

Solar activity reached high levels this week, with six M-class flares observed during the period. Region 3098 (N18, L=053, class/area Ehc/860 on 14 Sep) produced the largest event, an M7.9 flare at 16/0949 UTC. This was followed at 16/1559 UTC by an M6.2/Sn flare from the same region. The remaining M flares, all associated with Region 3098, ranged from M1.1 to M2.6. Of the 11 regions numbered, Region 3098 was the largest, most magnetically complex, and most productive. It was responsible for 39 C-class flares in addition to the M-flares described above. Throughout the week there were several CMEs but none were Earth-directed.

No proton events meeting alert criteria were observed at geosynchronous orbit, although the 10 MeV proton flux was slightly elevated above background levels, mostly likely in response to an event on the far side of the sun.

The greater than 2 MeV electron flux at geosynchronous orbit was elevated at the beginning of the week but subsequently fell below the 1000 pfu threshold after the arrival of a transient feature on the 14th described below. It remained at normal-moderate levels for the remainder of the week.

Geomagnetic field activity ranged from quiet to active levels. The active conditions were observed on the synoptic periods straddling 14-15 Sept and associated with influences from an unattributed transient feature. The disturbed conditions were preceded by a 30 nT sudden impulse observed at 2315 UTC (Boulder Magnetometer) on September 14th. An extended quiet period followed until 18 September when conditions rose to unsettled levels in response to coronal hole high speed stream influences. Solar wind speed in this coronal hole reached the mid 500 km/s range.

**Space Weather Outlook**  
**19 September - 15 October 2022**

Solar activity is expected to be low with a chance for M-class (R1-R2, Minor-Moderate) flares on 19 Sep - 02 Oct as old Region 3089 (S22, L=194) returns. This region was previously responsible for 5 M-class events and continues to be active based on imagery of the SE limb. Region 3098 is expected to return around 29 September, bringing the potential for a continued chance of M-class flare activity through the end of the period.

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 20-23 September and 01-11 October in response to CH HSS influences.

Geomagnetic field activity is likely to reach minor (G1) storm levels on the 22-23 Sep with the arrival of a HSS associated with a positive polarity coronal hole. Another positive polarity



coronal hole and HSS are expected to bring minor (G1) to moderate (G2) storm conditions on 30 Sep - 03 Oct.



### *Daily Solar Data*

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10 <sup>-6</sup> hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
12 September	150	117	370	C1.5	14	1	0	22	0	0	0	0
13 September	154	93	870	C1.7	16	0	0	24	0	0	0	0
14 September	144	57	1240	C1.2	13	1	0	16	1	0	0	0
15 September	140	71	1000	C1.0	7	0	0	2	2	0	0	0
16 September	131	64	1080	B9.0	13	2	0	7	0	0	0	0
17 September	132	76	520	B8.6	7	2	0	3	0	0	0	0
18 September	136	51	470	B8.9	10	0	0	6	0	0	0	0

### *Daily Particle Data*

Date	Proton Fluence (protons/cm <sup>2</sup> -day -sr)		Electron Fluence (electrons/cm <sup>2</sup> -day -sr)
	>1 MeV	>10 MeV	>2MeV
	12 September	4.5e+06	2.8e+05
13 September	5.0e+05	1.1e+05	2.2e+08
14 September	2.4e+06	1.6e+05	3.6e+08
15 September	8.7e+05	1.1e+05	1.1e+07
16 September	2.4e+06	2.0e+05	8.6e+06
17 September	4.1e+06	1.7e+05	5.9e+06
18 September	3.0e+06	1.4e+05	8.3e+06

