

KODAIKANAL OBSERVATORY

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INTRODUCTION

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

PART I

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

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

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

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

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

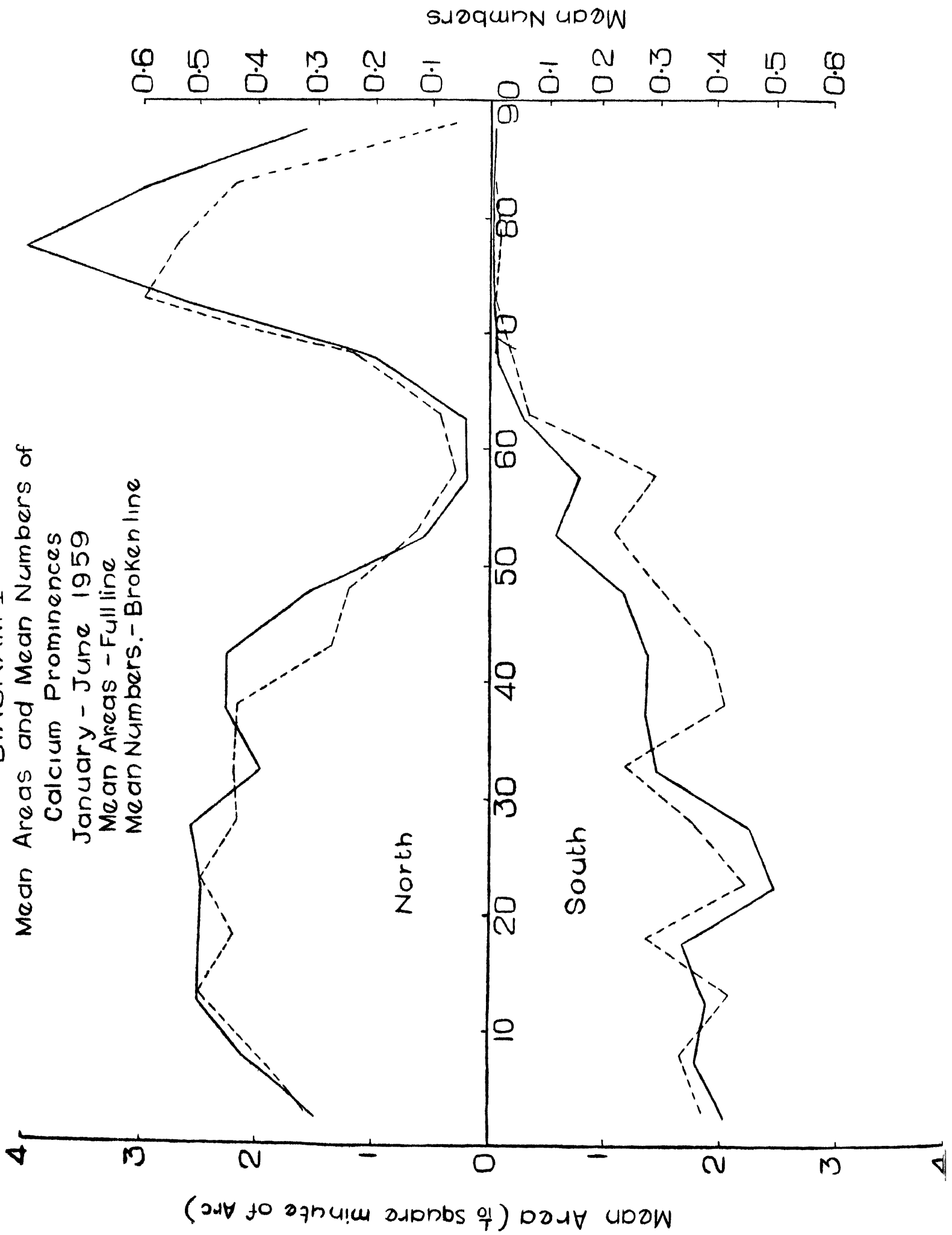
These figures when compared with the corresponding values of the previous half-year indicate a slight decrease of 8.3% in activity in areas and an increase of 7.5% in activity in numbers. The values based on Kodaikanal Observations alone are also given below for comparison with similar data published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

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

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

I

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



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

TABLE I

1959 months	No of effective days	Areas in square minutes	Numbers	Daily Means		Mean height "	Mean extent °
				Areas (Sq minutes)	Numbers		
January	29	231.6	342	7.98	11.80	50.06	5.07
February	27	140.3	330	5.20	12.22	46.77	3.25
March	31	117.15	314	3.78	9.90	43.28	4.47
April	29	130.5	276	4.50	9.51	45.45	3.36
May	26½	113.5	225	4.20	8.33	48.57	.60
June	30	234.5	333	7.81	11.10	51.62	3.84
1st Quarter	87	489.05	986	16.96	33.92	46.70	4.26
2nd Quarter	85½	478.50	834	16.51	28.94	48.55	3.60
1st half-Year	172½	967.55	1820	33.47	62.86	47.63	3.93

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

1959 January--June	East	West	Percentage East
Areas (Square minutes)	451.44	516.15	47.6
Numbers	925	895	50.8

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

	North	South	East	West	Displacements			Total
					To red	To Violet	Both ways	
Displacements in prominences	49	22	31	40	2	0	69	71
Displacements in dark markings	7	14	16	5	0	0	21	21

Particulars of solar flares observed during the period are summarised in Table II

TABLE II

Date 1959	Time in I S T			Mean Lat	Mean longitude from central meridian	Intensity	Maximum width of H-alpha line observed
	Begin- ning h m	Maximum h m	End h m				
January 11	08 41			16 S	63 W	1	
January 25	07 47	07 50	07 53	17 N	43 W	2	1 4
January 26	14 25	14 32	14 36	17 N	57 W	2	2 0
January 27	07 40	08 00	08 05	13 N	75 W	2	1 6
February 10	09 24		09 28	09 N	75 E	1	2 0
February 11	11 55	11 57	12 20	07 N	58 E	2	2 3
March 16(i)	09 32*		09 42	11 N	20 E	2	2 0
March 16 (ii)	14 56*		15 07	29 N	37 E	2	2 0
March 21	07 30*		08 05	12 N	36 W	2	1 8
March 24	15 40*		16 07	28 N	75 W	2	5 2
March 25	11 45*		11 53	16 N	62 W	2	2 3
April 13	10 40	10 45	10 55	27 N	22 E	1	1 4
May 13	10 45		.	20 N	27 E	Pro- bably 2	
June				Nil			

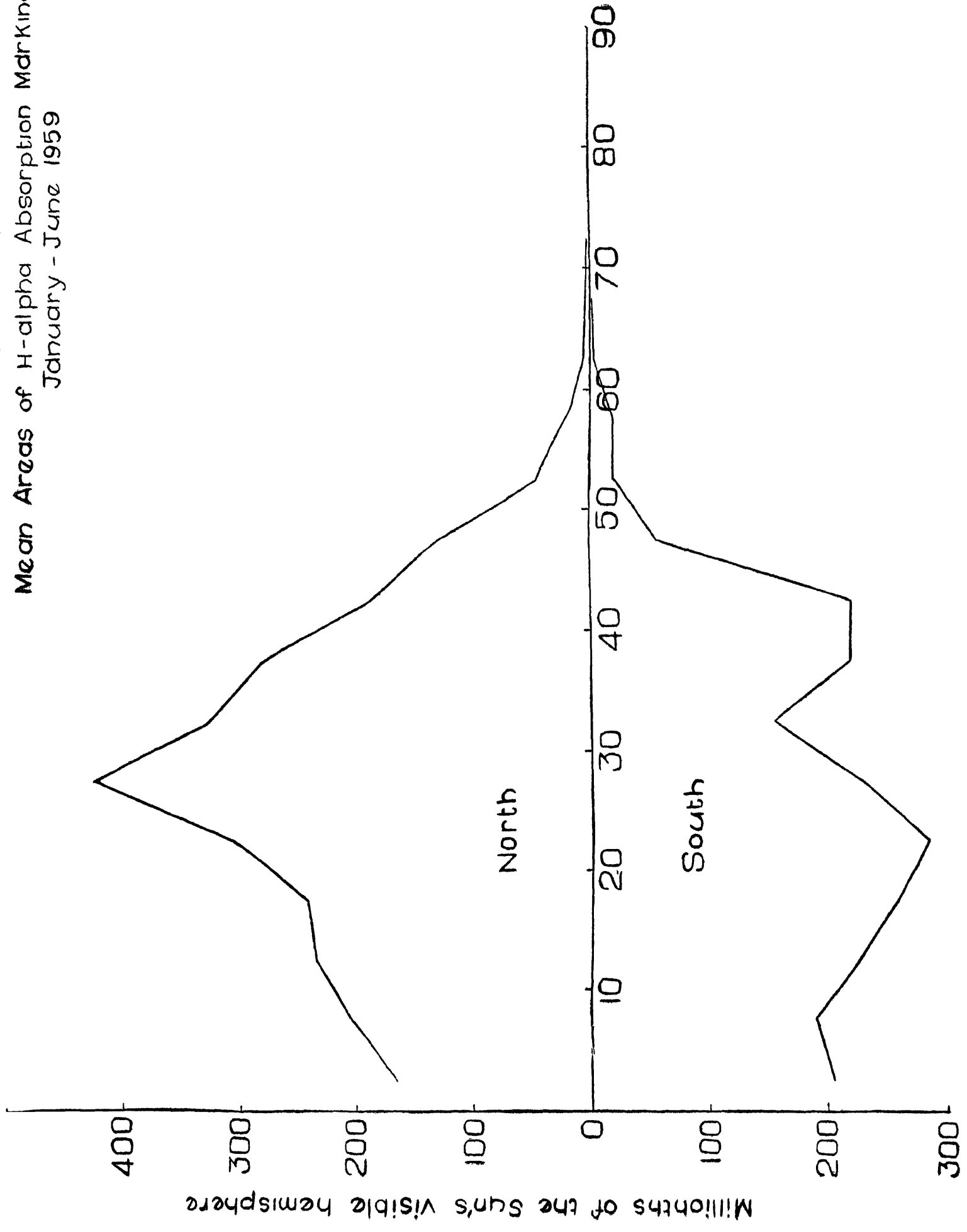
*Time of first observation of flare and not beginning of flare

Sudden disappearance of prominences and H-alpha dark markings—Table III gives a summary of sudden disappearances of prominences and H-alpha absorption markings observed during the period

TABLE III

Nature of phenomenon	Date and time of phenomenon when last seen		Coordinates of phenomenon		Remarks
	Date	Time (I S T) h m	Mean latitude	Mean longitude	
Dark Marking	11-2-59	14 30	30°S	28°E	Dark marking disappeared between 11th and 12th.
Dark Marking	18-2-59	12 00	13°S	63°E	Dark marking disappeared between 18th and 19th
Prominence	29-3-59	12 08	30°S	90°W	The prominence disappeared between 0638 and 0850 hrs

DIAGRAM II
 Mean Areas of H-alpha Absorption Markings
 January - June 1959



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 144 days. Spectroheliograms were also received for 33 days from the Mount Wilson Observatory and for 29 days from the Meudon Observatory. On the whole records are available for $174\frac{1}{2}$ effective days.

The mean daily area in millionths of the Sun's visible hemisphere (uncorrected for foreshortening) and the mean daily number of the H-alpha dark markings as derived from the combined data are given below —

		Combined data	
		Mean daily areas (millionths of the sun's visible hemisphere)	Mean daily numbers
North	.	2496	16.4
South	.	2086	13.2
TOTAL		4582	29.6

Compared with the previous half-year's values there has been a slight decrease of 5.8% in areas and 4.6% in numbers. The figures based solely on Kodaikanal photographs are also given for purposes of comparison.

		Kodaikanal data only	
		Mean daily area (Millionths of the sun's visible hemisphere)	Mean daily numbers
North	.	2555	16.2
South	.	2148	13.4
TOTAL		4703	29.6

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. The salient features of the distribution are a well marked peak of activity in the northern hemisphere in the latitude belt 25° — 30° and in the southern hemisphere two peaks of activity in the latitude belt 20° — 25° and 35° — 40° .

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)	3,69,500	4,48,156	45.3
Total numbers	2,457	2,706	47.6

There is noticeable western excess in the distribution of dark markings.

Calcium Flocculi —During the period under review calcium flocculus spectroheliograms were taken on 142 days at Kodaikanal, while Calcium spectroheliograms for 33 days were received from the Mount Wilson Observatory and for 31 days from the Meudon Observatory. In all, observations were available for $173\frac{3}{4}$ effective days.

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

	Combined data
	Mean daily area (milli- onths of the Sun's visible hemisphere)
North	19540
South	6832
TOTAL	<u>26372</u>

Compared to the previous half-year's value the area shows an increase of 1.2%.

The distribution of flocculi east and west of the Sun's axis of rotation is as follows

	East	West	Percentage East.
Total area in millionths of the Sun's visible hemisphere	2,229,882	2,354,310	48.6

There is a slight western excess in the distribution of calcium flocculi

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

Special International Geophysical Co-operation data are given in tables IV, V and VI.

TABLE IV

Surges, eruptive prominence and active prominence regions

Date	Phenomenon	Importance	Position		Time I S T		Direction of out flow	Remarks
			Latitude	Longitude difference from central meridian	Beginning	End		
1	2	3	4	5	6	7	8	9
1959			°	°				
3rd January	APR	2	40 N	90 E	07 40	14 30		Active during the period of observation between 0740 to 1430 most of the Prominence had disappeared before 1530 hours
4th January	BSL	2	15 S	90 W	08 52	09 50	r	
5th January	APR	2	15 N	90 W	07 30	16 00		Region active with small sprays and loop prominences
23rd January	DSD	1	27 S	70 E	07 30	08 30		Displaced 1A° to red and 1A° to violet
23rd January	DSD	1	5 N	67 W	11 30	12 00		Displaced 1 8A° to violet
30th January	EPL	1	14 N	90 W	07 50	08 17	r	
9th February	BSL	1	7 N	90 E	07 33	08 35	rn	G, V (2 4 A° and 5 2A° to V) at 0745
9th February	APR	2	7 N	90 E	14 02	14 30	rs	L and P
9th February	BSL	3	7 N	90 E	15 47	16 15	r	The prominence seen only in the displaced position of 4 3A° to V first noticed at 1547 at 1608 it still showed a displacement of 3 2A° to V. Became very faint at 1615
13th February	DSD	2	0	34 E	09 40	10 35	rs	G, The marking extending northwards from active spot group showed high activity with shift of 1 8A° to R at the north end and 1 8A° to R at spot end at 0940 I S T, at 0955 the spot end showed a 2 4A° to R and the prominence gradually disappeared by 1035

TABLE IV—Contd

Surges, eruptive prominence and active prominence regions—Contd

1	2	3	4	5	6	7	8	9
1959			°	°				
15th February	BSL	1	18 N	90 E	08 00	09 00	r	G
18th February	BSL	1	21 N	90 E	08 28	11 15	r	V (1 4A° to V and 2 4A° to R at 08 28)
19th February	EPL	3	43 S	90 W	*09 30	10 15	1	U *First observed in the process of erup- tion
4th March	APR	1	37 N	90 W	14 00	16 00	r	R (1 6A° to Red and 1 6A° to Violet)
5th March	BSL	1	20 N	90 W	11 45	11 58	r	Λ (Displaced by 2 Λ° to R & 2A° Violet)
10th March	BSL	1	18 N	90 E	11 30	12 10	r	V (1 3A° to Red and 2 6A° to Violet)
13th March	EPL	2	22 N	90 W	10 54	11 14	r	U (Displaced by 1 8A° to Violet and 2 6A° to Red)
21st April	BSL	1	26 N	90 W	09 30	09 44	18	
26th May	BSL	1	35 N	90 W	11 20	11 40	r	

Code —DSD=dark surge on disk, BSL=bright surge at limb, APR=active prominence region, BSD=bright surge on disk
EPL=Eruptive prominence at limb

TABLE V
Flare Patrol Hours (Spectroheliograph)

Month and Date	Periods of watch (IST)	Month and Date	Periods of watch (IST)
1959 January		1959 January	
1st	0730-0830, 0930-1000, 1030-1100, 1130-1200	20th .	0740-0840, 0930-1000, 1045-1100, 1400-1430, 1530-1600
2nd	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430,	21st .	0730-0830, 0930-1000, 1030-1100, 1130-1200
3rd	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1405-1430, 1530-1600	22nd .	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1410-1435, 1530-1550
4th	0730-0830, 0850-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	23rd . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430
5th	0730-0800, 0830-0900, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	24th .	0740-0830, 0930-1000, 1000-1100, 1130-1200, 1415-1430
6th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1410-1440, 1530-1600	25th . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1410-1430, 1530-1545
7th	0735-0830, 0930-1000, 1030-1100, 1130-1200, 1405-1430, 1530-1600	26th . .	0735-0830, 0930-1000, 1030-1100, 1130-1200, 1405-1445, 1530-1545
8th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1540	27th . . .	0730-0830, 0930-1000 ; 1030-1100, 1130-1200, 1400-1430
9th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430	28th	0735-0830, 0930-1000
10th	0745-0830, 0930-1000, 1030-1100, 1130-1200	29th	0730-0830, 0930-0950, 1030-1105, 1130-1200
11th	0845-1000, 1030-1100, 1130-1200	30th . .	0740-0830, 0930-1100, 1040-1050, 1135-1200
12th	0735-0830, 0930-1000, 1030-1100, 1130-1200, 1405-1430, 1530-1555	31st .	0730-0830
13th	0930-0945.	February	
14th	0800-0900, 0930-1000, 1030-1100	1st	0730-0830
17th	0735-0742; 0755-0830, 0930-1000, 1030-1100, 1130-1200.	2nd	0800-0815
18th	1130-1200;	3rd	0730-0830, 0930-1000
19th	0730-0830; 0930-1000; 1030-1100, 1130-1200, 1400-1430, 1530-1600	4th	1130-1200
		5th	0730-0745, 0955-1010, 1030-1100
		6th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600
		7th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600

TABLE V—Contd
Flare Patrol Hours (Spectroheliograph)—Contd

Month and Date	Periods of watch (IST)	Month and Date	Periods of watch (IST)
1959 February		1959 February	
8th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	26th . . .	0745-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430
9th . . .	0730-0835, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	27th . . .	0800-0830, 0930-1000, 1130-1200, 1400-1410
10th . . .	0750-0830, 0924-0955, 1130-1200, 1415-1430, 1530-1600	28th . . .	0730-0830, 0930-1000
11th . . .	0745-0845, 0930-1000, 1030-1100, 1130-1200, 1400-1430	March	
12th . . .	0800-0830, 0930-1000, 1030-1100, 1130-1200	1st . . .	0730-0835, 0930-1000, 1030-1100, 1130-1200, 1405-1430, 1530-1550
13th . . .	0750-0830, 0930-1000, 1030-1100, 1400-1430, 1530-1600	2nd . . .	0730-0830, 1030-1100, 1130-1200, 1405-1430, 1530-1600
14th . . .	0745-0830, 0930-1000; 1030-1100, 1130-1200, 1400-1430, 1530-1600	3rd . . .	0730-0830, 0930-1000; 1030-1100, 1130-1200, 1405-1430, 1530-1600
15th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430	4th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600
16th . . .	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1545	5th . . .	0735-0830, 0930-1000, 1030-1100, 1130-1200, 1542-1550
17th . . .	0745-0830, 0930-1000, 1030-1100	6th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200
18th . . .	0740-0845, 0930-1000, 1030-1100, 1130-1200	7th . . .	0735-0830, 0930-1000, 1030-1100, 1130-1200
19th . . .	0755-0840, 0930-1015, 1130-1200	8th . . .	0745-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1535-1545
20th . . .	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	9th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430
22nd . . .	1430-1500, 1530-1600	10th . . .	0745-0830, 0930-1000; 1030-1100, 1130-1200, 1400-1430, 1500-1545
23rd . . .	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	11th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1555
24th . . .	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	12th . . .	0730-0830, 0930-1000; 1030-1100, 1130-1200, 1400-1430, 1530-1600
25th . . .	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	13th . . .	0740-0830, 0930-1000; 1030-1115, 1130-1200, 1400-1430, 1530-1600

TABLE V—Contd
Flare Patrol Hours (Spectroheliograph)—Contd

Month and Date	Periods of watch (IST)	Month and Date	Periods of watch (IST)
1959 March		1959 April	
14th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430	1st	0730-0830, 0930-1000, 1030-1100, 1130-1200
15th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	2nd	0730-0830, 0930-1000, 1030-1100, 1130-1200.
16th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1456-1515, 1545-1600	3rd	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1555
17th	0745-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1545-1600	4th	0945-1000, 1030-1100, 1130-1200
18th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430	5th	0745-0830
19th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1410-1430, 1530-1600	6th	0950-1005
20th	0730-0830, 0930-1000, 1030-1100, 1130-1200	11th	0730-0830, 0930-1000, 1030-1100, 1130-1200
21st	0730-0830, 0930-1000, 1030-1100, 1130-1200	12th	0850-0950, 1025-1100, 1130-1200
22nd	0730-0830, 0930-1000, 1030-1100	13th	0940-1000, 1030-1100; 1130-1145
23rd	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1545	15th	0810-0830
24th	0730-0840, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1607	16th	0830-0845
25th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1558	17th	0730-0754, 0810-0825, 0932-0940, 1035-1040
26th	0740-0830, 0930-1000, 1030-1100, 1130-1200, 1530-1600	18th	0745-0815, 0930-0935
27th	0730-0830, 0930-1000, 1030-1100, 1130-1200	21st	0825-0845, 0905-1000, 1030-1100, 1130-1200
28th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600	22nd	0810-0840, 0930-1000, 1030-1100, 1545-1555
29th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1420-1430	23rd	0835-0845, 1040-1055
30th	0730-0830	24th	0730-0830, 0945-1000
31st	0745-0830, 0930-1000, 1030-1100, 1130-1200	25th	0740-0830, 0930-1000, 1030-1100
		26th	0745-0830, 0930-1000, 1030-1100, 1130-1200
		27th	0845-0900, 1040-1055.
		28th	0730-0830, 0930-1000, 1030-1115, 1130-1150
		29th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430, 1530-1600
		30th	0730-0830, 0930-1000, 1030-1100, 1130-1200, 1400-1430

TABLE V—*Concl'd*
Flare Patrol Hours (Spectroheliograph)—Concl'd

Month and Date	Periods of watch (IST)	Month and Date	Periods of watch (IST)
1959 <i>May</i>		1959 <i>May</i>	
1st	0730-0830, 0930-1000, 1030-1100, 1130-1200	24th	0830-0930, 1000-1030, 1100-1130
3rd	0800-0830, 0930-1000, 1030-1100	25th	0730-0830, 0930-1000, 1030-1100, 1130-1200
4th	1025-1035, 1045-1100, 1130-1150, 1430-1455	26th	0900-1000, 1030-1100, 1120-1155
5th	1520-1550	27th	0730-0830, 0930-1000, 1030-1100
6th	0820-0845, 0930-1000, 1030-1100, 1130-1200	28th	0745-0830, 0930-1000, 1045-1100
7th	0750-0830, 0900-0925, 0935-1000, 1030-1100, 1130-1150	30th	0930-1000, 1030-1100
8th	0830-0835, 0945-1015, 1030-1100	<i>June</i>	
9th	0730-0830, 0920-1000, 1030-1100, 1130-1200	1st	0730-0830, 0930-1000, 1030-1000, 1130-1200
10th	0815-0830, 0930-1000, 1145-1200, 1510-1530	3rd	0730-0830, 0930-1000, 1030-1100, 1130-1200
11th	0745-0830, 0930-0940	4th	0730-0830, 0930-1000, 1030-1100
12th	0730-0830, 0930-1000, 1040-1100, 1135-1145	5th	0745-0800, 1412-1420
13th	0900-0930, 1030-1100, 1410-1430	6th	0815-0825, 0835-0840
14th	1030-1100, 1100-1200, 1130-1200	8th	0840-1000
15th	0905-0910	11th	0745-0820, 0915-1000, 1030-1045
16th	0930-1000, 1130-1200	12th	0730-0830, 0935-1000, 1030-1100, 1130-1130
17th	1130-1135, 1150-1155	13th	0730-0830
19th	0920-0935, 1015-1030, 1105-1110	14th	0730-0830, 1030-1100
22nd	0800-0830	17th	1030-1100, 1130-1200
23rd	1030-1040	18th	0730-0830
		19th	0730-0830, 0930-1000, 1030-1100

TABLE VI
Last of Spectroheliograms

Month and date		H-alpha (IST)		K-Flocculus (IST)		K-Prominence (IST)	
1		2		3		4	
		H	M	H	M	H	M
<i>January</i>							
1	.	07 36		07 46		07 58	
		07 40		07 53		08 02	
		11 38		07 45		11 48	
2	.	07 34		07 44		07 51	
		07 37		07 46		07 54	
		11 33		11 37		11 40	
		14 00		14 05		14 10	
3	.	07 41		07 51		07 56	
		07 46		07 53		08 03	
		11 45		11 51		12 00	
		14 28		14 37		14 41	
4	.	07 43		07 53		07 59	
		07 48		07 55		08 04	
		11 41		11 39		09 14	
		14 12		14 20		09 27	
						09 32	
						11 35	
						14 24	
5	.	07 42		07 54		08 02	
		07 47		07 57		08 07	
		11 41		11 48		08 58	
		14 29		14 17		11 52	
						14 21	
6	.	07 40		07 51		07 57	
		07 45		07 54		08 02	
		11 35		11 41		11 15	
		14 22		14 14		14 11	
7	.	07 41		07 52		08 00	
		07 45		07 54		08 04	
		11 23		11 29		11 33	
		14 11		14 16		14 20	
8	.	07 38		07 19		07 55	
		07 43		07 51		08 00	
		11 23		11 28		14 33	
		14 09		14 16		14 22	
9	.	07 38		08 04		08 08	
		08 44		08 36		08 32	
		11 22		11 31		11 42	
10	.	07 39		07 50		08 31	
		07 45		07 58		08 39	
		11 45		11 50		11 53	
11	.	08 41		08 54		09 00	
		08 47		09 16		09 12	
		11 24		11 37		11 43	
		11 30					
12	.	07 48		07 59		08 07	
		07 52		08 01		08 11	
		11 37		11 42		11 46	
		14 16		14 20		14 23	

TABLE VI—Contd.
Last of Spectroheliograms—Contd.

	1	2	3	4
<i>January</i>		H M.	H M	H M
13	09 21 09 37	09 45	
14		08 22 08 23	08 35 08 37	08 43 08 48
17	08 00 08 28 11 26	08 09 08 12 11 37	08 16 08 21 11 40
18	11 39	11 46 12 05	11 52
19	07 38 08 07 11 53 11 56 13 58	07 41 07 49 12 01 13 51	07 54 07 58 12 05 13 47
20	07 37 07 41 11 36 14 02	07 48 07 52 11 43 14 07	07 58 08 03 14 15
21	07 42 07 46 11 31	07 52 07 57 11 39	08 01 08 05 11 45
22	07 44 07 46 11 34 14 07	07 53 07 55 11 40 14 13	07 59 08 02 11 41 14 18
23	07 41 07 45 11 26 14 16 14 25	07 51 07 53 11 30	07 59 08 03 11 36 14 28
24	07 35 07 57 11 32 14 24	07 41 07 43 11 38 14 19	07 46 07 51 11 42 14 16
25	07 45 07 50 11 29 14 21	07 57 07 59 11 39 15 02	08 04 08 08 11 33 15 35
26	07 42 07 48 11 25 13 57 14 35 14 36 14 37 14 38 14 38	07 55 07 57 11 31 14 01	08 02 08 07 11 35 14 05
27	07 40 07 46 11 20 14 03	07 54 07 57 11 35 14 10	08 04 08 10 11 40 14 16

TABLE VI—Contd.
List of Spectroheliograms—Contd.

	1	2	3	4
<i>January</i>		H M	H M	H. M
28	.	07 36 07 39 11 43	07 46 07 48 11 47	07 52 07 56 11 51
29	. . .	07 43 07 50 11 30	07 57 07 59 11 36	08 03 08 20 11 44
30	07 51 07 50 11 52	08 13 08 17 12 01	08 04 08 22 08 26 12 06 08 26
31	. . .	07 40 07 45	07 52 07 51	08 00 08 06
<i>February</i>				
1	07 46 08 11	07 53 08 06	07 58 08 02
2	08 03 08 06	08 12 08 15	08 37 08 43
3	07 50 07 56 14 05	08 02 08 03 14 11	08 06 08 13 14 15
4	11 31 11 44	11 48 12 02	11 56 11 59
5	07 40 07 44 11 28	08 45 10 01 11 19	10 07 11 16
6	07 45 07 48 11 45 14 19	07 54 07 56 11 50 14 27	08 00 08 03 11 53 14 24
7	07 41 07 47 11 36 14 04	07 53 07 54 11 42 13 58	07 58 08 02 11 46 13 55
8	07 40 07 45 11 30 14 23	07 51 07 54 11 36 14 26	07 58 08 03 11 40 14 33
9	07 50 07 54 07 55 07 56 08 00 08 42 11 44 14 10	08 34 08 36 11 52 14 22	08 05 08 09 08 19 08 20 08 25 11 55 14 19 14 42 14 44 15 47

TABLE VI—Contd.
List of Spectroheliograms—Contd.

	1	2	3	4
<i>February</i>		H M	H M	H M
10		08 02 08 13 09 35 11 26 14 10	08 19 08 23 11 32	08 29 08 34 11 36
11		07 45 09 17 11 47 12 04 12 05 12 06 12 07 12 08 12 08 12 09 12 10 12 11 12 13 12 14 12 15 12 16 12 16 12 17 12 18 12 19 14 16	09 24 09 27 11 55 14 40	09 34 09 41 11 59
12		08 09 08 14 11 51 14 13	08 19 08 21 14 19	08 26 08 30 14 23
13		08 02 08 06 11 52 14 21	08 16 08 18 11 57 14 16	08 30 08 36 12 02 14 12
14		07 39 08 04 11 50 14 20	08 10 08 11 11 56 14 24	08 16 08 21 12 00 14 30
15		07 39 07 42 11 36 14 17	07 54 07 56 11 43 14 25	08 01 08 05 11 47 14 29
16		07 38 07 44 11 50 14 15	07 55 08 00 11 56 14 10	08 06 08 10 12 01 14 07
17		07 55 08 02 11 49	08 09 08 12	08 16 08 22

TABLE VI—Contd.
List of Spectroheliograms—Contd.

	2	3	4
February	H M.	H. M	H M
18	07 42 07 47 11 47	08 00 08 05 11 40	08 09 08 13 10 58 11 00 11 02 11 04 11 09 11 11 11 13 11 14 11 37
19	07 38 07 43 11 50	07 48 07 50 11 44	07 54 07 57 09 48 09 58 10 01 10 03 10 06 11 41
20	07 47 07 52 11 35 14 15	08 00 08 03 11 41 14 22	08 08 08 12 11 46 14 31
22	08 29 08 51 16 15	08 59 09 02 16 19	09 07 09 14 16 22
23	07 36 07 41 11 42 14 20	07 48 07 51 11 50 14 31	07 56 07 59 11 57 14 36
24	07 36 07 41 11 40 14 05	07 47 07 50 11 47 13 59	07 53 07 57 11 50 13 56
25	08 05 08 09 11 26 14 32	08 16 08 19 11 31 14 37	08 24 08 29 11 35 14 41
26	07 40 07 44 11 39 14 23	07 49 07 53 11 44 14 28	07 56 08 01 11 50 14 34
27	08 30 08 39 11 40 14 22	08 58 09 28 11 46	09 03 09 25 11 50 14 42
28	07 40 08 08 11 31	07 48 07 52 11 37	07 56 08 02

TABLE VI—Contd
 List of Spectroheliograms—Contd

	1	2	3	4
<i>March</i>		II M	II M	H M
1	.	07 35 07 39 11 06 14 22	07 45 07 47 11 11 14 30	07 52 07 55 11 15 14 36
2	.	07 55 07 59 11 50 14 31	08 07 08 09 11 56 14 36	08 13 08 17 12 01 14 40
3	.	07 35 07 39 11 31 14 53	07 44 07 46 11 36 14 38	07 51 07 55 11 46 14 36
4	.	07 36 07 44 11 29 14 16	07 51 07 53 11 36 14 20	07 57 08 01 11 41 14 24
5	.	07 42 07 46 12 02	07 52 07 53 12 08	07 56 08 00 12 10
6	.	07 30 08 03 11 48	07 39 07 42 12 08	07 47 07 54 12 16
7		07 41 07 46 08 58 11 43	07 55 07 58 11 51	08 02 08 05 11 48
8	.	07 43 07 49 11 32 14 23	07 57 07 59 11 38 14 28	08 04 08 08 11 41 14 32
9	.	08 14 08 23 11 19 14 10	08 31 08 41 11 31 14 18	08 45 08 50 11 39 14 24
10	.	07 47 07 52 11 15 14 13	07 57 07 59 11 31 14 22	08 03 08 08 11 39 14 27
11	.	07 36 07 40 11 37 14 19	07 47 07 49 11 57 14 26	07 53 07 56 12 04 14 30
12	.	07 45 07 49 11 36 14 24	07 54 07 55 11 32 14 29	07 59 08 03 11 29 14 32
13	.	07 43 07 47 11 27 14 21	07 54 07 56 11 21 14 27	08 01 08 05 11 18 14 30

TABLE VI—Contd.
List of Spectroheliograms—Contd.

	1	2	3	4
<i>March</i>		H M	H M	H M
14		07 44 07 49 11 27 14 06	07 54 07 58 11 36 14 13	08 01 08 05 11 42 14 18
15		07 41 07 45 11 36 14 28	07 50 07 53 11 43 14 12	07 56 08 00 11 46 14 16
16		07 47 07 54 09 40 09 40 09 41 09 42 09 42 09 43 11 36 14 28 15 00 15 01 15 01 15 02 15 02 15 03 15 03 15 06 15 06 15 07 15 07 15 08 15 08 15 09	08 01 08 04 11 41 14 21	08 07 08 14 11 45 14 18
17		07 41 07 47 11 29 14 22	07 54 07 58 11 39 14 18	08 05 08 10 11 42 14 15
18		08 09 08 12 11 25 14 37	08 17 08 19 11 33 14 32	08 23 08 26 11 38 14 29
19		07 35 07 39 11 32 14 08	07 45 07 47 11 43 13 56	07 52 07 55 11 48 13 54
20		07 38 07 43 08 34 11 34	07 49 07 51 11 41	07 55 08 00 11 46
21		07 43 08 04 11 37	08 14 08 16 11 52	08 21 08 25 11 04
22		07 33 07 38 11 34	07 44 07 46 11 39	07 51 07 57 11 42

TABLE VI—Contd.
List of Spectroheliograms—Contd.

	1	2	3	4
<i>March</i>		H M	H M.	H M.
23	.	07 57 08 04 08 54 11 52 14 41	08 14 08 16 12 03 14 55	08 22 08 26 12 10 15 00
24	.	07 45 07 50 11 16 11 21 14 15 15 53 15 55 16 00 16 09 16 09 16 13 16 13 16 16 16 19 16 20 16 21	07 58 08 00 11 25 14 10	08 04 08 10 11 28 14 13
25	.	07 38 07 43 11 52 11 54 11 54 11 49 14 12	07 54 07 57 11 46 14 17	08 03 08 08 10 11 11 44
26	.	07 35 07 39 11 32 14 44	07 48 07 52 11 45 14 39	07 57 08 03 11 55 14 36
27	.	07 39 07 44 11 35	07 53 07 55 11 52	08 03 08 08 11 57
28	.	07 36 07 40 11 42 14 10	07 44 07 45 11 57 14 33	07 55 07 59 11 53 14 20
29	.	07 33 07 42 11 20	07 49 07 53 12 04	07 57 08 01 12 08
30	.	07 36 07 43	07 52 07 57 11 51	08 04 08 09 11 54
31	.	07 37 07 43 11 49	07 54 07 57 11 56	08 00 08 04 11 59

TABLE VI—Contd
 Last of Spectroheliograms—Contd

	1	2	3	4
<i>April</i>		H M	H M	H M
1		07 37 07 44 11 42	07 52 07 54 11 48	07 59 08 03 11 51
2 .		07 38 07 42	07 48 07 58	07 50 07 54
3 .		07 38 07 42 11 23 14 09	07 49 07 52 11 39 14 28	07 56 08 00 12 03 14 46
4		09 52 11 22	10 00 11 29	10 08 11 33
5		08 08 08 13	08 44 08 55	09 05 09 13
8 .		09 42 09 51	09 56 09 59	10 11
11 . .		07 40 08 49 11 20	07 47 07 49 11 45	07 52 07 59 11 38
12 .		09 35 10 35	10 03 10 31	10 07 10 25
13		10 44 10 50	11 00 11 07	11 12 11 15
15 . .		08 24 08 28	08 37 08 39	08 47 08 58
16		08 39 08 43	10 42	
17		07 29 07 33	07 44 07 47	07 52 07 57
18		07 36 07 40	07 45 07 47	07 50 07 56
19		09 47		
20		09 04		
21		08 23 08 27 11 46	08 33 08 35 11 51	08 39 08 44 11 55
22		08 12 08 17	08 28 08 30	08 34 08 41
23		08 27 08 31	08 36 08 38 11 32	08 41 11 27
24 . .		07 39 07 43 09 49	07 52 07 54 09 54	08 00 08 08 09 58

TABLE VI—Contd
 Last of Spectroheliograms—Contd

	1	2	3	4
<i>April</i>		H M	H M	H M.
25	.	07 51 08 30 09 09 11 47 14 21	07 58 08 10 11 54	08 04 08 16 12 00
26	.	07 32 07 40 11 07	07 51 07 54 11 12	08 00 08 05 11 16
27	.	10 53 10 57	11 03 11 07	11 12 11 17
28	.	07 37 08 18 11 22	07 52 07 56 11 35	08 00 08 12 11 38
29	.	07 36 07 43 09 55 11 18	08 06 08 10 09 34 11 30 14 37	08 20 08 29 11 38 14 28
30	.	07 39 07 43 11 39 14 05	07 49 07 55 11 45 14 10	07 59 08 04 11 59 14 14
<i>May</i>				
1	.	07 39 07 51 11 23	08 06 08 10 11 43	08 19 08 28 11 35
3	.	08 47 09 22	09 29 09 31	09 36 09 41
4	.	10 17 10 24 14 31	10 35 10 37 14 38	10 45 10 51 14 43
5	.	14 29 15 08	09 16 15 03	14 59 15 15
6	.	08 43 09 29 11 12	09 39 09 41 11 05	09 46 09 49 11 02
7	.	10 33 11 39	10 38	10 41
8	.	09 43	10 01	10 11
9	.	07 44 07 49 11 39	08 02 08 06 11 50	08 11 08 17
10	.	12 27 12 35 15 16	12 46 12 53	14 57 15 09
11	.	09 21		

TABLE VI—Contd
List of Spectroheliograms—Contd

	1	2	3	4
<i>May</i>		H M	H M	H M
12		07 38 08 11	07 45 07 59	07 49 07 55
13			14 37	
14		10 15 10 37	10 21 10 23	10 27 10 31
16		11 31 11 34	11 40 11 58	11 46 11 55
17		11 17 11 28	..	..
19		08 31 11 21	08 38 11 03	09 51 10 59
22		07 31 09 54	..	..
23		10 19 10 23	10 31 10 36	..
24		08 41 08 53	09 04 09 10	09 20 10 11
25	.	07 42 08 31 14 30	07 58 11 26	08 05 14 36
26	.	08 59 09 12	09 20 09 21	09 26 09 31 11 32 11 34 11 38 11 42
27	07 34 07 45	07 54 07 58	08 03 08 10
28	.	08 12 09 21	07 43 09 29	07 51 07 58
30		10 15 10 17	10 21 10 30
<i>June</i>				
1	.	07 40 07 44 11 25	07 52 09 43 11 40	08 04 08 09
2	08 03 08 31	08 09 08 28	08 13 08 24
3		07 38 07 45	07 54 07 58	08 03 08 07
4	07 53 08 49	08 06 08 39	08 11 08 43
5	08 09 08 14	08 25 08 30	

TABLE VI—Contd
 Last of Spectroheliograms—Contd

	1	2	3	4
<i>June</i>		H M	H M	H M
8	.	08 58	09 22	09 30 09 34
11	07 53 07 59 10 33	08 06 08 08 10 28	08 19 10 49
12		07 45 07 51	08 03 08 08	08 13 08 17
13		07 35 07 40	07 46 07 48	07 52 07 56
14		08 06 08 11	08 16 08 18	08 26 10 15
17		10 12	10 27	11 29
18		07 55 08 28	08 02 08 21	08 09 08 16
19		07 41 07 46	07 52 07 55	08 00 08 05

PART II

Magnetic observations for the first half of 1959

Brief descriptions of the absolute instruments, the variometers and the system of observations are available in Bulletins Nos CXXXII and CXXVI of this observatory. The data given in this Bulletin are derived mainly from the records of La Cour instruments, but in case of failure of La Cour records, Watson magnetograms have been used.

The adopted values of the scale coefficients for the Horizontal Force and Declination for the first half of 1959 were $29\gamma/\text{cm}$ and $14'/\text{cm}$ respectively, the adopted values of the scale coefficient for the Vertical Force were $115\gamma/\text{cm}$ for the month of January and $120\gamma/\text{cm}$ for the remaining five months of the first half of 1959.



PART III

Ionospheric observations for the first half of 1959

A description of the system of ionospheric observations at Kodaikanal together with a brief description of the Ionosphere Recorder has been given in Bulletin No 146 of this observatory. The present Bulletin contains half-hourly values of 11 ionospheric parameters viz., foF₂, foF₁, foE, foEs, fbEs, fmin., h'F₂, h'F, h'E, h'Es and (M 3000) F₂ with symbols and terminology as recommended by the Special Committee on World-wide Ionospheric Soundings to the URSI/AGI in its First Report (Brussels, September 2, 1956). The f-plots of the ionospheric parameters for Regular World Days and Special World Intervals during the first half of 1959, prepared under the I G C programme are also included in this Bulletin.

Kodaikanal Observatory,
January, 1961

M. K. VAINU BAPPU,
Director

PART II
MAGNETIC DATA

TABLE I
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

January

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	36 7	36 8	36 9	36 3	36 5	37 2	38 1	39 3	38 8	38 0	37 3	36 3	36 2	36 5	36 0	
2†	36 7	36 6	36 0	35 7	36 5	38 9	40 7	40 7	40 1	39 3	38 0	36 9	36 5	36 5	36 2	
3	36 8	36 6	35 7	34 4	35 4	38 7	40 1	40 4	40 6	40 5	38 9	36 8	36 6	36 5	36 2	
4	36 1	36 1	35 9	31 6	33 6	34 9	37 4	38 6	38 8	37 9	37 5	36 7	36 4	36 0	35 7	
5	36 7	37 0	37 7	35 7	35 6	36 7	39 8	40 6	40 5	39 1	37 9	36 3	36 1	36 5	36 1	
6††	34 4	34 6	35 1	35 1	36 0	37 0	38 1	38 8	37 8	37 2	35 8	35 0	35 0	35 1	35 0	
7††	35 7	35 1	35 1	36 0	35 0	36 5	37 4	37 7	37 8	37 8	37 2	35 7	35 0	35 1	35 0	
8	36 1	35 3	35 3	34 9	34 9	35 0	36 0	36 3	36 8	36 5	36 1	35 6	36 1	36 1	35 8	
9††	35 7	36 0	36 3	36 1	35 8	36 3	36 5	36 8	36 7	36 4	36 4	36 4	35 7	35 7	35 7	
10††	33 7	34 9	36 0	35 8	36 3	35 4	35 3	35 3	34 7	33 6	33 6	33 6	31 0	34 7	33 7	
11	35 3	35 6	35 7	36 3	36 7	38 5	39 3	39 2	37 9	36 4	35 7	35 0	35 0	35 0	35 0	
12	33 9	34 2	34 7	31 7	34 0	36 4	37 8	37 4	36 5	36 1	36 3	36 1	35 6	35 7	35 0	
13	36 4	36 1	35 6	35 3	35 7	37 4	39 2	39 5	38 9	37 4	36 3	35 3	35 1	35 1	35 0	
14	36 4	36 3	36 0	35 6	35 4	37 2	38 4	37 8	37 5	36 5	35 8	35 1	35 3	36 0	35 7	
15	35 6	35 7	35 8	36 3	36 3	37 4	38 8	37 8	37 5	36 4	35 8	35 1	35 0	35 1	35 0	
16	36 4	36 3	36 3	35 3	34 3	35 1	36 4	36 5	36 5	36 5	36 1	35 1	34 4	34 0	33 9	
17	36 3	36 4	36 5	37 0	36 1	37 2	39 2	40 0	37 8	36 5	35 1	35 0	34 9	31 9	35 0	
18	36 8	37 0	36 4	36 5	35 6	34 9	36 0	37 4	37 7	37 5	37 4	36 5	36 3	35 8	35 1	
19	37 0	37 1	36 4	35 8	34 9	35 0	36 3	37 4	37 2	36 5	36 4	36 4	36 3	36 1	36 0	
20†	36 5	36 8	36 7	35 8	34 9	34 3	35 0	35 3	35 4	36 0	36 0	35 7	36 0	36 4	36 3	
21†	36 8	37 1	37 7	37 5	37 7	37 7	38 1	37 9	38 2	37 9	37 5	36 5	36 3	36 5	36 3	
22	36 7	37 0	37 4	36 5	37 0	36 7	37 4	38 1	36 5	36 8	36 5	36 8	△	△	△	
23	37 0	37 5	37 7	37 5	36 5	36 5	37 4	37 7	37 1	37 2	37 4	36 5	36 4	36 4	36 3	
24†	36 8	37 8	37 8	37 4	36 5	37 1	37 8	37 4	36 5	36 3	36 1	35 1	35 7	36 5	36 4	
25	36 5	36 5	36 7	37 5	37 7	38 4	40 6	39 9	38 8	37 5	37 5	37 5	38 1	37 2	35 6	
26††	36 7	36 7	37 0	36 1	36 3	35 1	35 3	34 9	35 0	35 1	35 4	35 1	35 4	35 1	35 1	
27	35 7	35 8	36 0	35 8	36 0	36 1	39 3	38 6	37 1	36 3	36 3	36 3	36 3	36 4	36 1	
28	34 6	34 7	34 7	35 0	35 3	37 5	37 8	35 3	34 7	33 3	32 2	32 2	33 5	34 2	33 9	
29	35 0	35 1	35 8	36 5	36 8	37 8	39 5	39 9	39 2	37 4	36 3	36 1	36 3	36 3	36 0	
30	35 8	36 0	36 7	36 4	36 4	37 1	37 0	37 3	36 7	35 9	35 0	34 9	35 9	35 7	35 6	
31	36 0	36 0	36 4	37 0	37 8	39 0	39 9	40 2	39 9	39 7	36 9	36 2	35 5	35 2	35 2	
Mean	36 0	36 1	36 2	36 0	35 9	36 8	37 9	38 0	37 6	37 0	36 3	35 7	35 7	35 7	35 4	
Mean†	36 7	37 0	37 0	36 5	36 4	37 0	37 9	38 3	37 8	37 5	37 0	36 1	36 1	36 1	36 2	
Mean††	35 2	35 5	35 9	35 8	35 9	36 1	36 5	36 7	36 4	36 0	35 7	35 2	35 0	35 1	34 9	

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

TABLE I
Hourly Values of Declination (Westerly), 1959
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

January

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		
										H	M	H	M		
36 2	36 2	36 5	36 6	36 6	36 6	36 7	36 7	36 7	36 9	06 54	39 4	14 00	35 5	3 9	1†
36 1	36 1	36 5	36 6	36 6	36 8	36 9	36 9	36 9	37 3	06 13	41 0	03 15	35 5	5 5	2†
36 2	36 1	36 5	36 5	36 1	36 2	36 2	36 2	36 1	37 1	05 41	40 7	02 54	34 1	6 6	3
36 0	36 1	36 1	35 7	36 0	36 1	36 3	36 3	36 5	36 3	07 45	38 9	03 43	33 3	5 6	4
36 0	35 7	35 7	34 9	35 0	34 9	34 6	34 2	34 2	36 6	07 00	40 7	22 40	34 0	6 7	5
35 1	35 3	35 0	34 6	34 6	35 1	35 3	35 6	35 7	35 7	06 50	39 1	00 50	34 0	5 1	6††
35 1	35 1	35 4	35 1	35 1	36 1	36 1	36 8	36 0	36 0	08 00	37 8	21 10	34 0	2 9	7††
35 7	35 7	35 4	35 3	35 3	35 0	35 0	35 3	35 7	35 6	08 32	37 1	03 00	34 9	2 5	8
35 6	35 1	34 7	33 7	34 0	34 6	33 7	33 6	33 5	35 5	06 30	37 1	23 00	33 3	3 8	9††
33 9	33 5	33 5	33 6	31 0	34 0	34 1	34 7	34 1	34 5	03 39	36 8	17 01	33 2	3 6	10††
35 0	35 0	34 9	35 0	35 0	35 0	35 1	35 0	34 4	35 9	06 06	39 6	23 55	33 9	5 7	11
35 0	35 3	35 6	35 7	35 6	35 8	36 1	36 1	36 5	35 7	05 46	38 1	01 21	33 6	4 5	12
35 3	35 6	35 8	36 0	36 3	36 3	36 3	36 1	36 1	36 1	06 37	40 0	14 00	35 0	5 0	13
35 7	35 8	36 1	36 3	36 3	36 1	36 1	36 0	35 7	36 2	06 45	39 1	11 00	35 0	4 1	14
35 0	35 1	35 7	36 0	36 0	36 0	36 3	36 4	36 4	36 1	05 48	39 1	12 00	35 0	4 1	15
34 4	34 4	34 9	35 0	35 0	35 1	36 0	36 0	36 3	35 4	07 00	36 5	12 15	33 6	2 9	16
34 7	34 7	34 9	35 1	35 1	36 1	36 1	36 4	36 5	36 2	06 58	40 5	14 45	31 6	5 9	17
35 3	35 3	35 1	35 1	35 7	36 1	36 4	36 5	37 0	36 2	07 45	37 8	01 16	31 6	3 2	18
35 8	35 6	35 8	36 0	36 3	36 4	36 1	36 4	36 4	36 2	07 15	37 8	04 00	31 9	2 9	19
36 0	36 1	36 1	36 3	36 1	36 1	36 4	36 5	36 7	36 0	01 00	36 8	05 00	34 3	2 5	20†
36 3	36 4	36 3	36 1	36 3	36 3	36 3	36 5	36 5	36 9	08 00	38 2	18 00	36 1	2 1	21†
△	△	36 4	36 4	36 1	36 4	36 1	36 1	36 7	△	△	△	△	△	△	22
36 3	36 3	36 4	36 5	36 1	36 4	36 5	36 1	36 4	36 8	02 30	37 8	13 10	36 1	1 7	23
36 4	36 4	36 4	36 1	36 4	36 4	36 3	36 1	36 5	36 6	06 05	37 9	11 00	35 0	2 9	24†
36 1	35 1	34 9	34 9	35 4	35 7	36 0	36 3	36 7	37 0	06 00	40 6	17 34	34 6	6 0	25
35 0	35 4	35 1	35 4	35 8	36 1	36 3	36 1	35 8	35 6	02 02	37 1	08 42	34 6	2 5	26††
36 3	△	△	△	34 3	34 2	33 7	33 9	34 3	△	△	△	△	△	△	27
34 0	34 6	34 7	34 7	34 7	34 6	34 3	31 6	34 9	34 6	05 36	38 1	10 15	32 1	6 0	28
35 4	35 6	35 8	36 1	36 1	36 1	36 4	36 1	36 4	36 6	07 05	40 3	00 01	35 0	5 3	29
35 6	35 7	36 0	35 7	35 9	36 0	36 0	36 0	35 9	36 1	07 00	37 3	10 25	34 6	2 7	30
35 2	35 5	35 6	35 5	35 3	35 3	35 3	35 6	35 6	36 7	07 35	40 4	13 00	35 2	5 2	31
35 5	35 5	35 6	35 5	35 7	35 8	35 9	35 9	36 0	36 2					4 2	Mean
36 2	36 3	36 4	36 4	36 5	36 5	36 5	36 6	36 7							Mean†
34 9	34 9	34 7	34 5	34 7	35 4	35 2	35 4	35 2							Mean††

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

TABLE 2
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 February 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	36 0	35 9	35 9	35 2	34 1	34 2	35 6	35 9	34 9	34 8	34 8	35 2	36 0	36 0	35 5
2	36 2	36 6	36 4	37 4	37 6	37 6	38 8	39 1	38 7	38 0	37 6	36 6	36 4	36 2	35 3
3	35 3	36 0	37 1	36 9	36 3	35 5	35 6	35 9	36 2	36 0	36 3	35 6	35 9	35 7	35 3
4†	36 2	36 3	37 0	36 4	35 9	36 4	37 8	38 1	38 1	38 5	37 7	37 1	37 4	37 1	36 0
5	35 9	36 2	37 0	36 7	36 3	35 7	35 7	36 2	36 4	36 7	37 3	36 7	36 7	35 9	35 6
6	36 3	36 9	36 6	36 2	35 3	35 5	36 3	37 0	37 1	36 4	36 2	36 0	36 4	36 9	35 9
7	36 0	36 6	37 6	38 0	37 8	37 6	37 4	37 7	37 1	36 6	36 2	36 0	36 3	36 0	35 9
8	36 4	37 3	37 3	36 6	36 1	35 1	36 1	36 6	36 2	35 8	35 9	36 3	36 6	36 5	35 9
9	36 3	36 6	36 5	36 3	35 6	35 5	36 2	35 8	34 9	34 8	35 1	35 4	35 9	36 2	35 9
10†	35 6	36 1	36 9	36 8	36 5	36 1	36 2	36 6	37 0	37 0	36 8	36 3	36 3	36 5	36 1
11	36 5	37 2	37 6	37 7	38 3	39 0	40 0	40 3	39 8	37 7	34 7	33 7	34 8	34 8	34 4
12	37 2	37 3	37 9	38 0	37 5	37 7	38 7	38 6	37 6	36 8	36 6	36 1	36 5	36 3	36 2
13	36 9	37 5	38 2	37 5	36 8	36 0	36 7	36 8	36 4	37 1	36 7	36 5	37 4	37 4	37 4
14	36 4	37 2	37 9	37 8	37 4	36 8	38 7	38 5	38 7	37 8	37 5	37 0	37 1	35 0	34 9
15	36 8	37 3	37 4	37 3	37 2	37 2	37 2	37 2	38 6	38 3	37 0	36 3	36 9	36 0	35 8
16††	36 6	37 0	37 4	38 3	38 7	38 5	37 9	37 3	37 2	37 2	37 9	37 5	37 1	36 8	35 8
17	35 7	35 9	35 9	35 7	35 0	35 1	35 0	34 6	35 1	34 9	35 3	35 0	35 0	35 3	34 6
18†	36 7	36 8	37 0	36 5	35 8	36 5	37 1	37 0	35 8	35 8	35 8	35 7	35 7	35 7	35 7
19	37 0	37 0	37 0	36 3	35 7	35 7	36 0	36 4	35 7	35 8	35 8	35 7	35 3	34 4	34 2
20†	36 7	37 0	37 1	37 0	36 8	36 8	37 2	37 2	37 5	37 9	37 1	36 7	36 3	36 3	35 7
21†	36 5	36 0	35 8	35 6	35 0	35 4	36 4	37 2	36 0	37 0	36 8	36 3	35 8	36 4	36 1
22	37 0	37 2	37 8	38 1	38 1	37 2	37 4	38 2	38 2	36 8	35 6	35 6	36 0	36 4	36 0
23	36 8	36 8	37 0	36 3	36 5	36 4	36 7	37 8	37 4	36 8	35 4	34 4	35 0	35 8	35 8
24†	36 5	36 4	37 1	37 7	38 3	38 5	38 8	39 0	38 4	38 0	36 9	35 9	35 6	35 7	35 6
25††	36 7	36 7	36 7	37 0	38 3	39 3	39 4	38 3	36 1	36 2	35 8	34 7	35 4	35 2	34 1
26††	34 2	35 5	36 6	36 7	36 8	36 8	37 8	36 8	35 0	34 1	34 1	33 6	34 3	34 3	34 6
27	35 3	35 5	36 1	35 7	35 3	36 0	35 2	35 2	35 0	35 0	35 3	35 2	35 3	35 4	35 4
28††	35 2	35 3	35 6	35 3	35 3	35 9	36 6	36 9	36 7	35 9	35 3	35 2	34 1	33 7	33 9
Mean	36 2	36 6	36 9	36 8	36 6	36 6	37 1	37 2	36 8	36 6	36 2	35 8	35 9	35 9	35 5
Mean†	36 4	36 5	36 8	36 7	36 5	36 7	37 2	37 4	36 9	37 1	36 7	36 2	35 9	36 1	35 8
Mean††	35 8	36 2	36 7	36 7	37 0	37 4	37 9	37 5	36 6	36 4	36 2	35 6	35 7	35 4	34 9

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

TABLE 2
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centered at the full hours of Greenwich Mean Time)
 February 2° plus tabular quantities

Hours G M I									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
									H M		H M				
35 7	35 5	35 7	35 9	36 0	36 0	35 9	35 9	36 0	35 5	23 05	36 3	04 30	33 5	2 8	1
35 0	35 0	34 9	34 8	34 6	34 8	34 6	35 0	35 0	36 4	06 40	39 2	19 00	34 6	4 6	2
35 5	34 9	35 0	35 2	35 2	35 0	34 3	35 5	36 0	35 7	02 07	37 4	16 00	34 9	2 5	3
35 9	35 5	35 0	34 9	34 8	34 9	34 8	34 9	34 8	36 3	09 00	38 7	23 00	34 5	4 2	4†
35 0	35 2	34 9	34 9	34 9	35 0	35 2	35 7	36 0	35 9	10 00	37 3	17 00	34 9	2 4	5
35 3	35 2	35 9	35 7	35 6	35 2	35 0	35 3	35 7	36 0	07 55	37 4	20 45	34 9	2 5	6
35 6	35 9	35 9	35 7	35 9	35 9	35 9	36 0	36 3	36 5	03 20	38 4	15 00	35 6	2 8	7
35 5	35 5	35 6	35 8	35 9	35 9	35 9	36 0	36 2	36 1	00 55	37 4	15 00	35 5	1 9	8
35 8	35 5	35 5	35 5	35 6	35 5	35 4	35 6	35 6	35 7	01 01	36 9	08 21	34 2	2 5	9
36 1	36 1	36 1	36 1	35 9	35 8	35 9	36 2	36 5	36 3	08 00	37 0	00 08	35 2	1 8	10|
34 7	34 8	35 2	36 1	36 2	36 2	36 3	36 5	36 8	36 6	06 30	40 5	10 15	33 1	7 4	11
36 1	36 2	36 3	36 3	36 3	36 5	36 6	36 6	36 6	36 9	06 22	38 9	15 12	35 8	3 1	12
36 2	36 2	36 8	36 4	36 2	36 2	36 2	36 5	36 8	36 8	02 05	38 4	04 47	35 8	2 6	13
35 9	35 7	35 7	35 6	35 9	36 0	36 0	36 0	36 4	36 7	06 24	38 8	13 50	34 6	4 2	14
35 9	36 2	36 3	35 8	35 5	35 6	35 9	36 0	36 2	36 7	08 00	38 7	19 00	35 5	3 2	15
35 7	35 9	35 7	34 5	35 0	35 4	35 7	35 5	35 0	36 6	04 05	39 2	17 10	34 1	5 1	16††
35 3	35 6	35 6	35 8	35 8	35 7	36 0	36 3	36 5	36 4	23 00	36 5	07 00	34 6	1 9	17
35 8	36 0	36 1	36 7	36 8	36 1	36 1	36 1	36 4	36 2	06 00	37 1	11 00	35 6	1 5	18†
34 3	34 7	35 3	35 4	35 6	36 1	36 0	36 3	36 4	35 8	00 01	37 0	14 40	34 0	3 0	19
35 7	36 0	36 1	36 0	35 8	35 8	36 0	36 1	36 5	36 6	08 30	38 2	14 00	35 7	2 5	20†
36 0	36 1	36 4	36 1	36 3	36 3	36 4	37 0	37 0	36 2	07 30	37 9	03 28	34 7	3 2	21†
36 1	36 5	36 5	36 3	36 5	36 5	36 8	36 8	37 0	36 8	07 52	38 5	10 12	35 4	3 1	22
35 8	36 1	36 3	36 1	36 0	35 8	36 0	36 3	36 4	36 2	07 02	38 2	10 45	34 3	3 9	23
35 7	36 2	36 0	36 0	35 9	36 0	36 3	36 6	36 7	36 8	06 02	39 4	12 00	35 6	3 8	24†
33 0	32 4	32 6	32 6	32 6	32 8	33 7	33 8	34 1	35 3	05 52	40 1	15 35	32 3	7 8	25††
34 7	35 0	35 3	35 3	35 0	34 7	34 7	34 4	34 1	35 2	06 34	38 9	11 00	33 6	5 3	26††
35 6	35 3	34 5	35 0	34 7	34 9	34 9	35 0	34 9	35 2	04 52	36 3	17 25	33 9	2 4	27
33 8	33 9	33 7	33 9	33 8	33 9	34 9	34 1	34 5	34 9	07 30	37 3	16 52	33 5	3 8	28††
35 4	35 5	35 5	35 5	35 5	35 5	35 7	35 8	36 0	36 1					3 4	Mean
35 9	36 1	36 1	36 2	36 1	36 0	36 1	36 5	36 6							Mean†
34 6	34 5	34 5	34 2	34 2	34 3	34 8	34 5	34 6							Mean††

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

TABLE 3
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2° plus tabular quantities

March

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

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

TABLE 3
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2° plus tabular quantities

March

Hours G M T									Mean [†]	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
									H M		H M				
34 1	34 2	34 8	34 2	34 4	34 9	34 9	34 9	35 1	35 1	06 25	38 7	00 01	33 8	4 9	1††
34 2	34 4	34 8	35 2	35 2	35 1	35 3	35 2	35 1	35 0	07 22	37 2	02 22	33 7	3 5	2
35 1	35 2	35 6	34 9	32 2	35 2	35 1	34 9	34 6	35 0	06 50	35 8	04 22	34 6	1 2	3
35 1	35 1	35 1	35 2	34 9	34 6	34 8	35 1	35 2	35 3	06 00	37 0	01 00	34 4	2 6	4
35 2	35 2	35 3	35 1	34 8	34 9	34 9	34 9	34 9	35 3	07 30	36 3	18 30	34 6	1 7	5
35 3	35 3	35 3	35 2	35 2	35 2	35 1	35 2	35 3	36 1	06 25	39 4	00 01	35 1	4 3	6
34 9	35 1	34 8	34 8	34 8	34 8	34 6	34 6	34 8	35 5	06 00	36 7	21 00	31 6	2 1	7
35 3	35 3	35 2	35 3	35 3	35 2	35 2	35 2	35 2	35 5	07 40	37 0	02 00	34 8	2 2	8
35 5	35 3	35 5	35 6	35 6	35 9	35 8	36 2	36 5	36 3	08 30	39 0	15 45	35 2	3 8	9†
36 3	36 5	36 6	36 5	36 3	36 3	36 3	36 5	36 6	37 1	07 56	39 8	01 52	35 9	3 9	10†
36 6	36 6	36 7	36 7	36 6	36 3	36 5	36 6	36 7	36 9	07 48	38 3	20 25	36 2	2 1	11†
35 5	35 5	35 5	36 0	35 9	36 0	36 3	36 5	36 5	36 6	08 00	39 4	11 18	34 5	4 9	12
35 9	36 3	36 3	35 9	36 0	35 9	36 2	36 3	36 3	36 4	09 10	37 7	14 00	35 5	2 2	13
36 3	36 4	36 4	36 4	36 0	36 1	36 3	36 3	36 3	36 5	06 00	38 1	11 15	35 3	2 8	14
36 4	36 7	36 6	36 6	36 4	36 3	36 3	36 3	36 4	△	△	△	△	△	△	15
36 7	36 7	36 8	36 7	36 6	36 6	36 6	36 8	36 7	36 5	06 46	39 2	11 00	35 3	3 9	16†
36 6	36 7	36 8	37 0	36 8	36 7	36 8	36 8	36 7	36 6	07 00	38 2	11 00	35 3	2 9	17
36 1	36 1	36 4	36 4	36 5	36 5	36 7	36 8	36 9	36 4	06 34	39 6	10 52	34 4	5 2	18
35 8	35 9	35 9	35 9	36 1	36 1	36 1	36 2	36 2	△	△	△	△	△	△	19
35 9	35 9	36 0	36 0	36 0	35 9	35 9	36 0	36 2	36 2	07 08	40 1	02 35	33 5	6 6	20
35 7	35 7	35 6	35 7	36 0	36 0	36 1	36 3	36 3	36 5	07 36	40 5	03 00	34 6	5 9	21
35 9	35 9	35 8	35 9	35 8	35 8	36 0	36 0	36 2	△	△	△	△	△	△	22†
35 9	35 6	35 2	35 4	35 4	35 3	35 3	35 4	35 9	36 2	04 00	38 1	17 00	34 9	3 2	23
35 8	35 8	35 7	35 1	35 0	35 3	35 4	35 7	36 1	36 1	07 12	38 9	18 31	34 8	4 1	24
35 2	34 7	34 1	34 4	33 7	33 7	34 0	34 7	35 1	35 6	06 25	39 3	20 10	33 3	6 0	25
33 6	34 1	33 8	33 5	32 9	32 8	32 5	32 7	32 4	34 5	08 45	38 4	14 06	31 0	7 4	26††
30 9	30 1	31 5	31 0	31 5	32 4	33 0	34 4	34 1	32 7	05 22	36 5	16 00	29 5	7 0	27††
33 2	32 8	33 2	33 2	32 8	32 5	31 7	32 1	32 8	33 6	07 22	37 0	21 25	31 4	5 6	28††
33 3	33 7	33 7	34 0	34 3	34 4	34 6	34 7	34 8	34 9	08 01	39 6	00 18	32 4	7 2	29††
34 8	35 0	34 6	34 9	34 9	34 9	34 8	34 9	34 9	35 4	06 45	39 0	02 00	34 0	5 0	30
35 0	35 2	35 3	35 2	35 3	35 2	34 9	34 8	34 8	35 8	06 42	39 1	01 50	33 9	5 2	31
35 1	35 2	35 2	35 2	35 0	35 2	35 2	35 4	35 5	35 7					4 2	Mean
36 3	36 3	36 4	36 4	36 3	36 3	36 3	36 5	36 6							Mean†
33 0	33 0	33 4	33 2	33 2	33 4	33 3	33 8	33 8							Mean††

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

TABLE 4

Hourly Values of Declination (Westerly), 1959

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

April

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	36 6	35 7	34 9	35 5	36 7	38 1	39 1	38 7	38 3	38 1	38 0	37 7	37 4	37 1	37 0
2	37 0	36 9	35 6	34 9	33 9	34 9	36 0	37 6	38 1	38 3	38 1	37 3	37 0	36 6	36 2
3	35 9	35 6	35 9	36 2	36 8	37 3	38 6	39 6	39 4	38 2	37 0	36 6	36 3	35 8	35 6
4	35 9	35 5	35 1	35 2	36 3	37 0	38 0	39 3	38 6	37 3	36 5	35 8	35 5	35 5	35 8
5	35 9	35 5	35 1	35 4	35 9	36 5	37 2	37 9	37 0	36 2	35 4	34 9	35 1	35 6	36 2
6	36 8	35 8	35 4	35 4	35 9	37 5	39 4	39 6	38 7	38 2	37 0	36 2	35 6	35 6	36 5
7	36 5	35 6	35 1	35 2	35 9	36 8	38 3	39 1	39 3	38 0	36 6	35 6	35 5	35 9	36 3
8	35 5	35 4	34 5	34 4	35 4	36 6	38 2	38 9	38 6	37 9	36 5	35 5	35 8	35 2	35 9
9†	34 0	34 2	34 0	34 8	36 3	37 3	37 5	38 2	38 4	36 6	35 6	35 4	35 5	35 2	35 6
10††	35 6	35 5	34 7	34 3	34 6	35 7	38 1	39 3	38 1	36 7	36 2	36 1	35 5	33 3	32.5
11	33 7	33 2	33 6	34 1	35 5	36 0	37 5	38 1	37 5	36 8	36 4	35 3	35 7	35 5	35 8
12	35 7	35 3	35 0	35 1	35 7	37 2	38 2	38 5	38 3	37 8	37 1	36 8	36 5	35 5	35 5
13	35 7	35 4	35 0	34 8	35 4	36 7	38 5	39 2	38 8	37 9	36 5	35 5	35 4	35.3	35 7
14	35 8	35 4	34 8	35 1	35 5	36 5	37 9	39 3	39 2	38 9	38 2	37 6	36 8	36 2	35 8
15	35 8	35 4	34 1	34 0	34 6	36 0	38 1	39 3	39 3	38 5	36 9	36 5	35 8	35 4	35.5
16	36 2	36 2	36 0	36 0	36 7	37 2	38 3	39 3	39 3	38 2	36 9	35 7	35 5	35 1	35 4
17	35 4	35 1	35 0	35 2	35 6	37 1	39 2	39 5	38 7	37 5	36 6	35 3	35 2	34 2	34 5
18†	35 4	35 0	34 6	34 9	35 4	36 0	37 4	38 5	38 2	38 0	37 3	36 4	35 4	35 4	35.7
19†	35 3	34 5	34 2	35 3	35 9	37 0	38 5	39 2	38 4	37 4	36 6	35 7	36 0	35 6	36 0
20†	36 3	35 4	35 3	35 7	36 0	37 0	39 1	39 8	39 8	38 7	37 8	37.1	36.6	35 6	35 7
21	36 6	36 4	35 9	35 6	36 3	37 7	38 4	39 3	38 3	37 2	35 8	35 2	35 5	35 5	35 5
22†	35 9	35 9	35 3	35 4	35 9	37 2	37 9	38 9	38 3	37 9	36 8	36 1	35.2	35 2	35 8
23††	35 7	34 8	34 0	34 3	35 0	35 8	38 0	39 4	39 2	37 9	36 8	36 8	36 6	36 2	36 4
24††	33 1	32 4	33 4	34 9	36 4	37 9	39 1	38 8	38 4	38 6	36 1	35 0	34 3	33 9	34 7
25	34 4	33 6	33 5	34 1	35 0	36 2	37 3	38 7	37 8	37 0	36 2	35 2	34 9	34 5	35 0
26	35 0	34 6	33 8	34 3	35 3	36 9	38 4	39 1	38 8	37 4	36 2	35 0	34 2	34 5	34 8
27	34 9	34 1	33 6	34 2	34 8	36 2	38 3	39 8	39 4	37 8	36 7	36 2	35 2	34 5	34 6
28	34 9	33 8	32 9	33 6	34 9	36 3	38 1	39 3	39 5	38 6	37 7	35 6	35 3	35 3	35 3
29††	34 6	33 6	33 2	33 7	34 9	36 3	37 7	37 9	38 1	37 1	36 4	35 4	35 0	35 0	34 9
30	33 9	33 6	33 6	34 7	35 3	36 4	37 8	38 2	37 7	37 2	36 4	35 6	35 6	35 3	34 6
Mean	35 5	35 0	34 6	34 9	35 6	36 7	38 1	38 9	38 6	37 7	36 7	36 0	35 7	35 3	35 5
Mean†	35 8	35 3	34 9	35 3	35 8	36 7	38 0	38 9	38 3	37 6	36 8	36 0	35 7	35.5	35 9
Mean††	34 6	34 1	33 9	34 4	35 4	36 6	38 1	38 7	38 4	37 4	36 2	35 7	35 0	34 7	34 8

†Five international quiet days
 ††Five international disturbed days.
 Δ Loss of record, day omitted for reasons

TABLE 4
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes, centred at the full hours of Greenwich Mean Time)
 April 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		
									H	M	H	M			
37 0	37 0	36 9	36 9	36 7	36 7	36 9	37 0	37 0	37 1	06 05	39 2	02 05	34 6	4 6	1
35 9	35 7	35 7	35 6	35 6	35 6	35 7	35 6	35 9	36 2	09 00	38 3	03 42	33 8	4 5	2
35 5	35 6	35 5	35 5	35 8	35 8	35 9	36 2	36 1	36 5	07 20	40 1	01 00	35 6	4 5	3
36 2	36 2	35 8	36 2	36 1	35 8	35 9	36 1	35 9	36 3	07 00	39 3	02 00	34 9	4 4	4
36 5	36 5	36 3	36 2	36 1	36 1	36 3	36 6	36 8	36 1	07 00	37 9	11 00	34 9	3 0	5†
36 8	36 5	36 1	36 2	36 2	35 9	36 2	36 5	36 8	36 7	06 30	39 7	02 40	35 2	4 5	6
36 5	36 1	35 6	35 6	35 6	35 8	35 8	35 8	35 8	36 3	07 40	39 4	02 05	34 8	4 6	7
35 5	35 6	35 4	34 9	35 2	35 2	35 2	34 9	34 4	35 9	07 15	39 1	23 58	34 1	5 0	8
35 8	35 6	35 5	35 5	35 9	35 9	35 8	35 6	35 8	35 8	07 00	39 1	01 44	33 7	5 4	9††
33 6	33 9	33 7	33 7	34 3	33 6	33 9	33 7	33 9	35 0	06 40	39 6	14 25	31 9	7 7	10††
36 1	35 8	35 7	35 7	35 5	35 3	35 1	35 1	35 5	35 6	06 35	38 3	01 00	33 2	5 1	11
35 7	35 7	35 5	35 4	35 4	35 4	35 4	35 7	35 5	36 2	07 00	38 5	01 46	34 8	3 7	12
35 7	35 8	35 7	35 7	35 7	35 7	35 8	35 8	36 1	36 2	07 00	39 3	02 50	36 0	3 3	13
36 2	36 2	36 2	36 0	35 8	35 7	36 1	36 2	36 1	36 6	07 30	39 6	02 00	34 8	4 8	14
35 7	35 7	35 5	35 7	35 5	35 7	35 8	35 8	36 0	36 1	07 30	39 6	03 00	34 0	5 6	15
35 7	35 7	35 8	35 8	35 7	36 0	35 8	35 8	35 7	36 4	07 00	39 5	13 00	35 1	4 4	16
35 2	35 4	35 6	35 6	35 6	35 6	35 6	35 7	35 7	36 0	07 00	39 5	13 00	34 2	5 3	17
35 9	35 9	35 9	35 9	35 9	35 6	35 6	35 6	35 6	36 1	07 00	38 5	02 00	34 6	3 9	18†
36 3	36 3	36 3	35 9	35 9	36 0	36 1	36 4	36 4	36 3	07 00	39 4	02 00	34 2	5 2	19†
36 1	36 3	36 3	36 0	36 1	36 0	36 0	36 3	36 4	36 7	07 30	40 2	02 00	35 3	4 9	20†
35 5	35 3	35 8	35 9	35 9	35 9	35 9	36 0	35 9	36 3	07 10	39 4	10 45	35 1	4 3	21
36 1	36 1	35 9	35 8	35 7	35 5	35 7	35 8	35 8	36 3	07 00	39 2	12 00	35 1	4 1	22†
36 4	35 4	34 8	34 1	33 6	32 4	31 9	32 6	32 7	35 4	07 10	39 6	20 27	31 3	8 3	23††
34 7	34 7	34 0	34 3	34 3	34 2	34 0	34 3	34 7	35 3	07 00	40 5	01 10	32 3	8 2	24††
34 9	35 0	34 8	34 8	31 6	34 6	34 6	34 9	34 9	35 3	06 42	39 1	01 25	33 2	5 9	25
35 2	35 0	34 9	34 8	34 8	34 8	34 6	34 8	34 8	35 5	07 00	39 1	02 00	33 8	5 3	26
34 9	34 9	34 9	34 9	34 8	34 8	34 6	34 8	34 9	35 6	07 15	40 2	02 05	33 5	6 7	27
35 3	35 3	35 1	35 0	34 9	34 9	34 9	34 6	34 2	35 6	07 45	39 6	01 45	32 8	6 8	28
34 6	34 3	33 7	33 7	33 7	33 9	34 0	34 0	34 2	35 0	07 45	38 2	01 30	32 8	5 4	29††
34 6	34 9	34 6	34 6	34 9	34 6	34 6	34 6	34 4	35 3	07 00	38 2	01 15	33 5	4 7	30
35 7	35 6	35 4	35 4	35 4	35 3	35 3	35 4	35 5	36 0					5 1	Mean
36 2	36 2	36 1	36 0	35 9	35 8	35 9	36 1	36 2							Mean†
35 0	34 8	34 3	34 3	34 4	34 0	33 9	34 0	34 3							Mean††

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

TABLE 5
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2° plus tabular quantities

May

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

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

TABLE 5
 Hourly Values of Declination (Westerly), 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 May 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		
									H M		H M				
35 1	35 4	35 2	35 1	35 1	35 4	35 2	35 4	35 1	35 5	06 56	38 3	01 30	33 7	4 6	1
35 5	35 4	35 2	35 2	35 2	35 4	35 4	35 4	35 5	35 9	07 00	39 4	01 45	34 3	5 1	2
36 2	36 0	36 0	35 9	35 9	36 0	36 2	36 2	35 9	36 2	06 45	39 3	02 17	34 0	5 3	3
35 7	36 0	36 0	36 1	36 0	36 1	36 0	36 0	35 3	36 2	07 00	39 6	01 45	33 9	5 7	4
35 9	35 9	35 7	35 4	35 3	35 2	35 3	35 3	35 2	35 5	08 25	38 8	02 35	32 5	6 3	5
36 7	36 4	36 4	36 1	36 0	36 0	36 0	35 8	35 8	36 1	07 00	39 2	02 22	32 9	6 3	6†
36 8	36 8	36 8	36 6	36 5	36 5	36 5	36 6	36 3	36 6	07 08	39 3	02 00	34 4	4 9	7
36 8	36 9	36 3	36 2	35 8	36 1	35 6	35 8	35 9	36 2	07 22	40 3	02 14	34 2	6 1	8††
35 9	36 3	36 4	36 2	35 9	35 9	36 2	35 9	36 2	36 8	06 26	41 8	01 50	34 8	7 0	9
36 3	36 3	36 2	36 2	36 0	35 9	35 9	36 4	35 9	36 3	07 00	39 9	01 33	34 2	5 7	10
36 1	36 1	35 8	35 7	35 6	35 3	35 7	35 6	35 1	36 3	06 22	40 0	02 15	34 1	5 9	11
35 3	35 4	34 6	33 9	34 2	34 3	34 3	34 6	34 3	35 3	07 15	38 8	01 54	32 5	6 3	12||
35 5	35 5	35 5	35 4	35 2	35 7	35 8	35 7	35 8	35 6	07 07	39 7	02 00	32 8	6 9	13
35 2	35 7	35 7	35 7	35 8	35 7	35 8	35 8	35 5	35 4	07 00	38 5	02 10	32 9	5 6	14||
35 9	36 1	35 9	35 7	35 8	35 8	36 1	35 8	35 9	35 7	07 12	38 2	11 15	34 4	3 8	15||
35 2	35 3	35 3	35 1	35 1	35 2	34 1	34 1	34 3	34 7	06 35	36 7	02 00	32 9	3 8	16†
36 0	35 8	35 8	35 5	35 8	35 8	35 6	35 8	35 8	36 3	07 09	40 5	02 00	33 0	7 5	17
36 0	35 9	35 9	35 7	35 9	35 4	35 4	35 7	35 9	36 0	07 25	40 2	02 00	33 1	7 1	18
35 9	35 9	35 7	35 6	35 6	35 0	35 3	35 0	35 7	35 9	08 00	38 9	02 15	33 5	5 4	19
36 4	36 2	36 1	35 8	35 4	35 1	35 8	35 3	35 1	35 6	06 55	38 6	02 00	33 6	5 0	20
36 1	36 1	36 1	36 0	36 0	35 8	36 0	36 0	35 7	35 7	06 24	37 8	01 26	32 5	5 3	21
35 8	35 6	36 1	35 9	35 8	35 6	35 8	35 5	35 2	36 2	06 45	40 8	02 00	33 3	7 5	22
36 2	36 2	36 2	35 8	35 5	35 4	35 4	35 4	35 5	36 0	06 52	39 3	01 54	33 4	5 9	23
36 4	36 2	36 0	35 5	35 3	35 0	34 8	35 0	34 8	35 9	05 43	39 8	02 10	33 1	6 7	24||
35 9	35 3	35 6	35 5	35 2	35 0	35 2	35 0	34 8	35 6	06 18	39 1	01 42	31 8	7 3	25
36 2	36 2	36 1	35 9	35 6	35 5	35 8	35 8	35 6	36 4	07 30	39 8	01 00	34 2	5 6	26
36 2	36 2	36 1	36 0	35 8	35 7	35 7	35 7	35 7	35 9	07 11	38 9	02 15	33 4	5 5	27||
36 4	36 5	36 4	36 1	36 1	36 1	36 0	35 8	35 7	36 4	06 40	39 0	02 00	33 4	5 6	28†
36 6	36 4	36 1	36 0	36 0	35 9	35 9	35 9	35 7	36 8	07 00	40 6	02 15	33 7	6 9	29†
37 4	37 3	37 4	37 1	37 0	36 7	36 6	36 6	36 6	37 3	06 15	41 3	02 15	34 3	7 0	30
35 8	36 0	35 8	36 1	36 2	36 1	35 5	35 4	34 8	36 9	06 30	40 2	23 58	34 6	5 6	31
36 0	36 0	35 9	35 8	35 7	35 6	35 6	35 6	35 5	36 0					5 9	Mean
36 2	36 2	36 1	36 0	35 9	35 9	35 9	35 8	35 7							Mean†
35 9	36 0	35 6	35 3	35 2	35 3	35 0	35 1	35 0							Mean††

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

TABLE 6
Hourly Values of Declination (Westerly), 1959
(Averages for sixty minutes, centred at the full hours of Greenwich Mean Time)
2° plus tabular quantities

June

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
1	34.4	33.7	33.3	34.0	35.8	38.3	39.5	40.0	39.5	38.3	37.2	36.7	36.2	36.1	36.5
2	35.1	35.4	34.8	35.3	36.4	37.2	37.4	38.1	37.5	37.1	36.5	36.4	36.4	36.2	36.9
3	35.5	34.6	33.4	33.8	35.4	36.5	38.0	38.6	38.2	38.3	38.0	37.2	36.3	36.2	36.5
4††	35.8	34.4	33.8	34.4	35.5	37.2	38.3	39.0	38.4	38.4	37.9	37.0	35.8	35.9	36.5
5	35.8	35.4	34.9	35.5	36.2	36.9	37.3	37.9	38.2	37.7	37.6	37.2	36.3	36.3	36.3
6	36.2	35.5	35.1	35.5	36.3	37.6	39.0	40.1	40.3	39.1	37.7	37.0	36.3	36.1	36.2
7	36.3	36.1	35.9	36.7	37.7	38.4	39.9	40.6	40.5	39.4	38.0	36.7	36.3	36.4	36.7
8	36.4	35.3	34.8	34.5	35.5	37.4	39.0	40.1	39.7	38.7	37.6	36.6	36.4	36.2	36.4
9	36.3	35.6	35.0	35.7	37.0	38.7	39.0	39.1	39.2	38.5	36.3	35.3	35.0	35.9	37.1
10	36.2	34.8	34.3	34.7	35.5	36.3	37.2	37.7	37.5	36.3	36.3	36.2	36.3	36.3	36.3
11	36.1	35.1	34.9	34.9	35.6	36.2	37.7	38.7	39.1	39.0	37.2	36.5	34.8	34.9	36.3
12†	36.2	35.8	35.4	35.6	36.2	37.7	38.6	39.4	39.4	39.0	38.9	38.2	37.5	37.0	37.2
13†	36.5	35.9	35.1	35.0	36.0	37.6	38.6	39.0	39.0	38.9	38.6	37.8	37.4	37.1	37.2
14	36.8	36.0	35.7	35.7	37.1	38.5	39.3	40.2	40.2	39.0	37.8	37.4	38.5	37.1	36.8
15	37.2	36.0	35.4	35.7	37.2	37.6	38.9	39.9	40.2	39.0	37.8	37.4	37.2	37.2	37.2
16†	37.1	36.2	35.4	35.3	36.0	36.2	36.9	37.6	37.6	37.1	37.1	37.4	37.4	37.2	37.1
17†	36.2	35.0	34.8	35.4	36.2	38.4	39.8	40.6	40.1	38.8	37.4	36.3	36.3	37.0	37.4
18	36.0	35.0	34.7	35.2	36.4	38.4	39.2	40.1	40.2	38.9	38.1	37.7	37.5	37.1	37.1
19	35.9	34.5	33.8	34.6	36.7	37.8	38.8	39.2	39.7	38.8	38.4	37.4	36.7	36.6	37.4
20	35.9	34.7	34.6	34.7	35.7	37.2	38.1	39.5	40.0	39.0	38.6	37.8	37.5	37.2	37.2
21	35.8	35.0	34.7	34.8	35.7	36.7	38.1	39.0	39.5	39.0	38.6	37.8	37.6	37.4	37.1
22	36.1	35.0	34.4	34.7	36.1	37.2	38.4	40.0	40.4	40.4	39.1	39.0	38.7	37.9	38.3
23	36.1	35.1	34.5	34.1	34.9	37.5	38.9	40.0	40.3	40.4	40.0	38.9	38.6	37.2	37.2
24	35.8	34.7	33.4	33.6	34.3	35.6	37.8	39.5	40.1	39.5	39.0	37.8	37.3	36.4	36.2
25†	35.9	35.3	34.6	34.6	35.6	37.3	37.8	39.5	40.2	40.1	40.1	39.1	38.0	36.9	36.7
26	36.3	35.9	35.0	35.6	36.4	37.1	38.2	40.2	39.9	37.9	37.4	37.5	36.8	36.3	36.1
27††	36.1	35.3	35.3	35.8	36.5	36.5	37.1	38.6	39.9	39.5	39.1	38.9	38.2	37.9	37.9
28††	35.6	34.0	33.6	34.1	35.2	37.2	38.6	39.3	40.3	39.2	38.2	37.9	36.6	35.4	35.0
29††	36.1	35.1	34.5	34.7	35.4	36.4	37.5	37.9	40.7	39.3	38.2	37.2	37.2	37.1	36.6
30††	35.2	34.4	34.0	34.9	35.6	37.2	38.4	39.3	39.5	38.3	36.5	36.0	34.8	35.2	34.9
Mean	36.1	35.2	34.6	35.0	36.0	37.3	38.4	39.3	39.5	38.8	38.0	37.3	36.9	36.6	36.7
Mean†	36.4	35.6	35.1	35.2	36.0	37.4	38.3	39.2	39.3	38.8	38.4	37.8	37.3	37.0	37.1
Mean††	35.8	34.6	34.2	34.8	35.8	36.9	38.0	38.8	39.8	38.9	38.0	37.4	36.5	36.3	36.2

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

TABLE 6

Hourly Values of Declination (Westerly), 1959

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

June 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		
									H	M		H	M		
37 1	37 1	36 8	36 5	36 1	36 0	35 8	36 0	36 2	36 5	07 30	40 3	02 00	33 3	7 0	1
37 1	36 5	36 8	36 4	36 0	36 0	35 7	35 7	35 4	36 4	07 15	38 2	02 00	34 7	3 5	2
36 3	36 3	36 3	36 2	36 1	35 9	35 9	35 8	35 9	36 3	07 35	38 9	02 00	33 3	5 6	3
37 2	37 2	37 0	36 8	36 5	36 8	36 3	36 5	36 2	36 6	07 20	39 1	01 50	33 7	5 4	4†
37 0	37 0	36 6	36 5	36 3	36 2	36 3	36 1	36 3	36 6	07 30	38 4	01 50	34 8	3 6	5
37 0	37 2	37 0	36 8	36 8	36 8	36 9	36 8	36 6	37 1	08 00	40 3	02 00	35 1	5.2	6
37 1	37 3	37 3	37 3	37 1	36 7	36 9	36 7	36 7	37 4	07 00	40 6	02 00	35 9	4 7	7
36 4	36 4	36 4	36 6	36 3	36 4	36 4	36 6	36 3	36 8	07 01	40 2	03 00	34 5	5 7	8
37 4	37 4	37 3	36 3	37 1	36 9	36 6	36 7	36 3	36 9	08 13	39 4	01 52	34 9	4 5	9
36 5	36 6	37 0	36 8	36 8	36 6	36 5	36 2	36 2	36 3	07 15	37 7	02 08	34 1	3.6	10
36 2	36 5	36 3	36 8	36 9	36 9	36 8	36 8	36 6	36 5	09 12	39 7	11 52	34 7	5 0	11
37 6	37 5	37 3	37 2	36 9	36 8	36 8	36 9	37 0	37 3	07 00	39 7	02 00	35 4	4 3	12|
37 4	37 5	37 4	37 2	37 2	37 1	37 1	37 1	37 1	37 1	07 45	39 2	03 00	35.0	4 2	13|
37 2	37 4	37 5	37 4	37 4	37 2	37 2	37 2	37 2	37 2	07 20	40 4	02 30	35 5	4 9	14
37 4	37 4	37 4	37 4	37 4	37 4	37 4	37 4	37 1	37 5	08 15	40 3	01 58	35 1	5 2	15
37 4	37 5	37 5	37 4	37 2	37 2	37 1	37 1	36 7	36 9	06 35	37 9	02 06	35 0	2 9	16†
37 7	37.8	37 5	37 5	37 3	36 7	36 3	36 1	36 0	37 2	07 00	40 8	02 00	34 8	6.0	17†
37 4	37 4	37 3	37 0	36 3	36 0	36 0	36 3	36 3	37 1	07 30	40 3	02 15	34 6	5.7	18
37 4	37 4	37 3	37 1	36 7	36 3	36 1	36 3	36 3	37 0	07 05	39 8	01 55	33 3	6 5	19
37 4	37 2	37 1	36 9	36 5	36 2	36 2	36 1	36 1	37 0	07 52	40 2	02 32	34 5	5 7	20
37 4	37 2	37 2	36 9	36 4	36 2	36 4	36 4	36 4	36 5	07 48	39 6	02 00	34 7	4 9	21
37 7	37 6	37 6	37 5	36 8	36 3	36 3	36 2	36 2	37 4	08 00	40 4	02 10	34 3	6 1	22
37 3	37 0	36 9	36 8	36 2	35 9	36 2	35 8	36 1	37 2	08 35	40 5	02 45	34 0	6 5	23
36 3	36 6	36 4	36 4	36 4	36 3	36 2	36 0	35 9	36 6	07 30	40 2	02 12	32 9	7 3	24
37 3	37 1	35 9	35 9	35 6	36 3	36 3	36 3	36 3	37 0	08 00	40 2	02 15	34 5	5 7	25†
36 3	36 5	36 8	36 8	36 5	36 4	36 4	36 4	36 4	36 9	07 25	40 6	02 17	34 8	5 8	26
37 1	36 4	35 7	35 7	36 4	36 4	36 5	36 4	36 1	37 1	08 00	39 9	01 25	35 0	4 9	27††
35 5	35 5	35 9	36 2	36 4	36 2	36 5	36 5	36 4	36 5	08 15	40 6	02 00	33 6	7 0	28††
36 9	36 4	36 1	36 1	36 2	36 2	35 7	36 2	35 9	36 7	07 36	41 0	02 30	34 4	6 6	29††
34 9	35 3	36 2	36 5	36 6	36 2	36 2	36 2	36 0	36 2	08 05	40 5	01 30	33 7	6 8	30††
37 0	36 9	36 9	36 8	36 6	36 5	36 4	36 4	36 3	36 9					5 4	Mean
37 5	37 5	37 1	37 0	36 8	36 8	36 7	36 7	36 6							Mean†
36 3	36 2	36 2	36 3	36 4	36.4	36 2	36 4*	36 1							Mean††

