

MONTHLY REPORT OF SUNSPOT OBSERVATION

JANUARY 2003 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	2h45m	1	2	3	11	4	13	53	4	13	4	
2	2:20	1	2	2	13	3	15	45	2	13	1 - 2	
3		-	-	-	-	-	-	-	-	-		C
4	5:00	1	2	4	37	5	39	89	0	0	1 - 2	
5		-	-	-	-	-	-	-	-	-		C
6	2:24	3	10	4	59	7	69	139	4	43	2	
7	1:59	2	8	6	59	8	67	147	3	48	1 - 2	
8	2:29	1	5	7	89	8	94	174	4	75	2 - 3	
9	3:28	1	7	8	113	9	120	210	4	60	2	
10	3:45	0	0	8	111	8	111	191	2	23	3	
11	2:53	1	9	7	97	8	106	186	1	36	3	
12	2:45	1	5	7	103	8	108	188	3	49	4	
13	2:30	0	0	6	74	6	74	134	3	61	1 - 2	
14		-	-	-	-	-	-	-	-	-		M
15	4:07	3	9	4	54	7	63	133	4	42	2	
16		-	-	-	-	-	-	-	-	-		C
17	2:38	4	19	4	29	8	48	128	4	18	3	
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		C-S
20	2:58	5	32	6	11	11	43	153	4	19	2 - 3	
21	4:26	2	15	3	15	5	30	80	1	12	4	
22	3:30	4	18	5	36	9	54	144	3	15	3 - 4	
23		-	-	-	-	-	-	-	-	-		S
24	3:22	2	7	4	49	6	56	116	2	31	3	
25		-	-	-	-	-	-	-	-	-		M
26	4:30	1	7	4	41	5	48	98	3	40	1 - 2	
27		-	-	-	-	-	-	-	-	-		R
28	2:54	2	20	7	32	9	52	142	4	28	4	
29	3:49	1	17	8	42	9	59	149	3	23	2	
30	3:39	1	11	5	22	6	33	93	1	12	1 - 2	
31	2:28	2	9	5	16	7	25	95	2	5	2 - 3	
Sum		604		2283		2887			1276			
Mean		27.4		103.8		131.2			58.0			

Days 22

8cm Refractor X67 Projection 15cm

POLAR FACULAE (Days 17)

<u>N</u>	<u>S</u>
0.35	0.24
<u>0.59</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

FEBRUARY 2003 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks
		g	f	g	f	g	f	R	g	f		
1	3h14m	1	3	4	17	5	20	70	2	7	4	
2		-	-	-	-	-	-	-	-	-	-	C
3	3:21	0	0	5	36	5	36	86	3	13	3	
4	3:29	0	0	2	41	2	41	61	1	14	2 - 3	
5	3:46	2	10	3	39	5	49	99	2	12	2 - 3	
6	3:15	2	15	5	48	7	63	133	1	28	3	
7	4:45	3	19	5	43	8	62	142	2	31	3	
8	3:15	3	17	5	28	8	45	125	3	18	2	
9	4:36	4	28	6	34	10	62	162	4	30	3	
10	2:53	4	19	5	31	9	50	140	6	42	2 - 3	
11		-	-	-	-	-	-	-	-	-	-	C-R
12	2:59	3	17	5	25	8	42	122	5	29	2 - 3	
13	3:11	4	17	5	14	9	31	121	4	9	2	
14	4:00	5	15	3	12	8	27	107	3	8	2	
15	2:03	2	12	2	5	4	17	57	1	4	1 - 2	
16		-	-	-	-	-	-	-	-	-	-	S
17	3:24	1	7	0	0	1	7	17	0	0	3 - 4	
18		-	-	-	-	-	-	-	-	-	-	C
19	3:36	3	20	0	0	3	20	50	0	0	2	
20		-	-	-	-	-	-	-	-	-	-	M
21	2:41	3	48	2	7	5	55	105	4	33	2 - 3	
22		-	-	-	-	-	-	-	-	-	-	C
23		-	-	-	-	-	-	-	-	-	-	C
24		-	-	-	-	-	-	-	-	-	-	S
25	5:14	2	14	1	5	3	19	49	1	5	4	
26	4:20	2	10	2	6	4	16	56	1	5	2 - 3	
27	4:11	1	8	3	10	4	18	58	0	0	3	
28	3:30	2	4	3	15	5	19	69	0	0	3	
Sum		753		1076		1829			718			
Mean		37.7		53.8		91.5			35.9			

