Solar activity ranged from low to high levels. There were five M-class (R1-R2 Minor-Moderate) flares over the reporting period. The largest was an M5.8/2n (R2) flare from Region 3243 (N18, L=306, class/area=Dao/110 on 05 Mar). Associated with the event was a Type II radio sweep, a Tenflare and a CME signature in SOHO/LASCO imagery. The ejecta was analyzed and determined to not contain an Earth-directed component. Region 3242 (N10, L=218, class/area=Esc/300 on 07 Mar) and Region 3245 (S23, L=196, class/area=Dhi/440 on 08 Mar) also produced M-class (R1) events. The remaining 11 other spotted regions were either quiet or only produced C-class events.

Other activity included three filament eruptions. The first was a SW quadrant eruption near S20W50, beginning around 10/1600 UTC. The second was just south of the first, which began erupting around 11/1648 UTC. Both were analyzed and modeled. Although they were mostly oriented to the SW of Earth, the potential for a glancing blow was determined to be likely around 15 Mar. Finally, the third filament eruption, which began around 12/1730 UTC and in the SE quadrant near Region 3251 (S13, L=121, class/area=Hsx/50 on 12 Mar), produced a CME signature first seen in SOHO/LASCO C2 imagery at 12/1912 UTC. Analysis and modeling of the event is ongoing.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate to high levels. High levels were observed on 06-10 Mar due to influence from a negative polarity CH HSS. 11-12 Mar were at normal to moderate levels.

Geomagnetic field activity was at quiet to active levels. Waning coronal hole influence elevated winds speeds to between 500-600 km/s on 06-07 Mar before declining to nominal levels by 08 Mar. This produced isolated periods of active conditions over 06 Mar, which then declined to quiet to unsettled levels on 07-08 Mar. Weak transient influence increased total field strength to 8-9 nT on 09-10 Mar. This also produced isolated active periods on both days. Despite another weak transient influence observed in the IMF over 12 Mar, the remainder of the summary period was at quiet to unsettled levels.

#### Space Weather Outlook 13 March - 08 April 2023

Solar activity is expected to be at low levels with a slight chance for M-class (R1-R2 Minor - Moderate) flares over the outlook period. This is due to multiple regions that have either produced M-class activity already or are sufficiently complex to produce M-class activity currently being on the visible disk or expected to return to the visible disk during the outlook period.

No proton events are expected at geosynchronous orbit.



The greater than 2 MeV electron flux at geosynchronous orbit is expected to range from moderate to high levels. High levels are likely on 27 Mar 06 Apr due to recurrent coronal hole influence. The remainder of the outlook period is expected to be at moderate levels.

Geomagnetic field activity is expected to range from quiet to minor storm levels (G1 - Minor). G1 conditions are likely on 15 Mar due to anticipated effects from CMEs that left the Sun on 10-11 Mar. G1 conditions are again likely on 26 Mar and 30-31 Mar in response recurrent coronal hole activity. Active conditions 20 Mar, 25 Mar, 27 Mar and 01 Apr along with unsettled conditions on 14 Mar, 16 Mar, 19 Mar, 24 Mar, 28-29 Mar and 02-08 Apr are also due to recurrent features in the solar wind. The remainder of the outlook period is expected to be at mostly quiet levels.



### Daily Solar Data

	Radio Sun		un Sunspot X-ray				Flares									
	Flux	spot	Area	Background	_		X-ray	<u>/</u>		O	ptica	al				
Date	10.7cm	No.	(10 <sup>-6</sup> hemi.)	Flux		C	M	X	S	1	2	3	4			
06 March	188	173	1020	C1.6		5	3	0	4	0	1	0	0			
07 March	180	191	1220	C1.1		6	0	0	2	0	0	0	0			
08 March	182	146	1285	C1.1		6	2	0	7	1	0	0	0			
09 March	179	155	740	C1.0		14	0	0	8	1	0	0	0			
10 March	171	135	700	C1.0		5	0	0	6	2	0	0	0			
11 March	157	126	720	B8.2		6	0	0	4	0	0	0	0			
12 March	150	135	690	B6.8		2	0	0	2	0	0	0	0			

# Daily Particle Data

		n Fluence cm <sup>2</sup> -day -sr)	Electron Fluence (electrons/cm <sup>2</sup> -day -sr)
Date	>1 MeV	>10 MeV	>2MeV
06 March	1.6e+05	2.2e+04	1.6e+08
07 March	8.7e + 04	2.2e+04	1.5e+08
08 March	6.3e+04	2.3e+04	2.0e+08
09 March	9.0e + 04	2.2e+04	7.1e+07
10 March	2.1e+05	2.3e+04	4.2e+07
11 March	1.0e + 05	2.3e+04	2.1e+07
12 March	7.3e+04	2.3e+04	1.4e+07