†Five international quiet days

††Five international quiet days

ΔLoss of record, day omitted for means

TABLE 7

Hourly Values of Horizontal Force, 1959

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

January

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†	529	535	546	563	591	632	668	667	649	619	596	576	563	551	543
2†	531	524	525	552	600	642	664	660	642	617	599	586	578	560	544
3	538	533	526	550	595	634	604	596	605	596	577	561	557	549	543
4	527	523	518	508	531	579	618	624	624	607	604	595	569	540	534
5	515	521	543	560	606	642	674	666	631	587	562	542	516	478	458
6††	451	445	457	467	488	527	565	605	594	575	536	517	509	480	463
7††	477	469	466	491	517	552	564	560	554	548	535	521	515	506	501
8	501	492	487	492	534	582	607	612	602	563	528	507	507	513	507
9††	478	487	496	524	550	579	588	587	575	553	535	515	504	481	459
10††	440	456	464	464	508	512	523	512	496	575	546	526	531	412	414
11	440	443	460	490	515	540	540	535	521	507	502	499	495	484	471
12	471	463	472	503	553	604	610	596	563	534	521	519	522	527	522
13	501	496	498	521	567	617	657	653	648	578	534	527	522	515	510
14	520	521	535	553	580	629	660	642	635	584	563	555	551	537	537
15	514	509	517	529	556	587	608	599	597	559	538	524	517	510	501
16	516	511	524	549	581	618	633	625	607	587	588	549	493	472	473
17	498	502	512	548	581	610	620	638	589	567	532	515	503	480	485
18	503	502	497	517	552	585	602	620	614	588	563	537	519	514	507
19	510	514	526	553	563	584	598	611	597	572	557	550	537	522	505
20†	504	513	534	564	599	621	640	640	627	601	580	562	550	535	526
21†	515	519	543	586	609	612	607	604	598	577	568	565	558	541	534
22	521	524	544	572	618	637	662	685	648	628	613	601	581	563	550
23	528	535	546	568	591	619	639	653	639	623	598	580	567	551	572
24†	524	532	547	577	618	657	676	667	646	620	603	588	568	554	547
25	521	518	529	578	623	658	708	693	636	598	582	591	609	556	516
26††	488	501	527	561	631	597	605	599	574	557	561	560	514	464	479
27	486	489	505	538	596	658	685	661	599	563	538	531	536	529	531
28	485	489	507	553	609	662	666	656	620	569	532	526	532	522	511
29	510	515	537	605	617	667	681	669	632	579	535	533	536	522	502
30	510	508	531	560	606	651	628	596	587	573	565	569	557	534	522
31	514	510	517	544	603	664	675	641	606	579	557	544	524	505	502
Mean	502	503	514	540	577	612	628	625	605	580	560	547	537	536	509
Mean†	521	525	539	568	603	633	651	648	632	607	589	575	563	548	539
Mean††	467	472	482	501	539	553	569	573	559	562	543	528	515	469	463

†Five international quiet days

††Five international disturbed days

△Loss of record, day omitted for means

TABLE 7

Hourly Values of Horizontal Force, 1959

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

January

39,000 γ plus tabular quantities

Hours G M T										Maximum		Minimum		Range	Date		
15	16	17	18	19	20	21	22	23	Mean	Time	Mag	Time	Mag				
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	H	M	γ			
541	538	537	534	534	534	536	536	533	569	06	08	675	00	02	528	147	1†
544	544	544	542	546	548	546	544	541	572	06	15	668	01	48	519	149	2 |
540	543	541	535	533	531	533	532	531	558	05	10	650	02	18	521	129	3
528	524	518	499	496	499	501	505	511	545	07	50	633	03	16	492	141	4
480	482	482	469	469	454	443	452	450	528	06	12	684	21	20	437	247	5
475	463	454	440	435	464	475	488	485	494	07	06	614	18	30	431	183	6 † |
500	500	494	491	480	492	480	485	490	509	06	30	584	01	58	454	130	7 † |
500	493	476	475	485	476	466	474	478	515	07	06	628	21	40	461	167	8
466	429	414	374	388	422	424	413	412	486	07	18	593	18	26	359	231	9 † |
394	375	374	385	408	408	405	419	438	458	05	45	539	16	30	307	172	10 † |
458	461	469	476	481	479	479	481	463	487	05	20	550	00	36	435	115	11
512	514	512	506	480	488	498	497	502	521	05	37	616	01	58	459	157	12
517	509	500	500	507	512	512	514	519	539	07	31	671	01	24	499	172	13
534	526	517	516	517	517	520	517	517	558	05	25	607	18	26	513	184	14
500	503	506	510	511	514	516	517	516	532	06	07	613	14	22	498	115	15
455	450	469	469	468	488	494	500	498	526	06	15	635	15	42	436	199	16
468	457	468	486	499	509	502	504	505	524	06	56	653	15	50	454	199	17
501	496	502	496	495	501	509	510	513	531	07	37	632	15	54	490	142	18
507	506	503	503	506	517	513	505	503	536	07	12	615	16	47	501	114	19
524	520	518	521	524	520	520	520	519	553	06	22	628	00	01	502	126	20 †
533	529	521	515	513	517	520	521	520	551	04	30	617	19	22	511	106	21 †
538	536	536	530	526	527	528	526	523	572	07	10	714	23	30	519	195	22
538	536	536	534	535	538	535	528	522	567	06	48	663	23	36	518	145	23
542	534	532	531	530	527	527	527	524	571	06	02	687	00	01	523	164	24 †
483	458	417	421	464	477	490	489	482	546	06	28	710	17	52	407	303	25
479	469	456	460	473	477	482	485	485	520	03	42	672	16	45	483	189	26 † |
523	510	488	472	475	477	479	484	485	535	06	06	694	18	00	467	227	27
505	504	500	498	506	508	507	501	504	541	05	18	676	00	15	482	194	28
482	473	482	493	490	502	518	510	513	546	06	04	699	15	46	467	232	29
519	510	511	506	517	525	524	521	516	548	04	58	663	18	14	502	161	30
498	498	506	507	506	506	512	516	511	544	05	56	685	13	50	496	189	31
503	496	493	490	494	499	500	501	500	535							172	Mean
537	533	530	528	529	529	530	530	527									Mean †
463	447	438	430	438	453	455	458	462									Mean † †

† Five international quiet days

† † Five international disturbed days

△ Loss of record, day omitted for means

TABLE 8

Hourly Values of Horizontal Force, 1959

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

February

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	509	510	525	558	606	627	639	627	598	584	557	550	540	515	505
2	507	509	522	560	603	638	647	635	579	558	535	524	522	479	455
3	487	493	511	533	570	590	603	604	598	600	578	536	518	499	498
4††	495	492	491	496	522	541	561	543	546	546	526	523	516	478	474
5	497	501	522	548	567	565	538	516	518	530	530	524	520	475	451
6	496	504	516	536	566	592	602	607	601	572	537	515	520	509	497
7	491	498	519	543	564	596	602	596	578	555	543	538	532	520	507
8	502	507	526	558	589	598	611	596	563	540	540	540	541	537	519
9	505	502	520	553	580	599	609	585	525	485	466	485	486	487	485
10†	493	497	522	549	581	606	621	613	591	568	550	540	534	522	514
11	520	521	542	581	617	648	688	694	694	678	520	446	454	435	403
12	484	489	495	508	511	530	554	558	562	556	542	519	524	507	505
13	519	527	541	561	592	613	634	630	615	592	573	541	537	513	503
14	494	493	510	537	567	595	621	617	598	589	572	554	540	496	456
15	474	485	506	529	553	594	572	562	594	607	558	520	495	479	453
16††	479	483	485	516	564	556	570	561	547	542	565	560	540	501	454
17	446	445	463	493	521	544	549	536	537	513	493	483	471	456	457
18†	474	473	483	501	531	564	574	577	577	581	581	565	537	513	504
19	500	496	512	536	563	577	573	552	528	538	539	538	517	485	472
20†	509	511	534	568	592	620	628	627	611	596	575	559	548	537	524
21†	514	510	508	527	558	604	644	641	622	600	586	573	560	544	532
22	520	535	569	606	644	643	626	632	626	594	555	551	551	545	534
23	515	519	515	522	558	573	557	601	560	534	511	502	507	518	513
24†	507	507	523	550	581	601	604	599	588	571	559	552	548	534	523
25††	521	523	559	615	661	683	693	646	520	500	505	442	483	454	420
26††	414	430	452	463	492	496	506	503	409	419	453	454	460	431	445
27	465	471	489	518	548	564	555	548	541	530	527	514	505	502	495
28††	467	474	500	520	573	596	615	602	576	535	514	500	479	437	427
Mean	493	497	513	539	571	591	600	593	571	558	539	523	517	497	483
Mean†	499	500	514	539	569	599	614	611	598	583	570	558	545	530	519
Mean††	475	480	495	522	562	574	589	571	520	508	513	496	496	460	444

†Five international quiet days

††Five international disturbed days

△Loss of record, day omitted for means

TABLE 8

Hourly Values of Horizontal Force, 1959

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

February

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				
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	γ	H	M	γ		
500	490	493	499	515	517	514	514	511	542	04	26	676	15	30	486	190	1
453	453	455	466	470	481	480	490	489	521	05	42	659	17	04	444	215	2
479	456	471	477	472	475	486	492	503	522	07	11	611	16	04	451	160	3
478	480	474	459	462	494	483	472	478	501	05	58	597	17	58	454	143	4†
454	459	448	451	471	478	478	481	491	501	04	50	585	17	15	440	145	5
481	479	493	493	508	500	490	490	494	525	06	58	616	15	14	474	142	6
500	490	485	492	500	500	499	501	501	527	05	40	610	16	50	483	127	7
509	513	510	515	504	511	508	518	515	536	06	00	622	21	04	500	122	8
473	474	481	487	495	491	490	482	481	510	05	03	619	10	06	461	158	9
512	507	507	508	511	507	512	525	531	538	05	58	623	00	08	488	135	10†
406	424	457	464	467	463	471	478	474	523	08	10	731	15	23	391	340	11
494	489	490	496	498	505	507	510	511	514	06	25	586	04	10	470	116	12
475	479	482	480	493	482	482	493	502	536	06	15	647	15	40	458	189	13
448	456	426	420	445	460	462	467	474	512	06	21	635	17	40	412	223	14
451	472	481	454	446	460	468	473	473	507	08	38	620	18	40	440	180	15
441	442	451	411	446	451	440	457	453	496	07	40	605	17	40	378	227	16††
463	463	463	472	466	468	472	477	475	484	05	43	560	01	20	433	127	17
505	502	500	501	500	500	501	502	503	523	09	54	584	00	30	469	115	18†
471	472	481	473	490	499	506	508	509	514	05	21	584	15	24	468	116	19
517	518	516	514	513	514	514	514	514	549	06	22	637	00	01	508	129	20†
522	518	515	513	513	509	507	517	520	548	05	10	650	02	04	504	146	21†
523	530	521	517	523	523	522	518	517	559	05	18	662	23	34	508	154	22
511	505	505	503	504	505	505	505	507	523	07	02	617	10	38	498	119	23
518	517	516	520	517	517	520	522	522	542	05	20	607	00	15	506	101	24†
359	276	306	327	326	354	384	392	398	473	05	50	750	15	50	271	479	25††
445	448	466	457	453	462	469	474	465	457	06	36	573	08	19	390	182	26††
489	470	422	452	447	449	450	452	457	491	04	56	574	17	24	390	184	27
427	417	415	432	424	427	457	460	460	489	06	22	628	16	34	397	231	28††
475	471	473	473	478	482	485	489	490	517						175	Mean	
515	512	511	511	511	509	511	516	518								Mean†	
430	413	422	417	422	438	447	451	451								Mean††	

†Five international quiet days

††Five international disturbed days

△Loss of record, day omitted for means.

TABLE 9

Hourly Values of Horizontal Force, 1959

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

March

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
1††	461	469	466	498	529	554	572	562	499	488	493	469	478	485	466
2	480	470	470	496	530	547	552	542	533	525	496	481	473	475	465
3	483	478	505	530	559	588	574	584	559	545	542	532	513	499	480
4	496	493	509	539	565	585	586	559	539	536	532	530	512	497	489
5	481	483	506	541	561	579	577	547	524	513	528	544	535	509	494
6	493	492	510	541	585	633	651	632	586	564	547	538	532	520	506
7	512	504	518	552	591	626	629	606	577	560	560	555	537	514	496
8	478	483	508	541	581	616	606	592	561	530	527	532	536	527	516
9†	493	506	521	562	609	647	670	658	634	600	565	545	536	531	518
10†	514	516	537	576	627	670	710	696	682	635	601	568	555	551	542
11†	529	530	560	609	653	696	713	701	669	622	591	572	566	554	542
12	524	513	527	561	621	680	664	653	640	602	577	526	527	517	512
13	516	523	540	574	595	636	658	660	637	619	591	561	545	526	516
14	522	522	541	569	608	640	679	643	623	583	564	549	543	536	527
15	520	523	531	557	586	620	645	640	619	593	574	562	553	542	533
16†	520	528	554	593	653	691	709	705	665	613	580	569	562	554	542
17	529	534	553	580	598	653	659	642	616	598	580	572	561	553	542
18	529	525	548	582	631	673	691	682	643	596	572	564	560	551	542
19	538	538	558	583	633	675	694	692	671	642	616	596	580	557	543
20	525	526	553	606	653	691	698	680	623	593	566	566	569	555	543
21	528	527	551	591	643	688	713	700	671	638	606	581	567	554	537
22†	522	524	545	581	612	661	652	620	566	541	538	556	567	559	547
23	547	554	588	640	679	733	674	647	623	560	547	564	565	554	543
24	526	522	544	586	632	700	693	672	633	582	551	545	561	559	545
25	532	539	581	646	679	686	723	686	563	530	523	524	546	552	538
26††	473	479	515	573	646	692	702	675	628	604	570	465	388	398	317
27††	398	401	413	449	465	513	471	375	203	301	366	371	351	291	237
28††	371	390	432	472	513	542	547	527	492	432	433	435	412	410	379
29††	415	414	420	465	491	568	543	525	516	499	446	407	396	402	386
30	435	432	449	487	544	582	609	588	569	534	489	482	478	473	468
31	468	467	494	536	579	624	630	598	573	549	517	517	502	482	485
Mean	495	497	518	555	595	635	642	622	585	559	542	529	520	509	493
Mean†	516	519	543	584	631	673	691	676	643	602	575	568	557	550	538
Mean††	424	431	449	491	529	574	567	533	468	465	462	429	405	397	357

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

TABLE 9

Hourly Values of Horizontal Force, 1959

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

March

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		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
473	465	457	443	445	470	472	475	482	486	06 32	607	18 18	439	168	1††
472	466	467	485	485	485	497	487	482	494	05 13	578	14 15	460	118	2
483	483	495	475	486	489	487	486	489	514	05 22	608	17 52	467	141	3
485	475	472	490	485	477	483	486	485	513	04 50	597	16 55	468	129	4
488	479	477	467	469	491	496	495	491	511	05 20	593	18 36	461	152	5
501	498	497	498	508	506	505	505	505	536	06 18	657	01 00	490	167	6
491	482	469	463	468	473	475	476	479	546	05 56	637	18 08	462	175	7
512	503	497	503	505	501	502	499	496	527	05 10	624	00 12	476	148	8
508	502	495	501	506	507	508	510	513	547	05 58	672	00 44	491	181	9†
536	534	529	527	526	525	524	528	529	572	06 06	719	01 00	513	206	10†
541	538	536	533	528	527	532	531	528	579	06 26	719	19 34	522	197	11†
505	497	490	495	499	516	516	518	517	550	05 44	714	16 56	485	219	12
514	514	510	511	511	512	514	526	522	555	05 50	676	20 50	506	170	13
527	523	518	523	518	515	518	519	518	555	06 10	695	19 50	515	180	14
528	525	525	524	524	523	523	524	523	555	06 02	652	00 01	518	134	15
538	535	535	537	538	539	540	535	531	579	06 46	719	00 21	516	203	16†
536	533	530	532	540	529	526	525	530	565	06 02	674	21 50	523	151	17
538	537	535	533	534	533	534	547	540	572	06 35	700	00 56	523	177	18
535	529	529	530	529	531	532	532	531	579	06 11	761	16 15	523	238	19
536	533	532	531	532	531	531	532	530	572	05 54	711	00 30	522	189	20
536	533	519	522	526	524	528	522	522	576	05 45	723	17 00	518	205	21
541	538	534	534	534	534	531	530	541	559	05 45	667	00 50	520	147	22†
537	527	518	525	526	529	527	529	530	574	04 56	753	16 56	515	238	23
536	532	526	520	514	520	524	530	532	566	05 19	718	19 02	512	206	24
505	479	472	466	475	467	463	478	479	547	06 24	782	20 22	453	329	25
344	376	384	383	387	402	393	440	422	486	05 35	715	14 12	270	445	26††
186	170	215	204	248	291	296	361	378	331	05 04	539	08 04	120	319	27††
336	317	351	377	354	343	369	377	370	416	05 00	573	15 56	310	263	28††
385	407	404	407	429	448	445	439	439	446	05 02	592	14 28	376	216	29††
470	468	460	466	469	468	467	471	473	493	06 04	636	01 01	429	207	30
479	479	479	472	484	482	479	481	483	514	06 15	639	00 45	460	179	31
487	483	483	483	487	490	492	497	496	529					200	Mean
533	529	526	527	526	526	528	527	528							Mean†
345	347	362	363	373	391	395	418	418							Mean††

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

TABLE 10

Hourly Values of Horizontal Force, 1959

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

April

39,000 γ plus tabular quantities

Date	Hours GMT														
	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	476	477	493	524	568	609	590	534	502	513	512	514	510	501	489
2	481	478	482	517	556	599	617	606	588	562	547	540	530	508	497
3	478	490	519	551	589	619	622	617	572	531	526	516	511	508	496
4	493	492	525	571	618	653	660	640	602	551	529	533	534	525	513
5†	497	503	533	588	654	684	681	648	598	552	530	531	538	537	528
6	510	513	545	592	654	701	717	687	641	599	567	553	547	541	533
7	507	514	538	597	654	695	700	668	631	591	550	526	522	526	521
8	503	501	517	547	582	629	651	647	605	545	506	485	491	477	487
9††	446	461	473	533	589	653	589	591	580	529	499	496	491	487	477
10††	500	495	500	514	555	623	620	613	571	471	480	525	514	429	343
11	411	446	456	512	560	574	584	575	529	499	493	495	506	498	491
12	490	485	501	559	620	664	664	641	618	595	559	535	516	504	497
13	485	490	513	550	602	632	661	629	594	571	548	532	521	512	507
14	500	501	519	555	600	633	643	649	592	578	566	562	551	539	524
15	490	486	499	530	588	652	685	653	657	615	571	537	528	521	512
16	501	502	516	552	604	638	647	648	617	583	559	534	530	528	520
17	507	511	533	580	620	649	659	651	638	601	569	538	524	505	497
18†	504	503	517	559	604	642	675	676	647	610	572	555	545	537	528
19†	514	520	545	585	627	658	669	659	636	606	570	551	546	538	529
20†	521	523	546	591	630	676	687	666	628	597	572	560	555	540	525
21	516	517	547	601	659	683	659	642	621	579	537	516	518	520	510
22†	505	503	518	561	614	653	668	658	640	613	581	555	540	539	531
23††	514	515	531	573	623	675	700	689	655	615	582	595	583	559	531
24††	409	441	481	533	570	604	614	594	546	523	506	502	488	444	421
25	462	460	476	537	610	617	618	620	570	533	508	495	506	500	489
26	483	486	500	525	553	597	636	627	624	581	558	540	510	502	499
27	486	478	480	516	556	596	636	634	608	577	539	508	494	475	466
28	496	482	495	527	571	625	646	636	617	575	540	517	518	507	495
29††	486	473	474	523	567	602	627	609	588	561	535	512	503	497	467
30	472	475	501	540	575	591	597	591	567	553	531	515	513	507	475
31															
Mean	488	491	509	551	599	638	647	633	603	567	541	529	523	510	497
Mean†	508	510	532	577	626	663	676	661	630	596	565	550	545	538	528
Mean††	471	477	492	535	581	631	630	619	588	540	520	526	516	483	448

†Five international quiet days

††Five international disturbed days

ΔLoss of record, day omitted for means

TABLE 10

Hourly Values of Horizontal Force, 1959

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

April

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		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ		
486	485	483	481	480	480	483	484	485	507	05 10	629	00 10	474	155	1
489	483	479	473	472	480	481	481	480	518	06 10	621	18 50	470	151	2
490	487	481	486	490	494	496	496	490	523	05 43	643	00 34	474	169	3
511	513	506	510	510	508	504	502	498	542	05 50	666	00 45	488	178	4
522	517	517	514	514	516	517	520	518	552	05 15	692	00 20	495	197	5†
530	518	513	511	509	502	499	504	510	562	06 15	720	21 02	498	222	6
516	508	497	490	495	517	513	497	508	553	05 48	712	18 15	488	224	7
495	480	474	461	464	474	483	478	465	519	06 10	664	18 26	456	208	8
474	471	465	467	505	505	497	491	500	511	05 26	674	00 01	436	238	9††
327	356	366	374	373	390	407	406	412	465	08 14	687	14 28	311	376	10††
486	487	485	490	494	495	484	479	499	501	06 34	603	00 45	409	194	11
495	492	487	486	485	487	490	487	487	535	04 32	678	00 40	471	207	12
503	501	499	495	495	496	499	505	501	535	06 00	674	00 06	484	190	13
516	521	523	519	516	515	513	506	497	547	07 00	658	23 52	488	170	14
507	505	505	503	499	500	505	506	502	544	06 40	696	00 46	484	212	15
516	513	513	510	513	513	517	513	508	546	06 57	663	00 52	498	165	16
504	506	507	508	506	506	510	510	509	548	05 46	671	14 00	493	178	17
519	517	516	518	519	517	517	517	514	555	06 35	685	00 38	499	186	18†
523	522	521	521	522	522	520	516	520	560	05 35	674	22 06	512	162	19†
523	524	523	520	520	521	524	523	522	563	05 50	705	23 59	515	190	20†
500	499	505	503	504	506	507	507	507	548	05 26	695	15 36	496	199	21
528	525	522	521	520	522	522	521	517	557	06 03	673	00 58	501	172	22†
516	488	467	436	405	367	348	381	395	531	05 40	702	21 06	328	374	23††
416	423	423	438	445	447	454	463	467	486	06 08	666	00 01	406	260	24††
483	483	472	470	477	477	481	490	486	513	06 36	661	00 54	456	205	25
499	497	495	495	484	484	483	483	492	526	05 46	649	22 17	478	171	26
461	456	477	477	473	476	482	494	498	514	06 19	649	16 10	452	197	27
489	485	482	480	478	476	480	477	482	524	06 18	651	22 36	469	182	28
441	429	413	427	437	448	461	463	472	501	05 30	660	17 45	406	254	29††
452	463	458	475	482	471	469	468	468	509	06 02	606	15 17	444	162	30
															31
491	488	486	485	486	487	488	489	490	530					205	Mean
523	521	520	519	519	520	520	519	518							Mean†
435	433	427	428	433	431	433	441	449							Mean††

†Five international quiet days.

††Five international disturbed days

△Loss of record, day omitted for means.

TABLE 11

Hourly Values of Horizontal Force, 1959

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

May

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	475	486	518	573	615	648	626	601	565	538	518	501	488	477	480
2	493	497	520	561	598	628	642	646	606	570	544	532	533	528	516
3	518	515	532	582	627	660	662	651	618	589	564	544	539	537	529
4	529	519	534	572	626	660	686	678	670	640	571	552	539	534	531
5	487	481	451	453	476	549	586	619	615	594	534	515	508	498	495
6†	498	501	517	556	601	611	648	636	612	596	574	558	547	538	530
7	515	519	545	595	641	674	680	663	632	597	571	556	553	551	540
8††	535	528	538	606	671	690	637	634	601	488	457	446	481	486	491
9	489	492	508	636	593	638	644	650	637	603	567	540	522	524	518
10	517	522	539	577	597	626	611	629	564	558	516	522	530	526	516
11	509	507	501	543	589	623	650	638	638	586	560	538	527	523	516
12††	551	529	535	574	616	632	618	622	580	525	498	487	488	478	479
13	439	443	449	470	505	538	573	600	593	549	524	505	496	478	471
14†	472	476	496	528	564	597	612	607	592	571	554	537	511	491	482
15††	488	491	513	547	576	609	622	626	618	589	559	514	490	502	486
16††	477	467	475	513	505	523	509	492	443	452	481	483	479	473	469
17	476	482	503	540	577	601	629	612	600	588	560	533	504	506	506
18	488	483	495	547	618	624	613	616	600	562	540	519	502	495	490
19	504	505	517	552	586	603	634	633	618	600	548	505	489	487	489
20	495	502	518	542	589	606	619	603	479	551	526	520	525	524	515
21	498	510	533	563	599	611	611	574	546	525	501	501	511	505	501
22	498	509	527	549	577	611	618	612	564	525	504	506	518	521	505
23	488	495	505	531	566	594	617	622	603	578	534	513	514	521	517
24††	501	506	507	512	563	626	718	666	610	578	546	477	459	467	453
25	448	447	457	505	562	593	621	575	540	516	500	487	491	490	484
26	480	484	497	522	567	615	636	633	613	585	556	528	522	518	511
27†	496	494	504	534	578	615	639	624	599	579	553	540	531	527	526
28†	510	513	522	548	584	604	621	619	619	612	591	567	545	537	535
29†	525	526	532	556	591	624	634	630	612	583	553	542	548	548	540
30	535	551	572	594	619	638	640	637	616	594	577	561	566	563	555
31	543	552	572	596	624	601	586	593	590	559	549	543	533	520	491
Mean	499	501	514	551	587	615	627	621	593	567	540	522	516	512	505
Mean†	500	502	514	554	583	610	631	623	607	588	565	549	537	528	523
Mean††	510	504	514	550	586	616	621	608	570	526	508	481	479	481	476

†Five international quiet days

††Five international disturbed days

ΔLoss of record, day omitted for means

TABLE 11

Hourly Values of Horizontal Force, 1959

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

May

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		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
480	482	480	482	489	492	499	495	493	521	05 10	661	00 01	474	187	1
514	512	508	507	510	515	517	515	519	513	06 32	657	00 30	491	166	2
525	521	517	517	516	517	524	521	523	556	05 30	668	01 00	514	154	3
525	512	507	503	502	508	524	510	501	500	06 22	704	23 59	488	216	4
489	487	492	494	493	493	494	496	496	512	08 20	636	04 17	410	226	5
522	520	520	521	522	521	519	516	516	550	06 01	652	00 01	496	156	6
535	532	530	531	531	531	534	536	538	568	05 42	687	00 17	515	172	7
505	512	495	496	498	498	491	501	493	533	04 01	712	10 40	429	283	8†
507	510	513	504	504	511	513	509	507	547	06 30	670	00 51	484	186	9
512	513	517	509	513	513	511	513	510	540	07 07	676	18 15	504	172	10
513	509	513	515	507	511	516	513	507	544	06 18	690	01 34	196	194	11
464	465	416	401	415	423	423	425	430	503	05 15	658	17 04	374	284	12†
469	468	469	472	476	481	488	479	475	496	07 10	616	00 02	438	178	13
483	484	485	487	489	490	491	491	4 0	520	05 52	615	00 40	470	145	14
482	487	490	495	482	478	482	467	483	524	07 25	641	22 25	458	183	15†
469	471	472	471	473	474	472	475	480	479	05 22	538	08 14	423	115	16†
504	494	492	489	493	496	498	496	495	528	05 30	661	00 01	473	188	17
491	493	498	505	496	488	486	489	506	527	04 06	644	22 00	478	166	18
487	483	484	489	492	490	492	492	496	528	05 50	649	16 40	482	167	19
501	505	498	493	483	496	504	498	495	524	05 38	633	19 30	479	154	20
499	498	491	481	483	483	492	503	498	522	06 14	621	20 10	476	145	21
484	486	492	488	482	483	487	488	487	522	06 26	641	15 18	179	162	22
508	505	502	492	489	488	497	503	505	529	07 35	633	20 25	485	148	23
457	448	458	465	470	473	471	497	459	516	05 40	750	11 27	142	308	24†
480	480	488	485	482	482	481	484	481	503	05 52	645	01 23	430	215	25
511	509	506	502	497	500	512	506	500	534	06 24	611	07 34	477	164	26
522	519	516	515	514	513	516	515	511	541	05 58	644	00 45	192	152	27†
534	534	531	530	529	529	527	528	525	554	06 22	627	00 20	509	118	28†
538	538	538	536	535	535	536	537	531	557	06 22	638	00 01	523	115	29†
546	544	549	544	544	544	540	540	540	571	06 30	645	00 01	534	111	30
473	472	479	488	499	495	487	491	490	534	04 20	639	15 30	468	171	31
501	500	498	497	497	497	501	501	499	532					177	Mean
520	519	518	518	518	518	518	517	515							Mean†
475	477	466	466	468	469	469	473	469							Mean††

†Five international quiet days

††Five international disturbed days.

ΔLoss of record, day omitted for means.

TABLE 12

Hourly Values of Horizontal Force, 1959

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

June

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	500	505	508	534	567	607	599	586	550	523	523	523	528	523	521
2	514	526	539	536	602	627	616	608	577	529	525	519	514	514	510
3	503	503	508	520	569	600	616	592	558	553	532	512	510	514	513
4††	521	523	507	520	551	600	617	627	623	617	560	521	503	503	506
5	507	496	506	544	554	585	570	581	578	570	558	540	528	521	510
6	517	518	511	532	562	594	609	620	621	589	569	541	530	521	513
7	522	524	532	564	602	604	623	627	617	580	548	534	516	536	531
8	528	537	538	547	576	609	634	658	643	608	590	558	539	536	532
9	527	545	547	573	594	605	591	586	592	575	522	498	484	484	497
10	513	515	521	547	573	547	579	582	581	573	570	550	536	529	520
11	521	527	536	550	577	608	650	643	642	637	614	565	517	507	512
12†	512	524	533	547	572	603	614	618	610	595	566	544	536	531	525
13†	524	527	524	537	566	606	632	630	617	596	571	540	533	538	536
14	525	542	554	579	619	646	652	649	627	593	581	567	548	528	524
15	539	539	558	592	625	639	658	643	628	582	568	548	536	529	525
16†	521	525	536	563	583	597	607	616	603	580	559	545	543	538	530
17†	529	545	560	587	621	648	647	636	617	584	555	541	543	552	551
18	534	543	558	589	607	604	622	625	602	584	559	551	541	534	525
19	527	545	571	601	623	645	620	607	567	563	549	544	548	546	547
20	534	546	567	584	609	631	645	646	636	617	593	567	554	553	547
21	535	541	558	574	609	638	652	646	627	608	582	561	555	550	539
22	535	544	561	582	619	625	657	663	634	612	593	556	533	524	522
23	532	535	536	550	572	617	643	642	646	630	605	569	554	548	545
24	506	524	536	546	540	552	596	623	615	589	548	519	506	505	501
25†	511	516	524	551	591	627	633	635	622	603	575	559	547	539	535
26	532	523	524	541	601	616	661	652	620	569	527	501	496	489	481
27††	510	518	531	548	568	582	586	605	610	602	590	572	561	539	530
28††	495	488	489	503	511	529	559	570	572	562	537	497	465	442	449
29††	487	496	494	501	514	519	522	528	601	525	472	421	449	468	458
30††	473	473	482	514	541	580	597	588	600	557	479	444	421	443	432
Mean	517	524	532	552	580	603	617	618	608	584	557	533	523	520	516
Mean†	519	527	535	557	586	616	627	627	614	592	565	546	540	542	535
Mean††	497	500	501	517	537	562	576	584	601	573	528	491	480	479	475

†Five international quiet days

††Five international disturbed days.

△ Loss of record, day omitted for means.

TABLE 12

Hourly Values of Horizontal Force, 1959

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

June

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		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
521	523	521	518	514	514	513	517	515	531	05 11	613	00 02	497	116	1
509	501	505	496	492	490	491	493	492	530	04 46	639	23 06	484	155	2
504	497	497	491	492	494	500	504	510	525	05 30	638	17 52	489	149	3
505	509	507	506	514	515	501	519	506	537	08 55	651	20 58	488	163	4††
508	505	504	506	507	511	513	517	518	531	04 54	600	00 58	493	107	5
520	523	521	513	527	526	527	517	520	543	07 48	637	02 18	507	130	6
524	522	527	528	525	527	527	526	527	551	06 30	642	00 28	521	121	7
527	519	517	515	513	515	517	527	524	554	07 01	672	18 23	509	163	8
502	501	498	500	502	509	512	509	508	532	04 38	626	12 32	474	152	9
513	517	516	517	516	515	515	515	518	537	06 18	595	00 53	507	88	10
508	510	494	498	504	507	508	509	509	548	09 11	684	17 24	490	194	11
528	528	527	523	520	523	522	523	523	548	06 36	621	00 01	511	110	12†
534	534	534	536	537	537	537	534	533	554	06 37	636	02 26	521	115	13†
519	522	527	528	529	529	528	527	525	561	06 24	658	14 45	516	142	14
525	524	524	525	526	527	524	524	523	559	05 45	670	23 59	520	150	15
526	526	527	530	532	533	527	527	526	550	06 34	648	00 12	520	128	16†
553	553	551	545	538	535	541	526	535	566	05 02	650	21 54	523	127	17†
524	525	524	519	513	513	520	526	526	573	06 34	639	19 42	511	128	18
545	545	541	538	534	532	532	537	535	560	04 46	654	00 01	525	129	19
542	541	539	541	539	538	539	535	535	570	06 06	659	22 40	531	128	20
534	533	535	533	530	533	536	535	535	566	06 42	663	19 25	527	136	21
529	533	536	541	540	544	544	539	539	567	06 42	674	13 35	518	156	22
541	536	537	539	521	512	510	510	506	560	04 38	667	21 38	501	166	23
500	502	502	514	519	510	511	511	510	533	07 10	630	14 38	498	132	24
531	530	528	530	534	537	533	528	537	556	05 07	641	00 26	510	131	25†
481	495	503	504	507	509	510	509	508	536	06 15	704	14 18	475	229	26
500	481	463	440	469	483	480	497	495	532	06 56	623	17 54	440	183	27††
456	456	451	451	460	459	474	480	482	493	08 13	583	13 35	436	147	28
450	450	435	436	441	444	458	473	470	480	07 37	648	11 10	412	136	29††
409	418	446	450	458	461	467	475	477	487	08 04	627	15 10	403	224	30††
512	512	511	510	512	513	514	516	516	542				145	Mean	
534	534	533	533	532	533	532	528	531						Mean†	
464	463	460	457	468	472	476	489	486						Mean††	

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

TABLE 13

Hourly Values of Vertical Force, 1959

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

January

2,000 Y plus tabular quantities

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1†	331	332	327	346	343	333	328	318	320	320	313	314	316	318	321
2†	331	333	333	325	308	291	287	295	300	308	316	322	330	323	322
3	328	333	310	335	307	285	277	297	301	301	310	321	322	322	323
4	324	331	341	356	353	325	310	307	309	307	310	310	310	311	319
5	327	332	342	344	331	308	287	276	271	286	298	300	299	298	301
6†	323	323	323	333	331	332	323	311	300	294	291	310	315	314	312
7††	330	331	333	329	316	309	308	300	301	298	300	314	321	323	327
8	331	332	332	330	317	301	286	276	273	277	287	296	309	321	321
9†	322	333	322	319	311	308	301	294	289	288	299	307	311	309	309
10†	332	332	322	322	320	320	325	319	305	308	312	311	312	311	322
11	333	331	333	331	323	325	332	333	341	339	336	333	327	325	324
12	311	330	336	336	318	289	287	292	280	299	309	311	320	327	326
13	333	333	330	321	322	313	300	286	274	271	300	310	312	319	322
14	331	333	331	322	322	300	297	295	296	295	308	311	310	313	322
15	327	325	320	315	323	312	309	308	297	293	307	308	307	313	319
16	331	332	331	335	331	313	310	300	295	289	307	297	288	301	312
17	330	333	330	328	333	312	303	296	297	296	308	311	315	312	322
18	324	332	327	331	330	311	288	275	267	272	286	297	309	319	322
19	325	331	328	320	311	309	300	297	300	309	311	311	311	315	322
20†	325	332	334	335	325	313	302	295	284	285	293	302	309	312	320
21†	324	325	331	332	323	312	319	312	307	310	318	324	323	322	324
22	328	332	331	333	330	312	299	288	290	295	307	304	304	314	320
23	326	333	312	335	332	313	313	310	300	297	301	310	312	313	320
24†	323	325	333	335	322	310	302	299	293	296	299	300	302	311	319
25	325	331	332	325	312	287	258	265	308	301	315	315	323	304	301
26††	325	332	332	333	336	320	322	325	323	320	320	316	299	287	320
27	332	332	331	326	315	297	285	277	278	295	300	305	313	319	323
28	327	331	333	333	323	300	296	296	300	310	317	317	313	312	319
29	331	333	328	322	315	300	304	304	304	315	313	325	332	336	334
30	346	342	341	348	352	338	327	338	338	336	335	327	327	329	333
31	314	314	310	340	338	326	313	310	318	318	325	327	329	335	339
Mean	329	332	332	332	325	311	304	304	300	301	308	312	314	316	321
Mean†	327	329	332	325	324	312	308	304	301	304	308	312	316	317	321
Mean††	326	330	326	327	323	318	316	310	304	302	304	312	312	309	318

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

TABLE 13

Hourly Values of Vertical Force, 1959

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

January

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				
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	γ	H	M	γ	γ	
322	322	322	323	325	325	328	329	329	325	03	20	348	10	00	313	35	1 |
323	324	323	321	329	329	328	328	329	319	01	00	337	05	22	286	51	2 |
324	324	323	322	323	324	321	324	324	317	02	25	341	05	49	269	72	3
319	318	319	315	319	321	322	324	329	321	03	25	364	06	54	306	58	4
321	323	324	321	321	319	317	324	322	312	02	30	345	07	55	273	72	5
322	321	321	319	318	332	332	333	331	319	03	03	338	09	50	289	49	6 |
326	325	323	323	327	329	324	321	324	319	01	10	334	08	58	296	38	7 |
321	321	317	321	325	321	318	323	322	312	02	38	334	08	41	272	62	8
321	307	310	303	319	333	330	322	322	312	01	04	334	08	14	287	47	9 |
316	313	320	325	333	327	325	331	335	321	22	36	313	08	40	302	41	10 |
322	326	332	334	333	332	331	332	323	331	08	02	343	01	22	319	21	11
323	323	323	322	316	322	325	324	328	317	02	25	339	05	42	282	57	12
323	320	319	323	328	326	325	326	331	316	01	10	334	08	25	266	68	13
322	320	319	322	323	321	325	324	331	317	01	10	334	06	46	288	46	14
322	323	324	325	330	328	327	326	327	317	23	58	331	08	45	290	41	15
310	312	325	324	324	333	333	332	330	317	02	42	336	11	24	287	49	16
315	317	323	331	333	332	323	321	324	319	01	08	335	07	08	290	45	17
320	320	324	322	323	324	325	324	327	312	01	10	334	08	02	266	68	18
320	323	323	324	328	324	323	322	323	317	01	10	332	08	08	296	36	19
322	322	323	323	324	323	323	324	324	316	02	30	338	08	15	278	60	20 †
324	324	323	323	323	327	327	331	331	322	02	30	333	08	25	304	29	21 |
319	321	322	322	324	324	324	323	323	316	01	06	334	07	06	284	50	22
320	322	323	324	325	325	323	322	322	319	02	47	338	09	13	295	43	23
320	320	322	323	323	323	323	323	323	315	02	35	339	08	00	293	46	24 |
300	302	297	309	327	332	331	324	322	314	19	40	333	06	53	254	79	25
322	320	320	323	327	327	330	330	331	323	03	35	354	12	26	271	83	26 | †
322	Δ	Δ	322	320	323	323	324	324	Δ	01	12	333	07	35	272	61	27
319	320	323	323	330	330	328	323	327	319	01	12	342	05	30	294	48	28
329	329	339	344	341	347	350	342	342	327	21	00	350	07	40	302	48	29
338	336	339	339	347	348	343	341	340	339	03	20	355	12	30	326	29	30
339	340	348	347	347	347	348	347	346	336	21	00	348	06	30	306	42	31
321	321	322	324	327	329	328	327	328	320							51	Mean
322	322	323	323	325	325	326	327	327									Mean †
321	317	319	319	325	330	328	327	329									Mean † †

† Five international quiet days

†† Five international disturbed days

Δ Loss of records, day omitted for means

TABLE 14

Hourly Values of Vertical Force, 1959

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

February

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	343	349	350	356	352	337	328	317	317	311	309	314	316	325	331
2	340	341	345	340	335	317	302	293	303	307	314	319	333	325	326
3	340	339	337	340	345	343	340	331	323	314	310	307	314	326	339
4††	340	339	337	332	348	340	342	341	339	338	336	339	334	326	339
5	348	341	342	344	341	342	351	352	350	344	336	330	330	328	329
6	346	347	348	352	352	346	341	334	330	330	318	325	333	335	341
7	342	345	342	343	341	340	337	337	333	334	333	335	333	337	337
8	342	345	345	348	344	336	331	329	329	334	331	328	329	337	336
9	340	342	342	336	340	331	330	319	322	330	341	337	329	330	340
10†	341	340	344	353	347	337	327	320	318	323	329	331	331	332	339
11	342	343	344	355	356	356	354	354	354	331	294	308	319	320	319
12	344	344	347	356	356	368	368	367	367	355	342	Δ	Δ	Δ	Δ
13	Δ	Δ	Δ	Δ	Δ	Δ	Δ	308	309	312	307	308	311	311	317
14	329	329	330	331	331	321	315	306	305	305	308	312	317	308	303
15	331	335	337	331	324	309	296	288	296	289	282	295	314	313	311
16††	330	331	330	335	335	324	330	335	333	332	326	323	318	314	307
17	320	323	330	323	323	311	300	297	293	293	301	303	306	314	323
18†	329	330	331	338	336	329	319	323	323	318	315	318	317	315	320
19	330	330	329	328	327	323	323	321	323	317	311	315	312	311	317
20†	330	332	329	324	315	302	297	297	296	299	295	306	311	319	321
21†	326	331	335	336	331	324	307	296	293	288	301	302	306	302	317
22	325	331	329	328	324	305	310	316	307	300	296	306	310	317	319
23	319	328	322	328	331	328	324	328	307	313	307	306	307	318	322
24†	328	329	320	320	318	310	310	318	319	323	322	322	319	317	319
25††	329	331	334	335	324	316	293	275	276	293	278	280	311	305	307
26††	331	330	319	314	319	329	329	312	322	341	331	326	322	317	330
27	324	326	329	331	331	329	319	326	325	319	318	310	307	318	325
28††	330	328	330	325	320	317	313	316	313	308	308	307	308	301	310
Mean	334	335	335	336	334	327	322	319	317	316	313	316	319	320	324
Mean†	331	332	332	334	329	320	312	311	310	310	312	316	317	317	323
Mean††	332	332	330	328	329	325	321	316	317	322	316	315	319	313	319

† Five international quiet days

†† Five international disturbed days

 Δ Loss of record, day omitted for means

TABLE 14

Hourly Values of Vertical Force, 1959

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

February

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	Time	Mag			
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	γ	H	M	γ	γ		
333	332	339	340	350	345	341	341	340	334	02	52	358	09	23	303	55	1	
331	337	340	346	346	350	345	344	341	330	02	02	352	06	35	292	60	2	
332	327	340	346	339	340	343	343	347	334	22	52	350	10	55	304	46	3	
341	345	344	340	341	357	345	339	340	340	19	52	359	13	08	322	37	4††	
340	341	340	345	353	352	345	344	347	342	19	08	358	12	54	324	34	5	
337	339	349	347	353	343	340	341	342	340	19	15	355	10	05	316	39	6	
339	339	340	342	351	345	343	343	342	340	18	39	354	09	34	330	24	7	
337	342	342	343	343	343	342	343	343	338	01	06	350	11	30	325	25	8	
338	342	344	347	349	344	343	344	342	338	18	45	350	07	32	318	32	9	
341	339	341	343	344	344	344	349	348	338	02	40	354	07	45	317	37	10†	
332	344	355	353	349	343	345	347	344	340	03	27	367	10	16	332	35	11	
Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ			Δ			Δ	Δ	12	
309	319	324	324	331	323	326	330	332	319			Δ			Δ	Δ	13	
309	321	309	318	331	332	331	330	331	319	19	20	335	07	40	300	35	14	
318	331	332	320	321	330	331	330	330	316	01	12	339	10	00	281	58	15	
311	319	327	311	332	331	323	332	329	326	07	25	344	17	42	291	53	16††	
325	325	326	329	325	327	330	331	330	317	22	00	331	08	07	291	40	17	
321	324	325	327	329	329	330	330	330	325	03	00	339	09	47	314	25	18|	
320	321	326	329	330	331	331	331	331	324	20	50	332	11	40	308	24	19	
320	323	323	324	326	325	325	325	325	316	01	05	335	09	49	293	42	20|	
317	319	319	320	323	322	320	326	326	316	02	35	342	08	48	286	56	21†	
317	322	319	320	326	324	324	320	322	317	01	05	336	10	00	295	41	22	
320	322	324	325	328	328	326	326	326	321	04	00	331	07	54	305	26	23	
319	322	324	326	325	326	326	326	328	321	01	00	330	05	40	307	23	24†	
293	281	317	318	320	332	340	332	330	310	20	56	342	15	34	266	76	25†|	
330	329	335	330	330	335	332	331	324	327	16	28	344	07	20	301	43	26††	
322	319	307	329	324	326	326	328	330	322	17	58	342	17	25	296	46	27	
318	318	322	330	323	329	340	334	330	320	20	55	342	12	40	294	48	28†|	
325	328	331	333	335	336	335	335	335	327							41	Mean	
324	325	326	328	329	329	329	331	331										Mean†
319	318	329	326	329	337	336	334	331										Mean††

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

TABLE 15

Hourly Values of Vertical Force, 1959

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

March

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††	335	334	319	314	305	295	295	286	291	298	299	293	311	321	322
2	326	322	326	329	323	318	318	308	308	06	297	296	306	317	319
3	326	327	326	322	315	307	308	307	307	308	311	311	308	318	317
4	330	327	329	335	333	329	321	319	313	307	309	306	303	312	319
5	327	329	330	330	321	316	310	316	320	321	324	319	310	316	319
6	327	328	330	327	324	314	306	302	300	300	308	310	309	316	320
7	330	332	332	333	332	331	308	298	295	296	298	303	304	310	318
8	328	331	333	338	330	330	310	313	309	312	310	318	319	320	322
9†	325	328	333	337	329	321	305	293	286	281	290	302	310	317	321
10†	327	332	333	331	325	313	303	292	279	277	289	297	309	313	320
11†	327	331	328	332	327	320	301	285	277	283	290	2 8	310	311	319
12	322	322	332	330	322	315	308	310	300	306	305	302	311	310	320
13	328	332	332	328	328	328	315	306	297	2 6	298	300	306	310	318
14	324	328	330	330	321	311	296	291	29 1	297	303	302	308	311	320
15	328	329	327	332	Δ	326	316	310	308	302	299	303	311	322	324
16†	329	332	330	328	322	301	297	292	299	311	311	310	310	312	317
17	325	333	331	325	312	295	283	282	281	280	282	293	303	312	313
18	326	330	329	327	311	295	285	282	293	305	307	312	307	311	318
19	329	333	333	329	323	311	Δ	295	298	298	305	307	311	313	317
20	320	334	333	323	309	298	289	288	293	300	311	313	317	318	317
21	329	331	327	316	307	297	269	259	259	270	286	299	308	316	317
22†	329	336	335	330	325	309	308	306	310	320	321	322	322	321	320
23	332	332	328	322	311	299	288	296	291	298	308	308	309	314	318
24	323	329	330	333	333	312	296	293	296	306	310	311	322	324	322
25	332	334	332	322	308	306	292	267	287	314	321	32 1	322	321	324
26††	329	342	341	332	318	302	280	275	286	310	318	276	271	302	281
27††	322	330	321	307	297	285	284	268	297	311	343	333	321	311	304
28††	340	343	345	337	330	331	313	308	304	307	315	318	308	318	319
29††	344	332	332	326	325	318	294	290	288	290	301	300	315	327	324
30	331	339	341	340	332	330	320	307	308	296	307	316	318	326	326
31	329	338	337	329	323	315	295	292	298	2 7	304	315	311	316	322
Mean	328	332	331	328	321	312	300	294	296	300	306	307	310	316	318
Mean†	325	332	332	332	326	313	303	294	290	295	300	306	312	315	319
Mean††	334	336	332	323	315	306	293	285	294	303	315	304	306	316	310

†Five international quiet days

††Five international disturbed days

 Δ Loss of record, day omitted for means

TABLE 15
 Hourly Values of Vertical Force, 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

March

2,000 γ plus tabular quantities

Hour, G M T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
326	320	322	318	320	331	330	328	330	315	15 32	337	06 54	282	55	1††
326	324	326	333	331	327	332	325	324	320	19 06	337	09 15	295	42	2
321	321	332	332	327	330	329	329	326	319	16 45	335	07 35	303	32	3
320	320	323	333	330	324	329	327	327	322	18 05	338	11 45	301	37	4
320	321	325	322	325	336	336	332	328	323	20 15	338	05 40	309	29	5
322	322	326	331	333	331	330	328	330	320	19 07	331	07 35	297	37	6
319	319	319	321	326	330	331	328	328	318	03 02	336	08 00	295	41	7
324	322	321	327	330	328	328	326	324	323	02 30	340	05 45	308	32	8
319	320	321	326	329	329	329	329	323	325	03 00	339	08 25	279	60	9
320	321	322	325	325	325	325	325	325	315	02 00	333	08 35	273	60	10†
320	321	321	323	323	326	327	327	323	315	02 50	331	07 50	275	59	11
320	321	321	328	328	331	330	329	328	319	02 30	334	10 13	296	38	12
321	323	323	328	328	329	328	333	326	319	21 25	334	09 25	294	40	13
322	322	323	327	326	326	326	328	327	317	01 00	330	06 30	285	45	14
322	322	323	326	326	327	326	326	327	Δ	Δ	Δ	Δ	Δ	Δ	15
318	319	322	324	324	324	325	323	324	317	01 00	333	07 04	291	42	16†
315	317	318	322	322	323	323	322	327	319	01 00	335	06 25	276	59	17
319	321	322	322	325	327	327	333	328	315	22 12	342	07 00	277	65	18
318	319	322	323	324	327	327	328	329	Δ	Δ	Δ	Δ	Δ	Δ	19
318	321	325	325	327	328	328	327	327	316	01 00	340	07 22	285	55	20
323	321	319	324	328	328	329	327	327	309	00 52	334	07 45	253	81	21
320	322	323	324	326	327	328	326	326	310	02 06	339	05 20	304	35	22†
320	320	321	326	332	320	327	328	327	316	18 31	336	05 42	286	50	23
321	322	324	326	326	328	330	332	332	320	03 51	335	06 24	290	45	24
318	315	320	324	334	330	323	330	330	318	19 30	341	06 55	258	83	25
318	338	338	336	336	338	333	348	330	316	21 45	363	11 18	264	99	26††
297	305	328	325	341	349	338	357	350	318	22 11	363	06 50	261	102	27††
317	309	334	314	328	326	339	336	331	325	21 20	352	08 30	296	56	28††
327	339	330	332	339	342	333	331	331	321	00 05	355	09 00	283	72	29††
328	328	328	330	331	330	330	332	332	325	01 06	343	09 12	293	50	30
324	327	329	325	333	329	329	331	330	320	01 06	341	06 40	289	52	31
320	321	324	327	329	330	329	330	329	318					54	Mean
319	321	322	324	325	326	327	325	325							Mean†
317	322	330	331	333	337	335	340	334							Mean††

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

TABLE 16

Hourly Values of Vertical Force, 1959

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

April

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	325	330	329	328	321	304	291	288	302	303	306	308	314	322	32
2	326	334	340	341	344	333	320	312	315	314	305	305	305	312	31
3	324	333	327	321	325	316	301	301	297	303	315	314	316	323	32
4	327	333	338	338	324	312	292	280	280	288	300	304	312	316	31
5†	326	334	334	326	308	298	282	279	294	309	319	324	320	318	31
6	323	331	333	328	314	299	280	275	281	290	304	313	318	313	31
7	326	337	335	331	313	304	290	282	282	292	308	320	320	317	31
8	323	329	334	328	323	312	295	279	269	275	293	309	312	311	32
9††	317	335	337	341	342	322	300	305	295	284	308	320	322	321	31
10††	329	334	335	338	340	327	305	281	266	284	317	327	319	293	27
11	328	333	332	330	322	309	300	292	289	296	308	319	322	321	32
12	321	327	331	331	319	303	299	295	294	295	296	302	306	313	31
13	323	331	339	341	331	317	299	288	293	302	305	306	306	308	31
14	324	326	332	332	320	303	287	281	273	293	299	308	313	317	31
15	319	330	331	343	334	312	292	281	280	280	284	298	308	313	313
16	322	330	329	320	308	299	287	282	270	272	282	294	307	316	314
17	324	330	335	330	316	303	294	292	286	285	289	300	307	305	307
18†	325	327	327	323	315	297	282	270	270	277	294	310	316	313	312
19†	325	331	330	318	306	290	274	270	274	279	281	293	302	306	308
20†	321	326	327	326	324	304	282	278	279	293	299	305	310	310	310
21	322	330	329	329	317	296	278	280	292	290	302	311	315	314	312
22†	322	330	339	332	320	308	292	284	286	288	297	306	315	315	315
23††	326	330	328	319	301	280	267	266	271	280	295	317	316	305	303
24††	327	333	320	314	295	284	287	290	297	305	316	320	314	302	303
25	326	329	332	331	320	299	296	293	303	309	305	317	319	316	314
26	322	329	332	335	326	319	303	293	296	295	308	314	311	315	31
27	323	329	329	327	321	304	294	278	280	290	299	308	313	309	316.5
28	326	329	326	325	310	292	278	275	280	278	281	292	307	311	311
29††	326	327	333	338	327	322	303	291	290	290	301	309	315	316	309
30	329	337	316	344	339	328	319	305	303	307	308	313	316	316	308
Mean	324	331	332	330	321	307	292	286	286	292	301	310	313	313	312
Mean†	324	330	331	325	315	299	282	276	281	289	299	308	313	312	313
Mean††	325	332	331	330	321	307	292	287	283	287	307	319	317	307	302

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

TABLE 16
 Hourly Values of Vertical Force, 1959
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

April

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			Y
321	323	326	326	327	327	326	326	326	318	02 15	331	06 30	282	49	1
318	318	322	323	321	328	328	327	326	322	03 46	348	10 08	303	45	2
321	325	325	326	327	327	327	327	325	319	01 00	335	08 00	295	40	3
319	324	324	326	326	325	324	324	324	316	02 00	339	07 22	278	61	4
319	320	324	324	324	325	325	325	325	317	00 55	336	07 00	279	57	5
317	317	319	322	322	320	319	323	326	314	02 00	333	06 42	272	61	6
320	320	320	320	321	325	325	323	324	316	01 15	337	07 45	281	56	7
324	323	325	321	323	325	329	325	325	311	01 50	325	08 00	260	56	8
320	321	322	323	328	322	322	326	329	321	03 10	346	08 14	280	66	9†
298	320	321	328	323	331	333	325	328	316	03 08	319	08 07	251	98	10††
321	324	325	328	331	330	320	322	331	319	01 25	334	07 46	288	46	11
317	318	319	320	321	323	323	320	321	314	01 25	333	08 00	294	39	12
315	318	320	320	320	323	321	325	324	316	02 45	343	07 15	285	53	13
313	319	321	321	321	321	321	320	318	312	02 54	336	07 40	271	65	14
316	318	319	320	320	320	321	323	322	314	03 02	317	08 30	276	71	15
316	318	319	318	320	320	324	322	322	309	01 00	330	08 00	268	62	16
316	318	319	321	321	322	323	323	324	312	01 35	336	09 00	282	54	17
312	316	318	321	321	319	322	322	322	310	01 00	328	07 45	269	59	18†
310	315	316	318	321	320	318	317	321	306	00 50	331	06 50	260	65	19†
312	316	320	320	320	321	322	320	322	311	01 30	328	07 00	278	50	20†
314	316	320	321	323	322	322	322	322	313	01 25	331	06 03	276	58	21
316	317	318	320	322	323	323	323	323	314	02 00	340	06 52	285	55	22†
307	305	310	308	305	304	304	321	322	304	02 00	331	07 00	266	65	23††
311	321	322	328	327	327	327	328	327	314	01 45	339	05 30	279	60	24††
315	319	317	317	325	322	325	327	325	317	02 30	333	07 05	291	42	25
319	319	323	325	319	323	323	323	328	317	02 15	337	08 40	291	46	26
315	317	328	326	323	325	326	328	329	311	22 30	332	07 00	277	55	27
314	316	317	320	320	321	326	326	328	309	00 52	331	07 00	275	56	28
305	311	313	323	325	328	328	326	331	316	03 30	341	08 45	289	52	29†
308	322	320	328	328	323	323	325	327	321	01 45	347	07 32	302	45	30
315	318	320	322	323	324	321	324	325	314					56	Mean
314	317	319	321	322	322	322	322	323							Mean†
308	316	318	322	324	324	321	325	327							Mean††

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

TABLE 17

Hourly Values of Vertical Force, 1959

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

May

2,000 γ plus tabular quantity.

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	328	338	341	355	344	327	314	305	310	305	304	310	313	314	316
2	327	333	332	331	330	326	313	294	291	301	307	313	316	316	315
3	326	333	340	339	328	314	302	257	302	298	298	303	313	314	314
4	332	332	336	330	320	302	295	277	279	277	278	302	310	310	314
5	325	336	334	331	325	333	323	320	318	323	314	324	325	313	315
6†	329	336	344	339	325	315	306	301	300	301	302	312	312	312	313
7	325	332	335	330	315	303	294	296	299	303	313	321	317	313	313
8††	332	332	339	333	312	289	279	265	253	301	290	308	327	320	317
9	326	337	349	346	337	320	304	296	293	294	302	312	317	319	316
10	330	335	331	325	320	316	302	304	300	312	316	324	324	322	317
11	325	330	331	334	325	319	312	299	306	295	301	301	309	318	316
12††	352	338	329	324	311	299	293	288	264	272	299	300	311	316	318
13	332	340	342	336	319	309	291	289	280	281	295	305	317	320	317
14†	329	336	335	325	316	305	299	297	299	299	299	304	310	312	311
15††	321	331	329	323	311	310	311	317	322	316	313	310	313	322	313
16††	325	334	335	333	330	321	311	306	315	335	333	328	323	322	322
17	328	334	327	315	311	310	301	294	299	297	299	306	312	324	323
18	333	329	335	337	318	292	295	289	288	303	307	312	315	316	316
19	329	330	321	315	307	300	306	302	299	297	286	293	310	316	316
20	327	332	326	322	297	287	281	285	287	295	303	304	304	310	313
21	331	333	323	312	300	292	289	295	314	320	320	321	318	313	315
22	328	330	316	307	297	289	281	277	290	295	312	312	312	314	310
23	330	332	331	324	321	314	308	311	306	308	307	313	321	319	317
24††	326	332	339	335	331	317	302	271	271	277	282	281	303	311	310
25	314	330	334	340	326	313	298	294	291	295	311	318	319	318	317
26	322	335	344	347	328	311	306	301	301	306	311	311	317	317	313
27†	320	329	336	337	320	310	294	284	294	303	307	312	313	314	316
28†	328	331	336	329	317	303	289	289	292	292	292	290	300	311	314
29†	320	326	331	336	332	325	318	312	308	307	307	313	314	317	317
30	323	329	334	319	298	290	292	292	303	313	310	306	311	313	314
31	324	325	318	316	309	306	316	316	328	329	321	313	307	309	304
Mean	327	333	333	330	319	309	301	296	294	302	304	309	314	316	315
Mean†	325	332	336	333	322	312	301	297	299	300	301	306	310	313	314
Mean††	332	333	334	330	319	307	299	289	285	300	306	305	315	318	316

†Five international quiet days

††Five international disturbed days

△Loss of record, day omitted for means

TABLE 17
Hourly Values of Vertical Force, 1959

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

May

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		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
319	323	325	327	327	327	328	327	326	323	02 45	357	09 45	303	54	1
316	320	321	321	325	325	325	324	326	319	01 00	333	07 30	290	43	2
316	319	320	324	322	322	326	325	326	318	02 30	344	06 55	296	47	3
315	311	316	320	320	324	330	326	320	312	02 03	337	09 25	270	67	4
317	321	325	325	325	325	325	325	326	324	01 37	339	10 00	313	26	5
314	317	320	321	323	323	321	321	323	318	02 12	347	08 00	300	47	6†
314	317	320	324	321	325	325	326	329	317	01 30	336	06 15	291	45	7
325	330	324	327	325	325	325	325	326	314	01 46	341	07 32	251	90	8††
313	320	323	320	324	326	326	325	325	320	02 00	349	08 15	292	57	9
317	322	323	322	324	324	324	324	324	320	01 39	336	07 39	296	40	10
317	318	321	324	322	324	325	324	325	318	23 50	352	09 05	294	58	11
317	319	311	307	310	321	324	325	328	312	00 21	368	07 52	259	109	12††
318	324	325	326	326	326	331	325	324	317	01 15	343	08 25	277	66	13
315	319	323	323	323	323	323	323	324	316	01 00	336	07 00	297	39	14†
316	322	323	329	319	318	323	319	329	319	01 22	335	11 20	305	30	15††
323	324	327	327	327	327	327	328	333	326	01 25	340	06 26	301	39	16††
323	322	323	323	325	325	325	325	327	317	01 00	334	06 54	292	42	17
322	323	324	328	323	322	322	325	334	317	00 58	342	07 20	282	60	18
317	322	323	327	329	325	325	327	328	315	00 32	334	10 35	285	49	19
315	319	320	321	320	327	326	321	322	311	00 40	334	06 30	283	51	20
318	320	320	319	321	319	322	330	322	316	00 45	334	05 30	286	48	21
308	311	320	319	319	319	322	322	322	310	00 35	333	07 00	276	57	22
317	318	319	318	319	320	321	324	325	319	00 35	333	09 24	304	29	23
317	316	322	326	328	328	328	343	319	313	21 43	365	07 16	258	107	24††
318	319	323	320	319	320	319	323	320	317	02 48	342	06 14	289	53	25
316	317	318	319	318	320	326	319	319	318	02 09	350	07 28	300	50	26
317	318	319	320	322	322	322	323	323	316	02 24	341	06 50	283	58	27†
317	317	318	319	319	320	320	320	319	312	02 15	338	06 40	288	50	28†
317	318	318	319	319	319	319	320	319	319	03 00	337	09 00	307	30	29†
312	313	319	318	318	319	318	318	319	313	02 00	335	04 27	289	46	30
305	310	317	321	324	321	317	317	321	316	23 45	331	04 48	302	29	31
316	319	321	322	323	323	324	324	324	317					52	Mean
316	318	320	320	321	321	321	321	322							Mean|
320	322	321	323	324	324	325	328	327							Mean††

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

TABLE 18

Hourly values of Vertical Force, 1959

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

June

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	334	337	335	335	317	305	301	302	316	327	333	328	325	317	315
2	321	330	331	322	312	300	291	285	282	288	297	303	305	308	310
3	330	340	340	336	321	309	296	290	292	301	301	303	308	312	315
4††	329	332	333	336	322	317	315	304	306	293	296	305	306	304	308
5	321	320	334	339	338	339	339	327	315	307	303	307	314	311	314
6	319	321	321	322	315	311	307	305	299	304	302	302	304	307	307
7	321	323	327	332	332	314	313	301	297	302	299	316	315	313	312
8	321	326	316	315	302	283	267	265	255	270	280	291	299	309	309
9	320	328	326	326	321	313	314	325	328	314	302	303	307	312	314
10	325	326	327	322	303	301	303	296	303	301	299	301	302	306	306
11	325	326	327	328	318	312	303	298	292	295	298	302	303	302	302
12†	321	320	315	314	310	304	296	290	290	290	290	302	308	312	313
13†	324	327	337	338	328	317	313	314	308	304	309	309	312	315	313
14	322	326	326	321	311	296	293	290	299	311	313	303	303	314	313
15	323	327	323	310	304	284	278	267	263	280	304	310	315	315	313
16†	320	329	338	333	326	315	307	303	310	307	313	315	315	314	313
17†	325	327	326	326	317	316	315	313	309	316	322	319	315	315	315
18	325	327	327	320	309	307	305	304	304	305	310	310	308	315	315
19	328	331	326	311	304	303	302	304	311	316	322	322	318	316	315
20	327	331	325	320	316	311	308	299	293	296	301	303	306	315	315
21	327	328	328	328	320	315	305	301	303	303	304	308	314	315	316
22	328	333	333	335	325	318	299	281	294	304	301	307	307	316	309
23	327	333	335	340	341	337	325	318	317	307	309	311	318	317	316
24	325	336	322	316	305	294	292	282	286	290	293	295	305	314	318
25†	329	331	329	325	319	310	294	284	283	286	293	305	312	322	319
26	329	330	340	340	336	318	307	293	289	290	292	305	302	318	317
27††	329	330	324	325	327	332	329	320	318	307	306	308	318	318	319
28††	331	330	329	324	320	326	307	295	289	291	297	300	308	309	319
29††	337	343	345	355	348	349	348	342	314	303	298	308	321	322	320
30††	333	336	336	339	337	336	324	319	309	296	297	309	316	322	318
Mean	326	329	329	328	320	313	307	301	299	300	303	307	310	313	314
Mean†	324	325	329	327	320	312	305	301	300	301	305	310	312	316	315
Mean††	332	334	333	336	331	332	325	316	307	298	299	306	314	315	317

† Five international quiet days

†† Five international disturbed days

Δ Loss of record, day omitted for means

TABLE 18
Hourly values of Vertical Force, 1959

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

June

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.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H M	γ	H M	γ	γ	
317	318	319	319	318	318	318	321	321	321	00 45	339	06 00	300	39	1
315	314	308	317	316	316	316	318	323	310	01 30	333	08 08	280	53	2
315	315	317	315	316	317	320	320	323	315	01 00	341	07 00	290	51	3
312	317	318	320	324	323	316	326	315	316	02 30	341	09 20	291	53	4†
314	315	316	319	319	320	319	319	319	320	02 45	340	10 00	303	37	5
314	316	316	315	323	317	316	315	319	312	10 10	327	08 15	296	31	6
312	314	316	319	318	318	318	316	318	315	02 45	331	07 42	291	43	7
310	309	313	314	314	315	316	324	319	302	00 35	327	08 07	254	73	8
315	316	316	320	322	324	322	321	322	318	07 55	332	10 13	297	35	9
310	314	315	316	318	318	318	318	319	311	02 18	330	04 45	291	39	10
306	312	307	314	318	318	318	318	318	311	02 30	331	08 25	289	42	11
314	316	316	316	316	318	318	318	318	309	00 34	324	09 30	289	35	12†
314	314	318	318	319	318	318	316	318	318	02 20	339	08 30	302	37	13†
311	316	319	321	322	321	320	319	319	312	01 00	326	07 11	286	10	14
315	317	319	319	320	319	317	317	319	308	01 00	327	07 15	262	65	15
314	315	316	319	320	320	317	319	319	317	02 00	338	07 00	303	35	16†
316	319	319	319	317	317	319	317	323	318	00 37	328	08 15	307	21	17†
315	317	319	319	319	319	323	325	325	316	01 00	327	07 40	303	24	18
316	317	319	321	321	321	321	325	325	317	00 45	333	05 40	297	36	19
316	318	320	323	324	320	323	320	321	315	00 34	333	07 35	292	41	20
316	317	321	324	324	326	324	321	326	317	00 36	330	09 02	300	30	21
319	323	329	329	329	329	329	325	327	318	02 52	335	08 23	280	55	22
317	319	321	325	318	318	318	323	321	322	03 08	312	09 30	306	36	23
319	322	324	330	330	324	326	329	325	313	01 16	311	07 10	281	60	24
320	322	324	328	329	330	328	325	332	316	23 08	336	08 00	283	53	25†
318	328	330	330	329	328	328	328	326	319	02 45	342	06 42	287	55	26
314	313	311	312	325	331	330	338	331	322	21 55	339	10 00	306	33	27†
321	324	324	324	330	330	332	332	335	318	23 40	338	08 02	287	51	28†
320	321	319	324	326	328	333	338	332	329	02 58	355	10 25	290	65	29†
312	321	334	332	333	332	332	334	333	325	03 00	342	09 35	284	58	30†
315	317	319	321	322	322	322	323	323	316					44	Mean
316	317	319	320	320	321	320	319	322							Mean†
316	319	322	322	328	329	329	334	329							Mean††

†Five international quiet days

††Five international disturbed days

ΔLoss of record, day omitted for means

TABLE 19
PRINCIPAL MAGNETIC STORMS
January to June 1959

Observatory	Greenwich Date, 1959	Storm Time		Sudden commencements			C-figure Degree of Activity (iv)	Maximal Activity on K scale 0 to 9			Range			
		G M T of beginning	G M T of Ending (i)	Type (ii)	Amplitude (iii)			Greenwich Day	Greenwich 3 hr index	K-index	D	H	Z	
					D	H								Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Astrophysical observatory, Kodaikanal		h m	d h		'	γ	γ					'	γ	γ
	January 9	14 58	11 10	S C	1	38	23	m	10			6	191	46
	January 25	08 58	26 17	S C	1	28	12	ms	26			4	261	81
	February 11	07 56	12 14	S C	2	69	18	ms	11			6	338	87
	February 16	00 01	17 09					m	16			4	223	58
	February 25	02 28	26 22	S C	1	50	21	s	25			8	469	86
	March 26	08 42	29 18	S C	3	89	24	s	27			10	520	95
	April 9	18 28	10 21	S C	1	40	17	ms	10			7	380	75
	April 23	10 35	24 13	S C	2	52	18	ms	24			9	329	58
	May 4	20 20	5 15	S C	<1	11	6	m	5			5	220	26
	May 11	23 30	12 20	S C	1	41	23	ms	12			7	278	99
	May 24	05 38	25 13	S C	3	112	24	ms	24			8	320	98
	June 11	09 06	12 01	S C	1	70	17	m	11			6	191	30
June 29	07 30	3 17	S C	3	116	12	m	29			6	238	55	

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

(i) Approximate time of ending construed as the time of cessation of reasonably marked disturbance movements in the trace

(ii) S C = Sudden commencement, () = Gradual commencement

(iii) Signs of amplitudes of 'D' and 'Z' taken algebraically, (D—reckoned negative being westerly)
(Z—reckoned positive being vertically downwards)

(iv) Storm described by three degrees of activity { (m)—for moderate (when range is less than 250γ),
(ms)—for moderately severe (when range is between 251γ and 400γ)
(s)—for severe (when range is above 400γ)

IONOSPHERIC DATA

Characteristic . fo F2
Unit Mc.
Month . January 1959

TABLE 1
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	F	F	8 5 ^F	8 4	7 4	5 4	5 8	U9 6s	12 0	12 7	12 9	11 8
2	F	F	F	F	U5 9 ^F	5 9	6 1	9 4	11 8	11 8	11 4	10 8
3	F	F	F	F	F	6 5	6 4	9 7	11 4	12 0	12 3	11 4
4	F	U7 7 ^F	U7 5 ^S	F	F	8 4	U9 5 ^S	11 4	12 3	C	C	C
5	U8 0 ^F	F	F	U6 5 ^F	F	8 3	8 6	11 6	12 2	12 2	11 6	11 1
6	8 8	8 9	8 9	9 8	9 7	9 9	11 0	12 1	12 8	13 5	13 6	12 8
7	U9 6s	U9 2s	U9 6s	U9 5s	9 2	U7 4s	5 9	9 9	12 0	12 9	13 4	12 9
8	F	F	F	F	F	F	U7 1s	11 1	12 4	12 3	12 3	11 2
9	F	F	U7 2 ^F	F	U7 7 ^F	U7 6 ^F	7 9	U10 7s	12 6	12 7	12 2	11 8
10	F	U9 0s	U9 4s	U0 0 ^F	U9 1s	U9 0s	8 1	10 2	12 3	13 0	12 8	12 5
11	11 5	11 0	10 1	10 5	10 3	9 6	6 5	U10 1s	11 7	12 4	11 7	11 8
12	U8 5 ^F	U8 5 ^{FH}	U8 3 ^F	8 1	8 0	5 7	5 6	U9 0s	11 3	11 8	10 6	10 4
13	9 3	8 4	8 4	8 5	8 7	6 4	U5 0s	9 3	11 7	12 2	12 4	10 7
14	9 1	F	U7 7 ^F	7 8	7 8	7 8	7 8	10 4	11 6	11 6	11 0	10 7
15	F	10 0	9 7	8 8	6 7	4 5	5 1	9 4	11 3	12 4	12 0	11 3
16	U9 2s	8 6	8 0	7 7	6 6	4 6	J5 1s	U9 4s	11 3	C	C	C
17	10 4	U9 3s	U9 1s	8 4	J7 4s	6 9	5 7	U9 3s	11 4	11 4	10 8	10 7
18	U9 3s	8 7	8 0	8 1	7 6	5 2	4 9	9 0	11 4	12 6	12 0	11 1
19	8 0	8 4	7 8	U7 2s	6 5	5 8	U6 2s	9 8	12 4	12 6	12 9	12 6
20	C	C	C	C	C	C	C	C	C	C	C	C
21	J7 4s	FS	FS	5 6	5 6	5 0	5 1	9 4	11 8	12 6	11 7	11 7
22	F	F	U8 2s	FS	5 8	3 9	U4 8s	9 0	11 4	11 4	10 8	10 4
23	FS	FS	FS	FS	U7 0s	U5 8 ^{FS}	U5 5 ^{FS}	U9 2 ^{FS}	U12 0s	12 6	12 9	11 9
24	F	F	U8 2s	FS	U6 6s	4 7	U5 1s	U9 4s	11 6	11 4	10 8	10 2
25	F	F	F	F	7 0	F	U4 7 ^F	U9 3s	U12 0s	C	C	C
26	F	U10 8s	U10 6s	U9 4s	8 6	U7 5s	U7 2s	J10 2s	11 1	11 2	11 2	11 6
27	12 8	12 0	10 0	U9 1s	8 6	U7 1s	5 7	9 7	11 7	11 4	10 6	10 4
28	U11 4 ^{FS}	12 5	U11 8s	U9 8s	7 8 ^v	5 3	4 9	U9 8s	12 3	12 5	11 1	10 8
29	F	F	7 8	6 4	6 7	6 5	S	S	U11 6s	U11 7s	10 6	10 5
30	11 7	10 8	8 9	8 7	8 4	7 2	U6 0s	S	11 3	U11 7s	11 3	11 0
31	FS	F	8 5	8 0	8 0	6 9	5 7	U9 6s	U11 7s	12 8	11 7	10 1
Mean	9 7	9 6	8 8	8 4	7 6	6 6	6 3	9 9	11 8	12 2	11 8	11 3
Median	9 3	9 1	8 5	8 4	7 6	6 5	5 8	9 6	11 7	12 3	11 7	11 1
Count	15	16	23	21	26	28	29	28	30	27	27	27

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

Characteristic fo F2
Unit Mc.
Month January 1959

TABLE 1
Ionospheric Data
75 °E Mean Time

Latitude 10° 2N
Longitude . 77°.5E

12	13	14	15	16	17	18	19	20	21	22	23	Day
11 0	10 7	10 8	10 9	11 0	11 0	U10 2S	F	F	F	F	F	1
10 3	10 2	10 4	10 3	10 1	U9 5s	8 7	F	F	F	F	F	2
11 8	12 0	12 1	12 4	12 2	12 0	11 2	9 2S	F	10 2	9 6	8 2	3
C	C	C	C	11 6	11 1	U9 5S	F	U8 7F	F	F	U8 2F	4
11 1	U11 6R	12 4	12 8	13 0	12 6	12 6	12 6	10.9	11 0	10 1	U9 5S	5
11 7	11 3	10 7	10 0	9.6	9 8	10 2	9 7	10 2	U11 5S	11 2	10 6	6
11 5	10 8	10 8	10 6	10 5	10 4	9 8	C	C	C	F	U6 5F	7
10 0	9 8	9 9	10 6	11 2	U11 6S	12 1	10 6	9 0F	F	F	F	8
11 7	11 7	11 7	11 8	11 7	11 5	11 3	U9 8S	F	U9 2F	F	F	9
12 8	12 7	12 7	12 6	13 1	12 7	12 7	12 2	U13 1R	12 6	12 1	U11 6S	10
12 1	12 3	12 4	12 5	J12 0S	11 4	U10 8F	FS	F	F	U8 4F	9 4	11
10 5	10 8	11 3	11 6	11 5	11 4	11 0	10 5	U9 4S	9 7	9 5	9 5	12
10 0	9 6	9 4	9 8	10 6	11 1	U10 7S	9 4	9 1	10 2	F	FS	13
10 5	10 6	10 9	11 6	11 6	11 8	11 6	J10 0S	F	F	F	F	14
11 3	11 7	11 4	11 2	11 1	11 6	11 5	10 9	10 5	U9 5S	J10 2S	U9 8S	15
C	C	C	11 3	11 4	J11 0S	U9 8S	9 1	9 1	U9 9S	10 5	10 7	16
10 4	10 8	10 7	10 9	C	J11 0R	10 4	9 4	U9 1F	U8 9F	10 2	U9 6S	17
10 8	10 4	9 9	10 1	10 4	10 8	10 4	10 0	9 4	U8 8R	U8 3F	U7 6S	18
12 3	11 7	11 7	11 7	11 4	10 8	U9 3S	U8 2F	F	C	C	C	19
10 2	10 2	10 4	10 6	U10 7S	U10 8S	U9 6S	U8 2S	FS	FS	FS	FS	20
12 4	12 4	12 6	12 6	12.2	11 2	U9 3S	FS	FS	FS	FS	FS	21
10 2	9.9	10 4	10 8	U10 8S	U11 2S	U11 4S	F	FS	FS	FS	FS	22
11 5	11 4	11 2	11 4	11 4	11 2	U11 6S	F	FS	FS	FS	FS	23
U9.6S	9 9	10 0	9 9	U9 5S	U9 0S	U9 0S	U8 8S	8.4	F	F	F	24
10 3	10 9	11 4	U11 8S	12 2	U11 8S	U10 6S	U9 0S	F	F	F	F	25
12 0	12 0	12 6	12 7	12 7	J12 4S	U11 6S	U11 4W	U10 8S	U10 6S	U11 2S	U11 3S	26
10 1	10 4	11 0	11 5	U11 7S	11 5	S	9 3	U9 0F	S	FS	FS	27
10 8	11 2	11 8	11 2	12 6	12 6H	U12 2S	10 9H	F	F	C	F	28
10 6	C	11 5	U11 7S	12 1	J12 0S	11 0	F	F	F	F	U11 2FS	29
11 3	11 8	12 1	12 4	U12 0S	11 3	U10.0S	8 4	7 8F	8 0F	8 4	FS	0
10 0	10 4	11 0	11 2	11 0	U10 7S	U9 6S	U8.7F	F	8 2	U9 0S	U9 8S	31
11 0	11 0	11 2	11 4	11 4	11 2	U10 6	9 8	9 6	U9 9	9 9	U9 6	Mean
10 8	10 8	11 2	11 4	11.4	11 2	U10 6	9 6	9 1	U9 8	10 1	U9 8	Median
29	28	29	30	30	31	30	22	15	14	13	15	Count

Sweep 1 0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic fo F2
 Unit Mc
 Month January 1959

TABLE 1—Contd
 Ionospheric Data
 75°0'E Mean Time

Latitude 10° 2N
 Longitude 77° 5E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	8.3	8.5	6.3	4.5	7.9	11.2	12.2	12.8	12.1	11.3
2	F	F	F	U5.9F	U5.9F	5.0	8.2	10.8	11.7	11.8	10.9	10.4
3	F	F	F	F	6.6	5.8	8.3	10.8	11.9	12.4	11.8	11.6
4	U8.0F	U7.7F	U7.2S	F	F	8.7	10.6	12.2	12.7	C	C	C
5	U7.4F	F	U6.3F	U6.5F	7.8	8.2	10.3	11.8	12.4	12.1	11.3	U10.9R
6	9.1	8.9	9.2	10.0	9.8	10.4	11.7	12.6	13.4	13.7	13.1	11.8
7	9.2	9.2	U9.5S	8.9	8.9	5.3	8.3	11.2	12.3	13.2	13.2	12.1
8	F	F	F	F	F	U6.4F	U9.1F	12.4	12.3	12.3	11.8	10.4
9	F	F	U7.0F	U7.6F	U7.7F	7.8	U9.4S	11.7	12.9	12.5	11.8	11.8
10	U9.0F	U9.0F	9.7H	9.8	U9.4S	8.0	9.3	11.5	12.7	12.7	12.6	12.6
11	11.4	10.7	10.2	10.6	9.6	7.7	8.3	11.2	11.8	11.8	11.8	11.8
12	8.3	8.2	U7.6F	8.1	7.4	4.3	U7.4S	10.3	11.7	11.3	10.4	10.4
13	8.6	8.3	8.6	8.5	8.0	4.1	7.5	10.6	12.1	12.5	11.5	10.1
14	9.0	8.1	F	8.1	8.0	U7.4S	9.4	11.3	11.7	11.3	10.8	10.6
15	U10.2F	9.7	U9.3S	7.5	5.7	3.9	U7.5S	10.3	12.2	12.3	11.6	11.2
16	8.8	8.4	U7.9S	7.5	5.6	3.7	U7.5S	10.4	12.0	C	C	C
17	J9.8S	U9.3S	9.0	7.8	U6.9S	6.2	7.6	10.7	11.8	10.9	10.8	10.6
18	8.9	8.5	7.9	8.2	6.7	4.1	7.0	10.2	12.2	12.5	11.7	10.9
19	8.4	8.3	J7.4S	6.7	6.2	5.6	8.2	11.4	12.5	12.6	12.8	12.4
20	C	C	C	C	C	C	C	C	C	C	C	10.4
21	S	S	5.8	5.8	U5.3S	4.7	U7.2S	10.8	C	12.4	11.4	11.8
22	F	F	FS	U7.3S	4.8	3.1	7.0	10.4	11.4	U11.1R	10.6	10.4
23	FS	FS	FS	FS	U6.5S	F	F	U10.8FS	12.4	12.7	12.6	11.6
24	F	F	FS	U7.0S	5.5	F	FS	10.8	U11.7S	11.4	10.4	9.8
25	F	F	F	F	F	F	U7.4S	10.6	C	C	C	C
26	F	U10.8S	U9.9S	8.8	8.5	7.0	8.6	U10.8S	11.4	10.9	11.4	11.8
27	12.8	11.0	U9.5S	8.8	7.8	5.8	8.0	11.0	11.7	10.8	10.5	10.2
28	U12.0FS	12.1	U10.3S	8.8	6.8	3.6	U7.4S	11.0	12.7	U11.8S	10.7	10.7
29	F	U9.2S	U7.2S	F	6.7	U6.4S	U8.1S	S	11.8	11.2	10.5	10.4
30	11.1	9.8	8.6	8.8	U7.8S	U6.1S	7.9	10.8	11.4	U11.7S	C	11.0
31	FS	8.6	8.5	7.9	U7.6S	5.9	8.0	11.0	12.4	12.4	10.7	10.0
Mean	9.5	9.2	U8.4	8.1	7.2	5.9	8.3	11.0	12.1	12.0	11.5	11.0
Median	9.0	9.0	U8.6	8.1	6.9	5.8	8.0	10.8	12.2	12.3	11.4	10.9
Count	17	19	22	24	27	27	28	29	28	27	26	28

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic fo F2
Unit Mc
Month January 1959

TABLE 1—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10° 2N
Longitude 77° 5E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
10 8	10 8	11 0	10 9	11 0	10 6	U9 3s	F	F	F	F	F	1
10 2	10 4	10 3	10 4	U9 9s	9 0	U7 7s	U6 5F	F	F	F	F	2
12 0	11 9	12 2	12 2	12 4	11 8	10 4	9 1	F	F	8 8	U8 0F	3
C	C	C	C	11 4	U10 1s	U9 2s	8 7	8 8	U8 8F	F	F	4
U11.3R	12 0	12 9	13 0	U12 8R	U12 5R	U12 3s	U11 9F	10 9	10 7	U9 5s	8 9	5
11 6	11 1	10 4	9 7	9 5	9 9	9 7	U9 6s	11 1	11 2	11 3	U9 8s	6
10 9	10 9	10 6	10 5	10 4	10 2	U9 1s	C	C	U7 6F	F	F	7
9 8	9 8	10 1	10 8	11 5	12 0	11 4	U9 5F	F	F	U8 6F	F	8
11 6	11 7	11 9	11 8	11 3	11 4	U10 8s	F	F	F	U9 0F	F	9
12 8	12 8	12 5	12 8	13 2	12 8	12 5	12 6	13 0	U11 6s	U11 7s	12 0	10
12 3	12 3	12 7	12 3	U11 7s	U11 4R	9 5	F	F	F	8 6	U9 3F	11
10 6	11 1	11 5	11 7	11 5	11 3	U10 4s	U9 7s	9 6	9 7	9 4	9 6	12
9 8	9 4	9 7	10 3	11 0	11 0	U9 8s	U8 9F	U9 6s	10 3	10 5	U9 3s	13
10 4	10 8	11 3	11 7	11 7	11 7	11 1	J10 0s	F	F	F	F	14
11 7	11 7	11 3	11 2	11 4	11 6	J11 2s	10 6	FS	U9 5s	9 7	U9 7s	15
C	C	11 0	11 5	11 2	U10 3s	U9 5s	8 8	9 5	10 3	10 7	10 7	16
10 4	10 8	10 8	C	J11 0R	10 9	U9 8s	9 4	U8 8F	U9 6s	U9 8s	U9 6s	17
10 8	10 0	10 2	10 4	10 6	10 5	10 3	U9 5s	9 1	U8 8F	F	7 7	18
11 9	11 6	11 7	11 6	11 0	U10 0s	8 8	F	F	C	C	7 C	19
10 3	10 4	10 5	10 6	10 9	S	U9 3s	U8 0s	S	S	S	S	20
12 4	12 4	12 6	12 3	11 6	U10 6s	S	S	S	S	S	F	21
10 0	10 1	10 6	10 9	U11 2s	U11 2s	S	F	FS	FS	FS	FS	22
11 4	11 3	11 2	11 6	11 4	11 4	S	F	FS	FS	FS	F	23
9 8	10 0	9 9	J9 6s	U 9 2s	U9 2s	9 0	8 4	U7 9s	F	F	F	24
10 6	11 1	11 6	12 0	12 0	U11 2s	U9 4s	F	F	F	F	F	25
12 0	12 2	12 6	12 8	12 6	U11 8s	U11 4s	U11 2W	U10 8s	U10 6s	J11 2s	J12 0s	26
10 3	10 6	11 3	11 8	U11 6s	U11 2s	U10 5s	F	F	FS	FS	F	27
10 8	11 5	12 1	12 4	12 6	U12 3SH	U11 8s	F	F	F	F	F	28
10 8	11 4	11 5	12 0	U12 0s	U11 4s	U10 0W	F	F	F	F	11 5	29
11 5	11 8	12 1	12 4	11 8	U11 0s	U9 6s	7 8	F	F	FS	FS	30
10 2	10 8	11 1	11 2	11 0	U10 3s	9 2	U8 1F	F	8 6	U9 0s	U11 4s	31
11 0	11 1	11 3	11 5	11 4	11 0	U10 1	9 4	9 9	U9 8	9 8	U10.0	Mean
10 8	11 1	11 3	11 6	11 4	11 2	U9 8	9 4	9 6	U9 7	9 6	U9 6	Median
29	29	30	29	31	30	28	19	11	13	14	14	Count

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

Unit Mc
Month January 1959

TABLE 2
Ionospheric Data
75 °E Mean Time

Latitude . 10° 2N
Longitude 77° 5E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	L	L
3									L	L	L	L
4									L	C	C	C
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	L	L	L
14								L	L	L	L	L
15								L	L	L	L	L
16								L	L	C	C	C
17								L	L	L	L	L
18								L	L	L	L	L
19								L	L	L	L	L
20								C	C	C	C	C
21								L	L	L	L	L
22								L	L	L	L	L _H
23								L	L	L	L	L
24								L	L	L	L	L
25								L	L	C	C	C
26								L	L	L	L	L
27								L	L	L	L _H	L _H
28								L	L	L	L	L _H
29								L	L	L	L	L _H
30								L	L	L	L	L _H
31								L	L	L	L	L
Mean												
Median												
Count												

Sweep 10 Mc to 250 Mc. in 27 seconds.

