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SOLAR ACTIVITY DURING APRIL

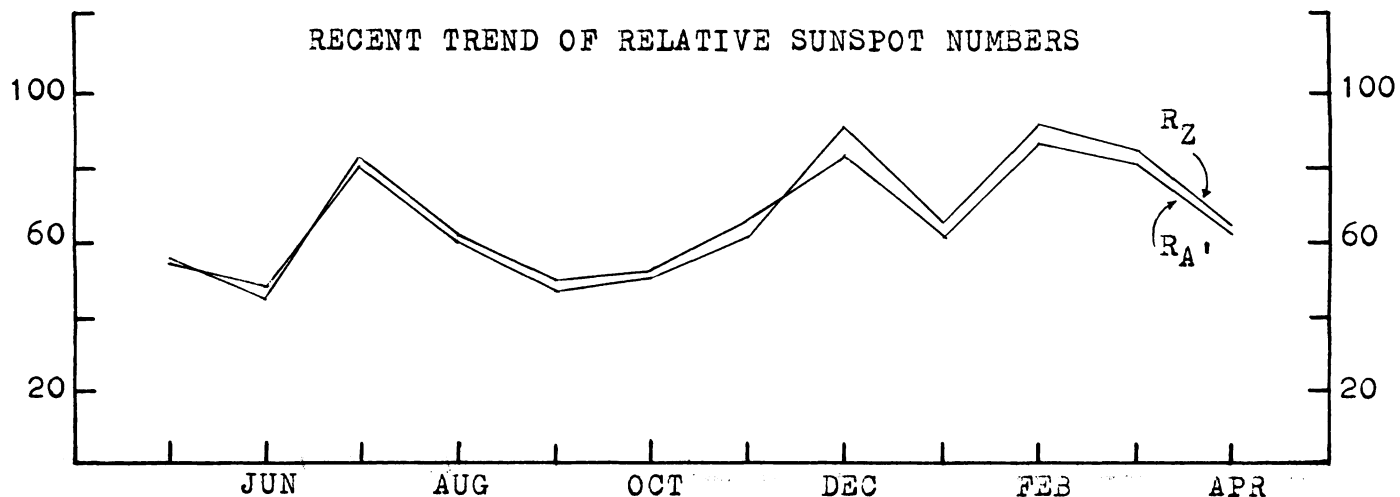
Thirteen ionospheric disturbances were recorded by the Solar Division's observers. While this represents about a half of the activity of March and about a fourth the activity of February 1972, it appears that the activity is possibly somewhat higher this month than might be expected for this point of the eleven year solar cycle.

On page two is reproduced several of the recorded SIDs (Sudden Ionospheric Disturbances). The larger event of the 14th as recorded by the SEA (Sudden Enhancement of Atmospherics) method is shown with the typical rise in trace after sunset. The first large event of the 18th is shown as recorded by the SES (Sudden Enhancement of Signal) method using a station at North West Cape, Australia. The recording of the 27th shows a typical sunrise effect; two reported SESs; and two quite small disturbances that were considered too small to scale. The recording of the 27th is a "short signal path" that usually gives "inverted" or a decrease in signal strength during a ionospheric disturbance caused by a solar flare.

Sunspot count activity decreased considerably from the previous month. The mean of the American sunspot numbers fell to 62.7

During April two groups were so close to the equator that it was difficult to decide if they were a northern or southern group. One of these crossed the central meridian on 2 April and was about one degree north. On the 22nd a new group formed slightly west of the central meridian. This group was slightly south of the equator.

After reaching a high on the 25th, sunspot numbers fell rapidly reaching a low level by the 30th when only two sunspot groups, each consisting of a single spot, were visible on the solar disk.



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

DAY	R_A'	R_Z	DAY	R_A'	R_Z
1	40	40	16	73	60
2	42	46	17	61	55
3	35	43	18	60	59
4	39	38	19	60	62
5	36	32	20	50	65
6	67	51	21	76	85
7	69	76	22	80	85
8	80	75	23	78	83
9	79	74	24	90	82
10	80	88	25	95	88
11	73	75	26	74	88
12	83	80	27	58	62
13	69	78	28	53	66
14	64	65	29	29	38
15	75	67	30	14	22

Monthly Means
 $R_A' = 62.7$
 $R_Z = 64.3$

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING APRIL 1972

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
9	2330		1+	5	A1,30,31	18	1508	1-	1-	5	A1,8,18,19,21,31
11	1711		1-	5	A1,19,21,30,31	18	1807	1+	1+	5	A1,8,18,19,21,22,26,30,31,34
14	1503		1-	4	A1,19,21	18	2058	1-	1-	5	A1,21,22,30,34
14	2009	1+	1+	5	A1,8,18,19,21,22,26,30,31	21	1500	1-	1-	5	A1,8,18,19,21,31,34
16	1706	1-	1-	5	A1,19,21,30,31,32	27	1645	1	1	5	A1,8,18,19,21,22,26,30,31,32,34
17	1702		1-	5	A1,19,21,30,31	27	1956		1-	5	A1,19,21,30,31
18	0107		2	5	A21,30,31						

ERRATUM: Observer A8 was erroneously omitted from listing in March issue of SOLAR BULLETIN for event on 24th at 1920.

APR 18 1972

