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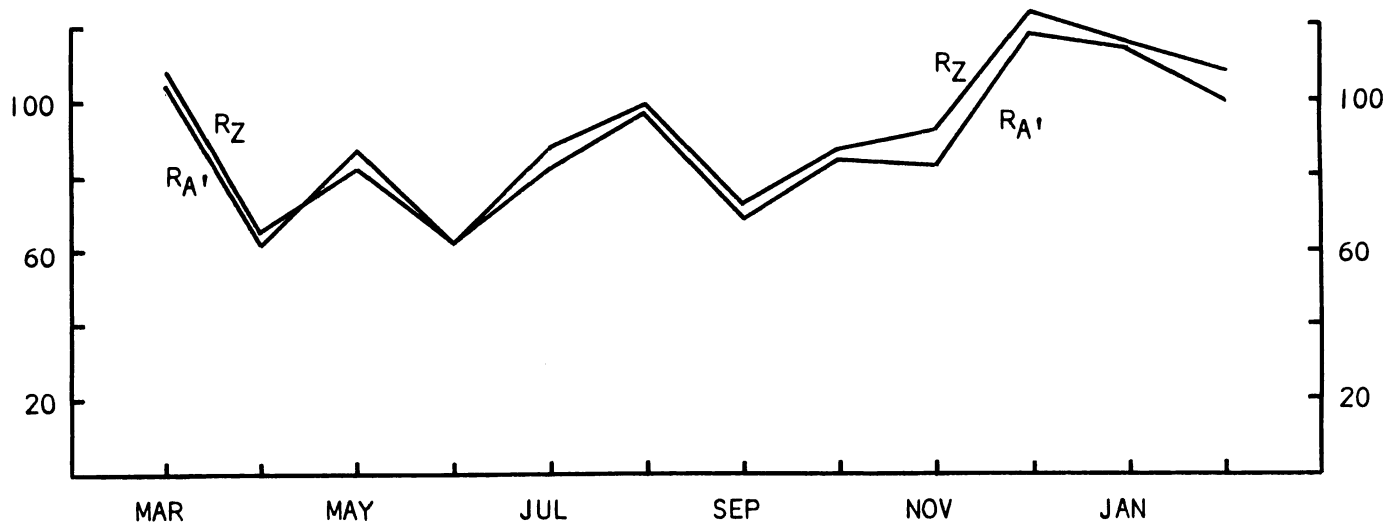
SOLAR ACTIVITY DURING FEBRUARY

Solar activity was at its highest level at the start of February when a remarkably large F-type sunspot group was nearing the sun's west limb. A recording of four sudden ionospheric disturbances caused by solar flares in this group is reproduced on page two. Once this group rotated over the west limb, conditions remained quiet until another active group appeared at the east limb on the 7th. This group soon decayed and was followed by another quiet period. Activity at the end of February was probably associated with a southern group which started to grow rapidly on the 23rd.

Sunspot activity was also dominated by the very large F-type group which passed over the west limb on the 5th and reappeared at the east limb on the 20th. Relative sunspot numbers reached a peak for February on the 2nd when eleven additional groups were visible along with the big F group.

The February mean of the American sunspot numbers fell somewhat from 113.5 in January to 99.2 this month.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, FEBRUARY 1968

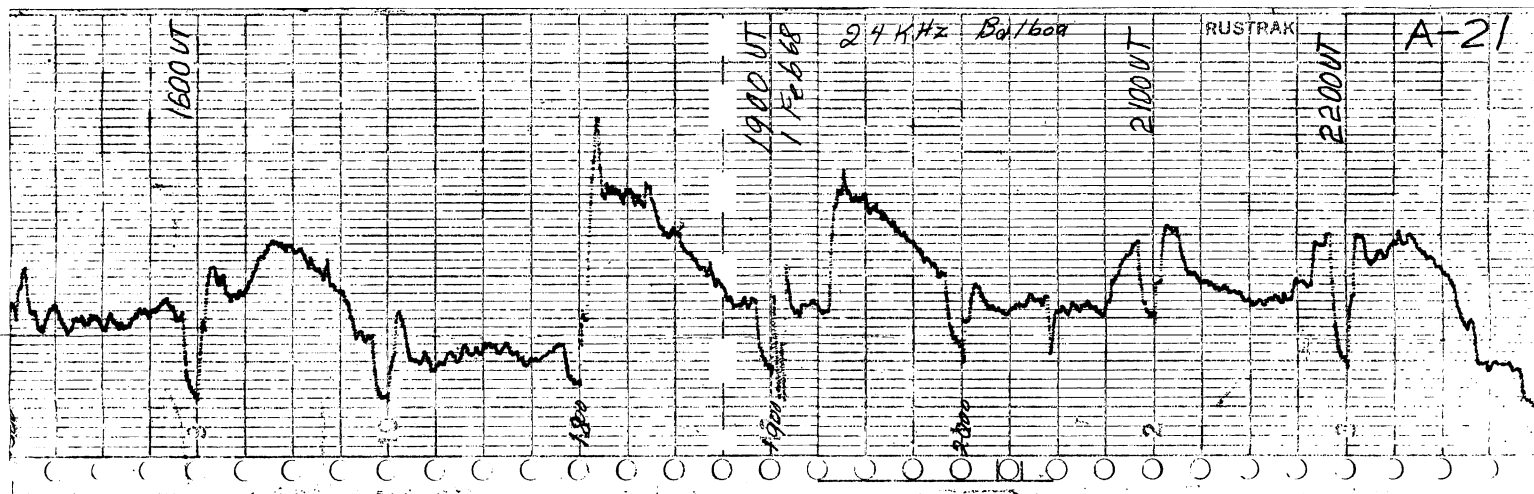
day	R_A	R_Z	day	R_A	R_Z
1	208	208	16	64	74
2	226	211	17	75	95
3	189	197	18	57	72
4	167	162	19	61	65
5	120	125	20	58	68
6	94	105	21	58	69
7	73	86	22	52	70
8	97	90	23	74	71
9	109	86	24	98	119
10	79	82	25	128	162
11	62	78	26	139	150
12	71	69	27	107	118
13	53	67	28	112	127
14	68	69	29	113	131
15	64	87			

February mean R_A = 99.2

February mean R_Z = 107.3

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING FEBRUARY

DAY	MAX.	SEA	SES	DEF.	OBSERVERS	DAY	MAX.	SEA	SES	DEF.	OBSERVERS
1	1623		1+	2	A-21	10	1907	2	3+	5	A-21, 6
1	1806	2	3	5	A-21, 1, 19	10	2055		2+	3	A-21
1	1922	2+	3	5	A-21, 1	18	1935		1+	4	A-21
1	2055	2	2	5	A-21, 1	26	0632	1		4	A-17
2	0550	1		3	A-17	27	2008		1	3	A-21, 1



The above strip-chart recording shows four sudden ionospheric disturbances reaching maximums at 1623 UT, 1806 UT, 1922 UT, and about 2055 UT on the first of February 1968. They were produced by recording enhancements of signal strength of very-low-frequency station NBA in Panama. NBA operates on a frequency of 24 kHz. The interruption near each hour mark is caused when the regular code transmission is interrupted to send time signals. An additional increase in signal strength occurs at about 2200 UT which might also represent an ionospheric event although this is considered doubtful because of its atypical shape and lack of confirmation on other recordings. The recording was made by observer A-21, K. L. Strait, of Littleton, Colorado.