Characteristic . fo F1
 Unit : Mc.
 Month January 1959

TABLE 2
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10°.2N
 Longitude : 77°.5E

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

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

Characteristic : fo F1
 Unit : Mc.
 Month : January 1959

TABLE 2—Contd
 Ionospheric Data
 75°0'E Mean Time

Latitude : 10°.2N
 Longitude : 77°.5E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	L	L
3								L	L	L	L	L
4								L	L	C	C	C
5								L	L	L	L	L
6							L	L	L	L	L	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L ^H	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	L	L
16							L	L	L	C	C	C
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20							C	C	C	C	C	L
21							L	L	C	L	L	L
22							L	L	L	L	L ^H	L ^H
23							L	L	L	L	L	L
24							L	L	L	L	L ^H	L
25							L	L	C	C	C	C
26							L	L	L	L	L	L
27							L ^H	L	L	L ^H	L ^H	L ^H
28							L ^H	L	L	L ^H	L	L ^H
29							L ^H	L	L	L	L	L ^H
30							L	L	L	L ^H	L	L ^H
31							L	L	L	L	L	L ^H
Mean												
Median												
Count												

Sweep 10 Mc to 25 Mc in 27 seconds

Characteristic fo F1
 Unit Mc
 Month January 1959

TABLE 2—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10° 2N
 Longitude 77° .5E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
C	C	C	C	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	L	L	L								14
L	L	L	L	L								15
C	C	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
LH	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
L	L	L	L	L								26
LH	L	L	L	L								27
LH	L	L	L	L								28
LH	LH	L	L	L								29
LH	L	L	L	L								30
LH	LH	L	L	L								31
												Mean
												Median
												Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic · fo E
Unit Mc
Month January 1959

TABLE 3
Ionospheric Data
75 0°E Mean Time

Latitude .10°.2N
Longitude : 77°.5E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1								2 7	3 3	U3 7R	A	B
2								2 7	3 4	A	A	A
3								2 7	3 4	A	A	A
4								2 7	3 3	C	A	C
5								2 6	3 3	A	A	A
6								2 6	3 2	A	A	A
7								2 4	3 4	A	A	A
8								2 5H	3 3	A	A	A
9								2 6H	A	A	A	A
10								2 6H	3 2	A	A	A
11								2 6H	A	A	A	A
12								U2 8R	3 5	A	A	A
13								2 5	U3 2R	A	A	A
14								2 8	A	A	A	A
15								U2 5R	A	A	A	A
16								A	A	C	C	C
17								R	A	A	A	A
18								2 5	A	A	A	A
19								2 6	A	A	A	A
20								C	C	C	C	C
21								A	A	A	A	A
22								2 6	A	A	A	A
23								U2 6A	A	A	A	A
24								A	A	A	A	A
25								2 7H	A	C	C	C
26								A	A	A	A	A
27								2 8H	A	A	A	A
28								2 6	A	A	A	A
29								U2 5A	A	A	A	A
30								A	A	A	A	A
31								2 5	A	A	B	A
Mean								2 6	3 3			
Median								2 6	3 3			
Count								24	11	1		

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo E
Unit Mc
Month January 1959

TABLE 3
Ionospheric Data
75 0°E Mean Time

Latitude 10° 2N
Longitude . 77° .5E

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

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic fo E
Unit Mc,
Month January 1959

TABLE 3—Contd
Ionospheric Data
75°0'E Mean Time

Latitude . 10° 2N
Longitude : 77° 5E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 3	3 2	3 5	A	A	A
2							2 2	3 0	A	A	A	A
3							2 2	3 0	A	A	A	A
4								3 0	B	C	C	C
5							2 2	3 0	A	A	A	B
6								2 9	A	A	A	A
7								3 0	A	A	A	A
8							2 1	3 0	A	A	A	A
9								A	3 6	A	A	A
10							2 0H	2 9	A	A	3 8	A
11								A	A	A	A	A
12								3 1R	A	A	A	A
13							1 9	A	3 5	C	A	A
14								A	A	A	A	A
15							2 1RH	U2 9A	A	A	A	A
16							2 0	A	A	C	C	C
17								A	A	A	A	A
18								2 9	A	A	A	A
19							1 9	A	A	A	A	A
20							C	C	C	C	C	A
21							1 9	A	C	A	A	A
22							U2 1R ^S	A	A	A	A	A
23							U2 1A	A	A	A	A	A
24							U2 2AH	A	A	A	A	A
25							U2 2A	A	C	C	C	C
26							A	A	A	A	A	A
27							2 1	A	A	A	A	A
28								A	A	A	A	A
29							2 2H	A	A	A	A	A
30								A	A	A	C	A
31								2 8	A	A	A	A
Mean							2 1	3 0				
Median							2 1	3 0				
Count							17	13	3		1	

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . fo E
 Unit Mc
 Month . January 1959

TABLE 3—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10°.2N
 Longitude : 77° 5E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
A	A	B	A	A	2 0							1
A	A	B	A	A								2
A	A	A	3 7	u3 or								3
C	C	C	C	A								4
B	A	A	A	A								5
A	A	A	A	A								6
A	A	A	A	u2 9A								7
A	A	A	A	A								8
A	A	A	A	3 0								9
A	3 9	3 6	u3 4A	A								10
A	A	A	A	A								11
A	A	A	A	A								12
A	A	A	3 7	A								13
A	A	A	A	A								14
A	A	A	A	A								15
C	C	A	A	A								16
A	A	A	A	A								17
A	A	A	A	A								18
A	A	A	A	A								19
A	A	A	A	A	S							20
A	A	A	A	A	A							21
A	A	A	A	A	A							22
A	A	A	A	A	A							23
A	A	A	A	A	A							24
A	A	A	A	A	A							25
A	A	B	A	A								26
A	A	A	A	A								27
A	A	A	A	A								28
A	A	A	A	A								29
A	A	A	A	A								30
A	A	A	A	A								31
												Mean
												Median
.	1	1	3	3	1							Count

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

Characteristic of Es
Unit Mc
Month January 1959

TABLE 4
Ionospheric Data
75 0°E Mean Time

Latitude : 10° 2N
Longitude 77° 5E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1								G	G	8 0	11 0	11 0
2								G	6 6	9 8	11 0	11 8
3								G	G	10 6	11 0	10 0
4								8 0	G	G	C	C
5								G	G	10 0	11 2	11 0
6								6 4	G	9 6	10 8	12 0
7								G	7 8	9 8	11 4	11 6
8	4 2							G	G	9 2	11 7	12 0
9								G	7 0	9 8	12 0	12 0
10								G	7 8	10 6	12 0	10 6
11	4 6							G	9 3	10 7	11 4	11 2
12								G	6 7	10 8	11 1	11 1
13		2 9	2 4					G	G	10 2	11 4	12 2
14		4 0						U5 8s	9 6	10 8	11 6	11 6
15								G	7 0	9 1	11 6	11 2
16		5 2	6 7					7 4	8 8	C	C	C
17	3 2	4 8	3 5					G	8 5	9 6	10 6	11 2
18								G	8 5	9 4	11 0	11 0
19								G	8 8	9 4	11 4	11 4
20	C	C	C	C	C	C	C	C	C	C	C	C
21								S	U8 8s	11 4	11 8	11 7
22	U3 0S	S						G	U11 0S	12 4	12 8	12 8
23								4 0	U9 0S	12 4	12 8	12 6
24				U4 0S		4 0		S	U9 0S	12 0	12 0	12 6
25					3 0			G	10 4	C	C	C
26								U9 6s	U12 0S	12 2	12 6	13 0
27								G	U10 0S	10 4	12 6	12 6
28								4 6	9 4	11 8	12 0	12 8
29			U4 2S					U5 0S	U7 4S	11 4	13 0	12 6
30		U5 0S	U5 0S					U6 0S	U9 0S	12 0	14 4	14 0
31								U4 4S	U9 6S	12 4	14 4	14 0
Mean		4 4	4 4					6 1	8 8	10 6	11 9	11 9
Median		4 8	4 2					G	8 5	10 6	11 6	11.8
Count	4	5	5	1	1	1		28	30	27	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo Es
Unit Mc
Month January 1959

TABLE 4
Ionospheric Data
75 0°E Mean Time

Latitude 10°.2N
Longitude .77°.5E

12	13	14	15	16	17	18	19	20	21	22	23	Day
11 4	11 6	11 0	11 0	8 8	S							1
11 2	12 0	11 0	11 0	8 8	6 6							2
9 6	11 0	10 6	9 4	G	7 6							3
C	C	C	C	9 4	7 0							4
9 6	11 0	11 0	10 4	8 2	7 6		2 9					5
12 2	12 0	12 0	10 8	9 8	8 0							6
11 4	10 6	11 6	11 2	7 8	7 8		C	C	C			7
11 6	11 6	10 8	10 0	8 6	G							8
12 2	12 0	11 4	10 6	8 6	10 8							9
15 6	10 6	10 8	5 4	4 4	6 8				8 0	7 6	8 6	10
11 8	10 9	11 0	11 3	8 4	6 6							11
11 3	10 7	10 4	8 4	8 6	8 5	1 8				3 4		12
12 0	11 6	11 0	9 5	7 8	6 9							13
11 6	12 0	11 4	9 8	8 6	7 6		2 1					14
11 0	11 6	11 6	10 1	7 0	6 8						5 0	15
C	C	C	10 7	8 8	7 4							16
11 3	11 2	11 2	10 6	C	6 4			1 9	3 8			17
11 1	11 2	10 8	10 6	8 4	6 8							18
11 2	11 8	11 6	10 4	9 0	6 8				C	C	C	19
12 8	12 8	12 2	S	09 08	S							20
12 6	12 2	11 5	S	S	S							21
13 0	13 0	12 8	U11 08	U9 08	U8 08	S						22
13 0	12 0	12 0	U11 08	U9 48	U9 48							23
13 0	12 6	12 0	10 8	10 4	U9 48	S						24
12 2	12 2	11 8	10 6	11 0	U8 08	4 4						25
12 5	12 4	B	11 0	11 6	U11 08	S			U5 88	3 4		26
13 0	12 4	11 6	11 0	U9 08	U6 08							27
12 8	12 4	12 0	9 0	9 0	U5 08					C		28
12 6	C	12 8	12 0	U9 88	U6 88	U3 08			U5 08		3 0	29
13 0	14 0	12 8	12 6	U9 08	U8 08	U3 08						30
13 4	14 0	13 0	U11 08	U9 28	U9 08				S			31
12 1	11 9	11 5	10 4	8 8	7 6							Mean
12 2	12 0	11 6	10 6	8 8	7 5							Median
29	28	28	28	29	28	4	2	1	3	4	3	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic fo Es
Unit · Mc
Month : January 1959

TABLE 4—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10° 2N
Longitude 77° 5E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	G	9 8	11 2	11 6
2	4 2	6 6					G	G	9 2	11 0	11 4	11 8
3							G	G	8 6	10 4	10 6	11 8
4	2 8						9 0	G	B	C	C	C
5							G	G	9 0	10 0	11 0	11.0
6								6 1	8 8	10 6	11 0	11 6
7								6 6	9 6	11 1	11 8	11 7
8							G	G	9 2	11 6	11 2	11 6
9								6 6	10 2	12 0	11 8	11 8
10							G	8 6	9 8	11 0	11 4	11.0
11								7 8	10 1	11 1	11 6	11 2
12								G	9 3	11 3	10 8	11.4
13		2 3	5 4				G	4 9	8 5	12 2	11 9	11 8
14								8 6	9 8	11 1	12 1	11 2
15	3 3						G	6 8	8 4	11 4	11 6	11 3
16		6 5					G	9 0	10 4	C	C	C
17	3 2	4 6						7 0	8 8	10 8	11 1	11 4
18								G	8 5	11 4	10 8	11 4
19							G	6 6	10 4	10 2	11 0	11.3
20	C	C	C	C	C	C	C	C	C	C	C	12.8
21							S	S	C	11 6	11 8	11.4
22	u2 4s	S					G	9 2	u10 6s	12 0	13 0	12 8
23							4 2	u9 0s	9 4	12 0	12 8	13 0
24			u4 0s	u3 8s	2 9		4 0	u9 0s	u12 0s	12 8	12 6	12.8
25			3 3				4 4	u6 0s	C	C	C	C
26							3 2	12 2	12 0	12 6	13 0	12 6
27							G	u7 0s	9 4	11 6	12 1	12 8
28								7 0	12 0	12 6	12 6	13.4
29	3 4		u4 0s				G	u7 0s	9 8	11 0	13 0	12.2
30	S	u7 0s					S	u7 0s	u11 0s	14 0	C	14 6
31								G	u9 0s	13 4	14 0	13 4
Mean	3 2	5 4					5 0	7 6	9 8	11 5	11 8	12 0
Median	3 2	6 5					G	6 6	9 4	11 4	11 7	11.8
Count	6	5	4	1	1		18	29	27	27	26	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo Es
Unit Mc
Month January 1959

TABLE 4—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10.2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
11 8	11 6	11 0	9 4	7 8	G							1
11 6	11 8	11 0	9 0	9 4								2
8 0	11 0	10 4	G	7 4							3 0	3
C	C	C	C	8 6								4
11 0	11 0	10 6	8 6	8 0								5
12 0	12 0	11 6	10 6	8 8								6
11 1	10 2	10 8	8 8	7 8			C	C				7
11 5	11 4	10 8	8 6	7 4								8
11 4	11 0	10 6	9 8	9 0								9
11 0	11 4	7 0	4 4	8 4				5 6	4 4	8 6	6 8	10
10 9	11 4	10 8	9 7	7 5								11
11 1	10 6	9 8	7 9	9 2	7 2							12
11 8	11 3	10 8	6 8	7 7								13
12 4	11 6	10 6	8 1	8 1	2 2							14
10 9	12 0	11 1	7 6	7 7	3 6			2 6				15
C	C	10 8	9 4	8 2							3 2	16
11.5	11 6	10 8	C	7 8				3 4				17
11 0	11 4	10 6	8 6	7 8								18
11.2	11 2	10 8	9 2	8 1	U3 8s				C	C		19
12 8	U12 8s	12 6	U9 4s	U8 1s	S							20
11.8	11 4	U10 5s	S	S	S							21
12 8	13 0	U11 0s	U9 4s	U9 0s	S							22
13 0	12 2	11 0	9 6	U10.0s	U6 8s							23
12 8	12 0	11 8	U11 6s	U10 6s	S							24
12 4	11 5	10 8	8 8	10 0	4 8							25
12 4	11 0	11 0	11 0	12 0	S			U4 0s	U4 4s			26
12 6	12 0	12 0	10 8	U8 0s	U4 0s							27
12 6	11 8	10 0	7 4	8 2	U4 2s							28
12 6	12 0	11 6	10 4	U9 0s	U4 2s							29
13 0	13 8	12 6	11 4	9 0	U5 0s							30
14 4	13 4	U12 0s	U11 0s	U9 4s	S			3 2	U4 0s			31
11.8	11 7	10 9	9 2	8 6	U4 6			3 8				Mean
11 8	11 6	10 8	9 3	8 4	U4 2			3 4				Median
29	29	30	28	30	11			5	3	1	3	Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · fbEs
 Unit Mc
 Month January 1959

TABLE 5
 Ionospheric Data
 75·0°E Mean Time

Latitude 10.2°N
 Longitude 77 5°E

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

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

Characteristic 1bEs
Unit Mc
Month January 1959

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	Day
4 5	4 5		4 0	3 4	2 6							1
4 6	4 4	4 2	3 8	3 3	2 6							2
4 5	4 4	4 2	3 9		2 6							3
C	C	C	C	3 6	2 6							4
	4 6	4 3	3.9	3 4	2 6							5
4 4	4 5	4 0	3 7	3 4	2 7							6
4 3	4 2	4 2	3 8	3 3	2 6		C	C	C			7
4 4	4 3	4 1	3 7	3 3								8
4 3	4 2	4 0	3 9	3 3	2 8							9
5 6	5 0	4 7	4 1	3 7	2 7				3 4	2 0	3 2	10
4 3	4 3	4 0	3 8	3 2	2 5							11
4 4	4 2	4 2	4 0	6 6	3 0					2 4		12
4 3	4 3	4 0	3 8	3 8	2 6							13
4 4	4 4	4 1	3 7	3 7	2 6							14
4 4	4 3	3 9	3 6	3 3	2 7						1 9	15
C	C	C	3 7	3 3	2 8							16
4 4	4 3	4 2	4 0	C	2 6				2 4			17
4 4	4 3	4 2	3 8	3 4	2 6							18
4 6	4 5	4 2	3 8	3 4	2 7				C	C	C	19
4 4	4 2	4 1	3 8	3 4	2 8							20
4 2	4.2	4 1	3 8	3 4	2 7							21
4 4	4 2	4 2	3 8	3 5	2 9	1 7						22
4 4	4 4	4 0	3 9	3 4	2 7							23
4 4	4 2	4 0	3 8	3 4	2 7	1 5						24
4 6	4 4	4 2	4 0	3 4	2 7	1 7						25
4 5	4 6		4 0	3 6	3 0	1 8			2 0	1 5		26
4 3	4 4	4 1	4 0	3 6	2 8							27
4 5	4 4	4 3	4 0	3 6	2 7					C		28
4 4	C	4 2	4 1	3 4	2 8	1 6				2 2		29
4 2	4 2	4 0	3 8	3 4	2 8	1 7						30
4.2	4 2	4 2	3 8	3 4	2 8				1 5			31
4 4	4 4	4.1	3 9	3 5	2 7	1 7	.	.			.	Mean
4 4	4 3	4 2	3 8	3 4	2 7	1 7				.		Median
28	28	27	30	29	30	6			4	4	2	Count

Sweep 1.0 Mc. to 25 0 Mc. in 27 seconds

Characteristic fbEs
Unit Mc
Month January 1959

TABLE 5—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77.5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1												
2	2 5	2 3							3 6	4 1	4 3	4 5
3									3 6	4 0	4 3	4 5
4	2 0									C	C	C
5									3 7	4 2	4 4	4 6
6								3 0	3 6	4 0	4 2	4 4
7								3 0	3 7	4 2	4 4	4 4
8									3 6	4 1	4 2	4 3
9								3 0	3 5	3 9	4 2	4 3
10								3 0	3 5	4 0	4 3	4 4
11								3 0	3 6	4 0	4 2	4 3
12									3 6	4 0	4 2	4 4
13		1 6						3 0	3 6	4 0	4 2	4 4
14								3 0	3 6	4 0	4 2	4 4
15	2 2							3 0	3 5	4 0	4 1	4 3
16		1 9						2 8	3 5	C	C	C
17	2 2	1 8						3 0	3 6	4 0	4 1	4 2
18									3 5	4 0	4 3	4 4
19								3 0	3 8	4 0	4 3	4 5
20	C	C	C	C	C	C	C	C	C	C	C	4 4
21								3 0	C	4 0	4 2	4 2
22								3 0	3 5	4 0	4 2	4 2
23								3 0	3 6	4 0	4 2	4 4
24			1 9	2 4				2 2	3 0	3 5	4 0	4 3
25								2 2	3 0	C	C	C
26								2 2	3 0	3 3	4 0	4 4
27									3 1	3 6	4 0	4 4
28									3 0	3 6	4 0	4 6
29									3 0	3 6	4 0	4 4
30		1 6						2 2	3 0	3 6	4 0	4 4
31									3 0	3 6	4 0	4 2
									3 5	3 9	4 2	4 2
Mean		1 8					2 2	3 0	3 6	4 0	4 2	4 4
Median		1 8					2 2	3 0	3 6	4 0	4 2	4 4
Count	4	5	1	1			5	21	26	27	26	28

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic fbEs
Unit Mc
Month January 1959

TABLE 5—Cont'd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
4 5	4 3		3 9	3 0								1
4 5	4 3		3 6	3 0								2
4 4	4 2	4 0		3 0							2 0	3
C	C	C	C	3 0								4
4 8	4 4	4 2	3 7	3 0								5
												6
4 5	4 3	4 0	3 8	3 0								7
4 4	4 2	4 0	3 6	3 0			C	C				8
4 4	4 2	3 8	3 6	3 0								9
4 4	4 2	4 0	3 6	3 0								10
4 4	5 5	4 2	3 8	3 4				2 1	2 1	3 0	2 6	10
												11
4 3	4 1	3 9	3 6	2 9								11
4 3	4 2	4 1	5 1	4 1	2 0							12
4 4	4 1	3 8	3 6	3 4								13
4 3	4 2	3 9	1 2	3 1	2 1							14
4 3	4 1	3 8	3 4	3 0	2 3			1 4				15
												16
C	C	3 8	3 6	3 2								16
4 4	4 2	4 0	C	3 1								17
4 4	4 3	4 0	3 8	3 0								18
4 5	4 4	4 0	3 6	3 1	2 2				C	C	C	19
4 2	4 2	4 0	3 6	3 1								20
												21
4 2	4 2	4 0	3 6	3 0	2 2							21
4 2	4 4	4 0	3 7	3 4	2 3							22
4 4	4 2	3 9	3 7	3 0	2 2							23
4 4	4 2	4 0	3 6	3 1	2 2							24
4 4	4 2	4 0	3 6	3 1	2 2							25
4 6	4 3	4 2	3 8	3 1	2 2							25
												26
4 6	4 4	4 4	4 0	3 3	2 4			1 5	1 6			26
4 4	4 2	4 0	3 8	3 1	2 3							27
4 6	4 4	4 2	3 8	3 1	2 4							28
4 5	4 2	4 0	3 8	3 1	2 3							29
4 3	4 2	4 0	3 6	3 2	2 4							30
												31
4 4	4 1	4 0	3 6	3 2	2 3				1 7			31
												Mean
4 4	4 3	4 0	3 8	3 1	2 2	.			.	..		Median
4 4	4 2	4 0	3 6	3 1	2 3				.		..	Count
29	29	28	28	31	15			3	3	1	2	

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f min
Unit Mc
Month January 1959

TABLE 6
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	2.1	1.9	2.2	1.8	1.7	1.7	1.7	1.9	2.5	2.8	2.9	4.8
2	2.0	2.0	2.0	1.9	2.0	1.7	1.7	1.7	2.2	2.6	2.8	3.0
3	1.6	2.1	2.0	1.4	1.8	1.6	1.7	2.0	2.5	2.8	2.7	3.3
4	2.0	1.8	1.9	2.2	1.7	2.4	2.0	2.3	2.6	C	C	C
5	1.5	1.5	1.8	1.5	1.8	1.8	1.7	2.1	2.6	3.0	3.1	3.0
6	2.2	1.8	2.2	1.7	1.6	1.9	1.7	1.7	2.4	2.6	2.6	2.8
7	2.2	1.7	1.6	1.5	1.8	1.5	1.7	2.1	2.6	3.0	3.0	3.0
8	1.3	1.6	1.5	1.5	1.7	1.8	1.6	2.1	2.8	2.8	3.0	3.1
9	2.1	2.3	1.7	1.6	1.6	1.7	1.4	2.0	2.3	2.5	2.7	3.0
10	1.7	2.0	2.0	2.6	1.8	1.5	1.6	1.7	2.2	2.5	2.6	3.3
11	2.0	1.8	1.7	1.7	1.4	1.6	1.6	1.8	2.0	2.5	2.6	3.0
12	1.7	1.4	1.5	1.5	1.6	1.6	1.5	2.0	2.5	2.6	2.8	3.0
13	1.8	1.7	1.2	1.7	1.5	1.7	1.7	2.1	2.1	2.6	2.8	3.0
14	2.3	2.1	2.1	1.6	1.6	1.9	1.6	1.9	2.3	2.7	2.7	2.9
15	1.9	2.2	1.8	1.8	1.6	1.7	1.6	1.7	1.9	2.4	2.5	3.0
16	1.9	1.8	1.5	1.8	1.6	1.8	1.5	1.5	1.7	C	C	C
17	1.6	1.7	1.5	1.6	1.6	1.6	1.6	2.6	2.2	2.7	2.8	2.7
18	1.7	1.5	1.5	1.4	1.4	1.7	1.5	2.0	2.2	2.5	3.0	3.0
19	1.4	1.7	1.6	1.4	1.4	1.5	1.5	1.7	2.1	2.5	2.6	3.0
20	C	C	C	C	C	C	C	C	C	C	C	C
21	U1 1.5	S	1.3	1.3	1.3	1.3	1.3	1.4	2.0	3.0	2.8	2.7
22	1.3	1.3	1.7	1.5	1.7	1.3	1.4	1.7	1.9	2.2	2.6	3.0
23	1.5	U1 1.8	1.6	U2 0.8	U2 0.8	1.4	1.3	1.6	1.8	2.3	2.6	2.8
24	1.3	1.1	1.6	E	1.5	1.4	1.3	1.6	2.0	2.6	2.8	3.0
25	1.1	1.4	1.2	1.5	1.6	1.5	1.4	1.8	2.2	C	C	C
26	1.1	1.1	1.1	1.1	1.1	1.2	1.4	2.0	2.2	2.4	3.0	3.0
27	1.3	1.1	1.1	E	1.1	1.1	1.4	1.5	1.9	2.4	2.6	2.9
28	1.0	1.0	1.1	1.0	1.1	1.3	1.2	1.7	1.9	2.2	2.5	2.7
29	1.5	U1 1.6	1.5	1.5	1.3	1.4	1.3	1.5	2.4	2.4	3.2	3.0
30	1.8	1.4	1.4	1.4	1.3	1.4	1.4	1.5	1.7	2.6	2.4	2.6
31	1.7	1.2	1.3	1.4	1.3	1.2	1.3	1.8	1.7	2.1	4.8	2.4
Mean	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.8	2.2	2.6	2.8	3.0
Median	1.7	1.7	1.6	1.5	1.6	1.6	1.5	1.8	2.2	2.6	2.8	3.0
Count	30	29	30	30	30	30	30	30	30	27	27	27

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f min
Unit Mc
Month January 1959

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	Day
3 6	3 4	4 8	3 3	2 4	1 8	1 5	1 8	1 8	1 8	1 9	2 0	1
3 2	3 0	2 7	2 6	2 3	1 7	1 5	1 8	1 9	1 8	1 7	1 8	2
3 0	3 4	3 0	2 7	2 8	2 0	1 6	1 8	1 8	1 5	1 6	1 7	3
C	C	C	C	2 7	2 0	1 7	2 0	1 7	1 5	1 5	1 9	4
5 0	4 6	3 0	2 6	2 6	2 1	1 5	1 6	1 5	1 7	1 8	2 0	5
3 2	3 2	3 0	2 4	2 4	2 1	1 6	1 7	1 6	2 2	1 9	2 3	6
2 8	2 7	3 0	2 6	2 6	2 1	1 4	C	C	C	1 4	1 4	7
3 0	3 1	2 8	2 5	2 4	1 9	1 5	1 6	1 7	1 8	2 0	2 4	8
3 1	3 2	2 9	2 7	2 7	2 2	1 7	1 4	1 7	1 6	1 4	1 6	9
3 4	3 1	2 8	2 6	2 3	1 7	1 7	1 5	1 5	1 7	1 7	1 7	10
3 0	3 0	2 6	2 5	2 2	1 6	1 5	1 4	1 8	1 8	1 6	1 9	11
2 9	2 7	2 6	2 5	2 1	1 7	1 5	1 6	1 4	1 7	1 6	1 7	12
3 1	3 2	2 7	2 4	2 4	1 8	1 6	1 5	1 7	1 8	1 9	1 8	13
2 8	2 9	2 5	2 4	2 2	1 8	1 5	1 5	1 9	2 0	1 9	2 1	14
3 2	2 8	2 6	2 3	2 2	1 8	1 6	1 9	1 5	1 6	2 2	1 7	15
C	C	C	2 5	2 3	2 2	1 7	2 0	1 6	1 6	1 6	1 6	16
3 1	3 3	3 1	2 7	C	2 0	1 6	1 4	1 5	1 9	2 0	1 7	17
3 2	3 0	2 6	2 6	2 3	1 8	1 5	1 7	1 9	1 5	1 4	1 6	18
3 0	4 4	2 8	2 7	2 4	1 8	1 6	1 6	1 8	C	C	C	19
3 0	2 9	2 6	2 6	2 2	2 0	UI 6s	UI 7s	S	S	S	S	20
2 8	2 8	2 6	2 5	2 2	1 9	1 6	S	S	S	UI 6s	1 5	21
3 0	2 8	2 8	2 2	1 9	1 6	1 3	1 5	S	S	S	1 3	22
2 9	3 0	2 6	2 4	2 0	1 8	1 6	1 5	UI 5F ^s	UI 5F ^s	UI 5F ^s	1 4	23
3 0	2 9	2 6	2 4	2 1	1 6	1 3	1 4	1 2	1 5	1 5	1 2	24
4 0	3 1	2 8	2 4	2 4	1 6	1 2	1 7	1 4	1 3	1 4	1 3	25
3 4	3 7	6 7	3 0	3 2	2 2	1 5	1 1	1 2	1 4	1 4	1 7	26
3 0	3 0	2 7	2 8	2 4	1 5	1 7	UI 0 ^s	UI 3 ^s	UI 1 ^s	1 1	1 0	27
2 9	2 8	2 8	2 6	2 2	1 7	1 7	1 5	S	1 5	C	1 4	28
3 0	C	2 6	2 4	2 0	1 7	UI 2 ^s	UI 0 ^s	S	1 4	1 3	1 6	29
2 6	2 6	2 5	2 0	1 7	1 5	UI 4 ^s	1 3	1 2	1 4	1 4	1 6	30
2 4	2 5	2 7	2 2	1 7	1 8	1 8	1 4	1 4	1 3	1 7	1 3	31
3 1	3 1	2 9	2 5	2 3	1 8	1 5	1 5	1 6	1 6	1 6	1 7	Mean
3 0	3 0	2 7	2 5	2 3	1 8	1 6	1 5	1 6	1 6	1 6	1 7	Median
29	28	29	30	30	31	31	29	25	26	27	29	Count

Sweep 1 0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f_{min}
 Unit Mc
 Month January 1959

TABLE 6—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	1 8	2 1	1 8	1 9	1 6	1 7	1 8	2 7	2 6	2 6	3 0	3 6
2	1 8	1 8	1 9	2 0	1 9	1 8	1 8	1 9	2 4	2 5	2 8	3 0
3	1 9	1 6	1 7	1 6	1 7	1 7	1 8	2 5	2 5	2 7	3 0	3 0
4	1 6	2 1	1 7	2 1	2 2	2 5	2 3	2 4	5 0	C	C	C
5	1 8	1 4	1 8	2 0	1 9	1 8	1 8	2 1	2 6	3 0	3 0	3 9
6	2 2	2 1	2 0	1 6	1 8	1 5	2 3	2 2	2 4	2 5	2 5	2 9
7	2 2	1 7	1 5	1 5	2 0	1 6	2 2	2 2	2 8	3 0	2 8	2 9
8	1 5	1 4	1 6	1 7	1 7	1 7	1 9	2 2	2 5	2 8	3 0	3 2
9	1 7	2 0	1 7	1 6	1 6	1 5	2 4	2 2	2 3	2 5	2 9	3 0
10	1 7	2 0	2 2	2 2	1 6	1 4	1 7	1 8	2 4	2 5	3 0	3 2
11	1 8	2 0	1 7	1 6	1 7	1 5	2 1	1 8	2 3	2 5	2 8	3 0
12	1 6	1 3	1 4	1 5	1 5	1 5	2 1	2 2	2 4	2 8	2 9	3 0
13	1 8	1 3	1 6	1 7	1 4	1 7	1 8	2 3	2 3	2 8	2 7	3 3
14	2 3	2 1	1 9	1 8	1 6	1 6	2 1	2 1	2 5	2 7	2 8	3 0
15	2 2	1 7	1 8	1 8	1 6	1 5	1 7	1 8	2 2	2 5	2 6	3 0
16	1 7	1 7	1 6	1 8	1 7	1 7	1 6	1 6	2 1	C	C	C
17	1 5	1 3	1 8	1 6	1 6	1 4	2 2	2 0	2 4	2 6	3 0	2 8
18	1 5	1 5	1 4	1 5	1 6	1 6	2 2	2 3	2 3	2 6	3 0	3 1
19	1 3	1 4	1 4	1 2	1 4	1 3	1 7	1 8	2 5	2 5	2 6	2 8
20	C	C	C	C	C	C	C	C	C	C	C	3 4
21	UI 1 5	S	1 2	1 4	1 2	1 2	1 6	1 7	C	3 0	2 8	3 0
22	1 3	1 3	1 6	1 3	1 5	1 3	1 5	1 8	2 0	2 4	2 6	2 8
23	S	UI 1 8s	U2 OS	U2 OS	E2 OS	1 3	1 6	1 7	2 2	2 3	2 6	3 0
24	1 2	1 1	1 5	E	1 3	1 3	1 5	1 7	2 2	2 6	2 8	3 0
25	1 2	1 4	1 5	1 5	1 5	1 6	1 6	2 2	C	C	C	C
26	E	1 1	1 1	1 2	1 3	1 4	E	2 2	2 2	2 6	3 0	3 2
27	1 2	E	1 1	1 2	1 1	1 2	1 5	2 0	2 2	2 4	3 0	3 0
28	E	E	E	1 1	1 3	1 4	2 2	1 8	2 0	2 4	2 6	2 6
29	1 4	1 5	1 5	1 1	1 4	1 3	1 6	1 8	2 2	2 4	3 3	3 0
30	1 8	1 4	1 7	1 4	1 3	1 6	1 7	1 6	2 2	2 2	C	2 6
31	1 4	1 3	1 4	1 5	1 2	1 3	1 8	1 8	1 8	2 2	2 6	2 6
Mean	1 6	1 6	1 6	1 6	1 6	1 5	1 8	2 1	2 4	2 6	2 8	3 0
Median	1 6	1 5	1 6	1 6	1 6	1 5	1 8	2 0	2 3	2 5	2 8	3 0
Count	29	29	30	30	29	30	30	30	28	27	26	28

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

Characteristic f min
Unit Mc
Month January 1959

TABLE 6—Contd
Ionospheric Data
75 0°E Mean Time

Latitude . 10 2°N
Longitude . 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
3 5	3 1	4 6	3 0	2 1	1 7	1 4	1 7	1 9	1 8	2 0	2 0	1
3 0	2 8	4 6	2 6	2 2	2 2	1 4	1 8	1 7	1 9	1 8	2 4	2
3 4	3 2	2 8	2 9	2 3	2 0	1 3	1 8	1 5	1 7	1 5	1 8	3
C	C	C	C	2 4	2 1	1 3	1 8	1 8	1 4	1 6	1 6	4
4 8	3 4	3 0	2 7	2 5	2 3	1 5	1 5	1 7	2 0	1 8	2 4	5
3 1	3 2	2 7	2 6	2 3	2 1	1 6	1 7	1 8	2 2	2 1	2 2	6
2 9	2 8	2 6	2 7	2 4	2 2	1 4	C	C	1 5	1 6	1 5	7
3 2	3 0	2 6	2 4	2 2	2 0	2 2	1 7	1 8	1 8	2 2	2 4	8
3 2	3 2	2 8	2 7	2 4	2 3	1 5	1 7	1 6	1 6	1 5	1 6	9
3 4	3 0	2 6	2 8	2 0	2 2	1 3	1 8	1 7	1 6	1 6	2 0	10
3 1	2 9	2 7	2 4	1 8	2 1	1 2	1 8	1 8	1 9	1 6	1 6	11
2 9	2 7	2 4	2 5	1 9	1 6	1 2	1 5	1 6	1 8	2 0	1 7	12
3 0	2 8	2 6	2 5	2 1	2 1	1 2	1 8	1 9	1 7	1 6	2 2	13
3 1	2 7	2 4	2 5	2 0	1 6	1 8	1 6	1 7	2 0	2 0	2 1	14
3 1	2 8	2 4	2 6	2 2	1 8	1 3	1 7	1 3	1 6	2 2	1 7	15
C	C	2 8	2 5	2 2	2 1	1 6	1 6	1 6	1 5	1 4	1 6	16
3 0	2 9	3 0	C	2 4	2 2	1 5	1 7	1 9	2 0	1 7	1 6	17
3 1	3 0	2 6	2 5	2 0	2 2	1 4	1 6	1 7	1 5	1 4	1 5	18
3 0	3 0	2 6	2 6	2 4	1 6	1 7	2 0	2 0	C	C	C	19
3 0	2 8	2 8	2 3	2 3	S	UI 7 ^s	S	S	S	S	UI 3 ^s	20
2 8	3 0	2 6	2 5	1 9	UI 5 ^s	1 4	S	UI 5 ^s	S	1 4	1 6	21
3 0	2 6	2 6	2 4	2 5	1 5	1 6	S	S	S	1 5	1 3	22
3 2	2 8	2 5	2 2	1 9	1 5	1 3	1 5	S	EI 5 ^s	1 3	1 1	23
3 0	2 8	2 6	2 3	2 0	1 3	1 3	1 4	1 2	1 4	1 4	1 1	24
3 2	3 0	2 8	2 6	2 0	1 5	1 2	1 3	1 4	1 6	1 3	1 3	25
3 6	3 4	3 8	3 0	2 8	1 8	1 3	E	1 2	1 3	1 5	1 5	26
2 8	2 8	2 6	2 3	1 9	1 4	UI 3 ^s	S	S	UI 3 ^s	1 1	E	27
3 4	2 8	3 0	2 5	2 1	1 5	1 5	1 5	S	1 4	1 5	1 5	28
3 0	2 8	2 4	2 3	1 7	1 5	UI 3 ^s	S	S	1 7	1 5	1 4	29
2 4	2 6	2 3	2 0	1 6	1 2	UI 2 ^s	UI 4 ^s	1 3	1 4	1 5	1 6	30
2 6	2 4	2 5	2 0	1 7	1 7	1 4	1 0	1 4	1 2	1 6	1 8	31
3 1	2 9	2 8	2 5	2 1	1 8	1 4	1 6	1 6	1 6	1 6	1 7	Mean
3 1	2 8	2 6	2 5	2 1	1 8	1 4	1 7	1 7	1 6	1 6	1 6	Median
29	29	30	29	31	30	31	25	24	27	29	30	Count

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

Characteristic h'F2
 Unit , Km
 Month January 1959

TABLE 7
 Ionospheric Data
 75°0'E Mean Time

Latitude · 10.2°N
 Longitude 77°5E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	L	L
3									L	L	L	L
4									L	C	L	C
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	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	C	C	C
17								L	L	L	L	L
18								L	L	L	L	L
19								L	L	L	L	L
20								C	C	C	C	C
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25								L	L	C	C	C
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	Lh
31								L	L	L	L	L
Mean												
Median												
Count												

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic h'F2
 Unit · Km
 Month January 1959

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

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic h'F2
 Unit · Km
 Month January 1959

TABLE 7—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
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	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	L	L
16							L	L	L	L	L	L
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21							L	L	L	L	L	L
22							L	L	L	L	L	L
23							L	L	L	L	L	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26							L	L	L	L	L	L
27							L	L	L	L	L	L
28							L	L	L	L	L	L
29							L	L	L	L	L	L
30							L	L	L	L	L	L
31							L	L	L	L	L	L
Mean												
Median												
Count												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F2
 Unit Km
 Month January 1959

TABLE 7—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
C	C	C	L	L								4
L	L	L	L	L								5
L	L	L	L	L								6
L _H	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 _H	L	L								11
L	L	L	L	L								12
L	L	L	L	L								13
L	L	L	L	L								14
L	L	L	L	L								15
C	C	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	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								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 _H	L	L	L	L								29
L	L	L	L	L								30
L	L	L	L	L								31
												Mean
												Median
												Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · h'F
 Unit Km
 Month January 1959

TABLE 8
 Ionospheric Data
 75 °E Mean Time

Latitude : 10°2'N
 Longitude 77°5'E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	275	260	260	255	230	225	270	260	240	225	220	220H
2	300	300	300	270	240	220	240	255	240	235	220	215
3	280	280	280	270	260	220	255	255	240	220	220	220
4	300	265	260	330	320	290	250	260	240	C	C	C
5	260	320	F	315	280	240	255	260	240	235	220	215
6	280	285	300	280	270	290	250	265	250	240	230	215H
7	280	305F	280	250	230	210	240	250	245	240	240	240
8	U280F	U275F	U300F	U375F	U410F	U275F	250	255	240	240	220	215H
9	U270F	U280F	U280F	U305F	U275F	245	240	260	240	245	220	215
10	U320F	310	320	265	240	235	250	270	250	230	215H	215H
11	300	280	275	285	245	230	250	265	250	245	225	215
12	260	245	260	260	230	225	260	265	260	245	220	205
13	245	280	280	290	240	220	250	260	240	240	220	210
14	260	270	300	290	270	240	260	260	240	240	220	205
15	260	260	280	235	220	220	260	260	240	240	220	210
16	250	255	U260A	250	230	235	255	260	240	C	C	C
17	240	260	255	240	240	220	240	255	245	230	220	210
18	240	240	235	235	220	220	235	255	240	240	225	210H
19	255	245	225	215	220	225	260	260	235	225	220	205H
20	C	C	C	C	C	C	C	C	C	C	C	C
21	U260S	Fs	200	205	210	200	U230S	235	215	220	200	200
22	U260F	U220F	240	220	210	210	260	240	220	200	200	200H
23	240F	U240S	225	240	220	205	235	240	220	215	200	200
24	240	220	220	220	210	205	210	240	220	220	210	200
25	260	240	235	220	205	200	220	240	220	C	C	C
26	260	260	260	250	210	200	240	240	220	220	210	200
27	230	235	250	260	230	210	240	240	230	220	210	200H
28	250	240	240	235	220	200	210H	240	230	220	200	200
29	240	220	230	220	230	220	230	240	220	220	210	200
30	270	260	260	250	240	240	270	265	250	245	220	210
31	250	240	260	260	230	230	240	260	240	240	220	210
Mean	265	260	260	260	245	235	245	275	245	240	220	210
Median	260	260	260	250	230	220	250	260	240	240	220	210
Count	30	29	29	30	30	30	30	30	30	27	26	27

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic h'F
Unit Km
Month January 1959

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	Day
210	215	B	240	255	280	330	F	F	400	400	U290F	1
220	220	220	230	245	275	320	F	F	F	300	300	2
220	220	220	240	255	280	325	U425F	390I	300	320	300	3
C	C	C	C	250	275	320	F	F	300	260	260	4
B	220	235	235	245	275	315	330	280	245	235	240	5
215H	220	225	240	255	270	310	360	310	265	245	255	6
210H	205H	210H	210H	255	270	330	C	C	U325F	U295F	U295F	7
210H	215H	210	230	250	270	310	U350F	F	U410F	U330F	U340F	8
220	205H	220	240	250	270	320	415F	U420F	U360F	330	U305F	9
A	A	U255A	240H	260	275	305	U310F	U300F	U300F	295	320	10
205H	215	220	235	250	280	320	425	F	325F	270	270	11
210	210	230	240	A	U290A	320	395	345	300	290	250	12
200	200	215	240	260	280	320	400	380	340	285	250	13
220	215	215H	235	255	275	315	380	F	F	F	F	14
195H	220	230	235	240	280	305	U380F	340F	320	265	250	15
C	C	C	235	245	260	300	395	325	280	245	245	16
200H	205	230	210	C	265	310	320	355	305F	270	240	17
215H	200	220	235	240	265	305	350	380F	360	325	280	18
200H	220	225	230	245	270	310	485	F	C	C	C	19
190H	195	195	210	225	245	300	400	FS	FS	FS	FS	20
200	190	200	205	220	245	300	F5	FS	FS	U295S	225	21
180H	180H	200	200	225	245	280	400F	FS	FS	F5	U240F	22
200	200	200	200	220	240	280	U380F	FS	U380FS	U360FS	U260F	23
200	190	200	205	220	240	300	400	U360F	U440F	320F	260F	24
200	200	215	220	220	240	300	400	U420F	U380F	330F	320F	25
200	200	B	220	240	255	300	360	340	260	260	240	26
195H	200	200	220	230	250	295	400	390F	320	320	290	27
200	195	210	220	220	250	300	410	F	360	C	260	28
200	C	230	245	250	280	340	U480F	F	380F	360	260	29
210	210	225	230	240	270	320	440	410	360	295	280	30
215	200H	220	235	250	270	320	400	400	340	280	245	31
205	205	220	230	240	265	310	395	360	335	305	270	Mean
200	205	220	235	245	270	310	400	360	330	295	260	Median
27	27	27	30	29	31	31	26	17	24	26	28	Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic h'F
Unit Km
Month January 1959

TABLE 8—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude .77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	260	260	255	240	230	225	265	245	230	220	220H	215H
2	315	315	280	255	240	215	255	245	235	220	210	205
3	280	280	260	260	210	220	260	245	235	220	215	220
4	295	280	300	325	315	260	260	250	B	C	C	C
5	300	330	F	305	250	270	275	250	235	225	220	215
6	285	300	300	260	300	260	265	255	240	230	220	225H
7	300	300	265	240	220	215	260	250	235	230	225	225
8	U270F	U290F	U320F	U380F	U355F	U240F	265	240	235	230	215	215H
9	U270F	U290F	U310F	U315F	U265F	225	270	250	240	225	220	220
10	310	315	300	240	240	240	270	255	235	225	210	215H
11	280	275	275	270	245	220	275	255	240	230	220	210
12	250	250	260	240	220	230	280	260	245	225	210H	205
13	260	280	285	270	220	220	270	245	240	230	220	205
14	260	280	300	280	250	230	280	255	240	230	210	210
15	265	270	260	225	225	235	280	250	245	235	220	200H
16	245	260	250	240	235	230	260	245	225	C	C	C
17	255	255	245	240	225	210	270	215	235	220	210	200H
18	235	230	230	235	210	220	265	245	230	220	210H	215H
19	240	240	220	220	C	225	280	250	240	225	220	200H
20	C	C	C	C	C	C	C	C	C	C	C	200
21	U240S	S	205	220	205	200	250	220	C	210	205	200
22	U230F	240	240	220	215	220	260	230	210	200	190H	185H
23	240FS	240	240	240	220	200	260	225	220	210	200	200
24	220	220	220	220	205	210	260	240	220	215	200	200
25	240	240	240	210	200	200	240	230	C	C	C	C
26	260	255	260	220	205	210	270	240	220	205	200	200
27	230	240	260	245	220	210	260	240	220	210	200	190H
28	240	230	240	220	210	200	255	235	220	200	200	200
29	230	220	220	240	220	205	250	235	220	210	210	200
30	270	250	250	240	230	230	290	260	240	230	C	210
31	250	240	265	250	230	220	280	255	235	230	215	220
Mean	260	265	260	250	235	220	265	245	230	220	210	205
Median	260	260	260	240	225	220	265	245	235	225	210	205
Count	30	29	29	30	29	30	30	30	27	27	26	28

Sweep 10 Mc. to 250 Mc. in 27 seconds.

Characteristic h'F
Unit Km
Month January 1959

TABLE 8—Cont'd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
215	220	240	255	260	300	400	F	400	400	F	315	1
210	220	235	240	260	300	400	F	F	340	325	300	2
220	220	235	240	260	300	380	400	340	300	320	305	3
C	C	C	C	260	300	360	F	F	280	260	260	4
220	225	235	240	260	295	320	300	275	245	235	275	5
220	220	230H	250	265	290	350	340I	280	250	250	260	6
220H	200H	230	245	260	300	360	C	C	U350F	U305F	U310F	7
210H	210	220	245	260	290	350	U400F	U440F	U410F	U350I	U330F	8
210	215	230	245	260	295	365	U420F	U380F	360F	U310F	U310F	9
215	A	235H	250	265	295	335	U325F	U270F	280F	315	295	10
220	220	225	245	265	300	380	445	F	300	265	260	11
215	220	235	A	U280A	295	365	385F	320	290	270	250	12
200	205	225	240	270	295	365	440	350	320	260	255	13
205H	200H	205H	260	260	280	365	U440F	F	F	320	285	14
200H	205H	240	240	255	285	345	U370F	305	265	260	250	15
C	C	230	220H	250	280	350	380	295	260	240	235	16
190H	220	230	C	245H	290	335	335	345F	275	255	240	17
200H	200H	225	230	250	280	340	360F	380	340	305	265	18
200H	225	220	240	250	280	385	F	F	C	C	C	19
180H	185H	205	210	235	265	360	S	S	S	S	U260S	20
195H	180H	200	215	230	270	U370S	S	S	U340S	260	U240F	21
180H	215	205	220	240	265	340	FS	FS	FS	U260FS	240F	22
200	200	200	220	220	260	350	U400F	FS	U380FS	U280I	U240F	23
200	195	200	215	240	270	350	U400F	U370F	U380F	320I	240	24
200	200	210	220	235	260	355	400F	U420I	340F	320F	300F	25
200	210	220	225	240	270	340	360	300	260	250	230	26
195H	205	210	230	240	260	340	400F	360I	320	300	260	27
200	200	215	220	235	260	360	F	F	F	270	240	28
200	180H	230	240	255	300	420	F	F	370F	300	265	29
200H	210	225	235	250	295	100	440	400	310	280	260	30
200H	210H	230	245	265	300	380	420	390	300	260	240	31
205	210	220	235	250	285	360	390	350	320	285	265	Mean
200	210	225	240	255	290	360	400	350	315	275	260	Median
29	28	30	28	31	31	31	21	19	26	28	30	Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic h'E
Unit Km
Month January 1959

TABLE 9
Ionospheric Data
75 03E Mean Time

Latitude 10 2°N
Longitude 77 5°E

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

Sweep 10 Mc to 250 Mc in 27 seconds.

Characteristic h'E
Unit Km
Month January 1959

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

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic h'E
Unit Km
Month January 1959

TABLE 9—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							125H	120H	110	105	A	A
2							125H	105H	105	A	A	A
3							135	110H	105	A	A	A
4								115	B	C	C	C
5							130	110H	105	A	A	B
6								115	110	A	A	A
7								120	110	110	110	110
8							140	120	115	110	110	A
9								115	110	110	A	105
10							120	110	110	105	105	110
11								110	A	A	A	A
12								115H	A	A	A	A
13							130	120	110	C	A	A
14								115	105	A	A	A
15							120H	115	115	A	A	A
16							120	110	115	C	C	C
17								110	A	A	A	A
18								120	110	A	A	A
19							130	110	A	A	A	A
20							C	C	C	C	C	A
21							120	A	C	A	A	A
22							110	A	A	A	A	A
23							120	A	A	A	A	A
24							110	A	A	A	A	A
25							110	100	C	C	C	C
26							A	A	A	A	A	A
27							120	A	A	A	A	A
28								110	A	A	A	A
29							110	A	A	A	A	A
30								115	110	A	C	A
31								120	115	110	B	A
Mean							120	115	110	110		
Median							120	115	110	110		
Count							17	23	16	6	3	3

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
 Unit Km
 Month January 1959

TABLE 9—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
A	A	B	A	110	140							1
A	105	B	A	A								2
A	A	110	120	120								3
C	C	C	C	A								4
B	A	A	110	115								5
A	A	A	A	120								6
A	105	110	A	120								7
A	A	110	110	115								8
110	A	110	115	120								9
A	115	110	120	A								10
A	A	A	A	A								11
A	A	A	110	A								12
A	A	A	120	A								13
A	A	A	105	A								14
A	A	A	120	A								15
C	C	A	A	A								16
A	A	A	C	120								17
A	A	A	A	110								18
A	A	A	115	115								19
A	A	A	A	A	S							20
A	A	A	A	A	A							21
A	A	A	A	A	A							22
A	A	A	A	A	A							23
A	A	A	A	A	A							24
A	A	A	A	A	A							25
A	A	B	A	A								26
A	A	A	A	A								27
A	A	110	105	105								28
A	A	110	115	115								29
110	110	110	110	110								30
110	110	110	110	110								31
	110	110	115	115								Mean
	110	110	110	115								Median
3	5	9	14	14	1							Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'E_s
 Unit Km
 Month January 1959

TABLE 10
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1								G	G	100	100	100
2								G	100	100	100	100
3								G	G	100	100	100
4								100	G	C	C	C
5								G	G	100	100	100
6								100	G	100	100	100
7								G	105	100	100	100
8	105							G	G	100	100	100
9								G	100	100	100	100
10								G	105	100	100	100
11	110							G	100	100	100	100
12								G	100	100	100	100
13		120	105					G	G	100	100	100
14		120						105	100	100	100	100
15								G	100	100	100	100
16		120	110					110	100	C	C	C
17	105	110	105					G	100	100	100	100
18								G	100	100	100	100
19								G	100	100	100	100
20	C	C	C	C	C	C	C	C	C	C	C	C
21								100	90	90	90	90
22	105	110						G	100	100	100	100
23								100	100	100	100	100
24				90		120		100	100	1000C	1000C	1000C
25					125			G	100	C	C	C
26								100	100	100	100	100
27								G	95	95	95	95
28								100	95	95	90	95
29			100					95	95	95	95	95
30		120	120					100	100	100	100	100
31								100	100	100	100	100
Mean		115	110					100	100	100	100	100
Median		120	105					100	100	100	100	100
Count	4	6	5	1	1	1		12	23	27	27	27

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic h'E:
Unit Km
Month January 1959

TABLE 10
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	Day
100	100	100	100	100	105							1
100	100	100	100	105	110							2
100	100	100	100	G	110							3
C	C	C	C	100	110							4
100	100	100	100	100	110		140					5
100	100	100	100	105	110							6
100	100	100	100	105	110		C	C	C			7
100	100	100	100	105	G							8
100	100	100	100	105	120							9
100	100	100	100	120	105				110	115	105	10
100	100	100	100	100	100							11
100	100	100	100	100	105	135				105		12
100	100	100	100	100	100							13
100	100	100	100	100	100		120					14
100	100	100	100	100	100						120	15
C	C	C	100	100	100							16
100	100	100	100	C	105			135	120			17
100	100	100	100	105	110							18
100	100	100	100	105	110				C	C	C	19
95	90	85	90	90	80							20
90	85	90	90	85	85							21
U95C	U95C	100	100	100	100	120						22
100	100	100	100	100	100							23
U90C	U90C	U95C	U100C	100	100	100						24
U95C	U95C	U100C	100	100	100	100						25
100	100	B	100	100	100	100			100	100		26
90	95	95	95	95	100							27
95	95	95	100	100	100					C		28
95	C	100	100	100	105	120				100	120	29
100	100	100	100	100	105	110						30
100	100	100	100	100	100				120			31
100	100	100	100	100	105	110						Mean
100	100	100	100	100	100	110						Median
29	28	28	30	29	30	7	2	1	4	4	3	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'Es
Unit Km
Month January 1959

TABLE 10—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	G	100	100	100
2	105	110					G	G	100	100	100	100
3							G	G	100	100	100	100
4	120						110	G	B	C	C	C
5							G	G	100	100	100	100
6								100	100	100	100	100
7								105	100	100	100	100
8							G	G	100	100	100	100
9								110	100	100	100	100
10							G	105	100	100	100	100
11								100	100	100	100	100
12								G	100	100	100	100
13		110	110				G	100	100	100	100	100
14								100	100	100	100	100
15	120						G	100	100	100	100	100
16		115					G	100	100	C	C	C
17	105	105						100	100	100	100	100
18							G	G	100	100	100	100
19							G	100	100	100	100	100
20	C	C	C	C	C	C	C	C	C	C	C	95
21							100	90	C	90	85	90
22	110	105					G	100	100	100	100	095c
23							100	100	100	100	095c	095c
24			95	80	110		120	100	095c	0100c	095c	090c
25			155				100	100	C	C	C	C
26							100	100	100	100	100	100
27							G	95	95	95	95	95
28								95	95	95	95	95
29	115		100				G	95	95	95	95	95
30	100	120					100	100	100	100	C	100
31								G	100	100	100	100
Mean	110	110					105	100	100	100	100	100
Median	110	110					100	100	100	100	100	100
Count	7	6	4	1	1		7	21	26	27	26	28

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic h'E,
Unit Km
Month January 1959

TABLE 10—*Contd*
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude . 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
100	100	100	100	105	G							1
100	100	100	100	105								2
100	100	100	G	105							120	3
C	C	C	C	100								4
100	100	100	100	105								5
100	100	100	100	105								6
100	100	100	100	105			C	C				7
100	100	100	100	105								8
100	100	100	105	105								9
100	100	100	120	105				120	115	105	110	10
100	100	100	100	100								11
100	100	100	100	100	115							12
100	100	100	100	100								13
100	100	100	100	100	140							14
100	100	100	100	100	100			120				15
C	C	100	100	100							125	16
100	100	100	C	105				140				17
100	100	100	100	105								18
100	100	100	100	105	115				C	C	C	19
85	85	90	90	90	S							20
90	85	90	90	90	85							21
U95c	100	100	100	100	100							22
100	100	100	100	100	100							23
U90c	U95c	U100c	100	100	100							24
U100c	U95c	100	100	100	100							25
100	100	100	100	100	100			100	105			26
95	95	95	95	95	100							27
95	95	100	100	100	100							28
95	95	100	100	105	120							29
100	100	100	100	100	110							30
100	100	100	100	105	130			120	110			31
100	100	100	100	100	110			120		.	.	Mean
100	100	100	100	100	100			120		.	.	Median
29	29	30	28	31	15	.		5	3	1	3	Count

Sweep 1.0 Mc to 2.5 Mc. in 27 seconds.

Characteristic : (M3000)F2
 Unit :
 Month . January 1959

TABLE 11
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	F	F	2 80	2 85	3 10	3 25	2 75	2 80	2 70	2 40	2 15	2 00
2	F	F	F	F	U2 90F	3 15	2 80II	3 10	2 80	2 35	2 10	2 05
3	F	F	F	F	F	3 15	2 80	2 90	2 85	2 40	2 10	2 10
4	F	U2 60r	2 65s	F	F	2 70	U3 00s	3 00	2 90	C	C	C
5	U2 60r	F	F	U2 40r	F	2 80	2 85	2 85	2 60	2 30	2 10	2 05
6	2 65	2 65	2 60	2 65	2 65	2 60	2 80	2 80	2 70	2 50	2 20	2 00
7	2 70	2 55	2 70	2 90	2 90	U3 40s	2 80	3 10	2 80	2 55	2 30	2 05
8	F	F	F	F	F	F	U2 95s	2 85	2 75	2 45	2 10	1 95
9	F	F	U2 60r	F	U2 60r	U2 90r	2 95	2 90	2 60	2 25	2 15	2 05
10	F	U2 50s	U2 50s	2 80r	U2 95s	U3 05s	2 90	2 80	2 55	2 30	2 15	2 10
11	2 60	2 80	2 85	2 70	2 90	3 10	3 15	U3 00s	2 65	2 35	2 25	2 25
12	U2 60r	U2 80rII	F	2 85	3 10	3 30	2 70	U3 00s	2 70	2 20	2 20	2 10
13	2 90	2 85	2 75	2 80	3 05	3 40	2 60	3 05	2 90	2 55	2 15	2 10
14	2 85	F	U2 75r	2 75	2 85	3 10	3 00	2 80	2 55	2 30	2 20	2 20
15	F	2 80	2 90	3 15	3 20	3 40	2 70	2 95	2 70	2 45	2 35	2 20
16	U2 90s	2 90	3 00	3 05	3 20	3 30	J2 70s	U3 00s	2 60	C	C	C
17	2 85	U2 80s	U2 80s	2 90	J3 00s	3 15	3 00	U2 90s	2 60	2 30	2 20	2 20
18	U2 85s	2 85	3 05	3 05	3 15	3 30	2 55	3 00	2 80	2 50	2 20	2 20
19	2 65	2 70	2 80	U3 00s	3 00	3 00	U2 70s	2 80	2 60	2 35	2 30	2 20
20	C	C	C	C	C	C	C	C	C	C	C	C
21	J2 70s	FS	FS	2 90	3 10	3 30	3 00	3 00	2 65	2 35	2 30	2 25
22	F	F	U2 90s	FS	3 40	3 40	U2 70s	3 00	2 70	2 10	2 40	2 20
23	FS	FS	FS	FS	U3 10s	U3 30r	U3 20r	U3 10r	U2 90s	2 60	2 35	2 25
24	F	F	U2 90rs	FS	U3 20s	3 40	U3 05s	U3 00s	2 65	2 30	2 30	2 20
25	F	F	F	F	3 30	F	U2 95r	U3 20s	U2 90s	C	C	C
26	F	U2 70s	U2 85	U2 95s	3 10	U3 40s	U3 10s	J2 90s	2 60	2 30	2 40	2 25
27	2 85	2 85	2 80	U2 90s	3 05	U3 20s	3 05	2 90	2 50	2 30	2 35	2 20
28	U2 75rs	2 90	U2 90s	U3 10s	3 20	3 40	2 60	U3 00s	2 80	2 30	2 20	2 20
29	F	F	3 10	3 10	3 00	3 10	S	S	U2 55s	U2 25s	U2 90s	2 20
30	2 65	2 85	2 90	2 85	3 00	3 05	U2 90s	S	2 40	U2 30s	2 15	2 10
31	FS	F	2 70	2 80	3 00	3 15	2 70	U2 90s	U2 65s	2 30	2 05	2 15
Mean	2 75	2 75	2 80	2 90	3 05	3 15	2 85	2 95	2 70	2 35	2 20	2 15
Median	2 70	2 80	2 80	2 90	3 05	3 20	2 85	3 00	2 70	2 35	2 20	2 20
Count	15	16	22	21	26	28	29	28	30	27	27	27

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic (M3000)F2
 Unit ..
 Month January 1959

TABLE 11
 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	Day
2 00	2 00	2 05	2 05	2 10	2 05	2 00	F	F	F	F	F	1
2 05	2 00	2 00	2 00	2 00	U2 00s	2 05	F	F	F	F	F	2
2 20	2 15	2 15	2 10	2 10	2 05	1 95	U2 00s	F	2 10	2 25	2 30	3
C	C	C	C	2 00	1 90	U2 15s	F	2 15	F	F	U2 60i	4
2 00	2 05	2 15	2 20	2 15	2 10	2 05	2 05	2 35	2 50	2 70	2 80	5
2 00	2 00	1 95	1 85	2 00	2 10	2 15	2 20	2 35	U2 65s	2 60	2 75	6
1 95	1 95	2 00	1 95	1 95	2 05	2 05	C	C	U2 65s	F	U2 45i	7
2 00	2 00	2 00	2 05	2 15	2 20	2 25	2 05	1 95F	F	F	F	8
2 10	2 10	2 05	2 05	2 05	2 05	2 05	U2 05s	F	U2 10F	F	F	9
2 15	2 20	2 10	2 10	2 15	2 20	2 10	2 10	U2 30R	2 30	2 50	U2 55s	10
2 20	2 15	2 20	2 10	J2 10s	2 00	U1 90i	FS	F	F	U2 60i	2 50	11
2 10	2 10	2 15	2 20	2 20	2 10	2 05	U1 95W	U2 10s	2 45	2 65	2 80	12
2 05	2 05	2 10	2 15	2 20	2 35	U2 10s	U1 90W	2 20	2 35	F	FS	13
2 15	2 10	2 15	2 20	2 25	2 20	2 10	J2 15s	F	F	F	F	14
2 15	2 15	2 05	2 10	2 20	2 25	2 25	2 10	2 25	U2 45s	J2 65s	U2 80s	15
C	C	C	2 15	2 15	2 15	U2 25s	2 20	2 25	2 55	2 75	2 85	16
2 15	2 05	2 10	2 10	C	J2 15R	2 10	2 10	U2 15i	U2 25F	2 45	U2 65s	17
2 10	2 05	2 05	2 10	2 15	2 15	2 10	2 10	2 10	U2 15R	U2 10F	U2 35s	18
2 10	2 00	2 05	2 10	2 10	2 00	U2 05s	U1 90F	F	C	C	C	19
2 15	2 10	2 10	2 10	U2 15s	2 15	U2 10s	U2 00s	FS	FS	FS	FS	20
2 25	2 15	2 15	2 10	2 15	2 05	U1 95s	FS	FS	FS	FS	FS	21
2 10	2 15	2 15	2 15	U2 20s	U2 25s	U2 20s	F	FS	FS	FS	FS	22
2 10	2 15	2 15	2 15	2 20	2 15	U2 05s	F	FS	FS	FS	FS	23
U2 20s	2 10	2 10	2 05	U2 10s	U2 15s	U2 20s	U2 10s	2 15	F	F	F	24
2 15	2 20	2 20	U2 25s	2 30	U2 15s	U1 95s	U2 00s	F	F	F	F	25
2 20	2 15	2 20	2 20	2 20	J2 15s	U2 00s	E1 95W	U2 20s	U2 50s	U2 65s	U2 75s	26
2 10	2 15	2 15	2 20	U2 20s	2 15	S	1 95	U2 00F	S	FS	FS	27
2 10	2 10	2 15	2 25	2 25	2 25	U2 20s	2 05II	F	F	C	F	28
2 15	C	2 05	U2 05s	U2 10s	U2 05s	L1 80W	F	F	F	F	U2 40F	29
2 10	2 10	2 05	2 00	U2 00s	1 95	U2 00s	1 95	2 00F	2 15s	2 40	FS	30
2 10	2 05	2 05	2 05	2 05	U2 00s	U2 05s	U2 00F	F	2 15	U2 40s	U2 70s	31
2 10	2 10	2 10	2 10	2 15	2 10	U2 10	2 05	2 15	2 35	2 50	U2 60	Mean
2 10	2 10	2 10	2 10	2 15	2 15	U2 05	2 05	2 15	2 30	2 60	U2 65	Median
29	28	29	30	30	31	30	22	15	14	13	15	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic (M3000)F2
 Unit .
 Month January 1959

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

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	2 85	3 00	3 15	3 20	2 80	2 80	2 60	2 30	2 10	2 00
2	F	F	F	U2 90F	3 00	3 25	3 05	2 95	2 55	2 15	2 10	2 05
3	F	F	F	F	2 90	3 30	3 00	2 95	2 65	2 25	2 10	2 15
4	U2 55F	U2 65F	U2 60s	F	F	2 85	2 95	2 95	2 90	C	C	C
5	U2 50r	F	U2 35F	U2 40F	2 70	3 00	2 85	2 75	2 45	2 15	2 10	U2 10M
6	2 70	2 55	2 55	2 75	2 60	2 80	2 85	2 75	2 55	2 35	2 10	2 05
7	2 00	2 60	2 80	2 95	3 10	3 30	3 00	3 00	2 65	2 40	2 15	2 05
8	F	F	F	F	F	U2 95r	2 85F	2 85	2 60	2 25	1 95	2 00
9	F	F	U2 60F	F	U2 65F	3 00	U2 95s	2 75	2 45	2 15	2 05	2 10
10	2 40	FS	2 55H	2 90	U2 90s	3 05	2 95	2 65	2 40	2 20	2 10	2 10
11	2 75	2 85	2 70	2 75	3 05	3 25	3 00	2 80	2 45	2 20	2 25	2 15
12	2 75	2 90	U2 80F	2 90	3 20	3 35	U3 00s	2 85	2 50	2 10	2 15	2 10
13	2 90	2 85	2 75	2 90	3 30	3 40	3 00	3 00	2 80	2 35	2 15	2 15
14	2 90	2 70	F	2 80	3 00	U3 20s	2 90	2 65	2 40	2 20	2 15	2 15
15	U2 75F	2 80	2 95	3 15	3 40	3 25	U3 00s	2 85	2 70	2 35	2 30	2 20
16	2 95	2 90	U3 05s	3 20	3 35	3 30	U3 10s	2 85	2 45	C	C	C
17	J2 85s	U2 80s	2 85	2 95	U3 00s	3 20	3 00	2 75	2 45	2 25	2 15	2 20
18	2 90	2 90	2 95	3 05	3 35	3 40	3 00	2 95	2 65	2 30	2 10	2 15
19	2 70	2 80	J2 90s	3 10	3 00	3 05	2 90	2 70	2 40	2 30	2 30	2 10
20	C	C	C	C	C	C	C	C	C	C	C	2 15
21	S	S	3 15	3 05	U3 25s	3 40	3 15	2 80	C	2 30	2 30	2 30
22	F	F	FS	U3 30s	3 35	3 40	3 00	2 85	2 55	U2 40R	2 30	2 15
23	FS	FS	FS	FS	U3 30s	F	F	U3 00rs	2 80	2 50	2 20	2 15
24	F	F	FS	U3 25s	3 25	F	FS	2 80	U2 50s	2 25	2 20	2 15
25	F	F	F	F	F	F	U3 20s	3 10	C	C	C	C
26	F	U2 80s	U2 95s	3 05	3 30	3 25	3 00	U2 65s	2 50	2 40	2 35	2 25
27	2 80	2 80	U2 80s	3 00	3 10	3 30	3 00	2 70	2 45	2 30	2 30	2 20
28	U2 85rs	2 95	U3 05s	3 10	3 30	3 40	3 10	2 95	2 50	U2 15s	2 15	2 20
29	F	U2 90s	U3 05s	F	3 10	U3 10s	FS	S	2 35	2 25	2 20	2 20
30	2 80	2 90	2 90	2 90	U3 10s	U3 05s	2 80	2 50	2 40	U2 15s	C	2 10
31	FS	2 80	2 75	2 90	U3 10s	3 20	2 95	2 80	2 45	2 10	2 05	2 20
Mean	2 75	2 80	2 80	2 95	3 10	3 20	3 00	2 75	2 55	2 25	2 15	2 15
Median	2 75	2 80	2 80	2 95	3 10	3 25	3 00	2 80	2 50	2 25	2 15	2 15
Count	17	18	22	23	27	27	27	30	28	27	26	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F2
Unit
Month January 1959

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

Latitude 10 2°N
Longitude 77 5°E

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

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

Characteristic foF2
Unit Mc
Month February 1959

TABLE 12
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	11 8	11 3	10 3	u9 3s	9 1	7 3	5 9	u9 8s	11 7	12 2	11 9	12 0
2	F	9 4	8 8	u7 8F	8 0	6 8	5 9	u9 6s	11 8	12 5	11 2	10 2
3	10 2	10 5	10 3	u10 0s	9 2	8 0	6 6	u10 0s	11 6	12 5	12 0	12 1
4	8 1F	F	u7 2s	7 5	7 8	7 2	6 0	10 2	12 4	13 4	14 1	14 1
5	11 4	10 6	8 3	7 1	7 1	6 1	C	8 6	11 0	12 0	12 8	13 2
6	8 7	C	F	C	C	C	5 5	9 9	11 8	12 5	12 3	12 1
7	F	F	F	FS	F	6 1	u5 5s	u9 6s	12 1	13 2	13 5	13 2
8	F	F	u7 8r	u6 8F	6 6	u6 2r	C	9 6	11 7	12 2	12 8	13 1
9	F	F	F	8 0	6 7	u5 5s	u5 0s	u9 5s	12 2	12 2	12 8	13 0
10	10 8r	F	u9 0s	7 8	u6 9c	u6 3s	u6 0s	u9 2s	11 6	12 4	12 0	11 8
11	F	9 0	FS	FS	FS	5 5	u5 8c	u9 1s	11 6	12 8	13 2	12 4
12	9 8	9 7	8 7	u7 4s	6 0	4 5	u5 1s	u9 3s	12 2	13 7	14 7	15 5
13	F	FS	FS	u8 5s	8 0	u5 4c	u5 3s	u9 2s	10 9	11 6	11 8	11 7
14	11 1	FS	u9 6s	FS	8 6	u7 0s	u5 9s	u9 7s	u11 6s	12 8	12 5	11 8
15	C	C	C	C	C	C	C	10 6	12 4	13 8	13 6	12 7
16	13 8	u13 6s	u12 0s	u10 5s	8 0	u5 5s	4 9	u10 0s	12 4	14 4	14 4	15 0
17	FS	u9 5s	u9 6s	u11 6s	u11 6s	11 0	12 1	13 4	13 6	12 8	12 6	12 3
18	11 0	10 9	9 8	9 5	8 5	6 1	u5 1s	10 3	12 7	13 7	13 2	12 3
19	F	F	F	F	F	7 5	RS	9 6	12 0	12 6	12 0	12 0
20	u11 4s	u11 2r	u11 7s	10 4	7 8	5 5	15 4sH	u9 6s	11 5	11 6	11 6	11 4
21	F	F	F	u7 2r	F	5 4	5 1	9 9	12 4	13 7	11 4	13 6
22	F	u8 7r	u8 2r	6 8	F	F	F	u9 4s	11 0	10 8	10 6	11 2
23	F	F	u7 6r	u7 3F	F	F	5 4	10 3	12 6	13 8	13 8	13 7
24	u12 2r	11 6	u10 2F	8 5	6 6	4 6	u5 1s	9 8	12 6	13 8	14 2	13 8
25	F	u8 6r	F	8 0	F	5 4	4 9	9 6	11 8	12 7	12 5	11 8
26	F	F	F	F	F	F	u7 5s	11 1	12 1	12 8	13 2	13 4
27	12 1	13 0	u10 2s	8 2	7 6	u7 6s	7 8	10 8	12 8	13 7	13 5	13 2
28	12 3	13 0	10 8	F	10 8	u9 4s	7 8	11 3H	11 6s	11 8	11 9	11 7
Mean	11 1	10 7	u9 4	8 4	8 0	6 5	6 1	10 0	12 0	12 8	12 8	12 7
Median	11 2	10 6	u9 6	8 0	7 9	6 2	5 5	9 8	11 9	12 8	12 8	12 4
Count	14	15	18	20	18	23	23	28	28	28	28	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month February 1959

TABLE 12
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	Day
11 7	11 7	11 8	11 7	11 1	U10 3s	9 4	8 4	F	F	F	F	1
10 4	10 6	10 9	11 4	11 0	S	U9 2s	F	U8 4r	F	U9 9s	9 7	2
C	11 7	11 4	11 0	10 4	10 0	9 6	9 4	8 7	F	F	U8 2r	3
13 6	13 3	13 1	13 0	12 9	13 3	12 8	U12 0r	F	F	F	13 4	4
13 6	11 0	13 9	13 7	13 1	U12 0r	U9 6s	F	F	F	U8 3s	U8 9r	5
12 1	12 0	11 7	11 3	11 4	11 5	11 5	U10 3s	F	F	F	F	6
12 8	12 8	13 0	12 9	12 7	J12 3r	U10 9w	Fs	F	F	F	F	7
13 5	14 1	14 4	15 0	14 8	14 III	12 7II	9 2VII	F	F	F	F	8
13 1	11 0	14 7	U15 6s	J16 2r	U15 4s	14 4II	U12 1r	F	F	Fs	1s	9
11.6	11 6	12 1	12 6	12 4	12 2	U11 0s	U8 8I	F	F	F	F	10
11 9	11 4	11 2	11 0	11 2	12 5	12 7	11 7	11 1	12 3	12 8	11 1	11
15 7	15 4	15 3	14 8	14 4	U13 5s	S	U10 4s	F	F	F	1s	12
11 1	11 6	11 7	11 8	U11 7s	11 3	U10 5s	U8 8I	F	F	F	1s	13
11 3	11 2	11 4	11 4	10 8	U10 4s	9 5	C	C	C	C	C	14
12 1	13 2	12 6	10 9	10 6	11 1	11 4	10 3	U10 1s	U9 2s	Fs	12 3	15
U15 7r	16 6	U16 0s	U15 1s	U15 2II	U13 8sRII	S	F	F	F	F	F	16
J12 2r	12 0	11 5	11 4	11 1	11 0	U10 1s	8 8	U9 0s	10 4	U10 8s	1s	17
12 0	11 9	11 8	11 2	10 8	U10 0s	U9 4s	F	F	F	F	F	18
12.0	12 4	12 6	12 6	11 8	11 0	U9 6s	9 0	F	F	F	U11 5s	19
11 0	11 0	11 1	U11 5s	11 6	U11 5s	U10 6s	8 4	F	F	F	F	20
12.0	11 7	11 6	11 7	11 7	11 0	U9 8s	8 4r	F	F	F	F	21
12 0	12 1	12 4	12 4	J12 0s	11 6	11 0	11 0	F	F	F	F	22
13 8	13 2	12 7	13 4	13 4	12 8	U11 6s	10 6	S	J10 4I	1s	Fs	23
14 0	13 6	13 5	13 8	13 6	13 0	12 2II	U9 5I	F	F	F	F	24
11 5	11.8	12.6	12 8	12 5II	12 2	11 8	10 0	F	F	F	F	25
13 5	13 0	13 8	14 4II	14 0	13 0II	12 4II	9 2	9 7	10 9	11 4	U11 4s	26
13 6	13 8	13 9	14 0	13 8	12 6	WHI	9 2I	F	F	F	U11 1I	27
11 9	12 4	13 1	13 3	13 2	13 0	11 6s	11 5	11 5	11 0	11 7s	12 6	28
12 6	12 6	12 7	12 7	12 5	12 1	11 0	9 8	U9 8	U10 7	U11 2	U11 0	Mean
12 1	12 4	12 6	12 6	12 2	12 2	11 0	9 4	U9 7	U10 6	U11 4	U11 4	Median
27	28	28	28	28	27	25	21	7	6	7	10	Count

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic foF2
Unit Mc
Month · February 1959

TABLE 12—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	11 7	10 9	9 6	9 2	8 2	6 3	7 7	10 9	12 1	11 9	12 0	12 0
2	F	9 2	8 5	8 0	7 6	5 9	7 8	10 8	12 5	11 7	10 7	10 0
3	10 3	10 5	10 1	9 5	8 7	6 9	8 7	11 0	12 0	12 4	12 4	12 1
4	7 7	U7 1F	7 1	7 9	7 9	6 4	8 2	11 5	13 1	13 7	14 7	13 8
5	11 0	9 1	7 7	7 2	6 6	6 1	8 2II	10 0	11 5	12 4	12 8	13 5
6	C	F	C	C	C	5 4	7 7	11 2	12 2	12 8	12 3	12 1
7	F	F	F	F	FS	U5 7s	U7 6s	U11 1s	12 6	U13 3s	13 5	13 0
8	F	U7 4F	F	6 8	F	5 7	7 6	10 8	11 8	12 8	12 8	13 2
9	F	F	8 6	C	6 5	5 3	U7 4s	11 0	U12 3s	12 4	12 8	13 0
10	10 9	U9 6r	U8 5s	U7 2c	6 6	U5 8c	7 8	10 1	12 0	12 4	11 6	11 7
11	U9 1s	FS	U7 5s	FS	U5 6c	5 5	FS	10 6	12 6	13 0	12 8	12 1
12	9 8	9 2	8 5	U6 9s	5 1	3 8	U7 1s	10 7	13 0	14 3	15 1	15 6
13	U11 4s	U10 6s	FS	8 6	U6 8s	4 6	U7 3s	U10 3s	11 3	11 7	11 8	11 5
14	U10 9s	U10 3s	U9 5s	U9 6s	7 6	6 4	U8 1s	11 0	12 5	12 8	12 2	11 4
15	C	C	C	C	C	C	C	11 5	13 2	14 0	J13 OR	12 6
16	U13 8s	U13 2R	U11 2s	U9 4s	U7 2s	4 8	7 6	11 5	13 6	14 5	14 6	R
17	F	U9 2s	U10 6s	U11 6s	10 8	11 4	U13 0s	13 4	U13 1R	12 6	12 5	12 0
18	U11 1R	F	U9 6s	9 2	7 8	5 0	7 6	11 6	13 7	13 5	12 8	12 2
19	F	F	F	F	8 3F	5 4	F	10 9	12 5	12 6	11 8	12 0
20	U11 3s	U11 5s	10 7	9 5	U6 9s	4 6	J7 5s	10 7	11 7	11 6	11 4	11 2
21	F	U9 2F	7 9F	U6 6F	U6 9F	5 0	7 6	11 4	13 0	14 2	14 1	12 6
22	F	F	7 4	F	F	F	U7 8Fs	10 6	10 8	10 4	10 8	11 6
23	F	F	F	6 8	F	F	J8 1s	11 6	13 2	14 2	13 8	14 0
24	12 0	10 5	9 0	7 5	J6 OR	3 7	7 7	11 4	13 4	14 0	14 0	13 7
25	F	8 6	8 2	U7 6Fs	6 2	4 6	U7 5s	11 1	12 7	12 7	12 1	11 5
26	F	F	F	8 8r	F	J7 5F	U9 2s	11 8	12 5	13 0	13 1	13 4
27	12 8	12 1	U9 4s	7 9	7 8	U7 6s	9 5	11 6	13 6	13 6	13 3	13 4
28	13 0	11 8	F	10 8	10 4s	8 6	U9 8s	SH	11 8s	11 7	11 8	11 6
Mean	11 1	10 0	8 9	8 4	7 4	5 9	8 2	11 1	12 5	12 9	12 7	12 4
Median	11 1	10 0	8 6	8 0	7 2	5 7	7 7	11 0	12 5	12 8	12 8	12 1
Count	15	18	19	21	21	25	25	27	28	28	28	27

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

Characteristic foF2
Unit Mc
Month February 1959

TABLE 12—Contd
Ionospheric Data
75 0°E Mean Time

Latitude : 10 2°N
Longitude : 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
11 6	11 8	11 7	11 6	10 7	U9 6s	U8 8s	F	F	F	F	U9 8s	1
10 4	10 7	11 1	11 2	10 7	U9 7s	U8 6s	U8 2F	F	F	F	10 0	2
11 7	11 4	11 2	10 5	10 2	U9 6s	U9 4s	9 2	8 1	F	U7 9F	U8 3F	3
13 5	13 2	13 1	12 9	13 0	U12 9s	12 4	12 4	F	U13 2R	13 0	12 1	4
13 9	14 0	14 0	13 3	U12 5R	10 7	U9 0s	F	F	8 3	F	8 5	5
12 0	11 9	11 3	11 3	11 4	11 6	11 0	F	F	F	F	F	6
12 7	12 9	12 9	12 7	12 6	U11 8s	U9 1s	F	F	F	F	F	7
13 6	14 1	15 0	U15 0s	14 6H	13 5H	9 5H	F	F	F	F	F	8
13 6	11 5	U15 0s	16 2	U15 8s	14 8H	14 0H	U11 5F	F	F	FS	F	9
11 7	11 8	12 3	12 6	12 3	U11 4s	10 6	F	F	F	F	F	10
11 7	11 4	11 1	10 8	11 7	13 3	11 8	11 5	11 7	FS	12 1	U10 5s	11
15 7	15 4	U15 0s	14 5	U13 8R	U13 1s	J11 2s	F	F	F	F	FS	12
11 6	U11 7s	11 9	11 9	11 5	10 9	U10 0s	F	F	F	FS	U10 6R	13
11 1	11 3	11 4	11 2	U10 7s	U9 7s	U8 8s	C	C	C	C	C	14
12 7	13 0	11 8	10 5	10 8	U11 3s	U10 8s	9 9	U9 6s	U9 8s	J11 OR	13 3	15
16 6	U16 4R	16 0	15 0H	U13 8RH	V11 8s	U10 0F	F	F	F	F	F	16
12 2	11 6	11 5	11 2	11 0	10 6	U9 2s	8 8	10 2	U10 7s	10 9	U11 0F	17
12 0	11 8	11 6	10 8	U10 0s	U9 8s	9 0	F	F	F	F	F	18
12 2	12 5	12 5	12 2	11 5	U9 6s	U9 0s	U8 7F	F	F	F	RS	19
11 0	10 9	11 4	11 6	U11 6s	11 4	U9 6s	U7 6F	F	F	U9 4s	F	20
11 6	11 6	11 6	11 6	11 4	U10 9s	9 3	F	F	F	F	F	21
12 4	12 6	12 6	12 3	11 6	11 4	U9 7s	F	F	F	F	F	22
13 3	13 2	12 8	13 4	13 1	12 2	11 4	J10 2F	10 7F	10 8	U11 4F	F	23
13 8	13 7	13 7	13 6	13 6	12 8	U11 4SH	F	F	F	F	U10 6F	24
11 3	12 2	13 1	12 6H	12 6	12 2	10 7	F	F	F	F	F	25
13 2	13 4	14 2	14 2	13 4H	13 0H	11 0WH	9 4	10 5	11 4	11 0	U11 7s	26
13 6	14 1	14 0	13 8	13 5	12 4H	U10 6WA	F	F	F	F	F	27
12 1	12 7	13 0	13 2	13 2	12 6	11 5	11 6sw	11 4s	11 6s	12 0	12 4	28
12 6	12 7	12 7	12 6	12 2	11 6	10 3	9 9	U10 3	U10 8	10 8	U10 7	Mean
12.2	12 6	12 6	12 4	12 0	11 5	10 0	9 6	U10 5	U10 8	11 0	U10 6	Median
28	28	28	28	28	28	28	12	7	7	10	12	Count

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

Characteristic : foF1
 Unit Mc
 Month : February 1959

TABLE 13
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	L	L
3									L	L	L	L
4								L	L	L	L	L
5									L	L	L	L
6									L	L	L	L
7								L	L	L	L	L
8								L	L	L	L _{II}	L
9									L	L	L	L
10									L	L	L	L
11								L	L	L	L	L
12									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								L	L	L	L	L
18								L	L	L	L	L
19								L	L	L _{II}	L	L _{II}
20								L	L _{II}	L _{II}	L _H	L
21								L	L	L	L	L
22									L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25								L	L	L	L	L _H
26								L	L	L	L _{II}	L
27								L	L	L	L	L _H
28								L	L	L	L	L _H
Mean												
Median												
Count												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF1
Unit Mc
Month February 1959

TABLE 13—Contd
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	Day
L	L	L	L	L	L							1
L	L	L	L	A	L							2
C	L	L	L	L	L							3
L	L	L	L	L	L							4
L	L	L	L	L	L							5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L _{II}	L _{II}	L _{II}	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	L	L	L	L							16
L	L	L _{II}	L _{II}	L	L							17
L	L _{II}	L	L	L	L							18
L	L _{II}	L	L _{II}	L	L							19
E	L	L _{II}	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L _{II}	L _{II}	L	L	L	L							25
L _{II}	L _{II}	L	L	L	L							26
L	L	L _{II}	L	L	L							27
L _{II}	L _{II}	L	L	L	L							28
												Mean
												Median
												Coun

Sweep 1 0 Mc to 25.0 Mc. in 27 seconds

Characteristic · foF1
 Unit Mc
 Month February 1959

TABLE 13—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	B	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 ^H	L ^H
9								L	L	L	L	L
10								L	L	L	L	L
11								L	L	L	L	B
12								L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	L	L
15							C	L	L	L	L	L
16								L	L	L	L	L
17							L	L	L	L	L	L
18								L	L	L	L	L
19								L	L	L	L	L ^H
20								L	L ^H	L	L ^H	L
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25								L	L	L	L	L ^H
26								L	L	L	L ^H	L ^H
27								L	L	L	L ^H	L
28								L	L	L	L	L ^H
Mean												
Median												
Count												

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

Characteristic foF1
 Unit Mc
 Month February 1959

TABLE 13—*Contd*
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								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 _H	L _H	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	L	L	L								14
L	L	L	L	L								15
L	L	L	L	L								16
L	L	L	L	L								17
L _H	L	L	L	L								18
L	L	L _H	L	L								19
L	L	L	L	L								20
L	L	L	L	L								21
L	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								24
L _H	L _H	L	L _H	L								25
L _H	L _H	L	L	L								26
L	L _H	L	L	L								27
L _H	L _H	L	L	L								28
												Mean
												Median
												Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month February 1959

TABLE 14
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1								2 5	A	A	A	A
2								2 6	A	A	A	A
3								A	A	A	A	A
4								2 5	J 2	A	A	A
5								A	A	A	A	A
6								A	A	A	A	A
7								A	A	A	A	A
8								A	A	A	A	A
9								A	A	A	A	A
10								U2 4A	A	A	A	A
11								A	A	A	A	A
12								2 6H	3 3	3 6	3 8	A
13								A	A	A	A	A
14								2 6	A	A	A	A
15								2 5	A	A	A	A
16								2 6	U3 2A	A	A	A
17								2 5	A	A	A	A
18								U2 5A	A	A	A	A
19								A	A	A	A	A
20								A	A	A	A	A
21								2 6H	3 2	A	A	A
22								A	A	A	A	A
23								2 6H	3 1	A	A	A
24								A	A	A	A	A
25								U2 8A	A	A	A	A
26								A	A	A	A	4 0
27								A	A	A	A	A
28								A	A	A	A	A
Mean								2 6	3 2			
Median								2 6	3 2			
Count								13	5	1	1	1

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month February 1959

TABLE 14—*Contd*
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	Day
A	A	A	A	A	A							1
A	A	A	A	A	A							2
C	A	A	A	A	A							3
A	A	A	A	A	A							4
A	4 0	A	A	A	A							5
A	A	A	A	A	A							6
A	A	A	A	A	A							7
A	A	A	A	A	A							8
A	A	4 0	B	3 3	A							9
A	A	A	A	U3 4A	A							10
A	B	A	A	3 2	A							11
A	A	A	A	A	A							12
A	A	A	A	A	A							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
U4 0A	A	A	A	A	A							16
A	A	A	A	A	A							17
A	A	A	A	A	A							18
A	U4 0A	A	A	A	A							19
A	A	A	A	A	A							20
A	A	A	A	A	F							21
A	A	A	A	A	A							22
A	A	A	A	A	A							23
A	A	A	A	A	A							24
A	A	A	A	A	A							25
A	4 2	U3 9A	A	A	A							26
A	A	A	A	A	A							27
A	A	A	A	A	A							28
												Mean
												Median
1	3	2		3								Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
 Unit Mc
 Month February 1959

