



Group No.	Heliographic		S. Hemisphere																																																											
	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																													
S1978	⇒		E23 G8																																																											(*)
S1979	2°-10'	0°-12'																																			Dec. 28																									
S1980	10°-12'	333-336'																																			肉眼観																									
S1981	18°-20'	13°-16'																																																												
S1982	11°	278°-283																																																												
S1983	14°-15'	302-307																																																												
S1984	23°-25'	17°-22'																																																												
S1985	11°-15'	184-196																																																												
S1986	10°	237																																			肉眼観																									
S1987	9°-14'	97-106																																																												
S1988	6°-8'	114																																			⇒																									

12.9

- - central Meridian-passage
- \* - prearrange-day of Meridian-passage
- ⇒ - Continued group Last Month

Observer

K. Fujimori

TABLE OF SUNSPOT GROUPS  
FEBRUARY 1971

Group No.	Heliographic		N. Hemisphere																												Remarks.	
	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		
N2737	⇒		F44	F49	F52	F45	E49	E34	E23	C5																						肉斑群 (.) Jan 31
N2739	⇒		D10	D9	D8																											
N2740	23-25	45-52			*		B3	B10	D9	D11	J3																					
N2741	18°	297							J2	J2	J2	J2	J2	J2	J2	A1	A1															
N2742	7-8	346-347						B3	*																							
N2743	13-15	329-333									C5	D7	C10	C4	B5	B7	H18															
N2744	13-15	221-224									J2	J2	J2	-	J3	-	C5	J3	J2	J3												
N2745	18-20	213-215									J2	J2	J2	-	J2	-	J2	J2	J2	J2	J2	J2	-	J2								
N2746	13-16	264-271									A3	D11	-	C21	-	C7	J2	A1														
N2747	20-21	228-234														*		B4	B8	C4												
N2748	8°	186																					*		A1							
N2749	5-6	148-145																														
N2750	5-8	70-75																													(.) Mar. 1 ⇒	
N2751	22-25	45-51																													(.) Mar. 3 ⇒	
N2752	6-10	30-36																													(.) Mar. 4 ⇒	
N2753	3°	112-116																													* A2 ⇒	

Helio-graphic		S. Hemisphere																												Remarks.			
Group No.	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		
S1987	⇒		C11	C10	C7	J2	J2																								( Jan. 30		
S1987	22°	30°	C4	A2	A2	*																											
S1990	5°-8°	10°-14°	J2	C3	J2	C5	H7	H5	H6	H2	J2	J2	J3	J3																			
S1991	10°-11°	17°-18°		A2			*																										
S1992	36°	338°							A1	*																							
S1993	21°	350°								*		A1	A1																				
S1994	22°	8°						*					A1																				
S1995	9°	305°											A1																				
S1996	14°	348-352							*					A1	B2																		
S1997	12°-13°	201-202												J2	J2	-	J2	-	J2	J2	J2	J2	J2	J2	J2	J2	J2	J2	J2	J2			
S1998	10°	229°												A1	*																		
S1999	12°-14°	183-190																															
S2000	15°-20°	135-149																															
S2001	6°-9°	123-130																															⇒
S2002	9°-16°	107-108																															⇒

13.7

- - Central Meridian-passage
- \* - prearrange-day of Meridian-passage
- ⇒ - Continued group Last Month

Observer

K. Fujimori



Heliographic			s. Hemisphere																																
Group No.	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		
S 2000	⇒																																		(.) Feb. 24
S 2001	⇒																																		(.) Feb. 25
S 2002	⇒																																		(.) Feb. 26
S 2003	14-15	54-62		*		D7	c5	J2	J2																										
S 2004	2-3	17-20				B4	c4	J2	A1																										
S 2005	11-12	340-343				A1	B2	A3	..	A1	A2																								
S 2006	7-9	293-301								A2	B4	-	B11	-	B12	B3	A1																		
S 2007	14-17	261-267								D7	D8	-	D6	-	D15	D15	D8	c5	c4	J2	J3	J2													
S 2008	3-5	213-216											J2	-	J3	J4	J3	c5	J4	c7	J5	c5	c4	J3											
S 2009	10	282											*		A1																				
S 2010	6	230																																	
S 2011	21-22	197-199																																	
S 2012	11	243-245																																	
S 2013	2-6	235-218																																	
S 2014	5-6	207-208																																	
S 2015	8-9	127-128																																	
S 2016	13-17	150-155																																	
S 2017	13-14	57-67																																	
S 2018	17-21	28-34																																	

10.8

- - Central Meridian-passage
- \* - prearrange-day of Meridian-passage
- ⇒ - Continued group Last Month

