Kodaikanal Observatory

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PART I

SUMMARY OF PROMINENCE AND CALCIUM FLOCCULUS OBSERVATIONS FOR THE SECOND HALF OF 1956

The results of observations of prominences and Calcium Flocculi made at Kodaikanal Observatory during the second half of 1956 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 Part I of this Bulletin.

Calcium Prominences on the limb.—During the half-year under review, photographs of Calcium prominences on the limb were obtained at Kodaikanal on 110 days which were counted as 108¼ effective days after giving due weightage to the photographs according to their quality. Spectroheliograms were obtained for 67 days from the Mt Wilson Observatory and for 3 days from the Meudon Observatory. In all, complete observations were available for 178¼ effective days.

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

	Combined data	
	Mean daily areas (sq. minutes)	Mean daily numbers
North	3·05	4·77
South	2·59	4·31
TOTAL	5·64	9·08

The above figures show that compared to the previous half-year there has been no significant change either in areas or in numbers.

For comparison with data published in bulletins prior to 1923, *i.e.* before the co-operation of the other observatories came into force, the following table gives the values based on Kodaikanal observations alone.

	Kodaikanal data only	
	Mean daily areas (sq minutes.)	Mean daily numbers
North	3·40	5·17
South	2·85	4·71
TOTAL	6·25	9·88

The distribution of areas and numbers in five-degree ranges of latitude as obtained from the combined data is represented in diagram I The peaks of activity for areas and numbers in both the hemispheres have advanced towards the poles when compared to the previous half-year; in the northern hemisphere the maximum activity is in the latitude belt 60°-65° and in the southern hemisphere in the belt 50°-55°.

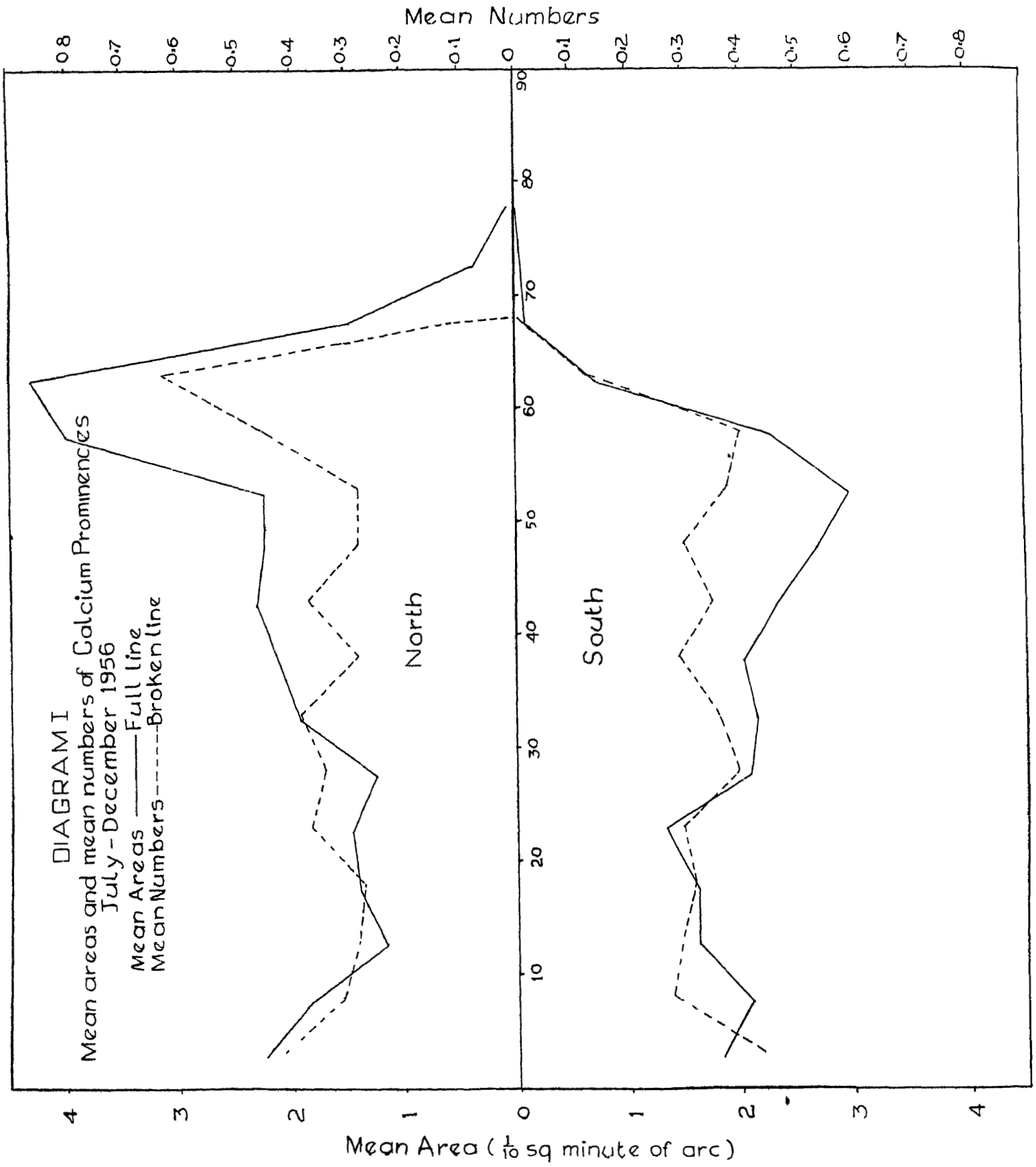
1—4 DDG. Kodai Kanal/57

Price : *Rs.* 22·50 *or* 34 *sh.* 6*d.*

DIAGRAM I

Mean areas and mean numbers of Calcium Prominences
July-December 1956

Mean Areas ——— Full line
Mean Numbers ------ Broken line



The monthly, quarterly and half-yearly areas, numbers, heights and extents of prominences derived from all the photographs are given in table 1.

TABLE 1

1956 Months	No of effective days	Areas (sq minutes)	Numbers	Daily means		Mean height ″	Mean extent °
				Areas (Sq. minutes)	Numbers		
July	30½	161·65	305	5·28	10·00	52·3	3·9
August	30	169·35	256	5·64	8 53	51·1	5·9
September	29½	231 10	314	7·93	10 64	56·9	5·0
October	28¾	125·05	239	4·35	8·31	53·4	3 9
November	29½	159·75	242	5 47	8 24	57·7	1·8
December	30	155·55	263	5·18	8·77	54·6	5·1
3rd quarter	90	565·10	875	6·28	9·72	53·6	4 9
4th quarter	88¼	439·95	714	4·98	8·43	55·2	4 6
2nd half-year	178¼	1005·05	1619	5·64	9·08	54·3	4 8

The distribution of prominences about the sun's axis of rotation is as follows :—

1956 July—December	East	West	Percentage East
Total Areas (sq minutes)	555·45	450·00	55·2
Total Numbers	805	814	49·5

Although the numbers indicate no significant east-west asymmetry, the areas show an eastern preponderance in the distribution of limb prominences.

Observations with the Prominence Spectroscope —Two metallic prominences were observed during the half-year. 3 bright reversals of H-alpha line and 2 dark reversals of D_3 line on the disc near sunspots were observed

The mean heights in H-alpha, D_3 and H-beta of 21 prominences observed with the spectroscope and the mean height in the K-line of the same prominences measured from the Calcium spectroheliograms were as follows :—

	Mean height
K	70″·5
H-alpha	58″·5
D_3	50″·3
H-beta	46″·2

Observations with the Hale Spectrohelioscope —Details of Doppler displacements in prominences and dark markings observed with the H-alpha line are summarised below .—

	North	South	East	West	Total	Displacements		
						To red.	To Violet	Both ways
Displacements in prominences	142	102	138	106	244	.		244
Displacements in dark markings	22	13	21	14	35	1	1	33

4

Solar Flares —The following table (Table 2) gives details of solar flares observed during the period.

TABLE 2

Date 1956	Time in I S.T Beginning h m	Maximum h m.	End h m	Mean latitude	Mean longitude from central meridian	Intensity	Maximum width of H-alpha line observed	Remarks
							°A	
July 6 .	08 16*		08 30	20°N	47°E	1	3	Observed in spectro-helioscope
August 8 . .	09 34	09 37	09 45	24°N	47°E	1	1·8	,,
August 18	07 55	08 10	08 25	18°S	27°E	1	2 8	,,
August 29	10 35*		10 53	30°N	56°W	1	2	,,
November 8 .	08 01	08 12	08 18	14°N	62°E	1	3·6	,,
November 11 .	10 48*			23°N	78°W	1	2·4	,,
November 13	09 17		09 30	21°S	40°W	1	2·4	,,
November 18	14 15	.	14 25	15°S	35°E	1	1·6	,,
December 8	07 42	.	..	25°S	8°E }	1		,,
,,	08 10*		08 24	16°S	15°E }			
December 11	08 20	08 22	08 37	25°S	35°E	1	2·3	,,
December 15 .	10 50	10 55	11 15	25°S	30°W	2	4·4	,,
December 16	10 36*		10 45	27°S	30°W	1	2·8	,,
,, .	15 56	16 00	16 14	22°S	47°W	1	2·8	,,
December 17	07 35*		07 46	25°N	37°W	1	2·4	,,
,,	07 45*		08 05	29°S	37°W	1	2·2	,,
,,	10 33*	.	11 24	15°N	53°E	2	2·6	,,
,,	15 45		15 55	22°S	50°W	1	2·2	,,
December 18	09 38	09 41	09 48	25°S	70°W	1	3·0	,,
,,	10 56		11 03	25°S	70°W	1	1 8	,,
,, .	14 00	14 35	15 37	25°S	70°W	1	2·2	,,
December 19 . .	10 35	10 45	10 56	25°S	85°W	1	2 2	,,
,, . .	14 10	14 23	14 52	16°S	78°E	2	4·1	,,
December 20 . .	10 27	10 29	10 38	25°S	90°W	2	3·6	,,
December 21 . .	09 30		09 50	19°N	72°E	1	2·0	,,
,, . .	10 28		.	18°S	60°E	1	2·0	,,
December 29 . . .	07 40	07 50	08 25	15°N	58°E	1	2·0	,,
December 30 .	10 28	10 30	10 32	16°S	65°W	1	2·2	,,

*Time when flare was first observed and not beginning of flare

Sudden disappearance of Prominences and H-alpha dark markings.—Details of sudden disappearances of prominences and H-alpha dark markings observed during the period are summarised in Table 3.

TABLE 3

Nature of phenomenon	Date and time of phenomenon when last seen			Coordinates of phenomenon		Remarks
	Month	Date	I.S.T. h m	Mean latitude	Mean longitude	
Prominence	September	7	09 38	25°N	90°W	The bright region disappeared at about 0938 hrs.
Dark Marking	October	25	16 00	22°N	39°W	Disappeared between 25th and 26th
Prominence	November	5	11 55	32°S	90°E	Disappeared at about 1155 hrs
Prominence	November	22	15 03	15°S	90°W	Do 1503 ,,
Prominence	November	24	14 03	31°N	90°W	Do. 1403 ,,
Prominence	November	29	09 35	49°S	90°E	Do. 0935 ,,
Prominence	December	3	09 55	22°S	90°E	Do 0955 ,,
Prominence	December	3	11 33	16°S	90°E	Do 1133 ,,
Prominence	December	7	11 58	28°S	90°W	Disappeared before 1400 hrs
Prominence	December	8	16 20	26°N	90°W	Most of the prominence disappeared by 1620 hrs
Prominence	December	11	10 00	45°N	90°W	Disappeared between 1000 and 1030 hrs.
Prominence	December	15	09 48	25°S	90°W	Disappeared at 0948 hrs
Prominence	December	18	07 59	13°S	90°E	Disappeared at 0759 hrs
Prominence	December	20	10 35	15°N	90°E	Disappeared at about 1035 hrs.
Prominence	December	20	12 10	25°S	90°W	Disappeared at about 1210 hrs
Prominence	December	20	16 02	23°N	90°E	Most of the prominence disappeared between 1525 and 1602 hrs.
Prominence	December	21	08 06	19°N	90°E	Disappeared at about 0806 hrs

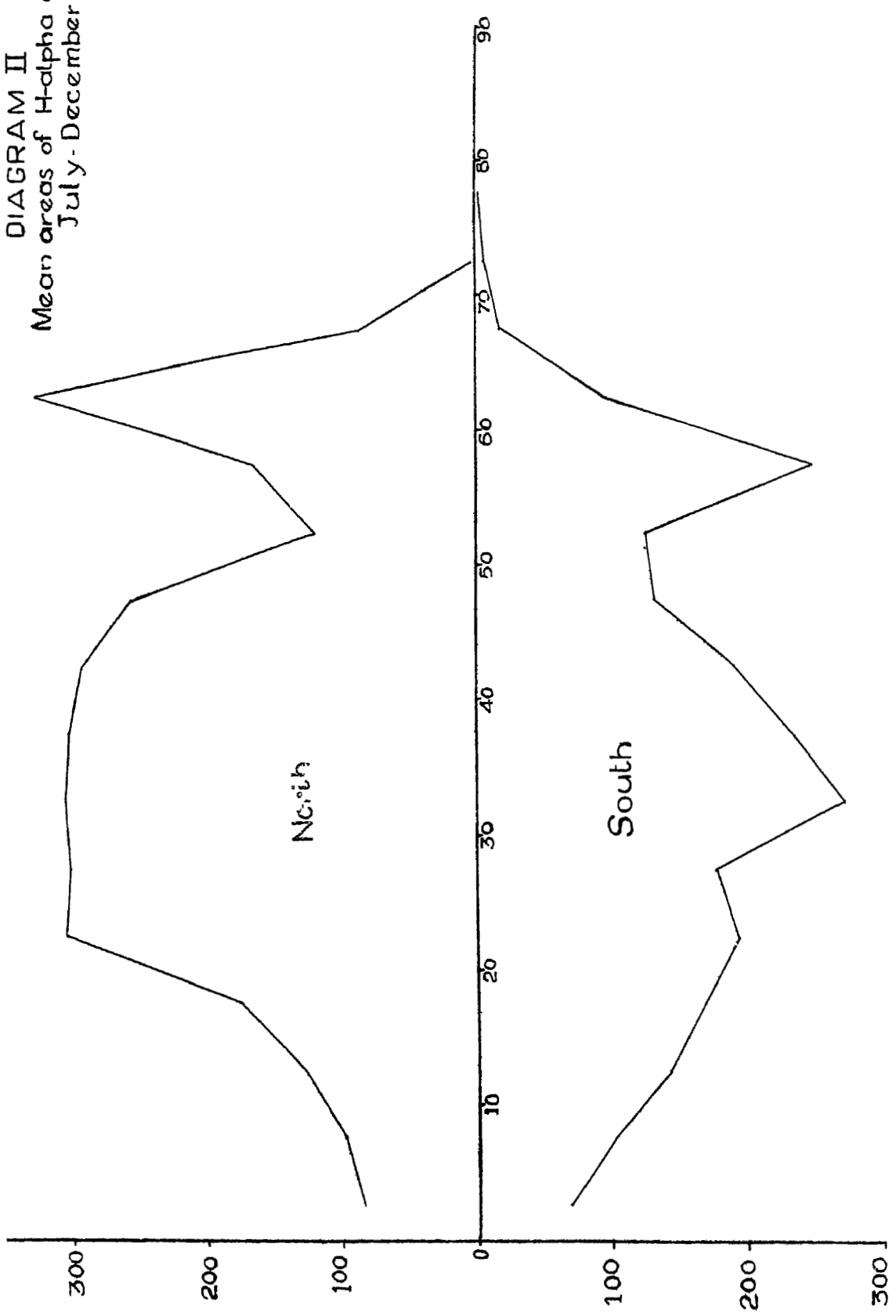
Prominences projected on the disc as absorption markings.—During the period under review photographs of the sun's disc in H-alpha line were obtained at Kodaikanal on 138 days. Spectroheliograms were also received for 39 days from the Mount Wilson Observatory and for 3 days from the Meudon Observatory. On the whole records were available for 174½ effective days after giving due weightage to the quality of the photographs.

The mean daily areas in millionths of the sun's visible hemisphere (uncorrected for foreshortening) and the mean daily numbers of H-alpha dark markings as derived from the combined data are as follows :—

	Combined data	
	Mean daily area (Millionths of the sun's visible hemisphere)	Mean daily number
North	2947	17·1
South	2131	13·3
TOTAL	5078	30·4

DIAGRAM II

Mean areas of H-alpha absorption markings
July-December '56



Millionths of the Sun's visible hemisphere

On comparing with the previous half-year's values these figure show a light increase in activity, the areas showing an increase of 11·3% and the numbers only 4·4%. The figures based solely on Kodaikanal photographs are also given for purposes of comparison with similar data.

	Kodaikanal data only	
	Mean daily area (Millionths of the sun's visible hemisphere)	Mean daily numbers
North	3046	17·8
South	2175	13·5
TOTAL	5221	31·3

The distribution of the areas of the markings in five-degree ranges of latitude as obtained from the combined data is shown in diagram II In the northern hemisphere there is a sharp increase in activity in the zone 60°-65° with a broad secondary maximum in the latitude belt 20°-40°. There are also two maxima of activity in the southern hemisphere in the latitude zones 30°-35° and 55°-60°.

The distribution of total areas and numbers of the dark markings east and west of the sun's axis is as follows.—

	Combined data		
	East	West	Percentage East
Total area (millionths of the sun's visible hemisphere uncorrected for foreshortening)	439,124	448,436	49·4
Total Number	2,665	2,656	50·1

There is no significant east-west asymmetry in the distribution of dark markings.

Calcium Flocculus.—During the half-year under review, Calcium Flocculus spectroheliograms were secured on 132 days at Kodaikanal. Calcium spectroheliograms for 44 days were received from the Mount Wilson Observatory and for 4 days from the Meudon Observatory. In all observations were available for 182 effective days

The mean daily areas (in millionths of the sun's visible hemisphere—uncorrected for foreshortening) computed from the compined data are given below·—

	Combined data
	Mean daily area (millionths of the sun's visible hemisphere)
Nortn	15,780
South	15,873
TOTAL	31,613

Compared to the previous half-year's value there is an increase of 56% in the mean daily area.

The distribution of flocculi east and west of the sun's axis of rotation is as follows·—

	East	West	Percentage East
Total area (millionths of the sun's visible hemisphere)	2,851,207	2,910,596	49.5%

There is no significant east-west asymmetry in the distribution of the areas of calcium flocculi.

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

PART II

Magnetic Observations for the Second Half of 1956

Brief descriptions of the absolute instruments, the variometers and the system of observations are available in Bulletins No. CXXXII and CXXXVI of this observatory. The data given in this bulletin are derived mainly from the records of the La Cour instruments, but in case of failure of La Cour records Watson magnetorgams have been used.

The adopted values of the scale coefficients of the horizontal force and declination magnetographs during the second half of 1956 are 28 ϒ/ cm and 14′.0/cm respectively. The adopted value of scale coefficient of the vertical force magnetograph for the first two months of the second half of 1956 is 110ϒ/cm; for the remaining four months it is 115ϒ/cm.

Trends in magnetic variations

The mean value of and range in horizontal force for the second half of 1956 were 39,499 ϒ and 153 ϒ respectively showing an increase over the corresponding values *viz.* 39,484ϒ and 139 ϒ for the first half of 1956 The mean value of vertical force decreased from 2,381ϒ to 2,376ϒ while the mean range increased from 50ϒ to 53ϒ. The mean westerly declination decreased from 2°35′·5 to 2°35′·3 and the mean range increased from 4′ 3 to 4′ 7.

PART III

Ionospheric Observations for the Second Half of 1956

The system of ionospheric observations at Kodaikanal, including a brief description of the ionosphere recorder, the parameters scaled and of the symbols and terminology used in scaling has been described in Bulletin No. 146 of this observatory. In the present bulletin hourly values of eight parameters *viz.*, fE, foE, foF1, foF2, h′E, h′F1, h′F2 and (M3000) F2 are given for the six months, July—December 1956.

Kodaikanal Observatory
November, 1957.

A. K. DAS,
Deputy Director-General of Observatories.

MAGNETIC DATA

2—4 D.D.G. Obs. K. Kanal/57

TABLE 1

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

July — 2° plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·8	34 5	34·4	34·5	35 2	35 9	36·2	36 6	36·6	35·6	35 2	35·2	35 5	35·8	35 9
2	35 2	34 9	34 5	34·5	35 2	36·6	37·7	38·4	38·0	37·6	36·6	35·9	35 2	35 2	35 2
3	35 2	34 9	34 5	34 8	35 9	37 3	38 7	39 4	39·0	38·0	36·6	35·9	35 2	34·8	34·9
4	35 2	34 5	34 1	34 0	34 7	35 1	36·5	37 6	36 8	37·1	37·2	36·5	35·8	35·4	35·7
5	35 1	34 5	34 4	34 8	35 8	36 8	37·6	38 5	38 5	38·5	37·9	36·5	35 8	35·1	35·7
6	35 1	34 7	33 7	33 9	34 7	35 7	36·4	36·4	36 4	36 4	36 1	35·6	35·0	35·0	35 7
7†	35 0	34 0	33 9	35 0	37 0	37 2	38·1	38·4	38·1	37·1	36 4	35 0	34 4	34 7	35·7
8	34 4	33 0	32 2	32 4	34 1	35 6	37·4	39·4	38·7	37·7	36·9	36·0	34 9	35·6	36·3
9	34 2	33 2	32 8	34 2	36 0	36 6	38 3	38·7	38·4	37·7	36 6	35 7	35·6	35·2	35·5
10	34 5	33 9	32 8	32 8	34 1	36 2	37·6	37·9	38·2	37·0	35·9	35·5	35·4	35·5	36·2
11	34 1	33 4	32 7	33 4	34·8	37 3	38·4	39·1	38·7	37·6	35 9	34 5	34·1	34·2	35 4
12	34·1	33 1	32 6	34 0	35 5	36 2	36 8	37·6	38 7	37·7	36·8	35·8	34·8	34·7	35·4
13††	34 8	34 0	33 1	33·4	34 2	36·5	37·3	37·6	37·6	36·9	36 6	36·2	36 2	36·2	36·2
14	34 0	33 4	32 8	33·4	34 1	35 1	35 5	36·2	36·2	36·9	36 2	35·5	35·1	34 8	35 4
15	34 5	34 1	33 4	33 7	35·1	36 2	36 9	36·9	36·9	36·9	36·2	35·5	35·5	35·5	35 4
16	34·8	34 8	34 5	34 8	35 5	36 2	36·5	36 9	36·9	36·9	36·5	35·9	35·5	35·5	35·5
17†	34 8	34 5	34 4	34 8	35 5	36 2	36·8	36 9	36·2	36·2	35·5	34·4	34·1	34·7	35·5
18†	34 5	33 3	33 1	34 0	35 4	36 2	36·2	37·3	38·0	38·0	37 3	36·2	35·6	35 5	35 8
19	34 5	33 7	33·8	34 4	35 8	36 5	37 5	38·1	37·9	37·5	37·5	36 1	36 1	36·1	36 1
20	34 4	35 0	33 7	34 7	35 8	36 4	37·4	36 9	37·1	36·8	36·4	35·8	35·4	35·8	36·1
21†	34 4	33 6	33 6	34·3	35·3	36 0	36·7	37 4	36 7	36·0	35·3	35·3	35 3	35 3	35·3
22†	34 6	33 9	33 6	34 2	35·9	37·3	38·0	38·7	38·4	37 0	35 5	34·5	34·2	34·5	35 2
23	35·1	34 2	33 8	34 1	35·0	35 8	36·5	37·2	37 9	37·8	37 8	37·2	36 5	36 5	36 5
24††	33 3	32 7	32 3	33 6	35·1	36 9	37 8	37·8	36·9	36·1	34·4	33 7	33 7	34·4	35·1
25††	33 7	33 0	33 0	33 6	34 7	35 4	36·3	36·4	36·0	35·4	34·6	33·2	32·6	32 9	33·2
26††	34 3	33 1	32 2	32·5	33·5	34 9	36·3	36·6	36·3	35·6	34·2	33·9	34 2	33·9	33·9
27	33·9	33·4	32 5	33 5	34·5	35·2	36·3	36·7	35·6	35·6	34·2	33·5	33 1	33·1	33·9
28††	34 2	33 4	33 1	34 1	35·2	37·3	37 9	37·9	37 7	37·5	35·8	34 4	34 0	33 5	33 8
29	34 1	33·3	32·1	32 7	33 4	34 8	36·3	36·1	35·8	35·5	35 2	34 4	34·1	33 7	34 0
30	34 1	33 8	33 0	34 7	34 4	35·0	35 8	36 8	37·4	37·4	36·8	36 2	35·4	35·1	34·7
31	34·0	33 2	32 9	33 3	35 4	36·9	38·2	37·6	36·8	38 2	38·2	36·0	34·7	34·0	33·3
Mean . .	34 5	33 8	33 3	33 9	35 1	36 2	37·1	37·5	37·4	37·0	36·2	35·4	34·9	34·9	35·2
Mean† .	34·7	33 9	33 7	34·3	35 8	36 6	37·2	37·7	37·5	36·9	36·0	35·1	34·7	34 9	35·5
Mean†† .	34 1	33·2	33·2	33·4	34·5	36 2	37 1	37·3	36·9	36·3	35 1	34·3	34·1	34·2	34·4

†Five International quiet days.
††Five International disturbed days.
△Loss of record ; day omitted for means.

TABLE I

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

July — 2° plus tabular quantities

Hours G.M.T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag.	Mag	
′	′	′	′	′	′	′	′	′	′	H M.	′	H M.	′	′	
35·5	35 2	35 8	35 9	35 9	35 5	35·2	35 5	35·2	35·5	07 40	36·9	02 25	34 1	2·8	1
35 2	35 9	35 9	36·2	35 9	35 9	35 5	35 2	35 2	35 9	07 04	39·0	02 25	34 4	4 6	2
35 5	35·9	35 9	35 9	35 9	35·9	35 8	35 8	35·2	36 1	06 45	39 7	01 45	34·4	5 3	3
35 8	35 8	35 8	35·7	35 7	35 8	35 7	35·7	35 7	35 7	06 54	37 9	02 45	33 7	4·2	4
35 8	35·8	35·8	35 8	35 8	35 8	35 8	35·8	35 7	36·1	08 10	38·7	02 06	34 3	4 4	5
35 7	35 7	35 7	35 7	35·7	35 6	35·6	35 6	35·6	35 5	08 50	36 7	02 25	33 5	3 2	6
35 7	36 1	35 7	36 0	35·7	35·7	35 7	35·6	35 3	35 9	06 44	38·5	01 35	33 6	4 9	7†
36·3	36 3	35 6	36·3	35·6	34 9	34 9	34 5	34·5	35 6	07 20	39 8	02 50	31 8	8 0	8
35 6	35 6	35 5	35 5	34·9	34·9	34 9	34 9	34 6	35 6	07 43	39 1	01 50	32 7	6 4	9
36 2	36 2	36·2	35·6	35·4	34 8	34·8	34 5	34 0	35 5	06 40	38 6	02 22	32 4	6 2	10
35 5	35·5	35·5	35 5	35·5	35·2	34 8	34·8	34·8	35 4	07 10	39·6	02 10	32 6	7 0	11
35 5	36 2	36·2	35 5	35 5	35 1	34 8	34 8	34 8	35 5	08 00	39·0	02 00	32 3	6 7	12
36 2	35 5	34·8	34 8	34 5	34 8	34 7	34 0	34 1	35·4	07 45	37 7	02 17	32 6	4 9	13††
35·5	35 5	35 4	34 8	34 8	34 8	34 8	34·8	34 8	35 0	08 50	37 0	02 10	32 7	4 3	14
35 5	35·5	35 5	35 5	35·4	34·8	34 8	34 8	34·8	35 4	08 54	37 3	02 09	33·3	4 0	15
35·5	35·5	35·5	35·5	34·8	34 8	34 8	34 8	34 8	35 5	07 54	37·0	01 50	34·1	2 9	16
35 5	35 5	35 5	35 5	34 8	34 8	34 8	34 8	34 8	35 3	06 20	37 0	01 49	33 8	3 2	17†
35·9	35 5	35·5	35 4	35 4	34 8	34 8	34 8	34 8	35 6	07 58	38 3	01 25	32·8	5·5	18†
36 1	36 1	35 4	35 3	34 7	34 7	34 7	35 0	34 7	35 8	07 24	38·9	00 55	33·4	5·5	19
35·8	35 4	35 4	35 0	34 7	34·7	34 7	34·7	34 7	35·5	06 04	37 5	01 35	33 3	4·2	20
35·3	35 3	35·3	35·3	34 9	34 6	34 6	34 6	34 6	35 2	07 00	37 4	01 25	33·3	4·1	21†
35 9	35 9	35·6	35 2	35 2	35 2	35 2	35 2	35 2	35·6	07 32	38·7	01 20	33 2	5 5	22†
36 4	35 8	35 8	35·4	34·4	34 4	33·7	33 3	33 3	35·6	08 32	38 0	22 30	32·7	5 3	23
35 8	35 8	35 4	35·1	35 1	34 4	34 1	34·4	34·1	34 9	06 20	38 2	01 40	31·9	6·3	24††
34 3	35·0	35 0	35·0	35 0	35·0	34·9	34·3	34·3	34 5	07 02	36 8	11 46	32 1	4·7	25††
34 8	34 5	34 5	36·7	34 2	34·5	34 2	34·8	33 5	34·5	07 50	36 9	02 30	31·7	5 2	26††
34·5	34 9	34 9	34 9	34·9	34 9	34 2	34·8	34 2	34 5	06 45	37 0	02 04	32 1	4 9	27
34 8	34 8	34·9	34 8	34 8	34·8	34·8	34 7	34 4	35·1	05 55	38 0	01 26	32·8	5 2	28††
34 1	34 1	34·1	34 4	34·8	34 8	34·1	34 1	34·1	34 3	06 25	37 5	02 10	32 0	5 5	29
34 7	34 7	35·1	34 8	34 6	34 7	34·8	34·7	34·3	35·1	07 17	37 5	01 45	32 7	4·8	30
34 0	34 0	34·0	34·7	34 7	34·7	34·6	34·7	34 6	35·1	06 06	38·2	01 34	32·6	5.6	31
35·4	35·5	35 4	35 4	35 1	35·0	34·9	34·8	34·7	35·4	..	.	.	..	5 0	Mean
35 7	35 7	35 5	35 5	35·2	35 1	35·0	35 0	34·9	..	..	.	.	..	..	Mean†
35 2	35·1	34 9	35·3	34·7	34 7	34·5	34·4	34·1	..	.	..	..	..		Mean††

†Five International quiet days.
††Five International disturbed days.
△Loss of Record; day omitted for means.

TABLE 2

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

August 2° plus tabular quantities

Date	Hours G.M.T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	34·0	32·9	32 6	33·1	33 9	34·7	36·0	36 8	36 7	36 0	35 9	35 3	35 0	34 6	34·5
2	34 5	33 6	33 2	33 5	35 2	36·0	37·3	37 3	36 7	35 8	34 5	33 5	33 1	33 5	34 4
3	33 8	33 5	33·5	34 4	35 9	37 6	37 9	37 3	37 2	36 5	35 8	35 1	34·3	33 7	33 7
4†	33 7	32 6	32 0	32 9	34·4	35 8	36 5	36 9	36 5	35·1	34 4	33 7	33 7	34 3	34 4
5†	34 1	32 9	32 3	33·6	34·7	35 0	35 7	36 4	37 0	36 4	35 7	35 0	34·3	34 3	34 3
6	33 6	32 2	31 6	32·5	33·3	33 9	34 4	36·3	36 0	34 9	34 9	34 9	34 5	34·4	34·9
7†	33 8	33 2	33·2	34 1	35 6	36 9	37 0	37 6	37 9	36·9	35 6	34 8	34·0	34 1	34 4
8	33 8	32 6	32 3	33 1	35 9	37 0	38 2	38·2	36 9	36 8	35 6	34 8	34 1	34 2	34·8
9	33 4	32 0	31·3	31 9	33·6	35 0	36 7	37·9	38 1	37·9	36 7	35 3	34 0	33 6	33 3
10	34 0	33 0	32 2	33 0	34 4	35·5	36 4	37 5	37·4	36 7	35 8	34 0	33 3	33 3	34 0
11††	34·0	33 6	33 6	34 5	35 5	37 0	37·3	38 3	37 9	36 9	36 9	36 2	34·8	34 1	34 1
12	32 7	31 7	31·4	32 0	33 4	35 4	36·9	37 2	36 9	36·5	35 9	34 8	34 1	34·1	33 8
13	33 7	32 6	31 4	32 1	33 2	34 2	35 6	36 6	37 3	37 0	36 3	36 0	35·6	34 9	34 2
14	33·8	33 1	32 4	32 4	33·5	34 9	36 9	37 7	38 0	38·0	37 0	36 3	35·5	34·2	34 2
15	34 1	33 2	32 9	34 2	35·3	36·8	37 8	38·4	38 5	38·4	37·1	35·7	35 0	34 3	35·0
16	34 3	33·3	32 2	32 8	33 6	35·3	37·0	37 2	37·2	37 0	36·0	35·0	35·0	35·0	34·6
17	34 3	33 3	32 5	33 4	35·1	36 5	35 8	35 8	36 5	36·5	36 2	35 1	34 0	34 4	35 1
18	33 7	33 3	33 1	33 8	35·2	37 0	38 4	38 7	38 3	36 9	36 3	35 2	34 8	34·5	34 5
19†	34 5	33 5	33 2	33 9	35 3	36·0	37·4	38 7	38 1	38·1	37 4	36·4	35 3	34 7	35 0
20†	34 6	33·9	33 5	33 9	34·9	36 4	37 4	37·3	36 7	35 7	35 3	35·0	34·6	34 6	35 3
21	34 6	33·6	33·5	34 3	35·4	37·2	38·6	38 8	38·3	37·4	36·8	36 1	35·7	35·4	34 8
22	33 7	32 6	32·3	33·8	35·5	37 0	38 0	38 6	38 3	37·5	36 1	35·5	35 2	35·5	35 5
23††	34 7	33 7	33 0	33 3	34·8	36 9	38 3	38 9	38 3	37 2	36 9	35 5	34·8	33 3	33 0
24††	35 8	33 8	32·7	32 5	33·1	35·2	36 3	37 6	37 6	37·6	35·6	34 2	33 1	32·1	31·7
25††	34·2	32·8	32·7	33 5	34·9	36 2	37·3	38·1	38 1	37·7	35 6	34 2	33·5	32·8	32·8
26††	34 9	33 1	31 7	32 6	34·3	36·3	37·1	37·4	36 7	36 5	36 3	36·0	35 7	35 0	34 3
27	34 6	33·9	33·5	33 6	35·7	36 5	37 6	38 2	37 8	37 1	36 3	35 1	33·9	33·6	33·9
28	34 6	34 3	32·2	32·5	33 6	35 0	36 4	37 7	38 5	38·5	37 4	36·4	35·7	35 0	34 3
29	35 0	34 0	32 6	33·0	33 7	36·5	38·6	40·4	40 0	38 9	37 2	35 5	34 1	34 4	34 4
30	35 0	34 1	33·3	33 7	35 8	37·9	39·2	40 0	39 4	38 6	36·6	34·8	34·4	34·4	34·4
31	34 7	33·7	32 3	32·7	33·4	35·8	37·2	38 6	39·3	38·3	37 2	35·1	35 1	34 7	35·1
Mean	34 2	33 2	32 6	33·2	34 6	36·0	37·1	37·8	37 7	37 1	36 2	35·2	34·5	34·2	34·3
Mean†	34·1	33 2	32 8	33 7	35 0	36 0	36 8	37·4	37 2	36 4	35 7	35·0	34 0	34·4	34 7
Mean††	34 7	33 4	32 7	33 3	34·5	36·3	37·3	38·1	37 7	37 2	36 3	35·2	34·4	33·5	33·2

†Five International quiet days.
††Five International disturbed days.
△ Loss of record, day omitted for means

TABLE 2

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

August — 2° plus tabular quantities

Hours G.M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag	
′	′	′	′	′	′	′	′	′	′	H. M	′	H M.	′	′	
34 7	35 0	35 0	34 9	54·7	34 6	34·6	34·6	34·6	34·8	07 40	37 3	01 48	32·5	4·8	1
34 5	34·5	34 5	34 9	34·9	54·5	34 5	34 5	34 4	34 7	06 38	37 3	01 54	32 8	4 5	2
34 4	34·4	34 4	34 4	34 4	34 4	34 4	34 3	34 0	35·0	06 10	38·2	01 15	33 1	5 1	3
34 4	34 8	34 8	34 8	34·4	34 4	34 4	34 4	34·4	34 5	07 22	37 3	01 50	31·6	5 7	4†
35 0	35·0	35·0	34·7	34 3	34·3	34 3	34 3	33 9	34·7	08 36	37 1	01 49	32·3	4 8	5†
35 2	34·8	34 8	34·8	34 8	34 1	34·1	34 0	34·0	34·3	07 00	36 4	01 41	32·4	4 0	6
34 8	34 8	34 2	34 2	34·1	34 1	34 1	34 1	34·1	34·9	07 50	38 2	00 50	32·8	5·4	7†
34 8	34 8	34 1	34 1	33 4	34 1	34 0	34 1	34 0	34·8	06 50	38·3	01 40	32 0	6 3	8
34 0	34 4	34 3	34 0	34 0	34·0	34 0	34 0	34 0	34·5	07 30	38 3	01 50	30 9	7 4	9
34 0	34 4	34 7	34 4	34·3	34·0	34 0	34 0	34·0	34·5	06 50	37 6	02 02	31·9	5 7	10
34·1	34 1	34 0	33 4	33·4	32 7	32 7	32 7	32·7	34·8	06 50	39·3	22 08	32·6	6·7	11††
34 1	34 1	34 1	34 1	33 4	33 4	33 4	33 4	33 7	34 2	07 32	37 3	02 12	31 3	6·0	12
34 9	34·2	34·2	34 2	34·2	34·2	34 2	33 8	33·5	34·5	09 01	37 7	02 17	31·3	6 4	13
34 2	34 2	34 2	34 2	34 2	34·2	34 2	34 2	34 1	34·8	08 58	38 3	02 18	32 1	6 2	14
35 0	35·0	35 0	34 7	34·4	34 3	34 3	34 4	34·3	35·3	08 45	38·9	01 52	32·8	6·1	15
35 0	35 0	35 0	34 7	34 7	34·4	34·7	34·7	34·3	34·9	07 02	37·5	02 12	32·2	5 3	16
34 4	35 1	35 1	34 8	34 4	34·0	33 7	34 0	33·7	34·7	04 50	36·8	02 08	32 2	4 6	17
34 9	35 2	35 2	35 2	34·5	34 5	34 5	34 5	34 5	35 3	06 25	39 4	01 30	33 0	6 4	18
35 3	35·3	35 3	35 3	35 3	34 7	34 6	34 6	34 6	35·5	07 06	38·8	01 45	33 1	5·7	19†
35·3	35 3	35 3	35 3	35 0	35·3	34 9	34 9	34·9	35·2	06 55	37·8	01 46	33·2	4·6	20†
35 4	35 4	35·1	34·7	34·7	34·4	34 0	34 3	34·0	35 5	07 32	39 0	01 33	33·1	5 9	21
35 5	35·5	35 5	35·2	34 8	34 8	34·8	34 8	34·8	35 5	06 34	39 0	01 35	31 8	7·2	22
33 3	34 4	34 1	34 8	34·8	34 8	35 5	36 2	36·9	35·3	06 54	39·0	01 58	32 7	6 3	23††
31 4	32 0	32 8	33 5	33 8	34·5	34 5	34 2	34 2	34·2	07 12	37·7	14 45	30 7	7 0	24††
33 5	34·2	34 8	34 9	35·3	34·8	35·6	35 6	35·4	34·9	07 17	38·5	01 40	32·4	6 1	25††
34 0	34·3	34·3	34 3	34·3	34 3	34 6	34·6	34·6	34·9	06 18	37·8	02 27	31·4	6 4	26††
34 0	34·3	34 6	35 0	34·7	34 9	35 0	35 0	35·0	35·2	06 27	38 5	02 02	33 2	5 3	27
34 3	34 6	35 0	35 0	35 0	35·0	35·1	35 0	35·0	35·3	08 23	39 2	02 10	31·8	7 4	28
34 4	34·4	35·1	35 2	35 1	35 0	35·0	35 1	35·1	35·5	07 00	40·7	02 23	32 4	8 3	29
34 8	35·1	34 7	35·1	35 1	35 1	35·1	35·1	35·1	35·7	07 00	40 4	02 15	33 0	7 4	30
35 1	35·1	34 7	34·4	34 4	34·1	34·4	34 4	34·7	35·2	07 32	39 4	02 25	31·9	7·5	31
34 5	34 6	34 6	34 6	34 5	34·4	34·4	34 4	34·4	34·9	.		.		6·0	Mean
34 8	35 0	34 9	34 9	34 6	34 6	34 4	34 5	34·4	..	..	.		.	.	Mean†
33 3	33 8	34 0	34 2	34 3	34·2	34 6	34·7	34·7	..	.	..	.		.	Mean††

†Five International quiet days.
††Five International disturbed days.
ΔLoss of record, day omitted for means.

TABLE 3

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

September — 2° plus tabular quantities

Date	Hours G M T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	34·4	33·3	33·0	33 7	35 8	36 8	37·3	38·0	37·8	36 9	35 8	35 1	35·1	35 1	35 5
2††	34·4	33 3	32·3	34·4	35 8	36 5	36·1	35·1	36·9	32 3	29·1	28 8	30 6	32·3	33 0
3††	33·7	33 4	32·7	33 6	35·1	35·8	36·4	37 5	36 5	35 5	33 7	32·7	32·4	32·7	33 0
4	34 1	32·7	32·4	33 6	36 4	37·8	38 9	39 2	38 2	36 4	35·1	34·1	34 4	34 4	34 4
5	34·4	32 7	31·6	32·3	35·1	37·2	38·9	39 7	39·4	38 0	36·1	35·0	34·7	35 1	35 1
6	35·4	33·7	32·2	32·3	33 7	36 5	38 6	39·2	38·9	37 9	36·5	35·2	35 1	34 1	33 7
7	35·0	33 0	32·2	32 6	34·3	35 9	37 1	39·9	39 6	39·1	37·8	36 4	35·7	35 7	35 0
8††	35 0	33 6	33 2	△	△	△	△	△	△	△	△	△	△	△	△
9	△	△	△	△	33 5	34·2	37·0	38·4	40·1	38·4	36·7	35 3	34 8	34 8	34 2
10	33 5	32·1	31 4	31 8	33 4	34·9	36 7	37·7	38 1	37 6	36·3	35 6	34 9	34 2	34 2
11	34·2	33·1	33·1	35·0	35·9	36·7	39 0	38·4	38·0	37 6	36·2	35·5	35·1	34 8	34·8
12	34·8	33·4	32 7	33 4	34·1	35·5	36·1	36·9	38·0	37·6	36·2	35·5	34 8	34 9	35 5
13	33·4	33·0	32·7	33 3	33·7	33 5	35 2	36·9	36 6	36·1	35 1	34 1	34·1	34·1	34 8
14†	34·1	32 7	32·4	33 3	35 4	36·5	37·6	38 2	37 9	36 1	35 1	34·7	34·0	34·3	34 7
15	34·0	33·2	32 6	34 3	36 0	38·2	39·5	39·6	39·3	37 6	36·1	35·4	35·4	35·4	35 4
16	34·0	33 7	33 4	34·3	35·7	37·6	39·6	39·6	38·1	36·5	35·4	35·4	35·4	35·4	35 4
17†	34·0	32·6	32·9	33·4	35·4	37 1	39·3	39 9	38 8	37·5	36·4	35 4	35·4	35·4	35·1
18†	34·3	32·6	32 3	33 2	33 9	36·0	37 5	38·1	37 6	36 6	36 0	35·3	35 3	35·3	35 3
19†	34 6	33 6	33·2	34 6	36·0	38·8	41·2	41·5	39·5	37·4	36·1	35·3	35·3	35·3	35 3
20	34 6	33·9	32·8	34·3	35·2	36·7	37·3	37·3	37·4	36·7	36·0	36·0	36·0	35 7	35·6
21††	35·3	34·2	33·6	35·2	35.2	36·3	37·3	37 6	37 3	35 9	34·5	34·5	34 5	33·8	33·8
22††	34·5	33·0	32·4	32·7	34·9	37·6	39·4	39·7	37 9	35·5	34·1	33·0	33·1	33 8	33 8
23	33·8	33·2	33·1	33 1	35·5	37·7	39·1	38 7	38·3	36·6	34·9	33 5	33 1	33 7	33 8
24	34·1	33·1	32·0	32 5	35·5	36 4	38 7	40·6	40 2	38·1	36·7	36·0	35·3	34 6	34·6
25	35·3	34 6	33·6	33 9	35·3	37 1	38·7	39·2	38·8	37·4	35·9	35·3	35·3	35·3	35·3
26	34 6	33·5	33 1	34 3	35·4	36·9	37·5	38·8	37·8	36·8	35 4	35 4	34 7	34·7	34 7
27	34·6	34 0	33 3	32·9	33·6	34 7	36 2	37 5	37·4	36 8	36·1	35 4	34·7	34·3	34 0
28	34·7	34·4	33·7	33·7	33·3	34·0	35·4	36·1	36·1	36·0	35·7	35·4	35·4	35 4	35·4
29†	35 4	35 1	34 3	34·8	35 5	36·9	38·9	39 6	39·3	37·7	36·9	36 5	36 5	36·2	36·1
30	35·5	35·2	34·4	34·1	34 7	35 5	37 5	38 3	37 6	36 5	35 5	34·8	34·8	35 2	35·5
Mean	34·5	33 4	32·8	33·6	35·0	36·5	37·9	38·5	38·1	36·8	35·5	34·8	34·7	34·7	34·7
Mean†	34·5	33·3	33·0	33·9	35·2	37·1	38 9	39·5	38 6	37·1	36·1	35·4	35·3	35·3	35·3
Mean††	34·5	33·5	32·7	34·0	35 4	36·5	37·3	37·7	37·1	34·8	32·9	32·3	32·7	33 1	33·4

†Five international quiet days.

††Five international disturbed days.

△Loss of record; day omitted for means.

