

Solar Bulletin

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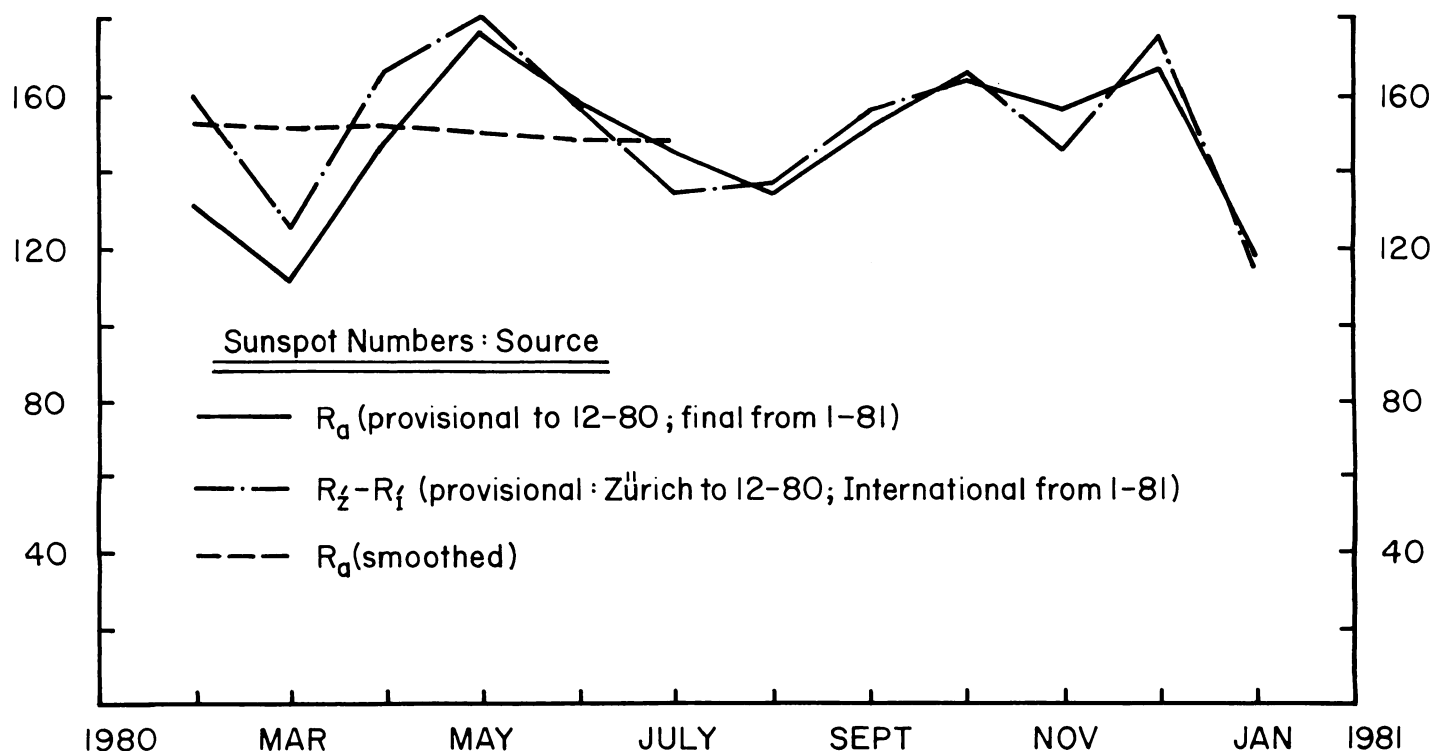
January 1981

SOLAR ACTIVITY DURING JANUARY 1981

Sunspot data are given in the summary graph at the bottom of this page, and in the table of daily numbers on page 2.

The twelve-month smoothed mean of AAVSO sunspot numbers dropped only slightly from June 1980 (148.7) to July 1980 (147.8). However, the monthly mean fell sharply from 166.9 in December 1980 to 115.4 in January 1981. Daily AAVSO sunspot numbers varied widely, from a low of 80 (January 6) to highs of 168 (January 1) and 153 (January 30). Small, short-lived groups appeared and disappeared frequently, particularly during the period from January 7 through 14. From a low on January 17 and 18, the numbers increased steadily. The marked increase in the last few days of the month was due in part to several larger active regions with complex structure which appeared around the eastern limb in both northern and southern latitudes.

