

## PROMINENCES

The following table gives the mean daily areas and numbers of calcium prominences at the limb as derived from spectroheliograms obtained at Kodaikanal during 1963.

1963	Area (in square minutes)					Numbers				
	N	S	E	W	Total	N	S	E	W	Total
January-June	1.91	0.71	1.08	1.54	2.62	4.19	2.65	3.22	3.62	6.84
July-December	1.57	1.27	1.29	1.55	2.84	4.20	3.60	3.40	4.40	7.80
Whole year (weighted mean)	1.78	0.93	1.17	1.54	2.71	4.20	3.00	3.30	3.90	7.20

The figures show a slight increase in the prominence activity judged by areas and a slight decrease judged by numbers from the previous year, the increase in area being 8.8 per cent and the decrease in numbers being 3.1 per cent. The distribution of areas in the northern hemisphere in five degree ranges of latitude shows a peak of activity extending from 30-35° with a secondary maximum in the zone 20-25°. In the southern hemisphere the maximum activity is in the zone 40-45° with a secondary maximum in the zone 20-25°. Three sudden disappearances of dark absorption markings were observed at Kodaikanal during the period.

The mean daily areas and numbers of hydrogen absorption markings on the disk as obtained from Kodaikanal records were as follows:—

1963	H-alpha dark marking area (in millionths of the Sun's visible hemisphere uncorrected for foreshortening)					Numbers				
	N	S	E	W	Total	N	S	E	W	Total
January-June	1439	519	879	1079	1958	10.33	4.01	6.78	7.56	14.34
July-December	2527	741	1483	1785	3268	16.20	6.60	9.90	12.90	22.80
Whole year (weighted mean)	1787	590	1072	1305	2377	12.20	4.80	7.80	9.20	17.00

Compared with the previous year there was an increase of activity of the absorption markings judged both by areas and numbers. The increase in area amounted to 21.3 per cent while the numbers showed an increase of 18.6 per cent. In the northern hemisphere the peak of activity was in the latitude belt 20-30° with a secondary maximum in the zone 45-50°. In the southern hemisphere the maximum activity was in the zone 10-20° with a secondary maximum in the zone 45-50°.

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