Solar activity was at low levels throughout. The largest flare was a C6.7 at 21/1935 UTC from Region 3561. Moderate development occurred in Region 3561 beginning on 21 Jan, however the spot group maintains a simple beta magnetic configuration. Region 3559 (N27, L=289, class/area Fkc/300 on 21 Jan) exhibited rapid growth and development since 20 Jan and is now classified as an Fkc spot group with beta-gamma magnetic characteristics.

Other activity included several filament eruptions. The first was a complex filament eruption centered near S15E22 that began around 20/0848 UTC. The subsequent CMEs were first visible at 20/0912 UTC in SOHO/LASCO C2 imagery. The CME appeared to have three fronts; to the east, southeast, and south-southwest. Modeling indicated a CME passage reaching Earth mid to late on 22 Jan. Two other filament eruptions occurred with a potential for a glancing blow. The first occurred at 21/0000 UTC centered near N23E40. An associated CME was observed off the ENE limb at 21/0024 UTC. The second was a CME off the SE limb at 21/1636 UTC, possibly associated with a filament eruption near S30E50. Initial modelling indicated the potential for a glancing blow early on 24 Jan, however analysis is still in progress.

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field activity ranged from quiet to unsettled levels. Solar wind speed and temperature values were not accurate through late on 16 Jan due to known instrument limitations during low densities. Estimates of solar wind speed were likely in the upper 400 km/s range. Solar wind speed declined to nominal levels on 17 Jan followed by a brief increase to 490 km/s on 19 Jan. Total field ranged from 2 nT to 9 nT. Isolated unsettled periods were observed on 16, 19, and 21 Jan.

Space Weather Outlook 22 January - 17 February 2024

Solar activity is expected to be at low to moderate (R1-R2/Minor-Moderate) levels on 22-29 Jan due primarily to the flare potential of Region 3559. Low levels with a chance for M-class flares is expected on 30 Jan-10 Feb. An increased chance for moderate levels is possible once again on 11-17 Feb as Region 3559 rotates back onto the visible disk.

No proton events are expected at geosynchronous orbit. A minor enhancement below S1 (Minor) threshold is in progress and likely to continue until the arrival of the 20 Jan CME.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 24-27 Jan due to CME influence.

Geomagnetic field activity is likely to reach G1-G2 (Minor-Moderate) levels on 22-23 Jan due to



the arrival of the 20 Jan CME. Unsettled to active conditions are likely on 24 Jan with the potential glancing blow from the 21 Jan CMEs. Unsettled levels are expected on 29-31 Jan and again on 17 Feb due to recurrent CH HSS activity.



Daily Solar Data

	Radio	Sun	Sunspot	X-ray				Flares				
	Flux	spot	Area	Background		X-ra	<u>y</u>		O	ptica	ıl	
Date	10.7cm	No.	(10 ⁻⁶ hemi.)	Flux	C	M	X	S	1	2	3	4
15 January	183	150	1120	C1.1	6	0	0	3	0	0	0	0
16 January	180	150	820	B9.3	2	0	0	4	0	0	0	0
17 January	174	158	880	C1.2	7	0	0	1	0	0	0	0
18 January	162	113	950	B9.2	5	0	0	1	1	0	0	0
19 January	157	137	930	B7.3	1	0	0	0	0	0	0	0
20 January	166	144	960	B7.5	9	0	0	0	0	0	0	0
21 January	179	150	1050	C1.3	16	0	0	12	1	0	0	0

Daily Particle Data

		Fluence m ² -day-sr)	Electron Fluence (electrons/cm ² -day -sr)
Date	>1 MeV	>10 MeV	>2MeV
15 January	5.0e+05	2.1e+04	1.4e+06
16 January	1.7e + 05	2.0e+04	1.1e+06
17 January	1.3e+05	1.8e + 04	1.4e+06
18 January	1.1e+05	1.8e + 04	1.1e+06
19 January	7.0e + 04	1.8e+04	1.1e+06
20 January	6.3e + 04	1.8e+04	1.4e+06
21 January	1.1e+05	1.8e+04	1.2e+06

