THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS

Solar Bulletin

... Published By ...

AAVSO - SOLAR DIVISION, 540 N. CENTRAL AVENUE, RAMSEY, NEW JERSEY, U. S. A.

Volume 21...Number 5...May 1965

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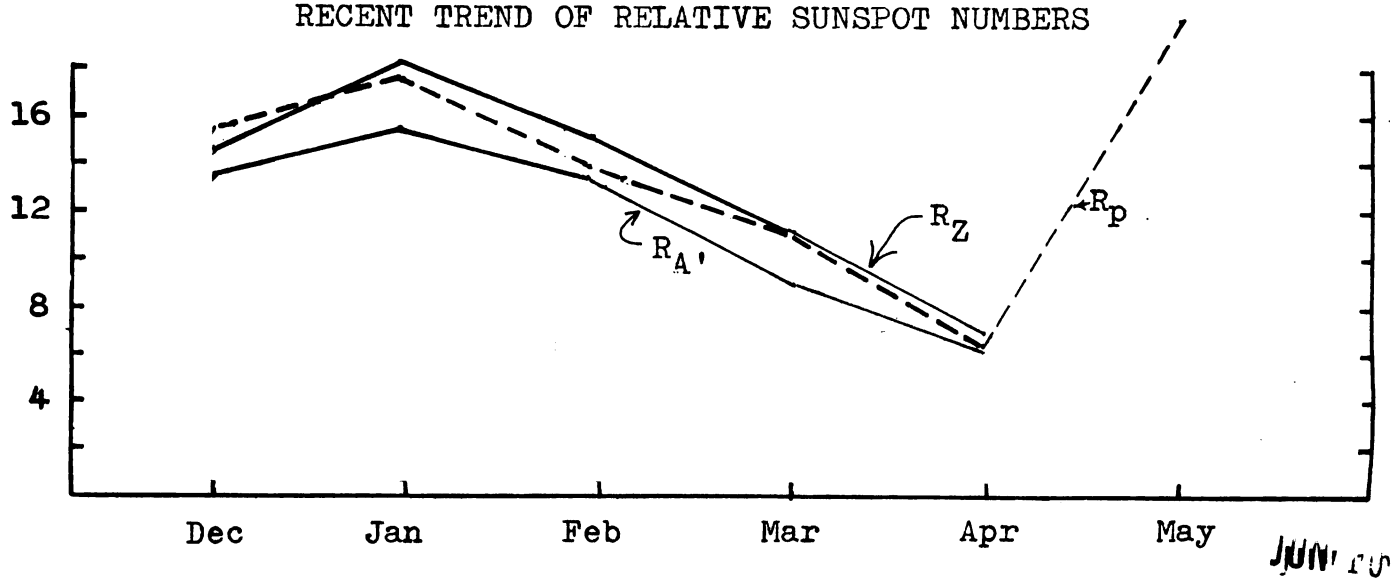
SOLAR ACTIVITY DURING MAY

Solar activity reached the highest level of the IQSY period during May. The Solar Division's "indirect flare patrol" group recorded a sudden ionospheric disturbance of moderate intensity at 1830 UT on 15 May plus several smaller disturbances during the following week.

This month's activity was dominated by two large new-cycle sunspot groups that first appeared at the east limb on the 14th and 16th. The group of the 14th was the largest group seen since October 1963 and its area was reported to be about 400 millionths of the solar hemisphere by Alan Hopper of Australia. It was possible to see this spot group with the unaided eye and it was observed in this manner by Victor Williams of Montreal, and Thomas Cragg of Mount Wilson. Despite its large size, it had decayed to almost nothing by the time it reached the west limb. The smaller of the two large groups appeared on the 16th and was reported to be actually the source of the greater amount of solar activity. By the time this group reached the central meridian, it had expanded in longitude so that it resembled two groups. The fact that it was contained in a single plage indicated that it was actually one group.

