

Solar Prominences in 1971

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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 1971.

1971	Area (sq. min)					Numbers				
	N	S	E	W	Total	N	S	E	W	Total
January–June	3.36	2.46	2.64	3.18	5.82	5.6	4.6	5.3	4.9	10.2
July–December	1.73	2.56	2.37	1.92	4.29	3.9	4.3	4.4	3.8	8.2
Whole year (weighted mean)	2.68	2.50	2.53	2.65	5.18	4.9	4.4	4.9	4.4	9.3

These values, when compared to the previous year, show an increase of activity by 4.9 per cent in the case of areas, whereas there is a decrease of activity by 3.1 per cent in the case of numbers. The distribution of areas in five-degree ranges of latitude shows a peak of activity in the belts 25° – 30° in the Northern Hemisphere and in the belt 30° – 40° in the Southern Hemisphere. In the case of numbers, the peak of activity is in the belt 25° – 30° in the Northern Hemisphere; there is no well-defined peak of activity in the Southern Hemisphere.

The mean daily areas and numbers of hydrogen absorption markings as obtained from Kodaikanal records are as follows:

1971	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	2890	2359	2504	2745	5249	22.1	19.0	20.5	20.6	41.1
July–December	1660	2166	1878	1948	3826	16.2	18.3	17.0	17.5	34.5
Whole year (weighted mean)	2340	2273	2225	2388	4613	19.5	18.7	18.9	19.3	38.2

These values, when compared to the previous year, show a decrease of activity by 22.5 per cent in the case of areas and 13.2 per cent in the case of numbers. The distribution of areas in five-degree ranges of latitude shows a peak of activity in the belt 25° – 30° in the Northern Hemisphere and 15° – 25° in the Southern Hemisphere.