Daily Geomagnetic Data

		Middle Latitude		High Latitude	Estimated				
]	Fredericksburg		College		Planetary			
Date	A	K-indices	A	K-indices	A	K-indices			
15 January	4 0-0-1-1-2-2-1		6	0-0-4-2-2-0-1-0	6	1-1-2-2-1-2-2			
16 January	4 0-0-1-1-2-2-2-1 4 2-2-1-0-2-2-1-0		2	2-1-0-0-1-0-1-0	6	3-2-1-1-1-1-1			
17 January	3	0-1-1-1-1-2-1-1	3	0-0-3-0-2-0-0-1	4	1-1-1-1-1-1			
18 January	4	1-1-0-2-2-2-1-1	7	0-0-1-4-3-1-1-2	6	1-1-2-2-1-2-2			
19 January	5	1-2-1-1-2-2-1-2	6	0-3-3-2-1-1-1-0	8	1-3-2-1-2-2-2			
20 January	4 0-2-1-1-2-2-1-1		8	0-0-2-3-4-2-1-1	6	1-2-1-1-2-2-1-2			
21 January	5	0-1-1-3-2-1-1-1	9	0-0-2-5-3-1-0-0	3	1-2-2-3-2-1-1-1			

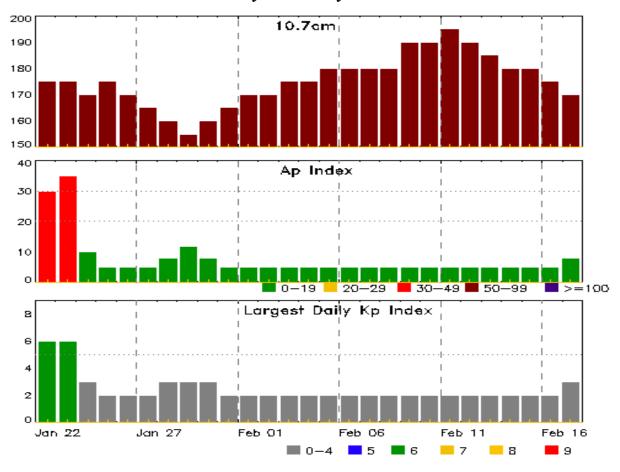


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
21 Jan 0753	WATCH: Geomagnetic Storm Cat	



Twenty-seven Day Outlook



	Radio Flux	•	Largest		Radio Flux	•	•
Date	10.7cm	A Index	Kp Index	Date	10.7cm	A Index	Kp Index
22 Jan	175	30	6	05 Feb	180	5	2
23	175	35	6	06	180	5	2
24	170	10	3	07	180	5	2
25	175	5	2	08	180	5	2
26	170	5	2	09	190	5	2
27	165	5	2	10	190	5	2
28	160	8	3	11	195	5	2
29	155	12	3	12	190	5	2
30	160	8	3	13	185	5	2
31	165	5	2	14	180	5	2
01 Feb	170	5	2	15	180	5	2
02	170	5	2	16	175	5	2
03	175	5	2	17	170	8	3
04	175	5	2				



Energetic Events

		Time		X-	-ray	_Optio	cal Informat	ion	P	eak	Sweep	Freq
			Half		Integ	Imp/	Location	Rgn	Radi	o Flux	Inten	sity
Date	Begin	Max	Max	Class	Flux	Brtns	Lat CMD	#	245	2695	II	IV