TABLE 14—*Contd*
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 0	A	A	B	A	A
2							A	A	A	A	A	A
3							2 1	A	A	A	A	A
4							2 1	A	3 4	A	A	A
5							2 0	A	A	A	A	A
6							2 0	A	A	A	A	A
7							U2 OR	A	A	A	A	A
8							2 OII	A	A	A	A	A
9							A	A	A	A	A	A
10							A	A	A	A	A	A
11							A	A	A	A	A	B
12							U2 IR	2 9	A	3 7	A	A
13							2 2	A	A	A	A	A
14							2 IR	A	A	A	A	A
15							2 III	A	A	A	A	A
16								U2 9A	U3 4A	A	B	A
17							U2 OR	A	A	A	A	A
18							R	A	A	A	A	A
19							U2 OR	A	A	A	A	A
20							2 III	A	A	A	A	A
21							R	2 9	3 4	A	A	A
22							A	A	A	A	A	A
23							2 III	2 9	3 5	A	A	A
24							2 IR	A	A	A	A	A
25							2 0	A	A	A	A	A
26								A	A	3 8	A	A
27								A	A	A	A	A
28								A	A	A	A	A
Mean							2 1					
Median							2 1					
Count							17	4	4	2		

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

Characteristic foE
Unit Mc
Month February 1959

TABLE 14—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
A	A	A	A	A								1
A	A	A	A	A								2
A	A	A	A	A	A							3
A	A	A	A	A								4
A	A	A	A	A								5
												6
A	A	A	A	A								7
A	A	A	A	A								8
A	A	B	A	A								9
A	U ₄ OR	3 8	B	A								10
A	A	A	A		A							11
B	A	A	3 5	A	A							12
A	A	A	A	A								13
A	A	A	A	A	A							14
A	A	A	A	A								15
												16
A	A	A	A	A								17
A	A	A	A	A	A							18
A	A	A	A	A								19
A	A	A	A	A								20
												21
A	A	A	A	U ₃ IF	F							22
A	A	A	A	A	A							23
A	A	A	A	A								24
A	A	A	A	A	A							25
												26
A	4 2	A	A	A								27
A	A	A	A	A								28
A	A	A	A	A								28
												Mean
												Median
	3	1	1	1								Count

Sweep 1.0 Mc to 2.5 Mc. in 27 seconds

Characteristic foEs
 Unit Mc
 Month February 1959

TABLE 15
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1			2 6					U6 0s	10 4	12 0	13 4	12 6
2	3 2							G	11 0	13 6	12 6	14 8
3								4 2	7 0	10 6	12 0	13 0
4								S	4 2	8 0	10 0	12 6
5									7 4	9 4	11 8	13 6
6									U8 0s	11 0	11 6	13 4
7				U4 8s					U6 6s	9 6	11 3	12 3
8									G	6 0	11 4	11 8
9										S	11 8	13 0
10			2 7							U7 0s	U9 4s	12 2
11												13 8
12	U5 5s	8 6	3 8							U7 4s	9 4	11 4
13										G	6 8	8 0
14											7 8	9 4
15	G	G	G	3 9	G	G	G	G	G	S	9 2	11 6
16											12 5	13 4
17		2 6									12 8	12 8
18			4 1	3 4	U8 6s	4 4	U3 0s	G	8 0	12 0	11 0	12 6
19									S	10 2	11 4	12 6
20									S	11 0	12 0	13 0
21										9 0	12 0	12 0
22										7 0	12 0	12 8
23											U18 0s	17 0
24	U6 5s	U4 8s		5 6	U6 6s			S	S	G	11 3	12 6
25				4 1							12 6	13 4
26											17 5	19 4
27											10 2	12 0
28	5 0s										10 6	10 6
											13 3	12 6
											13 2	13 0
											9 4	G
											12 4	12 2
											12 6	13 0
Mean				4 4				7 0	10 0	11 7	13 3	14 1
Median				4 1				7 0	9 4	11 6	13 0	13 4
Count	4	3	4	5	2	1	2	23	28	28	28	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month February 1959

TABLE 15— contd
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	Day
13 4	13 0	12 6	13 0	11 0	U10 0 ^s							1
13 0	12 6	13 0	13 0	12 0	8 8							2
C	13 0	15 0	13 0	10 4	19 0							3
12 8	11 0	15 0	15 0	12 0	L 8 0							4
11 8	8 0	10 0	12 2	11 0	10 0							5
13 0	14 0	12 6	13 4	9 2	8 0							6
14 3	13 8	12 2	11 3	U10 1 ^s	U7 8 ^s							7
14 0	12 6	11 4	10 0	9 0	8 2							8
18 0	14 6	G	B	G	8 7							9
14 4	14 7	13 5	13 0	10 6	8 3							10
13 6	14 0	13 4	12 6	G	3 8			2 1		S		11
12 2	12 6	11 4	U12 7 ^s	10 6 ^s	9 1	S				3 0		12
13 6	13 6	12 7	11 8	9.5	U8 6 ^s	S						13
13 4	13 6	13 6	12 6	10 8	8 7		C	C	C	C	C	14
12 6	13 6	13 2	13 1	10 4	8 5							15
13 0	11 0	9 0	13 0	12 0	8 6							16
13 6	14 0	13 6	12 0	11 6	9 0							17
18 4	16 0	14 0	13 6	11 0	U9 0 ^s	S						18
14 0	9 0	12 4	U14 0 ^s	10 4	U9 0 ^s	4 0						19
20 0	17 2	13 2	13 0	10 0	9 6							20
17 6	16 6	14 6	12 4	10 6	8 2							21
16 4	16 8	16 6	13 4	10 8	8 4							22
12 8	11 8	16 6	16 8	U9 8 ^s	8 6					U5 6 ^s	4 3	23
12 8	12 2	11 2	10 2	9 4	7 6					2 0		24
13 0	13 4	14 0	12 4	7 0	8 0							25
13 6	4 6	7 0	12 0	9 0	8 6							26
12 2	11 0	11 6	11 2	10 6	8 0							27
12 6	14 4	12 6	12 6	9 2	8 2			3 2				28
14 1	13 0	12 8	12 7	10 3	8 4						.	Mean
13 4	13 5	12 8	12 7	10 4	8 6					.		Median
27	28	28	27	28	28	1		1	1	3	1	Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month February 1959

TABLE 15—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude . 10 2°N
Longitude . 77°5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		07 08					03 08	10 0	12 0	12 0	13 8	13 0
2								10 0	11 4	13 2	13 0	13 0
3							06 08	08 08	11 4	13 2	13 0	13 0
4							G	09 08	G	12 6	10 4	11 6
5							S	8 0	9 8	12 8	13 0	13 4
6							06 08	10 0	11 6	14 4	14 0	14 0
7							G	09 38	10 6	12 8	13 6	13 8
8			3 1	06 48			G	8 8	11 0	13 0	13 0	14 0
9								11 0	12 4	19 6	18 2	17 4
10			2 9				04 48	9 0	11 4	13 6	14 2	16 6
11							06 18	7 8	12 4	11 1	13 0	13 3
12	6 0	3 6					G	7 2	9 2	4 6	9 8	13 0
13							S	9 8	12 0	14 2	14 6	13 8
14							G	8 6	10 9	12 6	12 8	13 6
15	C	C	C	C	C	C	C	07 28	10 6	11 7	13 6	12 6
16								4 4	8 0	14 0	11 8	13 8
17		3 2					G	09 08	11 6	12 6	13 4	13 2
18			09 08	07 68	8 6	05 08	G	11 0	11 0	14 0	17 0	18 0
19							G	9 2	12 0	17 0	18 0	14 0
20							3 2	11 4	12 0	20 0	01 8 08	17 0
21							G	G	8 6	13 6	13 3	14 8
22							4 2	09 68	11 4	17 4	17 6	15 4
23							G	05 88	6 6	12 5	9 8	16 4
24	4 7	4 4	06 08	06 08			S	6 8	10 4	12 4	13 5	12 4
25			3 2				G	7 4	11 2	12 4	13 2	13 0
26							2 9	9 2	11 0	8 6	10 4	13 2
27							05 08	9 4	11 4	13 6	13 0	12 6
28	4 4	2 8						9 0	11 2	13 0	13 2	14 0
Mean		4 2	4 8				4 8	8 7	10 8	13 3	13 6	14 1
Median		3 6	3 2				G	9 0	11 2	13 0	13 2	13 7
Count	3	5	5	3	1	1	20	28	28	28	28	28

Sweep 1 0 Mc. to 25.0 Mc. in 27 seconds

Characteristic foEs
Unit Mc
Month February 1959

TABLE 15—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
14 8	13 0	12 6	11 0	10 8	U6 0s							1
14 0	12 8	13 0	12 2	10 4	U6 0s		3 8					2
12 8	13 4	14 0	11 2	10 2	U7 0s							3
12 0	12 0	12 0	10 8	8 8	S							4
13 6	9 8	12 8	10 4	9 8	S							5
13 4	13 0	13 0	9 8	8 2								6
14 1	13 1	12 0	10 7	U9 7s	U5 6s							7
13 4	12 4	10 4	10 0	8 6	S							8
U19 0s	G	G	B	10 2	8 0							9
14 0	14 4	12 8	11 0	9 0	S							10
14 4	14 5	12 6	G	5 1	2 8							11
11 6	12 0	U13 6s	11 0	9 6	S				U3 8s			12
14 1	13 2	12 6	10 4	9 5	S							13
14 2	12 8	12 7	11 4	9 6	5 8		C	C	C	C	C	14
12 8	13 4	12 8	10 6	9 3								15
11 0	8 4	12 4	11 0	U10 8s	U7 0s							16
14 0	14 0	13 0	11 0	9 4	S							17
17 0	13 8	14 0	11 4	U10 0s	S					1 8		18
11 0	11 0	13 4	12 0	U10 0s	U8 0s							19
14 4	16 0	13 0	10 4	9 0	S							20
14 6	14 7	12 6	10 8	9 3	S							21
17 4	16 5	14 4	10 6	8 8	U6 8s							22
12 6	11 6	16 8	11 2	U9 4s	S					3 2	U4 8s	23
12 3	11 4	11 6	10 6	8 8	S					3 3		24
12 6	G	12 4	9 8	8 2	U4 4s							25
11 8	G	9 2	8 2	9 0	6 0							26
12 4	11 8	12 2	10 6	9 0	4 8s						3 2	27
15 4	14 0	13 4	10 0	8 8	5 6				7 0s			28
13 7	12 9	12 8	10 7	9 3	6 0							Mean
13 8	12 9	12 8	10 7	9 4	6 0							Median
28	28	28	27	28	14		1		2	3	2	Count

Sweep 1 0 Mc to 25 0 in 27 seconds

Characteristic : fbEs
 Unit Mc
 Month February 1959

TABLE 16
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1			1 4					2 5	3 3	3 7	4 0	4 3
2									3 2	3 7	4 0	4 1
3								2 5	3 2	3 6	4 0	4 1
4								2 5	3 2	3 6	3 8	4 0
5								2 5	3 2	3 6	3 8	4 2
6								2 5	3 1	3 6	4 0	4 1
7								2 6	3 2	3 7	4 0	4 2
8				3 1			C	2 6	3 2	3 6	4 0	4 0
9								2 7	3 4	3 8	4 0	4 2
10								2 5	3 4	4 2	4 0	4 2
11								2 5	3 2	3 7	4 0	4 2
12	2 6	2 8	1 8					2 6	3 2		4 0	4 1
13								2 6	3 3	3 7	4 0	4 2
14								2 5	3 1	3 7	4 0	4 3
15	C	C	C	1 5 C	C	C	C		3 1	3 6	4 0	4 0
16		1 6							3 2	3 6	4 0	4 2
17					2 0	1 8	1 3		3 2	3 6	4 0	4 2
18								2 5	3 2	3 6	4 0	4 6
19								2 6	3 2	3 7	4 0	4 2
20								2 5	3 2	3 6	3 8	4 0
21										3 6	3 9	4 2
22								2 6	3 4	4 0	4 2	4 3
23										3 6	4 0	4 2
24		1 8		2 2 1 6	2 4			2 6	3 3	3 8	4 0	4 2
25								2 7	3 4	3 8	4 0	4 2
26								2 7	3 3	3 8	4 0	
27								2 6	3 4	3 8	4 1	4 2
28	3 0							2 6	3 4	3 8	4 1	4 2
Mean								2 6	3 2	3 7	4 0	4 2
Median								2 6	3 2	3 7	4 0	4 2
Count	2	3	2	4	2	1	1	22	26	27	28	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fbEs
Unit Mc
Month February 1959

TABLE 16—contd
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	Day
4 3	4 2	4 1	3 8	3 4	2 8							1
4 4	4 3	4 0	4 1	4 3	2 8							2
C	4 0	4 0	3 7	3 5	2 8							3
4 3	4 0	4 2	5 2	4 3	2 7							4
4.1	4 0	4 0	3 7	3 2	2 7							5
4 2	4 1	4 0	3 6	3 2	2 8							6
4 3	4 2	3 9	3 6	3 3	2 7							7
4 2	4 2	4 0	3 6	3 3	2 7							8
4 2	4 1				2 6							9
4 2	4 3	4 2	4 0	3 4	2 8							10
4 2	4 4	4 1	3 7	3 4	3 0			2 0		1 7		11
4 2	4 3	4 0	3 7	3 4	2 7	1 8				1 7		12
4 4	4 3	4 0	3 7	3 3	2 7	1 9						13
4 3	4 2	4 0	3 7	3 3	2 7		C	C	C	C	C	14
4 3	4 3	4 0	3 6	3 4	2 8							15
4 1	4 2	4 0	3 6	3 4	2 8							16
4 2	4 2	4 0	3 7	3 5	2 7							17
4 4	4 0	4 0	3 8	3 4	2 7							18
4.4	4 0	4 2	3 7	3 4	2 8							19
4.1	4 0	3 9	3 7	3 3	2 6							20
4 4	4 1	4 1	3 8	3 4	2 8							21
4 4	4 3	4 1	3 8	3 5	2 8							22
4 3	4 2	4 3	5 1	3 4	2 8					1 9	2.0	23
4 2	4 2	4 1	3 8	3 5	2 9					1 5		24
4 4	4 2	4 6	3 8	3 4	2 7							25
4 4		4 0	3 8	3 4	2 8							26
4 4	4 2	4 2	4 0	3 5	2 8							27
4 2	4 2	4 2	3 8	3 6	2 8							28
4 3	4 2	4 1	3 8	3 5	2 8				.	.		Mean
4 3	4 2	4 0	3 7	3 4	2 8				.	.		Median
27	27	27	27	26	28	2	.	1		4	1	Count

Sweep 1 0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic fbEs
Unit Mc
Month February 1959

TABLE 16—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10°2'N
Longitude 77°5'E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		1 8					2 0	3 0	3 6	6 0	4 2	4 2
2								3 0	3 5	3 8	4 0	4 1
3							2 1	3 0	3 5	3 8	4 1	4 1
4								3 0		3 7	4 0	4 0
5							2 0	3 0	3 4	3 8	4 0	4 2
6							2 0	2 9	3 4	3 8	4 0	4 1
7			1 6	2 6				2 9	3 5	4 0	4 0	4 1
8								3 0	3 5	3 8	4 0	4 2
9								3 1	3 6	4 0	4 1	4 3
10							2 0	3 2	3 5	3 9	4 1	4 2
11							2 0	3 0	3 4	3 8	4 0	
12	2 2	1 9					2 1	3 0	3 5	3 8	4 0	4 2
13							2 1	3 0	3 5	3 8	4 1	4 2
14								2 9	3 5	3 9	4 2	4 2
15	C	C	C	C	C	C	C	2 9	3 4	3 8	4 0	4 1
16								3 0	3 4	3 8		4 3
17			2 4	2 6	4 0	1 9		3 0	3 5	4 0	4 0	4 2
18								2 9	3 6	4 0	4 2	4 4
19								3 0	3 5	3 8	4 0	4 2
20								3 0	3 4	3 8	4 0	4 0
21									3 4	3 8	4 0	4 2
22							2 0	3 2	3 6	4 0	4 2	4 3
23			2 4	2 3				3 0	3 5	3 8	4 2	4 4
24	1 8	1 6	1 2					3 0	3 6	4 0	4 3	4 2
25								3 0	3 6	3 9	4 2	4 3
26								3 0	3 6	4 0	4 2	4 2
27							2 2	3 0	3 7	4 0	4 2	4 3
28	2 2							3 0	3 7	4 0	4 2	4 4
Mean							2 0	3 0	3 5	4 0	4 1	4 2
Median							2 0	3 0	3 5	3 8	4 1	4 2
Count	3	3	4	3	1	1	10	27	27	28	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fbEs
Unit Mc
Month February 1959

TABLE 16—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
4 2	4 2	4 0	3 6	3 1	2 2							1
4 4	4 2	3 9	3 8	3 6	2 3							2
4 1	4 1	3 8	3 8	3 1	2 2							3
4 1	4 0	4 1	4 9	3 2	2 2							4
4 1	4 0	3 8	3 5	3 0	2 2							5
4 3	4 1	3 7	3 5	3 0								6
4 3	4 1	3 8	3 5	3 0	2 3							7
4 2	4 0		3 5	3 0	2 3							8
4 2				3 0	2 3							9
4 2	4 2	4 2	3 8	3 2	2 3							10
	4 3	3 9		3 9	2 4							11
4 2	4 1	4 0	3 6	3 1	2 3				1 9			12
4 3	4 1	3 8	3 5	3 0	2 3							13
4 3	4 0	3 9	3 5	3 0	2 3		C	C	C	C	C	14
4 3	4 2	3 9	3 7	3 1								15
4 2	4 0	3 9	3 6	3 0	2 4							16
4 2	4 1	4 0	3 6	3 2	2 2							17
4 2	4 1	3 8	3 6	3 1	2 5							18
4 2	4 1	4 0	3 6	3 1	2 4							19
4 2	4 0	4 0	3 6	3 1	2 2							20
4 2	4 1	4 0	3 8	3 1	2 4							21
4 4	4 2	4 0	3 7	3 1	2 3							22
4 1	4 1	4 6	4 2	3 1								23
4 3	4 2	3 9	3 6	3 2	2 4							24
4 4		4 0	3 6	3 0	2 3							25
4 3		4 0	3 8	3 2	2 3							26
4 3	4 2	4 1	3 7	3 1	2 4						2 2	27
4 3	4 3	4 0	3 8	3 2	2 4				3 0			28
4 2	4 1	4 0	3 7	3 1	2 3							Mean
4 2	4 1	4 0	3 6	3 1	2 3							Median
27	25	26	26	28	25				2		1	Count

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic f min
Unit Mc
Month February 1959

TABLE 17
Ionospheric Data
75 0°E Mean Time

Latitude 10°2'N
Longitude 77 5'E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	13	12	14	17	15	13	14	18	19	22	27	28
2	15	15	13	13	14	14	15	19	22	22	23	26
3	21	20	19	17	15	14	14	15	19	21	22	25
4	15	16	15	14	14	20	14	17	19	21	22	23
5	22	19	17	16	15	20	C	15	20	22	22	23
6	18	C	C	C	C	C	13	15	17	22	22	24
7	18	18	17	15	19	19	13	16	19	23	22	24
8	14	15	E	10	11	E	C	15	18	22	22	24
9	15	12	C	13	13	15	14	20	24	26	27	26
10	14	13	13	14	15	14	14	16	22	33	24	26
11	16	13	14	15	16	18	20	20	20	24	25	28
12	16	14	14	13	13	16	14	17	23	30	26	28
13	13	10	18	16	17	18	18	16	22	22	25	25
14	14	16	14	11	15	13	14	16	20	24	25	26
15	C	C	C	C	C	C	C	14	17	21	25	25
16	13	12	17	18	18	14	16	18	20	23	28	30
17	18	14	14	16	12	12	E	18	19	24	24	28
18	17	14	14	12	12	14	14	17	20	22	24	32
19	13	12	17	15	16	16	16	19	20	21	22	26
20	17	16	15	14	13	13	15	16	19	20	20	22
21	18	16	16	13	15	16	16	20	22	23	24	28
22	17	16	14	14	15	13	15	20	22	25	26	28
23	14	14	16	19	17	19	16	17	22	23	22	26
24	16	11	10	10	12	13	15	17	20	26	27	28
25	15	12	15	14	15	15	15	16	20	24	26	28
26	18	16	16	15	15	14	15	14	20	26	30	30
27	16	18	17	13	14	11	15	18	22	24	26	32
28	14	20	17	14	16	18	17	21	22	26	25	27
Mea	16	15	15	14	15	15	15	17	20	24	24	27
Median	16	14	15	14	15	14	15	17	20	23	24	26
Count	27	26	25	26	26	26	25	28	28	28	28	28

Sweep 10 Mc to 250 Mc in 27 seconds.

Characteristic : f min
 Unit Mc
 Month February 1959

TABLE 17
 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	Day
2 7	2 7	2 5	2 2	2 0	1 8	1 6	1 4	1 5	1 4	1 5	1 5	1
3 0	2 7	2 5	2 3	2 6	2 0	1 5	1 3	1 4	1 3	1 3	1 2	2
C	2 3	2 4	2 1	2 2	2 2	1 6	1 6	1 7	1 6	1 6	1 7	3
2 5	2 6	2 2	2 2	2 1	1 6	1 6	1 7	1 6	1 7	1 5	2 1	4
2 5	2 2	2 1	2 0	2 2	1 9	1 6	1 5	1 6	1 6	1 5	1 5	5
2 4	2 4	2 3	2 2	2 2	2 2	1 7	1 2	1 4	1 4	1 5	1 6	6
2 5	2 4	2 4	2 1	2 1	1 6	1 6	1 4	1 4	1 6	1 7	1 6	7
2 4	2 6	2 4	2 2	2 0	1 8	1 7	1 6	1 6	1 7	1 7	1 3	8
2 7	2 6	2 6	5 0	2 6	1 8	1 6	1 1	1 4	1 5	1 5	1 7	9
2 7	2 8	3 1	3 0	2 6	1 9	1 7	1 5	1 4	1 5	1 7	1 2	10
3 1	4 0	3 0	2 3	2 6	1 8	1 7	1 1	1 2	1 8	1 6	1 6	11
3 0	3 3	2 6	2 4	2 2	1 9	1 6	1 3	1 5	1 4	1 3	1 7	12
3 0	2 8	2 3	2 2	2 3	1 9	1 8	1 2	1 3	1 5	1 3	1 5	13
2 8	2 6	2 5	2 2	2 3	2 1	1 7	C	C	C	C	C	14
2 7	2 6	2 6	2 3	2 5	2 3	1 8	1 4	1 3	1 7	1 7	1 3	15
3 0	2 6	2 5	2 1	2 3	2 0	1 8	1 6	1 5	1 6	1 5	1 6	16
3 2	2 7	2 7	2 4	2 3	1 8	1 7	E	1 5	1 4	1 5	1 5	17
2 8	2 5	2 4	2 5	2 4	1 7	1 6	E	1 3	1 2	1 7	1 6	18
2 5	3 0	2 4	2 2	2 3	1 9	1 7	1 4	1 3	2 0	1 6	1 6	19
2 4	2 5	2 4	2 0	2 2	2 0	1 7	1 4	1 7	1 6	1 4	2 0	20
2 8	2 7	2 6	2 4	2 8	2 4	1 7	1 6	1 7	1 8	1 7	1 9	21
2 9	3 0	2 6	2 5	2 5	2 1	1 7	1 2	1 5	1 6	1 6	1 6	22
2 6	2 4	2 4	2 0	2 0	2 1	1 9	1 2	2 0	2 2	1 3	1 6	23
2 7	2 8	2 5	2 4	2 5	2 0	1 7	1 6	1 6	1 8	1 2	1 5	24
2 6	2 6	2 4	2 2	2 6	2 0	1 8	1 2	1 3	1 5	2 0	1 7	25
2 8	3 0	3 0	2 4	2 6	2 0	1 8	1 6	1 7	2 0	2 0	1 9	26
3 0	3 0	2 4	2 0	2 4	2 0	1 6	1 0	1 8	1 8	1 5	1 7	27
2 6	2 8	2 6	2 6	2 7	2 2	1 8	1 2	1 4	1 5	1 6	1 9	28
2 7	2 7	2 5	2 4	2 4	2 0	1 7	1 4	1 5	1 6	1 6	1 6	Mean
2 7	2 6	2 5	2 2	2 3	2 0	1 7	1 4	1 5	1 6	1 5	1 6	Median
2 7	2 8	2 8	2 8	2 8	2 8	2 8	2 7	2 7	2 7	2 7	2 7	Count

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic f min
Unit Mc
Month February 1959

TABLE 17—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude · 10·2°N
Longitude · 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	1 2	1 3	1 3	1 3	1 4	1 3	1 5	1 7	1 9	6 0	3 2	2 5
2	1 4	1 3	1 4	1 6	1 5	1 4	2 1	2 0	2 2	2 2	2 4	2 6
3	2 2	1 7	1 7	1 7	1 4	1 4	1 4	1 5	2 0	2 1	2 4	2 4
4	1 7	1 8	1 4	1 9	1 5	1 6	1 6	1 6	2 1	2 0	2 3	2 3
5	1 9	1 6	1 7	1 6	1 5	1 9	1 5	1 7	2 0	2 1	2 3	2 3
6	C	C	C	C	C	1 5	1 4	1 6	1 9	2 1	2 2	2 5
7	1 9	1 6	1 4	1 5	2 0	1 6	1 6	1 7	2 2	2 2	2 3	2 4
8	1 7	E	1 6	1 2	E	1 4	1 4	1 6	2 0	2 2	2 2	2 6
9	1 2	1 6	1 5	C	1 1	1 5	2 2	2 5	2 4	2 6	2 6	3 0
10	1 3	UI 40	1 6	1 4	1 3	1 4	1 4	2 6	2 1	2 4	2 6	2 4
11	1 4	1 4	1 5	1 5	1 5	2 1	1 6	1 8	2 1	2 3	2 6	5 6
12	1 2	1 2	1 4	1 3	1 3	1 7	1 8	1 8	2 4	2 4	2 5	2 8
13	1 4	1 5	1 6	1 7	1 6	1 7	1 9	1 9	2 2	2 3	2 3	2 7
14	1 4	1 5	1 2	1 7	1 4	1 6	1 7	1 7	2 2	2 3	2 5	2 6
15	C	C	C	C	C	C	C	1 6	1 9	2 2	2 6	2 8
16	1 3	1 7	1 7	1 5	1 7	1 5	2 2	2 0	2 2	2 3	4 8	3 0
17	1 7	1 3	1 3	1 6	1 3	1 4	1 7	1 9	2 2	2 4	2 4	2 6
18	1 4	1 4	1 5	1 3	1 5	1 5	1 6	1 8	2 6	2 2	2 7	3 0
19	1 3	1 6	1 3	1 7	1 7	1 6	1 7	2 0	2 1	2 1	2 4	2 6
20	1 9	1 7	1 4	1 3	1 3	1 6	1 5	1 7	2 0	2 0	2 2	2 4
21	2 0	1 5	1 4	1 6	1 5	1 5	1 9	2 2	2 3	2 3	2 4	2 7
22	1 5	1 5	1 4	1 3	1 3	1 5	1 2	2 0	2 4	2 3	2 6	3 0
23	1 4	1 5	1 9	1 8	2 4	1 7	1 6	2 0	2 1	2 2	2 7	2 5
24	1 1	1 1	E	1 2	1 3	1 4	1 6	1 8	2 4	2 6	3 0	3 0
25	1 6	1 4	1 4	1 4	1 6	1 9	1 7	1 7	2 2	2 4	2 4	2 8
26	1 6	1 5	1 2	1 5	1 1	1 7	1 8	1 7	2 6	2 8	2 8	2 6
27	1 8	1 8	1 4	1 6	1 6	1 3	1 0	1 9	2 3	2 2	2 8	2 8
28	1 7	1 5	1 6	1 7	1 9	1 7	2 3	2 0	2 2	2 4	2 5	2 8
Mean	1 5	1 5	1 4	1 5	1 5	1 6	1 6	1 8	2 2	2 4	2 6	2 8
Median	1 4	1 5	1 4	1 5	1 5	1 5	1 6	1 8	2 2	2 3	2 5	2 6
Count	26	26	26	25	26	27	27	28	28	28	28	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic f min
Unit Mc
Month February 1959

TABLE 17—Contd
Ionospheric Data
75 °E Mean Time

Latitude 10 2°N
Longitude 77°5'E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
2 6	2 4	2 3	2 1	1 9	1 6	1 5	1 4	1 4	1 5	1 4	1 4	1
2 8	2 6	2 3	2 4	2 1	1 8	1 4	1 1	1 3	1 3	1 2	1 4	2
2 4	2 4	2 2	2 8	2 0	1 7	1 2	1 7	1 6	1 6	2 0	1 9	3
2 5	2 4	2 3	2 1	1 9	2 0	1 4	1 4	1 6	1 6	1 7	2 2	4
2 5	2 2	2 1	2 3	2 0	1 8	1 4	1 5	1 7	1 8	1 5	1 7	5
2 4	2 4	2 2	2 3	2 2	2 3	1 5	1 4	1 3	1 5	1 5	1 6	6
2 5	2 4	2 3	2 3	1 9	1 6	1 4	1 3	1 6	1 7	1 9	1 7	7
2 6	2 4	4 2	2 4	1 9	1 8	1 3	1 7	1 8	1 4	1 4	1 4	8
2 8	3 0	2 6	4 0	2 0	1 8	1 4	1 4	1 3	1 7	1 5	1 6	9
2 5	3 2	3 0	3 1	2 3	1 8	1 2	1 5	1 6	1 2	1 5	1 3	10
4 7	3 3	2 5	2 5	2 3	1 7	1 3	1 2	1 4	1 6	1 4	1 9	11
3 1	3 0	2 5	2 3	2 1	1 7	1 4	1 3	1 6	1 2	1 6	1 4	12
3 0	2 6	2 2	2 2	2 1	1 8	1 6	1 4	1 4	1 7	1 4	1 4	13
2 8	2 5	2 4	2 5	2 1	1 8	1 4	C	C	C	C	C	14
2 5	2 7	2 4	2 5	2 2	2 2	1 5	1 7	1 6	1 5	1 7	1 5	15
2 7	2 6	2 6	2 5	2 2	2 2	1 5	1 4	1 6	1 3	1 7	1 7	16
2 8	2 5	2 5	2 4	2 1	1 5	1 4	1 3	1 4	1 5	1 8	1 5	17
2 6	2 4	2 4	2 2	2 0	1 7	1 2	1 3	1 2	1 4	1 3	1 6	18
3 0	3 0	2 4	2 4	2 4	1 8	1 2	1 6	1 6	1 7	1 7	1 6	19
2 5	2 5	2 4	2 4	2 0	1 8	1 4	1 6	1 4	1 6	1 7	2 0	20
2 7	2 7	2 5	2 6	2 4	2 2	1 3	1 8	1 7	1 8	1 6	1 7	21
3 0	3 0	2 6	2 5	2 2	1 8	1 3	1 6	1 7	1 7	1 6	1 7	22
2 4	2 4	2 4	2 3	2 6	2 1	1 5	1 5	1 7	1 8	1 6	1 6	23
2 8	2 7	2 5	2 6	2 3	1 8	1 4	1 8	1 8	1 5	1 7	1 7	24
2 8	2 8	2 2	2 6	2 1	2 1	1 4	1 4	1 4	1 6	1 7	1 8	25
2 9	3 2	2 4	2 8	2 4	1 9	1 2	1 3	1 6	2 4	1 9	1 7	26
2 6	2 8	2 2	2 5	2 3	1 9	1 3	1 7	1 6	1 7	1 7	1 5	27
2 7	2 8	2 6	3 0	2 4	1 9	1 2	1 6	1 6	1 5	1 6	1 7	28
2 8	2 7	2 5	2 5	2 2	1 9	1 4	1 5	1 5	1 6	1 6	1 6	Mean
2 7	2 6	2 4	2 4	2 1	1 8	1 4	1 4	1 6	1 6	1 6	1 6	Median
28	28	28	28	28	28	28	27	27	27	27	27	Count

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

Characteristic h'F2
 Unit Km
 Month February 1959

TABLE 18
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude : 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	L	L
3									L	L	L	L
4								L	L	L	L	L
5									L	L	L	L
6									L	L	L	L
7								L	L	L	L	L
8								L	L	L	L	L
9									L	L	L	L
10									L	L	L	L
11								L	L	L	L	L
12									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								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	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
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
Mean												
Median												
Count												

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

Characteristic h'F2
 Unit Km
 Month February 1959

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	Day
L	L	L	L	L	L							1
L	L	L	L	L	L							2
G	L	L	L	L	L							3
L	L	L	L	L	L							4
L	L	L	L	L	L							5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	L	L	LH	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
L	L	L	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28
												Mean
												Median
												Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'F2
 Unit Km
 Month February 1959

TABLE 18—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	B	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	L	L	L
14								L	L	L	L	L
15							C	L	L	L	L	L
16								L	L	L	L	L
17							325	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	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
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
Mean												
Median												
Count								1				

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

Characteristic h'F2
 Unit Km
 Month February 1959

TABLE 18—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10 2°N
 Longitude , 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								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	L	L	L								14
L	L	L	L	L								15
L	L	L	LH	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	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
L	L	L	L	L								26
L	L	L	L	L								27
												Mean
												Median
												Count

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

Characteristic . h'F
 Unit ; Km
 Month . February 1959

TABLE 19
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	235	240	250	245	220	220	240	260	240	230	220	220
2	220	235	240	240	240	220	235	260	240	220	210	205
3	240	240	255	260	240	225	260	260	240	230	220	220
4	230	240	280	250	240	220	240	260	240	230	220	210
5	240	240	230	280	230	290	340	265	240	235	215	215
6	245	C	C	C	C	C	250	260	240	240	220	215
7	235	235	245	280	275	230	255	260	245	230	220	220
8	250	260	240	235	240	220	C	260	240	230	225H	215
9	240	220	210	220	255	240	260	260	240	250	230	220
10	220	220	220	225	240	225	275	260	245	230	220	210
11	240	220	220	240	235	250	260	260	240	225	220	205
12	280	285	260	235	220	245	300	260	250	240	220	215
13	235	245	235	235	220	220	280	265	245	230	210	200
14	235	235	235	250	245	230	245	260	245	230	220	210
15	C	C	C	C	C	C	C	260	240	235	220	220
16	240	240	250	240	220	220	240	245	240	230	220	220
17	230	235	260	250	260	295	300	260	240	230	210	215
18	220	220	225	240	240	220	260	250	235	230	220	220
19	260	240	240	240	230	220	240	250	240	220	210	205H
20	250	250	230	230	220	220	250	260	240H	220H	200H	220
21	300	220	205	220	230	230	240	250	230	220	210	205
22	220	210	220	235	240	240	255	260	240	230	220	210
23	225	220	230	260	250	235	240	250	235	230	220	210
24	240	235	220	220	220	215	255	240	235	225	220	215
25	265	240	230	230	220	220	255	250	240	230	220	220
26	260	260	280	300	280	220	250	260	240	230	220	220
27	250	230	210	220	240	260	280	260	240	230	220	210
28	U270A	280	290	250	225	225	260	260	240	230	220	210
Mean	245	240	240	245	240	235	260	255	240	230	220	215
Median	240	240	235	240	240	225	255	260	240	230	220	215
Count	27	26	26	26	26	26	26	28	28	28	28	28

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

Characteristic h'F
Unit, Km
Month February 1959

TABLE 19
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	Day
210	200H	220	230	240	265	310	420	F	360	325	240	1
210H	200H	220	240	A	260	320	415	380	305	260	240	2
C	210H	215	235	240	265	310	380	420	410	360	255	3
210	200H	200	A	A	260	310	390	400	300	240	250	4
220	215	220	230	240	260	305	F	F	320	250	240	5
200	205H	220	220	230	260	310	430	F	F	380	260	6
220	215	215	220	210	265	325	F	F	U400F	U350F	270	7
210	205	200H	230	240	260	310	F	F	380	340F	250	8
215	220	220	B	235	260	310H	U440F	U400F	U360F	280	240	9
205H	220	220	230	240	260	305	F	F	U470F	290	U310F	10
200	220	220	235	240	270	325	420	400	300	255	240	11
110	220	220	235	215	265	305	430	F	F	U345F	260	12
100	105H	220	225	240	260	305	F	F	F	U280F	240	13
205	200	220	225	240	270	305	C	C	C	C	C	14
210	200	225	230	210	265	300	395	380	360	280	240	15
220	205	220	220	240	260	300	U360F	U400F	320F	210	260	16
220	210	200H	220H	240	260	305	420	350	310	240	240	17
210	210H	210	215	230	260	300	420F	F	420F	U360F	260	18
220	220	220	220H	240	260	300	395	420F	300F	260	240	19
200	205	200H	205	240	260	300	420	U480F	U340F	315F	300	20
195H	190H	210H	220	235	260	300	445	U460F	U480F	300	300	21
210	220	215	225	240	260	300	F	U370F	U390F	U315F	255	22
200H	210	U220A	A	240	260	300	405	400	360	260	260	23
200H	200	205H	220	225H	260	290	F	460	395	255	265	24
205H	205H	A	210H	240	270	320	410	440F	410	390	340F	25
210H	220	220	230	250	270	300	400	360	300	270	260	26
215	220	220	230	240	260	300	440	460F	340F	290	230	27
205H	210H	220	230	240	260	300	380	330	290	245	235	28
210	210	215	225	240	260	305	410	405	360	295	260	Mean
210	210	220	225	240	260	305	420	400	360	280	255	Median
27	28	27	25	26	28	28	20	18	24	27	27	Count

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

Characteristic · h'F

TABLE 19—Contd

Latitude . 10 2°N

Unit Km

Ionospheric Data

Longitude 77 5°E

Month February 1959

75 0°E Mean Time

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	235	245	250	240	220	220	270	245	235	B	215	215
2	220	235	240	240	220	220	270	245	235	215	205	200H
3	240	245	260	260	220	225	290	250	235	230	220	220
4	240	265	280	260	220	220	270	250	240	220	220	205
5	240	230	240	250	270	300	295H	250	240	225	215	220
6	C	235	C	C	C	220	280	240	240	230	220	215
7	230	235	260	285	250	240	280	250	235	225	220	220
8	260	240	245	240	230	240	280	250	240	220	220H	210
9	230	220	210	C	240	240	280	260	240	230	220	220
10	215	220	225	230	225	240	280	250	235	225	210	200H
11	225	230	225	220	240	255	265	245	240	230	215	B
12	260	265	245	230	240	260	285	255	240	225	220	210
13	240	240	235	230	220	240	285	260	240	220	200	200
14	225	240	240	240	240	225	280	245	235	225	215	205
15	C	C	C	C	C	C	C	245	240	230	220	220
16	245	240	250	220	220	220	270	240	230	220	B	220
17	220	240	280	260	295	280	270	250	240	220	215	210
18	220	220	240	240	225	220	260	240	235	220	215	220
19	230	240	240	240	220	220	260	240	230	220	210	200H
20	260	240	230	220	220	220	270	240	235H	220	200H	220
21	245	210	210	230	230	225	255	240	230	220	210	200
22	225	220	230	235	235	220	275	245	235	225	220	210
23	230	230	250	260	240	225	260	245	235	220	215	200H
24	240	230	220	220	215	210	260	240	225	220	220	200H
25	250	240	230	225	220	220	265	245	240	220	220	210H
26	240F	255	280	290	240	220	270	250	240	220	215	220
27	245	215	210	230	260	250	280	250	235	220	210	210
28	270	290	280	240	220	230	280	250	240	230	220	210
Mean	240	240	240	240	235	235	275	245	235	225	215	210
Median	240	240	240	240	225	225	270	245	235	220	215	210
Count	26	27	26	25	26	27	27	28	28	27	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
 Unit Km
 Month February 1959

TABLE 19—Cont'd
 Ionospheric Data
 75 0°E Mean Time

Latitude + 10 2°N
 Longitude + 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
215H	220	220	235	250	280	360	F	370	375	275	235	1
220	220	220	240	260	290	380	400	350	280	250	240	2
210H	200H	220	240	245	280	360	400	410	400	300	240	3
210	205	220	A	250	280	360	420	360	260	235	240	4
215	215	225	240	250	280	360	F	F	260	240	255	5
200	220H	225	220	240	280	380	460	500	460	310	240	6
215	220	215	230	250	280	380F	F	F	U370F	F	260	7
210	200H	B	235	250	290	380	490F	480	420	290F	240	8
220	220	220	U240B	250	280H	380H	U400F	U420F	300	260	230	9
210	220	230	240	250	275	360	U475F	F	360	U270F	280	10
B	220	230	235	A	285	370	420	325	275	240	255	11
215	220	230	240	250	280	365	F	F	420	340	225	12
200	205	220	235	250	280	375	F	F	U320F	245	235	13
200	200	215	225	250	280	370	C	C	C	C	C	14
210	220	235	235	260	280	345	395	380	305	255	240	15
215	210	220	240	250	270	360	U400F	U380F	260	250	240	16
215	210	220	225	245	280	370	400	330F	280	240	230	17
210H	205	205	215	250	260	380	420F	U380F	420F	250	300	18
220	220	210H	220	250	270	340	420	400F	280	260	240	19
220	210	220	235	240	280	360	U480F	U460F	U320F	280	295	20
190H	200H	200H	225	240	275	370	U450F	U465F	U380F	310	260	21
200	210	215	235	245	275	370	U405F	F	U380F	305	260	22
205H	210	A	E245A	245	275	360	420	U380F	305	250F	240	23
200H	200H	200H	215	250	270	350	F	400	300	270	260	24
200H	205H	215	225	250	290	380	420	420	400	340F	300	25
220	220	220	240	260	280	360	380	320	285	260	245	26
220	220	220	230	250	280	370	500F	440F	280F	250	240	27
205H	205H	220	240	255	280	350	350F	300	280	240	240	28
210	210	220	235	250	280	365	425	395	330	270	250	Mean
210	210	220	235	250	280	370	420	380	305	260	240	Median
27	28	26	26	27	28	28	21	21	27	26	27	Count

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

Characteristic 'h'E
 Unit ' Km
 Month February 1959

TABLE 20
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 b Mc. to 25.0 Mc in 27 seconds.

Characteristic · h'E
 Unit Km
 Month February 1959

TABLE 20
 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	Day
A	A	A	A	A	A							1
A	A	A	A	A	A							2
C	A	A	A	A	A							3
A	A	A	A	A	A							4
A	100	A	A	A	A							5
A	A	A	A	A	A							6
A	A	A	A	115	120							7
110	110	120	115	115								8
A	A	110	B	120	120							9
A	A	A	110	115	110							10
A	B	A	A	120	120							11
A	A	A	A	A	A							12
A	A	A	A	100	A							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
110	A	A	A	A	120							16
A	A	A	A	A	115							17
A	A	A	A	110	110							18
A	B	A	A	110	120							19
A	A	A	A	110	120							20
A	A	A	A	A	U120F							21
A	A	A	A	105	115							22
A	A	A	A	A	120							23
A	A	A	A	115	115							24
A	110	A	A	A	120							25
A	115	110	A	120	120							26
A	A	A	A	A	120							27
A	A	110	110	120								28
				115	120							Mean
				115	120							Median
2	4	4	3	13	16							Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic . h'E
 Unit Km
 Month February 1959

TABLE 20—Cont'd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							120	110	A	B	A	A
2								115	A	A	A	A
3							120	A	A	A	A	A
4							135	A	110	A	A	A
5							180	A	A	A	A	A
6							140	A	A	A	A	A
7							140	A	A	A	A	A
8							120	120	115	A	110	110
9								120	110	A	A	A
10								A	A	A	A	A
11							A	120	A	A	A	B
12							140	110	A	115	A	A
13							135	A	A	A	A	A
14							130	120	A	A	A	A
15							125	110	A	A	A	A
16								120	110	A	B	A
17							120	110	A	A	A	A
18							120	115	A	A	B	A
19							130	A	A	A	A	A
20							130	120	110	A	A	A
21								140	115	115	A	A
22									115	A	A	A
23							120	115	110	A	A	A
24							120	110	110	A	A	A
25							120	115	110	A	A	A
26								110	110	110	A	A
27								A	A	A	A	A
28								115	A	A	A	A
Mean							130	115	110			
Median							130	115	110			
Count							19	19	10	2	1	1

Sweep 10 Mc to 25.0 Mc in 27 seconds

Characteristic h'E
Unit Km
Month February 1959

TABLE 20—Cont'd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
A	A	A	A	A								1
A	A	A	A	A								2
A	A	A	A	A	A							3
A	A	A	A	A								4
A	A	A	A	A								5
A	A	A	110	120								6
A	A	A	110	115								7
110	110	B	115	120								8
A	120	110	B	120								9
A	A	115	120	110	120							10
B	A	A	120	120	A							11
A	A	A	A	A								12
A	A	A	110	115								13
A	A	A	A	A	A							14
A	A	A	A	A								15
A	A	A	A	120								16
A	A	A	A	110	120							17
A	A	A	A	110	120							18
B	B	A	110	110								19
A	A	A	A	110								20
A	A	A	A	120	F							21
A	A	A	110	110	120							22
A	A	A	A	115								23
A	A	A	115	115	120							24
A	110	A	A	115								25
A	120	A	120	120								26
A	A	A	A	A								27
A	A	110	120	120								28
			115	115	120							Mean
			115	115	120							Median
1	4	3	11	19	5							Count

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

Characteristic h'Es
Unit · Km
Month February 1959

TABLE 21
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1			105					100	100	100	100	100
2	120							G	100	100	100	100
3							125	100	100	100	100	100
4								110	100	100	100	100
5							105	105	100	100	100	100
6								100	100	100	100	100
7					115			100	100	100	100	100
8							C	100	100	100	100	100
9								100	100	100	100	100
10			105					100	100	100	100	100
11								100	100	100	100	100
12	120	115	105					100	100	G	100	100
13								100	100	100	100	100
14				100				100	100	100	100	100
15	C	C	C	C	C	C	C	G	100	100	100	100
16		120						G	100	100	100	100
17			105	120	100	120	110	100	100	100	100	100
18								100	100	100	100	100
19								100	100	100	100	100
20								105	100	100	100	100
21								100	G	100	100	100
22								100	100	100	100	100
23				105	100			G	G	100	100	100
24	125	100		100			120	120	100	100	100	100
25								100	100	100	95	100
26								100	100	100	100	G
27								100	100	100	100	100
28	110							100	100	100	100	100
Mean				110				100	100	100	100	100
Median				105				100	100	100	100	100
Count	4	3	4	5	2	1	4	24	26	27	28	27

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'Es

TABLE 21

Latitude 10 2°N

Unit Km

Ionospheric Data

Longitude 77 5°E

Month February 1959

75 0°E Mean Time

12	13	14	15	16	17	18	19	20	21	22	23	Day
100	100	100	100	100	100							1
100	100	100	100	100	105							2
G	100	100	100	100	105							3
100	100	100	100	100	100							4
100	100	100	100	100	100							5
												6
100	100	100	100	100	105							7
100	100	100	100	100	100							8
100	100	105	100	105	120							9
100	100	G	B	G	105							10
100	100	100	100	100	105							11
100	100	100	100	G	135			120		115		12
100	100	100	100	100	100	120				110		13
100	100	100	100	100	100	120	C	C	C	C	C	14
100	100	100	100	100	100							15
												16
100	100	100	100	100	110							17
100	100	100	100	100	100							18
100	100	100	100	100	100	100						19
100	100	100	100	100	110	120						20
100	100	100	100	100	100							21
100	100	100	100	100	100							22
100	100	100	100	100	105					100	120	23
100	100	100	100	100	105					105		24
100	100	100	100	100	100							25
100	100	100	100	100	100							26
100	160	100	100	100	110							27
100	100	100	100	100	105							28
100	100	100	100	100	110				140			28
100	100	100	100	100	105					.		Mean
100	100	100	100	100	100							Median
27	28	27	27	26	28	4		1	1	4	1	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'Es
 Unit Km
 Month February 1959

TABLE 21—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		105					120	100	100	100	100	100
2								100	100	100	100	100
3								100	100	100	100	100
4							G	100	G	100	100	100
5							100	100	100	100	100	100
6							105	100	100	100	100	100
7				110	120		G	100	100	100	100	100
8							G	100	100	100	100	100
9								100	100	100	100	100
10			110				105	100	100	100	100	100
11							100	100	100	100	100	100
12	115	105					G	100	100	100	100	100
13							100	100	100	100	100	100
14							G	100	100	100	100	100
15	C	C	C	C	C	C	G	100	100	100	100	100
16		120						130	100	100	100	100
17			100	100	100	110	G	100	100	100	100	100
18							G	100	100	100	100	100
19							G	100	100	100	100	100
20							120	100	100	100	100	100
21							G	G	100	100	100	100
22							100	100	100	100	100	100
23			105	105			G	100	100	100	100	100
24	100	100	100				135	100	100	100	100	100
25							G	100	100	100	100	100
26							140	100	100	140	100	100
27							100	100	100	100	100	100
28	110	115						100	100	100	100	100
Mean		110	105				110	100	100	100	100	100
Median		105	105				105	100	100	100	100	100
Count	3	5	5	3	1	1	11	27	27	28	28	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic \cdot h'Es
 Unit Km
 Month February 1959

TABLE 21—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
100	100	100	100	100	100							1
100	100	100	100	100	115		115					2
100	100	100	100	100	105							3
100	100	100	100	100	100							4
100	100	100	100	100	110							5
100	100	100	100	105								6
100	100	100	100	100	115							7
100	100	105	105	105	120							8
100	G	G	B	105	120							9
100	100	100	100	100	110							10
100	100	100	G	130	140							11
100	100	100	100	100	115				110			12
100	100	100	100	100	120							13
100	100	100	100	100	110		C	C	C	C	C	14
100	100	100	100	100								15
100	100	100	100	100	120							16
100	100	100	100	100	115							17
100	100	100	100	100	100					120		18
100	100	100	100	100	120							19
100	100	100	100	100	120							20
100	100	100	100	100	105							21
100	100	100	100	105	110							22
100	100	100	100	100	100					110	125	23
100	100	100	100	100	110					115		24
100	G	100	100	100	120							25
100	G	100	100	100	120							26
100	100	100	100	100	120						110	27
100	100	100	100	105	115				105			28
100	100	100	100	100	115							Mean
100	100	100	100	100	115							Median
28	25	27	26	28	26		1		2	3	2	Count

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

Characteristic (M3000)F2
 Unit
 Month February 1959

TABLE 22
 Ionospheric Data
 75°0'E Mean Time

Latitude 10 2°N
 Longitude 77°5'E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	2 65	2 80	2 75	U2 85s	3 00	3 10	U2 70s	U2 80s	2 50	2 20	2 25	2 20
2	F	2 90	2 90	U3 00F	3 00	3 15	2 80	U2 85s	2 55	2 20	2 10	2 10
3	2 70	2 80	2 75	U2 70s	2 90	3 00	2 85	U2 60s	2 50	2 30	2 20	2 15
4	2 85F	F	U2 70s	2 80	2 90	3 20	3 05	2 95	2 70	2 65	2 30	2 20
5	3 00	3 10	3 10	2 85	3 00	2 75	S	2 70	2 60	2 35	2 25	2 30
6	2 55	C	F	C	C	C	2 75	2 75	2 55	2 30	2 25	2 20
7	F	F	F	FS	F	3 20	U2 90s	U2 80s	2 60	2 35	2 20	2 15
8	F	F	U2 90R	U3 00R	3 00	U3 20k	C	2 90	2 60	2 50	2 40	2 30
9	F	F	F	3 10	2 95	U3 20s	U2 70s	U2 85s	2 45	2 35	2 30	2 20
10	2 95r	F	U3 00s	2 90	3 00	U3 05s	U2 90s	U2 65s	2 60	2 40	2 25	2 20
11	F	U2 95s	FS	F	F	3 15	U3 05C	U2 85s	2 70	2 35	2 20	2 15
12	2 75	2 80	2 85	U3 00s	3 10	3 15	U2 80s	U2 75s	2 80	2 65	2 50	2 40
13	F	FS	F	U2 95s	3 15	U3 250	U3 00s	U2 70s	2 60	2 40	2 30	2 15
14	2 85	F	2 95	F	2 95	3 10	U3 00s	2 85	2 60	2 45	2 25	2 20
15	C	C	C	C	C	C	C	2 85	2 70	2 40	2 20	2 15
16	2 90	U2 85s	U2 80s	U3 10s	3 20	U3 45s	2 80	U3 10s	3 05	2 75	2 45	2 40
17	FS	U3 05s	U2 80s	U2 80s	U2 85s	2 80	2 80	2 70	2 45	2 40	2 40	2 25
18	2 90	3 05	3 00	3 00	3 15	3 30	U3 00s	3 10	2 90	2 60	2 35	2 30
19	F	F	F	F	F	3 15	RS	3 00	2 75	2 45	2 40	2 25
20	U2 50s	U2 80R	U3 05s	3 05	3 20	3 30	J2 45SH	U2 90s	2 50	2 40	2 30	2 35
21	F	F	F	U3 05F	F	3 15	3 05	3 00	2 95	2 75	2 40	2 05
22	F	U3 10F	U3 05F	3 00	F	F	F	2 80	2 45	2 35	2 40	2 30
23	F	F	U2 90R	U2 90F	F	F	2 95	3 00	2 90	2 65	2 30	2 25
24	U2 70R	2 90	U3 00F	3 10	3 10	3 25	U2 75s	2 95	2 80	2 50	2 30	2 25
25	F	U2 75F	F	3 00	F	3 30	2 80	2 90	2 70	2 45	2 35	2 20
26	F	F	F	F	F	F	U2 90s	2 75	2 50	2 30	2 40	2 35
27	2 65	3 00	U3 15s	3 10	3 00	U2 90s	2 90	2 70	2 65	2 50	2 35	2 35
28	2 70	2 75	2 70	F	3 00	U3 10s	3 10	2 60H	2 60s	2 50	2 35	2 30
Mean	2 75	2 90	U2 90	2 95	3 00	3 15	2 85	2 85	2 65	2 45	2 30	2 25
Median	2 70	2 90	U2 90	3 00	3 00	3 15	2 90	2 85	2 60	2 40	2 30	2 20
Count	14	15	18	20	18	23	23	28	28	28	28	28

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic (M3000)F₂
Unit
Month February 1959

TABLE 22
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	Day
2 10	2 05	2 05	2 00	1 95	U2 00S	2 10	1 95	F	F	F	F	1
2 10	2 05	2 10	2 05	2 00	S	U2 05S	F	U2 05I	F	U2 60S	2 60	2
C	2 05	2 00	1 95	2 00	2 10	2 10	2 10	2 00	F	F	U2 40R	3
2 15	2 20	2 10	2 10	2 10	2 15	2 00	U 205R	F	F	2 55	2 90	4
2 25	2 30	2 20	2 15	2 00	U1 85R	U2 05S	F	F	F	U2 40S	U2 55R	5
2 10	2 05	2 05	2 05	2 10	2 10	2 05	U2 00S	F	F	F	F	6
2 10	2 15	2 20	2 15	2 10	2 00	1 90	IS	F	F	F	F	7
2 20	2 25	2 35	2 40	2 40	2 20H	2 00H	WH	F	F	F	F	8
2 10	2 10	2 20	U2 35S	J2 45R	U2 45S	2 30H	U2 05R	F	F	FS	FS	9
2 15	2 10	2 15	2 15	2 20	2 10	U2 00S	U1 90I	F	F	F	F	10
2 10	2 10	2 05	2 00	2 20	2 25	2 35	2 15	2 20	2 40	2 50	2 75	11
2 35	2 35	2 30	2 25	2 15	2 05	S	2 00	F	F	F	F	12
2 15	2 10	2 10	2 05	2 15	2 15	2 05	U1 95I	F	F	F	FS	13
2 15	2 15	2 10	2 10	2 05	2 10	2 20	C	C	C	C	C	14
2 15	2 15	2 00	2 00	2 15	2 25	2 20	2 15	U2 15S	2 30	FS	2 70	15
U2 40R	2 40	U2 40S	U2 35S	U2 25H	U2 05RH	S	F	F	F	F	F	16
J2 15I	2 20	2 05	2 15	2 10	2 10	U2 15S	2 00	U2 20S	2 30	U2 50S	FS	17
2 30	2 25	2 15	2 05	2 05	U2 20S	U2 20S	F	F	F	F	F	18
2 25	2 25	2 20	2 10	2 05	2 00	U2 20S	2 10	F	F	F	U2 40S	19
2 25	2 20	2 15	U2 20S	2 20	U2 15S	U2 15S	1 95	F	F	F	F	20
2 10	2 10	2 10	2 10	2 10	2 05	U2 05S	1 85R	F	F	F	F	21
2 25	2 10	2 10	1 95	J2 05S	2 10	2 05	F	F	F	F	F	22
2 20	2 10	2 15	2 15	2 20	2 10	U2 00S	2 00	S	J2 10I	FS	FS	23
2 25	2 20	2 20	2 20	2 20	2 05	1 90H	U1 90IS	F	F	F	F	24
2 20	2 25	2 35	2 25	2 10H	2 00	2 00	1 90W	F	F	F	F	25
2 15	15	2 35	2 30H	2 30	2 15H	1 95H	2 10	2 20	2 40	2 60	U2 60S	26
2 30	2 30	2 25	2 25	2 10	2 05	WH	1 85R	F	F	F	U2 70R	27
2 20	2 20	2 25	2 25	2 20	2 05	2 05S	1 95W	2 15	2 35	2 60S	2 80	28
2 20	2 15	2 15	2 15	2 15	2 10	2 10	2 00	U2 15	U2 30	U2 55	U2 65	Mean
2 15	2 15	2 15	2 15	2 10	2 10	2 05	2 00	U2 15	U2 30	U2 55	U2 65	Median
27	28	28	28	28	27	26	21	7	6	7	10	Count

Sweep 10 Mc. to 25.0 Mc. in 27 seconds

Characteristic (M3000)F2
 Unit
 Month February 1959

TABLE 22—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	2 70	2 75	2 75	2 95	3 05	3 10	2 90	2 65	2 30	2 20	2 20	2 15
2	F	2 90	2 90	2 95	3 10	3 10	2 95	2 70	2 35	2 10	2 10	2 15
3	2 75	2 80	2 75	2 70	2 90	3 15	2 70	2 50	2 40	2 20	2 15	2 10
4	2 80	U2 60R	2 65	2 80	2 95	3 25	2 90	2 80	2 70	2 45	2 30	2 10
5	3 00	3 00	3 00	3 05	2 80	2 70	2 25H	2 65	2 40	2 25	2 25	2 25
6	C	F	C	C	C	3 20	2 80	2 60	2 40	2 25	2 20	2 20
7	F	F	F	F	FS	U3 10S	U2 85S	U2 70S	2 45	2 30	2 15	2 15
8	F	U2 75F	F	3 00	F	3 20	2 95	2 70	2 60	2 45	2 30	2 25
9	F	F	3 10	C	3 05	3 30	U2 90S	2 70	U2 35S	2 30	2 25	2 15
10	3 00	U3 10F	3 00	2 95	3 00	3 05	2 75	2 70	2 45	2 30	2 25	2 20
11	U2 90S	FS	U3 00S	F	U3 05C	3 10	F	2 80	2 55	2 25	2 20	2 10
12	2 85	2 80	2 90	U3 00S	3 10	3 10	U2 80S	2 80	2 70	2 60	2 50	2 45
13	U2 75S	U2 80S	F	3 05	U3 20S	3 20	U2 80S	2 70	2 45	2 25	2 20	2 10
14	2 95	3 00	2 90	U2 90S	3 00	3 20	2 95	2 75	2 50	2 35	2 20	2 20
15	C	C	C	C	C	C	C	2 80	2 60	2 30	2 15	2 15
16	U2 90S	U2 80R	U2 95S	U3 20S	U3 30S	3 55	3 05	3 10	2 90	2 60	2 40	R
17	F	U2 95	U2 75S	U2 80S	2 90	2 80	U2 80S	2 65	U2 40R	2 40	2 25	2 20
18	U3 00R	F	2 95	3 00	3 20	3 40	3 15	3 00	2 75	2 45	2 30	2 30
19	F	F	F	F	U3 20F	3 30	F	2 90	2 50	2 30	2 30	2 30
20	U2 75S	U2 85S	3 05	3 20	U3 30S	3 40	J2 95S	2 70	2 45	2 35	2 40	2 30
21	F	U2 90F	3 05	U2 95F	U2 80F	3 20	3 05	3 05	2 80	2 55	2 20	2 10
22	F	F	2 95	F	F	F	U2 80FS	2 60	2 45	2 35	2 35	2 30
23	F	F	F	2 85	F	F	J3 00S	2 95	2 80	2 45	2 25	2 25
24	2 80	2 95	3 05	3 10	J3 20R	3 25	2 95	2 90	2 65	2 40	2 30	2 25
25	F	2 85	2 90	U3 10FS	3 20	3 20	U2 95S	2 90	2 55	2 35	2 40	2 20
26	F	F	F	2 70F	F	F	U2 90S	2 60	2 40	2 30	2 35	2 25
27	2 75	3 10	U3 10S	3 00	2 90	U3 00S	2 80	2 70	2 60	2 40	2 35	2 30
28	2 75	2 70	F	2 85	3 20S	3 20	U2 80S	SH	2 40S	2 40	2 35	2 25
Mean	2 85	2 85	2 95	2 95	3 05	3 15	2 85	2 75	2 55	2 35	2 25	2 20
Median	2 80	2 85	2 95	2 95	3 05	3 20	2 90	2 70	2 50	2 35	2 25	2 20
Count	15	18	19	21	21 ^{1/2}	24	25	27	28	28	28	27

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic (M3000)F₂
 Unit
 Month February 1959

TABLE 22—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . foF₂
 Unit Mc
 Month March 1959

TABLE 23
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude . 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	11 6	11 0	10 6	10 4	10 2	9 4	8 2	11 6	13 0	13 8	13 3	12 9
2	F	10 8	11 0	10 8	9 4	F	8 6	11 7	13 6	14 2	14 7	14 4
3	12 5	11 8	11 6	10 3	10 6	10 6	10 3	11 7	12 9	12 7	12 0	11 8
4	10 4	12 3	11 6	10 0	9 0	8 3	F	11 6	13 4	13 9	13 5	13 3
5	F	S	10 2	U10 0F	F	11 0	8 2	10 9	12 6	12 6	12 6	12 3
6	10 4	U11 5 ^r	11 8 ^F	12 1	10 6	F	7 8	C	13 3	14 2	13 2	11 3
7	F	F	U8 8 ^F	8 2 ^r	U7 4 ^r	5 3	5 9	9 9	12 1	13 7	13 1	12 5
8	U12 6 ^F	U13 1 ^r	U12 2 ^r	U12 3 ^F	11 7	11 1	U10 5 ^s	12 1	13 5	13 3	11 7	11 4
9	F	U10 8 ^r	F	9 4 ^F	F	6 4	6 1	10 2	12 2	12 6	11 7	11 1
10	F	F	10 7	8 4	F	U5 8 ^F	5 8	U10 0 ^s	12 0	12 5	11 9	C
11	F	F	F	F	U6 3 ^{sF}	F	5 5	U9 7 ^s	12 0	11 9	11 6	U11 0 ^s
12	U10 7 ^r	F	F	U7 2 ^F	6 8	5 7	5 8	10 3	12 7	13 8	12 8	11 4
13	U13 3 ^r	12 4	U11 0 ^s	FS	8 6	7 6	FS	10 8	12 7	13 0	12 5	12 1
14	F	12 5	U11 2 ^F	U9 2 ^s	F	F	U9 2 ^s	U11 1 ^r	13 2	13 7	12 7	11 7
15	F	12 7	11 8	10 9	F	5 6	U6 2 ^s	U10 3 ^s	12 9	13 8	13 7	C
16	F	F	F	F	FS	F	5 7	10 2	11 9	11 6	11 0	10 6
17	F	9 3 ^r	8 9	7 8	6.7	F	FS	10 1	12 4	13 6	13 0	11 8
18	F	12 4	F	J10 2 ^s	8 7	7 6	U7 6 ^s	10 9	12 4	12 6	11 4	10 8
19	F	F	10 6	9 7	8 3	6 3	U7 1 ^s	10 6	12 6	13 4	12 4	11 8
20	F	F	F	U9 4 ^r	F	7.8	7 2	10 6	12 2	12 2	11 9	11 8
21	F	8 8	F	U8 8 ^F	F	7 7 ^F	8 0	10 9	12 6	C	11 6	11 2
22	F	F	FS	F	FS	7 0 ^s	U8 0 ^s	U11 0 ^s	C	C	C	C
23	F	F	U11 0 ^s	U9 4 ^s	8 4	F	U7 4 ^s	10 4	11 0	10 9	10 8	10 8
24	F	FS	F	F	U9 2 ^s	F	U8 0 ^s	FS	U12 8 ^F	13 2	11 8	11 6
25	F	F	11 8	F	U10 2 ^s	U7 6 ^{sF}	FS	10 8	J12 2 ^s	10 6	11 0	11 6
26	F	F	F	F	F	F	U10 0 ^s	12 4	U13 1 ^r	12 8	11 5	11 0
27	9 8	8 9	8 7	6 4	5 6	5 8	S	11 5	13 7 ^H	14 4 ^H	13 0	12 4
28	U11 8 ^s	13 6	12 0	11 0	9 6	9 3	10 6 ^H	9 9	11 5	12 3	12 3	12 6
29	12 3	U9 8 ^s	8 3	U7 3 ^{sF}	8 5	F	FS	U11 8 ^s	13 8	14 0	13 8	13 4
30	12 8	11 2	10 6	10 7	10 0	8 2	7 9	11 5	13 8	14 9 ^H	14 5 ^H	12 8
31	F	F	10 8	9 6	8 4	6 8	7 5	11 4	13 4	13 8	12 5	11 8
Mean	11 6	11 3	10 7	9 6	8 8	7 7	7 7	10 9	12 7	13 1	12 4	11 9
Median	11 8	11 5	11 0	9 6	8 7	7 6	7 8	10 9	12 7	13 3	12 4	11 8
Count	11	17	21	24	21	21	25	29	30	29	30	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic \cdot foF₂
 Unit Mc
 Month March 1959

TABLE 23
 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	Day
12 7	13 1	13 5	14 1	13 9 ^{II}	13 6	U13 3s	11 7	10 4	F	F	F	1
14 2	14 2	14 7	15 2 ^{II}	14 8	14 7	U14 1R	R	F	F	F	F	2
12 1	12 3	12 1	12 3	11 9	11 2	U9 7s	9 2	U8 7 ^F	8 8	U9 3s	9 4	3
13 7	14 1	13 9	14 1	14 3	R	U11 0W	8 7	F	F	F	9 6	4
12 6	13 3	13 6	13 9	U13 5R	12 6	U9 5s	8 6	U8 3 ^F	F	F	C	5
11 3	11 7	12 1	12 6	12 7	12 5	10 9	U8 4 ^F	F	U8 8 ^r	F	F	6
12 5	12 6	12 8	13 4	13 1	12 4	10 8	9 8	F	F	F	U12 2 ^F	7
11 8	12 6	13 4	14 4	14 6	14 0 ^{II}	12 7 ^{II}	U10 2W	F	F	F	F	8
10 9	11 0	11 2	11 3	11 6	11 8	11 5	U10 4 ^F	F	F	F	F	9
C	C	C	C	11 6	11 7	11 8	U11 7s	9 8	F	F	F	10
10 7	10 7	11 1	11 3	11 5	11 3	10 6	U8 4 ^F	F	F	F	FS	11
12 1	12 6	12 7	12 8	13 1	12 9	12 6	U12 2R	11 7 ^F	F	F	F	12
11 8	11 7	11 6	11 4	11 0	10 8	10 5	U8 4W	F	F	F	F	13
11 2	11 7	12 0	12 4	12 5	12 3	U11 5s	U9 3W	U9 0 ^F	F	F	U11 3 ^F	14
12 7	12 7	12 7	12 9	12 7	12 2	11 3	U9 0 ^I	F	F	F	F	15
10 8	11 0	11 7	12 6	13 0	13 2	12 6	F	F	F	F	F	16
11 6	12 0	12 6	12 9	13 0	13 4	12 4	U10 3W	F	F	F	FS	17
10 9	11 6	12 2	12 8	13 5	13 4	12 6 ^{II}	U10 6 ^{HW}	F	F	F	F	18
11 6	11 7	12 0	12 0	11 9	11 8	10 8	U7 8 ^W	F	F	F	F	19
11 8	11 9	12 8	13 2	13 3	12 8 ^{II}	U11 6 ^{HS}	U8 2 ^F	F	F	F	F	20
11 2	11 4	11 8	12 0	12 0	12 2 ^{II}	11 4	9 4	U8 5 ^F	F	U9 4 ^F	U9 4 ^F	21
C	C	C	C	15 0	14 6	14 0 ^{II}	J12 2 ^{HR}	F	F	F	F	22
11 8	12 4	U13 0R	U13 7s	U14 6R	U14 2R	U13 0 ^{HR}	U10 8 ^F	F	F	F	F	23
11 6	12 3	12 8	13 3	13 7	14 0	U13 4R	F	F	F	F	F	24
11 2	11 9	13 0	U13 8s	U14 0R	U13 6 ^{HR}	13 0 ^{II}	11 3 ^{II}	F	F	F	F	25
11 3	12 0	12 6	13 2	13 2	13 6	13 6	U11 8s	U12 0s	J14 3s	U11 8s	10 2	26
12 4	13 3	14 3	U14 2s	14 1	14 0 ^{II}	13 6 ^{II}	13 5	12 3	12 6 ^I	12 3	U11 8s	27
12 8	13 3	14 1	U15 0s	U15 0s	14 4 ^{II}	12 7 ^{II}	W	F	F	F	F	28
13 0	13 1	13 6	13 3	13 2	12 6	12 0	11 5	10 8	10 8	U11 7s	12 6	29
12 0	12 4	12 6	12 6	12 8	12 6	11 6	10 2	U9 6 ^I	F	F	F	30
11 8	12 2	12 7	12 8	12 8	12 7	11 8	U9 8s	F	F	F	F	31
11 9	12 3	12 7	13 1	13 2	12 9	12 0	U10 0	U10 1	U11 1	U10 9	U10 8	Mean
11 8	12 3	12 7	12 9	13 1	12 8	11 9	U9 8	U10 0	U10 8	U11 7	U10 8	Median
29	29	29	29	31	30	30	27	10	5	5	8	Count

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

Characteristic foF₂
Unit Mc
Month March 1959

TABLE 23—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10°2'N
Longitude 77 5'E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	11 1	10 7	10 5	10 2	10 0	7 9	9 8	12 6	13 7H	13 8	12 8	12 8
2	U11 2s	11 1	10 9	10 1	F	8 1r	10 2	12 6	14 1	14 4	14 6	14 4
3	12 4	11 6	10 7	10 2	10 7	10 9	10 8	12 4	13 0	12 4	11 6	11 9
4	11 1	12 3	10 9	9 1	8 6	F	U10 0s	12 6	14 0	13 6	13 2	13 5
5	F	U9 8s	F	F	U10 8s	10 3	9 4	U11 8s	12 8	C	12 4	12 3
6	10 6	F	12 2r	12 0	9 5	7 8r	9 4	12 4	11 0	13 8	11 8	11 2
7	F	U9 8r	U8 8r	7 8	6 6	4 3	7 9	11 4	13 1	13 6	12 8	12 2
8	12 6F	F	F	F	11 4	10 4	11 0	12 9	13 6	12 7	11 3	11 6
9	F	F	U10 2r	U9 0r	7 4r	5 3	8 4	11 4	12 6	11 8	11 5	10 9
10	U11 5r	F	9 5	U7 3s	F	4 3	8 1	11 4	12 6	12 2	11 3	C
11	U11 3r	F	F	F	F	F	8 1	11 1	12 3	11 7	11 4	10 8
12	F	rs	F	7 3	6 5	4 6	8 2	11 6	13 5	13 5	11 8	11 7
13	U13 0r	rs	U9 9s	8 8	8 0	U6 9s	U9 3s	12 0	13 0	12 7	12 3	11 8
14	F	U11 6r	10 5	FS	U7 4r	F	U10 3s	12 3	13 7	13 3	12 0	11 3
15	F	12 7	U11 7s	U9 7s	6 5	4 7	8 5	11 7	13 6	13 8	C	12 7
16	F	F	F	7 7r	FS	F	8 1	11 3	12 2	11 2	11 0	10 6
17	F	8 8	F	7 2	U5 5rs	F	8 4	11 3	13 1	13 6	12 6	11 6
18	F	F	F	F	8 4	7 0	9 4	11 6	12 6	11 8	11 2	10 8
19	F	F	9 8	9 1	7 2	5 9	U9 3s	11 6	13 0	12 8	11 8	11 6
20	10 4	F	U9 4r	F	8 8F	6 3	9 2	11 6	12 6	11 8	11 8	11 8
21	F	U9 4r	U8 6r	U9 6r	F	7 0	9 7	12 0	12 8	C	11 4	11 2
22	F	F	F	U8 2rs	FS	6 7	U9 4s	U11 8s	C	C	C	C
23	U13 2rs	U12 0s	10 4r	8 6	U7 4s	F	U9 2s	10 8	11 0	11 0	10 7	11 4
24	FS	F	F	U9 6rs	U8 6rs	F	S	U11 8rs	13 3	12 6	11 4	11 5
25	F	F	U11 3s	U10 4r	FS	U6 0s	U9 2s	11 6	11 6	10 7	11 4	11 4
26	F	F	F	F	F	U9 2s	11 6	12 8	J13 2R	11 6	11 2	11 2
27	U9 4s	8 8	U7 6s	5 7	U6 0s	U6 2s	U9 6s	13 1	14 1	13 8H	12 6	12 1
28	13 1	12 8	11 4	10 3	9 1	9 5	S	10 8	12 0	12 4	12 2	12 8
29	10 9	8 6	F	FS	F	U6 8rs	U10 3s	13 2	13 8	14 1	13 4	13 1
30	U12 0s	10 8	10 7	10 4	U9 6s	6 8	U10 2s	12 9	14 5	14 8H	13 3	12 4
31	F	F	9 8	8 6	7 6	6 0	U9 7s	12 6	13 6	13 4	12 0	11 8
Mean	11 6	10 7	10 2	9 0	8 2	7 0	9 4	12 0	13 1	12 8	12 0	11 9
Median	11 3	10 8	10 4	9 1	8 2	6 8	9 4	11 8	13 1	12 8	11 8	11 7
Count	15	15	20	23	22	24	29	31	30	28	29	29

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

Characteristic foF₂
Unit Mc
Month March 1959

TABLE 23—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
12 8	13 3	13 7	14 1	U13 8s	13 5	U12 5R	U10 8F	F	F	F	F	1
14 1	14 6	14 9	15 2	U14 8R	U14 3R	13 2H	F	F	F	F	U12 5F	2
12 3	12 3	12 3	12 2	11 7	U10 4s	9 3	8 9I	U8 7F	9 1	9 3	U9 7s	3
13 9	14 0	13 9	14 4	13 9	12 6H	F	F	F	F	9 1	F	4
12 9	13 5	13 7	13 7	U13 2R	U11 8s	9 3	8 4	U8 2F	F	F	10 2	5
11 5	11 6	12 4	12 7	12 7	U11 9s	9 3	F	U8 5s	F	F	F	6
12 6	12 6	13 1	13 0	12 9	U11 7s	10 6	9 4	U10 1F	F	F	12 2F	7
12 0	12 7	14 1	14 4	14 1	13 7H	U12 2s	F	F	F	F	F	8
10 8	11 2	11 1	11 4	11 7	11 8	11 0	F	F	U11 8r	F	F	9
C	C	C	11 6	11 8	12 0	11 2	F	F	F	F	F	10
10 6	10 9	11 3	11 5	11 4	11 0	U9 8s	F	F	F	F	FS	11
12 5	12 7	12 7	12 9	12 8	12 8	12 5	U11 8F	12 1	F	F	F	12
11 7	11 7	11 7	11 2	10 9	10 7	U9 6W	F	U8 4F	U9 2r	F	F	13
11 3	C	12 1	12 1	12 1	12 6	J12 9s	10 8	U9 0WT	F	F	F	14
12 8	12 8	12 9	12 7	12 6	11 7	10 8	F	F	F	F	F	15
11 0	11 4	12 0	12 7	13 2	13 0	11 6	F	F	F	F	F	16
11 7	12 3	12 8	D13 OR	D12 8R	13 0	11 6	F	F	F	F	FH	17
11 1	11 7	12 6	13 2	13 6	13 1	11 5H	F	F	F	F	F	18
11 8	11 8	12 0	12 0	C	11 6	9 4	F	F	F	F	F	19
11 9	12 4	12 8	13 4	13 2	12 6H	10 2H	F	F	F	F	J9 8F	20
11 4	11 6	11 9	12 0	12 4	U11 7s	U10 3s	F	U8 8F	F	F	F	21
C	C	C	15 0	14 8	J14 4s	13 6H	F	F	F	F	F	22
12 2	12 6	13 6	U14 2R	14 6	U13 6sH	J12 4RH	F	F	F	F	F	23
12 0	12 7	13 0	R	13 8	U13 6R	12 6H	F	F	F	F	F	24
11 6	12 4	13 4	U14 OR	14 0	13 5H	12 4H	F	F	F	F	F	25
11 7	12 4	12 9	13 1	U13 2R	13 6	13 5	F	13 8	13 2	11 0	9 8	26
12 7	14 1	14 1	14 4	13 9H	13 7H	13 4H	U13 OR	12 3	U12 3R	U12 0s	U11 5s	27
13 1	13 5	14 6	U15 2sH	U14 6s	U13 2RH	U11 8sH	F	F	F	F	F	28
13 0	13 5	13 4	13 3	13 0	12 8	U11 6s	10 8	10 5F	11 4	12 2	12 8	29
12 0	12 4	12 5	12 8	12 9	12 0	11 1	10 0	9 5	F	U12 0F	F	30
11 9	12 6	12 6	12 8	12 7	U12 3s	11 2	U9 1F	F	F	F	U10 3F	31
12 1	12 5	12 9	13 2	13 1	12 6	11 3	10 1	10 1	U11 2	U10 9	11 0	Mean
12 0	12 5	12 8	13 0	13 2	12 8	11 4	9 7	9 5	U11 6	U11 5	10 3	Median
29	28	29	30	29	31	30	10	11	6	6	9	Count

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

Characteristic : foF1
 Unit Mc
 Month March 1959

TABLE 24
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10 2°N
 Longitude : 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	L	L
3									L	L	L	L
4									L	L	L	L
5									L	L	L	B
6								C	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	C
11								L	L	L	L	L
12								L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	L	L
15								L	L	L	L	C
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	L	C	L	L
22								L	C	C	L	L
23								L	L	L	L	L
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								L	L	L	L	L
Mean												
Median												
Count												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF1
 Unit Mc
 Month March 1959

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

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

Characteristic foF1
 Unit Mc
 Month March 1959

TABLE 24--Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
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	G	L	B
6								L	L	L	L	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10								L	L	L	L	L
11								L	L	L	L	L
12							L	L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	C	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	L	L	L
20								L	L	L	L	L
21								L	L	C	L	L
22								L	L	L	L	L
23								L	L	L	L	L
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							L	L	L	L	L	L
Mean												
Median												
Count												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF1
Unit Mc
Month : March 1959

TABLE 24—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude : 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								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
												6
L	L	L	L	L								7
L	L	L	L	L								8
L	L	L	L	L								9
C	C	C	L	L								10
												11
L	L	L	L	L								12
L	L	L	L	L								13
L	L	L	L	L								14
L	L	L	L	L								15
												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
												21
L	L	L	L	L								22
C	C	C	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
												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
												Mean
												Median
												Count

Sweep 1.0 Mc to 25 Mc. in 27 seconds.

Characteristic foE
Unit Mc
Month March 1959

TABLE 25
Ionospheric Data
75 G^hE 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 7	A	A	A	A
2								2 5	A	A	A	A
3								A	A	A	A	A
4								2 7	A	B	A	A
5								2 7	A	A	A	B
6								C	A	A	A	A
7								2 6	A	A	A	A
8								A	A	A	A	A
9								A	A	A	A	A
10								2 8	A	A	A	C
11								v2 8R	A	A	A	A
12								2 8H	A	A	A	A
13								A	A	A	A	A
14								2 9	A	A	A	A
15								2 7	A	A	A	C
16								A	A	B	A	A
17								2 8H	A	A	A	A
18								A	A	A	A	A
19								2 9	A	A	A	A
20								A	A	A	B	A
21								2 9	A	C	A	A
22								A	C	C	C	C
23								A	A	A	A	A
24								v2 9RH	A	A	A	A
25							R	A	A	A	A	B
26								A	A	A	A	A
27								A	A	A	A	A
28								A	A	A	A	A
29								A	A	A	A	A
30								2 7	A	A	A	A
31								2 8H	A	A	A	A
Mean								2 8				
Median								2 8				
Count								16				

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

Characteristic foE
Unit Mc
Month March 1959

TABLE 25
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	
A	A	A	A	A	A							1
A	A	A	A	A	3.3							2
A	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	U3.2A							7
A	A	A	A	A	A							8
A	A	A	A	A	A							9
C	C	C	C	C	A							10
A	A	A	A	A	U3 2R							11
A	A	A	A	A	B							12
A	A	A	A	A	A							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
B	A	A	A	A	3 5H							16
B	A	A	A	A	A							17
A	A	A	A	A	A							18
A	A	A	A	A	B							19
A	A	A	A	A	A							20
A	A	A	A	A	A							21
C	C	C	C	C	R							22
A	A	A	A	U3 8R	U3 3R							23
A	A	A	A	A	B							24
B	A	U4 2R	U4 0R	U3 5R	A							25
A	A	A	3 9	A	A							26
A	U4 2R	4 OH	A	A	A							27
A	A	4 2II	U3 8A	A	A							28
A	B	A	A	A	A							29
A	A	A	A	A	A							30
A	A	A	A	A	A							31
				3 3								Mean
				3 3								Median
	1	3	4	6								Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic . foE
 Unit Mc
 Month March 1959

TABLE 25—Contd
 Ionospheric Data
 75 °E Mean Time

Latitude . 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 2	3 0	A	A	A	A
2							2 1	2 9	A	A	A	A
3								A	A	A	A	A
4							2 3	A	A	A	A	A
5							2 2	A	A	C	B	B
6								A	A	A	A	A
7							2 1	A	U3 6A	A	A	A
8							2 2	A	A	A	A	A
9							2 3	A	A	A	A	A
10							A	A	A	A	B	C
11								A	A	A	A	A
12								3 1H	A	A	A	A
13							U2 1R	A	A	A	A	A
14							U2 3R	A	A	A	A	A
15							2 3H	A	A	A	C	A
16							U2 4F	A	A	A	A	A
17							2 3	A	A	A	A	A
18								A	A	A	A	A
19							2 4H	A	A	A	A	A
20							A	A	A	A	A	A
21							2 4	A	A	C	A	A
22							2 4	A	C	C	C	C
23							A	A	A	A	A	A
24							2 4H	A	A	A	A	A
25							U2 2A	A	A	A	A	B
26							2 4II	A	A	A	A	A
27							2 3	A	A	A	A	A
28							.	A	A	A	A	A
29							2 3H	A	A	A	A	A
30								3 1	A	A	A	B
31							2 3	U3 3A	A	A	A	A
Mean							2 3	3 1				
Median							2 3	3 1				
Count							21	5	1			

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month March 1959

TABLE 25—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	A	A	A	A	A							1
A	A	A	A	A								2
A	A	A	A	3 I								3
A	A	A	A	A								4
A	A	A	A	A								5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	A	A								8
A	A	A	A	A								9
C	C	C	A	A	A							10
A	A	A	3 5	A								11
A	A	A	A	A								12
A	A	A	A	A								13
A	A	A	A	A								14
A	A	A	A	A								15
A	A	B	3 4	A	A							16
A	A	A	B	A								17
A	A	A	A	A								18
A	A	A	A	A								19
A	A	A	A	A								20
A	A	B	A	A	A							21
C	C	C	U3 6R	R								22
A	A	U3 9R	B	A								23
A	A	A	B	B								24
A	U4 2R	U4 0R	B	U3 3R								25
A	A	A	A	A								26
A	A	3 9H	A	A								27
A	U4 2A	A	A	A								28
A	B	A	A	A								29
A	A	A	B	3 2A								30
A	A	A	A	A								31
												Mean
												Median
	2	3	3	3								Count

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic foEs
 Unit Mc
 Month March 1959

TABLE 26
 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 5			G	10 4	11 2	12 6	13 2
2								G	8 0	12 0	13 0	12 0
3								8 4	10 0	11 4	12 8	13 0
4								6 6	9 0	10 4	12 0	12 4
5								u7 os	10 0	12 0	13 6	11 4
6								C	8 8	11 1	14 0	11 6
7								u6 4s	9 8	11 8	12 7	14 6
8								8 8	10 4	12 0	16 4	16 6
9								u8 6s	11 6	12 0	14 0	14 6
10								6 4	10 8	12 4	17 0	C
11								u7 1s	9 3	11 3	13 2	13 1
12								G	9 4	11 6	12 8	13 2
13								7 8	10 7	11 1	13 8	13 4
14								G	11 0	12 2	13 2	13 7
15								u6 os	9 8	10 8	12 8	C
16								8 8	11 4	11 0	13 2	17 4
17								G	9 0	10 6	13 3	12 6
18								9 0	11 7	12 0	12 8	13 6
19					4 8			u6 os	10 6	11 6	14 6	13 6
20								u7 os	10 8	11 8	12 4	17 5
21								u7 os	11 2	C	18 2	18 0
22								7 6	C	C	C	C
23								9 2	12 0	12 0	13 0	19 6
24	3 7							8 4	12 0	12 0	16 6	18 2
25							G	10 4	12 0	12 6	18 0	12 6
26								4 0	12 0	12 6	18 2	17 2
27								10 2	11 2	12 0	13 2	18 4
28								u10 os	12 0	12 4	14 0	14 4
29								u7 os	11 0	11 0	14 2	13 0
30		u7 os						G	8 8	11 4	14 2	15 0
31								G	12 0	12 0	14 0	13 0
Mean								7 7	10 6	11 7	14 1	14 5
Median								7 0	10 8	11 8	13 4	13 6
Count	1	1			2		1	30	30	29	30	28

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month March 1959

TABLE 26
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
13 0	18 0	19 0	16 0	8 2	8 6	2 8						1
10 4	11 8	12 0	9 0	8 0	8 2							2
12 6	12 4	12 0	12 0	10 0	9 0							3
11 4	9 0	11 4	12 0	9 6	8 0							4
12 6	11 8	12 0	11 0	8 4	8 2						C	5
12 6	12 4	12 8	13 4	9 0	8 2							6
13 4	12 7	12 8	12 6	8 6	8 2							7
17 8	13 2	9 8	10 8	9 2	9 8					8 0		8
14 1	14 4	14 4	12 6	8 6	7 8							9
C	C	C	C	8 7	8 6	U5 0s						10
13 0	12 8	13 3	11 4	8 4	7 5							11
13 6	13 4	13 3	12 6	G	7 7					4 6		12
12 8	13 2	13 0	12 6	7 8	7 2						3 1	13
13 6	13 6	14 1	U11 8s	8 3	7 6							14
13 4	13 2	12 7	U12 0s	8 8	7 6							15
12 2	13 2	13 4	10 6	7 8	7 8							16
12 4	13 0	12 6	10 8	7 6	7 6							17
13 6	12 2	11 6	11 0	8 6	7 6							18
14 0	13 3	17 0	10 6	9 1	7 8							19
17 6	13 4	13 8	7 8	8 2	8 0							20
17 2	16 6	14 2	12 2	10 8	8 8							21
C	C	C	C	G	7 6					2.6		22
15 4	13 8	8 0	7 0	7 6	7 6						2 4	23
18 0	18 0	14 2	10 0	B	9 4							24
17 0	12 0	5 7	G	G	8 2							25
16 6	16 0	13 0	7 4	9 4	8 2	3 7						26
13 0	G	G	10 8	8 6	8 6							27
14 0	14 0	G	12 4	10 0	8 0							28
13 4	B	14 0	13 2	8 2	8 0							29
13 8	14 2	14 4	13 0	9 0	8 0							30
14 0	13 8	13 0	12 2	8 8	8 0							31
14 0	13 5	12 9	11 4	8 7	8 1							Mean
13 6	13 2	13 0	11 8	8 6	8 0	.						Median
29	28	29	29	30	31	3				3	2	Count

Sweep 1 0 Mc, to 25.0 Mc, in 27 seconds.