### Daily Geomagnetic Data

		Middle Latitude		High Latitude	Estimated				
		Fredericksburg		College		Planetary			
Date	A	K-indices	A	K-indices	A	K-indices			
06 March	11	3-2-2-3-3-2-3	20	3-3-2-5-4-4-2-3	15	4-3-2-2-3-3-4			
07 March	7	2-2-2-3-2-2-1-1	22	3-4-5-5-4-2-1-0	11	3-3-3-3-2-1-1-1			
08 March	6	0-1-2-2-2-2-2	9	1-2-3-4-1-1-2-2	8	1-2-2-1-1-3-3			
09 March	14	2-3-4-3-3-3-2-2	28	2-2-6-5-4-5-2-1	17	2-3-4-4-3-3-3-2			
10 March	10	4-1-2-1-2-3-2-2	11	2-1-3-0-3-4-3-2	11	4-2-2-1-1-3-2-3			
11 March	5	2-1-1-1-2-1-2-2	4	2-2-1-1-0-1-1-1	7	3-2-1-1-1-2-3			
12 March	6	2-1-3-2-2-0-1-1	10	2-1-4-4-2-1-0-1	12	3-2-3-3-1-1-1			

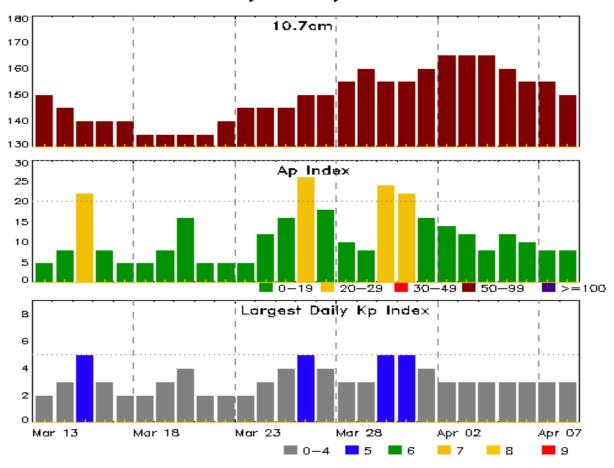


### Alerts and Warnings Issued

Date & Time of Issue UTC		Date & Time of Event UTC
06 Mar 0227	ALERT: X-ray Flux exceeded M5	06/0224
06 Mar 0315	ALERT: Type IV Radio Emission	06/0238
06 Mar 0317	SUMMARY: 10cm Radio Burst	06/0235 - 0256
06 Mar 0338	SUMMARY: X-ray Event exceeded M5	06/0208 - 0235
06 Mar 0508	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	28/2155
06 Mar 1111	EXTENDED WARNING: Geomagnetic K = 4	04/2225 - 06/2359
06 Mar 2304	EXTENDED WARNING: Geomagnetic K = 4	04/2225 - 07/0900
07 Mar 0521	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	28/2155
07 Mar 0853	EXTENDED WARNING: Geomagnetic K = 4	04/2225 - 07/1800
08 Mar 0502	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	28/2155
09 Mar 0438	WARNING: Geomagnetic $K = 4$	09/0437 - 1500
09 Mar 0632	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	28/2155
09 Mar 0738	ALERT: Geomagnetic $K = 4$	09/0737
09 Mar 0841	WARNING: Geomagnetic $K = 5$	09/0840 - 1500
09 Mar 1444	EXTENDED WARNING: Geomagnetic $K = 4$	09/0437 - 1800
10 Mar 0038	WARNING: Geomagnetic $K = 4$	10/0038 - 0600
10 Mar 0115	ALERT: Geomagnetic $K = 4$	10/0106
10 Mar 0555	EXTENDED WARNING: Geomagnetic $K = 4$	10/0038 - 1200
10 Mar 1543	CONTINUED ALERT: Electron 2MeV Integral Flux >= 1000pfu	28/2155
12 Mar 1127	WATCH: Geomagnetic Storm Category G1 predicte	ed