Days 20

POLAR FACULAE (Days 19)

8cm Refractor X67 Projection 15cm

<u>N</u>	<u>S</u>
0.11	0.21
<u>0.32</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

MARCH 2003 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	2h46m	1	17	4	23	5	40	90	1	7	2 - 3	
3		-	-	-	-	-	-	-	-	-		M
4		-	-	-	-	-	-	-	-	-		M
5	3:30	2	37	2	11	4	48	88	3	35	1 - 2	naked eye=1c
6	2:50	3	27	2	12	5	39	89	4	33	1	naked eye=1c
7		-	-	-	-	-	-	-	-	-		R
8	2:27	4	28	4	19	8	47	127	5	40	3	naked eye=1c
9	4:41	6	27	3	37	9	64	154	3	25	3	
10	3:10	4	19	4	39	8	58	138	1	11	2	
11	3:24	4	26	4	24	8	50	130	3	14	2 - 3	naked eye=1c
12	3:50	3	29	2	20	5	49	99	2	28	3	naked eye=1b
13	2:54	3	25	1	9	4	34	74	2	27	3	naked eye=1b
14	2:29	2	28	2	18	4	46	86	3	36	2	naked eye=1b
15		-	-	-	-	-	-	-	-	-		S-R
16	2:52	2	23	2	39	4	62	102	2	38	2	naked eye=1c
17		-	-	-	-	-	-	-	-	-		C
18	3:44	1	13	3	29	4	42	82	0	0	3 - 4	
19	2:49	1	11	2	38	3	49	79	0	0	2 - 3	
20	4:09	1	3	2	22	3	25	55	1	3	3	
21		-	-	-	-	-	-	-	-	-		M
22		-	-	-	-	-	-	-	-	-		C
23	4:40	1	2	2	8	3	10	40	1	2	2 - 3	
24	4:57	2	10	1	6	3	16	46	1	4	2 - 3	
25		-	-	-	-	-	-	-	-	-		R
26	3:00	4	39	2	10	6	49	109	3	14	2 - 3	
27	3:04	3	62	3	16	6	78	138	3	40	3	
28	2:02	4	67	3	19	7	86	156	3	43	3	
29	4:30	4	69	4	54	8	123	203	4	102	2 - 3	
30	2:36	4	61	5	51	9	112	202	4	73	3 - 4	
31	2:52	4	50	5	57	9	107	197	4	68	3 - 4	
Sum		1303		1181		2484			1173			
Mean		59.2		53.7		112.9			53.3			

Days 22

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 17)

<u>N</u>	<u>S</u>
0.06	0.41
<u>0.47</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