Characteristic foEs
Unit Mc
Month March 1959

TABLE 26—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	8 2	11 0	12 6	12 4	13 0
2							u6 os	G	11 6	13 0	13 0	13 0
3								10 0	11 0	13 0	13 6	13 2
4							G	8 4	10 0	12 6	12 0	11 0
5							G	9 0	11 2	C	12 4	B
6								u7 6s	11 1	12 4	14 2	12 6
7							G	8 6	10 6	14 4	13 1	12 6
8							G	8 6	12 0	14 6	17 0	16 6
9							G	10 6	12 0	14 6	15 0	14 2
10							3 8	8 8	11 4	19 6	12 0	C
11			3 3	3 5			4 6	9 6	11 4	12 6	12 6	13 2
12								6 8	10 1	13 1	12 6	12 4
13							G	9 6	10 7	12 3	14 4	13 1
14							G	8 1	11 4	12 8	13 8	12 9
15							G	8 6	9 8	12 4	C	13 1
16							G	11 2	11 6	13 0	17 5	16 2
17							G	6 8	10 6	13 0	13 5	12 8
18							6 6	9 0	11 4	12 7	13 2	13 6
19							G	7 8	11 6	13 5	14 0	12 6
20								10 8	11 4	14 0	17 2	17 4
21							G	9 0	11 8	C	18 6	17 6
22							G	11 0	C	C	C	C
23							7 4	10 8	12 2	13 0	19 8	17 0
24	3 8						G	10 4	12 0	18 0	14 0	18 4
25							2 7	12 0	12 0	18 4	17 0	14 0
26							G	10 6	12 0	17 6	18 6	14 0
27							3 8	11 0	11 6	13 0	14 2	13 0
28							u8 os	11 0	12 2	17 0	14 0	14 4
29							G	10 2	10 0	13 0	14 4	14 0
30								G	12 0	15 0	15 0	13 2
31							G	10 0	12 0	13.4	14 0	14 0
Mean							5 4	9 4	11 3	14 1	14 6	14 0
Median							G	9 0	11 4	13 0	14 0	13 2
Count	1		1	1			26	31	30	28	29	28

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

Characteristic . foEs
 Unit Mc
 Month March 1959

TABLE 26—*Contd*
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
12 0	21 0	22 0	9 0	9 0	7 0							1
12 2	12 8	12 0	9 0	8 4								2
12 6	12 4	12 0	10 0	9 0	U7 0S				2 4	7 2		3
9 2	12 0	12 0	10 4	10 0	U7 0S							4
13 0	12 8	13 0	11 0	8 0								5
12 8	12 6	12 6	9 6	8 2								6
13 4	12 6	12 7	8 6	8 2								7
14 0	11 8	11 4	9 6	8 7								8
13 0	14 6	13 2	9 6	8 2	U8 0S				2 8	3 6		9
G	C	C	9 6	8 8	8 0							10
12 7	13 0	12 8	8 7	7 7								11
13 1	14 1	12 7	9 1	7 6	8 4					4 6		12
13 1	13 9	12 6	8 7	8 1								13
14 6	G	12 8	8 6	8 0								14
13 5	12 7	12 4	8 7	8 5								15
13 3	12 8	11 7	7 8	7 6	7 0							16
12 0	13 2	12 6	7 6	8 2								17
13 4	11 4	11 2	7 4	7 7								18
14 4	17 0	14 2	9 6	C					2 2			19
14 2	13 4	10 8	4 1	8 5	7 0							20
17 2	16 8	12 4	9 8	10 6	U7 6S							21
C	C	C	G	G	8 0				4 2			22
14 4	12 0	G	B	7 8	U7 0S						4 2	23
18 0	16 8	12 0	B	B								24
17 6	G	G	G	G	7 4							25
16 6	14 4	12 0	10 0	8 0	3 0				4 0			26
13 8	12 0	G	8 0	8 6	8 0							27
13 0	11 8	12 8	9 0	U10 6S								28
14 0	12 4	13 0	9 0	8 0								29
14 0	13 2	13 4	9 2	8 2	8 0							30
14 0	13 4	12 2	10 0	8 6								31
13 8	13 6	12 8	9 0	8 5	7 2				3 1			Mean
13 4	12 8	12 4	9 0	8 2	7 4				2 8			Median
29	28	29	29	29	15				5	3	1	Count

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic fbEs
 Unit Mc
 Month March 1959

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

Sweep 1.0 Mc. to 25.0 Mc in 27 seconds.

Characteristic f_oE_s
 Unit Mc
 Month March 1959

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
4 2	4 9	6 0	4 0	3 4	2 8	2 0						1
4 3	4 5	1 0	3 7	3 4	2 8							2
4 3	1 1	4 0	3 7	3 4	2 8							3
4 4	4 2	4 2	4 0	3 4	2 8							4
4 6	4 3	4 1	3 8	3 7	3 0						C	5
4 3	4 2	1 0	3 6	3 4	3 0							6
4 2	4 2	1 0	3 7	3 4	2 9							7
4 2	1 2	1 1	3 8	3 6	3 0							8
4 4	4 2	4 0	3 7	3 5	2 9					3 0		9
C	C	C	C	3 7	3 0	2 6						10
4 4	1 3	4 2	3 9	3 6								11
4 4	4 4	4 1	3 9		4 0					2.2		12
4 4	4 3	4 1	3 8	3 8							1 9	13
4 4	4 3	4 0	3 7	3 6								14
4 3	4 3	4 2	3 8	3 5	3 0							15
.	4 5	4 4	3 8	3 5	3 0							16
	4 4	4 3	3 8	3 6	3 0							17
4 6	4 4	4 2	4 2	3 7								18
4 6	4 5	4 4	4 0									19
4 6	4 4	4 1	1 2	4 0	3 0							20
4 6	4 4	4 2	4 2	3 7	2 9							21
C	C	C	C							1 7		22
4 4	4 3	4 3	4 0	3 7	3 0							23
4 6	4 8	4 3	4 0									24
4 8	4 4	4 5			3 0							25
4 6	4 6	4 2	4 0	3 6	3 0							26
4 4			3 8	3 6	3 0							27
4 4	4 3		3 8	3 4	3 0							28
4 4		1 4	3 9	3 6								29
4 4	4 2	4 2	4 0	3 6	2 8							30
4 5	4 4	4 2	3 8	3 4	2 9							31
4 4	4 4	4 2	3 9	3 6	3 0	2						Mean
4 4	4 3	4 2	3 8	3 6	3 0							Median
27	27	27	28	26	23					3	1	Count

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

Characteristic : fbEs
 Unit Mc
 Month March 1959

TABLE 27—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude : 77.5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								3 0	3 5	4 0	4 0	4 2
2							2 1	3 5	3 5	4 0	4 2	4 2
3								3 0	3 6	4 0	4 1	4 1
4								3 0	3 6	4 0	4 2	4 2
5								3 0	3 7	C		
6								3 0	3 6	4 0	4 1	4 2
7								3 1	3 6	3 9	4 2	4 2
8								3 1	3 6	4 0	4 2	4 3
9								3 1	3 6	4 0	4 2	4 3
10							2 2	3 1	3 6	4 0		C
11								3 1	3 7	3 9	4 2	4 4
12								3 1	3 6	4 0	4 3	4 2
13								3 1	3 7	4 0	4 3	4 5
14								3 2	3 7	4 0	4 2	4 3
15								3 1	3 6	4 0	C	4 4
16								3 2	3 8	4 2	4 3	4 5
17								3 2	3 7	4 0	4 3	4 4
18							2 4	3 2	3 8	4 1	4 4	4 7
19								3 2	3 8	4 0	4 4	4 6
20								3 2	3 8	4 1	4 6	4 6
21								3 3	3 8	C	4 4	4 6
22								3 2	C	C		C
23							2 4	3 2	3 9	4 2	4 2	4 5
24	2.2							3 2	3 8	4 2	4 3	4 6
25							2 6	3 4	4 0	4 0	4 0	
26								3 3	4 0	4 1	4 4	4 4
27							2 4	3 2	3 8	4 2	4 4	4 3
28							2 4	3 1	3 6	4 0	4 2	4 4
29								3 2	3 7	3 9	4 2	4 4
30									3 8	4 1	4 3	4 6
31								3 2	3 8	4 2	4 4	4 4
Mean							2 4	3 1	3 7	4 0	4 5	4 4
Median							2 4	3 2	3 7	4 0	4 2	4 4
Count	1						7	29	30	28	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fbEs
Unit Mc
Month March 1959

TABLE 27—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
4 2	6 0	7 4	3 7	3 2	2 5							1
4 2	1 2	1 0	3 7	3 0								2
4 2	4 0	3 9	3 6	3 0	2 4				1 7	2 4		3
4 3	4 4	4 2	3 7	3 2	2 4							4
4 3	1 2	4 1	5 0	3 6								5
1 2	1 1	3 8	3 8	3 3								6
4 2	1 0	3 8	3 8	3 3								7
4 3	1 3	1 0	3 9	3 4								8
1 2	1 2	1 0	3 7	3 2	2 6				1 8	1 7		9
G	G	G	4 1	3 3	2 7							10
1 5	1 3	1 1	1 0	3 2								11
1 3	1 2	1 1	3 7	3 6	3 1					2 0		12
1 4	1 2	1 0	1 0	3 4								13
1 5	4 2	3 9	1 0	3 2								14
4 4	4 1	1 0	3 8	3 2								15
4 7	4 4		3 8	3 2	2 5							16
1 6	1 5	4 1		3 4								17
1 6	4 3	1 1	4 1	3 1								18
1 6	4 4	4 2	1 0	G					1 6			19
4 5	4 3	4 0	3 8	3 4								20
4 4	4 4		1 0	3 4	2 4							21
G	G	G							1 7			22
4 4	4 3			3 3							1 8	23
4 6	4 4	4 0										24
4 6												25
4 6	4 4	4 0	3 8	3 4	2 6							26
1 2	4 4		3 8	3 2								27
4 2	4 2	4 0	3 8	3 1								28
4 4		4 0	3 8	3 4								29
4 4	4 2	1 0		3 2								30
4 4	4 2	4 0	3 8	3 2								31
4 4	4 3	4 1	3 9	3 3	2 6					.		Mean
4 4	4 3	4 0	3 8	3 3	2 5							Median
29	27	24	25	27	9		.		4	3	1	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f min
Unit Mc
Month March 1959

TABLE 28
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	19	20	18	16	20	24	17	18	20	24	25	28
2	14	14	16	15	13	16	16	20	18	22	28	30
3	18	18	18	16	17	16	21	20	22	24	26	27
4	18	16	17	17	15	16	17	18	20	42	28	30
5	21	23	19	18	20	19	17	16	22	28	25	58
6	13	15	14	17	17	16	16	C	22	25	24	30
7	17	18	17	18	18	24	16	18	20	24	25	28
8	18	14	14	17	20	18	16	17	21	22	24	26
9	19	19	21	19	17	17	17	19	22	27	25	26
10	16	15	14	13	17	14	20	18	20	22	26	C
11	14	16	21	16	16	18	18	19	22	24	25	27
12	15	16	18	18	20	18	17	18	20	26	25	30
13	16	15	14	15	15	18	17	15	21	25	28	30
14	18	15	18	16	16	14	18	21	23	23	26	30
15	17	16	16	16	17	17	17	19	21	26	26	C
16	19	16	16	16	17	16	18	22	27	50	28	30
17	19	14	17	15	18	18	18	19	22	24	28	30
18	17	16	14	16	19	15	18	22	24	30	29	30
19	16	18	16	17	17	20	19	16	26	28	27	37
20	22	19	17	17	20	18	20	20	26	31	18	32
21	20	19	15	15	16	16	18	17	26	C	30	36
22	15	13	13	13	16	13	20	16	C	C	C	C
23	16	16	15	16	16	16	19	18	24	28	29	32
24	20	20	19	14	13	17	18	17	24	28	28	32
25	15	E	13	14	14	17	15	17	23	27	28	60
26	19	17	18	20	16	17	20	20	23	30	32	32
27	15	14	15	15	14	14	22	21	22	27	28	28
28	16	18	18	15	17	18	19	20	23	30	28	28
29	15	20	15	18	17	14	20	16	22	28	26	30
30	22	17	18	14	14	14	19	22	24	28	28	30
31	17	17	17	19	16	15	19	20	26	30	30	30
Mean	17	17	16	16	17	17	18	19	22	28	28	32
Median	17	16	17	16	17	17	18	18	22	27	28	30
Count	31	31	31	31	31	31	31	30	30	29	30	28

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic f min
Unit Mc
Month March 1959

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

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f_{min}
 Unit Mc
 Month March 1959

TABLE 28—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	2.0	1.9	1.7	1.9	1.8	1.9	1.8	2.0	2.2	2.3	2.6	2.6
2	1.5	1.5	1.5	1.5	1.7	1.4	1.7	2.1	1.9	2.3	2.9	3.0
3	1.8	1.9	2.2	1.8	1.8	1.8	2.2	2.0	2.4	2.3	2.8	2.7
4	1.7	1.9	1.5	1.6	1.5	1.7	2.0	2.2	3.6	2.6	3.0	2.9
5	2.3	1.7	1.9	1.8	2.2	2.3	1.8	1.8	2.2	C	5.0	6.0
6	1.1	1.7	1.6	1.8	1.7	1.4	2.2	1.8	2.4	2.4	2.4	2.8
7	1.7	1.8	1.8	1.8	1.8	1.7	1.8	1.7	2.4	2.5	2.8	2.8
8	1.7	1.5	1.8	1.7	1.6	1.4	1.6	1.8	2.1	2.3	2.6	2.7
9	1.9	1.9	1.8	1.7	1.6	1.6	1.7	2.1	2.3	2.4	2.6	3.0
10	1.4	1.7	1.7	1.3	1.6	1.5	1.6	1.9	2.3	2.6	6.4	C
11	1.6	1.7	1.9	1.9	1.8	1.8	2.3	2.0	2.5	2.4	2.7	3.0
12	1.5	1.7	1.8	1.8	1.9	1.8	2.3	2.0	2.3	2.4	2.6	2.9
13	1.7	1.5	1.7	1.6	1.8	1.7	1.9	1.7	2.3	2.6	3.1	3.0
14	1.4	1.5	1.9	2.0	1.7	1.8	1.8	2.2	2.5	2.5	2.8	3.0
15	1.6	1.6	1.8	1.6	2.1	1.7	1.6	2.0	2.3	2.4	C	2.8
16	1.6	1.8	1.7	1.7	1.6	2.0	2.0	2.4	2.8	3.3	3.0	3.0
17	1.7	1.4	1.5	1.6	1.7	1.9	1.7	2.0	2.4	2.5	3.0	3.0
18	1.7	1.8	1.8	1.6	1.7	1.6	1.9	2.4	2.5	2.8	3.0	3.4
19	2.1	1.7	1.4	1.6	1.8	1.8	1.6	1.8	2.5	2.8	3.3	3.4
20	1.7	2.0	1.7	1.7	1.9	2.4	2.4	2.2	2.6	3.0	3.6	3.2
21	1.8	1.5	1.8	1.6	1.8	1.7	1.9	2.7	2.8	C	3.0	3.9
22	1.3	1.3	1.4	1.4	1.5	1.4	1.7	1.8	C	C	C	C
23	1.6	1.7	1.6	1.7	1.7	1.4	1.7	2.0	2.8	2.7	3.0	3.0
24	1.7	1.8	1.5	1.2	1.7	1.5	1.8	1.9	2.4	2.7	3.0	3.0
25	1.6	1.2	1.3	1.3	1.5	1.5	1.7	1.9	2.4	2.8	3.0	5.4
26	2.0	1.6	2.0	1.4	1.6	1.9	1.8	2.1	2.7	3.0	3.0	3.2
27	1.7	1.7	1.3	1.5	1.5	1.6	1.7	2.0	2.4	2.6	2.8	3.0
28	1.8	1.9	1.5	1.3	1.3	1.8	2.0	2.1	2.4	2.8	2.8	3.0
29	1.5	1.3	1.6	1.5	1.5	1.5	1.8	2.0	2.4	2.5	2.8	3.2
30	2.0	1.6	1.6	1.3	1.5	1.5	2.2	2.4	2.6	2.8	2.8	2.9
31	1.6	1.9	1.6	1.6	1.4	1.3	1.8	2.4	2.8	2.8	3.0	3.2
Mean	1.7	1.7	1.7	1.6	1.7	1.7	1.9	2.0	2.5	2.6	3.1	3.1
Median	1.7	1.7	1.7	1.6	1.7	1.7	1.8	2.0	2.4	2.6	3.0	3.0
Count	31	31	31	31	31	31	31	31	30	28	29	29

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f min
Unit Mc
Month March 1959

TABLE 28—Cont'd
Ionospheric Data
75 0°L Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	D 1c
27	26	23	22	18	16	15	15	17	15	16	15	1
31	30	27	25	23	20	12	18	17	19	16	18	2
28	26	28	26	21	20	15	16	16	12	19	19	3
28	26	25	25	22	18	13	17	15	18	14	20	4
30	28	21	28	26	21	17	16	16	18	11	15	5
30	29	24	30	26	25	16	18	16	18	20	22	6
28	26	24	26	21	16	16	13	18	19	18	16	7
26	28	26	27	26	25	16	17	17	21	20	20	8
26	27	25	21	23	16	13	16	17	14	16	17	9
C	C	C	30	27	20	22	17	16	17	18	15	10
31	28	26	30	25	26	18	18	17	11	14	12	11
31	28	33	30	26	21	16	13	18	18	14	18	12
30	27	24	32	34	25	16	20	22	18	17	19	13
28	u ₃ IC	26	30	25	25	16	15	11	20	22	17	14
31	28	26	29	26	26	11	19	19	18	17	17	15
38	32	16	30	23	19	17	18	16	19	20	19	16
36	30	26	40	25	26	17	20	20	21	22	18	17
33	30	25	26	21	26	19	20	20	20	21	15	18
34	30	30	31	C	26	15	18	15	11	16	19	19
32	31	27	30	28	26	18	20	20	21	22	22	20
32	30	50	38	25	16	15	15	15	17	17	16	21
C	C	C	32	26	28	17	18	16	11	19	16	22
32	30	30	40	24	26	16	18	16	19	16	14	23
34	32	28	73	41	27	17	16	17	17	18	16	24
31	28	26	42	28	26	15	20	20	20	22	17	25
34	30	28	30	30	22	16	19	17	17	18	15	26
30	26	30	32	26	24	15	15	15	16	17	16	27
30	28	26	23	22	24	13	15	16	20	19	16	28
30	48	30	30	26	24	13	13	15	16	17	20	29
30	28	26	40	25	21	11	17	16	20	16	15	30
30	30	28	29	24	24	14	14	14	16	17	19	31
31	29	28	32	26	23	16	17	17	17	18	17	Mean
30	28	26	30	25	24	16	17	16	18	17	17	Median
29	29	29	31	30	31	31	31	31	31	31	31	Count

Sweep 10 Mc. to 25 0 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month March 1959

TABLE 29
 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									L	L	L	L
2									L	L	L	L
3									L _u	L	L	L
4									L	L	L	L
5									L	L	L	L
6								C	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	C
11								L	L	L	L	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								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	L	C	L	L
22								L	C	C	C	C
23								L	L	L	L	L
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								L	L	L	L	L
Mean												
Median												
Count												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month March 1959

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

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month March 1959

TABLE 29—Cont'd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	L	L
3								L ^{II}	L ^{II}	L	L	L
4								L	L	L	L	L
5								L	L	C	L	L
6								L	L	L	L	L
7								L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	L	C
11								L	L	L	L	L
12								L	L	L	L	L
13							L	L	L	L	L	L
14								L	L	L	L	L
15								L	L	L	C	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	L	C	L	L
22								L	C	C	C	L
23								L	L	L	L	L
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							L	L	L	L	L	L
Mean												
Median												
Count												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic : h'F₂
 Unit Km
 Month March 1959

TABLE 29—Contd
 Ionospheric Data
 75 °E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
L	L	L	L	L								1
L	L _{LH}	L	L	L								2
L	L	L	L	L								3
L	L	L	L	L								4
L	L	L	L	L								5
												6
L	L	L	L	L								7
L	L	L	L	L								8
L	L	L	L	L								9
G	G	G	L	L								10
												11
L	L _{LH}	L	L	L								12
L	L	L	L	L								13
L	L	L	L	L								14
L	L	L	L	L								15
												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
												21
L	L	L	L	L								22
G	G	G	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
												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
												Mean
												Median
												Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month March 1959

TABLE 30
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	250	260	210	240	250	220	210	245	225	220	220	205
2	245	255	240	220	220	230	260	245	235	220	220	215
3	240	240	230	260	275	260	210	260	240	220	205	200II
4	260	240	220	215	240	240	265	250	235	225	215	210
5	240	240	240	270	260	230	225	245	230	210	215	B
6	245	250	225	230	225	225Γ	250	C	230	215	205II	200
7	250Γ	210Γ	235	235	225	225	260	250	230	225	215	200
8	255	270	265	255	255	230	250	250	235	220	215	205II
9	U300Γ	U245Γ	235Γ	225	225Γ	220	255	250	235	225	215	215II
10	255	230	220	220	U235Γ	220	265	250	235	225	220	C
11	240	230	235	230	240	230	280	255	240	230	220	210
12	240	230	235	240	235	230	265	260	210	235	220	220
13	240	240	240	250	245	235	265	260	240	230	220	220
14	240	230	220	230	U240C	285	300	265	245	235	220	200H
15	260	240	225	220	230	230	280	260	240	235	220	C
16	240	230	220	225	220	235	295	250	210	B	220	220
17	280	230	260	230	245	220	280	250	235	220	215II	210
18	280	245	230	220	220	220	260	250	240	225	215	215
19	260	245	230	230	225	230	270	255	235	225	220	220
20	250	255	240	230	225	220	260	250	230	225	U230B	225
21	280	255	240	235	225	215	260	255	240	C	220	220
22	260	240	240	230	240	220	260	275	C	C	C	C
23	260	240	230	230	220	240	270	260	210	220	220	220
24	290	280	250	240	235	220	260	270	240	230	220	220
25	260	265	260	210	230	220	260	260	210	235	220	B
26	320	265	280Γ	280Γ	260I	220	210	250	240	235	220	215
27	260	260	240	240	270	280	275	260	215	230	220	220II
28	255	245	245	245	255	300	300	255	235	220	215	210II
29	230	235	245	240	240	235	280	250	240	220II	220	220
30	260	240	230	240	220	210	210	240	230	210	210	220
31	240	240	220	220	220	215	250	240	230	220	220	210II
Mean	260	245	240	235	235	230	265	250	235	225	220	215
Median	255	240	235	230	235	230	260	250	235	225	220	215
Count	31	31	31	31	31	31	31	30	30	28	30	26

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month March 1959

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
200	A	A	200	210	260	295	395	420	395	290	210	1
215	200	205	230	235	250	300	400	400	300	265	225	2
220	110	220	220	235	260	300	100	F	300	260	215	3
205	200H	210	210H	210	260	300	F	F	360	260	250	4
220	215H	215	220	210	260	300	400	400	430	310	C	5
215H	200H	200H	205H	210	260	300	U110F	F	U310F	330F	U270F	6
205	200	200	215	235	255	300	100	U410F	310F	260	215	7
200	200H	200H	230	230	260H	295	U410F	F	U425F	F	U340F	8
210H	200H	210H	230	210	260	300	415	F	F	U330F	U300F	9
C	C	C	C	215	260	300	455	U410F	F	U380F	U285F	10
215	210H	215	230	215	260	320	480	440	380	375	275	11
200	205H	205	230	210	280	300	450	430F	395	320	275	12
215	215H	205H	225	240	270	320	475	165	U100F	325F	260	13
205	210	210	220H	210	265	300	U160F	F	410F	300	270	14
220	210	215	225	210	265	305	480F	F	F	280	265	15
B	210	235	225	210	260	305	U180F	460	410	380	265	16
U235H	210	220	215	210	260	300	480	U560F	U480F	F	290	17
200H	200H	215	U225A	235	260	310	U460F	305	300	F	280	18
221	225	220	235	B	270	310	F	U345F	U100F	U300F	U320F	19
220	225	220	U240A	250	270	305	470	U165F	U400F	325	250	20
215	215	220	210	250	270	310	150	F	U120F	320	300	21
C	C	C	C	245	260	300	460	U100F	430F	330F	300	22
220	205H	220	210	240	260	310	460	U300F	U420F	U360F	305F	23
220	230	220	235	B	280	310	460	U500F	400F	360F	300	24
U220B	220	230	210	250	265	305	430	U500F	U360F	U320F	320	25
210	220	220	235	240	260	300	480	310	260	240	240	26
230H	220	230	240	250	270	300	300	360	320F	265	260	27
210H	215H	220	230	240	260	300	120	480B	320F	310F	275	28
210H	B	230	230	240	260	295	350	360	300	240	260	29
210H	210H	210H	220	240	255	300	420	420F	400F	300	265	30
210H	205H	210H	215	235	265	300	460	490F	105F	U345F	260	31
215	210	215	225	240	265	305	435	430	375	310	275	Mean
215	210	220	230	210	260	300	450	430	400	320	270	Median
28	27	28	29	29	31	31	29	23	28	28	30	Count

Sweep 10 Mc to 25 Mc in 27 seconds

Characteristic h'F
Unit Km
Month March 1959

TABLE 30—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	260	250	240	240	230	220	235	240	220	225	215	200
2	250	240	225	220	230	240	205	240	225	215	210	210
3	240	235	240	275	270	235	270	240	230	215	200	200H
4	245	240	215	220	240	240	260	245	230	220	210	205
5	240	235	260	280	240	215	260	240	220	C	B	B
6	245	U235F	230	220	220	220	265	240	225	215H	200	200H
7	240F	235	235	235	220	225	260	240	230	215	210	205
8	265	U265F	255	255	245	225	260	240	225	215	210H	200
9	U265F	U230F	230	220	220	220	260	245	230	220	210	210H
10	230	220	220	225	U240F	220	265	240	225	220	B	C
11	240	235	235	245	240	235	270	245	235	225	215	210
12	230	225	240	240	235	220	275	255	235	220	215	210
13	240	230	245	255	240	230	280	250	235	230	220	220
14	235	220	220	240	260	275	280	255	235	220	215	200
15	245	230	225	225	230	235	275	245	235	225	C	220
16	240	220	220	225	225	260	265	245	235	225	215	210
17	235	230	240	220	220	230	260	240	230	220	205H	220
18	255	240	230	220	230	225	265	245	235	220	210	200H
19	260	230	230	220	230	235	260	245	230	220	210	220
20	245	255	230	225	220	220	260	240	225	220	235	215
21	250	240	225	225	220	220	260	245	235	C	C	220
22	240	240	240	235	220	220	260	240	235	C	C	C
23	240	240	230	220	230	225	265	250	235	230	215	220
24	280	265	240	240	220	220	260	245	240	220	215	215
25	260	260	250	240	220	220	260	245	240	220	220	B
26	305F	260	300F	280F	220	220	260	240	240	225	220	210
27	260	250	240	250	250	280	270	255	235	220	215	215M
28	255	240	245	250	275	330	270	240	225	220	210H	215
29	225	240	240	240	245	220	260	245	230	220H	220	215M
30	250	240	240	230	215	210	245	235	230	220	220	220
31	245	230	220	215	210	215	250	235	225	220	220	215M
Mean	250	240	235	235	230	230	265	245	230	220	215	210
Median	245	240	235	235	230	225	260	245	230	220	215	210
Count	31	31	31	31	31	31	31	31	30	28	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month March 1959

TABLE 30—Cont'd
Ionospheric Data
75 °E Mean Time

Latitude : 10 2°N
Longitude : 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
200	A	A	240	245	270	340	405	405	370	245	240	1
210H	200	220	240	240	265	350	400	400	260	240	240	2
210	220	220	225	240	270	340	F	F	290	265	260	3
200H	220	220	235	245	270	360	F	F	280	240	240	4
220H	200H	220	A	260	275H	360	F	420	380	260	245	5
215H	215H	210	230	245	275	360	F	U370F	U310F	U330F	U260F	6
210	200	200	225	245	275	350	420	U370F	300	245	250	7
205	200H	215H	240	255	270	360	F	F	F	U340F	U320F	8
200H	200H	210	235	250	275	360	F	F	F	U330F	U280F	9
C	C	C	240	250	275	365	F	U405F	U395F	U310F	280	10
215	215	210	240	250	285	395	U505F	F	400F	325	240	11
215	205	225	235	250	285	370	460	400	360	285	260	12
220H	205H	225H	240	245	285	380	535	F	370F	265F	255	13
220	210	225	235	255	280	370	U480F	400	380F	280	275	14
215	210	215	230	250	285	390	F	F	360	280	245	15
215	205H	U235B	220	245	280	380	U520F	460	400	340	285	16
220	215	220	U240B	250	275	370	F	U520F	400	360	280H	17
220	200H	220	235	255	280	380	U405F	F	320	300	270	18
220	220H	U225G	235	C	280	380	U400F	260	U370F	U280F	270	19
220	220	220	230	260	280	375	F	U400F	365	305	260	20
215	220	B	240	255	280	380	U180F	U420F	370	295	300	21
C	C	C	240	260	280	360	U440F	U400F	380F	280F	280	22
220	220	230	240B	260	280	380	U500I	U460F	U350F	U360F	300	23
220	220	220	B	B	280	380	U460F	U460F	400F	320F	260	24
215	220	235	U250A	260	280	360	F	U400F	U360F	U320F	340	25
210	220	220	240	255	275	360	U440F	270	260	220	250	26
225	230	240	250	260	275	320	320	360	290	260	270	27
210	215	220H	235	250	280	360	500F	360F	380F	280F	255	28
205H	230B	220	235	250	275	320	380	330	260	260	260	29
205H	220	210H	235	245	260	360	420F	440	360	270	250	30
210H	215H	210	225	265	280	360	U485F	490F	U345F	285F	240	31
215	215	220	235	250	275	365	U450	400	345	290	265	Mean
215	215	220	235	250	280	360	U450	400	360	280	260	Median
29	28	27	29	29	31	31	20	23	29	31	31	Count

Sweep 10 Mc to 250 Mc. in 27 seconds

Characteristic : h'E
 Unit Km
 Month : March 1959

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

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic . h'E
 Unit Km
 Month March 1959

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

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic . h'E
 Unit Km
 Month March 1959

TABLE 31—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							135	105	A	A	A	A
2							125H	115	A	A	A	A
3							A	A	A	A	A	A
4							135	105	A	A	A	105
5							120H	A	A	C	B	B
6								110	A	A	A	A
7							130	105	105	A	A	A
8							125	110	110	A	A	A
9							125H	A	A	A	A	A
10							125	110	A	A	B	C
11								A	A	A	A	A
12								115	A	A	A	A
13							125	A	A	A	A	A
14							130	120	115	105	A	A
15							125	115	A	A	C	A
16							120	A	A	A	A	A
17							120	110	A	A	A	A
18								115	110	A	A	A
19							A	A	A	A	A	A
20							105	115	A	A	A	A
21							120	105	A	C	A	B
22							130	A	C	C	C	C
23							120	110	A	A	A	A
24							120	110	A	A	A	A
25							120	110	A	A	A	B
26							120	A	A	A	A	A
27							120	110	110	A	A	110
28							A	A	A	A	A	A
29							120	110	110	A	A	A
30								120	110	A	A	B
31							125	120	A	110	A	A
Mean							125	110	110			
Median							125	110	110			-
Count							23	21	7	2		2

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic . h'E
 Unit Km
 Month March 1959

TABLE 31—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	A	A	A	A	A							1
A	105	A	A	A	A							2
A	A	A	105	110								3
A	A	A	A	A								4
A	A	A	A	A								5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	A	A								8
A	A	A	110	115								9
C	C	C	A	A	A							10
A	A	A	105	105								11
A	A	A	A	A								12
A	A	A	A	A								13
A	A	A	A	A								14
A	A	A	A	A								15
B	A	B	115	115	120							16
A	A	A	B	A								17
A	A	A	A	A								18
A	A	A	A	C								19
A	A	A	A	120								20
A	A	B	B	115	120							21
C	C	C	120	120								22
A	A	115	B	120								23
A	A	110	B	B								24
A	105	100	B	120								25
A	A	110	A	A								26
A	A	120	120	120								27
A	U110A	A	A	115								28
A	B	115	120	120								29
A	A	110	B	115								30
A	A	A	115	A								31
		110	115	115								Mean
		110	115	115								Median
	3	7	8	13	2							Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic . h'Es
 Unit . Km
 Month March 1959

TABLE 32
 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								G	100	100	100	100
2					105			G	100	100	100	100
3								100	100	100	100	100
4								100	100	100	100	100
5								100	100	100	100	100
6								C	100	100	100	100
7								100	100	100	100	100
8								100	100	100	100	100
9								105	100	100	100	100
10								100	100	100	100	C
11								105	100	100	100	100
12								G	100	100	100	100
13								100	100	100	100	100
14								G	100	100	100	100
15								100	100	100	100	C
16								100	100	100	100	100
17								G	100	100	100	100
18					115			100	100	100	100	100
19								100	100	100	100	100
20								100	100	100	100	100
21								100	100	C	100	100
22								120	C	C	C	C
23								100	100	100	100	100
24	120							100	100	100	100	100
25							G	100	100	100	100	100
26								105	100	100	100	100
27								100	100	100	100	100
28								100	100	100	100	100
29								100	100	100	100	100
30		120						G	100	100	100	100
31								G	95	95	95	95
Mean								100	100	100	100	100
Median								100	100	100	100	100
Count	1	1			2			23	30	29	30	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'Es
Unit Km
Month March 1959

TABLE 32
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
100	100	100	100	100	100	100						1
100	100	100	100	100	100							2
100	100	100	100	100	105							3
100	100	100	100	100	105							4
100	100	100	100	100	105						C	5
100	100	100	100	105	105							6
100	100	100	100	100	100							7
100	100	100	100	100	105							8
100	100	100	100	100	100					115		9
C	C	C	C	100	100	100						10
100	100	100	100	100	100							11
100	100	100	100	G	100					120		12
100	100	100	100	100	105						115	13
100	100	100	100	100	105							14
100	100	100	100	100	100							15
100	100	100	100	100	105							16
100	100	100	100	100	100							17
100	100	100	100	100	105							18
100	100	100	100	100	105							19
100	100	100	100	105	110							20
100	100	100	100	100	100							21
C	C	C	C	G	105					120		22
100	100	100	100	100	105						105	23
100	100	100	100	B	100							24
100	100	120	G	G	100							25
100	100	100	120	100	100	120						26
100	G	G	100	100	110							27
100	100	G	100	100	110							28
100	B	100	100	100	110							29
100	100	100	100	105	105							30
95	100	100	100	100	115							31
100	100	100	100	100	105							Mean
100	100	100	100	100	105							Median
29	27	27	28	27	31	3				3	2	Count

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

Characteristic h'Es
Unit Km
Month March 1959

TABLE 32—Cont'd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	100	100	100	100	100
2							100	G	100	100	100	100
3								100	100	100	100	100
4							G	100	100	100	100	100
5							G	100	100	C	100	B
6								100	100	100	100	100
7							G	100	100	100	100	100
8							G	100	100	100	100	100
9							G	100	100	100	100	100
10							120	100	100	100	100	C
11			110	110			140	100	100	100	100	100
12								100	100	100	100	100
13							G	100	100	100	100	100
14							G	100	100	100	100	100
15							G	100	100	100	C	100
16							G	100	100	100	100	100
17							G	100	100	100	100	100
18							115	100	100	100	100	100
19							G	100	100	100	100	100
20								100	100	100	100	100
21							G	100	100	C	100	100
22							G	100	C	C	C	C
23							100	100	100	100	100	100
24		110					G	100	100	100	100	100
25							140	100	100	100	100	100
26							G	100	100	100	100	100
27							110	100	100	100	100	100
28							110	100	100	100	100	100
29							G	100	100	100	100	100
30								G	100	100	100	100
31							G	95	95	95	95	95
Mean							115	100	100	100	100	100
Median							110	100	100	100	100	100
Count	1		1	1			8	29	30	28	29	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'Es
Unit Km
Month . March 1959

TABLE 32—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
100	100	100	100	100	100							1
100	100	100	100	100	100							2
100	100	100	100	105	110				130	105		3
100	100	100	100	100	115							4
100	100	100	100	100								5
100	100	100	100	105								6
100	100	100	100	100								7
100	100	100	100	105								8
100	100	100	100	100	100				120	110		9
G	C	C	100	100	100							10
100	100	100	100	100								11
100	100	100	100	100	100					115		12
100	100	100	100	100								13
100	100	100	100	100								14
100	100	100	100	100								15
100	100	100	100	100	110							16
100	100	100	100	100								17
100	100	100	100	105								18
100	100	100	100	C					105			19
100	100	100	120	105	110							20
100	100	100	100	100	110							21
C	C	C	G	G	110				120			22
100	100	G	B	100	105						110	23
100	100	100	B	B								24
100	G	G	G	G	100							25
100	100	100	100	110	120				120			26
100	100	G	100	100	110							27
100	100	100	100	100								28
100	100	100	105	110								29
100	100	100	100	100	110							30
100	100	100	100	110								31
100	100	100	100	100	110				120			Mean
100	100	100	100	100	110				120			Median
29	28	26	27	27	15				5	3	1	Count

Sweep 1 Mc to 25 Mc. in 27 seconds.

Characteristic (M3000)F₂
 Unit .
 Month March 1959

TABLE 33
 Ionospheric Data
 75 °E Mean Time

Latitude 10 2°N
 Longitude 77 5°

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	2 80	2 75	2 80	2 85	2 90	3 20	2 90	2 95	2 70	2 30	2 15	2 25
2	F	2 60	2 80	3 00	3 05	F	2 85	2 85	2 75	2 50	2 25	2 20
3	2 90	2 85	3 05	2 90	2 80	2 85	3 05	2 75	2 35	2 30	2 30	2 20
4	2 65	2 85	2 90	3 05	3 00	2 95	F	2 70	2 55	2 40	2 30	2 25
5	F	S	2 75	U2 55F	F	3 00	3 30	2 90	2 50	2 25	2 30	2 20
6	2 70	U2 65F	2 80F	2 90	3 20	F	2 95	C	2 65	2 35	2 10	2 20
7	F	F	U2 90F	3 00F	U3 10F	3 30	2 70H	3 00	2 70	2 40	2 20	2 10
8	U2 60F	F	F	U2 90F	3 00	3 10	U3 05S	2 75	2 50	2 25	2 20	2 20
9	F	U2 90F	F	3 20F	F	3 35	2 90	2 90	2 55	2 25	2 30	2 25
10	F	F	3 05	3 10	F	U3 20F	2 75H	2 90	2 55	2 25	2 30	C
11	F	F	F	F	U3 05H	F	2 90	U2 80S	2 50	2 40	2 20	2 20
12	U3 10F	F	F	U3 10F	3 10	3 20	2 95	3 00	2 75	2 40	2 10	2 15
13	U2 95F	U3 00F	U2 95F	F _S	2 90	3 05	F _S	2 75	2 50	2 25	2 15	2.10
14	F	2 90	U3 10F	3 15	F	F	U2 90S	U2 70R	2 45	2 30	2 20	2 10
15	F	2 85	2 95	3 15	F	3 15	U2 90S	U2 85S	2 65	2 40	2 20	C
16	F	F	F	F	FS	F	2 75	2 75	2 40	2 20	2 20	2 20
17	F	2 85F	2 90	3 00	3 00	F	2 90	2 65	2 30	2 10	2 10	2 10
18	F	2 90	F	J3 00S	3 10	3 10	U2 95S	2 80	2 40	2 15	2 20	2 20
19	F	F	2 85	3 00	3 10	3 10	U2 90S	2 85	2 60	2 25	2 15	2 15
20	F	F	F	U2 90F	F	3 20	2 95	2 85	2 40	2 20	2 20	2 20
21	F	2 75	F	U2 85F	F	3 05F	2 80	2 65	2 40	C	2 20	2.10
22	F	F	FS	F	FS	U3 25S	U3 00S	U2 95S	C	C	C	C
23	F	F	U3 05S	U3 15S	3 25	F	U3 00S	2 60	2 50	2 50	2 20	2 30
24	F	FS	F	F	U3 05S	F	U3 00S	FS	U2 60F	2 25	2 20	2 25
25	F	F	2 90	F	U3 10S	U3 30SF	FS	2 85	J2 35S	2 40	2 30	2 20
26	F	F	F	F	F	F	U3 00S	2 90	U2 50R	2 15	2 25	2 30
27	2 90	2 85	3 00	2 90	2 85	2 80	S	2 85	2 50H	2 20H	2 10	2 05
28	U2 65S	2 90	2 80	2 90	2 85	2 60	2 40H	2 70	2 50	2 45	2 40	2 30
29	3 05	U2 90SF	2 90	U2 90SF	2 90	F	FS	U2 70S	2 50	2 40	2 30	2 25
30	2 95	2 90	2 90	3 00	3 15	3 30	3 10	3 10	2 95	2 55H	2 10H	2 30
31	F	F	3 00	3 15	3 20	3 20	3 00	2 95	2 60	2 30	2 25	2 25
Mean	2 85	2 85	2 90	3 00	3 05	3 10	2 90	2 85	2 55	2 30	2 20	2 20
Median	2 90	2 85	2 90	3 00	3 05	3 15	2 95	2 85	2 50	2 30	2 20	2 20
Count	11	16	20	24	21	21	25	20	30	29	30	28

Sweep 1 Mc. to 25 Mc in 17 seconds.

Characteristic (M3000)F2
 Unit
 Month, March 1959

TABLE 33
 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 10	2 20	2 20	2 20	2 15II	2 10	U2 05s	1 90	2 00	F	F	F	1
2 30	2 30	2 30	2 25	2 25	2 15	U2 05R	R	F	F	F	F	2
2 25	2 10	2 10	2 10	2 05	2 10	U2 10s	2 10	U2 10F	2 30	2 50	2 60	3
2 20	2 20	2 20	2 20	2 15	R	E1 90W	2 00	F	F	F	2 65	4
2 25	2 25	2 25	2 20	2 15	2 00	2 10	2 00	2 05	F	F	C	5
2 15	2 20	2 20	2 20	2 20	2 10	U2 00	U1 95F	F	U2 10F	F	F	6
2 15	2 20	2 20	2 15	2 10	2 00	2 00	2 00	F	F	F	U2 45F	7
2 20	2 20	2 20	2 30	2 30	2 20II	U2 05RII	U1 90W	F	F	F	F	8
2 20	2 10	2 10	2 10	2 10	2 20	U2 15	U2 00F	F	F	F	F	9
C	C	C	C	2 10	2 20	U2 15s	1 90	F	F	F	F	10
2 15	2 05	2 05	2 10	2 10	2 10	1 95	U1 80F	F	F	F	FS	11
2 30	2 15	2 05	2 05	2 05	2 05	2 05	U1 95	U1 90F	F	F	F	12
2 10	2 05	2 00	2 00	2 05	2 05	2 10	U1 80W	F	F	F	F	13
2 15	2 15	2 10	2 10	2 10	2 05	1 95	U1 90	U1 80I	F	F	U2 55F	14
2 05	2 10	2 15	2 15	2 05	2 05	1 90	U1 80	F	F	F	F	15
2 15	2 10	2 10	2 15	2 20	2 15	2 05	F	F	F	F	F	16
2 15	2 15	2 10	2 10	2 10	2 10	2 00	W	F	F	F	FS	17
2 15	2 10	2 10	2 20	2 20	2 15	2 00H	U1 90WII	F	F	F	F	18
2 05	2 05	2 10	2 05	2 05	2 05	1 95	U1 85F	F	F	F	F	19
2 05	2 10	2 10	2 15	2 15	2 05II	U1 95H	U1 85F	F	F	F	F	20
2 05	2 00	2 05	2 10	2 05	2 05II	1 95	1.90	U1 90F	F	U2 35F	U2 55F	21
C	C	C	C	2 45	2 35	2 25II	J2 00RII	F	F	F	F	22
2 30	2 20	U2 20R	U2 30S	U2 35R	U2 25R	U2 10IR	U1 95F	F	F	F	F	23
2 15	2 10	2 10	2 20	2 25	2 30	U2 20R	F	F	F	F	F	24
2 05	2 10	2 25	U2 30S	U2 30R	U2 30RII	2 15H	2 00H	F	F	F	F	25
2 15	2 20	2 20	2 30	2 20	2 15	2 20	U2 00S	U2 10S	J2 65S	U2 95S	2 90	26
2 25	2 30	2 40	U2 35S	2 30	2 20II	2 10H	2 15	2 10	2 15F	2 40	U2 50S	27
2 25	2 30	2 30	U2 40S	U2 40S	2 20II	2 00H	W	F	F	F	F	28
2 25	2 25	2 20	2 15	2 15	2 20	2 20	2 10	2 15	2 25	U2 60S	2 70	29
2 20	2 25	2 15	2 10	2 20	2 20	2 20	2 00	U2 00F	F	F	F	30
2 25	2 20	2 20	2 20	2 20	2 05	2 00	U1.95S	F	F	F	F	31
2 15	2 15	2 15	2 20	2 20	2 15	2 05	U1 95	U2.00	U2 30	U2 55	U2 60	Mean
2 15	2 15	2 15	2 15	2 15	2 10	2 05	U1 95	U2 00	U2 25	U2 50	U2 60	Median
29	29	29	29	31	30	31	28	10	5	5	8	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic (M3000)F₂
 Unit . . .
 Month March 1959

TABLE 33—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°N

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	2 75	2 80	2 80	2 85	3 00	3 15	3 00	2 85	2 50	2 15	2 20	2 20
2	U2 60s	2 75	2 90	3 05	F	3 05	2 80	2 85	2 65	2 35	2 25	2 25
3	2 80	2 90	3 00	2 75	2 85	3 05	2 95	2 55	2 30	2 30	2 30	2 30
4	2 70	2 90	2 95	3 05	3 00	F	U2 80s	2 60	2 45	2 35	2 25	2 25
5	F	U2 75s	F	F	U2 95s	3 25	3 00	U2 70s	2 25	C	2 25	2 25
6	2 70	F	2 80F	3 00	3 15	3 15F	2 95	2 80	2 50	2 15	2 20	2 20
7	F	U2 90F	U2 90F	3 05	3 15	3 15	3 00	2 85	2 55	2 25	2 15	2 15
8	2 70F	F	F	F	2 95	3 15	2 90	2 65	2 40	2 10	2 20	2 15
9	F	F	U3 05F	U3 15F	3 15F	3 30	2 90	2 75	2 35	2 35	2 30	2 25
10	U2 70F	F	3 10	3 10	F	3 30	2 95	2 75	2 40	2 30	2 30	C
11	U2 80F	F	F	F	F	F	2 85	2 65	2 40	2 30	2 25	2 20
12	F	FS	F	3 15	3 10	3 20	3 00	2 95	2 60	2 20	2 10	2 25
13	U2 90F	FS	U2 90s	2 85	3 00	U3 10s	U2 85s	2 70	2 30	2 20	2 15	2 10
14	F	U3 00F	3 05	FS	U2 90F	F	U2 70s	2 55	2 40	2 15	2 20	2 10
15	F	3 00	3 05	U3 15s	3 10	3 15	2 90	2 75	2 50	2 25	C	2 10
16	F	F	F	2 65F	FS	F	2 80	2 60	2 25	2 25	2 20	2 15
17	F	2 90	F	3 00	U3 25F	F	3 00	2 75	2 40	2 25	2 00	2 15
18	F	F	F	F	3 10	3 10	2 85	2 60	2 30	2 10	2 20	2 20
19	F	F	3 00	3 10	3 15	3 10	2 90	2 70	2 35	2 15	2 10	2 10
20	2 75	F	U2 80F	F	3 10F	3 05	2 90	2 60	2 20	2 20	2 20	2 10
21	F	U2 70F	U3 00F	U2 90F	F	3 10	2 85	2 55	2 25	C	2 15	2 15
22	F	F	F	U3 10rs	FS	3 25	U3 05s	U2 80s	C	C	C	C
23	U2 90rs	U3 05s	3 10	3 20	U3 30s	F	U2 80s	2 55	2 50	2 40	2 25	2 30
24	FS	F	F	U3 05FS	U3 20FS	F	S	U2 80rs	2 40	2 15	2 25	2 20
25	F	F	U2 90s	U3 00F	FS	U3 20s	U3 00s	2 60	2 25	2 35	2 20	2 10
26	F	F	F	F	F	U3 10s	3 00	2 70	J2 25R	2 30	2 25	2 20
27	U2 90s	2 90	U3 00s	2 90	U2 90s	U2 80s	U2 90s	2 75	2 40	2 15H	2 00	2 25
28	2 80	2 90	2 80	2 90	2 80	2 50	S	2 70	2 50	2 50	2 35	2 30
29	3 05	3 00	F	FS	F	U3 20rs	U2 80s	2 70	2 30	2 40	2 10	2 30
30	U3 05s	2 95	2 95	3 05	U3 30s	3 30	U3 20s	3 05	2 75	2 40H	2 25	2 20
31	F	F	3 10	3 00	3 10	3 20	U3 10s	2 85	2 50	2 20	2 35	2 30
Mean	2 80	2 90	2 95	3 00	3 05	3 10	2 90	2 70	2 40	2 25	2 20	2 20
Median	2 80	2 90	3 00	3 05	3 10	3 15	2 90	2 70	2 40	2 25	2 20	2 20
Count	15	15	20	23	22	24	29	31	30	28	29	29

Sweep 1 Mc to 25 in Mc in 27 seconds

Characteristic (M3000)F₂
 Unit
 Month March 1959

TABLE 33—Contd
 Ionospheric Data
 75°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month April 1959

TABLE 34
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	U11 2F	U10 8s	U10 4s	U9 8s	U9 9s	9 0	U10 1s	12 2	13 6	14 4	13 6	12 5
2	U9 6sF	F	8 9	8 6	U7 9FS	J6 2s	U7 6s	11 2	13 4	14 6	U15 OR	U14.8R
3	U10 8s	U11 2s	FS	9 0	F	8 7	U10 2s	12 3	13 4	12 8	12 5	11 8
4	U11 2F	U10 4sF	10 0	9 0	7 6	5 5	U7 2s	11 4	13 4	13 6	12 0	11 8
5	F	F	F	U9 6s	U8 8FS	5 0	U7 0s	10 9	C	C	C	C
6	F	F	F	F	F	6 5	7 5	10 9	12 3	11 4	10 3	10 0
7	C	C	C	C	C	C	C	C	C	11 7	11 1	10 7
8	F	U11 3F	F	U8 7F	F	U7 6F	8 6	11 7	13 0	13 6	12 7	11 7
9	13 6	12 6	10 9	10 2	8 1	3 7	7 1	C	C	C	C	C
10	11 3	10 7	S	10 2	9 1	9 6	11 1	13 1	14 1	15 5	15 3	14 1
11	12 6	10 9	10 5	8 9	8 3	7 5	8 5	11 6	13 2	12 6	11 9	11 9
12	U12 0F	11 4	10 8	U9 6s	U8 3s	7 6	U9 5s	12 4	13 2	12 2	11 0	11 2
13	F	F	U9 0F	8 4	8 0	U7 6s	9 2	12 1	13 6	14 0	12 9	11 9
14	U12 0sF	F	10 0F	9 6	9 0	7 0F	8 4	11 2	13 2	14 2	13 2	11 8
15	U12 5F	F	U9 8F	F	F	F	7 9	11 3	13 0	14 1	13 7	11 4
16	F	F	9 5	F	F	U7 4F	8 8	11 7	13 3	13 3	11 7	11 3
17	11 3	F	11 0	11 0	F	J7 5F	8 2	10 9	12 6	12 6	11 6	11 4
18	U11 6s	U10 8s	10 3	10 2	8 4	6 1	7 8	11 0	12 8	12 9	11 8	11 4
19	U10 8s	FS	U9 2s	8 8	7.8	6 5	8 3	11 2	12 6	12 7	11 8	11 4
20	U11 4F	FS	U8 5F	F	6 0	5 5	8 2	11 0	12 6	12 8	11 5	10 8
21	S	U9 8s	8 4	8 0	U7 1s	5 5	7 8	10 6	12 3	11 6	10 7	10 5
22	F	F	F	U8 0s	FS	U6 9s	F	U11 6s	13 3	13 6	12 8II	11 5
23	F	FS	F	F	7 8	5 4	8 0	11 2	12 8	13 4	13 0	11 4
24	12 5	U11 9s	U11 8s	11 0	F	U8 8r	FH	10 7	11 1	11 2	11 3	11 6
25	9 5	U9 5s	U9 8s	8 6	7.2	6 7	8 9	12 2	13 9	14 5	13 6	12 3
26	12 2	U11 6s	11 0	11 0	10 8	9 0	11 0	12 7	13 8	14 7	15 0	13 4
27	F	F	U11 4FS	F	9 4	U8 0FS	10 0	12 2	13.8	14 8II	14 5	13 5
28	U12 4s	U11 6s	11 2	11 2	U10 6s	U9 1s	9 9	12 8	14 5H	15 0	U14 OR	12 0
29	F	F	U11 8s	12 6F	U11 4s	U7 4s	U9 5s	11 6	13 4	14 3	14 4	12 9
30	U11 7s	10 8	11 1	11 2	11 3	10 2	10 8	13.0	13 9	13 8	12 8	12 7
Mean	U11 6	U11 0	10 2	9 7	8 7	7 2	8.8	11 7	13 2	13 4	12 7	11 9
Median	U11 6	U10 9	10 4	9 6	8 3	7 4	8 5	11.6	13 3	13 6	12 8	11 8
Count	19	15	22	23	21	28	27	28	27	28	28	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF₂
 Unit : Mc
 Month April 1959

TABLE 34
 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
12 8	13 8	14 4	U14 9s	U14 7s	U14 0s	U12 4w	U9 2s	U8 4sF	F	F	U9 2s	1
13 2	13 4	13 7	U13 8s	13 6	U13 0s	U11 6s	F	F	F	F	F	2
12 1	12 2	13 0	13 8	14 0	U13 8s	U13 0s	U11 6s	F	F	F	U10 8F	3
11 7	12 1	12 8	U13 4s	13 6	U13 6s	U12 8s	U11 0Fs	F	F	F	F	4
C	C	12 2	13 0	13 8	U13 5s	U13 2s	F	F	F	F	F	5
10 2	10 7	10 9	11 4	11 8	U12 3s	U12 0s	C	C	C	C	C	6
11 1	11 7	12 0	12 2	12 6	13 2	12 6	U11 0s	F	F	F	F	7
11 4	10 8	11 1	11 8	12 4	12 6	12 6	11 5	12 5	13 0	U13 3s	14 6	8
C	C	C	C	12 8	13 2	12 4	U11 6s	10 4	F	F	U10 7s	9
13 1	12 8	12 6	14 0	14 5	13 9	13 4II	11 3II	F	F	13 5	14 5	10
11 9	12 2	12 7	12 8	13 0	U13 0s	U12 8s	U10 7s	F	F	F	F	11
11 3	11 4	11 3	11 0	11 2	U11 4s	U11 0s	U9 1s	F	F	F	F	12
11 8	12 3	12 9	13 6	14 1	U13 7sII	U12 9s	U11 0F	F	F	F	U13 2F	13
11 9	11 8	12 3	12 7	13 0	12 6	U11 6s	9 7	F	F	F	F	14
11 0	11 2	11 6	12 0	12 6	12 6	12 4	U10 8s	F	F	F	U8 4F	15
11 4	11 4	C	C	C	13 2	13 0	11 6	F	10 6	11 4	11 5	16
11 4	11 5	11 6	11 6	12 2	12 4	12 0	S	9 6	10 6	11 6	12 8	17
11 2	11 3	11 2	11 6	12 3	12 4	J12 0s	10 6	F	F	FS	FS	18
11 2	11 0	11 2	11 6	12 0	12 4	12 2	10 6	F	F	F	F	19
10.7	11 3	11 7	12 4	12 8	12 8	12 2	S	F	F	F	F	20
10 8	11 3	11 6	11 7	12 7	U13 2s	13 5	11 6	F	F	F	F	21
11 1	11 3	11 5	11 4	11 8	12 3	12 3	U10 8s	F	F	F	F	22
10 9	10 9	11 4	11 8	12 5	13 1	U12 9s	U11 9s	12 1	12 4	13 0	13 7	23
12 1	12 5	13 0	13 3	13 6	C	12 7	U11 2R	10 5	U9 4F	FS	FS	24
12 6	12 9	13 4	14 0	14 6	U14 2s	13 8	U12 2R	F	12 0	12 6	13 3	25
11 8	11 3	11 4	11 8	12 0	U11 6s	11 4	10 3	F	F	F	FS	26
12 3	12 0	12 2	12 4	12 3	12 6	12 6	11 5	11 3	12 4	12 4	13 1	27
C	11 4	11 5	11 7	11 8	S	U11 8s	10 3	F	F	F	F	28
12 4	11 9	C	12 0	12 5	12 6	12 0	10 9	10 8	11 1	U11 9s	U11 5s	29
12 8	12 6	C	C	13 3	13 4	12 8	F	F	F	F	F	30
11 7	11 8	12 1	12 5	12 9	13 0	12 5	10 9	U10 7	U11 3	U12 5	U12 1	Mean
11.7	11 6	11 8	12 2	12 7	13 0	12 5	11 0	U10 6	U11 1	U12 5	U12 8	Median
27	28	26	27	29	28	30	24	8	7	8	13	Count

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic foF₂
 Unit Mc
 Month April 1959

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

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	U10 8s	U9 8s	U9 8s	U9 4s	U9 2s	11 2	13 0	14 2	14 0	12 9	12 4
2	F	U8 7s ^r	8 8	8 5	U7 4s	5 8	9 6	12 4	14 2	15 0	U15 OR ^s	13 5
3	U11 OS	10 9	U10 4s	F	F	9 1	11 2	13 0	13 6	12 7	12 2	11 9
4	FS	U10 2s	U9 7s	8 5	6 5	4 4	U9 6s	12 6	13 6	U13 OR	11 6	11 6
5	F	F	FS	F	J7 3s ^{II}	J5 4s ^{II}	U9 4s	G	G	G	G	G
6	F	U9 3F	F	8 6	U7 4F	5 3	U9 7s	12 0	12 1	10 7	10 1	10 0
7	C ₁	C	C	C	C	C	C	C	C	C	C	10 8
8	U12 1F	F	F	F	U8 6F	U7 3s	10 6	12 7	13 4	13 8	12 3	11 5
9	13 0	11 7	10 5	9 3	5 7	4 6	9 3	C	C	C	C	C
10	10 9	10 3	U10 6s	9 9	9 1	10 3	12 1	13 3	15 0	15 6	14 8	14 0
11	11 4	U10 5s	9 5	8 5	8 0	6 9	10 0	12 7	13 0	12 1	11 9	12 0
12	U11 9s	11 0	10 3	8 9	7 8	8 2	11 2	12 9	13 0	11 6	11 1	11 2
13	F	U9 2F	8 8	8 4	7 6	7 2	10 8	12 9	14 0	13 7	12 4	11 8
14	11 2F	F	U9 5s	F	8 5	6 4	10 1	12 4	13 8	13 9	12 4	11 8
15	F	F	F	F	F	F	9 5	12 3	13 7	14 1	13 1H	11 0
16	F	U9 3F	9 2	F	8 3	7 5F	10 2	12 6	13 6	12 8	11 3	11 4
17	11 2	11 0F	11 2	10 4	U9 2F	6 4	S	12 0	12 9	12 0	11 4	11 4
18	11 5	10 6	10 4	9 4	7 5	5 6	9 6	12 0	13 0	12 7	11 6	11 4
19	FS	U9 6s ^F	F	8 4	7 5	6 6	9 8	12 2	12 8	12 0	11 6	11 6
20	F	F	8 0	F	5 8	6 4F	9 8	12 0	12 8	12 2	10 9	10 7
21	U10 8s	9 1	8 5	7 6	U6 4s	U5 5s	9 5	11 9	12 4	10 9	10 7	10 7
22	F	F	F	J7 6s	F	FS	S	12 5	13 3	13 7	11 8	11 2
23	F	U9 6s	FS	8 5	6 5	5 4	9 7	12 0	13 3	13 5	U11 8R	J11 1R
24	U12 1s	12 4	11 1	U10 5s	9 0	FH	9.4	11 1	11 3	11 3	11 3	11 7
25	9 8	9 6	9 2	7 6	6 9	7 3	10 7	13 4	14 2	14 0	12 7	12 3
26	11 6	11 3	10 8	11 4	10 0	9 4	11 9	13 4	14 4	15 0	14 5	12 4
27	F	F	U11 6s	F	8 6	8 4	11 4	13 0	14 2V	14 8II	14 1	12 9
28	U11 5s	11 0	11 4	11 0	U10 4s	8 6	11 4	13 6	14 8	14 8	U13 OW	11 7
29	F	12 0	12 4	FS	U9 8s	7 9	10 5	12 6	14 0	14 4	14 OH	12 5
30	11 0	11 0	11 3	11 0	11 2	U9 6s	11 8	13 7	14 OII	13 3	12 6	12 7
Mean	11 4	10 4	10 1	9 2	8 1	7 1	10 4	12 6	13 5	13 2	12 3	11 8
Median	11 4	10 6	10 4	8 8	7 9	7 0	10 1	12 6	13 6	13 5	12 0	11 6
Count	15	22	22	20	26	26	27	27	27	27	28	28

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foF2
Unit, Mc
Month April 1959

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

Latitude 10 2°N
Longitude 77 5°E

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

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foF₁
 Unit Mc
 Month April 1959

TABLE 35
 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									L	L	L	L
2								L	L ^H	L	L	L
3								L	L	L	L	L
4								L	L	L	L	L
5								L	G	G	G	C
6								L	L	L	L	L
7								C	C	L	L	L
8								L	L	L	L	L
9								C	C	C	C	C
10								L	L	L	L	L
11								L	L	L	L	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								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	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
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
Mean												
Median												
Count												

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic : foF₁
 Unit Mc
 Month April 1959

TABLE 35
 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	L							1
L	L	L	L	L	L							2
L	LH	LH	L	L	L							3
L	L	L	L	L	L							4
C	C	L	L	L	L							5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
C	C	C	C	A	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	C	C	C	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
LH	LH	LH	L	L	L							26
L	L	L	L	L	L							27
C	LH	L	L	L	L							28
LH	LH	LH	L	L	L							29
LH	LH	C	C	L	L							30
												Mean
												Median
												Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF₁
 Unit Mc
 Month April 1959

TABLE 35—Contd.
 Ionospheric Data
 75 °E Mean Time

Latitude 10° 2N
 Longitude : 77° 5E

Dat	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L _H	L _H	L	L	L
3								L	L	L	L	L
4								L	L	L	L	L
5								G	C	C	C	C
6								L	L	L	L	L
7								C	C	C	L	L
8								L	L	L	L	L
9								C	C	C	C	C
10								L	L	L	L	L
11							L	L	L	L	L	L
12								L	L	L	L	L
13							L	L	L	L	L	L
14								L	L	L	L	L
15							L	L	L	L	L	L
16								L	L	L	L	L
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	L	L
23							L	L	L	L	L	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26								L	L	L	L	L
27							L	L	L	L	L	L
28							L	L	L	L	L	L _H
29							L	L	L	L	L	L _H
30								L	L	L	L	L _H
Mean												
Median												
Count												

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foF₁
 Unit · Mc
 Month April 1959

TABLE 35—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10° 2N
 Longitude 77° 5E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
L	L	L	L	L								1
L	L	L	L	L								2
L	L _{II}	L	L	L								3
L	L	L	L	L								4
C	L	L	L	L								5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
C	C	C	C	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	C	C	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
L _{II}	L _{II}	L	L	L	L							26
L	L	L	L	L	L							27
C	L	L	L	L	L							28
L _{II}	L _{II}	L _{II}	L	L	L							29
L _{II}	L _{II}	L	L	L	L							30
												Mean
												Median
												Count

Sweep 1 Mc to 25 Mc. in 27 seconds.

Characteristic foE
Unit Mc
Month April 1959

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								A	A	A	A	A
2								U2 9R	U3 5R	A	A	A
3								A	A	A	A	A
4								A	A	A	A	A
5								A	C	C	C	C
6								A	A	A	A	A
7							C	C	A	A	A	A
8								2 9	A	A	A	A
9								C	C	C	C	C
10								R	3 6	A	A	A
11							1 8	A	A	A	A	A
12								A	A	A	A	A
13							2 0	2 9	A	A	A	A
14								3 0	A	A	A	A
15							1 9	2 9	3 4	A	A	A
16								2 9	A	A	A	A
17							2 0	A	A	A	A	A
18								A	A	A	A	A
19								A	A	A	A	A
20								A	A	A	A	A
21								U3 1A	A	A	A	A
22							R	2 8	A	A	A	A
23								2 9H	A	A	A	A
24							2 6	A	A	A	A	A
25								U3 1HR	A	A	A	A
26								3 1	A	A	A	A
27								3 0H	U3 5A	A	A	A
28							2 3H	3 0	A	A	A	A
29								2 9	A	A	A	A
30								3 0	A	A	A	A
Mean							2 1	3 0				
Median							2 0	2 9				
Count							6	15	4			

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic , foE
 Unit Mc
 Month April 1959

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
A	A	A	A	A	A							1
A	A	A	A	A	A							2
A	A	A	A	A	A							3
A	B	A	A	A	A							4
C	C	A	A	A	A							5
A	A	B	A	A	u2 GR							6
B	A	A	A	R	A							7
A	A	A	A	A	A							8
C	C	C	C	A	A							9
A	A	4 0	A	B	A							10
A	A	A	A	A	A							11
A	A	A	A	A	A							12
A	A	B	A	A	A							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
A	A	C	C	C	A							16
A	A	A	A	A	A							17
A	A	A	A	A	A							18
A	A	A	A	A	A							19
A	A	A	A	A	A							20
A	A	A	A	A	A							21
A	A	A	A	A	A							22
A	A	A	A	A	A							23
A	A	A	A	A	C							24
A	A	A	A	A	A							25
A	A	A	A	A	A							26
A	A	A	A	A	A							27
C	A	A	A	A	A							28
A	A	A	A	A	A							29
A	A	C	C	A	u2 9A							30
												Mean
												Median
		1			2							Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foE
Unit Mc
Month April 1959

TABLE 36—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							A	A	A	A	A	A
2							U2 3R	3 2	A	A	A	A
3							A	A	A	A	A	A
4							2 5H	A	A	A	A	A
5							U2 4RH	C	C	C	C	C
6							2 6	A	A	A	A	A
7							C	C	C	C	C	C
8							R	A	A	A	A	A
9							C	C	C	C	C	C
10							2 5	R	3 2	3 7	A	A
11							2 4II	A	A	A	A	A
12							2 5II	A	A	A	A	A
13							A	A	A	A	A	A
14							2 5	A	A	A	A	A
15							2 5	3 2	A	A	A	A
16							2 5	A	A	A	A	A
17							2 5	A	A	A	A	A
18							2 5	A	A	A	A	A
19							A	A	A	A	A	A
20							2 6	A	A	A	A	A
21							2 6II	A	A	A	A	A
22							U2 5A	A	A	A	A	A
23							2 6	A	A	A	A	A
24							A	A	A	A	A	A
25							U2 6RH	A	A	A	A	A
26							2 8H	3 3	A	A	A	A
27							U2 8H	3 2	A	A	A	A
28							2 6	U3 2A	A	A	A	A
29							2 6	3 1	A	A	A	A
30							U2 5H	A	A	A	A	A
Mean							2 5	3 2				
Median							2 5	3 2				
Count							22	7	1			

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foE
Unit . Mc
Month April 1959

TABLE 36—Contd
Ionospheric Data
75 °E Mean Time

Latitude 10 2°N
Longitude . 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	A	A	A	A								1
A	A	A	A	A								2
A	A	A	A	A								3
B	B ₁	A	A	A								4
C	A	A	A	A								5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	A	A								8
C	C	C	C	A								9
A	A	A	A	A								10
A	A	A	A	A								11
A	A	A	A	A								12
A	A	A	A	A								13
A	A	A	A	A								14
A	A	A	A	A	A							15
A	A	C	C	A	A							16
A	A	A	A	A	A							17
A	A	A	A	A	A							18
A	B	A	A	A								19
A	A	A	A	A	A							20
A	A	A	A	A								21
A	A	A	A	A	A							22
A	A	A	A	B								23
A	A	A	A	A	A							24
A	A	A	A	C								25
A	A	A	A	A								26
A	A	A	A	A								27
C	A	A	A	A								28
A	A	A	A	A								29
A	A	A	C	A								30
												Mean
												Median
												Count

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic . foEs
 Unit : Mc
 Month : April 1959

TABLE 37
 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								U10 8s	12 0	12 6	18 0	16 0
2								G	8 0	10 8	13 4	13.6
3	U9 os							9 0	12 3	12 8	14 6	15 4
4								7 6	12 4	14 0	18 0	18.0
5								8.6	C	C	C	C
7	C	C	C	C	C	C	C	10 0	12 2	13 0	13 2	13.0
8								C	C	12 0	15 0	15.0
9								8 0	12 0	12 8	14 0	14 4
10		5 0	5 4			3 0		C	C	C	C	C
11								G	G	11 4	13 4	13 0
12							4 3	8 8	12 2	12 6	14 0	13 0
13	U5 6s	U7 os					U5 6s	9 0	12 0	12 8	15 6	16.4
14							U5 os	6 0	12 4	12 8	14 0	13 8
15				U6 OS		8 2	G	G	13 4	12 8	18 8	14 8
16								G	G	12 7	14 8	18 0
17								6 8	12 0	12 5	13 6	13 6
18								5 2	11 6	12 8	14 8	14 6
19								8 3	11 2	12 4	16 6	13 4
20								9 4	12 3	12 6	16 5	13.8
21	U6 8s							9 3	11 4	12 2	13 2	13 8
22								10 2	12 3	12 7	14 1	14 3
23							G	7 4	10 8	12 8	13 7	14.7
24								3 7	11 3	12 1	12 8	14 2
25	3 8						4 6	9 6	11 6	13 0	14 4	14.0
26	U5 OS	2 0	U4 2s	3 0			U7 OS	U7 1s	12 1	13 8	14 3	13 2
27		3 0						G	9 8	12 0	14 0	14 0
28	U7 OS							G	9 0	12 0	13 2	13 6
29								G	10.6	12 4	13 4	13 8
30								G	11 6	12 0	14 0	14 0
								6 0	11 0	12 2	12 5	13 2
Mean	6.2						5.3	8 0	11 5	12 5	14 6	14.4
Median	6 2						4 3	7.2	11 6	12 6	14.0	14 0
Count	6	4	2	2	1	1	9	28	27	28	28	28

Sweep 1 Mc. to 25 Mc. in 27 Seconds.

Characteristic foEs
 Unit - Mc
 Month April 1959

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
13 3	12 2	12 4	U14 2S	11 2	U11 0S				1 7			1
16 6	14 6	12 0	14 6	12 0	U10 0S							2
19 2	16 2	11 6	12 3	11 6	U10 0S							3
19 2	14 0	12 6	12 0	11 2	U9 0S					U4 8S		4
C	C	14 4	12 2	7 0	6 6							5
12 6	13 2	12 8	13 0	10 2	9 4		C	C	C	C	C	6
14 8	14 2	13 0	12 2	G	8 0					4 0	9 0	7
18 0	14 4	14 0	12 0	14 0	11 0				3 2	4 0	3 2	8
C	C	C	C	12 0	9 0				9 4	S		9
13 8	13 6	G	10 0	9 4	U9 0S					U4 4S		10
14 2	17 0	17 6	12 4	12 0	U10 0S							11
16 6	16 6	19 0	13 8	11 8	10 6						U7.0S	12
15 8	13 0	12 4	12 0	9 0	8 0							13
16 0	12 8	12 8	12 2	10 4	U10 0S					2 8		14
16 0	13 8	15 6	14 0	10 8	10 0							15
13.8	13 6	C	C	C	U7 0S				4 2			16
13 6	14 5	14 6	11 4	U9 4S	8 0							17
13 4	13 8	12 6	11 0	9 4	U6 6S							18
14 6	16 6	13 6	11 6	11 6	7 8							19
13 6	12 8	12 4	10 4	11 4	U7 0S							20
14 6	13 8	13 1	10 4	10 4	U9 9S						U6 6S	21
14 4	13 6	12 6	12 3	10 6	7 4							22
12 6	14 3	13 7	10 9	8 8	U7 8S							23
12 7	12 2	10 6	9 4	8 4	C							24
13 3	12 4	12 1	11 1	12 4	U8 1S						4 5	25
15 4	15 0	13 0	12 8	10 0	8 0							26
14 0	14 4	13 4	12 0	10 4	U12 0S	U5 0S						27
C	14 4	13 2	12 2	10 0	8 0					S	2 1	28
14 4	14 0	C	12 0	10 4	8 2				3 0	U4 4S		29
13 2	12 8	C	C	9 0	7 0							30
14 8	14 1	13 4	12 0	10 5	8 8				4 3	4 1	5 4	Mean
14 4	13 9	12 9	12 0	10 4	8 2				3 2	4 2	5 6	Median
27	28	26	27	29	29	1			5	6	6	Count

Sweep 1 Mc to 25 Mc. in 27 Seconds

Characteristic : foEs
 Unit Mc
 Month April 1959

TABLE 37—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							S	11 0	13 0	14 0	16 0	14 2
2							G	6 4	10 6	12 6	13 2	14 0
3	S				U5 0s		S	11 6	12 0	16 4	14 0	16 0
4							G	10 6	13 2	18 0	18 4	19 0
5							G	C	C	C	C	C
6							C	11 0	12 4	13 0	13 4	12 8
7	C	C	C	C	C	C	C	C	C	C	15 0	15 0
8							U7 0s	10 0	12 2	14 8	14 0	16 6
9							G	C	C	C	C	C
10		5 6					G	C	G	12 6	13 0	13 0
11							G	11 6	12 8	13 8	14 8	14 6
12							6 0	10 8	12 0	14 4	18 4	13 6
13	U4 2s	U5 2s					6 4	11 0	12 6	16 6	17 2	16 8
14							G	12 3	12 8	16 6	16 8	15 8
15							G	G	12 4	15 0	17 0	18 0
16							G	9 5	12 0	12 5	13 6	13 8
17							G	8 8	11 6	13 8	13 8	14 3
18							G	11 5	11 8	13 4	13 4	14 6
19							8 4	11 4	12 6	12 8	14 6	14 6
20							6 6	10 4	11 6	12 8	12 8	12 6
21	U5 4s						5 9	10 6	12 4	13 1	13 2	14 5
22							6 0	11 6	12 6	12 8	14 8	14 4
23							G	9 4	12 3	15 0	13 4	13 3
24							U7 8s	10 8	12 4	13 6	14 1	12 8
25						U4 8s	U6 0s	10 8	12 4	14 4	16 4	14 8
26	3 0	U3 2s	U4 2s			U6 0s	4 0	G	11 4	13 0	14 6	14 8
27	U4 0s						G	G	11 0	13 0	14 0	13 8
28							G	8 4	11 2	13 4	14 0	13 2
29							3 9	G	12 2	14 0	13 8	15 0
30							G	10 0	12 0	12 8	12 4	13 8
Mean							6 2	10 4	12 2	14 0	14 6	14 6
Median							G	10 6	12 2	13 6	14 0	14 4
Count	4	3	1		1	2	27	27	27	27	28	28

Sweep 1 Mc. to 25 Mc. in 27 Seconds.

Characteristic foEs
 Unit Mc
 Month April 1959

TABLE 37—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10.2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
12 6	12 6	12 0	11 4	12 0	S							1
14 6	12 0	14 4	12 0	11 0	S						U6 0s	2
19 6	13 0	11 6	11 4	U11 0s	S							3
18 0	13 4	12 8	11 0	11 2	S					U3 2s	4 4	4
C	17 0	9 0	8 6	U6 6s	S _u							5
13 4	13 4	13 0	12 0	11 0	S	C	C	C	C	C	C	6
14 6	13 6	12 6	10 4	7 0					U6 0s	U6 0s	S	7
14 0	14 4	19 0	17 0	12 0				2 6	3 0	3 0		8
C	C	C	C	10 4				3 4	9 6	U5 0s		9
14 0	14 0	13 0	8 4	9 8					U7 0s			10
17 0	14 0	13 6	11 0	10 4	U7 4s							11
17 0	18 0	18 6	12 4	12 0	U6 0s							12
13 8	14 0	13 0	10 8	10 6							8 4	13
15 8	12 6	12 6	11 8	11 0	U10 0s							14
14 2	16 6	14 0	11 2	16 6	U7 6s							15
13 4	13 4	C	C	8 0	S				4 2	S	5 0	16
17 4	14 6	12 6	10 6	8 8	U5 8s							17
13 8	12 6	12 5	10 8	8 3	S							18
16 4	13 3	12 2	11 2	9 0	S							19
13 8	13 2	11 6	8 7	9 2	U5 8s						U4 6s	20
14 3	13 8	11 8	8 3	10 8						2 8		21
13 7	13 1	U12 0s	10 9	8 3					2 0	U4 1s		22
14 1	13 8	12 6	9 2	10 8	S							23
12 6	12 0	10 4	8 1	C	S						U4 5s	24
13 4	12 8	12 6	10 4	10 5	S				2 8		U5 0s	25
15 0	14 0	13 2	11 4	9 2	S							26
16 4	13 4	12 2	11 0	7 0	10 0							27
C	13 4	13 0	12 0	9 0	U7 0s					6 0		28
14 2	13 8	12 8	12 0	8 6	7 0				U5 0s			29
13 0	12 6	11 8	C	8 0								30
14 8	13 7	12 9	10 9	9 9	7 4			.	5 0	4 3	5 4	Mean
14 2	13 4	12 6	11 0	10 4	7 0				4 6	4 1	5 0	Median
27	29	28	27	29	9		.	2	8	7	7	Count

Sweep 1 Mc. to 25 Mc. in 27 Seconds.

Characteristic f_oF₂
 Unit : Mc
 Month April 1959

TABLE 38
 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 0	3 6	3 8	4 2	4 4
2								3 1	3 6	4 0	4 2	4 6
3	2 1							2 9	3 5	3 8	4 0	4 4
4								2 8	3 5	3 8	4 0	4 4
5								3 0	C	C	C	C
6								3 0	3 5	4 0	4 2	4 5
7	C	C	C	C	C	C	C	C	C	4 1	4 3	4 6
8								3 0	3 4	4 0	4 1	4 4
9								C	C	C	C	C
10		1 9	2 0			1 6				4 0	4 3	4 3
11							2 0	2 9	3 6	4 0	4 2	4 3
12							2 0	3 0	3 6	3 9	4 3	4 3
13	1 7	1 8					2 1	3 0	3 5	3 9	4 0	4 3
14									3 5	3 9	4 2	4 3
15				1 6	1 9					3 9	4 0	4 2
16								3 0	3 5	3 8	4 1	4 2
17								3 0	3 4	4 0	4 2	4 2
18								3 0	3 6	3 9	4 2	4 4
19								3 0	3 6	4 0	4 2	4 4
20								3 0	3 6	4 0	4 1	4 4
21	1 9							3 0	3 5	4 0	4 0	4 4
22								3 2	3 5	3 9	4 2	4 4
23								3 0	3 5	3 9	4 3	4 4
24							2 1	3 0	3 6	4 0	4 2	4 4
25	1 5							3 0	3 6	4 0	4 2	4 3
26	1 1	C	1 6	1 4					3 6	4 0	4 2	4 5
27									3 6	4 0	4 1	4 2
28	2 2								3 6	4 0	4 4	4 6
29									3 5	3 8	4 2	4 4
30								3 1	3 5	4 0	4 2	4 3
Mean	1 8							3 0	3 6	3 9	4 2	4 4
Median	1 8							3 0	3 6	4 0	4 2	4 4
Count	6	2	2	2	1	1	4	20	25	28	28	28

Sweep 1 Mc to 25 Mc in 27 Seconds

Characteristic f_oF₂
 Unit . Mc
 Month April 1959

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

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

Characteristic . fbEs
 Unit Mc
 Month April 1959

TABLE 38—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 4	3 2	3 8	4 0	4 3	4 4
2									3 8	4 0	4 3	4 4
3	2 4				1 5		2 5	3 2	3 7	4 0	4 2	4 4
4								3 2	3 8	4 2	4 2	4 4
5								C	C	C	C	C
6								3 3	3 8	4 2	4 3	4 5
7	C	C	C	C	C	C	C	C	C	C	4 6	4 6
8							2 5	3 2	3 6	4 0	4 2	4 4
9								C	C	C	C	C
10		2 4								4 2	4 3	4 4
11								3 2	3 8	4 1	4 3	4 5
12							2 6	3 3	3 8	4 1	4 4	4 3
13	1 6	1 7					2 6	3 2	3 8	4 1	4 2	4 2
14								3 2	3 7	4 0	4 2	4 3
15									3 6	4 0	4 2	4 2
16								3 2	3 7	4 0	4 2	4 3
17								3 2	3 8	4 0	4 3	4 4
18								3 2	3 7	4 0	4 2	4 4
19							2 7	3 7	3 8	4 0	4 4	4 4
20								3 2	3 8	4 0	4 2	4 3
21	1 9						2 8	3 2	3 8	4 0	4 2	4 4
22							3 0	3 4	3 7	4 0	4 3	4 4
23								3 3	3 7	4 1	4 4	4 5
24							2 7	3 3	3 7	4 1	4 2	4 4
25						1 9	2 7	3 2	3 8	4 1	4 4	4 4
26	1 2	1 5	1 5						3 8	4 0	4 3	4 4
27	1 6								3 8	4 2	4 2	4 4
28								3 4	3 8	4 2	4 4	4 6
29							3 0	3 4	3 8	4 0	4 3	4 4
30								3 4	3 6	4 0	4 2	4 4
Mean	1 7						2 7	3 3	3 8	4 0	4 3	4 4
Median	1 6						2 7	3 2	3 8	4 0	4 3	4 4
Count	5	3	1		1	1	11	21	26	27	28	28

Sweep 1 Mc to 25 Mc in 27 Seconds,

Characteristic fbEs
Unit Mc
Month April 1959

TABLE 38—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
4 3	4 4	4 0	3 8	3 2	2 4							1
4 5	4 2	4 0	3 8	3 2							1 9	2
4 4	4 2	4 0	3 8	3 0	2 3							3
4 4		4 4	4 0	3 8								4
C	4 2	4 0	4 0	3 0	2 4							5
4 4	4 3	4 1	3 8	3 2	2 6	C	C	C	C	C	C	6
4 6	4 3	4 5	4 0	3 2					2 2	2 6		7
4 3	4 2	3 0	9 0	3 2				1 9	2 5	2 5		8
C	C	C	C	3 0				2 0	2 6	2 3		9
4 5	4 3	4 2	3 7	3 4					2 4			10
4 4	4 3	4 0	3 8	3 2	2 4							11
4 4	4 2	4 0	3 6	3 4	2 4						2 4	12
4 3	4 2	4 0	3 8	3 1								13
4 2	4 1	3 8	3 6	3 1	2 4							14
4 4	4 1	4 0	3 6	3 4	2 3							15
4 3	4 3	C	C	3 0	2 4				1 8	2 4	2 1	16
4 4	4 2	4 0	3 6	3 0	2 4							17
4 4	4 2	4 0	3 6	3 0								18
4 4	4 6	4 2	3 8	3 4								19
4 2	4 2	4 0	3 6	3 2	2 5						1 5	20
4 4	4 2	3 9	3 8	3 8								21
4 3	4 2	4 0	3 7									22
4 3	4 3	4 0	3 6	3 3	2 5							23
4 4	4 2	4 2	3 6	C	2 5						2 1	24
4 4	4 3	4 0	3 8	3 4	2 4						1 2	25
4 4	4 2	4 0	3 6	3 2								26
4 4	4 4	4 0	3 7	3 0	2 5							27
C	4 4	4 0	3 6	3 2						2 0		28
4 2	4 2	4 0	3 6	3 1					2 6			29
4 4	4 2	4 0	C	3 5								30
4 4	4 2	4 2	3 9	3 2	2 4				2 4	2 4	1 9	Mean
4 4	4 2	4 0	3 7	3 2	2 4				2 4	2 4	2 0	Median
27	28	28	27	28	15			2	6	5	6	Count

Sweep 1 Mc to 25 Mc. in 27 Seconds.

Characteristic f min
Unit Mc
Month April 1959

TABLE 39
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	18	15	13	13	14	13	20	22	24	24	27	30
2	18	17	17	17	16	15	20	21	23	28	30	33
3	18	17	18	16	16	16	21	19	22	24	26	28
4	19	16	13	16	16	18	17	21	28	24	26	34
5	20	16	17	14	17	17	20	18	C	C	C	C
6	15	16	16	14	16	16	21	18	22	26	28	30
7	C	C	C	C	C	C	C	C	C	30	30	32
8	16	14	13	14	13	15	20	18	21	25	26	34
9	20	17	15	14	18	17	20	C	C	C	C	C
10	18	12	11	15	14	14	20	20	25	28	30	32
11	14	14	15	14	12	16	16	17	27	26	27	28
12	14	13	12	17	16	15	14	18	22	26	27	27
13	13	15	13	11	11	15	16	19	22	24	26	20
14	15	16	16	14	14	24	21	22	22	26	27	26
15	15	14	14	13	15	19	16	18	22	25	26	26
16	16	16	16	14	17	15	20	22	20	24	25	27
17	14	14	12	13	14	15	17	18	22	27	25	27
18	14	12	14	13	15	15	22	17	22	25	25	28
19	18	14	12	13	14	16	22	18	23	25	26	28
20	16	15	15	16	15	14	21	17	22	24	25	28
21	15	16	16	17	16	14	22	17	22	24	24	26
22	13	12	12	12	15	14	17	20	20	24	25	25
23	12	12	13	15	15	15	24	23	23	25	26	28
24	15	14	13	16	12	15	18	17	21	25	25	27
25	12	15	13	13	14	16	22	16	21	26	27	28
26	E	11	E	E	UI 50	14	22	20	20	26	27	30
27	17	13	13	14	13	15	22	17	20	22	24	26
28	19	16	14	16	13	14	17	19	23	27	30	34
29	19	16	11	11	13	14	22	19	22	26	26	26
30	19	14	13	13	13	13	24	18	20	26	28	30
Mean	16	14	14	14	15	15	20	19	22	25	26	29
Median	16	15	13	14	15	15	20	18	22	25	26	28
Count	29	29	29	29	29	29	29	28	27	28	28	28

Sweep 1 Mc to 25 Mc in 27 Seconds.

Characteristic f min
Unit Mc
Month April 1959

TABLE 39
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
3 2	3 0	3 0	2 6	2 4	2 0	1 8	1 2	1 3	1 4	1 5	1 8	1
3 1	3 1	3 0	2 7	2 4	2 2	1 7	1 3	1 6	1 3	1 9	1 7	2
3 0	3 2	2 7	2 4	2 7	2 2	1 7	1 4	1 5	1 6	1 3	1 6	3
3 5	3 1	3 2	2 2	2 4	1 7	1 8	S	S	2 0	1 3	1 6	4
C	C	2 7	2 8	2 0	2 2	2 2	1 3	S	1 8	1 6	1 4	5
3 0	3 1	1 0	3 0	2 4	1 9	1 8	C	C	C	C	C	6
4 6	3 1	3 8	3 4	2 6	2 0	2 0	S	1 6	1 5	2 0	1 7	7
3 0	3 0	3 0	3 0	3 0	2 0	2 0	1 4	1 7	1 3	1 2	1 2	8
C	C	C	C	2 3	2 1	1 7	1 4	1 4	1 2	1 8	2 4	9
4 0	3 2	3 1	2 8	3 6	3 0	2 0	1 4	1 6	1 9	1 9	2 0	10
3 0	3 0	3 4	2 6	2 4	2 1	1 8	1 2	1 3	1 4	1 4	1 4	11
2 8	2 6	2 6	2 4	2 2	3 0	1 9	1 6	UI 5s	UI 5s	1 4	1 2	12
2 8	2 9	1 1	2 5	2 3	1 9	1 8	UI 5s	UI 7s	UI 5s	1 6	1 5	13
2 8	2 6	2 5	2 3	2 4	1 8	1 2	UI 5s	1 4	1 5	1 0	1 7	14
2 5	2 6	2 9	2 3	2 2	1 7	1 6	UI 5s	1 6	1 5	1 7	1 6	15
2 8	2 6	C	C	C	2 1	1 5	1 5	1 6	1 2	1 9	1 3	16
3 0	3 0	2 6	2 6	2 4	1 8	1 7	1 5	1 4	1 5	2 0	1 6	17
2 9	2 8	2 6	2 4	2 2	2 1	2 4	1 3	2 0	1 8	1 7	1 5	18
3 0	2 8	3 0	3 0	2 4	2 2	1 8	UI 6s	S	2 0	1 4	1 9	19
3 0	3 0	2 8	2 6	1 9	2 3	1 9	1 4	1 9	2 0	1 7	1 6	20
2 6	2 8	2 5	2 5	2 2	2 6	1 6	1 2	1 4	1 5	1 7	1 2	21
2 6	2 8	2 8	2 6	2 5	2 2	2 0	1 6	1 6	1 8	1 6	1 4	22
3 0	3 1	2 7	2 6	2 3	2 3	2 0	1 4	1 7	2 1	2 1	2 0	23
2 6	2 8	2 8	2 4	2 1	C	1 9	1 7	1 4	1 7	1 4	1 5	24
3 0	3 2	2 7	2 5	2 3	1 9	1 8	UI 4c	1 4	1 4	1 3	1 1	25
3 0	2 8	2 8	2 4	2 4	1 9	1 7	1 8	1 8	1 9	2 0	1 7	26
3 0	2 8	3 0	2 4	2 2	1 7	1 4	1 2	1 5	1 6	2 0	1 9	27
C	3 4	2 8	2 4	2 4	2 0	1 7	1 7	1 9	1 5	1 8	1 6	28
2 7	2 8	C	2 7	2 4	2 2	2 0	1 8	1 5	1 5	1 6	1 7	29
3 0	3 0	C	C	2 4	2 0	2 0	UI 5s	1 9	2 0	1 7	1 5	30
3 0	3 0	3 0	2 6	2 4	2 1	1 8	1 4	1 6	1 6	1 6	1 6	Mean
3 0	3 0	2 8	2 6	2 4	2 1	1 8	1 4	1 6	1 5	1 7	1 6	Median
27	28	26	27	29	29	30	27	26	29	29	29	Count

Sweep 1 Mc to 25 Mc in 27 Seconds

Characteristic f min
Unit Mc
Month April 1959

TABLE 39—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	1 7	1 6	1 2	1 4	1 6	1 4	1 9	2 0	2 6	2 6	3 0	3 1
2	1 6	1 8	1 8	1 4	1 6	1 6	2 0	2 2	2 7	2 9	3 0	3 4
3	1 6	1 6	1 6	1 5	1 3	2 0	2 1	2 1	2 6	2 6	2 9	3 0
4	1 9	1 5	1 4	1 7	1 7	1 6	1 7	2 0	2 6	2 5	2 8	3 0
5	1 9	1 6	1 5	1 6	1 8	1 6	1 7	C	C	C	C	C
6	1 5	1 4	1 4	1 5	1 7	2 1	1 9	2 0	2 4	2 6	3 0	3 0
7	C	C	C	C	C	C	C	C	C	C	3 1	3 4
8	1 4	1 5	1 2	1 3	1 6	1 4	1 8	2 0	2 2	2 4	2 7	3 0
9	1 7	1 4	1 5	1 3	1 9	1 8	2 0	C	C	C	C	C
10	1 7	1 4	1 7	1 4	1 6	1 9	1 7	2 1	2 8	3 0	3 0	3 5
11	1 4	1 5	1 6	1 4	1 4	1 6	1 7	1 9	2 3	2 7	2 7	3 1
12	1 4	1 6	1 5	1 5	1 5	1 4	1 7	2 1	2 3	2 7	2 7	2 8
13	1 4	1 6	1 4	1 3	1 3	1 8	2 0	2 0	2 5	2 5	3 0	3 0
14	1 6	1 4	1 4	1 6	1 6	2 2	2 0	2 0	2 4	2 6	2 7	2 9
15	1 1	1 4	1 3	1 6	1 6	1 8	1 7	2 0	2 4	2 5	2 6	2 6
16	2 2	1 6	1 6	1 4	2 0	1 7	1 9	2 2	2 2	2 6	2 6	2 8
17	1 1	1 3	1 4	1 3	1 5	1 5	1 6	1 6	2 3	2 8	2 8	2 7
18	1 3	1 1	1 3	1 4	1 5	1 6	1 7	2 0	2 5	2 6	2 6	3 0
19	1 4	1 4	1 2	1 2	1 7	1 5	1 9	1 9	2 3	2 3	2 6	3 0
20	1 5	1 5	1 5	1 7	1 4	1 6	1 8	1 9	2 2	2 3	2 6	3 0
21	1 5	1 4	1 6	1 7	1 7	1 7	1 9	1 9	2 2	2 1	2 3	2 7
22	1 3	1 1	1 3	1 5	1 4	1 6	1 9	1 9	2 1	2 4	2 6	2 7
23	1 2	1 3	1 4	1 5	1 6	1 9	2 3	2 2	2 3	2 5	2 7	2 9
24	1 6	1 3	1 3	1 1	1 4	1 6	1 7	1 9	2 3	2 4	2 6	3 0
25	1 2	1 6	1 1	1 2	1 4	1 8	2 3	1 7	2 3	2 4	2 7	3 0
26	1 0	E	E	1 5	U2 5C	2 0	2 0	2 1	2 2	2 6	2 8	3 0
27	1 3	1 2	1 4	1 4	1 4	1 8	1 7	1 8	2 2	2 5	2 6	2 7
28	1 9	1 5	1 4	1 5	1 3	1 7	1 7	2 3	2 8	2 8	3 2	3 2
29	1 5	1 6	1 1	1 2	1 5	1 6	1 8	2 2	2 4	2 1	2 7	2 6
30	1 7	1 4	1 6	1 2	1 3	1 7	1 8	1 9	2 1	2 8	3 0	3 0
Mean	1 5	1 4	1 4	1 4	1 6	1 7	1 8	2 0	2 4	2 6	2 8	3 0
Median	1 5	1 4	1 4	1 4	1 6	1 7	1 8	2 0	2 3	2 6	2 7	3 0
Count	29	29	29	29	29	29	29	27	27	27	28	28

Sweep 1 Mc to 25 Mc in 27 Seconds.