TABLE 3

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centerd at the full hours of Greenwich Mean Time)

September — 2° plus tabular quantities

Hours G M T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.	Mag.	
′	′	′	′	′	′	′	′	′	′	H M	′	H M.	′	′	
35·1	35 1	35·1	35·1	35·0	35·0	35 1	35·1	34 7	35·4	06 49	38 3	01 40	32 7	5 6	1
33 6	33·6	33 7	34·1	34·4	34·1	34·0	34·1	33·7	33 6	07 43	38 3	10 15	28 5	9 8	2††
33 3	34·1	34·4	34 4	34 4	34 4	34·4	34 4	34·4	34 3	07 25	38 0	13 20	32 3	5 7	3††
35·1	34 8	34 7	34·7	35·1	35 1	35 1	35·1	35 0	35 3	06 42	39 3	01 42	32 3	7·0	4
35·1	35 2	35 2	35 1	35 2	35·2	35 5	35 5	35 7	35 5	07 24	40 3	02 02	31·5	8 8	5
33 3	34 1	34·4	34·4	35 1	35·1	35 8	35 5	35 1	35 2	06 34	40 0	02 23	31 9	8 1	6
35 0	35·0	35·7	35·7	35·0	35·0	35 4	35 4	35 4	35 7	07 38	40·0	02 03	31 8	8 2	7
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	8††
34 5	34 5	34·2	34 2	34 5	34 2	34 2	33·9	33 5	△	△	△	△	△	△	9
34 5	34 5	34·9	34·9	34·5	34 2	34 2	34 2	34 5	34 7	07 58	38 4	01 42	31 3	7 1	10
34 8	34·8	34 8	34 8	34 8	34·4	34·7	34 7	34·8	35 4	06 18	39 3	01 30	32 8	6 5	11
35 5	35 5	35·5	35 5	35 5	35·1	34·8	34 7	34 1	35 2	07 26	38 3	02 22	32 6	5 7	12
34 8	34 8	34·8	34 8	34·8	34 4	34·4	34 1	34 1	34 5	07 25	37 2	01 47	32 1	5 1	13
35 1	34·7	34 7	34 7	34 7	34 7	34·7	34·7	34 7	35 0	07 22	38 3	01 34	32·0	6·3	14†
35 4	35 4	35·4	35·4	35·4	34 7	34 7	34 7	34 0	35 7	06 50	40 2	01 38	32 3	7 9	15
35·1	34·7	34·6	34 3	34·6	34 7	34·7	34 7	34·7	35·5	06 45	39 9	01 53	33 3	6·6	16
35 1	35 1	35 1	34 7	34·6	34 6	34·7	34 7	34·7	35 5	06 47	40 3	01 38	32 0	8 3	17†
35 3	35 3	35 3	35 3	35·0	35 0	35 3	35 3	35 3	35 3	06 55	38 4	01 55	31·8	6 6	18†
35 3	35 3	35·3	35 0	34 6	34 6	34 7	34·7	34 6	35 9	06 26	41·7	01 10	31 8	9 9	19†
35 3	34 6	33 9	33 9	34 2	34 6	34 6	34·6	35·3	35 3	07 34	37 4	01 39	31 7	5 7	20
34 5	34·1	34·4	34·5	34·5	34 5	34 9	34·9	34·5	35 0	06 50	38·0	01 19	32·4	5 6	21††
33 5	33 8	34 5	34·5	34·5	33 8	34 1	34·4	34 2	34·7	06 54	40.8	01 43	31 8	9 0	22††
34 4	34 5	34 9	34·5	34·5	34 5	34·5	34 5	34·5	35·0	06 24	39·4	11 45	33 0	6 4	23
34 6	35 0	35·3	35 3	35·3	35 3	35 3	35 3	35·3	35 6	07 25	40 9	01 53	31 8	9 1	24
35 3	35 3	35 3	35 3	35·3	35·0	34 6	34·6	34 7	35 7	07 05	39 5	02 12	33 3	6 2	25
34 7	34 7	35 1	34·7	34·7	34 7	34 7	34 7	34·7	35 3	06 47	38 9	02 00	32 8	6·1	26
34 0	34 7	34·7	34 7	34 7	34·7	34 7	34 7	34·8	34·9	07 56	37 6	03 02	32 6	5 0	27
35 1	35·4	35 4	35 4	35 4	35 4	35·1	35 4	35 4	35 1	07 35	36 2	02 37	33 2	3 0	28
35 5	35 5	35 5	35·5	35·5	35 5	35 5	35 5	35 5	36 2	07 30	40 0	01 48	34 0	6 0	29†
35 5	35 5	35 5	35·5	34 8	34 8	35 5	35 5	35·5	35 5	07 00	38 4	03 25	33 8	4 6	30
34·8	34 8	34·9	34 9	34·9	34·8	34·8	34·8	34 8	35·2	..	.			6 8	Mean
35 3	35 2	35 2	35 0	34·9	34 9	35·0	35·0	35 0	.	.	.				Mean†
33·7	33 9	34·3	34·4	34·5	34·2	34·3	34·5	34·2		..	.	.			Mean††

†Five international quiet days
††Five international disturbed days
△Loss of record; day omitted for means.

TABLE 4

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

October — 2° plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35 5	34 8	34 1	34·5	36·7	37 7	39·1	39·4	39·0	38·1	37·7	36 7	35·3	34·9	34·8
2††	35 6	34·9	33 9	34 5	35 6	36 7	37 0	37 8	36·6	35·6	34·2	34 2	34 2	33 6	33·5
3	34 9	34 5	34 9	35 6	36 3	37 3	37·6	37 8	37·8	36 3	35·6	34 9	34·2	34·2	34·2
4	34 9	34 2	33 6	34·2	35 7	36 3	37 2	37·8	36·8	36 0	35 7	35 7	35·7	35·7	35 4
5	35 7	34 3	33 9	34·6	36·4	37 7	38·5	38 2	36·7	35 7	34·3	34 6	35·4	35·4	35·7
6	35 1	33·6	33 6	35 0	36 3	36 4	37·7	39 2	39 9	39·1	37·1	36 8	35 7	35·7	35·7
7	34 6	33 7	33 5	33 7	35·4	37 7	39 2	39·2	39 1	38·2	36·5	36 0	35 7	35 7	35·7
8	35 0	34 6	34 3	34 6	35 7	36 4	37·8	37 8	37·7	37 1	36·0	35 7	35 7	35 7	35 0
9	35 4	34 6	34 3	34 9	35 7	37 1	37·9	38·5	38·5	37·9	36 5	36·3	35·7	35·7	35 4
10	35 0	34·3	34 3	34 3	35 3	37·1	38·5	39·1	39·1	38·5	37·1	36·4	35·7	35·7	35·0
11	35 0	34 6	34 3	34·6	35 7	36 4	37·7	37 8	37·5	36 8	35 7	35 7	35·7	35·7	35 7
12	35 7	34 9	34 3	34 6	35 0	36·7	37 7	37·7	37·5	36 8	36 3	35 7	35 7	35 7	35·7
13†	35 0	35 0	34 9	△	△	36 5	37 7	37·8	37 4	36·4	35·7	35·7	35·7	35 7	35·7
14†	35 7	35 4	35 3	35·7	37 5	38 8	39 2	39·1	38·5	37·1	35·7	34·9	34 9	35·4	35·7
15†	35 0	34 3	33 6	34·0	34 9	37·1	39·1	39·2	38·2	36 8	35·7	35·1	35·7	35·7	35·7
16	35 7	35 4	35 3	35 4	35 7	36·3	37·7	37·4	37·1	35·7	34·3	34·4	35·4	35·7	35·7
17†	35·7	35 7	35 4	35·7	36 3	37 4	38 2	37·8	36 4	36·0	35·7	35·7	35·7	35·7	35·7
18	35 7	35 4	35 4	35 7	36 3	37·1	37·4	36·3	35·7	35·7	35·3	35·4	35·4	35 7	35·7
19	35·7	35·7	35 6	35 7	35 7	36 3	37·1	36·4	35·7	35 7	35·1	35·1	35·1	35·7	35 7
20††	35 6	35 4	35 0	34 7	34 6	35·3	35·0	34·9	33·6	33·2	32·9	32 9	33·5	32·9	33·6
21††	34 6	34 6	35 0	34 3	34 3	35·0	35·0	34.9	35·0	35·0	35·0	34·3	34·3	34·0	33 7
22	35 0	34·9	34 6	34 6	35 0	35 7	36 5	37.1	36·4	35 7	35·7	35·7	35·7	35·0	34·3
23	34 6	34 0	34 3	35·0	35·7	36 5	37·7	36.4	35·7	35 0	35·0	35·0	35·0	34·3	34·3
24	35·0	34 6	35 0	35 7	35 7	37 1	37·8	37 7	36 5	36·4	36·4	36 0	35·7	35·7	35 0
25†	35 7	35 0	34 6	34 6	34 9	36 7	38·5	38 2	37·7	36·4	35 7	35·7	35 7	35·7	35·7
26††	35 7	36 3	35·4	35 7	35·7	36·4	37·7	37·8	37·8	37·4	36·7	35·7	35·7	35·7	35·1
27††	34 6	34 3	34 3	34 3	34·3	34·3	35 7	35 7	35·0	34 3	34·3	34·0	34·0	33 7	33·7
28	35 0	35 0	35 0	34 7	35 0	35 7	36 3	35·7	35·0	35·0	34·6	33·7	33·9	33 7	33·7
29	35·0	35 0	35 0	35 1	35 7	36 1	36 4	36·3	35·7	35·7	35·3	34·6	34·9	34·9	34 3
30	35 1	34·9	35 0	35·7	36·1	37 2	37 8	36·5	35·8	35 8	34·8	34·7	35 0	35 0	34·4
31	35·7	35·2	35·8	35·5	35 8	36·4	37·2	36·9	36·5	36·5	36·1	35·8	35·8	35·5	35·1
Mean	35 3	34 8	34 6	34 9	35·6	36 6	37 5	37·5	36·9	36·3	35·6	35 2	35·2	35 1	35·0
Mean†	35 5	35 1	34·7	35 0	35 9	37 7	37 0	38·6	37 7	36 6	35·7	35·3	35·5	35·6	35 7
Mean††	35 2	35 1	34·7	34·7	34·9	35 5	36·1	36·2	35·6	35·1	34·6	34 2	34·3	34·0	33·9

†Five International quiet days.

††Five International disturbed days.

△Loss of record; day omitted for means.

3—4 D. D. G. obs. K. Kanal/57.

Table 4

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

October — 2° plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.	Mag	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H M.	′	′	
34 8	34·6	34·9	34 9	34·9	34·9	34 9	35 3	35 6	36 0	07 04	39 8	02 00	33 8	6 0	1
33·9	33·9	34 2	34 2	34 2	34·2	34 2	34 8	34 9	34 9	06 48	38 7	14 19	33 1	5 6	2††
34 8	34 9	34 9	34·5	34 2	34·2	34·9	34 9	34 9	35 3	07 37	38 4	13 00	33 9	4 5	3
35 0	35·1	35·7	35 0	35 0	35 0	34 9	35 0	35 4	35 5	07 22	37·9	02 12	33 5	4 4	4
35 7	35·7	35 4	35 0	35 0	34 3	34 3	34 9	35·0	35 5	06 45	39 2	01 49	33 7	5·5	5
35·0	35·0	35·0	35 0	34 7	34·9	34 3	34 6	34 3	35·8	07 34	41 3	01 20	33 2	8 1	6
35 7	35 6	35·7	35 0	35 0	34 7	34 3	35 0	34 9	35 8	06 23	39 9	01 50	33 2	6 7	7
35·4	35 7	35 7	35 1	35·0	35 0	35 0	34 7	35 0	35 7	07 39	38 5	01 05	34 3	4 2	8
35 4	35 4	35·7	35·1	35 0	35 0	34 7	35 0	35 0	35 9	07 35	38 8	01 55	34 0	4·8	9
35·7	35·7	35 7	35 7	35 0	35 1	35 1	35 3	35 0	36 0	06 50	39 2	01 37	34 0	5 2	10
35·4	35·4	35 7	35·4	35·1	35·1	35 1	35·3	35 7	35·7	06 08	37 9	02 00	34 2	3 7	11
35·7	35 7	35 7	35·4	35·7	35 4	35·7	35 4	35 0	35 8	05 57	37 8	02 07	34 0	3·8	12
35·7	35 7	35·7	35 7	35 7	35 7	35·7	35 7	35 7	△	△ △	△	△	△	△	13†
35·7	35·7	35 7	35 7	35·4	35 7	35·1	35 0	35 0	36·2	06 10	39 9	11 21	34 6	5 3	14†
35·7	35 7	35·7	35 7	35·1	35 7	35 7	35·7	35 7	35 9	06 24	39 3	01 45	33 5	5 8	15†
35·7	35·7	35·7	35·7	35 7	35·7	35·7	35·7	35 7	35·8	06 28	37 8	09 58	33 (	4·2	16
35·7	35·7	35 7	35·7	35 4	35 4	35 7	35 7	35 7	36 0	06 12	38 5	02 35	35·1	3·4	17†
35·7	35·7	35 7	35 7	35 7	35 7	35·7	35·7	35 7	35 8	05 50	37 7	10 35	35 0	2 7	18
35·7	35·7	35·7	35 4	35·7	35·7	35 7	35·7	35·7	35 7	05 32	37 4	11 00	35 0	2 4	19
33·6	32 9	32·9	32·9	33 2	33·2	33·6	34 3	34 9	33 9	05 34	35·7	13 12	32 6	3 1	20††
34·0	34·3	34 2	33·7	34·0	34·0	34 3	34 6	34 6	34·4	06 45	35 7	13 52	33 5	3·2	21††
34·3	34·3	34·3	34·3	34·3	34·3	34·3	34·3	34 6	35 0	06 35	37 8	13 34	34 0	3·8	22
34·3	34·3	34 3	34·3	34·3	34 3	34 9	35 0	35 0	35 0	06 00	37 8	01 13	33 6	4 2	23
35·0	35·0	35 1	35·1	35·0	35·0	35 1	35 1	35 3	35 7	05 54	37 9	00 54	34·3	3 6	24
35·7	35·7	35·7	35 7	35·4	35·7	35·7	35·7	35·7	35 9	06 30	38 6	03 15	34·3	4·3	25†
34·6	34·3	34·3	34·3	33·6	32·9	34·0	34 3	34 3	35 5	06 23	37 9	20 10	32 8	5 1	26††
34·3	34·3	34·3	34·3	34·3	34·3	34·3	34 3	35·0	34·4	07 33	36 0	13 17	33 6	2 4	27††
34·0	34·3	34·3	34 3	34·3	34·9	34·9	34·9	34 9	34·7	05 50	36 5	14 04	33·5	3 0	28
34 6	34·3	34·3	34 3	34·3	34·3	34 9	35 0	35 0	35 0	06 04	36 5	11 38	34 0	2 5	29
34·4	34·7	35·7	34·7	34·7	34·7	35 1	35·1	35 2	35·3	05 27	37 9	13 50	34 1	3·8	30
35·1	35·1	35.1	35·1	35·1	35·1	35·2	35·8	35·8	35 7	06 24	37 5	00 45	35 0	2 5	31
35·0	35·0	35·1	34·9	34·8	34·8	34 9	35·1	35 1	35 5	..	..	..	..	4.3	Mean
35·7	35·7	35 7	35·7	35·8	35·6	35 5	35 0	35 5	..	..	..	..	..	:	Mean†
34·1	33·9	34·0	33 9	33·9	33·7	34·1	34 5	34·7	..	..	.	..	..	..	Mean††

† Five International quiet days.
†† Five International disturbed days
△ Loss of record; day omitted for means.

Table 5

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

November — 2° plus Tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·8	36·1	36·4	36 1	35 8	35 8	35 9	35 8	35 7	35 5	35 5	35 1	35 8	35 8	35 8
2	35 8	36·1	36 9	37 2	37 2	37 8	37 9	37 2	37 2	36 9	36 5	35 8	35 8	35 8	35 8
3	35·4	35·2	35 8	36 6	35 9	36 7	37 6	37 2	36 0	35 9	35·2	35 3	35 9	35 8	35 6
4	35 6	35 6	35 9	35 9	35 9	37 0	37 9	36 9	36 2	35 9	35 9	35 9	35 9	35 9	35 9
5†	35 9	35·9	35 9	36·0	35 4	35·1	35 1	35 1	34·9	34 9	34 7	34 9	35 4	35 6	35·7
6	35 8	36·2	36 2	36 2	35 9	36 6	37 3	37 4	37 3	36 9	36 0	35 9	35 9	35 9	35·9
7†	35 2	35 8	35 9	35 2	34 5	34 8	35 9	35 9	35 9	36.3	36 5	35 9	35 9	35 9	35·5
8†	35 6	35 9	35 9	35 5	35 5	36 5	37 3	36 9	36 6	36 6	36·0	35 9	35 9	35·9	35·8
9	35 9	35 8	35 9	35 9	36 1	36 7	36 4	35 7	35 9	35 7	35·7	35 4	35 3	35·1	35·2
10††	35 8	36 1	△	△	35 1	35 8	35 8	34 4	33·3	33 6	33 3	33·3	33 7	33 6	32·3
11††	35·2	35·1	35 1	35·8	35 8	35 2	34 3	33·7	33 7	33 7	34 1	34·3	34 4	34·1	33·8
12	35 8	35 2	35 8	35 8	36 4	37·2	37 5	37 2	35·8	35 4	35·0	35 1	35 8	34·7	34·1
13	35 0	35·1	35·1	35 0	35 0	35·1	35 8	35.7	35 1	35 1	35 1	34·7	34 7	34·4	34 4
14††	35·5	35·4	36 1	35 8	36 4	35 8	35 1	33 8	33·7	33 4	33 3	34·1	34 4	33·4	33·3
15††	33 7	34·7	35·5	34 1	33·6	33 0	32 3	31 6	31 3	29 1	30 2	31·3	32.7	32·3	32·9
16††	35·1	35·8	36 1	35·1	34·7	34 7	34 7	33·6	33 7	33·0	32·4	33 6	34 1	34·4	34·1
17	34 7	35 5	35·8	35 7	35 7	35·7	36·8	36 8	36·0	35·7	35 0	35 0	35 7	35·4	34·3
18	35·0	35·4	35 7	35 4	34·7	35·7	35 0	34 3	34 0	34·0	35·1	35·4	35 0	35·0	35·0
19†	35 0	35 4	35 7	35 7	36·3	36 4	37 1	36 8	35 7	35 7	35 7	35 7	35 7	35 7	35·4
20	36·0	36·4	37·0	36·3	36·4	37 1	37·4	37·0	35·4	34 3	34 2	34 3	35.1	35·4	35 0
21	35·7	35 7	37·1	37·1	37·2	37·1	37·1	36 8	35·8	35 1	34·6	34·3	34 3	34·3	34·3
22	35·6	35·7	35·8	36 3	36 4	36 1	36 3	36 0	34 2	33 6	33 6	34 3	34 6	34·0	34·3
23	35·7	36·0	36 5	36·4	35·7	35 0	35 7	35·0	34 3	34·0	33 6	33 6	33 9	34 3	34·3
24	35·7	35·7	35·7	35·4	35 0	35 7	35·7	35 7	35·4	35 0	35 0	35 0	35.0	35 7	35·0
25	35·7	35·7	36·0	36·3	36·3	36·4	36·7	36·4	36 4	36·3	35·7	35 7	35 7	35·4	33·3
26†	35·1	35·7	36·0	35·6	35·1	35·0	34·6	34 3	34 3	34 3	35 6	35·7	35 7	35 1	35·0
27	35 0	35 7	36·0	36·4	36·5	37 1	37 1	36 8	36 4	36 0	36·0	36·4	36 4	36·0	35 4
28	35 4	35 1	36·4	36 4	36 8	36 7	36·7	36·8	36 0	35 7	35 7	35 7	35 7	35 6	35·0
29	35·7	36·4	37 2	36 7	36 3	36 0	36 9	36 7	36 3	35·9	35 6	35·6	35 6	35·6	35·6
30	36 3	37 7	38·4	38·4	37 3	36 3	35 6	35 6	35 6	35·6	35 6	35·6	35 6	35 6	35 3
Mean	35 4	35 7	36 1	36·0	35 9	36 0	36·2	35 8	35 3	35 0	34 9	35.0	35 2	35·1	34 9
Mean†	35 4	35·7	35 9	35 6	35 4	35 6	36 0	35 8	35 5	35 6	35.7	35 6	35 7	35 6	35·5
Mean††	34 9	35 3	35 7	35 2	35 1	34 7	34·1	33 2	33 1	32·3	32 5	33 3	33·9	33·5	33·5

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record; day omitted for means.

TABLE 5

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

November — 2° plus Tabular quantities

Hours G.M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H M.	′	′	
35·2	35 7	35·5	35·5	35·1	35·1	35 1	35 1	35·5	35 6	02 05	36 5	10 50	33 6	2 9	1
35 8	35 8	35·8	35 1	35·1	35·4	35·1	35 5	35 7	36 2	05 30	38 6	20 06	35 0	3 6	2
35 9	35·9	35 9	35·3	35 6	35 2	34 8	35 2	35 9	35 8	06 55	38 0	21 04	34 5	3 5	3
35 9	35·9	35 9	35 9	35·8	35·6	35 6	35 6	35 9	36 0	06 30	38 0	09 06	35 2	2 8	4
35 7	35·7	35·8	35·7	35·6	35 7	35 6	35·7	35·7	35·5	01 24	36 2	10 12	34 6	1·6	5†
35 9	35 8	35 8	35·5	35 2	35·2	35 2	35 2	35 2	36 0	07 30	38 0	20 00	35 1	2 9	6
35·6	35·9	35·9	35 6	35·3	35 9	35 5	35 5	35 5	35 7	09 12	37 0	04 30	34 2	2 8	7†
35 8	35·9	35 9	35·9	35 6	35 5	35 9	35 9	35 9	36 0	05 56	37 6	03 47	35 2	2 4	8†
35·2	35·1	35·1	35 4	35 4	35·4	35 1	35 0	35·3	35 6	05 03	36 9	20 13	34 7	2 2	9
33 0	33·0	32 7	32·4	32·4	33 3	34 4	35 0	35 0	△	△	△	△	△	△	10††
34·1	33·7	33 7	33·6	33·0	33·0	32·7	33·6	33 7	34·1	03 43	37 2	21 06	31.9	5 3	11††
34·0	33 7	33·1	33·3	33·4	33·6	33·6	33 8	34 4	35 0	05 18	38 3	17 38	32 9	5 4	12
34 4	34 7	34·7	35·1	35 1	35 1	35 1	35 4	35 7	35 0	06 34	35 9	13 35	34 1	1 8	13
33·7	34 3	34·1	34·4	34·1	33·3	32·9	33 0	33 3	34 3	04 18	36 6	20 56	32 3	4 3	14††
33 0	33 3	33·7	34 1	34·1	33·7	33 8	34 4	34.7	33 0	01 50	36 5	09 15	28 7	7·8	15††
34·4	34·4	34·4	34·1	33·8	33·7	34·3	34·1	34 4	34·3	01 34	36 9	10 10	32 3	4 6	16††
34·3	34 3	34·3	34 3	34·3	34 3	34 3	34 3	34 3	35 1	07 03	37 1	19 18	34 0	3·1	17
35·0	35·0	35·0	35·0	35 0	34 3	34 3	34 7	35 0	34 7	11 55	35 8	06 56	33 9	1 9	18
35·0	35 4	35 1	35 0	35 0	35 1	35 3	35·6	35 7	35 6	06 25	37 2	13 50	34 9	2 3	19†
34·7	34·7	34·7	35 0	34 9	35·0	35 4	35 7	35 7	35 5	06 20	37·7	09 39	34 0	3·7	20
34 9	35 0	35 0	35 0	35·0	34 6	34·6	34 9	35 6	35 5	04 47	37 7	12 22	34.0	3 7	21
34·3	34·3	34 2	33·7	34 2	34 9	35·0	35 6	35 7	34 7	04 10	36 8	09 22	33 2	3 6	22
34 3	34 3	34 3	34·3	34·3	35·0	35 0	35·0	35 7	34 8	02 35	37 1	10 15	33 3	3 8	23
35·3	35·4	35·0	34·6	34 9	35·0	35 0	35 1	35.4	35 3	05 05	35 8	13 40	34 6	1 2	24
35 0	35·1	35·0	35·0	35 1	35 0	35 0	35 4	35 4	35 6	06 38	37·0	13 46	32.9	4·1	25
35 0	35 0	35 0	34·6	34·3	34·3	34·3	34·3	34 3	34 9	01 44	36 4	19 16	34 2	2 2	26†
35·4	35 4	35 4	35·1	35·3	35·0	34·6	34 6	35 0	35 8	06 45	37 2	14 36	34 9	2·3	27
35·1	35·0	35·0	35·0	35·0	35·0	35 0	35 0	35 4	35 6	06 45	37 8	08 46	34 9	2·9	28
35 6	35 6	35·6	35·6	35 6	34·9	35 5	35 5	35 6	35 9	01 42	37 8	09 38	35 5	2 3	29
35 6	35 6	35 6	35 6	35·3	35 6	35 6	35 6	35 6	36·0	01 53	38 7	14 37	35 2	3 5	30
35 0	35·0	35 0	34·9	34 8	34·8	34 8	35 0	35 2	35 3	.	..	..	.	3 3	Mean
35 4	35 6	35 5	35 4	35 2	35·3	35 3	35 4	35 4	.		.	.	..	..	Mean†
33 8	33 9	34 0	34 1	33 7	33·4	33 4	33 5	34·0	..	.	..	..	..	.	Mean††

† Five international quiet days.
†† Five international disturbed days.
△ Loss of record; day omitted for means.

TABLE 6

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

December — 2° plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·9	36 4	37 3	36·6	36·2	36·3	37 2	37·5	36·9	36·2	36 7	36 1	35 8	35·5	35·5
2	35 5	36 2	36 6	36 1	35·7	36·7	36 4	35·7	35·4	35 1	34 7	34·7	34·7	35·4	35 0
3	34 7	35 4	36 1	36 7	36 7	37·0	37 0	36·7	35 6	35·2	35·0	34 7	34·7	35 0	34·9
4	35 3	35·3	36 1	36 1	36 0	35·3	35·3	35 3	35 3	35·3	35·3	35 3	35 3	35·3	35·0
5	35·7	36·0	36 7	36·6	36 6	35 9	35·5	35·9	35·9	35·2	35·2	35 2	35·2	35·2	35·2
6	35 2	35·9	37 2	36 8	36 5	36·5	35·1	35·1	35·1	35·1	35 1	35·1	35·1	35·1	35·1
7	35 1	35 8	36 5	36·4	36 2	36 1	35·1	35 1	34·4	33·7	33·7	33·7	34·4	34 4	34 4
8	35·1	35 1	35 1	35·0	35 0	35 0	35·7	35·0	35·0	34·7	34·0	33·6	33 9	33·9	33 6
9	35·0	35·6	36·4	36·1	35 8	35·7	36·5	36·4	35·0	34 2	34 3	34 9	35·0	35·0	35·0
10††	35·7	36·0	37 1	37 0	36 6	36·2	36 2	36·2	35·6	35·5	35·5	34·9	35 0	35 0	34 8
11†	34 2	35 2	36 3	37 0	37 4	37·6	37·7	38·0	36·3	38·0	37·7	37 0	35·7	34·9	34 9
12	35·6	36·2	36·3	35·5	34·5	34 5	34·8	34·8	35·4	35·2	35·4	35·4	35 5	35·5	35·1
13††	34 8	35·5	36·2	35 8	36 1	35·8	35·8	36·4	36·2	35·4	34·7	34·4	34·1	34·0	34·0
14	35 4	35·3	35·8	35·8	36 1	36·1	35·8	35·4	35·4	35 4	34·7	34 7	34·7	34·7	34 7
15†	35·4	35·4	36·4	36·3	36 0	35·4	35·4	35·7	36·0	36·0	35·3	35 3	35·3	35·3	34 6
16†	35·7	36·0	36 6	36·3	35·9	34 5	34·5	34·6	34 2	34·2	34·6	35 3	35·3	35·0	34 6
17†	35·4	35·7	36·0	35·9	35·9	36 6	35·9	35·6	35·2	35·6	36·5	36·5	35·2	35·2	34·6
18	35·3	35·9	36·5	35·9	35 1	34 5	35·1	35·2	34·5	34·5	34 5	36·5	35·2	35·2	34 8
19	35·6	36·5	37·0	36 4	35 5	35·2	35 1	35·1	35·1	35 5	35·8	35·1	35·1	35·1	35 0
20	35·7	36 6	37 5	37·2	37·2	36·5	35·2	34·5	34 3	34·4	34·4	34·4	34 4	34 4	34·4
21†	36·1	36·5	37·8	37 2	37·2	37·2	36·6	36·4	36·5	36·5	35·8	35·1	35·1	35·2	35·1
22	35 9	36 2	36·5	36·6	35·9	34·9	34 5	35·2	35·9	36·6	35·9	35·2	34·5	35·1	34·9
23	35 2	35·9	36·5	35·9	35 9	36·6	37·3	37 3	36·6	36 5	35 9	34·8	34·5	34·5	34 5
24	35·1	35 2	36 2	36·2	36 6	37·0	38 0	38·0	37·9	37·2	35·9	34 8	35·2	35 1	34·5
25††	34·8	35·1	36·0	35·8	35 2	34·8	34·5	34·8	36·2	36·2	36 2	35·9	35·9	35·2	34 6
26	33·8	34 5	34 6	35·7	36 0	35·7	35·3	34·6	34·6	35·3	36·0	36·0	34·9	34·6	34·6
27	34·6	35 3	36·0	36·0	36 3	36·0	35·3	35·3	36·0	36·3	36·6	36·0	35·3	35 3	34 9
28††	34·6	34·6	35·2	36·0	36 0	35·3	35·3	34·9	33·5	33·9	34·6	34·6	34·0	34 6	34·6
29	35 3	36 0	36 8	36 0	36 0	35·3	35·3	35·2	35·3	35 2	34·6	34 6	34·6	34·6	34·6
30††	35·3	35·7	36·7	36 7	36 7	36·3	36·0	36·3	35·3	36·3	35·3	35·4	35·3	35·2	34·6
31	34·7	35·3	36·6	36·8	36·9	36·8	36·4	36·1	36·8	36·4	35 7	35·8	36 1	35·5	35·4
Mean	35·2	35·7	36 4	36 3	36·1	35·9	35·8	35.8	35·6	35·5	35·3	35·1	35·0	35·0	34 8
Mean†	35·4	35 8	36 6	36 5	36·5	36 3	36 0	36 1	36·0	36·1	36 0	35·8	35·3	35·1	34 6
Mean††	35·0	35 2	36 2	36·3	36·2	35·7	35·6	35·7	35·4	35·5	35·4	35·0	34 9	34·8	34·5

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record; day omitted for means.

Table 6

Hourly Values of Declination (Westerly), 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

December — 2° plus tabular quantities

Hours G.M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H M.	′		
35 5	35·1	34·9	34 8	34 8	34·8	34·8	35 1	35 5	35 9	06 36	37 9	18 18	34 7	3 2	1
35 1	35 3	35 4	34·7	34·7	34 0	34 0	34 3	34 3	35·2	05 36	36 9	20 20	33 9	3 0	2
35·2	35 3	35 3	35·0	35 0	35 2	34 7	34 9	35 3	35 5	04 45	37 3	11 35	34 6	2 7	3
35 0	35 3	35·3	35 3	35 3	34 7	34 7	35 3	35 3	35 3	02 50	36 6	20 25	34 6	2 0	4
35 2	35 2	34·9	34 9	34·9	34·8	34 9	35 1	35·2	35 5	02 43	36 9	17 03	34 5	2 4	5
34·8	35·1	35·0	34 5	34·5	34 3	34 3	34 5	34 5	35·2	02 35	37 2	20 55	34·0	3·2	6
35 0	35·1	35 1	35 1	35·1	35 1	35·1	35 1	35·1	35 0	02 25	36 6	09 18	33 4	3·2	7
34 3	34 3	34 7	34 9	34 9	35 0	35 0	35 0	35·0	34 7	05 51	35 8	10 51	33 3	2 5	8
35 0	35 0	35·1	35 0	35 0	35 0	35 0	35·0	35 6	35·3	06 10	37 0	08 42	33 9	3 1	9
34 9	34 9	34 2	34 2	34 2	33 9	33 9	33·8	33 8	35 2	02 16	37 7	22 39	33 5	4 2	10††
34 9	34 9	34 9	34 9	34 9	35 4	35 6	35 6	35 6	36·1	06 28	38 3	13 50	34 8	3·5	11†
34 8	34 8	34·7	34 1	34 1	33 4	33 4	33 1	33 7	34 8	01 43	36 4	21 55	32 7	3·7	12
34 1	34·0	34 0	34 4	34 4	34 7	34 7	34 7	35 3	35 0	07 17	36 7	13 19	33·4	3·3	13††
34 7	34·7	34 7	34·7	34 7	34 7	34 7	34 8	35·1	35·1	04 14	36 4	11 10	34 4	2·0	14
34 6	34·6	34·6	34·6	34 6	34 6	34·6	35 2	35 3	35 3	02 40	36·7	14 05	34 5	2·2	15†
34 6	34·6	34·6	34 6	34 9	34·9	34 6	35·2	35·3	35·0	02 17	36 7	08 21	33 9	2·8	16†
34 5	34·6	34 8	34 8	34·8	34 5	34 5	35 1	35 2	35 4	04 54	36 7	14 30	34 4	2 3	17†
34 5	34 5	34 5	34·5	34 8	35·1	35 1	35 2	35·2	35·0	01 46	36 6	08 38	34·4	2 2	18
35 1	35 1	35 1	35·1	35·0	34·5	34·5	35·1	35 1	35 3	01 27	37·2	21 38	34 4	2·8	19
34 4	35 0	34·4	34·4	34 4	35·0	35 1	35·5	35·8	35 2	02 11	37 5	08 00	33 8	3·7	20
35 1	35·1	35 1	35 1	35 1	35·2	35·1	35 5	35 8	35 9	02 25	37 9	11 18	34 8	3·1	21†
34 8	34·5	34 8	34·8	35 2	35·2	35 2	35 2	35 2	35 4	02 40	36 7	05 31	34 2	2·5	22
35 2	35 2	35·2	35·2	34·8	34·5	34 5	35·2	35·2	35·5	07 54	37·6	14 08	34 2	3 4	23
34 5	34·5	35·1	34 6	34 8	34 5	34 5	34 5	34 5	35·6	07 23	38·1	19 58	34 4	3 7	24
34 6	34 5	34 5	33 8	33·5	33 7	33·4	33·7	33 8	34·9	10 24	36 6	21 37	33 1	3 5	25††
34 6	34 6	34·6	34 6	34·6	34 6	34·6	34·6	34 6	34 9	10 32	36 6	00 06	33 7	2·9	26
34 6	34 6	34 7	33 9	33·2	33 1	33 8	33 9	34 5	35·1	09 48	36 7	19 54	32 5	4 2	27
35 2	34 0	34 6	34 6	34 6	34·6	35 2	35 3	35 3	34 8	07 24	36 3	07 55	33 2	3 1	28††
34 6	34 7	34 7	34·6	34·6	34·6	34·6	34 9	35·2	35 1	02 20	37 4	11 47	34 3	3 1	29
34·6	34 6	34 6	34·6	34 6	34·3	34·0	34 3	34·6	35·3	02 26	37 4	21 30	33·9	3 5	30††
35·4	35 4	35 3	35·4	35·3	34·7	35·0	35·0	34 8	35 7	08 08	36 9	19 12	34 6	2·5	31
34 8	34·8	34 8	34·7	34 7	34 6	34·6	34·8	35 0	35 3	..	..	.	.	3 0	Mean
34 7	34 8	34·8	34 8	34 9	34 9	34 9	35·3	35·4	.	..	..	.		.	Mean†
34 7	34 4	34 4	34·3	34·3	34·2	34 2	34 4	34·4	.	..	..	.	..	..	Mean††

† Five international quiet days.
†† Five international disturbed days.
△ Loss of record; day omitted for means.

Table 7

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

July — 39,000 γ plus tabular quantities

Date	Hours G.M.T. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	471	478	485	504	507	543	545	559	534	509	490	482	481	482	475
2	478	486	496	510	537	560	592	584	554	528	499	488	478	475	470
3	478	482	487	500	517	552	562	551	524	506	485	475	465	468	473
4	473	475	477	492	513	531	536	542	532	528	525	511	494	487	482
5	490	493	499	513	536	564	587	585	574	550	524	494	481	486	491
6	481	484	494	510	524	546	550	558	547	546	526	503	490	489	490
7†	485	496	514	541	565	579	589	580	562	535	504	485	485	497	498
8	489	499	511	528	558	568	584	591	575	534	503	490	493	501	498
9	486	485	495	517	580	555	580	592	559	520	486	470	464	473	479
10	474	477	486	510	550	577	580	582	562	535	510	494	492	496	496
11	488	491	505	544	566	578	598	594	566	528	487	467	469	481	484
12	479	488	498	518	549	555	549	556	567	557	536	509	489	484	487
13††	478	473	475	499	547	596	606	593	575	549	530	510	498	497	494
14	438	455	456	471	514	539	550	544	555	552	535	506	481	475	471
15	471	474	481	507	537	566	574	570	564	551	526	507	494	488	481
16	474	482	498	515	540	572	571	578	572	556	539	516	496	491	485
17†	481	487	500	522	551	581	580	578	562	538	511	495	492	493	492
18†	484	490	499	520	537	554	536	536	558	549	537	523	510	501	493
19	480	501	526	542	569	601	609	590	563	540	527	517	513	509	504
20	485	492	494	515	538	568	596	589	578	559	535	512	493	482	480
21†	478	486	505	533	569	587	586	560	528	508	505	500	497	494	489
22†	492	502	522	550	584	614	624	618	610	537	505	490	492	497	499
23	507	523	531	546	571	601	618	624	612	586	557	530	519	527	523
24††	461	466	480	518	564	612	615	593	534	467	435	440	447	467	463
25††	472	477	486	500	518	546	556	547	547	523	485	434	420	422	410
26††	450	464	476	497	524	523	539	502	506	466	454	453	451	455	454
27	469	465	463	487	525	533	545	555	536	515	492	477	475	471	467
28††	467	476	482	491	533	570	586	591	579	567	527	497	487	478	467
29	477	474	476	495	529	549	584	556	537	514	503	484	477	472	464
30	473	478	486	498	△	547	569	583	564	545	530	514	495	483	485
31	485	489	500	521	546	566	566	561	541	525	515	504	477	455	460
Mean	477	484	493	514	543	566	576	572	557	533	510	492	483	483	481
Mean†	484	492	508	533	561	583	583	574	564	533	512	499	495	496	494
Mean††	466	471	480	501	537	569	580	565	548	514	486	467	461	464	458

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record; day omitted for means.

Table 7

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

July — 39,000 γ plus tabular quantities

Hours G M T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H. M.	γ	γ	
466	466	473	475	476	474	479	480	477	492	06 58	572	16 11	463	109	1
467	468	474	474	475	484	479	478	478	501	06 24	612	15 48	463	149	2
474	474	476	477	479	479	477	474	474	492	05 30	586	12 18	458	128	3
483	483	483	483	482	482	484	487	488	498	07 00	548	02 11	471	77	4
491	491	490	489	490	489	487	483	482	511	06 35	592	11 55	478	114	5
486	485	484	481	479	482	482	483	482	503	06 54	566	19 04	478	88	6
491	485	482	482	484	488	490	492	490	512	05 48	590	17 00	480	110	7†
496	493	495	500	498	489	483	481	478	514	06 24	600	23 23	475	125	8
476	474	472	472	473	472	472	471	471	500	06 42	606	12 14	462	144	9
493	492	492	493	493	492	486	484	479	509	06 42	597	00 02	473	124	10
482	482	480	479	479	480	482	482	481	507	05 42	607	11 03	465	142	11
485	485	484	483	481	486	491	487	488	508	08 17	578	00 02	477	103	12
498	479	460	447	455	453	449	445	442	502	06 02	610	23 57	432	168	13††
467	466	465	466	470	470	477	477	472	491	08 34	562	00 04	432	130	14
476	476	476	476	474	474	474	477	476	503	06 18	580	00 20	469	111	15
481	475	478	480	480	480	481	482	482	509	07 18	585	00 20	473	112	16
489	489	487	487	487	486	492	487	486	511	05 07	586	00 10	480	106	17†
485	481	478	483	478	483	484	482	480	507	06 24	568	17 18	477	91	18†
493	497	492	487	492	493	496	492	482	521	05 04	619	23 26	474	145	19
481	483	482	477	479	487	482	481	480	510	06 02	614	18 24	475	139	20
488	488	488	488	488	486	487	488	488	509	05 40	594	00 14	476	118	21†
498	500	496	491	489	494	494	494	497	525	06 48	628	11 02	486	142	22†
513	501	493	480	475	468	455	448	456	528	07 23	631	21 40	443	188	23
462	467	465	464	466	469	470	470	472	490	05 19	653	09 56	425	228	24††
459	452	456	457	457	461	472	470	461	479	05 35	569	13 58	407	162	25††
450	441	446	459	455	459	463	462	471	472	05 58	580	16 10	437	143	26††
469	475	476	477	476	475	473	477	468	489	06 38	563	02 02	459	104	27
469	476	479	472	471	470	485	477	485	503	05 54	595	14 19	461	134	28††
465	455	462	463	469	468	468	472	472	491	06 16	611	16 00	453	158	29
480	478	475	475	473	477	486	485	483	△	△	△	△	△	△	30
456	461	470	471	473	475	476	475	472	498	05 23	574	13 16	449	125	31
480	478	478	477	477	477	479	478	477	503	..	.		.	131	Mean
490	489	486	486	485	487	489	489	488	.	..	..	..	.	.	Mean†
468	463	461	460	461	462	468	465	466	.	..	..		..	..	Mean††

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record; day omitted for means.

TABLE 8

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

August — 39,000 γ plus tabular quantities

Date	Hours G.M.T. 00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	472	472	476	491	514	546	562	568	564	549	530	510	498	489	477
2	478	484	496	513	529	550	566	567	556	533	518	511	492	478	476
3	485	490	499	527	559	587	604	592	577	576	559	526	502	484	481
4†	480	484	488	519	549	566	568	564	551	533	524	523	516	506	498
5†	492	495	505	518	531	535	548	548	553	554	539	520	506	502	500
6	496	504	520	517	572	593	598	597	595	586	565	545	530	521	515
7†	487	493	501	523	546	566	584	599	603	602	571	543	516	506	502
8	504	506	516	530	551	568	599	591	562	556	536	521	509	507	501
9	473	479	490	509	540	556	553	549	538	540	514	504	466	452	458
10	465	468	477	508	517	541	568	579	567	547	525	500	484	484	478
11††	491	528	540	581	606	636	608	608	578	534	513	476	471	473	456
12	447	441	443	475	509	555	582	547	520	512	500	465	463	452	427
13	452	453	454	472	502	541	562	574	558	543	528	509	492	486	475
14	463	461	452	470	513	558	587	574	562	558	544	523	501	485	473
15	473	475	485	512	558	593	608	604	587	558	528	509	501	501	499
16	478	479	487	506	545	577	598	604	589	571	554	538	519	504	491
17	486	491	494	512	546	603	546	493	531	512	515	488	467	470	467
18	471	479	493	513	544	574	591	581	560	536	525	517	507	496	488
19†	478	482	494	528	569	595	609	616	602	587	567	541	517	500	491
20†	487	491	510	531	572	603	600	590	565	541	528	523	515	505	498
21	490	502	530	570	610	644	651	622	584	546	547	548	530	521	474
22	470	464	472	504	551	591	590	573	549	521	499	497	510	511	498
23††	463	470	485	505	550	580	578	582	569	530	492	477	469	449	420
24††	422	445	449	462	525	560	546	553	532	532	472	440	429	406	361
25††	415	424	438	468	519	553	564	561	542	525	466	433	426	428	410
26††	433	415	420	459	490	557	584	579	553	521	485	460	456	445	436
27	442	443	448	476	528	565	573	563	543	509	489	460	453	449	443
28	448	452	465	486	523	562	583	597	589	566	531	501	492	482	466
29	461	457	454	482	529	601	642	645	600	553	508	472	465	475	464
30	459	461	472	505	547	591	603	610	582	556	531	492	480	469	458
31	469	470	484	516	557	586	611	617	600	565	537	481	460	461	461
Mean . .	469	473	482	506	542	575	586	582	566	547	524	502	488	481	469
Mean† .	485	489	500	524	553	573	582	583	575	563	546	530	514	504	498
Mean†† . .	445	456	466	495	538	577	576	577	555	528	486	457	450	440	417

† Five international quiet days.
†† Five international disturbed days.
^ Loss of record, day omitted for means.

