

MONTHLY REPORT OF SUNSPOT OBSERVATION

JANUARY 2002 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	5h10m	6	36	5	73	11	109	219	6	22	2	
3		-	-	-	-	-	-	-	-	-		C
4	3:00	6	26	9	88	15	114	264	5	63	2	
5	4:50	4	8	6	47	10	55	155	3	32	1	
6	2:57	4	15	6	59	10	74	174	3	46	2 - 3	
7	4:11	4	16	4	36	8	52	132	2	33	1 - 2	
8	4:06	5	26	4	34	9	60	150	4	25	2	
9	5:00	5	49	5	37	10	86	186	4	54	2	
10	3:27	4	65	5	56	9	121	211	5	78	3	naked eye=1c
11	5:54	4	44	6	49	10	93	193	4	50	1	
12	5:35	4	44	5	52	9	96	186	4	46	1 - 2	
13		-	-	-	-	-	-	-	-	-		C
14	4:48	4	44	7	59	11	103	213	3	29	2 - 3	
15		-	-	-	-	-	-	-	-	-		M
16		-	-	-	-	-	-	-	-	-		R
17	2:49	2	28	4	25	6	53	113	4	48	3	
18	2:59	3	34	5	25	8	59	139	5	53	3	
19	4:20	5	28	4	31	9	59	149	4	42	2	
20	3:19	7	38	5	35	12	73	193	3	19	3	
21		-	-	-	-	-	-	-	-	-		R
22	2:10	4	41	7	58	11	99	209	4	49	3 - 4	naked eye=1c
23	5:20	8	44	10	49	18	93	273	7	51	3	naked eye=1b
24	2:50	5	27	9	42	14	69	209	7	44	4	naked eye=1b
25	3:00	5	25	10	38	15	63	213	9	40	2 - 3	naked eye=1b
26		-	-	-	-	-	-	-	-	-		C
27	5:42	4	63	7	38	11	101	211	4	23	2	
28	2:52	4	59	7	49	11	108	218	3	15	3	
29		-	-	-	-	-	-	-	-	-		M
30	2:59	3	63	7	55	10	118	218	4	75	2	
31	3:27	3	54	6	73	9	127	217	5	110	1 - 2	naked eye=1c
Sum			1907		2538			4445		2067		
Mean			82.9		110.4			193.3		89.9		

Days 23

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 13)

<u>N</u>	<u>S</u>
0.00	0.08
<u>0.08</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

FEBRUARY 2002 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	2h58m	3	51	6	70	9	121	211	5	96	2 - 3	naked eye=1C
2		-	-	-	-	-	-	-	-	-		C
3		-	-	-	-	-	-	-	-	-		S
4	2:39	6	34	7	127	13	161	291	7	76	2 - 3	
5		-	-	-	-	-	-	-	-	-		C
6	4:35	6	29	8	75	14	104	244	5	38	2	
7	3:42	4	32	6	52	10	84	184	4	26	2	
8	2:46	7	29	6	23	13	52	182	6	36	2 - 3	
9	4:02	9	30	3	30	12	60	180	5	40	1 - 2	
10	3:40	4	23	4	46	8	69	149	3	44	1 - 2	
11	4:50	4	29	6	62	10	91	191	3	52	2 - 3	
12		-	-	-	-	-	-	-	-	-		M
13		-	-	-	-	-	-	-	-	-		M
14	3:25	3	63	5	25	8	88	168	3	61	2 - 3	
15	2:40	4	61	6	23	10	84	184	4	61	3 - 4	
16	3:05	3	42	4	26	7	68	138	4	36	3	
17		-	-	-	-	-	-	-	-	-		M
18		-	-	-	-	-	-	-	-	-		M
19	3:19	3	10	3	58	6	68	128	4	59	2	naked eye=1c
20	3:48	4	13	4	54	8	67	147	4	50	2 - 3	naked eye=1c
21	3:36	4	7	6	58	10	65	165	5	51	2 - 3	
22	3:05	3	10	6	58	9	68	158	5	47	2 - 3	
23	3:31	1	8	6	51	7	59	129	3	18	2 - 3	
24	4:00	3	18	6	41	9	59	149	1	9	3	
25	3:10	3	26	6	62	9	88	178	2	21	2	
26	2:58	4	31	8	70	12	101	221	5	32	3 - 4	
27	3:00	4	40	6	49	10	89	189	5	35	2	
28		-	-	-	-	-	-	-	-	-		R-C
Sum		1406		2180		3586			1718			
Mean		70.3		109.0		179.3			85.9			