Observer

K. Fujimori

TABLE OF SUNSPOT GROUPS  
APRIL 1971

Group No.	Heliographic		N. Hemisphere																														Remarks					
	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						
N2759	→		A1																														(*) Mar. 31					
N2761	10°-13'	2°-8'	c10	c13	c7	J2	J3	A1	A1																													
N2762	13'	303'	A1 A1 A1 *																																			
N2763	13°-18'	236°-272'	J4 J3 J3 J6 J5 - c6 c8 c6 J5 J4 J2																																			
N2764	10°-13'	330°-338'	B2 A1 c14 c19 - D8																																			
N2765	1°-5'	176°-184'	J2 c6 D11 D10 D8 D8 D15 - c5 J2 c3 J2																																			
N2766	8°-10'	150°-162'	J2 J3 G5 G12 G11 - G11 G7 c6 c13 - J3 J2																																			
N2767	19°-20'	154°-160'	J2 J2 J2 J3 J2 - c6 c4 A2 A1																																			
N2768	17°-21'	142°-153'	A2 J7 c10 - D20 D38 E43 c43 - c8 A1																																			
N2769	19°-20'	208°-210'	* B3 A2																																			
N2770	10°-12'	124°-127'	A3 c6 B7																																			
N2771	16°-19'	158°-163'	* B7 - c10																																			
N2772	5'	152°-157'	* B2 c4																																			
N2773	3'	95'	* A1																																			
N2774	6°-8'	35°-34'	B2 D19 D20 - - D13 ⇒																																			

12.4





TABLE OF SUNSPOT GROUPS  
MAY 1971

Group No.	Heliographic		N. Hemisphere																																		
	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				
N2774	→		D8	B3																																(*) Apr 2	
N2775	18-19°	332°	J3	A2	A1																																
N2776	10-12°	250-255°	J2	C4	-	C4	-	J2	C3	J2	J2	J3	J3	J3	A2																						
N2777	10-15°	264-276°	C13	-	D46	-	E44	E54	E45	E74	E28	E21	J3																								(*) Apr 6
N2778	15°	249°	A1	*																																	
N2779	4-5°	186-193°	B2	C4	D7	D4	D5	D7	C5	C3	A1																										
N2780	1-4°	156-161°	A1	C5	B7	B11	B8	B9	C9	B6	B4																										
N2781	2-7°	129-135°	B4	H11	H21	H28	H24	H25	C16	C13	-	C5	J4	J3																							
N2782	18-19°	189-195°	C6	C8	C4	C3	A1																														
N2783	6°	216-221°	*	D8	C4	A1																															
N2784	11-13°	142-145°	C8	D8	C6	J3																															
N2785	16-17°	59-60°	J2	J2	-	J5	J3	J2	*																												
N2786	12-15°	29-39°	C5	C6	C6	-	-	A2																													
N2787	6°	32°	A1	*																																	
N2788	9-13°	343-329°																																			
N2789	10-13°	293-278°																																		(*) June 2	
N2790	9-11°	325-330°																																		(*) June 3	
N2791	8°	268°																																			



TABLE OF SUNSPOT GROUPS

JUNE 1971

Group No.	Heliographic		N. Hemisphere																														Remarks		
	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			
N2788	⇒		G12	G11																															(*) May. 28
N2789	⇒		B6	B4																															
N2790	⇒		C4	B5																															(*) May. 29
N2791	⇒		A1	A1	.	.	.	.	A1																										
N2792	7'	22.6'	A1					*																											
N2793	15'-16'	220'-224'						*	B4	C6	A3																								
N2794	13'	124'-127'												*																					
N2795	8'-11'	340'-347'																																	
N2796	12'-18'	88'-300'																																	
N2797	13'-15'	301'-305'																																	
N2798	15'-16'	227'-229'																																	
N2799	7'-8'	245'-252'																																	

12.4

Helio graphic		S. Hemisphere																														Remarks			
Group No.	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		
S2044	11° - 1'	219° - 222'	J3	J6	-	-	-	c8	J5	c5	J2	J2																							
S2045	5° - 5'	198° - 201'	J2	-	-	-	J3	c4	J2	J2	J3																								
S2046	2° - 3'	210° - 212'					A1	A3	A2																										
S2047	13'	221'									* A1																								
S2048	12° - 14'	122° - 127'																																	
S2049	9'	39'																																	
S2050	11'	80'																																	
S2051	5° - 7'	95° - 97'																																	
S2052	3° - 5'	16° - 19'																																	
S2053	10° - 12'	82° - 87'																																	
S2054	17° - 19'	350° - 355'																																	
S2055	19° - 23'	344° - 351'																																	
S2056	15° - 19'	325° - 330'																																	
S2057	5° - 9'	237° - 243'																																	
S2058	11° - 15'	221° - 235'																																	
S2059	9° - 11'	220° - 227'																																	
S2060	10'	280'																																	