4—4 D.D.G. Obs, Kodaikanal/57

Table 8

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

August — 39,000 γ plus tabular quantities

15	16	17	18	19	20	21	22	23	Mean	Maximum Time	Maximum Mag.	Minimum Time	Minimum Mag	Range Mag	Date
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M	γ	H. M	γ	γ	
475	476	479	479	479	482	483	480	478	501	06 40	571	01 34	468	103	1
479	479	479	487	488	485	483	484	487	504	06 38	571	13 30	474	97	2
474	476	481	484	486	485	486	484	481	516	06 16	609	15 14	472	137	3
493	489	486	485	487	489	489	493	493	511	05 56	571	00 32	479	92	4†
497	496	495	496	496	497	496	494	495	513	08 32	560	00 06	491	69	5†
508	502	502	501	498	495	495	494	490	531	05 50	601	00 15	489	112	6
502	502	502	501	499	504	506	508	507	528	07 21	606	00 02	487	119	7†
490	484	461	455	451	457	468	476	473	511	06 10	610	19 22	448	162	8
465	468	447	456	461	466	466	472	461	491	05 20	568	17 05	438	130	9
477	479	479	475	473	475	475	482	488	500	06 35	583	00 08	464	119	10
458	453	447	442	431	424	434	445	453	504	06 50	691	19 55	421	270	11††
446	451	451	447	446	447	463	465	458	476	05 53	600	14 02	419	181	12
471	474	472	470	468	471	478	474	467	494	06 34	582	01 50	449	133	13
471	471	471	470	470	469	469	468	471	498	06 07	599	02 14	448	151	14
493	492	489	486	481	481	483	484	481	515	05 51	610	00 38	473	137	15
487	482	473	480	485	487	491	491	490	517	07 08	606	17 08	470	136	16
463	474	471	468	469	469	470	471	472	494	04 55	623	06 38	449	173	17
482	480	480	479	477	475	476	477	477	507	06 19	597	00 06	469	128	18
488	486	486	485	485	485	486	488	488	523	06 54	620	00 34	477	143	19†
493	491	488	488	488	490	491	491	490	520	05 06	613	00 28	485	128	20†
458	463	460	472	472	472	468	477	472	524	05 42	670	15 30	449	221	21
492	486	483	477	468	465	461	466	466	503	05 39	602	20 56	460	142	22
416	432	437	443	434	434	450	466	451	483	05 19	602	14 38	404	198	23††
356	341	356	366	394	410	406	414	418	441	04 48	578	15 58	327	251	24††
406	425	429	440	442	434	453	446	437	462	06 02	584	14 35	401	183	25††
431	428	428	429	436	436	441	439	440	467	06 18	602	02 44	402	200	26††
437	443	449	449	451	452	458	455	453	476	06 24	588	14 36	435	153	27
456	461	462	460	459	459	462	463	462	495	08 23	606	00 28	443	163	28
452	461	460	461	457	460	461	463	462	498	06 38	653	14 54	447	206	29
459	458	453	460	465	469	470	472	470	500	06 54	616	16 58	451	165	30
455	444	419	417	435	444	445	449	453	493	06 58	621	17 35	405	216	31
465	466	464	465	466	467	470	472	470	500					155	Mean
495	493	491	491	491	493	494	495	495	.		.	..		..	Mean†
413	416	419	424	427	428	437	442	440	..	.	.			.	Mean††

† Five International quiet days.
†† Five International disturbed days.
Δ Loss of record , day omitted for means

TABLE 9

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

September — 39,000 γ plus tabular quantities

Date	Hours G.M.T.														
	0	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	452	463	485	517	548	566	553	544	526	511	498	482	468	453	457
2††	466	473	490	576	621	622	511	378	478	372	252	267	335	347	346
3††	406	414	423	433	452	482	464	457	437	404	377	368	360	360	382
4	416	430	451	484	518	547	546	540	511	485	469	451	445	439	427
5	435	435	465	521	566	611	636	632	586	530	486	472	481	484	477
6	460	455	472	520	577	599	624	624	573	530	487	469	450	423	412
7	449	443	451	484	526	584	620	601	596	563	530	512	504	495	484
8††	469	467	482	△	△	△	△	△	△	△	△	△	△	△	△
9	△	△	△	△	477	511	550	557	513	474	440	429	414	411	402
10	436	431	445	486	528	556	569	559	563	544	525	500	481	469	466
11	458	453	457	473	531	560	566	533	532	517	497	476	458	453	453
12	465	471	479	508	545	568	584	593	557	544	533	518	511	497	486
13	457	444	458	510	549	502	536	557	538	516	506	487	477	465	457
14†	451	452	472	517	561	597	611	601	587	557	531	507	495	485	480
15	465	468	480	515	564	601	614	605	581	550	531	520	517	506	496
16	482	484	511	560	599	625	623	594	568	548	538	532	523	511	499
17†	469	472	503	541	591	611	622	588	560	543	523	504	502	495	484
18†	469	467	485	523	569	602	615	606	577	557	545	536	516	508	498
19†	484	496	533	561	618	658	△	653	605	562	540	529	525	520	517
20	△	△	△	△	615	642	638	581	575	562	570	567	555	525	502
21††	469	472	477	522	545	566	548	526	507	500	480	476	470	440	436
22††	455	459	488	526	596	625	611	570	502	453	434	435	421	441	433
23	444	450	473	520	571	604	631	594	562	522	496	468	459	456	454
24	458	459	486	538	596	628	623	601	582	552	520	502	495	485	473
25	473	467	490	519	550	590	611	605	584	557	535	517	504	495	484
26	479	468	474	508	550	576	586	564	529	504	481	475	475	469	460
27	471	473	487	511	554	595	610	606	583	556	531	510	482	459	456
28	463	457	465	490	520	538	550	546	539	524	515	507	499	489	478
29†	478	472	474	501	546	587	608	599	580	560	547	537	530	517	510
30	478	475	493	529	579	610	648	631	612	565	533	510	508	483	497
Mean	458	458	474	513	556	579	589	571	552	522	496	482	476	466	461
Mean†	467	466	484	521	567	599	614	599	576	552	537	522	511	501	493
Mean††	449	455	470	514	554	574	534	483	481	432	386	387	397	397	399

† Five International quiet days
†† Five International disturbed days
△ Loss of record ; day omitted for means.

TABLE 9

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

September — 39,000 γ plus tabular quantities

Hours G.M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
455	452	455	455	457	469	471	473	471	487	04 36	573	13 10	447	126	1
352	344	357	379	388	390	394	400	404	414	04 30	681	10 00	238	443	2††
374	375	388	393	398	409	415	415	414	408	04 19	524	13 00	354	170	3††
431	433	436	438	440	444	442	441	440	463	05 16	557	00 02	415	142	4
473	474	468	464	463	464	465	465	468	501	06 26	644	00 44	429	215	5
413	417	423	433	439	452	454	452	452	484	06 30	644	14 10	409	235	6
479	473	470	470	468	470	470	470	470	503	Δ	Δ	01 04	440	Δ	7
Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	8††
403	412	413	419	433	441	439	436	439	Δ	Δ	Δ	Δ	Δ	Δ	9
460	456	457	464	457	456	453	455	458	486	07 42	579	01 02	425	154	10
453	452	454	457	458	461	462	463	465	481	05 46	573	01 40	451	122	11
484	480	479	477	472	471	462	463	467	505	06 48	599	23 58	449	150	12
456	453	456	452	447	450	450	451	453	480	07 24	578	18 36	435	143	13
476	473	471	471	471	469	469	470	471	506	05 58	617	00 44	449	168	14†
493	490	488	487	485	485	484	481	481	516	05 50	619	00 18	461	158	15
488	465	451	456	463	464	465	473	473	516	05 22	631	17 12	447	184	16
477	473	473	474	474	475	476	476	474	512	06 10	633	00 56	467	166	17†
495	491	490	487	487	489	490	490	489	520	06 10	618	00 46	463	155	18†
515	514	512	512	511	512	512	512	512	Δ	Δ	Δ	Δ	Δ	Δ	19†
492	454	413	437	451	458	462	467	472	Δ	Δ	Δ	Δ	Δ	Δ	20
443	442	448	447	446	457	459	466	459	479	04 54	590	13 36	428	162	21††
428	447	438	443	455	445	447	448	448	477	04 42	643	11 42	408	235	22††
455	460	467	465	466	465	463	462	461	495	05 22	664	00 12	442	222	23
468	471	471	473	475	475	479	474	477	511	05 28	639	00 42	454	185	24
478	473	474	476	476	480	477	471	478	511	06 05	619	01 07	464	155	25
459	462	461	462	464	464	468	470	471	491	05 36	594	15 00	457	137	26
450	455	454	456	455	464	464	466	466	501	06 10	612	14 44	445	167	27
472	467	470	474	476	475	477	482	482	494	05 54	553	01 23	453	100	28
500	490	487	479	483	483	486	486	488	518	06 11	610	01 24	470	140	29†
493	489	488	489	488	486	481	482	484	522	06 04	661	00 32	471	190	30
458	456	457	459	460	462	462	463	464	492					177	Mean
487	482	480	478	479	479	480	481	481							Mean †
399	402	408	416	422	425	429	432	431	..						Mean ††

† Five International quiet days.
†† Five International disturbed days
Δ Loss of record, day omitted for means

TABLE 10

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

October — 39,000 γ plus tabular quantities

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	482	481	497	534	553	577	584	561	544	529	516	515	478	456	446
2††	474	480	503	533	581	625	598	572	518	468	428	451	459	413	385
3	457	464	477	516	556	589	583	560	543	490	482	489	477	441	446
4	455	468	490	541	588	6 6	620	597	529	498	495	507	509	496	484
5	464	466	499	562	612	653	662	649	569	479	435	460	486	487	479
6	461	465	489	536	589	621	653	644	610	557	518	492	487	480	469
7	471	472	482	524	575	612	628	596	574	545	525	514	507	492	475
8	467	469	489	520	572	593	599	583	566	541	526	517	510	498	490
9	478	481	499	531	570	596	590	575	554	528	510	512	508	490	487
10	476	476	493	523	563	591	605	600	579	556	540	530	520	502	494
11	479	475	491	525	563	594	614	605	579	550	535	529	517	499	591
12	483	480	487	506	565	602	616	609	585	569	554	533	519	509	502
13†	482	483	502	△	△	637	643	625	598	568	547	532	522	510	503
14†	491	494	520	560	600	628	641	6 9	599	571	549	535	525	512	502
15†	488	491	517	559	606	640	653	633	601	572	550	537	526	514	505
16	500	505	528	566	603	641	672	646	602	548	516	507	509	504	496
17†	496	498	512	538	574	599	614	612	588	572	558	545	531	518	511
18	501	503	531	582	606	618	611	594	576	554	540	533	528	517	511
19	510	514	534	579	615	650	643	622	588	562	544	532	519	513	511
20††	507	510	538	△	605	620	602	545	509	482	461	452	425	393	388
21††	443	445	459	466	506	531	519	534	519	487	470	448	416	396	399
22	443	447	470	502	515	545	563	563	556	538	517	503	490	467	449
23	451	449	482	537	555	577	579	555	525	512	501	491	471	446	445
24	464	467	494	537	566	595	600	583	563	542	525	514	503	490	484
25†	479	482	502	536	592	634	652	630	588	548	520	511	516	509	502
26††	493	509	525	569	612	640	650	620	600	575	547	532	521	511	492
27††	410	399	402	426	443	443	470	490	474	453	438	425	417	400	406
28	420	427	461	496	519	536	529	507	484	478	461	445	417	405	414
29	443	452	467	505	537	564	573	563	550	530	499	477	471	462	453
30	452	451	472	516	552	586	594	588	552	519	499	483	469	452	433
31	465	480	509	538	572	595	605	599	575	533	513	505	491	479	470
Mean .	469	472	492	530	568	596	604	590	562	531	511	502	493	478	470
Mean† .	489	491	513	548	593	625	640	624	594	566	544	532	525	513	505
Mean†† . .	455	458	470	499	536	560	559	554	528	496	471	464	453	430	421

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record ; day omitted for means.

TABLE 10

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

October — 39,000 γ plus tabular quantities

Hours G M T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ		H M	γ	H. M.	γ	γ	
454	444	447	461	465	475	479	478	472	497	05 44	604	16 22	441	163	1
406	418	422	443	443	438	457	455	454	476	05 18	658	14 12	380	278	2††
449	459	460	459	446	448	455	453	449	485	04 48	614	13 08	435	179	3
476	476	476	469	468	465	468	471	469	505	05 10	626	00 02	457	169	4
476	476	474	472	466	464	461	464	462	507	06 35	678	09 58	427	251	5
462	464	459	460	468	474	474	469	462	511	06 24	678	15 02	454	224	6
465	468	475	479	474	468	472	478	472	510	06 10	635	15 36	459	176	7
487	482	479	473	475	471	484	481	481	511	05 21	617	00 39	460	157	8
485	483	480	477	475	476	479	484	480	510	05 33	610	19 18	470	140	9
491	488	484	483	482	484	485	483	480	517	05 44	608	00 32	472	136	10
494	492	489	488	488	487	486	485	485	518	06 12	622	01 06	473	149	11
499	494	492	489	492	492	489	494	488	523	06 10	592	01 22	477	115	12
500	499	497	497	498	499	493	495	494	△	△	△	△	△	△	13†
499	496	495	496	496	494	492	491	491	533	05 59	645	23 40	488	157	14†
501	498	497	497	499	499	500	502	502	537	05 40	654	00 37	486	168	15†
495	494	494	495	495	497	498	498	496	534	05 56	681	18 38	493	188	16
501	496	497	496	494	493	496	496	500	531	06 54	622	20 20	492	130	17†
508	507	506	505	507	510	510	512	512	537	04 34	625	00 27	497	128	18
505	496	492	497	501	504	508	510	509	540	05 36	655	16 39	488	167	19
385	363	389	386	398	398	413	414	443	△	△	△	△	△	△	20††
396	409	415	412	418	432	444	441	440	452	06 52	554	14 40	357	197	21††
442	434	428	430	438	440	443	450	453	480	06 32	574	16 56	388	188	22
444	436	439	444	447	455	463	472	468	485	06 14	584	16 14	434	150	23
482	481	481	484	482	484	485	483	481	511	05 46	610	00 30	461	149	24
497	497	493	492	491	490	490	491	491	526	05 42	655	00 32	476	179	25†
440	424	427	441	401	370	393	381	381	502	06 24	654	20 30	353	301	26††
414	420	425	421	426	419	424	420	425	429	07 30	525	01 25	385	140	27††
421	428	432	439	443	445	449	445	440	456	05 46	551	12 52	396	155	28
448	440	433	443	443	449	460	459	456	482	06 10	577	17 16	429	148	29
442	458	452	451	456	459	463	465	464	489	06 30	600	14 00	427	173	30
470	468	470	473	477	477	477	479	473	508	06 26	580	00 02	464	116	31
467	466	466	468	467	468	472	472	470	504	.	.	.	..	171	Mean
500	497	496	495	495	494	495	495	496	..	..	.	..	.	..	Mean†
414	418	422	429	422	415	430	424	425	..			..		..	Mean††

† Five International quiet days.
†† Five International disturbed days
△ Loss of record ; day omitted for means

TABLE 11

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

November — 39,000 γ plus tabular quantities

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	480	482	500	529	556	583	581	589	580	560	537	527	522	505	486
2	488	503	535	572	607	634	634	628	609	580	552	525	525	518	504
3	478	488	499	526	561	587	581	591	558	535	497	488	485	479	476
4	472	465	485	529	573	626	650	641	604	567	541	523	511	502	494
5†	489	490	509	543	561	588	601	595	575	551	537	529	521	515	508
6	502	504	516	537	555	594	618	636	628	599	565	542	521	513	504
7†	480	481	485	505	532	569	602	616	616	593	561	531	517	504	495
8†	484	484	489	504	536	580	606	610	605	592	569	546	528	511	499
9	486	486	506	535	570	591	600	600	595	588	561	542	525	514	510
10††	494	504	514	507	466	496	549	539	518	503	476	448	423	399	367
11††	412	397	392	402	472	448	414	432	422	401	372	391	396	381	385
12	442	441	436	481	515	537	535	507	473	426	436	439	443	432	389
13	411	420	453	480	493	507	515	520	512	497	476	454	439	425	434
14††	450	459	497	519	544	556	517	481	486	469	458	459	437	418	419
15††	394	430	398	409	400	362	362	352	370	336	313	336	325	344	341
16††	413	424	449	432	446	468	526	488	508	475	430	426	429	425	425
17	442	464	492	518	520	521	537	529	511	494	494	501	492	464	448
18	427	437	455	480	499	524	513	503	493	472	480	473	460	450	452
19†	452	461	490	525	564	589	598	584	563	544	512	500	496	485	471
20	477	490	521	551	582	606	610	602	572	537	519	508	499	497	479
21	453	462	485	512	530	543	546	548	533	507	475	453	428	412	424
22	450	454	469	509	531	547	565	572	545	511	490	479	473	456	430
23	435	423	434	462	495	520	534	511	481	487	467	437	414	409	409
24	442	446	460	479	509	543	543	550	544	533	517	494	482	473	462
25	451	463	479	500	535	556	564	557	535	519	505	487	491	465	434
26†	460	466	474	477	504	523	530	532	531	523	512	504	497	487	479
27	471	480	505	530	549	563	563	554	541	526	519	512	502	493	489
28	448	420	453	479	529	551	569	547	514	494	489	486	477	467	466
29	472	487	499	△	△	538	535	535	534	529	526	524	520	512	500
30	483	513	554	574	577	575	562	550	549	549	549	525	511	491	480
Mean	457	463	480	504	528	548	556	550	537	516	497	485	475	463	454
Mean†	473	476	488	511	539	570	587	587	578	561	538	522	512	500	490
Mean††	433	443	450	454	467	466	474	458	461	437	410	412	402	393	387

† Five International quiet days.
†† Five International disturbed days
△ Loss of record ; day omitted for means.

TABLE 11

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

November — 39,000 γ plus tabular quantities

Hours G.M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M.	γ	H M	γ	γ	
472	465	482	481	461	482	463	482	486	513	06 45	592	16 14	458	134	1
493	488	492	486	490	488	490	491	483	534	05 28	658	23 34	463	195	2
482	481	479	478	487	485	479	482	480	507	06 50	610	18 02	473	137	3
493	494	492	489	489	493	492	490	486	525	06 30	675	23 02	483	192	4
506	504	500	499	497	500	500	506	503	526	05 06	607	00 48	488	119	5†
493	482	469	475	484	487	489	483	483	528	07 26	644	17 26	464	180	6
489	489	489	488	488	492	490	490	486	520	07 37	623	00 54	477	146	7†
497	495	492	492	492	491	492	492	490	524	06 54	612	01 08	480	132	8†
504	492	482	475	477	486	508	509	509	527	06 37	610	18 36	474	136	9
372	377	381	360	352	385	411	414	420	445	05 40	569	18 59	345	224	10††
373	373	382	373	372	388	403	402	402	399	03 41	503	10 00	328	175	11††
377	366	334	365	372	373	385	391	395	429	05 18	574	17 14	328	146	12
440	441	441	446	446	447	446	448	447	460	06 52	525	00 18	410	115	13
429	425	419	425	433	405	404	397	403	455	05 15	576	22 19	385	191	14††
356	377	390	406	408	391	395	392	402	375	08 02	492	09 59	297	195	15††
416	415	422	425	423	435	436	438	437	442	04 39	571	10 10	379	192	16††
430	428	431	416	430	430	436	433	427	470	06 13	520	17 46	409	111	17
446	447	454	457	454	453	457	455	451	466	04 52	536	00 50	423	113	18
470	471	471	473	473	475	477	477	475	504	05 32	603	00 01	450	153	19†
453	435	453	454	463	460	465	470	462	507	06 37	617	15 59	428	189	20
440	444	446	444	455	462	459	466	455	474	04 46	560	13 08	404	156	21
428	402	385	392	401	425	422	419	433	466	06 34	582	16 54	383	199	22
407	398	406	414	429	441	445	440	437	447	06 20	546	16 40	389	157	23
470	457	435	421	428	444	449	448	449	478	06 50	554	18 19	412	142	24
438	453	451	462	470	468	465	466	466	487	06 38	568	13 42	402	166	25
477	476	476	473	472	475	473	472	471	490	05 58	535	02 36	457	78	26†
487	485	482	483	488	472	456	453	452	502	05 05	568	23 33	434	134	27
471	469	470	475	472	466	466	466	468	484	06 20	602	01 10	406	196	28
498	493	487	481	486	475	466	458	470	△	△ △	△	△ △	△	△	29
481	482	487	485	481	479	479	481	478	516	04 42	585	15 25	476	109	30
451	449	448	449	452	454	456	457	456	483	.				156	Mean
499	487	486	485	484	487	486	487	485				.	.	.	Mean†
389	393	399	398	398	401	410	409	413	.				.	..	Mean ††

† Five International quiet days
†† Five International disturbed days
△ Loss of record ; day omitted for means.

TABLE 12

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centered at the full hours of Greenwich Mean Time)

December — 39,000 γ plus tabular quantities

Date	Hours G.M.T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	481	494	514	530	547	568	579	580	568	548	528	520	515	507	495
2	478	496	500	509	522	565	593	604	591	568	539	520	505	493	495
3	481	488	506	525	550	577	584	578	573	550	529	507	495	490	487
4	482	488	503	524	554	577	600	615	611	584	553	530	507	502	497
5	497	505	523	556	574	573	580	575	558	536	529	528	523	506	498
6	483	494	516	537	578	582	568	538	529	526	520	524	521	506	493
7	478	479	494	517	558	600	608	619	608	584	556	536	524	509	507
8	487	487	492	491	495	5 9	539	575	568	556	524	497	484	474	481
9	484	492	506	514	5 9	514	529	534	537	536	531	518	512	496	489
10††	480	485	516	529	530	537	544	531	524	522	508	487	458	437	438
11†	470	463	468	478	487	501	514	545	561	559	538	518	502	492	493
12	489	496	510	523	535	550	554	556	566	559	541	530	518	500	498
13††	443	454	469	486	503	510	529	554	536	525	518	498	475	454	452
14	468	466	482	486	526	544	554	567	561	556	524	504	502	494	488
15†	480	486	502	515	542	559	567	555	548	538	521	502	491	486	483
16†	480	483	499	518	537	548	549	548	534	528	526	521	510	497	492
17†	488	491	512	534	537	572	570	550	541	540	507	521	510	505	503
18	498	516	547	571	589	595	590	572	566	532	523	520	520	512	493
19	501	515	542	566	589	591	615	623	602	589	568	541	510	519	515
20	504	515	539	566	600	630	600	573	549	537	531	521	508	501	503
21†	505	509	520	545	572	610	631	638	636	616	589	559	542	531	528
22	512	510	506	513	519	534	546	590	625	637	602	563	529	510	501
23	511	515	529	545	560	591	605	614	574	597	576	552	529	519	514
24	495	495	505	518	552	565	574	587	613	616	592	558	533	525	521
25††	499	501	509	514	533	544	550	572	601	589	565	564	513	471	474
26	474	474	486	483	492	483	517	512	526	533	542	524	510	500	495
27	490	495	501	497	511	527	534	549	559	563	560	537	512	489	475
28††	457	463	467	492	494	510	522	537	509	519	541	527	509	475	466
29	479	494	528	515	526	537	538	542	550	538	525	512	502	490	488
30††	488	498	527	557	587	609	628	638	587	552	517	510	483	484	487
31	483	490	505	528	539	546	552	552	548	539	527	518	507	505	504
Mean	485	492	507	522	541	557	567	572	566	557	540	525	508	496	492
Mean†	485	486	500	518	535	558	566	567	564	556	536	524	511	502	500
Mean††	465	480	498	516	529	542	555	566	551	541	530	517	488	464	463

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record ; day omitted for means.

5†—4 D. D. G. Obs. K. Kanal/57

TABLE 12

Hourly Values of Horizontal Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

December — 39,000 γ plus tabular quantities

Hours G M.T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M	γ	H M	γ	γ	
486	488	487	488	490	487	485	489	488	515	05 36	585	23 56	475	110	1
492	488	492	475	484	483	479	478	478	514	06 33	613	18 21	467	146	2
482	487	481	481	484	490	497	489	486	512	05 46	593	18 10	479	114	3
495	496	492	499	499	493	490	498	496	524	07 14	628	00 04	482	146	4
492	480	469	475	481	483	482	482	482	516	05 38	591	16 54	454	137	5
477	483	476	478	473	471	478	489	484	509	05 22	590	20 05	466	124	6
505	492	492	492	487	487	487	487	486	525	06 48	629	00 31	473	156	7
483	485	486	482	481	483	489	485	482	501	07 26	598	12 48	471	127	8
490	491	490	491	491	489	488	482	480	504	06 10	551	22 30	478	73	9
438	438	448	454	463	466	467	472	470	485	06 09	557	15 06	432	125	10††
494	494	492	491	488	487	486	489	490	500	08 12	564	01 00	458	106	11†
495	471	440	434	444	438	434	428	432	498	08 02	472	22 15	423	149	12
452	450	465	470	475	471	470	470	466	483	06 44	568	13 44	436	132	13††
483	481	482	479	493	487	481	480	478	503	06 34	575	00 38	460	115	14
484	484	485	485	487	485	486	485	483	506	05 30	580	00 01	479	101	15†
489	489	489	490	490	490	491	489	488	507	06 18	555	00 10	478	77	16†
500	500	499	501	502	501	501	498	495	515	05 00	592	00 32	488	104	17†
481	488	492	492	496	502	503	503	500	525	05 37	600	14 46	477	123	18
514	513	505	498	498	500	498	496	496	538	06 15	641	23 10	493	148	19
503	502	497	499	500	499	498	505	506	529	04 54	661	21 14	495	166	20
526	524	523	520	517	515	511	504	505	549	07 18	642	00 14	503	139	21†
508	506	508	508	517	517	515	508	509	533	08 26	650	13 58	496	154	22
514	513	512	509	507	504	498	493	498	537	06 58	619	21 54	492	127	23
516	512	510	506	504	504	505	505	498	534	08 26	625	00 32	493	132	24
473	476	475	471	454	456	466	472	471	509	08 04	624	19 30	449	175	25††
491	490	489	488	490	489	488	492	491	498	09 55	546	04 03	465	81	26
470	465	467	457	436	439	446	459	456	496	09 37	563	19 36	418	150	27
448	457	458	469	480	487	495	485	478	489	07 26	604	15 07	441	163	28††
489	487	483	484	485	491	489	492	491	506	08 07	557	00 16	466	91	29
486	484	475	476	482	486	482	479	482	520	06 50	696	17 02	472	224	30††
504	501	500	501	499	495	496	499	495	514	05 41	556	00 18	483	73	31
489	488	486	485	486	486	486	487	485	513	.	.	.		129	Mean
499	498	498	497	497	496	495	493	492		.		.		..	Mean†
459	461	464	468	471	473	476	476	473	.	..	.	.	..	.	Mean††

† Five International quiet days
†† Five International disturbed days
Δ Loss of record; day omitted for means

Table 13

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

July — 2,000 γ plus tabular quantities

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	401	404	401	387	384	379	372	366	364	379	388	401	395	393	386
2	398	406	406	407	398	393	386	368	362	370	381	396	398	395	393
3	402	406	408	412	412	406	398	394	401	407	406	401	393	395	395
4	401	406	407	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
5	Δ	Δ	Δ	Δ	Δ	Δ	Δ	363	346	358	363	379	389	396	388
6	396	402	407	400	405	397	387	385	371	374	374	375	383	385	385
7†	396	398	397	384	373	373	366	374	374	386	384	388	389	390	388
8	401	410	400	387	376	355	343	331	351	364	384	395	395	391	385
9	403	401	401	392	381	376	372	355	352	367	391	394	394	394	394
10	397	406	416	407	403	398	390	381	375	384	386	387	394	389	390
11	405	405	403	393	382	371	367	371	369	377	386	393	393	387	384
12	395	404	404	397	393	383	393	388	382	383	384	387	393	386	387
13††	393	404	406	403	386	366	357	361	365	363	366	370	377	386	390
14	393	405	392	382	370	364	354	353	359	359	367	373	381	385	385
15	392	392	393	402	391	381	377	372	374	373	369	376	380	380	380
16	393	402	391	384	384	379	368	369	368	368	379	377	380	384	385
17†	390	391	385	379	376	378	367	369	378	378	379	389	389	389	389
18†	400	396	382	372	367	374	378	379	387	378	378	379	387	387	386
19	398	400	392	386	393	377	366	355	356	364	366	373	378	388	388
20	396	393	378	366	365	365	355	356	360	365	366	377	378	376	382
21†	388	390	381	374	365	365	365	372	377	376	376	376	377	378	385
22†	396	398	387	376	365	354	354	354	365	382	388	395	387	385	381
23	398	398	388	374	374	365	354	344	341	343	351	361	376	385	384
24††	389	398	396	380	375	373	354	355	345	346	365	387	386	386	386
25††	391	394	387	386	384	380	368	370	372	358	351	351	371	375	373
26††	386	397	391	386	370	364	361	370	362	353	373	364	365	375	380
27	397	395	397	384	375	364	354	364	364	364	365	371	379	375	375
28††	386	387	386	375	373	369	359	364	362	370	364	379	386	386	377
29	387	388	387	380	379	367	364	340	348	355	366	377	380	375	373
30	390	387	376	Δ	Δ	373	374	366	353	345	354	355	365	374	376
31	387	388	393	393	386	376	366	366	363	365	Δ	369	368	369	376
Mean	395	399	395	387	381	375	368	365	366	370	375	381	385	385	385
Mean†	394	395	386	377	369	379	366	370	376	380	381	385	386	386	386
Mean††	389	396	393	386	378	370	360	364	361	358	364	370	377	382	381

† Five International quiet days.
†† Five International disturbed days.
Δ Loss of record ; day omitted for means.

TABLE 13

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

July — 2,000 γ plus tabular quantities

Hours G M.T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag.	Mag	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M.	γ	γ	
390	392	398	397	399	396	399	396	398	390	01 50	416	07 26	353	63	1
393	395	397	395	395	401	396	397	401	393	02 32	410	07 26	362	48	2
395	396	398	399	397	396	396	397	401	401	02 28	416	12 22	386	30	3
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	4
389	390	391	393	396	396	394	390	394	△	△	△	△	△	△	5
386	386	388	391	393	396	396	396	397	390	03 34	410	07 30	361	49	6
389	390	389	395	395	395	395	396	398	388	00 38	401	05 46	366	35	7†
389	395	395	395	395	393	395	393	395	384	01 04	414	06 42	323	91	8
394	394	394	394	392	394	395	394	396	388	01 54	407	07 58	347	60	9
389	391	394	395	394	395	394	394	394	394	01 58	416	08 00	368	48	10
387	389	391	393	393	394	394	394	395	388	00 38	410	08 09	365	45	11
388	390	393	393	393	394	393	393	393	391	00 54	406	08 02	376	30	12
392	382	381	382	393	384	392	392	392	383	19 06	408	06 02	353	55	13††
386	386	390	392	392	392	392	392	392	382	00 36	417	06 24	345	72	14
380	380	389	391	391	391	392	394	392	385	02 16	407	08 50	363	44	15
385	386	390	390	390	390	391	390	390	384	00 34	405	08 22	365	40	16
389	389	389	390	390	389	390	389	390	385	20 38	403	06 08	361	42	17†
386	389	389	391	389	392	390	390	393	385	17 50	405	09 30	362	43	18†
386	388	388	388	394	392	389	388	388	383	00 46	409	06 54	349	60	19
387	387	387	387	388	394	387	388	388	378	00 10	404	06 12	350	54	20
387	387	388	388	388	387	388	387	388	381	00 50	401	05 06	359	42	21†
387	387	388	387	387	388	387	387	387	381	00 30	402	07 08	3 9	63	22†
385	385	387	383	387	387	387	385	394	376	00 50	400	07 52	330	70	23
384	386	386	386	391	391	390	392	392	380	01 22	404	08 30	335	69	24††
386	395	391	390	392	392	397	394	386	381	15 34	402	10 40	336	66	25††
375	375	382	387	387	387	390	391	397	378	22 50	403	08 37	347	56	26††
378	386	386	386	386	386	386	387	386	379	01 22	400	06 01	347	53	27
386	386	386	384	386	387	391	384	391	380	20 24	406	08 19	351	55	28††
377	375	387	384	388	386	388	387	386	376	01 01	401	06 54	325	76	29
377	377	376	377	379	385	387	386	386	△	△	△	△	△	△	30
373	379	384	386	386	387	386	387	386	△	△	△	△	△	△	31
387	388	390	390	391	391	392	391	393	384		.		.	54	Mean
388	388	389	390	390	390	390	390	391	.	.		.	..	..	Mean†
385	385	385	386	390	388	392	390	392	.	..	.		..		Mean††

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record ; day omitted for means.

TABLE 14

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

August — 2,000 γ plus tabular quantities

Date	Hours G M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	389	387	383	380	381	379	369	369	367	367	359	357	369	372	372
2	386	391	383	376	371	371	371	373	376	378	385	371	371	372	376
3	382	385	377	369	360	354	355	357	358	355	△	△	△	△	△
4†	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
5†	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
6	△	△	△	△	△	△	△	394	387	381	376	368	371	376	376
7†	387	389	381	376	362	358	360	359	361	365	370	376	376	377	377
8	389	391	379	370	368	372	376	377	390	387	384	388	387	382	381
9	392	393	382	372	347	348	354	361	369	369	365	371	360	368	380
10	389	392	398	392	376	379	378	370	365	370	374	381	381	381	381
11††	392	402	396	394	388	382	369	372	381	370	368	369	372	376	379
12	391	393	387	387	381	370	370	368	376	383	382	381	384	380	372
13	391	392	384	370	369	360	357	359	360	365	372	378	378	381	382
14	387	398	403	403	398	383	373	365	368	369	367	370	376	376	379
15	387	390	390	383	381	373	370	376	373	376	380	385	387	381	381
16	387	392	393	392	381	374	365	361	363	361	365	361	370	376	376
17	389	395	389	381	376	360	359	376	374	373	372	370	371	372	381
18	388	388	382	381	376	368	358	361	372	376	381	378	372	376	378
19†	388	391	381	376	368	362	358	359	359	354	356	361	363	374	376
20†	384	389	383	380	371	365	354	359	365	368	370	373	370	376	378
21	387	391	381	370	359	349	347	344	358	379	376	376	371	373	365
22	384	387	377	370	343	345	355	367	373	382	387	377	376	376	376
23††	387	391	381	376	363	354	350	354	354	354	356	368	372	373	370
24††	381	403	391	376	370	340	337	343	354	354	345	367	374	371	363
25††	391	393	385	380	369	364	362	362	366	364	367	375	382	380	379
26††	391	391	386	364	357	349	336	331	331	342	349	364	373	377	379
27	384	391	392	390	394	379	367	370	378	377	379	380	380	379	377
28	388	394	390	380	379	367	355	341	332	330	335	341	356	366	374
29	381	383	390	384	369	359	344	340	343	356	370	378	377	371	373
30	386	390	388	384	369	360	351	352	356	362	367	368	373	373	373
31	386	392	390	377	363	361	350	337	333	334	334	336	355	370	370
Mean	388	392	387	380	371	364	359	359	363	365	367	370	373	375	375
Mean†	386	390	382	377	367	362	357	359	362	362	365	370	370	376	377
Mean††	388	396	388	378	369	358	351	352	357	357	357	369	375	375	374

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record ; day omitted for means.

TABLE 14

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

August — 2,000 γ plus tabular quantities

Hours G M T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time.	Mag	Time.	Mag	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
373	375	380	380	381	383	382	384	383	376	00 33	402	10 42	358	44	1
377	377	379	385	385	382	380	382	386	379	00 38	403	12 18	365	38	2
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	3
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	4†
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	5†
377	381	382	381	387	387	387	387	387	△	△	△	△	△	△	6
381	387	387	387	387	389	387	388	387	377	00 46	392	06 26	348	44	7†
381	378	380	382	387	390	392	392	390	383	08 14	400	04 14	359	41	8
381	387	380	384	387	390	388	388	387	379	21 26	403	04 10	343	60	9
383	384	387	387	387	389	387	391	392	383	02 16	401	05 57	360	41	10
381	383	382	382	380	381	389	392	391	382	00 50	425	06 18	359	66	11††
387	391	391	391	389	391	393	391	389	384	00 48	398	06 16	359	39	12
382	387	387	387	387	388	392	388	387	378	20 18	396	05 58	354	42	13
380	382	382	383	385	385	382	382	387	382	02 35	412	07 10	359	53	14
381	381	382	382	383	384	387	387	382	382	01 30	392	07 58	370	22	15
380	381	381	387	387	387	387	387	390	379	01 58	395	08 50	359	36	16
381	387	387	387	387	387	387	388	388	380	00 50	403	05 50	348	55	17
378	381	382	383	387	385	387	384	387	379	01 06	392	05 58	354	38	18
381	381	382	383	387	385	384	385	387	374	00 46	393	09 02	354	39	19†
380	381	382	384	385	387	385	385	383	376	00 58	391	05 41	348	43	20†
371	380	382	392	390	391	387	389	382	374	17 46	401	06 54	337	64	21
380	381	381	381	381	381	381	385	383	379	10 30	391	05 02	337	54	22
376	381	384	383	381	381	388	392	385	373	21 06	398	05 30	348	50	23††
371	367	381	382	398	396	391	392	392	373	01 18	414	05 30	332	82	24††
380	388	389	389	388	386	393	387	388	379	20 50	400	06 08	358	42	25††
380	381	383	386	387	388	388	386	386	370	01 18	399	06 30	325	74	26††
376	380	385	385	385	385	385	385	385	382	04 14	400	06 02	361	39	27
374	371	379	379	379	380	380	381	383	368	01 46	399	07 14	326	73	28
369	378	379	380	379	384	382	384	384	373	00 50	391	07 32	334	57	29
378	378	377	378	385	384	385	384	384	374	01 04	391	07 40	349	42	30
372	372	370	377	381	388	379	383	383	366	01 39	400	07 41	332	68	31
378	380	382	384	385	386	386	386	386	377	.			..	50	Mean
381	383	384	385	386	387	385	386	386	..	..	..	..	.		Mean†
378	380	384	384	387	386	390	390	388	..	..	..	..		.	Mean††

† Five International quiet days
†† Five International disturbed days
△ Loss of record; day omitted for means.

TABLE 15

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

September — 2,000 γ plus tabular quantities

Date	Hours G.M.T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	407	411	399	373	363	363	362	365	371	375	369	375	376	381	387
2††	392	399	388	398	393	347	318	378	375	335	364	376	385	380	386
3††	398	402	395	380	370	361	357	357	354	357	364	372	375	379	391
4	398	398	386	375	357	353	346	340	353	361	368	370	375	380	383
5	396	402	398	379	365	357	345	329	332	350	363	375	375	378	380
6	394	398	395	366	341	318	△	△	△	△	337	346	352	355	363
7	383	392	387	375	366	△	△	341	341	347	355	363	369	373	375
8††	386	393	389	△	△	△	△	△	△	△	△	△	△	△	△
9	△	△	△	△	356	357	353	352	362	363	363	373	370	376	380
10	395	391	379	362	341	338	334	339	341	347	352	357	369	376	376
11	388	395	394	385	△	△	△	△	△	△	△	△	△	△	△
12	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
13	△	△	△	△	△	△	△	366	362	361	365	369	372	373	375
14†	386	391	380	370	356	343	334	339	341	347	357	363	369	369	373
15	384	391	383	365	355	340	339	340	346	356	363	369	372	375	375
16	386	387	386	375	368	363	357	361	368	369	363	363	364	369	372
17†	387	393	377	355	345	325	324	335	353	357	357	364	376	378	377
18†	386	395	379	366	350	337	330	329	340	345	352	360	365	371	375
19†	387	392	379	365	342	332	319	325	335	343	357	365	372	375	375
20	386	391	381	358	352	358	339	348	363	369	375	368	365	356	358
21††	383	386	369	368	349	346	340	347	364	364	362	369	368	364	369
22††	385	387	381	362	356	333	326	320	340	349	354	364	371	380	375
23	383	385	375	363	352	339	330	329	338	353	363	366	369	372	375
24	386	392	387	378	369	352	340	340	349	350	357	362	369	370	369
25	385	386	385	383	378	371	361	356	357	361	368	369	369	373	373
26	385	385	379	373	369	365	352	346	352	356	360	369	379	380	380
27	386	392	394	392	386	376	362	357	353	350	352	352	357	356	373
28	385	392	392	386	385	370	362	357	357	361	364	369	370	377	375
29†	385	386	386	384	377	373	361	367	367	370	367	367	373	378	378
30	384	390	389	384	384	367	346	338	339	348	356	367	376	378	376
Mean	389	392	385	374	363	353	343	346	352	355	361	367	371	374	376
Mean†	386	391	380	368	354	342	334	339	347	352	358	364	371	374	376
Mean††	389	394	383	377	367	347	335	351	358	351	361	370	375	376	380

† Five International quiet days.
†† Five International disturbed days.
△ Loss of record; day omitted for means.

Table 15

Hourly Values of Vertical Force, 1956

(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

September — 2,000 γ plus tabular quantities

Hours G M T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H M.	γ	γ	
386	387	391	392	391	398	393	395	392	383	00 32	422	06 15	358	64	1
391	387	398	398	396	394	395	398	398	382	01 17	408	05 44	346	62	2††
386	387	396	398	394	398	398	398	394	382	01 16	408	08 20	352	56	3††
387	388	392	392	392	392	389	392	393	378	00 49	404	07 14	333	71	4
383	387	386	386	387	388	392	392	393	376	00 50	409	07 00	327	82	5
368	375	378	381	381	386	380	378	380	Δ	Δ	Δ	Δ	Δ	Δ	6
375	376	380	383	384	385	385	386	386	Δ	Δ	Δ	Δ	Δ	Δ	7
Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	8††
383	386	392	392	398	395	391	387	392	Δ	Δ	Δ	Δ	Δ	Δ	9
379	381	384	387	381	385	386	387	388	369	00 44	399	06 11	331	68	10
Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	11
Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	12
377	377	380	381	380	386	385	386	386	Δ	Δ	Δ	Δ	Δ	Δ	13
375	376	379	381	380	380	379	383	381	368	00 58	393	06 03	329	64	14†
376	376	379	384	384	386	385	385	386	371	00 44	398	06 38	338	60	15
375	368	368	378	383	381	384	386	386	373	21 49	394	06 37	353	41	16
376	380	383	385	385	384	385	385	385	369	00 47	398	06 19	318	80	17†
375	375	378	380	384	385	385	385	386	367	00 44	398	06 25	322	76	18†
375	376	380	381	381	380	380	383	384	366	00 43	399	06 04	314	85	19†
363	356	358	379	383	380	380	380	384	368	00 42	396	05 13	333	63	20
377	379	380	380	380	386	386	386	385	370	00 46	394	05 10	330	64	21††
375	384	379	381	386	380	381	383	385	367	18 22	398	06 58	317	81	22††
375	377	385	383	381	383	380	380	381	367	00 44	395	06 39	322	73	23
375	377	380	380	381	381	383	384	385	371	01 05	398	06 10	326	72	24
375	375	380	384	381	385	384	380	384	375	00 57	394	07 27	339	55	25
380	383	380	386	386	386	386	386	386	375	19 26	392	06 34	340	52	26
375	380	380	381	383	387	384	384	385	374	01 46	398	09 09	341	57	27
375	376	384	385	386	385	386	386	386	377	01 30	396	07 50	352	44	28
373	373	378	377	378	379	382	381	381	376	01 35	395	05 58	362	33	29†
377	378	381	384	383	383	383	383	384	373	01 39	394	07 42	339	55	30
378	379	382	385	385	386	386	386	387	373	.	..	.		63	Mean
375	376	380	381	382	382	382	383	383	..	.	..	.	..	..	Mean†
382	384	388	389	389	390	390	391	391			.	..	.	..	Mean††

† Five International quite days.
†† Five International disturbed days.
Δ Loss of record , day omitted for means.

TABLE 16

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

October — 2,000 γ plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	382	384	384	370	362	363	370	371	378	376	373	368	367	370	373
2††	385	389	378	370	366	355	340	343	345	344	358	367	367	360	361
3	384	384	369	365	361	361	359	361	360	359	370	372	369	361	374
4	389	392	377	363	360	354	349	349	353	360	360	366	369	376	375
5	382	386	375	355	340	326	316	314	312	330	355	370	373	377	377
6	383	385	374	360	352	337	329	320	327	339	350	362	365	370	372
7	383	389	377	366	360	347	345	345	347	354	366	372	376	376	372
8	381	389	391	392	382	366	353	350	347	350	358	361	367	374	376
9	383	384	384	388	382	372	368	368	368	358	361	369	374	375	379
10	382	384	383	384	376	365	357	353	350	353	356	360	365	371	375
11	382	385	384	384	376	373	365	361	352	360	360	365	368	373	375
12	382	388	388	389	375	357	352	353	357	362	363	366	370	377	377
13†	383	386	382	377	358	349	338	339	340	350	359	365	369	374	377
14†	383	386	383	377	368	371	363	361	360	360	362	370	373	374	376
15†	386	396	387	386	374	349	346	354	357	363	363	365	364	371	376
16	385	390	392	392	386	375	360	355	352	362	357	361	362	377	379
17†	386	389	396	396	393	377	375	381	372	370	372	369	371	377	379
18	392	398	398	396	372	358	359	362	355	354	353	361	371	377	380
19	389	397	393	385	371	359	359	361	358	357	356	362	370	379	381
20††	397	399	399	385	372	348	346	353	362	355	356	354	355	369	376
21††	393	387	386	387	382	373	377	378	367	362	363	369	363	369	378
22	389	396	389	386	377	371	366	365	361	359	363	369	373	374	377
23	393	397	386	381	378	366	358	358	363	367	369	370	370	372	380
24	390	390	385	380	371	363	361	357	351	350	355	363	370	376	376
25†	370	372	393	387	377	356	348	342	343	355	363	373	378	384	385
26††	393	400	396	393	384	370	354	348	354	357	365	370	373	379	377
27††	396	393	388	386	374	370	369	365	354	358	363	369	372	374	379
28	378	378	377	376	381	365	350	355	354	351	347	355	357	364	370
29	380	381	376	370	367	348	344	348	347	343	347	353	367	373	374
30	389	392	381	379	353	344	350	342	338	349	364	364	365	376	374
31	397	399	390	387	374	367	364	353	343	347	359	370	370	380	381
Mean	386	389	385	380	371	360	355	354	352	355	360	365	368	374	376
Mean†	382	386	388	385	374	360	354	355	354	360	364	368	371	376	379
Mean††	393	394	389	384	376	363	357	357	356	355	361	366	366	370	374

†Five International quiet days.
††Five International disturbed days.
△Loss of record ; day omitted for means.

