Solar Prominences in 1970

M.K.V.Bappu

(Astrophysical Observatory, Kodaikanal, India)

The following table gives the mean daily areas and numbers of Calcium prominences at the limb derived from spectroheliograms obtained at Kodaikanal during 1970.

1970	Area (sq. minutes)					Numbers				
	N	S	Е	W	Total	N	S	E	W Total	
January–June July–December Whole year (weighted mean)	3·16 2·48 2·87	2·07 2·07 2·07	2·48 1·95 2·25	2·75 2·60 2·69	5·23 4·55 4·94	5·3 5·3	4·7 3·7 4·3	5·0 4·2 4·7	5·0 4·8 4·9	9·6 9·0

Compared with the previous year, there is decrease of activity, the decrease being 27 per cent in areas and 19.6 per cent in numbers. The distribution of areas in five-degree ranges of latitude shows a peak of activity in the belts $25^{\circ}-35^{\circ}$ in the Northern Hemisphere, whereas the peak of activity is in the belt $25^{\circ}-30^{\circ}$ in the Southern Hemisphere. In the case of numbers, there are two peaks of activity in the latitude belts $30^{\circ}-35^{\circ}$ and $60^{\circ}-65^{\circ}$ in the Northern Hemisphere.

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

	H-alpha absorption marking area (in millionths of the Sun's visible hemisphere uncorrected for foreshortening)					Numbers					
1970	N	S	Е	W	Total	N	S	Е	W	Total	
January-June July-December Whole year (weighted mean)	3558 3107 3351	2803 2360 2600	_		6361 5467 5951	24.7	18.4	21.9	21.2	44·8 43·1 44·0	

Compared with the previous year, there is an increase of activity in areas, the increase being 12.5 per cent. In the case of numbers there is a slight decrease of activity, amounting to 4.2 per cent. The distribution of areas in five-degree ranges of latitude shows a peak of activity in the belts 20°-30° in the Northern Hemisphere and 15°-25° in the Southern Hemisphere.