No Events Observed

Flare List

					(Optical	
		Time		X-ray	Imp/	Location	Rgn
Date	Begin	Max	End	Class	Brtns	Lat CMD	#
15 Jan	0217	0226	0231	C2.1			3541
15 Jan	0519	0523	0528	C1.6			3541
15 Jan	0853	0900	0911	C1.7			3540
15 Jan	1354	1405	1411	C2.8			
15 Jan	1604	1616	1618		SF	N06E56	3553
15 Jan	1807	1807	1810		SF	S20W57	3541
15 Jan	1839	1844	1851	C2.0			3541
15 Jan	1924	1933	1957	C1.9	SF	S08W47	3540
16 Jan	0321	0330	0340	C2.4	SF	S21W63	3541
16 Jan	0804	0809	0814	C1.5	SF	S17E23	3549
16 Jan	1007	1010	1016		SF	S08W56	
16 Jan	1102	1106	1207		SF	S07W12	3545
17 Jan	0717	0724	0728	C2.6			
17 Jan	1033	1034	1040		SF	S17E07	3549
17 Jan	1347	1356	1404	C2.3			
17 Jan	1657	1708	1722	C2.4			3540
17 Jan	2029	2040	2047	C2.3			
17 Jan	2109	2122	2133	C2.5			3558
17 Jan	2133	2143	2147	C2.6			3558
17 Jan	2319	2325	2330	C1.6			3558
18 Jan	0335	0346	0355	C2.7			3553
18 Jan	0359	0408	0417	C5.4			3553
18 Jan	0504	0518	0527	C2.5			3553
18 Jan	0812	0813	0815		SF	N03E14	3553
18 Jan	1005	1014	1028	C3.0			3540
18 Jan	1215	1221	1234		1F	N04E12	3553
18 Jan	1442	1449	1459	C1.6			3552
19 Jan	0146	0153	0158	C1.8			
20 Jan	0251	0258	0302	C1.7			3559
20 Jan	0333	0341	0349	B9.5			3560
20 Jan	0515	0522	0524	B8.5			3559



Flare List

					(Optical	
		Time		X-ray	Imp/	Location	Rgn
Date	Begin	Max	End	Class	Brtns	Lat CMD	#
20 Jan	0524	0528	0532	B9.6			3559
20 Jan	0536	0541	0547	B9.6			3559
20 Jan	0835	0934	1032	C3.5			3555
20 Jan	1249	1253	1257	C1.7			3560
20 Jan	1349	1358	1405	C1.7			3560
20 Jan	1421	1434	1443	C5.2			3559
20 Jan	1817	1826	1834	C1.5			3559
20 Jan	2141	2151	2200	C1.3			3560
20 Jan	2200	2209	2215	C1.4			3559
20 Jan	2215	2222	2226	C1.5			3559
21 Jan	0003	0027	0035	C4.0			3559
21 Jan	0035	0041	0055	C5.3			3559
21 Jan	0137	0140	0142		SF	N29E38	3559
21 Jan	0145	0145	0147		SF	N25E34	3559
21 Jan	0157	0202	0211	C6.3	1F	N25E34	3559
21 Jan	0213	0215	0216		SF	N25E34	3559
21 Jan	0222	0226	0228		SF	N25E34	3559
21 Jan	0238	0238	0239		SF	N25E32	3559
21 Jan	0352	0354	0355		SF	N25E32	3559
21 Jan	0739	0744	0748	C2.2	SF	N25E30	3559
21 Jan	0834	0840	0846	C2.0	SF	N25E30	3559
21 Jan	B0900	U0900	A0907		SF	N25E30	3559
21 Jan	1116	1116	1119		SF	S10E28	3560
21 Jan	1133	1137	1144	C2.5	SF	N29E36	3559
21 Jan	1141	1141	1147		SF	N05W30	3553
21 Jan	1522	1525	1529	C2.2			3559
21 Jan	1612	1623	1636	C2.9			3559
21 Jan	1656	1702	1712	C2.8			
21 Jan	1725	1734	1745	C3.9			3359
21 Jan	1823	1838	1855	C5.8			3559
21 Jan	1927	1935	1944	C6.7			3561
21 Jan	2010	2015	2021	C5.8			3559
21 Jan	2112	2118	2124	C1.8			3549
21 Jan	2144	2152	2201	C2.7			3559
21 Jan	2233	2241	2247	C3.7			3559