6—4 D.D.G. Obs. K. Kanal/57

Table 16

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

October — 2,000 γ plus tabular quantities

Hours G.M.T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H M	γ	γ	
378	377	382	390	385	389	387	390	384	377	18 14	396	03 46	359	37	1
378	383	384	389	386	371	387	384	384	370	17 42	396	06 04	336	60	2††
378	383	382	383	377	382	383	383	383	373	00 30	393	06 08	336	57	3
376	378	383	381	382	382	383	383	382	372	00 26	393	07 26	307	86	4
377	381	380	382	382	383	381	382	381	363	00 50	395	08 03	314	81	5
370	377	381	383	384	385	381	382	382	365	19 11	393	07 46	338	55	6
373	378	384	385	383	382	384	383	381	371	01 38	395	06 44	339	56	7
377	377	380	381	382	382	385	382	382	374	02 58	396	07 54	351	45	8
380	380	380	381	381	382	382	383	383	377	02 38	393	09 10	350	43	9
376	375	376	377	380	381	381	380	381	372	01 39	391	07 45	345	46	10
379	380	380	381	382	382	382	381	381	375	00 41	392	07 49	348	44	11
377	377	378	380	383	382	381	383	382	374	00 46	392	06 58	347	45	12
377	377	381	382	382	382	382	382	383	370	01 13	388	05 42	331	57	13†
377	379	382	383	383	384	384	384	385	375	00 34	390	08 54	350	40	14†
376	378	383	385	385	384	384	385	385	374	00 54	397	05 50	340	57	15†
380	384	384	386	386	386	386	385	387	377	02 22	397	07 52	347	50	16
380	380	385	385	385	386	385	385	387	382	03 49	399	08 50	365	34	17†
381	382	385	387	387	388	387	387	388	377	01 30	400	10 04	353	47	18
382	382	386	393	393	394	394	395	396	379	00 34	399	09 38	343	56	19
377	374	385	384	389	387	390	389	399	375	00 45	400	05 33	354	46	20††
382	392	390	388	392	393	395	388	390	381	20 18	401	12 03	356	45	21††
377	378	380	386	389	392	389	392	392	379	00 59	397	08 54	356	41	22
382	379	385	386	388	393	393	395	393	379	00 42	400	07 00	354	46	23
376	374	373	379	378	376	373	372	370	371	00 43	396	08 20	344	52	24
381	385	386	386	387	387	387	388	389	375	01 38	394	07 26	335	59	25†
363	370	379	388	374	373	381	374	378	375	00 30	405	07 00	341	64	26††
381	384	385	381	385	378	381	377	381	377	00 01	397	07 42	347	50	27††
376	376	378	381	379	377	377	377	380	369	02 22	387	10 10	341	46	28
374	376	380	385	386	388	392	388	387	370	20 44	397	09 34	341	56	29
382	393	388	389	392	394	393	393	394	374	00 38	399	06 40	332	67	30
381	385	387	389	392	389	388	387	386	378	00 31	407	08 22	335	72	31
378	380	382	384	384	384	385	384	385	374	..		..	.	53	Mean
378	380	383	384	384	385	384	385	386	..	..	.	.	.	.	Mean†
376	381	385	386	385	380	387	382	386	..	..	.		..	..	Mean††

†Five International quiet days
††Five International disturbed days.
△Loss of record; day omitted for means

Table 17

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

November

2,000 γ plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	394	395	400	404	399	386	381	380	371	371	377	380	376	381	380
2	393	388	387	393	384	377	369	361	348	350	353	362	371	380	381
3	389	394	396	405	388	376	370	364	357	349	350	361	366	374	380
4	393	396	404	403	373	361	353	348	339	338	347	356	362	372	373
5†	390	394	402	404	△	△	△	△	△	△	△	△	△	△	△
6	△	△	△	△	396	390	379	364	338	339	348	355	361	370	371
7†	381	380	382	385	382	378	365	348	327	325	336	344	356	369	377
8†	378	382	395	401	395	382	373	366	350	348	354	361	369	373	373
9	392	386	386	379	△	△	△	△	△	△	△	△	△	△	△
10††	△	△	△	△	△	399	386	374	367	354	353	353	358	363	359
11††	382	374	376	381	381	369	381	379	366	359	361	376	380	381	384
12	396	382	372	376	370	359	348	342	335	358	374	376	374	378	362
13	392	387	381	377	366	365	366	363	351	350	363	370	370	376	381
14††	387	387	385	387	386	374	367	369	366	356	363	355	364	372	379
15††	374	364	373	388	392	395	389	387	379	347	354	365	364	386	382
16††	387	388	394	396	404	409	404	382	361	357	353	362	369	380	379
17	381	380	384	392	389	390	385	376	366	365	370	369	370	369	371
18	378	381	380	382	387	382	372	372	366	364	361	359	362	377	376
19†	382	382	378	379	359	370	363	360	357	345	348	355	360	371	370
20	381	379	375	375	373	374	372	371	364	361	358	356	361	373	369
21	378	381	375	368	362	361	362	360	361	358	356	356	356	364	373
22	376	377	380	384	384	384	385	377	365	342	349	356	361	362	358
23	379	372	374	383	382	376	373	360	365	360	355	351	359	371	374
24	383	381	388	395	398	387	379	367	358	359	360	360	364	372	371
25	381	383	386	389	387	381	377	369	362	360	362	363	374	366	364
26†	379	379	379	386	385	383	372	362	360	355	354	361	375	383	382
27	382	382	377	372	367	367	368	356	357	361	362	360	367	377	377
28	376	368	377	375	367	355	353	342	346	350	359	364	370	376	379
29	378	380	380	385	386	378	370	370	374	368	366	363	365	371	371
30	372	373	376	368	364	366	370	362	353	346	345	346	360	365	365
Mean	383	381	383	386	381	376	372	365	358	354	357	361	366	374	374
Mean†	380	381	384	388	380	378	368	359	349	343	348	355	365	374	376
Mean††	383	378	382	388	391	387	385	379	368	355	358	365	369	380	381

†Five International quiet days.
††Five International disturbed days.
△Loss of record; day omitted for means

Table 17

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

November — 2,000 γ plus tabular quantities

Hours G.M.T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M	γ	γ	
379	382	389	393	392	388	387	388	388	386	02 40	409	08 10	364	45	1
380	382	389	392	387	390	390	388	382	378	00 25	396	08 58	344	52	2
381	382	387	390	393	394	392	393	393	380	02 57	411	09 14	341	70	3
376	380	380	382	382	387	384	384	385	373	01 47	409	08 54	332	77	4
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	5†
371	371	370	379	382	380	381	380	381	△	△	△	△	△	△	6
371	374	378	382	382	382	381	380	381	369	03 08	389	08 48	318	71	7†
380	382	382	385	385	387	389	389	388	378	03 00	401	09 26	341	60	8†
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	9
373	374	380	366	371	385	389	384	385	△	△	△	△	△	△	10††
378	380	382	381	381	387	390	381	381	378	20 38	399	09 58	353	46	11††
371	367	361	381	381	381	386	386	387	371	00 01	410	08 00	324	86	12
384	384	382	387	385	382	381	382	384	375	00 38	399	08 22	341	58	13
381	379	379	388	384	372	373	370	377	375	02 05	397	11 14	348	49	14††
388	392	390	393	388	379	382	379	385	380	03 56	399	09 06	339	60	15††
379	380	382	386	384	388	385	382	381	382	05 22	422	10 14	341	81	16††
367	371	376	373	381	382	382	381	379	377	03 28	399	08 22	356	43	17
376	380	381	382	380	380	380	381	381	376	04 05	389	10 26	353	36	18
371	377	377	377	381	381	380	380	379	370	00 42	387	09 26	339	48	19†
364	363	369	378	383	378	382	383	380	372	00 40	386	11 00	352	34	20
380	379	379	377	384	384	383	379	379	371	19 26	389	10 26	346	43	21
365	360	362	370	376	383	377	374	381	370	06 19	390	09 20	342	48	22
374	373	378	382	386	385	383	382	380	373	19 52	391	10 58	347	44	23
376	372	368	368	376	383	384	381	381	375	04 00	400	08 35	356	44	24
371	383	382	383	384	382	378	378	381	376	03 18	392	13 45	344	48	25
385	382	383	383	383	385	384	382	386	377	03 12	392	09 42	349	43	26†
380	378	377	382	385	375	370	371	375	372	18 36	391	07 07	347	44	27
379	378	380	382	377	376	376	376	376	369	16 29	390	07 10	336	54	28
371	371	371	369	369	371	365	364	370	372	04 26	391	11 00	360	31	29
369	373	376	377	374	371	371	373	371	366	17 40	380	09 14	337	43	30
376	377	378	382	382	382	381	380	381	375	..	..	..	..	52	Mean
377	379	380	382	383	384	384	383	384	.	..	..		.	.	Mean†
381	383	383	387	384	382	383	378	381	.	..	..		..	..	Mean††

†Five International quiet days.
††Five International disturbed days
△Loss of record; day omitted for means.

TABLE 18

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

December — 2,000 γ plus tabular quantities

Date	Hours G.M.T.														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	371	372	377	378	378	378	372	364	362	361	360	363	369	371	372
2	374	377	380	380	387	388	387	371	355	354	357	363	362	367	372
3	374	377	371	372	372	372	369	366	364	361	361	361	363	370	373
4	375	379	378	380	387	388	381	361	342	339	349	357	361	366	370
5	379	374	379	379	370	371	366	353	353	360	362	364	367	371	372
6	380	380	385	386	389	382	368	365	366	364	363	368	375	379	376
7	382	382	387	398	403	403	389	374	358	344	343	345	348	357	360
8	371	371	364	366	367	374	381	374	364	349	336	346	360	369	374
9	380	377	379	381	380	381	391	387	379	367	363	363	363	365	368
10††	368	372	374	370	384	391	376	373	364	361	358	357	352	360	369
11†	368	364	366	367	375	388	384	374	360	352	354	364	366	369	373
12	373	373	377	390	390	385	382	373	362	350	346	348	359	365	369
13††	368	370	376	381	384	390	383	363	356	356	361	360	359	365	369
14	374	375	377	382	382	373	371	362	356	353	353	359	365	369	370
15†	374	371	371	371	368	364	360	354	347	345	345	348	357	367	371
16†	371	374	376	385	385	381	373	368	363	351	348	348	361	371	373
17†	373	374	371	365	363	354	351	351	350	341	346	355	365	373	375
18	375	377	382	387	387	383	379	372	360	355	357	359	365	371	367
19	379	380	378	378	376	369	376	381	358	350	345	353	362	370	375
20	380	377	378	390	383	374	366	368	359	360	356	358	361	367	377
21†	378	378	379	379	379	378	373	369	355	341	341	353	359	367	373
22	378	378	379	381	396	404	409	401	376	351	348	354	355	363	367
23	378	379	379	387	384	378	367	363	356	347	351	359	360	370	373
24	375	376	378	380	383	377	370	370	359	354	357	360	363	372	376
25††	377	379	376	376	378	374	375	368	359	346	355	372	357	361	370
26	379	378	378	375	377	382	385	382	369	362	361	363	371	378	380
27	380	380	382	388	401	402	410	408	390	374	361	361	365	370	374
28††	377	377	378	383	395	410	425	414	394	376	377	376	372	367	370
29	377	379	380	374	379	380	382	388	379	362	364	368	370	376	379
30††	383	383	384	386	389	389	378	363	367	360	356	354	370	378	378
31	378	375	370	370	368	369	375	370	363	359	360	364	364	375	378
Mean . .	376	376	377	380	382	382	379	373	363	355	355	359	363	369	372
Mean† , .	373	372	373	373	374	373	368	363	355	346	347	354	362	369	373
Mean†† . .	375	376	378	370	386	391	387	376	368	360	361	364	362	366	371

†Five International quiet days.
††Five International disturbed days.
△Loss of record ; day omitted for means.

Table 18

Hourly Values of Vertical Force, 1956

Averages for sixty minutes centred at the full hours of Greenwich Mean Time

December — 2,000 γ plus tabular quantities

Hours G.M.T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M.	γ	H. M	γ	γ	
371	376	377	378	378	376	376	377	376	372	02 58	383	10 08	360	23	1
372	375	378	372	380	378	374	372	375	373	05 39	396	09 06	349	47	2
374	378	377	378	380	381	381	378	377	372	20 30	387	09 55	358	29	3
372	373	373	379	378	377	377	379	378	371	04 34	393	08 43	336	57	4
371	370	371	378	380	380	378	375	379	371	01 35	384	07 07	349	35	5
373	380	381	385	385	382	388	385	382	378	03 59	395	10 02	362	33	6
360	359	365	366	366	367	367	366	368	369	04 40	409	09 18	339	70	7
376	379	380	379	379	379	380	380	381	370	04 34	386	10 14	328	58	8
368	369	368	371	374	373	371	368	368	373	06 14	395	09 38	357	38	9
370	372	380	381	381	378	375	375	372	371	04 40	396	12 22	346	50	10††
374	374	375	372	372	370	370	370	372	370	05 23	396	09 40	347	49	11†
370	362	359	361	368	366	368	366	365	368	03 34	398	09 50	342	56	12
368	371	378	378	376	371	373	371	370	371	04 58	398	08 46	348	50	13††
368	371	375	374	378	376	371	371	371	370	03 20	388	09 36	351	37	14
372	372	374	374	374	372	374	372	371	369	00 52	376	08 26	341	35	15†
373	372	373	373	374	374	374	374	373	370	03 38	391	10 38	342	49	16†
377	377	377	377	377	378	378	377	377	367	21 24	380	09 24	335	45	17†
367	375	376	376	379	379	378	376	376	373	04 14	393	08 53	349	44	18
376	375	372	375	377	377	377	376	377	371	06 19	389	09 54	339	50	19
376	374	374	377	378	377	377	378	378	373	03 34	394	10 26	351	43	20
373	375	377	378	374	375	373	373	376	370	04 06	385	09 08	338	47	21†
374	373	377	377	378	378	378	377	378	376	05 38	416	09 35	340	76	22
373	373	375	375	377	376	375	374	377	371	02 52	393	09 16	340	53	23
375	374	376	377	378	379	379	377	375	373	03 12	387	08 37	351	36	24
375	379	380	379	378	379	383	380	379	372	21 30	394	09 00	340	54	25††
379	379	378	378	379	379	380	379	379	372	05 12	391	10 41	353	38	26
377	378	380	377	376	378	378	380	378	381	06 26	420	10 06	353	67	27
369	378	381	386	385	385	382	377	377	384	06 19	432	12 09	360	72	28††
379	380	380	382	383	385	384	385	384	378	06 50	394	09 26	356	38	29
378	377	379	379	382	381	378	378	379	376	03 30	396	11 42	340	56	30††
377	378	378	378	378	378	378	377	378	372	05 52	382	11 40	355	27	31
373	374	376	376	377	377	377	376	376	372	..	..	..	..	47	Mean
374	374	375	375	374	374	374	373	374	..	.	..	..	..	..	Mean†
372	375	380	381	380	379	378	376	375	..	.	..	..	..	..	Mean††

†Five International quiet days.
††Five International disturbed days.
△Loss of record; day omitted for means

TABLE 19

PRINCIPAL MAGNETIC STORMS

July—December, 1956

Observatory	Greenwich Date	Storm Time: G.M.T of beginning	Storm Time: G.M.T of ending (1)	Sudden commencement: Type(2)	Sudden commencement: Amplitude (3) D′	Sudden commencement: Amplitude (3) H γ	Sudden commencement: Amplitude (3) Z γ	C-figure, degree of activities (4)	Maxumal activity on K-scale 0 to 9: Greenwich Day	Maxumal activity on K-scale 0 to 9: Gr 3-hour period	Maxumal activity on K-scale 0 to 9: K index	Ranges: D	Ranges: H γ	Ranges: Z γ
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Astrophysical Observatory, Kodaikanal	1956	H. M.	D H.											
	July 23 . .	10 56	24 18	.	.	..	.	m	24	.		6	210	55
	August 9	10 44	10 06	S.C.	1	23	8	m	9	..	.	4	128	33
	August 11 . .	00 43	12 23	S.C.	1	56	29	ms	11	.		8	252	65
	August 24 .	00 19	26 10	.		..	..	ms	24		.	8	280	82
	August 31	10 15	31 23	S.C.	1	27	12	m	31	.	.	3	145	57
	September 2	02 29	03 16	S.C.	1	Δ	16	ms	2	..		10	395	96
	September 8 .	10 02	09 09	S.C.	Δ	[37]	Δ	ms	8	..		Δ	[280]	Δ
	September 20	01 45	22 11	.	..	..	.	ms	20	..		9	284	73
	October 20. .	03 44	22 07	..	..	..	..	m	20			4	248	58
	October 26. .	00 27	28 15	S.C	1	20	11	ms	26	..	..	5	282	54
	November 9	20 34	12 18	S.C.	Δ	Δ	Δ	m	11	..		7	230	77
	November 14 .	01 57	16 11	.	..	..	.	ms	15	.		8	263	77
	December 27 .	14 58	29 09	S.C.	1	14	6	m	28	..	..	5	162	72

The following symbols and conventions have been used according to recognised practice :—

(1) Approximate time of ending of storm construed as the time of cessation of reasonably marked distrubance movements in the traces.

(2) S.C. = sudden commencement ; (..) = gradual commencement.

(3) Signs of amplitudes of 'D' and 'Z' taken algebraically : (D = reckoned negative being westerly);
(Z = reckoned postive being vertically downwards)

(4) Storm described by three degrees of activity : (m) for moderate (when range is less than 250 γ);
(ms) for moderately severe (when range is between 251 γ and 400 γ);
(s) for severe (when range is above 400 γ).

NOTE — [ ] Extrapolated Value.
Δ Incomplete record.

IONOSPHERIC DATA

7—4 D. D. G. Obs K. Kanal/57

Characteristic : h'F2 | TABLE 1 | Latitude : 10°.2 N.

Unit · Km. | IONOSPHERIC DATA | Longitude : 77°.5E.

Month · July 1956. | 75 0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	300	360	360	360	A	400	280	260	320	325	L	340
2	C	310	315	300	300	280H	280	L	L	320	350	370
3	330	320	320	305	320	280	280	L	L	320H	L	340
4	340	330	350	330	260	250	260	280	320	L	370	360
5	400	380	340	300	270	245	270	L	L	L	L	L
6	245	260	270	270	260	270	280	L	300	L	400	L
7	360	320	280	260	240	270	270	240	L	L	L	L
8	360	360	360	300	235	250	265	230	L	C	C	C
9	310	305	280	270	270	245	275	255	L	L	L	380
10	270	260	275	260	240	260	270	240	LH	LH	L	L
11	320	300	320	260	240	240	270	280	L	LH	L	L
12	460	420	390	300	240	240	270	240	L	L	L	A
13	335	280	275	300	280	230	260	L	M	M	L	L
14	280	320	340	270	260	240	270	260	L	L	LH	L
15	335	330	305	260	260	260	A	L	L	C	C	C
16	300	300	A	300	260	240	290	L	L	300H	L	L
17	340	300	265	260	260	260	300	L	L	L	L	L
18	280	300	300	260	240	260	270	255	L	L	L	360
19	340	335	310	275	235	240	270	255	L	400	410	L
20	370	380	410	360	240	240	270	L	L	330	L	L
21	420	380	340	315	270	250	280	240	300	355H	410K	445K
22	270	245	250	240	250	260	270	L	L	L	L	L
23	300	235	250	255	230	260	275	L	L	330	390	L
24	340	275	240	260	240	255	270	265	L	LH	380	400
25	360	330	260	240	250	260	280	260	L	L	L	400
26	255	240	275	265	260	275	280	260	L	300H	L	L
27	280	300	270	230	215	240	265	280	L	LHK	440HK	LK
28	340	300	260	240	235	B	280	255	L	L	L	L
29	300	260	260	A	260	240	270	L	L	LH	L	360
30	335	315	290	280	270	260	280	250	L	325	L	245
31	300	300	310	300	260	240	270	245	L	320	L	330HK
Mean .	325	310	300	280	255	260	275	255	..	330	395	370 —
Median	330	305	295	270	260	250	270	255		325	395	360
Count	30	31	30	30	30	30	30	19	4	11	8	12

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · h'F2 | TABLE 1 | Latitude · 10°.2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude 77°.5 E.

Month · July 1956. | 75·9°E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
340	L	L	330A	L	250H	280	320	390	400	350	315	1
380H	LK	400K	380	L	260	285	305	F	380	380	345	2
L	400	A	L	L	250H	300H	305	320	350	380	350	3
400	420	335H	L	L	250	300	320	F	360	370	360	4
L	L	440	L	L	L	280	305	360	350	320	275	5
450	L	L	475K	380K	375	A	340	400	F	F	400	6
L	LH	440	A	L	250	290	330	360	365	375	365	7
L	L	L	L	L	265H	300	320	340	350	335	305	8
L	440	L	420	L	260H	305	360	360	360	370	320	9
L	L	440	405	L	255	295	370	F	500	F	400	10
430	400	L	440	L	260H	285	360	430	460	F	500	11
L	460	420	L	L	A	A	340	F	420	420	400	12
440	L	L	L	L	250	300	400	480	B	360	310	13
L	L	L	LH	L	250	295	380	450	440	400	360	14
C	C	C	C	L	A	A	400	F	440	F	300	15
L	L	L	L	L	260	A	395	465	460	380	340	16
L	L	425	L	L	255	285	370	430	410	365	305	17
L	L	L	L	L	255H	300	340	400	F	400	355	18
L	400	L	L	L	260	300	360	450	420	340	340	19
L	L	L	445	L	A	295	395	460	480	450	440	20
400	L	L	L	L	240	275	345	400	420	400	340	21
L	L	430	L	L	250	290H	360	F	420	440	400	22
420	400	L	360H	L	A	280	340	380	400	380	340	23
420	L	L	L	L	275	310H	415H	520	440	420	400	24
400	L	L	L	L	260	300	380	370	325	300	255	25
375	380	L	L	L	260H	300H	395	410	F	F	340	26
L	L	L	L	L	265	295	350	450	450	400	380	27
360	L	L	L	L	A	295	360	380	380	370	340	28
L	L	L	L	L	270	300	345	F	360	360	340	29
LH	L	L	L	L	260	A	320	380	360	400	340	30
340K	380	L	L	LH	245H	280H	350	360	300	360	330	31
395	410	415	405		260	295	355	405	400	380	350	Mean
400	400	430	410	.	260	295	350	400	400	380	340	Median
13	9	8	8	1	25	26	31	24	27	26	31	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF 2 | TABLE 2 | Latitude . 10°.2 N

Unit : Mc. | IONOSPHERIC DATA | Longitude 77°.5 E.

Month . July 1956. | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	5·6	4·6	4·0	3·4	3·2	2·8	6·1	8 6	9·8	9·8	9 6	9·5
2	C	6 7	6·4	6·4	6 2	4·8H	6 7	9·0	9·9	10·0	9 7	9 4
3	7·6	7·2	7·1	6·9	5·9	4·4	6·9	9·4	10·3	10·1H	10 2	9 9
4	7·6	7 0	5·8F	5 2	5·1	4·0	6 8	9·2	10·0	10·3	10·4	10·3
5	F	F	F	(5·9)F	5 4	5·5	7 0	8 8	10 0	10 3	9·9	9·4
6	8·5	7·4	6 6	6·6	6·3	4·8	7·0	9·7	10·8	10 8	10 7	10 1
7	F	F	6·2	5·4	3·6	2·3	6·1	9·0	9 6	8 9	8·8	8 8
8	6 6	5 5	5·0	5·2	4·5	2·8	6·3	8·7	9·6	C	C	C
9	7·9	7·4	7 3	6·8F	(6 3)F	(5·4)F	6·8	8·8	10·5	10·7	9·0	9·9
10	7·9	6·9	6·0	5·9	5 9	3·9	7 0	9·7	10·4H	10 5H	9·4	9·1
11	F	F	6·4F	6·4	5·2	3·8	6·8	10·0	10 3	9·9H	9·1	9·5
12	F	F	F	F	5·2F	3·4	6·8	9·7	10·8	11 4	10·8	10·2
13	F	F	F	F	F	7·2	7·0	9·0	M	M	9·4	8·6
14	F	F	(7·0)F	6 8	6·2	6·1	7·8	9·2	11·0	11·7	11·7H	10·0
15	F	F	F	F	8·7F	7·6	8 9	10·3	11·3	C	C	C
16	F	F	8·7	8·3	F	F	7·7F	10·1	10·4	9·7H	9·9	9 6
17	8·3	F	8·4	7·9	6·5	5·7	7·6	9 2	9·9	9·3	9·4	9·0
18	8·8F	7·8	6·8	6·5	6·0	4·9	7·2	9 6	10 3	10·5	10·4	10·0
19	F	6·7F	6·9	7·3	6·7	5·0	6·7	8·3	8·9	9·1	9 1	9·0
20	F	F	F	F	F	4·4	6·6	8·9	9·6	9·7	9·3	9 0
21	F	F	F	F	F	5 9F	7·1H	8·8	9·0	8·6H	8·8K	8·9K
22	F	F	6·4	5·4	3 7	2·7	6·0	8·0	8·4	8·0	8·0	8 2
23	F	F	6·6F	5·7	5 1	3·3	6·3	9 0	10·0	9·7	10·0	9 1
24	F	F	6·1	5·2	4·2	2·5	6·4	9·1	10·2	10·1H	9 0	9·0
25	F	F	F	6·0	4·9	3·4	6·1	8 2	9 7	9·8	9·4	9·6
26	9·2	7·2	5·8	5·7	4·7	3·4	6·4	8 9	10·4	10·5H	10·9	11·0
27	F	F	F	F	5·5F	2·2	6·2	9·2	10 6	11·5HK	(11·0)HK	10·0K
28	F	F	7·8	6·8	4·9	B	6·0	8·8	10·0	10·6	9·7	9·0
29	8·6	8·3	7·2	5·9	5·1	4·0	6·3	8·8	10 6	11·1H	11·2	10·2
30	8·6	7 9	7·0	5·9	5 9	5·1	6·8	9·1	10·5	10·8	10·3	10·5
31	F	F	F	F	F	F	7·5	9·1	10·3	10·4	10·2	10·0HK
Mean	7·9	7·0	6·6	6·1	5·4	4·3	6·8	9·1	10 1	10·1	9·8	9·5
Median	8·1	7·2	6 6	6 0	5·3	4·2	6 8	9 0	10·2	10 2	9·7	9 5
Count	12	13	22	24	26	28	31	31	30	28	29	29

Sweep 1 Mc to 25 Mc in $\frac{1}{2}$ min.

Characteristic . foF 2 | TABLE 2 | Latitude : 10°.2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month . July 1956. | 75 0°E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
9 2	9·7	10·3	10·7	10·8	11·8H	12·6	11·2	9 7F	8·3F	8·0F	7·8	1
8·8H	8·8K	9·4K	10·6	10·7	11·4	12·8	11·4	F	8·9F	8·6F	8·0F	2
9·8	10·3	11·2	12·6	12·7	11·8H	11·9H	11·9F	11·0	9·1	9·0	8·5	3
10·1	10 6	10·7H	10·3	10·4	10·9	11 0	10 6	(10·3)F	9·8F	8·8F	(7·8)F	4
8·9	8·8	8·7	9·3	10·2	11·4	11·7	10·6	9 0F	8·9	9·0	9·3	5
10·6	10·3	10 0	10·0K	10·6K	10·3	10·5	9·5	8 0F	F	F	F	6
9·2	9 0H	9·5	A	10·3	11·5	11·7	10·3	9·2F	8·4	7·5	7·6	7
9·7	9·4	9·6	10·5	11·0	12·2H	13·2	11·6	9·6F	8·9	8·8	8·4	8
9·8	9·6	9·9	10·1	10·7	11·4H	12·0	11 4	9·5	8·9	8·9	8·9	9
9·0	9·0	9·3	10·1	10·4	10·6	10·7	10 1	(8·2)F	F	F	F	10
9·3	9·0	9·6	10·4	10·9	11·4H	11·1	10·7	8·9F	F	F	F	11
10·3	10·6	10·7	10·5	10·2	A	11·3	11 4	F	9·5F	8·8F	8·4F	12
8·7	8 7	9·2	9 3	9 8	10·1	9·9	8·7	(7·2)F	B	F	F	13
9·6	9·5	9·6	9·4H	10·0	9·8	10·4	9 5	8·1F	8·1F	F	F	14
C	C	C	C	10·4	10·4	10·6	(9·4)B	F	F	F	F	15
9·6	9·5	9·7	9 4	9·4	9·5	9·7	9·7	8·7	F	9·0	8·7	16
9·3	9·7	10·0	9·6	9·9	10·5	10 7	10·1	9·1F	F	(9·0)F	9·5F	17
10·0	10·3	10·9	10·8	11·2	11·6H	11·5	10·4F	(9·0)F	8·6F	F	F	18
9·0	9·2	9·6	9·8	10 2	9·6	10·1	9·2	7·8F	F	F	F	19
8·7	8 8	9·0	9·1	9·6	10·0	9·5	8 9	7·4F	F	F	F	20
9·5	10·0	10·5	10·8	11·4	11·0	11·3	10·8	F	F	F	F	21
8·0	8·0	9·1	10·1	10·6	10·8	10·7H	10·0F	F	F	F	F	22
9·1	8 9	8·8	8·9H	9·3	10·2	10·4	10·4	9·2	8·3F	F	F	23
9·0	9·3	9·5	10·1	11·0	11·5	11·4H	10·0H	F	F	F	F	24
9·7	10 0	10·0	9·6	9·8	9·8	10·0	(9 6)BF	9·3	9·8	10·1	9·7	25
11·5	11·9	11·6	11·7	12·7	12·3H	(11·8)8H	9·9F	F	F	F	F	26
10·0	10·3	10 7	11·0	11·0	10·8	11·4	(9·7)F	F	F	F	F	27
9·0	9·1	9 4	9·4	9·7	9·9	9·9	9·5	9·2F	9·2	8·8F	8·7F	28
9·3	9·4	10·0	10 5	10·8	11·6	(11·8)8	11·7	10·9F	10·3F	10·3F	9·2F	29
10·1H	9·6	9·5	9·7	10·2	10·6	11·2	11·0	F	(8·9)F	F	F	30
10·2K	10·8	11·0	11·0	11·4H	11·4H	10·9H	10·3F	F	F	8·8F	F	31
9·5	9·6	9 9	10·2	10·6	10·9	11·1	10·3	9·0	9·0	8·9	8·6	Mean
9·4	9·5	9 6	10·1	10·4	10·8	11·1	10·3	9·1	8·9	8·8	8·6	Median
30	30	30	29	31	30	31	31	21	16	15	14	Count

Sweep 1 Mc to 25 Mc in ¼ min.

Characteristic · h'F1 | TABLE 3 | Latitude : 10°.2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month . July 1956. | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	240H	220H	B	B
2								255	240	240	220	215
3								240	230	220	215	200
4								240	220H	220	240	200
5								240	240	230	B	215
6								260	245	225	220	220
7								Q	220	220	200	215
8								Q	235	C	C	C
9								Q	240H	230	235	220
10								Q	225	220H	220H	220
11								A	230H	215	210H	225H
12								Q	220	220	220	A
13								B	M	M	215H	210
14								Q	240	240	220	220
15								250	230	C	C	C
16								255	250	220	220	220
17								250	235	220H	230	220
18								Q	225	220	215	230
19								Q	245	220H	220	220H
20								255	240	230	220	220
21								Q	240	225	220H	220
22								240	225	220H	235	210
23								255	230	220	B	210H
24								250	220	210	200H	B
25								Q	250	235	B	B
26								Q	250	B	225	B
27								255	240	225K	BK	B
28								Q	240	225	220	220
29								245	220	220	215	210
30								Q	235	230	215	205H
31								Q	235	215	290	230
Mean								250	235	225	220	215
Median								250	235	220	220	220
Count								14	30	27	24	23

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · h 'F1 | TABLE 3 | Latitude 10°.2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude · 77°.5 E.

Month : July 1956. | 75 0°E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
205H	220	A	A	235	Q							1
200H	200H	205HK	200H	240	Q							2
200	A	A	230	A	Q							3
200H	230	200H	200H	235	Q							4
215	200	200H	A	A	255							5
215H	215	220	230H	300K	300							6
220	215	210H	A	260	Q							7
205H	205H	220H	235H	A	Q							8
210	200H	235H	235H	235	Q							9
220H	220H	220	220	240	Q							10
BH	220	220	A	240	Q							11
AH	200H	215	240	A	A							12
215	210H	220	220H	230	Q							13
210H	210	200H	215H	230	Q							14
C	C	C	C	A	A							15
230	220	215	220	235	Q							16
220H	220H	215H	210H	215H	Q							17
220	220H	205H	210H	230H	Q							18
230	215H	215	220	230H	Q							19
215	200H	210	220H	230H	Q							20
215H	200	220	220H	230	Q							21
200H	200H	220H	235	235	Q							22
205	205	205H	B	235	Q							23
230	220	220	A	A	Q							24
230	220	220	230	240	Q							25
230	220	210	220H	240	Q							26
210	200	210	220	240	Q							27
220	220	210	215	235	Q							28
205	210	210	225	240	Q							29
205	200	220H	225	235	Q							30
220	215K	210	225	225	Q							31
215	210	215	220	240								Mean
215	215	215	220	235	..							Median
28	29	28	24	25	2							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : foF1 | TABLE 4 | Latitude : 10°.2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude . 77°.5 E.

Month : July 1956. | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	L_H	L_H	L	L
2								L	L	L	L	L
3								L	L	L	L	L
4								L	L_H	L	L	L
5								L	L	L	L	L
6								L	L	L	L	L
7								Q	L	L	L	L
8								Q	L	C	C	C
9								Q	L_H	L	L	L
10								Q	L	L_H	L_H	L
11								L	L_H	L	L_H	L_H
12								Q	L	L	L	A
13								L	M	M	L_H	L
14								Q	L	L	L	L
15								L	L	C	C	C
16								L	L	L	L	L
17								L	L	L_H	L	L
18								Q	L	L	L	L
19								Q	L	L_H	L	L_H
20								L	L	L	L	L
21								Q	L	L	L_H	L
22								L	L	L_H	L	L
23								L	L	L	L	L_H
24								L	L	L	L_H	L
25								Q	L	L	L	L
26								Q	L	L	L	L
27								L	L	L_K	L_K	L
28								Q	L	L	L	L
29								L	L	L	L	L
30								Q	L	L	L	L_H
31								Q	L	L	L	L
Mean . .									..		..	.
Median .									..	..	.	
Count . .								..	.	..	.	.

Sweep 1 Mc to 25 Mc in ½ min.

8—4 D.D.G Obs K Kanal/57

Characteristic : foF1 | TABLE 4 | Latitude : 10°.2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month : July 1956. | 75·0°E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
5·1H	L	A	A	L	Q							1
LH	LH	LK	LH	L	Q							2
L	L	A	L	L	Q							3
LH	L	LH	LH	L	Q							4
L	L	LH	L	L	L							5
LH	L	L	LH	LK	L							6
L	L	LH	A	L	Q							7
LH	LH	LH	LH	L	Q							8
L	LH	LH	LH	L	Q							9
LH	LH	L	L	L	Q							10
LH	L	L	A	L	Q							11
LH	LH	L	L	L	A							12
L	LH	L	LH	L	Q							13
LH	L	LH	LH	L	Q							14
C	C	C	C	L	A							15
L	L	L	L	L	Q							16
LH	LH	LH	LH	LH	Q							17
L	LH	LH	LH	LH	Q							18
L	LH	L	L	L	Q							19
L	LH	L	LH	LH	Q							20
LH	L	L	LH	L	Q							21
LH	LH	LH	L	L	Q							22
L	L	LH	L	L	Q							23
L	L	L	L	L	Q							24
L	L	L	L	L	Q							25
L	L	L	LH	L	Q							26
L	L	L	L	L	Q							27
5·2	L	L	L	L	Q							28
L	L	L	L	L	Q							29
L	L	LH	L	L	Q							30
L	LK	L	L	L	Q							31
..	.	.	..	.	..							Mean
..	..	..	.	.	..							Median
2	.	..	.	..	..							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'E

Unit : Km.

Month : July 1956.

TABLE 5

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	B	B
2									B	A	A	A
3								B	110	A	A	A
4									110	A	A	A
5									A	B	B	B
6									120	A	A	A
7									A	A	A	A
8									A	C	C	C
9									B	A	B	B
10									110	B	B	A
11								A	A	A	B	B
12									B	A	B	A
13								B	M	M	B	B
14									105	A	A	A
15								B	110	C	C	C
16								A	A	A	A	B
17								A	115	A	B	B
18									115	A	A	115
19									A	A	A	A
20									115	A	A	A
21									115	A	A	A
22								A	115	B	A	A
23									115	110	B	B
24									A	A	B	B
25									B	B	B	B
26									120	B	115	B
27									A	B	B	B
28									B	B	B	B
29								115	110	B	B	B
30									115	A	A	A
31									B	A	A	A
Mean									115	.		.
Median								.	115	..		.
Count								1	15	1	1	1

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'E

Unit Km.

Month · July 1956.

TABLE 5

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	A	A	A	B								1
A	A	A	A	120	135							2
A	A	A	A	A								3
A	A	A	A	A	A							4
B	A	A	A	A	A							5
A	A	A	A	A	A							6
B	A	A	A	A								7
B	B	A	A	A	B							8
B	A	A	120	120								9
B	A	A	120	A	120							10
B	A	A	A	A	A							11
A	A	A	A	A	A							12
A	A	A	A	A	B							13
A	A	A	A	A								14
C	C	C	C	A	A							15
A	A	A	A	A	A							16
B	A	110	A	115	120							17
A	B	A	A	120								18
B	B	120	A	A	A							19
A	A	A	A	A	A							20
A	110	B	115	120	120							21
A	A	A	B	A								22
A	B	A	B	115								23
B	B	B	A	A	A							24
B	115	A	A	A								25
B	B	115	115	A	A							26
B	A	A	A	A	120							27
A	A	A	A	A	A							28
A	A	115	115	A	A							29
A	A	A	A	A								30
A	A	A	A	115	120							31
.		.	115	120	120							Mean
..	..		115	120	120							Median
..	2	4	5	7	6							Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic . foE | TABLE 6 | Latitude : 10°.2 N.

Unit : Mc | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month · July 1956. | *75·0°E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	B	B
2									B	A	A	A
3								B	3·3	A	A	A
4									N	A	A	A
5									A	B	B	A
6									N	A	A	A
7									A	A	A	A
8									A	C	C	C
9									B	A	B	A
10									N	B	B	A
11								A	A	A	A	A
12									B	A	B	A
13								B	M	M	B	B
14									N	A	A	A
15								B	3·5	C	C	C
16								A	A	A	A	A
17								A	3·6	A	B	A
18									N	A	A	N
19									A	A	A	A
20									3·3	A	A	A
21									3·7	A	A	A
22								A	3·6	A	A	A
23									3·5	4·0	A	A
24									A	A	B	B
25									B	B	B	B
26									N	B	N	B
27									A	B	B	B
28									B	B	B	B
29								2·9	N	B	B	B
30									N	A	A	A
31									B	A	A	A
Mean									3·5	.	.	.
Median								..	3·5	..	.	.
Count								1	7	1	..	..

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : foE

Unit : Mc

Month · July 1956.

TABLE 6

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	A	A	A	B								1
A	A	A	A	N	2·9							2
A	A	A	A	A								3
A	A	A	A	A	A							4
A	A	A	A	A	A							5
A	A	A	A	A	A							6
A	A	A	A	A								7
A	A	A	A	A	B							8
A	A	A	3·9	N								9
B	A	A	3·7	A	2·9							10
A	A	A	A	A	A							11
A	A	A	A	A	A							12
A	A	A	A	A	B							13
A	A	A	A	A								14
C	C	C	C	A	A							15
A	A	A	A	A	A							16
A	A	4·1	A	3·2	2·8							17
A	A	A	A	N								18
B	A	4·0	A	A	A							19
A	A	A	A	A	A							20
A	4·1	B	3·6	3·3	2·9							21
A	A	A	B	A								22
A	A	A	B	3·4								23
B	A	B	A	A	A							24
A	A	A	A	A								25
B	A	4·1	3·7	A	A							26
A	A	A	A	A	3·0							27
A	A	A	A	A	A							28
A	A	4·0	A	A	A							29
A	A	A	A	A								30
A	A	A	A	3·5	3·0							31
..	.	.		..	2·9							Mean
..	.	.	..	.	2·9							Median
..	1	4	4	4	6							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : fEs

Unit : Mc

Month : July 1956.

TABLE 7

IONOSPHERIC DATA

75.0°*E Mean Time.*

Latitude . 10°.2 N.

Longitude : 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1				4·4H	5·8	5·4H			8·0F	8·8F	G	10·2F
2	C			3·0	3·0				G	7·0F	9·0F	10·0F
3	3·8		9·0					G	G	4·8	10·0F	10 0F
4	3·6								G	8 0F	9·4F	10·4F
5									4·6	7·2	8·0	8·6
6									7·6	8·0F	10·0F	9·0F
7								4·0	8·0F	9·0F	11·0F	12·0F
8									8·0	C	C	C
9									G	7·4	8·0	10·2F
10									G	G	G	8·0
11		5·0	4·6H					7·6	7·4F	10·4F	10·0F	10·0F
12									G	6·8	G	12·0F
13								G	M	M	9·0F	7·8F
14									G	9·0F	10·0F	9·8F
15				4·0	8·8	5·2	8·0	G	G	C	C	C
16			7·2	6·6			6·6	7·0F	9·8F	9·0F	9·0F	9·0
17								4·0F	G	7·8F	7·4	8·4F
18									G	7·0	8·4F	8 6F
19									8·0	9·0F	10·4F	9·2F
20									7·0F	8·8F	8·0F	9·0F
21									G	8·0F	9·0	11·0F
22								6·6F	7·4	7·4F	9·0F	9·6F
23								8·4F	G	7·6F	9·4F	10·0F
24									6·2F	7·4F	9·0F	9·0F
25									G	G	7·8	8·0
26									G	G	9·0F	9 6
27									7·4F	8·0	8·0	10·0F
28									G	7·6	7·4	9·4
29			5·8FH	7·0FH				G	G	7·4	7·8F	9·0F
30									G	8·6	9·0F	10·4F
31									7·0	8·0F	9·0F	10·8F
Mean . .	.	.		5·0	..	..	..	6·3	7·4	7·9	8·9	9·6
Median . .	.	.	.	4·4	..	..	..	4·0	G	7·7	9·0	9·6
Count .	2	1	4	5	3	2	2	10	30	28	29	29

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic fEs

TABLE 7

Unit . Mc

IONOSPHERIC DATA

Latitude : 10°.2 N.

Month : July 1956.

77·0°*E Mean Time*

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
11·2F	11·2F	12·6FH	7·6FH	6 0	4·4	5·0			6·2			1
10·6F	10·6F	10·4F	8·0F	G	G			3·0	7·6FH	6·0F		2
10·0F	16·0FH	12·0FH	9·0F	7·4	4·0	4·6				6·6		3
10·0F	9·6F	10·0F	9·0F	9·0F	9·0F	11·0FH		6·0		3·6		4
10·0F	10·0F	11·2F	11·4	11·0F	5 0F	5·0	2·6	5·0	3·0	3·6		5
11·4F	10·4F	10·6F	9·0	10·0F	8·0F	10·0F	5·8F	3·6	3·6	5·0		6
11·0F	10·8FH	11·0F	20 0FH	9·2F	6·0	7·0			4·0	3·2		7
10·0F	10·6F	9·2F	6·6F	7·2	G						3·6	8
10·4F	10·6F	10·0F	G	G		3·8	3·8					9
8·0	9·2F	8·0F	G	6·0	G	4·0						10
10·0F	10·0F	9·0F	12·0F	7·4	7·0							11
11·0F	11·0F	11·0F	12·6F	16·0FH	17·0F	12·0F	5·4F					12
9·8F	10·0F	9·0F	8·0F	7·6F	G	7·0F				4 8		13
10·8F	9·6F	11·4F	9·0F	8·0F							3·8	14
C	C	C	C	11·0F	12·8F	7·8F					3·0	15
10·2F	10·0F	10·0F	11·0F	8·6F	7·0FH	8·6						16
9·0F	10·6F	9·6F	10·0F	6·2FH	G							17
8 4F	9 0F	8 6F	8·0F	G								18
9·6F	9·0F	9·6F	9·0	9·4F	7·0F							19
10·0F	10·8F	10·0F	9·0F	7·6F	8 0							20
11·0F	10·0F	G	G	G	G							21
10·0F	11·0F	10·4F	G	5·6	6·0	3·8						22
10·2F	10·0F	10·0F	8·0	G	8·0	6·0						23
9·0F	10·4F	8·6F	11·0F	3·8	5·0F							24
9·0F	10·0F	10·4F	10·2F	7·8F								25
8 0F	9·6F	9·6	6·4F	8·4F	7·8F							26
9 0F	10·6F	11·0F	10·8F	10·4F	7·0F							27
9·6F	10·6F	10·0F	10·2F	9·0F	6·4F	4·0F				5·0		28
10·0F	10·2F	9·2F	9·0F	7·4	7·8H	8·4					4·0	29
10·6F	9·0F	10·6F	10·4F	9·0F		6·0F	4·6F					30
15·0FH	9·0F	10·0F	10·0F	8·6F	7·0F							31
10·1	10·3	10·1	9·8	8·4	7·5	6·7	4·4		4·9	4·7	.	Mean
10·0	10·1	10·0	9·0	7·6	6·7	6·0	4·6		4·0	4·9	.	Median
30	30	30	30	31	26	17	5	4	5	8	4	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : (M 3000) F2

Unit : —

Month : July 1956.

TABLE 8

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	2 8	2·65	2·75	2·7	(2 7)	2 7	2 9	2·9	2 45	2 35	2 35	2 2
2	C	2 85	2 85	2 9	2·95	3·05H	2·95	2 8	2 55	2 35	2 35	2 3
3	2·55	(2·8)	(2 9)	2·8	2·9	3 2	3 05	3·0	2 75	2·45H	2 3	2 2
4	2·7	2·7	2·7	2·75	(3 25)	3 35	3 15	3·1	2 9	2 5	2 2	2 45
5	F	F	F	(2 7)F	3·1	3 25	3·1	2·9	2·65	2·5	2 2	2 2
6	3·1	(3·1)	2 95	3·1	3·2	3 2	2 95	2.85	2 65	2.45	2 2	2 3
7	F	F	3 0F	3 2	3 4	3 3	2 95	2.75	2·45	<2.4	2 35	2 25
8	2 6	2 55	2·65	2·95	3·4	(3·3)	3·0	2.85	2 55	C	C	C
9	2 7	2·75	2·9	3 0	(3 1)F	(3·2)F	3·15	2· 9	2·65	2 25	2 4	2 25
10	2·95	2·95	3·0	3·0	3 2	3 2	3·0	2· 9	2 6H	2.3H	2 2	2 25
11	F	F	2 7F	3·1	3·3	3 4	3 0	2·85	2 4	<2·3	2 3	2 1
12	F	F	F	F	3·35F	3·4	3 0	2·85	2·7	2·4	2 2	2 35
13	F	F	F	F	F	3·3	3·2	3 15	M	M ·	<2 15	2 15
14	F	F	(2·6)F	2·85	2 9	3·25	3·05	2 9	2·65	2 4	<2 05H	2 15
15	F	F	F	F	3 05F	3·1	2·95	2 85	2·7	C	C	C
16	F	F	2·75	2 8	F	F	3 0F	2·7	2·3	2 2H	2·2	2 15
17	2 65	F	3·0	3·1	3 1	3·2	2·9	2 85	2·35	2·3	2·3	2 3
18	2·85	2·85	2·9	3 1	3 2	3·15	3·0	2·85	2·6	2 35	2 25	2 25
19	F	2 6	2 8	3 0	3·3	3·3	2·9	2·75	2 4	2·25	2 25	<2·2
20	F	F	F	F	F	3·35	2·95	2·7	2 4	2 2	2 25	<2·15
21	F	F	F	F	F	3·1F	2·8H	2·6	2 35	2 35	2 3K	2 35K
22	F	F	3·15	3·3	(3·4)	(3·4)	3·0	2 8	2·4	2·35	2 3	2 35
23	F	F	3·1F	3·1	3·35	3·2	2·9	2·8	2·5	2 4	2 2	2·2
24	F	F	3·1	2·9	3·3	3 3	3·05	3 0	2·7	2·7	2·3	2 25
25	F	F	F	3 2	3 2	3 3	3·0	2 8	2·55	2·35	2 3	2 25
26	3·1	3·2	3·0	3·1	3·2	3·2	3·1	2·9	2·6	2·3H	2·2	2 35
27	F	F	F	F	3·35F	3 4	3·15	3·1	2 8	2·6	2 15HK	2·35K
28	F	F	3 15	3 3	3·4	B	3·0	2·9	2·7	2·4	2 25	2 3
29	2 8	3·05	3 2	3·0	3·0	3 4	3·0	3 0	2·9	2·6H	2 3	2 3
30	2 65	2 7	2·9	2·9	2·9	(3·35)	2 9	2·85	2 55	2 35	2 3	2·25
31	F	F	F	F	F	F	3·1	2·9	2·6	2 4	2.3	2·3HK
Mean	2 8	2·85	2·9	3·0	3·15	3·25	3·0	2·85	2 6	2 4	2 25	2 25
Median	2·75	2 8	2 9	3 0	3·2	3 2	3·0	2·85	2 6	2 4	2 25	2·25
Count	12	13	22	24	26	28	31	31	30	28	29	29

Sweep 1 Mc to 25 Mc in ½ min.

9—4 D. D. G. Obs. K. Kanal/57

Characteristic : (M 3000) F2

Unit · —

Month : July 1956.

