

Kodaikanal Observatory.

BULLETIN No. LXXVIII.

SUMMARY OF PROMINENCE OBSERVATIONS FOR THE FIRST HALF OF THE YEAR 1925.

In pursuance of the programme of work adopted since 1st January 1923 under the auspices of the International Astronomical Union, all observatories taking spectroheliograms of the Sun have been asked to co-operate with the Kodaikanal Observatory by supplying copies of their photographs on those days when the Kodaikanal records are imperfect or wanting. In response to our requirements for the first half of the year 1925, the Mount Wilson Observatory supplied prominence plates for 17 days and H α disc plates for 7 days; Meudon Observatory supplied K $_s$ disc plates for 29 days and H α disc plates for 15 days and Yerkes Observatory sent prominence plates for 6 days.

When incomplete or imperfect photographs for the same day are available from more than one observatory, the best photograph is chosen as representing the solar activity of that day after weighting it according to its quality, and the remaining photographs are ignored.

The mean daily areas and numbers of prominences during the half-year are given below. The means are corrected for incomplete or imperfect observations, the total of 181 days when plates were available being reduced to 163 effective days.

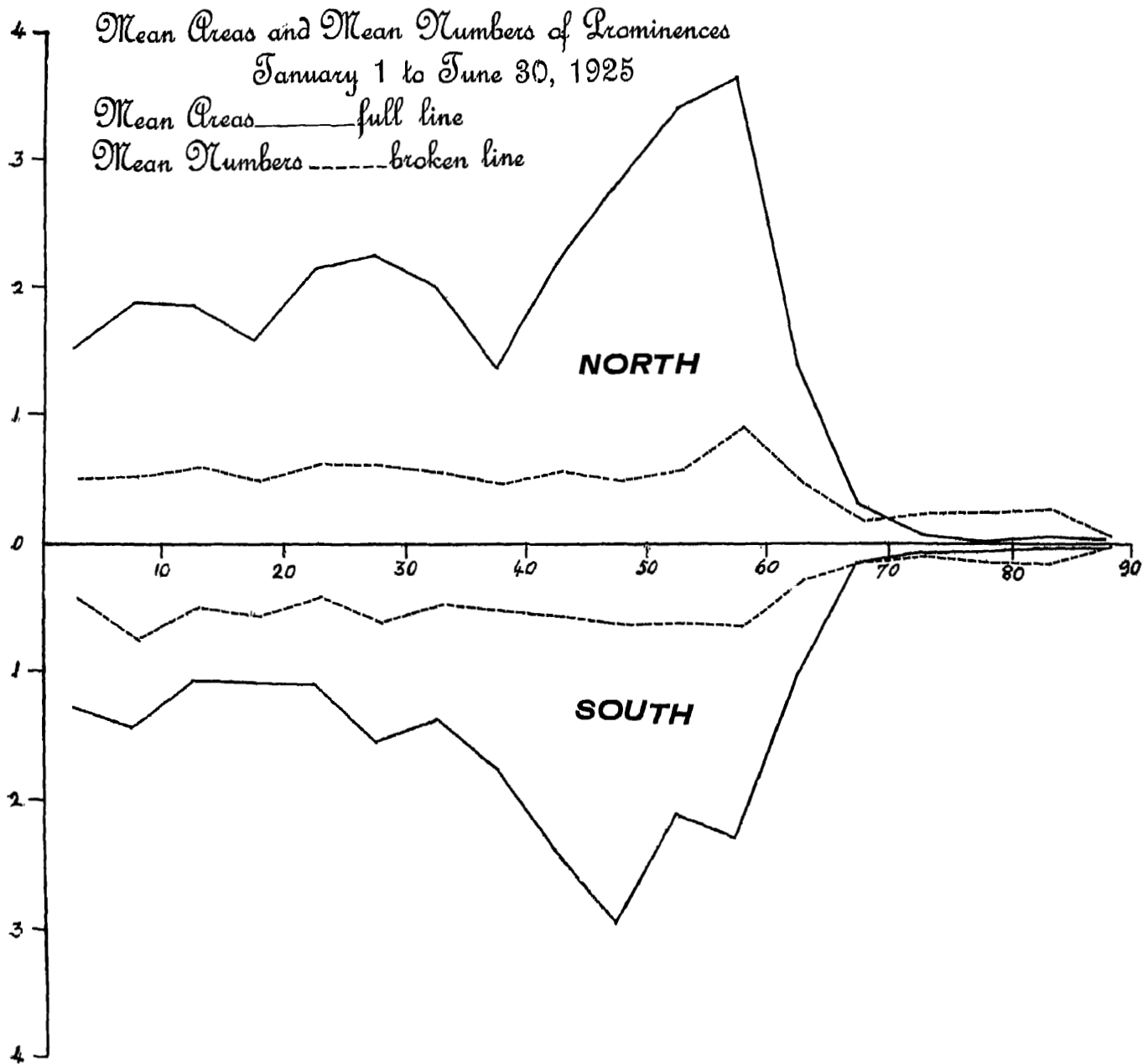
								Mean daily areas (square minutes).	Mean daily numbers.
North	...	...	...	...	...	...	...	2.86	8.54
South	...	...	...	...	...	...	...	2.17	7.59
Total								5.03	16.13

