul	2341	2350	0001	C2.7			3359
07 Jul	0541	0557	0614	C1.7			3359
07 Jul	B0610	U0627	A0801	M4.0	2B	S22W15	3359
07 Jul	0701	U0708	0721		SF	N23E13	3361
07 Jul	0725	0732	0739	C4.2			3359
07 Jul	B0911	U0918	A0931		SF	N25E14	3361
07 Jul	B1048	U1053	A1121		SF	N25E13	3361
07 Jul	1122	1123	1138		SF	S11W03	3358
07 Jul	1132	1132	1137		SF	S15W17	3358
07 Jul	1135	1136	1142		SF	N25E13	3361
07 Jul	1306	1308	1315		SF	N25E14	3361
07 Jul	B1335	1346	1437		SF	S18E66	3363
07 Jul	B1335	1339	1423		SF	S11W05	3366
07 Jul	B1335	1358	1423		SF	N23E11	3361
07 Jul	1351	1358	1402	C2.3			3361
07 Jul	1544	1600	1612		SF	N24E09	3361
07 Jul	1555	1556	1559		SF	S21W16	3359
07 Jul	1558	1558	1617		SF	S10W05	3366
07 Jul	1600	1602	1611		SF	S10W05	3366

Flare List

Date	Time			X-ray	Optical		
	Begin	Max	End	Class	Imp/ Brtns	Location Lat CMD	Rgn #
07 Jul	1603	1606	1619		SF	S21W15	3359
07 Jul	1633	1635	1658		SF	N24W13	3360
07 Jul	1732	1736	1742		SF	S10W06	3366
07 Jul	1736	1736	1742		SF	N25E11	3361
07 Jul	1816	1819	1823	C2.7	SF	N24E06	3361
07 Jul	1840	1844	1846		SF	S07W60	3355
07 Jul	1900	1900	1900		SF	N24E06	3361
07 Jul	1904	1912	1926		SF	N24E07	3361
07 Jul	2118	2123	2130		SF	S14W23	3358
07 Jul	2151	2209	2256		SF	N23E05	3361
08 Jul	0127	0144	0203	C4.2	SF	N26E17	3361
08 Jul	B0855	U0859	A0931		SF	N23W00	3361
08 Jul	1103	1131	1218	C3.3	1F	N23W02	3361
08 Jul	1328	1328	1334		SF	N24W02	3361
08 Jul	1401	1407	1417	C1.7			3361
08 Jul	1417	1426	1435	C1.5			3364
08 Jul	1545	1546	1559		SF	S11W82	3355
08 Jul	1847	1854	1859	C1.6			3363
08 Jul	2111	2119	2129	C2.3	SF	N25W07	3361
08 Jul	2153	2200	2212	C2.4	SF	N24W08	3361
08 Jul	2313	2321	2331	C2.0			3361
08 Jul	2337	0002	0005	C5.5			3366
09 Jul	0002	0002	0008		SF	N24W10	3361
09 Jul	0002	0006	0044	C5.7	SF	S12W21	3366
09 Jul	0107	0107	0111		SF	S17E46	3363
09 Jul	0540	0547	0555	C1.7	SF	N25W10	3361
09 Jul	0556	0558	0612		SF	N10E12	3367
09 Jul	0835	0837	0839		SF	S22E37	3363
09 Jul	0917	0919	0923		SF	S15W17	3358
09 Jul	1055	1107	1225		SF	S11W29	3366
09 Jul	1100	1121	1130	C3.8			3366
09 Jul	1329	1331	1333		SF	N10E12	3367
09 Jul	1345	1353	1410	C4.2	SF	S24W41	3359
09 Jul	1347	1400	1406		SF	S21W51	3359
09 Jul	1414	1416	1419		SF	S20W16	
09 Jul	1453	1456	1458		SF	N10E07	3367
09 Jul	1527	1535	1537		SF	N10E06	3367
09 Jul	1539	1603	1627		SF	N10E06	3367

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
09 Jul	1625	1632	1642		SF	S11W33	3366
09 Jul	1630	1648	1703		SF	N10E05	3367
09 Jul	1637	1649	1655		SF	N24W20	3361
09 Jul	1715	1721	1733		SF	S11W42	3358
09 Jul	1805	1812	1823	C3.7	SF	S26W52	3359
09 Jul	2203	2204	2207		SF	N25W20	3361
09 Jul	2310	2320	2327	C6.8	SF	N20W46	3366
09 Jul	2331	2339	2346	C6.6	SF	S13W46	3358
09 Jul	2350	2354	2359	C6.2			3366