Characteristic f min
Unit Mc
Month April 1959

TABLE 39—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
3 0	3 0	2 8	2 8	2 2	1 8	1 5	1 5	1 5	1 5	1 7	1 5	1
3 2	3 1	2 8	2 6	2 2	2 4	1 6	1 5	1 5	1 8	1 7	1 7	2
3 0	3 0	2 2	2 6	2 4	2 0	1 5	1 4	1 8	1 1	1 5	1 7	3
3 4	5 0	2 8	2 5	2 0	2 4	S	C	S	1 9	1 7	2 1	4
C	2 8	2 6	2 4	2 0	2 2	1 6	1 6	1 7	1 8	1 6	1 6	5
3 0	3 4	3 2	2 8	2 0	1 8	C	C	C	C	C	C	6
3 8	3 0	3 2	3 0	2 6	2 1	1 5	1 5	1 2	1 2	1 6	1 7	7
3 0	3 2	1 6	3 0	2 2	2 4	1 6	1 1	1 4	1 6	1 3	2 1	8
C	C	C	C	2 2	2 4	1 3	1 2	1 3	1 5	1 8	2 4	9
3 6	3 4	2 8	3 0	3 3	2 1	1 5	1 4	1 7	1 6	1 7	1 5	10
2 9	2 9	2 8	2 7	2 1	1 9	1 3	1 2	1 3	1 1	1 1	1 1	11
3 0	2 4	2 3	2 6	2 7	U2 1 5	1 1	U1 5 5	U1 5 5	1 7	1 2	1 3	12
2 9	2 8	2 8	2 5	2 2	2 3	1 5	U1 5 5	U1 5 5	1 5	1 7	1 6	13
2 7	2 6	2 5	2 1	1 9	2 0	U1 5 5	S	1 4	1 5	1 5	2 0	14
2 8	2 7	2 6	2 5	2 0	1 3	1 1	1 4	1 5	1 8	1 7	1 9	15
2 8	2 8	C	C	2 2	1 5	1 8	1 5	1 5	1 7	1 4	1 6	16
2 8	3 0	2 6	2 5	2 1	1 7	1 1	1 2	1 9	1 7	1 6	1 4	17
3 0	3 0	2 6	2 4	2 2	2 3	1 5	1 9	2 0	2 0	2 0	1 8	18
2 8	4 1	3 0	2 6	2 7	2 3	U1 7 5	S	1 9	1 3	2 0	1 8	19
2 9	2 8	2 6	2 3	2 4	2 2	1 5	1 9	2 0	1 7	1 6	1 1	20
2 6	2 6	2 5	2 4	2 2	1 8	1 1	1 4	1 4	1 6	1 3	1 4	21
2 6	2 8	2 6	2 6	3 9	2 4	1 4	1 8	1 6	1 5	1 6	1 4	22
3 0	2 8	2 6	2 6	2 2	2 4	1 6	1 6	2 1	2 0	1 9	1 6	23
2 8	2 9	2 7	2 2	C	2 0	1 2	1 6	1 5	1 4	1 6	1 4	24
3 0	2 9	2 7	2 3	2 0	1 8	1 5	1 6	1 4	U1 4 C	1 1	E	25
3 0	2 9	2 6	2 4	2 0	2 4	1 5	1 7	1 7	2 0	1 7	1 3	26
3 2	3 0	3 0	2 6	2 3	1 5	1 4	1 3	1 8	U1 5 C	1 8	1 9	27
C	3 0	2 9	2 4	2 3	2 2	1 3	1 5	2 0	1 5	1 1	2 4	28
2 8	2 6	2 7	2 6	2 2	2 6	1 6	U1 5 C	1 1	1 3	1 7	1 9	29
3 0	2 8	2 6	C	2 1	1 9	1 4	1 6	1 8	1 7	1 8	1 5	30
3 0	3 0	2 8	2 6	2 3	2 1	1 5	1 5	1 6	1 6	1 6	1 7	Mean
3 0	2 9	2 7	2 6	2 2	2 2	1 5	1 5	1 5	1 6	1 6	1 6	Median
27	29	28	27	29	30	28	26	28	29	29	29	Count

Sweep 1 Mc to 25 Mc. in 27 Seconds.

Characteristic h'F₂
 Unit Km
 Month April 1959

TABLE 40
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2								L	L	L	L	L
3								L	L	L	L	L
4								L	L	L	L	L
5								L	C	C	C	C
6								L	L	L	L	L
7								C	C	L	L	L
8								L	L	L	L	L
9								C	C	C	C	C
10								L	L	L	L	L
11								L	L	L	L	L
12								L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	L	L
15								L	L	L	L ₁₁	L
16								L	L	L	L	L
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
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
Mean												
Median												
Count												

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

Characteristic h'F₂
 Unit Km
 Month April 1959

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

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

Characteristic h'F2
 Unit Km
 Month April 1959

TABLE 40—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
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								G	C	C	C	C
6								L	L	L	L	L
7								G	C	C	C	C
8								L	L	L	L	L
9								L	L	L	L	L
10												
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15												
16							L	L	L	L	L	L
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20												
21								L	L	L	L	L
22								L	L	L	L	L
23							L	L	L	L	L	L
24							L	L	L	L	L	L
25												
26							L	L	L	L	L	L
27							L	L	L	L	L	L
28								L	L	L	L	L
29							L	L	L	L	L	L
30												L _h
Mean												
Median												
Count												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month April 1959

TABLE 40—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
L	L	L	L	L								4
C	L	L	L	L								5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	C	C	C	L	L							9
C	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	C	C	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
L	L	L	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28
L _{II}	L _{II}	L _{II}	L _{II}	L _{II}	L _{II}							29
L _{III}	L _{II}	L	C	L	L							30
												Count
												Median
												Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month April 1959

TABLE 41
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	240	240	240	240	220	230	265	240	240	220	220	210
2	245	220	240	240	230	220	255	240	230H	220	220	220
3	260	240	230	235	210	250	265	210	240	220	200	220
4	260	240	240	220	220	220	260	210	240	220	210	220
5	260r	260	260	230	220	220	265	240	C	C	C	C
6	260	240	255	230	230	220	260	245	230	225	220	215
7	C	C	C	C	C	C	C	C	C	C	C	C
8	250	240	240	210	235	220	260	245	240	220	220	215
9	245	255	280	230	205	220	260	C	C	C	C	C
10	245	260	265	210	240	220	250	240	230	220	210	205
11	255	235	240	255	270	230	270	245	230	220	215	205
12	235	240	250	225	230	265	275	255	230	215	210	210H
13	250	270	215	230	235	225	260	245	225	220	215H	210
14	240	240	240	255	U245F	230	260	240	230	220	215H	210H
15	245	U240r	235	U235r	225	U225I	260	240	230	225H	205H	205H
16	260	245	245	255	220	220	255	240	225	220	210	205
17	260	240	240	220	210	205	250	240	220	210	215	205
18	240	240	240	220	215	205	260	235	230	220	215	205H
19	265	240	220	220	210	210	265	235	200H	220	210	200
20	255	230	220	220	220	230	265	240	230	220	210	210
21	240	235	240	240	230	220	270	250	235	220	215	215
22	280	265	260	240	240	230	260	U250A	230	225	225	215
23	290	265	245	230	225	210	260	240	230	215	220	200
24	240	240	230	320	385	340	285	250	230	220	230	220
25	300	265	235	220	235	240	270	250	235	220	215	215
26	260	250	280	260	240	240	270	250	235	230	220	215
27	280	260	275	255	220	240	260	240	230	220	210	210
28	260	260	280	280	240	225	260	245	230	220	210	210H
29	280	300	280	250	220	220	265	240	230	220	220	210
30	260	280	310	280	240	225	260	240	230	220	220	220
Mean	255	250	250	240	235	230	265	245	230	220	215	210
Median	260	240	240	240	230	225	260	240	230	220	215	210
Count	29	29	29	29	29	29	29	28	27	28	28	28

Sweep 1 0 Mc 1025 0 Mc in 27 Seconds

Characteristic h'F
Unit Km
Month April 1959

TABLE 41
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	Day
215	220	220	235	240	260	300	440	440	U400F	400I	275	1
215	210	220	220	235	260	300	F	F	U320I	280F	300F	2
200	200II	200II	230	240	260	300	415	420F	U360I	300	280	3
210	B	230	240	240	260	300	U100S	S	U300I	U340I	320	4
C	C	220	A	240	260	300	U130I	FS	U370F	U280I	265	5
200	220	215	245	240	260	300	C	C	C	C	C	6
B	200	240	240	240	260	300	S	320	300	325	255	7
220	210	220	230	240	260	300	A	320	300	260	230	8
C	C	C	C	240	260	305	375	445	F	F	280	9
200	200	215	220	245	265	305	400	420	280	300	260	10
200	210	220	220	240	255	300	435	U430I	360I	315	260	11
205II	205	205	230	240	265	300	465	F	F	U305I	U330F	12
200II	200II	220	210II	235	260	300	F	F	F	U375F	215F	13
205II	205II	200II	230	235	260	305	U150S	F	F	U275F	U295F	14
200II	200II	200II	210	240	260	300	U450F	F	F	F	U280F	15
200II	200	C	C	C	250	300	420	500	360	300	300	16
200	200	210	220	230	250	300	450	425	360	300	265	17
205	205	210	215	230	245	300	420	F	F	FS	U340I	18
200	210	220	225	230	255	295	430	U140F	F	305	U305	19
200II	215	205	225	240	260	300	U460I	F	F	U320F	245	20
215	210	200	230	240	U280A	300	460	F	F	F	300	21
210	205	210	205	250	260	300	480	U160I	U420F	335	320	22
205	220	215	215	235	260	300	415	380	330	290	250	23
220	215	230	235	245	C	315	110	445	420	390	350	24
220	220	220	230	A	265	300	U420C	F	360	310	260	25
210II	210II	205II	225	240	260	300	460	510F	370I	400I	270	26
210	220	210	220	230	A	300	420	420	380	300	250	27
C	220II	230	210	245	265	305	400I	140F	440I	320I	310	28
215	215	C	220	245	260	310	415	430	370	305	265	29
220II	215	C	C	250	280	300	460I	F	400F	F	260I	30
210	210	215	225	240	260	300	430	430	355	320	280	Mean
205	210	215	225	240	260	300	425	430	360	305	275	Median
26	27	26	26	28	27	30	26	17	20	24	29	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month April 1959

TABLE 41—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	220	240	240	220	220	240	260	240	225	220	210	220
2	240	220	240	230	220	220	240	230H	220H	220	210	220
3	260	240	230	240	245	260	260	240	220	205	220	215
4	250	240	240	220	215	220	250	240	230	220	220	215
5	260	260	235	225	220	220	250	G	G	G	G	G
6	245	260	240	230	220	220	260	240	230	220	220	200
7	G	G	G	G	G	G	G	G	G	G	G	215
8	240	230	240	240	230	235	260	240	230	220	215	205
9	260	265	260	220	210	235	260	G	G	G	G	G
10	250	280	245	240	240	235	250	240	220	220	215	205
11	240	245	240	275	250	230	255	240	230	225	210	215
12	230	215	235	225	235	300	260	240	225	215	215	205H
13	250	250I	240	235	225	235	255	230	230	220H	220H	210H
14	240	240	245	U250G	240	240	255	235H	225	220	210H	210H
15	245F	U235F	U240F	235	U235G	U230G	250	235	230H	215H	205H	205H
16	255	250	250	240	220	235	240	230	220	215	205	205
17	250	240	240	220	205	220	245	220H	215	210	210	205
18	240	240	220	220	200	235	250	230	220	215	210	200H
19	240	240	220	200	210	230	245	245	220	215	210	205
20	240	210	220	220	230	260	250	235	225	220	210	210
21	235	240	240	230	225	240	260	240	230	220	215	220
22	270	275	255	240	225	240	U260A	240	235	225	220	200
23	280	260	240	220	220	240	245	235	220	220	205	200
24	260	225	260	380	360	320	260	240	230	225	220	220
25	280	240	225	225	235	260	260	240	220	210	220	215
26	240	260	275	240	240	260	265	240	235	230	225	210
27	270	270	280	235	240	250	255	235	225	215	210	210
28	255	270	280	260	235	250	260	240	230	220	220	205H
29	290	300	260	230	220	260	255	240	225	215	215	200H
30	275	300	300	255	230	250	260	230	225	220	220	220
Count	29	29	29	29	29	29	29	27	27	27	28	28
Median	250	245	240	230	225	240	255	240	225	220	215	210
Mean	250	250	245	240	230	245	255	235	225	220	215	210

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic h'F
 Unit . Km
 Month April 1959

TABLE 41—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10°2'N
 Longitude 77 5'E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
210	215	220	230	250	275	360	460	U490F	400I	320F	250	1
210	210	220	230	240	270	U340F	U980F	U310I	U340F	280F	U260F	2
210	205II	220	235	240	275	360	425	380I	U340I	300	260	3
210	B	230	210	260	280	U360S	S	U360IS	U340I	360	300F	4
C	220	215	230	210	280	360	U420I	U120F	U280I	280I	260	5
205	215	200II	240	250	275	C	C	C	C	C	C	6
215	210	240	240	245	270	375	400	305	340	270	260	7
215	220	A	A	255	280	350	100	F	280	210	240	8
C	C	C	C	250	280	350	400	F	F	F	260	9
200	200	220	235	250	295	340	420	355	300	280	255	10
210	215	220	235	245	270	365	U445F	U405I	340	280	240	11
200II	200II	205	230	255	275	370	U520I	F	U300I	310	F	12
200II	205II	215	235	210	275	375	F	F	F	U270I	240	13
200II	200II	200II	230	215	280	380	U480S	F	F	U285F	U260I	14
200II	200II	200	230	250	280	370	U500I	F	F	F	270	15
200	200	C	C	245	270	360	480	105	320	290	280	16
200	205	215	220	240	270	360	160	400	320	275	250	17
200	210	210	220	235	260	355	F	F	U405I	F	305	18
205	220	225	230	210	270	360	F5	F	F	300	285	19
200	210	210	230	250	275	360	F	U100F	F	265	240	20
215	200	200	245	U260A	280	380	F	F	F	340I	295	21
215	220	200	240	U260B	280	370	U195I	U460F	U390I	320	300	22
210	215	220	230	U245A	280	355	415	350	310	270	240	23
220	230	235	240	C	285	360	140	440	385	370	330	24
210	220	220II	240	U260A	285	360	F	U395I	U335F	295	260	25
210II	210II	230	210	255	275	370	500I	160I	F	280	280	26
210	220	220	230	250	280	360	440	120	320	265	240	27
C	210	220	240	250	280	360	F	120I	370	F	300	28
220	210II	215II	210	250	280	365	430	405	345	280	260	29
215II	215II	220	C	260	270	360	480I	460I	390I	U280I	260	30
27	28	27	26	29	30	29	21	20	21	25	28	Count
210	210	220	235	250	280	360	440	405	340	280	260	Median
210	210	215	235	250	275	360	445	100	340	290	265	Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic h'F
Unit Km
Month April 1959

TABLE 42
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	A	A	A
2								120	110	110	A	A
3								110	A	A	A	A
4								115	A	A	A	A
5								115	C	C	C	C
6								105	A	A	A	A
7							C	C	C	A	A	A
8								105	A	A	A	A
9								C	C	C	C	C
10								105	105	A	A	A
11							130	A	A	A	A	A
12								105	A	A	A	A
13							125	110	A	A	A	A
14								115	A	A	A	A
15							125	115	110	A	A	A
16								100H	A	A	A	A
17							120	110	A	A	A	A
18								100	A	A	A	A
19								A	A	A	A	A
20								A	A	A	A	A
21								115	A	A	A	A
22							125	115	A	A	A	A
23								110	105	A	A	A
24							135	110	105	A	A	A
25								105	110	A	A	A
26								120	A	110	110	A
27								110	110	A	A	A
28							120	120	A	A	A	B
29								115	115	A	A	A
30								120	120	A	A	A
Mean							125	110	110			
Median							125	110	110			
Count							7	24	9	2	1	

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

Characteristic h'E
Unit Km
Month April 1959

TABLE 42
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	110	110							1
A	A	A	A	110	115							2
A	\	A	A	A	120							3
A	B	\	A	A	A							4
C	C	\	A	A	A							5
A	A	B	105	105	110							6
B	A	A	A	115	100							7
A	A	A	A	115	A							8
C	C	C	C	A	110							9
A	A	110	A	B	A							10
A	A	A	A	A	A							11
A	A	A	A	A	A							12
A	A	B	110	110	A							13
A	A	A	A	A	A							14
A	A	A	105	105	110							15
A	A	C	C	C	A							16
A	A	A	A	A	110							17
A	A	A	A	A	A							18
A	A	A	A	A	A							19
A	A	A	A	A	A							20
A	A	A	A	A	A							21
A	A	A	A	A	A							22
A	A	A	A	A	A							23
A	A	A	A	A	C							24
A	A	A	A	A	120							25
A	A	A	110	115	120							26
A	A	A	115	120	A							27
C	A	A	110	115	A							28
A	A	A	A	120	120							29
A	120	C	C	120	120							30
			110	115	115							Mean
			110	115	110							Median
	1	1	6	12	12							Count

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

Characteristic h'E
 Unit Km
 Month April 1959

TABLE 42—Cont'd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							120	A	A	A	A	A
2							120	115	110	A	A	A
3							120	110	A	A	A	A
4							120	110	A	A	A	A
5							120	C	C	C	C	C
6							120	A	A	A	A	A
7							C	C	C	C	A	A
8							105	A	A	A	A	A
9							120H	C	C	C	C	C
10							115H	110	105	A	A	A
11							120	A	A	A	A	A
12							115	A	A	A	A	A
13							A	110	A	A	A	A
14							120	A	A	A	A	A
15							120	115	A	A	A	A
16							120	115	A	A	A	A
17							115	A	A	A	A	A
18							105	A	A	A	A	A
19							115	A	A	A	A	A
20							105	A	A	A	A	A
21							120	A	A	A	A	A
22							120	105	A	A	A	A
23							115	105	A	A	A	A
24							115	110	105	A	A	A
25							110	110	A	A	A	A
26							120	115	105	110	A	A
27							120	110	A	A	A	A
28							120	120	A	A	A	A
29							120	115	A	A	A	A
30							120	120	A	A	A	A
Count							28	16	4	1		
Median							120	110				
Mean							115	110				

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
Unit . Km
Month April 1959

TABLE 42—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Data
A	A	A	110	110								1
A	A	A	110	110								2
A	A	A	A	120								3
B	B	A	A	A								4
C	A	A	A	A								5
A	A	A	A	110								6
A	A	A	115	100								7
A	A	A	A	A								8
C	C	C	C	105								9
A	A	A	A	A								10
A	A	A	110	A								11
A	A	A	A	A								12
A	A	A	110	110								13
A	A	A	A	105								14
A	A	A	105	110	110							15
A	A	C	C	A	A							16
A	A	A	110	A	120							17
A	A	A	A	100								18
A	B	A	A	A								19
A	A	A	A	A	A							20
A	A	A	A	A								21
A	A	A	A	A	B							22
A	A	A	A	A	A	A						23
A	A	A	A	A	C							24
A	A	A	A	A	A							25
A	A	110	110	120								26
A	A	120	A	120								27
C	A	A	A	120								28
A	A	A	A	120								29
A	A	A	C	120								30
		2	8	15	2							Count
			110	110								Median
			110	110								Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'Es
Unit Km
Month April 1959

TABLE 43
Ionospheric Data
75 0°E Mean Time

Latitude 10.2°N
Longitude 77 5°E

Day	00	01	02	03	04	05	06	07	08	09	10	11
1								100	100	100	100	100
2								G	100	100	100	100
3	100							100	100	100	100	100
4								100	100	100	100	100
5								100	C	C	C	C
6								100	100	100	100	100
7	C	C	C	C	C	C	C	C	C	100	100	100
8								100	100	100	100	100
9								C	C	C	C	C
10		105	100			100		G	G	100	100	100
11							130	100	100	100	100	100
12							110	100	100	100	100	100
13	105	100						100	100	100	100	100
14					100			G	100	100	100	100
15				120			G	G	G	100	100	100
16								105	100	100	100	100
17							G	115	100	100	100	100
18								100	100	100	100	100
19								100	100	100	100	100
20								100	100	100	100	100
21	105							100	100	100	100	100
22							G	120	100	100	100	100
23								110	100	100	100	100
24							120	100	100	100	100	100
25	115							100	100	100	100	100
26	110	110	100	100			100	G	100	100	100	100
27		120						G	100	100	100	100
28	120						G	G	100	100	100	100
29								G	100	100	100	100
30								140	100	100	100	10
Mean	110						110	105	100	100	100	100
Median	110						110	100	100	100	100	100
Count	6	4	2	2	1	1	5	20	25	28	28	28

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

Characteristic · h'Es
 Unit Km
 Month April 1959

TABLE 43
 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	Day
100	100	100	100	100	100				110			1
100	100	100	100	100	100							2
100	100	100	100	100	100							3
100	100	100	100	100	100					120		4
C	C	100	100	100	100							5
100	100	100	100	100	100		C	C	C	C	C	6
100	100	100	100	G	100					100	105	7
100	100	100	100	105	100				110	100	100	8
C	C	C	C	100	100				110	100		9
100	100	G	100	100	100					115		10
100	100	100	100	100	105							11
100	100	100	100	100	105						105	12
100	100	100	100	100	105							13
100	100	100	100	100	100					125		14
100	100	100	100	100	105							15
100	100	C	C	C	100				105			16
100	100	100	100	100	105							17
100	100	100	100	100	100							18
100	100	100	100	100	100							19
100	100	100	100	100	100							20
100	100	100	100	100	100						110	21
100	100	100	100	100	100							22
100	100	100	100	100	100							23
100	100	100	100	100	C							24
100	100	100	100	100	105						115	25
100	100	100	100	100	110							26
100	100	100	100	100	100	100						27
C	100	100	100	100	120					110	100	28
100	100	C	100	100	100				120	100		29
100	100	C	C	100	110							30
100	100	100	100	100	100				110	110	105	Mean
100	100	100	100	100	100				110	105	105	Median
27	28	25	27	28	29	1			5	8	6	Count

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic h'Es
 Unit Km
 Month April 1959

TABLE 43—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude . 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							110	100	100	100	100	100
2							G	130	100	100	100	100
3	110				100		G	100	100	100	100	100
4							G	100	100	100	100	100
5							G	C	C	C	C	C
6							G	100	100	100	100	100
7	C	C	C	C	C	C	C	C	C	C	C	C
8							100	100	100	100	100	100
9							G	C	C	C	C	C
10		105					G	G	G	100	100	100
11							G	100	100	100	100	100
12							130	100	100	100	100	100
13	100	100					100	100	100	100	100	100
14							G	100	100	100	100	100
15							G	G	100	100	100	100
16							G	100	100	100	100	100
17							G	100	100	100	100	100
18							G	100	100	100	100	100
19							110	100	100	100	100	100
20							110	100	100	100	100	100
21	105						100	100	100	100	100	100
22							130	100	100	100	100	100
23							G	100	100	100	100	100
24							100	100	100	100	100	100
25						110	100	100	100	100	100	100
26	110	100	100			100	140	G	100	100	100	100
27	115						G	G	100	100	100	100
28							G	100	100	100	100	100
29							160	G	100	100	100	100
30							G	100	100	100	100	100
Count	5	3	1		1	2	13	22	26	27	28	28
Median	110						110	100	100	100	100	100
Mean	110						115	100	100	100	100	100

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'Es
Unit Km
Month April 1959

TABLE 43—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
100	100	100	100	100	110							1
100	100	100	100	100	110						105	2
100	100	100	100	100	105							3
100	100	100	100	100	110					120	140	4
C	100	100	100	100	100							5
100	100	100	100	100	100	C	C	C	C	C	C	6
100	100	100	100	100					105	105	105	7
100	100	100	100	100				120	100	100		8
C	C	C	C	100				115	100	100		9
100	100	100	100	100					110			10
100	100	100	100	100	110							11
100	100	100	100	100	100						100	12
100	100	100	100	100								13
100	100	100	100	100	100							14
100	100	100	100	100	105							15
100	100	C	C	100	100				105	100	100	16
100	100	100	100	100	105							17
100	100	100	100	100	S							18
100	100	100	100	100	S							19
100	100	100	100	100	100						115	20
100	100	100	100	100						105		21
100	100	100	100	105					120	130		22
100	100	100	100	100	115							23
100	100	100	100	C	120						115	24
100	100	100	100	100	120						105	25
100	100	100	100	100	120							26
100	100	100	100	100	100							27
C	100	100	100	110	120					120		28
100	100	100	100	110	120				100			29
100	100	100	C	110								30
27	29	28	27	29	20			2	8	8	8	Count
100	100	100	100	100	110				105	105	105	Median
100	100	100	100	100	110				110	110	110	Mean

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic (M3000)F2

TABLE 44

Latitude . 10 2°N

Unit

Ionospheric Data

Longitude . 77 5°E

Month April 1959

75 0°E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	U2 90F	U2 90S	U2 90S	U2 95S	U3 05S	3 05	U3 10S	2 90	2 60	2 35	2 15	2 20
2	U2 90SF	F	2 95	3 00	U3 20S	J3 20S	U3 05S	3 10	2 95	2 65	U2 10R	U2 10R
3	U2 90SF	U2 90S	FS	3 10	F	2 80	U2 90S	2 75	2 45	2 50	2 30	2 25
4	U2 70F	U2 70SF	2 80	2 95	3 15	3 35	U3 00S	3 00	2 65	2 20	2 25	2 20
5	F	F	F	U3 10S	U3 20FS	3 30	U3 00S	2 95	C	C	C	C
6	F	F	F	F	F	3 10F	2 95	2 80	2 45	2 25	2 30	2 30
7	C	C	C	C	C	C	C	C	C	2 30	2 30	2 30
8	F	U3 05F	F	U2 90F	F	U3 20F	2 95	2 95	2 60	2 35	2 15	2 20
9	2 95	2 90	2 75	2 95	3 25	3 35	3 00	C	C	C	C	C
10	2 75	2 70	S	2 80	2 90	2 95	3 05	3 05	2 70	2 60	2 25	2 10
11	2 85	2 80	2 85	2 90	2 90	3 15	3 00	2 75	2 40	2 25	2 30	2 20
12	U2 80F	2 80	2 90	U2 95S	2 95	2 75	U2 70S	2 70	2 40	2 20	2 30	2 20
13	F	F	U2 80F	2 90	2 95	U3 05S	2 85	2 85	2 60	2 25	2 20	2 10
14	S	F	3 00F	3 00	3 20	3 25F	2 90	2 95	2 65	2 40	2 15	2 25
15	U2 65F	F	U3 05F	F	F	F	3 05	3 20	2 90	2 55	2 10	2 20
16	F	F	2 75	F	F	3 15	2 95	2 90	2 65	2 20	2 20	2 20
17	2 65	F	2 90	3 05	F	U3 20F	3 05	2 85	2 55	2 15	2 20	2 15
18	2 85	U2 85S	2 80	3 00	3 20	3 25	2 90	2 85	2 55	2 20	2 20	2 15
19	U2 55S	FS	U2 75S	2 95	3 10	3 10	2 90	2 70	2 45	2 15	2 20	2 15
20	U2 60F	FS	U2 90F	F	3 05	2 80	2 85	2 75	2 45	2 20	2 20	2 10
21	S	U2 90S	2 90	3 05	U3 10S	3 20	3 10	2 75	2 35	2 15	2 20	2 15
22	F	F	F	U3 00S	FS	U3 15S	F	U2 95S	2 75	2 35	2 05II	2 10
23	F	FS	F	F	3 10	3 25	3 20	3 00	2 70	2 35	2 05	2 15
24	2 80	U2 80S	U2 90S	2 60	F	U2 50F	FH	2 60	2 35	2 20	2 15	2 10
25	2 40	U2 60S	U2 90S	3 10	3 00	2 85	3 00	2 90	2 70	2 35	2 00	2 20
26	2 80	U2 80S	2 70	2 85	3 00	3 00	2 90	2 70	2 60	2 50	2 25	2 05
27	F	F	U2 60FS	F	3 00	U3 00FS	3 00	3 00	2 70	2 50II	2 20	2 10
28	U2 90S	U2 75S	2 60	2 70	U3 00S	U3 05S	3 05	2 90	2 70II	2 50	U2 05R	2 10
29	F	F	U2 70S	U3 00F	U3 00S	U3 20S	U3 10S	2 95	2 75	2 45	2 20	2 10
30	U2 75S	2 60	2 55	2 60	2 80	3 00	3 00	2 80	2 55	2 20	2 20	2 20
Mean	U2 75	U2 80	2 80	2 95	3 05	3 10	3 00	2 90	2 60	2 35	2 20	2 15
Median	2 80	U2 80	2 80	2 95	3 05	3 10	3 00	2 90	2 60	2 30	2 20	2 15
Count	18	15	22	23	21	28	27	28	27	28	28	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000)F₂
 Unit
 Month April 1959

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	Day
2 25	2 30	2 30	U2 30 ^s	U2 20 ^s	U2 10 ^s	U1 90W	U2 00 ^s	U2 10 ^{rs}	F	F	U2 80 ^s	1
2 20	2 25	2 20	U2 20 ^s	2 15	U2 10 ^s	U1 95 ^s	F	F	F	F	F	2
2 25	2 20	2 30	2 35	2 30	U2 25 ^s	U2 10 ^s	U1 95 ^s	F	F	F	U2 60 ^r	3
2 20	2 20	2 20	U2 30 ^s	2 30	U2 25 ^s	U2 10 ^s	U2 00 ^{sf}	F	F	F	F	4
C	C	2 25	2 40	2 40	U2 45 ^s	U2 25 ^s	F	F	F	F	F	5
2 25	2 20	2 15	2 20	2 20	U2 20 ^s	U2 10 ^s	C	C	C	C	C	6
2 15	2 10	2 10	2 15	2 20	2 25	2 15	U2 00 ^s	F	F	F	F	7
2 10	2 05	2 10	2 20	2 30	2 30	2 20	2 05	2 25	2 50	U2 75 ^s	3 00	8
C	C	C	C	2 15	2 25	2 15	U2 05 ^s	2 00	F	F	U2 45 ^s	9
2 00	2 00	2 10	2 35	2 30	2 25	2 15H	2 00H	F	F	2 55	2 80	10
2 10	2 10	2 15	2 20	2 15	U2 15 ^s	U2 05 ^s	U2 00 ^s	F	F	F	F	11
2 10	2 10	2 00	2 05	2 10	U2 15 ^s	U2 10 ^s	U1 95 ^s	F	F	F	F	12
2 05	2 15	2 20	2 20	2 25	U2 25 st	U2 10 ^s	U2 00 ^r	F	F	F	U2 85 ^r	13
2 15	2 10	2 25	2 25	2 20	2 10	U2 00 ^s	W	F	F	F	F	14
2 15	2 10	2 10	2 15	2 15	2 20	2 15	U2 00 ^s	F	F	F	U2 80 ^r	15
2 15	2 10	C	C	C	2 25	2 15	2 00	F	2 05	2 30	2 50	16
2 10	2 05	2 10	2 10	2 10	2 15	2 05	S	2 00	2 10	2 40	2 60	17
2 10	2 10	2 10	2 10	2 15	2 20	J2 15 ^s	2 00	F	F	F	FS	18
2 10	2 05	2 05	2 10	2 20	2 20	2 10	2 00	F	F	F	F	19
2 15	2 10	2 15	2 15	2 20	2 15	2 05	F	F	F	F	F	20
2 10	2 05	2 10	2 10	2 25	U2 30 ^s	2 25	2 05	F	F	F	F	21
2 10	2 10	2 05	2 10	2 15	2 20	2 15	U2 05 ^s	F	F	F	F	22
2 10	2 10	2 10	2 15	2 20	2 30	U2 30 ^s	U2 15 ^s	2 15	2 25	2 55	2 75	23
2 10	2 05	2 05	2 10	2 10	C	2 00	U1 90 ^r	1 95	U2 00 ^r	FS	FS	24
2 10	2 10	2 15	2 20	2 25	U2 30 ^s	2 15	U1 95 ^r	F	2 20	2 45	2 65	25
2 05	2 05	2 05	2 10	2 20	U2 15 ^s	2 10	1 95	F	F	F	FS	26
2 05	2 05	2 10	2 10	2 10	2 15	2 20	2 05	2 10	F	2 35	2 60	27
C	2 05	2 05	2 10	2 15	S	U2 05 ^s	2 00	F	F	F	F	28
2 05	2 05	C	2 10	2 15	2 20	2 15	2 00	2 00	2 15	U2 40 ^s	U2 70 ^s	29
2 15	2 05	C	C	2 25	2 25	2 20	F	F	F	F	F	30
2 10	2 10	2 15	2 20	2 20	2 20	2 10	U1 90	U2 05	U2 20	U2 45	U2 70	Mean
2 10	2 10	2 10	2 15	2 20	2 20	2 10	U2 00	U2 05	U2 15	U2 40	2 70	Median
27	28	26	27	29	28	30	24	8	7	8	13	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic (M3000)F₂
Unit .
Month April 1959

TABLE 44—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude . 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	U3 00S	U2 90S	U3 10S	U3 10S	U3 05S	3 00	2 80	2 50	2 25	2 15	2 25
2	F	U3 10FS	3 00	3 10	U3 25S	3 20	3 20	3 05	2 80	2 55	U2 20RS	2 20
3	U2 95S	2 90	U3 05S	F	F	2 80	2 90	2 65	2 30	2 35	2 20	2 30
4	FS	U2 70S	U2 90S	3 10	3 20	3 20	U3 00S	2 90	2 45	U2 15R	2 25	2 25
5	F	F	FS	F	J3 35SH	J2 50SH	U3 00S	C	C	C	C	C
6	F	U2 85R	F	3 00	U3 20F	3 25	2 95	2 65	2 25	2 30	2 30	2 25
7	C	C	C	C	C	C	C	C	C	C	2 30	2 25
8	U2 95F	F	F	F	U3 10F	U2 90S	2 95	2 80	2 50	2 15	2 10	2 10
9	2 95	2 85	2 85	3 10	3 35	2 40H	3 05	C	C	C	C	C
10	2 70	2 70	U2 75S	2 90	2 85	2 95	3 05	2 85	2 65	2 40	2 10	2 05
11	2 80	U2 80S	3 00	2 80	3 00	3 25	2 90	2 55	2 35	2 25	2 25	2 20
12	2 80	2 85	2 95	3 05	2 90	2 70	2 70	2 60	2 20	2 20	2 35	2 15
13	F	U2 75F	2 85	2 90	3 05	3 00	2 95	2 75	2 45	2 05	2 20	2 10
14	3 00R	F	U2 95S	F	3 30	2 90R	3 00	2 80	2 55	2 20	2 25	2 20
15	F	F	F	F	F	F	3 10	3 00	2 75	2 35	WH	2 15
16	F	U2 75R	2 80	F	3 05	3 10	3 00	2 80	2 45	2 05	2 20	2 20
17	2 70	2 80R	2 95	3 05	U3 20F	3 10	S	2 70	2 30	2 20	2 20	2 15
18	2 90	2 85	2 90	3 15	3 40	3 00	2 95	2 70	2 35	2 10	2 10	2 15
19	FS	U2 65S	F	3 00	3 05	2 90	2 85	2 60	2 30	2 20	2 15	2 15
20	F	F	3 00	F	3 00	2 85	2 80	2 60	2 30	2 10	2 20	2 15
21	U2 95S	2 90	2 95	3 10	U3 10S	2 90	2 95	2 55	2 20	2 20	2 20	2 10
22	F	F	F	U2 90S	F	FS	S	2 90	2 55	2 05	2 10	2 15
23	F	U2 60S	F	3 00	3 25	2 95	3 05	2 85	2 55	2 15	U2 15R	U2 20R
24	U2 70S	2 90	2 75	U2 35S	2 45	FH	2 70	2 45	2 15	2 10	2 15	2 10
25	2 50	2 80	3 10	3 05	2 90	2 90	2 95	2 80	2 55	2 10	2 25	2 15
26	2 80	2 75	2 70	2 90	3 10	2 85	2 90	2 65	2 50	2 35	2 10	2 05
27	F	F	U2 80S	F	3 05	2 90	3 10	2 90	2 65V	2 35H	2 05	2 05
28	U2 80S	2 70	2 60	2 80	U3 00S	3 00	2 90	2 80	2 60	2 25	U1 95WH	2 10
29	F	2 65	2 85	rs	U3 10S	3 00	3 00	2 90	2 65	2 35	2 05	2 05
30	2 70	2 50	2 60	2 70	3 00	U3 05S	2 90	2 70	2 40H	2 15	2 20	2 20
Count	15	22	22	20	26	26	27	27	27	27	28	82
Median	2 80	2 80	2 90	3 00	3 10	2 95	2 95	2 80	2 45	2 20	2 20	2 15
Mean	2 80	2 80	2 85	2 95	3 10	2 95	2 95	2 75	2 45	2 20	2 15	2 15

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F₂
 Unit .
 Month : April 1959

TABLE 44—Contd
 Ionospheric Data
 75°0'E Mean Time

Latitude . 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Day
2 25	2 30	U2 30s	U2 25s	2.15	RS	U2 10s	U2 05F	F	F	F	U2.80s	1
2 20	2.20	2 20	U2 20s	U2 20s	S	U1.90W	F	F	F	F	F	2
J2 25R	2 25	2 30	2.30	U2 30s	U2 20s	U2.05s	1 95	F	F	U2 45FS	F	3
2 20	2.20	2.25	2.30	U2.25s	U2 20s	U2 05s	FS	F	F	F	F	4
C	2.30	2 30	2 35	2.45	U2.35s	2.15	F	F	F	F	F	5
2.20	2 25	2 20	2.20	U2 20s	U2.20s	C	C	C	C	C	C	6
2.15	2.10	2.10	2.15	2 25	U2.25s	U2 10s	F	F	F	F	2.85F	7
2 10	2 05	2 15	2 25	2 30	2 30	2 15	2.15	2.35	U2 65F	2 90	3.05	8
C	C	C	C	2.20	2 25	2 05	2 00	F	F	F	2.60	9
2 00	2 00	2 20	2 35	2 30	2 20H	2 00H	1 95SH	F	2 45	2 65	U2 90s	10
2.15	2 15	2 20	2.15	2 15	2 10	U2.00s	U1.95s	F	2 25	F	F	11
2.10	2 05	2 00	2 05	2.10	U2.15s	U2 05s	F	F	F	F	F	12
2.15	2.20	2 20	2.25	2 25	U2 15SH	2 00	F	F	F	F	U2.90F	13
2.10	2 20	2 25	2 25	2 15	U2 05s	WS	F	F	F	F	F	14
2 15	2 10	2 10	2 15	2 15	2.20	U2 05s	F	F	F	F	F	15
2 10	2 10	C	C	2 20	2.20	2 05	1.95	2 00	2.25	2 45	2 50	16
2 10	2 10	2 10	2 10	2.15	J2 15s	2 00	1 90	2 05	2.25	2 55	2 70	17
2 10	2 10	2.10	J2 15s	2 20	J2 15s	2.05	F	F	F	F	F	18
2 05	2 05	2 10	2 15	2 20	2 15	U2 05s	2.00	F	F	F	F	19
2.10	2 10	2 15	2 15	2 20	U2.15s	1.95	F	F	F	U2.40F	FS	20
2 10	2 10	2 10	2.10	2 30	2 30	2 15	2 00	F	F	F	F	21
2.10	2 10	2 10	2.10	2.15	2 20	U2 10s	F	F	F	F	F	22
2 10	2 05	2 10	2.20	2.30	2 35	2 15	2 10	2 25	2.45	2 65	U2 90s	23
2 05	2 05	2 10	2 10	C	U2 00s	U1 95s	1 90	1 95	U2 05FS	FS	U2.30s	24
2 10	2 15	2 20	2 30	2 30	2 25	2 10	1 95F	F	2 30	FS	U2 80s	25
2.10	2 05	2.05	2.10	U2.15s	2 10	2.00	F	F	F	F	F	26
2 05	2.05	2.10	2.10	2.10	2 20	2 10	2 00F	F	U2 45s	FS	S	27
C	2.05	2 05	2 15	2.15	U2 10s	2 00	F	F	F	FS	F	28
2 10	2 05	2 10	2 15	2 20	2 15	2 05	2 00R	2 10	U2 25s	U2 60s	U2 75s	29
2 10	2.10	2.15	C	2.25	2 20	2 00	F	F	F	F	F	30
27	29	28	27	29	28	29	15	6	10	8	12	Count
2.10	2 10	2 10	2 15	2.20	2 20	2.05	2 00	U2 10	2 30	2 60	U2 80	Median
2 10	2 10	2 15	2 20	2 20	2 20	2 05	2.00	U2 10	2 35	2 60	U2 75	Mean

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic foF₂
 Unit Mc
 Month May 1959

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	F	F	10 4	11 0	9 9	9 2	10 1	12 3	12 9	11 9	11 4	C
2	10 0	u8 8s	9 0	9 4	9 3	7 9	9 9	12 2	12 8	C	11 6	11 5
3	F	F	8 6	9 3	8 1	5 8	8 7	11 4	12 2	12 7	11 7	11 5
4	F	F	F	u9 9F	9 2	F	F	11 6	13 0	12 9	11 3	11 1
5	F	F	F	9 7	9 4	7 8	9 6	11 2	12 4	13 1	13 0	13 6
6	F	F	F	10 5	8 7	5 3	7 7	11 1	12 7	13 7	13 7	12 7
7	F	F	F	F	8 4F	u6 1F	8 0F	10 8	11 8	11 5	10 4	10 9
8	u10 6F	F	F	F	F	6 9	u8 6F	11 4	12 4	12 3	9 9	10 2
9	u11 8s	10 8	10 2	u9 7s	9 4	6 8	8 4	11 8	13 0	13 4	12 8	11 3
10	F	F	u10 2F	u9 9s	9 7	6 5	8 5	11 0	12 6	12 3	12 1	12 0
11	F	F	F	F	9 9	8 6	10 4	12 3	C	13 7	13 4	12 6
12	u10 3FS	FS	F	F	F	8 3I	10 1	12 0	13 4	14 0	13 0	11 8
13	FS	9 0F	F	F	10 0	8 5	10 6	13 0	14 1	15 0	15 1	14 9
14	12 2	11 6	11 5	11 2	10 8	9 8	10 5	12 1	13 0	13 2	12 6	12 0
15	10 8	10 0	9 6	u9 6s	9 9	8 4F	9 9	11 6	12 4	11 8	11 4	11 4
16	FS	FS	F	u9 4s	F	u9 8sr	10 8	12 6	13 2	13 4	14 7	u11 2s
17	FS	10 8	10 4	11 1	u9 2s	4 9	8 8	u11 8s	12 2	12 6	12 0	12 1
18	F	FS	F	F	u9 2sF	1 5	8 4	11 0	12 2	12 8	10 8	10 8
19	11 2	10 9	u10 2F	F	9 7	u9 4s	10 2	11 6	11 6	C	11 8	11 5
20	C	10 2	10 4	10 4	u9 8s	8 4	10 0	u11 4s	12 4	12 4	11 8	11 6
21	F	F	F	C	F	u9 8rs	10 8	F	u11 8s	11 6	10 8	11 2
22	F	F	F	F	F	9 1	10 6	12 1	13 0	12 7	12 0	11 5
23	F	F	F	F	F	F	u8 7F	11 0	11 9	13 0	12 8	12 7
24	F	F	F	F	F	FS	FS	u11 4F	u12 0s	12 9	13 0	u10 8w
25	8 8F	8 0	C	C	C	C	C	C	12 3	13 9	13 3	J12 6ur
26	u10 8F	u9 9F	9 3	u9 5F	u8 9F	u7 1s	8 5	10 8	u12 1s	12 8	13 4	12 5
27	F	F	F	F	F	7 8	9 2	11 0	12 3	12 3	11 6	10 8
28	F	F	9 5	F	u9 6s	u7 0s	8 8	10 6	11 3	12 1	12 4	12 7
29	FS	FS	FS	FS	FS	FS	FS	u10 0sF	11 2	11 4	11 6	12 1
30	FS	FS	F	F	u7 0sF	6 4	8 4	u10 2s	10 6	10 0	9 8	10 1
31	F	F	F	FS	F	u8 0F	9 2	10 6II	10 8	10 6	10 4	11 3
Mean	10 7	10 0	9 9	10 0	9 3	7 7	9 4	11 4	12 3	12 6	12 1	11 9
Median	10 8	10 1	10 2	9 8	9 4	7 9	9 2	11 4	12 4	12 7	12 0	11 6
Count	9	10	12	14	20	25	27	29	30	29	31	30

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month May 1959

TABLE 45
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
C	13 2	C	12 9	12 9	13 0	S	U10 4W	F	F	F	F	1
11 4	11 1	11 8	12 3	12 9	13 4	13 8	11 8	F	F	F	F	2
11 8	12 1	12 5	12 9	13 1	13 7	13 5	11 9	F	F	F	F	3
10 7	10 6	10 6	10 8	11 5	12 6	12 4	11 2	F	10 5	10 9	11 4	4
13 9	12 6	11 7	12 6	13 0	13 5	13 2	12 2	F	F	F	F	5
12 4	12 0	12 3	12 6	12 8	12 6	U12 0S	U10 8S	F	F	F	F	6
11 0	11 2	11 6	12 1	12 9	13 6	C	12 6	F	F	F	F	7
10 9	11 1	C	12 5	13 2	13 6	C	13 0	12 2	12 2	12 2	12 6	8
10 9	10 1	10 6	10 9	11 6	12 0	11 8	10 7	F	F	F	F	9
12 4	12 1	12 9	13 5	13 7	13 7II	13 2	U11 5b	F	F	F	F	10
11 8	11 9	12 2	12 6	12 6	12 4	11 6	11 3	C	U10 6F	U10 6F	F	11
12 3	11 8	11 3	C	11 7	12 0II	11 3II	10 III	F	F	F	Fs	12
13 7	12 4	12 0	12 2	12 5	12 4	11 2	10 8	10 8	11 6	12 8	13 8	13
12 0	12 0	11 7	11 8	11 8	11 6	11 1	19 0S	9 5	F	10 4	U11 5S	14
11 3	11 8	11 8	C	12 3	12 7	12 7	11 6	U9 8F	F	F	F	15
14 6	11 6	U15 2S	U15 0S	14 6	14 6	U13 8S	12 8	F	F	F	F	16
12 0	11 8	11 6	11 2	10 7	10 8	10 7	J10 OR	U9 4FS	U9 6S	FS	FS	17
11 0	11 1	11 2	11 4	11 4	11 3	U11 4S	10 7	U10 OR	U10 4F	U11 7S	U11 8S	18
11 7	11 5	11 4	11 0	11 0	U11 5S	U12 4S	11 0	J10 4FS	U10 0F	J10 2S	10 9	19
11 4	11 4	11 8	12 6	13 3	13 5	13 0	U11 0S	F	F	F	F	20
11 4	12 0	12 8	13 4	14 2	U13 8S	13 2	U11 8S	F	F	F	F	21
11 0	11 0	11 4	12 3	13 0	13 5	13 3	12 1	F	F	F	F	22
12 3	11 8	11 8	11 4	U11 9S	12 7	13 2	U12 OR	F	F	F	F	23
U9 3W	9 6	10 4	10 5	U10 1S	10 7	U11 0S	10 4	9 7	10 2	U9 9S	U9 1S	24
11 6	12 0	12 7	13 0	13 3	13 4	12 8	U11 9S	F	F	F	F	25
U11 9W	12 0	U12 0S	12 4	12 7	12 7	12 8	11 5	F	F	F	F	26
10 6	10 8	11 0	11 6	12 2	12 6	S	11 5	F	F	F	F	27
12 0	11 8	11 3	11 4	11 4	U10 5S	S	U9 6SF	FS	FS	FS	FS	28
12 4	12 6	12 6	13 0	12 8	U13 2S	S	F	FS	FS	FS	FS	29
10 4	11 0	11 6	12 0	12 4	12 8	12 4	U10 4R	8 8	F	F	FS	30
11 9	12 0	12 8	13 1	13 4	U13 5S	S	U12 0S	10 8	F	F	F	31
11 7	11 7	11 9	12 2	12 5	12 7	12 4	11 3	10 1	U10 6	U11 1	U11 6	Mean
11 8	11 8	11 8	12 3	12 7	12 7	12 6	11 4	9 9	U10 4	U10 8	U11 5	Median
30	31	29	29	31	31	24	30	10	8	8	7	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foF₂
 Unit . Mc
 Month May 1959

TABLE 45—Cont'd
 Ionospheric Data
 75 °E Mean Time

Latitude · 10 2°N
 Longitude · 77 5°E

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	10 7	F	9 5	9 0	11 5	12 7	12 3	11 7	C	C
2	9 2	8 8	9 3	9 7	8 9	8 1	10 9	12 7	C	11 6	11 4	11 5
3	F	F	9 1	9 1	6 7	6 8	10 4	12 0	12 6	12 4	11 5	11 6
4	F	F	F	9 5	F	F	10 8	12 4	13 0	12 1	11 2	C
5	u9 6s	F	F	10 1	9 0	8 4	10 6	11 4	12 8	13 1	13 4	13 8
6	F	F	F	u9 9s	7 7	5 9	9 7	11 9	13 5	14 2	12 8	12 7
7	F	F	F	u8 9F	u7 2F	u6 2F	9 6	11 5	11 7	10 6	10 7	11 1
8	F	F	F	F	8 8	6 8H	u10 4F	12 0	12 6	10 7H	9 9	10 8
9	11 4	u10 7s	10 0	u9 7s	8 4	6 6	10 1	12 3	13 3	13 3	11 5	11 1
10	F	F	u10 4s	10 2	8 4	6 8	9 8	12 1	12 5	12 1	12 0	12 3
11	F	F	u10 6i	10 4	9 6	9 1	11 1	12 8	13 6	13 6	13 2	12 2
12	FS	S	F	F	u9 1F	8 9	11 0	12 7	13 8	13 6	12 2	12 2
13	FS	F	F	9 8	9 4	9 3	12 0	13 6	14 4	15 1	15 0	14 4
14	11 7	11 7	11 3	11 0	u10 6s	9 7	11 2	12 6	13 2	12 8	12 2	11 9
15	10 3	9 7	u9 5s	9 9	9 5	8 8	10 8	12 3	12 4	11 4	11 4	11 4
16	FS	F	F	u9 8s	F	u10 0s	u11 9s	13 0	u13 2R	14 0	14 8	14 8
17	11 2	10 4	10 8	10 8	6 5	6 4	10 4	12 0	J12 4R	12 2	u12 0R	12 2
18	FS	F	F	F	u8 6s	7 0	9 8	11 6	13 0	u12 0R	10 6	11 0
19	11 0	10 6	F	u9 8F	9 5	9 4	11 3	u11 8s	11 6	11 6	11 7	11 6
20	10 5	10 2F	10 4	10 0	8 9	9 2	11 0	u11 8s	12 4	J12 1R	11 6	11 6
21	F	F	F	F	F	10 4	FS	11 7	11 8	11 1	11 0	11 3
22	F	F	F	F	u9 3F	u9 7s	11 5	12 7	13 0	12 5	11 7	11 3
23	F	F	F	F	F	F	u9 9I	11 5	12 3	12 8	12 9	12 3
24	F	F	F	F	F	FS	F	J11 8s	12 6H	13 1	12 3	u9 6W
25	u8 4F	u7 9F	FS	C	C	C	C	10 7	13 5	13 5	13 2	11 6
26	u10 5F	9 6	u9 4F	u9 6F	8 5	7 0	9 9	11 2	13 0	13 0	u12 7R	C
27	F	F	F	F	8 4	8 3	10 3	11 7	12 6	12 0	C	10 5
28	9 6	F	F	u10 4F	8 6	u7 1s	9 5	11 1	12 2	12 2	12 7	12 7H
29	FS	FS	FS	FS	FS	FS	u9 2FS	10 8	11 4	11 3	11 8	12 6
30	FS	F	F	F	6 6	7 0	9 7	10 8	10 4	9 8	9 9	10 2
31	F	F	FS	F	F	u8 6FS	10 4H	10 5	10 8	10 5	10 6	12 0
Count	11	9	11	18	23	26	28	31	30	31	29	28
Median	10 5	10 2	10 4	9 8	8 8	8 4	10 4	11 9	12 6	12 2	11 8	11 6
Mean	10 3	10 0	10 1	9 8	8 6	8 1	10 5	11 9	12 6	12 3	12 0	11 9

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF₂
Unit Mc
Month May 1959

TABLE 45—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
12 9	13 2	C	13 2	13 2	U12 6R	U11 1S	F	F	F	F	F	1
11 1	11 2	11 9	12 6	13 1	13 6	13 1	F	F	F	F	F	2
12 0	12 4	12 8	12 9	13 4	13 8	12 8	10 9	F	F	F	F	3
10 7	10 7	10 6	11 1	12 1	12 7	12 0	F	10 3F	10 8	F	F	4
13 5	12 1	12 0	13 0	13 3	13 5	12 8	U11 2F	F	F	F	F	5
12 4	12 0	12 3	12 8	12 6	12 5	U11 3S	U10 31	F	F	F	F	6
11 1	11 4	11 8	12 6	13 3	13 7	U13 6S	U11 8F	F	U11 3F	F	11 6F	7
11 1	11 2	C	12 9	13 4	14 0H	13 6	12 4F	12 4	12 2	12 4	12 5	8
10 6	10 4	10 6	11 3	11 8	U11 7S	11 4	U10 2F	F	F	F	F	9
12 3	12 8	13 1	13 6	13 7	13 6H	12 6H	U10 8F	F	F	F	F	10
11 9	11 9	12 5	12 4	12 4	12 2	11 4	11 2	10 9	F	U10 2F	F	11
12 2	11 6	11 1	11 8	J12 0R	J12 0S	10 8H	9 6H	F	F	FS	FS	12
13 0	12 0	12 0	12 5	12 4	12 0	11 0	10 6	11 2	12 2	13 6	13 0	13
12 0	11 8	11 7	11 6	11 6	11 4	10 9	9 6	10 1	9 2	11 2	11 2	14
11 6	11 7	11 7	12 0	12 5	12 7	12 4	10 4	F	F	F	FS	15
14 6	U15 2S	U15 2S	11 8	U14 7S	U14 0S	U13 6S	F	F	F	F	F	16
12 0	11 8	11 4	10 8	10 8	10 8	U10 4S	U9 6S	9 2	U10 2Rb	U10 4Rb	U10 8F	17
11 1	11 0	11 2	11 4	11 2	11 4	11 0	U10 0F	U10 41	11 0	U11 8S	U11 6S	18
11 7	11 4	11 2	11 0	11 4	U11 8S	U11 8S	10 6	F	U10 2S	U10 5S	11 0	19
11 4	11 6	12 0	13 0	U13 5S	13 4	U12 0S	F	F	F	F	F	20
12 0	12 2	13 0	13 8	14 4	U13 6S	12 6	10 8F	F	F	F	F	21
10 8	11 3	11 7	12 8	13 4	13 3	12 6	11 5	F	F	F	F	22
12 1	11 8	11 6	11 7	12 5	13 1	12 8	F	F	F	F	F	23
9 5	10 0	10 7	10 3	10 5	S	U10 8S	U9 7S	9 7	U10 3S	C	9 0	24
11 9	12 5	12 8	13 2	13 3	13 0	12 5	U11 2SH	F	F	F	U10 8F	25
11 9	11 9	12 1	12 7	13 1	12 8	12 4	F	F	F	F	F	26
10 6	10 9	11 1	11 8	12 3	12 6	U12 0S	F	F	F	F	F	27
U12 1RH	11 5	11 3	11 4	10 8	U10 5S	U10 2S	FS	FS	FS	FS	FS	28
12 5	12 6	12 8	12 7	U13 2S	U12 6S	U11 4SH	F	FS	FS	FS	FS	29
10 8	11 4	11 8	12 1	12 6	12 6	U11 8S	U9 6S	F	F	FS	FS	30
12 0	12 4	13 0	13 3	13 4	13 8	12 8	11 6	F	F	F	F	31
31	31	29 1/2	31	31	30	31	21	8	9	7	9	Count
11 9	11 8	11 8	12 6	12 6	12 7	12 0	10 6	U10 4	10 8	U11 2	11 2	Median
11 8	11 8	12 0	12 4	12 6	12 7	12 0	10 6	U10 5	10 8	U11 4	11 3	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF₁
 Unit Mc
 Month May 1959

TABLE 46
 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									L	L	L	C
2								L	L	C	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	C	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	E	L
16								L	L	L	L	L
17								L	L	L	L	L
18								L	L	L	L	L
19								L	L	C	L	L
20								L	L	L	L	LH
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25							C	L	L	L	L	L
26								L	L	LH	LH	LH
27								L	L	L	L	L
28								L	L	L	LH	LH
29								L	L	L	LH	L
30								L	L	L	L	L
31								L	L	L	u5 1L	LH
Mean												
Median												
Count											1	

Sweep 10 Mc to 250 Mc in 27 seconds.

Characteristic foF₁
 Unit Mc
 Month May 1959

TABLE 46—Contd.
 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
C	L	C	L	L	L							1
L	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	L							4
												5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
LH	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
LH	L	L	L	L	L							26
LH	LH	LH	L	L	L							27
L	LH	LH	L	L	L							28
L	LH	LH	L	L	L							29
L	L	L	L	L	L							30
LH	L	LH	L	L	L							31
												Mean
												Median
												Count

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

Characteristic foF₁
Unit . Mc
Month May 1959

TABLE 46—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude . 10 2°N
Longitude . 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	C	C
2								L	C	L	I	L
3								L	B	L	L	L
4								L	L	L	L	C
5								L	L	L	L	L
6							L	L	L	L	L	L
7								L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	L	L
16								L	L	L	L	L
17								L	L	L	B	L
18								L	L	L	L	L ^H
19								L	L	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25							C	L	L	L	L	L
26							L	L	L	L	L	C
27							L	L	L ^H	L	L	L
28							L	L	L ^H	L ^H	L	L ^H
29							L	L	L	L ^H	L	L ^H
30							L	L	L	L	L	L
31								L	L	L	U ₅ 3L	U ₅ 5L
Count											1	1
Median												
Mean												

Sweep 1 0 Mc , 0 25 0 Mc, in 27 seconds,

Characteristic foF₁
 Unit Mc
 Month May 1959

TABLE 46—*Concl'd*
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
L	L	C	L	L								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	L	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	L	L	L								20
L	L	L	L	L								21
L	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
L	L	L	L	L								26
L	LH	L	L	L								27
LH	LH	LH	L	L								28
LH	LH	LH	L	L								29
L	L	L	L	L								30
L	L	L	L	L								31
												Count
												Median
												Mean

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic foE
 Unit Mc
 Month May 1959

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								A	A	A	A	C
2								A	A	C	A	A
3								A	A	A	A	A
4								A	A	A	B	A
5								3 0	A	A	A	A
6								3 1	A	A	A	A
7							2 2	A	A	A	A	A
8								3 2	A	A	A	A
9								3 1	3 7	A	A	A
10								A	A	A	A	A
11							2 5	3 4	C	A	B	B
12								3 1	A	A	A	A
13								3 1	A	A	A	A
14							2 3	3 1	A	A	A	A
15								A	A	A	A	A
16							A	A	A	A	A	A
17							U2 2R	A	A	A	A	B
18							U2 2R	3 1	A	A	A	A
19							2 2	A	A	C	A	B
20							A	A	A	A	A	A
21								A	A	A	A	A
22							U2 3R	A	A	A	A	A
23							R	3.2H	A	A	A	A
24								R	3 8	A	A	A
25							C	C	U3 3R	A	A	A
26							2 2	A	A	A	A	A
27								A	A	A	A	A
28							2 0	2 8	A	A	A	A
29								3 0	A	A	A	A
30							2 3H	A	A	A	A	A
31							F	A	A	A	A	A
Mean							2 2	3 1				
Median							2 2	3 1				
Count							10	12	3			

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month May 1959

TABLE 47—Contd
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
C	B	C	A	A	A							1
A	A	A	A	A	A							2
A	A	A	A	A	A							3
A	A	A	A	A	A							4
												5
A	A	A	A	A	A							6
A	A	A	A	A	A							7
A	A	C	3 6	3 4	3 0II							8
A	A	A	A	A	2 8II							9
A	A	A	A	A	A							10
B	A	A	A	A	A							11
A	A	A	C	A	A							12
B	A	A	A	A	A							13
A	A	A	A	A	A							14
A	A	A	C	A	A							15
												16
A	A	A	A	A	A							17
B	A	A	A	A	A							18
A	A	A	A	A	A							19
A	A	A	A	A	A							20
A	A	R	U3 7A	3 2	A							21
A	A	A	U3 7R	3 2	A							22
A	A	A	A	3 3	A							23
A	A	A	A	A	A							24
A	A	A	A	U3.5R	A							25
												26
A	A	A	A	A	A							27
A	A	A	A	A	A							28
A	A	A	A	A	A							29
A	A	A	A	A	A							30
A	U4 0A	4 0	U3 7A	U3 3F								31
				3 3								Mean
				3 3								Median
	1	1	1	6	2							Count

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

Characteristic foE
Unit Mc
Month May 1959

TABLE 47—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 7	A	A	A	C	C
2							A	A	C	A	A	A
3							R	A	B	A	A	A
4							2 8	R	A	A	A	C
5							2 8	R	A	A	A	B
6							2 6	A	A	A	A	A
7							A	A	A	A	A	A
8							2 8	3 5	A	A	A	A
9							2 7	3 4	A	A	A	A
10							2 8	A	A	A	A	A
11							2 9	3 6	A	A	B	A
12							2 8	A	A	A	A	A
13							2 7	3 4	A	A	B	A
14							2 7	A	A	A	A	A
15							2 7	A	A	A	A	A
16							A	A	A	A	A	A
17							U2 7A	A	A	A	B	B
18							U2 7R	A	A	A	A	A
19							A	A	A	A	A	A
20							A	A	A	A	A	A
21							A	A	A	A	A	A
22							A	A	A	A	A	A
23							U2 8H	A	A	A	A	A
24							U2 3RH	U3 6R	A	A	A	A
25							C	3 1	3 5	A	A	A
26							U2 5R	A	A	A	A	C
27							A	A	A	A	C	A
28							2 4	A	A	A	A	A
29							2 6H	3 2	A	A	A	A
30							A	A	A	A	A	A
31							U2 8F	A	A	A	U4 0A	A
Count							19	7	1		1	
Median							2 7	3 4				
Mean							2 7	3 4				

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
Unit . Mc
Month May 1959

TABLE 47—*Concl'd*
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	Δ	C	Δ	A								1
A	Δ	A	Δ	A								2
A	Δ	A	Δ	A								3
A	Δ	A	Δ	A								4
A	Δ	A	Δ	A								5
A	Δ	A	Δ	A								6
A	Δ	A	Δ	A								7
A	Δ	A	Δ	A	A							8
A	Δ	A	Δ	A								9
A	Δ	A	Δ	A								10
A	Δ	A	Δ	A	A							11
B	Δ	A	Δ	A	A							12
B	Δ	A	Δ	A	A							13
A	Δ	A	Δ	A	A							14
A	Δ	A	Δ	A	A							15
A	Δ	A	Δ	A	A							16
B	Δ	A	Δ	A	A							17
A	Δ	A	Δ	A	A							18
A	Δ	A	Δ	A	A							19
A	Δ	A	Δ	A	A							20
A	Δ	A	Δ	A	A							21
A	Δ	A	Δ	A	A							22
A	Δ	A	Δ	A	A							23
A	Δ	A	Δ	A	A							24
A	Δ	A	Δ	A	A							25
A	Δ	A	Δ	A	A							26
A	Δ	A	Δ	A	A							27
A	Δ	A	Δ	A	A							28
A	Δ	A	Δ	A	A							29
A	Δ	A	Δ	A	A							30
A	Δ	A	Δ	A	A							31
		1	4	4								Count
												Median
												Mean

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

Characteristic foEs
Unit : Mc
Month May 1959

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			U4 OS	5 0				10 0	12 2	13 0	13 6	C
2								10 0	12 0	C	14 0	12 6
3								9 4	12 2	12 4	13 4	14 0
4	U7 OS							10 0	12 6	13 0	14 0	13 8
5					4 5			G	8 0	13 0	13 6	11 0
6		3 8						7 0	12 0	12 0	14 1	15 6
7	U5 OS	U7 OS	4 4				G	8 8	12 0	13 0	16 8	16 6
8								9 0	12 4	12 1	18 0	17 0
9	3 6	U6 6s	3 2					7 4	12 0	13 0	14 6	17 0
10								9 4	12 4	12 8	18 4	14 0
11							G	6 6	C	12 4	11 8	16 8
12								G	11 3	12 0	16 4	13 4
13			3 1	3 6				5 8	7 8	12 4	13 8	17 0
14							G	9 0	11 6	12 0	14 6	13 8
15							3 0	9 8	12 6	13 4	14 0	17 4
16				U5 OS			2 6	10 8	13 6	11 2	9 6	13 0
17	S	U4 8s					G	12 0	12 0	13 2	U18 2s	17 0
18			U5 OS				G	G	11 6	15 8	19 2	17 0
19		U4 8s	3 2	S			G	9 2	12 4	C	14 0	18 0
20	C	3 0	3 1				3 4	12 0	14 6	11 0	17 0	U18 OS
21				C			8 0	11 0	13 0	14 2	17 0	19 0
22							5 4	9 8	13 4	13 2	14 1	16 8
23			3 1	3 9			G	G	12 1	11 8	14 6	14 4
24		3 2	5 1	3 3				3 0	3 9	16 6	13 8	14 6
25		4 3		C	C	C	C	C	8 1	11 6	13 8	14 2
26				6 0			G	11 3	12 2	14 0	13 6	16 8
27	U7 OS	4 0	U5 OS	3 2	4 0			9 0	12 0	12 2	15 0	14 2
28							G	G	11 0	12 2	14 4	14 0
29	U4 6s	2 8						G	9 4	12 0	14 0	14 4
30	U9 OS	U6 OS					2 9	U10 OS	12 8	13 0	13 6	14 1
31							G	11 0	12 4	15 2	13 4	13 4
Mean	6 0	4 6	3 9	4 3			4 2	9 2	11 5	13 0	14 8	15 4
Median	6 0	4 3	3 6	3 9			G	9 1	12 0	13 0	14 1	14 5
Count	6	11	10	7	2		16	30	30	29	31	30

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month May 1959

TABLE 48—Contd
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
C	13 8	C	12 0	10 6	9 4							1
14 0	13 4	13 0	12 0	10 6	8 0					S	3 0	2
13 6	13 6	13 0	11 2	9 0	11 0	S					4 6	3
13 2	13 4	14 4	12 2	10 0	9 0						4 1	4
14 4	12 8	13 0	18 0	13 0	10 4	6 0					3 6	5
14 2	14 8	13 6	11 6	12 0	9 0						U4 0s	6
17 4	14 0	12 4	13 8	13 6	10 6	C						7
15 8	14 6	C	7 8	G	G	C		3 4	3 4	U9 8s	U8 0s	8
13 2	17 6	15 2	12 6	12 0	8 0							9
16 2	13 6	13 0	13 3	12 0	10 4							10
17 8	17 5	14 3	13 5	11 4	8 6							11
14 0	16 6	13 6	C	10 8	8 4					3 5		12
16 8	16 8	16 8	14 4	10 4	8 8				3 2		3 6	13
16 8	17 6	16 5	13 7	11 4	8 8							14
15 2	17 0	13 8	C	11 0	6 6	11 4						15
13 0	12 0	12 4	12 8	10 6	9 4	S					U6 1s	16
17 0	18 6	17 0	14 2	12 0	U10 0s					3 4		17
18 0	16 6	17 0	13 0	10 4	8 4					2 4	U4 4s	18
19 0	18 6	15 0	14 0	10 6	S					3 0		19
U20 0s	16 4	11 4	11 6	U20 0s	12 8	S					2 6	20
14 4	11 8	G	7 0	6 6	7 2	3 2					3 6	21
16 6	11 8	12 8	G	G	5 8	S					2 4	22
14 4	14 2	13 0	7 4	G							3 3	23
12 9	13 1	12 7	12 4	10 6	12 8	S			4 0			24
11 4	13 6	18 6	12 2	G	9 1							25
U18 0r	14 1	14 2	12 1	10 2	8 2				2 1	2 3	2 1	26
14 0	13 0	16 8	14 0	11 2	U8 0s	U3 2s						27
15 0	14 6	14 0	12 6	11 6	U9 0s	U4 0s			U4 8s	U3 2s	U3 0s	28
16 0	14 0	13 8	8 6	7 0	U10 0s	U3 4s					2 6	29
14 8	15 0	14 6	13 0	12 0	9 0						2 0	30
13 4	12 8	8 0	U7 0s	G	9 0						3 6	31
15 4	14 8	14 2	12 1	11 2	9 1	U5 2			3 5	4 0	3 7	Mean
14 9	14 2	13 8	12 4	10 6	9 0	U3 7			3 4	3 4	3 4	Median
30	31	29	29	31	29	6		1	5	12	16	Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month May 1959

TABLE 48—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		6 0	5 0				G	11 6	12 6	13 0	C	C
2							4 0	11 6	C	14 0	13 6	13 6
3							9 0	12 4	12 0	13 8	13 8	13 6
4							G	12 0	13 0	13 6	14 0	C
5			4 8		4 8		G	G	8 0	13 0	14 0	14 4
6		U5 0S					G	8 6	12 4	16 4	14 6	14 2
7	U5 0S	U8 2S					5 2	11 0	12 8	19 0	18 6	14 5
8							G	8 6	12 2	14 0	17 0	16 0
9	5 6						7 4	7 0	12 0	14 6	14 2	15 6
10							8 2	12 0	12 8	13 2	17 6	14 2
11							G	G	11 6	13 5	15 8	17 8
12	2 5						G	10 8	12 2	13 4	14 8	13 4
13	2 8	4 4					G	7 1	11 6	13 4	16 8	15 8
14							8 0	11 8	12 0	12 0	14 4	17 0
15	4 1				3 8		G	12 6	12 6	17 0	17 6	15 0
16			4 2				7 4	12 4	12 0	12 0	13 0	14 0
17	U4 6S						8 0	12 0	12 8	14 4	B	17 0
18	3 6	4 4	U5 0S				G	9 2	13 0	17 0	17 0	18 0
19	5 0	4 8	S	U6 8S			7 0	12 4	13 0	15 0	17 4	18 0
20	U5 0S		3 6				8 6	13 0	14 2	17 0	18 0	U19 0S
21	U5 0S		U5 4S			2 4	8 0	12 2	14 0	18 0	19 0	18 6
22			3 6				8 3	12 1	14 6	12 8	14 5	14 6
23	3 8						G	9 6	11 2	12 7	13 8	13 8
24	3 8	5 2	4 1				G	3 4	10 8	14 4	16 6	13 8
25	3 4	4 1		C	C	C	C	G	8 7	12 7	14 1	15 6
26			3 8				6 6	8 6	12 6	14 8	13 6	C
27	U5 0S	4 4	3 4	U7 0S			8 6	11 0	13 4	14 4	C	14 0
28							G	9 4	11 4	14 4	13 8	14 4
29	3 6	2 6					G	G	12 0	13 0	14 0	14 0
30	U7 0S	U3 0S					7 0	U12 0S	13 0	14 0	13 6	14 0
31						1 3	U7 0S	12 0	13 0	16 0	12 0	14 0
Count	16	11	10	2	2	2	30	31	30	31	28	28
Median	4 4	4 4	4 2				4 6	11 0	12 5	14 0	14 4	14 4
Mean	4 4	4 7	4 3				7 4	10 6	12 2	14 4	15 2	15 3

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit . Mc
Month May 1959

TABLE 48—*Conold*
Ionospheric Data
75 0°E Mean Time

Latitude . 10 2°N
Longitude : 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
17 4	13 4	G	11 0	9 0								1
14 6	13 8	12 0	11 0	8 4	R							2
14 0	12 8	13 0	10 0	11 4	11 0				3 6	5 0		3
14 0	14 6	13 0	11 0	12 0	8 4				4 0	3 8		4
12 8	13 0	16 0	16 0	13 6	11 0							5
15 6	14 6	14 0	12 0	9 1	U7 OS					3 8	U5 OS	6
14 1	13 4	12 0	12 6	10 6	U10 OS							7
16 6	14 6	G	G	7 3	7 4		2 4	7 6	U3 6s		U5 OS	8
14 2	15 8	14 0	12 0	7 8	7 6						3 7	9
18 4	14 6	12 0	12 0	11 0								10
17 0	17 4	12 5	11 2	10 5	S					3 4		11
16 6	14 4	8 8	11 6	9 6	S						3 2	12
16 8	17 0	14 6	12 2	10 8	S				3 8	S	4 6	13
15 6	17 0	12 6	11 8	9 2	S			2 0				14
17 0	17 0	14 8	11 6	6 6	11 0	U7 OS						15
18 4	14 0	9 4	10 0	10 6	8 2						9 0	16
18 0	16 6	14 0	13 6	10 4	U7 OS							17
18 2	17 0	14 6	U11 6s	9 0	U7 OS					3 8		18
19 0	17 4	16 0	U12 OS	10 2	S							19
19 0	14 4	12 0	U19 OS	14 4	S					2 2	3 0	20
12 0	12 0	14 0	7 2	7 0	S					2 8	3 8	21
14 2	13 4	6 4	8 0	3 8	S					2 2		22
14 7	12 9	11 2	G	4 9	G				3 9	4 6		23
13 6	12 8	12 8	11 2	12 4	14 8	3 2			4 4			24
12 7	13 7	9 9	8 7	6 8	4 3							25
13 7	14 6	13 2	12 8	U9 6s	3 2				4 6	2 8	3 6	26
14 0	17 0	14 0	12 0	8 0	U5 OS							27
14 0	13 8	13 0	11 8	10 0	S				2 2	U4 OS	U5 OS	28
15 0	14 0	11 0	6 0	9 0	U7 OS						U9 OS	29
14 4	15 0	13 6	11 6	9 0	U5 OS					U5 OS		30
13 0	10 2	G	9 0	4 0						2 8		31
31	31	29	31	31	18	2	1	2	8	13	11	Count
14 7	14 4	13 0	11 6	9 2	7 2				3 8	3 8	4 6	Median
15 4	14 6	12 7	11 4	9 4	7 8				3 8	3 6	5 0	Mean

Sweep 1 0 Mc. to 25.0 Mc in 27 seconds.

Characteristic fbEs
 Unit Mc
 Month . May 1959

TABLE 49
 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			1 6	1 8				3 0	3 6	4 0	4 2	C
2								2 9	3 6	C	4 2	4 3
3								3 2	3 5	4 0	4 2	4 4
4	3 0							3 1	3 5	4 0	4 6	4 4
5									3 6	4 3	4 3	4 4
6		1 6						3 2	3 7	4 2	4 4	4 4
7	1 4	2 0	1 5					3 0	3 5	4 1	4 2	4 3
8								3 2	3 6	4 2	4 4	4 4
9	1 8		1 9					3 2	3 6	4 1	4 2	4 4
10								3 1	3 6	4 0	4 2	4 3
11									C	4 4	4 6	4 6
12									3 6	4 0	4 3	4 6
13				1 6					3 7	4 0	4 4	4 6
14								3 1	3 6	4 2	4 2	4 4
15							2 3	3 1	3 6	4 0	4 2	4 4
16				1 9			2 4	3 0	3 4	4 0	4 2	4 3
17	2 1							3 3	3 6	4 0	4 2	4 6
18									3 7	4 0	4 0	4 4
19		1 8	1 2	2 0				3 0	3 6	C	4 1	4 4
20	C	1 5	1 7				2 3	3 0	3 6	4 0	4 2	4 2
21				C			2 4	3 0	3 6	4 0	4 2	4 3
22							2 2	3 0	3 6	4 0	4 2	4 3
23			1 4	1 6					3 5	3 9	4 1	4 2
24		2 0	2 1	1 9				3 0	3 5	4 7	4 2	4 3
25		1 8		C	C	C	C	C	3 4	3 9	4 0	4 2
26				1 8				3 0	3 5	3 7	4 0	4 3
27	1 7	1 2	2 0	1 5	1 7			3 0	3 6	4 0	4 2	4 4
28									3 6	4 0	4 3	4 2
29	U2 08								3 5	3 8	4 0	4 2
30		1 7							3 0	3 5	3 8	4 0
31								3 0	3 4	3 8	4 0	4 0
Mean	2 0	1 7	1 7	1 8			2 3	3 1	3 5	4 0	4 2	4 3
Median	1 9	1 8	1 6	1 8			2 3	3 0	3 6	4 0	4 2	4 4
Count	6	8	8	8	1		5	21	30	29	31	30

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

Characteristic $f_b E_s$
 Unit · Mc
 Month May 1959

TABLE 49
 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
C	4 5	C	3 8	3 2	2 8							1
4 3	4 3	4 0	3 9	3 4	2 8					2 1	2 0	2
4 4	4 3	4 2	3 9	3 3	3 1	2 4				1 9		3
4 3	4 4	4 1	3 8	3 6	3 2					2 1		4
4 4	4 3	4 2	5 6	4 6	4 0	2 1				1 8		5
4 5	4 3	4 2	4 2	3 5	3 0						1 4	6
4 4	4 2	4 0	4 2	5 6	3 0	C						7
4 4	4 4	C	4 0			C		1 6	2 2	1 7		8
4 6	4 4	4 2	3 9	3 4	3 0							9
4 4	4 2	4 1	4 2	4 0	3 1							10
4 8	4 6	4 2	4 0	3 5	3 0					1 9		11
4 7	4 3	4 4	C	3 4	2 9							12
.	4 4	4 4	4 0	3 5	3 0							13
4 4	4 3	4 2	3 8	3 6	2 8							14
4 4	4 2	4 0	C	3 4	2 8	3 6				2.8		15
4 4	4 4	4 0	3 8	3 5	3 0						1 7	16
4 6	4 4	4 2	3 8	3 5	2 9							17
4 4	4 4	4 2	3 8	3 4	2 8					1 3	1 7	18
4 2	4 4	4 1	3 8	3 6	3 0					1 6		19
4 3	4 4	4 2	3 8	6 2	3 6	2 0					1 5	20
4 2	4 2		3 9	3 4	2 8	2 0					1 3	21
4 3	4 2	4 2			2 8	2 4						22
4 3	4 1	4 1	4 0							1 9	2 0	23
4 4	1 1	4 2	3 8	3 4	5 2	2 2			2 5			24
4 2	4 2	4 4	3 8		2 9							25
4 2	4 2	4 0	3 6	3 3	2 8				1 7	1 4	1 3	26
4 3	4 3	4 1	4 0	3 4	2 9							27
4 3	4 4	4 0	3 8	3 3	2 8							28
4 2	4 2	4 0	3 7	3 4	2 8	2 0						29
4 2	4 2	4 0	4 0	3 3	2 8							30
4 0	4 0		3 6		3 0							31
4 4	4 3	4 1	3 9	3 7	3 1	2 3				1 9	1 6	Mean
4 4	4 3	4 2	3 8	3 4	2 9	2 2				1 9	1 6	Median
28	31	27	28	26	29	8		1	3	11	8	Count

Sweep 1 Mc to 25 0 Mc in 27 seconds.

