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SOLAR ACTIVITY DURING MAY

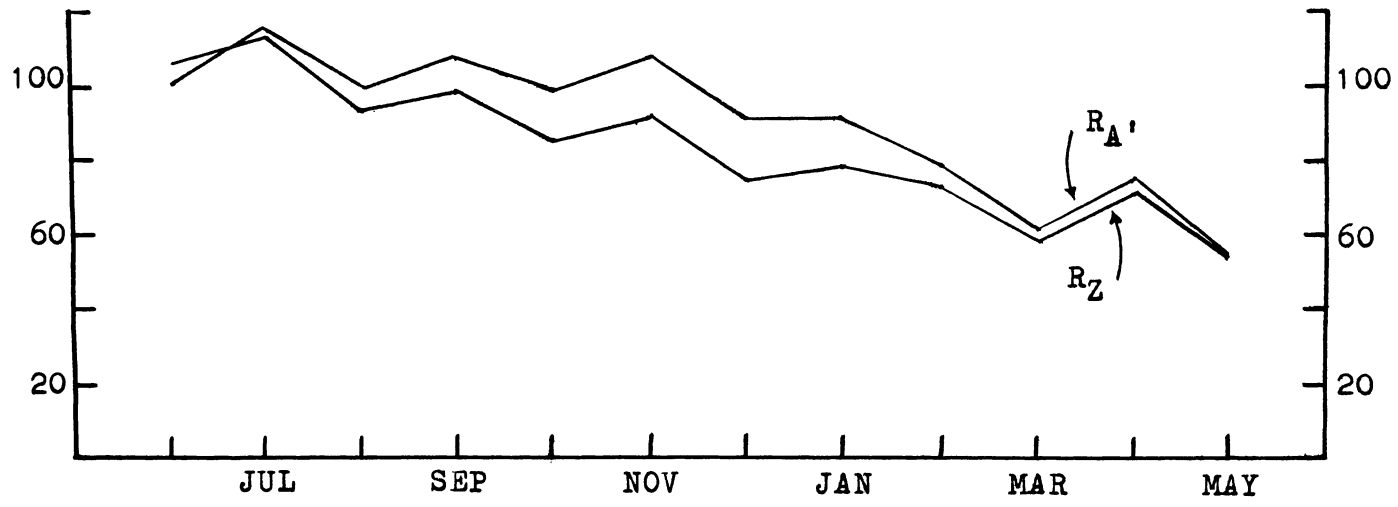
While the number of ionospheric disturbances recorded by the Solar Division observers reached a total of thirteen during May, only six of these thirteen were classed above a minor (1-) in importance.

On page two is reproduced two of the most widely recorded events. The event of the 3rd of the month is shown as recorded by A17 in the southern hemisphere and also by A27 in the northern hemisphere. The major event recorded on the 14th was recorded by Dr. Walter L. Moore (A26).

The mean of the American sunspot numbers fell to 54.6 from 74.9 last month. The lesser activity provided sunspot observers with a taste of approaching minimum conditions starting on the 23rd of May. During this brief period only A and B-type sunspot groups were present on the solar disk with none of the larger types which have dominated the scene during recent maximum. By the 23rd a prominent J-type group had passed over the west limb and another J group of the previous day had decayed to a single small spot. East of the small spot was a B-type group and to the south an A group. These three groups were all that could be seen that day.

On the 31st, a pair of sunspots encompassed in the same penumbra had the solar equator passing between them. Magnetic observations showed the two spots to be of opposite polarity with the leading spot of "R" polarity indicating the group probably belonged to the southern hemisphere.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A') AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, MAY 1971

DAY	R_A'	R_Z
1	42	41
2	47	46
3	48	52
4	61	59
5	66	65
6	60	64
7	62	72
8	63	70
9	65	67
10	73	73
11	83	61
12	79	62
13	82	76
14	77	73
15	65	75
16	58	81
17	53	62
18	43	43
19	44	40
20	43	40
21	40	38
22	36	30
23	10	15
24	15	16
25	24	25
26	36	35
27	53	49
28	66	65
29	67	56
30	73	58
31	58	60

