

MONTHLY REPORT OF SUNSPOT OBSERVATION

JANUARY 2013 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	2h49m	4	35	2	4	6	39	99	4	29	3	
2		-	-	-	-	-	-	-	-	-		C
3	6:00	5	19	2	11	7	30	100	3	13	2	
4	2:36	7	29	2	10	9	39	129	3	12	2 - 3	
5	3:08	8	27	4	12	12	39	159	3	10	2	
6		-	-	-	-	-	-	-	-	-		C
7	2:34	7	22	3	10	10	32	132	3	6	2	
8	2:52	6	26	4	14	10	40	140	3	6	2	
9	5:10	6	38	4	16	10	54	154	6	15	3	
10	3:07	4	46	4	17	8	63	143	5	20	3	
11	3:52	4	44	4	13	8	57	137	5	30	3	
12	3:54	5	53	4	9	9	62	152	6	43	3	
13	2:40	3	36	3	9	6	45	105	2	31	2	
14		-	-	-	-	-	-	-	-	-		S
15	2:21	3	36	3	8	6	44	104	2	30	2 - 3	
16	2:29	3	31	2	5	5	36	86	2	26	3 - 4	
17	3:20	2	23	1	2	3	25	55	2	11	2	
18	2:21	1	19	1	2	2	21	41	1	2	3	
19	3:50	1	10	1	2	2	12	32	1	2	3	
20	2:35	2	12	1	2	3	14	44	2	8	4	
21	2:50	1	12	1	2	2	14	34	1	12	2 - 3	
22		-	-	-	-	-	-	-	-	-		S-R
23		-	-	-	-	-	-	-	-	-		C
24	2:41	3	14	1	2	4	16	56	0	0	3	
25	2:02	3	13	1	1	4	14	54	0	0	3	
26		-	-	-	-	-	-	-	-	-		C
27	3:00	3	11	1	7	4	18	58	1	4	4	
28	2:41	2	5	1	6	3	11	41	1	4	3	
29	2:48	3	5	1	2	4	7	47	1	2	3	
30	2:29	2	4	2	4	4	8	48	1	2	2 - 3	
31	3:19	2	5	2	5	4	10	50	1	3	4	
Sum		1475		725		2200			911			
Mean		59.0		29.0		88.0			36.4			

Days 25

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

FEBRUARY 2013 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	2h32m	3	8	1	4	4	12	52	1	4	3	
2		-	-	-	-	-	-	-	-	-		R-C
3	2:21	4	21	1	2	5	23	73	2	9	3	
4		-	-	-	-	-	-	-	-	-		R
5	3:00	3	8	0	0	3	8	38	1	2	2 - 3	
6		-	-	-	-	-	-	-	-	-		S-R
7	2:17	4	12	0	0	4	12	52	1	7	3	
8	4:36	4	16	0	0	4	16	56	2	6	3	
9	2:34	3	14	0	0	3	14	44	1	10	2 - 3	
10	2:24	2	12	0	0	2	12	32	1	10	3	
11	4:23	3	15	0	0	3	15	45	1	10	3	
12		-	-	-	-	-	-	-	-	-		C-S
13	2:23	2	6	0	0	2	6	26	0	0	2	
14	2:20	2	6	0	0	2	6	26	0	0	3	
15		-	-	-	-	-	-	-	-	-		S
16	2:21	1	2	1	2	2	4	24	1	2	3	
17		-	-	-	-	-	-	-	-	-		C
18		-	-	-	-	-	-	-	-	-		S
19		-	-	-	-	-	-	-	-	-		C
20	4:20	3	17	2	16	5	33	83	2	16	2	
21	4:45	3	17	2	14	5	31	81	2	14	3 - 4	
22	5:11	3	11	2	8	5	19	69	2	8	4 - 5	
23	4:38	2	4	2	3	4	7	47	2	3	2 - 3	
24	2:14	1	2	1	3	2	5	25	1	3	3	
25	2:38	1	2	2	6	3	8	38	1	2	3 - 4	
26	1:15	1	2	2	15	3	17	47	1	9	4	
27	4:08	1	3	2	18	3	21	51	2	18	4	
28	2:25	1	3	3	29	4	32	72	2	24	3	
Sum			651		330			981		417		
Mean			32.6		16.5			49.1		20.9		

