

SUN-SPOT OBSERVATIONS

JANUARY 1963

Observer-K. Fujimori

SUWA

Date	J. S. T	N		S		Total		log ₁₀ t	Facula		Central Zone	Seeing	Remarks
		g	+	g	+	g	+		E	W			
1	13 ^h 0 ^m	2	7	0	0	2	7	27.2	0	0	0	3	
2													C
3	12 35	2	7	0	0	2	7	27.1	0	1	5	2	
4	11 5	3	9	1	8	4	17	57.2	0	3	9	4-5	
5													C
6													M
7	14 10	2	7	0	0	2	7	27.0	1	1	1	3	
8	14 30	1	4	0	0	1	4	14.0	2	0	0	4	
9	10 30	2	5	0	0	2	5	25.1	1	0	0	3	
10	14 0	2	6	0	0	2	6	26.2	0	0	0	4	
11	14 15	1	9	0	0	1	9	19.1	1	0	0	4	
12													
13	10 30	1	8	0	0	1	8	18.1	0	0	0	3	
14	14 20	3	19	0	0	3	19	49.0	0	2	16	4	
15	10 40	2	28	0	0	2	28	48.0	1	2	28	2	
16	11 50	2	24	0	0	2	24	44.0	1	2	24	3	
17	13 30	2	16	0	0	2	16	36.0	0	2	16	3	
18													C
19													C
20	12 30	2	5	0	0	2	5	25.0	1	0	0	3-4	
21													
22	14 20	0	0	0	0	0	0	0.0	1	0	0	3	
23													M
24													
25	11 20	0	0	0	0	0	0	0.0	0	0	0	3-4	
26	14 30	0	0	0	0	0	0	0.0	0	0	0	4	
27	13 30	1	1	0	0	1	1	11.2	0	0	0	2-3	
28													M
29	11 40	1	17	0	0	1	17	27.0	0	0	0	4	
30													C
31	14 0	1	12	0	0	1	12	22.1	0	0	0		
Total			484		18		502				229		
Mean			24.2		0.9		25.1				1.15		

観測日数 20日 観測器械 100mm L 直視 x56 > 同架赤道儀
 60mm R 望遠鏡 x48
 7 8 9 10 11 12 ⊙ 2 3 4 5 6 7
 2u = 19.3
 6142 ÷ 208 = 29.5

n4657 = 22.4
 s1485 = 7.1

SUN-SPOT OBSERVATIONS

FEBRUARY 1963

Observer - K. Fujimori

SUWA

Date	J. S. T		M		S		Total		log ₁₀ f	Facula		Centari Zone	Seeing	Remarks
			g	+	g	+	g	+		E	W			
1	13	20 ^m	1	15	1	4	2	19	39	1	1	0	0	2-3
2														M
3	14	5	1	1	1	18	2	19	39	1	0	0	0	2-3
4	14	20	1	4	1	14	2	18	38	1	0	1	8	3
5	11	30	1	5	1	21	2	26	46	1	0	1	21	4
6	13	20	2	7	1	16	3	23	53	1	0	1	16	3
7	11	20	2	11	1	14	3	25	55	1	0	2	19	3
8														M
9														M
10	12	10	1	3	1	3	2	6	26	0	1	1	3	2-3
11														S-C
12	13	20	1	3	0	0	1	3	13	1	0	1	5	3
13														
14	13	20	2	5	0	0	2	5	25	1	1	0	0	3
15	13	20	1	2	0	0	1	2	12	1	0	0	0	3
16	14	20	1	3	0	0	1	3	13	2	1	0	0	3
17	9	55	2	5	0	0	2	5	25	1	1	0	0	3
18	13	30	2	8	0	0	2	8	28	1	0	0	0	3-4
19														M
20														M
21	14	50	1	4	0	0	1	4	14	1	0	1	4	3
22	13	30	1	4	0	0	1	4	14	0	0	1	4	3
23	14	0	2	4	0	0	2	4	24	0	1	1	3	4
24														C
25														M
26														
27														M
28														M
Total			3	04		1	60	4	464	4	64		18	1
Mean			19.0		1	0.0		29.0	22.0				11.3	

観測日数 16 日 観測器 100mm L 直視 x56 > 同架赤道儀
 60mm R 投影 8x9 10 11 12 1 ② 3 4 5 6 7 8
 zu = 22.7 6300 ÷ 207 = 30.4
 N4732-229 51568-126