Compared with the second half of the year 1924, areas show a slight decrease in the northern hemisphere and a slight increase in the southern. In the case of numbers, there is an increase amounting to 11 per cent in the northern hemisphere and 19 per cent in the southern. The activity continued to be more pronounced in the northern hemisphere.

For comparison with bulletins issued prior to the co-operation of other observatories, the means based on Kodaikanal photographs alone are also given. 171 days of observation being counted as 149½ effective days.

								Mean daily areas (square minutes).	Mean daily numbers.
North (Kodaikanal photographs only)	...	...	...	...	...	...	...	2.98	8.90
South	do.	...	...	...	...	...	...	2.26	7.92
Total								5.24	16.82

The distribution of the prominences in latitude is represented in the following diagram, in which the full line gives the mean daily areas and the broken line the mean daily numbers for each zone of 5° of latitude. The ordinates represent tenths of a square minute of arc for the full line and numbers for the broken line. Compared with the second half of 1924, there has been an increase of activity in equatorial regions, between 30° and 40° and between 60° and 70° , but there has been a decrease between 40° and 50° more marked in the northern than in the southern hemisphere.



The monthly, quarterly and half-yearly areas and numbers, and the mean height and mean extent of the prominences on photographs from all the co-operating observatories are given in Table I. The unit of area is

1 square minute of arc. The mean height is derived by adding together the greatest heights reached by individual prominences and dividing by the total number of prominences observed; the mean extent is derived by adding together the lengths of the base on the chromosphere of individual prominences and dividing by the total number of prominences.

TABLE I.—ABSTRACT FOR THE FIRST HALF OF 1925.

Months.	Number of days (effective..)	Areas.	Numbers.	Daily Means.		Mean height.	Mean extent.
				Areas.	Numbers.		
1925						"	"
January	28½	138·6	449	4·8	15·6	36·0	3·85
February	28	147·2	459	5·3	16·4	37·6	4·02
March	28½	127·4	455	4·4	15·8	33·8	3·91
April	27½	128·4	475	4·7	17·4	34·0	3·74
May	27½	147·3	435	5·4	16·0	35·3	4·51
June	23	130·0	353	5·7	15·3	37·7	4·89
First quarter	85½	413·2	1363	4·8	15·9	35·8	3·99
Second quarter	77½	405·7	1263	5·2	16·3	35·5	4·33
First half-year	163	818·9	2626	5·0	16·1	35·6	4·11

Distribution east and west of the Sun's axis.

Both areas and numbers showed a slight excess in the eastern hemisphere as will be seen from the following table :—

1925 January to June.	East.	West.	Percentage East.
Total number observed	1326	1300	50·5
Total areas in square minutes	411·0	407·9	50·2

Metallic prominences.

