

TABLE OF SUNSPOT GROUPS  
JANUARY 1978

Group No.	Heliographic Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
N3337	=		J2	..	A2	B3																												(*) Dec. 29	
N3338	=		D34	D29	E28	E35	E23	H8																										(*) Dec. 30	
N3339	33	35	159	-169		D5	D10	D8	D7	B3																									
N3340	21	-24	138	-143		A1	B3	B3	B4	C6	*																								
N3341	14	-15	114	-115		A2	B3	A2			*																								
N3342	17	-19	140	-144		C3	J4	C8	*			A1																							
N3343	15	-16	181	-185		*	J3	B4	B5																										
N3344	15	-18	61	-72								B3	B7	C4	D20	E16	C10	D6	C3																
N3345	17	233																				A1													
N3346	19	-22	233	-239																		J2	J2	J2	-	J3	-	J3	-	J2	-	J2	N3338, recur.		
N3347	14	-19	219	-257																															
N3348	33	220	-223																																
N3349	12	256	-259																																
N3350	13	-15	157	-163																															
N3351	16	-21	139	-150																															
N3352	12	139	-140																																
N3353	13	127																																	
S2658	=					C11	C7	C8	C7	C8	C11	H8																							
S2659	=					C18	C21	C20	C18	C7	D14	C11																							
S2661	21	154				A1		*																											
S2662	21	117						A1		*																									
S2663	21	2																																	
S2664	27	76	-81																																
S2665	23	72	-74																																
S2666	22	63																																	
S2667	25	353	-2																																
S2668	23	352	-354																																
S2669	22	263	18	-355																															
S2670	19	213																																	
S2671	25	28	156	-167																															
S2672	28	32	155	-168																															
S2673	15	-19	166	-173																															
S2674	25	-27	140	-145																															

. - Central meridian-passage \* - Prearrange-day of meridian-passage

= - Continued group from last month

## (2) TABLE OF SUNSPOT GROUPS

FEBRUARY 1978

Group No.	Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side			C.M.	W-Side			
	Latitude	Longitude											
N3350	=		Feb. 2	Jan. 29	Feb. 5	A 2	-	C 6	-	D10	-	C 5	A 1
N3351	=		Feb. 3	Jan. 29	Feb. 8	C 7	-	F23	-	F35	-	F25	F18 D 9 D 7 C 4
N3352	=		-	Jan. 31	Feb. 2	A 1	-	A 2					
N3354	(24)	25103-109	-	Feb. 2	Feb. 4	C 3	-	J 2					
N3355	(16)	21 74-86	Feb. 8	Feb. 2	Feb. 14	A 1	-	F20 F27 F25 F22	F16	F10	-	G 5	- C 4 J 2
N3356	(30)	34149-156	-	Feb. 4	Feb. 7							B22 B11	.. A 1
N3357	(21)	22146-147	-	Feb. 4	Feb. 5					A 4	A 1		
N3358	(23)	26 82-70	Feb. 8	Feb. 4	Feb. 14	B 4	C 4	B10 D16	F20 F21	-	F18	-	G 7 J 2
N3359	(10)	18 23-41	Feb. 11	Feb. 6	Feb. 18	D12	F16 F27 F26	-	F43	-	F74 F56	F38 F36	F22 C 4
N3360	(25)	139	-	Feb. 7	Feb. 7							J 2	
N3361	(15)	17 63-71	-	Feb. 9	Feb. 13					C 5	-	D17	- A 1
N3362	(27)	32279-290	Feb. 19	Feb. 14	Feb. 26	D 6	D 6 D 7 C 6	C10 C 9 C 9	C 9 C 9	C 5	H 4 H 3	J 2	A 1
N3363	(17)	21257-263	Feb. 21	Feb. 16	Feb. 26	C 4	C 5 D 5 C 7	C 6 C16	C15	D14	D10	C 6	A 1
N3364	(25)	28349-359	-	Feb. 17	Feb. 20							D 7 D15	D13 D12
N3365	(16)	24217-233	Feb. 24	Feb. 18	Mar. 2	J 2	D 9 F14 F16 F22 F24 F33	F31 F32	G31	-	G10	B 2	
N3366	(14)	38184-193	Feb. 26	Feb. 21	Mar. 3	J 3	J 3 J 3 J 3	J 4 D 6	D 9	-	D17	C17	C12
N3367	(17)	18251-252	Feb. 22	Feb. 22	Feb. 23				A 3	A 3			
N3368	(17)	20145-148	Mar. 2	Feb. 24	Mar. 8	A 1	J 2 J 2 J 2	-	C 3	J 2 J 2	-	J 2 J 2	J 2 J 2
N3369	(14)	167-169	-	Feb. 26	Feb. 27				B 2	A 2			
S2671	=		Feb. 1	Jan. 27	Feb. 8	C 7	-	D 8	-	D 6	-	C10	- G10 J 4 J 2 J 2 A 1
S2672	=		Feb. 1	Jan. 27	Feb. 7	B 8	-	D15	-	F28	-	G24	- C22 C 6 C 7 C 5
S2673	=		Feb. 1	Jan. 29	Feb. 7			C 8	-	C11	-	G 8	- C11 D 7 A 1 A 1
S2674	=		-	Jan. 31	Feb. 2			B 3	-	B 3			
S2675	(26)	28 81-90	Feb. 7	Feb. 2	Feb. 11	D 6	-	D10 D 9 C 7	C 8	J 2 J 2	-	J 2	
S2676	(22)	153-155	-	Feb. 6	Feb. 7							B 4	B 3
S2677	(20)	24350-354	Feb. 14	Feb. 8	Feb. 17	A 1	J 2 - J 2	-	C 4	J 2 J 2	J 3	A 2	
S2678	(25)	27 28-34	-	Feb. 13	Feb. 16						C11	B 4 B 4	A 1
S2679	(25)	0	Feb. 14	Feb. 13	Feb. 14				A 1	A 1			
S2680	(29)	359	-	Feb. 13	Feb. 13				A 1				
S2681	(25)	335	-	Feb. 19	Feb. 19							A 2	
S2682	(19)	21183-188	Feb. 27	Feb. 21	Mar. 6	J 2	J 3 C 3 C 5	D 9 C10	C 8	-	C 4	J 2 J 2	- J 2 A 1
S2683	(22)	24161-164	Mar. 1	Feb. 23	Mar. 2	J 2	J 2 J 2 J 2	J 2	-	C 5	A 2		
S2684	(22)	25136-141	Mar. 2	Feb. 24	Mar. 3	A 1	J 2 J 2 J 2	-	C 7	C 6	J 2		
S2685	(29)	156	-	Feb. 26	Mar. 3			A 2	..	-	..	..	A 1