SUN SPOT OBSERVATIONS

MARCH 1963 Observer-K. Fujimori SUWA

Date	J. S. T	N		S		Total		10g+	Facula		Center zone	Seeing	Remarks
		+	-	+	-	+	-		E	W			
1													
2													
3													S
4													M
5	14 ^h 20 ^m	1	6	0	0	1	6	162	0	0	0	4	
6													M
7	9 20	1	7	0	0	1	7	171	0	0	0	2	
8	9 30	2	20	0	0	2	20	401	0	1	18	4	
9													
10													
11													M
12													M
13													
14	7 30	2	2	0	0	2	2	220	1	1	1	3	
15	13 10	1	3	0	0	1	3	130	1	1	3	2-3	
16													R
17	13 20	1	5	0	0	1	5	151	0	0	0	2	
18	11 30	1	5	0	0	1	5	151	0	0	0	4	
19	11 10	1	6	0	0	1	6	161	0	0	0	4	
20													M
21	11 20	1	5	0	0	1	5	150	0	1	5	4	
22	15 35	1	5	0	0	1	5	150	0	1	5	3	
23	7 30	1	4	0	0	1	4	140	0	1	4	4	
24													S
25													M
26	10 45	1	3	0	0	1	3	130	1	0	0	3-4	
27	10 20	1	3	0	0	1	3	130	1	0	0	2	
28	11 0	0	0	0	0	0	0	00	0	0	0	3	
29	13 5	0	0	0	0	0	0	00	0	0	0	4	
30	11 20	0	0	1	12	1	12	220	0	1	12	3	
31	13 15	0	0	1	11	1	11	212	0	1	11	3	
Total			224		43		267				139		
Mean			13.2		2.5		15.7				8.2		

観測日数 17日 観測口径 100^{mm} L 直視 x56 赤道儀

9 10 11 12 1 2 (3) 4 5 6 7 8 9

$2u = 16.9 \quad 5807 \div 191 = 30.4$

$N4572 = 22.9$
 $S1235 = 6.5$

SUN-SPOT OBSERVATIONS

APRIL 1963

Observer - K. Fujimori

SUWA

$\lambda = 138^{\circ} 7'$
 $\phi = 36^{\circ} 2'$

Date	J.S.T	N		S		Total		log ₁₀ f ₊	Facula	Cent	Tarl	Seeing	Remarks
		+	-	+	-	+	-						
1													
2													
3	13 15 ^m	0	0	1	9	1	9	19.1	0	1	9	2	
4													
5	14 15	0	0	1	1	1	1	11.0	0	0	0	4	
6	13 5	2	23	1	1	3	24	54.0	1	2	23	3-4	
7													
8													
9	13 41	3	17	2	6	5	23	73.2	1	1	10	2	
10	14 0	3	6	2	12	5	18	68.2	2	0	0	1-2	
11	14 20	2	7	2	24	4	31	71.2	3	0	0	4	
12	12 52	1	11	2	22	3	33	63.1	1	0	0	3	
13													M
14													M
15													M
16													M
17													M
18													M
19	15 36	0	0	1	13	1	13	23.0	1	0	0	1-2	
20	12 16	0	0	1	7	1	7	17.1	1	0	0	2-3	
21													M
22	12 50	0	0	0	0	0	0	0.0	1	0	0	3	
23													R
24	12 58	0	0	0	0	0	0	0-	-	0	0	3	Δ
25	12 10	0	0	0	0	0	0	0.1	0	0	0	3	
26	11 29	0	0	0	0	0	0	0.0	0	0	0	3	
27	9 30	0	0	0	0	0	0	0.0	0	0	0	3	
28													c
29	12 32	1	4	0	0	1	4	14.1	0	0	0	3	
30	13 19	2	16	0	0	2	16	36.1	0	1	4	4	
Total		224		225		449					96		
Mean		14.0		14.1		28.1					6.0		

観測日数 16日 観測器械 100^{mm} L 通視 ×56 赤道儀 Δ 不确实観測

10 11 12 1 2 3 (4) 5 6 7 8 9 10

$2u = 29.7$

$5668 \div 186 = 30.5$

$N4278 = 23.0$

$S1390 = 7.5$

SUN-SPOT OBSERVATIONS

MAY 1963

Observer - K. Fujimori

SUWA ($\Delta = 158^{\circ} 2'$
 $\phi = 36^{\circ} 2'$)

Date	J. S. T	N		S		Total		103+	Facula	Central		Seeing	Remarks
		g	f	g	f	g	f			E	W		
1													
2	13 ^h 32 ^m	1	12	0	0	1	12	22	0	0	0	2	
3	13 38	1	15	0	0	1	15	25	0	0	1	15	2
4													
5													
6													
7	15 28	2	8	1	14	3	22	52	1	2	2	16	4
8	13 21	3	9	1	13	4	22	62	1	1	3	17	4
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19	13 19	3	43	1	2	4	45	85	0	1	1	28	4
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
Total		187		59		246					146		
Mean		37.4		11.8		49.2					29.2		

* 黒点活動は今月比較的多く、5月には雨天多く又毎年の事では多忙な時期です。観測は少く、黒点活動は...