Twenty-one metallic prominences were observed during the half-year, of which 16 were north of the equator. Their details are given below :—

TABLE II.—LIST OF METALLIC PROMINENCES OBSERVED AT KODAIKANAL, JANUARY TO JUNE 1925.

Date.	Hour I.S.T.		Latitude.			Limb.	Height.	Lines.
			Base.	North.	South.			
1925	H.	M.	°	°	°		"	
January	11	9 18	2	28.5		E	10	b ₁ , b ₂ , b ₃ , b ₄ , D ₁ , D ₂ .
	25	8 58		24		W	15	b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
February	7	9 2	4	31		E	210	4922.0, 4924.1, 5016, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5276.2, 5284.2, 5316.8, 5335.1, D ₁ , D ₂ , 6677, 7065.
	7	9 20	3		18	E	25	b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677, 7065.
	10	9 20	2	35.5		E	20	5016, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
	23	9 2	2	31		W	20	4924.1, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ .
	24	9 17	3		24	W	30	4924.1, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ .
	24	9 11	1		10.5	W	10	b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
	24	9 3	2	31		W	15	4924.1, 5016, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ .
March	21	8 30	2		31.5	W	30	L ₁ , b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
	23	8 58			35.5	W	60	4924.1, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677.
	27	9 4	3	26		W	30	4924.1, 5016, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677, 7065.
April	3	9 16		19		W	10	4924.1, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677, 7065.
	6	8 45	5	33.5		E	10	4924.1, 5016, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ , 6677, 7065.
	6	8 45	3	27.5		E	25	5016, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677, 7065.
	9	8 58		28		E	15	4924.1, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
	10	9 15	5	22.5		E	65	4924.1, 5016, 5018.6, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ , 6677, 7065.
	18	8 55	4	19		E	15	4924.1, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ , 6677, 7065.
May	25	9 20		24		W	60	4924.1, 5016, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, D ₁ , D ₂ .
June	4	10 35		25		E	20	4924.1, b ₁ , b ₂ , b ₃ , b ₄ , 5316.8, 5363.0, D ₁ , D ₂ , 7065.
	5	9 15		18		W	40	D ₁ , D ₂ .

The activity of prominences showing metallic lines was again confined to the higher latitudes as will be seen from their distribution given below :—

				11°—20°	21°—30°	31°—40°	Mean latitude.	Extreme latitudes.
North	...	...	...	3	8	5	26°.2	18° and 35°.5
South	...	..	...	2	1	2	23°.9	10°.5 and 35°

Ten metallic prominences were on the east limb and 11 on the west.

Displacements of the hydrogen lines.

Particulars of the displacements observed in the chromosphere and prominences are given in the following table :—

TABLE III.—DISPLACEMENTS OF HYDROGEN LINES.