### Twenty-seven Day Outlook



	Radio Flux	•	Largest		Radio Flux	•	•
Date	10.7cm	A Index	Kp Index	Date	10.7cm	A Index	Kp Index
13 Mar	150	5	2	27 Mar	150	18	4
14	145	8	3	28	155	10	3
15	140	22	5	29	160	8	3
16	140	8	3	30	155	24	5
17	140	5	2	31	155	22	5
18	135	5	2	01 Apr	160	16	4
19	135	8	3	02	165	14	3
20	135	16	4	03	165	12	3
21	135	5	2	04	165	8	3
22	140	5	2	05	160	12	3
23	145	5	2	06	155	10	3
24	145	12	3	07	155	8	3
25	145	16	4	08	150	8	3
26	150	26	5				



# Energetic Events

		Time			ray	Optical Information				I	Peak	Sweep Fre	
			Half		Integ	Imp/	Lo	cation	Rgn	Rad	lio Flux	Inter	nsity
Date	Begin	Max	Max	Class	Flux	Brtns	Lat	t CMD	#	245	2695	II	IV
06 Mar	0208	0228	0235	M5.8	3 0.0	)44 2	2N	N19W	V65	3243		480	1
06 Mar	0857	0912	0937	M1.3	3 0.0	021							
06 Mar	1724	1750	1810	M1.0	0.0	021				3242			
08 Mar	0953	1012	1046	M1.	0.0	026				3242			
08 Mar	2235	2244	2252	M1.3	3 0.0	007	lΝ	S24I	E14	3245	110		

