## Solar Bulletin

Publisher:

THE AMERICAN ASSOCIATION SAO NORTH CENTRAL AVENUE RAMSEY, NEW JERSEY, U.S.A.

Volume 23 Number 9

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS

- Solar Division

EDITOR: C. H. HOSSFIELD

September 1967

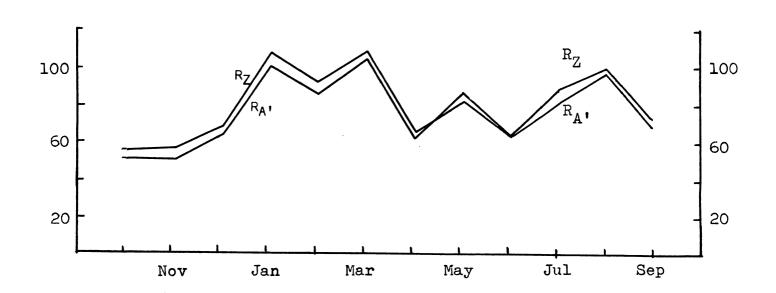
## SOLAR ACTIVITY DURING SEPTEMBER

There was comparatively little solar activity during September. Strip-chart recordings made by the Solar Division's indirect flare patrol show only one outstanding sudden ionospheric disturbance on the 12th starting at 1342 UT. Reproductions of a sudden enhancement of atmospheric noise at this time appear on page 2.

Sunspot activity also fell to a much lower level. The monthly mean of the American sunspot numbers fell to 68.5 from 96.7 for the month of August. No outstanding sunspot groups were seen in September. On the 8th, a small spot appeared a little to the west of the central meridian in the northern hemisphere. By the next day it had developed into a substantial group and it began to show beta-gamma characteristics on the 10th and 1lth. This group was seen to be declining as it reached the western limb on the 13th. It reached its maximum size on the 12th, the day that the sudden ionospheric disturbance mentioned above occurred.

It was noticeable that sunspot activity was about equal in the northern and southern hemispheres this month contrary to the recent trend of excess activity in the north.

## RECENT TREND OF RELATIVE SUNSPOT NUMBERS

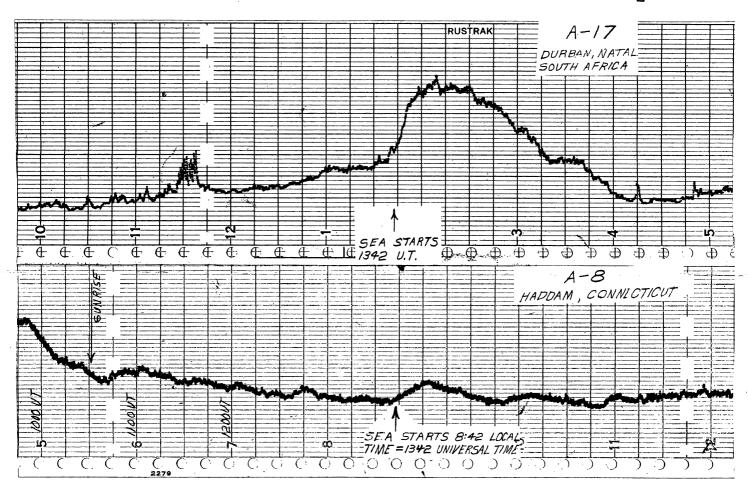


American ( $R_{A}$ ) and Zurich ( $R_{Z}$ ) relative sunspot numbers, September 1967

day	${\mathtt R}_{{f A}^{f 1}}$	$\mathtt{R}_{\mathbf{Z}}$	DAY	R <sub>A</sub> ,	$\mathtt{R}_{\mathbf{Z}}$
1	96	120	16	33	34
2	115	108	17	41	40
3	129	108	18	45	49
4	126	112	19	49	53
5	152	116	20	59	59
6 7 8 9	114 96 78 81 74	113 97 104 99 95	21 22 23 24 25	58 55 35 39 53	64 59 53 51 61
11	69	75	26	39	53
12	68	76	27	46	50
13	58	50	28	46	72
14	40	51	29	57	58
15	33	31	30	70	68

September mean  $R_{A!} = 68.5$ 

September mean  $R_Z = 72.6$ 



Sudden enhancement of atmospheric noise (SEA) as it was recorded simultaneously in Durban, Natal, South Africa and Haddam, Connecticut, U.S.A. The Haddam record shows a much smaller enhancement because it occurred soon after local sunrise.