On page 2 of the Bulletin are listed those Sudden Enhancements of Signal (SEs) detected by the 17 members of the AAVSO Indirect Solar Flare Patrol supplying useable records for January. Sixty-two events satisfied the criteria for listing, a large increase over December's forty. SEs were observed on records for nineteen days, with the most activity appearing on January 25 (seventeen) and January 26 (eight). By combining sections of records from three observers (A19, A31, A56), SES activity can be traced on January 25 from 00:00 UT through 08:45, and 13:45 through 24:00. These charts cover 19 of the day's 24 hours, giving signal strength at the three recording stations.



RELATIVE SUNSPOT NUMBERS (R):

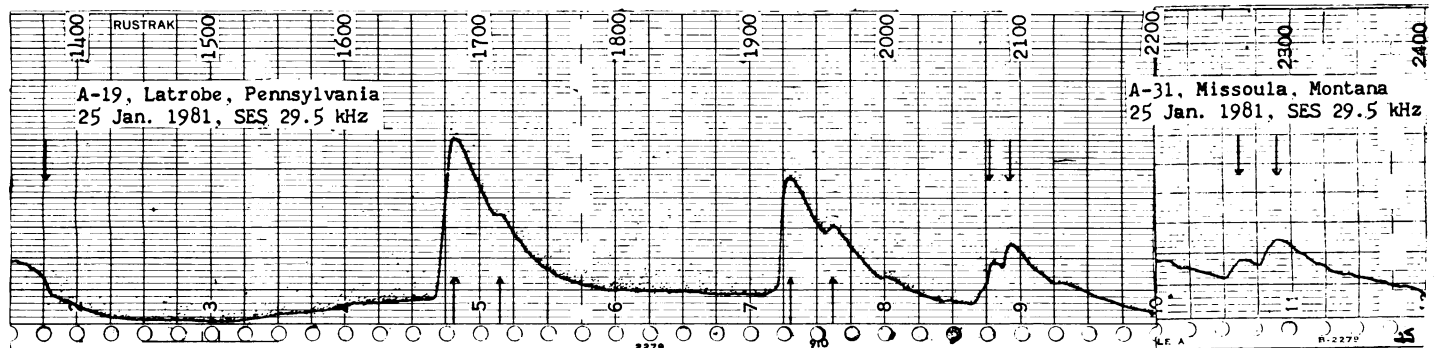
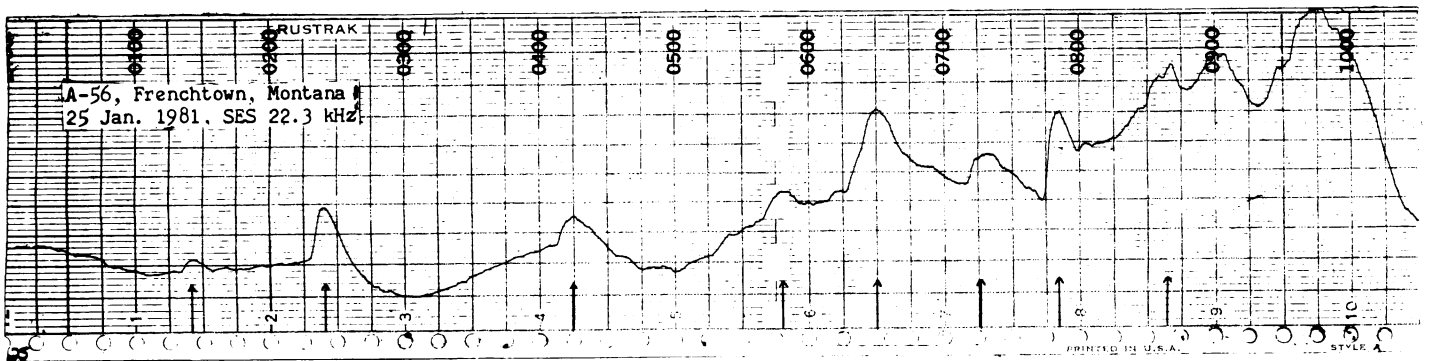
AAVSO (a), INTERNATIONAL (I)

