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E R R A T A.

Kodaikanal Observatory Bulletin No. CLVIII.

Page.	Table No.	Column.	Date.	Read.	for
3	I	8	May	3.60	.60
3	I	5	1st Half-year	16.73	33.47
3	I	6	1st Half-year.	31.43	62.86
4	III	3	29 March	1208	Not clear
4	III	6	29 March	1208 and 1420	0638 & 0850
0	V	2	30 January	0930-1000	0930- 1100
3	V	2	14 May	Delete 1130-1200	1130- 1200
5	VI	4 (3rd group)	30 January	delete 0826	0826
1	VI	2 (6th group)	25 March	1159	1149

PART - II.

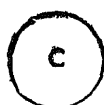
Page.	Table No.	Line/date.	Column/hour.	Read.	for
19	7	6	Minimum-Time	00 05	00 50
1	8	26	Maximum-Mag.	572	573
4	9	9	01	496	596
8	11	6	05	640	611
8		23	02	504	505
9		Mean	20	498	497
6	15	13	09	296	2 6
8	16	1	14	322	32
		2	14	316	31
		3	14	321	32
		4	14	315	31
		5	14	318	31
		6	14	313	31
		7	14	319	31
		8	14	321	32
		9	14	316	31
		10	14	278	27
		11	14	320	32
		12	14	315	31
		13	14	312	31
		14	14	314	31
		26	14	315	31
		27	14	313	3195
		Mean	22	321	322

PART-III.

7	1	28	15	12.2	11.2
0	17	7	05	1.9	1.0
1	22	26	13	2.15	.15
	33	29	01	U2.90S	U2.90SF
		14	1930	U1.85WF	U1.85W
	34	14	0530	6.4F	6.4
2	35	5	08	C	0
1	37	Date	-	6	-
3		11	1730	U7.0S	U,7.4S
1	39	19	0930	2.6	2.3

Contd. 2.

Page.	Table No.	Line/Date.	Column/hour.	Read.	for.
225	40	9	1230	C	L
		10	1230	L	C
		28	1230	C	L
227	41	17	22	300	3-0
236	43	3	0630	100	G
239	44	23	14	2.10	2.-0
240		Count.	1130	28	82
259	49	Count	12	29	28
266	51	Count.	10	1	...
273	52	9	2430	U400F	U4-0F
306	61	30	11	2.2	2.-



KODAIKANAL OBSERVATORY

Bulletin No. CLVIII

Published on 17 APR 1963

INTRODUCTION

This Bulletin for the first half of 1959 contains in addition to the usual summary of prominence and calcium flocculus observations, other data specially collected for the International Geophysical Co-operation in respect of surges and active prominence regions. Information about the hours of flare patrol and times at which spectro-heliograms were secured at this observatory is also included.

PART I

Summary of Prominence and Calcium Flocculus Observations for the first half of 1959

The results of observations of Prominences and Calcium Flocculi made at Kodaikanal Observatory during the first half of 1959 supplemented by data computed from photographs supplied by Mount Wilson and Meudon Observatories for those days on which Kodaikanal had imperfect or no observations are summarised in this Bulletin.

Calcium Prominences on the limb —During the half-year under review, photographs of Calcium Prominences at the limb were obtained at Kodaikanal on 138 days which were counted as 137½ effective days after giving due weight to the photographs according to their quality. Spectroheliograms for 38 days were received from the Mount Wilson Observatory and for 31 days from the Meudon Observatory. In all, complete observations were available for 172½ effective days.

The mean daily areas (in square minutes of arc) and the mean daily numbers of prominences derived from all the above records are given below —

		Combined data	
		Mean daily areas (Square minutes)	Mean daily numbers
North	. . . . .	3.59	6.27
South	. . . . .	2.01	4.28
TOTAL		5.60	10.55