Characteristic . f_oE_s
 Unit Mc
 Month May 1959

TABLE 49—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		1 3	2 0					3 2	3 8	4 1	C	C
2							2 6	3 2	C	4 2	4 3	4 4
3							3 0	3 4	5 2	4 3	4 4	4 3
4								3 4	3 8	4 2	4 4	C
5									3 7	4 2	4 4	.
6		1 8						3 5	4 0	4 0	4 4	4 4
7	1 8	2 3					2 7	3 2	3 6	4 0	4 2	4 5
8								3 5	3 9	4 4	4 4	4 4
9	2 1						2 7	3 4	4 0	4 1	4 2	4 3
10							2 8	3 4	4 0	4 0	4 2	4 3
11									4 2	4 4	4 8	4 8
12	1 3							3 3	3 9	4 0	4 4	4 5
13	2 0	2 2						3 4	4 0	4 2	4 4	4 5
14								3 3	3 8	4 0	4 2	4 4
15	1 7							3 3	3 8	4 0	4 2	4 4
16							2 7	3 3	3 7	4 0	4 2	4 4
17	2 0						2 8	3 4	3 8	4 2	4 4	4 6
18	2 0	1 6	1 4					3 4	3 8	4 2	4 4	4 4
19	2 0	2 0	2 0	2 2			2 8	3 4	3 7	4 0	4 2	4 6
20	2 2		1 2				2 7	3 4	3 8	4 0	4 2	4 4
21	2 2					2 2	2 4	3 4	3 8	4 0	4 2	4 3
22							2 7	3 4	3 8	4 0	4 4	4 3
23	1 8							3 4	3 7	3 9	4 3	4 2
24	2 2	2 1	1 9					3 3	3 7	4 2	4 2	4 3
25	1 8			C	C	C	C		3 5	3 9	4 1	4 2
26			1 3				2 7	3 2	3 6	4 0	4 3	C
27	1 7	2 2	1 5	1 6			2 8	3 4	4 0	4 0	C	4 2
28	1 5							3 4	3 9	4 0	4 2	4 4
29									3 7	4 0	4 2	4 0
30	2 6	UI 6s					2 8	3 2	3 7	4 0	4 2	4 2
31								3.2	3 6	4 0	4 0	4 0
Mean	1 9	1 9	1 6				2 7	3 3	3 8	4 1	4 3	4 4
Median	2 0	2 0	1 5				2 7	3 4	3 8	4 0	4 2	4 4
Count	16	9	7	2		1	15	27	30	31	27	27

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic f_bEs
Unit Mc
Month May 1959

TABLE 49—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
4 2	4 2	C	3 6	3 1								1
4 6	4 2	4 0	3 6	3 1								2
4 3	4 4	4 0	3 6	3 5	3 0				1 6	1 7		3
4 4	4 2	4 0	3 8	4 0	2 6				2 2	2 0		4
4 3	4 3	4 3	5 0	5 0	4 4							5
4 5	4 2	4 2	4 0	3 3	2 7							6
4 3	4 1	4 0	5 4	3 4	3 0					1 4	1 5	7
4 4	4 2	C		6 0	2 6		1 4	1 6				8
4 6	4 3	4 1	3 7	3 2	2 6						1 5	9
4 3	4 2	4 2	4 8	3 8								10
4 6	4 5	4 3	4 0	3 2	2 5					2 1		11
4 6	4 3	4 0	3 8	3 2	2 5						1 7	12
4 7	4 2	4 2	3 6	3 1	2 4						1 9	13
4 4	4 2	4 1	3 6	3 4	2 5			1 4				14
4 3	4 2	4 0	3 9		5 0	3 4						15
4 5	4 4	4 0	3 7	3 4	2 5						2 6	16
4 6	4 4	4 2	3 7	3 2	2 4							17
4 4	4 2	4 0	3 6	3 2	2 5					1 3		18
4 4	4 0	4 0	3 8	3 2	2 6							19
4 3	4 3	4 2	6 2	5 2	2 4							20
4 4	4 2	4 0		3 3	2 5					1 3	1 5	21
4 3	4 1	4 0	3 5	3 2	2 5					1 4		22
4 2	4 2	4 1		4 1	3 6					1 8		23
4 3	4 1	4 0	3 6	4 4	5 0	1 7			1 9	2 0		24
4 2	4 3	4 0	3 6	3 2	2 3				2 0			25
4 2	4 2	3 9	3 6	3 1	2 4				1 7	1 5		26
4 2	4 3	4 0	3 8	3 2	2 4							27
4 2	4 0	4 0	3 5	3 1	2 4							28
4 2	4 1	4 0	3 6	3 0	2 5							29
4 2	4 2	4 0	3 8	3 2	2 3							30
4 0	4 0		3 6	3 0								31
4 4	4 2	4 1	3 9	3 5	2 8				1 9	1 6	1 8	Mnea
4 3	4 2	1 0	3 7	3 2	2 5				1 9	1 5	1 6	Median
31	31	28	28	29	27	2	1	2	5	9	6	Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · f min
Unit : Mc
Month May 1959

TABLE 50
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	13	12	10	11	18	19	22	20	22	24	25	C
2	15	15	12	15	17	16	21	18	20	C	26	28
3	20	16	15	14	16	16	23	18	20	32	30	32
4	12	13	12	13	13	20	22	20	22	30	46	30
5	16	14	15	15	14	15	22	19	25	34	30	32
6	13	10	15	13	17	15	22	21	28	35	36	32
7	10	10	11	16	16	16	19	14	22	23	26	30
8	16	14	17	19	17	17	24	26	26	31	28	32
9	15	14	13	20	17	15	23	20	24	28	31	30
10	18	13	14	15	16	17	24	16	22	25	26	30
11	14	11	11	13	15	15	22	28	C	36	40	39
12	14	13	16	13	15	14	24	20	24	26	30	32
13	15	13	14	15	15	12	24	22	25	28	31	32
14	17	21	16	16	17	14	22	22	22	30	29	33
15	18	15	14	14	12	14	16	18	22	26	30	28
16	18	17	16	15	11	12	18	20	22	24	28	30
17	16	20	17	15	16	14	15	26	23	26	28	40
18	16	20	17	16	13	13	19	20	25	27	30	32
19	12	12	E	11	20	16	18	18	21	C	26	34
20	C	11	E	12	13	14	16	18	19	22	24	26
21	14	16	18	C	17	15	20	18	22	25	26	28
22	13	14	13	12	12	12	17	19	22	25	26	28
23	12	14	12	13	14	16	15	22	21	23	25	26
24	18	19	15	16	14	16	19	20	22	26	25	26
25	16	14	16	C	C	C	C	C	19	21	24	25
26	19	16	18	15	13	17	15	17	21	22	25	25
27	E	E	E	E	12	20	24	21	24	24	28	28
28	14	14	20	20	16	14	14	20	19	20	26	28
29	E	E	15	13	16	14	24	18	21	22	24	28
30	10	11	E	12	13	11	14	16	18	22	24	26
31	17	10	14	14	13	13	12	15	16	20	24	26
Mean	15	14	15	14	15	15	20	20	22	26	28	30
Median	15	14	14	14	15	15	20	20	22	25	26	30
Count	30	31	31	29	30	30	30	30	30	29	31	30

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic . f min
Unit . Mc
Month May 1959

TABLE 50
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
C	4 2	C	2 9	2 2	2 0	1 7	1 4	1 8	1 8	1 6	1 2	1
3 1	3 0	2 6	2 6	2 4	2 0	1 7	1 7	1 5	1 8	1 5	1 6	2
3 0	3 2	3 0	2 8	2 6	1 8	1 6	1 4	1 7	1 9	1 3	1 6	3
3 2	3 0	3 1	2 9	2 0	1 7	2 0	1 7	1 5	1 8	1 4	2 0	4
3 6	3 1	2 8	2 7	2 4	2 2	1 8	1 5	1 5	1 8	1 2	1 6	5
3 2	3 1	3 0	3 0	2 5	2 2	1 9	1 6	1 6	1 6	U1 5 ^s	1 0	6
3 0	2 7	2 6	2 2	2 1	2 0	C	U1 9 ^s	U1 9 ^s	2 0	2 0	1 6	7
3 2	3 1	C	3 0	2 4	2 2	C	1 4	1 3	1 4	1 4	1 4	8
3 8	3 2	2 9	2 5	2 3	2 0	1 9	1 1	1 5	1 6	1 6	1 5	9
3 0	2 8	2 7	2 8	2 6	2 2	1 9	1 1	1 6	1 6	1 5	1 5	10
U4 2 ^s	3 6	3 2	3 0	2 6	2 2	1 8	1 7	C	1 8	1 1	1 6	11
3 2	3 0	2 7	C	2 5	2 0	1 9	1 3	1 5	1 7	1 5	1 4	12
5 0	3 3	3 8	2 6	2 3	2 0	1 8	1 2	1 7	2 1	1 9	1 8	13
3 0	2 8	2 6	2 5	2 3	1 8	1 9	1 6	1 5	1 3	1 7	1 6	14
3 0	2 8	2 7	C	2 4	1 6	1 2	S	2 3	2 1	2 0	2 0	15
3 0	3 0	2 6	2 1	2 2	2 0	1 9	1 7	U1 7 ^s	1 7	S	1 2	16
3 6	3 2	3 0	2 5	2 2	1 9	2 0	2 6	1 8	2 0	1 5	1 8	17
3 0	3 0	2 7	2 5	2 2	1 9	2 0	1 4	1 6	1 5	E	1 2	18
3 0	2 8	2 6	U2 2 ^s	2 4	1 8	2 0	1 5	1 4	1 7	E	1 3	19
3 0	2 6	2 4	2 2	2 1	1 8	1 5	1 2	1 6	1 3	1 5	1 1	20
2 8	2 8	2 8	2 4	2 3	1 8	1 1	1 3	1 5	1 6	1 4	E	21
2 8	2 6	2 5	2 4	2 5	1 6	1 2	1 4	1 6	1 8	1 4	1 4	22
2 7	2 5	2 3	2 4	2 2	2 6	U2 0 ^s	1 8	1 8	1 4	1 1	1 9	23
2 7	2 8	2 6	2 5	2 2	1 7	1 8	1 4	1 5	1 5	1 8	2 0	24
2 6	2 6	2 5	2 2	2 3	1 9	2 5	1 2	1 4	1 8	1 8	1 6	25
2 5	2 5	2 6	2 4	2 3	1 9	1 9	1 4	1 5	1 3	1 2	1 1	26
2 8	2 7	2 6	2 6	2 0	1 7	1 1	1 5	S	S	S	1 5	27
3 0	3 0	2 6	2 4	2 0	1 7	1 5	S	1 4	S	1 3	E	28
2 8	2 6	2 5	2 6	2 4	1 5	S	S	S	1 7	S	1 3	29
2 6	3 0	S	2 6	2 2	2 0	2 0	1 3	1 5	S	S	S	30
2 6	2 6	2 4	2 6	2 2	1 5	2 0	1 3	1 7	S	S	1 3	31
3 1	2 9	2 7	2 6	2 3	1 9	1 8	1 5	1 6	1 7	1 5	1 5	Mean
3 0	3 0	2 6	2 5	2 3	1 9	1 9	1 4	1 6	1 7	1 5	1 5	Median
3 0	3 1	2 8	2 9	3 1	3 1	2 8	2 8	2 8	2 7	2 6	3 0	Count

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

Characteristic f_{min}
Unit Mc
Month May 1959

TABLE 50—Contd
Ionospheric Data
75 °E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	11	11	10	15	19	20	19	21	23	24	C	C
2	17	16	17	15	17	20	20	20	C	S	28	30
3	17	15	15	14	15	18	20	19	52	30	30	30
4	14	12	13	14	16	20	22	22	23	30	34	C
5	16	15	15	15	14	17	19	20	27	26	30	60
6	14	15	15	15	19	20	23	22	30	37	30	32
7	12	12	13	16	15	18	20	17	22	23	28	27
8	14	17	18	16	16	19	23	27	27	31	32	31
9	13	16	16	15	17	18	18	21	23	28	28	32
10	15	15	16	15	16	19	17	21	23	24	26	30
11	15	14	14	13	15	19	26	30	34	S	40	36
12	13	14	16	15	13	18	22	21	25	26	30	31
13	13	E	13	16	15	18	21	25	24	28	50	31
14	16	15	16	18	14	18	21	20	25	26	29	32
15	15	15	14	12	14	17	19	21	24	26	28	30
16	15	15	16	14	13	17	21	22	23	24	31	31
17	17	18	17	15	15	17	19	23	23	27	31	36
18	16	15	12	14	13	17	20	21	24	30	30	30
19	13	20	11	16	18	20	18	19	22	24	28	30
20	E	18	11	13	15	17	16	19	23	24	26	27
21	15	16	18	15	15	15	19	21	23	26	28	28
22	15	12	12	10	13	17	18	18	23	24	30	30
23	10	14	15	16	13	17	18	17	23	24	26	26
24	19	14	12	15	17	13	18	21	24	25	25	27
25	16	14	15	C	C	C	C	18	20	22	25	27
26	16	15	10	15	15	19	18	21	23	24	25	C
27	E	E	E	E	18	22	20	23	24	26	C	26
28	17	17	20	22	17	16	14	18	22	22	26	26
29	E	11	14	13	15	16	20	17	22	22	26	26
30	11	E	13	14	11	16	16	17	20	22	24	26
31	15	12	S	15	13	11	13	16	20	20	26	26
Mean	15	15	14	15	15	18	19	21	25	26	31	30
Median	15	15	14	15	15	18	19	21	23	25	28	30
Count	31	31	30	30	30	30	30	31	30	29	29	28

Sweep 1 Mc to 25 Mc. in 27 seconds

Characteristic f min
Unit Mc
Month May 1959

TABLE 50—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
2 8	3 0	C	2 6	2 2	2 3	1 5	1 8	1 6	1 5	1 2	1 4	1
3 0	2 9	2 9	2 5	2 2	2 0	1 6	1 5	1 4	1 5	1 9	1 6	2
3 4	3 0	3 0	2 6	2 0	1 7	1 6	1 7	1 8	1 2	1 3	1 5	3
2 8	3 1	2 8	2 1	1 8	1 5	1 7	1 6	1 6	1 3	1 4	1 9	4
3 4	3 0	2 8	5 0	2 4	1 8	1 4	1 5	1 6	1 4	1 6	1 6	5
3 4	3 0	3 3	3 1	2 3	2 1	1 7	1 5	1 5	1 4	1 3	1 0	6
2 8	2 8	2 8	2 2	1 8	UI 8s	2 0	UI 7s	UI 8s	1 7	1 6	1 6	7
3 2	3 1	C	3 0	2 4	2 2	1 6	1 0	1 0	1 5	1 4	1 6	8
3 6	3 1	2 7	2 6	2 1	2 0	1 3	1 8	1 7	1 5	1 4	1 3	9
2 9	2 8	3 1	2 7	2 4	2 7	1 4	1 6	1 7	1 5	1 3	1 5	10
3 6	3 5	3 2	3 0	2 4	2 0	1 4	1 6	2 0	1 7	1 9	1 6	11
4 2	3 0	2 7	2 8	2 1	1 7	1 4	1 5	1 8	1 4	1 1	1 6	12
4 2	3 0	3 0	2 7	2 3	2 4	1 4	1 8	2 0	2 2	1 7	1 6	13
3 0	2 8	3 0	2 5	2 3	1 8	1 6	1 5	E	1 7	1 3	1 6	14
3 0	2 5	2 3	2 2	2 6	1 6	1 3	2 0	2 4	1 7	2 2	2 0	15
3 4	2 9	2 5	3 0	2 0	1 9	1 4	1 7	1 6	S	1 4	1 6	16
3 4	3 0	2 9	2 4	2 2	1 7	1 3	2 4	1 6	1 6	1 9	1 9	17
3 0	2 8	2 8	2 3	2 1	1 6	1 2	1 4	1 6	UI 4C	1 1	1 7	18
2 8	2 4	2 5	2 2	2 2	S	1 3	1 5	1 7	1 2	1 4	1 7	19
2 7	2 4	UI 6s	2 2	2 0	1 7	1 3	1 5	1 5	1 5	1 4	1 5	20
2 8	2 6	2 8	2 4	2 6	1 4	1 8	1 4	1 4	1 3	1 1	1 1	21
2 6	2 4	2 5	2 6	2 0	1 4	1 6	1 6	1 7	1 4	1 2	1 2	22
2 6	2 4	2 3	2 5	2 2	2 3	1 9	1 8	1 7	1 3	1 3	1 9	23
2 6	2 6	2 7	2 4	1 9	1 7	1 3	1 3	1 9	1 6	1 9	1 6	24
2 6	2 5	2 4	2 2	2 1	1 6	1 6	UI 6s	1 6	1 8	1 7	2 0	25
2 6	2 6	2 2	2 2	2 0	2 0	1 5	1 7	1 5	UI 1S	1 0	E	26
2 7	2 8	2 6	2 4	1 9	1 4	UI 4s	S	S	S	UI 5s	1 9	27
2 8	2 6	2 5	2 1	2 0	1 7	UI 5C	S	S	E	F	E	28
2 6	2 6	2 6	2 0	1 8	1 3	UI 5s	S	S	1 5	S	1 2	29
2 6	2 8	S	2 4	2 1	1 6	1 5	1 8	S	S	E	S	30
2 6	2 2	2 3	2 5	1 9	2 4	S	1 5	S	S	E	1 5	31
3 0	3 1	2 7	2 6	2 1	1 8	1 5	1 6	1 7	1 5	1 5	1 6	Mean
2 8	2 8	2 7	2 5	2 1	1 8	1 5	1 6	1 6	1 5	1 4	1 6	Median
3 1	2 8	2 8	3 1	3 1	3 0	3 0	2 8	2 6	2 7	3 0	3 0	Count

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

Characteristic · h'F₂
 Unit Km
 Month May 1959

TABLE 51
 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									L	L	L	C
2								L	L	C	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	LH	L	L
10								L	L	L	L	L
11							L	L	C	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	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	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25							C	L	L	L	L	L
26								L	L	L	L	LH
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								L	L	L	u28oL	L
Mean												
Median												
Count											:	.

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month May 1959

TABLE 51
 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
C	L	C	L	L	L							1
L	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	L							4
L	L	L	L	L	L							5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
L	L	L	L	L	L							15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
L	L	L	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28
L	L	L	L	L	L							29
L	L	L	L	L	L							30
L	L	L	L	L	L							31
												Mean
												Median
												Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic h'F₂
 Unit : Km
 Month : May 1959

TABLE 51—Cont'd
 Ionospheric Data
 75 0°E Mean Time

Latitude · 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	C	C
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	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L ^H	L
10							L	L	L	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	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	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25							C	L	L	L	L	L
26							L	L	L	L	L	C
27							L	L	L	L	L	L
28							L	L	L ^H	L	L	L
29							L	L	L	L	L	L
30							L	L	L	L	L	L
31								L	L	L	U _{290L}	U _{920L}
Mean												
Median												
Count											1	1

Sweep 10 Mc to 250 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month May 1959

TABLE 51—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10.2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
L	L	C	L	L								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	L	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	L	L	L								20
L	L	L	L	L								21
L	L	L	L	L								22
L	L	L	L	L								23
L	L	L	L	L								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
												Mean
												Median
												Count

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month May 1959

TABLE 52
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	260	280	320	305	240	220	265	240	235	220	215	C
2	235	250	260	240	225	215	260	240	215	C	200	220
3	300	260	245	225	220	220	255	240	220	225	215	200
4	290	275	275	240	220	225	255	240	230	220	220	215
5	280	300	300	240	220	220	250	240	240	240	230	220
6	350	325	275	220	215	210	260	240	230	220	210	205H
7	F	F	U280F	240	220	250	255	235	215	200H	205H	200
8	315	U345F	U320F	U260F	U220F	215	260	245	235	230	230	215H
9	275	260	265	260	230	220	255	250	235	225	215H	220H
10	U300F	U275F	260	245	220	220	265	245	230	225	215	210H
11	260	275	260	240	220	220	265	250	C	235	225	220H
12	265	260	300	280	240	215	240	240	230	220	220	215H
13	340	360	380	300	240	215	260	245	235	225	220	215H
14	265	300	300	260	260	245	260	240	230	220	210	220
15	250	260	260	240	225	215	260	240	230	220	210	200
16	280	300	300	260	240	260	260	240	240	220	220	210
17	270	260	260	240	205	220	260	240	220	220	220	220
18	260	300	300	245	215	210	255	240	235	220	220	210
19	315	345	360	295F	240	240	275	250	220	C	205	210H
20	C	280	300	260	230	220	260	240	230	220	210	205H
21	280	280	280	C	260	240	270	240	220	220	210	210
22	330	315	325	340	300	245	270	235H	235	220H	200H	210
23	F	F	F	340	260	215	260	240	230	220	220	215
24	385F	395F	F	390	310	270	270	260	235	U250A	220	210H
25	380	340	265	C	C	C	C	C	240	230	215H	210H
26	305	315	290	260	220	220	260	240	235	230H	200H	200H
27	300	265	280	260	235	220	260	240	230	220	210	210
28	280	270	290	260	225	210	255	240	220	220	220	210
29	FS	350	300	265	240	220	260	230	220	210	205	200
30	320	320	260	240	230	240	260	220H	210H	210	200	210
31	280	260	290	310	285	240	270	240	230	215	205	200
Mean	295	295	290	270	235	225	260	240	230	220	215	210
Median	280	280	290	260	230	220	260	240	230	220	215	210
Count	27	29	29	29	30	30	30	30	30	29	31	30

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'F
Unit - Km
Month May 1959

TABLE 52
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
C	220	C	220	240	260	300	400	F	330	260	240	1
205	200	215	225	240	255	300	430	F	F	F	340	2
200	215	200	220	235	260	300	405	460	380	F	280	3
200	200	200	220	225	270	300	420	F	390	360	300	4
220	215	220	A	260	A	300	440	450	F	F	380	5
200	210H	220	240	240	255	U295r	U400r	F	F	F	F	6
200	200H	205	220	A	265	C	420	F	F	365F	340	7
215	205H	C	235	240	260	C	U380F	F	335	300	280	8
220H	210H	215	235H	245	260	300	U420F	F	U440F	U360F	U300F	9
205	200	205	245	A	265	310	U420r	U440r	U370r	F	U300F	10
230	225	220	225	235	260	300	395	F	U380F	355	305	11
215H	215	220	C	240	270	315	425	F	U420F	250	305	12
B	220	220	235	240	260	300	355	F	320	280	260	13
210	205	205	200H	235	260	295	400	445	440	315	270	14
215	210	210	C	240	255	310	440	F	465	F	270	15
210	230	220	235	240	260	300	400F	F	U320r	U320Fs	280r	16
210	230	220	220	240	260	300	420	U400r	380	320	280	17
220	210	220	220	230	260	300	380	U380F	400r	320	310	18
210	200H	215	220	A	260	280	360F	U360F	U340F	320	265	19
220	200	220	230	240	260	300	U400F	F	F	F	U320F	20
200H	200	220	220	210	245	300	U340F	U350F	F	U380F	320	21
220	220	220	220H	235H	260	295	380r	F	F	F	l'	22
215	215H	210H	230	235	260	300	360	F	F	F	F	23
210	210	200	220	250	A	300	400	450F	405	395	400	24
215	220	U230A	230	240	270	320	380	485	F	F	345	25
215H	210	205	230	220H	250	295	405F	F	F	420F	360	26
200	210	210	230	240	260	290	380	F	F	F	320	27
200	205	200	205	225	250	280	F	300	FS	FS	FS	28
200	200	200	220	230	250	290	420	FS	440F	FS	FS	29
210	205	210	220	220	240	270	340	370F	F	F	300F	30
200	200	210	210H	220	250	270	330	380F	F	400	290F	31
210	210	215	225	235	260	295	395	405	355	335	305	Mean
210	210	215	220	240	260	300	400	400	380	320	300	Median
29	31	29	28	28	29	29	30	13	17	17	26	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'F
Unit Km
Month May 1959

TABLE 52—*Conid*
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	260	300	320	280	220	235	250	240	230	220	C	C
2	240	260	260	230	220	240	260	235	C	205	200	205
3	280	255	240	220	215	240	245	235	B	220	215	200
4	270	280	260	240	220	240	250	240	220	220	220	C
5	285	295	295	220	220	220	250	235	230	230	220	B
6	335	U300F	245	225	215	245	245	240	230	215	205	205H
7	F	U340F	U260F	225	250	245F	245	230	220	200H	200H	200
8	U325F	U320F	U300F	235	210	240	250	235	230H	220	220H	200
9	270	265	260	250	225	250	250	240	230	210H	225H	215H
10	U280F	265	260	235	220	260	250	245	230	220	215H	210H
11	280	275	260	225	205	250	255	250	240	U225S	230	220
12	260	280	300	260	220	250	245	235	225	215	220H	225
13	365	U390A	320	280	220	245	250	240	235	220	B	205H
14	280	300	280	265	260	270	250	235	225	210	205H	215
15	255	260	260	240	210	250	245	235	220	210	205	205
16	300	300	270	240	250	280	260	240	230	220	215	200
17	270	260	250	225	215	270	260	235	220	225	B	210
18	280	310	275	225	220	240	245	230	220	220	220	200H
19	320	380	U340F	280	240	260	260	240	220	220	210H	U200L
20	260	300	280	240	220	270	260	240	220	210	210	215
21	285	270	280	280	260	270	270	230	220	220	210	205
22	330	325	335	325	270	280	255	235	220	210H	210	220
23	F	F	U375F	300	220	260	250	240	235	220	210	210
24	390F	405F	400	370	265	230	275	245	235	220	215H	210
25	360	315	240	C	C	C	C	255H	235H	220H	215H	210
26	305	305	280	245	220	240	245	240	230	205	200	C
27	280	270	265	240	225	250	255	240	230	210	C	205
28	270	270	260	230	215	245	240	230	220	210H	210H	190H
29	350	340	270	240	230	270	245	220	210	200	210	200
30	310	280	260	240	230	280	250	230	210	210	220	210
31	270	300	FS	290	250	270	250	230	220	220	200	205
Mean	295	300	285	255	230	255	250	235	225	215	210	205
Median	280	300	270	240	220	250	250	235	225	220	210	205
Count	29	30	30	30	30	30	30	31	29	31	27	27

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic h'F
Unit Km
Month May 1959

TABLE 52—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
210	220	C	235	245	275	340	F	320	320	260	235	1
205	200	220	230	250	270	340	F	F	F	360	310	2
210	215	220	220	260	280	340	160	400	F	300	275	3
200	210	200	235	235	270	340	460	410	380	335	280	4
220	220	230	A	A	A	350	F	470	F	400	U360F	5
220	205II	220	240	250	275	330	F	F	F	F	F	6
200II	200	200II	A	250	280	340	U480F	1	F	355	310	7
210II	200	C	240	A	275	355	J	345	325	280	280	8
215	220II	230	235	255	275	360	F	F	U400F	330	U285F	9
200	200	225	A	270	285	360	U420F	F	F	U270F	U290F	10
235	220	220	230	250	280	335	U415I	F	380	335	270	11
225	215	225	240	260	300	355	500	U460I	U360I	260	310	12
225	215	220	240	240	265	325	F	345	300	260	260	13
205	210	210	225	245	270	325	F	415	345	290	260	14
210	205	205	225	245	A	355	F	F	400	30,II	280	15
225	210	235	240	270	280	340	F	U400F	U400F	U280F	300	16
220	220	220	220	270	270	340	U400F	120	340	300	275	17
220	220	220	220	240	280	330	U380F	U380F	U340F	320	310	18
210	210	215	220	240	270	320	U360I	U330F	320F	230	260	19
200	210	220	A	A	275	340	U410F	F	F	U360F	300F	20
205	210	220	225	250	265	335	U400F	U320F	U400F	U360F	325	21
225	225	220	225II	240	270	320	F	F	F	F	F	22
210II	205II	235	230	250	U230A	340	F	F	F	F	380	23
215	205	205II	235	A	A	340	435	405	400	395	385	24
220	230	225	240	245	285	330	120	F	F	U370F	320	25
215	210	210	235	240	280	325	F	F	U390F	U390F	340	26
200	210	210	230	250	270	320	F	F	F	360	300	27
200	210	220	210	230	260	310	F	FS	FS	FS	FS	28
200	200	220	220	240	260	340	FS	FS	420F	FS	300	29
205	210	220	230	230	260	300	370F	F	F	FS	FS	30
200	220	220	225	220	260	290	360I	F	F	400	270	31
210	210	220	230	245	275	335	425	385	360	325	300	Mean
210	210	220	230	250	275	310	120	400	360	330	300	Median
31	31	29	27	27	28	31	15	14	17	25	27	Count

Sweep 1 Mc. to 25 Mc in 27 seconds.

Characteristic h'E
 Unit Km
 Month May 1959

TABLE 53
 Ionospheric Data
 73 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								110	A	A	A	C
2								105	A	C	A	A
3								A	A	A	A	A
4								105	A	A	B	A
5								105	110	A	A	A
6								110	A	A	A	A
7							135H	A	A	A	A	A
8								125H	A	A	A	A
9								105	120	A	A	A
10								A	A	A	A	A
11							120	120	C	A	B	B
12								110	105	A	A	A
13								120	120	A	A	A
14							130	105	A	A	A	A
15								110	A	A	A	A
16							A	120	110	A	A	A
17							120	110	A	A	A	B
18							135	120	A	A	A	A
19							120	115	110	C	A	B
20							A	115	A	A	A	A
21								115	110	A	A	A
22							130	105	100	100	100	100
23							120	115	105	A	A	A
24								115	115	100	A	A
25							C	C	100	100	A	A
26							120H	115	A	A	A	A
27								A	A	A	A	A
28							120	110	110	A	110	A
29								110	110	110	A	A
30							120	110	110	110	110	A
31							110	A	A	A	A	A
Mean							125	110	110	105		
Median							120	110	110	100		
Count							12	25	14	5	3	1

Sweep 1 Mc. to 25 Mc in 27 seconds.

Characteristic h'E
Unit Km
Month May 1959

TABLE 53
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
C	A	C	A	105	110							1
A	A	A	A	A	A							2
A	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	A							7
A	A	C	120	115	120							8
A	A	A	105	115	125							9
A	A	A	A	A	A							10
B	A	A	A	A	A							11
A	A	A	C	A	105							12
B	A	B	A	A	A							13
A	A	A	A	A	A							14
A	A	A	C	A	A							15
A	A	A	110	A	120							16
B	B	A	110	110	120							17
A	A	110	110	110	120							18
A	A	A	110	110	120							19
A	A	A	110	110	A							20
A	A	120	100	115	120							21
100	100	100	105	115	A							22
A	A	A	A	A	115							23
A	A	A	A	A	A							24
A	A	A	A	120	A							25
A	A	A	A	A	A							26
A	A	A	110	A	A							27
A	110	110	A	A	120							28
A	A	A	120	A	A							29
A	A	A	A	110	120							30
A	110	120	110	120								31
		110	110	115	120							Mean
		110	110	115	120							Median
1	3	5	12	13	11							Count

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic h'E
Unit . Km
Month May 1959

TABLE 53—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							120H	A	A	A	C	C
2								A	A	A	A	A
3							A	A	B	A	A	A
4							120	A	A	A	A	C
5							110H	105	105	A	A	B
6							120	115	A	A	A	A
7							115	A	A	A	A	A
8							130H	120	A	A	A	A
9							115	110	A	A	A	A
10							110	105	A	A	A	A
11							120	120	A	A	B	A
12							120	105	105	A	A	A
13							120	120	A	A	B	A
14							120	100	A	A	A	A
15							115	A	A	A	A	A
16							120	110	110	A	A	A
17							110	110	A	A	B	B
18							120	120	A	A	A	A
19							120	110	110	A	P	A
20							120	110	A	A	A	A
21							120	110	A	A	A	A
22							120	105	100	100	100	100
23							120	105	A	A	A	A
24							120	115	100	100	A	A
25							C	105	100	A	A	A
26							115H	A	A	A	A	C
27							A	A	A	A	C	A
28							110	110	A	A	A	A
29							120	105	110	A	A	A
30							115	110	110	A	A	A
31							110	A	A	A	110	A
Mean							120	110	105			
Median							120	110	105			
Count							27	22	9	2	2	1

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
Unit Km
Month May 1959

TABLE 53—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	A	C	A	110								1
A	A	A	A	A								2
A	A	A	115	A								3
A	A	A	A	A								4
A	A	A	A	A								5
A	A	A	A	A								6
A	A	A	A	A	A							7
A	A	C	120	120								8
A	A	A	A	120								9
A	A	A	A	A								10
A	A	A	A	A	A							11
B	A	A	A	110	115							12
B	A	A	A	A								13
A	A	A	A	A								14
A	A	A	A	120								15
A	A	A	A		120							16
B	A	A	110	115	120							17
A	110	110	110	115	120							18
A	100	A	110	110	115							19
A	A	110	110	A								20
A	A	A	115	120								21
100	100	100	110	110	A							22
A	A	A	115	115								23
A	A	A	A	A								24
A	A	A	105	120								25
A	A	A	A	115								26
A	A	A	A	120								27
A	110	A	110	110								28
A	A	120	A	A								29
110	A	A	110	120								30
A	110	110	A	A								31
2	5	5	12	16	4							Mean
	110	110	110	115								Median
	105	110	110	115								Count

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

Characteristic $h'E_s$
Unit . Km
Month May 1959

TABLE 54
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	105				100	100	100	100	G
2								100	100	C	100	100
3								100	100	100	100	100
4	115							100	100	100	100	100
5					120			G	105	100	100	100
6		110						105	100	100	100	100
7	110	110	105				G	100	100	100	100	100
8								110	100	100	100	100
9	120	120	105					100	105	100	100	100
10								100	100	100	100	100
11							G	120	C	100	100	100
12								G	100	100	100	100
13			120	120				135	105	100	100	100
14							G	100	100	100	100	100
15							110	100	100	100	100	100
16				110			130	105	100	100	100	100
17	110	105					G	100	100	100	100	100
18			130				G	G	100	100	100	100
19		120	115	105			G	100	100	C	100	100
20	C	120	120				120	100	100	100	100	100
21				C			120	100	100	100	100	100
22							100	100	100	100	100	100
23			120	110			G	G	100	100	100	100
24		135	120	120				165	135	100	100	100
25		135		C	C	C	C	C	100	100	100	100
26				120			G	100	100	100	100	100
27	110	120	110	U120C	100			110	100	100	100	100
28							G	G	100	100	100	100
29	100	100						G	100	100	100	100
30	120	120					130	100	100	100	100	100
31							G	100	100	100	100	100
Mean	110	120	115	115			120	105	100	100	100	100
Median	110	120	120	115			120	100	100	100	100	100
Count	7	11	10	8	2		6	24	30	29	31	30

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month May 1959

TABLE 54
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
C	100	C	100	100	105							1
100	100	100	100	100	100					105	105	2
100	100	100	100	100	100	S				120	130	3
100	100	100	100	100	100					120		4
100	100	100	100	100	100	100				115		5
100	100	100	100	100	105						110	6
100	100	100	100	100	100	C						7
100	100	C	105	G	G	C		125	110	120	120	8
100	100	100	100	105	110							9
100	100	100	105	100	105							10
100	100	100	100	100	105					120		11
100	100	100	C	100	105							12
100	100	100	100	100	100				130		140	13
100	100	100	100	100	105							14
100	100	100	C	100	100	100				120		15
100	110	100	100	100	100	100					120	16
100	100	100	100	100	100					120		17
100	100	100	100	100	110					140	120	18
100	100	100	100	100	110					120		19
100	100	100	100	100	110	110					125	20
100	100	G	100	100	100	100					120	21
100	100	100	G	G	100	100					125	22
100	100	100	100	G						120	125	23
100	100	100	100	100	100	100			130			24
100	100	100	100	G	120							25
100	100	100	100	100	115				125	125	120	26
100	100	100	100	100	100	100						27
100	100	100	100	100	110	120			120	130	100	28
100	100	100	100	100	100	120					120	29
100	100	100	100	100	110						135	30
100	100	130	100		100						120	31
100	100	100	100	100	105	105			125	120	120	Mean
100	100	100	100	100	100	100			125	120	120	Median
30	31	28	28	26	29	10		1	5	13	16	Count

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'Es
Unit Km
Month May 1959

TABLE 54—Contd
Ionospheric Data
75 °E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1		105	100				G	100	100	100	C	C
2							115	100	C	100	100	100
3							100	100	100	100	100	100
4							G	100	100	100	100	C
5			120		120		G	G	110	100	100	100
6		105					G	100	100	100	100	100
7	110	105					120	100	100	100	100	100
8							G	105	100	100	100	100
9	115						120	100	100	100	100	100
10							105	100	100	100	100	100
11							G	G	100	100	100	100
12	100						G	100	100	100	100	100
13	105	100					G	105	100	100	100	100
14							140	100	100	100	100	100
15	115				110		G	100	100	100	100	100
16			140				120	100	100	100	100	100
17	105						105	100	100	100	B	100
18	120	120	120				G	100	100	100	100	100
19	115	115	105	110			110	100	100	100	100	100
20	120		120				110	100	100	100	100	100
21	100		100			120	110	100	100	100	100	100
22			100				100	100	100	100	100	100
23	125						G	100	100	100	100	100
24	130	125	120		C	C	G	140	100	100	100	100
25	130	120			C	C	C	G	100	100	100	100
26			120				110	100	100	100	100	100
27	115	115	110	UII0C			110	100	100	100	C	100
28							G	100	100	100	100	100
29	100	100					G	G	100	100	100	100
30	110	110					100	100	100	100	100	100
31						110	110	100	100	100	100	100
Mean	115	110	115				110	100	100	100	100	100
Median	115	110	120				110	100	100	100	100	100
Count	16	11	11	2	2	2	16	27	30	31	28	29

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds.

Characteristic h'Es
 Unit Km
 Month May 1959

TABLE 54—Contd
 Ionospheric Data
 75°0'E Mean Time

Latitude 10 2°N
 Longitude 77°5'E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
100	100	G	100	105								1
100	100	100	100	100	140							2
100	100	100	100	100	100				120	120		3
100	100	100	100	100	100				120	115		4
100	100	100	100	100	100							5
100	100	100	100	105	110					110	110	6
100	100	100	100	100	100							7
100	100	C	G	130	135		120	120	120		125	8
100	100	100	100	105	140						115	9
100	100	100	100	105	105							10
100	100	100	100	100	110					120		11
100	100	100	100	105	105						115	12
100	100	100	100	100	100				120	120	120	13
100	100	100	100	100	100			120				14
100	100	100	100	105	100	100						15
100	100	100	100	100	105						110	16
100	100	100	100	100	110							17
100	100	100	100	105	105					140		18
100	100	100	100	105	100							19
100	100	100	100	100	100					140	120	20
100	100	110	100	100	100					120	105	21
100	100	115	100	140	100					120		22
100	100	100	G	G	140				120	120		23
100	100	100	100	100	100	100			140			24
100	100	100	100	120	125							25
100	100	100	100	100	140				125	125	120	26
100	100	100	100	100	100							27
100	100	100	100	100	120				130	110	100	28
100	100	100	100	100	100						120	29
100	100	100	100	110	120					105		30
100	100	G	100	100						120		31
100	100	100	100	105	110				125	120	115	Mean
100	100	100	100	100	100				120	120	115	Median
31	31	28	29	30	28	2	1	2	8	14	11	Count

Sweep 10 Mc to 250 Mc. in 27 seconds.

Characteristic (M3000)F₂

TABLE 55

Latitude 10 2°N

Unit . . .

Ionospheric Data

Longitude 77 5°E

Month May 1959

75 0°E Mean Time

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	F	F	2 50	2 65	2 90	3 00	2 90	2 60	2 30	2 25	2 15	C
2	2 75	U2 65s	2 65	2 90	3 00	3 15	2 95	2 80	2 40	C	2 20	2 15
3	F	F	2 75	3 05	3 15	3 15	3 00	2 85	2 55	2 20	2 20	2 15
4	F	F	F	U3 05F	3 05	F	F	2 90	2 55	2 20	2 20	2 20
5	F	F	F	2 80	3 00	3 05	3 05	3 00	2 90	2 65	2 40	2 25
6	F	F	F	2 90	3 20	3 40	3 10	3 00	2 75	2 50	2 15	2 15
7	F	F	F	F	3 25F	U3 30F	3 15F	2 85	2 45	2 10	2 25	2 20
8	U2 60F	F	F	F	F	3 10	U2 90I	2 95	2 60	2 10II	2 30	2 20
9	U2 80s	2 80	2 70	U2 80s	3 05	3 20	3 10	2 95	2 70	2 35	2 00	2 15
10	F	F	U2 70F	U2 85s	3 20	3 30	2 85	2 70	2 50	2 20	2 20	2 10
11	F	F	F	F	3 00	3 10	2 90	2 80	C	2 35	2 10	2 10
12	U2 50sF	FS	F	F	F	3 20F	3 15	2 95	2 65	2 35	2 00	2 15
13	FS	2 35I	F	F	2 90	3 10	2 85	2 80	2 70	2 50	2 30	2 10
14	2 70	2 50	2 55	2 80	2 85	2 80	2 75	2 60	2 45	2 20	2 20	2 15
15	2 70	2 65	2 55	2 65	2 90	2 95	2 80	2 70	2 35	2 20	2 10	2 10
16	FS	FS	F	U2 70I	F	U2 90I	2 90	2 80	2 55	2 35	2 40	2 30
17	FS	2 75	2 90	3 05	U3 40s	3 20	3 10	U2 90s	2 55	2 30	2 30	2 25
18	F	FS	F	F	U3 10s	FS	3 10	2 95	2 65	2 30	2 15	2 25
19	2 60	2 60	U2 60I	F	3 00	U3 10s	2 90	2 50	2 35	C	2 25	2 15
20	C	2 75F	2 70	2 85	U3 05s	3 10	2 80	U2 60s	2 40	2 20	2 20	2 15
21	F	F	F	C	F	U3 10I	2 90	F	2 35	2 25	2 20	2 30
22	F	F	F	F	F	2 85	2 75	2 60	2 30	2 30	2 15	2 05
23	F	F	F	F	F	F	U3 00I	2 90I	2 70	2 40	2 15	2 05
24	F	F	F	F	F	FS	FS	2 8-1	2 65	2 50	2 15	1 95
25	2 35	2 50	C	C	C	C	C	C	2 70	2 55	2 25	1 85
26	2 50	2 55	2 60	U2 85F	U3 20I	U3 30s	3 15	3 00	U2 75s	2 45	2 15	2 05
27	F	F	F	F	F	3 20	3 20	2 95	2 75	2 40	2 15	2 20
28	F	F	2 80	F	U3 20s	U3 30s	3 10	2 95	2 70	2 50	2 25	2 15
29	FS	FS	FS	FS	FS	FS	FS	U3 00sF	2 70	2 40	2 30	2 30
30	FS	FS	F	F	U3 00sF	3 10	2 95	U2 70s	2 45	2 35	2 35	2 30
31	F	F	F	FS	F	U3 20F	2 85	2 55II	2 50	2 40	2 40	2 45
Mean	2 60	2 60	2 65	2 85	3 05	3 15	2 95	2 80	2 55	2 35	2 20	2 15
Median	2 60	2 60	2 70	2 85	3 05	3 15	2 95	2 85	2 55	2 35	2 20	2 15
Count	9	10	12	14	20	25	27	29	30	29	31	30

Sweep 1 Mc. to 25 Mc. in 27 seconds

Characteristic (M3000)F2
 Unit . . .
 Month May 1959

TABLE 55
 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
C	2 11	C	2 10	2 15	2 10	S	U1 90W	F	F	F	F	1
2 01	2 10	2 10	2 20	2 20	2 30	2 30	2 10	F	F	F	F	2
2 11	2 20	2 20	2 20	2 25	2 30	2 25	2 05	F	F	F	F	3
2 10	2 10	1 01	2 10	2 20	2 30	2 25	2 05	F	2 20	2 35	2 55	4
2 00	2 01	2 01	2 15	2 25	2 30	2 30	2 10	F	F	F	F	5
2 10	2 11	2 11	2 10	2 10	2 10	U2 05S	U1 951	F	F	F	F	6
2 20	2 11	2 10	1 15	2 25	2 35	C	2 10	F	F	F	F	7
2 20	2 01	C	2 20	2 35	2 10	C	2 20	2 30	2 40	2 50	2 70	8
2 10	2 05	2 05	2 05	2 20	2 30	2 20	2 05	F	F	F	F	9
2 10	2 10	1 10	2 15	2 20	2 25II	2 15	U2 051	F	F	F	F	10
2 10	2 10	2 10	2 10	2 10	2 05	2 05	2 00	C	U2 051	U2 20R	F	11
2 15	2 00	2 00	C	2 15	2 15	2 05II	2 00II	F	F	F	F	12
2 00	2 00	2 05	2 10	2 10	2 05	2 05	2 00	2 05	2 30	2 55	2 80	13
2 10	2 10	2 05	2 10	2 10	2 05	2 05	J2 00S	1 95	F	2 20	U2 50S	14
2 10	2 10	2 10	C	2 15	2 20	2 20	2 05	U2 05I	F	F	F	15
2 15	2 20	U2 30S	U2 30S	2 25	2 25	U2 25S	2 10	F	F	F	F	16
2 15	2 10	2 10	2 00	2 10	2 15	2 20	J2 10R	U2 10RS	U2 20S	FS	FS	17
2 15	2 15	2 15	2 10	2 15	2 15	U2 10S	2 05	U2 10F	U2 20R	U2 10S	U2 55S	18
2 10	2 10	2 00	2 05	2 15	U2 30S	U2 10S	2 20	J2 25FS	U2 30I	J2 10S	2 65	19
2 10	2 15	2 20	2 25	2 35	2 10	2 30	U2 10S	F	F	F	F	20
2 20	2 30	2 30	2 10	2 15	U2 15S	2 35	U2 20S	F	F	F	F	21
2 05	2 15	2 20	2 30	1 10	2 15	2 50	2 35	F	F	F	F	22
2 15	2 05	2 10	2 20	2 15	2 10	2 10	2 35	F	F	F	F	23
2 00	2 20	2 10	2 05	2 00	2 15	2 25	2 05	2 05	2 20	2 25	2 30	24
2 15	2 20	2 20	2 25	2 30	2 30	2 20	2 10	F	F	F	F	25
2 00	2 05	2 00	2 05	2 15	2 30	2 30	2 10	F	F	F	F	26
2 20	2 15	2 25	2 30	2 30	2 30	2 35	S	2 10	F	F	F	27
2 10	2 15	2 10	2 10	1 10	U2 20S	S	U2 10RS	FS	FS	FS	FS	28
2 30	2 15	2 20	1 00	2 15	U2 15S	S	F	FS	FS	FS	FS	29
2 25	2 20	2 30	2 30	2 15	2 10	2 35	U2 30R	2 05	F	F	FS	30
2 15	2 10	2 10	2 15	2 15	U2 10S	S	U2 40S	2 30	F	F	F	31
2 15	2 11	1 15	2 15	2 20	2 25	2 20	2 10	2 10	U2 25	U2 35	U2 60	Mean
2 10	2 15	2 10	2 15	2 20	2 30	2 25	2 10	2 10	U2 20	U2 40	U2 55	Median
30	31	29	29	31	31	24	30	10	8	8	7	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic (M3000) F2
 Unit
 Month May 1959

TABLE 55—Contd
 Ionospheric Data
 75 °E Mean Time

Latitude : 10 2°N
 Longitude . 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	2 60	F	2 90	2 95	2 75	2 45	2 25	2 20	C	C
2	2 60	2 65	2 80	3 00	3 15	2 90	2 90	2 60	C	2 25	2 20	2 10
3	F	F	2 85	3 10	3 10	2 90	3 00	2 75	2 40	2 10	2 20	2 10
4	F	F	F	3 00	F	F	3 00	2 70	2 35	2 15	2 20	C
5	U2 65s	F	F	3 00	3 05	3 05	3 10	3 00	2 80	2 60	2 30	2 15
6	F	F	F	U3 05s	3 40	2 90	3 00	2 90	2 60	2 35	2 20	2 10
7	F	F	F	U3 00r	U3 10r	U3 05i	3 00	2 70	2 25	2 20	2 20	2 20
8	F	F	F	F	3 30	2 95ii	U3 00i	2 80	2 40	2 10ii	2 20	2 25
9	2 80	U2 80s	2 75	U2 90s	3 10	3 00	3 00	2 85	2 55	2 15	2 15	2 10
10	F	F	U2 75s	3 00	3 20	2 90	2 85	2 60	2 30	2 20	2 15	2 10
11	F	F	U2 75r	2 90	3 05	3 00	2 90	2 75	2 50	2 20	2 05	2 00
12	FS	S	F	F	U3 00r	2 95	3 05	2 80	2 55	2 15	2 10	2 15
13	FS	F	F	2 70	2 95	2 90	2 80	2 70	2 60	2 40	2 20	2 05
14	2 55	2 55	2 70	2 85	2 75	2 70	2 70	2 50	2 30	2 20	2 20	2 15
15	2 70	2 60	U2 55s	2 80	2 95	2 80	2 75	2 50	2 20	2 25	2 10	2 15
16	FS	F	F	U2 90s	F	U2 90s	U2 90s	2 75	2 45	2 35	2 30	2 20
17	2 80	2 80	3 00	3 25	3 35	2 90	3 00	2 70	U2 35r	2 30	U2 30r	2 20
18	FS	F	F	F	U3 20s	3 05	3 05	2 85	2 55	U2 15r	2 20	2 25
19	2 60	2 60	F	U2 85r	3 00	3 10	2 70	U2 40s	2 35	2 20	2 20	2 10
20	2 80	2 70r	2 70	2 90	3 20	2 95	2 70	U2 50s	2 30	U2 10r	2 20	2 15
21	F	F	F	F	F	3 05	FS	2 45	2 30	2 30	2 25	2 20
22	F	F	F	F	2 95r	2 85	2 70	2 50	2 25	2 25	2 10	2 10
23	F	F	F	F	F	F	U3 00r	2 80	2 60	2 25	2 10	2 15
24	F	F	F	F	F	FS	F	2 80	2 60	2 35	2 05	2 15
25	2 35r	2 50r	FS	C	C	C	C	2 80	2 60	2 45	2 10	2 00
26	2 50	2 60	U2 70r	U3 10r	3 20	3 20	3 05	2 80	2 65	2 30	2 10	C
27	F	F	F	F	3 20	3 25	3 15	2 85	2 50	2 20	C	2 15
28	2 75	F	F	U3 10r	3 30	U3 05s	3 05	2 90	2 60	2 35	2 15	2 05ii
29	FS	FS	FS	FS	FS	FS	U3 00rs	2 80	2 55	2 35	2 30	2 35
30	FS	F	F	F	3 10	2 95	2 85	2 60	2 40	2 35	2 35	2 30
31	F	F	F	F	F	U2 90rs	2 70ii	2 50	2 40	2 35	2 40	2 50
Mean	2 65	2 65	2 75	2 95	3 10	2 95	2 90	2 70	2 45	2 25	2 20	2 15
Median	2 65	2 60	2 75	3 00	3 10	2 95	3 00	2 75	2 40	2 25	2 20	2 15
Count	11	9	11	18	23	26	28	31	30	31	29	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000) F2
 Unit .
 Month May 1959

TABLE 55—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

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

Characteristic foF2
Unit Mc.
Month June 1959

TABLE 56
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	F	F	F	F	F	1	9 3	10 9	12 4	12 4	12 4	11 3
2	F	F	F	F	F	5 2	8 4	10 7	11 5	11 8	10 7	10 4
3	9 3	8 0	U7 2S	F	6 8	5 8	8 1	C	11 1	12 0	12 1	11 1
4	F	F	F	F	F	F	1	10 3	11 9	12 4	12 7	12 3
5	9 0	8 1	7 6	5 5	5 3	5 2	8 5	10 2	11 5	10 9	11 6	11 9
6	F	F	F	F	F	F	1	1	12 7	12 5	13 2	13 0
7	F	U8 6F	U8 1F	8 0F	8 0	3 9	7 7	9 8	11 4	11 7	11 9	11 4
8	F	F	F	F	F	F	9 0F	10 7	12 3	13 0	12 6	12 2
9	U9 2F	9 2	9 3	9 1	8 1	7 9	9 8F	10 8	12 1	12 3	11 9	11 7
10	U11 2F	9 0	7 1	6 1	U6 2S	6 0	8 2	10 2	11 2	11 5	10 8	11 2
11	F	F	F	F	F	1	F	10 0	11 0	11 6	11 6	11 6
12	J9 9S	U9 2F	8 0	7 4	6 9	5 8	8 0	9 8	11 0	11 7	11 2	10 8
13	F	F	F	F	F	F	U10 0F	10 8	12 6	13 2	13 1	12 6
14	F	F	U7 2F	6 4	6 0	4 7	7 7	10 0	10 6	10 2	10 0	10 2
15	F	8 3	8 6	8 2	7 1	5 3	7 9	9 8	10 5	10 5	10 6	10 4
16	U9 2S	8 6	8 2	U8 2S	7 8	6 9	9 4	11 0	U11 8S	11 6	11 0	10 8
17	F	F	F	F	F	F	U7 2SF	U9 6S	10 8	10 6	10 1	10 2
18	F	F	F	F	F	F	F	U10 8SF	11 0	10 2	10 4	11 2
19	F	F	U7 9F	U7 5S	7 8	U6 0S	7 6	U9 5S	J10 2R	10 4	10 6	10 9
20	F	F	F	F	F	6 2	7 8	U9 8S	10 6	10 8	10 4	10 3
21	F	F	F	F	F	6 3	8 3	10 6	11 8	11 3	10 5	9 5
22	F	F	F	F	F	F	8 8	11 0	11 6	12 2	11 2	10 7
23	8 8	7 9	F	F	F	F	9 6	11 6	12 3	13 2	13 3	12 7
24	7 9	6 6	F	F	F	F	U5 9S	7 8	9 9	10 7	11 5	11 5
25	F	F	F	F	F	F	8 3	10 6	11 7	11 6	10 6	10 3
26	U9 2S	U9 3S	8 6	8 0	7 4	6 5	8 3	11 0	11 8	12 2	12 0H	U11 7H
27	U9 6S	9 0	8 6	7 4	7 5	U7 5S	9 0	U10 1S	10 9	11 5	12 0	11 8
28	F	F	F	F	F	F	F	10 3	12 0	13 0	13 7	13 8H
29	8 2F	7 8F	8 4	8 1F	8 7	8 4	U9 6S	11 1	11 7	11 8	12 6	12 8
30	8 2	S	U4 9S	4 5H	U4 4S	4 2	U7 9S	U10 2S	11 6	12 2	12 8	12 8
Mean	9 1	8 4	7 8	7 3	7 0	6 0	8 5	10 4	11 5	11 7	11 7	11 4
Median	9 2	8 6	8 0	7 5	7 2	6 0	8 3	10 3	11 6	11 7	11 8	11 4
Count	12	13	14	13	14	18	25	28	30	30	30	30

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF2
Unit : Mc
Month June 1959

TABLE 56
Ionospheric Data
75 °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 3	12 1	13 0	13 8	13 6	13 7	13 4	12 4	F	F	F	F	1
10 5	10 9	11 9	12 7	13 3	13 2	U13 4 ^s	12 7	11 7	10 6	10 7	10 7	2
10 8	11 1	11 9	11 9	12 4	12 9	13 1	11 8	U11 11	F	U10 6 ^s	F	3
U11 7 ^R	10 5	10 8	11 0	11 4	C	12 8	11 6	F	9 4	U9 3 ^F	U9 7 ^F	4
12 3	12 3	12 1	11 9	U11 2 ^s	11 3	U10 5 ^s	9 5	F	F	F	F	5
12 7	12 0	11 7	11 2	11 3	11 6	U11 7 ^s	11 5	11 0	10 3 ^F	F	F	6
11 1	10 7	10 7	10 8	11 3	11 8	12 4	11 4	F	F	F	F	7
11 0	10 0	9 8	10 0	10 4	11 0	11 4	10 6	9 4 ^F	F	F	U8 8 ^F	8
12 1	12 7	12 6	12 3	12 1	12 6	12 4	12 0 ^F	11 1	11 2 ^F	U11 6 ^F	U12 0 ^F	9
11 8	11 9	12 2	11 6	11 4	11 7	11 5	U10 4 ^s	U8 8 ^F	F	F	F	10
10 6	10 5	10 6	10 8	11 2	11 8	12 6	12 4	11 0	F	U9 2 ^F	F	11
10 8	10 6	10 4	10 6	10 8	11 0	10 8	9 6	7 8	F	F	F	12
11 2	10 4	10 9	11 2	11 3	11 8	11 8	10 8	9 9	9 0	F	F	13
9 9	10 1	10 6	10 8	11 0	11 2	10 4	9 5	F	F	F	F	14
C	10 4	10 0	10 4	10 8	11 2	11 4	10 6	FS	9 3 ^F	9 2	9 0	15
11 0	11 8	12 0	11 6	U11 8 ^s	U12 0 ^s	U11 6 ^s	10 3	F	F	F	F	16
10 6	10 8	11 1	U11 8 ^s	U11 8 ^s	J12 4 ^R	12 4 ^{II}	11 0	F	F	F	F	17
11 0	10 6	11 0	11 1	11 4	11 6	11 2	10 8	F	F	F	F	18
11 3	11 8	12 1	12 6	13 0	U13 2 ^s	U13 2 ^s	12 4	F	F	8 6	F	19
9 9	9 8	10 2	10 9	11 4	J12 0 ^s	U11 8 ^s	10 8	F	F	F	F	20
9 7	9 8	10 0	10 2	10 6	11 2	10 8	U9 8 ^s	F	F	F	F	21
10 5	9 8	9 9	10 5	11 3	11 5	U11 9 ^s	U11 6 ^s	U10 8 ^s	U9 7 ^s	9 4	9 6	22
11 8	11 0 ^{II}	10 8	10 8	11 4	12 3	U12 2 ^s	U11 1 ^s	9 6	U9 3 ^s	U9 3 ^{FS}	9 0	23
11.0	9 6	9 8	10 1	10 5	10 8	U11 3 ^s	U9 9 ^s	8 4 ^V	F	F	F	24
10 2	10 4	10 8	10 9	10 7	U11 0 ^s	11 5	U10 8 ^s	U10 1 ^s	U10 3 ^s	10 8	11 1	25
10 7	10 1	9 9	10 4	11 2	U11 5 ^s	U11 2 ^s	10 7	9 9	U9 7 ^s	10 6	U10 2 ^s	26
12 0	12 0	11 8	11 0	10 6	C	U10 7 ^s	S	U9 3 ^s	F	F	F	27
13 3 ^{II}	13 2 ^{II}	U12 3 ^W	W	11 6	11 8	11 6	F	F	F	U8 8 ^F	U8 6 ^F	28
12 6	12 0	11 3 ^{II}	11 3	11 8	U11 8 ^s	U12 0 ^s	C	10 9	8 8	U9 1 ^s	S	29
12 1	12 1	12 6 ^{III}	12 7	13 2 ^{II}	U14 1 ^s	13 9	12 9	11 0	10 8	10.7	U11 4 ^s	30
11 2	11 0	11 2	11 3	11 5	11 9	11 9	11 1	10 1	9 9	9 8	U10 0	Mean
11 0	10 8	11 0	11 0	11 1	11 8	11 8	10 8	10 1	9 7	9.4	U9 7	Median
29	30	30	29	30	28	30	27	17	12	14	11	Count

Sweep 1 Mc 10 25 Mc in 27 seconds

Characteristic · foF2
Unit · Mc
Month June 1959

TABLE 56—Contd
Ionospheric Data
75 0°E Mean Time

Latitude · 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	F	F	F	7.6	10.4	12.0	12.1	12.7	12.1	11.1
2	F	F	F	F	F	6.4 ^v	9.9	11.2	11.7	11.7	10.5	10.6
3	8.5	U7.7 ^F	6.9	U6.7 ^F	6.5	6.3	9.3	11.0	11.9	12.3	12.2 ^{II}	10.9
4	F	F	F	F	F	F	F	11.2	12.3	12.8	C	U11.9 ^R
5	8.4	8.2	7.2	5.5	U5.2 ^S	6.5	9.6	10.9	11.5	11.6	11.6	12.0
6	F	F	F	F	F	F	F	12.0	12.5	12.9	12.9	12.8
7	U8.8 ^F	U8.4 ^F	U8.1 ^F	8.0 ^F	6.1	5.5	9.4	10.7	11.8	11.9	11.7	11.2
8	F	F	F	F	F	U8.2 ^F	9.8 ^F	11.7	12.6	12.9	12.7	11.7
9	9.2	9.2	9.3	8.6	8.0	9.0 ^F	U10.3 ^F	11.6	12.3	12.6	11.8	11.9
10	10.6	7.9	6.5	6.1	U6.1 ^S	6.8	9.4	10.9	11.2	11.1	10.9	11.4
11	F	F	F	F	F	U8.4 ^F	F	10.6	11.6	12.0	11.6	11.0
12	9.6	8.6	7.8	7.2	6.4	6.6	8.8	10.5	11.6	11.4	10.8	10.8
13	F	F	F	F	F	F	10.2	12.2	13.0	13.0 ^{II}	13.3	12.2
14	F	F	U7.2 ^F	6.3	5.5	6.1	9.0	10.3	10.6	10.0	10.0	9.8
15	8.2 ^r	8.6	8.0	7.9	6.4	6.6	9.0	10.0	10.4	10.5	10.4	C
16	U9.2 ^S	8.0	8.1	7.7	7.6	7.7	10.4	11.6	J12.2 ^R	11.6	10.8	10.7
17	F	F	F	F	F	FH	8.5	10.6	10.8	10.5	10.0	10.4
18	F	F	F	F	F	F	F	11.0	10.6	10.2	11.0	11.2
19	F	F	U7.8 ^{FS}	7.6	7.6	6.3	8.7	9.8	10.4	10.4	10.8	C
20	F	F	F	F	U7.5 ^F	6.4	8.8	U10.3 ^S	U10.7 ^S	10.7	10.4	10.0
21	F	F	F	F	F	7.1	9.4	11.5	11.7	11.0	9.8	9.6
22	F	F	F	F	F	7.6	10.1	11.6	11.8	11.7	10.8	10.6
23	8.3	7.4	F	F	F	F	10.8	11.9	12.6	13.4	13.0	U12.2 ^S
24	7.0	F	F	F	FS	6.1	8.8	10.4	11.1	12.0	11.8	11.3
25	F	F	F	F	F	U6.7 ^{FS}	9.8	11.1	11.9	11.3	10.4	10.3
26	9.6	U9.4 ^S	8.3	7.6	7.2	6.4	9.7	11.5	12.0	12.2 ^{II}	U11.8 ^{RII}	11.0
27	9.2	8.8	7.8	7.4	7.5	8.1	R	10.6	11.3	12.0	12.3	11.8
28	F	F	F	F	F	F	F	11.4	12.4	13.5	14.0	13.6 ^{II}
29	8.0 ^F	F	8.1	8.6	8.6	8.5	10.4	11.2	11.8	12.1	12.8	12.5
30	S	5.4	4.9	4.8	3.9	5.8 ^{II}	9.0	11.2	11.8	12.4	12.8	12.7
Mean	8.8	8.1	7.6	7.1	6.7	7.0	9.6	11.1	11.7	11.8	11.6	11.3
Median	8.8	8.3	7.8	7.5	6.5	6.6	9.5	11.2	11.8	12.0	11.6	11.2
Count	13	12	14	14	15	23	24	30	30	30	29	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic of foF2
Unit: Mc.
Month: June 1959

TABLE 56—Contd
Ionospheric Data
75 0°E Mean Line

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
11 8	12 1	13 6	13 8	14 0	13 5	13 1	11 4	10 6	F	F	F	1
10 9	11 3	12 1	11 9	13 4	13 2	13 1	12 1	11 5	10 6	11 1	10 0	2
10 9	11 7	12 0	12 1	12 7	13 1	12 5	U11 8F	10 7F	10 1	10 8	F	3
10 8	10 6	10 8	11 2	12 2	13 0	12 4	F	F	U9 3F	U9 7F	U9 7F	4
11 1	12 1	11 9	U11 8s	U11 2s	11 0	U10 0s	F	F	F	F	F	5
12 1	11 7	11 5	11 1	11 1	11 6	11 9	11 0	10 8	U10 4F	F	F	6
10 9	10 6	10 8	11 0	11 7	12 3	12 3	U10 21	F	F	F	F	7
10 1	10 0	9 8	10 1	10 7	11 0	11 4	U9 8s	U8 9F	F	F	U9 5F	8
12 4	12 8	11 3	12 1	10 3	11 8	12 1	11 3	11 0	U11 5F	U12 3F	U11 7F	9
11 8	12 1	11 8	11 1	11 5	11 7	U11 0s	U9 6s	F	F	F	F	10
10 1	10 6	10 8	11 0	11 1	12 6	12 1	11 5	10 1	9 2	F	F	11
10 8	10 6	10 1	10 8	11 0	11 0	10 2	8 6	U7 5F	F	F	F	12
11 0	10 1	C	11 2	11 6	11 8	11 4	10 2	9 5	U9 2F	F	F	13
10 2	10 6	10 8	11 0	11 2	10 8	10 2	U8 6F	F	F	F	U8 2F	14
10 1	10 2	10 1	10 6	10 8	11 2	11 1	10 0	U9 4F	9 2	9 4	9 0	15
11 5	11 8	11 6	12 0	11 0	12 2	11 2	F	F	F	F	F	16
10 6	11 0	11 4	12 0	12 4	U12 0s	12 0	U10 41	F	F	F	F	17
10 7	11 0	11 0	11 4	11 5	11 2	11 2	U9 81	1	F	F	F	18
11 4	12 0	12 1	13 0	13 2	U13 2s	13 0	U11 6Fs	F	U9 0Fs	U8 3s	F	19
9 8	10 0	10 6	11 0	U11 6s	12 4	11 2	F	F	F	F	F	20
9 8	9 9	10 3	10 1	10 9	U11 1s	10 6	F	F	F	F	F	21
110 2R	9 7	10 2	10 8	11 6	U11 8s	U11 8s	S	U10 3s	9 5	9 8	9 5	22
11 5H	U10 9s	10 9	11 0	11 7	12 3	11 5	U10 3s	U9 4Fs	F	9 1	8 6	23
10 3	9 7	10 0	10 3	10 7	U11 1s	U10 7s	9 1F	F	F	F	F	24
10 5	10 5	11 1	10 7	10 8	11 5	11 4	10 3	10 1	10 1	11 4	10 0	25
10 3	10 0	9 9	10 8	11 4	U11 5s	U11 0s	10 2	U9 8s	U10 2s	U10 5s	U9 9s	26
12 0	11 9	11 1	10 7	10 6	10 8	U10 6s	U9 5s	F	F	F	F	27
11 3H	12 8H	WH	11 3	U11 7s	U11 6s	11 4	F	F	U8 7F	F	8 4F	28
U11 6s	11 5H	11 4	11 1	S	U11 8H	C	U11 0s	S	8 5	U9 8s	FS	29
12 5	12 1	11 6	12 7	13 5H	U11 2s	13 8	U11 7s	11 0	10 7	11 2	U11 6s	30
11 1	11 1	11 2	11 4	11 7	11 9	11 6	U10 4	10 0	9 7	10 3	9 7	Mean
10 8	11 0	11 0	11 2	11 6	11 8	11 4	U10 3	10 1	9 5	10 2	9 6	Median
30	30	28	30	29	30	29	23	15	15	12	12	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF₁
 Unit . Mc.
 Month June 1959

TABLE 57
 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								L	L	L	I	L
2								L	L	L	L	L
3								G	L	L	L	L
4								L	L	L	L	L
5								L	L	L	I.	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								I	L	L	L	L
12								L	L	L	L	L
13							L	L	L	L	L	L
14								L	L	L	L	L
15								L	L	L	L	L
16								L	L	L	L	L
17								L	L	LH	LH	LH
18								L	L	LH	LH	LH
19								L	L	L	L	LH
20								L	L	L	L	L
21								L	L	L	L	LH
22								L	L	L	L	L
23								L	L	L	L	L
24								L	L	L	L	L
25								L	L	L	L	L
26								L	L	L	LH	LH
27								L	L	L	LH	L
28								L	L	L	L	L
29								L	L	L	L	A
30								L	L	L	LH	LH
Mean												
Median												
Count												

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foF₁
Unit Mc
Month . June 1959

TABLE 57
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	L							1
L	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	L							4
L	L	L	L	L	L							5
L	L	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
C	L	L	L	L	L							15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	LH	LH	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	L	L	L							25
LH	LH	LH	L	L	L							26
LH	LH	LH	L	LH	L							27
LH	LH	LH	L	L	L							28
L	L	L	L	L	L							29
LH	LH	L	L	L	L							30
												Mean
												Median
			1									Count

Sweep 1 Mc. to 25 Mc in 27 seconds.

Characteristic : foF₁
 Unit . Mc
 Month June 1959

TABLE 57—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude · 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	L	L
3								L	L	L	L	L
4								L	L	L	C	L
5								L	L	L	L	L
6							L	L	L	L	L	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	E	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	L	G
16							L	L	L	L	L	B
17								L	L	LH	LH	LH
18								L	L	LH	LH	L
19								L	L	L	L	C
20								L	L	L	L	L
21								L	L	L	L	LH
22								L	L	L	L	L
23								L	L	L	L	L
24							L	L	L	L	L	L
25								L	L	L	L	L
26								L	L	LH	LH	LH
27								L	L	L	L	L
28								L	L	L	L	LH
29								L	L	L	A	A
30								L	L	L	LH	L
Mean												
Median												
Count												

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic \cdot foF₁
 Unit Mc.
 Month June 1959

TABLE 57—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude \cdot 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
L	L	L	L	L								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	I.							11
L	L	L	L	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
L	L	L	L	L								18
L	L	L	L	L								19
LH	L	LH	L	L								20
L	L	L	L	L								21
L	L	L	L	L								22
LH	L	L	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
LH	LH	LH	L	L								26
LH	LH	LH	LH	L								27
LH	LH	LH	L	L								28
A	LH	L	A	L								29
LH	LH	L	L	L								30
												Mean
												Median
												Count

Sweep 1 Mc to 25 Mc. in 27 seconds.

Characteristic : foE
 Unit : Mc
 Month June 1959

TABLE 58
 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 0	A	A	A	A
2							2 2	A	A	A	A	A
3							2 3	C	A	A	A	A
4							2 3	3 0	3 5	3 8	A	A
5							2 2	A	A	A	A	A
6							2 3	3 0	3 5H	A	A	A
7							2 1	A	A	A	A	A
8							A	A	A	A	A	A
9							2 3II	A	A	A	A	A
10							A	A	A	A	A	A
11							2 3II	3 2	A	A	A	B
12							A	A	A	A	A	A
13							2 4II	3 0	3 5	B	A	A
14							2 3	A	A	A	A	A
15							F	A	B	B	A	A
16							2 2	U3 0A	A	A	A	A
17							A	A	A	A	A	A
18							A	A	A	A	A	A
19							A	A	A	A	A	A
20							2 2	A	A	A	A	A
21							U2 7R	A	A	A	A	A
22							R	A	A	A	A	A
23							2 8II	A	3 6	A	A	A
24							A	A	A	A	A	A
25							2 4	A	A	A	A	A
26							R	3 0	U3 6R	A	A	A
27							U2 2R	A	A	A	A	A
28							2 2II	3 0	U3 9A	U3 8A	U3 7R	A
29							A	2 9	A	A	A	A
30							R	3 0	A	A	A	A
Mean							2 3	3.0	3 6			
Median							2 3	3 0	3 6			
Count							17	10	6	2	1	.

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic · foE
Unit : Mc
Month June 1959

TABLE 58
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
Λ	Λ	3.9	3.7	3.3	Λ							1
Λ	Λ	Λ	Λ	Λ	Λ							2
Λ	U1 2R	Λ	Λ	Λ	Λ							3
Λ	Λ	Λ	Λ	Λ	C							4
Λ	Λ	Λ	Λ	Λ	Λ							5
Λ	Λ	Λ	Λ	Λ	2.7							6
Λ	Λ	Λ	Λ	Λ	Λ							7
Λ	Λ	Λ	Λ	Λ	Λ							8
Λ	Λ	Λ	Λ	Λ	3.0							9
Λ	Λ	Λ	Λ	Λ	Λ							10
B	Λ	Λ	Λ	3.4	3.0							11
Λ	Λ	B	Λ	Λ	Λ							12
Λ	Λ	Λ	Λ	3.5	2.8	R						13
Λ	Λ	Λ	Λ	Λ	Λ							14
C	Λ	Λ	Λ	Λ	Λ							15
B	Λ	Λ	Λ	Λ	2.8							16
Λ	Λ	Λ	Λ	R	U2 8s							17
Λ	Λ	Λ	Λ	Λ	Λ							18
Λ	Λ	Λ	Λ	Λ	Λ							19
Λ	Λ	Λ	Λ	Λ	Λ							20
Λ	Λ	Λ	Λ	Λ	Λ							21
Λ	Λ	Λ	Λ	Λ	Λ							22
Λ	Λ	Λ	Λ	Λ	3.111							23
Λ	Λ	Λ	Λ	Λ	Λ							24
Λ	Λ	Λ	Λ	Λ	Λ							25
Λ	Λ	Λ	Λ	Λ	Λ							26
Λ	Λ	Λ	Λ	U3 3A	C							27
Λ	Λ	Λ	Λ	Λ	U2 9A							28
Λ	Λ	Λ	Λ	Λ	Λ							29
Λ	Λ	Λ	U3.9A	3.5	2.9							30
				3.1	2.9							Mean
				3.4	2.9							Median
	1	1	2	5	9							Count

Sweep 1 Mc to 25 Mc. in 27 sec cond

Characteristic f_oE
 Unit . Mc
 Month June 1959

TABLE 58—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10 2°N
 Longitude 77.5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							2 7	3 3	A	A	A	A
2							A	A	A	A	A	A
3							2 5	3 2	3 5	A	A	A
4							2 7	3 3	3 7	A	C	A
5							2 7	A	A	A	A	A
6							2 7	3 2	3 7	A	A	A
7							A	A	A	A	A	A
8							2 7	A	A	A	A	A
9							2 7	A	A	A	A	A
10							2 6	A	A	A	A	A
11							2 5	A	A	A	A	B
12						A	A	A	A	A	A	A
13							2 7	3 3	A	A	A	A
14							A	A	A	A	A	A
15							2 8	A	B	A	A	C
16							2 8	A	A	A	A	B
17						R	A	A	A	A	A	A
18							A	A	A	A	A	A
19							A	A	A	A	A	C
20							2.7	A	A	A	A	A
21							A	A	A	A	A	A
22							A	A	A	A	A	A
23						2 6	3 2	U3 4R	A	A	A	A
24							U2 7R	A	A	A	A	A
25							3 0	A	A	A	A	A
26							2 7	3 2	3 8	A	A	A
27							A	A	A	A	A	A
28							2 7II	A	A	3 9	A	A
29							2 5	3 2	A	A	A	A
30							2 6II	3 3	A	A	A	A
Mean							2 7	3 3				
Median							2 7	3 3				
Count						1	20	9	4	1		

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foE
Unit Mc
Month June 1959

TABLE 58—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	U4.0R	3.8	3.4	3.1								1
A	A	A	3.4	A	A							2
A	A	A	A	A								3
A	A	A	R	3.2								4
A	A	A	A	A	A							5
A	A	A	A	3.2	2.3							6
A	A	A	A	A	A							7
A	A	A	A	A	A							8
A	A	A	A	A	A							9
A	A	A	A	A								10
A	A	A	A	3.3	2.3							11
A	B	A	A	A	A							12
A	A	C	A	3.1	2.5							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
B	A	A	A	3.2								16
A	A	A	A	U3.2R								17
A	A	A	A	A								18
A	A	A	A	A								19
A	A	A	A	A								20
A	A	A	A	A	A							21
A	A	A	B	A	A							22
A	A	A	A	B	A							23
A	A	A	A	A								24
A	A	A	A	A								25
A	A	A	A	U3.2A								26
A	A	A	A	A	A							27
A	A	A	A	U3.3A	A							28
A	A	A	A	A	A							29
A	A	A	A	3.2	A							30
.	..	.	..	3.2	..							Mean
.	.	.	.	3.2								Median
.	1	1	2	10	3							Count

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

Characteristic foEs
Unit Mc
Month June 1959

TABLE 59
Ionospheric Data
75 °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								G	9 0	11 4	11 0	14 6
2		4 6	3 8				G	11 0	12 0	12 8	17 0	17 0
3							G	G	12 4	12 4	13 8	19 0
4	U5 os	U5 os	U5 os				G	G	10 8	10 8	14 0	14 0
5					U4 os		G	7 0	14 6	13 0	15 0	14.0
6	3 1	U6 os	6 2	U5 os	U4 8s		G	G	G	12 0	13 6	13 4
7	2 8	4 0	3 3				5 4	11 8	11 0	12 0	14 0	16 8
8							6 4	10 2	18 2	12 3	18 8	14 6
9	5 0	U7 8s	U5 4s	3 0			G	11 0	12 4	13 4	16 8	14 0
10	5 2	5 2		6 6				7 8	11 8	11 8	12 4	14.8
11	3 6						5 6	8 4	10 4	18 5	12 6	12 6
12			3 6				U8 4s	11 2	12 4	13 1	14 4	17 0
13	4 2	2 5	3 0	5 2			G	7 0	8 3	7 3	12 6	14 4
14	2 8	2 2	3 4				G	10 6	12 8	12 4	17 6	14 7
15		4 8	4 8				G	11 4	11 8	12 0	13 5	15.5
16							G	9 0	12 2	14 0	18 4	14 0
17							7 4	11 2	15 0	15 6	18 4	17 0
18	U3 6s	4 0	6 4				9 0	11 4	13 4	14 0	17.0	13.3
19	3 2						8 0	U11 os	17 2	12 6	18 0	17 0
20	3 8	3 0					G	U11 os	12 6	12 8	14 0	16 4
21		3 0		2 8	3 8		G	10 4	19 8	12 8	13 2	13.6
22						3 1	G	10 8	13 4	14 0	13 6	14.4
23	3 2			2 1	3 8		G	5 8	5 8	12 7	12 8	14.0
24								9 8	11 5	9 8	14 4	15 6
25			S	U7 3s			G	10 4	12 8	13 7	17.2	G
26		U8 os	4 0	3 8			G	G	8 7	12 4	17 0	16 0
27		U6 os	3 2	U6 os	U7 os		5 0	U9 os	U13 4s	17 0	U17.08	15 0
28	2 5						G	7 0	11 2	6 8	9 0	U15.0
29		U5 4s	4 0	U6 os	U7 os	1 3		7 0	7 6	U20 os	25 0	22 0
30	U5 os	U8 os	U6 os	U4 os			G	7 0	10 4	12 0	14 0	13.0
Mean	3 8	5 0	4 4	4 7	5 1		6.9	9 5	12 2	12 9	15 3	15 3
M d m	3 6	4 9	4 0	5 0	4 4		G	9 8	12 1	12 6	14 2	14 7
Count	14	16	14	11	6	2	26	29	30	30	30	29

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month June 1959

TABLE 59
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
13 0	11 0	7 8	G	G	8 2	3 0						1
15 0	14 0	11 0	12 0	11 0	8 0	2 7		2 1	3 2	3 1	U5 0S	2
14 4	12 2	14 0	12 2	13 0	12 0					U7 0S	U5 0S	3
14 6	14 6	14 0	12 2	7 6	G	U1 0S						4
14 0	14 2	14 1	13 0	11 0	9 0	U6 0S				3 2	U4 2S	5
14 0	16 8	17 4	13 1	11 4	8 0	3 6		1 8	4 0			6
16 6	17 2	14 0	12 4	15 6	11 6	8 2						7
16 4	16 6	16 8	12 8	11 4	10 0	12 8	9 0				11 0	8
12 4	20 0	14 6	13 6	12 6	10 0				2 4	5 0	4 4	9
18 8	16 6	13 8	12 8	16 6	14 8	9 2			1 9	5 8	U6 8S	10
12 7	14 2	14 3	13 4	9 6	3 8	3 3						11
17 4	14 4	14 0	13 6	11 4	8 4	3 8			2 0	3 6		12
13 8	14 0	13 0	11 4	7 0	G	G				2 2	U6 5S	13
16 6	15 6	13 8	13 6	11 0	9 4				2 4	4 0	2 2	14
C	U18 0S	16 6	11 8	17 0	11 6	U7 5S		2 8	2 6			15
12 0	15 6	13 0	10 6	8 4	6 6	S				1 8	1 9	16
18 0	17 0	14 0	11 6	G	G	2 2				3 4	2 4	17
15 0	14 0	17 0	11 0	10 0	8 0	S				2 4	U4 1S	18
18 6	20 0	U20 0S	17 0	12 0	13 0	9 0	4 0		2 6	4 0	U4 0S	19
17 4	17 0	17 0	14 8	10 0	8 4	2 7				3 1		20
15 8	14 6	14 1	12 8	10 8	S	3 9			1 9			21
13 6	13 8	13 6	13 4	9 2	9 2	S			3 2	U4 3S		22
14 6	14 3	12 8	12 6	10 9	U7 0S	U4 7S	3 0					23
13 7	16 8	15 2	13 3	12 1	10 4	S						24
17 8	14 6	14 3	12 8	U10 5S	U10 3S	S	4 1	U3 4S	3 5			25
17 0	U17 0S	14 0	U13 0S	U10 0S	U9 2S	U6 0S				U3 6S	U4 2S	26
14 0	14 6	U15 0S	13 0	U11 8S	G	U4 0S						27
U15 0S	U14 4S	U13 6S	U13 0S	U10 8S	U7 0S	2 5						28
U19 0S	14 0	14 0	13 0	23 0	U10 0S	U5 0S	C		U1 0S	2 8	U6 0S	29
15 0	14 0	13 0	11 0	G	4 2	U5 0S						30
15 4	15 4	14 3	12 8	11 7	9 1	5 0			2 8	3 7	4 8	Mean
15 0	14 6	14 0	12 8	10 9	9 0	4 0			2 6	3 5	4 2	Median
29	30	30	30	30	27	22	4	4	12	16	13	Count

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic foEs
 Unit Mc
 Month June 1959

TABLE 59—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10.2°N
 Longitude 77.5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	9.4	14.4	14.2	13.8
2		2.8	2.8				8.0	13.0	12.8	14.0	14.6	16.0
3							G	G	8.0	13.0	14.4	13.6
4	U6 OS	U6 OS	3.0	3.2			G	G	6.2	13.6	C	15.0
5					U4 OS		7.0	11.0	12.8	14.0	12.4	13.0
6	U6 OS	4.8	U4 4F	U4 4S			G	7.0	8.8	12.6	14.4	15.4
7		2.2				4.6	9.4	11.0	12.8	15.6	13.1	16.8
8							7.8	11.0	12.0	14.0	15.8	16.8
9		U5 4S	6.8				7.0	12.2	12.2	14.6	18.6	17.8
10	4.4		10.8				6.6	12.4	12.8	15.6	18.8	13.4
11	3.6						6.3	9.2	13.8	13.8	12.4	11.5
12						U5 6S	10.2	12.4	12.4	13.8	14.2	17.0
13	3.4		3.8				G	G	7.4	12.8	13.8	14.4
14							7.6	12.6	12.5	16.6	14.5	16.8
15	7.8	U5 OS					7.6	11.2	12.4	14.6	14.4	C
16							G	11.0	13.0	17.0	17.6	B
17							8.2	13.0	16.0	18.0	17.0	19.0
18	4.0	7.0	2.4		1.5		8.2	13.4	13.0	14.0	14.4	18.0
19							9.0	16.6	14.0	13.4	14.0	C
20	8.6						8.0	12.0	14.6	14.0	16.0	17.0
21	2.9		2.7				6.9	12.8	13.6	15.6	14.3	14.7
22				2.8			8.6	11.9	13.1	13.8	13.8	13.7
23			1.8	U4 OS		G	G	9.7	7.2	12.1	13.2	13.8
24							G	11.2	12.7	12.1	14.8	18.0
25		U5 2S	S	U5 8S			G	11.5	11.8	14.7	16.8	17.1
26	4.0	U8 OS	3.0				5.6	9.2	6.0	15.0	17.0	17.0
27	U5 OS	U5 OS	2.8	U6 OS	4.4		U7 OS	U11 4S	U14 OS	U17 OS	U18 OS	14.0
28						2.6	G	6.5	10.6	9.4	U17 OS	U14 OS
29		3.7	U6 OS	U4 OS			G	7.0	11.0	U20 OS	21.0	U18 OS
30	2.8	U6 OS	U6 OS				G	G	13.0	13.4	U17 OS	13.8
Mean	4.9	U5.1	4.3	U4.3			7.7	11.2	11.7	14.4	15.5	15.5
Median	4.2	U5.1	3.0	U4.0		2.6	6.8	11.1	12.6	14.0	14.5	15.4
Count	12	12	13	7	3	5	30	30	30	30	15.5	27

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic foEs
 Unit Mc
 Month June 1959

TABLE 59—*Contd*
 Ionospheric Data
 75.0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
13 0	12 0	G	G	G	S	2 5						1
13 8	11 6	10 0	G	7 4	7 0			3 0	4 1	4 0		2
13 4	13 2	12 8	14 0	16 0	10 0			2 4		U5 OS	U4 4s	3
14 8	15 0	13 0	8 2	G	U5 OS							4
14 0	14 0	12 6	12 0	10 0	U7 OS				2 0	4 8	2 6	5
15 6	19 0	14 4	11 2	8 0	U6 4s	3 2		2 6	3 0	3 8	3 6	6
16 6	16 6	12 0	18 4	10 8	U9 OS							7
15 6	17 8	13 4	12 0	17 6	11 8	17 0	3 0			U7 OS	U6 8s	8
15 6	14 8	14 0	12 4	11 0	7 8				6 0	9 0	5 0	9
17 4	16 8	13 0	12 6	18 4	10 0	U5 4s			3 6	U1 6s	3 4	10
14 4	13 6	13 2	12 7	8 0	3 2	2 5			1 8			11
16 4	14 4	13 4	11 6	8 8	U6 8s	U3 8s		1 7	2 7	3 2	3 3	12
13 6	13 4	C	10 0	G	G				2 2	3 2	2 9	13
16 2	14 2	12 3	12 2	10 4	6 8				3 6	3 5		14
17 0	17 0	12 0	12 4	17 2	9 0	3 8			2 8			15
13 6	14 4	12 2	11 0	8 0	8 0					2 2		16
18 0	14 4	13 4	8 2	G	7 6					2 1	2 0	17
16 0	13 4	10 4	11 6	10 6	12 4	S	3 0		2 0	3 5	5 4	18
17 0	19 4	16 0	16 0	9 4	U9 4s	S	3 8		3 8	5 6	3 6	19
16 8	17 0	16 2	12 0	8 2	8 4				2 0	2 8		20
14 3	13 6	13 7	11 2	8 9	U6 7s	2 3						21
13 8	13 4	13 7	12 6	13 6	8 1	S						22
13 8	14 6	13 5	11 6	8 6	U7 7s	U3 2s				4 6		23
15 7	14 6	13 8	11 8	11 3	U7 8s			1 8	1 8			24
17 4	14 8	15 8	12 1	11 6	U11 6s	S	U2 9s	3 1	5 8			25
17 0	14 0	U13 OS	U12 OS	9 0	U6 OS					U4 OS		26
14 0	15 0	14 0	12 4	9 0	U8 OS				2 4		3 0	27
U15 OS	U14 6s	13 4	12 0	8 2	U6 OS							28
24 0	13 0	13 6	12 0	U10 OS	U7 OS	C		U4 4s	U4 OS	U5 OS	U7 OS	29
14 4	U14 OS	12 0	7 0	G	U6 OS	2 4					2 3	30
15 6	14 8	13 2	11 9	10 8	7 9	4 6		2 7	3 2	4 3	4 0	Mean
15 6	14 4	13 4	12 0	9 0	7 7	3 2		2 6	2 8	4 0	3 5	Median
30	30	29	30	30	29	10	4	7	17	18	14	Count

Sweep 1 Mc to 25 Mc. in 27 seconds

Characteristic fbEs
 Unit Mc
 Month June 1959

TABLE 60
 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 5	3 9	4 0	4 2
2		1 6	1 4					3 0	3 4	3 8	4 1	4 3
3								C	3 5	3 8	4 0	4 1
4	1 5	1 7	1 6							4 0	4 0	4 2
5					1 5			3 0	3 8	3 8	4 0	4 2
6	1 1	1 4	1 6	1 6	1 6					4 0	4 1	4 2
7	1 3	1 1					2 3	3 1	3 5	4 1	4 0	4 3
8							2 2	3 0	4 2	3 9	4 0	4 2
9	2 3	1 3	2 0	1 7				3 0	3 6	4 0	4 3	4 3
10				1 5				3 0	3 6	4 0	4 2	4 3
11								3 2	4 0	5 0	4 6	
12			1 4				2 3	3 0	3 6	3 8	4 2	4 4
13	2 2			1 5				3 1	3 8		4 2	4 3
14		1 4	1 5					3 0	3 5	4 0	4 2	4 4
15		2 0	1 7					3 2		4 4	4 4	4 6
16								3 0	3 8	4 0	4 2	4 2
17							2 3	3 0	3 4	4 0	4 1	4 3
18	1 4	1 6	1 7				2.9	3 1	3 5	4 0	4 1	4 2
19							2 2	3 0	3 6	4 0	4 2	4 4
20		2 0						3 0	3 6	4 0	4 2	4 2
21		1 9		1 4	1 6			2 8	3 6	3 9	4 0	4 3
22								3 0	3 5	4 0	4 2	4 2
23	1 6			1 2	1 4			3 0	3 5	4 0	4 2	4 3
24								2 9	3 5	3 9	4 1	4 3
25			1 7	2 1				3 0	3 5	3 9	4 2	4 2
26		1 6		1 4					3 6	4 0	4 2	4 3
27		2 0	1 4	2 0	1 4			3 0	u3 8s	4 4	4 2	4 8
28										4 0	6 0	4 4
29		1 7	2 1	1 6	2 0			3 0	3 6	5 2	4 4	7 0
30	2 0	2 4	2 0	1 7					3 5	4 0	4 2	4 2
Mean	1 7	1 7	1 7	1 6	1 6		2 4	3 0	3 6	4 1	4 2	4 4
Median	1 6	1 6	1 6	1 6	1 6		2 3	3 0	3 6	4 0	4 2	4 3
Count	8	14	12	11	6		6	23	26	29	30	29

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic f_bE_s
 Unit · Mc
 Month June 1959

TABLE 60
 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
4 2	4 2	4 0			2 8	2 1						1
4 2	4 1	5 0	4 0	4 3	2 8	2 0		1 6	1 6	1 4		2
4 2	4 1	3 9	4 0	4 1	4 0	C				1 6	2 2	3
4 1	4 1	3 9	3 6	3 4	C	1 8						4
4 2	4 3	4 1	3 6	4 0	2 7	1 8				1 4	1 7	5
4 3	4 3	4 0	3 7	3 4	2 9	2 4		1 5	1 4			6
4 2	4 1	4 0	4 0	3 8	3 0	2 3						7
4 3	4 1	4 0	3 7	3 4	2 9	4 0	2 4				2 6	8
4 5	4 7	4 0	3 8	3 7	3 0				1 3	1 6	1 8	9
4 5	4 3	4 2	4 0	4 5	5 0	3 0				1 7	1 7	10
4 8	4 6	4 4	4 0	3 8	3 5	2 5						11
4 4	4 4	4 6	4 0	3 4	2 8	2 0			1 4	1 6		12
4 2	4 2	4 1	3 8	3 6						1 4	2 0	13
4 4	4 2	4 0	5 0	5 3	3 0				1 5	1 7	1 3	14
C	4 4	4 2	5 4	4 1	3 2	2 0		1 5	1 6			15
	4 5	4 2	4 0	3 8	3 2	2 8						16
4 4	4 4	4 2	4 0			2 1					1 6	17
4 3	4 2	4 0	3 8	3 6	4 2	2 4				1 5	2 5	18
4 4	6 2	6 0	6 0	4 0	4 4	2 8	1 7			1 9	2 0	19
4 4	4 2	4 2	3 8	3 6	3 6	2 0				1 6		20
4 3	4 2	4 0	3 8	3 6	3 1	2 0			1 6			21
4 3	4 2	4 1	3 8	3 6	2 9	2 0	1 2		1 4	1 4		22
4 3	4 3	4 0	3 8	3 5	3 0	2 0						23
4 4	4 3	4 2	3 8	3 4	2 9	1 9						24
4 5	4 3	4 1	3 8	3 4	3 1	2 5	1 7	1 8	2 0			25
4 4	4 2	4 2	3 8	3 5	3 0	2 3				1 4		26
4 8	4 2	4 0	3 8	3 5	C	2 0						27
4 2	4 2	4 2	3 9	3 5	3 1							28
5 0	4 8	4 2	5 0	3 8	3 8	2 0	C		1 8	1 5	1 6	29
4 2	4 0	4 0	3 9		3 2	2 6						30
4 4	4 3	4 2	4 0	3 9	3 3	2 3			1 6	1 6	1 9	Mean
4 3	4 2	4 1	3 8	3 6	3 0	2 1			1 6	1 6	1 8	Median
28	30	30	29	27	26	25	4	4	10	14	11	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic .fbEs
Unit: Mc
Month June 1959

TABLE 60—Contd.
Ionospheric Data
75.0°E Mean Time

Latitude . 10.2°N
Longitude . 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1									3.7	4.0	4.1	4.2
2		1.4	1.3				2.6	3.3	3.6	4.0	4.2	4.2
3									3.6	4.0	4.0	4.2
4	1.5	1.5	1.5	1.4					4.0	4.0	C	4.2
5					1.6		2.6	3.2	3.5	4.0	4.1	4.2
6	1.7	1.6	1.6	1.3				3.3	3.6	4.0	4.1	4.2
7		1.1				1.6	2.8	3.4	3.7	4.0	4.0	4.3
8							2.7	3.2	3.8	4.0	4.0	4.2
9		2.3	1.6				2.7	3.0	3.7	4.0	4.3	4.4
10	1.5		1.7				2.7	3.3	3.8	4.0	4.6	4.4
11							2.7	3.6	4.1	4.4	4.4	
12						2.0	2.7	3.2	3.8	4.1	4.3	4.4
13	1.1								3.9	4.0	4.2	4.2
14							2.8	3.2	3.8	4.1	4.4	4.4
15	2.4	1.8					2.9	3.6		4.4	4.6	C
16								3.4	4.0	4.1	4.2	
17							2.7	3.3	3.6	4.2	4.2	4.4
18		1.5	1.4		1.5		2.8	3.2	3.8	4.2	4.1	4.4
19							2.7	3.4	3.9	4.0	4.3	C
20	2.8						2.6	3.4	3.8	4.0	4.2	4.2
21	2.0						2.8	3.2	3.7	4.0	4.2	4.2
22							2.7	3.3	3.7	4.0	4.0	4.2
23				1.1				3.4	3.8	4.1	4.2	4.2
24								3.3	3.7	4.0	4.2	4.3
25		1.7	1.8	2.0				3.3	3.8	4.1	4.2	4.3
26		2.8	1.2					3.2	3.8	4.2	4.2	4.2
27	2.6	1.6	1.3	1.7			2.6	3.2	4.0	4.0	4.8	5.6
28								3.3	3.8	5.4	5.2	4.3
29		2.0	1.7	1.4				3.3	3.6	4.4	8.4	6.6
30	1.7	2.6	1.6						3.7	4.0	4.2	4.2
Mean	1.9	1.8	1.5	1.5			2.7	3.3	3.8	4.1	4.4	4.4
Median	1.7	1.6	1.6	1.4			2.7	3.3	3.8	4.0	4.2	4.2
Count	9	12	11	6	2	2	17	25	29	30	29	26

Sweep 1 Mc to 25 Mc, in 27 seconds

Characteristic f_oF₂
Unit, Mc
Month June 1959

TABLE 60—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
1.3	1.1				2.4	1.7						1
1.2	1.0	1.1		3.6	2.4							2
1.2	1.1	1.0	4.3	5.0	2.8			1.5	1.6	1.8		3
1.1	1.0	3.8	3.1		2.2			1.3		2.0	1.6	4
1.1	1.0	1.0	3.5	3.2	2.4				1.5	2.0	1.2	5
1.3	1.1	1.0	3.6	3.1	2.6	UI Gs		1.1	1.6	1.7	1.2	6
1.1	1.2	1.0	1.0	3.4	2.5							7
1.2	1.0	1.0	3.5	3.1	2.8	3.8	1.6			2.1	2.4	8
4.1	1.2	1.1	3.7	3.3	2.6				1.6	1.7		9
1.5	1.1	4.1	1.0	5.9	3.3	1.8			1.3	1.8	1.9	10
4.5	1.6	1.2	4.0	3.8	2.8	2.1						11
1.1	1.5	1.1	3.8	3.2	2.5	1.6			1.2		1.1	12
1.2	1.2	C	3.6						1.6	1.6	1.3	13
1.3	1.2	1.0	1.8	1.1	2.1				1.6			14
4.1	1.1	1.0	3.8	1.9	2.6	1.4			1.3			15
1.7	4.1	1.2	3.8	3.8	3.2					1.6		16
1.3	1.2	1.2	3.8		2.6					1.6		17
1.2	1.2	3.0	3.5	3.2	2.8	1.8	1.6		1.7	1.5		18
1.1	8.0	5.6	4.5	3.8	1.1	2.1	1.7			2.0		19
1.4	1.3	4.2	3.8	3.6	2.6				1.8	2.0		20
1.2	4.1	1.0	3.7	3.2	2.5	1.9						21
1.2	1.0	1.0	1.3	1.4	2.5	1.4				1.9		22
1.1	4.2	3.9	3.7		2.5	1.4						23
1.2	1.3	4.0	3.6	3.2	2.5							24
4.3	1.4	4.0	3.5	3.1	3.8	2.2	1.9	2.0	1.9			25
1.2	1.2	1.0	3.6	3.2	2.6							26
1.2	1.2	1.0	3.6	3.2	2.6						1.6	27
4.2	1.2	1.2	3.7	3.3	2.6							28
0.6	1.2	1.0	06.08	3.6	2.7	C		1.4	1.8	1.6	2.0	29
1.0	1.2	1.0	3.6		3.0	1.5					1.3	30
4.4	4.3	1.1	3.9	3.7	2.7	1.9		1.5	1.6	1.8	1.6	Mean
4.3	1.2	1.0	3.7	3.4	2.6	1.8		1.4	1.6	1.8	1.4	Median
30	30	28	28	24	29	14	4	5	13	15	10	Count

Sweep 1 Mc to 25 Mc 27 in seconds.