Days 20

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

MARCH 2013 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	2h40m	1	2	3	19	4	21	61	2	3	2 - 3	
3	4:30	1	2	5	23	6	25	85	2	9	2 - 3	
4	2:27	0	0	5	24	5	24	74	2	8	3	
5	2:43	0	0	5	23	5	23	73	2	9	3	
6	2:54	0	0	4	20	4	20	60	2	8	4	
7	2:50	1	2	2	13	3	15	45	0	0	2	
8		-	-	-	-	-	-	-	-	-	-	C
9	2:50	2	8	1	7	3	15	45	1	7	3	
10		-	-	-	-	-	-	-	-	-	-	C
11	2:39	5	11	1	15	6	26	86	2	18	3	
12	2:24	6	18	1	17	7	35	105	3	17	3 - 4	
13		-	-	-	-	-	-	-	-	-	-	C-R
14	3:00	6	36	1	3	7	39	109	4	26	2 - 3	
15	2:03	6	26	1	4	7	30	100	4	14	2 - 3	
16	2:49	6	27	1	11	7	38	108	4	15	4 - 5	
17	2:08	5	23	2	13	7	36	106	2	5	3	
18		-	-	-	-	-	-	-	-	-	-	M
19	4:22	3	12	2	7	5	19	69	1	4	2 - 3	
20		-	-	-	-	-	-	-	-	-	-	C
21	2:51	2	10	0	0	2	10	30	0	0	2	
22	2:36	3	9	0	0	3	9	39	1	3	3	
23	6:59	1	7	1	7	2	14	34	0	0	2	
24	2:48	2	10	0	0	2	10	30	0	0	2	
25	4:20	2	6	1	6	3	12	42	1	2	3	
26	2:50	1	3	1	5	2	8	28	1	5	2 - 3	
27		-	-	-	-	-	-	-	-	-	-	C
28	2:40	1	3	1	4	2	7	27	2	7	3	
29		-	-	-	-	-	-	-	-	-	-	C
30	3:03	2	7	3	10	5	17	67	2	6	3	
31		-	-	-	-	-	-	-	-	-	-	C
Sum			782		641			1423		546		
Mean			35.5		29.1			64.7		24.8		

Days 22

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

APRIL 2013 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	3h10m	3	9	3	17	6	26	86	2	10	3	
2		-	-	-	-	-	-	-	-	-		C
3	6:55	4	13	2	12	6	25	85	3	13	2 - 3	
4	2:18	4	13	2	15	6	28	88	5	26	3	
5	2:16	4	25	3	15	7	40	110	4	31	3 - 4	
6		-	-	-	-	-	-	-	-	-		C-R
7	3:00	5	29	3	7	8	36	116	4	14	2 - 3	
8		-	-	-	-	-	-	-	-	-		M
9	3:23	4	50	3	7	7	57	127	3	27	3	
10	4:58	4	40	3	12	7	52	122	2	24	2	
11		-	-	-	-	-	-	-	-	-		C
12	4:20	3	37	3	18	6	55	115	3	33	2 - 3	
13	2:56	3	35	2	15	5	50	100	3	33	2	
14	5:00	2	20	4	24	6	44	104	3	17	2 - 3	
15	3:24	1	3	4	23	5	26	76	2	9	2 - 3	
16	2:48	1	3	4	28	5	31	81	2	21	3	
17		-	-	-	-	-	-	-	-	-		M
18	2:22	1	2	4	31	5	33	83	2	20	3 - 4	
19	2:33	0	0	4	23	4	23	37	2	17	3 - 4	
20		-	-	-	-	-	-	-	-	-		C
21		-	-	-	-	-	-	-	-	-		S-C
22	2:43	2	40	1	3	3	43	73	1	27	4	
23		-	-	-	-	-	-	-	-	-		C
24		-	-	-	-	-	-	-	-	-		R
25	3:02	4	31	2	10	6	41	101	1	5	3	
26	3:00	4	23	2	6	6	29	89	1	2	3	
27	2:50	3	19	3	18	6	37	97	2	16	2 - 3	
28	2:44	2	24	3	17	5	41	91	2	14	3 - 4	
29	4:11	2	26	4	30	6	56	116	3	46	3	
30		-	-	-	-	-	-	-	-	-		R-C
Sum		1002		921		1923			905			
Mean		50.1		46.1		96.2			45.3			