### *Daily Geomagnetic Data*

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	12 September	9	2-2-3-3-3-1-2-1	23	1-3-6-5-4-2-0-1	9
13 September	5	0-1-3-1-2-2-1-1	5	0-0-3-3-1-1-0-0	4	0-0-2-1-1-1-0-1
14 September	10	1-0-3-2-2-2-3-4	6	0-0-1-2-3-1-2-3	9	1-0-2-2-2-2-3-4
15 September	8	4-1-1-2-2-2-1-1	4	2-1-0-1-1-2-1-1	6	4-1-1-1-1-2-1-1
16 September	5	0-2-1-1-2-3-1-1	2	0-1-0-1-0-1-0-1	4	1-2-1-2-1-1-0-1
17 September	5	1-1-1-1-3-2-1-1	4	1-1-1-2-3-0-0-1	5	1-1-1-1-2-1-0-2
18 September	9	2-2-3-2-3-2-2-2	22	2-2-5-5-5-2-2-2	7	2-2-3-3-3-2-2-2

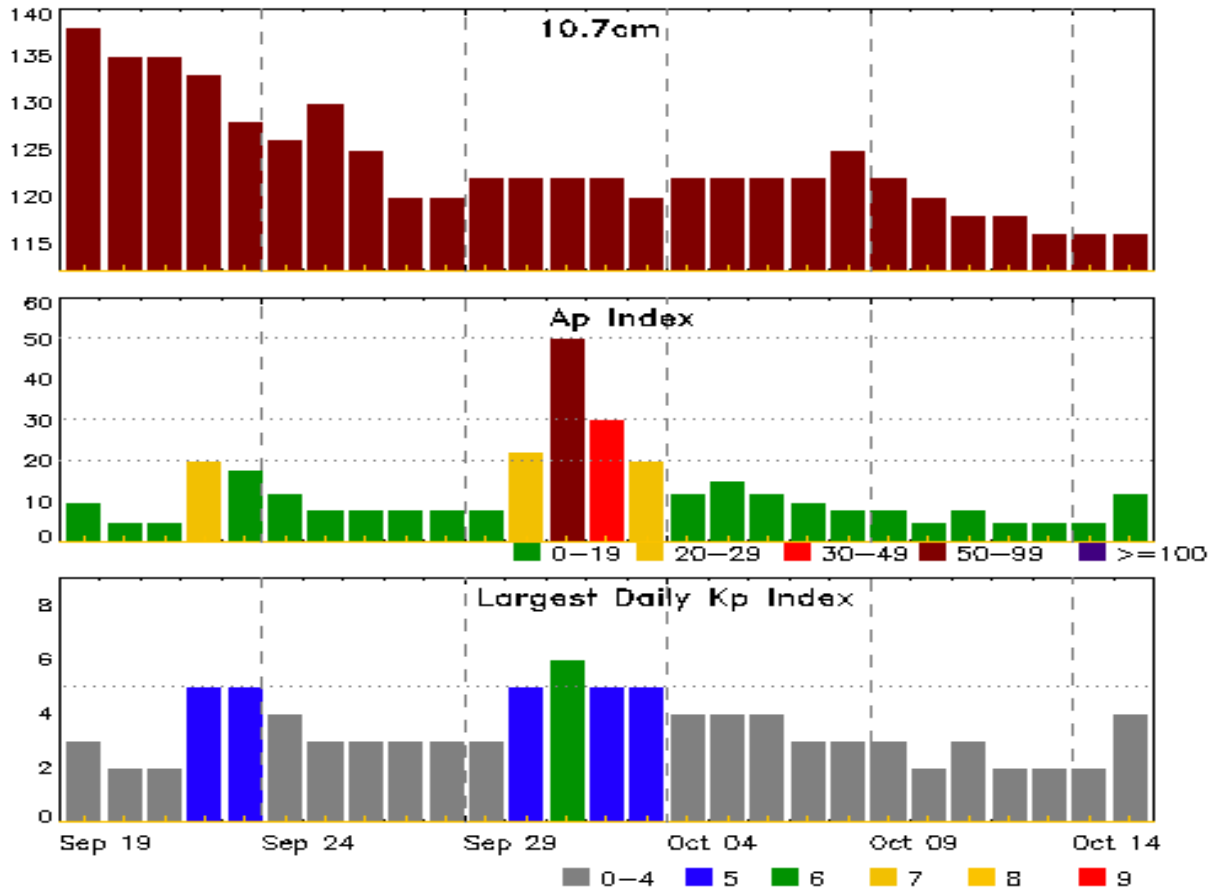


### *Alerts and Warnings Issued*

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
12 Sep 0721	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	04/1405
12 Sep 1225	WARNING: Proton 10MeV Integral Flux $>$ 10pfu	12/1300 - 2200
13 Sep 0000	SUMMARY: 10cm Radio Burst	12/2343 - 2345
13 Sep 0836	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	04/1405
14 Sep 0507	CONTINUED ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu	04/1405
14 Sep 2202	WARNING: Geomagnetic K = 4	14/2205 - 15/0600
14 Sep 2208	WARNING: Geomagnetic Sudden Impulse expected	14/2240 - 2340
14 Sep 2323	ALERT: Geomagnetic K = 4	14/2320
14 Sep 2327	SUMMARY: Geomagnetic Sudden Impulse	14/2315
15 Sep 0555	EXTENDED WARNING: Geomagnetic K = 4	14/2205 - 15/1200
16 Sep 0955	ALERT: X-ray Flux exceeded M5	16/0949
16 Sep 1010	SUMMARY: X-ray Event exceeded M5	16/0944 - 0956
16 Sep 1604	ALERT: X-ray Flux exceeded M5	16/1557
16 Sep 1627	SUMMARY: X-ray Event exceeded M5	16/1549 - 1612
18 Sep 1130	WARNING: Geomagnetic K = 4	18/1130 - 1800



## 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
19 Sep	138	10	3	03 Oct	120	20	5
20	135	5	2	04	122	12	4