APRIL 2003 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	5h20m	3	31	5	60	8	91	171	5	57	3	
2		-	-	-	-	-	-	-	-	-		R
3	3:10	4	28	4	57	8	85	165	5	47	2	
4		-	-	-	-	-	-	-	-	-		C
5		-	-	-	-	-	-	-	-	-		S-R
6	2:38	4	12	3	27	7	39	109	1	7	3 - 4	
7	3:42	3	10	3	12	6	22	82	1	5	3	
8		-	-	-	-	-	-	-	-	-		R
9	3:00	3	16	3	10	6	26	86	2	15	2	naked eye=1c
10	3:40	2	16	3	7	5	23	73	1	13	2	naked eye=1c
11	3:54	2	12	1	5	3	17	47	2	12	2	naked eye=1c
12		-	-	-	-	-	-	-	-	-		R
13	5:25	2	17	2	5	4	22	62	1	6	3	
14	5:30	2	6	2	6	4	12	52	2	7	1 - 2	
15		-	-	-	-	-	-	-	-	-		R
16	2:57	0	0	2	6	2	6	26	2	4	3 - 4	
17	3:46	0	0	2	4	2	4	24	2	4	4	
18	2:14	1	3	2	9	3	12	42	2	9	3 - 4	
19		-	-	-	-	-	-	-	-	-		C
20		-	-	-	-	-	-	-	-	-		R
21	3:20	3	26	2	17	5	43	93	1	12	4	
22	3:42	3	31	4	30	7	61	131	2	22	3	
23		-	-	-	-	-	-	-	-	-		R-C
24		-	-	-	-	-	-	-	-	-		R
25		-	-	-	-	-	-	-	-	-		R
26	3:40	6	51	3	16	9	67	157	4	24	2 - 3	
27	2:46	4	31	6	47	10	78	178	3	31	3	
28	3:32	3	22	7	70	10	92	192	4	24	3	
29	3:14	2	20	6	85	8	105	185	5	47	3	
30		-	-	-	-	-	-	-	-	-		R
Sum		802		1073		1875			796			
Mean		44.6		59.6		104.2			44.2			

Days 18

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 14)

<u>N</u>	<u>S</u>
0.07	0.29
<u>0.36</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

MAY 2003 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks
		g	f	g	f	g	f	R	g	f		
1	4h50m	3	15	6	76	9	91	181	4	67	3	naked eye=1b
2	3:28	3	20	3	78	6	98	158	3	76	4 - 5	naked eye=1b
3	3:47	4	15	4	81	8	96	176	1	59	3	naked eye=1c
4	7:19	4	8	5	96	9	104	194	0	0	4 - 5	
5	2:45	4	7	3	78	7	85	155	1	2	3	
6	2:36	4	8	3	57	7	65	135	1	2	2 - 3	
7		-	-	-	-	-	-	-	-	-		C
8		-	-	-	-	-	-	-	-	-		R
9	3:19	3	8	0	0	3	8	38	2	2	3 - 4	
10	3:42	2	6	0	0	2	6	26	0	0	4	
11		-	-	-	-	-	-	-	-	-		C-R
12	3:44	2	5	1	5	3	10	40	0	0	3	
13	4:30	2	6	1	5	3	11	41	1	4	1 - 2	
14		-	-	-	-	-	-	-	-	-		C
15		-	-	-	-	-	-	-	-	-		R
16	4:00	3	23	2	10	5	33	83	3	21	2 - 3	
17	4:10	2	4	3	17	5	21	71	1	7	3	
18		-	-	-	-	-	-	-	-	-		M
19		-	-	-	-	-	-	-	-	-		C
20		-	-	-	-	-	-	-	-	-		C-R
21	2:47	0	0	4	40	4	40	80	1	7	2 - 3	
22	3:50	0	0	7	39	7	39	109	1	14	3 - 4	
23	2:40	3	5	5	18	8	23	103	2	9	2 - 3	
24		-	-	-	-	-	-	-	-	-		M
25	3:50	0	0	3	24	3	24	54	1	17	2	
26		-	-	-	-	-	-	-	-	-		C
27		-	-	-	-	-	-	-	-	-		C
28	2:05	1	2	3	44	4	46	86	3	39	3	naked eye=1c
29		-	-	-	-	-	-	-	-	-		M
30	3:20	1	2	2	44	3	46	76	0	0	3	
31		-	-	-	-	-	-	-	-	-		R
Sum		544		1262		1806			586			
Mean		30.2		70.1		100.3			32.6			

Days 18

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 15)