Days 20

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

MAY 2013 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	2h38m	1	38	4	32	5	70	120	2	40	2 - 3	
2	2:34	1	28	3	17	4	45	85	2	33	2	
3	5:03	1	21	3	22	4	43	83	3	11	3	
4		-	-	-	-	-	-	-	-	-	-	C
5	2:45	3	19	3	24	6	43	103	2	22	4 - 5	
6	2:16	3	13	3	18	6	31	91	1	11	3 - 4	
7	2:37	2	7	5	31	7	38	108	4	18	3 - 4	
8	2:17	2	12	5	23	7	35	105	3	12	2 - 3	
9	2:46	4	16	4	16	8	32	112	2	12	4 - 5	
10		-	-	-	-	-	-	-	-	-	-	C
11		-	-	-	-	-	-	-	-	-	-	R
12	2:29	5	29	3	17	8	46	126	1	7	2 - 3	
13	2:49	4	45	3	19	7	64	134	3	32	3 - 4	
14	2:53	5	53	2	16	7	69	139	2	21	4	
15	2:42	4	39	4	17	8	56	136	5	34	4	
16	2:33	5	50	6	37	11	87	197	8	58	4 - 5	
17		-	-	-	-	-	-	-	-	-	-	M
18	4:35	3	26	4	18	7	44	114	5	30	4 - 5	
19		-	-	-	-	-	-	-	-	-	-	C-R
20	3:30	4	15	2	13	6	28	88	1	8	3 - 4	
21		-	-	-	-	-	-	-	-	-	-	M
22	2:22	4	21	3	16	7	37	107	1	3	3 - 4	
23	3:12	3	13	3	23	6	36	96	1	5	3	
24	4:53	3	15	2	24	5	39	89	3	12	4 - 5	
25	2:59	2	15	3	27	5	42	92	4	38	4 - 5	
26	5:06	1	13	3	20	4	33	73	3	31	2	
27	4:50	1	8	2	9	3	17	47	2	15	2	
28		-	-	-	-	-	-	-	-	-	-	C
29		-	-	-	-	-	-	-	-	-	-	C
30		-	-	-	-	-	-	-	-	-	-	C
31	2:16	1	2	3	7	4	9	49	2	4	3	
Sum		1118		1176		2294			1057			
Mean		50.8		53.5		104.3			48.0			

Days 22

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

JUNE 2013 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		-	-	-	-	-	-	-	-	-		C
3	3h47m	1	11	2	19	3	30	60	2	14	4 - 5	
4	2:06	1	6	2	14	3	20	50	0	0	3	
5	3:20	2	10	1	15	3	25	55	1	3	2 - 3	
6	1:50	3	15	1	13	4	28	68	1	8	2	
7		-	-	-	-	-	-	-	-	-		
8	3:43	1	15	0	0	1	15	25	1	15	4	
9	2:20	1	14	0	0	1	14	24	1	14	2	
10	4:00	1	12	0	0	1	12	22	0	0	3	
11	2:30	1	7	0	0	1	7	17	0	0	2	
12		-	-	-	-	-	-	-	-	-		C
13		-	-	-	-	-	-	-	-	-		C
14		-	-	-	-	-	-	-	-	-		C
15		-	-	-	-	-	-	-	-	-		M
16	4:30	1	2	5	19	6	21	81	0	0	2	C
17	4:00	1	9	5	29	6	38	98	2	5	2	R
18		-	-	-	-	-	-	-	-	-		C
19		-	-	-	-	-	-	-	-	-		R
20		-	-	-	-	-	-	-	-	-		C
21		-	-	-	-	-	-	-	-	-		C-R
22		-	-	-	-	-	-	-	-	-		M
23		-	-	-	-	-	-	-	-	-		M
24	2:12	1	8	6	26	7	34	104	1	1	2 - 3	
25	2:56	2	4	4	16	6	20	80	1	3	3	
26		-	-	-	-	-	-	-	-	-		R
27	4:57	1	1	3	17	4	18	58	2	9	4	
28	2:30	2	4	2	10	4	14	54	4	14	2 - 3	
29	2:34	1	5	2	12	3	17	47	2	15	3	
30	2:40	1	9	2	6	3	15	45	1	9	2	
Sum		342		546		888			300			
Mean		21.4		34.1		55.5			18.8			