Days 20

8cm Refractor X67 Projection 15cm

POLAR FACULAE (Days 16)

<u>N</u>	<u>S</u>
0.00	0.13
<u>0.13</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

MARCH 2002 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	3h10m	4	62	7	32	11	94	204	4	52	4	
2	3:04	3	36	3	21	6	57	117	2	27	3	
3	4:36	4	41	6	23	10	64	164	2	10	3	
4	3:10	2	30	8	32	10	62	162	3	17	4	
5		-	-	-	-	-	-	-	-	-	-	C
6		-	-	-	-	-	-	-	-	-	-	R-C
7	6:10	5	22	4	48	9	70	160	4	48	2 - 3	
8	4:11	2	6	4	41	6	47	107	4	40	2	
9	3:23	2	7	5	31	7	38	108	3	15	2	
10	2:36	2	9	6	37	8	46	126	3	11	3 - 4	
11	2:48	5	12	6	39	11	51	161	2	5	1 - 2	
12	4:20	3	9	5	39	8	48	128	1	2	2 - 3	
13	2:48	3	12	6	53	9	65	155	3	17	2	naked eye=1c
14	3:39	2	8	5	44	7	52	122	3	37	2	naked eye=1b
15		-	-	-	-	-	-	-	-	-	-	M
16	6:30	2	6	5	56	7	62	132	4	48	1 - 2	
17	2:33	1	2	5	73	6	75	135	5	69	3	
18		-	-	-	-	-	-	-	-	-	-	C
19	3:43	2	4	5	56	7	60	130	2	32	2 - 3	
20	3:42	1	4	7	48	8	52	132	2	16	2	
21		-	-	-	-	-	-	-	-	-	-	M
22		-	-	-	-	-	-	-	-	-	-	C
23	3:26	6	32	5	42	11	74	184	4	21	2	
24	1:50	5	28	4	43	9	71	161	4	30	2 - 3	
25	3:30	4	34	4	43	8	77	157	4	49	2	
26	2:42	4	40	3	38	7	78	148	4	62	2	
27		-	-	-	-	-	-	-	-	-	-	R
28	2:34	6	57	4	35	10	92	192	4	48	3	
29		-	-	-	-	-	-	-	-	-	-	R
30	3:13	6	71	3	20	9	91	181	2	13	3	
31	2:04	4	87	4	36	8	123	203	2	34	3	
Sum		1399		2070		3469			1413			
Mean		60.8		90.0		150.8			61.4			

Days 23

8cm Refractor X67 Projection 15cm

POLAR FACULAE (Days 17)