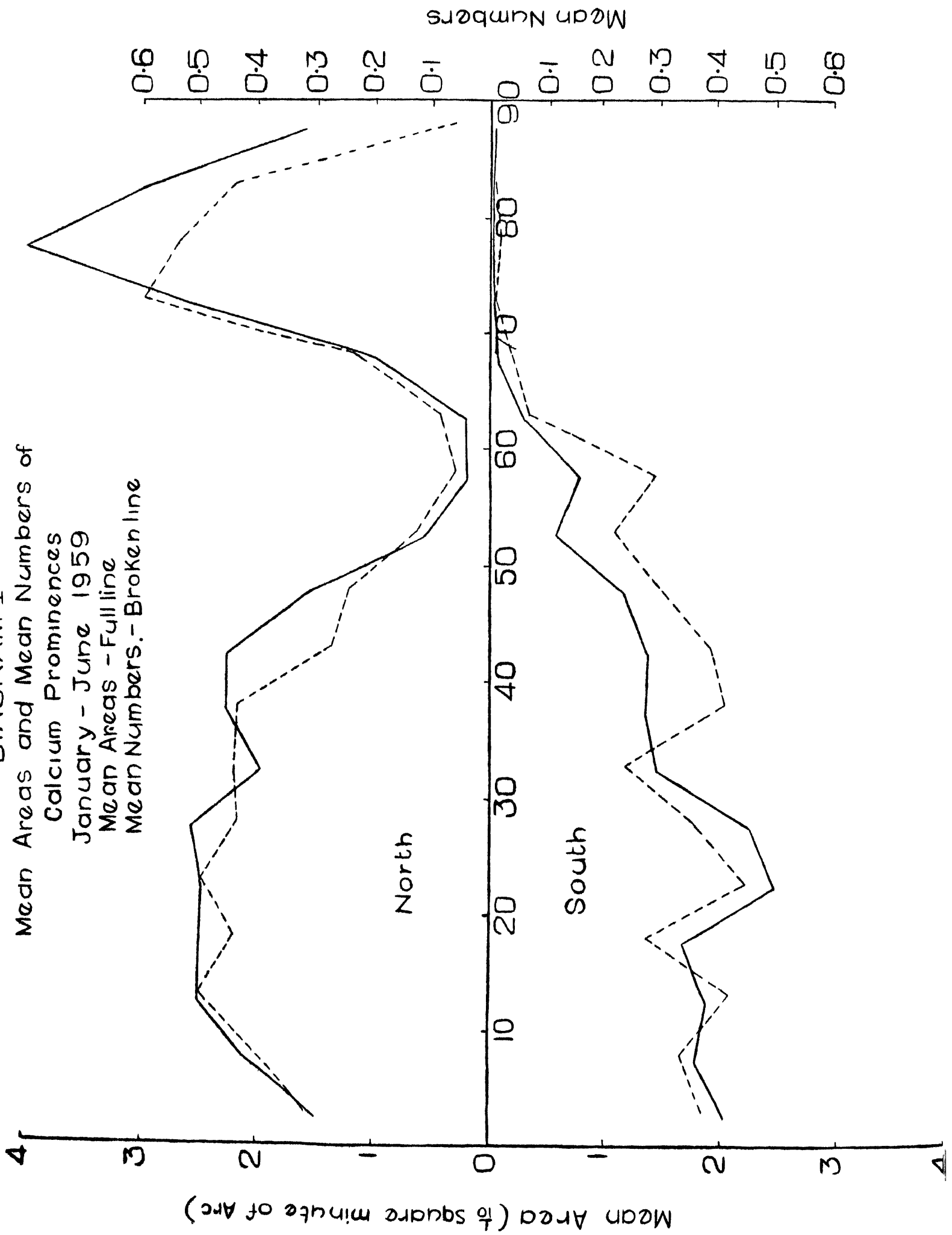
These figures when compared with the corresponding values of the previous half-year indicate a slight decrease of 8.3% in activity in areas and an increase of 7.5% in activity in numbers. The values based on Kodaikanal Observations alone are also given below for comparison with similar data published in bulletins prior to 1923.

		Kodaikanal data only,	
		Mean daily areas (Square minutes)	Mean daily numbers
North	. . . . .	3.33	6.11
South	. . . . .	1.85	3.93
TOTAL		5.18	10.04

The distribution of areas and numbers in five-degree ranges of latitude as obtained from the combined data is represented in diagram I. The areas show pronounced peak of activity in the northern hemisphere in the latitude belt 75°—80°. In the southern hemisphere the maximum activity is in the belt 20°—25°.

