

MONTHLY REPORT OF SUNSPOT OBSERVATION

JANUARY 2012 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	3h10m	0	0	4	18	4	18	58	2	5	1	
2	4:20	0	0	4	28	4	28	68	3	17	1 - 2	
3	3:16	2	10	4	23	6	33	93	3	21	1 - 2	
4		-	-	-	-	-	-	-	-	-		C-S
5	2:54	3	23	3	8	6	31	91	3	12	2	
6	2:37	4	28	3	5	7	33	103	2	11	2 - 3	
7		-	-	-	-	-	-	-	-	-		M
8	2:20	4	43	2	4	6	47	107	1	19	1 - 2	
9	2:55	3	34	1	3	4	37	77	1	18	2	
10		-	-	-	-	-	-	-	-	-		M
11	4:36	3	22	0	0	3	22	52	1	2	2	
12	2:16	3	14	0	0	3	14	44	0	0	2	
13	2:59	3	22	1	3	4	25	65	1	4	3	
14	3:23	4	30	2	9	6	39	99	4	19	2	
15		-	-	-	-	-	-	-	-	-		C
16		-	-	-	-	-	-	-	-	-		C
17	3:38	5	29	3	9	8	38	118	1	5	4	
18	2:41	4	31	3	11	7	42	112	1	6	2 - 3	
19	4:00	3	34	2	6	5	40	90	3	12	2	
20		-	-	-	-	-	-	-	-	-		S
21		-	-	-	-	-	-	-	-	-		C
22	4:55	5	47	0	0	5	47	97	2	26	3	
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		M
25		-	-	-	-	-	-	-	-	-		M
26	2:16	2	15	0	0	2	15	35	1	3	2	
27	2:20	3	10	0	0	3	10	40	1	4	2	
28	5:09	2	5	1	2	3	7	37	2	5	1 - 2	
29	2:31	2	5	3	8	5	13	63	4	9	3	
30	2:09	3	25	1	1	4	26	66	1	1	2	
31	3:20	3	19	1	6	4	25	65	3	22	2	
Sum		1056		524		1580			621			
Mean		50.3		25.0		75.2			29.6			

Days 21

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

FEBRUARY 2012 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		-	-	-	-	-	-	-	-	-		S-C
2	2h00m	2	16	1	4	3	20	50	2	16	1 - 2	
3	3:59	2	13	0	0	2	13	33	2	10	2	
4		-	-	-	-	-	-	-	-	-		C
5	2:20	2	5	0	0	2	5	25	0	0	2	
6		-	-	-	-	-	-	-	-	-		C-R
7		-	-	-	-	-	-	-	-	-		R
8	3:35	1	6	0	0	1	6	16	0	0	2 - 3	
9		-	-	-	-	-	-	-	-	-	3	
10	2:55	1	1	1	18	2	19	39	1	18	3	
11	2:28	1	3	1	16	2	19	39	1	16	2 - 3	
12	2:23	1	4	1	19	2	23	43	1	19	3	
13		-	-	-	-	-	-	-	-	-		C
14		-	-	-	-	-	-	-	-	-		C-R
15		-	-	-	-	-	-	-	-	-		C
16	6:07	2	6	2	3	4	9	49	1	1	2	
17	2:00	2	5	1	2	3	7	37	1	2	2	
18	3:35	2	4	1	4	3	8	38	1	2	2	
19	2:17	4	10	0	0	4	10	50	2	6	2 - 3	
20	2:16	4	17	0	0	4	17	57	2	14	3 - 4	
21	2:30	4	21	0	0	4	21	61	1	16	3	
22	4:55	2	15	0	0	2	15	35	0	0	2	
23		-	-	-	-	-	-	-	-	-		R
24	2:33	3	10	0	0	3	10	40	0	0	2	
25		-	-	-	-	-	-	-	-	-		R
26		-	-	-	-	-	-	-	-	-		C
27	2:22	3	6	0	0	3	6	36	1	2	2 - 3	
28	4:10	3	7	0	0	3	7	37	3	7	2 - 3	
29	5:22	2	4	0	0	2	4	24	2	4	3	
Sum		563		146		709			343			
Mean		31.3		8.1		39.4			19.1			