Days 16

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

JULY 2013 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks		
		U.	T.	g	f	g	f	g	f	R			g	f
1	5h20m	2	19	2	5	4	24	64	0	0	2	-	3	
2	2:42	2	11	6	17	8	28	108	0	0	3			
3		-	-	-	-	-	-	-	-	-				C
4	5:10	0	0	4	43	4	43	83	1	9	2			
5		-	-	-	-	-	-	-	-	-				R-C
6		-	-	-	-	-	-	-	-	-				C
7	5:40	0	0	5	66	5	66	116	2	40	2	-	3	
8	2:50	0	0	5	67	5	67	117	3	59	3			
9	2:10	0	0	5	55	5	55	105	4	53	3			
10	2:30	0	0	3	48	3	48	78	2	23	3			
11	5:02	0	0	3	21	3	21	51	1	4	3			
12	4:21	0	0	3	11	3	11	41	0	0	4			
13		-	-	-	-	-	-	-	-	-				C
14		-	-	-	-	-	-	-	-	-				C
15	2:30	2	9	1	9	3	18	48	1	9	3			
16	3:40	2	13	1	9	3	22	52	1	9	3			
17	2:40	1	10	2	12	3	22	52	1	9	2	-	3	
18	2:38	1	12	4	14	5	26	76	2	8	3			
19	3:50	1	15	3	5	4	20	60	1	14	2	-	3	
20	3:01	1	17	2	4	3	21	51	2	19	3			
21	3:07	1	19	1	8	2	27	47	1	29	3			
22		-	-	-	-	-	-	-	-	-				M
23	2:46	1	5	1	5	2	10	30	2	7	3			
24		-	-	-	-	-	-	-	-	-				R
25	1:45	2	6	2	15	4	21	61	1	13	3	-	4	
26	3:00	2	6	2	17	4	23	63	1	5	2			
27	1:58	1	2	3	15	4	17	57	1	4	3	-	4	
28	1:00	1	2	3	19	4	21	61	2	4	3			
29		-	-	-	-	-	-	-	-	-				R
30	2:44	3	13	2	14	5	27	77	2	8	2	-	3	
31	1:58	4	11	2	14	6	25	85	2	10	3			
Sum			440		1143			1583		656				
Mean			19.1		49.7			68.8		28.5				

Days 23

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

AUGUST 2013 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	5h01m	5	14	2	6	7	20	90	2	7	3	
2	3:20	4	11	3	13	7	24	94	3	14	4 - 5	
3	2:50	4	13	2	12	6	25	85	3	16	3 - 4	
4	5:41	3	9	2	10	5	19	69	2	7	2	
5	3:50	2	7	3	7	5	14	64	2	7	2	
6	5:48	2	4	2	8	4	12	52	2	4	2 - 3	
7	3:49	2	5	1	7	3	12	42	2	6	2 - 3	
8	3:20	2	4	1	7	3	11	41	2	9	2	
9	3:32	1	2	3	11	4	13	53	1	8	3	
10	5:43	1	2	3	5	4	7	47	0	0	3	
11	4:31	1	1	4	16	5	17	67	0	0	3	
12	3:36	0	0	4	26	4	26	66	0	0	3	
13	3:08	0	0	3	34	3	34	64	1	23	3 - 4	
14	3:01	0	0	4	34	4	34	74	3	32	3	
15	4:43	1	4	5	31	6	35	95	4	18	2 - 3	
16	3:48	0	0	6	24	6	24	84	1	8	3 - 4	
17	3:05	0	0	5	22	5	22	72	2	12	4	
18	2:56	1	1	4	18	5	19	69	2	12	4	
19		-	-	-	-	-	-	-	-	-		M
20		-	-	-	-	-	-	-	-	-		M
21		-	-	-	-	-	-	-	-	-		M
22	3:42	4	16	4	21	8	37	117	1	2	3	
23		-	-	-	-	-	-	-	-	-		C-R
24		-	-	-	-	-	-	-	-	-		C
25		-	-	-	-	-	-	-	-	-		C
26	5:30	1	2	2	4	3	6	36	1	2	2 - 3	
27	2:20	2	5	2	7	4	12	52	0	0	4	
28	2:13	2	6	1	8	3	14	44	0	0	3	
29	3:32	2	11	1	8	3	19	49	2	14	3 - 4	
30	3:48	2	13	1	10	3	23	53	2	19	4	
31	2:50	2	12	1	9	3	21	51	3	15	2	
Sum		582		1048		1630			645			
Mean		23.3		41.9		65.2			25.8			