TABLE 8

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
2·25	2·25	2·3	2·4	2·45	2·6H	2·7	2 65	2·5F	2 4F	2·55F	2 8	1
<2·3H	2·15K	2·25K	2·4	2·5	2·55	2·75	2·7	F	2·5F	2 5F	2 6F	2
2·2	2·3	2·45	2·6	2·65	2·7H	2·65H	2·7F	2·65	2 6	2 6F	2·6	3
2·3	2·3	2·2	2·25	2·35	2·4	2·45	2·4	(2·4)F	2·45F	(2 4)F	(2·45)F	4
2·25	2·2	2·2	2·2	2·2	2 5	2·7	2·6	2·5F	2·5	2·7	2 85	5
2·2	2·15	2·15	2·1	2·25	2·35	2·4	(2·35)	(2·3)F	F	F	F	6
2·2	2 2	2 2	A	2·45	2·6	2·7	2·55	2·45	2·4	2·45	2·55	7
2·2	2·1	2·15	2·3	2·45	2·55	2·7	2 7	2·55	2 5	2·6	2·75	8
2·1	2·0	<2·1	2·2	2·3	2·4	2 5	2·5	2 4	2·35	2·55	2 8	9
2·2	2 1	<2·2	2·25	2·3	2·4	2,45	2·3	(2·1)F	F	F	F	10
2·15	2·15	<2·15	2·3	2·4	2·5H	2·55	2·4	2·3F	F	F	F	11
2·3	2·2	2·15	<2·2	2·2	A	2·4	2·4	F	2·35F	2 3F	2·4F	12
2·2	<2·1	<2·2	2·2	2·1	2·2	2·3	2·1	(2 05)F	B	F	F	13
2·2	2·1	2·15	<2·1H	2·1H	2·25	2·3	2·2	2·15F	2·2F	F	F	14
C	C	C	C	2·1	2·1	2·15	2 2	F	F	F	F	15
2·1	<2·1	<2·1	2·05	2·2	2·25	2·3	2·25	2·25	F	2·45	2·6	16
2·1	2·1	2·2	<2·15	2·2	2·3	2·35	2·3	2·3	F	(2·6)F	2·7F	17
2·2	2·2	2·3	2·3	2·35	2·35	2·4	2·3F	2·2F	2·2F	F	F	18
2·2	2·25	2·15	2·15	2·2	2·25	2·25	2·3	2·1	F	F	F	19
2·2	2·25	2·2	2·3	2·25	2·25	2·3	2·15	2·1F	F	F	F	20
2·3	2·3	2·3	2·3	2·35	2·5	2·5	2·4	F	F	F	F	21
2·3	2·2	2·25	2·35	2·5	2·5	2·5	(2·3)F	F	F	F	F	22
2·2	2·25	<2·1	2·15	2·25	2·4	2·5	2·4	2·4	2 4F	F	F	23
2·25	2·2	2·25	2·3	2·45	2·5	2·5	2·25	F	F	F	F	24
2·25	2·2	2·1	2·1	2·2	2·35	2·4	2·35	2·45	2·6	2 75	3 0	25
2·35	2·4	2·25	2·35	2·45	2·35H	(2·3)SH	(2·2)F	F	F	F	F	26
2·25	2·2	2·25	2·3	2·3	2·3	2·4	(2·25)F	F	F	F	F	27
2·3	2·3	2·3	2·3	2·2	2·35	2·45	2·4	2·4F	2·45	2·45	2·6	28
2·1	2·3	2·3	2·35	2·35	2·5	(2·6)S	2·6	2·6F	2·5F	2·5F	2·7F	29
2·15	2·15	2·2	2·15	2·3	2·3	(2·55)	2·5	F	(2·4)F	F	F	30
2·25K	2·2	2·3	2·3	2·25H	2·3H	(2·45)H	2·2F	F	F	2·5F	F	31
2 2	2·2	2·2	2·25	2·3	2·4	2·45	2·4	2·35	2·4	2·55	2·65	Mean
2·2	2·2	2·2	2·3	2·3	2·4	2·45	2·35	2·4	2·4	2·5	2·65	Median
30	30	30	29	31	30	31	31	21	16	15	14	Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic : h'F2

Unit : Km

Month : August 1956

TABLE 9

IONOSPHERIC DATA

75.0°*E Mean Time*

Latitude : 10°.2 N

Longitude · 77°.5 E

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	285	260	250	240	240	250	275	245	L	(310)L	305	L
2	310F	275	245	260	260	270	280	260	L	L	L	L
3	310F	320F	305F	270F	220	230	275	245	L	L	L	L
4	300	250	245	220	250	280	280	240	L	LH	L	L
5	345F	335F	295F	240	240	240	295	250	310	L	L	L
6	260	220	230	230	260	280	275	L	L	L	L	L
7	270	240	240	235	225	230	280	245	L	320	345L	L
8	300	265	245	275	275	C	290	260	L	L	L	L
9	315F	340F	340F	335	300F	255F	300	260	L	L	L	LK
10	335	430	375	270	245	270	300	260	L	300L	L	L
11	300	250	245	240	240	230	300	255	305L	320L	L	LH
12	305	315	355F	360F	350F	305F	275	250	L	L	C	C
13	300	320	335	360	370	305	275	240	L	305	L	L
14	320	280	270	255	250	240	265	240	290L	L	L	L
15	260F	240F	240	255	235	235	265	240	L	L	L	L
16	250F	235	255	280F	255	235	260	L	L	L	L	300L
17	285F	240	235F	230	225F	225	260	260	L	305L	310H	L
18	280	220	240	230	235	220	275	245	L	L	330L	L
19	250	250F	250F	230	225	250	265	240	C	C	C	C
20	245	235	245F	225F	220	235	275	L	L	L	L	L
21	255	235	230	220	220	240	275	250	L	L	L	L
22	300	270	235	220	225	265	260	L	L	300L	L	L
23	255F	240	260	260	265F	225	255	L	L	L	L	L
24	235	235	235	255	220	225	260	240	L	M	L	L
25	270	260F	280F	280F	275	235	275	L	L	L	L	300L
26	285	300	285	265	260	220	240	245	L	LH	L	LH
27	M	M	255	230	220	220	255	240	L	L	L	L
28	250	255	255	245	235	220	255	265	L	L	L	L
29	245F	240	240	250F	240	220	250F	240	L	L	L	L
30	235	245	245	255	240	210	260	L	M	L	L	L
31	260	250	265	255	240	225	265	L	L	L	L	L
Mean	280	270	265	255	250	235	270	250	.	310	..	..
Median .	280	250	250	255	240	235	275	245	.	305	.	..
Count .	30	30	31	31	31	30	31	23	3	7	4	2

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F2

Unit : Km

Month : August 1956

TABLE 9

IONOSPHERIC DATA

75°0°*E Mean Time*

Latitude : 10°.2 N

Longitude : 77.°5 E

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	390	360	L	L	L	300	425	F	320	F	340F	1
375	L	L	L	L	L	295	380	420F	420F	400F	365F	2
LH	310H	(430)L	465	L	255H	285	330	400	380	360	345	3
LH	L	L	LH	LH	L	300H	395H	F	F	420F	390	4
LH	L	L	L	L	L	295	365	380	325	320	300	5
(420)I	(400)L	L	L	L	240	290	385	450F	425	405	305	6
365H	L	L	L	L	L	280	340	380	365	345	325	7
L	L	L	L	L	270	300	400	520	485F	420F	340F	8
LK	455K	L	L	L	260	300	355	400	400	350	320	9
LH	LH	L	L	L	260	300	400F	455F	435	400	345	10
L	410L	400L	L	L	L	295	390F	F	(320)F	360F	325F	11
C	C	L	LHK	L	L	290	380	415	380	330	305	12
LHK	LHK	LHK	LH	L	240	275	380F	460F	425	385F	365	13
L	LH	L	L	L	L	285	420	F	400F	M	315F	14
L	L	LH	L	L	240	270	345	(400)F	F	310F	300F	15
L	L	L	L	L	L	275	395	425F	F	400F	370F	16
L	L	L	LH	LH	245	280	335	340	320	320	305	17
L	L	L	L	L	245	280	400	F	F	400F	300F	18
C	C	C	L	L	L	280	390	470F	F	F	320F	19
L	L	L	L	L	L	280	400	F	325F	305F	290F	20
L	L	L	380L	L	245	295	420	F	320F	315F	300	21
L	L	L	L	L	L	300H	430HF	F	F	340F	325F	22
L	L	L	L	L	260	300F	460	500F	330	300	260	23
L	L	L	L	L	260	300	410	405F	360F	305F	270F	24
L	L	L	L	C	255	295	395	385F	F	275	275	25
L	L	L	L	L	270	300	460	F	F	300F	255	26
L	L	L	L	L	260	290	375	F	320	260	240	27
L	L	L	L	L	255F	300	F	410F	400F	F	260F	28
L	L	L	L	L	255H	300	390F	420F	310F	265F	235F	29
L	L	LH	380L	L	250	295	450	435F	340F	310	295	30
L	L	L	L	L	260	300	355	400	335F	295	255F	31
	39?	..	..	..	255	290	390	420	365	340	310	Mean
..	400	..	..	..	255	295	390	415	360	330	305	Median
3	5	3	3	..	19	31	30	21	23	27	31	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF2

Unit : Mc

Month : August 1956

TABLE 10

IONOSPHERIC DATA

75.0°*E Mean Time*

Latitude : 10°.2 N

Longitude : 77°.5 E

Date.	00	01	02	03	04	05	06	07	08	09	10	11
1	9·8	9·2	7·9	6·0	4·4	2·8	6·5	9·4	10·5	11 2	11·1	10·9
2	F	8·1	7 2F	6·3	4·9	3 5	6·7	9·4	10·3	10·5	10·4	10·3
3	F	F	F	F	F	5 5	7 0	9·3	10·6	10·8	9·9	9·8
4	8·5	8·4	8·4	(7·4)S	(4·0)	(2 8)	6·0	9·0	10 3	10·6H	9·7	10·1
5	F	F	F	F	(7·3)F	5·8	7·0	9·0	10·2	10 7	10 5	10 9
6	11·7	9·8	6·8	4·8	2·9	2·5	6·0	8·9	9 9	9 9	9·8	10·1
7	(9 1)F	9·7	9·7	8·7	7·9	6·0	6·9	9·3	10·9	11·3	10 6	10·7
8	9·4	9·9	9·8	9·1	8·8	C	7·1	9·5	10 5	10·8	10·8	11·3
9	F	8·6	F	5·9	F	5·0F	(6·5)F	9·7	11·2	11·8	11·7	10·7K
10	10·6	8·7	8·3	8·0	7·0	6·1	8·0	10·0	12·0	12·6	11·8	11·0
11	F	9·7	9·1	8·9	7·8	6·7	7·4	10·0	11·2	11 9	11·5	11·3H
12	(10·0)F	10·9F	(10·6)F	F	8·3F	8·8	10·4	11·6F	12·0	12·7	C	C
13	10 8	10·4	10·4	8·9	6·9	6·6	9·0	10·9	11·5	12·0	12·0	10·6
14	F	(8·5)F	10 3	10·6	10·2	8·6	8·8	10·4	12·0	12·2	12·5	11·9
15	F	F	7·3F	7·5	F	6·3	7·3F	10·1F	11·7	12 1	10·8	10·5
16	F	10·2	9·4	8·7	8·2	7·4	7·4	10·3	12·0	12·0	12·2	10·8
17	F	10·2	F	8·1	F	F	7·2	9·6	10·8	11·6	11·4H	9·8
18	12·5	10·6	9·2	8·4	6·7	5·1	6·5	9·3	10·9	11·3	11·6	11 2
19	F	F	F	8·4	5·8	(4·3)	6·6Z	9 8	C	C	C	C
20	(9·2)F	7·8F	7·4	F	F	F	7·0F	9·6	10·8	10·5	10·3	10 1
21	11·2F	(10·3)F	8·5	F	5·7	F	6·9	9·3	9·7	9·2	9·2	9·1
22	10 0	9·7	9·5	8·7	6·8	6·6	8·4	10·8	11·6	12·1	10·6	10·5
23	F	F	(10·4)F	9·6F	F	7·1F	8·2F	10·6	11·8	11·8	11·2	10·8
24	(12·8)	10 3	8·5	8·4	8·6	4·1	7·1	10·5	11·5	M	11·9	10·5
25	12·0	10·2F	10·8F	F	(9·0)F	8·0	9·5	11·4	(12·2)	11·7	11·0	10·6
26	11 7	11·0	11·1	11·0	10·2	8·7	8·2	10·4	11·7	12·2H	11·6	10·5H
27	M	M	10·7	F	10·5	F	7·4	10 7	12·0	12·6	12 6	11·8
28	12·3	10·3	9·4	9·0	8·4	5·2	6·9	10·2	12·0	13·2	12·1	11·3
29	F	9·5	7·6	F	8·3F	(5·9)F	(7·6)F	10·4	12·1	13·4	12·7	11·5
30	12·4	9·0	7·8	7 7	7·6	6·1	7·0	10·3	M	11·9	11·0	10·4
31	(12·3)F	11·6	9·3	8·9F	7·5	4 8	7·0	10·0	12·1	12·3	11·4	10·9
Mean	10·9	9·7	9·0	8 2	7·3	5·8	7·4	10·0	11·2	11·6	11 2	10·7
Median	11·0	9·8	9·2	8·4	7·6	6·0	7·1	10·0	11·5	11·8	11 2	10·7
Count	18	25	26	23	25	26	31	31	29	29	29	29

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF2 | TABLE 10 | Latitude : 10°.2 N

Unit · Mc | IONOSPHERIC DATA | Longitude : 77° 5 E

Month : August 1956 | 75.0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
10·7	11·1	11 2	10·9	10 3	10·7	10·1	8 9	F	F	F	F	1
10·3	10·5	11·1	11·1	11·4	11·0	10·1	9·7	9·8F	F	F	F	2
9·5H	9 2H	9·8	9 8	9·7	9·4H	9·5	9·1	8·7	8·8	8·8	8 6	3
10·2H	11·1	11·7	11 7H	12·3H	12·0	11·6H	10·1H	F	F	F	F	4
10·9H	11·0	10·8	10·7	10·7	11·0	11·4	11·0	10·8F	10·2F	9·6F	10·4F	5
10·0	10·1	10·6	10·9	10·7	10·5	10·3	9·7	(8·4)F	8 5F	F	8·7F	6
10·4H	10·3	10·0	9 6	9·3	9 4	10·5	10·4	10·2	10·4	10·7	10·4	7
10·8	10·9	11·3	11·6	11·7	12·3	12·7	11·7	(9 7)F	F	F	F	8
10·8K	11·6K	11 8	12·2	12·4	12·0	(11·2)	10 3	9 9	9·9	11·0	11·1	9
11·1H	11·0H	11·0	11·2	11 6	11·8	11·8	10·8	9·7	9·7F	F	F	10
11·0	11·5	12·0	12·4	12·7	13·2	13·0	11·6	10·0F	F	F	F	11
C	C	11·6	12·0HK	12·0	12·3	12·7	11·9	10·7	10·5	10·8	11·0	12
10 7HK	10 7HK	11·0HK	11·7H	12·5	12·7	11·9	11·1	9·7F	F	F	F	13
10·8	10·5H	11·0	11·5	11·5	10·6	10·0	8·7	F	F	M	8 3F	14
11·0	10·9	11·5H	11·7	12·7	13·7	13·7	11·8	(10 6)F	F	(10·4)F	(10·5)F	15
10·6	10·6	10 7	10·7	10·3	10 0	9·5	8·0	F	F	F	F	16
11 0	12·6	12·8	12·5H	12·5H	12 0	11·3	11·8	11·7	11·6	11·8	12·3	17
10·9	11·0	11·6	11 8	12·1	11 7	11·0	9·7	F	F	F	F	18
C	C	C	9 7	10·0	9·9	10·0	8·9	8·0F	F	F	(9·0)F	19
10·6	10·7	11 4	11 7	12·2	12·0	11·5	9·3	(8·5)F	F	F	F	20
9·5	10·2	11·1	12·3	12·6	12·6	11·8	10·1	F	9·0F	10·6F	11·5F	21
10·8	11·4	12·2	13·1	13·5	13·7	12·9H	11·3H	F	F	F	F	22
11·0	10·9	10·7	10·8	11·2	11·8	11·8	9·9F	F	10·4	11·0F	12·1	23
10·7	11·1	11·0	10 8	10·9	11·6	12·2	10·3	10·3F	(10·5)F	F	F	24
10·8	11·3	11·5	11·6	C	12·1	12·7	11·7	10·3	10·4F	10·9	12·0	25
10 3	10·2	10·6	10·7	10 9	11 4	11·0	9·5	8·7F	F	F	F	26
11·5	11·5	11 8	12·5	12·6	13·1	12·6	(12·9)	(11·9)F	11·6F	(12·2)F	N	27
10·9	10·6	10·7	10·8	11·0	10·7	10·3	7·9F	F	F	(10 5)F	F	28
10·8	10 8	11·5	12·5	13·4	14 0H	13·4	12·2	F	F	F	13 9	29
10·3	10·0	10 2H	11 0	11·0	11·0	10·5	8·8	9·0F	10·1F	(11·3)F	F	30
10·4	10·2	10·4	11·1	11·5	11 2	10·6	10 3	9·5	10 8F	(11·9)F	13·0F	31
10 6	10 9	11 1	11·4	11 6	11 6	11·4	10 3	9 8	10 2	10 8	10 8	Mean
10·8	10·8	11·2	11·5	11·6	11·8	11·4	10·3	9·8	10 4	10·8	11·0	Median
29	29	30	31	30	31	31	31	21	15	14	15	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F1 | TABLE 11 | Latitude : 10°.2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month : August 1956. | 75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	230	225	210	210
2								Q	240	240	240	230
3								Q	235	225	220	210
4								Q	230	220	225	210
5								Q	220	230	225	220H
6								250	230H	220	210	210
7								Q	225	225	205	210H
8								Q	235	230	225	225
9								Q	230	235	235H	260HK
10								Q	235	230	220	215H
11								Q	225	225	215	210
12								Q	230	225	C	C
13								Q	235	215	200	200
14								Q	230	220H	205	215
15								Q	220	220	220	210
16								235	215	210	210	200
17								Q	225	230	220	210
18								Q	230	220H	215	210
19								Q	C	C	C	C
20								240	225	215	210	210H
21								Q	215	220	210	205
22								240	220	220	215H	200H
23								235	220	235	210	210
24								Q	230	M	220H	240
25								240	240	225	230	210
26								Q	240	230	230	220H
27								Q	225	220	210	210
28								235	225	220	B	215
29								Q	225	220	215H	220H
30								240	M	215	210	210
31								235	225	225	215	210
Mean								240	230	225	215	215
Median								240	230	225	215	210
Count								9	29	29	28	29

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F1.

Unit : Km.

Month : August 1956.

TABLE 11

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude : 10°.2 N

Longitude : 77°. 5E

12	13	14	15	16	17	18	19	20	21	22	23	Date
225	220H	220	220	215	230							1
230	225	220	220	220	255							2
220H	205	205	210H	240	Q							3
220H	210H	210H	225	230H	250							4
225H	215H	220	215H	220	245							5
205H	210	210	215	215H	Q							6
215H	210H	200H	210H	225	250							7
220H	220H	220H	220	230	Q							8
230K	220K	230	225	235	Q							9
210H	225H	220	235H	245	Q							10
210H	200H	215	215	240	245							11
C	C	210H	215HK	225HK	245							12
205HK	205HK	200H	215H	A	Q							13
200	210H	220	225	220H	240H							14
210H	200	210H	215	A	Q							15
200	190H	215	215H	220	240							16
200	200	210H	215H	220	Q							17
205	210	210H	220	225	Q							18
C	C	C	245	220	245							19
200	200H	205H	210H	220H	240							20
210	210	210	225	230	Q							21
200	205	210	215	220	240							22
215H	215H	215	220	230	Q							23
240	220	220H	225H	235	Q							24
215	205	215H	210	C	Q							25
220H	205	220	215H	235	Q							26
210	210	220H	B	230	Q							27
215	210	B	215H	240F	Q							28
240	215	225	B	240	Q							29
210H	210	B	B	230	Q							30
205	200	200	225	230F	Q							31
215	210	215	220	230	245							Mean
210	210	215	215	230	245							Median
29	29	28	28	28	12							Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic : foF1.

TABLE 12

Latitude · 10° 2 N.

Unit : Mc.

IONOSPHERIC DATA

Longitude · 77° 5 E.

Month : August 1956.

75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	L	L	L	L
2								Q	L	L	L	L
3								Q	L	L	L	L
4								Q	L	L	L	L
5								Q	L	L	L	L_H
6								L	L_H	L	L	L
7								Q	L	L	L	L_H
8								Q	L	L	L	L
9								Q	L	L	L_H	L_{HK}
10								Q	L	L	L	L_H
11								Q	L	L	L	L
12								Q	L	L	C	C
13								Q	L	L	L	L
14								Q	L	L_H	L	L
15								Q	L	L	L	L
16								L	L	L	L	L
17								Q	L	L	L	L
18								Q	L	L_H	L	L
19								Q	C	C	C	C
20								L	L	L	L	L_H
21								Q	L	L	L	L
22								L	L	L	L_H	L_H
23								L	L	L	L	L
24								Q	L	M	L_H	L
25								L	L	L	L	L
26								Q	L	L	L	L_H
27								Q	L	L	L	L
28								L	L	L	L	L
29								Q	L	L	L_H	L_H
30								L	M	L	L	L
31								L	L	L	L	L
Mean											·	·
Median											·	..
Count												..

Sweep 1 Mc to 25 Mc in $\frac{1}{2}$ min

10—4 D. D. G. Obs K. Kanal/57

Characteristic · foF 1.

TABLE 12

Latitude : 10°.2 N.

Unit . Mc.

IONOSPHERIC DATA

Month . August 1956.

75·0°*E Mean Time*

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	LH	L	L	L	L							1
L	L	L	L	L	L							2
LH	(5 2)L	L	LH	L	LQ							3
LH	LH	LH	L	LH	LL							4
LH	LH	L	LH	L	L							5
LH	L	L	L	LH	QL							6
LH	LH	LH	LH	L	LQ							7
LH	LH	LH	L	L	LQQ							8
LK	LK	L	L	L	LQQ							9
LH	LH	L	LH	L	LQ							10
LH	LH	L	L	L	L							11
C	C	LH	LHK	LHK	LL							12
LHK	LHK	LH	LH	A	LQ							13
L	LH	L	L	LH	LLH							14
LH	L	LH	L	A	LQ							15
L	LH	L	LH	L	LQ							16
L	L	LH	LH	L	LQQ							17
L	L	LH	L	L	LQQ							18
C	C	C	L	L	LL							19
L	LH	LH	LH	LH	L							20
L	L	L	L	L	QL							21
L	L	L	L	L	LQ							22
LH	LH	L	L	L	QQ							23
L	L	LH	LH	L	QQ							24
L	L	LH	L	C	QQ							25
LH	L	L	LH	L	QQ							26
L	L	LH	B	L	QQ							27
L	L	L	LH	L	QQQ							28
L	L	L	L	L	QQ							29
LH	L	L	L	L	QQ							30
L	L	L	L	L	Q							31
..	..		..	..								Mean
..	.	.		..	..							Median
..	1	..	.	..	..							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'E

TABLE 13

Latitude . 10° 2 N.

Unit . Km.

IONOSPHERIC DATA

Longitude : 77°.5 E.

Month : August 1956

75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	A	A
2									130	A	A	A
3									115	A	A	A
4								120	110F	115	A	A
5									A	A	120	A
6								120	110	110	110	A
7								120	115	120	110	110
8								130	120	120	120	120
9									120	120	120A	A
10									125	105	120	120
11									120	120	A	A
12									105	A	C	C
13									115	B	B	B
14									B	B	A	A
15									115	110	105	100
16									110	105	115	A
17									120	105	115	A
18									100	105	A	A
19								120	C	C	C	C
20								120	120	110	110	110
21									105	110	A	105
22								130	105	B	110	105
23								115	B	A	110	115
24									110	M	110	A
25								120	B	B	B	115
26										110	120	A
27									110	110	B	A
28									115	110	B	105
29									100	A	B	A
30								120	M	105	105	105
31									110	110	110	A
Mean								120	115	110	115	110
Median								120	115	110	110	110
Count								10	23	18	16	11

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'E | TABLE 13 | Latitude : 10°.2 N.

Unit . Km | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month . August 1956 | 75·0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	A	A	A	A	120							1
A	115	A	125	120	125							2
A	A	110	110F	120								3
A	115	105	110	105	105							4
120	A	110	115	115	A							5
115	120	A	110	110	A							6
A	A	110	110	110								7
A	A	110	120	125								8
A	120	120	120	120	125							9
120	120	110	115	110	105							10
A	N	N	115	N	110							11
C	C	A	115	115	120							12
B	110	100	115	100A								13
A	A	A	100	115	A							14
A	105	100	100	A	105							15
A	A	100	100	110	120							16
100	A	105	A	B								17
110	110	120	110	110								18
C	C	110	110	115								19
105	105	105	105	105	A							20
110	110	115	100	105	A							21
110	115	110	110	B	110							22
110	105	105	110	110								23
A	115	120	105	110	110							24
A	105	105	105	C								25
A	A	105	105	105	115							26
A	A	115	B	115								27
110	110	B	105	110								28
A	A	A	B	120								29
105	110	B	B	105	A							30
A	115	110	105	110	115							31
110	110	110	110	110	115							Mean
110	110	110	110	110	115							Median
11	17	21	26	25	14							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foE

Table 14

Latitude . 10°.2 N.

Unit : Mc.

IONOSPHERIC DATA

Month · August 1956.

75 0°*E Mean Time*

Longitude . 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	A	A
2									3 5	A	A	A
3									A	A	A	A
4								(3 3)	A	A	A	A
5									A	A	A	A
6								3 4	3 5	3·8	A	A
7								N	3 4	A	A	A
8								3.4	3·4	A	A	A
9									N	A	A	A
10									3·4	A	A	A
11									N	3·6A	A	A
12									N	A	C	C
13									4·1	B	B	B
14									B	B	A	A
15									3 2	A	A	A
16									A	A	A	A
17									3·3	A	A	A
18									A	A	A	A
19								3 5	C	C	C	C
20								2·9	3 5	A	4·0	A
21									3 3	3·6	A	3 9
22								3·3	A	B	A	4.1
23								2·6	B	A	3·8	A
24									3 4	M	A	A
25								2·9	B	B	B	A
26										A	A	A
27									3·5	A	B	A
28									3·6	A	B	A
29									3·2	A	B	A
30								3·1	M	3 8	A	4.0
31									3 2	3 6A	4·0	A
Mean								3·2	3·4	3·7		.
Median								3·3	3·4	3·6	.	..
Count								9	15	5	3	3

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · foE.

Unit . Mc.

Month · August 1956.

TABLE 14

IONOSPHERIC DATA

75 0°*E Mean Time*

Latitude : 10°.2 N.

Longitude 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	A	A	A	A	A							1
A	A	A	A	A	A							2
A	A	A	A	3 6								3
A	A	A	A	A	3 2							4
A	A	A	A	A	A							5
A	A	A	A	A	A							6
A	A	A	A	A								7
A	A	A	3 7	3 3								8
A	A	A	A	A	N							9
A	A	3·5	3 4	3·4	N							10
A	N	N	A	N	A							11
C	C	A	A	A	A							12
B	A	A	3 6	A								13
A	A	A	3 5	A	A							14
A	A	A	A	A	(3·0)							15
A	A	A	A	A	N							16
A	A	3 7	A	B								17
3·9	4 1A	A	3 7	A								18
C	C	C	A	3 3	3 1							19
A	A	A	3·7A	3 3	A							20
4·2	4·2	A	A	3 2	A							21
A	A	B	3·5	B	2·8							22
A	4·0	A	A	3 2								23
A	A	A	3 6	A	2·9							24
A	4 0	4 0	A	C								25
A	A	A	3·7	A	A							26
A	A	(3 7)	B	A								27
4·0	4 0	B	3 3	A	A							28
A	A	A	B	3 4								29
A	4 3	B	B	A	A							30
A	4 3	A	A	A	A							31
.	4 1	.	3 6	3 3	3·0							Mean
	4 1	.	3·6	3·3	3·0							Median
3	7	4	10	8	5							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic fEs. | TABLE 15 | Latitude : 10° 2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude . 77°·5 E.

Month : August 1956. | 75.0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									10 7FH	8·9FH	9·1FH	9·0F
2									G	6·0	7·7	9·4F
3									7.2	7·5F	9·0F	9·6F
4								G	7·1F	7·2	8·8	11·3F
5		4·0							9·0	7·2	9·0	9·0
6								G	7·2	7·4F	8·8	10·2F
7								G	G	8·0F	9·5F	11·0F
8								G	7·2	8·5F	9·0F	10·0F
9									G	9·9F	10·3F	10·2
10								7·8FH	G	7·2	8·5F	9·7F
11									G	7 6	9 1F	10 2F
12									G	8·0F	C	C
13									4·7	B	B	B
14									B	B	7·0F	10·7F
15									6·2F	7·9F	9·7F	9·0F
16			5·5						7·2F	8·9F	9·0F	9·5F
17									G	7·9F	8·3F	10·0F
18									6·3F	7·2F	9·9F	10·0F
19	5·5	4·3						G	C	C	C	C
20								G	7·0F	9·6F	10·2F	10·4F
21									8·8F	8·5F·	9·5F	9·7F
22								G	4·0F	G	8·8F	10·3F
23								G	G	8·7F	8·8F	10·6F
24									G	M	10·2F	8·8F
25		5·5	3·7					G	G	G	G	9·7F
26										8·6F	9·1F	8·2F
27									G	7·2F	G	9·0F
28									G	9·0F	10·2F	10·5F
29									4·0F	6·0F	G	9·8F
30								G	M	8·0F	11·0F	10·4F
31									7·2F	11·0F	11·1F	11·4F
Mean	.	..	..					.	7·0	8·1	9·3	9·9
Median	..	..	..					G	4·7	7·9	9·0	10·0
Count	1	3	2					11	27	27	28	28

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : fEs.

TABLE 15

Unit : Mc.

IONOSPHERIC DATA

Latitude : 10°·2 N.

Month : August 1956.

75.0° *E Mean Time*

Longitude · 77° 5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
9·0F	9·5F	8·6F	9·7F	8·5F	7·0						3·9	1
9·9F	9·4F	9·8F	8·7F	8·0F	6 4F							2
10·9F	10·2FH	10·0F	9 6F	8·0					3·9			3
12 0F	10·6F	10·0FH	8·7FH	8 2FH	G							4
9·9	10·4	10·0F	10·5F	8 8	6·7							5
10·2F	10 5F	10·4F	10·4F	8·8F	6·7							6
10 5F	10·8F	10·5F	10·2F	8·5F	6·1							7
10·3F	7·3F	9·7FH	7·7F	G								8
11 0F	9·9F	10·3FH	10·0FH	8.8F	G						3·7	9
11·0F	9·7F	9·0F	7·4F	6·0	G							10
10·0F	N	N	7 3F	N	6·8F							11
C	C	8·9F	10·4F	8·8F	6·7F							12
6·5B	7·6F	7·6F	6·4F	10 8FH								13
10·8F	8·5F	8·3F	8·4F	8·7F	6·2F							14
8·9F	9·7F	8·9F	9·8FH	8·8F	G							15
9·0F	10·0F	10·8F	8·7F	8·5F	G							16
8·7F	8·7F	6·5F	8·8F	B								17
9·6F	9·8F	7·8F	6·2F	7·9F								18
C	C	C	7·8F	8·6F	4·2F							19
10 8F	10·6F	9·0F	8·7F	8·0F	6·7F							20
10·5F	10·2F	6·8F	9·6F	8·0F	6·0F							21
9·8F	8·8F	G	G	G	G							22
10·7F	10·7F	10·2F	8·8F	7·1F								23
8·8F	10·9F	10·8F	10·8F	7·8F	8·6F							24
10·8F	10·5F	10·3F	10·8F	C								25
10·8F	11·2F	10·8F	9·0F	9·0F	7·6F							26
8 8F	9·4F	6·6F	G	8·3F								27
10·7F	10·4F	10·7F	9·7F	8·8FH	6·0F					2·6F	2·6	28
10·0F	11·4F	11·0F	G	G								29
11·0F	11·0F	10·6F	10·0F	8·8F	7·0F							30
11·3F	11·7F	11·5F	10·7F	9·7F	10·1F							31
10·1	10·0	9·5	9·1	8·4	6 8				..	.	.	Mean
10·3	10·2	10·0	8·8	8·5	6·3				.	.	..	Median
29	28	29	31	28	22				1	1	3	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : (M3000)F2.

TABLE 16

Unit .

IONOSPHERIC DATA

Latitude 10°·2 N.

Month August 1956.

75·0°*E Mean Time*

Longitude . 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	2·9	3·0	3·2	3·3	3·3	3·35	3·0	2·9	2·7	2·5	2·25	2·3
2	F	3·0	3·1F	3·1	3·1	3·2	3·05	2·9	2·5	2·35	2·25	2·3
3	F	F	F	F	F	3·35	3·05	2·9	2·6	2·3	2·2	2.2
4	2·75	3·0	3·1	(3·3)S	(3·3)	(3·2)	3·1	2·9	2·65	2·35	2·35	2·25
5	F	F	F	F	(3·2)F	3·2	2·9	2·65	2·6	2·35	2·3	2·3
6	(3·2)	3·3	3·3	3·3	3·2	3·2	2·8	2·8	2·4	2·35	2·2	2·2
7	(2·8)F	3·0	3·2	3·2	3·2	3·35	2·9	2·85	2·6	2·35	2·2	2·2
8	2·8	3·0	(3·2)	3·15	3·1	C	3·1	2·9	2·55	2·3	2·35	2·2
9	F	(2·6)F	F	2·7	F	2·9F	(2·7)F	2·7	2·6	2·4	2·1	2·1
10	2·65	2·4	2·45	2·85	3·0	3·0	2·8	2·8	2·7	(2·5)	2·3	2·2
11	F	3·1	3·0	3·0	3·1	3·2	3·0	2·9	2·75	2·4	2·35	2·3H
12	(2·8)F	2·9F	2·6F	F	2·5F	2·85	3·1	3·0	2·7	2·5	C	C
13	2·8	2·7	2·6	2·5	2·45	2·7	3·1	3·0	2·8	2·6	2·3	2·4
14	F	F	2·85	3·0	3·1	3·1	3·15	3·1	3·1	2·9	2·5	2·15
15	F	F	3·1F	3·2	F	3·4	3·2F	3·1	2·8	2·5	2·3	2·3
16	F	3·15	3·15	2·9	3·1	3·4	3·2	3·0	2·85	2·6	2·15	2·3
17	F	3·1	F	3·2	F	F	3·2	3·2	3·0	2·6	2·2	2·35
18	2·9	3·15	3·2	3·3	3·3	3·5	2·95	2·9	2·6	2·4	2·3	2·3
19	F	F	F	2·85	3·45	3·4	3·2z	2·95	C	C	C	C
20	(3·0)F	3·05F	3·1	F	(3·2)F	F	3·0F	2·85	2·5	2·4	2·35	2·3
21	3·0	(3·4)F	3·2	F	3·4	F	2·95	2·8	2·5	2·4	2·35	2·35
22	2·7	2·9	3·0	3·25	3·2	2·95	2·9	2·9	2·65	(2·3)	2·3	2·3
23	F	F	F	2·9F	(2·8)F	3·2F	3·2	2·95F	2·55	2·3	2·3	2·2
24	3·3	3·3	3 05	2·9	3·3	3·5	3·1	3·1	2·8	M	2·1	2·4
25	3·15F	(3·1)F	F	F	(3·0)F	3·1	3·1	2·9	2·8	2·4	2·35	2·35
26	2·9	2·9	3·0	3·0	2·9	3·3	3·3	3·15	3·0	2·5H	2·15	2·25H
27	M	M	3·0	F	3·3	F	3·1	3·1	2·9	2·55	2·3	2·3
28	3·1	3·1	3·1	3·0	3·3	3·5	3·1	3·0	2·8	2·5	2·2	2·2
29	F	3·0	3·0	F	3·1F	(3·5)F	(3·0)F	3·05	2·95	2·65	2·35	2·2
30	3·25	3·1	3·25	3·15	3·25	3·45	3·15	3·15	M	2·3	2·2	2·2
31	(3·2)F	3·2	3·1	(3·1)F	3·4	3·4	3·1	3·0	2·7	2·4	2·35	2·25
Mean	2·95	3·0	3·05	3·05	3·15	3·25	3·05	2·95	2·7	2·45	2·25	2·25
Median	2·9	3·0	3·1	3·1	3·2	3·25	3·1	2·9	2·7	2·4	2·3	2·3
Count	18	24	24	23	27	26	31	31	29	29	29	29

Sweep 1 Mc to 25 Mc in ½ min.

11—4 D.D.G. Kodi Kanal/57

Characteristic (M3000)F2

TABLE 16

Latitude : 10°·2 N.

Unit :

IONOSPHERIC DATA

Longitude : 77°·5 E.

Month · August 1956

75·0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
2·25	2·25	2·25	2·15	2·1	2 2	2·3	2·1	F	F	F	F	1
2·2	2·25	2·3	2·3	2·2	2·1H	2·15	2·3	(2·3)	F	F	F	2
2·15	2·2	2·2	2·15	2·1	2·3	2·4	2·4	2 3	2·35	2·4	2·5	3
2 2H	2·3	2 35	2·35H	2·4H	2·4	2·25H	2·15H	F	F	F	F	4
2·25H	2·2	2·15	2·15	2·2	2·3	2·4	2·25	(2·4)F	2·4F	2·5F	2·7F	5
2·2	2·15	2·15	2·2	2·2	2·2	2·15	2·1	(2·0)F	(2·2)F	F	2·5F	6
2·1H	2·05	2·0	<2·05	2·1	2·2	2·3	2·4	2·3	2·4	2·4	2·6	7
2·1	2·15	2·2	2·2	2·25	2·4	2·45	2·35	(2·2)F	F	F	F	8
2·2	2·2	2·2	2·25	2·2	2·2	(2 2)	2·3	2·35	2·3	2·5	2·75	9
2 2	2 2	2·2	2·2	2·2	2 3	2·35	2·3	2·2	2·3F	F	F	10
2·25	2·25	2·4	2·4	2·35	2·45	2·4	2·2	(2·2)F	F	F	F	11
C	C	2·35	2·5	2 35	2·4	2 4	2·35	2·25	2 3	2·5	2·7	12
2 25	2·2	2·3	2·3	2·4	2·5	(2·5)	2·3	2·1F	F	F	F	13
2 2	2·25	2·2	2·2	2·2	2·2	2·2	<2·0	F	F	F	2·6F	14
2·25	2·3	2·3	2·4	2·45	2·6	2·7	(2·5)	(2·35)F	F	(2·5)F	F	15
2·25	2·25	2·2	2·1	2·1	2·3	2·3	2·3	F	F	F	F	16
2·55	2·45	2·4	2·3	2·25	2·25	2·35	2·3	2·35	2·4	2·6	2·8	17
2·25	2·3	2·3	2·25	2·35	2·3	2·2	2·1	F	F	F	F	18
C	C	C	2·15	2·15	2·25	2·3	2·2	2·1	F	F	(2·8)F	19
2·2	2·25	2 3	2·3	2·3	2·3	2·3	2·2	(2·2)F	F	F	F	20
2·3	2·25	2·35	2·4	2·4	2·4	2·3	<2·05	F	(2·3)F	2·3F	2 6F	21
2·35	2·35	2·4	2·5	2·6	2·65	2·6H	2·25H	F	F	F	F	22
2·2	(2 2)	2·15	2·2	2·35	2·35	2 3	2·2F	F	2·3F	(2·6)F	3·0	23
2·2	2 25	2·2	2·1	2·2	2·4	2·5	2·35	2·3F	2·4F	F	F	24
2·3	2·3	2·2	2·15	C	2·4	2·5	2·4	2·4	2·4F	2·65	2·9	25
2·3	2·25	2·2	2·2	2·2	2·25	2·25	2·1	(2·2)F	(2 4)F	F	F	26
2·25	2·3	2·3	2·35	2·3	2·35	2·4	2 4	2·35	2·4F	2·9F	N	27
2·1	2·1	2 15	2·15	2·15	2·25	2·2	2·3	F	F	(2·4)F	F	28
2·15	2·2	2 25	2·4	2·55	2·65	2·65	2·35	F	F	F	3·15	29
2·2	2·2	2·2H	2·2	<2·2	2·2	2·2	2·2	2·15F	2·3F	2·5F	F	30
2·15	2·15	<2·15	2·2	2·1	2·35	2·3	2·2	2·3	2·4F	(2·7)F	3·0F	31
2·2	2·25	2·25	2·25	2·25	2·35	2·35	2·25	2 25	2·35	2·55	2·75	Mean
2·2	2·25	2·2	2·2	2·2	2·3	2·3	2·3	2·3	2·4	2·5	2·8	Median
29	29	30	31	30	31	31	31	21	16	14	14	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h/F_2

Unit : Km.

Month : September 1956.

TABLE 17

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude : 10°·2 N

Longitude : 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	240F	235	255	250F	235	235	260	L	L	L	L	L
2	220F	240	250F	240	235	225	255	(255)L	C	C	C	C
3	240	275	290F	265	235	220	260	L	L	275L	L	L
4	255	255	240	230	230	220	275	275	L	L	260L	L
5	240	235	225	220	220	210	245	L	(250)L	L	L	L
6	240F	235F	240	235 F	230F	225F	245	L	L	L	L	L
7	230	225	255	255	265	230	250	L	L	L	L	L
8	235F	230F	240	230F	230F	220	255	(235)	L	L	L	M
9	340F	365	340F	325	365	320	275	M	M	M	L	L
10	260	245	255	255	235	215	260	L	L	L	L	270L
11	235	240	240	235	220	220	255	L	L	LH	L	L
12	235	220	240	235	240	220	255	L	L	L	L	L
13	230	225	220F	215	235F	220	260	L	L	L	L	L
14	240F	235	235	235	220	210	255	L		L	L	L
15	275F	230F	230F	230F	235	220	270	L	L	L	L	L
16	235F	225	225	235	240	BF	275	L	L	L	L	L
17	295F	265F	255F	230	240F	225	270	245	L	L	L	L
18	255F	250F	250	235F	225	220F	260	250	L	L	L	L
19	240	230F	230	230F	225	225	265	L	L	L	L	L
20	250F	235F	235F	225F	220F	215	260	L	L	L	L	L
21	270F	250	260	260	260F	240	285	L	L	L	L	L
22	255	240	240	230	230	220	255	260L	L	T	T	T
23	T	T	T	T	T	T	T	T	T	T	T	T
24	T	T	T	T	T	T	T	T	T	T	T	T
25	T	T	T	T	T	T	T	T	T	T	T	T
26	T	T	T	T	T	T	T	T	T	T	T	T
27	240	235	225	230F	235	235	260	L	L	L	L	L
28	225	220	240	280	315F	255	260	L	265L	275	L	295L
29	235	220F	235	260F	240	230	260	260	L	L	L	280L
30	255F	250F	250F	250	235	225	265	260	275	L	L	L
Mean	250	245	245	245	240	230	260	255	.	.	.	..
Median	240	235	240	235	235	220	260	260	..		..	.
Count	26	26	26	26	26	25	26	8	3	2	1	1

Sweep 1 Mc to 25 Mc in ¼ min.

Characteristic · h'F2

TABLE 17

Unit Km.

IONOSPHERIC DATA

Latitude : 10° 2 N.

Month : September 1956.

75.0°*E Mean Time*

Longitude : 77°·5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L	245	285	410F	F	320F	275F	260F	1
C	C	L	L	L	275H	325H	325H	255H	240	235	240	2
L	L	L	L	L	250	280	370	340F	280	265	260	3
L	L	L	L	L	245	265	410	430F..	270F	295F	275	4
L	L	L	L	L	250	280	F	F	(310)F	280F	280F	5
L	L	L	L	L	255	300	390F	F	265	235	235	6
L	L	L	L	L	250	300	445F	(330)F	325F	245F	240F	7
L	L	L	L	L	245	285	F	F	340F	300	275	8
L	B	L	L	L	265	310	400F	370F	300F	280	275	9
L	L	L	L	L	265	300F	405	560F	390F	350F	300F	10
L	410L	L	L	L	260	300	390	F	F	315F	275F	11
L	L	L	L	L	255	300	445F	F	405F	F	260F	12
L	L	L	L	L	255	310	F	F	325F	290FH	300F	13
L	L	L	L	L	270	315F	485F	550F	425F	385F	320F	14
L	L	L	L	L	260	315	485F	F	F	330F	275F	15
L	L	L	480L	530L	L	325	500F	F	F	360F	260F	16
L	L	L	L	L	275	335	475F	(480)F	405F	F	245	17
L	L	L	450L	500L	265	320	460	405F	330F	265F	280F	18
L	L	L	L	L	250	310	475F	350F	300F	F	275F	19
L	L	(430)L	L	(520)L	260	300	430F	385F	F	320F	305	20
L	L	490L	520	L	260	315	F	260F	270F	275	260	21
T	T	T	T	T	T	T	T	T	T	T	T	22
T	T	T	T	T	T	T	T	T	T	T	T	23
T	T	T	T	T	T	T	T	T	T	T	T	24
T	T	T	T	T	T	T	T	T	T	T	T	25
T	T	T	T	L	260	310	435FH	F	305F	240	235	26
L	L	L	L	L	270	340	F	500F	280F	295F	240F	27
L	L	L	L	L	260	325	460F	480F	365F	320F	290F	28
L	L	L	L	L	265	335	F	445F	360F	330F	260F	29
L	L	L	L	L	260	310	430F	F	F	315F	280	30
	..	..	.		260	310	430	410	325	295	270	Mean
..	..		.	.	260	310	430	405	320	295	275	Median
..	1	2	3	3	25	26	20	15	21	23	26	Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic foF2.

TABLE 18

Latitude . 10° 2 N.

Unit : Mc.

IONOSPHERIC DATA

Longitude : 77° 5 E.

Month : September 1956.

