

Solar Bulletin

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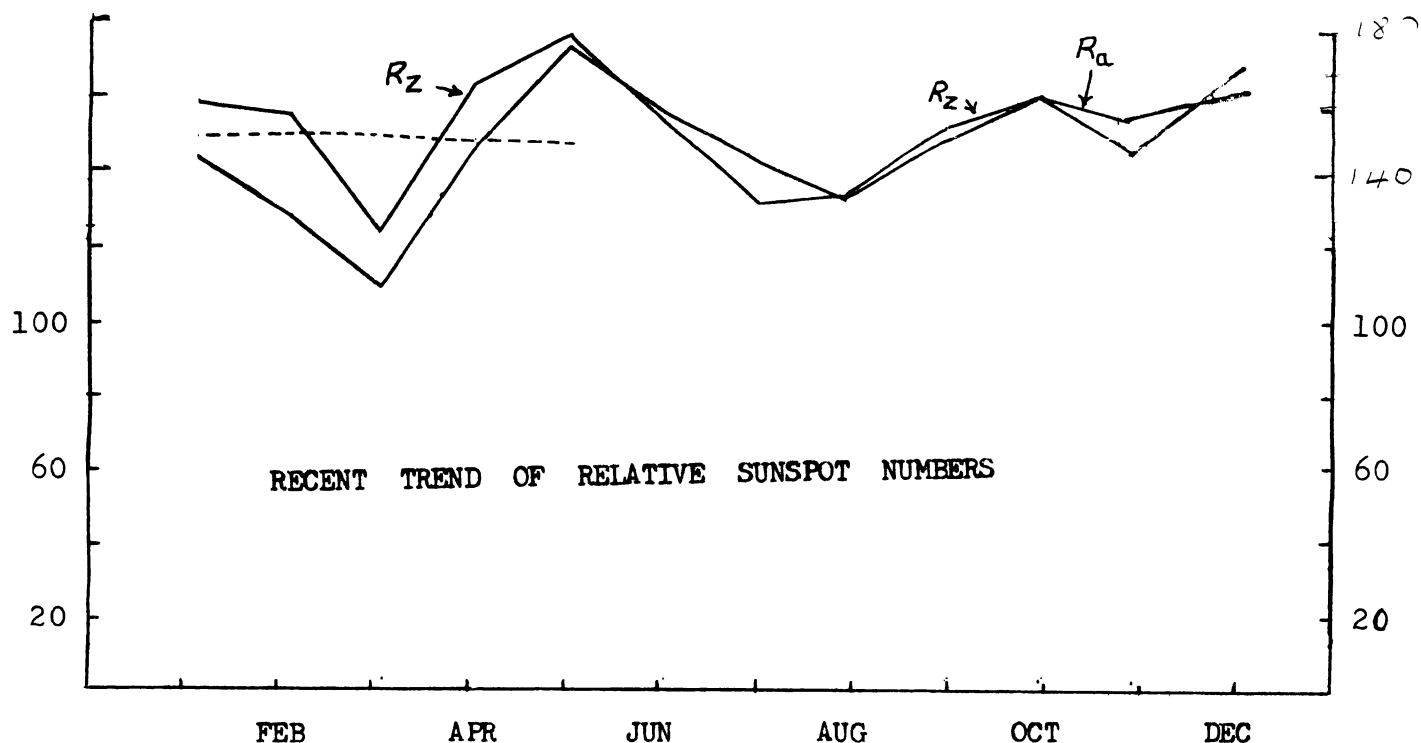
Number 12

December 1980

SUNSPOT ACTIVITY FOR DECEMBER 1980

The mean of the AAVSO relative sunspot numbers rose to 166.9 for December. The twelve-month smooth mean continued its three-month downward trend reaching 148.7 for June 1980

On page 2 of the Bulletin are listed those Sudden Enhancements of Signal (SES) detected by fourteen members of the AAVSO Indirect Solar Flare Patrol supplying records for December. Forty events (SES) satisfied the criteria for listing, many fewer than in November. Ses's were observed on records for eighteen days, with the most (six each) on December 11 and 12. Sections from two excellent records are reproduced, for several hours of December 12 for A51, and a different period of December 12 for A55. A51's record shows above average sensitivity, probably due to low noise level. The three arrows indicate three events detected by the group for this period, those of 17:08 and 17:25 being clearly separated on other records. The A55 record is notable for two large SES after local sunset, but while the signal path from Australia was still partially in sunlight. The estimated time range of effective recording of moderate SESs during December was Approximately 14:30 UT to 05:00 UT for the Patrol Network.



(R₂) RELATIVE SUNSPOT

NUMBERS FOR DECEMBER 1980

DAY	R _a	R ₂
1	161	171
2	168	176
3	153	152
4	119	146
5	116	152
6	95	132
7	100	108
8	107	124
9	120	135
10	130	145
11	152	148
12	176	178
13	199	185
14	211	213
15	191	225
16	209	237
17	173	198
18	184	183
19	183	166
20	177	171
21	163	170
22	175	178
23	199	177
24	181	191
25	181	200
26	180	208
27	188	206
28	220	206
29	188	208
30	195	187
31	180	182
Mean	166.9	176.1

Day	Max.	SEA	SES	Def.	Observers	Day	Max.	SEA	SES	Def.	Observers
1	18:11		1+	5	A19,26,31,41,48,50,51,55,56	14	17:51		2+	5	A1,5,19,26,31,32,41,48,50,51,55
1	19:34		1+	5	A1,19,26,31,41,50,55,56	14	19:36		1-	4	A1,31
2	06:32		1-	4	A31,55,56	14	22:11		2	5	A31,41,55,56
6	14:39		2	5	A19,26,28,48,51	15	08:42		2+	5	A31,55
7	01:49		1	4	A31,55	15	18:44		2	5	A1,5,19,26,28,31,41,48,50,51,55
7	16:28		1+	5	A1,5,19,26,28,31,48,50,51	15	19:28		2+	5	A1,5,19,26,31,41,48,50,51,55,56
10	18:15		2	3+	A1,19,31,32,41,50,56	16	14:59		2	5	A1,5,19,26,32,50
11	16:20		1+	3	A26,32	17	16:39		1	5	A26,48,51
11	17:20		1	4	A1,31,32,55,56	17	18:30		2	5	A1,5,19,26,28,31,48,50,51
11	19:21		2+	5	A1,19,26,28,31,32,48,51,55	17	22:58		1+	5	A31,55,56
11	22:31		2	5	A31,55,56	18	01:52		1+	5	A31,55,56
11	22:49		2	5	A31,55,56	21	16:05		3+	5	A1,5,19,32,48,51
11	23:12		2+	5	A31,55,56	22	17:15		1-	3+	A19,51,55
12	00:19		2+	5	A55,56,31	22	22:24		2	5	A31,55,56
12	05:06		3	5	A55,56	23	01:00		1-	5	A31,55,56
12	15:43		2+	5	A1,5,19,26,28,32,48,51	23	21:18		1	5	A31,41,55,56
12	17:08		2+	5	A1,5,19,26,28,31,32,41,48,50,51,55,56	26	07:34		3	5	A31,55,56
12	17:25		3	5	A1,31,51,55	28	19:10		1+	5	A1,19,31,32,41,48,50,51,55,56
12	21:17		2	5	A1,31,41,50,55,56	29	14:55		1	4	A19,48,51
14	16:17		1-	5	A1,5,19,31,32,48,51	29	16:21		1+	3+	A19,41,48,50,51

