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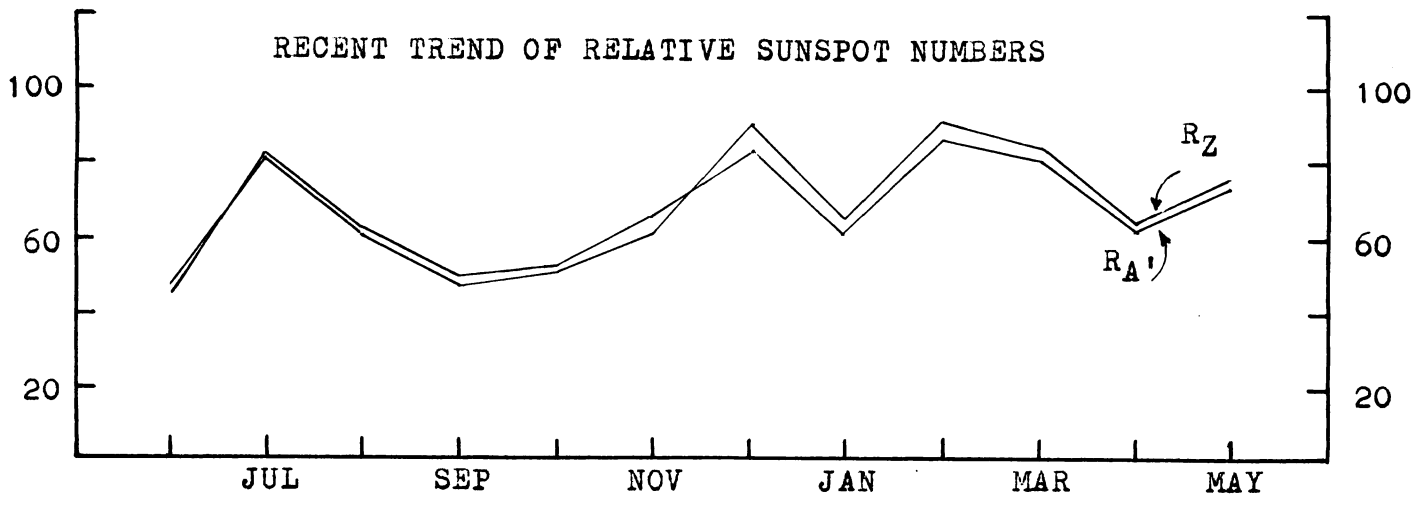
Twenty-eight ionospheric disturbances were recorded by the Solar Division's observers. A large number of high energy events further emphasized this high activity. The event of the 28th possibly equaled the magnitude of any event recorded in recent years.

The event of the 17th as recorded by one of our newer observers, Mr. Allen S. Clarke, Paeonian Springs, Virginia, is shown on page two. This reproduction illustrates that events can be recorded quite well even under adverse conditions of rather high thunderstorm activity and during the ending of the daylight hours when normal attenuation of response occurs.

The event of the 24th reproduced on page two presents a very puzzling point. It was recorded by five SES observers, over ten different signal paths using five different frequencies from 17.8 kHz to 37.2 kHz, with traces giving both high amplitude and a very long decay time, yet none of the seven SEA observers who were in operation at the time appeared to record this disturbance at 27 kHz. It is common for the SES method to record minor events not recorded by the SEA method due to the slightly greater sensitivity of the SES method but for major events, this has not been noted before. Correlation with other methods should be interesting.

The mean of the American sunspot numbers rose to 75.7 for May with spottedness typical of solar cycle maximum occurring at the middle of the month when at one point thirteen sunspot groups were present on visible disk.

Among interesting groups this month was a high northern latitude group that formed about one day east of the central meridian on the 7th. This developed into an impressive group by west limb passage. It was seen to reappear at the east limb on the 29th. Another impressive group rotated over the east limb on the 24th. Magnetic polarities were badly mixed in this group and it was classified gamma or beta-gamma during its passage across the disk throughout May. It was visible to the unaided eye when near the central meridian.



AMERICAN (R_A') AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, MAY 1972

DAY	R_A'	R_Z
1	22	17
2	38	39
3	19	32
4	27	27
5	44	49
6	71	68
7	70	79
8	60	73
9	88	99
10	90	91
11	87	79
12	98	92
13	127	103
14	138	130
15	127	113
16	128	125
17	123	140
18	126	133
19	119	127
20	95	105
21	70	89
22	64	77
23	47	59
24	55	58
25	59	56
26	56	55
27	40	41
28	46	44
29	68	58
30	80	79
31	65	85

Monthly Means

R_A' = 75.7

R_Z = 78.1

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING MAY 1972

DAY	MAX	SEA	SES	DEF	OBSERVERS
4	1511		1	5	A1,19,21
7	1459	1-	1	5	A1,19,21,26,31,34
7	1845		1-	5	A19,21,30
8	1600		1-	5	A1,19,21
9	1558		1-	5	A1,19,21
9	1855		1-	5	A1,19,21
11	1637		1-	5	A1,19,21,30,31
11	1727	1	1	5	A1,19,21,26,30,31 32
12	1305	1	1	5	A1,8,18,19,22,26 32,34
12	2003		1-	5	A1,19,21,30
13	1359	1	1	5	A1,18,19,21,22,26, 31,34
14	1507		1-	4	A1,19,21
14	2256		1-	5	A21,30
15	1526		1-	5	A19,21
15	1800		1-	5	A1,21,30,31
15	1951	1+	2	5	A1,8,18,19,21,22, 26,30,31,34
16	0322		2	4	A31
17	2242	2	2+	5	A1,8,18,19,21,26, 30,31,34
18	1411	2	2-	5	A1,8,18,19,21,22, 26,31,32,34
18	1620	1+	1+	5	A1,8,18,19,21,26, 30,31,34
18	2031	1	1+	5	A1,8,18,19,21,26,30
18	2237		1-	5	A19,21,30,31
20	1702	1	1+	5	A1,19,21,26,31,34
22	2112		1	5	A1,19,21,30,31
23	1555	1-	1	5	A1,19,26,30,31
24	1800		2	5	A1,19,21,30,31
27	0145		1	4	A31
28	1332	3-	3-	5	A1,8,15,18,19,21, 26,30,31,32,34