75·0° *E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	12·8F	10·6	(9 0)F	F	7·5	6·2	7·5	10·0	11·0	10·7	10 6	11·0
2	F	8·5	F	F	8·3	7·5F	8·9	11 3	C	C	C	C
3	8·1	6 8	7·0	7·4	6·9	4·8	7·4	10·7	12·3	13·4	13·1	12·2
4	11 6	10·6	10·5	9·4	9·0	6·6	7·0	10·3	11·4	11·4	11·4	11·1
5	10·6F	9·1	8·4	7·5	6 8	5·6	7·0	10·4	12·0	10·7	10·4	10 2
6	11·4F	(10·4)F	F	(7·2)F	F	7·2F	8·2	10·8	12·1	11·2	9·6	10·0
7	11·0	8 4	6·8	6·3	6·3	5·6	7·8	10·4	12·4	13 2	12·0	11·2
8	10 2F	8·9F	7·4	F	F	5 2	F	(10·4)	12·0	12·5	11·0	M
9	11·1F	F	9·9	9 8	8 6	8·0	10·0	M	M	M	12·3	11·9
10	(13·3)	11·8	10·8	10·2	9·4	6·7	7·6	11·0	12·5	12·8	11·7	11·6
11	F	11·5	10·8	10·6	9·8	6·6	7·2	10·6	12 6	13·8H	13·0	12·4
12	12·4	12·3	N	9·1	9·0	7·3	7·7	10·7	12·6	13·5	12 9	12·5
13	11·8F	10·8	F	F	F	F	7·4	10·6	12·7	12·4	12 1	12·8
14	F	F	11·4	10·5	8·0	6·6F	7·6	11·3	N	12 4	11 9	11·6
15	11·1F	F	(9·2)F	F	6·5	4·0	7·2	11·6	12·5	13·0	12·1	11·4
16	10·5F	10·4F	7·7	4·3	3·4	BF	7·0	10·6	11·7	11·1	11·4	11·6
17	10·7F	10·2F	10·0F	9·8F	9·3F	F	9·0F	F	(13·0)	12·0	11·0	11·3
18	F	F	8·6	F	F	F	(7·7)F	10·9	12·6	12·5	11·8	11·7
19	12·0F	F	F	F	5 6F	3·4	7·1F	10 7	11·7	10·9	10·5	10·5
20	(12·0)F	(8·4)F	F	6·4F	(6·3)F	4·4	7·2	10·6	11·6	10·7	10·6	11·1
21	F	F	(10·5)F	9·7F	F	8·0	9·5	11·5	12·4	12·2	11·6	12·0
22	12·2	10·9	10·2	8·8	7·7	6·8	8·0	11·0	12·8	T	T	T
23	T	T	T	T	T	T	T	T	T	T	T	T
24	T	T	T	T	T	T	T	T	T	T	T	T
25	T	T	T	T	T	T	T	T	T	T	T	T
26	T	T	T	T	T	T	T	T	T	T	T	T
27	13·4	11 9F	9·7F	F	6·5	4·6F	7·5	10·8	13·0	13·7	12·6	11·7
28	(12 0)	9·0F	F	7·6F	F	7·9	9·1	11·7	13·2	14·5	14·7	13·2
29	12 9F	F	F	F	6·6	F	7·5F	10·8	12·6	13·6	13·7	12·8
30	F	F	10 1F	(9·1)F	F	6·2F	7·4	11·0	12 5	13·2	11·7	11·0
Mean	11·6	10·0	9·3	8·4	7·4	6·2	7·8	10·8	12 3	12·4	11·8	11·8
Median	11·7	10·4	9·8	9·1	7·5	6·6	7·5	10·8	12·5	12·5	11 8	11·6
Count	20	18	18	17	19	21	25	24	23	23	24	23

Sweep 1 Mc to 25 Mc in ¼ min.

Characteristic : foF2.

Unit : Mc.

Month : September 1956.

TABLE 18

IONOSPHERIC DATA

75·0° *E Mean Time*

Latitude : 10°·2 N.

Longitude : 77° 5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
11·5	12·0	12 1	11·9	11 9	11·9	11·2	9·7F	F	F	12·1F	F	1
C	C	C	13·9	15·3	13·8H	13 4H	13·1H	13·2H	12·1	11·1	11·4	2
11·7	12 2	11·7	11 6	11 7	12 0	11 7	11 0	10 7	11 0	11·4	11 6	3
11·4	12·0	12·1	12·7	13·0	12·6	12·0	(9 7)F	(9·7)F	9·3F	F	11·1F	4
10·0	10·2	11·0	11·9	12·8	13·4	12 8	11·0F	F	F	11 9F	F	5
9·8	9·5	10·3	11·2	11·7	11·8	11·7	(9·6)F	(10·2)F	10·4	(12·0)F	12·1F	6
11·4	11·0	11·4	11·7	12·0	12·2	11·9	F	F	9 5F	F	F	7
11·0	11·2	11·6	12·0	12·6	12·7	12·5N	F	F	F	F	F	8
11·5	B	12·0	12·3	12·1	12 0	11·8	11·1F	F	(12·2)F	12·6	(13·0)	9
11·8	11·7	11·5	11·4	11·4	11·4	11·2	10·5	F	(10·1)F	F	F	10
12·4	12·9	13·7	13·8	13·5	13·7	(13·5)	11·7	11.3F	11·0F	F	11·2F	11
13·0	12·9	13·1	13·6	13·7	(13·2)	12·3	F	F	F	F	F	12
12·7	12 9	12·8	12·3	12·3	12·4	(11·2)	8·7	F	F	FH	F	13
11·4	11·6	11·8	11·7	12·0	12·4	(11·4)	10·4	F	F	F	F	14
11·5	11·7	12·1	12·5	12·5	12·5	(11·8)S	F	F	F	F	F	15
11·8	(12·9)	14·0	14·0	14·0	14·0	(12·6)	F	F	F	F	F	16
11·6	12·4	13·0	13·0	12·5	11·9	10·7	F	F	F	F	(12·0)F	17
11·6	12·2	12·9	13·7	14·0	14·0	13·0	10·8	(9·9)	(12·0)F	12·7	F	18
10·6	11·0	11·6	12·1	12·5	12·7	11·3J	F	F	F	(13·0)F	F	19
11·9	12·7	13·4	13·6	13 8	14·0	13·3	11·8F	11·8F	11·9F	F	F	20
12·8	13·8	14·4	14·6	14·9	14·8	13·9	F	F	(12·0)F	11·9F	(11·9)	21
T	T	T	T	T	T	T	T	T	T	T	T	22
T	T	T	T	T	T	T	T	T	T	T	T	23
T	T	T	T	T	T	T	T	T	T	T	T	24
T	T	T	T	T	T	T	T	T	T	T	T	25
T	T	T	T	12·4	12·5	11·7	F	(12·0)F	F	12·7	13·2F	26
11·4	11·6	11·8	11·9	11·8	11·2	9·7	F	F	F	F	F	27
13·4	13·4	13·9	14·0	13·8	12·9	10 8	9·0	F	F	F	F	28
11·6	12·4	13·0	13·4	13·6	13·3	12·2	F	F	F	(9·8)F	F	29
10·7	11·2	11·6	11·7	12·4	12·7	(12·3)	11·0	10·3F	F	F	F	30
11·6	12·0	12·4	12·6	12·8	12·8	12·0	10·6	11·0	11·0	11·9	11· 9	Mean
11·6	12·0	12·1	12·3	12·5	12·6	11·8	10·8	10·7	11·0	12·0	11·9	Median
24	23	24	25	26	26	26	15	9	11	11	9	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F1.

Unit . Km.

Month · September 1956.

TABLE 19

IONOSPHERIC DATA

75.0° *E Mean Time*

Latitude 10° 2 N.

Longitude : 77° 5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								235	210	210	210	200H
2								230	C	C	C	C
3								235	215	220	220	200
4								240	230	220	210	210
5								230	220	210	210	220
6								235	215	215	B	B
7								235	220	220	210	A
8								Q	215	220	200	M
9								M	M	M	240	A
10								245	235	225	220	215
11								240	235	A	225H	220
12								235	235	215	215	205
13								240	235	B	B	205
14								235	215	215	210	215
15								240	235	230	225	225
16								245	235	205	215	215
17								Q	235	220	210	210
18								Q	235	A	215	215
19								240	210	210	210	200H
20								235	205	200	205	205
21								250	215	220	220	220
22								235	225	T	T	T
23								T	T	T	T	T
24								T	T	T	T	T
25								T	T	T	T	T
26								T	T	T	T	T
27								245	230	220	220	210
28								240	230	215	210	200
29								240	235	225	210	210
30								240	230	220	215	200
Mean								240	225	215	215	210
Median								240	230	220	210	210
Count								22	24	20	22	20

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F1.

Table 19

Latitude : 10° 2 N.

Unit : Km.

IONOSPHERIC DATA

Month September, 1956.

75 0°*E Mean Time*

Longitude : 77° 5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
205	200	210	210	220								1
C	C	C	240	2·0								2
230	220	225	235	235								3
200H	215	220	215	230								4
210	205	210	215	235								5
B	B	B	230	235								6
200	205	205	220	225								7
200H	195	200	210	225								8
B	B	A	A	240								9
215	230	225	230	245								10
B	225	225H	230	230								11
A	210	210	220	235								12
(215)	220	215	225	235								13
210H	210	220	225	240								14
230H	220H	225	225	240								15
220H	215	215	220	240								16
220	220H	220	225	235								17
215	205	220H	220H	240								18
200	200	220	225	245								19
215H	210	220	220	235								20
A	A	220	230	240								21
T	T	T	T	T								22
T	T	T	T	T								23
T	T	T	T	T								24
T	T	T	T	T								25
T	T	T	T	235								26
210H	210H	210H	205H	225								27
205	200	200	215	230								28
200	205	205	210	235								29
210H	205	210	220	230								30
210	210	215	220	235								Mean
210	210	220	220	235								Median
19	21	22	24	26								Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic : foF1.

TABLE 20

Unit : Mc.

IONOSPHERIC DATA

Latitude : 10° 2 N.

Month : September, 1956.

75·0°*E Mean Time*

Longitude . 77° 5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								L	L	L	L	LH
2								L	C	C	C	C
3								L	L	L	L	L
4								L	L	L	L	L
5								L	L	L	L	L
6								L	L	L	L	L
7								L	L	L	L	L
8								L	L	L	L	M
9								M	M	M	L	L
10								L	L	L	L	L
11								L	L	L	LH	L
12								L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	L	L
15								L	L	L	L	L
16								L	L	L	L	L
17								Q	L	L	L	L
18								Q	L	L	L	L
19								L	L	L	L	LH
20								L	L	L	L	L
21								L	L	L	L	L
22								T	T	T	T	T
23								T	T	T	T	T
24								T	T	T	T	T
25								T	T	T	T	T
26								T	T	T	T	T
27								L	L	L	L	L
28								L	L	L	L	L
29								L	L	L	L	L
30								L	L	L	L	L
Mean								..	..	..	..	..
Median								..	..	..	..	..
Count								..	..	..	..	..

Sweep 1 Mc to 25 Mc in ½ min.

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Characteristic · foF1.

TABLE 20

Latitude : 10°·2 N.

Unit : Mc

IONOSPHERIC DATA

Longitude : 77°·5 E.

Month . September, 1956.

75·0° *E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L								1
C	C	C	L	L								2
L	L	L	L	L								3
LH	L	L	L	L								4
L	L	L	L	L								5
L	L	L	L	L								6
L	L	L	L	L								7
LH	L	L	L	L								8
L	B	L	L	L								9
L	L	L	L	L								10
L	L	LH	L	L								11
L	L	L	L	L								12
L	L	L	L	L								13
LH	L	L	L	L								14
LH	LH	L	L	L								15
LH	L	L	L	L								16
L	LH	L	L	L								17
L	L	LH	LH	L								18
L	L	L	L	L								19
LH	L	L	L	L								20
L	L	L	L	L								21
T	T	T	T	T								22
T	T	T	T	T								23
T	T	T	T	T								24
T	T	T	T	T								25
T	T	T	T	L								26
LH	LH	LH	LH	L								27
L	L	L	L	L								28
L	L	L	L	L								29
LH	L	L	L	L								30
..	.	..	..	..								Mean
.	.	..	..	..								Median
.	..		..	..								Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · h'E

Unit : Km

Month : September, 1956.

TABLE 21

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude . 10° 2 N.

Longitude : 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									105	110	100	115
2								105	C	C	C	C
3									105	115	115	110
4								115	110	105	100	110
5									110	110	105	A
6									105	115	B	B
7								115	A	105	A	A
8								110	110	A	A	M
9								M	M	M	B	A
10										105	A	A
11									B	A	110	110
12									N	A	A	B
13								105	105	B	B	B
14								105	100	A	A	A
15								120	110	A	A	115
16									A	A	A	110
17									115	105	105	110
18									105	105	A	A
19								115	110	110	105	A
20									100	A	A	A
21									A	A	110	A
22									110	T	T	T
23								T	T	T	T	T
24								T	T	T	T	T
25								T	T	T	T	T
26								T	T	T	T	T
27								120	110	110	A	A
28								120	105	110	A	110
29								125	115	A	A	A
30									110	110	A	A
Mean								115	110	110	105	110
Median								115	110	110	105	110
Count								11	18	13	8	8

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'E

TABLE 21

Latitude : 10°·2 N.

Unit : Km

IONOSPHERIC DATA

Month : September, 1956.

75·0° *E Mean Time*

Longitude : 77°·5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
115	110	110	105	105								1
C	C	C	B	B	A							2
A	115	115	115	110								3
120	105	110	105	110	110							4
110	A	A	115	110								5
B	B	B	A	100								6
A	A	A	110	A								7
A	A	A	115									8
B	B	A	A									9
A	A	A	A	110	115							10
B	A	A	A	120								11
A	A	A	115	A								12
B	110	105	105	105								13
110	110	110	110	A								14
A	115	115	110	110	A							15
A	A	A	A	A	A							16
115	110	110	110	110								17
A	105	110	105	115								18
110	A	105	110	105	115							19
105	105	105	105	105	A							20
A	A	115	110	110	120							21
T	T	T	T	T	T							22
T	T	T	T	T	T							23
T	T	T	T	T	T							24
T	T	T	T	T	T							25
T	T	T	T	105	A							26
A	110	110	110	110								27
110	110	110	105	110								28
110	A	110	110	110								29
110	110	A	110	110								30
110	110	110	110	110	.							Mean
110	110	110	110	110	.							Median
10	12	14	19	19	4							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : foE

Unit : Mc

Month : September, 1956.

TABLE 22

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude : 10°.2N

Longitude : 77°.5E

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									3·2A	3·5A	4·0	A
2								(2·5)	C	C	C	C
3									3 2	3 6A	4·1A	A
4								3·0	3 3	A	A	A
5									(3 4)	(3 7)	A	A
6									3 4	4·3	B	B
7								(3·0)	A	A	A	A
8								(2 8)	3 3	A	A	M
9								M	M	M	B	A
10										A	A	A
11									B	A	4·0A	A
12									N	A	A	B
13								N .	3 7	B	B	B
14								2·9	A	A	A	A
15								3 0	(3 5)	A	A	A
16									A	A	A	A
17									3 5	A	3·9	A
18									A	A	A	A
19								2·9	A	3·4	3·5A	A
20									A	A	A	A
21									A	A	3·5A	A
22									3 3A	T	T	T
23								T	T	T	T	T
24								T	T	T	T	T
25								T	T	T	T	T
26								T	T	T	T	T
27								2·8	3 0A	A	A	A
28								2 8	A	A	A	A
29								2·7	3 3	A	A	A
30									A	A	A	A
Mean								2 8	3·3	3·7	3·8	..
Median								2·8	3·3	3 6	4 0	..
Count								10	12	5	6	..

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · foE

TABLE 22

Latitude : 10°.2N

Unit : Mc

IONOSPHERIC DATA

Longitude : 77°·5E

Month : September, 1956.

75 0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	4 2	A	4 1	3·8								1
C	C	C	B	B	A							2
A	4·0	A	3 6	3·3								3
A	A	A	A	A	A							4
A	A	A	4·0	3 2								5
B	B	B	A	A								6
A	A	A	A	A								7
A	A	A	A									8
B	B	A	A									9
A	A	A	A	A	A							10
B	A	A	A	A								11
A	A	A	3 8	A								12
B	A	4·0	A	3·4								13
A	A	A	A	A								14
A	4·3A	A	A	A	A							15
A	A	A	A	A	A							16
A	A	4 0	A	3 5								17
A	A	4·0	A	A								18
A	A	3 3A	A	3·4A	A							19
A	A	3·5A	A	3 5A	A							20
A	A	3·8	3 8	A	3 0							21
T	T	T	T	T	T							22
T	T	T	T	T	T							23
T	T	T	T	T	T							24
T	T	T	T	T	T							25
T	T	T	T	A	A							26
A	A	A	A	A								27
A	A	A	A	A								28
A	A	3 5A	A	A								29
A	A	A	3 0A	A								30
..	..	3·7	3·7	3 4	..							Mean
.	..	3·8	3·8	3·4	..							Median
..	3	7	6	7	1							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : fEs

TABLE 23

Unit : Mc

IONOSPHERIC DATA

Latitude : 10°.2N

Month : September, 1956.

75·0°*E Mean Time*

Longitude : 77°.5E

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									8 7F	9 7F	9 9F	9 1F
2		5 8H						G	C	C	C	C
3			3·3						7·9F	8 3F	9 6F	10 3F
4								G	8·3F	10 3F	11 3F	11 2F
5									G	G	9 8F	9 6F
6									6·0F	8 8F	G	G
7								G	4 2F	7 2F	8 0F	8 5F
8								G	4 2F	7 3F	8·7F	M
9								M	M	M	G	10 6F
10										7·5F	8 9F	9 0F
11									G	8 6F	10 2F	10 8F
12									G	8 7F	6 7F	9·1F
13								G	6 0F	G	G	G
14				2·8				6 0F	7 5F	7 9F	10 5F	9·7F
15								G	G	9 6F	10·7F	11·0F
16									7 4F	9 0F	9 0F	10 3F
17		3·8F							8 4F	9 0F	10 8F	11 0F
18									8 8F	10·3F	10 3F	10 6F
19								6·4F	8 2F	9 4F	10 9F	10 5F
20									8·5F	8 5F	10 8F	10·8F
21									7 1F	8 5F	11 4F	10·8F
22									7 8F	T	T	T
23								T	T	T	T	T
24								T	T	T	T	T
25								T	T	T	T	T
26								T	T	T	T	T
27	10·6F	7·6F		3·9			6·1	6·0F	8 8F	11 8F	12 0F	12 2F
28								G	9·3F	10 8F	11 4F	11·5F
29								5 7F	5·6F	11 0F	11·4F	11 6F
30								7 2	10 7F	11 0F	11 8F	11 8F
Mean	..	..	..	..			.	6·3	7 5	9 2	10 2	10 5
Median		..	..	..			..	G	7 5	8 8	10·2	10 6
Count	1	3	1	2			1	12	23	23	24	23

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : f Es

TABLE 23

Latitude : 10°·2N

Unit : Mc

IONOSPHERIC DATA

Longitude : 77°·5E

Month : September, 1956.

75·0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
9 0F	9 0F	10·0F	9 5F	8·0F					3·2			1
C	C	C	G	G	6·9F							2
10 9F	10·5F	10·3F	9·0F	7 6F								3
11 7F	11 4F	11·4F	10·5F	8 2F	6 8F							4
8 9F	11 6F	10·4F	8 9F	G								5
7 0F	G	10 3F	9 7F	7 4F								6
7·6F	9 0F	8 9F	7 8F	6·9F								7
10 3F	10 9F	8 8F	8 8F									8
9 0F	G	10 6F	10 2H									9
10 5F	11 0F	9 8F	10 0F	9·0F	7·0F							10
G	9 8F	10·6F	10·3F	8·7F	7 2F							11
8 6F	7 2F	7 3F	8 5F	8·6F								12
G	9 7F	10 3F	10·2F	8·2F	7 0F							13
10·2F	10 4F	9 8F	8·6F	7·0F								14
10 9F	11.7F	11·0F	9·6F	7 8F	7·0F							15
8 7F	8 3F	10·7F	8 6F	7·0F	6 7F							16
11 0F	11 0F	11 0F	9 4F	7 2F					2·0			17
11 2F	10 5F	10 6F	9 8F	8·2F	6 1F							18
11 0F	11 0F	11·0F	11 0FH	10 2FH	6·3F							19
9 0F	8 6F	8 0F	8 8F	9·0F	6·4F						4·4	20
11·0F	8·6F	9 8F	10 7F	10·8F	6·6F				2·5F	2·3F		21
T	T	T	T	T	T							22
T	T	T	T	T	T							23
T	T	T	T	T	T							24
T	T	T	T	T	T							25
T	T	T	T	8 7F	7·7F							26
12 2F	12·0F	12·0F	12·0F	11·0F	6·8F							27
12 0F	12 0F	12·0F	12 0F	9 6F	8 7F							28
12 6F	12 4F	12 0F	11 4F	9·0F	8 1F							29
12·2F	12 4F	12·4F	11 8F	10 6F	6 7F							30
10·2	10 4	10·4	9 9	8 6	7·0				.	..	..	Mean
10·4	10·5	10·5	9·7	8·2	6·8				..	..	..	Median
24	24	24	25	24	16				3	1	1	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic (M 3000) F2 | TABLE 24 | Latitude 10°·2N

Unit · — | IONOSPHERIC DATA | Longitude : 77°·5E

Month : September, 1956. | 75·0° *E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	(3 3)F	3·2	(3 1)F	(3·0)F	3 25	3 3	3·0	2 8	2 45	2 35	2·3	2·4
2	F	3·1	F	F	2 95	3 15	3·0	2·75	C	C	C	C
3	3 35	2 9	2 85	2 9	3 2	3 4	3·1	3 0	2 75	2 5	2·4	2 3
4	2 9	2 9	3 0	3 15	3 25	3·5	3·0	2·65	2·5	2 45	2 3	2 35
5	3 0F	3 0	3 1	3 1	3 25	3 35	3·2	2·9	2 5	2 35	2·3	2 2
6	F	(3 1)F	F	(3 2)F	F	3 2F	3·2	3·0	2 65	2 15	2 5	2 2
7	3 1	3 1	3 05	2 95	3 0	3 1	3·15	3 0	2 8	2 5	2·35	2 35
8	3 4	3 2F	3 1	F	F	3 5F	3·2F	3·1	2 7	2 35	2 35	M
9	2 6F	F	2·6	2 6	2 3	2·5	2 8	M	M	M	2·35	2 25
10	(3 2)	3 1	3·0	3 0	3 1	3·45	3 15	3 1	2 8	2 3	2·3	2 35
11	(3·2)F	3·1	3 0	3·15	3 3	3 4	3 2	3·1	2.95	2 6H	2·25H	2 35
12	(3 0)	3 1	(3·3)N	3 15	3 15	3 35	3·15	3 0	2 7	(2 55)	2 35	2 35
13	(3 2)F	3 3	F	F	F	(3 2)F	3 2F	3·0	2·7	2 35	2·45	2 35
14	(3 0)F	F	3 0	3·15	3 3	(3 5)F	3·0	2 9	N	2 3	2·25	2 15
15	2 9	F	(3 3)F	F	3·2	3 4	3·1	3 0	2 65	2·2	2 2	2 25
16	F	(3·4)F	3·35	3·3	3·2	B	3 0	2·75	2 4	2 35	2·25	2 2
17	2 7	(2·8)F	2·85F	(3 1)F	3 2F	F	3·1F	2 8F	2 35	2 35	2·3	2 2
18	F	F	3 1	F	F	F	(3·1)F	2 95	2 55	2 4	2 2	2·2
19	(3·0)F	F	F	F	3 3F	(3·4)	3·05F	2 8	2·3	2·25	2 3	2 15
20	F	(3·3)F	F	3 2F	(3 4)F	3 4	3·0	2 8	2·9	2 35	2 25	2 3
21	F	F	3·1	(2·9)F	F	2·9	2 6	2·7	2 4	2 35	2·1	2 1
22	3·0	2 9	2·9	3·0	3·1	3 3	3·0	2·7	2·4	T	T	T
23	T	T	T	T	T	T	T	T	T	T	T	T
24	T	T	T	T	T	T	T	T	T	T	T	T
25	T	T	T	T	T	T	T	T	T	T	T	T
26	T	T	T	T	T	T	T	T	T	T	T	T
27	3·0	3·1	3·1F	F	3·1	3·2F	3·0	2·9	2·65	2 3	2·25	2·2
28	3 2	3 1F	F	(2 8)F	F	3·0	3·1	3·0	2 7	2·5	2·2	2·25
29	3 0F	F	(3 1)F	F	3·15	F	3·0F	3 05	2 85	2·65	2·25	2·2
30	F	F	(3·0)F	(3·0)F	F	(3·5)F	3·0	2 9	2·65	2 3	2·2	<2·15
Mean	3 05	3·1	3·05	3·05	3·15	3·25	3 05	2 9	2·6	2 4	2·3	2·25
Median	3 0	3 1	3·1	3·05	3·2	3·35	3·1	2·9	2 65	2·35	2·3	2 25
Count	19	18	20	18	19	22	26	25	23	23	24	23

Sweep 1 Mc to 25 Mc in ½ min

13—4 D.D.G. Obs. K. Kanal/57

Characteristic : (M 3000) F2 | TABLE 24 | Latitude . 10°.2 N

Unit : — | IONOSPHERIC DATA | Longitude · 77°.5 E

Month : September, 1956. | 75·0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
2 3	2 25	2·25	2·3	2 3	2 3	2 2	2 2F	F	F	2 75F	F	1
C	C	C	2 4	2 5	2 5H	2 3H	2 4H	2 7H	3 1	3 0	3 1	2
2 3	2·2	2·2	2 15	2 2	2·3	2 3	2 2	2 25	2 4	2 7	2 8	3
2 2	2·2	2 25	2·25	2 35	2 3	2 2	(2 2)F	(2 3)F	2 6F	(2 6)F	2 9F	4
2 15	2 2	2 25	2 4	2 5	2 55	2 45	(2 2)F	F	F	F	F	5
2 2	2·15	2·25	2 25	2·3	2 3	2 2	(2·2)F	(2 2)F	2 35	(2 7)F	3·0F	6
2·2	2 2	2·2	2 25	2 3	2 4	2 3	2 2F	F	2·7F	F	F	7
2·25	2·2	2 2	2 35	2 35	2 5	2 5N	F	F	F	F	F	8
2 2	B	2 25	2 3	2 35	2 25	2 25	2·15	2 2F	(2·5)F	2 7	(3·1)	9
2·3	2·3	2 15	2·2	2 15	2 3	2 3	2 1	F	F	F	F	10
2·3	2·35	2 3	2 3	2 2	2 2	2 2	2 2	2·2F	2 25F	(2 35)F	2 6F	11
2·25	2 2	2 25	2 25	2 3	2 3	(2 25)	F	F	F	F	F	12
2·3	2 15	2·15	2 2	2 2	2 2	(2 25)	2 2	F	F	FH	F	13
2·15	2 1	2 2	2 2	2 2	2 3	(2 35)	<2·0	F	F	F	F	14
2·1	2 1	2 15	2 2	2 2	2 15	2 1	F	F	F	F	F	15
2·2	(2 2)	2 3	2 35	2·3	2·25	2 1	F	F	F	F	F	16
2·1	2 2	2 25	2·2	2 2	2 1	2 05	F	F	F	F	(2 8)F	17
2 1	2·2	2 2	2 3	2 25	2 3	2 2	<2 0	(2·1)	(2 5)F	2 6	F	18
2 1	2 1	2·1	2 2	2 2	2·2	2 15	F	F	F	F	F	19
2·25	2·25	2 3	2 25	2 3	2 4	2 2	2 1	2·2	2 3	(2 5)F	F	20
2·1	2·15	2 2	2·2	2 2	2 2	2 1	2 2F	F	(2 4)F	2·55F	(2·9)	21
T	T	T	T	T	T	T	T	T	T	T	T	22
T	T	T	T	T	T	T	T	T	T	T	T	23
T	T	T	T	T	T	T	T	T	T	T	T	24
T	T	T	T	T	T	T	T	T	T	T	T	25
T	T	T	T	2 1	2 15	2·1	F	(2 2)F	F	2 5	2·75F	26
2 15	2·1	<2·1	2 15	2 15	2 1	2 05	F	F	F	(2 9)F	F	27
2 2	2 2	2 2	2·25	2 2	2 1	2 05	F	F	F	F	F	28
2 15	2 2	2 3	2 25	2 2	2 1	<2 0	F	F	F	(2 5)F	F	29
<2·2	<2·15	2 15	2 25	2 25	2 3	(2 3)	2 0	2 1	F	S	F	30
2 2	2 2	2 2	2 25	2 25	2·25	2 2	2 15	2 25	2 5	2 65	2 9	Mean
2·2	2 2	2 2	2 25	2 2	2 3	2 2	2 2	2 2	2 45	2 6	2 9	Median
24	23	24	25	26	26	26	16	10	10	13	9	Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic h'F2

Unit Km

Month : October, 1956.

TABLE 25

IONOSPHERIC DATA

75 0°*E Mean Time*

Latitude 10°·2N

Longitude : 77° 5E

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	245F	235	240	235	235	260	270	L	L	280L	305A	L
2	240	235	230	220	220	215	260	250	L	280L	L	L
3	240	225	245	255	240	220	C	255	L	L	L	L
4	240	275	295	260	225	215	275	255	L	L	L	L
5	275F	255F	255	250	250	230	260	250	260	L	L	L
6	260	275	240	250	230	220	260	L	L	L	L	L
7	245	240	235	235	230	225	265	L	250	L	L	L
8	235	255	260	270	240	220	255	250	L	L	L	L
9	240	225	220	250	270	250	275	255	L	L	L	L
10	240	250	250	240	240	230	270	L	L	L	L	L
11	255F	240	235	225	245	F	260	L	L	L	L	L
12	240	235	220F	240	230	235	265	L	270L	L	L	L
13	260F	250	240	C	C	C	275	255	L	L	L	L
14	240	240	240	230	230	220	275	250	L	C	C	C
15	255F	240	235F	235	240	225	265	L	L	L	L	L
16	260	240F	240	235	230	235	270	L	L	L	L	L
17	230F	230F	235	230	240	225	255	L	L	L	L	L
18	240	220	235	235	220	235	260	L	L	L	L	L
19	245	240F	235	240	230	220	270	L	L	L	L	L
20	240	235	240	235	235	235	275	L	L	270L	L	L
21	260	240	260	315F	300	270	275	L	C	260	L	L
22	250	240	230	235	225	220	275	L	L	L	245L	L
23	250	240	235	250	245	220	260	L	L	L	L	C
24	280	235	240	225	225	225	275	L	L	L	L	L
25	300F	235	230F	230F	215	230	260	L	L	255L	L	L
26	260F	240	235	230	240	235	260	L	L	L	L	L
27	230	260	235	260F	F	260	270	L	L	L	L	L
28	260	260	260	240	225	235	275	255	L	L	L	L
29	250	240	240	225	210	225	280	255	L	L	L	L
30	265	C	260	250	220	220	270	L	L	L	L	L
31	280	275	260	235	C	C	C	255	L	L	L	L
Mean	250	245	240	240	235	230	270	255	..	270	.	.
Median	250	240	240	235	230	225	270	255	..	270	.	..
Count	31	30	31	30	28	28	29	11	3	5	2	..

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'F2 | TABLE 25 | Latitude . 10°·2N

Unit · Km | IONOSPHERIC DATA | ,Longitude : 77°·5E

Month : October, 1956. | 75·0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
280H	L	L	420L	460	270H	310	420F	F	F	300F	270F	1
L	L	L	L	L	270	C	F	370F	260	260	265	2
L	L	L	L	L	280	350	F	F	380F	275F	250	3
L	L	L	L	L	280	370	F	F	265F	300F	280F	4
L	L	L	L	L	270	350	490	440F	320	315	280	5
L	L	L	L	L	270	345	490F	395	360F	300	260	6
L	L	L	L	L	275	340	450F	400F	355F	295F	235	7
L	L	L	L	L	270	360	485F	F	400	375F	275	8
L	L	L	L	L	275	365	500F	F	(330)F	320F	260	9
L	L	L	L	L	275	365	F	F	420F	F	290F	10
L	L	L	L	L	270F	365	F	480F	380F	330F	235	11
L	L	L	L	L	275	360	450	500F	F	305F	300F	12
L	L	L	L	L	275	370	560F	540F	350F	340F	260F	13
C	C	C	L	L	280	375	F	F	F	350F	260F	14
L	L	L	L	L	280	375	425F	420F	315F	300	260	15
L	L	L	L	L	275	360	500F	470F	305F	280F	240	16
L	L	L	L	L	280	360	F	300F	360F	F	260	17
L	L	L	L	L	275	350	F	340F	425	300F	240	18
L	L	L	L	L	280	360	F	440F	F	340F	290F	19
L	L	L	L	L	270H	380	F	300	245	240	260	20
L	L	L	L	L	280	360F	F	395F	290	255	240	21
L	C	L	L	L	280	360	F	F	310F	335F	260	22
C	C	C	C	L	285	360	410F	(380)F	340F	310	280	23
L	L	L	L	255	280	380	F	F	(270)F	F	280F	24
L	L	L	C	C	285	380	F	F	480F	365F	365F	25
L	L	L	L	L	280	360	F	(500)F	410F	310F	270	26
L	L	L	L	L	275	340	365	380	355	300	260	27
L	L	L	L	L	280	345	340F	315	260	245	240	28
L	L	L	L	L	295	380	460F	400F	400F	305F	320F	29
L	L	L	L	255	295	380	F	440F	F	330	290F	30
L	L	L	L	L	285	375	430F	F	310F	280	280F	31
	..	.	.	..	280	360	450	410	340	305	270	Mean
..	..	.		.	280	360	450	400	345	300	260	Median
1	..	..	1	3	31	30	15	20	26	28	31	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF2 | TABLE 26 | Latitude . 10°.2N

Unit : Mc | IONOSPHERIC DATA | Longitude : 77 5°E

Month : October, 1956 | 75.0° *E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	(12 0)F	10·1	8 5	7 2	6 2	5 4	7·9	11.5	12 8	13 2	13 0	13 4
2	11·9F	11 7F	10 4	F	F	7·8	8 5	11 4	13·4	14 0	12 7	11 8
3	12 6	10·5	8 0	7·5	(7 6)F	6 1	C	11.1	13 0	12 8	12 0	11 7
4	12 3	12 4	12·5	12·4	10·7	6·1	7 7	11.4	12 9	12 5	12 0	12 2
5	F	10 8F	10 0	F	F	6·7	8 7F	11.5	12 8	11 7	11 2	11·2
6	(12·4)F	(12·3)F	9 9	(9 9)F	9 1	5·4	7·4	11 4	13 0	12 0	11 0	10 9
7	13·2	13 2	11·0	9·2	F	5·8	7·7	11·6	13 0	14 0	13 3	12 8
8	11 0F	10 2	9 8F	9 6	9 7	8 8	9·4	12.2	14 0	15 6	(14 2)	12 8
9	12·6	11 7	9·1	7 3F	7·6F	(8 0)F	8·6	12 3	14 3	14 7	13 8	12 8
10	12·4F	11 2F	10 7F	10 0	8 6	6 8	8 2	11 7	13 5	14 2	13 2	12 8
11	(8·7)F	9 7	F	7 4	F	F	8 1F	11.4	13 3	14 3	13 7	12 8
12	F	10·2	F	F	F	6 6F	8 4	11 5	13 6	14 4	14 0	12·4
13	F	9·0	8 0F	C	C	C	8 4F	11 4F	13·4	13 7	12 4	11 5
14	10 3F	(9·7)F	(9 0)F	6·9F	6·4F	5·7	7·9	11 4	12·5	C	C	C
15	F	9·4F	F	F	F	F	8·0	11.0	12 8	12.9	11 8	11 0
16	8 6F	F	F	7 0	6·3	5 1	8·0	11 1	12 5	12 1	11 8	11 1
17	11·6F	F	7 6F	6·9	5·8	4 8F	F	10 8F	13 0	14 0	13 8	12 6
18	11·3	F	8·4	F	(6 5)F	4 1	7·2	10.5	12 6	11 7	11 0	11 4
19	F	(9·2)F	7·7	7 6F	5 8	4 0	7·3	10 8	13 2	12 1	11 1	11 1
20	(12·2)F	11·6F	(8·4)F	7·5	5·2	3·5	7 2	11 0	12 8	12 7	11 5	11 6
21	10·7	10·4	9 8	9·6	9·8	10 6	11·1	13.1	C	14·0	14·0	13·8
22	11·6	(12·4)	10·4	9·1	8·1	7·0	8·6	11.8	14·0	14·0	13 7	13 7
23	F	(11·9)F	12·1	10·8	9 3	7·8	8 8	12.0	13·4	12 7	12·6	C
24	14 4	F	F	11 0	9·0	7·6	9·1	11 9	13 3	12 8	12 4	11·7
25	F	F	(10·6)F	7·6F	6 3F	3·6	7 2	11.0	12 8	13 6	12·0	11 2
26	F	11·7	9 7F	(8·0)F	5·8	3 8	7 2	10 9	13 0	13 2	11 7	11 6
27	10·8F	10·2	9·9F	8.6	8·1	9·5	10·4	(13 2)	14 5	14 8	14·7	14 6
28	12·8	11·6	11·5	11 2	8 7	6·2	8·6	12 0	13·6	14 0	13 9	13 2
29	12 7	11·7	10·7	9 9	6·7	3·6	8·1	12.2	13 8	14·3	13·6	13 0
30	(10·2)F	C	10·2	9.7	8·0	5·6	8·1	11.5	13·5	13·7	12 8	12·3
31	12·0F	12 3	11·5F	10·0F	C	C	C	11.4	12 6	12·9	12 4	12·0
Mean .	11 7	11·0	9 8	8·9	7·6	6·1	8·3	11·5	13 2	13·4	12·7	12 2
Median .	12·0	11·2	9 9	9·1	7·6	6·1	8·1	11 4	13·1	13 6	12 6	12 2
Count .	23	25	26	25	23	27	28	31	30	30	30	29

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF2 | TABLE 26 | Latitude : .10°.2 N

Unit Mc | IONOSPHERIC DATA | Longitude : 77°.5 E

Monh . October, 1956 | 75.0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
13 8H	14 2	15 2	15 3	15 4	15·4H	14 8	11 7F	F	F	F	F	1
12 0	13 0	13 7	13 9	14 4	14 4	C	F	F	12 3	13 1	13 5	2
11 8	12 2	12·7	13 6	13 6	12 7	10·7	F	F	F	F	12 6	3
12 2	13 0	14·0	14 4	14 4	14 0	12 3	F	F	F	F	F	4
11·3	11 4	11 9	12 9	14 0	14 0	13 0	F	F	F	F	F	5
11 0	10 9	11 5	11 8	12 7	12·8	12 2	10 6	(10 6)F	11 8F	F	F	6
12 1	12 5	12 8	13 0	13 0	12 8	11 9	9 1	9 1	10 5F	11 5F	F	7
12 4	12 4	12 8	13 1	12 8	12 0J	(11 3)	(9 3)	F	F	F	10·8F	8
13 0	13 3	13 6	13 7	13 7	(13 6)	(11·6)	8 8	F	F	(12 2)F	F	9
12 8	12 8	13 0	13 0	12 8	12 4	10·8	F	F	F	F	F	10
12 6	12 5	12 9	13 2	13 0	12 8	10 9	(8 5)F	F	F	F	F	11
12 1	12 5	13 2	13 5	13 0	12 3	10 7	9·0	F	F		F	12
11 5	11 6	11 8	12 3	12 4	12 4	10 9	F	F	F	F	F	13
C	C	C	12 5	12 5	11 7	9 9	F	F	F	F	F	14
11 0	11 6	12 1	12 6	12 8	12·8	11 7	F	F	F	F	8·6F	15
10 6	11 0	11 8	12 4	12 8	12 6	11 8	F	F	F	F	F	16
12 2	12 4	12 7	12·7	12 6	11 9	11 3F	F	F	F	F	F	17
12 0	12 5	12 5	13 0	12 9	12 6	11 0	(8 9)	(9·0)FII	9 2F	F	F	18
11 6	12 0	12·5	12 8	12 7	12 6	11·0	9·2	F	F	F	F	19
11 5	12 4	13 0	13 5	13 6	13·6H	11 9	(7 8)F	8·6	10·0	11 0	10·5	20
13 7	14 0	13 6	13 4	13 5	13 4	12·1	(10 8)	(9 9)F	10·7	11·8	12 0	21
13 2	C	12 7	12 7	12 3	11 7	11·0	(9 7)	F	F	F	N	22
C	C	C	C	13 7	12 4	11 5	(10·3)F	(9·8)F	F	10 9	(14·0)	23
11 8	12 0	12·0	12 3	12 0	11 8	11 0	8 6F	F	F	F	F	24
11·2	11·6	12 3	C	C	13 7	13 5	(10 7)F	F	F	F	F	25
11 6	12 0	12 1	12 2	12 0	11 9	10 9	F	F	F	F	(10 3)F	26
14 1	13 2	12 8	11 9	12 4	12 8	12 7	12 1	(12 3)	11 9	12 9N	13 1	27
13 1	12 9	12·7	12 6	11 7	11 0	10 4	10·8	10 4	11 0	11 6	12 9	28
12 8	12·8	12 8	12 2	12 2	11 9	10 9	8·9	8 9F	9 5	F	9·1F	29
12 1	12 4	12 8	12 9	13 4	13 5	12 9	F	F	F	F	F	30
11 8	11 9	11·7	12 1	12 6	12 8	11 6	(10 2)F	F	F	(10 9)F	F	
12·2	12 4	12 7	12 9	13 0	12 8	11·6	9 7	9 8	10 8	11 8	11·6	Mean
12 1	12 4	12·7	12 9	12 8	12 7	11 4	9 3	9 8	10·7	11 6	12·0	Median
29	28	29	29	30	31	30	19	9	9	9	11	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'F1

TABLE 27

Latitude 10°.2 N

Unit : Km

IONOSPHERIC DATA

Longitude : 77°.5 E.

Month : October, 1956

75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								245	240	230	220	225
2								Q	235	220	220	225
3								Q	240	235	225	215
4								Q	235	225	225	220
5								Q	235	215	220	215
6								240	240	230	220	B
7								240	235	225	215	205
8								240	235	220	215	215
9								Q	235	230	225	220
10								255	235	215	220	220
11								240	235	225	215	205
12								245	235	220	210	215
13								Q	235	215H	215	215
14								Q	240	C	C	C
15								240	220	210	200	200
16								245	230	220	215	200
17								235	230	220	210	210
18								240	230	220	210	200
19								250	235	220	205	215
20								250	235	230	210	215
21								245	C	235	235	235
22								240	235	215	210	235
23								250	235	220	205	C
24								250	235	230	220	215
25								245	230	220	220	200
26								250	235	250	200	200
27								240	220	225	215	215
28								Q	240	225	225	B
29								Q	240	225	220	225
30								250	240	225	220	215
31								Q	245	230	220	225
Mean .								245	235	225	215	215
Median .								245	235	225	220	215
Count								21	30	30	30	27

Sweep 1 Mc to 25 Mc in ½ min

Characteristic . h'F 1

Unit : Km

Month : October, 1956

TABLE 27

IONOSPHERIC DATA

75.0°*E Mean Time*

Latitude : 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
215H	205H	210	220	240								1
215	220H	225H	230	250								2
215	205H	230H	240	240								3
A	220A	B	265	260								4
220H	215	215	235	240								5
215	220	225	240	245								6
210	205	210	235	245								7
210	210	220	230	245								8
220	220	220	220	250								9
220	220	220	215	245								10
215	210	210	215	250								11
220	210	220	235	215								12
220	220	220	225	255								13
C	C	C	230	245								14
205	220	220	230	255								15
205	210	210	220	250								16
220	220	220	230	250								17
205	205	210	220	240								18
215	210	215	230	250								19
220	230	A	260A	260								20
220H	235	225	240	255								21
225	C	235	240	260								22
C	C	C	C	255								23
215	215	215	230	Q								24
205	210	215	C	C								25
210	225	215	220	250								26
210	220	220	230	250								27
220	225	220	235	255								28
220	225	220	230	255								29
215	215	230	235	Q								30
215	215	230	230	255								31
215	215	220	230	250								Mean
215	220	220	230	250								Median
28	28	27	29	28								Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF1 | TABLE 28 | Latitude : 10°.2 N

Unit : Mc | IONOSPHERIC DATA | Longitude . 77°.5 E

Month October, 1956 | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								L	L	L	L	L
2								L	L	L	L	L
3								L	L	L	L	L
4								L	L	L	L	L
5								L	L	L	L	L
6								L	L	L	L	L
7								L	L	L	L	L
8								L	L	L	L	L
9								L	L	L	L	L
10								L	L	L	L	L
11								L	L	L	L	L
12								L	L	L	L	L
13								L	L	LH	L	L
14								L	L	C	L	C
15								L	L	L	L	L
16								L	L	L	L	L
17								L	L	L	L	L
18								L	L	L	L	L
19								L	L	L	L	L
20								L	L	L	L	L
21								L	C	L	L	L
22								L	L	L	L	L
23								L	L	L	L	C
24								L	L	L	L	L
25								L	L	L	L	L
26								L	L	L	L	L
27								L	L	L	L	L
28								L	L	L	L	L
29								L	L	L	L	L
30								L	L	L	L	L
31								Q	L	L	L	L
Mean								.	..	..	..	..
Median								..	...	..	.	..
Count								..	..	..	..	..

Sweep 1 Mc to 25 Mc in ½ min.

14—4 D. D. G. KodaiKanal/57.

Characteristic · foF1 | TABLE 28 |

Unit : Mc | IONOSPHERIC DATA | Latitude 10°.2 N

Month : October, 1956 | 75 0°*E Mean Time* | Longitude · 77°.5 E

12	13	14	15	16	17	18	19	20	21	22	23	Date
LH	LH	L	L	L								1
L	LH	LH	L	L								2
L	LH	LH	L	L								3
L	L	L	L	L								4
LH	L	L	L	L								5
L	L	L	L	L								6
L	L	L	L	L								7
L	L	L	L	L								8
L	L	L	L	L								9
L	L	L	L	L								10
L	L	L	L	L								11
L	L	L	L	L								12
L	L	L	L	L								13
C	C	C	L	L								14
L	L	L	L	L								15
L	L	L	L	L								16
L	L	L	L	L								17
L	L	L	L	L								18
L	L	L	L	L								19
L	L	A	A	L								20
LH	L	L	L	L								21
L	C	L	L	L								22
C	C	L	L	L								23
L	L	L	L	Q								24
L	L	L	C	C								25
L	L	L	L	L								26
L	L	L	L	L								27
L	L	L	L	L								28
L	L	L	L	L								29
L	L	L	L	Q								30
L	L	L	L	L								31
..	.		.	.								Mean
..	.	..	.	.								Median
..	..	..	.	.								Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'E

TABLE 29

Latitude : 10°.2 N

Unit : Km

IONOSPHERIC DATA

Longitude : 77°.5 E

Month : October, 1956

75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								120	A	A	A	A
2								115	105	105	A	A
3									110	110	110	A
4									110	115	A	A
5								115	A	A	A	110
6									115	A	A	B
7									110	A	A	A
8								120	115	110	110	A
9								130	115	A	A	A
10								120	115	A	115	A
11									115	A	A	A
12								120	115	115	110	110
13									115	115	115	A
14									115	C	C	C
15								120	A	110	A	110
16								110	110	A	105	A
17								115	A	A	A	A
18									110	A	110	A
19								120	115	115	A	A
20								120	110	115	A	110
21								120	C	115	115	A
22									A	115	110	A
23								120	A	A	110	C
24								120	A	110	110	115
25								120	A	A	A	110
26								125	A	A	A	110
27									110	110	110	115
28								120	A	A	A	B
29								120	A	A	A	115
30								120	115	A	A	A
31								120	115	A	115	110
Mean								120	115	110	110	110
Median								120	115	115	110	110
Count								21	19	13	13	10

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · h'E

TABLE 29

Latitude : 10°.2 N

Unit : Km

IONOSPHERIC DATA

Longitude : 77°.5 E

Month : October, 1956

75·0°*E Mean Time.*

12	13	14	15	16	17	18	19	20	21	22	23	Date
110	110	105	100	110	A							1
A	A	A	105	A								2
A	A	110	115	A								3
A	A	B	115	A								4
A	110	110	115	110								5
105	A	A	115	115								6
A	A	110	110	110								7
A	A	110	110	110								8
A	115	115	115	A								9
A	A	A	A	115								10
A	A	A	110	120								11
A	115	A	A	A								12
A	110	A	110	115	A							13
C	C	C	110	120								14
105	A	110	115	115								15
A	A	A	110	115								16
A	110	115	A	120								17
A	A	105	A	A								18
115	110	110	110	A								19
110	A	A	A	120								20
A	115	A	115	A								21
A	C	115	115	A								22
C	C	C	C	A								23
A	110	A	110									24
A	A	110	C	C								25
A	110	A	A	A								26
A	A	A	110	A								27
115	115	A	115	A								28
A	115	115	A	A								29
105	A	110	A									30
A	110	110	A	A								31
110	110	110	110	115	..							Mean
110	110	110	110	115	..							Median
7	13	15	20	13	.							Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic foE

TABLE 30

Latitude 10°.2 N.