21	135	5	2	05	122	15	4
22	133	20	5	06	122	12	4
23	128	18	5	07	122	10	3
24	126	12	4	08	125	8	3
25	130	8	3	09	122	8	3
26	125	8	3	10	120	5	2
27	120	8	3	11	118	8	3
28	120	8	3	12	118	5	2
29	122	8	3	13	116	5	2
30	122	22	5	14	116	5	2
01 Oct	122	50	6	15	116	12	4
02	122	30	5				



### *Energetic Events*

Date	Time			X-ray	Optical Information				Peak		Sweep Freq	
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV
12 Sep	2337	2344	2348	M1.7	0.005	SF	N19W40		3098	100	400	
14 Sep	0941	1019	1043	M1.1	0.027	SF	N21W56		3098			
16 Sep	0944	0949	0956	M7.9	0.030				3098			
16 Sep	1549	1559	1612	M6.2	0.057	SN	N18W81		3098			
17 Sep	1321	1339	1353	M1.9	0.031				3098			
17 Sep	2032	2041	2052	M2.6	0.021				3098			

### *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
	Begin	Max	End				
12 Sep	0022	0028	0035	C2.8			3098
12 Sep	0222	0421	0424		SF	N29W71	3101
12 Sep	0312	0319	0325	C3.2			3101
12 Sep	0412	0416	0422	C2.1			3101
12 Sep	B0539	U0742	0812		SF	N20W25	3098
12 Sep	0600	0609	0617	C3.0			
12 Sep	0621	0630	0642	C4.5			3101
12 Sep	0642	0643	0645		SF	S13W58	3097
12 Sep	0813	0832	0904	C2.3	SF	N19W28	3098
12 Sep	0916	0925	0934	C3.7			
12 Sep	0958	0958	1001		SF	N20W29	3098
12 Sep	1007	1011	1013		SF	N20W29	3098
12 Sep	1109	1119	1138	C3.5	SF	N28W76	3101
12 Sep	1140	1142	1158		SF	N28W76	3101
12 Sep	1159	1219	1233	C6.3	SF	N29W75	3101
12 Sep	1243	1258	1320	C7.4	SF	N28W77	3101
12 Sep	1316	1317	1322		SF	N18W47	3094
12 Sep	1348	1349	1401		SF	N30W77	3101
12 Sep	1407	1412	1413		SF	N27W78	3101
12 Sep	1420	1420	1429		SF	S13W64	3092
12 Sep	1438	1444	1457		SF	N15E07	3101
12 Sep	1504	1509	1515		SF	N27W78	3101
12 Sep	1545	1547	1656		SF	N27W78	3101
12 Sep	1609	1617	1624	C2.0			3101
12 Sep	1718	1719	1721		SF	N27W78	3101



