

Solar Bulletin

Publisher:

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS — SOLAR DIVISION
540 NORTH CENTRAL AVENUE
RAMSEY, NEW JERSEY, U.S.A.



EDITOR: C. H. HOSSFELD

Volume 22 Number 10

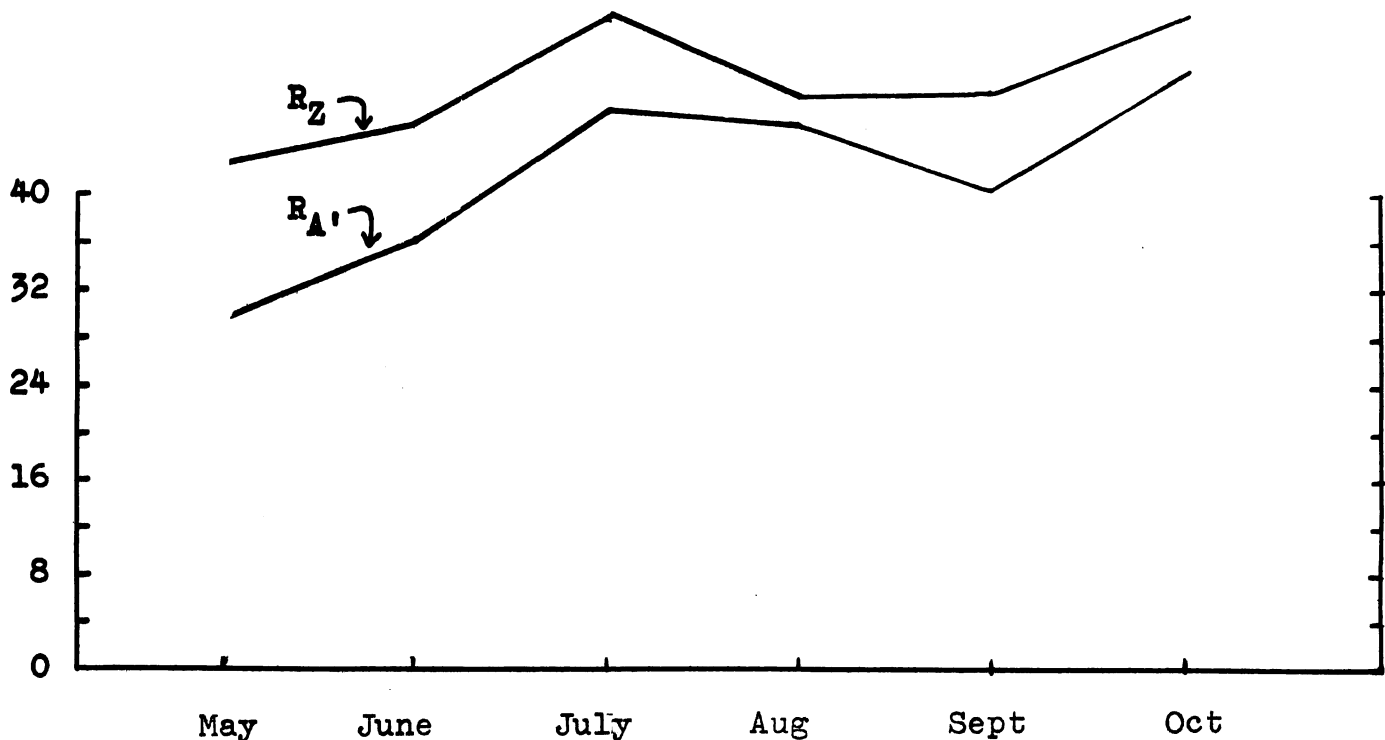
October 1966

SOLAR ACTIVITY DURING OCTOBER

Two periods considerable solar activity occurred during October. The first period was associated with a sunspot group first seen near the northeast limb on the 11th. By the 13th, this group had developed into a beta-gamma type group and flares could be anticipated. A recording of a sudden ionospheric disturbance caused by a flare in this group is shown on page 2. Also shown is another recording of 3 sudden ionospheric disturbances that occurred on the 23rd during the second period of activity.

Sunspot activity reached a higher level than the previous month. The mean of the American sunspot number rose from 40.9 in September to 50.6 this month. There were no spotless days and the southern hemisphere lacked spots on only 11 days compared to 21 days last month. There were 20 groups having lifetimes greater than 2 days compared to 12 such groups in September. A large inactive sunspot crossed the disk for the second time from 10 to 22 October. It will probably make a third appearance in which case it will be seen at the east limb on 6 November.

