

MONTHLY REPORT OF SUNSPOT OBSERVATION

JANUARY 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	3h28m	0	0	3	24	3	24	54	2	12	1 - 2	
2	5:34	0	0	3	15	3	15	45	1	1	2	
3		-	-	-	-	-	-	-	-	-		C
4		-	-	-	-	-	-	-	-	-		C-R
5		-	-	-	-	-	-	-	-	-		C
6	1:52	1	6	2	10	3	16	46	1	5	2 - 3	
7	2:00	1	14	3	8	4	22	62	1	4	1 - 2	
8	2:52	1	17	2	20	3	37	67	1	11	3 - 4	
9	3:10	1	9	2	13	3	22	52	0	0	1	
10	1:42	2	20	2	14	4	34	74	2	10	2 - 3	
11		-	-	-	-	-	-	-	-	-		M
12	2:30	2	23	2	7	4	30	70	2	7	2 - 3	
13	3:16	3	18	3	10	6	28	88	1	3	3	
14	1:49	3	20	3	18	6	38	98	1	3	2	
15		-	-	-	-	-	-	-	-	-		C
16	4:12	1	4	4	38	5	42	92	1	4	2	
17	3:13	1	3	2	34	3	37	67	2	9	2	
18	2:10	0	0	3	35	3	35	65	2	23	2	
19	2:19	0	0	3	41	3	41	71	1	22	2	
20	2:39	0	0	3	41	3	41	71	2	25	2 - 3	
21		-	-	-	-	-	-	-	-	-		C
22		-	-	-	-	-	-	-	-	-		C
23	5:34	0	0	2	24	2	24	44	1	5	1 - 2	
24	0:50	0	0	3	17	3	17	47	0	0	1 - 2	
25	1:29	0	0	2	11	2	11	31	0	0	1 - 2	
26	0:50	0	0	3	12	3	12	42	0	0	3	
27	1:27	1	9	3	11	4	20	60	1	8	2 - 3	
28	4:08	1	16	3	11	4	27	67	2	10	2	
29	0:34	3	13	2	8	5	21	71	1	5	2	
30	1:07	3	13	2	3	5	16	66	2	8	2	
31	0:46	4	19	2	3	6	22	82	2	13	4 - 5	
Sum		484		1048		1532			478			
Mean		20.2		43.7		63.8			19.9			

Days 24

8cm Refractor X67 Projection 15cm

POLAR FACULAE

<u>N</u>	<u>S</u>
0.00	0.53
<u>0.53</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

FEBRUARY 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	2h00m	4	25	0	0	4	25	65	1	12	2 - 3	
2	2:42	4	22	0	0	4	22	62	2	5	1 - 2	
3		-	-	-	-	-	-	-	-	-		C
4	2:38	4	20	1	1	5	21	71	2	13	2 - 3	
5		-	-	-	-	-	-	-	-	-		C-R
6	3:25	3	13	0	0	3	13	43	1	5	2	
7	0:37	3	10	0	0	3	10	40	0	0	2 - 3	
8	2:03	3	16	0	0	3	16	46	0	0	2	
9	2:37	3	13	0	0	3	13	43	0	0	2 - 3	
10	2:41	2	5	1	1	3	6	36	0	0	2	
11	3:26	1	2	1	2	2	4	24	0	0	2	
12	1:55	0	0	1	2	1	2	12	0	0	2 - 3	
13	3:14	1	2	1	2	2	4	24	0	0	1	
14	1:30	1	2	1	1	2	3	23	0	0	2	
15	3:00	1	4	1	3	2	7	27	0	0	2	
16	2:00	1	5	1	4	2	9	29	0	0	2	
17		-	-	-	-	-	-	-	-	-		C
18	1:34	1	10	1	6	2	16	36	1	3	4	naked eye=lb
19	2:06	2	9	2	19	4	28	68	2	14	2 - 3	naked eye=lb
20	0:33	2	8	3	15	5	23	73	2	12	2 - 3	naked eye=lb
21	0:58	2	9	1	2	3	11	41	2	4	2 - 3	naked eye=lb
22	2:31	1	6	0	0	1	6	16	0	0	2 - 3	naked eye=lc
23		-	-	-	-	-	-	-	-	-		C
24		-	-	-	-	-	-	-	-	-		M
25	3:20	1	2	0	0	1	2	12	0	0	2	
26	2:17	0	0	0	0	0	0	0	0	0	1 - 2	
27		-	-	-	-	-	-	-	-	-		S
28	3:08	2	11	0	0	2	11	31	0	0	2 - 3	
29	4:30	1	8	1	10	2	18	38	0	0	1	
Sum		632		228		860			198			
Mean		27.5		9.9		37.4			8.6			