### Flare List

Date   Time   X-ray   Imp/ Class   Location Brtns   Rgn     06 Mar   0114   0122   0129   C2.6   3243     06 Mar   0208   0228   0235   M5.8   2N   N19W65   3243     06 Mar   0418   0422   0445   SF   S24E50   3245     06 Mar   0857   0912   0937   M1.3   3243   3243     06 Mar   1201   1218   1230   C5.0   3243   3241     06 Mar   1419   1424   1430   C4.2   3241   3241     06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1705   1714   1724   C2.3   3243   3243     06 Mar   1705   1714   1724   C2.3   SF   N30E07   3241     06 Mar   1724   1750   1810   M1.0   3242   3243     07 Mar   0106   0107							Optical	
06 Mar   0114   0122   0129   C2.6   3243     06 Mar   0208   0228   0235   M5.8   2N   N19W65   3243     06 Mar   0418   0422   0445   SF   S24E50   3245     06 Mar   0857   0912   0937   M1.3   3243     06 Mar   1201   1218   1230   C5.0   3243     06 Mar   1419   1424   1430   C4.2   3241     06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1466   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   3243     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar			Time		X-ray	Imp/	Location	Rgn
06 Mar   0208   0228   0235   M5.8   2N   N19W65   3243     06 Mar   0418   0422   0445   SF   S24E50   3245     06 Mar   0857   0912   0937   M1.3   SF   S24E50   3245     06 Mar   1201   1218   1230   C5.0   3243   3241     06 Mar   1419   1424   1430   C4.2   3241   3241     06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1446   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   SF   N30E07   3241     06 Mar   1724   1750   1810   M1.0   3242   3243     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar <th>Date</th> <th>Begin</th> <th>Max</th> <th>End</th> <th>Class</th> <th>Brtns</th> <th>Lat CMD</th> <th>#</th>	Date	Begin	Max	End	Class	Brtns	Lat CMD	#
06 Mar   0418   0422   0445   SF   S24E50   3245     06 Mar   0857   0912   0937   M1.3   3243     06 Mar   1201   1218   1230   C5.0   3243     06 Mar   1419   1424   1430   C4.2   3241     06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1446   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   3243     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0358   0405   0412   C4.7   3243   3243     07 Mar   1026	06 Mar	0114	0122	0129	C2.6			3243
06 Mar   0857   0912   0937   M1.3     06 Mar   1201   1218   1230   C5.0   3243     06 Mar   1419   1424   1430   C4.2   3241     06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1446   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   3243     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3245     07 Mar   1026   1037   1049   C1.8	06 Mar	0208	0228	0235	M5.8	2N	N19W65	3243
06 Mar 1201 1218 1230 C5.0 3243   06 Mar 1419 1424 1430 C4.2 3241   06 Mar 1430 1442 1449 C7.2 SF N31E09 3241   06 Mar 1446 1446 1504 SF N30E07 3241   06 Mar 1705 1714 1724 C2.3 3243   06 Mar 1724 1750 1810 M1.0 3242   06 Mar 2232 2233 2238 SF N18W75 3243   07 Mar 0106 0107 0111 SF N08E05 3242   07 Mar 0223 0239 0314 C4.0 SF S26E40 3245   07 Mar 0358 0405 0412 C4.7 3243   07 Mar 0811 0820 0828 C3.0 3243   07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0519	06 Mar	0418	0422	0445		SF	S24E50	3245
06 Mar 1419 1424 1430 C4.2 3241   06 Mar 1430 1442 1449 C7.2 SF N31E09 3241   06 Mar 1446 1446 1504 SF N30E07 3241   06 Mar 1705 1714 1724 C2.3 3243   06 Mar 1724 1750 1810 M1.0 3242   06 Mar 2232 2233 2238 SF N18W75 3243   07 Mar 0106 0107 0111 SF N08E05 3242   07 Mar 0223 0239 0314 C4.0 SF S26E40 3245   07 Mar 0358 0405 0412 C4.7 3243   07 Mar 0811 0820 0828 C3.0 3243   07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0519	06 Mar	0857	0912	0937	M1.3			
06 Mar   1430   1442   1449   C7.2   SF   N31E09   3241     06 Mar   1446   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   3243     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0223   0239   0314   C4.0   SF   S26E40   3245     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0519	06 Mar	1201	1218	1230	C5.0			3243
06 Mar   1446   1446   1504   SF   N30E07   3241     06 Mar   1705   1714   1724   C2.3   3243     06 Mar   1724   1750   1810   M1.0   3242     06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0223   0239   0314   C4.0   SF   S26E40   3245     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0240   0247   0253   C1.8   SF   S22W75   3244     08 Mar   0519	06 Mar	1419	1424	1430	C4.2			3241
06 Mar 1705 1714 1724 C2.3 3243   06 Mar 1724 1750 1810 M1.0 3242   06 Mar 2232 2233 2238 SF N18W75 3243   07 Mar 0106 0107 0111 SF N08E05 3242   07 Mar 0223 0239 0314 C4.0 SF S26E40 3245   07 Mar 0358 0405 0412 C4.7 3243   07 Mar 0811 0820 0828 C3.0 3243   07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0736 0748 0758 SF S24E27 3245   08	06 Mar	1430	1442	1449	C7.2	SF	N31E09	3241
06 Mar 1724 1750 1810 M1.0 3242   06 Mar 2232 2233 2238 SF N18W75 3243   07 Mar 0106 0107 0111 SF N08E05 3242   07 Mar 0223 0239 0314 C4.0 SF S26E40 3245   07 Mar 0358 0405 0412 C4.7 3243   07 Mar 0811 0820 0828 C3.0 3243   07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0335 1012 1046 M1.1 3242   08	06 Mar	1446	1446	1504		SF	N30E07	3241
06 Mar   2232   2233   2238   SF   N18W75   3243     07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0223   0239   0314   C4.0   SF   S26E40   3245     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0240   0247   0253   C1.8   SF   S22W75   3244     08 Mar   0519   0525   0529   C1.7   SF   N15W57   3248     08 Mar   0736   0748   0758   SF   S24E27   3245     08 Mar   0353   1012   1046   M1.1   3242	06 Mar	1705	1714	1724	C2.3			3243
07 Mar   0106   0107   0111   SF   N08E05   3242     07 Mar   0223   0239   0314   C4.0   SF   S26E40   3245     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0240   0247   0253   C1.8   SF   S22W75   3244     08 Mar   0519   0525   0529   C1.7   SF   N15W57   3248     08 Mar   0736   0748   0758   SF   S24E27   3245     08 Mar   0953   1012   1046   M1.1   3242     08 Mar   1335   1341   1355   C3.3   SF   N10W05   3242 <td>06 Mar</td> <td>1724</td> <td>1750</td> <td>1810</td> <td>M1.0</td> <td></td> <td></td> <td>3242</td>	06 Mar	1724	1750	1810	M1.0			3242
07 Mar   0223   0239   0314   C4.0   SF   S26E40   3245     07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0240   0247   0253   C1.8   SF   S22W75   3244     08 Mar   0519   0525   0529   C1.7   SF   N15W57   3248     08 Mar   0527   0539   0542   SF   S24E27   3245     08 Mar   0736   0748   0758   SF   S24E27   3245     08 Mar   1335   1341   1355   C3.3   SF   N10W05   3242     08 Mar   1357   1415   1419   SF   N10W05 <td>06 Mar</td> <td>2232</td> <td>2233</td> <td>2238</td> <td></td> <td>SF</td> <td>N18W75</td> <td>3243</td>	06 Mar	2232	2233	2238		SF	N18W75	3243
07 Mar   0358   0405   0412   C4.7   3243     07 Mar   0811   0820   0828   C3.0   3243     07 Mar   1026   1037   1049   C1.8   3245     07 Mar   1244   1250   1254   C1.6   3242     07 Mar   1733   1749   1824   C2.6   3245     08 Mar   0240   0247   0253   C1.8   SF   S22W75   3244     08 Mar   0519   0525   0529   C1.7   SF   N15W57   3248     08 Mar   0527   0539   0542   SF   S24E27   3245     08 Mar   0736   0748   0758   SF   S24E27   3245     08 Mar   1335   1341   1355   C3.3   SF   N10W05   3242     08 Mar   1357   1415   1419   SF   N10W05   3242	07 Mar	0106	0107	0111		SF	N08E05	3242
07 Mar 0811 0820 0828 C3.0 3243   07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242   08 Mar 1357 1415 1419 SF N10W05 3242	07 Mar	0223	0239	0314	C4.0	SF	S26E40	3245
07 Mar 1026 1037 1049 C1.8 3245   07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242   08 Mar 1357 1415 1419 SF N10W05 3242	07 Mar	0358	0405	0412	C4.7			3243
07 Mar 1244 1250 1254 C1.6 3242   07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242	07 Mar	0811	0820	0828	C3.0			3243
07 Mar 1733 1749 1824 C2.6 3245   08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242	07 Mar	1026	1037	1049	C1.8			3245
08 Mar 0240 0247 0253 C1.8 SF S22W75 3244   08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242   08 Mar 1357 1415 1419 SF N10W05 3242	07 Mar	1244	1250	1254	C1.6			3242
08 Mar 0519 0525 0529 C1.7 SF N15W57 3248   08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 SF N10W05 3242   08 Mar 1357 1415 1419 SF N10W05 3242	07 Mar	1733	1749	1824	C2.6			3245
08 Mar 0527 0539 0542 SF S24E27 3245   08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 3242   08 Mar 1357 1415 1419 SF N10W05 3242	08 Mar	0240	0247	0253	C1.8	SF	S22W75	3244
08 Mar 0736 0748 0758 SF S24E27 3245   08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 3242   08 Mar 1357 1415 1419 SF N10W05 3242	08 Mar	0519	0525	0529	C1.7	SF	N15W57	3248
08 Mar 0953 1012 1046 M1.1 3242   08 Mar 1335 1341 1355 C3.3 3242   08 Mar 1357 1415 1419 SF N10W05 3242	08 Mar	0527	0539	0542		SF	S24E27	3245
08 Mar 1335 1341 1355 C3.3 3242   08 Mar 1357 1415 1419 SF N10W05 3242	08 Mar	0736	0748	0758		SF	S24E27	3245
08 Mar 1357 1415 1419 SF N10W05 3242	08 Mar	0953	1012	1046	M1.1			3242
	08 Mar	1335	1341	1355	C3.3			3242
08 Mar 1517 1517 1521 SF N10W05 3242	08 Mar	1357	1415	1419		SF	N10W05	3242
	08 Mar	1517	1517	1521		SF	N10W05	3242