N	S
0.33	0.13
0.47	

MONTHLY REPORT OF SUNSPOT OBSERVATION

JUNE 2003 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		-	-	-	-	-	-	-	-	-		M
2	2h31m	2	19	1	1	3	20	50	1	12	3 - 4	
3	2:46	2	27	1	8	3	35	65	2	20	4 - 5	
4		-	-	-	-	-	-	-	-	-		C
5	3:14	3	32	1	4	4	36	76	2	6	4	
6	2:49	4	54	2	9	6	63	123	2	42	3 - 4	naked eye=1c
7		-	-	-	-	-	-	-	-	-		C
8	2:37	4	82	3	18	7	100	170	3	76	4	naked eye=1b
9	3:00	4	83	1	27	5	110	160	3	81	2 - 3	naked eye=1b
10		-	-	-	-	-	-	-	-	-		C
11	2:00	3	70	3	63	6	133	193	4	57	2 - 3	naked eye=1c
12		-	-	-	-	-	-	-	-	-		M
13		-	-	-	-	-	-	-	-	-		C
14		-	-	-	-	-	-	-	-	-		C
15		-	-	-	-	-	-	-	-	-		C
16		-	-	-	-	-	-	-	-	-		C
17		-	-	-	-	-	-	-	-	-		R-C
18		-	-	-	-	-	-	-	-	-		C
19	1:30	2	16	3	38	5	54	104	2	11	2	
20	3:30	2	18	3	51	5	69	119	3	46	2 - 3	
21		-	-	-	-	-	-	-	-	-		M
22		-	-	-	-	-	-	-	-	-		M
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		C
25	4:20	4	40	3	11	7	51	121	2	35	2	
26		-	-	-	-	-	-	-	-	-		C
27	2:20	7	36	2	15	9	51	141	3	12	2	
28		-	-	-	-	-	-	-	-	-		R-C
29	2:40	7	41	2	20	9	61	151	5	23	3	
30	2:23	8	46	1	20	9	66	156	4	13	3	
Sum		1084		545		1629			794			
Mean		83.4		41.9		125.3			61.1			

Days 13

8cm Refractor X67 projection 15cm

POLAR FACULAE(Days 10)

<u>N</u>	<u>S</u>
<u>1.50</u>	<u>0.30</u>
<u>1.80</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

JULY 2003 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	7h00m	8	66	1	6	9	72	162	3	51	3	naked eye=1c
3		-	-	-	-	-	-	-	-	-		C
4	5:20	5	76	0	0	5	76	126	3	54	2	naked eye=1c
5	4:30	3	67	0	0	3	67	97	3	65	2	naked eye=1c
6	6:39	3	61	1	1	4	62	102	3	55	2 - 3	naked eye=1c
7		-	-	-	-	-	-	-	-	-		R
8	5:31	2	53	4	26	6	79	139	1	25	2 - 3	
9		-	-	-	-	-	-	-	-	-		M
10		-	-	-	-	-	-	-	-	-		C-R
11		-	-	-	-	-	-	-	-	-		C-R
12	2:20	1	4	4	33	5	37	87	4	33	2	
13		-	-	-	-	-	-	-	-	-		C-R
14		-	-	-	-	-	-	-	-	-		C-R
15	7:02	5	44	4	25	9	69	159	3	22	3	
16	2:53	5	45	4	20	9	65	155	3	14	3	
17	3:16	4	54	4	26	8	80	160	4	58	3 - 4	
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		C
20	5:30	4	51	6	77	10	128	228	6	101	2	naked eye=1c
21	6:12	4	60	6	77	10	137	237	7	63	2 - 3	naked eye=1c
22	3:47	3	38	5	82	8	120	200	4	21	4	
23		-	-	-	-	-	-	-	-	-		R
24	2:50	3	16	4	25	7	41	111	2	7	4	
25	1:56	3	6	2	10	5	16	66	1	3	1 - 2	
26	3:56	2	4	1	3	3	7	37	0	0	4	
27	5:30	2	4	1	3	3	7	37	1	2	3	
28	5:00	3	14	2	11	5	25	75	2	8	2	
29		-	-	-	-	-	-	-	-	-		C
30	6:57	2	12	1	18	3	30	60	1	2	2 - 3	
31	2:30	2	8	2	18	4	26	66	2	4	2 - 3	
Sum		1323		981		2304			1118			
Mean		69.6		51.6		121.3			58.8			

