

# Solar Bulletin

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## SOLAR ACTIVITY DURING AUGUST

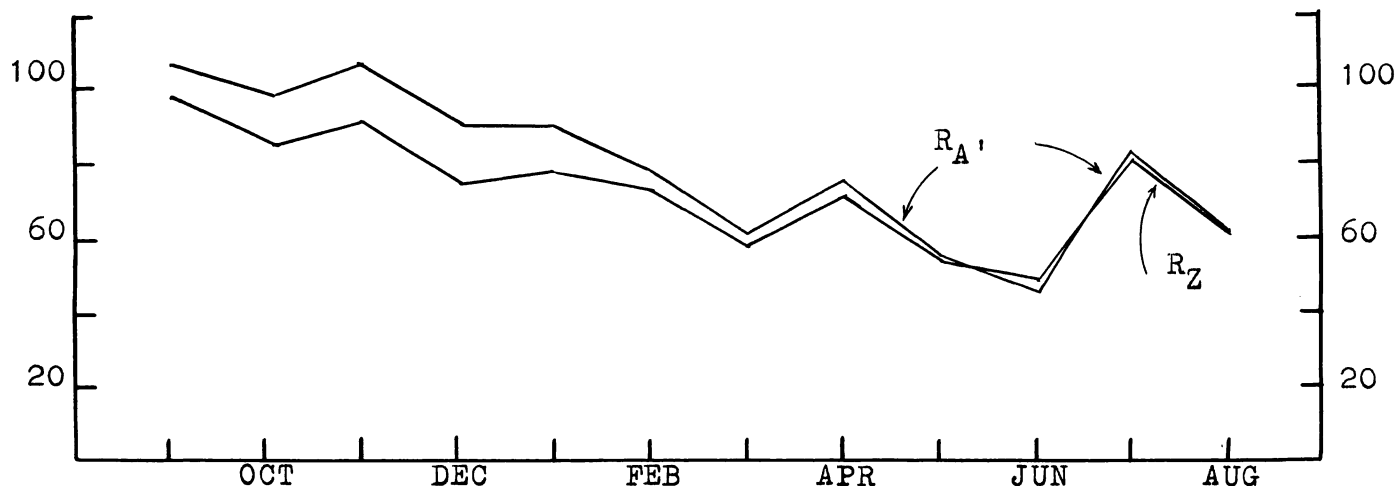
While the number of ionospheric disturbances recorded by the Solar Division observers reached a total of fourteen during August, only six of these were classed above a minor (1-) in importance. It is likely that the relatively high number of recorded events is related to the increase in the number of observers and improved techniques rather than indicative of ionospheric activity.

On page two is reproduced two events that illustrate typical "fast rise" and "slow rise" times. The event of the 19th was recorded by the SES method (Inverted) and despite the particularly high local interference at the time, shown by the sharp rising "noise spikes", the trace clearly shows the quite "fast rise" time for this particular event. The very "slow rise" time typical of the recording of the event on the 29th was also recorded by the SES method. Theoretical explanation of the difference of "rise time" is controversial, however widely dispersed points of recordings, showing the same characteristics indicate that the ionosphere is affected world wide and this is not a local phenomena.

The American sunspot numbers fell to 60.2 from a mean of 83.0 for last month.

Sunspot activity continued its downward trend except for a rather phenomenal F-type group which dominated the scene during the latter third of the month. This huge group which reached the central meridian on 23 August, was reported visible to the unaided eye by observers Cragg and Elias. August was a month of remarkably simple sunspot groups making the division of spottedness into groups a simple task for most sunspot observers.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN ( $R_A$ ) AND ZURICH ( $R_Z$ ) RELATIVE SUNSPOT NUMBERS, AUGUST 1971

DAY	$R_A$	$R_Z$		DAY	$R_A$	$R_Z$
1	68	70		16	52	49
2	57	57		17	59	52
3	49	58		18	69	60
4	39	43		19	74	62
5	31	48		20	89	82
6	27	40	Monthly Means	21	97	107
7	42	48		22	105	98
8	63	55	$R_A = 60.2$	23	96	106
9	66	59		24	98	93
10	64	64	$R_Z = 59.9$	25	99	91
11	64	60		26	71	82
12	67	58		27	60	49
13	62	58		28	46	37
14	49	58		29	29	29
15	47	53		30	14	17
				31	12	15

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING AUGUST 1971

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
18	1425	1-	1-	5	A1, 19, 21, 26, 27, 30, 31	23	2033	1	1	5	A1, 18, 19, 21, 22, 26, 27, 30, 31
18	1538		1	4	A21						
18	2354		1	5	A30	27	1625		1-	4	A1, 21, 31
19	1608		1-	4	A1, 21, 30, 31	29	1921	1	1+	5	A1, 18, 22, 23, 27, 30, 31
19	2210	1-	1-	5	A1, 18, 19, 26, 27, 30, 31	30	1515	1-	1+	5	A1, 21, 22, 23, 27, 31
20	1723	1-	1-	5	A1, 18, 21, 22, 30, 31	30	2040		1-	5	A1, 21, 30, 31
20	1821	1-	1-	5	A1, 18, 21, 22, 27, 30	30	2124	1	1	5	A18, 21, 27, 30, 31
20	2034		1-	4	A30, 31						