10.2

- - Central Meridian-passage
- \* - prearrange-day of Meridian-passage
- ⇒ - Continued group Last Month

Observer

K. Fujimori



Heliographic		S. Hemisphere																																				
Group No.	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					
S2057	⇒		-	.	D10	C15	H7	C3	-	J2																												
S2058	⇒		-	-	E46	E53	E48	E37	-	H13	H7																											
S2059	⇒		-	-	G12	G7	C9	J5																														
S2061	8°-9°	209°-210°			A3		*																															
S2062	12°-13°	181°-186°				B3	D6	B3	*																													
S2063	10°	203°						*	A2																													
S2064	3°-10°	121°-133°								C13	-	E25	C25	C36	C27	C36	D19	C16	J4	H5	A1																	
S2065	10°-13°	94°-95°								J3	J3	J4	C7	J6	J5	A5																						
S2066	3°-5°	2°-6°																																				
S2067	8°	29°-35°																																				
S2068	15°-16°	13°-17°																																				
S2069	5°-6°	95°-98°																																				
S2070	12°	339°																																				
S2071	15°-18°	354°-358°																																				
S2072	13°	340°-341°																						*														
S2073	16°	257°																							*													
S2074	6°-7°	242°-243°																																				
S2075	11°-14°	271°-275°																																				
S2076	10°-15°	228°-231°																																				
S2077	17°	234°																																				
S2078	14°	257°																																				
S2079	25°-28°	155°-159°																																				
						</																																

TABLE OF SUNSPOT GROUPS  
AUGUST 1971

Group No.	Heliographic		N. Hemisphere																																
	Lat. - Long.	Lat. - Long.	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		
N2812	→																																		
N2814	→																																		
N2815	→																																		
N2816	10-12	146-150					*																												
N2817	12-14	118-127																																	
N2818	21	40-43																																	
N2819	12-14	354-355																																	
N2820	14	37-41																																	
N2821	13-14	316-318																																	
N2822	14-17	343-345																																	
N2823	15-17	294																																	
N2824	9	356																																	
N2825	11-14	285-286																																	

13.8

Group No.	Heliographic		S. Hemisphere																																	
	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		
S2074	⇒		J3	J3																																(c) July 29
S2075	⇒		A1																																(c) July 27	
S2076	⇒		C9	C6	-	J4	J5																												(c) July 30	
S2077	⇒		A2																																(c) July 30	
S2079	⇒		B6	D8	-	A3	A1																													
S2080	5°	134-137	B2	-	A2	A2	*																													
S2081	6-12°	88-101	J3	C3	-	-	E30	E4	E3	E22	-	G15	G8	C4																						
S2082	10°	77-80	B4	..	B4	*																														
S2083	13-15°	12-19°													B4	..	B7	B4	B3																	
S2084	3°	5°													A1																					
S2085	7-15°	257-277																																	(c) July 26	
S2086	3-6°	231-235																																		
S2087	12°	225																																	⇒	
																																				A1 *

9.1

- Cental Meridian - passage
- \* - prearrange-day of Meridian-passage
- ⇒ - Continued group Last Month

from

observer

K. Fujimori



TABLE OF SUNSPOT GROUPS

SEPTEMBER 1971

Heliographic		N. Hemisphere																														Remarks			
Group No.	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		
N2826	17-18	94-100				A2	.	-	-	c5	-	-	-	A2																					
N2827	0-5	125-132			*					D22																									
N2828	20	84						*		A1																									
N2829	3-4	49-51								B3	*																								
N2830	12	319												J2	J2	-	-	J3	-	-	A1														
N2831	14	291												A1						*															
N2832	5-6	275-281												J2	-	-	J3	-	-	c4	-	-	-	-	-	-	J3	A2							
N2833	12-14	292-298																		*	J2	-	-	-	-	-	-	-	-	-	-	-	-	-	
N2834	16	187-189																																	
N2835	8-16	75-83																																	

10.6

Oct 4  
D10 D18

S. Hemisphere

S2086	⇒									J2																									
S2088	9	102				A1	A1			*																									
S2089	5-8	115-128				A3	-	D23	-	-	-	-	E25																						
S2090	13-15	358-3												B3	c/2	-	-	c10																	
S2091	10-14	268-283																																	
S2092	2	244																																	
S2093	4-6	230-235																			A1		*												
S2094	11-15	189-194																																	
S2095	3-7	127-134																																	
S2096	4-7	115-123																																	
S2097	11	134																																	