Days 19

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 15)

<u>N</u>	<u>S</u>
1.73	0.13
<u>1.87</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

AUGUST 2003 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	3h17m	2	3	2	25	4	28	68	3	17	3 - 4	
2	3:22	2	3	5	33	7	36	106	4	22	3	
3	2:39	2	12	4	43	6	55	115	2	30	3	
4	3:43	2	13	5	45	7	58	128	3	21	3	
5	2:54	4	18	4	60	8	78	158	4	17	3	
6	3:03	2	15	5	55	7	70	140	4	34	2 - 3	naked eye=1c
7		-	-	-	-	-	-	-	-	-		M
8		-	-	-	-	-	-	-	-	-		R
9		-	-	-	-	-	-	-	-	-		R
10	3:28	0	0	5	88	5	88	138	1	17	4	
11	5:19	1	2	5	70	6	72	132	2	7	2 - 3	
12		-	-	-	-	-	-	-	-	-		R
13	5:15	0	0	5	65	5	65	115	1	24	2 - 3	
14		-	-	-	-	-	-	-	-	-		R
15	4:50	0	0	4	67	4	67	107	1	61	2	
16		-	-	-	-	-	-	-	-	-		M
17		-	-	-	-	-	-	-	-	-		R
18		-	-	-	-	-	-	-	-	-		C
19	2:02	1	12	4	23	5	35	85	1	2	3	
20	3:06	2	23	4	13	6	36	96	0	0	5	
21	4:40	4	34	2	3	6	37	97	3	28	2 - 3	
22	4:30	4	40	2	18	6	58	118	4	49	3 - 4	
23	3:25	4	52	2	21	6	73	133	4	56	4	
24	3:10	4	61	2	18	6	79	139	4	73	4 - 5	
25	2:56	5	55	2	13	7	68	138	4	46	3	
26		-	-	-	-	-	-	-	-	-		R
27	0:40	4	49	3	11	7	60	130	4	49	3	
28		-	-	-	-	-	-	-	-	-		R
29		-	-	-	-	-	-	-	-	-		M
30	3:40	4	26	3	10	7	36	106	5	28	1 - 2	
31		-	-	-	-	-	-	-	-	-		R
Sum		888		1361		2249			1121			
Mean		46.7		71.6		118.4			59.0			

Days 19

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 15)

N	S
1.67	0.00
1.67	



MONTHLY REPORT OF SUNSPOT OBSERVATION

SEPTEMBER 2003 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks
		g	f	g	f	g	f	R	g	f		
1	3h18m	3	13	6	17	9	30	120	2	13	4	
2	2:44	2	12	4	15	6	27	87	2	18	3 - 4	
3	3:10	1	5	3	15	4	20	60	2	13	2	
4	3:13	1	2	5	28	6	30	90	2	11	3	
5	4:40	0	0	4	36	4	36	76	2	15	3	
6	5:18	0	0	3	16	3	16	46	1	6	1 - 2	
7	3:08	0	0	3	13	3	13	43	1	3	3 - 4	
8	5:57	0	0	1	7	1	7	17	1	7	3	
9	2:31	0	0	2	15	2	15	35	2	15	4 - 5	
10		-	-	-	-	-	-	-	-	-		M
11		-	-	-	-	-	-	-	-	-		M
12	4:59	0	0	2	30	2	30	50	1	3	2 - 3	
13	3:48	0	0	3	31	3	31	61	1	3	2 - 3	
14	4:30	0	0	3	23	3	23	53	0	0	3 - 4	
15	3:13	2	3	4	15	6	18	78	1	2	4	
16	2:42	2	5	3	10	5	15	65	3	10	4 - 5	
17	3:16	3	20	2	18	5	38	88	1	11	4 - 5	
18	2:52	3	22	2	8	5	30	80	1	6	3 - 4	
19	1:49	3	19	2	15	5	34	84	1	13	2	
20		-	-	-	-	-	-	-	-	-		C-R
21		-	-	-	-	-	-	-	-	-		R
22	3:38	3	22	3	13	6	35	95	2	4	4	
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		R
25		-	-	-	-	-	-	-	-	-		R
26	5:10	2	71	3	17	5	88	138	4	81	3 - 4	
27	3:39	2	70	5	18	7	88	158	6	86	3 - 4	
28	7:00	1	53	4	22	5	75	125	5	60	2	
29	4:16	1	46	6	17	7	63	133	3	16	3	naked eye=1c
30	3:21	1	33	4	19	5	52	102	1	5	3	
Sum			696		1188			1884		851		
Mean			30.3		51.6			81.9		37.0		