Days 18

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

MARCH 2012 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	4h10m	1	3	0	0	1	3	13	1	3	2 - 3	
2		-	-	-	-	-	-	-	-	-	-	C-R
3	3:12	3	14	1	2	4	16	56	1	4	2 - 3	
4	2:20	3	15	1	7	4	22	62	0	0	2 - 3	
5		-	-	-	-	-	-	-	-	-	-	R
6	5:20	3	29	2	22	5	51	101	1	17	1 - 2	
7		-	-	-	-	-	-	-	-	-	-	C
8		-	-	-	-	-	-	-	-	-	-	C
9		-	-	-	-	-	-	-	-	-	-	R
10		-	-	-	-	-	-	-	-	-	-	S
11	2:06	4	43	2	8	6	51	111	1	1	2	
12		-	-	-	-	-	-	-	-	-	-	C
13	3:24	4	38	1	4	5	42	92	0	0	2 - 3	
14	2:53	3	33	1	2	4	35	75	2	16	2 - 3	
15	2:05	3	25	2	7	5	32	82	4	23	3	
16	1:50	2	13	2	4	4	17	57	4	17	2	
17		-	-	-	-	-	-	-	-	-	-	R
18		-	-	-	-	-	-	-	-	-	-	C
19	3:01	2	9	2	14	4	23	63	0	0	2 - 3	
20	2:50	2	5	3	12	5	17	67	0	0	2	
21	2:30	1	2	4	12	5	14	64	1	3	3	
22		-	-	-	-	-	-	-	-	-	-	R
23		-	-	-	-	-	-	-	-	-	-	R
24	6:02	2	12	2	10	4	22	62	1	3	3 - 4	
25	2:16	2	13	3	13	5	26	76	1	2	2 - 3	
26	3:16	1	6	2	10	3	16	46	2	8	2 - 3	
27	2:06	1	12	3	16	4	28	68	2	14	3	
28	3:10	1	10	4	12	5	22	72	3	16	2	
29	2:59	2	9	5	17	7	26	96	3	13	3 - 4	
30	3:20	2	13	4	23	6	36	96	3	16	3	
31		-	-	-	-	-	-	-	-	-	-	R
Sum		724		635		1359			456			
Mean		38.1		33.4		71.5			24.0			

Days 19

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

APRIL 2012 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	3h30m	2	11	2	7	4	18	58	1	5	2 - 3	
3		-	-	-	-	-	-	-	-	-		R
4		-	-	-	-	-	-	-	-	-		M
5	3:55	2	22	0	0	2	22	42	2	19	3	
6	4:15	2	19	0	0	2	19	39	1	4	2 - 3	
7	4:38	1	5	0	0	1	5	15	0	0	2	
8	2:50	1	2	0	0	1	2	12	0	0	2 - 3	
9	4:08	1	2	0	0	1	2	12	0	0	3	
10	2:43	0	0	0	0	0	0	0	0	0	2 - 3	
11		-	-	-	-	-	-	-	-	-		R
12	3:12	1	15	3	7	4	22	62	2	17	3	
13		-	-	-	-	-	-	-	-	-		M
14		-	-	-	-	-	-	-	-	-		R
15	3:00	2	19	1	2	3	21	51	0	0	3	
16		-	-	-	-	-	-	-	-	-		C
17	2:47	3	14	1	17	4	31	71	0	0	3	
18	3:14	3	15	4	42	7	57	127	4	14	3 - 4	
19	2:28	2	18	3	48	5	66	116	3	43	3 - 4	
20		-	-	-	-	-	-	-	-	-		C
21	2:50	1	14	5	55	6	69	129	3	48	2 - 3	
22		-	-	-	-	-	-	-	-	-		C-R
23		-	-	-	-	-	-	-	-	-		C
24	2:30	3	16	4	42	7	58	128	3	25	4	
25	2:04	4	20	3	34	7	54	124	3	30	3	
26		-	-	-	-	-	-	-	-	-		C
27	3:06	3	25	3	17	6	42	102	2	13	4	
28	3:06	3	15	3	21	6	36	96	1	7	4	
29		-	-	-	-	-	-	-	-	-		M
30		-	-	-	-	-	-	-	-	-		C
Sum		572		612		1184			475			
Mean		33.6		36.0		69.6			27.9			