## *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
12 Sep	1854	1903	1912	C5.2	SN	N21W34		3098
12 Sep	1952	1956	2000	C3.6	SF	N29W81		3101
12 Sep	2041	2051	2104	C3.1				
12 Sep	2135	2140	2156		SF	N21W34		3098
12 Sep	2320	2321	2324	M1.7	SF	N19W40		3098
13 Sep	0126	0133	0137	C3.1				
13 Sep	0258	0306	0310	C2.6				
13 Sep	0346	0352	0403	C4.4				3102
13 Sep	0553	0559	0603	C3.9	SF	N18W47		3094
13 Sep	B0620	U0621	A0629		SF	N19W40		3098
13 Sep	0638	0638	0640		SF	N19W42		3098
13 Sep	0725	0732	0741		SF	N19W40		3098
13 Sep	0756	0756	0759		SF	N29W80		3101
13 Sep	0812	0813	0827		SF	N18W43		3098
13 Sep	0848	0848	0854		SF	N20W40		3098
13 Sep	0851	0858	0911	C3.7	SF	N29W82		3101
13 Sep	0939	0941	0949		SF	N19W42		3098
13 Sep	1001	1008	1020		SF	N18W44		3098
13 Sep	1055	1056	1104		SF	N19W42		3098
13 Sep	1105	1107	1110		SF	N19W42		3098
13 Sep	1127	1130	1134	C4.0	SF	S30E76		3102
13 Sep	1156	1200	1206	C2.9	SF	N19W41		3098
13 Sep	1231	1236	1240	C7.0	SF	N30W82		3101
13 Sep	1325	1326	1329	C6.7	SF	S30E76		3102
13 Sep	1417	1419	1421		SF	N21W46		3098
13 Sep	1425	1523	1622	C9.2	SF	N24W48		3098
13 Sep	1725	1728	1732	C4.9				
13 Sep	1750	1755	1802	C2.5				
13 Sep	2017	2029	2037	C2.2	SF	N18W52		3098
13 Sep	2120	2121	2124		SF	N20W45		3098
13 Sep	2157	2201	2204	C2.4	SF	S27E66		3102
13 Sep	2228	2233	2247	C4.1	SN	N18W53		3098
13 Sep	2241	2250	2255	C3.4				
13 Sep	2308	2309	2328		SF	S27E66		3102
13 Sep	2355	2355	2358		SF	N18W53		3098
14 Sep	0002	0004	0005		SF	N20W47		3098
14 Sep	0055	0103	0109	C3.3				
14 Sep	0252	0257	0301	C4.4	SF	N22W48		3098



## Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
14 Sep	0330	0334	0337	C4.6			3098
14 Sep	0337	0341	0345	C7.2			3098
14 Sep	0338	0350	0356		SF	N19W57	3098
14 Sep	0349	0352	0356	C5.2			3098
14 Sep	0422	0428	0438	C2.1			
14 Sep	0515	0521	0526	C2.7			3100
14 Sep	0551	0556	0606	C2.3			3102
14 Sep	0555	0556	0600		SF	N19W54	3098
14 Sep	0606	0607	0609		SF	S29E64	3102
14 Sep	0614	0615	0628		SF	S28E62	3102
14 Sep	0930	0940	0953		SF	S28E62	3102
14 Sep	0941	1019	1043	M1.1	SF	N21W56	3098
14 Sep	1107	1116	1140	C5.9	SF	N19W59	3098
14 Sep	1157	1201	1203		SF	N19W59	3098
14 Sep	1206	1216	1229	C7.7	SF	S28E60	3102
14 Sep	1420	1423	1429	C1.8	SF	N19W60	3098
14 Sep	1436	1437	1439		SF	S25E55	3102
14 Sep	1448	1458	1511	C3.6	1N	N18W61	3098
14 Sep	1810	1811	1812		SF	N21W62	3098
14 Sep	1817	1817	1823		SF	S28E53	3102
14 Sep	1932	1939	1956	C3.1			3094
14 Sep	2309	2322	2332		SF	S30E68	3102
15 Sep	0155	0202	0206	C1.5			3098
15 Sep	0223	0312	0336		1F	S30E52	3102
15 Sep	0228	0235	0240	C1.5			3098
15 Sep	0303	0319	0345	C3.8			3098
15 Sep	0554	0633	0713	C6.4			
15 Sep	0852	0854	0856		1F	S30E52	3102
15 Sep	1127	1136	1145	C1.5			3098
15 Sep	1320	1326	1341		SF	S29E46	3102
15 Sep	1651	1700	1708	C1.6			3098
15 Sep	1912	1921	1930	C2.3			3100
15 Sep	2306	2307	2310		SF	S13E07	3103
16 Sep	0017	0023	0035	C2.0			3098
16 Sep	0100	0105	0109	C1.6			3103
16 Sep	0121	0121	0125		SF	S16E10	3103
16 Sep	0254	0302	0306	C2.6			3098
16 Sep	0308	0317	0322	C3.9	SF	S21E06	3103