Days 23

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 20)

<u>N</u>	<u>S</u>
2.70	0.15
2.85	

MONTHLY REPORT OF SUNSPOT OBSERVATION

OCTOBER 2003 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		-	-	-	-	-	-	-	-	-		M
2	3h27m	1	5	4	42	5	47	97	2	13	3	
3	3:42	2	3	4	49	6	52	112	1	1	3 - 4	
4	4:30	0	0	2	49	2	49	69	1	20	2 - 3	
5	3:19	0	0	4	56	4	56	96	1	48	3	
6		-	-	-	-	-	-	-	-	-		C
7	2:26	0	0	3	42	3	42	72	2	39	1 - 2	
8		-	-	-	-	-	-	-	-	-		C
9		-	-	-	-	-	-	-	-	-		M
10	3:00	2	3	2	27	4	30	70	1	1	2	
11	2:10	1	2	2	18	3	20	50	1	3	1 - 2	
12		-	-	-	-	-	-	-	-	-		C
13		-	-	-	-	-	-	-	-	-		R
14		-	-	-	-	-	-	-	-	-		R
15	2:39	2	11	0	0	2	11	31	2	11	2 - 3	
16	2:59	1	6	1	5	2	11	31	1	4	2	
17	2:26	2	6	2	5	4	11	51	1	2	2 - 3	
18	3:16	3	17	1	7	4	24	64	1	7	3 - 4	
19	3:39	2	35	1	2	3	37	67	0	0	3	
20	2:37	2	59	1	1	3	60	90	0	0	2 - 3	
21		-	-	-	-	-	-	-	-	-		C
22		-	-	-	-	-	-	-	-	-		R
23	2:40	1	53	5	21	6	74	134	2	57	2 - 3	naked eye=1a
24	2:29	4	68	2	34	6	102	162	4	66	2	naked eye=1a
25		-	-	-	-	-	-	-	-	-		C
26	1:07	2	62	1	75	3	137	167	1	41	2	naked eye=1a,1b,
27	3:50	4	84	4	106	8	190	270	5	51	3	naked eye=1a,1b,
28		-	-	-	-	-	-	-	-	-		C
29	0:09	3	68	5	128	8	196	276	5	152	1 - 2	naked eye=1a,1b,
30	2:14	3	84	8	164	11	248	358	6	198	3	naked eye=2a
31	2:50	2	76	7	138	9	214	304	6	92	2 - 3	naked eye=2b
Sum		1012		1559		2571			1236			
Mean		50.6		78.0		128.6			61.8			

Days 20

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 17)

<u>N</u>	<u>S</u>
1.65	0.35
<u>2.00</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