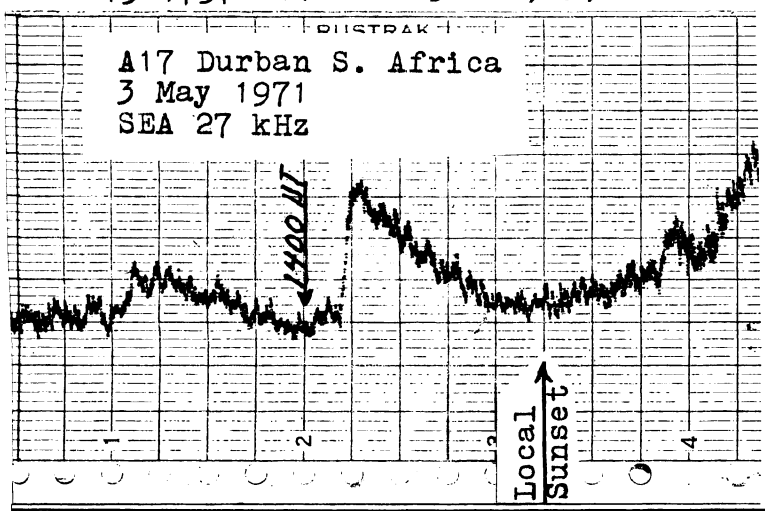
Monthly Means

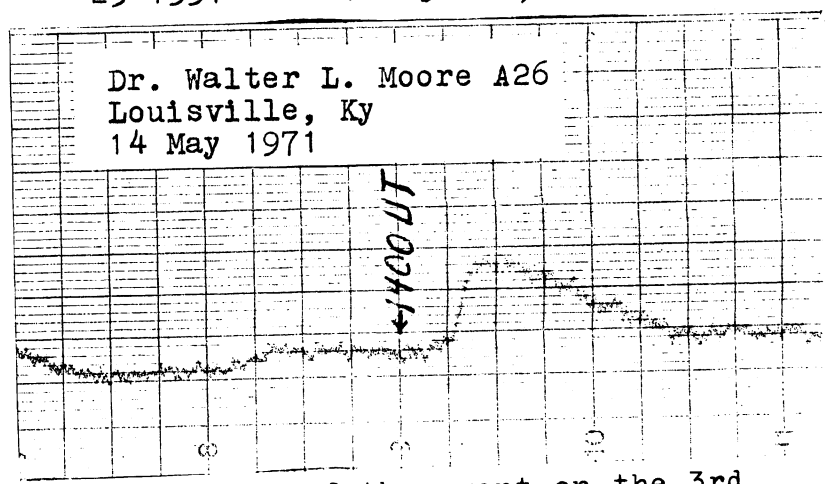
R_A' = 54.6

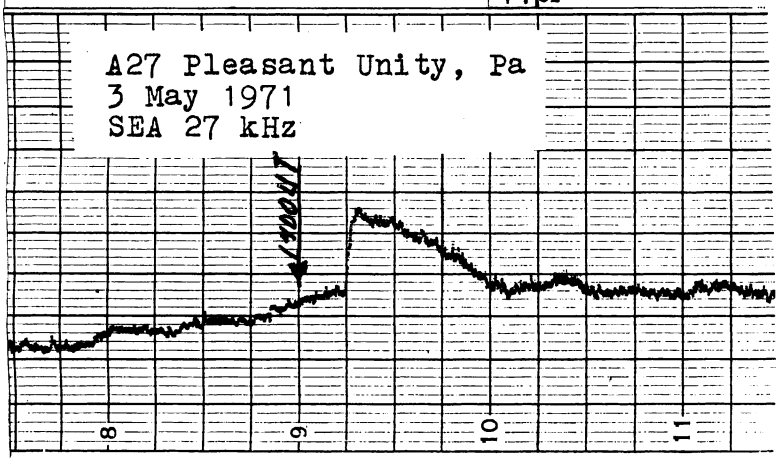
R_Z = 53.8

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING MAY 1971

DAY	MAX	SEA	SES	DEF	OBSERVERS
3	1417	2	2	5	A1,17,21,23,26,27
5	1217	2	2	5	A1,8,17,22,27
5	1931		1-	4	A1,21
5	2306		1	4	A21
8	1317	1-	1-	4	A1,17
13	1702		1	4	A1
13	1757	1+	2-	5	A1,23,26
14	1425	2+	2+	5	A1,17,21,22,23 26,27
14	1744	1-	1-	5	A1,21,26,27
18	1510	1-	1-	4	A1,21
27	1446		1-	4	A1,21
27	1530		1-	4	A1,21
29	1551		1-	5	A1,21







The recording of the event on the 3rd was made in Durban, S. Africa about one hour before local sunset. The same event recorded in Pennsylvania at about four hours after local sunrise. The fast rise characteristics and sharp peak show in both. The trace made in South Africa does show the typical fast fall time that is almost concave. This is very common for events recorded just before local sunset.

The recording made by A26 on the 14th is typical of the recordings of this event, which have a fast rise with a rounded peak in contrast to the event of the 3rd.