22.5

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## (2) TABLE OF SUNSPOT GROUPS

Group NO.	Heliographic		C.M. Passage	First Obs.	Last Obs.	MARCH 1978						C.M.	W-Side						
	Latitude	Longitude				E-Side													
N3370	17-25	70-85	Mar. 7	Mar. 1	Mar. 13	A 1	C 6	E16	-	E25	E30	E30	E28	C25	-	C 9	C 4	H 4	
N3371	23-25	79-82	-	Mar. 2	Mar. 2	A 2													
N3372	11-13	75-83	Mar. 7	Mar. 2	Mar. 11	A 1	J 2	-	J 2	C 8	C15	D14	C15	-	A 1				
N3373	25-27	62-68	Mar. 8	Mar. 3	Mar. 13	J 2	-	J 2	C 5	C 7	C 8	C 5	-	D13	J 3	A 1			
N3374	11-18	37-42	Mar. 10	Mar. 5	Mar. 16	J 2	H 4	H 4	H 3	H11	-	H 7	H 7	H 5	J 3	J 3	J 3		
N3375	12-16	346-360	Mar. 13	Mar. 8	Mar. 20	H 9	H 9	-	H 9	G11	G20	G20	H13	C12	H 8	H 3	H 2	J 2	
N3376	18	23	Mar. 11	Mar. 11	Mar. 13							A 1	..	A 2					
N3377	18	344-347	Mar. 14	Mar. 13	Mar. 14					A 1	B 2								
N3378	29-31	268-270	Mar. 20	Mar. 14	Mar. 25	A 1	J 2	J 3	J 5	J 3	J 4	J 3	-	-	J 2	J 2	A 1		
N3379	15-20	261-271	Mar. 20	Mar. 15	Mar. 26	B 4	C 7	C 8	C 7	C17	C21	-	-	B 3	A 1	C10	A 1		
N3380	18-21	231	Mar. 23	Mar. 17	Mar. 25	A 1	J 2	J 2	J 2	-	-	J 2	C 4	B 3					
N3381	17	285	-	Mar. 23	Mar. 24										A 1	A 1			
N3382	13-15	178-186	Mar. 26	Mar. 23	Mar. 30		C 6	C 7	C 6	C 5	J 4	-	J 2	A 1					
N3383	35-38	172-178	Mar. 27	Mar. 23	Mar. 27	J 4	C 6	C10	C 6	J 2									
N3384	14-15	171-174	Mar. 27	Mar. 26	Mar. 30					A 3	B 6	-	A 1	A 1					
N3385	21	85-88	-	Mar. 29	Mar. 31	A 1	B 2	B 3											
N3386	29	65-67	Apr. 4	Mar. 31	Apr. 5	C 4	C 4	-	C 3	A 1	A 2								
S2686	15	186-188	-	Mar. 1	Mar. 2									A 2	A 2				
S2687	17-18	169-172	-	Mar. 1	Mar. 2									B 3	A 2				
S2688	27-28	153-154	Mar. 1	Mar. 1	Mar. 1					A 3									
S2689	16	196	-	Mar. 5	Mar. 5													A 1	
S2690	17-18	159-162	-	Mar. 5	Mar. 5									B 3					
S2691	23	92-96	Mar. 6	Mar. 5	Mar. 7					B 3	B 4	B 4							
S2692	26	146	-	Mar. 8	Mar. 8													A 1	
S2693	1-4	353-360	Mar. 13	Mar. 9	Mar. 18		C 5	-	D10	C11	C14	C 5	C 6	J 5	J 4	A 1			
S2694	27-36	308-325	Mar. 16	Mar. 11	Mar. 24	G13	G20	G26	G24	G17	G22	G22	G22	G11	G13	-	-	G 5	A 1
S2695	29-31	338-342	-	Mar. 13	Mar. 13					C 3									
S2696	31-32	333-334	-	Mar. 16	Mar. 18									A 1	A 2	A 3			
S2697	34	256	-	Mar. 19	Mar. 19					A 1									
S2698	39-42	271-280	-	Mar. 23	Mar. 26									D 8	D12	C11	C 6		
S2699	31	222-225	Mar. 23	Mar. 23	Mar. 24						D 4	A 1							
S2700	22	184	Mar. 26	Mar. 23	Mar. 27					J 2	J 2	J 2	J 3	A 2					

C.M.