Date.	Hour I.S.T.		Latitude.		Limb.	Displacement.			Remarks.
			North.	South.		Red.	Violet.	Both ways.	
1925	H.	M.	°	'		A.	A.	A.	
January	1	11 24	27		E		1		At base.
	2	8 40	55		E		0.5		Do.
	2	8 48	3		W	Slight			At top.
	3	8 52		1	E	1			Do.
	4	9 7	43		W	1			Do.
	5	8 34	58		E		0.5		At base.
	6	8 26	51		W	1			At top.
	10	8 35	71.5		W		Slight		
	15	8 56	84.5		E		1		
	15	9 16		26	E	1	0.5		To red at base; to violet at top
	15	9 8		53	W		1		At base.
	16	11 3	82.5		E	Slight			
	17	8 56	23		W		1		
	18	9 34	79		E		1		At top.
	18	9 21	75.5		E	3			
	19	10 20	61.5		E	0.5			At top.
	19	10 24	53.5		W		0.5		At base.
	20	8 38	77		E		Slight		
	20	8 50	41		W		Do.		
	20	8 41	80.5		W	0.5			
	22	9 4		10	E	Slight			
	22	8 55		29	W		Slight		
	22	8 50	14		W	4	1.5		To red at top; to violet at base.
	23	8 32	48.5		E	0.5			
	23	8 45	21		W	1			
	23	8 41	39		W	0.5			
	23	8 36	76		W		0.5		
	25	8 48	83		E		Slight		
	25	8 58	24		W		0.5		
	25	8 51	64.5		W	1			
	26	9 4	26		E	Slight			
	26	9 16		20	E		1		At top.
	26	8 59	23		W	0.5			Do.
	26	8 49	60.5		W		0.5		
	27	8 36	75		E		0.5		
	27	8 46	23		W	1			
	27	8 39	75		W		Slight		
	28	9 28		34	E	2			At top.
	28	9 5	41		W	0.5			Do.
	29	8 58		56.5	E	Slight			
	29	8 34	79		W	0.5			
	30	8 37	62.5		E		Slight		
	30	9 9		62	E	0.5			At top.
	30	8 46		16	W		Slight		
	30	8 41	54.5		W		0.5		
February	2	9 28		83.5	E	Slight			
	2	9 8	12		W	0.5			
	3	8 46	79		E		Slight		
	3	9 14	25		E	0.5			At base.
	3	9 17		21	E		Slight		
	3	9 6		79	W		Do.		
	3	9 2		20	W	1			
	3	8 57	32		W	0.5			
	5	8 55	66		E		0.5		
	5	9 24	57.5		E	0.5			
	5	8 53	46.5		E	0.5			
	5	9 31	23		E		1		At top.
	5	9 18	3		W	0.5			

Date.	Hour I.S.T.		Latitude.		Limb.	Displacement.			Remarks.
			North.	South.		Red.	Violet.	Both ways.	
1925	H.	M.	°	°		A.	A.	A.	
February	6	8 48	64		E	Slight			
	6	9 8	30		E		0.5		At base.
	6	9 14	20		E	1			
	6	9 14	15		E	1.5			
	6	9 20		21	E	1			
	6	9 23		36	E	1			At base.
	6	8 58	43.5		W	1			
	7	9 2	31		E		2		
	7	9 20		18	E	3			At top.
	7	8 45		20	W		Slight		
	8	8 39	73.5		E		Do.		
	8	8 36	61		E	1			At base.
	8	8 34	35		E	1			At top.
	8	8 34	30		E		1		
	8	9 22		16	E		0.5		
	8	9 3	17		W		Slight		
	8	8 51	28		W	1			At top.
	9	11 0	14		E	Slight			At base.
	10	9 20	36		E	3			At top.
	10	9 20	33		E	2			
	10	9 25		11	E		1		
	12	9 58	74.5		E	0.5			
	12	10 38	34		E	Slight			
	12	10 42	11		E		0.5		
	12	10 26	52.5		W	1			
	13	9 12	46		E	0.5			At top.
	13	9 15	34		E	1			Do.
	13	8 54	68		W		Slight		
	14	9 10		55	W		Do.		
	15	8 53	62		E	1			At top.
	15	9 1	41		W	1			
	16	9 12	42.5		E	Slight			
	16	9 17		14	E		0.5		
	16	9 22		80	E		0.5		
	16	9 4		61	W		Slight		At base.
	16	8 55	75.5		W	0.5			At top.
	17	8 58	81.5		E		Slight		
	17	9 18	20		E	1			
	18	9 4	81.5		E		1		
	18	9 29		59	W		1		At top.
	18	9 12	26		W		Slight		Do.
	19	8 41	58		E	1			Do.
	19	8 38	23		E		Slight		
	20	8 44	18.5		E		0.5		
	20	9 17		32.5	E	0.5			
	21	8 42	13		E	Slight			
	21	8 47		41.5	E	Do.			
	22	9 20	22		E	1			
	22	9 8	14		W	Slight			At top.
	22	9 8	31.5		W	0.5			Do.
	22	8 55	76		W	0.5			
	23	8 48	74.5		E	Slight			
	23	8 58	29		W		Slight		
	23	8 48	64		W		Do.		
	23	8 46	75.5		W	1			
	24	8 50	74.5		E	0.5			
	24	9 17		25.5	W	3			At base.
	24	9 17		25.5	W	1			At top.
	26	10 13	62		E	Slight			
	27	8 42	34.5		E	Do.			
	27	9 11	18		E		0.5		At top.
	28	8 34	54		E		Slight		
	28	8 42	37.5		W			Slight	
	28	8 39	58		W		Slight		
	28	8 38	77.5		W		Do.		