Days 23

8cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.00	0.06
0.06	

MONTHLY REPORT OF SUNSPOT OBSERVATION

MARCH 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1		-	-	-	-	-	-	-	-	-		R
2		-	-	-	-	-	-	-	-	-		R
3	1h50m	2	20	2	12	4	32	72	2	19	2	
4	1:29	2	32	2	11	4	43	83	3	40	2 - 3	
5		-	-	-	-	-	-	-	-	-		C
6	1:00	2	27	1	10	3	37	67	1	10	2	
7		-	-	-	-	-	-	-	-	-		C
8	3:14	3	34	1	8	4	42	82	0	0	2	
9	0:56	3	29	1	2	4	31	71	0	0	2 - 3	
10	2:39	2	20	0	0	2	20	40	0	0	2	
11	0:12	1	14	0	0	1	14	24	0	0	3 - 4	
12		-	-	-	-	-	-	-	-	-		M
13		-	-	-	-	-	-	-	-	-		M
14	-1:04	1	5	2	32	3	37	67	1	2	3	
15	2:15	1	4	1	28	2	32	52	0	0	2	
16	3:48	1	6	1	30	2	36	56	1	5	2	
17		-	-	-	-	-	-	-	-	-		S
18		-	-	-	-	-	-	-	-	-		R-C
19	1:23	3	25	2	52	5	77	127	2	57	3	naked eye=lc
20	0:08	3	24	2	48	5	72	122	1	35	3	naked eye=lb
21		-	-	-	-	-	-	-	-	-		C
22		-	-	-	-	-	-	-	-	-		S-R
23	2:48	2	22	2	27	4	49	89	0	0	2	
24	2:25	2	16	2	18	4	34	74	1	11	2	
25		-	-	-	-	-	-	-	-	-		C
26		-	-	-	-	-	-	-	-	-		S
27	0:38	3	51	2	16	5	67	117	1	8	3	
28	1:08	3	58	2	27	5	85	135	1	11	3 - 4	
29		-	-	-	-	-	-	-	-	-		C
30		-	-	-	-	-	-	-	-	-		C
31		-	-	-	-	-	-	-	-	-		C
Sum		727		551		1278			338			
Mean		45.4		34.4		79.9			21.1			