Days 25

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

SEPTEMBER 2013 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		-	-	-	-	-	-	-	-	-		C-R
4		-	-	-	-	-	-	-	-	-		C
5	2h48m	1	8	1	9	2	17	37	0	0	4	
6	2:22	2	5	2	8	4	13	53	1	1	3 - 4	
7		-	-	-	-	-	-	-	-	-		C
8		-	-	-	-	-	-	-	-	-		R
9	2:28	0	0	1	2	1	2	12	1	2	3	
10	5:30	0	0	1	2	1	2	12	1	2	2 - 3	
11	3:43	0	0	2	7	2	7	27	1	4	4	
12	2:59	1	3	1	2	2	5	25	0	0	2 - 3	
13	2:29	0	0	2	4	2	4	24	0	0	2 - 3	
14	2:50	0	0	1	2	1	2	12	0	0	2	
15	5:40	0	0	1	2	1	2	12	0	0	2	
16		-	-	-	-	-	-	-	-	-		R
17	2:57	0	0	1	2	1	2	12	1	2	3	
18	2:32	1	6	3	5	4	11	51	2	8	3	
19	2:58	1	10	3	5	4	15	55	2	12	3	
20	2:30	2	5	3	6	5	11	61	1	2	3	
21	5:21	3	20	1	2	4	22	62	1	10	3	
22		-	-	-	-	-	-	-	-	-		M
23	3:08	2	13	4	6	6	19	79	4	14	3 - 4	
24	3:45	2	12	1	2	3	14	44	3	12	3 - 4	
25	2:44	3	17	1	2	4	19	59	2	15	3	
26		-	-	-	-	-	-	-	-	-		C
27	3:31	1	13	2	4	3	17	47	1	13	3	
28	2:30	3	12	1	2	4	14	54	1	6	3 - 4	
29	3:22	2	7	1	2	3	9	39	0	0	3 - 4	
30		-	-	-	-	-	-	-	-	-		M
Sum		371		406		777			335			
Mean		18.6		20.3		38.9			16.8			

Days 20

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

OCTOBER 2013 Observer - K. Fujimori Suwa City, Nagano

Date	Time U. T.	N		S		Total 10+f			Cent.		Seeing 5 - 1	Remarks
		g	f	g	f	g	f	R	g	f		
1	3h37m	2	4	1	14	3	18	48	2	16	3	
2	2:21	1	2	2	18	3	20	50	2	18	3 - 4	
3	3:40	2	9	2	14	4	23	63	1	12	2	
4		-	-	-	-	-	-	-	-	-		C
5		-	-	-	-	-	-	-	-	-		C
6	5:30	1	3	2	5	3	8	38	2	5	2 - 3	
7	3:12	1	3	3	6	4	9	49	3	8	4	
8		-	-	-	-	-	-	-	-	-		C
9		-	-	-	-	-	-	-	-	-		C
10	2:50	1	2	5	23	6	25	85	2	4	2	
11	3:06	1	2	6	36	7	38	108	3	22	3 - 4	
12	3:38	1	2	4	28	5	30	80	2	14	2	
13	4:29	4	13	5	38	9	51	141	4	30	4	
14	4:00	3	12	6	26	9	38	128	4	22	4	
15		-	-	-	-	-	-	-	-	-	-	R
16	3:10	2	6	5	27	7	33	103	1	3	2	
17	3:55	3	12	4	22	7	34	104	0	0	3	
18		-	-	-	-	-	-	-	-	-		M
19	6:40	4	20	4	13	8	33	113	3	13	2	
20		-	-	-	-	-	-	-	-	-		R
21	4:18	2	27	4	21	6	48	108	4	31	3	
22		-	-	-	-	-	-	-	-	-		C
23		-	-	-	-	-	-	-	-	-		C
24	6:40	1	32	3	25	4	57	97	3	53	2	
25		-	-	-	-	-	-	-	-	-		C-R
26		-	-	-	-	-	-	-	-	-		C
27	4:40	3	19	6	31	9	50	140	2	7	3 - 4	
28	4:38	3	20	6	41	9	61	151	2	5	3	
29		-	-	-	-	-	-	-	-	-		C-R
30	4:14	1	8	5	46	6	54	114	2	23	3	
31	3:40	2	7	5	43	7	50	120	5	38	2 - 3	
Sum		583		1257		1840			794			
Mean		30.7		66.2		96.8			41.8			