Region Summary

	Location	on	Sunspot Characteristics]	Flares	3			
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			O	ptica	1	
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Regio	on 3539												
05 Jan	N10E25	136	10	1	Axx	2	A								
06 Jan	N11E14	134	60	5	Dsi	9	BG								
07 Jan	N11W01	135	30	5	Dri	7	BG				1				
08 Jan	N11W12	133	40	6	Cao	5	В	1					1		
09 Jan	N10W27	136	60	5	Dai	8	В								
10 Jan	N10W41	137	220	7	Dao	9	В								
11 Jan	N10W56	139	230	8	Dai	13	В	7	1		6				
12 Jan	N10W69	138	130	6	Dao	8	В	4			2				
13 Jan	N13W82	138	110	3	Cao	3	В								
14 Jan	N13W96	139	110	3	Cao	3	В	1							
								13	1	0	9	0	1	0	0
Crosso	Wast Lim	h													

Crossed West Limb. Absolute heliographic longitude: 135

		Regio	n 3540												
04 Jan	S18E81	94	plage					1							
05 Jan	S18E67	94	100	9	Dao	9	В	3							
06 Jan	S18E53	95	350	9	Dki	12	BG	2							
07 Jan	S17E47	92	310	11	Eki	17	BG	1			1				
08 Jan	S17E31	90	290	10	Dki	15	BG	1			1				
09 Jan	S18E18	91	240	9	Cao	14	В				1				
10 Jan	S18E04	92	240	9	Cao	14	В				1				
11 Jan	S18W10	93	150	8	Cao	12	В	1			2				
12 Jan	S17W22	91	60	7	Cao	8	В				1				
13 Jan	S18W37	93	80	8	Cai	13	В								
14 Jan	S19W51	94	110	10	Dai	16	BG								
15 Jan	S17W59	90	160	5	Cai	8	В	2							
16 Jan	S20W81	97	80	10	Cao	4	В								
17 Jan	S20W95	99	plage					1							
								12	0	0	7	0	0	0	0

Crossed West Limb. Absolute heliographic longitude: 92



	Location	haracte	ristics		Flares										
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			0	ptica	ıl	
Date	Lat CMD	Lon 1	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		ъ.	25.41												
		Regio	on 3541												
05 Jan	S21E65	96	10	2	Hax	1	A								
06 Jan	S21E51	97	30	2	Cao	4	В								
07 Jan	S20E43	94	60	2	Cao	3	В								
08 Jan	S20E29	92	50	3	Dai	3	В								
09 Jan	S21E17	92	80	6	Dai	5	В	2							
10 Jan	S23E07	89	60	13	Eai	24	BG								
11 Jan	S22W04	87	100	12	Esi	15	BG								
12 Jan	S22W22	91	50	9	Dai	12	BG	1			1				
13 Jan	S22W33	89	70	6	Dao	4	BD	1			4				
14 Jan	S22W48	91	50	5	Cso	4	В	5			2	1			
15 Jan	S20W61	90	120	5	Cao	9	В	3			1				
16 Jan	S22W77	93	60	5	Cao	3	В	1			1				
17 Jan	S22W90	93	plage												
								13	0	0	9	1	0	0	0
	l West Lim			_											
Absolut	te heliograp	hic lon	gitude: 8	7											
		Regio	on 3544												
07 Jan	N19E60	75	30	1	Hax	1	A								
08 Jan	N19E47	74	30	1	Hax	1	A								
09 Jan	N18E32	77	20	1	Hsx	1	A								
10 Jan	N18E18	78	20	1	Hsx	1	A								
11 Jan	N18E04	79	10	1	Axx	1	A								
12 Jan	N18W11	80	10	1	Axx	1	A								
13 Jan	N18W24	80	10	1	Axx	1	A								
14 Jan	N18W38	81	plage												
15 Jan	N18W52	82	plage												
16 Jan	N18W66	83	plage												
17 Jan	N18W80	84	plage												
									_	_			_	_	