Days 16

8cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.00	0.31
0.31	

MONTHLY REPORT OF SUNSPOT OBSERVATION

APRIL 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10G+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	4h20m	1	48	3	21	4	69	109	3	16	1	
2		-	-	-	-	-	-	-	-	-	-	C
3	0:43	2	43	3	25	5	68	118	1	8	2	
4		-	-	-	-	-	-	-	-	-	-	M
5		-	-	-	-	-	-	-	-	-	-	C
6	2:37	2	14	1	2	3	16	46	0	0	3	
7		-	-	-	-	-	-	-	-	-	-	C-S
8		-	-	-	-	-	-	-	-	-	-	S-R
9	2:31	5	42	4	16	9	58	148	2	24	4	
10	-1:49	4	45	3	13	7	58	128	1	9	4 - 5	
11	3:14	4	45	4	16	8	61	141	2	5	3	
12		-	-	-	-	-	-	-	-	-	-	C
13		-	-	-	-	-	-	-	-	-	-	R
14	3:26	5	52	4	38	9	90	180	3	47	3	
15	4:52	4	54	5	34	9	88	178	3	26	2	
16	0:18	4	66	5	32	9	98	188	4	29	3	
17	4:11	4	63	4	20	8	83	163	2	39	2	naked eye=lc
18		-	-	-	-	-	-	-	-	-	-	C-R
19	2:21	4	68	3	9	7	77	147	3	17	3	
20	2:39	3	54	1	3	4	57	97	2	18	2 - 3	
21	0:58	3	41	2	9	5	50	100	2	22	2	
22		-	-	-	-	-	-	-	-	-	-	C
23	2:24	2	12	1	2	3	14	44	0	0	2	
24	2:41	3	4	1	2	4	6	46	0	0	2 - 3	
25	2:49	1	2	2	11	3	13	43	0	0	2 - 3	
26	2:49	0	0	3	22	3	22	52	1	3	3 - 4	
27		-	-	-	-	-	-	-	-	-	-	M
28	2:09	0	0	3	20	3	20	50	2	3	3	
29		-	-	-	-	-	-	-	-	-	-	R
30	1:49	0	0	5	23	5	23	73	4	22	3	

Sum 1163 888 2051 638

Mean 61.2 46.7 107.9 33.6

Days 19

8cm Refractor X67 Projection 15cm

<u>POLAR FACULAE</u>	
<u>N</u>	<u>S</u>
0.00	0.06
<u>0.06</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

MAY 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	1h45m	1	1	4	30	5	31	81	2	25	4	
2	2:38	2	11	4	37	6	43	108	2	25	4	
3		-	-	-	-	-	-	-	-	-	-	M
4		-	-	-	-	-	-	-	-	-	-	C
5		-	-	-	-	-	-	-	-	-	-	M
6	1:59	3	13	3	15	6	23	88	1	2	2	
7		-	-	-	-	-	-	-	-	-	-	C-R
8	3:00	3	15	1	2	4	17	57	2	13	2	
9	3:30	3	12	2	20	5	32	82	3	8	2 - 3	
10		-	-	-	-	-	-	-	-	-	-	C
11		-	-	-	-	-	-	-	-	-	-	M
12	3:54	3	7	1	14	4	21	61	2	16	2	
13		-	-	-	-	-	-	-	-	-	-	M
14		-	-	-	-	-	-	-	-	-	-	C
15		-	-	-	-	-	-	-	-	-	-	R
16	3:43	1	3	2	15	3	23	53	2	16	3	
17	1:41	1	4	3	21	4	25	65	0	0	2 - 3	
18	3:11	2	5	2	14	4	19	59	0	0	3 - 4	
19	0:13	1	1	1	12	2	13	33	0	0	4	
20		-	-	-	-	-	-	-	-	-	-	M
21		-	-	-	-	-	-	-	-	-	-	C-R
22		-	-	-	-	-	-	-	-	-	-	R
23		-	-	-	-	-	-	-	-	-	-	R
24	2:50	0	0	1	30	1	30	40	0	0	1 - 2	
25		-	-	-	-	-	-	-	-	-	-	C
26	1:50	0	0	1	57	1	57	67	1	12	2 - 3	
27	0:06	0	0	1	67	1	67	77	1	63	3	
28	2:58	1	4	1	69	2	73	93	2	72	3	naked eye=lc
29	- 19	1	1	1	60	2	61	81	2	61	2 - 3	
30	3:48	3	7	1	51	4	58	99	1	12	3	
31	5:00	4	25	1	23	5	48	93	0	0	2	

