

Solar Bulletin

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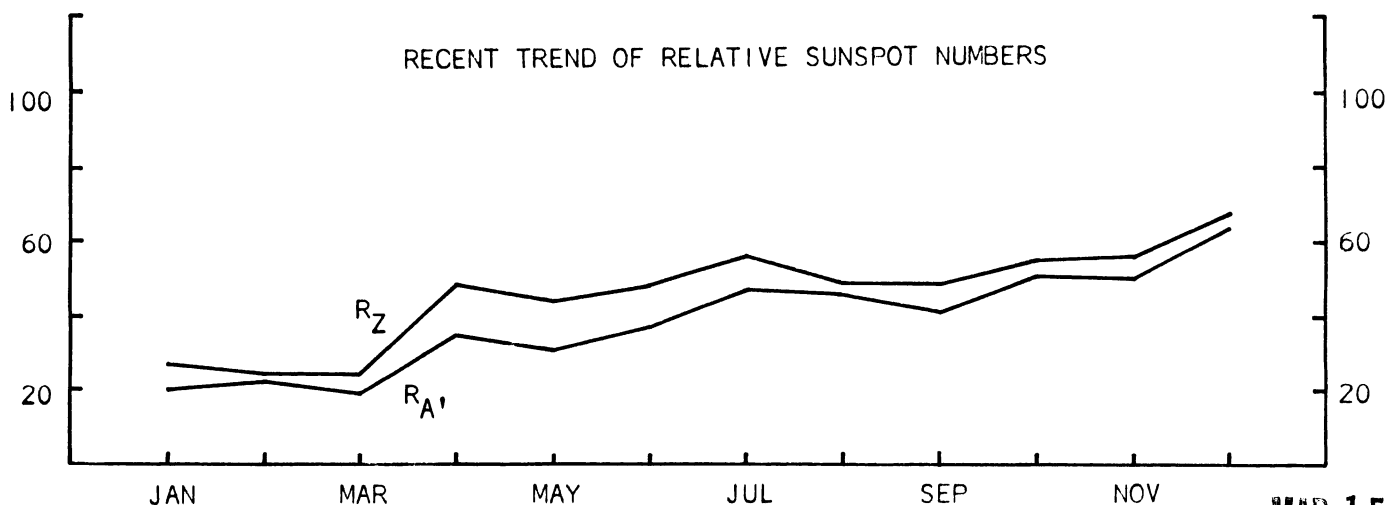
December 1966

SOLAR ACTIVITY DURING DECEMBER

Solar activity increased to a high level during the first part of the month. An intense sudden ionospheric disturbance commencing at about 1758 UT on December 9 was widely recorded by members of the Solar Division's indirect flare patrol and was undoubtedly associated with a class 2 flare reported at that time by the High Altitude Observatory's Preliminary Report. Other intense sudden ionospheric disturbances were reported by members of the Solar Division's indirect flare patrol on the 10th and the 13th.

Sunspot activity also increased sharply during the first part of the month. The monthly mean of the American relative sunspot numbers increased from 50.0 for November to 64.3 for December, and the daily numbers were greater than 100 during the five day period from December 10 through December 14. This is the first time during the current cycle that the American relative sunspot number for any day has been in excess of 100. After a long relatively quiescent period, the southern hemisphere of the sun showed increased sunspot activity, being spotless for only 10 days of the month, as compared with 23 days in November. On the disc as a whole, there were 21 groups with lifetimes greater than 2 days, compared with 14 such groups in November.

The complex spot in the southern hemisphere which was first seen near the east limb on December 7 developed rapidly and was reported to be visible to the naked eye by the 10th. Despite its size and complex arrangement, polarity measures on a number of days at Mount Wilson indicated it to be a simple beta group. The very long-lived "H" group mentioned in the November Solar Bulletin crossed the disc for the 4th time and appeared again at the east limb on the 31st. Polarity measures at Mount Wilson indicate that a new group may be forming around the old spot, which will seriously interfere with the determination of the real lifetime of this very long-lived group.



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(R_A) December 1966

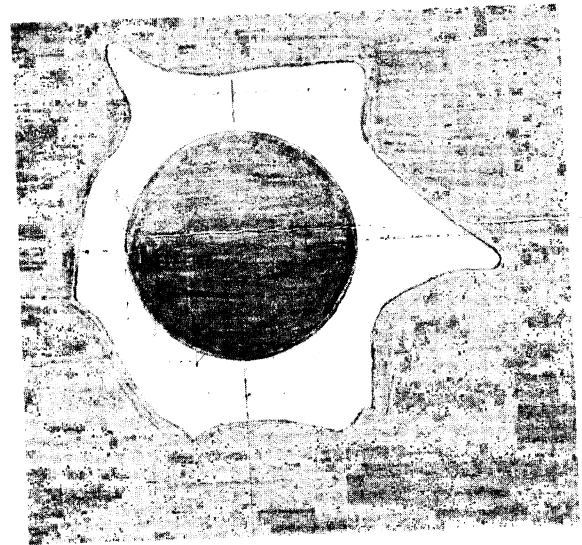
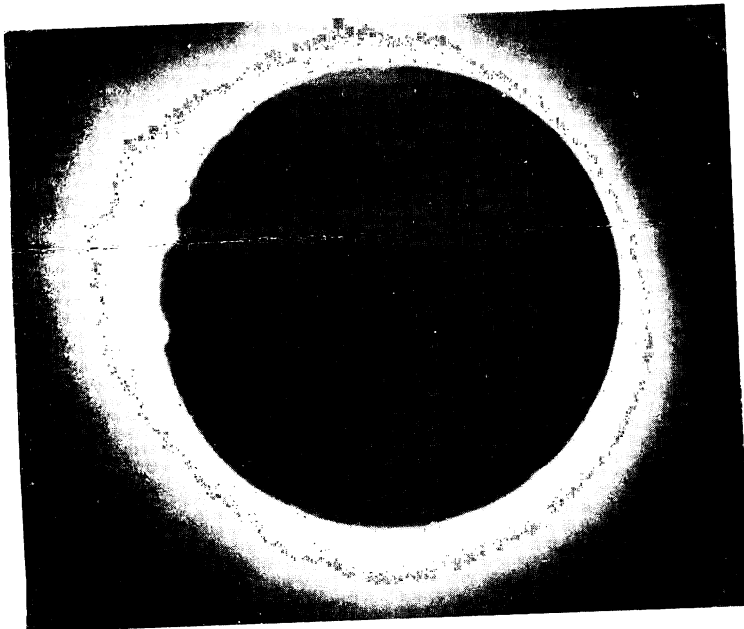
Mean = 64.3

1	32	16	80
2	28	17	59
3	21	18	60
4	46	19	46
5	65	20	19
6	57	21	34
7	70	22	35
8	87	23	39
9	99	24	52
10	110	25	56
11	116	26	58
12	128	27	62
13	115	28	59
14	110	29	48
15	95	30	53
		31	55

(R_Z) December 1966

Mean = 68.2

1	35	16	116
2	33	17	74
3	30	18	58
4	57	19	40
5	69	20	37
5	68	21	34
7	64	22	32
8	88	23	38
9	86	24	42
10	112	25	60
11	125	26	65
12	130	27	43
13	118	28	41
14	113	29	48
15	107	30	76
		31	74



The total eclipse of 12 November 1966 as seen from southern Brazil. The photograph was made by Jean Nicolini and the drawing by Wanderley Nazareth. Both are AAVSO solar observers from Sao Paulo, Brazil.