S2701	27-32	188-197	Mar.26	Mar.25	Apr. 1					J 2	C 7	C 11	-	C 8	C 4	J 2	A 1
S2702	18	161	-	Mar.25	Mar.29			A 1	..	..	-	A 1					
S2703	25	149	Mar.29	Mar.25	Mar.31			A 1	..	..	-	A 2	A 2	A 1			
S2704	25-27	157-159	-	Mar.29	Mar.29							B 2					
S2705	17-18	75-81	Apr. 3	Mar.30	Apr. 5			A 1	A 1	D 7	-	C 7	J 3	A 2	-	..	.. A 1 (S2710 212月卷)
S2706	15-16	68-69	Apr. 4	Mar.30	Apr. 5			J 2	J 2	J 2	-	J 2	J 2	J 2			

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## (2) TABLE OF SUNSPOT GROUPS

APRIL 1978

Group NO.	Helio-graphic		C.M. Passage	First Obs.	Last Obs.	W-Side				C.M.	W-Side					
	Date	Longitude														
N3387	17-25	26-35	Apr. 7	Apr. 1	Apr. 11	C 4	-	D16	D18	D32	-	D32	D17	D29	D25	D17
N3388	24-25	145-149	-	Apr. 3	Apr. 4											B 2 A 1
N3389	11-13	126-130	-	Apr. 3	Apr. 4								J 2	B 5		
N3390	15	37	-	Apr. 3	Apr. 5			J 2	J 2	J 2						
N3391	15-17	352-356	Apr. 10	Apr. 4	Apr. 11	A 1	J 4	-	J 5	B 6	B 4	A 1	A 1			
N3392	20-22	71-77	-	Apr. 7	Apr. 10									C 4	C 7	C10 A 1
N3393	14	44	-	Apr. 7	Apr. 7							A 2				
N3394	14-15	353-356	Apr. 9	Apr. 7	Apr. 11					A 2	A 1	B 3	C 4	A 1		
N3395	15-17	338-340	Apr. 11	Apr. 7	Apr. 11	C 5	J 2	J 3	C 4	B 2						
N3396	34	44-46	-	Apr. 8	Apr. 10									A 2	A 1	A 1
N3397	13	22	-	Apr. 9	Apr. 9							A 1				
N3398	11-18	281-297	Apr. 14	Apr. 9	Apr. 21	C 4	E20	E22	-	-	G29	G32	G28	-	-	D17 G10 C 3
N3399	14-17	270-279	Apr. 15	Apr. 10	Apr. 22	A 2	C 6	-	-	C10	C 8	D 7	-	-	D 6 C 4 C 3 C 6	
N3400	17-20	298-305	Apr. 14	Apr. 14	Apr. 19						D 8	B 9	C 8	-	-	A 1
N3401	29	299-302	-	Apr. 15	Apr. 15							B 2				
N3402	29-32	210-216	Apr. 20	Apr. 16	Apr. 20	B 4	-	-	-	B 3	A 1					
N3403	18-22	180-193	Apr. 22	Apr. 19	Apr. 28			D 9	D17	D20	E33	E30	-	E37	E24	C11 C 5
N3404	13-16	178-188	Apr. 22	Apr. 19	Apr. 28	A 2	C 9	D15	B 7	B 9	-	-	C18	D20	D18 D 7	
N3405	17-19	259-263	-	Apr. 21	Apr. 23									C 8	D11	J 2
N3406	16-18	210-216	-	Apr. 22	Apr. 26							C10	D13	-	A 2 B 2	
N3407	11-22	163-169	Apr. 24	Apr. 23	Apr. 27					D10	-	C 9	A 2	A 1		
N3408	15	196	-	Apr. 25	Apr. 25											A 1
N3409	17-26	68-84	May 1	Apr. 25	May 5	D 6	C16	E29	E39	-	-	E72	F61	F54	F40 F36	
N3410	26-29	130-136	Apr. 26	Apr. 26	Apr. 28						J 5	C 5	C 8			
N3411	19-25	44-62	May 2	Apr. 27	May 8	C 4	D12	-	-	G20	G30	G30	C19	D12	-	D12
S2707	24-28	2-11	Apr. 9	Apr. 4	Apr. 14	J 2	C 4	-	D12	C12	C 8	C 9	D18	-	-	C10
S2708	27-32	324-335	Apr. 11	Apr. 5	Apr. 14	A 1	-	C 4	D 6	D12	D13	C11	-	-	J 3	
S2709	33-35	304-309	Apr. 14	Apr. 7	Apr. 15	A2	J 3	J 4	C 6	C 6	-	-	A 2	A 1		
S2710	18	76	-	Apr. 9	Apr. 9											
S2711	26	351	Apr. 10	Apr. 9	Apr. 10					A 1	A 1					A 1 (S2705)
S2712	27	359	-	Apr. 11	Apr. 11											
S2713	3-4	245-244	Apr. 18	Apr. 11	Apr. 25	J 2	-	-	J 2	J 2	J 2	-	-	J 2	J 2	J 2 J 2 J 2 - J 2





C.M.

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S2736	16	139-141	-	May 25	May 25
S2737	15-17	78-86	May 28	May 27	Jun. 3
S2738	22-23	111-117	-	May 31	Jun. 1
S2739	16-18	58-65	-	May 31	Jun. 3
S2740	18-19	47-51	-	May 31	Jun. 3
S2741	24	22	Jun. 1	May 31	Jun. 1