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

MONTHLY REPORT OF SUNSPOT OBSERVATION

APRIL 2002 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	3h57m	4	95	5	34	9	129	219	4	57	3	naked eye=1c
2	3:25	4	102	5	47	9	149	239	7	122	3	naked eye=2c
3	3:20	4	102	8	35	12	137	257	9	125	3	naked eye=1c
4	3:48	5	92	4	19	9	111	201	5	86	1 - 2	naked eye=1c
5	3:51	6	108	3	20	9	128	218	4	60	1 - 2	naked eye=1c
6		-	-	-	-	-	-	-	-	-		M
7	3:10	6	73	6	28	12	101	221	4	18	1 - 2	
8		-	-	-	-	-	-	-	-	-		M
9		-	-	-	-	-	-	-	-	-		C
10	6:00	4	63	6	34	10	97	197	6	74	2	
11	4:20	4	65	6	45	10	110	210	5	61	2	
12		-	-	-	-	-	-	-	-	-		R-C
13		-	-	-	-	-	-	-	-	-		M
14	2:50	5	58	6	79	11	137	247	4	53	3 - 4	naked eye=1c
15	3:07	6	44	5	72	11	116	226	5	54	4	naked eye=1c
16		-	-	-	-	-	-	-	-	-		C
17		-	-	-	-	-	-	-	-	-		R
18	3:05	4	13	5	74	9	87	177	4	43	2 - 3	
19	3:18	3	19	7	80	10	99	199	6	48	4	
20	3:32	2	26	6	61	8	87	167	6	54	2 - 3	
21		-	-	-	-	-	-	-	-	-		R
22	3:41	4	46	4	23	8	69	149	3	32	3	
23	3:40	6	52	4	23	10	75	175	4	28	2 - 3	
24		-	-	-	-	-	-	-	-	-		M
25		-	-	-	-	-	-	-	-	-		C
26	3:37	4	46	5	26	9	72	162	4	41	2 - 3	
27	3:50	5	54	5	8	10	62	162	5	46	3	
28	3:12	4	52	1	7	5	59	109	4	36	4	
29	3:22	5	38	1	1	6	39	99	2	19		
30		-	-	-	-	-	-	-	-	-		C
Sum		1998		1636		3634			1967			
Mean		105.2		86.1		191.3			103.5			

Days 19

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 14)

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

MONTHLY REPORT OF SUNSPOT OBSERVATION

MAY 2002 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		-	-	-	-	-	-	-	-	-		C
2	3h49m	5	44	4	29	9	73	163	2	20	4 - 5	
3	3:20	6	50	5	43	11	93	203	3	25	2 - 3	
4		-	-	-	-	-	-	-	-	-		M
5	4:26	6	46	9	80	15	126	276	10	59	3 - 4	
6	3:48	6	35	9	96	15	111	261	9	74	3	naked eye=1c
7		-	-	-	-	-	-	-	-	-		R
8		-	-	-	-	-	-	-	-	-		C
9	4:00	3	17	7	59	10	76	176	4	55	2	naked eye=1c
10		-	-	-	-	-	-	-	-	-		R
11		-	-	-	-	-	-	-	-	-		M
12	3:25	2	6	7	108	9	114	204	3	34	3	
13	3:34	3	9	6	71	9	80	170	3	31	3 - 4	
14	3:09	2	4	6	58	8	62	142	2	37	3	
15	3:30	1	2	6	37	7	39	109	3	26	2	
16		-	-	-	-	-	-	-	-	-		C
17		-	-	-	-	-	-	-	-	-		R
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		M
20	3:33	5	61	5	32	10	93	193	4	19	2 - 3	
21	3:30	5	97	4	40	9	137	227	4	96	3	
22	4:15	6	78	6	37	12	115	235	6	76	2 - 3	
23	5:43	6	70	4	34	10	104	204	5	65	2	
24	4:42	6	88	6	30	12	118	238	6	77	3	
25	0:50	6	84	4	28	10	112	212	6	65	3	
26		-	-	-	-	-	-	-	-	-		M
27	3:34	9	72	4	21	13	93	223	7	50	2 - 3	
28	3:05	8	60	4	18	12	78	198	4	30	4 - 5	
29	4:20	7	38	4	33	11	71	181	3	19	2	
30	4:00	5	31	5	52	10	83	183	3	15	2 - 3	
31	4:30	4	23	6	56	10	79	179	3	17	1 - 2	
Sum		1925		2052		3977			1790			
Mean		96.3		102.6		198.9			89.5			

Days 20

POLAR FACULAE (Days 17)