Crossed West Limb. Absolute heliographic longitude: 79



 $0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0$

	Location Sunspot Characteristics								Flares						
		Helio	Area	Extent	Spot	Spot	Mag	X	-ray			О	ptica	ıl	
Date	Lat CMD	Lon 1	10 ⁻⁶ hemi.		_	_	Class	С	M	X	S	1	2	3	4
		Regio	on 3545												
09 Jan	S06E67	42	190	3	Hax	1	A								
10 Jan	S06E52	44	190	3	Hax	1	A								
11 Jan	S06E40	43	150	3	Hsx	1	A								
12 Jan	S07E30	39	160	7	Cho	4	В								
13 Jan	S06E17	39	250	6	Cho	3	В				1				
14 Jan	S06E02	41	250	6	Cho	4	В	2							
15 Jan	S06W10	39	290	10	Cko	10	В								
16 Jan	S07W26	41	110	3	Hax	2	A				1				
17 Jan	S07W39	42	120	3	Cao	2	В								
18 Jan	S07W51	41	180	3	Hax	2	A								
19 Jan	S06W66	42	180	3	Hax	2	A								
20 Jan	S06W79	43	130	3	Hax	2	A								
21 Jan	S06W91	42	120	3	Hsx	1	A								
Still on	Disk.							2	0	0	2	0	0	0	0
Absolu	te heliograp	ohic lon	gitude: 4	-1											
		Regio	on 3546												
09 Jan	S24E50	58	70	3	Cao	11	В								
10 Jan	S24E36	60	70	3	Cai	11	В	1							
11 Jan	S24E22	61	70	7	Dai	11	В	1			2				
12 Jan	S24E09	60	60	7	Dai	11	В								
13 Jan	S24W03	59	40	8	Cro	9	В								
14 Jan	S24W17	60	10	8	Bxi	9	В								
15 Jan	S24W31	61	plage												
16 Jan	S24W45	62	plage												
17 Jan	S24W59	63	plage												
18 Jan	S24W73	63	plage												
19 Jan	S24W87	64	plage												
								2	0	0	2	0	0	0	0
Crosso	Wost Lim	h													

Crossed West Limb. Absolute heliographic longitude: 59



	Location	on	Su	Sunspot Characteristics						Flares									
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			О	ptica	ıl					
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	<u>C</u>	M	X	S	1	2	3	4				
		Regi	on 3547																
11 Jan	N19E19	64	40	5	Dso	3	В												
12 Jan	N19E05	64	50	7	Cso	5	В		1		1								
13 Jan	N18W09	65	30	8	Cao	6	В												
14 Jan	N18W23	66	10	8	Bxo	2	В												
15 Jan	N18W37	67	plage																
16 Jan	N18W51	68	plage																
17 Jan	N18W65	69	plage																
18 Jan	N18W79	69	plage																
								0	1	0	1	0	0	0	0				
Crossed	l West Limi	b.																	
Absolut	te heliograp	hic lon	igitude: 6	4															
		Regi	on 3548																
12 Jan	N12E41	28	90	4	Dso	5	В	2											
12 Jan	N12E41 N12E28	28	70	4	Dao	5	В	2											
13 Jan	N12E28 N12E14	29	40	4	Cao	5	В												
14 Jan	N12W00	30	30	4	Cao	2	В												
16 Jan	N02W19	33	10	1	Axx	1	A												
10 Jan 17 Jan	N15W24	28	10	2	Bxo	3	В												
17 Jan 18 Jan	N15W24 N15W38	28	plage	2	Вхо	3	ь												
19 Jan	N15W52	29	plage																
20 Jan	N15W52 N15W66	30	plage																
20 Jan 21 Jan	N15W80	31	plage																
41 Jaii	1417 44 00	31	prage					2	0	0	0	0	0	0	0				
Ctill on	Diale							<i>_</i>	U	U	U	U	U	U	U				