B 3 C 7  
 B 3 C 7 - - C 5 D 8 C 9 B 3  
 C 5 D 1 2 B 6 C 5  
 B 2 A 2 B 5 B 3  
 J 2 A 1  
 C 4 A 1

TABLE OF SUNSPOT GROUPS

JUNE 1978

Group NO.	Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side					C.M.	W-Side							
	Latitude	Longitude				.	.	.	.	.		.	.	.	.	.	.	.	
N3431	14	354-356	Jun. 3	Jun. 3	Jun. 3						B 2								
N3432	17	284-286	Jun. 8	Jun. 5	Jun. 9		J 2	J 2	J 2		A 1	B 2							
N3433	11	308	-	Jun. 8	Jun. 8							A 1							
N3434	15-16	212-216	-	Jun. 9	Jun. 12		J 2	C 5	-	A 3									
N3435	14-15	327-329	-	Jun. 10	Jun. 10										B 3				
N3436	17	263-267	-	Jun. 12	Jun. 12							B 2							
N3437	20	254	-	Jun. 12	Jun. 12						A 1								
N3438	15-18	238-247	Jun. 12	Jun. 12	Jun. 18						D18	D22	C24	C21	-	D12	C 5		
N3439	15-18	157-165	Jun. 18	Jun. 12	Jun. 21	B 3	B 2	A 1	B 4	-	B 4	C 8	-	C12	D14				
N3440	17	205-210	Jun. 14	Jun. 13	Jun. 14						A 1	B 2							
N3441	23-25	184-191	Jun. 16	Jun. 13	Jun. 20				B 2	B 7	B 4	-	B 7	B 7	-	B 2			
N3442	17-19	153-155	Jun. 18	Jun. 13	Jun. 20	J 2	J 2	J 6	-	J 4	J 6	-	B 2						
N3443	18	224	-	Jun. 15	Jun. 15								A 1						
N3444	18	214	-	Jun. 15	Jun. 15							A 1							
N3445	12	198	Jun. 15	Jun. 15	Jun. 15						A 1								
N3446	14-17	202-210	-	Jun. 17	Jun. 20									J 2	D15	-	C 5		
N3447	17-18	187-189	-	Jun. 17	Jun. 18							B 4	C 6						
N3448	10-12	133-139	Jun. 20	Jun. 18	Jun. 21					B 5	-	B 4	D11						
N3449	17-18	79-86	-	Jun. 18	Jun. 21	J 2	-	J 2	C 6										
N3450	31	88	-	Jun. 20	Jun. 21				J 2	A 1									
N3451	14-19	56-71	Jun. 25	Jun. 20	Jun. 30	H 6	E19	-	-	-	-	-	-	C37	C19	C12			
N3452	25-26	53-58	Jun. 26	Jun. 20	Jun. 30	J 2	C 5	-	-	-	-	-	-	C 7	B 3	B 2			
N3453	17-20	36-40	Jun. 27	Jun. 20	Jun. 30	A1G 4	-	-	-	-	-	-	-	C10	B 4	A 2			
N3454	17	95	-	Jun. 21	Jun. 21						A 1								
N3455	22-26	27-37	Jun. 28	Jun. 28	Jul. 3							C22	D18	E24	-	G11	C 4		
N3456	13-16	337-345	-	Jun. 28	Jun. 30				C 6	J 3	C 6								
N3457	18	332	-	Jun. 28	Jun. 30		A 1	A 1	A 1										
N3458	22	317	-	Jun. 29	Jun. 30		A 1	A 1											
N3459	26-28	322-329	Jul. 2	Jun. 30	Jul. 8						A 1	-	A 1	D 7	D12	D14	D 7	D 6	A 1
N3460	21-27	276-285	Jul. 6	Jun. 30	Jul. 11	J 2	-	C 5	C 6	C 7	J 4	C 4	C 5	C 5	J 4	J 3	J 2		

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C.M.

S2742	23-27	2-10	Jun. 2	Jun. 1	Jun. 9	B 4	A 1	C 8	-	D17	C12	C 4	D 6	A 1
S2743	21-22	339-342	Jun. 4	Jun. 3	Jun. 5	B 4	-	B 3						
S2744	20-21	31	-	Jun. 6	Jun. 6								A 2	
S2745	(25)	252	-	Jun. 6	Jun. 6	A 1								
S2746	(20)	337	-	Jun. 7	Jun. 7					A 1				
S2747	(22)	262	-	Jun. 7	Jun. 7									
S2748	(15)	338	-	Jun. 8	Jun. 8									
S2749	(13)	239-243	-	Jun. 8	Jun. 13	A 1	B 2	A 1	-				A 1	
S2750	32-33	195-201	-	Jun. 12	Jun. 14		B 5	B 4	B 3					
S2751	22-26	115-119	Jun. 21	Jun. 17	Jun. 21	H 9	H14	-	C15	B 7				
S2752	(26)	119	-	Jun. 20	Jun. 20					A 1				
S2753	(13)	95	-	Jun. 21	Jun. 21					J 2				
S2754	16-18	82-84	-	Jun. 21	Jun. 21					B 4				
S2755	18-23	39-53	Jun. 26	Jun. 21	Jul. 2	E10	-	-	-	-	-	E39	E28	C16 - G15
S2756	14-17	51-59	-	Jun. 28	Jun. 30							C10	D 9	B 7
S2757	15-16	315-320	-	Jun. 30	Jul. 10		B 5	-						D 7 D 6 A 1

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C.M.