Flare List

						Optical		
		Time		X-r	ay Imp	Location	Rgn	
Date	Begin	Max	End	Cla	ss Brtns	s Lat CMD	#	
08 Mar	1621	1635	1653	C2.	0			
08 Mar	1927	1944	2011	C3.	7 SF	S23E16	3245	
08 Mar	2235	2244	2252	M1.	3 1N	S24E14	3245	
08 Mar	2357	0007	0022	C1.	8		3248	
09 Mar	0044	0054	0107	C4.	2 SF	N11W10	3242	
09 Mar	0114	0119	0127	C3.	9			
09 Mar	0235	0237	0243		SF	S24E14	3245	
09 Mar	0624	0631	0637	C1.	4 SF	N11W10	3242	
09 Mar	0830	0904	0919	C3.	1		3245	
09 Mar	1003	1011	1026	C1.	8			
09 Mar	B1100	U1101	A1115		SF	S23E07	3245	
09 Mar	1224	U1244	1250		SF	N13W11	3242	
09 Mar	1251	1252	1306		SF	N08W22	3242	
09 Mar	1338	1353	1402	C3.	0 1F	N12W11	3242	
09 Mar	1402	1414	1430	C3.	5			
09 Mar	1444	U1456	A1538	C3.	7 SF	S22E05	3245	
09 Mar	1744	1744	1755		SF	S23E03	3245	
09 Mar	1810	1816	1823	C2.	4		3250	
09 Mar	1824	1830	1836	C2.	6		3245	
09 Mar	1959	2011	2017	C3.	1		3245	
09 Mar	2017	2024	2032	C6.	2		3245	
09 Mar	2056	2109	2125	C2.	9		3250	
09 Mar	2321	2331	2342	C3.	4		3252	
10 Mar	0642	0708	0718	C7.	1 1F	S24E00	3245	
10 Mar	B0937	U1028	A1214	C4.	5 1F	S25W10	3245	
10 Mar	1016	1024	1028	C3.	9		3242	
10 Mar	1128	1134	1149		SF	N11W23	3242	
10 Mar	B1215	U1215	A1220		SF	S23W07	3245	
10 Mar	1312	1333	1348	C2.	5 SF	S13W65	3240	
10 Mar	1438	1455	1511	C3.	2 SF	S20W09	3245	
10 Mar	1540	1542	1546		SF	N09W35	3242	
10 Mar	2044	2048	2056		SF	N24E49		
11 Mar	0039	0040	0106	C4.	9 SF	S25W17	3245	
11 Mar	0530	0535	0547	C1.	4 SF	S23W20	3245	
11 Mar	0603	0610	0619	C1.	3		3245	
11 Mar	1008	1016	1024	C1.	2 SF	S26W19	3245	
11 Mar	1029	1038	1045	C1.			3245	
11 Mar	1435	1438	1644	C1.	6 SF	S20W21	3245	