8cm Refractor X67 Projection 15cm

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

MONTHLY REPORT OF SUNSPOT OBSERVATION

JUNE 2002 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	3h21m	4	16	7	68	11	84	194	3	22	2	naked eye=1c
2	4:26	3	10	7	76	10	86	186	6	54	2 - 3	naked eye=1c
3	4:07	4	17	8	76	12	93	213	5	59	3	naked eye=1c
4	4:12	5	23	5	62	10	85	185	4	59	1 - 2	
5	5:28	6	29	6	62	12	91	211	5	62	3	
6	2:41	4	21	7	53	11	74	184	4	37	2 - 3	
7	3:04	4	27	9	58	13	85	215	7	54	2 - 3	
8		-	-	-	-	-	-	-	-	-		M
9	2:35	4	25	8	56	12	81	201	7	58	2 - 3	
10	4:00	4	17	7	53	11	70	180	4	47	2 - 3	
11		-	-	-	-	-	-	-	-	-		C
12	5:40	4	8	3	27	7	35	105	3	13	1 - 2	
13	3:10	3	3	3	20	6	23	83	2	11	1 - 2	
14	2:51	4	6	4	16	8	22	102	2	8	2 - 3	
15		-	-	-	-	-	-	-	-	-		M
16		-	-	-	-	-	-	-	-	-		M
17		-	-	-	-	-	-	-	-	-		C
18		-	-	-	-	-	-	-	-	-		R
19	3:02	4	20	4	21	8	41	121	4	19	4 - 5	
20		-	-	-	-	-	-	-	-	-		C-R
21	3:14	3	12	3	21	6	33	93	3	12	4 - 5	
22	5:09	2	19	3	21	5	40	90	3	20	3 - 4	naked eye=1c
23		-	-	-	-	-	-	-	-	-		C
24	3:20	2	14	5	35	7	49	119	3	27	3	naked eye=1c
25		-	-	-	-	-	-	-	-	-		R
26		-	-	-	-	-	-	-	-	-		R
27		-	-	-	-	-	-	-	-	-		C
28	4:57	1	2	4	15	5	17	67	2	10	3	
29		-	-	-	-	-	-	-	-	-		C
30		-	-	-	-	-	-	-	-	-		C
Sum		879		1670		2549			1242			
Mean		51.7		98.2		149.9			73.1			

Days 17

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 14)

<u>N</u>	<u>S</u>
0.14	0.00
0.14	

MONTHLY REPORT OF SUNSPOT OBSERVATION

JULY 2002 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	3h59m	1	2	5	46	6	48	108	2	5	3	
3	4:44	1	1	7	60	8	61	141	2	4	3	
4	2:15	1	1	7	64	8	65	145	1	19	3	
5	4:20	0	0	8	56	8	56	136	2	28	1 - 2	
6		-	-	-	-	-	-	-	-	-		C
7	7:10	0	0	7	36	7	36	106	3	12	1 - 2	
8	2:42	0	0	7	44	7	44	114	1	3	5	
9	2:36	1	4	6	25	7	29	99	1	2	3	
10		-	-	-	-	-	-	-	-	-		R
11	6:33	2	23	3	13	5	36	86	2	11	3 - 4	
12	2:52	2	44	3	10	5	54	104	3	10	4	
13		-	-	-	-	-	-	-	-	-		C-R
14	4:10	2	72	3	8	5	80	130	3	54	3	
15		-	-	-	-	-	-	-	-	-		C
16	3:38	4	90	4	19	8	109	189	3	88	3	naked eye=1b
17		-	-	-	-	-	-	-	-	-		C
18	2:06	4	82	2	39	6	121	181	2	56	5	naked eye=1c
19	4:10	2	70	2	43	4	113	153	1	13	2	
20	4:56	3	40	2	62	5	102	152	4	64	2 - 3	naked eye=1b
21	3:07	3	25	2	61	5	86	136	3	64	5	naked eye=1b
22		-	-	-	-	-	-	-	-	-		C
23	2:29	5	20	7	84	12	104	224	4	52	3	naked eye=1c
24	2:24	5	25	7	104	12	129	249	6	41	2	naked eye=1c
25	3:06	5	33	6	120	11	153	263	4	20	4	
26	3:50	6	64	4	232	10	296	396	5	55	2 - 3	
27		-	-	-	-	-	-	-	-	-		M
28	4:38	6	55	7	146	13	201	331	6	176	4 - 5	naked eye=1c
29	2:05	5	47	6	150	11	197	307	7	181	2	naked eye=1c
30		-	-	-	-	-	-	-	-	-		M
31	3:07	5	25	5	161	10	186	286	3	57	3	naked eye=1c
Sum		1353		2683		4036			1695			
Mean		61.5		122.0		183.5			77.0			