S2768	67-40119-124	-	Jul.20	Jul.22
S2769	(23) 74-76	-	Jul.21	Jul.21
S2770	(15) 75	Jul.22	Jul.21	Jul.22
S2771	(23) 102	-	Jul.25	Jul.25
S2772	(24) 330	-	Jul.25	Jul.25
S2773	21-24262-272	Aug. 3	Jul.29	Aug. 9

B 4 B 4 B 3

B 2

A 1 A 1

A 1

A 1

A 1 C 4 C 6 C 7 D12 C 7 C11 C10 C11 C12 - J 2

TABLE OF SUNSPOT GROUPS  
AUGUST 1978

Group No.	Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side		C.M.	W-Side	
	Latitude	Longitude								
N3482	24-25	06-31	-	Aug. 2	Aug. 4					
N3483	15-18	60-168	-	Aug. 5	Aug. 9	A 1 C 4 B 2	- A 1		B 3	A 2
N3484	15-17	174-180	-	Aug. 7	Aug. 14		A 1 - ..	B 9	- B 7 C 7 J 2	
N3485	22	166	-	Aug. 10	Aug. 10		A 1			
N3486	15-17	156-158	Aug. 12	Aug. 10	Aug. 13		A 1 -	B 5	A 1	
N3487	21	160	-	Aug. 12	Aug. 12			A 1		
N3488	20-21	189-192	-	Aug. 13	Aug. 13					B 2
N3489	12	150	-	Aug. 13	Aug. 13					
N3490	12	131-134	Aug. 13	Aug. 13	Aug. 14				A 1	
N3491	24-26	123-124	Aug. 14	Aug. 14	Aug. 16			B 4	B 4	
N3492	42-44	68-79	Aug. 18	Aug. 14	Aug. 19			B 3 J 3	A 1	
N3493	36-37	49-54	-	Aug. 14	Aug. 16	A 1 B 3	A 1			
N3494	29-22	115-123	-	Aug. 18	Aug. 19					
N3495	19-20	20-23	-	Aug. 23	Aug. 26					G 13 C 6
N3496	8-10	289-291	-	Aug. 24	Aug. 30	A 1 A 1	.. B 6 B 5	.. B 2	C 5 B 4	A 1 A 1
N3497	24-26	6-9	-	Aug. 25	Aug. 25					B 4
N3498	17-21	242-252	Sep. 1	Aug. 27	Sep. 7	D 6 C 9 D 17 D 16	C 7 D 22 E 23	- - -	- - -	C 3 A 1
N3499	9-12	338-342	-	Aug. 28	Aug. 31					B 3 B 3 B 3
N3500	13-17	198-217	Sep. 4	Aug. 29	Sep. 10	A 3 D 9 D 22 E 24 F 31	- - -	- - -	F 23 E 20 E 16	G 7 J 4
N3501	29	237	-	Aug. 30	Aug. 30		A 1			
N3502	18	312	-	Aug. 31	Aug. 31					
N3503	21	302	-	Aug. 31	Sep. 2					A 1
N3504	15-15	272-275	-	Aug. 31	Sep. 2				A 1 ..	A 1
N3507	30-31	241-246	-	Aug. 31	Aug. 31				A 1 B 2	A 1
S2774	27	355	-	Aug. 2	Aug. 2					
S2775	17-19	204-207	-	Aug. 5	Aug. 5					A 1
S2776	20-22	188-191	-	Aug. 5	Aug. 5					B 3
S2777	22-30	166-179	Aug. 10	Aug. 5	Aug. 16	J 4 C 7 E 20	- E 42 E 40	- D 25 D 15 D 17 D 17	B 5	
S2778	20	135	-	Aug. 10	Aug. 10		A 1			
S2779	20-21	202-207	-	Aug. 13	Aug. 14					

21.0

22.7



TABLE OF SUNSPOT GROUPS

SEPTEMBER 1978

Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side						C.M.	W-Side							
Group NO.	Latitude				Longitude	1	2	3	4	5		6	7	8	9	10	11	12	
N3506	35-36	222-226	Sep. 3	Sep. 2	Sep. 8							C 4	-	-	-	B 5	B 3	B 3	
N3507	29-32	94-106	Sep. 12	Sep. 6	Sep. 18	D 8	E 16	E 17	F 19	E 11	-	-	E 19	-	G 5	J 2	J 2	A 1	
N3508	15-18	61-71	Sep. 14	Sep. 8	Sep. 20	J 2	J 2	C 4	-	-	C 6	-	H 3	J 2	J 2	J 2	J 2	J 2	
N3509	19-20	185-188	-	Sep. 9	Sep. 9												B 2		
N3510	20-21	123-125	Sep. 10	Sep. 9	Sep. 10							B 2	A 1						
N3511	17	114	-	Sep. 13	Sep. 13														A 1
N3512	33-37	18-31	Sep. 18	Sep. 13	Sep. 22		G 11	-	E 9	E 10	C 9	C 6	C 4	C 3	-	J 2			
N3513	26-28	12-23	Sep. 18	Sep. 13	Sep. 25		J 4	-	C 6	C 10	C 12	C 6	C 6	H 4	-	J 2	-	-	J 2
N3514	31-38	358-14	Sep. 19	Sep. 13	Sep. 25	A 1	-	E 22	E 31	E 39	F 33	F 39	F 51	-	F 56	-	-	F 15	
N3515	29-30	5-8	Sep. 19	Sep. 13	Sep. 19	J 2	-	J 2	J 2	J 2	C 4	J 4							
N3516	16-20	33-39	Sep. 17	Sep. 15	Sep. 18							B 5	B 3	B 8	B 3				
N3517	15	49	Sep. 16	Sep. 16	Sep. 16								A 1						
N3518	13-16	332-338	Sep. 22	Sep. 18	Sep. 26			B 2	A 2	B 8		D 15	-	-	C 10	D 6			
N3519	24-26	307-309	Sep. 24	Sep. 18	Sep. 27	J 2	J 5	J 8	-	J 7	-	-	J 3	J 3	J 2				
N3520	20-21	309-311	-	Sep. 20	Sep. 22			J 4	-	A 3									
N3521	27-29	276-284	Sep. 26	Sep. 22	Oct. 2			J 2	-	-	C 12	C 7	D 11	-	C 5	J 3	J 2	J 2	
N3522	25	273	-	Sep. 22	Sep. 25			A 1	-	-	A 1								
N3523	35	217-223	Sep. 30	Sep. 25	Sep. 30			J 2	C 3	J 2	-	J 2	J 2						
N3524	15-18	215-218	Oct. 1	Sep. 25	Oct. 6	J 2	J 3	J 4	-	J 5	J 5	J 3	C 5	J 3	J 5	-	J 2		
N3525	19-20	290-293	-	Sep. 26	Sep. 29								B 2	A 1	-	B 2			
N3526	36-39	199-210	Oct. 2	Sep. 29	Oct. 3								D 10	D 14	B 8	B 6	A 2		
S2789	34-38	175-182	-	Sep. 2	Sep. 2			D 6											
S2790	20	176	Sep. 6	Sep. 2	Sep. 6			J 2	-	-	-	A 1							
S2791	20-23	190-200	-	Sep. 6	Sep. 10										D 19	D 26	D 21	D 12	C 5
S2792	14	155	-	Sep. 6	Sep. 6														
S2793	17-18	133-137	-	Sep. 6	Sep. 8							A 1							
S2794	22-25	78-82	-	Sep. 15	Sep. 16			B 4	B 4	A 1									
S2795	25-28	4-15	Sep. 19	Sep. 15	Sep. 20								A 4	A 1					
S2796	15-17	49-53	Sep. 16	Sep. 16	Sep. 20			B 10	C 15	D 18	D 17	C 11	B 11						
												B 2	..	C 6	D 15	B 6			