Sum	404	837	1241	535
Mean	23.8	49.2	73.0	31.5

Days 17

8cm Refractor X67 Projection 15cm

POLAR FACULAE
N S
 0.00 0.33
 0.33

MONTHLY REPORT OF SUNSPOT OBSERVATION

JUNE 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U, T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1		-	-	-	-	-	-	-	-	-		C
2		-	-	-	-	-	-	-	-	-		R
3		-	-	-	-	-	-	-	-	-		R
4	3h21m	5	64	2	22	7	86	156	4	55	3	
5	1:30	5	62	2	21	7	83	153	4	52	3 - 4	
6	2:47	7	63	3	40	10	103	203	6	67	5	
7	1:55	5	45	3	46	8	91	171	5	48	2 - 3	
8		-	-	-	-	-	-	-	-	-		M
9	- 50	6	46	3	63	9	109	199	1	8	2	
10		-	-	-	-	-	-	-	-	-		M
11	0:59	6	26	2	54	8	80	160	1	46	3	
12	4:00	3	17	2	24	5	41	91	3	37	1 - 2	
13	2:43	3	14	2	23	5	37	87	3	28	2	
14	2:23	2	15	2	9	4	23	63	2	15	3 - 4	
15	1:34	3	17	2	7	5	24	74	2	15	2 - 3	
16		-	-	-	-	-	-	-	-	-		C
17	2:32	5	30	1	9	6	33	98	1	2	2	
18		-	-	-	-	-	-	-	-	-		C
19	2:39	4	16	2	14	6	30	90	1	12	2 - 3	naked eye=lb
20		-	-	-	-	-	-	-	-	-		C
21		-	-	-	-	-	-	-	-	-		C
22	1:41	2	14	4	47	6	61	121	1	40	4	naked eye=lb
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		R
25		-	-	-	-	-	-	-	-	-		C
26	0:03	3	11	5	47	8	58	138	2	7	2	
27		-	-	-	-	-	-	-	-	-		C
28	0:30	2	13	5	75	7	93	163	0	0	3	naked eye=lb
29		-	-	-	-	-	-	-	-	-		C
30		-	-	-	-	-	-	-	-	-		C-R
Sum		1068		899		1967		792				
Mean		71.2		59.9		131.1		52.8				

Days 15

3cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.77	0.15
0.92	

MONTHLY REPORT OF SUNSPOT OBSERVATION

JULY 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	0h35m	2	36	3	87	5	123	173	4	120	3	naked eye=1a
2	-1:41	3	45	3	81	6	126	136	5	123	4	naked eye=1a
3		-	-	-	-	-	-	-	-	-		C
4	3:15	3	53	2	70	5	123	173	3	50	2 - 3	naked eye=1b
5		-	-	-	-	-	-	-	-	-		M
6	1:45	4	27	1	50	5	77	127	0	0	3	
7		-	-	-	-	-	-	-	-	-		M
8	4:50	7	37	1	8	8	45	125	1	8	3	
9		-	-	-	-	-	-	-	-	-		M
10		-	-	-	-	-	-	-	-	-		R
11		-	-	-	-	-	-	-	-	-		R
12	1:41	6	67	2	12	8	79	159	6	57	3	
13	0:10	4	43	2	26	6	74	134	3	34	2	
14		-	-	-	-	-	-	-	-	-		C
15		-	-	-	-	-	-	-	-	-		R
16		-	-	-	-	-	-	-	-	-		C
17		-	-	-	-	-	-	-	-	-		C
18	0:57	2	7	6	90	8	97	177	4	85	3 - 4	naked eye=1b
19	2:15	0	0	5	70	5	70	120	2	53	2	naked eye=1b
20		-	-	-	-	-	-	-	-	-		C-R
21	4:56	1	8	5	43	6	56	116	1	8	2 - 3	
22	2:50	2	11	5	39	7	50	120	2	13	2	
23		-	-	-	-	-	-	-	-	-		C
24		-	-	-	-	-	-	-	-	-		C
25		-	-	-	-	-	-	-	-	-		C
26	4:37	1	5	2	23	3	23	53	0	0	2	
27	3:00	3	16	3	23	6	44	104	1	5	2 - 3	
28		-	-	-	-	-	-	-	-	-		R
29	2:13	5	49	1	35	6	84	144	3	47	2	naked eye=1c
30	1:30	5	70	1	31	6	101	161	4	53	3 - 4	naked eye=1c
31	1:50	4	71	2	26	6	97	157	2	33	3	naked eye=2c