Days 17

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

MAY 2012 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	3h20m	0	0	4	18	4	18	58	3	8	2	
2		-	-	-	-	-	-	-	-	-	-	C
3	2:20	2	4	6	27	8	31	111	3	10	3	
4	2:53	2	4	4	29	6	33	93	2	17	4 - 5	
5		-	-	-	-	-	-	-	-	-	-	C
6		-	-	-	-	-	-	-	-	-	-	R
7	4:00	2	25	2	11	4	36	76	1	2	4	
8		-	-	-	-	-	-	-	-	-	-	C
9		-	-	-	-	-	-	-	-	-	-	C-R
10	4:11	1	35	3	8	4	43	83	2	35	3	
11	3:38	2	49	2	7	4	56	96	2	49	4	
12	3:50	3	42	1	4	4	46	86	1	38		
13		-	-	-	-	-	-	-	-	-	-	M
14	3:10	4	37	2	6	6	43	103	2	6	2 - 3	
15		-	-	-	-	-	-	-	-	-	-	R
16	3:55	4	31	4	12	8	43	123	3	21	3 - 4	
17	3:50	4	26	1	4	5	30	80	3	13	2	
18	3:06	4	46	1	3	5	49	99	3	43	3	
19	3:02	4	44	2	4	6	48	108	3	39	3 - 4	
20		-	-	-	-	-	-	-	-	-	-	M
21	2:08	4	35	2	11	6	46	106	1	19	2 - 3	
22		-	-	-	-	-	-	-	-	-	-	C-R
23	3:58	4	20	1	2	5	22	72	1	3	3	
24		-	-	-	-	-	-	-	-	-	-	M
25		-	-	-	-	-	-	-	-	-	-	C-R
26	3:30	2	10	2	12	4	22	62	0	0	3	
27	4:33	3	16	2	21	5	37	87	2	11	3	
28		-	-	-	-	-	-	-	-	-	-	M
29	3:20	2	5	2	26	4	31	71	3	18	2	
30	2:50	1	2	2	27	3	29	59	2	27	3	
31	2:40	1	1	2	17	3	18	48	2	17	2 - 3	
Sum		922		699		1621			766			
Mean		48.5		36.8		85.3			40.3			

Days 19

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

JUNE 2012 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	2h27m	3	16	5	29	8	45	125	2	14	3	
2	5:30	3	20	5	20	8	40	120	2	7	2 - 3	
3	1:20	5	31	5	22	10	53	153	3	11	3	
4	3:06	5	33	3	15	8	48	128	4	31	3 - 4	
5		-	-	-	-	-	-	-	-	-		C
6	4:52	5	28	2	19	7	47	117	6	45	3	
7	3:10	4	23	2	13	6	36	96	5	28	2	
8	2:43	4	28	2	18	6	46	106	5	27	4 - 5	
9		-	-	-	-	-	-	-	-	-		C
10		-	-	-	-	-	-	-	-	-		C
11	3:20	3	12	3	27	6	39	99	0	0	2 - 3	
12		-	-	-	-	-	-	-	-	-		C
13	3:46	1	6	3	47	4	53	93	3	30	4	
14	3:05	2	7	3	60	5	67	117	5	66	4	
15	3:10	1	7	4	53	5	60	110	4	35	2 - 3	
16		-	-	-	-	-	-	-	-	-		R
17	4:40	0	0	3	37	3	37	67	2	12	3	
18	3:10	0	0	2	18	2	18	38	0	0	2	
19		-	-	-	-	-	-	-	-	-		C-R
20	3:50	0	0	1	12	1	12	22	0	0		
21		-	-	-	-	-	-	-	-	-		C-R
22	3:40	1	4	0	0	1	4	14	1	4	4	
23	2:50	1	3	0	0	1	3	13	1	3	2 - 3	
24	3:00	1	2	0	0	1	2	12	0	0	4 - 5	
25	2:28	0	0	1	3	1	3	13	0	0	3	
26	1:47	0	0	1	11	1	11	21	0	0	4 - 5	
27	4:10	1	2	1	21	2	23	43	1	18	2	
28	6:35	1	7	3	27	4	34	74	1	17	2 - 3	
29	1:05	3	12	3	34	6	46	106	1	17	3 - 4	
30	5:00	2	16	3	34	5	50	100	3	17	2 - 3	
Sum			717		1070			1787		872		
Mean			31.2		46.5			77.7		37.9		