	Location	on	Su	Sunspot Characteristics]	Flares	3			
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			O	ptica	ıl	
Date	Lat CMD	Lon 1	0 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Regio	on 3549												
12 Jan	S20E62	7	140	5	Dso	3	В								
13 Jan	S21E50	6	180	5	Dsi	7	В								
14 Jan	S21E36	7	250	6	Chi	7	В	2			1				
15 Jan	S17E23	6	240	6	Cso	8	В								
16 Jan	S21E10	5	180	6	Cso	7	В	1			1				
17 Jan	S22W01	4	180	6	Cso	5	В				1				
18 Jan	S21W14	4	200	4	Cao	5	В								
19 Jan	S21W28	5	200	4	Cao	3	В								
20 Jan	S21W41	5	180	3	Cso	3	В								
21 Jan	S21W55	6	170	2	Hsx	1	A	1 4	0	0	3	0	0	0	
Still on Absolu	Disk. te heliograp	hic lon	gitude: 4												
		Regio	on 3550												
12 Jan	S16E21	48	10	6	Bxo	3	В								
13 Jan	S18E09	47	10	1	Axx	1	A								
14 Jan	S18W03	46	10	2	Axx	3	A								
15 Jan	S18W17	47	10	2	Axx	3	A								
16 Jan	S18W31	48	plage	_											
17 Jan	S18W45	49	plage												
18 Jan	S18W59	49	plage												
19 Jan	S18W73	50	plage												
20 Jan	S18W87	51	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb. Absolute heliographic longitude: 46



	Location	Su	Sunspot Characteristics						Flares									
		Helio	Area	Extent	Spot	Spot	Mag		K-ray			O	ptica	ı1				
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4			
		Regi	on 3551															
12 Jan	N25E50	19	10	7	Bxo	3	В											
13 Jan	N26E39	17	10	3	Bxo	3	В											
14 Jan	N26E25	18	10	3	Bxo	3	В											
15 Jan	N26E11	19	plage															
16 Jan	N26W03	20	plage															
17 Jan	N28W12	18	30	1	Hsx	2	A											
18 Jan	N26W24	15	plage															
19 Jan	N26W36	13	20	2	Bxo	3	В											
20 Jan	N26W50	14	plage															
21 Jan	N26W64	15	plage															
			, ,					0	0	0	0	0	0	0	0			
Still on	Disk.																	
	te heliograp	hic lon	gitude: 2	0														
	0 1																	
		Regi	on 3552															
12 Jan	S23W14	83	30	7	Cso	5	В											
13 Jan	S22W25	81	10	6	Cao	5	В											
14 Jan	S22W39	82	10	3	Axx	4	A											
15 Jan	S22W53	83	10	3	Cao	2	В											
16 Jan	S24W67	85	100	3	Cao	2	В											
17 Jan	S24W81	85	100	3	Cao	2	В											
								0	0	0	0	0	0	0	0			
Crosse	d West Lim	b.																
	ite heliograp		gitude: 8	3														
	<i>C</i> 1		C															
		Regi	on 3553															
13 Jan	N05E68	348	120	1	Hsx	1	A											
14 Jan	N05E54	349	80	2	Hsx	3	A											
15 Jan	N05E42	347	150	3	Hax	3	A				1							
16 Jan	N05E28	347	70	4	Cao	5	В				_							
17 Jan	N09E17	346	90	4	Cao	35	В											
18 Jan	N05E03	347	110	4	Cao	10	В	3			1	1						
19 Jan	N05W11	348	80	5	Cao	6	В				-	-						
20 Jan	N05W23	347	40	2	Hax	1	A											
21 Jan	N05W38	349	20	1	Hrx	1	A				1							
	1,02,,00	2.17	20	•		•	• •	3	0	0	3	1	0	0	0			
G . 111	D: 1							5	U	J	5	•	J	9	0			