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 3348												
23 Jun	S31E46	183	20	5	Bxo	3	B								
24 Jun	S31E34	182	20	7	Bxo	2	B								
25 Jun	S31E20	182	plage												
26 Jun	S33E07	182	10	4	Bxo	2	B								
27 Jun	S33W06	182	10	5	Bxo	5	B								
28 Jun	S33W19	182	10	6	Bxo	3	B	1			1				
29 Jun	S33W33	183	plage					1			1				
30 Jun	S33W47	183	plage												
01 Jul	S33W61	184	plage												
02 Jul	S33W75	185	plage												
03 Jul	S33W89	186	plage												
								2	0	0	2	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 182

			Region 3349												
23 Jun	N09E38	191	20	3	Bxo	3	B								
24 Jun	N09E24	192	20	5	Bxo	2	B								
25 Jun	N08E11	191	10	6	Bxo	2	B								
26 Jun	N08W03	192	plage												
27 Jun	N08W17	193	plage												
28 Jun	N08W31	194	plage												
29 Jun	N08W45	195	plage												
30 Jun	N08W59	195	plage												
01 Jul	N08W73	196	plage												
02 Jul	N08W87	197	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 192

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 3350												
23 Jun	S11E39	190	10	1	Axx	1	A				1				
24 Jun	S11E25	191	plage												
25 Jun	S11E11	191	plage												
26 Jun	S11W03	192	plage												
27 Jun	S11W17	193	plage												
28 Jun	S11W31	194	plage												
29 Jun	S11W45	195	plage												
30 Jun	S11W59	195	plage												
01 Jul	S11W73	196	plage												
02 Jul	S11W87	197	plage												
								0	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 192

			Region 3351												
23 Jun	N22E59	170	20	2	Hsx	1	A								
24 Jun	N22E46	170	30	1	Hsx	1	A								
25 Jun	N22E32	170	20	2	Hrx	3	A								
26 Jun	N20E18	171	30	3	Cro	5	B	1			1				
27 Jun	N20E05	171	10	4	Bxo	2	B	1			1				
28 Jun	N21W08	171	10	2	Bxo	2	B								
29 Jun	N21W22	172	plage												
30 Jun	N21W36	172	plage												
01 Jul	N21W50	173	plage								1				
02 Jul	N21W64	174	plage								1				
03 Jul	N21W78	175	plage												
								2	0	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 171

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 3354												
26 Jun	N15E24	164	20	3	Cso	5	B								
27 Jun	N15E11	165	450	9	Dki	19	BG	6			6				
28 Jun	N14W03	166	800	11	Ekc	38	BGD	4			12				
29 Jun	N15W16	166	890	13	Ekc	40	BGD	4	1		4		1		
30 Jun	N13W30	166	880	16	Fkc	30	BGD	6			4	1			
01 Jul	N13W44	167	1100	17	Fkc	26	BGD	3			4				
02 Jul	N16W58	168	1150	18	Fkc	22	BGD	5		1	9				
03 Jul	N16W72	169	1130	18	Fkc	25	BGD	2			8				
04 Jul	N16W87	170	1130	18	Fkc	25	BGD	3	1		2				
								33	2	1	49	1	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 166

			Region 3355												
27 Jun	S16E56	120	40	1	Hax	1	A								
28 Jun	S16E42	121	30	1	Hsx	1	A								
29 Jun	S16E28	122	30	1	Hax	1	A								
30 Jun	S16E14	122	20	2	Hsx	3	A								
01 Jul	S16E03	119	10	2	Hrx	2	A								
02 Jul	S16W06	116	10	2	Axx	1	A								
03 Jul	S16W18	116	plage												
04 Jul	S16W32	115	plage												
05 Jul	S16W46	116	plage												
06 Jul	S15W59	116	10	2	Bxo	4	B								
07 Jul	S15W70	114	plage								1				
08 Jul	S14W84	114	10	1	Axx	1	A				1				
								0	0	0	2	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 119

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 3356												
30 Jun	S08E38	98	10	1	Bxo	2	B								
01 Jul	S08E24	99	30	3	Cro	5	B								
02 Jul	S07E09	101	10	3	Bxo	3	B								
03 Jul	S07W06	103	10	3	Bxo	2	B								
04 Jul	S07W21	104	plage												
05 Jul	S07W35	106	plage												
06 Jul	S07W50	107	plage												
07 Jul	S07W65	109	plage												
08 Jul	S07W80	110	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 103

			Region 3357												
01 Jul	S07E32	91	20	2	Dro	5	B	1			2				
02 Jul	S07E18	92	30	3	Dao	6	B								
03 Jul	S07E05	92	50	6	Dao	6	B								
04 Jul	S07W09	92	40	8	Dao	7	B								
05 Jul	S06W21	91	10	7	Bxo	9	B								
06 Jul	S07W35	92	10	2	Axx	1	A								
07 Jul	S07W48	92	plage												
08 Jul	S07W63	93	plage												
09 Jul	S07W78	95	plage												
								1	0	0	2	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 92