25.0

18.7

S2797	20-23335-340	Sep.21	Sep.16	Sep.26
S2798	18 35	Sep.17	Sep.17	Scp.17
S2799	21-23320-322	-	Sep.19	Scp.19
S2800	11-15303-311	Sep.24	Sep.20	Sep.29
S2801	15-16350-355	-	Sep.25	Scp.25
S2802	17-18303-308	-	Sep.25	Sep.27
S2803	11-12249-254	Sep.27	Sep.25	Sep.30
S2804	17-18243-248	-	Sep.25	Sep.27
S2805	10-12238-242	Sep.29	Sep.25	Sep.29
S2806	15-17226-232	Sep.30	Sep.26	Oct. 3
S2807	20-22197-201	-	Sep.27	Oct. 4
S2808	9-15150-159	Oct. 5	Sep.30	Oct.11

C.M.

J 2	J 2	J 2	J 3	J 3	-	C16	-	-	D13	J 7
						A 1				
	A 2									
	C 8	-	C16	-	-	C 9	J 6	J 3	-	A 1
										C 4
						D 8	D 7	J 2		
			B 3	C 3	J 2	-	J 2	A 1		
			B 2	A 1	A 1					
	B 5	B 7	J 2	-	A 1					
	B 3	..	-	..	C 8	D10	C 5	J 3		
J 4	-	C 7	J 6	B 8	..	B 4	A 3			
J 6	C 6	C11	C12	C20	-	C13	D15	D19	H21	H15 H 8

TABLE OF SUNSPOT GROUPS

OCTOBER 1978

Group NO.	Heliographic Longitude	C.M. First Passage	First Obs.	Last Obs.	E-Side	C.M.	W-Side
N3527	14-10143-152	-	Oct. 1	Oct. 3	A 2 B 5 A 2		
N3528	42 191	-	Oct. 4	Oct. 4		A 1	
N3529	50-31156-160	-	Oct. 4	Oct. 4		B 2	
N3530	26 143	-	Oct. 4	Oct. 4		A 1	
N3531	15 199-202	-	Oct. 6	Oct. 6			B 2
N3532	13-18133-139	Oct. 7	Oct. 6	Oct. 9		B 3 C 3	J 2 B 2
N3533	15-18 66-71	Oct. 12	Oct. 6	Oct. 18	J 2 J 2 J 2 J 2 J 4 J 2	J 2	- D15 - C 6 C 3 A 1
N3534	20-24 99-104	Oct. 9	Oct. 7	Oct. 14		B 3 D 5 D10	D10 D10 C 6 - J 2
N3535	15 142	-	Oct. 9	Oct. 9			A 1
N3536	28-29152-156	-	Oct. 10	Oct. 11			C 5 B 4
N3537	27-29 8-10	Oct. 16	Oct. 10	Oct. 23	J 2 J 2 J 2 - J 2 -	J 3	J 3 J 3 J 3 J 2 J 2 J 2 J 2
N3538	18-23 33-42	Oct. 14	Oct. 11	Oct. 20		A 5 C 9 - C15	- C14 D 6 C16 C15 C 4
N3539	13 56	-	Oct. 12	Oct. 12		A 1	
N3540	31 352	-	Oct. 14	Oct. 14		A 1	
N3541	16-20321-329	Oct. 19	Oct. 14	Oct. 22	J 4 - C 7 C 6 C 6	C11	C10 C 6 J 2
N3542	28-31314-319	Oct. 20	Oct. 14	Oct. 26	J 3 - C13 H16 H14 C 9	C 6	J 3 J 2 J 2 - J 2 J 2
N3543	36 81	-	Oct. 16	Oct. 16			A.1
N3544	43 7	Oct. 16	Oct. 16	Oct. 18		J 3	J 2 A 1
N3545	22-28258-269	Oct. 24	Oct. 18	Oct. 30	J 2 E15 E22 E21 E20 C28	-	C 9 C12 - - - J 3
N3546	30-31271-270	Oct. 24	Oct. 18	Oct. 26	J 2 J 2 J 2 J 2 J 2 J 2	-	J 2 J 2
N3547	33 283	-	Oct. 19	Oct. 19		A 1	
N3548	13-15292-298	Oct. 22	Oct. 20	Oct. 23		C 5 D 7 D11	B 5
N3549	12-14242-247	-	Oct. 21	Oct. 23	A 1 B 2 A 1		
N3550	14-15336-339	-	Oct. 23	Oct. 23			B 2
N3551	18 243	-	Oct. 23	Oct. 23		A 1	
N3552	17-19204-214	Oct. 28	Oct. 23	Nov. 3	J 2 - C 6 C 5 -	-	- C 6 C 6 C 3 J 2 A 1
N3553	18-20233-236	-	Oct. 25	Oct. 26		C 3 A 2	
N3554	21-23209-219	-	Oct. 30	Nov. 3			B15 C 9 B 2 B 2 A 1
N3555	29 153	-	Oct. 30	Oct. 31		A 1 A 1	
N3556	36 190	-	Oct. 31	Nov. 1			A 2 A 1
N3557	5 125	-	Oct. 31	Nov. 1		A 1 A 1	