### Flare List

				Optical							
		Time		X-ray	Imp/	Location	Rgn				
Date	Begin	Max	End	Class	Brtns	Lat CMD	#				
12 Mar	0607	0607	0611		SF	S26W33	3245				
12 Mar	0702	0719	0732	C3.2	SF	S30E09	3253				
12 Mar	1010	1018	1027	C1.5			3245				



### Region Summary

	Location	on	Su	nspot C	haracte	ristics				I	Flares	5			
		Helio	Area	Extent	Spot	Spot	Mag	X	-ray			0	ptica	ıl	
Date	Lat CMD	Lon 1	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Regio	on 3238												
27 Feb	N08E62	259	50	1	Hsx	1	Α								
28 Feb	N09E50	258	70	2	Hsx	1	A								
01 Mar	N09E36	259	70	2	Hsx	1	A								
02 Mar	N09E22	260	70	2	Hsx	1	Α								
03 Mar	N09E09	260	70	2	Hsx	1	Α								
04 Mar	N09W05	260	80	3	Hsx	3	Α								
05 Mar	N09W18	260	90	3	Cso	4	В		2		2				
06 Mar	N11W30	259	80	3	Hsx	1	Α								
07 Mar	N08W44	260	30	2	Hsx	1	Α								
08 Mar	N09W58	261	30	5	Cro	1	В								
09 Mar	N09W72	262	10	1	Axx	1	Α								
								0	2	0	2	0	0	0	0
Died on Absolut	Disk. e heliograp	hic lon	gitude: 2	60											
		Regio	on 3239												
28 Feb	N30E69	238	90	3	Hsx	1	A								
01 Mar	N30E55	241	100	2	Hsx	1	Α								
02 Mar	N31E41	241	100	2	Hsx	1	A								
03 Mar	N31E28	241	100	2	Hsx	1	A	1							
04 Mar	N31E14	241	100	3	Hsx	1	Α								
05 Mar	N31E01	241	110	3	Hsx	1	A								
06 Mar	N31W12	241	120	3	Hsx	1	A								
07 Mar	N33W25	241	100	2	Hsx	1	A								
08 Mar	N33W37	240	140	2	Hsx	1	A								
09 Mar	N32W41	241	70	2	Hsx	1	A								
10 Mar	N32W57	243	70	2	Hsx	1	A								
11 Mar	N32W70	233	70	2	Hsx	1	A								
12 Mar	N32W83	233	70	2	Hsx	1	A								
								1	0	0	0	0	0	0	0