観測日数 5日 観測器械 100mm L x 56 直視 (同架) 赤道儀
 11 12 1 2 3 4 5 6 7 8 9 10 11
 $2u = 44.0$ $5328 \div 183 = 29.1$ $14059 = 22.2$ $51269 = 6.9$

SUN SPOT OBSERVATIONS

JUNE 1963 Observer - K. Fujimori SUWA

Date	J. S. T	N		S		Total		log ₁₀ f _E	Facular	Central	Zone	Seeing	Remarks	
		-	+	-	+	-	+							
1														K
2														M
3														R
4														R
5	14 ^h 16 ^m	1	2	2	3	3	5	35.5	2	1		2.3-4		
6														R
7														R
8	13 31	2	12	2	21	4	33	43.2	1	1	18	4		
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														M
19	10 39	2	7	0	0	2	7	27.2	2	0	0	4		
20														
21	12 30	2	5	0	0	2	5	25.7	1	0	0	3-4		
22	12 49	1	2	0	0	1	2	12.1	1	1		2.2-3		
23	12 58	1	3	0	0	1	3	13.1	0	1	3	3		
24														M
25	13 31	2	11	0	0	2	11	31.0	1	0	0	3-4		
26	13 20	2	13	0	0	2	13	33.1	1	1	11	5		
27														M
28	14 29	2	15	0	0	2	15	35.1	1	1	13	5		
29	12 43	3	17	0	0	3	17	47.1	1	2	14	4-5		
30	11 29	3	8	0	0	3	8	38.1	1	2	7	2-3		
Total		305	64				369				170			
Mean		27.7	5.8				33.5				15.5			

観測日数 11日 観測器 100^{mm}L x 56 直視 (同架) 赤道儀
80^{mm}R x 48 投影

12 1 2 3 4 5 6 7 8 9 10 11 12

100% L x 56 直視
80% R x 48 投影

$$5148 \div 191 = 27.0$$

$$N4002 = 21.0$$

$$S1146 = 6.0$$

SUN-SPOT OBSERVATIONS

JULY 1963 Observer - K. Fujimori

SUWA ($\lambda = 133^{\circ}7'$
 $\phi = 36^{\circ}2'$)

Date	J. S. T	N		S		Total		10g+f	Facula		central zone	Seeing	Remarks
		g	f	g	f	g	f		E	W			
1													M
2													M
3													M
4	13 ^h 4 ^m	1	2	0	0	1	2	121	1	0	0	2	N=37
5													
6													
7													
8													
9													
10	12 7	1	2	0	0	1	2	120	0	1	2	2-3	N=37
11													R
12	12 9	1	8	0	0	1	8	180	0	0	0	3-4	N=37
13	13 50	2	7	0	0	2	7	270	1	1	3	2	N=37, 38
14													
15													
16													
17													
18													
19	15 27	2	2	0	0	2	2	221	1	0	0	3	*N=37, 37
20													
21													
22													
23													
24													
25													
26	12 30	0	0	0	0	0	0	00	0	0	0	3	A
27													M
28	13 55	0	0	0	0	0	0	00	1	0	0	4	
29	13 43	1	1	0	0	1	1	111	2	1	1	3	N=40
30	14 16	3	24	0	0	3	24	542	2	1	15	4-5	N=40 41, 42
31													C
Total		156		0		156					50		0
Mean		17.3		0		17.3					5.6		

観測用数9日観測器械100^{mm}L x 56直視 (同架)赤道儀
*又成半島突端=行観測(6^{cm}R x 56) 80^{mm}R x 48投影

A=候理藤森昭子 1 2 3 4 5 6 (7) 8 9 10 11 12 1
4874 ÷ 187 = 26.1 N 3805 = 20.4
S 1068 = 5.7