Days 22

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 19)

<u>N</u>	<u>S</u>
1.11	0.00

1.11

MONTHLY REPORT OF SUNSPOT OBSERVATION

AUGUST 2002 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	3h49m	3	11	6	138	9	149	239	3	12	3	
2	3:00	3	12	7	92	10	104	204	3	20	1 - 2	
3	2:46	2	10	7	85	9	95	185	3	33	4 - 5	
4	2:29	3	20	7	55	10	75	175	2	30	4	
5	4:17	3	18	5	38	8	56	136	3	7	4	
6	3:33	4	36	4	21	8	57	137	3	16	3 - 4	
7		-	-	-	-	-	-	-	-	-		M
8		-	-	-	-	-	-	-	-	-		M
9		-	-	-	-	-	-	-	-	-		M
10	2:30	5	42	2	13	7	55	125	2	28	5	
11	2:50	6	47	2	11	8	58	138	3	36	4	
12	3:37	4	38	4	44	8	82	162	2	14	2 - 3	
13	4:46	5	63	5	54	10	117	217	3	30	4	
14	4:49	8	86	8	67	16	153	313	9	66	3	naked eye=1c
15		-	-	-	-	-	-	-	-	-		M
16		-	-	-	-	-	-	-	-	-		M
17	3:02	7	82	5	115	12	197	317	6	144	3	naked eye=1a
18		-	-	-	-	-	-	-	-	-		C-R
19		-	-	-	-	-	-	-	-	-		R
20	3:32	4	28	6	104	10	132	232	4	54	2 - 3	naked eye=1a
21	3:00	3	18	8	94	11	112	222	3	14	2 - 3	naked eye=1c
22	2:58	2	12	8	94	10	106	206	3	28	3	
23		-	-	-	-	-	-	-	-	-		C-R
24	3:56	1	2	8	95	9	97	187	4	56	3 - 4	naked eye=1c
25	2:36	0	0	9	72	9	72	162	5	26	4 - 5	naked eye=1b
26	3:27	1	5	7	54	8	59	139	1	15	4	naked eye=1c
27	2:38	0	0	6	43	6	43	103	2	29	3	naked eye=2c
28	1:00	0	0	7	52	7	52	122	2	26	3	naked eye=1c
29		-	-	-	-	-	-	-	-	-		M
30		-	-	-	-	-	-	-	-	-		M
31	3:02	1	36	7	61	8	97	177	1	12	3	
Sum		1216		2682		3898			1366			
Mean		57.9		127.7		185.6			65.0			

Days 21

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 19)

<u>N</u>	<u>S</u>
0.47	0.00
<u>0.47</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

SEPTEMBER 2002 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	3h06m	3	57	7	53	10	110	210	2	9	3	
2	3:21	4	66	7	46	11	112	222	3	39	3	
3	2:47	4	72	8	36	12	108	228	5	83	3	
4		-	-	-	-	-	-	-	-	-	-	M
5		-	-	-	-	-	-	-	-	-	-	M
6		-	-	-	-	-	-	-	-	-	-	R
7		-	-	-	-	-	-	-	-	-	-	C
8	2:07	6	58	5	36	11	94	204	3	42	4	
9	3:59	5	56	5	48	10	99	199	2	41	2 - 3	
10	1:30	5	60	5	51	10	111	211	3	42	2 - 3	
11		-	-	-	-	-	-	-	-	-	-	C
12	3:54	5	71	3	78	8	149	229	7	88	4	naked eye=1b
13		-	-	-	-	-	-	-	-	-	-	M
14		-	-	-	-	-	-	-	-	-	-	C
15		-	-	-	-	-	-	-	-	-	-	C
16		-	-	-	-	-	-	-	-	-	-	C
17		-	-	-	-	-	-	-	-	-	-	R
18	2:06	4	15	7	87	11	102	212	3	48	3 - 4	
19	3:59	3	13	8	75	11	88	198	3	52	4 - 5	
20	2:13	1	4	9	85	10	89	189	6	63	4 - 5	naked eye=1c
21		-	-	-	-	-	-	-	-	-	-	M
22		-	-	-	-	-	-	-	-	-	-	C
23		-	-	-	-	-	-	-	-	-	-	C
24	3:17	3	28	5	52	8	80	160	2	32	4 - 5	naked eye=1c
25	2:40	5	49	4	48	9	97	187	5	34	3	
26		-	-	-	-	-	-	-	-	-	-	C
27	6:03	5	53	4	16	9	69	159	3	15	2 - 3	
28		-	-	-	-	-	-	-	-	-	-	R
29		-	-	-	-	-	-	-	-	-	-	C-R
30		-	-	-	-	-	-	-	-	-	-	R-C
Sum			1132		1476			2608		1058		
Mean			87.1		113.5			200.6		81.4		

