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SOLAR ACTIVITY DURING MARCH

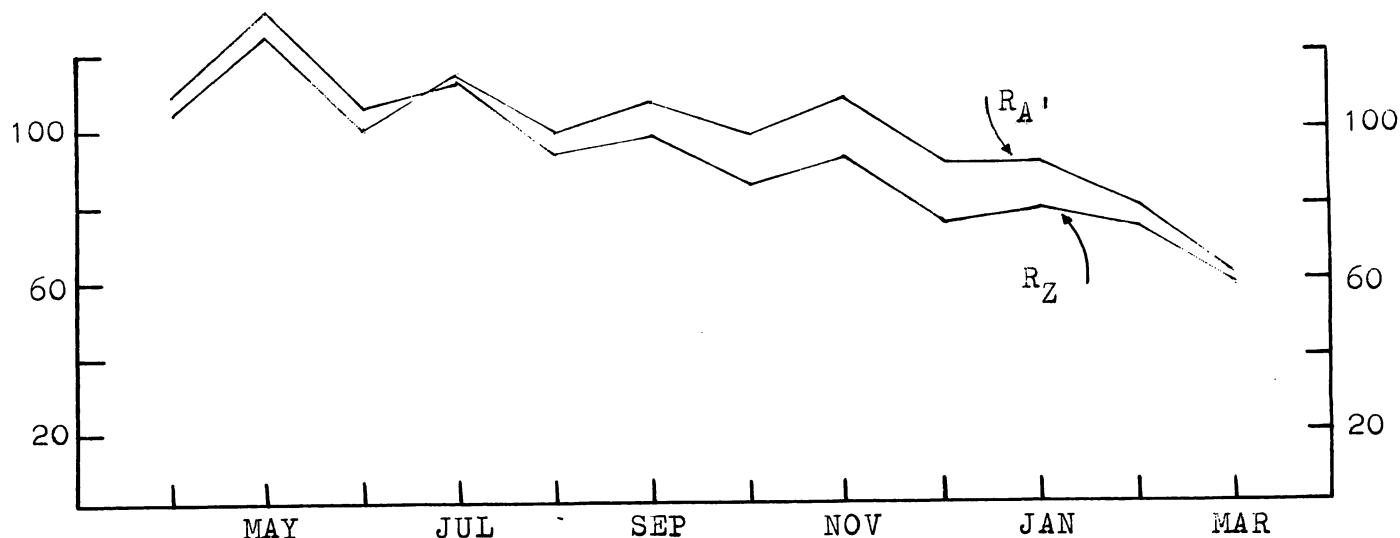
Four separate ionospheric disturbances were recorded by the Solar Divisions observers during March. This downward trend from the eleven events recorded last month is in agreement with the general decreasing activity of the sun during this 20th cycle.

All of the events were recorded in the last few days of the month. These events were all of the relatively "fast rise" type with an average decay slope. A reproduction of the two events recorded on the last day of the month is shown on page two. The recording was made by using the SES method, by recording the amplitude of a signal from a unlisted radio station operating on 37.2 kHz. The first event departed slightly from the characteristics of the other three events recorded by having a "double peak". The first peak occurred at 1727 UT with a small lesser peak about five minutes later. This second peak was recorded by observers at wide spread locations, confirming its existence.

The mean of the American sunspot numbers fell to 61.1 from 77.8 last month, continuing the decline of recent months.

A sunspot group which came over the southeast limb on 25 March was puzzling to many observers. Because of its considerable latitudinal spread, this one seemed like it should have been two separate groups, but magnetic polarity data showed it to be actually a single group. It was classified a gamma group according to the Mount Wilson magnetic classification system with its neutral line nearly parallel to the equator.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, MARCH 1971

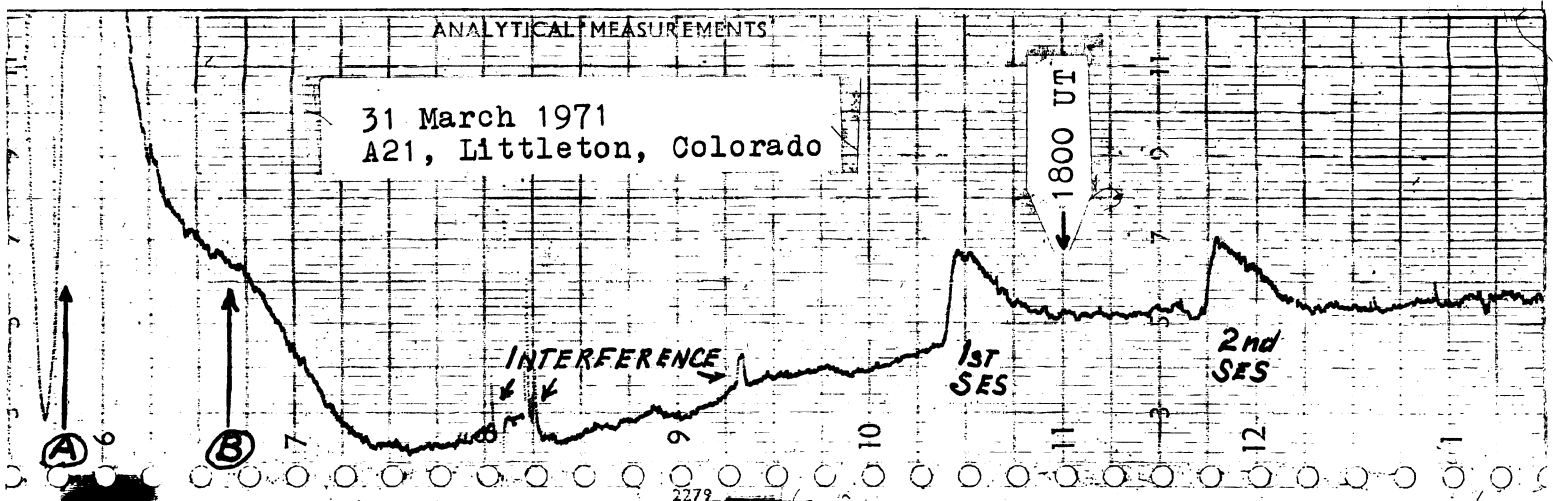
DAY	R_A	R_Z	DAY	R_A	R_Z
1	88	76	16	78	76
2	100	90	17	65	76
3	87	82	18	69	79
4	69	70	19	69	63
5	65	53	20	60	50
6	49	47	21	54	51
7	40	47	22	51	55
8	42	46	23	48	55
9	37	35	24	37	51
10	44	34	25	53	48
11	60	43	26	52	49
12	73	63	27	55	55
13	84	76	28	55	49
14	69	65	29	53	44
15	72	68	30	57	56
			31	59	52

March mean R_A = 61.1

March mean R_Z = 58.2

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING MARCH

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
29	1419		1	4	A1	31	1727	1	1	5	A1,21,23,27
29	1950	1-	1-	5	A1,21,23	31	1848	1	1	5	A1,21,23,27



Point marked "A" is local ground sunrise at Littleton, Co. "B" is the estimated local ground sunrise at transmitting station. This illustrates a typical "sunrise effect" for a signal originating west of the observing station, with the first "dip" near the local sunrise at the observing station. In converse, if the signal source has a earlier sunrise (east) than the observing station, the first "dip" in signal amplitude occurs before local sunrise at the observing station and near local sunrise at the transmitting station.