## *Flare List*

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
16 Sep	0421	0425	0430	C3.0	SF	S15E03		3103
16 Sep	0611	0615	0619	C3.2				3098
16 Sep	0735	0738	0745	C3.7				3098
16 Sep	0936	0938	0940		SF	S30E40		3102
16 Sep	0944	0949	0956	M7.9				3098
16 Sep	1520	1525	1540	C1.5				3098
16 Sep	1549	1559	1612	M6.2	SN	N18W81		3098
16 Sep	1640	1646	1650		SF	S24E32		3102
16 Sep	1902	1907	1911	C2.7				3098
16 Sep	2106	2118	2124	C2.2				3098
16 Sep	2259	2309	2314	C2.4	SF	S26E29		3102
16 Sep	2337	2344	2350	C1.3				3102
16 Sep	2350	0004	0009	C1.7				3102
17 Sep	0135	0157	0211	C3.0	SF	S26W25		3100
17 Sep	0431	0440	0448	C1.7				3098
17 Sep	0509	0517	0525	C1.6				3102
17 Sep	0815	0823	0831	C1.2				3100
17 Sep	0831	0838	0844	C1.4				3098
17 Sep	1321	1339	1353	M1.9				3098
17 Sep	1925	1925	1929		SF	S25E16		3102
17 Sep	2013	2022	2031	C2.3				3098
17 Sep	2032	2041	2052	M2.6				3098
17 Sep	2313	2319	2325	C1.6	SF	S26W41		3100
18 Sep	0414	0420	0427	C1.5				
18 Sep	0616	0617	0619		SF	S25E12		3102
18 Sep	1045	1054	1058	C1.2	SF	S26E09		3102
18 Sep	1124	1130	1136	C1.5	SF	S25E10		3102
18 Sep	1259	1304	1311	C3.6	SF	S28E08		3102
18 Sep	1319	1321	1346		SF	S27E06		3102
18 Sep	1502	1512	1518	C2.2	SF	S25E07		3102
18 Sep	1723	1816	1910	C3.5				3100
18 Sep	1608	1614	1618	C3.7				3102
18 Sep	2035	2041	2051	C1.8				
18 Sep	2140	2213	2230	C3.0				3102
18 Sep	2324	2339	0000	C3.0				