Date.	Hour L.S.T.		Latitude.		Lamb.	Displacement.			Remarks.
			North.	South.		Red.	Violet.	Both ways	
1925	H.	M.	"	"		A.	A.	A.	
March	1	8 50	42		E		1		At base.
	3	8 46	61		E	1			At top
	3	9 33	22		E	1	1		To red at base; to violet at top.
	3	8 57	80		W	3			
	4	9 25		33.5	E		0.5		
	5	8 53	75		E	1	1		To red at top; to violet at base.
	5	8 48	38.5		E		Slight		
	6	8 54	67.5		E	0.5			
	6	9 14		73.5	E	0.5			
	6	9 1	47		W		1		
	7	9 10		51.5	W		Slight		
	8	9 15	43.5		E		Do.		
	8	9 32		53.5	W	0.5			
	8	9 27		14	W	Slight			
	9	8 46	58.5		E		0.5		
	9	8 0	42		E		0.5		At base.
	9	8 59		31.5	E	Slight			
	9	8 50	69		W	Do.			
	10	8 56	28		E	1			
	10	8 40	28		E		2		
	14	9 5		15	E	Slight			
	16	9 53	47		E	0.5			At base.
	17	8 48	81.5		E		Slight		
	19	10 43		78	E		1		
	21	8 30		33	W		2		At base.
	22	8 22	71.5		W		Slight		
	22	8 21	76		W	Slight			
	22	8 42	36		E		0.5		At base.
	22	9 0		82	E		Slight		
	22	8 55		36	W	1			At top.
	22	8 50	20		W	0.5			
	23	8 44	71.5		E		0.5		
	23	9 18		83	W	0.5			
	23	9 16		71.5	W		1		
	23	9 12		31.5	W	2	1		
	23	8 52	16		W		Slight		At base.
	23	8 50	60		W		0.5		Do.
	24	8 58	82.5		E	0.5			
	24	9 6	60		W		Slight		At top.
	24	9 2	78.5		W		Do.		
	25	9 8	49		E		0.5		At top.
	25	9 2	32		W		0.5		At base.
	26	8 58	63		E	0.5			
	26	9 9		69	W	0.5			
	27	9 14	22		W	1.5			To red at top; to violet at base.
	28	8 42	80		E		Slight		Slight
	28	8 43	82		W				
	29	8 36	42		E	1			At top.
	29	8 54		22	W		Slight		At base.
	29	8 40	80		W	0.5			At top.
	30	8 45	52		E		Slight		At base.
	30	8 53	61		W		Do.		
	31	8 52	82		E		Do.		
April	1	10 7		48.5	E		1		
	1	10 7		50.5	E	1			
	2	8 52	70		E		Slight		
	2	8 50	56		E	1			At top.
	2	8 46	39.5		E		0.5		
	2	9 2		33	W		Slight		At base.
	3	9 7	68		E	1			
	3	9 5	58.5		E	0.5			
	3	9 36	16		E	0.5			At base.
	3	9 10	51.5		W		Slight		
	4	8 30	63		E		Do.		
	4	8 53		15	E	1.5			
	4	8 58		59.5	E	Slight			