Days 13

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 13)

<u>N</u>	<u>S</u>
0.31	0.00
<u>0.31</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

OCTOBER 2002 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	3h51m	4	30	1	30	5	60	110	3	22	3	
3	3:23	3	28	2	26	5	54	104	2	37	4	
4	3:21	3	37	1	21	4	58	98	1	21	4	
5		-	-	-	-	-	-	-	-	-		M
6		-	-	-	-	-	-	-	-	-		C
7	2:26	2	41	4	29	6	70	130	2	50	2 - 3	naked eye=1b
8		-	-	-	-	-	-	-	-	-		C-R
9	4:53	5	48	7	38	12	86	206	7	57	3 - 4	naked eye=1b
10	4:15	6	59	8	27	14	86	226	6	70	3 - 4	naked eye=1b
11	2:58	8	76	4	18	12	94	214	5	46	2 - 3	naked eye=1c
12	2:53	7	69	5	18	12	87	207	4	22	4	
13	3:32	7	67	5	22	12	89	209	6	29	3 - 4	
14	2:41	5	53	6	23	11	76	186	4	35	3 - 4	
15	1:35	4	47	7	23	11	70	180	4	55	3 - 4	
16	2:45	4	47	8	46	12	93	213	5	58	3 - 4	naked eye=1c
17	3:42	4	41	8	57	12	98	218	6	55	4	
18		-	-	-	-	-	-	-	-	-		M
19		-	-	-	-	-	-	-	-	-		C
20		-	-	-	-	-	-	-	-	-		C
21		-	-	-	-	-	-	-	-	-		R
22	3:10	2	61	4	24	6	85	145	1	4	2 - 3	
23	2:42	2	71	3	14	5	85	135	1	30	3	naked eye=2c
24	3:20	5	75	2	4	7	79	149	3	67	3	naked eye=2c
25	3:21	4	65	1	4	5	69	119	2	61	3 - 4	naked eye=2c
26	4:02	4	55	3	8	7	63	133	2	47	2 - 3	
27		-	-	-	-	-	-	-	-	-		M
28	4:00	4	46	4	8	8	54	134	2	8	1	
29		-	-	-	-	-	-	-	-	-		M
30	4:04	7	50	4	16	11	66	176	3	16	3	
31	3:00	8	44	1	6	9	50	140	3	9	3	
Sum		2090		1342		3432			1519			
Mean		99.5		63.9		163.4			72.3			

Days 21

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 20)