## Region Summary

Date	Location		Sunspot Characteristics				Flares																
	Lat	CMD	Helio Lon	Area 10 <sup>-6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical											
									C	M	X	S	1	2	3	4							
<b>Region 3092</b>																							
01 Sep	S09E67		94	110	3	Cao	3	B	2														
02 Sep	S09E53		95	170	3	Cao	3	B															
03 Sep	S10E38		96	130	3	Cso	3	B	1														
04 Sep	S10E27		94	90	3	Cso	3	B	2			2											
05 Sep	S10E13		95	120	3	Hsx	3	A	4				1										
06 Sep	S16W00		93	120	3	Hsx	3	A															
07 Sep	S16W14		95	150	3	Hsx	3	A															
08 Sep	S11W27		94	70	3	Hsx	1	A															
09 Sep	S10W40		95	50	2	Hsx	1	A															
10 Sep	S09W54		96	60	2	Hsx	1	A															
11 Sep	S09W68		97	60	2	Hsx	2	A															
12 Sep	S10W80		95	30	2	Hsx	1	A					1										
13 Sep	S10W94		96	30	2	Hsx	1	A															
									9	0	0	3	1	0	0	0	0						

Crossed West Limb.

Absolute heliographic longitude: 93

<b>Region 3093</b>																							
02 Sep	S26E42		106	20	6	Cro	7	B	1														
03 Sep	S27E26		108	30	5	Bxo	4	B															
04 Sep	S27E16		105	30	3	Cro	3	B	1														
05 Sep	S27E04		103	10	5	Bxo	4	B															
06 Sep	S27W10		105	10	5	Bxo	4	B															
07 Sep	S26W25		106	0		Axx	1	A															
08 Sep	S26W39		107	plage																			
09 Sep	S26W53		108	plage																			
10 Sep	S26W67		109	plage																			
11 Sep	S26W81		110	plage																			
									2	0	0	0	0	0	0	0	0	0					

Crossed West Limb.

Absolute heliographic longitude: 103



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	Lon	Helio 10 <sup>6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical							
								C	M	X	S	1	2	3	4			
<b>Region 3094</b>																		
02 Sep	N22E79	69	120	3	Hsx	1	A	3										
03 Sep	N20E67	69	100	4	Cao	3	B											
04 Sep	N21E53	68	100	2	Cao	3	B	1										
05 Sep	N21E40	68	110	4	Dso	8	B											
06 Sep	N21E26	69	110	4	Dso	8	B											
07 Sep	N21E12	69	30	4	Cso	8	B											
08 Sep	N17E01	66	10	4	Cro	4	B					1						
09 Sep	N18W12	67	10	1	Axx	1	A					2						
10 Sep	N20W27	69	10	1	Axx	1	A											
11 Sep	N20W41	70	10	1	Axx	1	A						1					
12 Sep	N20W55	70	10	1	Axx	1	A						1					
13 Sep	N20W69	71	plage									1		1				
14 Sep	N20W83	72	plage									1						
								6	0	0	6	0	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 66

<b>Region 3096</b>																		
06 Sep	N18E71	22	30	2	Hsx	1	A											
07 Sep	N18E57	24	40	5	Dso	6	B	3				2						
08 Sep	N16E44	23	130	7	Dso	8	B											
09 Sep	N16E33	22	90	8	Dai	9	B	2										
10 Sep	N16E19	23	100	7	Dao	7	B											
11 Sep	N16E05	24	30	5	Cro	5	B											
12 Sep	N16W09	24	0	5	Axx	1	A											
13 Sep	N18W19	21	0	1	Axx	2	A											
14 Sep	N18W33	22	plage															
15 Sep	N18W47	23	plage															
16 Sep	N18W61	24	plage															
17 Sep	N18W75	24	plage															
18 Sep	N18W89	25	plage															
								5	0	0	2	0	0	0	0	0		

Still on Disk.

Absolute heliographic longitude: 24



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	Lon	Area 10 <sup>6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical							
								C	M	X	S	1	2	3	4			
<b>Region 3097</b>																		
07 Sep	S12E01	79	20	4	Dso	5	B											
08 Sep	S12W12	79	20	4	Dro	7	B											
09 Sep	S11W25	80	10	5	Bxo	3	B	1				1						
10 Sep	S11W39	81	10	2	Bxo	3	B											
11 Sep	S11W53	82	plage															
12 Sep	S11W69	84	20	6	Dro	6	B					1						
13 Sep	S11W85	86	0	2	Axx	1	A											
								1	0	0	2	0	0	0	0	0		