Sum 1070 1164 2234 1104

Mean 66.9 72.3 139.6 69.0

Days 16

8cm Refractor X67 Projection 15cm

POLAR FACULAE

N

S

0.39

0.00

0.39

MONTHLY REPORT OF SUNSPOT OBSERVATION

AUGUST 1933 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	2h22m	4	80	1	15	5	95	145	3	42	3	naked eye=lc
2	3:42	4	96	2	21	6	117	177	2	70	2 - 3	naked eye=lc
3		-	-	-	-	-	-	-	-	-		M
4		-	-	-	-	-	-	-	-	-		C
5	- 27	4	71	1	6	5	77	127	2	19	2	
6	3:12	5	55	2	15	7	70	140	1	13	3	
7	2:40	5	43	1	27	6	75	135	1	27	1 - 2	
8		-	-	-	-	-	-	-	-	-		M
9	1:10	7	63	3	27	10	115	215	3	34	3	
10		-	-	-	-	-	-	-	-	-		C
11	3:35	4	63	3	23	7	91	161	4	35	2	naked eye=2c
12	4:40	4	64	3	11	7	75	145	5	63	2	naked eye=lc
13	1:23	4	72	2	5	6	77	137	4	50	3	naked eye=2c
14	1:30	6	67	4	12	10	79	179	6	53	4 - 5	naked eye=2c
15	3:34	6	59	3	10	9	63	153	5	44	3 - 4	
16		-	-	-	-	-	-	-	-	-		M
17		-	-	-	-	-	-	-	-	-		M
18		-	-	-	-	-	-	-	-	-		M
19		-	-	-	-	-	-	-	-	-		M
20	2:25	2	4	3	3	5	12	62	0	0	1 - 2	
21	3:50	1	4	2	4	3	9	39	1	1	2	
22	2:54	1	4	0	0	1	4	14	0	0	3	
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		C
25	0:43	5	29	1	4	6	32	92	3	25	3	
26	3:00	5	29	2	7	7	36	106	2	9	2	
27		-	-	-	-	-	-	-	-	-		M
28		-	-	-	-	-	-	-	-	-		M
29		-	-	-	-	-	-	-	-	-		M
30	2:39	5	41	4	73	9	114	204	2	33	2	naked eye=lc
31	3:46	4	36	5	64	9	100	190	4	51	3	naked eye=lc,lb
Sum			1673		752			2425		1054		
Mean			92.9		41.8			134.7		53.6		

Days 18

3cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.50	0.00
<u>0.50</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

SEPTEMBER 1933 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f		Cent.		Seeing	Remarks	
		g	f	g	f	g	f	g	f			
1	2h44m	3	33	3	63	6	101	161	4	50	2 - 3	naked eye=lc,lb
2	3:56	4	33	4	77	8	115	195	4	93	3 - 4	naked eye=lb
3	2:45	3	31	4	71	7	102	172	3	72	3	naked eye=lb
4		-	-	-	-	-	-	-	-	-		M
5		-	-	-	-	-	-	-	-	-		C
6		-	-	-	-	-	-	-	-	-		R
7	4:12	4	21	4	23	8	49	129	1	9	3	
8	2:54	4	13	3	19	7	32	102	1	3	2	
9	0:36	3	8	3	12	6	20	80	1	1	3 - 4	
10		-	-	-	-	-	-	-	-	-		C
11		-	-	-	-	-	-	-	-	-		C-R
12	2:40	3	9	4	20	7	23	94	3	9	2	
13	2:50	4	19	3	24	7	43	113	4	19	3 - 4	
14	2:30	5	17	3	23	8	40	120	3	9	2 - 3	
15		-	-	-	-	-	-	-	-	-		C
16	2:20	5	13	3	14	8	32	112	2	12	2 - 3	
17		-	-	-	-	-	-	-	-	-		C
18		-	-	-	-	-	-	-	-	-		M
19	3:36	3	31	5	23	8	59	139	2	20	3	
20		-	-	-	-	-	-	-	-	-		R-C
21	3:44	7	30	5	36	12	66	196	4	23	3	
22	3:54	7	44	5	49	12	93	213	5	49	3	
23		-	-	-	-	-	-	-	-	-		C
24		-	-	-	-	-	-	-	-	-		R
25		-	-	-	-	-	-	-	-	-		R
26	3:53	7	72	3	14	10	86	196	4	54	3	
27		-	-	-	-	-	-	-	-	-		C
28		-	-	-	-	-	-	-	-	-		C
29		-	-	-	-	-	-	-	-	-		C
30		-	-	-	-	-	-	-	-	-		C