I

DIAGRAM I
 Mean Areas and Mean Numbers of
 Calcium Prominences
 January - June 1959
 Mean Areas - Fullline
 Mean Numbers - Brokenline



Characteristic (M3000)F2
 Unit
 Month January 1959

TABLE 11—Contd
 Ionospheric Data
 75 0°E Mean Line

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
2 05	2 05	2 05	2 10	2 10	2 00	2 00	F	F	F	F	F	1
2 00	2 00	2 00	2 00	U2 00S	2 00	U2 05S	U2 001	F	F	F	F	2
2 15	2 15	2 10	2 10	2 05	2 00	1 90	1 85	F	F	2 25	U2 301	3
C	C	C	C	1 95	U2 05S	2 10	2 05	2 30	U2 301	F	F	4
2 05	2 10	2 20	2 15	2 10	2 10	U2 15S	2 10	2 35	2 60	U2 85S	2 70	5
2 00	1 95	1 85	1 95	2 10	2 15	2 20	U2 30S	2 40	2 60	2 70	2 75	6
1 95	2 00	1 95	1 95	1 95	2 00	2 00	C	C	U2 151	F	F	7
2 00	2 00	2 05	2 10	2 20	2 25	2 10	U2 05F	F	F	U2 15F	F	8
2 10	2 10	2 05	2 05	2 05	2 05	2 00	F	F	F	U2 20F	F	9
2 20	2 10	2 10	2 10	2 15	2 15	2 05	2 20	2 10	U2 45S	2 50	2 60	10
2 20	2 15	2 15	2 15	U2 05S	U1 90R	U2 05F	F	F	F	2 55	U2 60R	11
2 10	2 15	2 15	2 20	2 15	2 10	2 05	U2 05S	2 25	2 50	2 65	2 90	12
2 10	2 05	2 15	2 20	2 25	2 20	U2 10S	U2 00F	U2 20S	2 55	2 65	U2 65S	13
2 15	2 10	2 20	2 25	2 25	2 15	2 05	J2 05S	F	F	F	F	14
2 20	2 05	2 05	2 15	2 25	2 30	2 15	2 10	FS	2 50	2 75	U2 85S	15
C	C	2 15	2 15	2 15	U2 20S	U2 20S	2 15	2 50	2 65	2 80	2 85	16
2 10	2 10	2 10	C	J2 15R	2 15	U2 10S	2 10	U2 10F	U2 50S	U2 55S	U2 75S	17
2 05	2 10	2 05	2 10	2 15	2 15	2 10	U2 15S	2 15	U2 101	F	2 50	18
2 05	2 05	2 10	2 10	2 05	U2 05S	2 00	F	F	C	C	C	19
2 10	2 10	2 10	2 10	2 15	S	U2 00S	U2 00S	S	S	S	S	20
2 20	2 20	2 10	2 10	2 10	U1 95S	S	S	S	S	S	F	21
2 10	2 20	2 15	2 20	U2 25S	U2 20S	S	F	FS	FS	FS	FS	22
2 15	2 10	2 10	2 20	2 20	2 10	S	F	FS	FS	FS	F	23
2 10	2 15	2 10	2 05	U2 15S	U2 15S	2 15	2 00	U2 30S	F	F	F	24
2 15	2 20	2 20	2 35	2 20	U2 05S	U2 05S	F	F	F	F	F	25
2 15	2 20	2 25	2 20	2 20	U2 10S	U2 00S	U2 00W	U2 30S	U2 60S	J2 70S	U2 85S	26
2 10	2 15	2 15	2 20	U2 20S	U2 10S	U2 00S	F	F	FS	FS	F	27
2 05	2 10	2 20	2 20	2 25	2 25W	U2 10S	F	F	F	F	F	28
2 10	2 15	2 00	2 05	U2 10S	U2 00S	W	F	F	F	F	2 50	29
2 10	2 05	2 00	2 00	1 95	U1 95S	U1 95S	2 00	F	F	FS	FS	30
2 10	2 05	2 00	2 00	2 05	U2 00S	2 00	U2 00F	F	2 30	U2 15S	U2 65S	31
2 10	2 10	2 10	2 10	2 10	2 10	2 05	U2 05	2 30	2 45	2 55	U2 65	Mean
2 10	2 10	2 10	2 10	2 15	2 10	2 05	U2 05	2 30	2 50	2 60	U2 70	Median
29	29	30	29	31	30	28	19	11	13	14	14	Count

Sweep 1 0 Mc. to 25 0 Mc in 27 seconds.

