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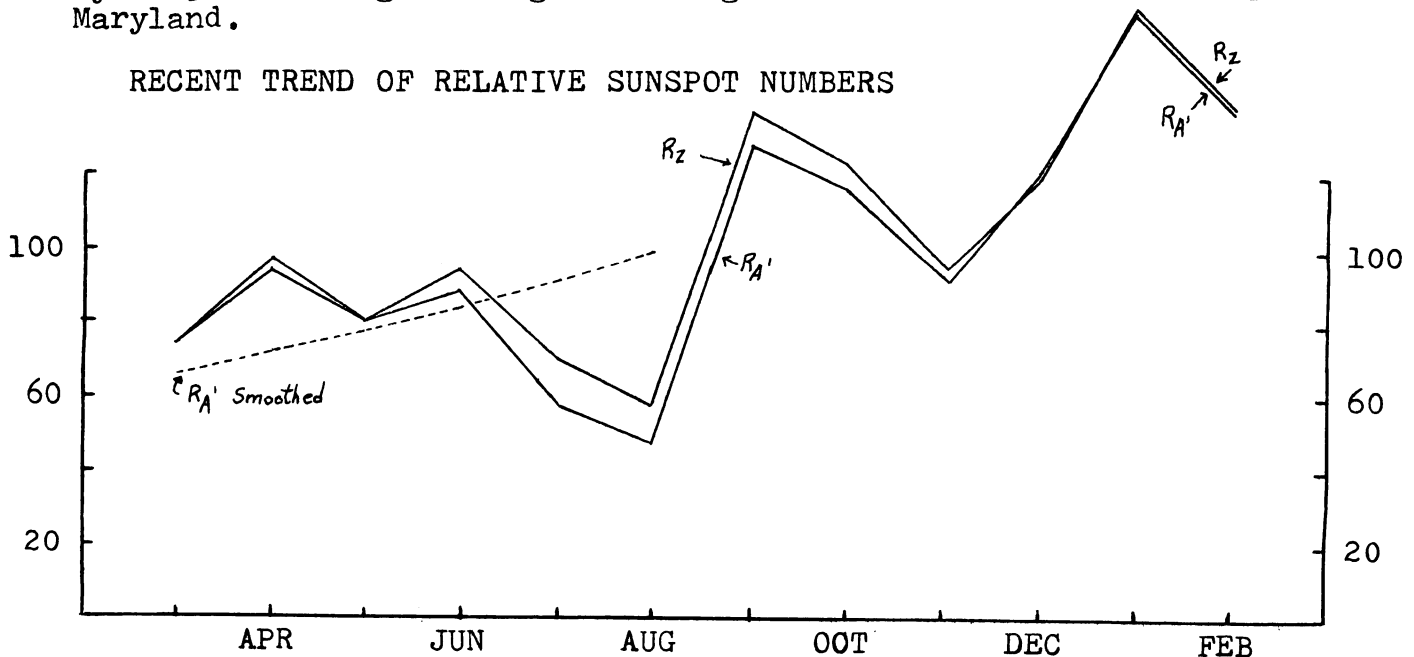
February 1979

SOLAR ACTIVITY DURING FEBRUARY 1979

The mean of the American sunspot numbers fell from the record high of 164.4 last month to 136.8 for February. This is still higher than recent monthly means and the 12-month smoothed means plotted below as a dotted line, continues its upward trend toward Solar Maximum.

Six AAVSO Indirect Flare Patrol observers recorded the 26 February total eclipse of the sun quite unexpectedly on their regular flare patrol charts. All six of these recordings are reproduced on page two. Each chart shows 14 hours of recorded signal strength with the daylight hours in the middle of the chart. The sunrise patterns are at the left ends of the charts and the sunset patterns at the right. Normal daytime levels are below the nighttime levels and run along the bottom of the charts. The eclipse effect can be seen as a slow rise from the daytime level which takes almost two hours to reach a peak near 1700 universal time. The decay of the eclipse effect is more rapid on all chart recordings taking less than an hour. All charts also show a solar flare of moderate intensity starting at 1842 Universal Time. Note how the rise time of the flare takes only a few minutes compared to over an hour for the eclipse. The top chart made by A-31 in Missoula, Montana, which was on the path of totality, could have been expected to record some eclipse effect although one would not expect a great effect due to the signal source in Nebraska being rather far outside the eclipse area. What is surprising is that the effect was recorded so noticeably by observers in the eastern United States. The recording by A-28 in Cleveland, Ohio is as strong as the one from Montana. Even more surprising is the inverted effect on the bottom chart made by A-45 recording the signal strength of a VLF radio station in Maryland.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS

DAY	R_A	R_Z	DAY	R_A	R_Z
1	110	116	16	158	159
2	108	127	17	178	160
3	142	148	18	192	162
4	129	123	19	184	166
5	111	134	20	194	169
6	140	146	21	190	171
7	149	144	22	135	155
8	140	142	23	113	127
9	140	139	24	97	99
10	129	137	25	88	88
11	135	137	26	97	108
12	129	138	27	102	97
13	129	152	28	108	95
14	150	163			
15	154	161			
			Mean	136.8	138.0