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 3358												
01 Jul	S12E57	66	90	3	Dai	3	B	2			1				
02 Jul	S12E43	66	70	6	Dai	15	B				1				
03 Jul	S13E29	68	100	6	Dai	14	B	5	1		8	1			
04 Jul	S14E14	69	40	9	Dsi	13	B	1			3				
05 Jul	S11W02	72	10	7	Bxo	10	B								
06 Jul	S11W15	72	10	11	Bxo	11	B								
07 Jul	S13W23	66	10	5	Bxo	7	B				3				
08 Jul	S13W36	66	10	1	Axx	31	A								
09 Jul	S13W50	67	10	1	Axx	1	A	1			3				
								9	1	0	19	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 72

			Region 3359												
01 Jul	S20E61	61	30	5	Dri	7	B	1	1		1				
02 Jul	S22E41	68	60	7	Dai	7	B	3	1		6				
03 Jul	S22E26	71	80	7	Dso	8	B	1			6				
04 Jul	S21E11	72	60	8	Dso	5	BG	1							
05 Jul	S21W00	70	140	10	Dso	12	BG	2			1	1			
06 Jul	S21W15	72	240	9	Dao	10	B	2			5				
07 Jul	S22W27	71	210	8	Dao	11	B	2	1		2		1		
08 Jul	S22W40	70	30	8	Cro	8	B								
09 Jul	S22W54	71	10	10	Bxo	6	B	2			3				
								14	3	0	24	1	1	0	0

Still on Disk.
Absolute heliographic longitude: 70

			Region 3360												
02 Jul	N23E44	66	20	2	Hsx	2	A								
03 Jul	N23E30	67	30	2	Hsx	2	A	6			7	1			
04 Jul	N23E15	68	30	5	Cao	8	B	3			1				
05 Jul	N23E07	62	30	4	Cro	6	B	1			1				
06 Jul	N22W06	63	30	4	Cro	7	B	1			2	1			
07 Jul	N23W21	65	20	2	Cro	24	A				1				
08 Jul	N23W35	65	20	2	Hrx	1	A								
09 Jul	N23W46	63	30	4	Dri	6	B								
								13	0	0	13	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 63

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 3361												
04 Jul	N23E45	38	10	7	Bxo	3	B	1			2				
05 Jul	N23E31	39	10	7	Cao	3	BG	1	1		2				
06 Jul	N22E17	40	230	10	Dai	17	B	2			6				
07 Jul	N24E02	42	240	12	Eac	17	BD	2			12				
08 Jul	N24W12	42	260	11	Ekc	21	BD	6			5	1			
09 Jul	N24W26	43	250	11	Ehi	13	BGD	1			4				
								13	1	0	31	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 42

			Region 3362												
05 Jul	S10E60	9	70	2	Hsx	1	A								
06 Jul	S10E47	10	40	2	Hsx	1	A								
07 Jul	S09E33	11	50	2	Hsx	1	A								
08 Jul	S09E19	11	50	2	Hsx	2	A								
09 Jul	S09E06	11	50	2	Hsx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 11

			Region 3363												
06 Jul	S21E68	349	390	5	Hhx	1	A								
07 Jul	S21E56	348	320	5	Hkx	2	A				1				
08 Jul	S21E43	347	320	8	Cko	2	B	1							
09 Jul	S21E30	347	320	6	Hkx	2	A				2				
								1	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 347

			Region 3364												
06 Jul	N23E57	360	20	2	Cro	7	B								
07 Jul	N24E43	1	20	3	Cro	3	B								
08 Jul	N24E29	1	10	1	Axx	1	A	1							
09 Jul	N24E15	2	10	1	Axx	1	A								
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 2

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 3365												
07 Jul	S36W21	65	20	3	Bxo	2	B								
08 Jul	S36W35	65	10	6	Bxo	2	B								
09 Jul	S36W48	65	10	6	Axx	2	A								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 65

			Region 3366												
07 Jul	S11W09	52	20	3	Dri	10	B				4				
08 Jul	S10W24	54	100	6	Dai	11	B	1							
09 Jul	S10W38	55	120	7	Dsi	10	B	4			4				
								5	0	0	8	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 52

			Region 3367												
08 Jul	N10E15	14	10	4	Bxo	7	B								
09 Jul	N10E01	16	80	5	Dai	10	B				6				
								0	0	0	6	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 16

			Region 3368												
09 Jul	S19W33	50	30	3	Dri	5	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 50

			Region 3369												
09 Jul	S18W23	39	30	3	Dro	5	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 39

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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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