8.5

A1

Observer. K. Fujimori

TABLE OF SUNSPOT GROUPS  
Oct. 1971

Heliographic			N. Hemisphere																																	
Group No.	Lat- itude	Longi- tude	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			
N2835	⇒		-	-	c21	.	-	-	-	J5	J3	J3																								
N2836	20°	19°-23°								B3	*																									肉眼的
N2837	11°	320°								J2	J2	J2			*																					
N2838	8-12	20°-25°								*	c9	c5																								
N2839	12°	298°																																		
N2840	5-11	204-216																																		
N2841	8°	273-276																																		肉眼的
N2842	5°	273°																																		
N2843	9°	191°																																		
N2844	18-20°	185-194																																		
N2845	10-12°	128-135																																		
N2846	19°	107°																																		
N2847	9-12	79-82																																		

11.8

S. Hemisphere

S2095	⇒		-	-	H2																																(*) 肉眼的 Sept. 30
S2096	⇒		-	-	B5																																
S2097	9°	72-76°								*																											
S2098	10-12°	326-333																																			
S2099	10°	277°																																			
S2100	13°	220-222																																			
S2101	12°	204-207																																			
S2102	4-7°	126-135																																			
S2103	7°	64°																																			
S2104	9-14°	87-93																																			

9.7

c16 ⇒



Heliographic		S. Hemisphere																														Remarks
Group No.	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	
S2102	⇒		C4 J2																													
S2104	⇒		B15 D24 D16 B12 D9																												(*) Oct. 28	
S2105	15°	83°	A1																												(*) Oct. 31	
S2106	10°	44°	J2 *																												(*) Oct. 31	
S2107	7-10	1-7	J2 J3 D8 C11 H13 - - H12 H9 H5 J4 J2																													
S2108	18-19	2-3	J2 J2 J2 J3 J4 - - J4 J3 J2 A1 A1																												REARIS	
S2109	10°	347°																														
S2110	7°	327°	* A1 A2 A2																													
S2111	3°	297°	J2 J3 A2 B2 B4																													
S2112	15-16	261-262	B3 J2 *																													
S2113	13°	279°	A2																													
S2114	11-16	187-200	H2 - - H8 - - C8 C15 C17 C15 C23 C10 C7																												REARIS	
S2115	10°	262-266	* C4 B3																													
S2116	5-6	133-134	J2 J2 J2 J2 J2 J2 J2 - J2 J2 J2																													
S2117	8-10	90-94	A2 J3 J4 C10 C10 C10 - 15 D8 B8 ⇒																													
S2118	14-18	82-95	A1 D6 D9 C10 B13 C38 - E55 E40 E35 ⇒																													
S2119	11°	95°																														
S2120	8-11	82-86	A1 *																													
S2121	14-15	32-36	B2 C12 - C14 C8 B4 ⇒																													
S2122	10°	6°	C3 D4 B4 A1 A1																												(*) ⇒ Dec. 1 (*) Dec. 3	

11.5

- Central Meridian-passage
- \* - Prearrange-day of Meridian-passage
- ⇒ - Continued group from Last Month

K. Fujimori

December 1971

Group No.	Heliographic		N. Hemisphere																															
	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	
N2860	⇒		-	C5	D9																													
N2863	8-11	344-351																																
N2864	10-12	306-312																																
N2865	8-11	238-249																																
N2866	5-8	285-290																																
N2867	22	317-321																																
N2868	3	287																																
N2869	16-20	190-199																																
N2870	6	238																																
N2871	10-13	178-185																																
N2872	8-9	139-145																																
N2873	18	108																																
N2874	26-22	331-333																																

Group No.	Heliographic		S. Hemisphere																															
	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	
S2117	⇒		-	B2																														
S2118	⇒		-	D20	B6																													
S2120	⇒		-	B4																														
S2121	⇒		-	C4	D8	D6	C4	-	A2																									
S2123	2-7	316-325																																
S2124	13-15	302-304																																
S2125	2-3	248-252																																
S2126	8	318																																
S2127	5-7	286-287																																

12.0

0.2

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Nov 28

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Jan 2

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Nov 27  
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Nov 27  
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Nov 27

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Nov 26

			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		
S2128	14'	330-335						*							D6	A1																			
S2129	13-15'	189-190													J3	J3	J4	J4	J4	J4	J5	J2													
S2130	10-11'	297-301							*							c4																			
S2131	8'	222																																	
S2132	13'	206'																																	
S2133	4-5'	134-135																																	
S2134	13'	210-214																																	
S2135	10-16'	107-117																																	
S2136	7'	107																																	
S2137	12-18'	93-103																																	
S2138	8-10'	173-176																																	
S2139	8-13'	87-95																																	
S2140	8'	104																																	
S2141	3'	98																																	
S2142	15-17'	78-80																																	
S2143	11-14'	41-48																																	
S2144	13'	57																																	
S2145	3-5'	329-331																																	
S2146	6-8'	357-6																																	
S2147	12-13'	54-57																																	
S2148	18'	304																																	

- - Cental Meridian-passage
- \* - Prearrange-day of Meridian-passage
- ⇒ - Continued group from Last Month