

Solar Bulletin

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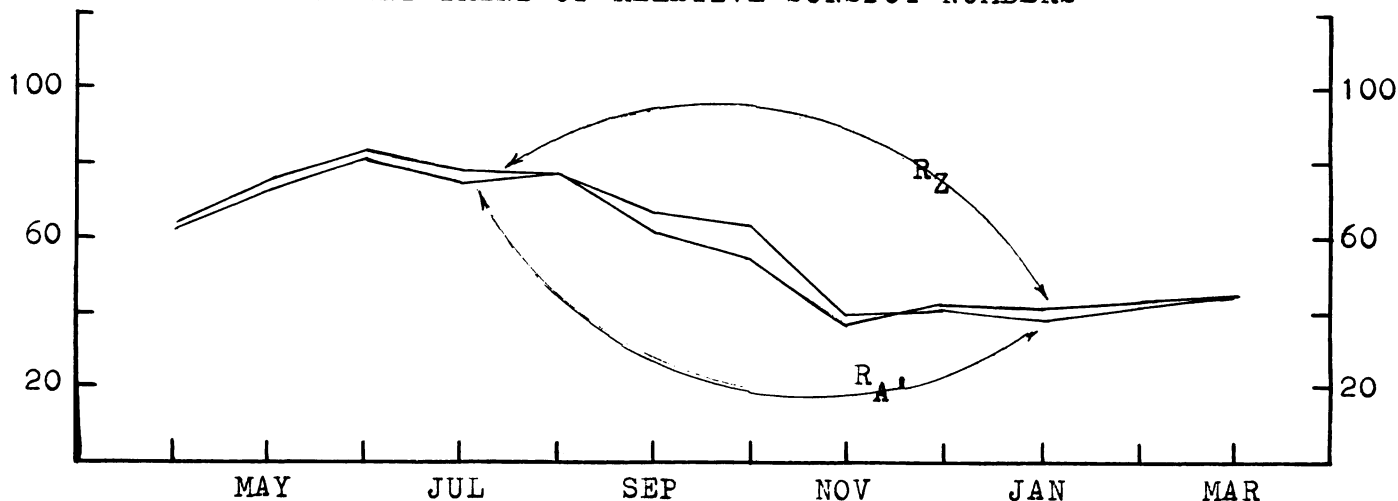
Thirteen ionospheric disturbances were recorded by the Solar Division's observers during March. Five of the thirteen events were considered to be greater than minor or a -1 event. There were no ionospheric disturbances classified as being extra large. Activity for the past three months remains at about the same level both for ionospheric disturbances and the relative sunspot numbers.

One of the larger ionospheric disturbances is reproduced on page two as recorded by observer A37, Yakima, Washington. This recording was made by the SES (Sudden Enhancement of Signal) method recording a radio station operating at 34.5 kHz.

One of the smaller events is also reproduced on page two. This ionospheric disturbance was recorded over two different signal paths on one chart by observer A19, Latrobe, Pennsylvania. The top and narrow width trace is from a signal path of approximately 1500 km (\cong 950 miles) from a radio station operating at 34.5 kHz. Note that instead of the signal being enhanced during the "solar flare" the signal decreases and gives an "inverted" SES. The fact that this particular event was recorded as inverted was unusual as this was the only event recorded over this signal path during the month that became inverted. Eleven other events over this signal path during the month were recorded in the normal "enhanced" position. The lower and broad trace is a normal enhancement of signal and was from a radio station at 18.6 kHz at approximately 3300 km (\cong 2050 miles).

The mean of the American sunspot numbers rose slightly to 44.9. This is the fourth consecutive month that the mean of the sunspot numbers has continued with very little variation.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A') AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, MARCH 1973

DAY	R _A '	R _Z	DAY	R _A '	R _Z
1	47	40	16	51	64
2	41	38	17	44	52
3	27	35	18	35	44
4	29	32	19	41	34
5	21	22	20	21	23
6	33	32	21	17	20
7	36	38	22	34	30
8	40	50	23	33	37
9	54	53	24	32	29
10	66	67	25	29	27
11	85	69	26	27	23
12	96	92	27	34	32
13	85	79	28	33	43
14	79	78	29	41	46
15	66	73	30	49	50
			31	67	56

Monthly Means
 R_A' = 44.9
 R_Z = 45.4

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING MARCH 1973

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
2	1829	1-	1	5	A1, 19, 21, 26, 30, 31, 33, 36, 37, 38	13	1953	1	1-	5	A1, 19, 26, 30, 31, 33, 34, 37
5	2205	1	1+	5	A1, 8, 19, 21, 23, 26, 30, 31, 34, 36, 37	13	2238		1-	5	A19, 30, 31, 33, 36, 37
6	1956	1	1	5	A1, 8, 19, 21, 23, 30, 31, 33, 34, 36, 37	14	1351		1-	5	A1, 19, 33
8	1510	1-	1-	5	A1, 19, 21, 33, 34, 36, 37	14	1707		1-	5	A1, 19, 21, 30, 31, 33, 37
12	2204		1-	5	A19, 21, 30, 31, 33, 36, 37	14	1923		1-	5	A1, 19, 21, 30, 31, 33, 37
						18	2121		1-	5	A1, 19, 21, 30, 31, 33, 37
						27	1448		1-	5	A1, 19, 33, 36, 38
						27	2131	1	1+	5	A1, 19, 21, 26, 30, 31, 33, 36, 37, 38

Dr. V. Barocas, Preston, U.K. reports by letter, "No Events".

