

Solar Prominences in 1972

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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 1972.

| 1972 | Area (sq. min.) | | | | | Numbers | | | | |
|-------------------------------|-----------------|------|------|------|-------|---------|-----|-----|-----|-------|
| | N | S | E | W | Total | N | S | E | W | Total |
| January–June | 2.42 | 2.80 | 2.69 | 2.56 | 5.23 | 4.6 | 4.5 | 4.6 | 4.5 | 9.1 |
| July–December | 2.02 | 2.36 | 2.28 | 2.10 | 4.38 | 4.1 | 3.6 | 3.8 | 3.9 | 7.7 |
| Whole year (weighted mean) | 2.27 | 2.63 | 2.50 | 2.40 | 4.90 | 4.4 | 4.2 | 4.3 | 4.2 | 8.5 |

These values when compared to the previous year show a decrease of activity, the decrease being 5.2 per cent in areas and 8.6 per cent in numbers. The distribution of areas in five degree ranges of latitude shows a peak of activity in the belts of 25° – 35° in the Northern Hemisphere, as in the previous year. In the case of Southern Hemisphere, peak activity has tended to be in the belt 40° – 50° . Prominence numbers both in the Northern and Southern Hemispheres exhibit two active latitude belts; one between 25° and 35° and the other being 45° – 50° .

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

| 1972 | 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 | 2145 | 2830 | 2543 | 2433 | 4975 | 19.9 | 23.4 | 22.0 | 21.3 | 43.3 |
| July–December | 2452 | 3072 | 2627 | 2896 | 5521 | 20.1 | 22.8 | 20.9 | 21.9 | 42.9 |
| Whole year (weighted mean) | 2337 | 2939 | 2580 | 2643 | 5223 | 20.0 | 23.2 | 21.5 | 21.6 | 43.1 |

These values when compared with the previous year's show an increase of activity by 13.2 per cent in the case of areas and 12.8 per cent in numbers. The distribution of areas in five degree ranges of latitude shows a peak of activity in the 10° – 20° belts in both Northern and Southern Hemispheres; the activity being less in the case of the Northern Hemisphere than for the Southern Hemisphere.