NOVEMBER 2003 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks
		U.	T.	g	f	g	f	R	g	f		
1	2h44m	2	55	7	92	9	147	237	4	35	3	naked eye=2c
2	5:56	2	41	8	63	10	104	204	6	32	2 - 3	
3		-	-	-	-	-	-	-	-	-		C-R
4	2:31	2	8	2	25	4	33	73	0	0	2	
5		-	-	-	-	-	-	-	-	-		M
6	5:06	0	0	1	2	1	2	12	0	0	3	
7	1:43	0	0	1	2	1	2	12	0	0	3	
8		-	-	-	-	-	-	-	-	-		M
9		-	-	-	-	-	-	-	-	-		C
10		-	-	-	-	-	-	-	-	-		R
11		-	-	-	-	-	-	-	-	-		R
12	4:20	0	0	2	6	2	6	26	0	0	2 - 3	
13	5:50	2	4	0	0	2	4	24	0	0	1	
14	3:36	2	15	0	0	2	15	35	0	0	2	
15	2:13	2	19	0	0	2	19	39	0	0	2	
16	4:39	3	24	0	0	3	24	54	1	4	2	
17	2:04	2	21	1	1	3	22	52	2	4	2 - 3	
18	3:38	3	26	2	3	5	29	79	1	21	2	naked eye=1c
19	4:20	3	35	3	15	6	50	110	1	19	3 - 4	naked eye=1c
20		-	-	-	-	-	-	-	-	-		R
21		-	-	-	-	-	-	-	-	-		M
22	2:29	3	43	3	45	6	88	148	3	5	2	naked eye=1b
23	3:45	3	48	5	54	8	102	182	6	52	3	naked eye=1b
24	3:39	3	41	6	51	9	92	182	6	82	3 - 4	naked eye=1b
25		-	-	-	-	-	-	-	-	-		R
26	3:19	3	36	5	71	8	107	187	5	87	2 - 3	naked eye=1c
27		-	-	-	-	-	-	-	-	-		C
28	4:30	3	22	8	71	11	93	203	5	32	3 - 4	
29	4:20	2	13	6	64	8	77	157	3	36	2	
30		-	-	-	-	-	-	-	-	-		R-C
Sum			851		1165			2016		839		
Mean			44.8		61.3			106.1		44.2		

Days 19

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 17)

<u>N</u>	<u>S</u>
<u>0.53</u>	<u>0.35</u>
<u>0.88</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

DECEMBER 2003 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	3h35m	1	2	7	46	8	48	128	3	16	2 - 3	
3	2:58	1	2	7	33	8	35	115	4	16	2 - 3	
4	3:40	1	2	5	33	6	35	95	4	18	2	
5		-	-	-	-	-	-	-	-	-		M
6		-	-	-	-	-	-	-	-	-		R
7	2:56	1	2	2	22	3	24	54	1	16	2	
8	3:52	1	2	2	12	3	14	44	1	9	2	
9	3:15	0	0	2	5	2	5	25	0	0	2	
10	2:53	1	1	2	4	3	5	35	0	0	2 - 3	
11		-	-	-	-	-	-	-	-	-		C
12		-	-	-	-	-	-	-	-	-		R-C
13	2:30	2	7	1	4	3	11	41	0	0	1 - 2	
14		-	-	-	-	-	-	-	-	-		M
15	2:21	2	11	1	6	3	17	47	2	12	2	
16	2:25	2	16	2	11	4	27	67	2	25	2	
17	3:21	3	15	4	18	7	33	103	3	20	2	
18		-	-	-	-	-	-	-	-	-		M
19		-	-	-	-	-	-	-	-	-		C
20	3:34	5	48	2	6	7	54	124	3	16	2	
21	3:24	4	46	3	4	7	50	120	4	24	2 - 3	
22	3:20	4	51	2	5	6	56	116	4	27	2	
23	3:50	3	67	3	8	6	75	135	5	72	3	
24	4:04	2	61	3	4	5	65	115	4	63	2 - 3	
25	3:01	2	36	1	4	3	40	70	2	36	1 - 2	
26	2:50	1	41	2	10	3	51	81	3	51	1 - 2	
27	3:40	1	22	1	9	2	31	51	2	20	1	
28	3:17	1	18	2	8	3	26	56	2	8	2 - 3	
29	3:00	1	16	1	4	2	20	40	0	0	2	
30	3:09	1	9	2	3	3	12	42	1	2	4	
31		-	-	-	-	-	-	-	-	-		C-R
Sum		875		829		1704			951			
Mean		39.8		37.7		77.5			43.2			

Days 22

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 17)

<u>N</u>	<u>S</u>
0.47	0.77

1.24