Date.	Hour I.S.T.		Latitude.		Limb.	Displacement.			Remarks.
			North.	South		Red.	Violet.	Both ways.	
1925	h.	m.	°	°		A.	A.	A.	
April	4	8 48	18		W			2	
	4	8 40	49		W			Slight	
	4	8 35	83		W			0.5	
	5	9 19	29		E			Slight	At top.
	5	9 3		83	W				
	6	8 55	78.5		E	Slight			
	6	8 45	32		E			2	At base.
	6	9 10	23		E			0.5	Do.
	6	9 22		83.5	E			1	
	7	9 12	28		E	1.5			At top.
	7	9 2		27	E			0.5	
	7	9 4	20		W			2	At base.
	7	9 7	20		W	2			At top.
	7	8 57	39.5		W	0.5			
	8	10 39	31		E	1			At top.
	8	10 52		83	E			1	Slight
	9	8 44	75.5		E	1			
	9	8 42	39.5		E	0.5			
	9	8 58	25		E	1			At top.
	10	9 15	24		E	1			Do.
	10	9 15	20		E			1	At base.
	10	9 20		20	E	0.5			
	11	9 4	44.5		W	0.5			
	12	9 43		3.5	E			1	At top.
	12	9 49		83	E	0.5		0.5	To red at base; to violet at top.
	12	9 53		61.5	W	0.5		1	Do.
	12	9 12	27		W			1	
	12	9 12	28		W	1			
	15	9 27	34		E	1			
	15	9 19	20		E			1	
	15	9 19	19		E	0.5			
	16	9 25	27		E	0.5			At top.
	16	9 50	24		E			1	At base.
	16	9 55		24	E			0.5	
	16	9 38	26		W	1			
	17	8 53	78.5		E	Slight			
	17	9 12		23	E			1	At top.
	18	8 40	73		E			Slight	
	18	8 55	14		E			Do.	
	18	8 46	24		W			Do.	At base.
	20	9 5	47.5		E	1			
	20	9 6	40		E	Slight			
	20	9 1		59.5	W	0.5			
	20	8 55		8	W	2		1	To red at top; to violet at base.
	21	8 46	83		E			0.5	
	21	9 8		6	E			0.5	
	21	9 1		53.5	W			Slight	
	21	8 57		37	W	0.5			
	21	8 51	67.5		W	1			
	22	10 32		9	W			Slight	
	23	9 48	47		E	0.5			
	23	9 42		76	W			Slight	At base.
	24	10 14	80.5		E			0.5	
	24	10 9	53		E	0.5			At top.
	24	10 18	45		W			Slight	
	25	8 42	45		W			Do.	
	27	8 50	69.5		E			Do.	
	28	9 30	83		E	0.5			
	28	9 26	42		E	Slight			
	28	9 44		81	E	Do.			
	30	8 54	15		E	4			At top. 1.5 A to violet at top at 9h 16m.
	30	9 7	29		W			Slight	At base.
May	1	9 45	79		E			Do.	
	1	9 44	66.5		E			1	
	1	9 49	27		W			Slight	

Date.	Hour I.S.T.		Latitude.		Limb.	Displacement.			Remarks.
			North.	South.		Red.	Violet.	Both ways.	
1925	II.	M.	°	°		A.	A.	A.	
May	2	8 52	12		W		Slight		
	4	9 40	24		E	Slight			
	4	9 42		25	E	1			At base.
	4	9 38		85.5	E		0.5		
	4	9 36		8	W	1			
	5	9 13	36		E	Slight			
	7	9 9	85.5		E	Do.			
	7	9 20		21	E	1			
	8	8 48	75.5		W	0.5			
	9	9 14	22		E	Slight			
	11	8 46	79.5		E	0.5			
	11	8 58	58		E	Slight			At base.
	12	9 3	24		E	6			Do.
	12	8 51	19		E	1.5			At top.
	12	8 58		8	W		Slight		
	12	8 55	60		W	Slight			
	18	11 5	85.5		E	Do.			
	18	11 10		24	E		1		
	19	9 8		38	E	0.5			At base.
	19	9 12		81.5	E	0.5			
	19	8 55	84.5		W	1			
	20	10 15	19		E		1		
	21	9 14	84.5		E	1			
	21	9 12	60		E		Slight		
	21	9 10	46		E	0.5			
	22	9 10		11	E	0.5			At base.
	22	9 13		68	E		Slight		
	22	9 6		22	W	0.5			At top.
	22	9 3	14		W	1			Do.
	24	9 13	15		W	1			At base.
	24	9 11	24		W		1.5		Do.
	24	9 9	47		W		Slight		
	25	9 16	72		E	0.5			
	25	9 12	42		E	0.5			
	25	9 20	24		W	1			At top.
	26	9 39		22	W	Slight			
	27	8 48	28		W	2			To red at top ; to violet at base.
	28	8 37	49		W		Slight		
	29	9 35		26	E	0.5			
	29	9 29	22		W	0.5			At base.
	29	9 22	28		W	1			At top.
	30	9 26	23		W	1.5			Do.
	30	9 24	70		W	Slight			
June	1	9 15	5		W	1			At top.
	3	8 58	57		E	Slight			
	3	8 40	73		W	1.5			
	4	10 35	25		E	1		0.5	To red at top ; to violet at base.
	4	10 20		21	W	1			At top.
	5	8 51	81		E	0.5			
	5	8 50	72		E	1			
	5	9 15		18	W		2		At base.
	6	9 30		2	W	Slight			
	8	9 15	80		E		0.5		
	8	9 12		62	W		Slight		
	8	9 0	61.5		W	1			To red at top ; to violet at base.
	8	8 55	89		W	0.5			
	9	9 3	83		E		Slight		
	9	8 48	32		E		1.5		At base ; 3 A at 9h 20m.
	9	8 49	24		E	2			At top.
	9	9 20		57	E		2		Do.
	10	10 35	35		W	0.5			
	11	9 6	62		E	2			At base.
	11	8 57	10		W	0.5			
	11	8 46	59		W	Slight			
	12	9 10	84		E	Do.			