	Location	on	Su	nspot C	haracte	ristics				]	Flares	S			
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			O	ptica	ıl	
Date	Lat CMD	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Reg	ion 3240												
01 Mar	S16E55	240	10	2	Bxo	3	В	2	1		1	1			
02 Mar	S16E41	241	10	2	Bxo	2	В								
03 Mar	S16E28	241	30	4	Cro	6	В								
04 Mar	S16E14	241	10	5	Bxo	6	В								
05 Mar	S16E01	241	10	5	Bxo	5	В								
06 Mar	S16W13	242	10	9	Cro	6	В								
07 Mar	S10W35	251	10	7	Bxo	4	В								
08 Mar	S09W49	252	plage												
09 Mar	S09W63	253	plage												
10 Mar	S09W77	253	plage					1			1				
								3	1	0	2	1	0	0	0
Died on	Disk.														
Absolut	e heliograp	hic lo	ngitude: 2	41											
		Reg	ion 3241												
01 Mar	N27E73	222	50	4	Hsx	3	A								
02 Mar	N27E59	223	70	4	Hsx	2	A								
03 Mar	N27E46	223	70	4	Hsx	2	A								
04 Mar	N27E32	223	60	2	Hsx	1	A								
05 Mar	N27E19	223	50	2	Hsx	1	A								
06 Mar	N27E05	224	50	1	Hsx	1	A	2			2				
07 Mar	N28W08	224	40	1	Hsx	1	A								
08 Mar	N29W22	225	70	1	Hsx	1	A								
09 Mar	N28W36	226	20	1	Hsx	1	A								
10 Mar	N28W48	224	30	1	Hax	1	A								
11 Mar	N28W61	224	30	1	Hsx	1	A								
12 Mar	N28W74	224	10	1	Axx	1	A								
								2	0	0	2	0	0	0	0



	Location	on	Su	nspot C	haracte	ristics	_				Flares	3			
		Helio	Area	Extent	Spot	Spot	Mag	X	-ray			O	ptica	ı1	
Date	Lat CMD	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Regi	ion 3242												
02 Mar	N10E66	216	220	6	Cao	5	В								
03 Mar	N10E53	216	230	6	Cao	8	В	2			10	1			
04 Mar	N10E39	216	140	8	Cai	16	В	6	1		5	2	2		
05 Mar	N10E26	216	170	14	Eai	16	В	2	1		5				
06 Mar	N10E12	217	240	13	Esc	23	В		1						
07 Mar	N10W02	218	300	15	Esc	27	BD	1			1				
08 Mar	N10W15	218	245	14	Esi	18	BG	1	1		2				
09 Mar	N09W29	219	170	14	Esi	13	BG	3			4	1			
10 Mar	N10W44	220	110	10	Cso	7	В	1			2				
11 Mar	N10W57	224	100	2	Hsx	1	A								
12 Mar	N11W72	222	100	2	Hsx	1	A								
								16	4	0	29	4	2	0	0
Still on	Disk.														
Absolut	te heliograp	hic lor	ngitude: 2	18											
		Rogi	ion 3243												
		_			_		_								
03 Mar	N18W37	306	10	4	Bxo	4	В				_				
04 Mar	N18W51	306	90	6	Cao	12	В	1	1		5				
05 Mar	N18W64	306	110	8	Dao	12	В	3	1		1				
06 Mar	N18W78	307	110	8	Dao	8	В	3	1		1		1		
07 Mar	N18W89	305	80	1	Dao	1	В	2	2	0	_	0		0	0
		_						9	3	0	7	0	1	0	0
	l West Lim			0.5											
Absolut	te heliograp	ohic loi	ngitude: 3	06											
		Regi	ion 3244												
03 Mar	S22W19	288	20	4	Cro	2	В								
04 Mar	S22W17	288	20	2	Hrx	2	A								
05 Mar	S22W35 S22W46	288	30	6	Dso	5	В				1				
06 Mar	S22W60	289	30	6	Cro	5	В				1				
00 Mar	S22W74	290	40	5	Cro	7	В								
08 Mar	S22W74 S22W88	291	30	8	Cro	3	В	1			1				
oo waa	522 11 00	2/1	30	O	C10	3	ם	1	0	0	2	0	0	0	0
								1	U	U	4	U	J	U	U