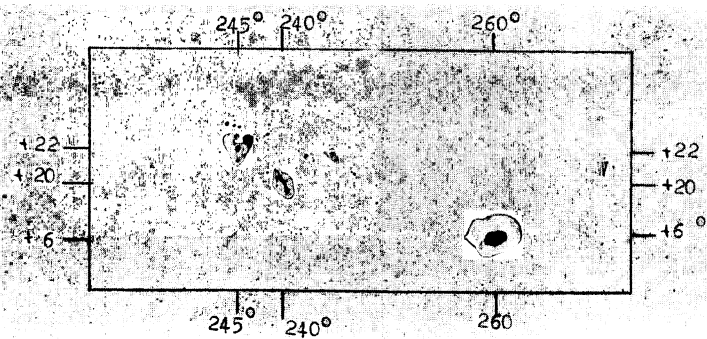
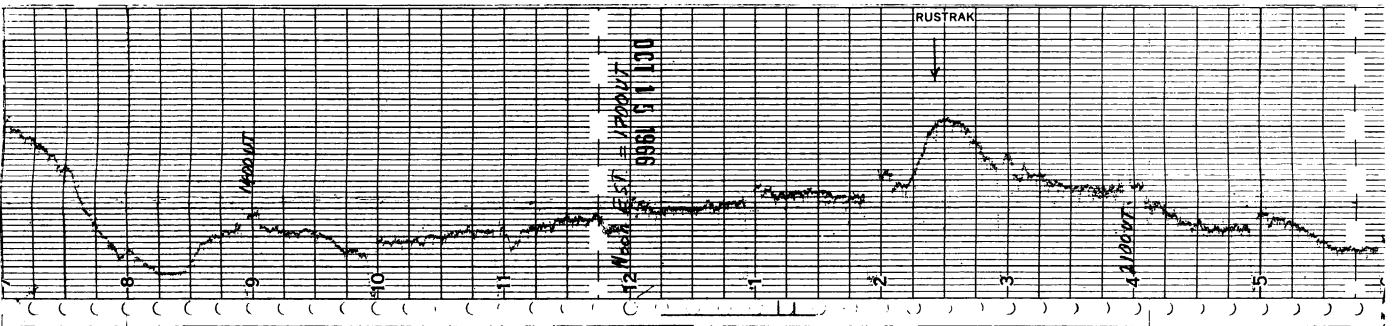
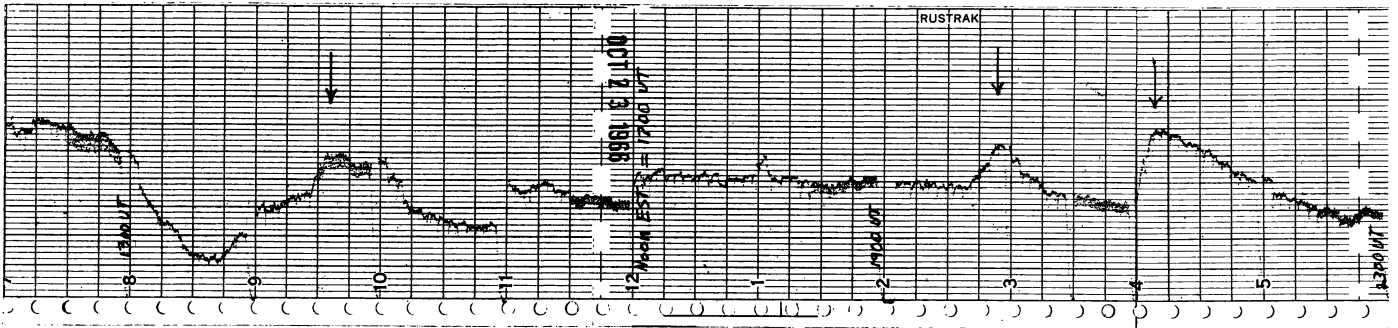
RECENT TREND OF RELATIVE SUNSPOT NUMBERS



NOV 9 1966

AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS FOR OCTOBER 1966

R _A , October 1966				R _Z October 1966			
mean = 50.6				mean = 55.3			
1	53	16	59	1	57	16	70
2	44	17	66	2	55	17	70
3	42	18	65	3	50	18	70
4	39	19	73	4	36	19	66
5	34	20	82	5	40	20	81
6	44	21	78	6	44	21	96
7	41	22	77	7	53	22	81
8	39	23	64	8	48	23	70
9	45	24	60	9	44	24	61
10	44	25	47	10	65	25	50
11	73	26	41	11	66	26	44
12	55	27	16	12	49	27	39
13	72	28	3	13	72	28	28
14	65	29	28	14	64	29	25
15	57	30	29	15	60	30	24
		31	35			31	35



The upper chart shows three sudden ionospheric disturbances recorded on 23 October. Arrows point to the three sudden enhancements of signal (SES) of very-low-frequency station NPG operating on 18.6 kHz near Seattle, Washington, U. S. A. Both charts were made by R. H. Davis (A-18) of Scituate, Massachusetts. The lower chart shows an SES starting at 1912 UT which was associated with an active beta-gamma group first seen on the 11th of October. A detailed drawing of this group is shown at the left. It was made by Arnaldo Gutierrez of Caracas, Venezuela and shows the group as it appeared at 1410 UT on the 16th. To the southwest of this group is the large inactive sunspot that has already crossed the sun's disk twice and will appear again on 6 November at the east limb.