Unit : Mc

IONOSPHERIC DATA

Longitude : 77°.5 E.

Month : October, 1956

75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								2 6	A	A	A	A
2								2·9	A	3 2	A	A
3									A	A	A	A
4									A	3·4A	A	A
5								3 0	A	A	A	4 1A
6									A	A	A	B
7									3 2	A	A	A
8								2·9	3 5	A	A	A
9								2 8	A	A	A	A
10								2 7	3·1A	A	A	A
11									A	A	A	A
12								2·8	3 3	A	A	A
13									A	3·4A	A	A
14									A	C	C	C
15								2 7	A	A	A	A
16								2·4	A	A	A	A
17								2 8	A	A	A	A
18									A	A	A	A
19								2·8	A	A	A	A
20								2·5	A	2 9	A	A
21								A	C	A	3 6A	A
22									A	A	A	A
23								2·8	A	A	A	C
24								A	A	3·7A	A	4·0A
25								2·9	A	A	A	A
26								2·9	A	A	A	A
27									3 1	A	A	A
28								A	A	A	A	B
29								3 0	A	A	A	3·8A
30								3·0	3·6A	A	A	A
31								2·7	A	A	A	A
Mean								2.8	3 3	3.3	..	..
Median								2.8	3.2	3 4	..	..
Count								18	6	5	1	3

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foE

Unit Mc

Month . October, 1956

TABLE 30

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	3 7A	A	A	A	A							1
A	A	A	3·5	A								2
A	A	4 0	A	A								3
A	A	B	3·7A	A								4
A	A	A	3 8	3 3								5
A	A	A	3 0	A								6
A	A	A	A	A								7
A	A	A	A	3·1A								8
A	A	A	A	A								9
A	A	A	A	A								10
A	A	A	A	3 2								11
A	A	A	A	A								12
A	A	A	A	A	A							13
C	C	C	A	3 0								14
A	A	A	A	A								15
A	A	A	A	A								16
A	A	A	A	A								17
A	A	3 0A	A	A								18
A	A	A	A	A								19
A	A	\	A	3·1A								20
A	4·0A	A	A	A								21
A	C	A	A	A								22
C	C	C	C	A								23
A	A	A	A									24
A	A	A	C	C								25
A	A	A	A	A								26
A	A	A	A	A								27
A	A	A	A	A								28
A	A	3·0A	A	A								29
A	A	A	A									30
A	A	A	A	A								31
.	.	..	..	3 1								Mean
..	..	..	..	3.1	..							Median
	2	3	4	5	..							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic . fEs

Unit : Mc

Month : October, 1956

TABLE 31

IONOSPHERIC DATA

75·0° E *Mean Time*

Latitude : 10°.2 N.

Longitude · 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								3 4	7·6F	10 8F	11·4F	12 0F
2							4·1	7 8F	9·7F	11·4F	12·2F	12 1F
3							C		10·2F	11 9F	12·4F	12·0F
4								3·2F	10·3F	11 8F	11 1F	12 3FH
5								7·0F	9·8F	12·0F	12 4F	12 4F
6									10·4F	11·0F	11·3F	12 3F
7									10·3F	11 0F	12 4F	12·4F
8								G	9 0	11 1F	10 5F	11 9F
9								G	8·7F	12 1F	12·4F	11 8F
10								G	7·8F	11·0F	11 4F	12·7F
11									7·4F	10 8F	12·0F	11 4F
12								G	6·4F	10·4F	11 2F	12·5F
13									10 8F	11·6F	11 5F	12·7F
14								6·8F	8 0F	C	C	C
15								6·9F	10·3F	12 0F	12·5F	12·2F
16								7·4F	8 7F	9 8F	11·6F	11·6F
17	6·3	2·9			3 2	4 7		G	9·3F	11·9F	11 8F	12 3F
18									11·4F	11 4F	12·2F	12·0F
19								7·7F	10 7F	12·3F	11 8F	12 4F
20								7·3F	10·6F	10·6F	11·6F	12·5F
21						4·0	6.8	7·4F	C	10 8F	12 0F	12·0F
22									11·7F	11·8F	12 0F	12 3F
23							3.6	7·9F	11·4F	12·2F	12·6F	C
24								7 0F	11·3F	9·8F	10·8F	10·6F
25								G	9 0F	10·0F	12·3F	12 3F
26								G	11 7F	11·8F	12·0F	12·6F
27									10·0F	11·0F	9·8F	11·6F
28								6 9F	8·4F	10 8F	12·0F	12·0F
29								G	7·8F	9 0F	10·8F	10 6F
30		C						G	8·4FH	11·0F	12 0F	12 2F
31					C	C	C	7·4F	11·4F	11·8F	11·8F	12 0F
Mean	..	..			.	..	..	6·7	9·6	11·2	11·7	12 0
Median	..	..			..	..	..	6 8	9 9	11·0	11·9	12·2
Count	1	1			1	2	3	23	30	30	30	29

Sweep 1 Mc to 25 Mc in ½min.

Characteristic fEs

Unit : Mc

Month October, 1956

TABLE 31

IONOSPHERIC DATA

75 0°E *Mean Time*

Latitude · 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
11 2F	8 3F	11 4F	9 6F	10 0F	7 4F							1
12 4F	12 0F	11 0F	G	7·0F	6 4F	C						2
12·0F	12·4F	11 0F	9 5F	10 0F	7 6F							3
11·1F	11 2F	5 5F	8·2F	8 8F	6 0							4
12 3F	12 3F	11·5F	G	6 4F	6 0F							5
12 6F	12 8F	12 2F	12 6F	10 0F	6·7F							6
12 4F	12 0F	12 2F	11 0F	10 5F	7·4F							7
11 8F	12 0F	11 2F	11 5F	8 0F	6 8F							8
12 0F	10 8F	12 0F	11 0F	8 7F								9
12 3F	12·6F	11 7F	11 8F	11 4F	7 6F							10
11 6F	11 0F	10·9F	12 0F	10 8F	8 3F							11
11·8F	11 8F	11·0F	10 8F	11 9F	8·4F							12
12 5F	12 8F	12·1F	11 8F	10 7F	6 8F							13
C	C	C	11·4F	9 5F	7 0F				1 8			14
11 8F	12 2F	12·1F	11 0F	11 4F	9 4F							15
12 4F	12 2F	11 8F	10 0F	11 0F						3 0		16
12 1F	12 0F	12 0F	11 5F	9 8F	7·6F				1 6			17
11 9F	12 2F	10 9F	10 2F	10 0F	6 0F							18
12 3F	12 3F	11 8F	11 4F	8 6F	6 4F							19
12 4FH	12 0FH	11·7FH	10·8FH	9 1F	6 8F							20
12 5F	12·1F	12 6F	11·4F	10 8F	7 0F							21
12 0F	C	12·1F	10·5F	8·2F	7 0F							22
C	C	C	C	10·2F	7·4F							23
10 6F	11 0F	12 0F	10 8FH	8 8F	6·2F				3·8	6·3		24
12·8F	12 2F	11 8F	C	C	6 9F							25
12 2F	12·4F	12 0F	10 5F	8·2F	4 1F							26
12·0F	12 0F	12 1F	10 5F	8 0F	7 0F							27
12·0F	12·2F	11 9F	10 8F	8·6F								28
10 9F	12 4F	12 5F	10 8F	10 0F	6·8F							29
12 2F	12 0F	11 5FH	9 0FH	7·7FH								30
11·8F	11·6F	12·0F	11 0F	6·8F	6·7F							31
12·0	11·9	11·5	10 8	9·4	7·0	..				.		Mean
12·0	12 0	11·8	10·8	9 6	6 9	..			.	..		Median
29	28	29	29	30	27	..			3	2		Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic (M 3000) F2 | TABLE 32 | Latitude : 10°.2 N.

Unit — | IONOSPHERIC DATA | Longitude 77° 5 E.

Month : October, 1956 | 75 0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	(3·2)F	3·05	3 0	3 15	3·25	3 05	2 95	2 85	2 55	2 2	2 3	2 25
2	2 6F	2 8	2 95	(3·1)F	F	3 2	3.0	2 75	2 55	2 2	2·2	2 15
3	3 0	3 15	2 95	3 0	(3 1)F	3 25	C	2 8	2 4	2·25	2·15	2 2
4	2 9	2 8	2 7	2 85	3·2	3·4	2·9	2·7	2 4	2 1	2·15	2 15
5	F	F	2 9	F	F	3 2	3 05F	2·85	2·35	2·3	2·3	2 2
6	(3·0)F	3·1	3·0	(3 0)F	3·1	3 35	3·15	2 9	2 4	2·25	2 3	2 15
7	2 9	3 0	3 0	3·0	F	3·3	3·0	3 0	2·7	2 35	2 3	2·1
8	2 8	2 6	2 75F	2 8	3 1	3·15	3·1	2·9	·2·75	2 5	2 2	2·1
9	(3·0)	3 1	3·15	3 0	2·9	F	2 9	2 8	2 65	2 35	2 2	2·15
10	(2 9)F	2·9F	3 0F	2 9	3·1	3·2	3 0	2 9	2·7	2 4	2·3	2·15
11	F	2 85	F	3·1	F	F	(3·0)F	3·0	2 7	2 4	2·2	2·1
12	F	2 9	F	F	F	(3·1)F	3 0	2·85	2 65	2·35	2 1	<2 05
13	F	F	3 0	C	C	C	3·0F	2·9F	2·55	2 2	2 1	2 1
14	2·7F	2 8F	(3 0)F	3 0F	3·1F	3·15	2·9	2·75	2·4	C	C	C
15	F	2 9F	F	F	F	F	3·1	2 85	2 55	2·4	2·25	2·2
16	2 8F	F	F	3·05	3 1	3 2	3·05	2 9	2·55	2 4	2·3	2 15
17	2 95F	F	3 05F	3 1	3 2	3·4F	F	2·95F	2 7	2·55	>2·2	2·15
18	(3 05)	F	3 0	F	(3·15)F	3 3	3·1	<2 9	2 5	2 35	2·35	2·3
19	F	(3 2)F	3·05	3·1F	3 1	3·3	>3·1	2 95	2·6	2 4	2 3	<2·2
20	(3 1)F	3·2F	(3·15)F	3 2	3 3	3·1	3·0	2 8	2 6	2·35	2·1	<2 15
21	2 8	2 9	<2 9	(2 65)	2·8	>3·0	2·9	2 6	C	2 4	(2·15)	2·2
22	2 85	(3 1)	3 0	2 9	3 1	3·1	3·0	2·8	2 55	>2·35	2 3	<2 2
23	F	(3 1)F	<3 0	2 9	3 1	>3 25	3 0	2·9	2 45	2 3	2 2	C
24	2 7	F	F	3 0	3·15	>3 05	3·0	2·75	2 4	2·35	2 3	2·15
25	F	F	(3 2)F	3 2F	3 3F	3·4	3 1	3 0	>2 65	(2 25)	2 2	2 2
26	F	3 0	(3 2)F	(3·2)F	3·2	<3·35	3·1	2·75	2·6	>2·2	2 15	2·15
27	(2·95)F	2 85	(3 0)F	3·0	2 6	>2 85	2 9	3·0	2 65	2·3	2·1	<2·15
28	>2·95	2 9	2·85	2·9	3 1	3·2	>2·85	2·75	2·5	2 3	>2 2	2 1
29	>2 75	2 8	<2 95	(3·1)	3 25	<3·2	>2 85	2·85	2·6	2 35	>2 3	2·25
30	2 75	C	>2·75	2·95	3·1	3·3	3 05	2·9	2 55	2·25	2 15	2·15
31	(2 8)F	2 7	2 7	2·8	C	C	C	2·65	2 45	>2·25	2·15	2·1
Mean	2 9	2·95	2·95	3·0	3 1	3 2	3·0	2 85	2·55	2·3	2·2	2 15
Median .	2 9	2·9	3 0	3·0	3 1	3·2	3·0	2·85	2·55	2·35	2·2	2·15
Count . .	22	23	26	26	23	26	28	31	30	30	30	29

Sweep 1 Mc to 25 Mc in ½ min.

15—4 D. D G Khodai kanal/57

Characteristic : (M 3000)F2

TABLE 32

Latitude : 10°.2 N.

Unit : —

IONOSPHERIC DATA

Longitude : 77°.5 E.

Month · October, 1956

75.0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
2 25H	2 3	2·35	2 4	(2 4)	(2·3)H	2 2H	<2·0FH	F	F	F	F	1
(2 2)	2 15	2 2	2 2	2 25	2 2	C	F	F	2·2	2 6	2 8	2
2 15	2 1	2 15	2·15	2 15	2 1	<1 8	F	F	F	F	2·7	3
2·2	2 2	2 3	2 3	2·3	2 25	(2 1)	F	F	F	F	F	4
2 15	2 1	2 15	2 2	2 3	2 4	2 2	F	F	F	F	F	5
2 1	<2 1	<2 05	2·1	(2 2)	2 2	(2·15)	<2 0	(2 0)F	(2·2)F	F	F	6
2 1	2 15	2 15	2·2	2 1	2 1	<2 0	2·0	<2 05	2·3F	2 6	F	7
2 1	2 1	2 15	2 15	2·1	2 2	2·1	(2 15)	F	F	F	2 6	8
2·2	2 25	2 2	2 2	2 25	(2 3)	(2·25)	2·1F	F	F	F	F	9
2 1	2 1	2 1	2 1	2 1	2 05	2 0	F	F	F	F	F	10
<2 1	<2 1	2 1	2 1	2 05	2·0	<2 0	<1·9F	F	F	F	F	11
2·1	2 15	2·15	2 1	2 1	<2·0	<1 95	<1 95	F	F	F	F	12
2 1	2 05	2·1	2 1	2 1	2 05	2 0	F	F	F	F	F	13
C	C	C	2 0	2 1	2 0	2 0	F	F	F	F	F	14
2 2	2 2	2 2	2 2	<2 15	2 1	<2·05	F	F	F	F	F	15
<2 15	2 1	2 1	>2·2	>2·2	2·2	2 05	F	F	F	F	F	16
2·15	2 2	2 2	2 2	(2 2)	(2 15)	2 05F	F	F	F	F	F	17
2·25	2 2	<2 2	2 15	>2 1	(2 1)S	2 1	(2 0)	(2 4)FH	(2·5)F	F	F	18
2 15	<2 2	2 15	>2 15	(2·2)	>2 15	2·05	2 05	F	F	F	F	19
2 2	2·25	2 2	2 2	(2 2)	(2 05)H	(2 05)	(2·05)F	(2 25)	<2 5	2 5	2 6	20
2·15	2 1	2 0	>2 0	2 1	(2 05)S	2 05	(2·05)	(2 1)F	2·25	2 5	2 8	21
2 1	C	2 05	2 15	2 2	(2 1)S	2·05	(1·95)	F	F	F	N	22
C	C	C	C	2·05	(2 1)S	(2 05)	(2 05)F	(2 25)F	F	(2 2)	(2 5)	23
2 15	2 1	2 1	<2 1	2·0	(2 0)	1·95	(2·0)F	F	F	F	F	24
2·2	>2 15	2 2	C	C	(2 2)S	2·1	(1 85)F	F	F	F	F	25
2 15	2·1	>2 05	2·05	2 1	<2 1	2·0	F	F	F	F	(2 65)F	26
2·2	2 0	1 95	2 05	2 15	>2 2	2 15	2·1	2·25	2 2	2 55	>2 75	27
2 05	2 05	>2 05	2 0	2 05	2·1	<2 1	2·15	2·3	2·45	2·6	2 7	28
<2 2	2 15	2 05	2 05	2 05	>(2 05)S	(2 05)	>2·05	2·15F	2·15	F	(2 7)F	29
2·05	2 1	2 1	2 1	2 2	(2 25)	(2 15)	F	F	F	F	F	30
2·1	2 05	2 05	2 1	2 25	2·2	>(1·95)S	(2·05)F	F	F	(2 55)F	F	31
2 15	2 15	2·15	2 15	2·15	2·15	2 05	2 0	2 2	2 3	2 5	2·7	Mean
2 15	2·1	2 15	2·15	2 15	2 1	2 05	2·05	2 25	2 25	2·55	2·7	Median
29	28	29	29	30	31	30	19	9	9	8	10	Count

Sweep 1 Mc to 25 Mc in ½ min.

TABLE 33

IONOSPHERIC DATA

Characteristic · h'F2 | Latitude · 10°.2 N.

Unit Km | Longitude · 77°.5 E.

Month November, 1956 | 75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	240	240	240	240	230	215	275	250	L	L	L	L
2	280	265	250	245	230	230	280	255	L	L	L	L
3	260	250	240	240	240	220	265	255	L	L	L	L
4	250	240	235	260	235	235	280	265	L	L	L	L
5	250	245	240	240	225	230	270	255	L	L	L	L
6	260	265	240	235	240	250	280	255	L	L	L	L
7	260	260	245	260	260	240	275	255	L	L	L	L
8	285	265	260	245	235	220	270	L	L	L	L	L
9	275	265	260	250	240	230	280	250	L	L	C	C
10	300	290	275F	285	260	235	285	260	L	L	400L	490
11	290	345	360	330	215	220	290	260	L	L	L	L
12	265	310	290	260	250	235	295	C	L	L	L	L
13	320	330	335	275	225	210	285	C	C	C	C	C
14	285	280	240	225	220	215	280	L	L	L	L	L
15	270	240	220	230	255	240	295	265	L	L	L	(420)L
16	285	280	245	220	220	220	295	255	L	L	L	L
17	255	260	260	280	260	255	315	C	L	L	L	L
18	290	300	285	250	235	235	285	260	L	L	L	L
19	260	260	240	230	210	215	280	255	L	L	L	L
20	300	280	255	230	230	230	290	265	L	L	L	L
21	305F	285F	270	240	220	215	270	255	L	L	L	L
22	C	C	C	C	C	C	C	C	C	L	L	L
23	290	305	270	245	C	C	C	275	L	L	L	L
24	290	300	290	260	225	230	290	260	L	L	L	C
25	355F	300	290	280	240	225	295	C	L	L	L	L
26	285	285	290	260	220	240	300	260	L	L	L	L
27	330F	260	265	230	230	215	295	260	L	L	L	L
28	(325)F	270	240	260	245	240	280	270	L	L	L	L
29	300	285F	260	240	225	240	290	260	L	C	L	L
30	300	320F	(295)F	270	225	C	310H	260	L	L	L	L
Mean	285	280	265	250	235	230	285	260	.		..	.
Median	285	280	260	245	230	230	285	260	..		.	.
Count	29	29	29	29	28	27	28	23	..	..	1	2

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic . h'F2 | TABLE 33 | Latitude : 10° 2 N.

Unit : Km | IONOSPHERIC DATA | Longitude . 77°.5 E

Month . November, 1956 | 75 0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L	295	405	F	F	(510)F	(325)F	305	1
L	L	L	L	L	300	400	500	465	425	305	275	2
L	L	L	L	L	295	390	430	365	310	300	250	3
L	L	L	L	L	300	395	490	(490)F	400F	325	285	4
L	L	L	L	L	300	400	475F	F	F	(400)F	295	5
L	L	L	L	L	305	435	605	F	405	300	280	6
L	L	L	L	L	305	295	520	460	340	F	320	7
L	L	L	L	L	300	420	F	F	F	325	290	8
C	C	L	L	L	305	425	545	475	425	360	350F	9
580L	L	L	L	L	310	395	445	345	285	280	265	10
(500)L	(530)L	L	L	275	C	400	440	400	335	270	260	11
L	L	L	L	L	C	420	470F	330F	320	300	300	12
C	C	C	C	C	300	380	430F	470F	405	420	365	13
L	L	L	L	L	315	390	490	420	345	290	290	14
(435)L	(490)L	(580)L	L	L	300	340	275	240	245	260	285	15
L	L	L	L	L	285	380	420	405	370	295	255	16
L	L	L	L	L	300	400	455	460F	400	F	340	17
L	L	L	L	L	290	370	425	415	370F	305	265	18
L	L	L	L	L	295	380	475	540F	F	(385)F	310	19
L	L	L	L	L	295	370	490F	(480)F	475F	365F	300F	20
L	L	LH	L	L	300	370	400	355	280	275	C	21
L	L	L	L	L	300	370	420	365	280	265	280	22
L	C	L	L	L	290	345	360	360	340	335	295	23
L	L	L	L	L	295	375	440	(470)F	500F	395F	340	24
L	L	L	L	L	310	425	F	(480)F	395F	255	260	25
L	L	L	L	L	300	370	(480)F	480F	(500)F	400F	365F	26
L	L	L	L	L	305	380	400	(430)F	(460)F	380F	340F	27
L	L	L	L	C	300	380	495F	(495)F	495F	400F	375	28
(470)L	(490)L	L	L	L	285	375	(425)F	(350)F	F	(395)F	(275)F	29
L	L	L	L	L	300	395	485	500F	450	(405)F	300	30
..	.	.	..	.	300	385	455	425	385	335	300	Mean
	..		.		300	385	455	445	400	325	295	Median
4	3	1		1	28	30	27	26	26	28	29	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · foF2

TABLE 34

Unit Mc

IONOSPHERIC DATA

Latitude . 10°.2 N.

Month November, 1956

75.0°*E Mean Time*

Longitude : 77°.5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	9·2FS	(9 8)F	7·5F	8 0F	(7 9)F	6 0	8·0	11 2	14 1	14 0	13·1	13 5
2	F	8 9F	F	9·5	8 0	F	(7 8)F	11 6	12 9	13 5	13 2	12 7
3	(11 1)F	(11·0)F	9 2	8 2	7 4	6 0	8 4	11·3	13 3	14·4	15 4	15 5
4	(12 2)F	11 6	10·2	8 2	7·4F	5·6	8·3	11·7	13 7	14·0	13 8	12 0
5	(10·5)F	F	F	8 3	5 8	3·3	7 5	12 1	13 9	15 3	14 1	12·6
6	10·9	F	(9 5)F	F	7 1	6·2	8 5	11·5	13 7	14 2	14 0	13 5
7	(11 2)F	10·8	9 4	8·5F	8 2	(7·3)F	8 6F	11 5	14 1	14 6	15 0	13 8
8	F	(8 7)F	8 9	8 9	8·7	7·1	8 4	11 6	13·7	14 7	14 9	14·1
9	10·4	9·4	9·4	(7 5)F	8 1F	5·8	7 9F	11·5	13 8	14·0	C	C
10	F	8·8	(7 3)F	(8 0)F	(8 2)F	9·3	10 7	(11 9)	13·0	14 2	15 6	15 3
11	11·6	11·5	12 2	11·5	11 7	7·0	8·7	11 8	13 1	14 0	14·9	14 8
12	11 6	10 9	11 6	11·2	10 9	10·0	9·5	C	13·6	13 7	13 8	13 3
13	(11 7)	11 8	12·0	12 1	11 0	7·5	8 1	C	C	C	C	C
14	F	F	8 6	7·8	7·7	6·6	8·1	11 1	12·7	13·5	14·0	13 8
15	11·7	(13 0)	10 5	9·1	8 5	8·6	9·3	12·3	13·5	14·4	15·6	16·0
16	10 8	11·1	10 7	7·1	6·5	5·0	8 1	11·6	13·4	15·2	15 9	16 4
17	11·7	11 1	10·3	10·1	9 8	9 4	10·8	C	12 6	13 1	13 5	14 2
18	8·3	F	F	(7 9)F	(8 5)F	7·5	F	(11 0)F	13·6	14·4	14 7	14 5
19	(10 9)F	10 9F	11 0	10·2	7 8	4·5	7·3	11·0	12 8	13 2	12 3	11 9
20	(7·8)F	(7·1)F	(7·3)F	8 0	6·4	3·7	6·8	10·5	11 8	12 0	12·1	12 0
21	F	(9·9)F	10·0	9·3FS	8 5	5·5	7·0	10 7	12·4	13·2	13 0	12 8
22	C	C	C	C	C	C	C	C	C	13 9	14·0	13 7
23	11·9	12·3	12·3	9 0	C	C	C	11 0	13 0	14·1	13 8	13 3
24	(9·1)S	9 5	10·3	10·8	9 8	6·1	7 0S	10 2	11·8	13·0	13 7	C
25	F	(9 0)F	F	(9 2)F	(9·0)F	7·2	7·6	C	12 9	13·2	12 9	12 2
26	10 2	10 3	10·1	9·0	6 8	5 0	7·0S	10 8	13·2	14 1	14 1	13 9
27	F	F	(8 0)FS	(7·4)FS	7 8S	5·6	7 0	10 2	11 9	12·1	12 4	12 3
28	F	(9·3)F	9 0F	8·2	(7·6)F	5·8	7·0S	10·9	12 9	13 3	13 0	12·2
29	(7 9)F	(9 0)F	10 1	9 4	7 5	5·5	7·2S	10 8	12 8	C	13·3	13 0
30	(8 2)F	F	F	F	(8·2)F	C	7·8H	8·8	10 4	10 8	11 5	12·2
Mean .	10·4	10 2	9 8	9·0	8 2	6·4	8·1	11 1	13 0	13 7	13 8	13 5
Median .	10·9	10·3	10 0	8·9	8·0	6·0	8·0	11 2	13·0	14 0	13·8	13·5
Count .	21	23	24	27	28	26	27	25	28	28	28	27

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF2 | TABLE 34 | Latitude · 10°.2 N.

Unit Mc | IONOSPHERIC DATA | Longitude · 77° 5 E.

Month November, 1956 | 75.0°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
13 2	13 3	13 5	(13 2)	13·6	(13 2)s	(12 7)s	F	F	F	(8 8)F	F	1
13 2	12 6	12 4	12 3	12·0	12 6	11·7	10 8	(9 0)F	10 8F	(9 9)F	(11·1)F	2
14 6	14 0	13 8	14 0	13 2	13·8	12 6	11 7	(12 2)	(12 2)	(12 0)F	(11 6)F	3
11 5	11 2	11 2	11 8	12·0	(12 2)	11·8	8·9	F	(8·2)F	(8 8)F	F	4
12 0	11 9	12 0	12 0	11·8	11 6	10 8	8 8	F	F	(8 5)F	(9 6)F	5
12 5	11 8	11·0	11 0	10 9	10 7	9 3	8 0F	F	F	10 0F	(10 9)F	6
12 7	12 0	11 7	11 9	12 0s	11 4	10 8	(8 9)	F	(8 6)F	F	(9 0)F	7
12 6	11 9	12 1	11·7	11 5	(11 3)s	(10 4)	8 1F	F	F	9 2F	(10 6)F	8
C	C	11·5	11·3	(10 8)	10 8	8 8	F	8·4F	(8 6)F	8 7F	F	9
14 8	14 2	(13·2)	12 6	11 7	(11·5)	10 6	9·8	10 9	11 6	11·4s	11 5	10
14·3	14 5	14 1	14 2	13 6	C	11·3	11 3	11 0	10 5	11 2	11 9F	11
13 2	13 0	13 6	14·0	14 0	C	12 1s	(10 0)F	(9 6)F	(10·3)F	(11 5)F	(11·9)	12
C	C	C	C	C	12 0	11·6	10 4F	(8 7)F	F	7·5F	F	13
13 6	14 1	14·2	13 5	13 8	13·2	11 9	10 0	9 6F	(10·3)F	(11 2)F	(11 1)F	14
15 5	15 5	14·9	14·8	14 6	13·6	13·6	15·1	16 0	(13 8)	12 1	10·8	15
15 8	15·2	14 7	14·2	14 1	14·2	13 5	12·2	10 7F	10·9	11 0	11 6F	16
14·2	14 2	13·7	13·5s	13 5	(13·7)	11·8s	(9 7)F	(8 0)F	(8 6)F	F	(7 9)F	17
14 3	14 4	14·7	14·4	13 7	13 1	10 8	8·6	(8 9)F	9 0	9 8	11 5	18
12·1	12 0	12·8	13 4	13 6	13 0	12 1	10·7	(8·2)F	F	F	F	19
11 8	11 8	12 5	12 9	13 3	13 5	(12 0)s	10 9	F	F	F	F	20
12·5	11 8	11 6H	11 7	11·8	11 6	11 0	10·7	11 5	11·9	11·7	C	21
13 1	12·8	13 5	13 8	14 0	14 2	13 6	(12 0)	(13·2)F	(11·6)	11 7	11·9	22
11 9	C	12·0	11 8	11 6	10·8	11 1	11 1	10 6	(10·0)	9·2FS	9 2s	23
12 7	12 7	13 0	12 1s	11 5s	10·9	10 6	9·4	(8 6)F	F	F	F	24
12 7	12 6	12 6	12 6	12 2	11 7	10·8	(7·2)F	F	F	9·3s	10 1	25
14 0	14 1	14·0	13 1	12·1	11 4	11 0	(9 0)F	F	F	F	F	26
12 0	12 2	12·7	12 5	12 1	11·4	10 7	9·8F	F	F	F	(8·9)F	27
11 7	12 1	12 5	12 6	C	12·1	11 5	10 0	F	F	F	F	28
13 0	13 5	13 8	13 7	13 1	12 8	11 4	F	F	F	F	F	29
12 0	11 8	11 9	11 1	10 8	10 4s	9·7s	8 7	(7 8)F	7·6	F	(8 4)F	30
13 1	13 0	12 9	12 8	12·6	12·2	11 4	10 1	10 2	10 3	10·2	10·5	Mean
12 8	12 7	12 8	12 6	12·2	12·0	11·4	10 0	9·6	10 3	10 0	10 9	Median
28	27	29	29	28	28	30	27	18	17	20	19	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · h'F1 | TABLE 35 | Latitude · 10°.2 N.

Unit : Km | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month : November, 1956 | 75·0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	235	240	235	225
2								Q	245	225	225	235
3								Q	240	230	220	220
4								Q	240	230	235	220
5								Q	240	230	220	220
6								Q	240	245	235	225
7								Q	240	235	230	220
8								245	250	230	235	B
9								Q	250	245	C	C
10								Q	245	B	240	230
11								Q	240	235	225	235
12								C	250	245	235H	235
13								C	C	C	C	C
14								245	235	225	230	235H
15								Q	245H	235	220	225
16								Q	240	235	225	235
17								C	245	245	B	230
18								Q	240	235	220	235
19								Q	240	220H	205	240
20								Q	230	225	235	230
21								Q	240	235	230	230H
22								C	C	235H	230	225
23								Q	245	230	225H	225
24								Q	245	235	220	C
25								C	250	230	225	220H
26								Q	240	230	220H	220
27								Q	240	225	210	205H
28								Q	250	245	220	215
29								Q	240	C	230	215H
30								Q	240	220H	220	225H
Mean									240	235	225	225
Median								..	240	235	225	225
Count								2	28	27	27	26

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : h'F1 | TABLE 35 | Latitude · 10°.2 N.

Unit · Km | IONOSPHERIC DATA | Longitude 77°.5 E.

Month : November, 1956 | 75 o°*E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
225	230	'35	240	245								1
225H	230	235	245	260								2
225H	230	2 5	240	260								3
225	230	235	240	260								4
215H	220	225	240H	260								5
230	235	230	250	260								6
225	225	230	245	260								7
230	230	220	B	265								8
C	C	240	255	B								9
230	235	245	250	265								10
230	235	240	250	Q								11
230H	230	240	255	255								12
C	C	C	C	C								13
230	240	240	250	B								14
225	235	240	235	250H								15
220H	225	235	245	260								16
225	230	235	240	265								17
220	215	240	235	255								18
230	255	B	255	260								19
215	205H	220H	225H	260H								20
220	220	225H	240	255								21
225	215H	240	A	260								22
220	C	240	250	265								23
215H	220	230	240	250								24
225	230	225	230H	250								25
215HK	220HK	215H	235	255								26
205H	205H	240	240	255								27
215	225H	230	240	C								28
225H	200H	225	235	250								29
215	210H	220	235	250								30
225	225	230	240	255								Mean
225	230	235	240	260								Median
28	27	28	27	25								Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foF1

Unit . Mc

Month : November, 1956

TABLE 36

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude 10°.2 N.

Longitude . 77°.5 E

. Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	L	L	L	L
2								Q	L	L	L	L
3								Q	L	L	L	L
4								Q	L	L	L	L
5								Q	L	L	L	L
6								Q	L	L	L	L
7								Q	L	L	L	L
8								L	L	L	L	B
9								Q	L	L	C	C
10								Q	L	B	L	L
11								Q	L	L	L	L
12								Q	L	L	LH	L
13								C	C	C	C	C
14								L	L	L	L	LH
15								Q	LH	L	L	L
16								Q	L	L	L	L
17								C	L	L	B	L
18								Q	L	LH	L	L
19								Q	L	L	L	L
20								Q	L	L	L	L
21								Q	L	L	L	LH
22								C	C	LH	L	L
23								Q	L	L	LH	L
24								Q	L	L	L	C
25								C	L	L	L	LH
26								Q	L	L	LH	L
27								Q	L	L	L	LH
28								Q	L	L	L	L
29								Q	L	C	L	LH
30								Q	L	LH	L	LH
Mean								.	.	.		
Median								.	.	.	.	.
Count								.	.	.	.	

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : foF1

Unit · Mc

Month : November, 1956

TABLE 36

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude . 10°.2 N.

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L								1
LH	L	L	L	L								2
LH	L	L	L	L								3
L	L	L	L	L								4
LH	L	L	LH	L								5
L	L	L	L	L								6
L	L	L	L	L								7
L	L	L	B	L								8
C	C	L	L	B								9
L	L	L	L	L								10
L	L	L	L	Q								11
LH	L	L	L	L								12
C	C	C	C	C								13
L	L	L	L	B								14
L	L	L	L	LH								15
LH	L	L	L	L								16
L	L	L	L	L								17
L	L	L	L	L								18
L	L	B	L	L								19
L	LH	LH	LH	LH								20
L	L	LH	L	L								21
L	LH	L	A	L								22
L	C	L	L	L								23
LH	L	L	L	L								24
L	L	L	LH	L								25
LHK	LHK	LH	L	L								26
LH	LH	L	L	L								27
L	LH	L	L	C								28
LH	LH	L	L	L								29
L	LH	L	L	L								30
..	..	..	..	..								Mean
.	..	..	..	..								Median
..	.	.	..	..								Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'E | TABLE 37 | Latitude : 10°.2N.

Unit : Km | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month November, 1956 | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								115	A	A	A	A
2								A	A	105	105	B
3								105	105	105	105	100
4									115	110	B	A
5								115	105	105	A	105
6								115	110	B	105	105
7								110	115	105	105	105
8								115	B	110	B	B
9								115	105	110	C	C
10									110	B	B	A
11								110	105	A	A	105
12								C	110	A	B	110
13								C	C	C	C	C
14								110	A	105	105	110
15									110	A	A	105
16								115	110	110	105	105
17								C	B	B	B	105
18								120	115	110	B	105
19								120	B	A	A	B
20									115	110	B	B
21								110	105	105	105	A
22								C	C	115	A	105
23								120	110	105	105	105
24								125	B	115	115	C
25								C	110	105	105	105
26								115	110	105	110	B
27									105	105	105	105
28								120	105	105	105	105
29								120	110	C	B	105
30								A	105	105	105	105
Mean								115	110	110	105	105
Median								115	110	105	105	105
Count								18	21	20	14	18

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic h'E

Unit Km

Month · November, 1956

TABLE 37

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude : 10°.2 N

Longitude : 77°.5 E·

12	13	14	15	16	17	18	19	20	21	22	23	Date
B	A	A	A	A	A							1
A	A	105	A									2
A	100	100	105	A	A							3
A	A	A	105	110								4
105	B	A	A	A								5
105	105	A	A	A								6
105	105	105	A	A								7
105	110	A	B	A								8
C	C	115	A	B								9
A	105	A	A	A								10
105	A	A	115									11
A	110	B	115	A	C							12
C	C	C	C	C								13
105	A	A	115	B								14
A	B	A	105	A								15
105	A	105	110	A								16
110	110	110	A	A								17
105	105	B	A	A								18
B	B	B	B	125	A							19
110	A	110	115	B								20
105	105	105	115	A								21
105	105	115	B	A								22
A	C	110	A	A								23
105	105	105	A	A								24
105	105	115	A	A								25
B	105	A	110	A								26
110	A	110	115	A								27
110	110	105	110	C								28
105	105	105	110	A								29
105	105	105	A	A								30
105	105	110	110	.	..							Mean
105	105	105	110	..	..							Median
18	16	16	13	2	.							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foE | TABLE 38 | Latitude 10° 2 N

Unit . Mc. | IONOSPHERIC DATA | Longitude · 77° 5 E

Month : November 1956 | 75 0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								3 2	A	A	A	A
2								3 1A	A	A	A	B
3								(2 8)	A	A	A	A
4									3 6A	A	B	A
5								3.0	A	A	A	A
6								3 0	A	B	A	A
7								3.2	A	A	A	A
8								3 4	B	A	B	B
9								(3 2)	A	A	C	C
10									A	B	B	A
11								2 8	3 4	A	A	A
12								C	A	A	B	A
13								C	C	C	C	C
14								A	A	A	A	A
15									A	A	A	A
16								2 8	3 3	3 4	3.7	A
17								C	B	B	B	A
18								2 9	A	A	B	A
19								2.8	B	A	A	B
20									A	A	B	B
21								2 8	A	A	A	A
22								C	C	A	A	A
23								2.8	3.5	A	A	A
24								N	B	A	A	C
25								C	A	A	A	A
26								A	3 5	A	A	B
27									A	A	A	A
28								(2.9)	A	A	A	A
29								2 9	(3 5)A	C	B	A
30								A	A	A	A	A
Mean								3 0	3 5			.
Median								2 9	3 5	..	.	.
Count								16	6	1	1	.

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic · foE

Unit : Mc.

Month : November 1956

TABLE 38

IONOSPHERIC DATA

75·0°E *Mean Time*

Latitude : 10°.2 N·

Longitude · 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
"B	A	A	A	A	A							1
A	A	A	A									2
A	A	A	A	A	A							3
A	A	A	A	A								4
A	B	A	A	A								5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	B	A								8
C	C	A	A	B								9
A	3 9	A	A	A								10
4 1A	A	A	3.5									11
A	A	B	3 5A	A	C							12
C	C	C	C	C								13
A	A	A	A	B								14
A	B	A	A	A								15
A	A	A	A	A								16
A	A	A	A	A								17
A	A	B	A	A								18
B	B	B	B	(3 1)A	A							19
A	A	A	A	B								20
A	A	A	A	A								21
A	A	A	B	A								22
A	C	A	A	A								23
A	A	A	A	A								24
A	A	A	A	A								25
B	A	A	A	A								26
A	A	A	A	A								27
A	A	A	A	C								28
A	A	A	A	A								29
A	A	A	A	A								30
..	..	..	..	..	..							Mean
..	.	..	..	..	..							Median
1	1	..	2	1	..							Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic : fEs | TABLE 39 | Latitude : 10°.2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude : 77° 5 E

Month : November 1956 | 75.0° E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								6 8	8 7F	13 2F	12 2F	12 2F
2							2 0	9 0F	11 0F	10 4F	12 2F	9 0
3								G	7 4	10 6F	11·4F	12 0F
4									10 6	12 2F	11·9F	12 3F
5								G	10·0F	12 5F	11 9F	11·4F
6								G	4·7	7 2F	8 2F	12·2F
7								G	4 6F	10 2F	12 4F	12 4F
8								G	G	7·2F	10 7F	11 8F
9		5 5						G	8·8F	9·3F	C	C
10									7·4F	G	G	7 2F
11			3·4					G	G	9·9F	11 6F	11·7F
12		3·9						C	10·2F	11·8F	12 0F	11·8F
13								C	C	C	C	C
14								8·2F	9·6F	11 0F	12 0F	12·0F
15									6 6F	9 8F	8 1F	5·9F
16								G	G	G	G	7 9F
17								C	7·2F	10 2F	G	12·2F
18	6 7	(6·0)S	2 9					G	7·4	8 2	12 0F	11·0F
19								G	5 8	8·6F	11 6F	12 0F
20									7·9F	11·0F	11 6F	12·0F
21								4·3	8·3F	10·2F	11 0F	10·4F
22	C	C	C	C	C	C	C	C	C	10·2F	12·1	8·8F
23					C	C	C	G	6·3F	11·0F	11 8F	12·3F
24								G	G	7·8F	11 1	C
25	3 3	4 2						C	7 6F	8·9F	7·0F	10 6F
26	(6.0)	2·6	(7·0)S					7·8FS	G	8·8F	11 2F	10 8F
27								3·8F	9·0F	9·0F	8 8F	7·8F
28								G	(10·4)F	11·1F	11·2F	11 2F
29								G	7·0F	C	G	8·8F
30			(5·2)S			C		6·8F	11·0F	8·8F	8 6F	10 2F
Mean	.	4 4	..	..	..	..	.	6·7	8·2	10 0	10 9	10·7
Median	.	4.2	..	..	..	..	..	G	7 4	10 0	11·3	11·4
Count	3	5	4	..	..	..	1	21	28	28	28	27

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic fEs | TABLE 39 | Latitude · 10°.2 N.

Unit . Mc. | IONOSPHERIC DATA | Longitude : 77°.5 E.

Month . November 1956 | 75 0° E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
11 8	12 2	12 3F	11 6F	(11 0)F	N							1
13 6F	12 9F	(9 0)F	(12 2)F									2
12 4F	13 0F	13 1F	11·0F	9 0F	8 0F							3
12·2F	13 1F	12 2F	9 2F	7 0F								4
9 0F	8 0F	7 6F	8 0F	7 6F								5
12 1F	11 9F	7 9F	12 0F	9 6F								6
13 0F	12 2F	11 8F	8 2F	8 6F								7
12·4F	9 9F	8 0F	9 2F	7 4F								8
C	C	9 4F	9 1F	G								9
7 9F	7·6F	8 0F	7 6F	(7 3)F								10
10 7F	11 6F	11·0F	G		C							11
11 9F	12·9F	7 8F	7 0F	7 8F	C							12
C	C	C	C	C								13
9 6F	12 0F	11 7F	11 6F	8 2F	(8 6)S							14
9 6F	7 8F	9 6F	7 9F	7 6F								15
8 6F	9 2F	8 3F	7·3F	7·9								16
12·0F	12 3F	8 8F	11 0FS	10 8FS						5 8F	7 3	17
11·6F	8·7F	G	10 7F	7 3F								18
11 3F	10 8F	10 2F	9 8F	6 8F	6·2F							19
11 9F	11 6F	11 8F	7 6F	G								20
10 2F	8 3F	8·1F	6·8F	7 4F						6·7	C	21
12 6F	12 0F	11 9F	11 2F	7 3F								22
12·1F	C	11·9F	8 2F	8 6F								23
12·0F	9 0F	12 0F	11 0F	9 2FS								24
11 6F	11 0F	12 0F	10·5F	7 8F								25
11 6F	12 2F	(11 0)F	10 0F	8 6F								26
8 8F	(11 0)F	11 0F	7·8F	6 8F								27
9 2F	7 9F	7 6F	7 0F	C								28
8 9F	8·6F	7·8F	7 4F	6 3F								29
10 0F	11·7F	9 8F	9·0F	(9·0)S								30
11·0	10·7	10 0	9 3	8 1	..	.		..		.		Mean
11·6	11 6	9 6	9 1	7 7	..	.	..	..	.		..	Median
28	27	29	29	29	3	..	.	..	.	2	1	Count

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic (M 3000) F2 | TABLE 40 | Latitude : 10° 2 N.

Unit : — | IONOSPHERIC DATA | Longitude · 77° 5 E.