TABLE OF SUNSPOT GROUPS  
NOVEMBER 1978

Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side	C.M.	W-Side
Group No.	Lat-Longitude						
N3558	(15) 184-185	-	Nov. 1	Nov. 1			A 2
N3559	(12-14) 158-163	Nov. 1	Nov. 1	Nov. 4		B 3	C 7 C 9 C 8
N3560	(26) 141	Nov. 3	Nov. 3	Nov. 3		A 1	
N3561	(23) 108	-	Nov. 3	Nov. 3		A 1	
N3562	(30-33) 168-173	-	Nov. 4	Nov. 5			B 3 B 3
N3563	(15-21) 37-51	Nov. 10	Nov. 4	Nov. 16	H 3 G 4 G 6 - E14 E23	E27	- - - E22 E15 E 8
N3564	(28) 139	-	Nov. 5	Nov. 5			A 1
N3565	(29) 355	-	Nov. 8	Nov. 10	J 2 J 2 J 2		
N3566	(24) 83	-	Nov. 10	Nov. 10			A 1
N3567	(20-22) 34-36	-	Nov. 10	Nov. 10		B 5	
N3568	(23) 4	-	Nov. 14	Nov. 14			A 1
N3569	(22-24) 338-351	Nov. 14	Nov. 14	Nov. 20		D10	D 9 D10 C 9 C 9 E12 B 4
N3570	(38) 325	-	Nov. 14	Nov. 14		A 2	
N3571	(15) 276	-	Nov. 14	Nov. 17	A 1 A 1 A 1 A 1		
N3572	(10-12) 28-33	Nov. 16	Nov. 16	Nov. 17		B 3	B 4
N3573	(16) 299	Nov. 18	Nov. 18	Nov. 18		A 1	
N3574	(17-41) 15-32	-	Nov. 19	Nov. 23			A 1 C 8 C 5 C 6 A 1
N3575	(14) 218	-	Nov. 19	Nov. 20	A 1 J 2		
N3576	(23) 243-246	Nov. 22	Nov. 22	Nov. 23		C 3	A 1
N3577	(13-15) 167-172	Nov. 28	Nov. 22	Dec. 4	A 2 J 2 J 3 J 2 - -	C 5	J 3 J 3 J 3 - C 4 J 2
N3578	(6-9) 143-148	Nov. 30	Nov. 25	Dec. 1	B 4 - - D 9 B 7	C 5	B 3
N3579	(12-15) 118-128	Dec. 1	Nov. 25	Dec. 7	J 2 - - D 9 D 8 C 7	C 3	- J 2 C 4 J 2 J 2 J 2
N3580	(10-14) 206-218	-	Nov. 28	Dec. 1			D21 E18 E 9 C 6
N3581	(11-15) 114-117	Dec. 2	Nov. 28	Dec. 8	J 2 J 2 J 2 C 3 -	J 3	J 3 J 3 J 3 J 2 J 2 J 2
N3582	(21-22) 106-108	Dec. 3	Nov. 28	Dec. 9	J 2 J 2 J 2 C 3 -	J 3	J 2 J 3 J 2 J 2 J 2 J 2
N3583	(25-26) 106-108	-	Nov. 28	Nov. 29	A 2 A 2		