Date.	Hour I.S.T.		Latitude.		Limb.	Displacement.			Remarks.
			North	South		Red.	Violet.	Both ways.	
1925	H.	M.	°	'		A.	A.	A.	
June	12	9 20	19		E		0.5		
	12	9 16		14	W		0.5		
	13	8 30	38		E		2		At top.
	14	8 47		40	E	Slight			
	15	9 25		33	W	1	0.5		To red at top; to violet at base.
	16	9 50		25	W		0.5		
	19	9 36	18.5		W		0.5		At base.
	21	9 50	58		E		Slight		
	21	10 2		31	W		0.5		
	21	9 58	37		W	1			
	21	9 56	88		W		Slight		

There was a large increase in the number of displacements, the total number observed being 344 as against 141 in the previous half-year. They were distributed as follows:—

Latitude.	North.	South.
1°—30°	83	44
31°—60°	78	29
61°—90°	86	24
	Total ... 247	97
East limb	...	...
West limb	...	...
	Total ... 344	...

One hundred and eighty-three displacements were towards the red, 156 towards the violet and 5 both ways simultaneously.

Reversals and displacements on the disc.

One hundred and sixty-four bright reversals of the $H\alpha$ line, 73 dark reversals of the D_3 line and 45 displacements of the $H\alpha$ line were observed on the disc during the half-year. Their distribution is shown below:—

	North.	South.	East.	West.
Bright reversals of $H\alpha$	117	47	71	93
Dark reversals of D_3	54	19	27	46
Displacements of $H\alpha$	32	13	24	21

Thirty-eight displacements were towards the red, six towards the violet and one both ways simultaneously.

Prominences projected on the disc as absorption markings.

Photographs of the Sun's disc in $H\alpha$ light were available from Kodaikanal and the co-operating observatories for a total of 175 days, which were counted as 171 effective days. The mean daily areas of $H\alpha$

absorption markings (corrected for foreshortening) in millionths of the Sun's visible hemisphere and the mean daily numbers are given below :—

