

Prominences in 1975

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The following table gives the mean daily areas and numbers of calcium prominences at the limb derived from the spectroheliograms obtained at Kodaikanal during 1975.

1975	Area (sq. min.)					Numbers				
	N	S	E	W	Total	N	S	E	W	Total
January-June	1.16	1.06	1.17	1.06	2.23	3.19	2.22	2.78	2.63	5.41
July-December	1.40	1.09	0.74	1.76	2.50	2.71	2.14	1.86	3.00	4.85
Whole year (weighted mean)	1.24	1.07	1.03	1.28	2.31	3.03	2.20	2.49	2.75	5.23

These values, when compared to the previous year, show a decrease of activity by 20.6 per cent in the case of areas and 9.8 per cent in the case of numbers. The distribution of K-prominence areas in five degree range of latitude shows two peaks of activity in the belts 20-25° and 45-50° in the northern hemisphere. In the southern hemisphere the peak of activity is in the belt 30-40°. Prominence numbers show two peaks of activity in the northern hemisphere in latitude belts 15-20° and 40-50°, while in the southern hemisphere peak of activity is confined to the latitude belt 35-40°.

The mean daily areas and numbers of hydrogen absorption markings obtained from H-alpha spectroheliograms at Kodaikanal are tabulated below.

1975	H-alpha absorption marking areas (in millionths of the Sun's visible hemisphere uncorrected for foreshortening)					Numbers				
	N	S	E	W	Total	N	S	E	W	Total
January-June	704.2	575.9	664.1	616.0	1280.1	7.9	6.3	7.4	6.9	14.2
July-December	853.7	680.3	718.9	815.2	1534.1	9.0	7.0	7.4	8.6	16.0
Whole year (weighted mean)	753.6	610.4	682.2	681.8	1363.9	8.3	6.5	7.4	7.4	14.8

These values, when compared to the previous year, show a decrease of activity by 41 per cent in the case of areas and 29.9 per cent in the case of numbers. The distribution of areas and numbers in five degree ranges of latitude show two peaks of activity in the latitude belts $15-20^\circ$ and $45-50^\circ$ in the northern hemisphere. In the southern hemisphere the peaks of activity in areas are in the latitude belts $20-25^\circ$ and $35-40^\circ$. The maximum activity in numbers is in the belts $15-20^\circ$ and $35-40^\circ$.