Crossed West Limb.  
Absolute heliographic longitude: 79

<b>Region 3098</b>																		
08 Sep	N15E17	49	10	4	Bxi	5	B	3				3						
09 Sep	N17E05	50	20	4	Cro	8	B	1										
10 Sep	N18W08	50	60	8	Cao	12	B	2				2						
11 Sep	N18W22	51	160	12	Eai	12	BG	7				9						
12 Sep	N18W36	51	160	12	Eac	12	BG	3	1			7						
13 Sep	N18W51	52	460	13	Ehc	18	BG	4				16						
14 Sep	N18W65	53	860	14	Ehc	16	BG	7	1			9	1					
15 Sep	N19W76	52	560	12	Ehc	10	BG	5										
16 Sep	N18W91	53	540	15	Ehc	4	BG	7	2			1						
								39	4	0	47	1	0	0	0	0		

Crossed West Limb.  
Absolute heliographic longitude: 50

<b>Region 3099</b>																		
10 Sep	N12E32	10	20	3	Cro	2	B											
11 Sep	N12E18	11	10	3	Bxo	2	B	1										
12 Sep	N12E04	11	0	3	Axx	1	A											
13 Sep	N12W10	12	plage															
14 Sep	N12W24	13	plage															
15 Sep	N12W38	14	plage															
16 Sep	N12W52	15	plage															
17 Sep	N12W66	15	plage															
18 Sep	N12W80	16	plage															
								1	0	0	0	0	0	0	0	0		

Still on Disk.  
Absolute heliographic longitude: 11



### *Region Summary - continued*

Date	Location		Sunspot Characteristics					Flares								
	Lat CMD	Helio Lon	Area 10 <sup>6</sup> hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical					
								C	M	X	S	1	2	3	4	
<b>Region 3100</b>																
10 Sep	S25E48	354	70	4	Csi	11	B	6			2	1				
11 Sep	S25E37	352	80	7	Cai	11	B	1			2					
12 Sep	S24E25	350	60	10	Dso	10	B									
13 Sep	S24E22	350	140	11	Cso	7	B									
14 Sep	S25W02	351	140	13	Cso	7	B	1								
15 Sep	S24W14	350	160	14	Cso	9	B	1								
16 Sep	S24W28	351	150	14	Cso	5	B									
17 Sep	S23W42	351	190	15	Eso	13	B	3			2					
18 Sep	S22W60	354	150	9	Dso	6	B	1								
								13	0	0	6	1	0	0	0	

Still on Disk.

Absolute heliographic longitude: 351

#### **Region 3101**

10 Sep	N29W57	99	10	3	Bxo	5	B									
11 Sep	N29W71	100	60	10	Dai	10	B	1			9					
12 Sep	N28W83	98	90	10	Dso	5	BG	8			12					
								9	0	0	21	0	0	0	0	

Crossed West Limb.

Absolute heliographic longitude: 99

#### **Region 3102**

13 Sep	S28E60	302	240	4	Cso	4	B	4			4					
14 Sep	S26E46	302	240	7	Dao	4	B	2			7					
15 Sep	S26E38	298	250	11	Dko	5	B				1	2				
16 Sep	S26E24	299	290	12	Eko	8	B	3			3					
17 Sep	S27E11	298	310	12	Eki	24	B	1			1					
18 Sep	S25W02	298	320	12	Eki	25	B	6			6					
								16	0	0	22	2	0	0	0	

Still on Disk.

Absolute heliographic longitude: 298



### *Region Summary - continued*

Date	Location		Sunspot Characteristics				Flares													
	Lat CMD	Lon	Heli 10 <sup>-6</sup> hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical								
									C	M	X	S	1	2	3	4				
<b>Region 3103</b>																				
15 Sep	S16E06	330	30	4	Cro	7	B						1							
16 Sep	S16W09	332	100	5	Dai	7	B	3					3							
17 Sep	S16W22	331	20	5	Bxo	9	B													
18 Sep	S16W36	332	plage																	
								3	0	0	4	0	0	0	0	0				

Still on Disk.

Absolute heliographic longitude: 330



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

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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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