Days 23

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

JULY 2012 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	3h26m	3	29	3	36	6	65	125	5	55	3	
3		-	-	-	-	-	-	-	-	-		C-R
4	2:21	2	17	2	45	4	62	102	3	60	3	
5		-	-	-	-	-	-	-	-	-		C
6		-	-	-	-	-	-	-	-	-		R
7		-	-	-	-	-	-	-	-	-		R-C
8	2:53	2	9	3	55	5	64	114	1	7	3	
9	2:29	1	2	4	72	5	74	124	2	4	3	
10	2:43	0	0	3	63	3	63	93	3	24	3	
11	2:58	0	0	3	60	3	60	90	3	57	3	
12		-	-	-	-	-	-	-	-	-		R
13		-	-	-	-	-	-	-	-	-		C
14		-	-	-	-	-	-	-	-	-		C
15	2:50	1	5	4	62	5	67	117	1	2	2 - 3	
16	2:42	1	5	5	33	6	38	98	0	0	4	
17	2:09	1	2	6	26	7	28	98	0	0	3	
18	2:20	0	0	4	18	4	18	58	0	0	3	
19	2:22	0	0	3	10	3	10	40	0	0		
20		-	-	-	-	-	-	-	-	-		C
21		-	-	-	-	-	-	-	-	-		C-R
22		-	-	-	-	-	-	-	-	-		C
23	3:20	1	2	2	8	3	10	40	1	2	3	
24		-	-	-	-	-	-	-	-	-		C
25		-	-	-	-	-	-	-	-	-		C
26	2:35	2	7	4	14	6	21	81	1	4	4 - 5	
27	3:00	2	10	5	18	7	28	98	2	7	4 - 5	
28	0:39	2	4	4	24	6	28	88	2	5	2 - 3	
29	4:55	1	2	4	29	5	31	81	3	9	3	
30	3:40	2	5	4	35	6	40	100	3	8	2 - 3	
31	2:31	2	10	6	38	8	48	128	6	27	3	
Sum		339		1336		1675			631			
Mean		18.8		74.2		93.1			35.1			

Days 18

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

AUGUST 2012 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	1h43m	3	13	4	27	7	40	110	1	13	4 - 5	
2	6:00	2	11	5	23	7	34	104	1	13	2 - 3	
3	2:04	4	15	7	31	11	46	156	2	9	3 - 4	
4	2:15	3	12	7	30	10	42	142	1	9	3	
5	2:37	3	8	6	25	9	33	123	4	10	3	
6	4:00	2	5	4	12	6	17	77	3	10	2	
7	3:12	3	7	5	21	8	28	108	4	7	2 - 3	
8	2:47	3	10	4	25	7	35	105	3	10	4 - 5	
9	2:26	4	12	6	37	10	49	149	2	4	4	
10		-	-	-	-	-	-	-	-	-		M
11		-	-	-	-	-	-	-	-	-		M
12	1:59	1	7	4	15	5	22	72	3	17	3 - 4	
13		-	-	-	-	-	-	-	-	-		C
14	4:30	1	7	1	4	2	11	31	2	11	2 - 3	
15		-	-	-	-	-	-	-	-	-		C
16	4:30	2	6	0	0	2	6	26	0	0	3	
17	3:12	3	14	0	0	3	14	44	1	2	3 - 4	
18	2:50	3	9	0	0	3	9	39	1	3	2 - 4	
19	3:30	4	15	1	3	5	18	68	2	6	4	
20	4:31	4	14	2	2	6	16	76	3	10	3 - 4	
21	1:53	3	13	2	6	5	19	69	2	8	3 - 4	
22	1:59	3	12	1	2	4	14	54	3	10	4	
23	2:29	3	8	2	4	5	12	62	3	8	2 - 3	
24	2:24	3	17	2	4	5	21	71	3	17	4	
25	2:39	3	15	2	7	5	22	72	2	12	4	
26	3:50	2	18	2	9	4	27	67	2	13	4	
27	2:17	2	16	3	9	5	25	75	3	11	3	
28	4:51	3	18	1	4	4	22	62	2	6	3	
29	3:30	3	18	1	3	4	21	61	2	15	2 - 3	
30	2:40	3	23	2	12	5	35	85	1	11	2	
31	3:21	4	31	4	21	8	52	132	3	27	3 - 4	
Sum		1124		1116		2240			862			
Mean		41.6		41.3		83.0			31.9			