Month · November 1956 | 75 0° E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	(2 95)FS	(2·8)F	(2·85)F	S	(3 15)FS	(3 2)S	2 9	2 75	2·5	2 25	2 05	2 1
2	F	2·7F	F	3 0	3 15	F	F	2 55	2 4	2·15	2 1	2 05
3	(3·0)F	(2·9)F	2 9	3·0	3 0	3·2	2·95	2 9	2 7	2·5	2·2	2 1
4	(2·8)F	2·9	2 9	2 95	3 0	3·1	2 9	2 9	2 65	2·3	1 95	2 0
5	(2·7)F	F	F	2·95	3 05	3 15	2·95	2 8	2 6	2·35	2·1	2·0
6	(2 6)	F	(3·0)F	3 1	3 0	2·85	2·8	2 5	2·35	2 2	2 0	<2 0
7	(2 8)F	2 9	2 9	2·8F	2 85F	(3 1)F	(2 9)F	2·75	2·6	2·4	2 2	2·0
8	F	(2·8)F	2 7	2 8	2 9	3 1	2 8	2·85	2 6	2 45	2·2	2·0
9	2 35	2 65	2 8	(2·9)F	2 95F	3 1	2 9	2 7	2·45	2 25	C	C
10	F	2·5	(2 8)F	(2 6)F	(2 8)F	3·0	2 7	(2·6)	2·3	2·35	2 35	2 2
11	2 55	2 4	2 4	2 5	3 1	3 1	2·7	2·65	2 45	2 4	2 05	2 05
12	2 6	2 45	2 6	2 6	2 85	3 0	2·7	C	2 2	2·1	2·1	2·05
13	(2 8)	2·6	(2 8)	2 8	3 1	3 3	2·7	C	C	C	C	C
14	F	F	2·7	2 9	2 95	3·2	2 8	2 55	2·45	2 3	2 2	2 1
15	2 5	2·7	2·9	2 9	2 8	2·7	2·7	2·4	2 4	2·3	2 3	2 25
16	2·8	2 8	2 8	3 1	3 15	3·05	2·75	2·7	2·6	2 55	2 3	2 3
17	2 6	2 7	2·8	2 65	2 8	2 8	2·65	C	2 5	2·5	2 25	2·2
18	2·5	2 3F	F	(2 8)F	2 9F	2·95	F	(2·65)F	2·45	2 3	2 2	2 15
19	(2·4)F	(2·65)F	2 9	3·05	3 15	3 1	2·9	2·75	2·45	2·25	2 15	2 15
20	(2·4)F	F	(2 9)F	3 1	3 2	3 4	2·7	2·65	2 4	2 4	2·2	2 15
21	F	2 65F	2 8F	2 9F	3 0	3·2	2 9	2·8	2·5	2·2	2·2	2·15
22	C	C	C	C	C	C	C	C	C	2 3	2·2	2·1
23	2·6	2·5	2 8	3 1	C	C	C	2 7	2·55	2·3	2 15	<2 05
24	(2 4)S	2·4	2 5	2·6	3 05	3·25	2·8	2 7	2 7	2·35	2·2	C
25	F	(2.5)F	F	(2 9)F	(2 9)F	3·2	2·8	C	2 5	2·35	2·1	2·15
26	2·5	2·7	2 7	2·95	3 0	3 0	2·7S	2·7	2·65	2·5	2 25	2·2
27	F	F	(2 4)FS	(2 7)FS	3 0S	3·2	2·75	2 5	2 5	2·3	2·2	2·2
28	F	(2 5)F	2 7F	2·8F	2·75F	3·1	2·9S	2·7	2·5	2·2	<2·1	2·05
29	(2·5)F	(2·5)F	2 8	2 95	3 05	3 15	2·7	2·55	2 5	C	2 2	2·1
30	(2·5)F	F	F	F	(3·2)F	C	2·5H	2 5	2·35	2·35	2·1	2·1
Mean	2 6	2·65	2 75	2 85	3 0	3·1	2 8	2·65	2 5	2·3	2 15	2 1
Median	2 6	2·65	2 8	2 9	3 0	3 1	2·8	2·7	2·5	2 3	2·2	2 1
Count	21	23	24	27	28	26	26	25	28	28	28	27

Sweep 1 Mc to 25 Mc in 1/2 min.

17—4 D. D. G. Obs, Kodai kanal/57

Characteristic · (M 3000) F2

Unit : —

Month : November 1956.

TABLE 40

IONOSPHERIC DATA

75 0° E *Mean Time*

Latitude · 10° 2 N·

Longitude : 77°.5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
2 1	2·05	2·0	2 0	2 05	2 0	<1 95	F	F	F	(2 4)F	F	1
<2·05	2 0	2 0	2 0	2·1	2 05	2 0	<2 0	1 9F	2 2F	(2 4)F	(2 6)F	2
<2 0	2 0	2 0	<2 0	2 05	2 0	<2 0	2 0	(2 1)	(2 2)	(2 5)F	(2 6)F	3
<2 0	<1 95	<2 0	2 05	2 0	2 15	<(2 05)	<2 0	F	(2 2)F	F	F	4
2 0	2 0	2·0	2 05	2 05	2·1	<1·95	<2 0	F	F	F	(2 4)F	5
<1·9	<1 95	<1·95	<1·95	2 0	2 0	1 95	F	F	F	2 3	(2 4)F	6
<2 0	<2 0	1 95	<2 0	2 0	2·05	2 0	(1 9)	F	(2 1)F	F	(2 9)F	7
2·0	2 0	<2 0	<1 95	<2 0	2 05	<2 0	<(1 85)F	F	F	2 4F	(2 4)F	8
C	C	2 0	<2 0	(2 1)	2 0	<2 0	1 9F	2·0F	(2 1)F	(2 35)F	F	9
2 05	<1·95	<1·9	<2 0	2 0	2 0	2·05	<1 95	2 0	2 4	(2 5)s	2 6	10
2·1	2 05	2 05	2 05	2 05	C	2 0	<1 85	<1 9	2 1	2 3	(2 5)F	11
2 05	2·0	2·0	2·1	2 1	C	1 9	F	(2 1)F	(2 3)F	(2 5)F	(2 8)	12
C	C	C	C	C	2 15	2·1	<1 95F	F	(2 0)F	2 3F	F	13
2 1	2 1	2 1	2 0	2 0	<1 9	<1 9	<1 9	1·95F	1 95F	2 1F	2 2F	14
2 25	2 2	2 1	2 0	(1 9)	<2 0	(2 0)	(2 4)	2 7	2 9	2 85	2 7	15
2 2	2 1	<2·0	2 0	2 1	2·15	2 0	<2·0	2 0F	(2·0)F	2 4	2 5	16
2·15	2 1	2 05	2 05	2 1	2 05	<1 9	< 1 95F	1·9F	(2 2)F	F	2 1F	17
2·1	2 1	2 1	2·1	2·1	(2·25)	2 15	(2 25)	(2 1)F	<2 05	2 25	2 3	18
2 1	2·15	2 1	2·1	2 15	2 15	2 1	<1 9	(2 0)F	F	F	F	19
2 1	2 05	2 1	2 15	2·2	2·2	(215)	<1 9	F	F	F	F	20
2·1	2·0	2·05	2 05	<2 05	2 1	2·0	2·05	2 15	(2 35)	2 6	C	21
2 1	2·05	<2·1	2 1	2 2	2 15	2 1	(2 2)F	(2 2)F	(2·7)	(2 7)	2 6	22
<2·0	C	2 05	2 0	2 0	2·1	2 15	2 2	2 1	2 2	2 25Fs	2·35s	23
2·05	2 05	<2 05	<2 05	2 0s	2 05	2·0	<1 95	(<2 0)F	F	F	F	24
2 1	2·05	<2 05	2 05	(2 15)s	2 05	<1 95	2 1	F	F	2·55s	2 5	25
2·1	2·05	2·0	<2 0	2 0	2·0	<2 0	<2 0F	F	F	F	F	26
2·1	2·05	2 0	<2·05	(2 05)s	2 0	<1 95	(<1 9)F	F	F	F	(2 1)F	27
<2·0	2·0	<2 05	<2 05	C	2·0	2 0	<1 85F	F	F	F	F	28
2 1	2·1	2 1	2·05	2 0	<1 95	<1 9	F	F	F	F	F	29
2·05	2 1	<2 0	<1·95	2 0	2·05s	2 0s	<2 0	(2 0)F	2 0	F	2 3	30
2 05	2·05	2 05	2·05	2 05	2·05	2 0	<2 0	2 05	2 2	2 4	2 45	Mean
2 1	2·05	2 0	<2 05	2 05	2 05	2 0	<2 0	2 0	2·2	2 4	2 5	Median
28	27	29	29	28	28	30	26	17	18	18	19	Count

Sweep 1 Mc to 25 Mc in 1/2 min

Characteristic : h'F2

Table 41

Latitude . 10°·2 N.

Unit : Km.

IONOSPHERIC DATA

Month · December 1956.

75·0° E. *Mean Time*

Longitude · 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	280	270	270	260	250	235	300	265	L	260L	L	L
2	275	260	245	240	225	220	300	255	L	L	L	L
3	265	265	305	290	240	225	280	260	L	L	L	L
4	275F	245	240	245	240	225	280	255	L	L	L	L
5	280	280	260	245	220	220	300	250	L	L	L	L
6	320H	320	280	260	240	240	300	270	L	L	L	L
7	315	320	280	260	295	240	280	260	L	L	L	L
8	300	280	270	245	240	240	270	260	L	L	L	(465)L
9	295	270	260	280	265	265	305	270	L	LH	C	C
10	320	300	270	250	240	240	280	275	250	L	L	L
11	300	300	320	260	240	260	280	260	L	L	400	L
12	360	280	240	240	245	225	280	260	L	L	L	L
13	275	290F	280	285F	300F	325F	310	260	L	L	L	L
14	300F	270	240	240	235	220	260	260	L	L	L	L
15	355	300	280	280	270	250	300	L	L	L	L	L
16	300	275	260	250	220	220	280	260	L	C	C	C
17	300	270	280	300	260	245	290	270	260	L	B	L
18	(325)F	300	245	240	225	240	330	275	L	L	L	L
19	380F	315	315	330F	260	220	275	260	L	L	L	L
20	360	320	290	280	220	220	305	260	L	L	B	L
21	F	300	300	235	235	220	260	255	L	L	L	L
22	300	240	220	230	230	220	255	265	L	L	L	L
23	275	280	280	270	250	240	265	255	L	L	L	L
24	300	260	255	260	260F	240	270	255	L	L	L	C
25	300	320	370	400	345	270	285	290	L	L	L	L
26	315	345	350	360	400	395	360	295	L	L	L	510L
27	440	380	320F	295	280	275	300	290	L	L	L	L
28	300	320F	360	335	315	300	355	290	260	L	500	L
29	280	290	275	265	240	240	305	L	L	L	L	L
30	300	260	240	250	240	230	295	275	L	L	L	L
31	290	295	300	300	280	270	320	290	L	L	L	500LH
Mean	310	290	280	275	260	250	295	265	..	..	..	..
Median	300	290	280	260	240	240	290	260		..	..	..
Count	30	31	31	31	31	31	31	29	3	1	2	3

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic h'F2 | TABLE 41 | Latitude 10°·2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude : 77° 5 E.

Month · December 1956. | 75.0° E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L	295	375	F	(400)F	405F	F	280F	1
L	L	L	L	L	295	380	460	435	380	300F	270	2
L	L	L	L	L	295	375	(400)F	390F	F	320F	300F	3
C	L	L	L	L	290	365	460F	F	420F	400	340	4
L	L	L	L	L	L	400	550	500H	440	390H	370	5
L	L	500	L	L	295	400	F	500	460	480	400	6
L	L	L	L	L	290	375	475	F	F	340	315	7
L	L	L	L	L	285	360	420	415	345	305	295	8
(450)	500	L	550	L	L	380H	F	F	F	F	340F	9
L	L	L	L	L	300	380	F	F	340	280	320	10
500	LH	LH	L	L	280	340	435	F	F	F	440	11
(480)L	(470)L	L	L	L	285	365	460F	425F	345F	350F	260	12
L	L	L	L	L	290	355	460F	(390)F	370F	(395)F	295F	13
L	L	L	L	L	300	370	495	F	500	430	315	14
L	L	L	L	L	300	360	480	500	400	375	350	15
C	C	C	L	L	305	400	F	F	450	440	400	16
L	L	L	L	L	300	360	470F	(500)F	445F	420F	435F	17
L	L	L	L	L	300	375	540	(505)F	F	295	325F	18
L	L	L	L	L	280	340	F	F	F	F	400	19
L	L	L	L	L	280	340	440	F	460	440	F	20
L	L	L	L	L	280	325	420	500	400	395	315	21
(470)L	L	L	L	L	280	335	440	440F	385F	320	280	22
L	(460)L	(500)L	L	L	280	340	405F	(430)F	425F	360F	330F	23
C	C	C	C	C	C	370	430	470	420	380	310	24
L	L	LH	L	280	320	390	455	365	310	300	300	25
L	L	L	LH	280	315	380	480	460	440	430	440	26
500L	(550)L	LK	LK	280F	310F	400	580F	(570)F	(560)F	(500)F	380F	27
(520)K	LK	(530)L	555	620	L	375	F	400	460	320	280	28
L	520	L	L	L	295	345	460	500	540	500	360	29
L	L	L	L	L	L	360	440	420	420	395	320	30
L	L	L	L	L	300	370	475	480	(460)F	F	415	31
485	500	.	.	..	295	365	465	455	425	380	340	Mean
490	500		..	..	295	370	460	450	420	385	320	Median
6	5	3	2	4	26	31	24	22	25	26	30	Count

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic · foF2

Table 42

Latitude : 10°·2 N.

Unit Mc.

IONOSPHERIC DATA

Longitude : 77°·5 E.

Month : December 1956.

75 0° E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	8·6F	8·6z	8·0	8 8	8·3	6.7	7 7	10 8	12 2	13 0	13·6	13 4
2	(9·0)F	10 3	9 1s	7 6	6 8	4 4	6·9	10 9	13·0	14·0	14 5	14·1
3	10·0)	10 4	9 8	10·3	10·2	7 4	8 0	11·2	13 4	13 5	13·1	12·4
4	(10 1)F	(9·4)FS	9·8	9·3	8·6	7·2	8·0	11 0	13 5	13 6	13 8	13·2
5	9·4F	F	F	8·8	8 0F	F	7 4	10 5	12·4	12·1	12·1	12 2
6	FH	F	F	8 5F	7 9	5·4	6·7	10·1	11 8	11·9	12·0	11·5
7	F	F	F	F	F	F	(8·4)F	10 8	12 5	12 9	13·3	13 3
8	7 3F	8 5	8·8	(8·3)F	7 4	F	7·9	11·2	13·5	14·2	15·0	15 1
9	8 9F	9 7F	10·8	10·1	9 6	8 0	8 8	11 7	12 9	13·7H	C	C
10	F	F	10 8F	10 7	9·5	6 7	7 1	10·8	12·3	12·3	13 0	13·4
11	9 2	8·9	8·4	8·8F	9·5	9 2	9·5	12·1	12·5	13·8	14·6	14 6
12	F	F	F	9·0	8·6	7·9	7·5	10 5	12·8	13·8	13 7	14 1
13	9 8	F	F	F	F	F	(5·3)F	10·5	12·2	13 2	13 7	13 6
14	7·4F	(7 2)F	F	(7·6)F	7 5	7 2	8 0	11·4	13·4	14·0	13 5	13·1
15	F	F	F	F	(8·1)F	7 6	8 8	11·1	11·6	12·2	11 7	11·3
16	F	(8·7)F	8 4	8 7	7·2	5·1	6·0	9·9	12 1	C	C	C
17	F	F	F	F	F	F	F	10 3	12 0	12 4	(12·2)B	12·0
18	F	F	(8 3)F	7·0	5·0	2 8	5 0	8 6	10·5	11·4	12 2	12 6
19	F	10·0F	F	F	F	9·0	8·2	10 8	12·1	12 3	12 8	12·9
20	F	F	F	F	F	F	6·6F	9·6	11 0	11·9	B	13 3
21	F	F	F	F	7·6F	6·6	6 8	10·6	12·5	13 3	14·0	12·9
22	F	F	F	6·4F	F	6 5	7·0	10·3	12·6	13 4	13·7	13 9
23	9·0	8 4	8·0	7 0	6 8F	6·5	7 1	10·4	12 0	12 7	13 2	13·0
24	F	F	F	F	6 4F	5·9	7·2	10·8	12·5	13·7	13 9	C
25	8·5	7·7	8·2	8 0F	F	8·3	8·3	11·1	12·2	13 4	13 1	13·4
26	10 1	10·2	10 2	10·2	10·2	8 8	9·6	10·3	12·1	12·8	13·4	13·9
27	F	F	(6 6)F	(6 9)F	6 8	7·2	7·5	10 8	12·3	13 6	13·4	13·4
28	F	F	(7·5)J	9 1	10·2	9·2	9·6	(11 5)F	12 0	12·5	12 8	12 1
29	F	10 6	10·7	10·5	9·9	6·9	6·5	9·1	10 8	12·1	12 7	12·8
30	F	9 5	9 9	8·1	7·1	6·1	6·1	9·3	10·8	11·3	10·8	10 7
31	11·0	10 6	9·9	8·2	7·4	6·1	6·3	9·2	10·8	11·4	12·1	12·6H
Mean	9·2	9·3	9·1	8 6	8·1	6 9	7·5	10·6	12 2	12·9	13·1	13 0
Median	9 1	9 4	9·0	8 7	8 0	6·9	7·4	10 8	12 2	13 0	13 2	13 2
Count	14	16	18	23	24	25	30	31	31	30	28	28

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic foF2 | TABLE 42 | Latitude 10° 2 N.

Unit · Mc. | IONOSPHERIC DATA | Longitude : 77°·5 E.

Month · December 1956. | 75.0° E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
12 8	12 3	12 1	12 0	12 1	(11 7)s	11·1	F	F	F	F	F	1
12 2	11 4	11 1	11 3	11 8s	11 6	11·0	9 3	9·0F	(8 4)	9·0	9 7	2
12·5	12 2	12 0	12 1	11 9	11·0	10 2	9 6F	F	F	(9 4)F	F	3
C	11 3	10 4	10 2	9 9	10 4s	10 2	9·2	(9 4)F	(9 2)F	F	F	4
12 4	12 3	12 0	12 1	12·1	11·5	11 0	>9 2F	FH	F	FH	F	5
11 9	12 2	12 8	13 0	12·7	>11·9	>8 7	F	F	F	F	F	6
12 6	12 2	11 8	11 3	11 3	10 8	N	>9·8	F	F	8 5F	F	7
14 4	13 8	>13 1	>11 5	>10 9	11·0	10 5	9·7	9 6	9 1	9 2	9 7	8
14 8	14 7	14 5	14 0	13·5	13 0	11 3H	F	F	F	F	F	9
13 4	13 1	12 8	12 6	s	10 7	(9·6)s	F	F	F	F	9·0F	10
14 4	14 4H	13 8H	13 3	(11 7)s	11·1	10·7	9 2	F	8 4F	F	F	11
14 5	14 6	14 0	14 0	>12 4	9·9	9 1	>8 0	F	F	F	10 3	12
13 6	13·3	12 8	12 1	>11 6	>10 8	>10 1	>8 9	F	8 6	F	8 0F	13
12 8	12 1	11 7	11 5	11 5	11 5	11·0J	9·8F	F	F	F	F	14
11·2	11 3	11 3	11 0	10 8	10 6	10 5	>8·7F	F	(8.5)F	F	F	15
C	C	C	12 0	11 5	>10 6	>8 7	F	F	F	F	F	16
12 2	12 2	12 2	12 0	11·7	11 5	(11 1)N	F	(6 0)F	F	F	F	17
13 1	13 0	13 2	13 6	14 0	(12 5)N	(11 3)N	>9·7F	F	F	F	F	18
13 1	13 1	12 7	12 5	12 5	10 8	10·5	F	F	F	F	F	19
13 7	14 0	13 9	13 6	13 0	12 3	11·6	F	F	F	F	F	20
12·3	11 6	11 0	10·8	10 7	10 9	10·5	8 6F	F	F	F	F	21
13 8	13 0	11 5	9·8	(9 4)s	9 5s	9·3	8·4	8·0	8 2	8·0	8 4	22
12 7	12·1	11 6	11·0	11 0	10 6	>10·2	>9·5F	(8 0)F	7·7F	7·7F	7·5F	23
C	C	C	C	C	C	10 1	9 9	9·3	(9·8)N	10 2	9·2	24
13 0	12 6	11 6H	>9 9	10 0	10 2	9 3	(9 1)s	10 6	10·0	10·8	10·6	25
13·8	13 0	12 2	11·0H	10 4	9·3	9·0	8 5	>8 3	7·8	7·6F	(7·2)F	26
13·7	13 3	12 8K	11 7K	>9 8	9·0	8 4	(7·0)F	F	F	F	F	27
13 2K	13 2K	13 5	13·6	12 7	(12·7)s	(11·0)s	F	F	F	(10 0)F	F	28
12 8	12 7	12 4	12·1	11·2	10 6	9 4	8 6	(8·0)F	F	F	(8·2)F	29
10 6	10·7	11 2	11 7	12 3	12 0	11 7	(11·4)F	10 3	8·6	9·0	9 6	30
12 4	12 6	12·6	12 5	12·6	(12 1)N	11·7	11·0	10 6F	(9 5)F	F	(7·3)F	31
13 0	12 7	12 4	12 0	11 6	11·1	10 3	9 2	8·9	8 8	9·0	8·8	Mean
12 9	12 6	12 2	12 0	11 7	11 0	10·5	9·2	9·2	8 6	9·0	9·0	Median
28	29	29	30	29	30	30	22	12	13	11	13	Count

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic · h'F1 | TABLE 43 | Latitude · 10°·2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude · 77°·5 E.

Month : December 1956. | 75·0°E *Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q	245	235	220H	220
2								Q	240	230	225	220
3								Q	240	230	220	215H
4								Q	240	235	230	230
5								Q	235	220	220	210
6								Q	255	240	240	235
7								Q	245	230H	220	220
8								Q	250	235	230	220
9								Q	250	235	C	C
10								Q	Q	240	A	235
11								Q	240	230	230	225
12								Q	240	230	225	220
13								Q	245	230	220	A
14								Q	240	230	220	215
15								275	250	240	240	240H
16								Q	240	C	C	C
17								Q	Q	240	B	235
18								Q	245	235	230	220
19								Q	240	235	235	220
20								Q	240	220	B	235
21								Q	240	B	B	235
22								Q	240	230	220	215
23								Q	240	235	230	230
24								Q	235	235	220	C
25								Q	270	260	240	240
26								Q	270	260	B	B
27								Q	260	250	240	235
28								Q	Q	240	240	245
29								275	250	240	240	230
30								Q	240	235	225	215H
31								Q	270	250	240	240
Mean								..	245	235	230	225
Median								..	240	235	230	230
Count								2	28	29	24	26

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic : h'F1 | TABLE 43 | Latitude : 10°·2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude : 77°·5 E.

Month : December 1956. | 75·0°E *Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
220H	215	215	235H	260	Q							1
215	215	215	240	265	Q							2
200H	220	230	245	260	Q							3
C	220	235	240	255	Q							4
200H	235H	230	240	260	305							5
230	225	220	240	260	Q							6
210	220	220	225	250	Q							7
220	215	215	240	255	Q							8
225	225	220	240	260	300							9
B	220H	205H	245	265	Q							10
220	215	215	240	250	Q							11
215H	215H	220	235	255	Q							12
220H	215H	220	220	255	Q							13
210	205H	220H	240	265	Q							14
225	220H	220H	240	265	Q							15
C	C	C	250	275	Q							16
235	235	250	255	280	Q							17
215	215	B	260	275	Q							18
B	B	B	245	260	Q							19
B	220	220H	230	245	Q							20
B	220	210H	220H	245	Q							21
215	215	215	230	250	Q							22
220	210H	210H	220H	250	Q							23
C	C	C	C	C	C							24
240	240	245	270	Q	Q							25
250	245	245	250	Q	Q							26
B	230	235	235H	Q	Q							27
235	240H	220HK	260	260	300							28
220H	220	220H	240	260	Q							29
220	220H	230	245	275	300							30
235H	235	240H	250H	265	Q							31
220	220	225	240	260								Mean
220	220	220	240	260	..							Median
23	28	27	30	27	4							Count

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic : foF1 | TABLE 44 | Latitude : 10°·2 N.

Unit : Mc. | IONOSPHERIC DATA | Longitude : 77°·5 E.

Month . December 1956. | 75·0°*E Mean Time.*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								Q Q Q Q Q	L L L L L	L L L L L	LH L L L L	L L LH L L
6								Q Q Q Q Q	L L L L Q	L LH L L L	L L L C L	L L L C L
11								Q Q Q Q Q	L L L L L	L L L L L	N L L L L	L L L L LH
16								Q Q Q Q Q	L Q L L L	C L L L L	C B L L B	C L L L L
21								Q Q Q Q Q	L L L L L	L L L L L	L L L L L	L L L C L
26								Q Q Q L Q	L L Q L L	L L L L L	L L L L L	L L L L LH
31								Q	L	L	L	L
Mean								..	..	..	..	..
Median								..	..	..	..	..
Count								..	..	.	..	..

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic . foF1

Unit · Mc.

Month : December 1956.

TABLE 44

IONOSPHERIC DATA

75·0°*E Mean Time.*

Latitude : 10°·2 N.

Longitude : 77°·5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
LH	L	L	LH	L	Q							1
L	L	L	L	L	Q							2
LH	L	L	L	L	Q							3
C	L	L	L	L	Q							4
LH	LH	L	L	L	L							5
L	L	L	L	L	Q							6
L	L	L	L	L	Q							7
L	L	L	L	L	Q							8
L	L	L	L	L	Q							9
L	LH	LH	L	L	Q							10
L	L	L	L	L	Q							11
LH	LH	L	L	L	Q							12
LH	LH	L	L	L	Q							13
L	LH	LH	L	L	Q							14
L	LH	LH	L	L	Q							15
C	C	C	L	L	Q							16
L	L	L	L	L	Q							17
L	L	L	L	L	Q							18
L	L	L	L	L	Q							19
L	L	LH	L	L	Q							20
L	L	LH	LH	L	Q							21
L	L	L	L	L	Q							22
L	LH	LH	LH	L	Q							23
C	C	C	C	C	Q							24
L	L	L	L	C	Q							25
L	L	L	L	Q	Q							26
L	L	L	LH	Q	L							27
L	LH	LHK	L	L	L							28
LH	L	LH	L	L	L							29
L	LH	L	L	L	L							30
LH	L	LH	LH	L	Q							31
..	..	.	..	.	.							Mean
..	..	..	..	..	..							Median
..	..	..	..	..	..							Count

Sweep 1 Mc to 25 Mc in 1/2 mn.

Characteristic h'E

Unit . Km.

Month : December 1956.

TABLE 45

IONOSPHERIC DATA

75·0°*E Mean Time*

Latitude 10°·2 N.

Longitude 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									B	110	110	110
2								110	110	105	A	105
3								115	110	110	105	105
4								115	110	105	A	A
5								110	A	A	A	A
6								120	A	B	A	B
7								115	105	A	A	B
8								120	115	115	110	110
9								130	115	115	C	C
10								115	110	105	A	A
11									B	105	100	A
12								115	110	110	105	110
13								110	105	A	A	A
14									110	A	A	A
15								110	A	A	A	B
16									115	C	C	C
17								120	115N	A	B	B
18								120	110	110	105	110
19								120	A	A	A	A
20									A	A	B	A
21									105	B	B	A
22									110H	105	105	105
23								120	115	(110)	A	110
24									110	110	105	C
25									120	120	120	A
26									130	120	B	B
27										120	120	120
28									115	A	110	B
29								A	A	A	A	A
30								A	A	A	A	A
31									120	120	A	B
Mean								115	115	110	110	110
Median								115	110	110	105	110
Count								16	21	17	11	9

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic · h'E | TABLE 45 | Latitude · 10°·2 N.

Unit : Km. | IONOSPHERIC DATA | Longitude · 77°·5 E.

Month : December 1956. | 75·0°*E Mean Time.*

12	13	14	15	16	17	18	19	20	21	22	23	Date
105	A	110	115	115								1
110	105	105	A	115								2
105	105	110	110	110								3
C	B	A	105	A								4
A	A	A	A	120	A							5
A	A	A	A	A								6
A	A	A	A	A								7
110	110	110	110	A								8
115	115	A	A	A								9
B	A	A	A	A	A							10
A	A	A	A	A	120							11
B	A	110	110	A								12
A	105	A	A	A								13
A	A	A	A	A								14
A	A	A	A	A	125							15
C	C	C	A	A	A							16
115	115	B	A	A								17
110	A	B	120	120								18
B	B	B	A	A	A							19
B	A	A	A	A	135							20
B	A	A	A	A								21
A	105	A	A	A	A							22
A	105	105	110	110	A							23
C	C	C	C	C	C							24
B	(120)	120	120	A								25
120	120	120	120	A								26
B	A	A	120	A								27
B	115	115	A	A	125							28
A	A	A	A	A								29
A	A	A	115	120								30
120	115	120	120	120								31
110	110	110	115	115	..							Mean
110	110	110	115	120	.							Median
9	12	10	12	8	4							Count

Sweep 1 Mc to 25 Mc in 1/2 min.

Characteristic foE. | TABLE 46 | Latitude 10°·2 N.

Unit . Mc. | IONOSPHERIC DATA | Longitude : 77°·5 E.

Month December 1956. | 75 0°*E Mean Time*

Date	00	01	02	03	04	05	06	07	08	09	10	11
1									B	A	A	A
2								2 8	3·4	3 5	A	A
3								2·7	A	A	A	A
4								(2 8)	3 2	A	A	A
5								2 9	A	A	A	A
6								2·8	A	A	A	A
7								2 9	3 5	A	A	A
8								2 7	3 3	3 6	A	A
9								3 0	3 6	3 9	C	C
10								N	N	N	A	A
11									B	N	N	A
12								2·8	(3 4)A	A	A	A
13								2 3	3·0	A	A	A
14									(3·1)	A	A	A
15								N	A	A	A	A
16									N	C	C	C
17								(3 1)	N	A	B	B
18								A	A	A	A	A
19								N	A	A	A	A
20									A	A	B	A
21									A	B	B	A
22									3 2H	3 5	A	A
23								3.3	(3 4)N	N	A	A
24									3 2	A	A	C
25									3·1	A	A	A
26									3 4	(3 3)A	B	B
27										3·4	3 6A	A
28									N	A	N	B
29								A	A	A	A	A
30								A	A	A	A	A
31									A	A	A	B
Mean								2 8	3·3	3 5	..	..
Median								2 8	3 3	3·5		
Count								12	13	6	1	.

Sweep 1 Mc to 25 Mc in ½ min.

Characteristic foE. | TABLE 46 | Latitude · 10°·2 N.

Unit : Mc | IONOSPHERIC DATA | Longitude : 77° 5 E.

Month . December 1956 | *75·0°E Mean Time*

12	13	14	15	16	17	18	19	20	21	22	23	Date
A	A	A	A	(3 0)A								1
A	A	A	A	A								2
A	A	A	A	3 2A								3
C	B	A	A	A								4
A	A	A	A	3 2	A							5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	A	A								8
(4 2)	(4 1)	A	A	A								9
B	A	A	A	A	A							10
A	A	A	A	A	2 3							11
B	A	A	A	A								12
A	3.5A	A	A	A								13
A	A	A	A	A								14
A	A	A	A	A	2 4							15
C	C	C	A	A	A							16
A	A	B	A	A								17
A	A	B	(4 0)	3.4								18
B	B	B	A	A	A							19
B	A	A	A	A	N							20
B	A	A	A	A								21
A	A	A	A	A	A							22
A	A	A	A	(3 1)A	A							23
C	C	C	C	C	C							24
B	A	A	3 2	A								25
4 2A	A	A	A	A								26
B	A	A	A	A								27
B	N	N	A	A	N							28
A	A	A	A	A								29
A	A	A	3·7	3 3								30
(3 6)A	3 7	A	A	3 1								31
.	.	.	..	3 2	..							Mean
.		..	.	3·2	..							Median
3	3		3	7	2							Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic : fEs.
Unit · Mc.
Month : December 1956.

TABLE 47
IONOSPHERIC DATA
75·0°*E Mean Time*

Latitude · 10°·2 N.
Longitude : 77° 5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1								3·6F	B	11 0F	12 0F	11 6F
2								G	G	9 0F	11 6F	11 4F
3								G	(9·9)FS	11·0F	12 4F	12 3F
4								G	G	10 2F	10 9F	11 4F
5		(4 6)						6 0	10 4F	11 0F	11 4F	11 6F
6								G	7 4F	10·0F	11·4F	11 2F
7								G	7·0	7 2F	10 6F	11 8F
8								G	5 2	7 8	8 0F	10 0F
9								G	G	G	C	C
10								G	8 0F	8·4F	12 0F	12 6F
11	4·0		3 6			3·8			G	6 4	7 8	10·0F
12								G	7 3F	8 7F	9 6F	11 0F
13								G	G	8 6F	9 3FH	12·8FH
14									G	10 6F	12 0F	11·6F
15								G	8 0F	11 8F	11 6F	12·8F
16									G	C	C	C
17								G	(8·8)F	11 0F	B	12 2F
18								7 0F	8·6F	10·0F	12·0F	12·2F
19								(7·0)S	8·8F	11 0F	12 0F	12 4F
20									10 0F	11 4F	B	12·4F
21									8·0	B	10·6	12·0F
22									G	G	8 8F	8·6F
23		5·8F	3·1					G	G	8 3F	11·2F	11 8F
24									G	8·2F	(10 9)F	C
25									7·0	9 6F	10·2F	10·2F
26									7·4F	8·4F	G	10 7
27										G	8·6F	10·8F
28									7 0	9·0F	9 6F	G
29								(8·0)S	10 6F	11·0F	11·4F	12·0F
30								6·6	9 0F	10 6F	11·6F	12 0F
31									7·2F	10 0F	9 6F	8·7F
Mean	..	..	..	.	..	.	..	6 4	8 2	9 6	10 7	11 4
Median	..	.	..		..	..	..	G	7·2	9 6	10 9	11 6
Count	1	2	2	..	..	1	..	19	29	29	27	28

Sweep 1 Mc to 25 Mc in ½ min

Characteristic . fEs. | TABLE 47 | Latitude : 10° 2 N.

Unit . Mc. | IONOSPHERIC DATA | Longitude : 77°·5 E.

Month : December 1956. | 75·0°*E Mean Time*

12	13	14	15	16.	17	18	19	20	21	22	23	Date
12·4F	12·8F	11 9F	12·0F	9 2F								1
12 2F	12 0F	12·2F	11·0F	8 0F								2
12·0F	11·5F	12 0F	11 0F	9 0FS								3
C	12·2F	12 6F	(12 0)FS	(10 0)FS	(8 8)FS							4
11·6F	11 6F	11 4F	10 4F	8 0F	6 6F							5
9 0F	11·6F	11·2F	11 4F	9 0F								6
12·6F	12 2F	12 4F	12 0F	7 2F								7
12·0F	11 8F	12 0F	11 3F	8 0F								8
G	8·0F	12 0F	12 0F	7 8F								9
10.6	12 8F	12·6F	12·0F	(10 0)S	(7 4) S						2·7	10
12 0F	12·0F	12 2F	12 4F	9 0F	6·0F							11
11·0F	11 8F	12·4F	12 0F	8 4F								12
10·0F	10 2F	10·9F	11·0F	8·4F								13
11 6F	11 6F	12·0F	11 2F	7 4F								14
12·4F	12·4F	12 0F	11 4	11 0FS	S							15
C	C	C	11 8F	(10 4)FS	(7·0)FS							16
12·5F	12 2F	12 3F	12·0F	10 7F	7·0F							17
12·0F	11·0F	B	G	8 5F								18
B	11·6F	B	12 0F	10 4F	(7·4)S							19
B	11 6F	11·0F	11 0F	7 4FS	G					2·8		20
12·0	12 4F	12·4F	11·6F	(10·0)S								21
9·3F	11·8F	11·6F	11 0F	11 0FS	7·0S							22
12·4F	12 2F	12 2F	12 0F	9 4F	7·4FS							23
C	C	C	C	C	C				3·5	4·8		24
11 6F	12·0F	12·2F	10 2F	7 3F								25
10 4F	12 6F	12·2F	10 4F	7·8F								26
10·9F	11·8F	11 4F	11·5F	11·0F								27
G	7 0F	8 8	12·0F	(9.0)FS	S							28
12·0F	11 4F	12 0F	11 6F	8·4F								29
11 8F	11·6F	11·0F	7·2F	7·2F								30
12 0F	11·0F	11·5F	10 2F	7·4F								31
11 5	11 5	11 8	11 3	8·9	7 2				..	..	.	Mean
11 9	11 8	12 0	11·4	8 8	7 0				..	..	..	Median
26	29	27	30	30	10				1	2	1	Count

Sweep 1 Mc to 25 Mc in ½ min

Characteristic : (M3000)F2.

Unit :

Month . December , 1956.

TABLE 48

IONOSPHERIC DATA

75 0°*E Mean Time*

Latitude : 10°·2 N.

Longitude : 77°·5 E.

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	(2 65)F	2 65F	2 5	2 7	2 9	3·0	2·7	2 4	2 45	2 35	2 1	2 05
2	(2 4)F	2 65	(2 9)s	3 0	3 0	3 1	2·65	2 7	2 5	2 4	2·2	2 0
3	2 55	2 5	2 45	2 55	2·85	3·1	2 8	2 55	2·35	2 1	2 0	<2 0
4	(2 4)F	F	2 7	2 75	2 8	3·1	2 7	2·6	2 45	2 3	2 1	2 0
5	(2 3)F	F	F	2 7	(2 9)F	F	2 7	2 55	2 35	2 1	2 05	2 0
6	(2 2)F	(2 3)F	F	(2 7)F	2 9	3 0	2 6	2 45	2·35	2 2	2·0	2·0
7	F	F	F	F	F	F	2 6	2·6	2 4	2 3	2 1	2 0
8	2 3	2 5	2 55	2 8F	2 9	F	2·8	2·75	2·6	2 55	2 4	2·3
9	2 3F	(2·4)F	2 55	2 65	2 8	2 85	2·7	2·5	2 4	2 4	C	C
10	F	(2 5)FS	(2 65)F	2 85	3 0	3·2	(2 75)s	2 55	2·3	2·25	2 2	2 15
11	2 4	2 35	2 4	2 5	2 8	2·75	2·65	2·65	2 5	2·45	2·4	2·35
12	F	F	(2 6)E	2 65	2·8	2 9	2 7	2 6	2 5	2·4	2·3	2·25
13	2·2F	F	F	F	F	F	(2 6)F	(2 65)s	2·6	2 35	2 25	2·15
14	2 2	(2 5)F	F	(2 8)s	2 8	2 85	2·8	2 7	2 5	2 4	2·2	2·05
15	F	(2 5)F	(2·6)F	F	2 7F	2·9	2 85	2·55	2·4	2 3	2·15	2·05
16	(2 3)F	2 4	2 65	2 85	(3 1)s	3 2	2 8	2 85	2 65	C	C	C
17	F	2 8F	F	F	F	F	(2·8)F	2 7	2 5	2 3	2 3	2 15
18	F	F	(2 8)F	3 15s	3 25	3 25	2·7	2 65	2 55	2·3	2·25	2 2
19	F	2 4F	(2·4)F	F	F	3·15	2·95	2 65	2.5s	2 3	2·2	2 2
20	F	F	F	F	F	(3 2)F	2·8	2·7	2.6	2 3	B	2·3
21	F	(2 5)F	(2 6)F	(2 7)F	3 0	3·2	2·9	3·0	2 75	2 5	2 35	2·1
22	F	(2 6)F	(2 9)FS	2·95	(2·9)F	2·9	3 0	3 05	2·9	2 7	2·55	2·45
23	2 7	2 6	2 65	2 8	2·85F	3·0	3·05	2 85	2·75	2·5	2 3	2 15
24	F	F	F	F	2 9F	2·95	2·8	2·9	2 75	2 6	2 4	C
25	2 6	2.6	2 45s	2 3F	F	3·0	2·95	2·9	2·65	2·5	2 35	2·2
26	2 65	2 5	2 5	2 5	2 4	2·45	2·6s	2·6	2·7	2·5	2 5	2·35
27	F	(2·25)F	(2·6)FS	2 7F	2·85	2 9s	3·0	2·9	2 7	2·65	2·45	2 35
28	F	F	(2 7)J	2 4	2 6	2·65	2·5	(2 5)F	2·55	2·4	2·3	2·3
29	2 5F	2 6	2 85	2 95	3·1	3·2	2·8	2 65	2·6	2·45	2·3	2·2
30	F	2 7	2 9s	2·95s	3·0	3·1	2·9	2·5	2 45	2·3	2 2	2·1
31	2 65	2·8	2·9	(2·95)s	3.0	3·2	2·85	2·7s	2·4	2·4	2 3	2·2
Mean	2 45	2 55	2 65	2·75	2·9	3·0	2·75	2·65	2 55	2 4	2·25	2 15
Median	2·4	2·5	2 6	2 7	2 9	3·0	2·8	2 65	2 5	2·4	2·3	2·15
Count	17	22	23	24	25	26	31	31	31	30	28	28

Sweep 1 Mc to 25 Mc in ½ min.

Charactristic : (M3000)F2.
Unit :
Month : December 1956.

TABLE 48
IONOSPHERIC DATA
75 0°*E Mean Time*

Latitude : 10°·2 N.
Longitude 77°·5 E.

12	13	14	15	16	17	18	19	20	21	22	23	Date
2·0	<2·0	<2·0	2 0	?·0	(2 05)s	< 1 9	(1 9)F	F	F	F	F	1
<2·0	<1 95	<2 0	<2 0	2 0	2·0	2 0	<2 0F	2 0F	(2 0)F	2 3	2 4	2
<2·0	2·0	<2·0	<1·95	<1 95	2 0	<1 9	<(1 9)F	<(1 95)	F	(2 1)F	F	3
C	9·1	<1·9	<1·95	<2 0	2 0s	<2 0	<1 9	(1 9)F	F	F	F	4
2·0	1·95	<2·0	2·0	2 0	2 0	<1 9	<1 85	<(1 9)F	F	(2 0)F	(2 2)F	5
2·05	<2 05	2 05	<2 05	2 0	1 9	(2·05)	F	F	F	F	F	6
<2·0	2·0	1·95	<1 95	2 0	<2 0	(2 1)N	(1 9)F	F	F	2 1	2 2F	7
2·1	2·0	<1·9	1·9	<1 95	2 0	2 0	2 0	2 0	2 15	2·3	2·3	8
2·25	2·2	2 15	2·1	2 1	2 05	1 95	(1 95)F	F	F	F	F	9
2·1	2·05	2 0	<2 0	<2 0	<1 9	(1 95)s	(1 9)F	(1 9)F	(2 05)F	F	2 2F	10
2·15	2·05	2 05	2 0	<(1 95)s	2 0	2 0	<2 0	F	1 9	(2 0)F	F	11
2·2	2·1	2 1	2 0	(1·9)	2·1	2 0	<2.0	F	F	F	2 25	12
2 0	2·0	<2 0	<2 0	<1 95	<1 95	2 05	1 95F	(2 1)F	2 2	F	(2 4)F	13
2·0	2·0	<2 0	2·0	2 05	2 15	2 15	2 0	2 0	F	F	F	14
2·0	2·0	2 0	2·0	<2 0	2 0	2 0	<1 9	F	(2 05)F	F	F	15
C	C	C	2 0	<1 95	<1 9	<2 0	<1 9F	F	F	F	F	16
2·1	2·05	2·05	2 0	<2·0	<2 0	2 0	(2 2)F	F	F	F	F	17
2 2	2·15	2·2	2 2	2 2	2 3N	2·1	<1 9F	F	F	F	F	18
2·25	2·2	2·15	2 05	1 9	2 0	2 05	(2 00)F	F	F	F	F	19
2·2	2·2	2 2	2 15	2 1	2·05	2 0	<1 9	F	F	F	F	20
2 0	<2·05	<2 0	2·0	2·1	2 15	2 05	<2 0	F	F	F	(2 6)F	21
2 3	2·0	<1 9	<2 0	2·05s	(2 15)s	2 2	2.1	2·05	2·2	2 3	2.5	22
2·1	2·1	2·05	<2·0	2 0	2 0	2 05s	2 05	<2 0F	2 05F	(2·2)F	2 3F	23
C	C	C	C	C	C	2 25	2 2s	<2 05	(2 2)s	2·2	2 5	24
2·2	2·1	<2·0	<2·0	2 05	2·05	(2 05)s	2 05	2 20	2 45s	2 6	2.55	25
2·25	2·1	<2 0	<2 0	2·0	2 2	2 1	2 0	<2 05	2 1	2 1	(2 1)F	26
2·25	2·2	2·0	<2 0	<1 9	2·05	2 1	<(2.0)F	F	F	F	F	27
2·25	2·2	2·2	2 2	2 15	2·15s	<(1 9)	<(1 9)	F	F	(2 4)FS	(2 4)F	28
2·2	2·1	2 05	2 0	<2 0	2·0	2 1s	2.05	(2 0)F	F	F	2 2	29
<2·05	2·05	2·15	2 2s	2 2	(2 2)s	(2·2)s	2 1	(2 2)	2 1	(2·3)	2.5	30
2·15	2·15	2·1	2 1	2·1	(2 15)s	2 1	2 0	2 0F	2 0F	(2 0)F	(2.2)F	31
2·1	2·05	2·05	2·05	2 0	2·05	2 05	2 0	2·0	2·1	2·2	2 35	Mean
2·1	2·05	2·0	2 0	2 0	2 0	2 05	<2 0	2 0	2 1	2 2	2·3	Median
28	29	29	30	30	30	31	30	16	13	14	17	Count

Sweep 1 Mc to 25 Mc in ½ min.

GIPN—S4—D. D. G. Obs. K. Kanal/57 2-3-59—365

E R R A T A

KODAIKANAL OBSERVATORY BULLETIN NO.CXLVIII.

Part I

Page	7	line	1	for pr vious read previous
"	7	"	1	for haf-year's read half-year's
"	7	"	1	for light read slight
"	7	"	14	from bottom for compined read combined
"	7	"	9	from bottom for north read north.

Part II

Table No.	Page No.	Line or Date.	Hour or Column	Read	For
-	8	Part II of Introduction	3rd line of paragraph 1	Magnetogram	Magnetogram
1	9	27	01	33.3	33.4
2	12	25	23	35.0	35.4
4	16	30	17	34.7	35.7
10	27	4	05	616	6-6
10	27	14	07	619	6-9
12	31	8	05	619	5-9
12	31	9	04	619	5-9
13	34	22	Min.	329	3-9
18	43	Mean††	03	379	370
19	45	legend	2nd line	Disturbance	Disturbance

Part III

1	46	3	06	270	280
1	46	30	11	345	245
1	47			75°.0E Mean. Time.	75.9E Mean Time
2	49	29	21	10.2F	10.3F
5	55	12	18	A	Blank Space
6	57	12	18	A	Blank Space
8	60	19	09	2.4	2.45
8	60	21	09	2.35H	2.25
8	60	24	09	2.7H	2.7
8	61	27	19	(2.25)S	(2.25)F
10	65	Mean	14	11.2	11.1
10	65	Median	14	11.1	11.2
13	71	19	14	C	118
13	71	19	16	110	115
13	71	19	17	175	Blank Space
13	71	28	17	A	Blank Space
15	74	22	08	6.0F	4.0F
16	76	29	07	3.15	3.05
16	76	30	07	3.05	3.15
16	77	2	20	(2.3)F	(2.3)
16	77	12	15	2.3	3.5
16	77	27	20	2.3F	2.25
18	81	5	22	(11.9)F	11.9F
18	81	15	15	12.1	12.3
18	81	19	15	12.0	12.1
22	89	19	22	3.4	3.4A
24	93	30	22	F	S
25	94	7	08	210L	230
32	108	21	05	A 3.0	A 3.0
35	115	1	14	325	35
35	115	3	14	255	245
40	124	17	09	2.4	2.5
40	125	4	18	(2.05)	A (2.05)
40	125	14	16	A 2.0	3.0
48	140	12	02	(2.0)F	(2.6)E
48	141	4	13	1.5	
48	141	3	20	A (1.95)F	A (1.95)
48	141	23	20	(2.0)F	2.05
48	141	24	20	2.05	2.05