Crossed West Limb. Absolute heliographic longitude: 288



	Location	on	Sunspot Characteristics						Flares							
			Area	Extent	Spot	Spot	Mag	Σ	K-ray			0	ptica	ıl		
Date	Lat CMD	Lon	10 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4	
		Regi	ion 3245													
03 Mar	S23E74	195	80	3	Hsx	1	A									
04 Mar	S23E60	195	120	3	Hsx	1	A	1			1					
05 Mar	S23E47	195	140	4	Hax	2	A	1								
06 Mar	S23E33	196	250	4	Dko	9	BG				1					
07 Mar	S22E22	196	300	4	Dki	13	В	3			1					
08 Mar	S23E07	196	440	5	Dhi	11	BG	1	1		3	1				
09 Mar	S24W07	197	250	7	Dho	11	BG	5			4					
10 Mar	S23W18	194	220	4	Csi	9	В	3			2	2				
11 Mar	S23W31	194	220	4	Cso	7	В	6			4					
12 Mar	S23W44	194	210	3	Cso	2	В	1			1					
								21	1	0	17	3	0	0	0	
Still on	Disk.															
Absolut	e heliograp	hic lo	ngitude: 1	96												
		Regi	ion 3246													
05 Mar	N23E70	172	60	2	Hsx	1	A				4					
06 Mar	N23E56	173	80	4	Cao	4	В									
07 Mar	N24E42	174	60	6	Cao	3	В									
08 Mar	N23E28	175	50	6	Hax	1	Α									
09 Mar	N25E14	176	40	1	Hax	1	Α									
10 Mar	N25W00	176	50	2	Cao	3	В									
11 Mar	N24W13	176	30	2	Hsx	2	Α									
12 Mar	N24W26	176	30	2	Hsx	2	Α									
								0	0	0	4	0	0	0	0	
Still on																
Absolut	e heliograp	hic lo	ngitude: 1	76												
		Dage	ion 22.47													
			ion 3247													
06 Mar	S23E68	161	50	2	Dao	2	В									
07 Mar	S23E54	162	90	3	Cso	3	В									
08 Mar	S24E41	162	100	4	Cao	3	В									
09 Mar	S24E28	162	70	7	Cso	5	В									
10 Mar	S23E16	160	70	7	Cso	6	В									
11 Mar	S23E03	160	70	4	Cso	4	В									
12 Mar	S23W10	160	60	3	Cso	3	В									
								0	0	0	0	0	0	0	0	



	Location	on		Sunspot Characteristics					Flares							
		Helio	Area	Extent			Mag	X-ray			- 1010	.1				
Date	Lat CMD		10 <sup>-6</sup> hemi.		_	_	•	С	M	X	S	1	2	3	4	
		Regio	on 3248													
06 Mar	N17W47	276	0	4	Cro	3	В									
07 Mar	N19W60	216	50	6	Cro	9	В									
08 Mar	N15W72	275	30	6	Cro	6	В	2			1					
09 Mar	N15W85	275	20	1	Cro	6	В	2	0	0	1	0	0	0	0	
	West Lim		gitude: 2	76				۷	U	U	1	U	U	U	U	
11000100	e memograp		.B.10.000 =	, 0												
		Regio	on 3249													
07 Mar	S12E75	141	120	1	Hsx	1	A									
08 Mar	S12E61	142	150	2	Hax	1	A									
09 Mar	S11E47	143	30	1	Hax	1	A									
10 Mar	S11E34	142	70	2	Hsx	1	Α									
11 Mar	S11E21	142	60	1	Hsx	1	A									
12 Mar	S11E08	142	50	2	Hsx	2	A	0	0	0	0	0	0	0	0	
Still on	Disk							U	U	U	U	U	U	U	U	
	e heliograp	hic lon	gitude: 1	42												
		Region 3250														
09 Mar	S20E45	145	10	3	Bxo	4	В	2								
10 Mar	S20E43 S20E32	143	10	4	Bxo	5	В	2								
10 Mar	S20E32 S20E19	144	70	4	Cao	7	В									
12 Mar	S20E17	144	80	5	Cao	7	В									
12 IVIAI	520E00	144	00	3	Cao	,	Ъ	2	0	0	0	0	0	0	0	
Still on																
Absolut	e heliograp	hic lon	gitude: 1	44												
	Region 3251															
09 Mar	S13E69	121	50	2	Hsx	1	A									
10 Mar	S13E55	121	50	3	Hsx	1	A									
11 Mar	S13E42	121	50	2	Hsx	1	A									
12 Mar	S13E29	121	50	2	Hsx	1	A									
								0	0	0	0	0	0	0	0	
Still on	Disk.															





	Location	on	Sunspot Characteristics						Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical					
Date	Lat CMD	Lon 1	0 <sup>-6</sup> hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4	
		Regio	on 3252													
09 Mar	N16E74	116	plage					1								
10 Mar	N16E60	116	20	1	Hsx	1	A									
11 Mar	N13E47	116	20	1	Hsx	1	A									
12 Mar	N13E34	116	20	1	Hsx	1	A									
								1	0	0	0	0	0	0	0	
Still on																
Absolut	e heliograp	ohic long	gitude: 1	16												
	Region 3253															
12 Mar	S30W01	151	10	3	Bxo	4	В	1								
								1	0	0	0	0	0	0	0	
Still on		hia land	aituda. 1	<b>5</b> 1												
Ausolul	e heliograp	onic tons	gnude: 1	31												



#### 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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