SUN-SPOT OBSERVATIONS

AUGUST 1963 Observer - K. Fujimori SUWA

Date	J.S.T		N		S		Total		log ₁₀ + E	Facula W	Central Zone	Seeing	Remarks
	h	m	+	-	+	-	+	-					
1	14	21	3	39	0	0	3	39	69.2	1	0	0.3-4	N=46.42, 42
2													M
3													M
4	14	56	2	35	0	0	2	35	55.2	0	2	3.5	3 N=42.43
5													
6	13	26	2	26	0	0	2	26	46.1	0	2	2.6	2 N=42.43
7	13	21	3	29	0	0	3	29	59.0	0	2	1.9	3-4 N=42.43, 44
8	12	44	2	6	0	0	2	6	26.1	1	0	0	3 N=43.44
9	15	20	2	8	0	0	2	8	28.0	2	0	0	2 N=43.44
10													
11													
12													C
13	7	11	0	0	1	1	1	1	11.1	1	0	0	5 S=10.23
14	11	34	1	5	0	0	1	5	15.2	1	1	5	3 N=45
15	13	14	0	0	1	3	1	3	13.2	0	0	0	3 S=11.23
16	11	20	0	0	1	6	1	6	16.-	-	0	0	2 Δ S=11
17													M
18	13	46	0	0	1	17	1	17	27.-	-	1	17	1 Δ S=11
19	13	35	0	0	2	25	2	25	45.2	0	1	2.0	2-3 S=11.12
20	15	40	1	2	2	14	3	16	46.2	0	2	9.2	3 N=46 S=11.12
21													C
22													C
23	14	35	1	-	2	-	3	-	-	-	0	0	3
24													R
25													M
26	12	53	2	4	1	1	3	5	35.2	2	0	0	3 N=47.48 S=11
27	15	0	2	3	0	0	2	3	23.2	0	0	0	3 N=47.48
28													
29													
30													
31													
Total			357		157		514					241	0
Mean			23.8		10.5		34.3					16.1	

観測日数 15日 観測器械 100^{mm} L x 56直視) 同架赤道儀
 Δ 不確定観測 80^{mm} R x 48投影
 23 4 5 6 7 (8) 9 10 11 12 12
 $4665 \div 183 = 25.5$ $N3546 = 19.4$
 $S1119 = 6.1$

SUN-SPOT OBSERVATIONS

SEPTEMBER 1963

Observer - K. Fujimori

SUWA (λ = 138° 7', φ = 36° 2')

◎今日付中旬に於て極小期にはおぼろしく因眼的の大黒斑が出現した。又全般に非較的汚染有り活動の有様無黒斑日数は一月で廿七日でした。

Date	J.S.T	N		S		Total		10gtf	Facula		Central Zone	Seeing	Remarks	
		g	+	g	+	g	+		E	W				
1													M	
2													C	
3	14 ^h 0 ^m	3	11	0	0	3	11	41	0	0	3	11	3-4	
4	13 52	4	17	0	0	4	17	57	0	1	3	15	2	
5	11 45	4	25	0	0	4	25	65	0	1	2	23	4	
6													C	
7													M	
8	14 30	1	3	0	0	1	3	13	0	1	0	0	3-4	
9													R	
10	12 58	1	2	1	1	2	3	23	4	1	0	0	4-5	
11	13 0	1	2	1	2	2	4	24	3	1	0	0	3-4	
12													C	
13													C	
14													M	
15	16 25	2	16	1	26	3	42	72	1	0	2	28	3	大黒斑出現
16														R
17														M
18	11 58	1	37	1	3	2	40	60	0	0	1	13	2	因眼的!
19	7 0	1	51	1	4	2	55	75	0	0	1	51	3	"
20	13 28	1	47	1	5	2	52	72	0	1	1	47	2	大黒斑子午線通過
21														M
22														M
23														M
24	11 46	1	30	0	0	1	30	40	0	1	0	0	2	
25														
26														
27	13 18	0	0	0	0	0	0	0	0	0	0	0	3-4	
28														
29														
30														
Total		441		101		542						318		2
Mean		36.7		8.5		45.2						26.5		

観測日数 12日 観測器械 100^{mm}L x 56 直視) 同架赤道儀
 80^{mm}R x 48 投影
 3 4 5 6 7 8 ⑨ 10 11 12 1 2 3
 $4582 \div 187 = 245$

$N3527 = 18.9$
 $S1055 = 5.6$

SUN-SPOT OBSERVATIONS

OCTOBER 1963

Observer, K. Fujimori

Suwa ($\lambda = 138^{\circ} 7'$
 $\phi = 36^{\circ} 2'$)