Characteristic foF2
Unit, Mc
Month April 1959

TABLE 34—Contd
Ionospheric Data
75°0'E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
13 3	14 4	U14 7s	U14 8s	14 4	RS	U9 8s	U8 6r	F	F	F	U9 2s	1
13 3	13 5	13 8	U13 8s	U13 4s	S	U10 8wr	F	F	F	F	F	2
J12 1R	12 6	13 5	14 0	U13 8s	U13 6s	U12 4s	10 4	F	F	U10 8rs	F	3
11 8	12 6	13 2	13 4	U13 6s	U13 4s	U12 0s	FS	F	F	F	F	4
C	11 8	12 6	13 6	13 6	U13 5s	12 6	F	F	F	F	F	5
10 4	10 8	11 2	11 5	U12 0s	U12 7s	C	C	C	C	C	C	6
11 4	11 8	12 3	12 4	12 8	U13 7s	U12 0s	F	F	F	F	12 6i	7
10 9	10 9	11 5	11 8	12 5	12 6	12 2	11 9	12 8	U13 4F	14 2	13 8	8
C	C	C	C	12 9	12 7	12 4	11 0	F	F	F	11 0	9
12 8	12 3	13 2	14 3	14 2	14 0	U12 3s	U10 6s	F	12 9	13 9	U13 6s	10
11 8	12 4	12 7	12 8	13 2	13 0	U12 0s	U10 0s	F	10 9	F	F	11
11 5	11 3	11 1	11 1	11 2	U11 2s	U10 6s	F	F	F	U10 6F	F	12
12 1	12 6	13 0	13 9	14 0	U13 4sII	12 3	F	F	F	F	U12 6F	13
11 8	11 8	12 4	12 8	13 0	12 3	U11 3s	F	F	F	F	F	14
11 0	11 4	11 8	12 2	12 4	12 6	U11 8s	F	F	F	F	F	15
11 4	11 4	C	C	12 8	13 0	12 4	10 8	10 4	11 0	11 6	11 4	16
11 6	11 6	11 6	11 9	12 4	J12 1s	11 2	9 4F	10 0	11 4	12 2	12 4	17
11 2	11 0	11 4	J12 1s	12 4	J12 2s	11 4	F	F	F	F	F	18
11 1	11 0	11 3	11 7	12 1	12 4	U11 6s	9 6	F	F	F	F	19
11 0	11 4	12 0	12 6	12 8	U12 5s	11 2	F	F	F	U11 4F	FS	20
11 1	11 4	11 7	12 0	13 0	13 6	12 9	10 6	F	F	F	F	21
11 2	11 4	11 5	11 7	12 1	12 4	U11 8s	F	F	F	F	F	22
10 8	11 0	11 6	12 0	12 8	13 4	12 6	11 6	12 6	12 7	13 4	U13 1s	23
12 3	12 8	13 3	13 5	C	U13 1s	U11 8s	10 8	10 4	U9 0F	FS	U9 6s	24
12 7	13 0	13 7	14 4	14 6	14 2	13 3	U11 5F	F	12 5	FS	U13 2s	25
11 6	11 4	11 6	11 8	U12 0s	11 6	11 3	F	F	F	F	F	26
12 1	12 0	12 3	12 3	12 5	12 8	12 2	11 3F	F	U11 8s	FS	S	27
C	11 4	11 6	11 7	11 8	U11 8s	11 4	F	F	F	FS	F	28
12 0	11 8	11 8	12 4	12 8	12 4	U11 8s	10 8R	10 8	U11 6s	U11 8s	U12 0s	29
12 8	12 5	12 5	C	13 4	13 2	11 8	F	F	F	F	F	30
11 7	11 9	12 3	12 7	12 9	12 8	11 8	10 6	U11 2	11 7	12 2	U12 0	Mean
11 6	11 8	12 2	12 4	12 8	12 8	11 8	10 8	U10 6	11 7	11 8	U12 5	Median
27	29	28	27	29	28	29	15	6	10	9	12	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

