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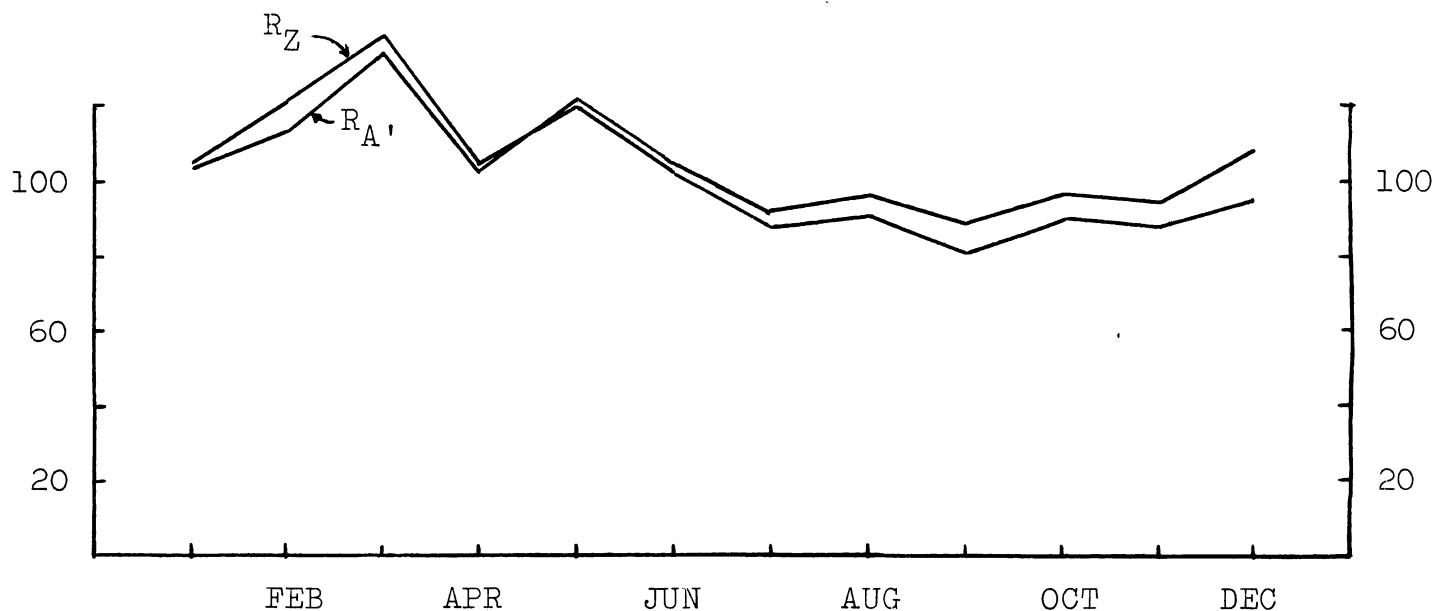
December 1969

SOLAR ACTIVITY DURING DECEMBER

Nine ionospheric disturbances were recorded during December, far fewer than the record twenty two of the previous month. An event on the 12th reaching maximum at 1751 UT was the most intense and widely recorded. It is shown on page two as an SES recording. Above it is an SEA of the two events of the 30th.

All ionospheric disturbances recorded by the Solar Division's indirect flare patrol group are listed in a table which is a regular feature of page two each month. The abbreviations used have caused some confusion. Following the date is the column headed MAX. which gives the universal time that the recording showed its maximum signal level indicating maximum ionization of the D layer of the earth's ionosphere due to X-radiation from a solar flare. SEA stands for sudden enhancement of atmospherics and the numbers in this column indicate the intensity of the enhancement with 3+ being the most intense event. SES in the next column stands for sudden enhancement of signal with the numbers to the same same scale. The next column is the definiteness of the event on a scale where 5 is the most definite as indicated by the ease with which the enhancement can be picked out on the chart. Following this are the ESSA designations for each AAVSO observer: "A" followed by a number. The locations of these observers is given whenever their charts are reproduced in the Bulletin.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, DECEMBER 1969

DAY	R_A	R_Z	DAY	R_A	R_Z
1	92	91	16	105	86
2	118	107	17	95	98
3	109	93	18	118	85
4	115	90	19	130	76
5	94	78	20	125	90
6	72	66	21	155	112
7	55	46	22	142	125
8	44	39	23	129	113
9	41	44	24	133	127
10	34	37	25	160	149
11	35	27	26	118	131
12	57	51	27	140	136
13	79	74	28	136	139
14	107	94	29	154	152
15	116	83	30	152	152
			31	147	116

December mean R_A = 106.7

December mean R_Z = 93.8

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING DECEMBER 1969

DAY	MAX.	SEA	SES	DEF.	OBSERVERS	DAY	MAX.	SEA	SES	DEF.	OBSERVERS
2	1800	2+	2	5	A-21,1,8	25	1835	2		5	A-22,8,19
11	2230		1	5	A-21	30	1631	2		4	A-8,22
12	1751	2+	3	5	A-1,21,22,20,6,8	30	1930	2+	2	5	A-8,22,21,19
14	1617		1	4	A-21	31	2231		2	4	A-21
20	2018		1+	4	A-21,1,19						