Days 27

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

SEPTEMBER 2012 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	3h25m	3	29	5	33	8	62	142	3	28	3	
2		-	-	-	-	-	-	-	-	-	-	M
3	3:50	2	33	4	33	6	66	126	2	31	2	
4		-	-	-	-	-	-	-	-	-	-	M
5	2:35	3	20	2	25	5	45	95	2	24	3	
6		-	-	-	-	-	-	-	-	-	-	M
7	1:58	3	5	2	27	5	32	82	2	23	4	
8		-	-	-	-	-	-	-	-	-	-	M
9	4:10	2	7	3	20	5	27	77	2	9	2	
10	2:50	2	7	2	13	4	20	60	2	7	3	
11		-	-	-	-	-	-	-	-	-	-	C
12	2:28	1	2	3	13	4	15	55	2	7	3 - 4	
13	2:25	1	2	2	17	3	19	49	0	0	2 - 3	
14	2:04	2	3	2	15	4	18	58	2	4	3 - 4	
15	5:47	2	4	2	18	4	22	62	1	14	3	
16	2:33	0	0	2	14	2	14	34	2	14	3 - 4	
17	5:30	0	0	3	14	3	14	44	2	9	2	
18	3:50	0	0	3	8	3	8	38	1	2	2	
19		-	-	-	-	-	-	-	-	-	-	R
20	2:13	1	7	4	10	5	17	67	0	0	3 - 4	
21	3:20	1	7	4	14	5	21	71	0	0	2 - 3	
22	3:30	3	14	1	4	4	18	58	1	2	3	
23		-	-	-	-	-	-	-	-	-	-	R
24	2:18	2	24	2	5	4	29	69	4	24	3 - 4	
25	4:30	4	26	2	7	6	33	93	4	26	2	
26	3:33	5	24	3	9	8	33	113	4	18	4	
27	5:00	4	11	3	6	7	17	87	2	4	2	
28	2:40	3	9	2	6	5	15	65	1	2	3	
29		-	-	-	-	-	-	-	-	-	-	M
30	1:50	3	14	2	4	5	18	68	1	2		
Sum		718		895		1613			650			
Mean		32.6		40.7		73.3			29.5			

Days 22

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

OCTOBER 2012 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	2h29m	3	6	3	13	6	19	79	2	4	2 - 3	
2		-	-	-	-	-	-	-	-	-		M
3		-	-	-	-	-	-	-	-	-		M
4	3:20	0	0	4	23	4	23	63	1	4	2 - 3	
5	1:26	0	0	4	21	4	21	61	0	0		
6		-	-	-	-	-	-	-	-	-		C
7	4:40	0	0	3	7	3	7	37	1	3	2	
8	4:12	0	0	3	14	3	14	44	1	10	3	
9	2:49	1	3	2	10	3	13	43	1	7	2 - 3	
10	2:17	2	12	2	6	4	18	58	0	0	2 - 3	
11	5:40	1	15	3	7	4	22	62	1	2	3	
12	2:42	2	20	3	7	5	27	77	1	2	2 - 3	
13	2:49	2	27	3	6	5	33	83	1	2	2 - 3	
14		-	-	-	-	-	-	-	-	-		M
15	4:28	3	44	2	5	5	49	99	2	31	3 - 4	
16	5:01	4	37	3	10	7	47	117	3	28	3	
17		-	-	-	-	-	-	-	-	-		M
18		-	-	-	-	-	-	-	-	-		R
19	2:22	4	18	2	9	6	27	87	1	2	3	
20	2:24	3	16	1	6	4	22	62	2	8	2 - 3	
21	2:38	3	21	2	6	5	27	77	1	9	3	
22	2:31	3	22	1	11	4	33	73	2	10	2	
23		-	-	-	-	-	-	-	-	-		M
24		-	-	-	-	-	-	-	-	-		R
25	5:10	1	9	2	21	3	30	60	2	16	2 - 3	
26		-	-	-	-	-	-	-	-	-		M
27	5:08	2	12	2	13	4	25	65	3	17	3	
28		-	-	-	-	-	-	-	-	-		R
29	6:03	2	9	3	11	5	20	70	2	9	2 - 3	
30	4:54	2	4	3	10	5	14	64	1	2	3	
31	2:32	0	0	3	9	3	9	39	1	2	2 - 3	
Sum		655		765		1420			458			
Mean		31.2		36.4		67.6			21.8			