DAY R_a (final) R_I (prov)

1	168	147
2	123	141
3	129	122
4	109	113
5	86	94
6	80	71
7	100	89
8	126	115
9	126	126
10	130	120
11	124	123
12	124	126
13	116	123
14	111	106
15	98	106
16	89	81
17	83	72
18	83	79
19	101	78
20	102	88
21	103	105
22	107	99
23	115	115
24	114	120
25	104	115
26	111	120
27	134	115
28	148	142
29	152	165
30	153	174
31	129	159
Mean	115.4	114.4

Day	Max	Imp	Def	Observers	Day	Max	Imp	Def	Observers
1	02:38	1	5	A31	25	20:58	2+	5	A19,26,28,31,41,54,56,57
5	08:47	1-	5	A31,56	25	22:37	1	5	A31,41,56,57
5	16:24	2	5	A1,26,31,37,56	25	22:53	2	5	A1,3,41,54,56,57
5	20:24	2+	5	A1,19,28,31,41,48,50,51,56	26	02:17	1+	5	A31,56
5	21:45	1	5	A31,56	26	07:35	1+	5	A31,55
6	04:35	1+	5	A31,56	26	14:47	1	5	A1,19,26,28,46,48,51,54
6	21:28	1	5	A1,3,19,31,46,56	26	17:21	1+	5	A1,19,26,28,31,41,48,50,51,54,56
7	19:32	1	5	A1,31,56	26	17:40	1-	5	A1,19,26,28,31
7	21:05	1-	5	A31	26	18:38	1-	5	A1,19,54
8	17:37	3	5	A3,31,48,55,56	26	19:57	2	5	A1,19,26,28,41,48,50,51,54,56,57
9	03:15	1+	5	A31,56	26	22:48	1-	5	A1,31,41,56
10	05:06	1	5	A31,56	27	05:38	1+	5	A31,56
10	21:00	1	5	A1,31,56	27	15:49	3	5	A1,19,31,41,50,51,54,56
11	19:57	1-	4	A31,55,56	27	17:44	1-	5	A31,41,54
12	07:14	2+	5	A31,56	27	19:31	1	5	A1,31,41,57
14	21:05	1+	5	A1,28,31,37,41,50,56	27	20:30	1	5	A1,19,31,41,50,56,57
15	17:16	2	5	A1,3,28,31,32,41,48,50,51,56	28	02:20	2	5	A31,55,56
23	21:20	1	5	A3,54,55	28	04:20	2+	5	A31,55,56
25	01:24	1-	5	A31,56,57	28	16:03	4	5	A1,19,26,28,31,41,48,50,51,54
25	02:23	2	5	A31,55,56,57	28	18:33	1-	5	A1,19,26,28,31,56
25	04:16	1+	5	A31,56	29	00:34	1	5	A31,56
25	05:48	1	4+	A31,56	29	04:15	1	5	A31,56
25	06:30	2+	5	A31,55,56	29	14:46	1+	5	A1,3,19,26,48,51
25	07:17	1	5	A31,56	29	16:31	2	5	A3,31,55,56
25	07:50	2	5	A31,55,56	29	19:18	1	5	A1,19,26,31,51,56,57
25	08:38	1	4	A31,56	30	20:21	1	5	A1,19,26,31,41,48,50,51,56,57
25	13:49	2	5	A1,19,26,28,37,46,50,51	30	21:17	1	5	A1,19,31,41,50,56,57
25	16:49	3	5	A1,19,26,28,31,41,50,51,54,56	31	18:31	1-	4	A1,56
25	17:09	1+	5	A19,31,54	31	19:35	1-	5	A1,19,26,31,41,50,51,56,57
25	19:18	2+	5	A1,19,26,28,31,41,48,50,51,54,56,57	31	20:13	1-	5	A1,31,56,57
25	19:38	1	5	A1,19,26,28,31,41,48,51,54,57					
25	20:49	2	5	A1,19,26,31,41,48,54,56,57					

Records were received from A1, 3, 19, 26, 28, 31, 32, 37, 41, 46, 48, 50, 51, 54, 55, 56, and 57.



A-31, Missoula, Montana
25 Jan. 1981, SES 29.5 kHz