20.0

S2839	20-27	106-121	Nov. 5	Nov. 1	Nov. 10	A 2 C10 C25 C22 C16	B16	--	B 3	A 1 A 1
S2840	20	113	--	Nov. 1	Nov. 1	A 1				
S2841	21	196	--	Nov. 2	Nov. 2				A 1	
S2842	12	163-167	--	Nov. 3	Nov. 4				B 2 B 3	
S2843	9-15	69-85	Nov. 7	Nov. 3	Nov. 10	B 7 D19 E24 E32	-	E46 E48 E48		
S2844	21-22	92-97	Nov. 6	Nov. 6	Nov. 8		B 6	-	C 5	
S2845	19-20	5-9	Nov. 13	Nov. 8	Nov. 19	J 2 J 2 J 3 - -	-	J 2 C 4 C 4 J 3 J 5 J 3		
S2846	18-19	42-46	Nov. 10	Nov. 9	Nov. 10		C 4 A 1			
S2847	17-18	327-333	--	Nov. 14	Nov. 20		B 2	..	A 2 B 3 B 4 A 1	
S2848	16-17	341-345	--	Nov. 16	Nov. 19				A 1 B 3 A 2 A 1	
S2849	21-23	260-265	--	Nov. 16	Nov. 20	A 1 C 5 C 5 C 3 C 3				
S2850	15-17	244-249	Nov. 22	Nov. 16	Nov. 25	J 3 J 3 J 3 J 3 J 6 H 7	C14	C 9 C10 D 6		
S2851	16-20	234-237	Nov. 23	Nov. 17	Nov. 29	J 2 C 3 C 3 J 2 J 2 J 2	C 3	C 3 J 2 - - C 3 J 2		
S2852	1-10	247-251	--	Nov. 18	Nov. 24	A 1 .. ..	..	..	B 3	
S2853	15-16	198-199	--	Nov. 21	Nov. 23	A 1 A 1 A 2				
S2854	24	262	--	Nov. 22	Nov. 22			A 1		
S2855	29-30	255-258	--	Nov. 22	Nov. 22			B 3		
S2856	10	208	--	Nov. 22	Nov. 22	A 1				
S2857	13	204	Nov. 25	Nov. 25	Nov. 25		A 1			
S2858	13	196	--	Nov. 28	Nov. 28			A 1		
S2859	25	167	Nov. 28	Nov. 28	Nov. 28		A 1			
S2860	13-15	162-166	Nov. 28	Nov. 28	Nov. 30		D 8	D 5 B 3		
S2861	14-19	82-95	Dec. 4	Nov. 28	Dec. 9	J 3 C 6 C12 E30 - D18	C23	C25 C30 D19 C11 J 4		
S2862	26	116	--	Nov. 30	Nov. 30			A 1		
S2863	18-23	74-83	Dec. 5	Nov. 30	Dec. 10	C 3 C 5 - D16 D22	C25	C 8 C 5 C 5 J 2 J 3		

19.0

TABLE OF SUNSPOT GROUPS

DECEMBER 1978

Group NO.	Heliographic		C.M. Passage	First Obs.	Last Obs.	E-Side										C.M.	W-Side						
	Latitude	Longitude				J	K	L	M	N	O	P	Q	R	S		T	U	V	W	X	Y	Z
N3584	14-15	48-49	Dec. 7	Dec. 1	Dec. 13	J 2	-	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	J 2	-	J 2	J 2
N3585	24	46-47	Dec. 7	Dec. 5	Dec. 8					A 1	A 1	A 1	A 2										
N3586	18	50	Dec. 7	Dec. 6	Dec. 7						A 1	A 1											
N3587	15-24	331-337	Dec. 12	Dec. 7	Dec. 18	A 1	D 17	D 23	E 33	-	F 60	F 52	F 55	F 27	F 22	F 10	G 7						
N3588	23-24	09-31	Dec. 14	Dec. 9	Dec. 14	A 1	A 2	-	B 3	B 2	A 1												
N3589	26	308	-	Dec. 13	Dec. 13					A 1													
N3590	18-23	225-233	Dec. 20	Dec. 15	Dec. 24	J 2	J 2	C 3	J 2	-	C 3	C 4	J 2	-	A 1								
N3591	8-12	209-218	Dec. 22	Dec. 16	Dec. 27	H 3	D 7	D 5	-	D 6	D 9	C 7	-	C 3	C 4	H 3	J 2						
N3592	16-18	301-308	-	Dec. 17	Dec. 20										B 2	D 8	-	C 3					
N3593	16-21	284-295	-	Dec. 17	Dec. 22										C 18	D 23	-	E 17	E 9	E 9			
N3594	15	195	-	Dec. 20	Dec. 20					A 1													
N3595	10-12	162-169	Dec. 25	Dec. 20	Dec. 27	A 1	C 4	C 4	-	C 7	D 8	C 12	C 9										
N3596	24-25	235-238	-	Dec. 22	Dec. 24										A 1	-	B 2						
N3597	16-17	247-250	-	Dec. 24	Dec. 24																	B 2	
N3598	18-19	171-177	Dec. 25	Dec. 24	Dec. 27						B 3	B 10	B 7	D 8									
N3599	25	120	-	Dec. 24	Dec. 24	A 1																	
N3600	9-12	118-128	Dec. 28	Dec. 25	Jan. 3					C 8	C 7	C 9	-	-	C 32	D 27	D 20	D 14	C 4				
N3601	16	44	-	Dec. 30	Jan. 2		J 2	J 2	J 2	A 1													
N3602	10-13	26-33	Jan. 5	Dec. 30	Jan. 11	A 1	C 8	C 8	D 7	D 8	C 5	C 9	C 3	-	C 5	J 3	J 2	J 2					
N3603	31	118	-	Dec. 31	Dec. 31										A 1								
S2864	12	90	-	Dec. 1	Dec. 1					A 1													
S2865	25-26	152-153	-	Dec. 3	Dec. 3																	J 3	
S2866	28-32	98-108	Dec. 3	Dec. 3	Dec. 9							C 6	D 17	D 24	D 25	D 21	D 22	D 5					
S2867	20-23	25-37	Dec. 8	Dec. 3	Dec. 14	B 4	D 7	D 14	D 9	C 8	C 23	C 22	C 15	-	C 9	C 4	C 3						
S2869	17-20	50-55	Dec. 7	Dec. 5	Dec. 10					A 2	D 6	C 8	D 14	C 9	B 3								
S2870	23	98	-	Dec. 6	Dec. 6										A 1								
S2871	15-20	31-41	-	Dec. 7	Dec. 14						B 4	C 8	D 14	-	H 34	H 18	H 16						
S2872	13-19	20-34	Dec. 13	Dec. 7	Dec. 18	D 8	D 20	D 24	D 23	-	F 47	C 43	C 41	F 34	F 40	F 36	C 21						
S2873	11-13	21-33	Dec. 13	Dec. 8	Dec. 17		A 3	J 3	J 3	-	C 11	B 14	C 8	B 5	D 8	B 4							

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