Sum 1003 1003 2006 931

Mean 71.6 71.6 143.3 59.4

Days 14

8cm Refractor X67 Projection 15cm

POLAR FACULAE

<u>N</u>	<u>S</u>
0.93	0.00

0.93

MONTHLY REPORT OF SUNSPOT OBSERVATION

OCTOBER 1963 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	- 33m	7	47	1	17	8	64	144	3	39	2 - 3	naked eye=lb
2		-	-	-	-	-	-	-	-	-		C
3		-	-	-	-	-	-	-	-	-		M
4	2:43	3	40	2	40	5	80	130	0	0	2	naked eye=lc
5		-	-	-	-	-	-	-	-	-		C-R
6		-	-	-	-	-	-	-	-	-		R
7		-	-	-	-	-	-	-	-	-		C
8		-	-	-	-	-	-	-	-	-		C
9	1:00	4	31	4	47	8	78	158	3	42	2 - 3	naked eye=la,lb
10	0:14	4	37	5	44	9	81	171	2	31	3	naked eye=lb,lc
11	0:37	5	41	6	41	11	82	192	4	37	3	naked eye=lc
12		-	-	-	-	-	-	-	-	-		R
13	1:12	5	33	7	34	12	67	147	3	11	2	
14	- 36	4	33	7	19	11	51	161	3	15	4	
15		-	-	-	-	-	-	-	-	-		M
16	2:12	4	32	4	14	8	46	126	3	26	3	
17		-	-	-	-	-	-	-	-	-		C
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		C
20	3:04	5	45	4	21	9	66	156	1	3	2	
21	3:07	5	54	5	11	10	65	165	1	4	2	
22		-	-	-	-	-	-	-	-	-		C
23	2:41	2	79	3	6	5	85	135	1	42	3	naked eye=lb
24		-	-	-	-	-	-	-	-	-		M
25		-	-	-	-	-	-	-	-	-		C
26		-	-	-	-	-	-	-	-	-		C
27	3:01	3	91	3	6	6	97	157	2	68	2 - 3	naked eye=lc
28	2:21	3	92	3	6	6	83	143	1	2	2 - 3	
29		-	-	-	-	-	-	-	-	-		M
29	0:56	5	60	3	13	8	73	153	2	16	2 - 3	
30	2:15	5	26	4	23	9	54	144	2	13	2 - 3	
31	3:23	4	16	4	31	8	47	127	2	10	2	
Sum		1427		1027			2454		695			
Mean		39.2		64.2			153.4		43.4			

