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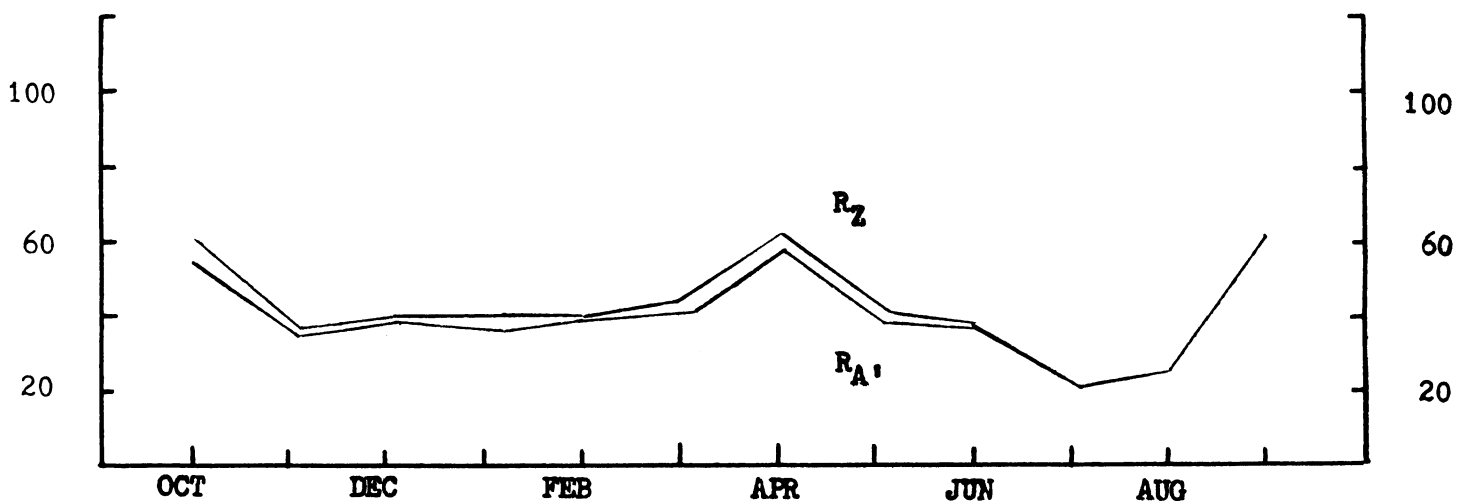
SEPTEMBER 1973

SOLAR ACTIVITY DURING SEPTEMBER

Sunspot activity reached a high level more appropriate for solar maximum during the first few days of September. The mean of the American sunspot numbers rose to 61.3, the highest since October 1972. As the active longitudes which had contained up to nine sunspot groups on the 3rd and 4th rotated toward the west limb nothing formed east of them nor did anything appear over the east limb. On the 12th the last spot rotated over the west limb to leave the sun completely spotless on the 13th and part of the 14th but late that day a large spot came over the east limb which was the beginning of new activity which continued to increase until month's end.

Many ionospheric disturbances were associated with the high level of solar activity during the first week of September. AAVSO observers recorded a total of 13 events of which four occurred on the 2nd making it the most eventful day although these were small ones as can be seen by a chart for that day which is reproduced on page two. Two disturbances on the 5th were the most intense but even these were moderate events. A recording of these two is also shown on page two. Note how the rise times of these two events differ. A recording of a tiny disturbance on the 7th is also shown and is an excellent example of how a very clean interference-free trace can clearly show disturbances of very low intensity.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS FOR SEPTEMBER 1973

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING SEPTEMBER 1973

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING SEPTEMBER 1973

DAY	R_A	R_Z
1	96	89
2	134	129
3	144	135
4	129	127
5	111	108
6	88	84
7	83	77
8	74	72
9	82	75
10	54	62
11	35	42
12	16	27
13	0	0
14	6	0
15	14	8
16	18	33
17	14	20
18	13	16
19	13	8
20	31	30
21	39	39
22	44	48
23	59	58
24	65	63
25	76	82
26	80	82
27	77	83
28	83	80
29	85	75
30	75	71
Means =	61.3	60.8

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
2	1718		1-	2	A19,38	5	1835	2	2	5	A1,19,21,30,31
2	1814		1	5	A1,19,31,36,37,38						33,36,37,38
2	1913		1	5	A1,19,31,36,37,38	5	2020		2	5	A1,19,21,30,31
2	2156		1-	5	A1,30,31,36,37						33,36,37,38
3	1620		1	5	A1,19,30,31,33	6	1457		1	5	A1,19,33,38
					36,37,38	7	1205		1+	4	A1,38,*
4	1507		1	5	A1,38	7	1617		1	3	A1,19,33,37
4	1638		1-	5	A1,19,30,33,37,38,*	9	2148		1+	5	A1,19,31,30,37,38

*=events reported by letter by Dr. Barocas, Preston, U.K.