Days 21

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

NOVEMBER 2012 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	2h26	0	0	3	7	3	7	37	0	0	2	
2	3:09	0	0	3	6	3	6	36	0	0	1 - 2	
3	2:58	2	2	2	4	4	6	46	1	2	4	
4	5:30	1	2	2	4	3	6	36	1	2	4	
5	2:51	1	2	2	4	3	6	36	1	2	4	
6		-	-	-	-	-	-	-	-	-	-	C
7	3:30	1	4	3	6	4	10	50	0	0	3	
8		-	-	-	-	-	-	-	-	-	-	M
9	3:07	2	7	2	6	4	13	53	0	0	4	
10	2:21	2	9	3	15	5	24	74	1	3	4	
11		-	-	-	-	-	-	-	-	-	-	C-R
12		-	-	-	-	-	-	-	-	-	-	M
13	5:10	4	25	2	33	6	58	118	3	30	2 - 3	
14	4:20	5	37	2	21	7	58	128	3	19	2	
15	4:35	6	41	3	21	9	62	152	7	34	3	
16	4:22	6	31	3	13	9	44	134	6	28	3	
17		-	-	-	-	-	-	-	-	-	-	R
18	5:34	6	30	1	2	7	32	102	3	23	2 - 3	
19		-	-	-	-	-	-	-	-	-	-	M
20	2:52	2	41	2	4	4	45	85	2	37	2 - 3	
21	4:14	2	37	3	6	5	43	93	2	35	3	
22	2:39	3	40	2	4	5	44	94	1	28	2 - 3	
23		-	-	-	-	-	-	-	-	-	-	R
24	2:30	3	24	1	5	4	29	69	2	16	2 - 3	
25	2:16	3	19	1	5	4	24	64	1	5	3	
26		-	-	-	-	-	-	-	-	-	-	R
27	2:29	2	7	1	27	3	34	64	1	2	2 - 3	
28	2:47	2	6	1	23	3	29	59	0	0	1 - 2	
29		-	-	-	-	-	-	-	-	-	-	M
30	2:30	3	14	1	8	4	22	62	1	3	2 - 3	
Sum		938		654		1592			629			
Mean		44.7		31.1		75.8			30.0			

Days 21

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

DECEMBER 2012 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	3h00m	3	18	0	0	3	18	48	2	4	2	
2		-	-	-	-	-	-	-	-	-	-	C
3	3:51	3	11	0	0	3	11	41	2	7	3	
4		-	-	-	-	-	-	-	-	-	-	M
5		-	-	-	-	-	-	-	-	-	-	M
6	5:02	2	6	0	0	2	6	26	0	0	2	
7	2:18	2	5	0	0	2	5	25	0	0	3	
8	5:50	2	4	0	0	2	4	24	0	0	1 - 2	
9		-	-	-	-	-	-	-	-	-	-	C
10	2:40	2	13	0	0	2	13	33	2	13	2 - 3	
11	3:20	2	29	0	0	2	29	49	2	29	2	
12	5:29	3	27	0	0	3	27	57	3	22	2 - 3	
13	3:26	4	34	0	0	4	34	74	3	25	3 - 4	
14	2:20	4	23	0	0	4	23	63	1	11	2 - 3	
15		-	-	-	-	-	-	-	-	-	-	C
16	2:51	2	12	2	9	4	21	61	0	0	2 - 3	
17	6:04	3	8	2	10	5	18	68	0	0	2	
18		-	-	-	-	-	-	-	-	-	-	M
19	2:52	1	3	2	13	3	16	46	2	13	3	
20	1:59	1	5	2	16	3	21	51	2	16	2 - 3	
21		-	-	-	-	-	-	-	-	-	-	C
22		-	-	-	-	-	-	-	-	-	-	S-R
23	2:14	1	20	3	24	4	44	84	4	37	2 - 3	
24	2:10	1	19	3	11	4	30	70	2	20	2 - 3	
25	2:21	1	19	1	4	2	23	43	1	19	2	
26	2:15	1	15	1	2	2	17	37	1	15	2	
27	2:14	1	12	0	0	1	12	22	0	0	2	
28		-	-	-	-	-	-	-	-	-	-	C-S
29	3:25	3	5	1	7	4	12	52	1	1	4	
30		-	-	-	-	-	-	-	-	-	-	R
31	3:47	4	18	1	2	5	20	70	2	7	2 - 3	
Sum		766		278		1044			539			
Mean		36.5		13.2		49.7			25.7			

Days 21

8cm Refractor X67 Projection 15cm