Days 16

9cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.19	0.00
0.19	

MONTHLY REPORT OF SUNSPOT OBSERVATION

NOVEMBER 1988 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	3ho4m	5	20	4	34	9	54	144	1	3	3	naked eye=lc
2		-	-	-	-	-	-	-	-	-	-	M
3	0:41	5	31	4	33	9	64	154	2	34	2	naked eye=lb
4	0:45	4	22	2	26	6	48	108	2	25	2 - 3	naked eye=lb
5		-	-	-	-	-	-	-	-	-	-	M
6	2:11	7	47	2	33	9	80	170	4	37	2 - 3	naked eye=lc
7	2:32	5	39	2	24	7	63	133	3	33	2 - 3	
8	2:05	3	35	4	16	7	51	121	3	35	2	
9	2:36	4	28	3	15	7	43	113	2	23	2 - 3	
10	4:49	5	41	5	15	10	56	156	2	6	3	
11	5:00	9	48	3	11	12	59	179	3	12	1 - 2	
12	2:03	12	63	3	17	15	80	230	8	28	2 - 3	
13	1:51	6	62	2	16	8	78	158	3	23	2	
14		-	-	-	-	-	-	-	-	-	-	M
15	3:52	7	51	3	30	10	81	181	3	29	2	
16	3:42	11	86	2	23	13	109	239	3	31	3	
17		-	-	-	-	-	-	-	-	-	-	C
18		-	-	-	-	-	-	-	-	-	-	C
19		-	-	-	-	-	-	-	-	-	-	C
20	4:49	6	70	1	2	7	72	142	3	47	1 - 2	
21	4:07	7	54	4	16	11	70	180	4	38	2	
22	3:43	6	59	3	15	9	74	164	2	11	2 - 3	
23	0:46	6	52	3	18	9	70	160	1	2	3	
24		-	-	-	-	-	-	-	-	-	-	R
25		-	-	-	-	-	-	-	-	-	-	S
26	3:08	4	14	3	18	7	32	102	2	11	3 - 4	
27	3:41	2	13	3	23	5	36	86	3	16	2 - 3	
28	0:55	3	22	2	21	5	43	93	2	20	4	
29	3:30	3	16	2	24	5	40	90	3	21	1 - 2	
30	2:36	5	23	2	27	7	50	120	5	39	2	

Sum 2146 1077 3223 1164

Mean 97.5 49.0 146.5 52.9

Days 22

8cm Refractor X67 Projection

POLAR FACULAE

N	S
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0.28	0.06
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0.33

MONTHLY REPORT OF SUNSPOT OBSERVATION

DECEMBER 1988 Observer - K. Fujimori Suwa City Nagano

Date	Time U.T.	N		S		Total 10g+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	3h27m	5	43	2	28	7	71	141	3	44	2	
2	2:12	4	43	2	27	6	70	130	4	50	2	
3	2:22	5	44	4	29	9	73	163	4	51	3	
4		-	-	-	-	-	-	-	-	-		C
5		-	-	-	-	-	-	-	-	-		C
6	2:51	5	31	6	42	11	73	183	2	13	2	
7	2:49	6	28	7	34	13	62	192	2	6	2 - 3	
8	3:01	6	16	5	22	11	38	148	2	3	3 - 4	
9	3:19	3	33	6	25	9	58	148	3	33	2	
10		-	-	-	-	-	-	-	-	-		M
11	3:25	5	35	8	44	13	79	209	5	29	2 - 3	
12	3:44	4	29	8	59	12	88	208	5	34	2	
13		-	-	-	-	-	-	-	-	-		C
14	3:24	7	86	7	55	14	141	281	5	24	3	
15		-	-	-	-	-	-	-	-	-		C
16	3:00	7	100	5	50	12	150	270	5	66	1 - 2	naked eye=lc
17	4:34	7	102	5	49	12	151	271	3	46	1	naked eye=lc
18	3:36	7	135	4	47	11	182	292	2	60	2	naked eye=lb
19	2:37	8	111	4	40	12	151	271	4	74	2	naked eye=lb
20	3:18	7	145	2	38	9	183	273	4	92	2	naked eye=lb
21	2:11	6	137	2	38	8	175	255	4	77	2 - 3	naked eye=lc
22	1:32	9	148	6	36	15	184	334	3	38	2 - 3	
23	3:32	9	128	6	36	15	164	314	3	28	2	
24	2:18	10	106	5	22	15	128	278	3	47	2 - 3	
25	2:10	9	92	3	19	12	111	231	2	34	1 - 2	
26	0:54	8	87	6	37	14	124	264	6	57	3 - 4	
27	2:14	5	70	4	61	9	131	221	7	96	3	
28	4:27	6	64	4	57	10	121	221	6	82	1	
29	2:36	7	57	5	78	12	135	255	7	102	3	
30	3:21	5	40	6	72	11	112	222	5	68	2 - 3	
31	2:28	4	36	6	78	10	114	214	3	33	2 - 3	
Sum		3586		2103		5999			2307			
Mean		137.9		92.4		230.3			88.7			

Days 26

8cm Refractor X67 Projection 15cm

POLAR FACULAE

N	S
0.18	0.05
0.23	