The monthly mean of the preliminary sunspot number reached 20.9 for May. All spots were observed in the northern hemisphere, the southern hemisphere being completely spotless during the entire month. Following this great surge of activity, May ended with four spotless days.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



($R_{A'}$) MARCH 1965

Mean = 9.1

1	6
2	1
3	1
4	5
5	6
6	5
7	8
8	0
9	1
10	12
11	10
12	20
13	20
14	20
15	21
16	16
17	19
18	23
19	23
20	14
21	2
22	0
23	0
24	3
25	13
26	11
27	12
28	8
29	1
30	0
31	0

Relative sunspot numbers above in the $R_{A'}$ column are American Relative Sunspot Numbers computed from sunspot counts made by the Solar Division of the AAVSO. They are final numbers. Relative sunspot numbers in the R_Z column are Zurich Relative Sunspot Numbers computed from observations made at Zurich, Locarno, and Arosa. They are provisional numbers.

(R_Z) MARCH 1965

Mean = 11.3

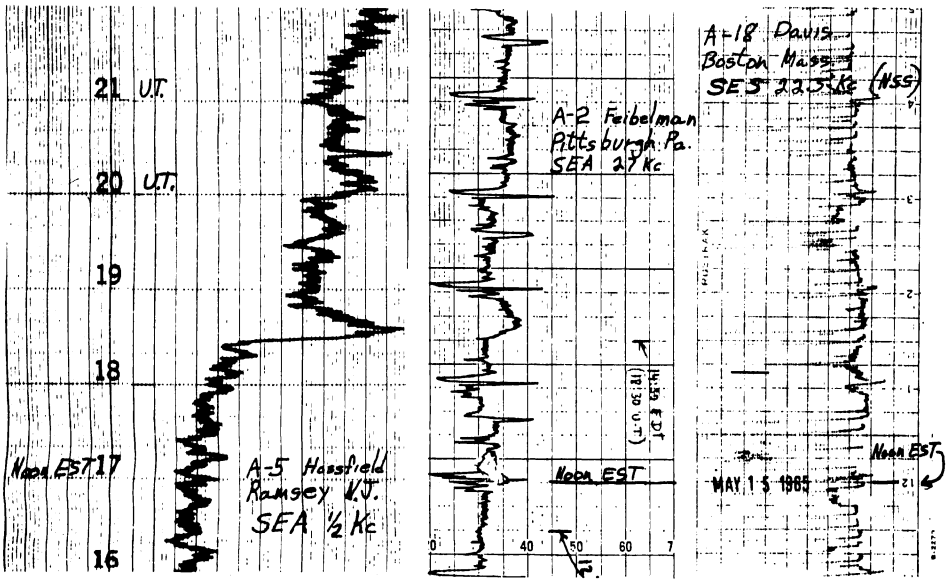
1	13
2	0
3	0
4	8
5	7
6	29
7	26
8	7
9	0
10	12
11	9
12	18
13	16
14	17
15	12
16	9
17	11
18	22
19	17
20	19
21	9
22	0
23	0
24	7
25	17
26	10
27	18
28	12
29	9
30	9
31	8

(R_p) MAY 1965

Mean = 20.9

1	0
2	11
3	12
4	10
5	4
6	0
7	13
8	17
9	8
10	0
11	3
12	13
13	13
14	10
15	33
16	38
17	62
18	71
19	58
20	52
21	54
22	50
23	39
24	36
25	27
26	14
27	0
28	0
29	0
30	0
31	0

Numbers in the R_p column are provisional sunspot numbers computed from some of the early reports received from Solar Division sunspot observers. They are not meant to be used for definitive purposes.



Strip-chart recordings showing a sudden ionospheric disturbance at 1830 UT on 15 May 1965. These were made by the Solar Division's "Indirect Flare Patrol" group who detect solar flares by their effect on the ionosphere. The recordings show sudden enhancements of atmospheric noise (SEA) and a sudden enhancement of signal (SES). The signal is very low frequency station NSS operating on 22.3 Kc

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