<u>N</u>	<u>S</u>
0.40	0.00
<u>0.40</u>	

MONTHLY REPORT OF SUNSPOT OBSERVATION

NOVEMBER 2002 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		-	-	-	-	-	-	-	-	-		R
2	3h20m	7	58	3	14	10	72	172	4	22	2	
3		-	-	-	-	-	-	-	-	-		M
4	1:50	6	37	3	36	9	73	163	4	31	1 - 2	naked eye=1c
5	4:00	6	44	3	76	9	120	210	6	89	2	
6		-	-	-	-	-	-	-	-	-		M
7		-	-	-	-	-	-	-	-	-		M
8	4:39	6	33	5	76	11	109	219	5	85	1 - 2	naked eye=1c
9	4:20	5	28	5	79	10	107	207	5	32	3	
10	4:28	4	20	5	87	9	107	197	3	30	2	
11	3:16	4	10	5	98	9	108	198	3	23	2	
12		-	-	-	-	-	-	-	-	-		R
13	4:40	0	0	5	70	5	70	120	3	39	1 - 2	
14	2:10	2	11	6	89	8	100	180	2	79	2	naked eye=1c
15	4:08	2	35	5	77	7	112	182	2	61	1 - 2	naked eye=1c
16	3:01	2	21	4	70	6	91	151	2	50	4	naked eye=1c
17	3:48	2	17	3	73	5	90	140	1	14	4	
18	4:50	2	12	3	51	5	63	113	1	3	1	
19	3:41	1	2	4	58	5	60	110	2	11	2	
20	2:21	2	7	4	62	6	69	129	4	36	2 - 3	naked eye=2c
21		-	-	-	-	-	-	-	-	-		M
22		-	-	-	-	-	-	-	-	-		M
23	3:48	2	5	4	49	6	54	114	3	39	3	naked eye=1c
24	1:24	2	3	4	50	6	53	113	2	19	2	naked eye=1c
25		-	-	-	-	-	-	-	-	-		C-R
26	4:03	2	4	2	13	4	17	57	1	3	2 - 3	
27		-	-	-	-	-	-	-	-	-		C
28	3:49	4	20	4	30	8	50	130	2	17	2 - 3	
29	4:11	4	12	2	13	6	25	85	2	9	3	
30	3:50	4	14	3	24	7	38	108	2	4	1 - 2	
Sum		1083		2015				3098	1286			
Mean		51.6		95.9				147.5	61.2			

Days 21

POLAR FACULAE (Days 13)

<u>N</u>	<u>S</u>
0.46	0.00

8cm Refractor X67 Projection 15cm

0.46

MONTHLY REPOOT OF SUNSPOT OBSERVATION

DECEMBER 2002 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		-	-	-	-	-	-	-	-	-		C-R
2	3h59m	3	25	3	30	6	55	115	3	26	1 - 2	
3	2:58	3	30	2	24	5	54	104	4	36	2 - 3	
4		-	-	-	-	-	-	-	-	-		R
5	3:32	5	38	4	16	9	54	144	5	36	3 - 4	
6	3:30	5	52	3	10	8	62	142	5	26	2	
7		-	-	-	-	-	-	-	-	-		C
8		-	-	-	-	-	-	-	-	-		C
9		-	-	-	-	-	-	-	-	-		S
10	4:12	5	13	7	47	12	60	180	5	23	2 - 3	
11	3:30	3	6	6	55	9	61	151	4	23	1 - 2	
12	3:10	2	6	3	32	5	38	88	2	29	1 - 2	
13		-	-	-	-	-	-	-	-	-		M
14	0:58	4	22	4	56	8	78	158	2	34	2	
15	2:59	4	43	6	67	10	110	210	4	30	2 - 3	
16	0:57	4	63	4	44	8	107	187	4	26	1 - 2	
17	2:25	4	83	4	68	8	151	231	5	100	2	
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		C
20	2:42	5	42	5	106	10	148	248	6	69	2	
21		-	-	-	-	-	-	-	-	-		S
22		-	-	-	-	-	-	-	-	-		C
23	1:51	3	15	4	69	7	84	154	1	21	2 - 3	
24		-	-	-	-	-	-	-	-	-		C
25		-	-	-	-	-	-	-	-	-		C
26	2:39	3	5	2	7	5	12	62	1	1	4	
27	2:50	2	3	2	8	4	11	51	1	1	1 - 2	
28	3:42	3	10	1	2	4	12	52	0	0	1 - 2	
29	2:33	3	8	1	3	4	11	51	2	5	2	
30	2:39	2	3	2	11	4	14	54	3	5	4	
31	2:56	1	2	3	16	4	18	58	4	14	4	
Sum		1109		1331		2440			1115			
Mean		58.4		70.1		128.4			58.7			

Days 19

8cm Refractor X67 Projection 15cm

POLAR FACULAE(Days 14)

<u>N</u>	<u>S</u>
0.43	0.21
<u>0.64</u>	