Date	J. S. T.	N		S		Total		log f	Facula E	W	Central Zone	Seeing	Remarks
		g	f	g	f	g	f						
1													R
2	12 ^h 45 ^m	0	0	0	0	0	0	00	0	0	0	4	
3	13 14	1	3	0	0	1	3	131	0	0	0	2-3	
4	10 58	1	2	0	0	1	2	121	1	0	0	5	
5	11 39	0	0	0	0	0	0	01	1	0	0	2-3	黒点状 2
6													C
7													M
8													M
9													M
10	13 50	2	24	0	0	2	24	440	0	1	14	5	黒点状 2
11													M
12													M
13													M
14													M
15													R-C
16													M
17													R
18	15 10	3	10	0	0	3	10	400	4	0	0	2-3	
19	12 46	1	6	0	0	1	6	160	2	0	0	2	
20	12 54	2	15	0	0	2	15	351	2	0	0	2-3	
21	13 0	1	15	0	0	1	15	251	1	0	0	2-3	
22													C
23	11 51	1	30	0	0	1	30	401	2	0	0	3	
24	13 15	1	46	0	0	1	46	560	0	1	15	3-4	
25	11 16	1	67	1	2	2	69	890	0	1	67	5	
26													C
27													C
28													C
29													C
30	12 0	3	28	1	2	4	30	700	2	1	19	2-3	
31	13 0	3	28	0	0	3	28	580	1	2	26	4	
Total			474		24		498				201		0
Mean			33.9		1.7		35.6				14.4		

観測回数 14回 観測器械 100^{mm} L x 56^{mm} 同架赤道儀

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
 $4479 \div 188 = 23.8$ $N3359 = 17.9$ $51120 = 6.0$

SUN-SPOT OBSERVATIONS

DECEMBER 1963

Observer - K. Fujimori

SUWA ($\lambda = 138^{\circ} 7'$
 $\phi = 36^{\circ} 2'$)

Date	J. S. T	N		S		Total		log ₁₀ F _E	Facula W	Central Zone	Seeing	Remarks	
		g	f	g	f	g	f						
1	13 ⁿ 14 ^m	1	2	1	3	2	5	25.1	1	0	0	2	
2													M
3													R
4													R
5	13 15	0	0	1	7	1	7	17.0	1	1	7	2	
6	15 14	0	0	1	8	1	8	18.0	0	1	8	3	
7	14 13	0	0	1	13	1	13	23.0	0	1	13	4	
8	13 56	0	0	1	8	1	8	18.0	1	1	8	2-3	
9	14 59	0	0	1	3	1	3	13.0	1	0	0	3	
10													
11	15 8	1	1	1	3	2	4	24.1	1	0	0	3	
12	12 58	1	7	0	0	1	7	17.1	2	0	0	2-3	
13	14 30	1	2	0	0	1	2	12.2	1	0	0	2-3	
14	15 0	0	0	0	0	0	0	0.1	0	0	0	2	
15	13 23	0	0	0	0	0	0	0.1	0	0	0	3	
16	11 58	0	0	0	0	0	0	0.1	0	0	0	2-3	
17													
18	13 13	1	2	0	0	1	2	12.1	0	0	0	2	
19	12 20	1	3	0	0	1	3	13.2	1	0	0	4	
20	13 51	1	2	0	0	1	2	12.1	1	0	0	3	
21													C
22	13 34	2	6	0	0	2	6	26.0	2	0	0	4	
23	13 20	1	4	0	0	1	4	14.0	2	1	4	3	
24													C
25	13 20	1	2	0	0	1	2	12.0	1	0	0	3	
26													C
27	10 45	0	0	0	0	0	0	0.0	1	0	0	3	
28	10 31	0	0	0	0	0	0	0.0	0	0	0	2	
29	12 21	0	0	0	0	0	0	0.0	0	0	0	2-3	
30	10 55	0	0	0	0	0	0	0.1	1	0	0	3	
31	12 0	0	0	0	0	0	0	0.1	1	0	0	2	
Total			141		115		256				90		0
Mean			6.1		5.0		11.1	11.1			3.9		

観測日数 23日 観測器械 100^{mm} 凸透镜 x56) 赤道儀 (同架)

N3594 21.1

S. 966 5.7

6 7-8 9 10 11 (12) 1 2 3 4 5 6

N3270-1529

年平均 4560 ÷ 170 = 26.8

4178 ÷ 206 = 20.3

8908 = 4.4