Days 19

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

NOVEMBER 2013 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	1	2	5	40	6	42	102	3	32	2 - 3	
2	2:40	1	3	4	25	5	28	78	2	20	2 - 3	
3		-	-	-	-	-	-	-	-	-		C
4		-	-	-	-	-	-	-	-	-		C
5	4:48	1	14	5	51	6	65	125	2	25	3	
6	4:05	1	12	5	58	6	70	130	3	22	3	
7		-	-	-	-	-	-	-	-	-		R
8	5:10	1	5	4	60	5	65	115	1	46	4	
9		-	-	-	-	-	-	-	-	-		C
10		-	-	-	-	-	-	-	-	-		C-R
11		-	-	-	-	-	-	-	-	-		M
12	0:38	1	2	4	41	5	43	93	1	2	2	
13	2:10	2	5	5	53	7	58	128	3	13	2 - 3	
14	2:52	2	7	5	58	7	65	135	4	23	2 - 3	
15		-	-	-	-	-	-	-	-	-		R-C
16	3:01	3	11	4	66	7	77	147	4	50	3	
17	2:53	4	11	4	57	8	68	148	5	39	3	
18	2:32	2	6	4	39	6	45	105	3	25	3 - 4	
19	3:24	2	5	4	22	6	27	87	1	3	3	
20	3:58	3	7	3	12	6	19	79	2	5	3	
21	2:45	3	10	2	7	5	17	67	2	4	3 - 4	
22	3:52	3	7	1	2	4	9	49	1	2	3 - 4	
23	2:46	2	8	1	2	3	10	40	1	2	3	
24	2:24	4	9	1	2	5	11	61	2	4	3	
25		-	-	-	-	-	-	-	-	-		C-R
26		-	-	-	-	-	-	-	-	-		M
27	3:02	0	0	4	14	4	14	54	1	7	3	
28		-	-	-	-	-	-	-	-	-		C
29	2:42	1	2	5	30	6	32	92	2	11	2	
30	5:01	1	1	5	28	6	29	89	4	13	3 - 4	
Sum			507		1417			1924		818		
Mean			25.4		70.9			96.2		40.9		

Days 20

8cm Refractor X67 Projection 15cm

MONTHLY REPORT OF SUNSPOT OBSERVATION

DECEMBER 2013 Observer - K. Fujimori Suwa City, Nagano

Date	Time	N		S		Total 10g+f			Cent.		Seeing	Remarks
		U.	T.	g	f	g	f	g	f	R		
1	2h17m	1	5	5	38	6	43	103	2	17	3 - 4	
2	3:10	1	4	7	48	8	52	132	5	39	3	
3	2:30	0	0	6	31	6	31	91	3	18	3	
4	3:58	0	0	8	32	8	32	112	5	19	3	
5	2:39	0	0	7	24	7	24	94	2	12	2 - 3	
6		-	-	-	-	-	-	-	-	-		C
7		-	-	-	-	-	-	-	-	-		M
8		-	-	-	-	-	-	-	-	-		M
9		-	-	-	-	-	-	-	-	-		M
10		-	-	-	-	-	-	-	-	-		M
11		-	-	-	-	-	-	-	-	-		C
12	5:00	3	14	5	23	8	37	117	2	9	2 - 3	
13		-	-	-	-	-	-	-	-	-		C
14		-	-	-	-	-	-	-	-	-		C
15	2:41	5	17	4	22	9	39	129	6	32	2	
16	4:22	2	5	4	18	6	23	83	3	8	2	
17		-	-	-	-	-	-	-	-	-		C
18		-	-	-	-	-	-	-	-	-		C-S
19		-	-	-	-	-	-	-	-	-		S-R
20		-	-	-	-	-	-	-	-	-		C
21	1:49	2	6	6	43	8	49	129	3	13	2	
22	2:40	1	2	5	39	6	41	101	1	6	2	
23	4:09	0	0	5	32	5	32	82	2	6	2	
24	2:34	0	0	8	34	8	34	114	2	9	2 - 3	
25	2:40	0	0	6	18	6	18	78	2	8	3	
26		-	-	-	-	-	-	-	-	-		C-R
27		-	-	-	-	-	-	-	-	-		C
28	3:41	0	0	5	35	5	35	85	2	24	3	
29	2:52	1	2	4	35	5	37	87	1	17	3	
30	3:53	0	0	4	35	4	35	75	1	18	2	
31	2:21	0	0	5	32	5	32	82	3	22	2	
Sum			215		1479			1694		727		
Mean			12.6		87.0			99.6		42.8		

Days 17

8cm Refractor X67 Projection 15cm