	Location	on	Su	ınspot C	haracte	eristics]	Flares				
		Helio	Area	Extent	Spot	Spot	Mag	X	K-ray			0	ptica	1	
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Regio	on 3554												
15 Jan	N07E53	336	70	2	Hsx	2	A								
16 Jan	N07E37	339	40	2	Hsx	1	A								
17 Jan	N07E24	339	40	1	Hsx	1	A								
18 Jan	N07E12	338	30	2	Hrx	2	A								
19 Jan	N07W01	338	10	2	Axx	2	A								
20 Jan	N07W16	340	plage												
21 Jan	N07W31	342	plage												
								0	0	0	0	0	0	0	0
Still on	Disk.														
Absolu	te heliograp	hic lon	gitude: 3	38											
		Regio	on 3555												
15 Jan	S11E72	318	40	7	Dao	3	В								
16 Jan	S11E72 S11E56	319	80	8	Dso	2	В								
17 Jan	S11E30 S10E45	318	180	5	Dso	4	BG								
18 Jan	S11E31	319	160	9	Dai	8	В								
19 Jan	S11E16	321	150	9	Dai	8	В								
20 Jan	S12E04	320	150	10	Cso	6	В	1							
21 Jan	S12W09	320	110	5	Cso	5	В	-							
							_	1	0	0	0	0	0	0	0
Still on	Disk.														
	te heliograp	hic lon	gitude: 3	20											
		Regio	on 3556												
4	3 V 4	_		_	•-	_	_								
16 Jan	N16E62	313	70	2	Hsx	1	A								
17 Jan	N17E52	311	80	1	Hsx	1	A								
18 Jan	N16E39	311	90	2	Hax	2	A								
19 Jan	N16E25	312	90	2	Hax	2	A								
20 Jan	N15E12	312	90	2	Hax	1	A								
21 Jan	N15W01	312	70	2	Hax	1	A	0	0	0	0	0	0	0	0
Still on	Dick							U	U	U	U	U	U	U	U



	Location	on	Su	Sunspot Characteristics							Flares	<u> </u>			
		Helio		Extent			Mag	X	K-ray		_ 101 01		ptica	.1	
Date	Lat CMD		10 ⁻⁶ hemi.		_	_	_	C	M	X	S	1	2	3	4
		D :	2557												
		_	on 3557												
16 Jan	S13E74	57	10	2	Hax	1	A								
17 Jan	S13E60	60	plage												
18 Jan	S13E46	304	plage												
19 Jan	S13E32	305	plage												
20 Jan	S13E18	306	plage												
21 Jan	S13E04	307	plage												
								0	0	0	0	0	0	0	0
Still on		1 . 1	. 1 2	07											
Absolut	te heliograp	onic Ion	igitude: 3	07											
		Regi	on 3558												
16 Jan	S10W65	81	10	3	Hsx	1	A								
10 Jan	S10W03 S11W81	84	50	2	Cao	3	В	3							
1 / Jaii	311 W 01	04	30	2	Cao	3	Ъ	3	0	0	0	0	0	0	0
	l West Lim te heliograp		ngitude: 8	1											
		Regi	on 3559												
18 Jan	N27E60	290	160	10	Dso	3	В								
19 Jan	N26E46	291	170	10	Dao	6	В								
20 Jan	N27E35	289	220	14	Eai	22	В	5							
21 Jan	N27E22	289	300	18	Fkc	28	BG	12			10	1			
21 0 411	112/22	207	200	10	1 110	20	20	17	0	0	10	1	0	0	0
Still on		1 . 1	. 1 0	00					Ĭ	Ĭ					
Absolut	te heliograp	onic ion	igitude: 2	89											
		Regi	on 3560												
18 Jan	S11E66	284	20	1	Hrx	1	A								
19 Jan	S11E50	285	10	1	Axx	1	A								
20 Jan	S11E32 S10E35	289	40	6	Bxi	8	В	3							
20 Jan 21 Jan	S10E33	289	60	8	Cri	10	В	5			1				
21 Juli	J10L22	20)	00	G	CII	10	ט	3	0	0	1	0	0	0	0
Still on	Disk.							-	-	-	_	-	-	-	-



	Location	on	Su	Sunspot Characteristics						Flares								
		Helio	Area	Extent	Spot	Spot	Mag		K-ray			O	ptica	ıl				
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4			
19 Jan	S16E11	326	20	4	Cao	4	В											
20 Jan	S16W03	327	80	5	Dao	6	В											
21 Jan	S16W16	327	90	7	Dri	8	В	1										
								1	0	0	0	0	0	0	0			
Still on Absolut	Disk. te heliograp	hic lor	ngitude: 3	27														
		Regi	on 3562															
20 Jan	S09W14	338	30	3	Cro	5	В											
21 Jan	S08W27	338	110	5	Dao	5	В											
								0	0	0	0	0	0	0	0			

Still on Disk.

Absolute heliographic longitude: 338



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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