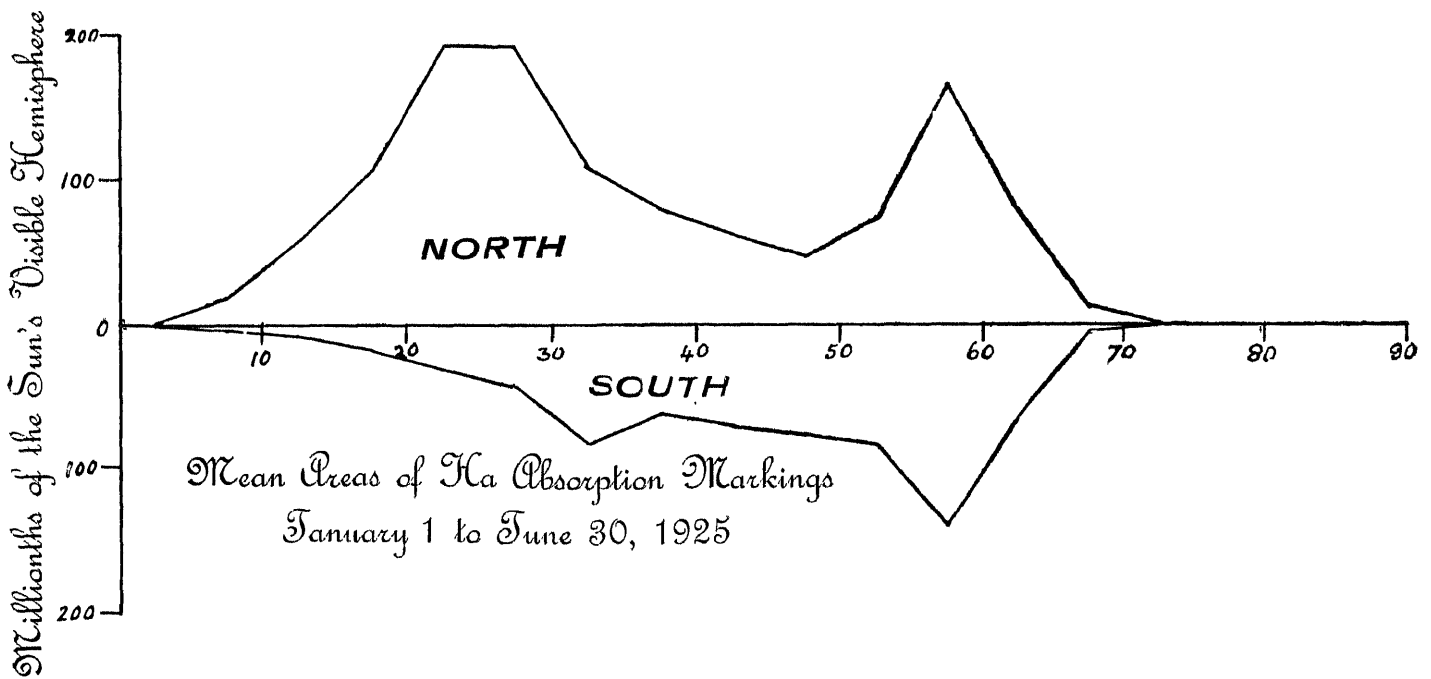
						Mean daily areas.	Mean daily numbers.
North	...	...	...	...	...	1203	9.4
South	...	...	...	...	...	703	5.5
Total						1906	14.9

Both areas and numbers have decreased compared with the previous half-year. As in the case of prominences at the limb, the activity continued to be more pronounced in the northern hemisphere.

For comparison with bulletins issued prior to the co-operation of other observatories, the means based on Kodaikanal photographs alone are also given, 164 days of observation being counted as 158 effective days.

					Mean daily areas.	Mean daily numbers.	
North	(Kodaikanal photographs only)	...	...	...	1182	9.4
South	do.	...	...	...	712	5.5
Total						1894	14.9

The distribution of the mean daily areas in latitude is shown in the following diagram and is strikingly different from that of prominences at the limb. In the northern hemisphere the zone of greatest activity is at 20°—30° with a secondary maximum at 55°—60°, whilst in the southern hemisphere, the maximum is at 55°—60° with only slight activity in the other regions.



As in the case of prominences at the limb, there is an excess of activity in the eastern hemisphere the percentage east being 53·94 for areas and 50·37 for numbers.

Thanks are due to the co-operating observatories for the photographs supplied by them.

THE OBSERVATORY, KODAIKANAL,
19th February 1926.

T. ROYDS,
Director, Kodaikanal and Madras Observatories.