Characteristic f min

TABLE 61

Latitude 10 2°N

Unit Mc

Ionospheric Data

Longitude 77 5°E

Month June, 1959

75 0°E Mean Time

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	17	14	14	13	15	16	22	21	21	25	28	30
2	11	11	11	11	16	14	15	15	20	23	24	28
3	18	15	12	12	14	13	17	C	18	21	22	25
4	E	E	E	11	11	13	15	15	18	22	22	30
5	S	S	15	17	14	14	18	16	20	23	25	27
6	10	10	12	12	10	12	16	20	22	23	22	26
7	12	11	10	12	11	11	13	14	18	28	25	25
8	12	13	10	10	11	13	14	16	24	22	22	27
9	13	11	17	14	15	15	14	15	18	21	28	30
10	18	16	13	10	19	15	23	17	21	24	24	25
11	16	18	16	15	16	14	13	23	31	30	32	48
12	11	13	E	12	15	17	17	17	20	22	24	26
13	11	12	12	E	13	13	18	14	20	47	24	28
14	11	13	14	12	16	14	18	17	20	21	25	29
15	11	10	12	15	14	11	18	26	43	42	31	35
16	19	15	15	11	E	12	18	16	18	23	24	26
17	16	13	13	11	12	14	16	17	20	22	24	26
18	E	12	E	13	11	17	18	16	19	22	24	24
19	15	15	13	15	15	12	14	13	17	20	22	24
20	22	15	19	18	17	16	18	13	18	22	23	26
21	14	16	14	13	12	17	17	16	18	21	23	26
22	13	13	14	10	14	11	19	16	19	21	22	24
23	13	16	12	E	12	16	12	16	20	28	27	25
24	15	11	E	10	13	13	23	16	20	24	24	27
25	13	16	12	12	20	16	17	13	16	20	23	25
26	14	12	13	10	13	13	16	13	18	22	24	24
27	12	12	10	E	E	12	15	14	17	20	21	24
28	10	S	16	13	10	11	14	16	20	24	26	24
29	10	14	11	10	16	17	24	22	22	26	30	28
30	11	E	15	12	12	14	16	15	19	22	24	22
Mean	14	13	13	13	14	14	17	16	21	24	25	27
Median	13	13	12	12	14	14	17	16	20	22	24	26
Count	29	28	30	30	30	30	30	29	30	30	30	30

Sweep 1 Mc. to 25 Mc in 27 seconds

Characteristic f_oF₂ min
Unit Mc
Month June, 1959

TABLE 61
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
2.8	2.8	2.8	2.6	2.6	2.0	1.7	1.2	1.5	1.5	1.4	1.2	1
3.0	2.7	2.5	2.2	2.1	2.0	1.7	1.2	1.1	1.1	1.1	1.1	2
2.6	2.6	2.6	2.2	2.0	1.9	2.0	1.3	1.3	1.5	1.2	1.1	3
2.5	2.6	2.1	2.1	2.2	C	1.2	1.6	S	S	1.5	S	4
3.0	2.6	2.1	2.1	2.1	1.7	1.2	1.3	1.4	1.3	E	E	5
2.8	2.7	1.5	2.3	2.0	1.6	1.6	1.3	1.5	1.2	1.5	1.2	6
2.8	2.1	2.1	2.2	2.1	2.0	1.2	1.1	1.2	1.3	UI 25	1.1	7
2.7	2.6	2.1	2.2	2.0	1.5	1.1	1.0	1.4	UI 45	UI 75	1.4	8
3.2	3.0	2.7	2.6	2.2	1.9	2.0	1.2	1.5	1.0	1.0	1.3	9
3.0	3.0	2.8	2.1	2.0	2.2	1.1	1.3	1.3	1.4	1.1	1.3	10
4.0	3.8	3.4	2.7	2.3	2.2	1.8	1.1	1.5	1.6	1.3	1.2	11
3.0	3.1	4.6	2.8	2.0	1.7	1.1	1.3	1.6	1.2	1.1	1.2	12
2.8	2.1	2.6	2.1	2.3	2.0	1.7	1.1	1.6	2.0	1.1	E	13
2.9	2.1	2.6	2.1	2.1	1.9	2.0	1.5	S	1.1	1.1	1.0	14
C	2.7	2.1	2.3	2.8	2.0	1.6	1.2	1.0	1.0	1.5	1.6	15
3.0	3.0	2.6	2.6	2.3	1.8	1.1	1.5	S	1.5	1.6	1.5	16
2.6	2.7	2.6	2.6	2.6	2.1	1.5	1.4	1.3	1.5	1.8	1.1	17
2.1	2.1	2.1	2.2	2.1	3.2	1.1	1.5	1.5	1.3	E	1.3	18
2.6	2.9	2.1	1.9	1.6	1.8	1.3	E	1.3	1.5	E	1.2	19
2.8	2.7	2.5	2.1	2.1	2.1	1.7	1.3	1.3	1.5	1.1	1.5	20
2.8	2.5	2.5	2.5	2.1	1.9	1.9	1.2	1.8	1.4	1.5	1.5	21
2.5	2.5	2.1	2.2	2.3	1.8	1.5	E	1.6	1.2	1.1	1.5	22
2.6	2.7	2.2	2.1	2.1	2.1	1.6	1.2	1.3	1.4	1.5	1.2	23
2.9	2.6	2.7	2.1	2.1	2.0	1.3	1.0	1.2	E	E	1.3	24
2.6	2.5	2.1	2.2	1.8	1.3	E	E	1.1	1.3	1.3	1.7	25
2.4	2.6	2.1	2.3	2.0	1.7	1.5	1.2	S	1.2	UI 15	1.4	26
2.6	2.5	2.1	2.2	1.9	C	1.2	UI 25	S	S	S	1.0	27
2.1	2.1	2.2	2.3	2.1	1.7	1.1	1.1	S	S	1.3	1.0	28
2.6	2.6	2.1	2.1	1.9	1.5	1.2	C	1.2	S	1.1	E	29
2.1	2.2	2.1	2.0	1.9	1.6	1.2	1.2	S	1.3	1.2	1.2	30
2.8	2.7	2.6	2.1	2.1	2.9	1.5	1.2	1.1	1.3	1.3	1.3	Mean
2.8	2.6	2.1	2.1	2.1	1.9	1.5	1.2	1.1	1.3	1.2	1.2	Median
29	30	30	30	30	28	30	29	23	26	29	29	Count

Sweep 1 Mc. to 25 Mc. in 27 seconds

Characteristic f_{min}
 Unit Mc
 Month June, 1959

TABLE 61—*Contd*
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	1 6	1 4	1 5	1 3	1 7	1 9	1 9	2 0	2 1	2 7	2 7	2 8
2	1 2	1 3	1 1	1 5	1 6	1 7	1 3	1 7	2 3	2 4	2 6	3 0
3	1 4	1 5	1 2	1 5	1 4	1 7	1 8	1 9	2 0	2 1	2 1	2 6
4	E	E	E	E	1 4	1 7	1 5	1 9	2 2	2 2	C	2 7
5	S	1 5	1 5	1 8	1 3	2 0	1 7	1 8	2 0	2 3	2 7	2 8
6	1 0	1 0	1 2	1 0	1 3	1 8	1 7	2 0	2 2	2 5	2 5	2 8
7	1 1	1 0	1 1	1 2	1 2	1 2	1 3	1 5	2 1	2 4	2 4	2 6
8	1 4	1 2	1 1	1 2	1 3	1 7	1 6	1 8	2 1	2 2	2 4	2 6
9	1 6	1 0	1 0	1 5	1 2	1 7	1 5	1 6	2 0	2 2	2 2	3 1
10	1 2	1 6	1 0	1 7	1 7	1 8	2 0	2 0	2 2	2 4	2 6	3 0
11	1 8	1 9	1 3	1 7	1 3	1 8	1 6	2 9	3 0	3 0	3 3	5 8
12	1 4	1 3	1 1	1 2	1 7	1 6	1 8	1 8	2 2	2 4	3 1	3 0
13	1 1	1 1	1 2	1 1	1 3	1 8	1 6	1 8	2 3	2 5	2 5	2 6
14	1 2	1 5	1 4	1 5	1 7	1 7	2 0	1 6	2 0	2 4	2 6	2 8
15	1 0	1 4	1 7	1 4	1 2	2 2	2 3	2 6	4 2	3 2	3 4	C
16	1 6	1 6	1 5	1 1	1 3	1 9	2 2	1 7	2 0	2 1	2 6	8 2
17	1 6	1 5	1 4	1 4	1 2	1 2	1 8	1 8	2 1	2 4	2 4	2 6
18	1 2	1 1	1 2	1 5	1 2	2 1	1 9	1 8	1 9	2 3	2 3	2 3
19	2 0	1 4	1 5	1 6	1 2	1 5	1 6	1 5	1 9	2 0	2 3	C
20	1 9	2 0	2 0	1 7	1 5	1 8	1 9	1 6	2 0	2 2	2 6	3 0
21	1 4	1 7	1 4	1 4	1 6	2 0	1 8	1 6	2 0	2 0	2 3	2 6
22	1 1	1 1	1 3	1 2	1 3	1 9	1 9	1 6	1 9	2 2	2 3	2 5
23	1 5	1 6	1 1	E	1 3	1 5	1 3	1 8	2 2	2 6	2 4	2 7
24	1 3	1 3	1 4	1 9	1 4	1 6	2 1	1 7	2 2	2 4	2 5	2 7
25	1 7	1 3	1 3	1 6	1 4	1 9	1 6	1 3	1 9	2 2	2 5	2 4
26	1 4	1 1	1 0	1 8	1 4	1 5	1 6	1 4	2 0	2 4	2 2	2 4
27	1 3	1 1	E	1 0	1 1	1 8	1 5	1 6	1 8	2 0	2 4	2 4
28	S	1 3	1 5	1 4	1 0	1 0	1 8	1 7	2 1	2 4	2 6	2 4
29	1 1	1 2	1 4	E	1 5	2 0	2 0	2 3	2 4	2 6	2 8	2 8
30	E	E	1 3	1 6	1 2	1 7	1 5	1 9	2 0	2 2	2 1	2 4
Mean	1 4	1 4	1 3	1 4	1 4	1 7	1 7	1 8	2 2	2 4	2 6	3 0
Median	1 4	1 3	1 3	1 4	1 3	1 8	1 8	1 8	2 1	2 4	2 5	2 7
Count	28	30	30	30	30	30	30	30	30	30	29	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic 1 min
Unit Mc
Month June, 1959

TABLE 61—Contd
Ionospheric Data
75 0 E Mean Time

Latitude 10°2'N
Longitude 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
2.8	2.8	2.8	2.8	2.0	1.6	1.2	1.4	1.4	1.5	1.3	1.1	1
2.6	2.5	2.5	2.4	2.0	1.8	1.4	1.3	1.2	1.2	1.1	1.9	2
2.7	2.6	2.5	2.2	2.0	1.6	1.5	1.5	1.1	1.5	1.2	1.1	3
2.5	2.1	2.1	2.5	2.1	1.7	2.0	S	2.0	1.1	1.6	S	4
2.6	2.8	2.8	2.2	1.9	1.1	1.2	1.2	1.3	1.1	1.1	1.0	5
2.6	2.1	2.4	2.3	2.0	1.3	1.1	1.3	1.1	1.2	1.0	1.0	6
2.4	2.7	2.3	2.0	2.0	1.4	1.4	1.2	1.3	UI 35	1.1	1.0	7
2.7	2.1	2.5	2.2	1.9	1.3	1.0	1.1	UI 33	UI 78	1.2	1.2	8
3.1	3.0	2.1	2.1	2.2	2.0	1.4	1.2	1.5	1.2	1.3	1.7	9
3.2	3.0	2.9	2.2	2.0	1.4	1.1	1.4	1.6	1.0	1.0	1.3	10
3.6	3.8	3.2	2.5	2.2	1.9	1.2	1.2	1.4	1.5	1.2	1.4	11
3.0	1.1	3.1	2.1	2.0	1.1	1.0	1.1	1.3	1.1	1.3	1.0	12
2.6	2.5	C	2.6	2.1	2.0	1.4	1.4	1.8	1.0	1.1	E	13
2.8	2.6	2.6	2.2	2.0	1.8	1.1	1.5	1.8	1.1	1.4	1.2	14
UI 25	2.1	2.6	2.3	2.5	1.7	1.3	1.2	1.3	1.1	1.7	1.5	15
4.0	2.6	2.6	2.4	2.0	2.2	1.6	S	1.5	1.2	E	1.5	16
2.6	2.5	2.6	2.1	2.4	1.7	1.4	UI 75	1.5	1.5	1.1	1.5	17
2.6	2.3	2.1	2.1	2.1	1.7	S	E	1.7	E	1.1	1.5	18
2.6	2.5	2.2	1.9	1.6	1.6	E	E	1.5	1.5	1.1	1.9	19
2.6	2.7	2.8	2.1	2.1	1.4	1.5	1.6	1.7	1.1	1.7	1.3	20
2.5	2.5	2.4	2.3	2.0	1.6	1.6	1.6	1.8	1.3	1.4	1.0	21
2.5	2.5	2.3	3.6	2.0	1.8	1.3	1.2	1.7	1.4	1.2	1.5	22
2.6	2.4	2.3	2.3	3.5	1.7	1.1	1.3	1.4	1.4	1.6	1.3	23
2.9	3.0	2.5	2.4	2.0	1.7	1.2	1.2	1.4	E	1.2	1.4	24
2.5	2.5	2.3	2.1	1.6	1.1	1.2	1.1	1.1	1.2	1.5	1.6	25
2.5	2.2	2.1	2.2	1.8	1.5	UI 58	1.2	UI 28	UI 28	1.7	1.6	26
2.4	2.4	2.2	2.1	1.8	1.6	1.4	UI 28	S	1.0	S	1.1	27
2.4	2.6	2.4	2.3	2.0	1.6	S	S	S	1.2	1.1	1.1	28
2.6	2.6	2.6	2.2	1.7	1.6	C	C	1.0	1.1	1.1	E	29
2.3	2.2	2.0	2.0	1.9	1.6	1.1	S	S	1.3	1.3	E	30
2.7	2.7	2.5	2.3	2.1	1.6	1.3	1.3	1.1	1.3	1.3	1.3	Mean
2.6	2.5	2.5	2.3	2.0	1.6	1.3	1.2	1.4	1.2	1.2	1.3	Median
30	30	29	30	30	30	27	25	26	30	29	29	Count

Sweep 1 Mc to 25 Mc. in 27 seconds

Characteristic · h'F₂
 Unit Km
 Month June, 1959

TABLE 62
 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								L	L	L	L	L
2								L	L	L	L	L
3								C	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	L	L	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	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	L	LH
23								L	L	L	L	L
24								L	L	L	L	LH
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
Mean												
Median												
Count												

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'F₂
 Unit Km
 Month June, 1959

TABLE 62
 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	380	L							1
L	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	C							4
L	L	L	L	L	L							5
L	L	L	L	L								6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
L	L	L	L	L	L							14
C	L	L	L	L	L							15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L	L	L	L	L	L							23
L	L	L	L	L	L							24
L	L	L	u415L	L	L							25
L	L	L	L	L	L							26
L	L	L	L	L	C							27
L	L	L	L	L	L							28
L	L	L	L	L	A							29
L	L	L	L	L	L							30
												Mean
												Median
			1	1								Count

Sweep 1 Mc. to 25 Mc in 27 seconds.

Characteristic h'F₂
 Unit Km
 Month June, 1959

TABLE 62—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2' N
 Longitude : 77 5' E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	L	L
3								280	L	L	L	L
4								L	L	L	C	L
5								L	L	L	L	L
6							L	L	L	L	L	L
7							L	L	L	L	L	L
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	L	L
11							L	L	L	L	L	L
12							L	L	L	L	L	L
13							L	L	L	L	L	L
14							L	L	L	L	L	L
15							L	L	L	L	L	C
16							L	L	L	L	L	B
17							L	L	L	L	L	L
18							L	L	L	L	L	L
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21							L	L	L	L	L	L
22							L	L	L	L	L	L
23							L	L	L	L	L	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26							L	L	L	L	L	L
27							L	L	L	L	L	L
28							L	L	L	L	L	L
29							L	L	L	L	L	L
30							L	L	L	L	L	L
Mean												
Median												
Count								1				

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Latitude 10 2°N Longitude 77 5°E
 Characteristic h'F₂ Unit Km
 FABRI 62-Cond Ionospheric Data Month June, 1959
 75 0°E Mean Time

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L							
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L						
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L					
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L				
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L			
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
1950	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L

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

Characteristic h'F

TABLE 63

Latitude . 10.2°N

Unit Km

Ionospheric Data

Longitude . 77 5°E

Month June, 1959

75 0°E Mean Time

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	320	315	320	350	300	230	255	240	225	215	200	200
2	360	360	320	260	220	235	260	230	220	215	210	200
3	295	315	310	320	260	220	240	C	235	220	210	200
4	F	F	360	350	300	250	260	235	225	210	210	220
5	235	240	225	230	260	250	260	240	240	215	200	220
6	F	U3201	U3001	U300F	U2801	U2601	250	240	220	200II	205II	190H
7	275F	U2801	U3001	U280F	220	215	260	240	230	230	210	200II
8	U3001	U300F	U2751	U2751	U250F	240	260	235	A	215	200II	200H
9	U270F	280	300	260	245	250	265	240	230	220	220II	220
10	U300F	335	305	345	280	215	260	240	235	225II	215	205
11	370	345	320	300	300	280	260	245	235	A	225	225
12	250	270	275	260	245	260	275	245	230	220	215	205II
13	340	330	310	300	255	230	250	230	225	B	205	215
14	325	280	260	240	230	220	270	240	220	200II	200II	200II
15	265	270	260	215	225	225	270	250	245	230	225	215
16	320	320	320	280	245	240	260	240	235	220	205	200
17	U400F	U3601	3101	315	275	275	270	240	220	220	200II	200H
18	U340F	3201	2751	260	260	240	260	240	220	200II	195II	200II
19	340	3001	280	280	255	220	260	240	230	210	200	200II
20	4001	380F	380	U3601	280	225	270	240	220	200	210	200
21	F	390	350	320	300	245	270	240II	235	220	200	200II
22	375	345	340	3451	300	240	275	240	225	220	215	200H
23	340	400	460	U4451	390	270	265	240	230	230	220	210
24	380	465	F	370	240	220	275	250	240	230II	215	210II
25	360F	F	F	310	295F	265	270	240	230	220	220	200
26	280	300	300	300	240	235	265	250	230	220	220II	210
27	280	300	320	380	340	285	270	240	U240A	U240A	230	235
28	F	F	F	330	270	280	270	250	235	230	A	220
29	320F	340	380	370	320	250	275	255	240	A	220	A
30	350	380	380	320	270	295	270	240	230	230	220	200II
Mean	325	325	320	310	270	245	265	240	230	220	210	205
Median	320	320	320	305	265	240	265	240	230	220	210	200
Count	26	27	27	30	30	30	30	29	29	27	29	29

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic : h'F
 Unit Km
 Month June, 1959

TABLE 63
 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	
200	215	210	220	235	250	280	F	400	F	F	360	1	
200	200	A	220	A	260	285	340	F	F	320	280	2	
205	200	220	235	260	280	290	350	F	F	300	350	3	
200	200	200II	220	240	C	280	F	F	F	360	290	4	
205	215	195II	215	A	240	275	360	F	300	360	380	5	
205II	205II	200II	220II	230II	260	280	365	F	U1101	U1701	U3001	6	
200II	200	210II	220II	240	255	280	U3601	F	F	F	U320F	7	
190II	190II	190II	215II	230	260	300	360	U4001	F	F	F	U3101	8
220	A	220	230	240	265	290	U320F	U3601	U310F	U3301	U3101	9	
215	215II	225	220II	A	A	300	U3701	U1701	F	F	F	10	
230	215II	215	220II	240	260	280	330	U3201	F	380	300	11	
200II	205	U240B	230	230	250	280	380	U5001	460	410	370	12	
205	200II	210	220	235	250	280	360	F	400	380	360	13	
220	205	210	A	A	215	275	370	F	U1001	U3801	330	14	
C	200II	205II	A	U260A	260	300	360	320	F	325	305	15	
B	210	200II	215	245	255	300	400	F	F	F	100F	16	
200	210	220	220	235	240	280	380	U1201	F	F	F	17	
210	200	210	220	235	A	300	380	U1101	F	F	4201	18	
220	A	A	A	240	A	280	345	U3601	U1201	420	400	19	
200	200II	200II	210	240	260	280	3201	F	F	U160F	U1401	20	
200	200	200	200II	230	250	295	F	F	F	F	F	21	
200II	215II	215	220	240	260	290	325	F	390	380	340	22	
210	200	200	200	245	260	290	370	F	U3901	350	330	23	
210II	225	220	215II	235	270	295	380	F	F	F	F	24	
220	220	220	215	245	270	U300A	370	F	U1051	360	305	25	
200II	200	210	210	240	260	290	340	370	350	300	290	26	
240	205	205	205II	235	C	295	345	3201	U3801	4201	3701	27	
220	200	200	240	240	260	290	3101	F	310F	3801	340	28	
A	250	220	A	A	A	305	380	C	110	100	360	29	
200	195	220	220	220	260	260	350	3101	390F	340	280	30	
210	205	210	220	240	260	290	355	385	385	370	340	Mean	
205	200	210	220	240	260	290	360	375	390	370	335	Median	
27	28	28	26	25	24	30	26	11	16	21	26	Count	

SWEEP 1 Mc. to 25 Mc. in 27 seconds.

Characteristic f^oF_2
 Unit Km
 Month June, 1959

TABLE 63—Contd.
 Ionospheric Data
 75 0°E Mean Time

Latitude 10° 2 N
 Longitude 77 5 E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	320	310	340	320	250	250	240	225	215	205	200	200
2	350	350	300	240	220	270	240	230	220	210	200	185
3	320	320	325	300	230	235	240	230	225	220	210	200
4	F	380	350	340	280	285	240	230	A	200	C	210
5	240	240	230	240	260	260	245	220	215	210	210	210
6	U360F	U300F	U285F	U290F	U270F	U275F	210	220	200H	200H	195H	205H
7	275F	U290F	U300F	255F	205	270	250	230	230	220H	200H	205H
8	U300F	U280F	U270F	U265F	U235F	260	215	230	225	205H	200H	200H
9	270	300	280	260	240	U300I	255	225	225	220	200H	220
10	315	365	365	300	255	290	245	240	230	220	210H	215
11	345	330	305	300	280	295	250	240	235	210	205H	B
12	255	275	260	260	245	310	255	240	225	215	215H	210
13	335	300	305	280	235	260	240	235	225	210	210	210
14	300	265	250	240	230	265	245	230	210	200H	200H	205
15	U280A	260	240	220	220	280	255	245	235	230	220	C
16	320	320	300	260	240	270	245	230	225	210	200	B
17	U400F	U360F	330	280	260	305H	255	235	220	210H	200H	200H
18	320F	300F	265	260	260	280	250	225	215	200H	200H	210
19	U320F	280	280	280	220	280	250	240	220	210	200	C
20	400F	380F	380	310	245	270	260	235	220	205	200	200
21	U400F	370	340	315	260	265	260	A	220	215	205	205
22	340	345	340F	340I	260	280	260	235	210H	220	205	200H
23	360	420	460F	430F	320	280	250	210	220	220H	210	200
24	420	F	F	300	235	280	260	250	230	220	210	215H
25	F	320F	F	295F	265	280	245	240	220	215	210	210
26	280	320	300	280	230	260	250	230	230	220H	200	200
27	300	310	340	375	310	300	260	240	U240A	230	240	A
28	F	480F	390F	280	280	300	260	245	230	A	A	205
29	320	360	380	350	280	260	270	250	210	U230A	A	A
30	320	385	350	295	280	300	255	235	225	220	215	215
Mean	325	330	315	290	255	275	250	235	225	215	205	205
Median	320	320	305	290	250	280	250	235	225	215	205	205
Count	27	29	28	30	30	30	30	29	29	29	27	24

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'F
Unit Km
Month June, 1959

TABLE 63—*Contd*
Ionospheric Data
75.0 E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
200	200	220	230	240	260	300	F	400	F	380	360	1
200	200	Λ	230	260	270	300	360	F	340	300	280	2
200	220	220	Λ	Λ	275	300	F	320	360	320	360	3
200	200	220	220	245	270	300	F	F	F	320	270	4
205	215	215	220	240	260	300	F	320	F	F	F	5
210H	200H	220	215H	245	270	305	U400F	F	U400F	U340F	280F	6
200H	200H	200H	U230A	240	260	310	F	F	F	U340F	U305F	7
190H	195H	220H	225H	240	270	320	375	F	F	U340F	U270F	8
210	220	220	225	250	280	U300F	U350F	U360F	U360F	U325F	U300F	9
220H	220	220	235	Λ	280	U320F	U415F	F	F	F	U390F	10
205H	220H	200H	240	250	265	300	340	F	390	350	250	11
200H	230	230	220	230	260	310	U460F	460	440	405	360	12
205H	205	C	230	240	265	305	380	F	390	370	330	13
210H	205	205	Λ	Λ	260	310	F	405	U400F	340	300	14
200	200H	220	235	Λ	280	320	380	U275F	F	315	310	15
200H	210	215	230	260	280	320	F	F	F	U150F	U440F	16
200	220	220	235	240	260	305	U400F	F	F	F	U380F	17
200	200	210	230	240	280	320	440	F	U180F	420F	360	18
210	Λ	Λ	Λ	250	Λ	320	360F	F	400F	420	U100F	19
200H	210	200H	220	245	260	300	U360F	F	U410F	F	440	20
210	205	205	230	235	270	325	F	F	F	F	380	21
200H	205	215	250	Λ	265	300	U340F	380	380	365	330	22
200H	200	205	240	245	280	300	U380F	U390F	F	330	350	23
210H	225H	220H	230	245	275	310H	F	F	F	F	380	24
215	215	210	215	255	Λ	300	U420F	U390F	395	340	280	25
200H	200H	205H	220	245	270	300	F	380	340	290	280	26
230	200	210	220	250	280	320	340F	F	400F	F	380F	27
210	210	230	230	250	275	305	300F	350F	340F	360F	340	28
Λ	190H	230	Λ	260	290	C	380	385	410	390	350	29
200	220	220	220	250	260	300	360F	360F	360F	305	280	30
205	210	215	230	245	270	310	380	370	390	355	335	Mean
200	205	220	230	245	270	305	380	380	390	340	340	Median
29	29	27	26	25	28	29	20	14	18	23	29	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'E
Unit Km
Month June 1959

TABLE 64
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	105	Λ	Λ	Λ
2							115	Λ	Λ	Λ	Λ	Λ
3							120II	C	Λ	Λ	Λ	Λ
4							125	105	100	100	Λ	Λ
5							120	100	Λ	Λ	Λ	Λ
6							120	110	105	Λ	105	110
7							110II	Λ	Λ	Λ	Λ	Λ
8							120	Λ	Λ	Λ	Λ	Λ
9							120	110	105	Λ	Λ	Λ
10								Λ	Λ	Λ	Λ	Λ
11							105II	115	120	Λ	Λ	B
12							Λ	Λ	Λ	Λ	Λ	Λ
13							115	105	100	B	Λ	Λ
14							120	Λ	Λ	Λ	Λ	Λ
15							120	120	B	B	Λ	Λ
16							130	110	Λ	Λ	Λ	Λ
17							120	Λ	Λ	Λ	Λ	Λ
18							Λ	Λ	Λ	Λ	Λ	Λ
19							120	Λ	Λ	Λ	Λ	Λ
20							120	Λ	Λ	Λ	Λ	Λ
21							120	Λ	Λ	Λ	Λ	Λ
22							120	Λ	Λ	Λ	Λ	Λ
23							110	105	105	115	Λ	Λ
24								115	Λ	Λ	Λ	Λ
25							120	Λ	Λ	Λ	Λ	Λ
26							130	110	110	110	Λ	Λ
27							120	110	110	110	110	Λ
28							120	110	115	110	115	Λ
29								120	115	Λ	Λ	Λ
30							120	110	110	110	Λ	Λ
Mean							120	110	110	110		
Median							120	110	110	110		
Count							21	16	12	6	3	1

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic h'E
 Unit . Km
 Month . June 1959

TABLE 64
 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	Λ	110	105	115	110							1
A	Λ	Λ	Λ	Λ	Λ							2
A	105	Λ	Λ	Λ	Λ							3
A	Λ	Λ	Λ	100	C							4
A	Λ	Λ	Λ	Λ	Λ							5
A	Λ	Λ	Λ	Λ	115							6
A	Λ	Λ	Λ	Λ	Λ							7
A	Λ	Λ	Λ	Λ	110							8
A	Λ	Λ	Λ	105	110							9
A	Λ	Λ	105	Λ	Λ							10
B	Λ	Λ	Λ	115	125							11
A	Λ	B	Λ	Λ	Λ							12
Λ	Λ	Λ	Λ	120	120	140						13
A	Λ	Λ	Λ	Λ	Λ							14
C	Λ	Λ	Λ	Λ	Λ							15
B	A	Λ	Λ	Λ	120							16
A	Λ	Λ	110	120	120							17
A	Λ	Λ	Λ	Λ	Λ							18
A	Λ	Λ	Λ	Λ	Λ							19
A	Λ	Λ	Λ	120	120							20
Λ	Λ	Λ	Λ	Λ	115							21
Λ	Λ	Λ	Λ	110	Λ							22
Λ	Λ	Λ	Λ	Λ	120							23
Λ	Λ	Λ	105	Λ	Λ							24
Λ	Λ	Λ	Λ	Λ	Λ							25
A	A	A	115	120	120							26
110	110	110	110	110	C							27
Λ	Λ	Λ	Λ	115	120							28
Λ	Λ	Λ	Λ	Λ	Λ							29
Λ	Λ	Λ	110	120	120							30
			110	115	120							Mean
			110	115	120							Median
1	2	2	7	12	14	1						Count

Sweep 1 Mc to 25 Mc. in 27 seconds.

Characteristic h'E
 Unit Km
 Month June 1959

TABLE 64—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							11011	105	Λ	Λ	Λ	Λ
2							Λ	Λ	Λ	Λ	Λ	Λ
3							115	105	Λ	Λ	Λ	Λ
4							115	105	105	100	C	Λ
5							105	Λ	Λ	Λ	Λ	Λ
6							115	105	105	Λ	Λ	Λ
7							Λ	Λ	Λ	Λ	Λ	Λ
8							110	105	Λ	Λ	Λ	Λ
9							115	105	Λ	Λ	Λ	Λ
10							115	Λ	Λ	Λ	Λ	110
11							105	115	Λ	Λ	Λ	B
12						Λ	Λ	Λ	Λ	Λ	Λ	Λ
13							105	105	105	Λ	Λ	Λ
14							120	Λ	Λ	Λ	Λ	A
15							120	115	B	Λ	Λ	C
16							120	Λ	Λ	Λ	Λ	B
17						120	120	Λ	Λ	Λ	Λ	Λ
18							Λ	Λ	Λ	Λ	Λ	A
19							110	Λ	Λ	Λ	Λ	C
20							120	Λ	Λ	Λ	Λ	Λ
21							115	Λ	Λ	Λ	Λ	Λ
22							120	Λ	Λ	Λ	Λ	Λ
23						115	105	100	110	110	Λ	Λ
24							120	Λ	Λ	Λ	Λ	Λ
25							115	Λ	Λ	Λ	Λ	Λ
26							120	110	110	110	Λ	110
27							115	110	110	110	110	Λ
28							120	110	110	110	110	110
29							120	115	110	Λ	Λ	Λ
30							120	110	Λ	Λ	Λ	Λ
Mean							115	110	110	110		
Median							115	105	110	110		
Count						2	26	15	9	5	2	3

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'E
Unit Km
Month June 1959

TABLE 64—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
A	105	105	115	110								1
A	A	A	110	110	A							2
A	A	A	A	A								3
A	A	A	110	115								4
A	A	A	A	A	A							5
A	105	A	A	110	110							6
A	A	A	A	A								7
A	A	A	A	105								8
A	A	A	A	115	A							9
A	A	A	A	A								10
A	A	A	A	120	125							11
A	B	A	A	A	105							12
A	A	C	A	120	140							13
A	A	A	A	A	120							14
A	A	A	A	A	A							15
B	A	A	A	120								16
A	A	A	110	120								17
A	A	A	A	120								18
A	A	A	A	A								19
A	A	A	115	120								20
A	A	A	A	115	105							21
A	A	A	B	A	A							22
A	A	A	A	B	120							23
A	A	A	A	A								24
A	A	A	A	A								25
A	A	A	115	120								26
A	110	110	110	115	120							27
A	A	110	115	120	115							28
A	A	A	110	110								29
A	A	A	110	120	120							30
			110	115	120							Mean
			110	120	120							Median
	3	3	10	18	10							Count

Sweep 1 Mc. to 25 Mc in 27 seconds.

Characteristic h'Es
Unit Km
Month June 1959

TABLE 65
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								G	100	100	100	100
2		120	115				G	100	100	100	100	100
3							G	G	100	100	100	100
4	100	100	100				G	G	G	100	100	100
5					100		G	105	100	100	100	100
6	120	105	120	110	100		G	G	G	100	100	100
7	125	120	130				105	100	100	100	100	100
8							100	100	100	100	100	100
9	100	100	100	100			G	100	100	100	100	100
10	120	115		105				100	100	100	100	100
11	100						100	100	100	100	100	100
12			115				105	100	100	100	100	100
13	110	120	160	105			G	125	150	100	100	100
14	125	120	110				G	100	100	100	100	100
15		100	100				G	100	100	100	100	100
16							G	110	100	100	100	100
17							110	100	100	100	100	100
18	120	110	110				105	100	100	100	100	100
19	120						110	100	100	100	100	100
20	140	120					G	100	100	100	100	100
21		100		115	110		G	100	100	100	100	100
22						120	G	100	100	100	100	100
23	130			120	110		G	100	100	120	100	100
24								100	100	100	100	100
25			120	110			G	100	100	100	100	100
26		120	125	120			G	G	110	100	100	100
27		120	120	120	110		110	100	100	100	100	100
28	120					120	G	130	110	100	120	100
29		120	100	120	120			100	110	100	105	100
30	100	100	100	100			G	100	100	100	100	100
Mean	115	115	115	110	110		105	100	100	100	100	100
Median	120	120	115	110	110		105	100	100	100	100	100
Count	14	16	15	11	6	2	8	25	28	30	30	30

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic h'Es
Unit Km
Month June 1959

TABLE 65
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
100	100	120	G	G	100	110						1
100	100	100	100	100	120	140		120	120	120		2
100	100	100	100	100	100	100				105	100	3
100	100	100	100	100	G	100						4
100	100	100	100	100	100	105				120	120	5
100	100	100	100	100	105	140		135	125			6
100	100	100	100	100	105	105						7
100	100	100	100	100	105	100	100				100	8
100	100	100	100	100	105	105			130	105	120	9
100	100	100	100	100	100	100			140	120	115	10
100	100	100	100	100	110	130						11
100	100	100	100	100	100	100			105	105		12
100	100	100	100	100	G	G				120	110	13
100	100	100	100	100	105	105			120	120	120	14
G	100	100	100	100	100	120		130	120			15
100	100	100	100	100	100	100				135	120	16
100	100	100	100	100	G	G				120	120	17
100	100	100	100	100	100	100				135	120	18
100	100	100	100	100	100	100	100		120	120	120	19
100	100	100	100	100	100	150				120		20
100	100	100	100	100	100	100			130			21
100	100	100	100	100	100	105	120		120	115		22
100	100	100	100	100	100	140						23
100	100	100	100	100	100	120						24
100	100	100	100	100	100	100	100	100	120			25
100	100	100	100	100	110	120				110	115	26
100	100	100	100	100	G	110						27
100	100	100	100	100	100	140						28
100	100	100	100	100	100	110	G		100	100	120	29
100	100	100	100	G	130	120						30
100	100	100	100	100	105	115			120	115	115	Mean
100	100	100	100	100	100	110			120	120	120	Median
29	30	30	29	27	26	26	1	1	12	16	13	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic h'Es
Unit Km
Month June 1959

TABLE 65—Contd
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	100	100	100	100
2		115	105				100	100	100	100	100	100
3							G	G	100	100	100	100
4	100	100	105	120			G	G	120	100	C	100
5					100		100	100	100	100	100	100
6	105	105	100	100			G	130	100	100	100	100
7		120				110	100	100	100	100	100	100
8							100	100	100	100	100	100
9		100	100				110	100	100	100	100	100
10	120		105				105	100	100	100	100	100
11	135						100	100	100	100	100	100
12						115	100	100	100	100	100	100
13	125		120				G	G	110	100	100	100
14							110	100	100	100	100	100
15	100	100					100	100	100	100	100	C
16							G	100	100	100	100	B
17						G	105	100	100	100	100	100
18	130	110	115		105		100	100	100	100	100	100
19							105	100	100	100	100	C
20	120						100	100	100	100	100	100
21	100		120				100	100	100	100	100	100
22				120			100	100	100	100	100	100
23			130	120		G	G	100	130	100	100	100
24							G	100	100	100	100	100
25		120	120	105			G	100	100	100	100	100
26	120	115	120				150	125	120	100	100	100
27	110	120	130	120	140		110	100	100	100	100	100
28						120	G	110	100	130	100	100
29		110	120	110			G	115	110	110	105	100
30	100	100	100				G	G	100	100	100	100
Mean	115	110	115	115			105	105	105	100	100	100
Median	115	110	120	120			100	100	100	100	100	100
Count	12	12	14	7	3	3	18	25	30	30	29	27

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic h'Es
Unit . Km
Month June 1959

TABLE 65—Contd.
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
100	100	G	G	G	110	110						1
100	100	100	100	135	100			120	115	100		2
100	100	100	100	100	100			135		100	100	3
100	100	100	110	G	105							4
100	100	100	100	100	100				125	120	120	5
100	100	100	100	100	105	130		125	120	120	120	6
100	100	100	100	105	105							7
100	100	100	100	100	100	100	105			100	100	8
100	100	100	100	105	110				120	120	125	9
100	100	100	100	100	100	100			125	100	120	10
100	100	100	100	100	130	120			125			11
100	100	100	100	100	100	100		130	115	120	105	12
100	100	G	100	G	G				120	110	120	13
100	100	100	100	100	105				120	125		14
100	100	100	100	100	105	120			130			15
100	100	100	100	100	130					120		16
100	100	100	100	G	110					120	120	17
100	100	100	100	100	100	100	100		140	120	140	18
100	100	100	100	100	100	100	100		140	120	130	19
100	100	100	100	100	100				120	120		20
100	100	100	100	100	100	120						21
100	100	100	100	100	100	100				115		22
100	100	100	100	105	115	130						23
100	100	100	100	100	110			140	140			24
100	100	100	100	100	100	100	100	130	120			25
100	100	100	100	100	120					110		26
100	100	100	100	105	110				130		125	27
100	100	100	100	100	105							28
100	100	100	100	100	110	G		100	100	120	110	29
100	100	100	100	G	120	125					120	30
100	100	100	100	100	105	115		125	125	115	120	Mean
100	100	100	100	100	105	110		130	120	120	120	Median
30	30	28	28	25	29	14	4	7	17	18	14	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000)F₂

TABLE 66

Latitude 10 2°N

Unit

Ionospheric Data

Longitude 77 5°E

Month June 1959

75 0°E Mean Time

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	F	F	F	F	F	F	3 20	3 00	2 85	2 50	2 20	2 10
2	F	F	F	F	F	3 05	2 95	2 80	2 55	2 25	2 15	2 20
3	2 65	2 55	U2 45 ^s	F	2 85	3 25	3 25	C	2 85	2 55	2 25	2 15
4	F	F	F	F	F	F	F	2 80	2 80	2 60	2 40	2 10
5	2 85	2 80	3 15	3 00	2 85	2 70	3 10	2 90	2 60	2 30	2 10	2 20
6	F	F	F	F	F	F	F	F	2 90	2 70	2 45	2 30
7	F	U2 75 ^r	U2 65 ^r	2 80 ^r	3 25	3 25	3 00	2 90	2 70	2 40	2 10	2 15
8	F	F	F	F	F	F	2 90 ^r	2 70	2 70	2 45	2 30	2 10
9	U2 75 ^r	2 70	2 70	2 95	2 95	2 90	2 80 ⁱ	2 55	2 45	2 35	2 15	2 20
10	U2 65 ^r	2 55	2 45	2 60	U2 85 ^s	3 00	2 80	2 75	2 50	2 20	2 30	2 30
11	F	F	F	F	F	F	F	2 80	2 50	2 35	2 20	2 10
12	J2 70 ^s	U2 75 ^r	2 85	2 90	2 95	2 85	2 15 ^{II}	2 65	2 40	2 30	2 10	2 10
13	F	F	F	F	F	F	U3 10 ⁱ	2 85	2 75	2 60	2 40	2 10
14	F	F	U3 05 ⁱ	3 10	3 15	3 25	2 90	2 70	2 40	2 25	2 15	2 15
15	F	2 75	2 85	2 95	3 05	3 05	2 80	2 50	2 35	2 20	2 20	2 10
16	2 50	2 50	2 60	U2 75 ^s	3 00	3 15	2 95 ⁱ	2 75	U2 50 ^s	2 20	2 20	2 20
17	F	F	F	F	F	F	U2 85 ^s	U2 75 ^s	2 60	2 25	2 20	2 20
18	F	F	F	F	F	F	F	U2 60 ^s	2 40	2 30	2 30	2 25
19	F	F	U2 80 ^r	U2 80 ^s	3 00	U3 45 ^s	2 80	2 60	J2 40 ^r	2 40	2 25	2 20
20	F	F	F	F	F	3 25	2 90	U2 60 ^s	2 15	2 35	2 20	2 15
21	F	F	F	F	F	3 10	2 85	2 65	2 50	2 15	2 05	2 10
22	F	F	F	F	F	F	2 80	2 60	2 45	2 20	2 10	2 10 ^{II}
23	2 50	2 40	F	F	F	F	2 90	3 00	2 75	2 55	2 45	2 05
24	2 30	2 10	F	F	F	F	U3 30 ^s	2 80	2 75	2 15	2 30	2 15
25	F	F	F	F	F	F	2 90	2 80	2 50	2 15	2 15	2 15
26	U2 55 ^s	U2 60 ^s	2 60	2 60	2 85	3 10	3 20	3 05	2 90	2 60	2 20 ^{II}	U2 10 ^{III}
27	U2 75 ^s	2 70	2 55	2 45	2 45	U2 80 ^s	2 60	U2 75 ^s	2 40	2 30	2 30	2 30
28	F	F	F	F	F	F	F	2 70	2 75	2 60	2 55	2 40 ^{II}
29	2 30 ^r	2 30 ⁱ	2 40	2 35 ^r	2 65	2 90	U2 85 ^s	2 80	2 60	2 50	2 50	2 40
30	2 50	S	U2 40 ^s	2 50 ^{II}	U3 15 ^s	2 85	U2 90 ^s	2 90	2 70	2 50	2 35	2 20
Mean	2 60	2 55	2 65	2 75	2 95	3 05	2 90	2 75	2 60	2 35	2 25	2 20
Median	2 60	2 60	2 60	2 80	2 95	3 10	2 90	2 75	2 50	2 30	2 20	2 15
Count	12	13	14	13	14	18	25	28	30	30	30	30

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000)F2
 Unit
 Month June 1959

TABLE 66
 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 20	2 35	2 40	2 60	2 55	2 60	2 50	2 35	F	F	F	F	1
2 15	2 15	2 30	2 40	2 45	2 50	U2 45 ^s	2 35	2 35	2 40	2 45	2 75	2
2 15	2 20	2 25	2 25	2 30	2 35	2 35	2 25	U2 20I	F	U2 35 ^s	F	3
U1 05R	2 10	2 15	2 15	2 35	C	2 50	2 25	F	2 20	U2 35 ^r	U2 55I	4
2 25	2 20	2 15	2 05	U2 00 ^s	2 15	U2 30 ^s	2 15	F	F	F	F	5
2 10	2 10	2 10	2 10	2 10	2 25	U2 35 ^s	2 20	2 15	2 25 ^r	F	F	6
2 10	2 05	2 05	2 15	2 30	2 40	2 40	2 20	F	F	F	F	7
2 10	2 00	2 10	2 10	2 10	2 20	2 35	2 25	2 15I	F	F	U2 60I	8
2 25	2 25	2 25	2 10	2 05	2 10	2 25	2 20I	2 15	2 25 ^r	U2 50I	U2 60I	9
2 25	2 20	2 15	2 10	2 10	2 20	2 20	U2 05 ^s	U2 00I	F	F	F	10
2 10	2 10	2 10	2 05	2 10	2 20	2 35	2 35	2 30	F	U2 30 ^r	F	11
2 10	2 10	2 05	2 10	2 15	2 20	2 15	2 05	2 00	F	F	F	12
2 00	2 05	2 10	2 15	2 20	2 35	2 35	2 20	2 20	2 20	F	F	13
2 05	2 10	2 10	2 10	2 10	2 15	2 10	2 00	F	F	F	F	14
C	2 00	2 00	2 10	2 10	2 15	2 15	2 10	F ^s	2 15I	2 25	2 10	15
2 15	2 20	2 20	2 20	U2 20 ^s	U2 25 ^s	U2 20 ^s	2 00	F	F	F	F	16
2 20	2 20	2 20	U2 25 ^s	U2 40 ^s	J2 40 ^r	2 35	2 20	F	F	F	F	17
2 10	2 05	2 20	2 20	2 20	2 20	2 25	2 10	F	F	F	F	18
2 20	2 20	2 30	2 30	2 40	U2 50 ^s	U2 45 ^s	2 10	F	F	2 30	F	19
2 10	2 10	2 10	2 20	2 25	J2 35 ^s	U2 40 ^s	2 30	F	F	F	F	20
2 05	2 05	2 05	2 05	2 10	2 20	2 15	U2 00 ^s	F	F	F	F	21
2 00II	2 05II	2 05	2 10	2 20	2 25	U2 40 ^s	2 40	U2 35 ^s	U2 35 ^s	2 35	2 45	22
2 10	2 05	2 05	2 05	2 15	2 30	2 35	U2 25 ^s	2 10	U2 20 ^s	U2 35 ^s I	2 40	23
1 95	1 95	2 05	2 10	2 15	2 20	2 20	2 00	1 90 ^v	F	F	F	24
2 10	2 10	2 10	2 10	2 15	2 15	2 15	U2 15 ^s	U2 05 ^s	U2 15 ^s	2 35	2 60	25
2 05	2 15	2 10	2 10	2 20	U2 30 ^s	U2 35 ^s	2 30	2 25	U2 40 ^s	2 50	U2 65 ^s	26
2 30	2 20	2 15	2 00	1 95	C	U2 10 ^s	S	U2 05 ^s	F	F	F	27
2 20II	2 05II	U1 05W	W	2 05	2 20	2 30	F	F	F	U2 20I	U2 35 ^r	28
2 30	2 15	2 00II	2 05	2 30	U2 30 ^s	U ^r 35 ^s	C	2 30	2 20	U2 30 ^s	S	29
2 20	2 25	2 25HR	2 25	2 30II	U2 10 ^s	2 55	2 35	2 25	2 25	2 15	U2 55 ^s	30
2 15	2 10	2 15	2 15	2 20	2 30	2 30	2 20	2 15	2 25	2 35	U2 55	Mean
2 10	2 10	2 10	2 10	2 20	2 25	2 35	2 20	2 15	2 20	2 35	U2 55	Median
29	30	30	30	30	28	30	27	17	12	14	11	Count

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000)F₂
 Unit
 Month June 1959

TABLE 66—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°EE

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	F	F	F	3 20	3 10	2 95	2 65	2 40	2 05	2 20
2	F	F	F	F	F	3 10V	2 85	2 70	2 40	2 20	2 20	2 20
3	2 60	U2 50R	2 50	U2 65F	3 20	3 00	3 20	3 00	2 75	2 40	2 00II	2 20
4	F	F	F	F	F	F	F	2 75	2 70	2 50	C	U2 00R
5	2 85	2 95	3 25	3 10	U2 90S	3 05	3 05	2 80	2 45	2 20	2 20	2 30
6	F	F	F	F	F	F	F	2 85	2 75	2 60	2 40	2 15
7	U2 75R	U2 70R	U2 60R	3 00R	3 30	2 90	2 95	2 80	2 50	2 20	2 10	2 15
8	F	F	F	F	l	U3 10R	2 75R	2 65	2 60	2 40	2 10	2 10
9	2 75	2 70	2 85	3 00	2 90	2 85R	U2 65R	2 60	2 40	2 30	2 15	2 30
10	2 60	2 45	2 40	2 75	U3 00S	3 00	2 80	2 60	2 40	2 20	2 35	2 25
11	F	F	F	F	F	U2 75R	F	2 70	2 45	2 25	2 10	2 10
12	2 65	2 80	2 90	2 95	2 90	2 70	2 70	2 50	2 35	2 15	2 10	2 10
13	F	F	F	F	F	l	2 95	2 80	2 70	2 50II	2 20	2 05
14	F	F	U3 00I	3 10	3 15	2 95	2 75	2 60	2 20	2 20	2 15	2 15
15	2 70R	2 80	2 85	3 10	3 05	2 85	2 60	2 45	2 30	2 20	2 20	C
16	U2 60S	2 55	2 70	2 85	3 20	3 00	2 90	2 65	J2 35R	2 20	2 20	2 15
17	F	F	F	F	F	FH	2 90	2 65	2 35	2 20	2 20	2 20
18	F	F	F	F	F	F	F	2 50	2 30	2 25	2 30	2 20
19	F	F	U2 80FS	2 90	3 25	3 00	2 60	2 55	2 30	2 30	2 20	C
20	F	F	F	l	U3 25F	3 10	2 70	U2 50S	U2 40S	2 25	2 20	2 10
21	F	F	F	F	F	2 95	2 85	2 60	2 35	2 05	2 05	2 05
22	F	F	F	F	F	2 90	2 70	2 50	2 25	2 15	2 15	2 05II
23	2 45	2 35	F	l	F	F	2 90	2 85	2 60	2 50	2 35	2 10
24	2 15	F	F	F	FS	2 80	2 80	2 50	2 30	2 25	2 20	2 00
25	F	F	F	F	F	U3 00S	2 95	2 70	2 35	2 10	2 15	2 15
26	2 60	U2 65S	2 55	2 70	3 05	3 05	3 10	3 00	2 70	2 35II	U2 05RII	2 10
27	2 75	2 65	2 50	2 40	2 65	2 80	R	2 70	2 40	2 30	2 30	2 30
28	F	F	F	F	F	F	F	2 80	2 60	2 60	2 50	2 25II
29	2 35F	F	2 35	2 45	2 80	2 85	2 85	2 70	2 65	2 45	2 40	2 35
30	S	2 40	2 50	2 75	3 00	2 80II	2 95	2 85	2 55	2 45	2 25	2 10
Mean	2 60	2 60	2 70	2 85	3 05	2 95	2 85	2 70	2 45	2 30	2 20	2 15
Median	2 60	2 65	2 65	2 90	3 05	2 95	2 85	2 70	2 40	2 25	2 20	2 15
Count	13	12	14	14	15	23	21	30	30	30	29	28

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic (M3000)F2
 Unit
 Month June 1959

TABLE 66—Contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 Mc to 25 Mc in 27 seconds

TABLE II.

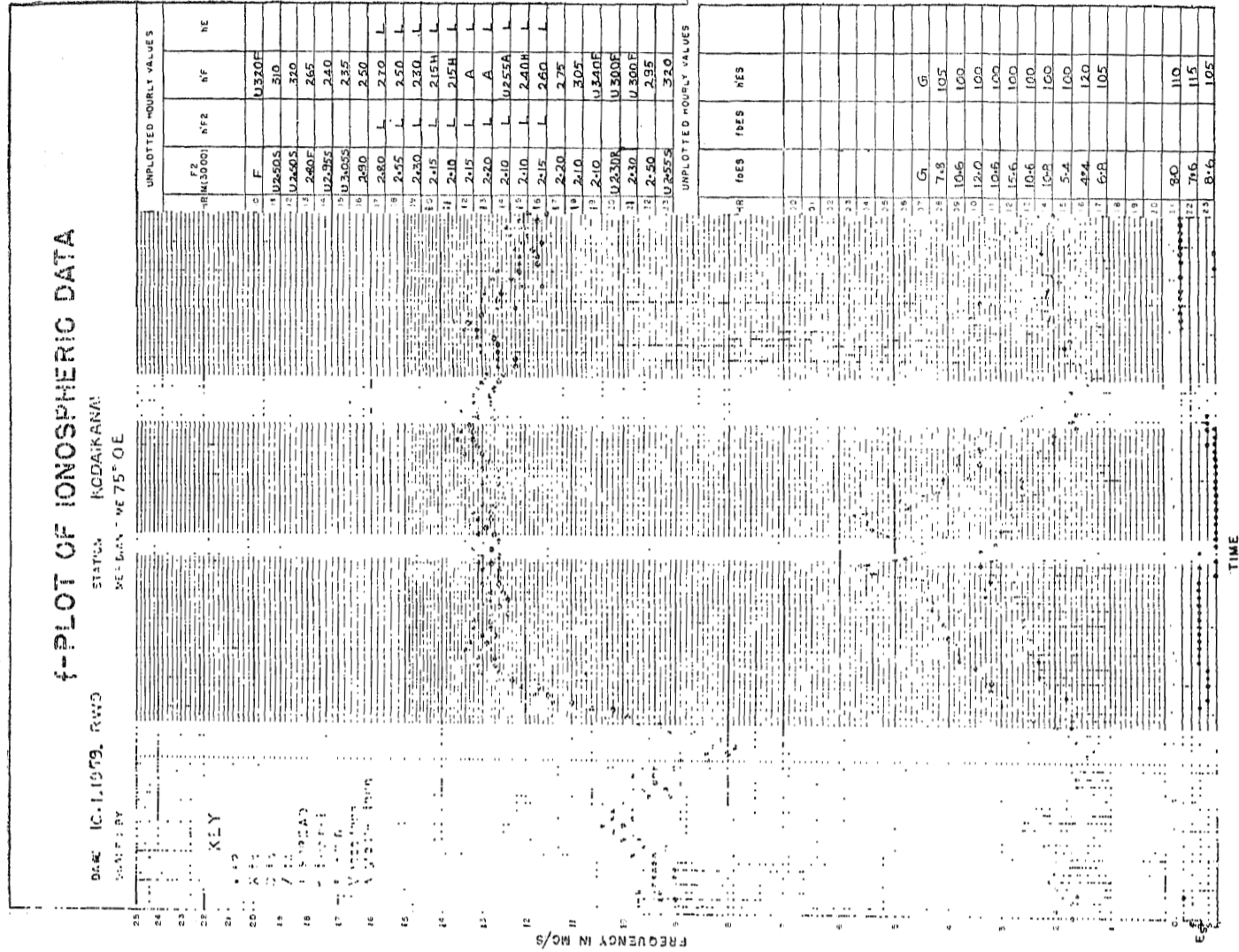
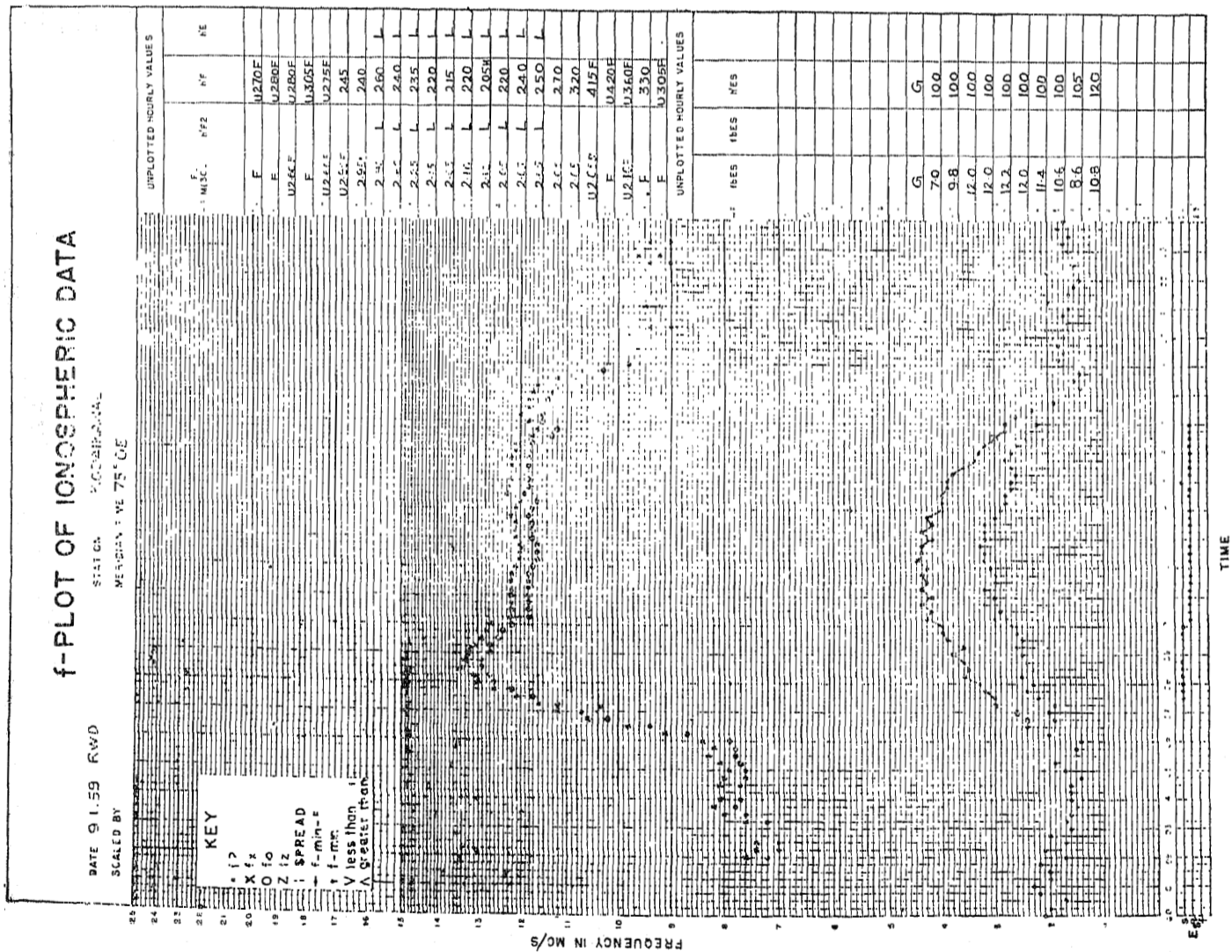


TABLE III.

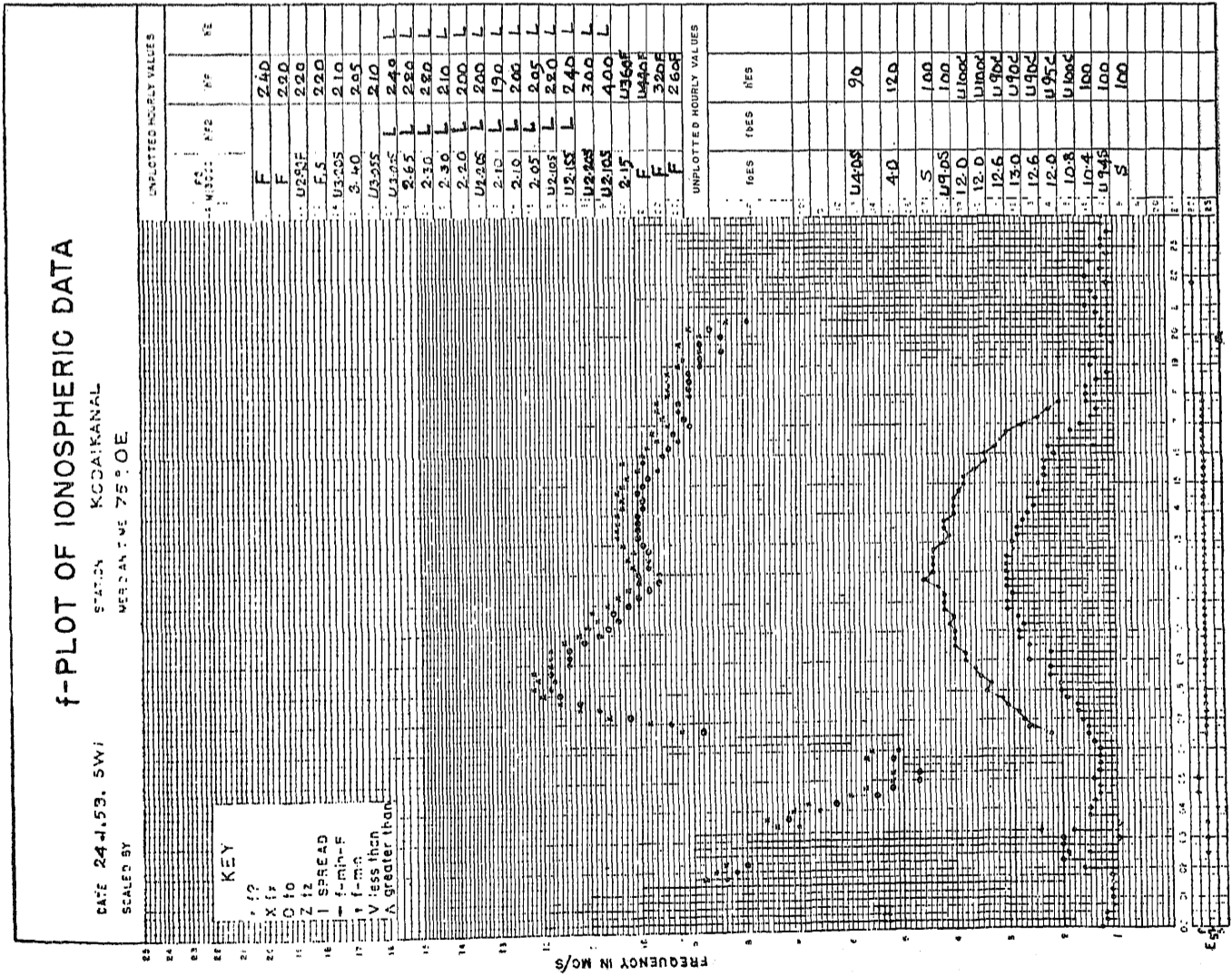
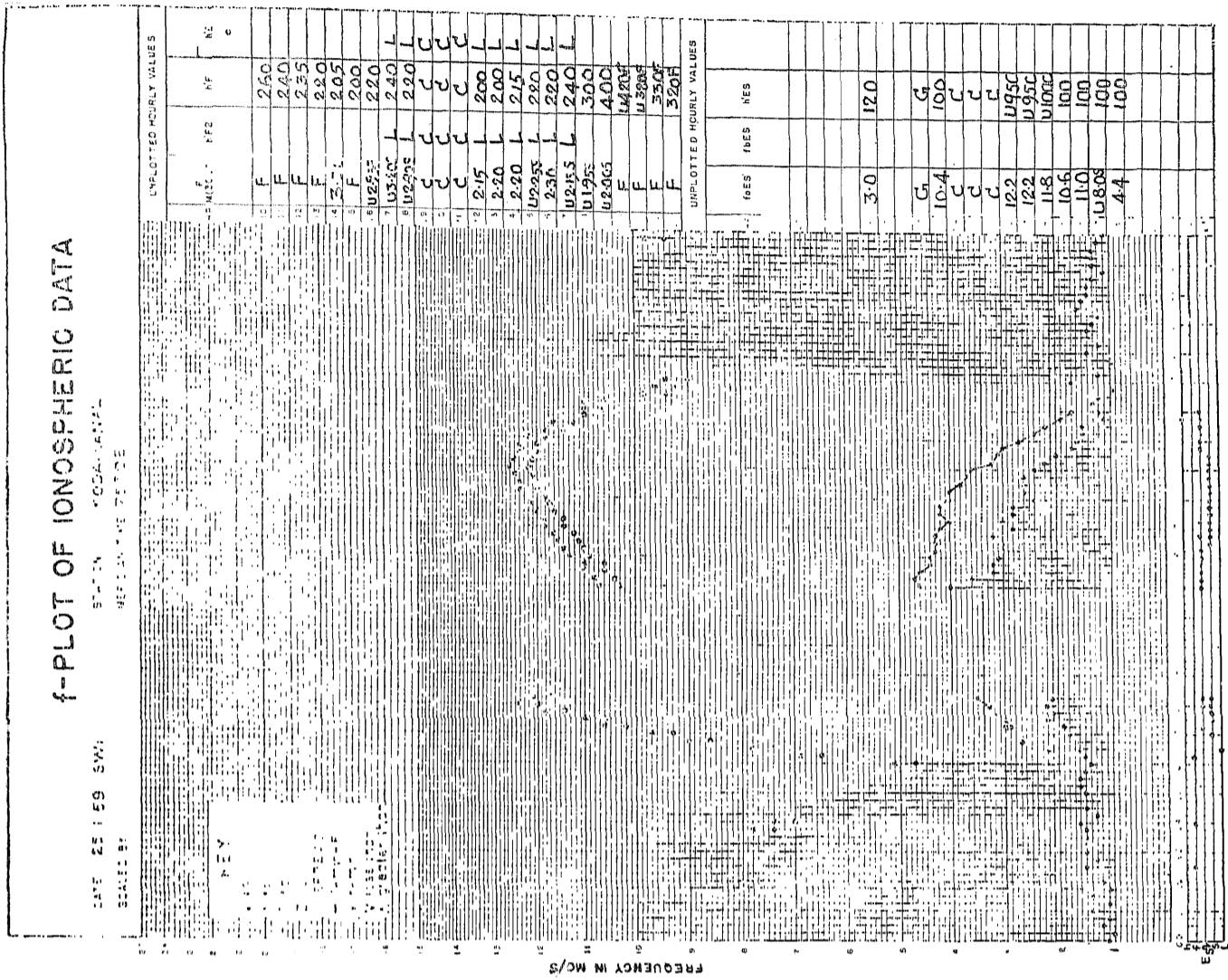


TABLE V.

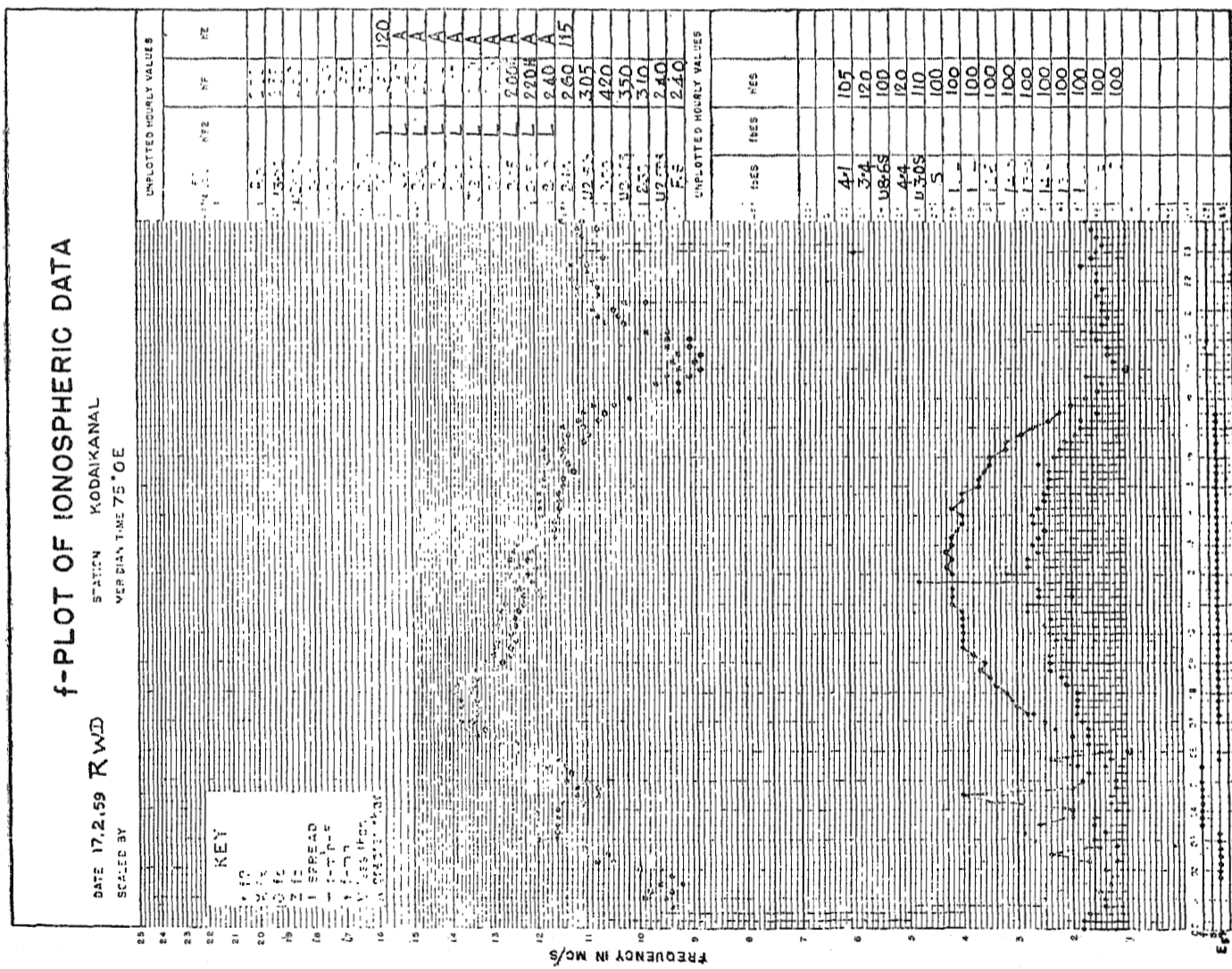
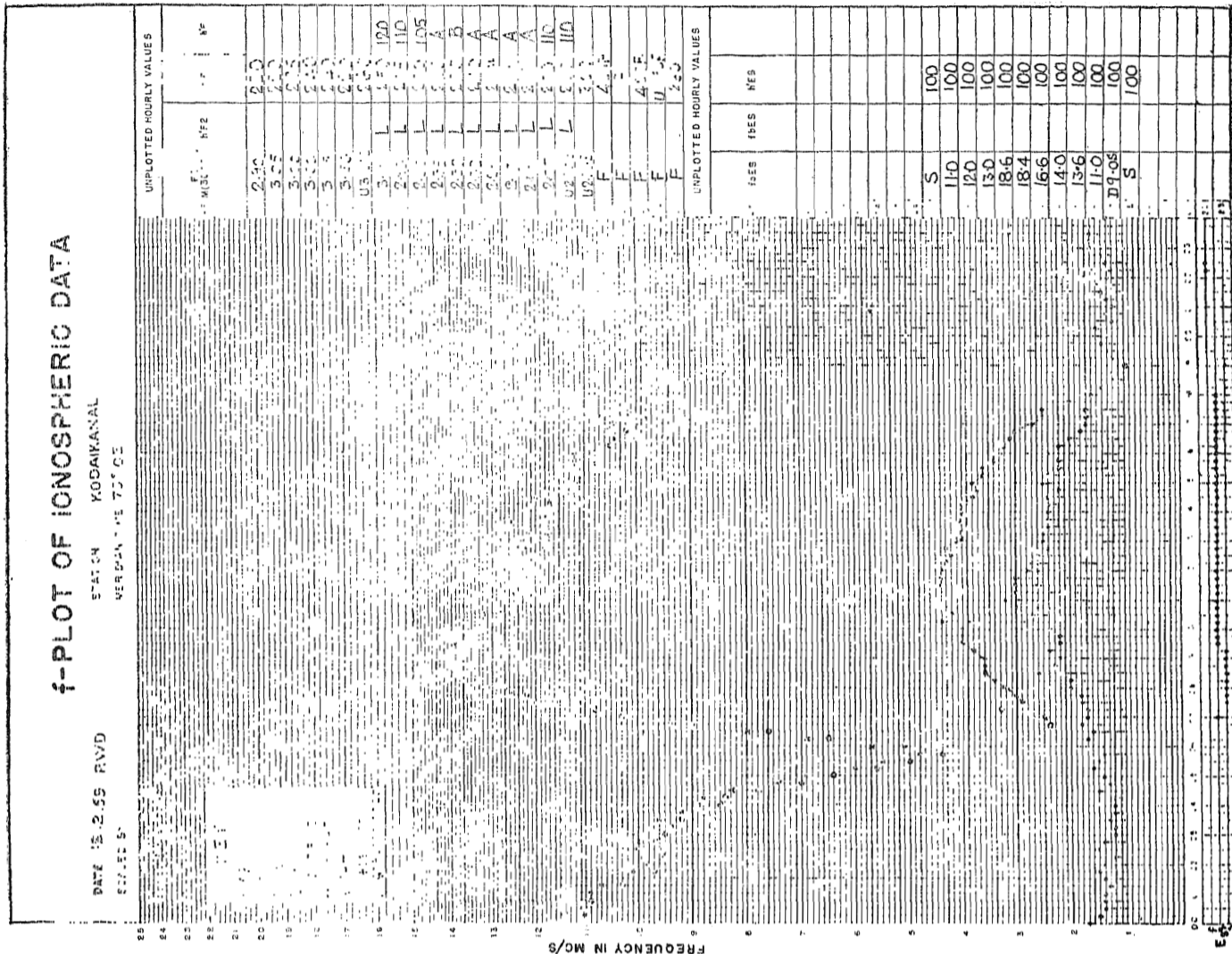
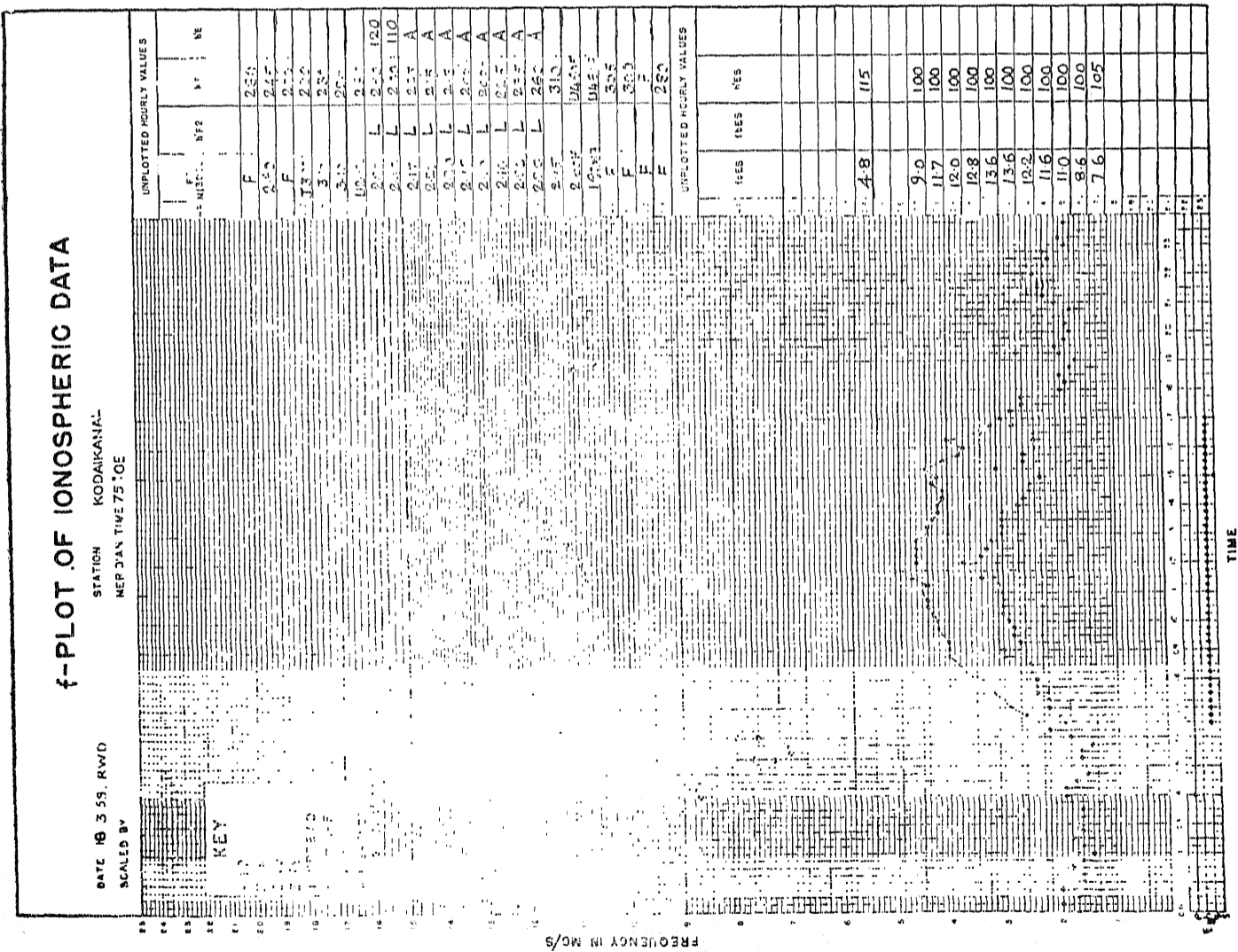
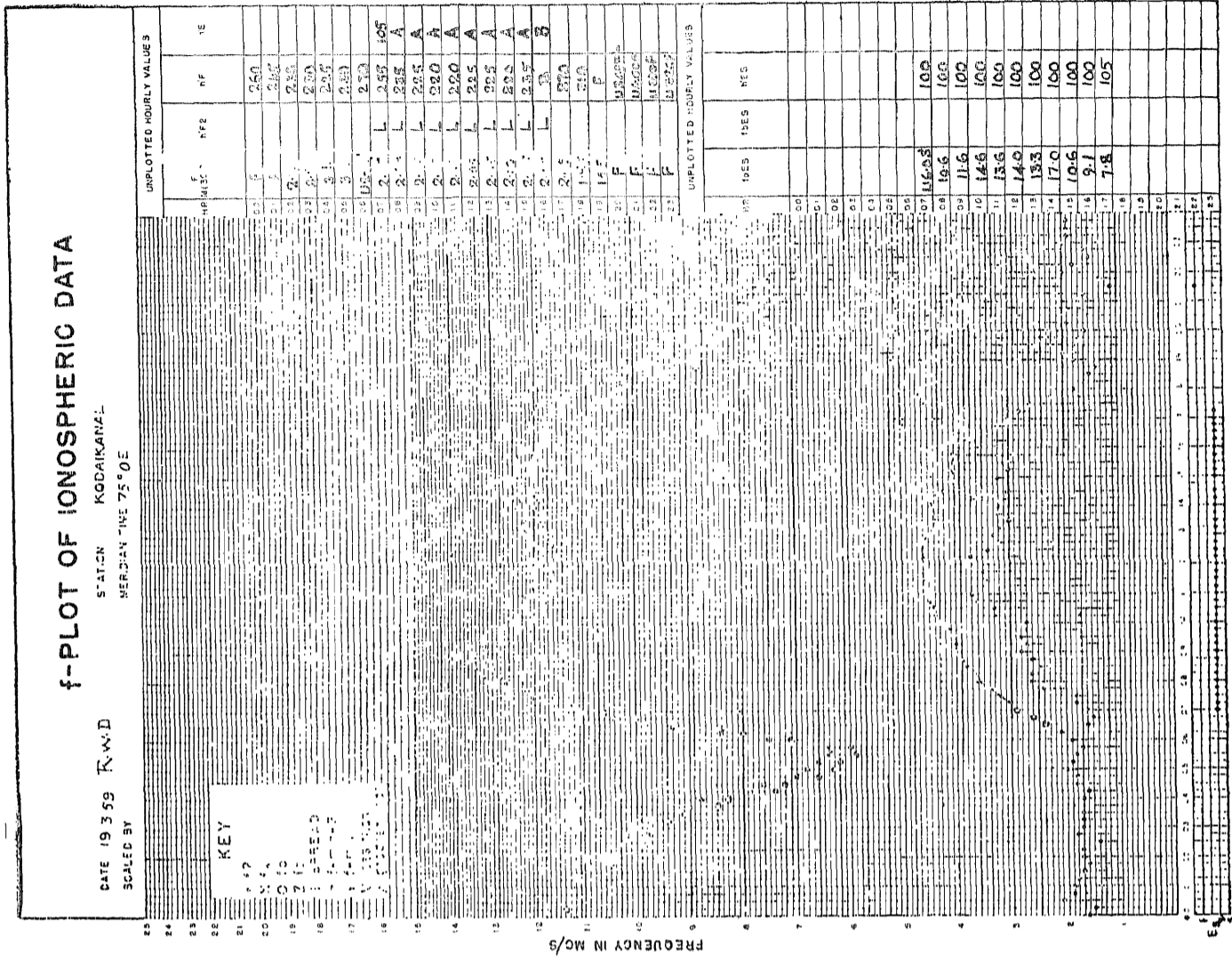


TABLE VII.



TABEL IX.

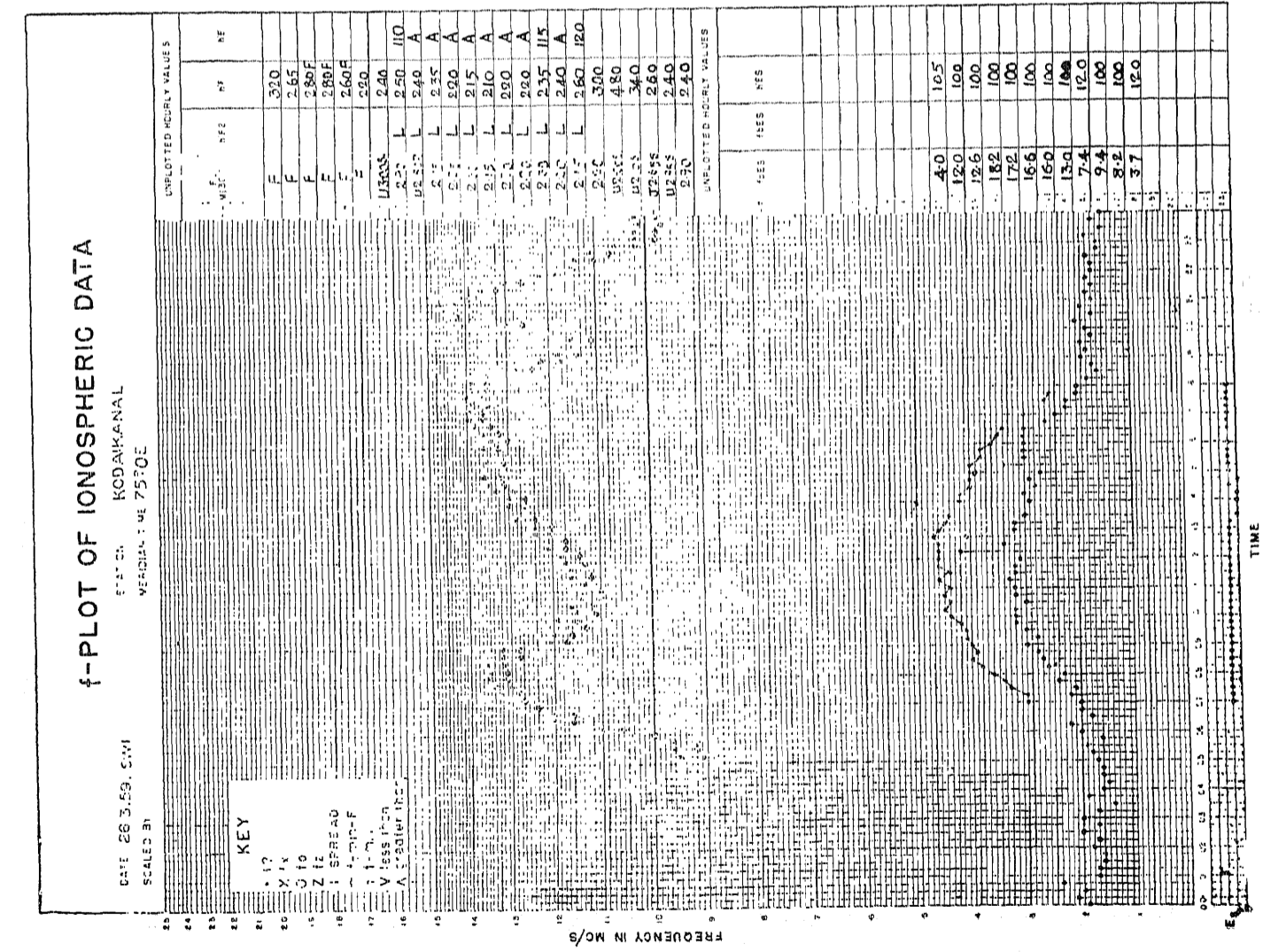
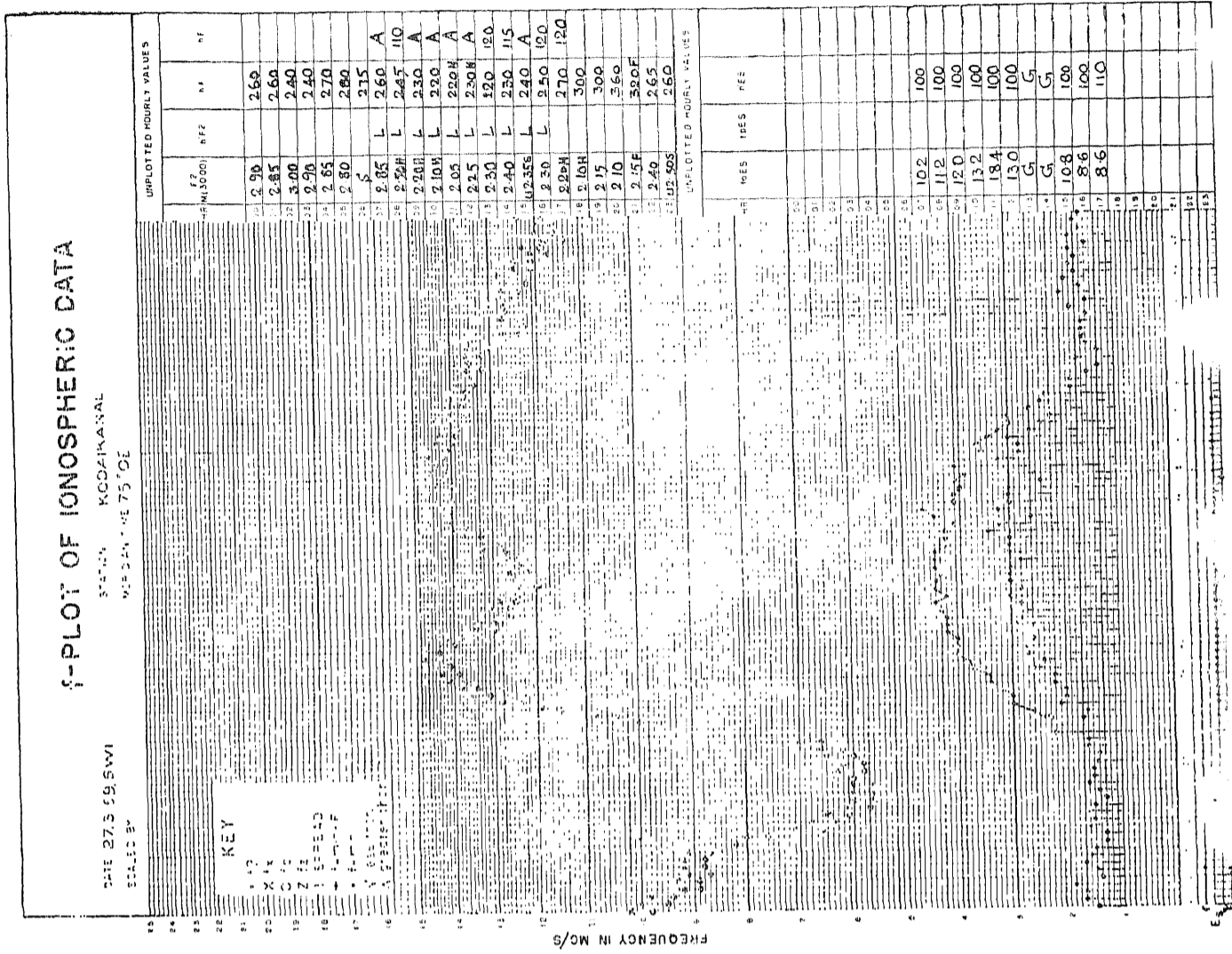


TABLE XI.

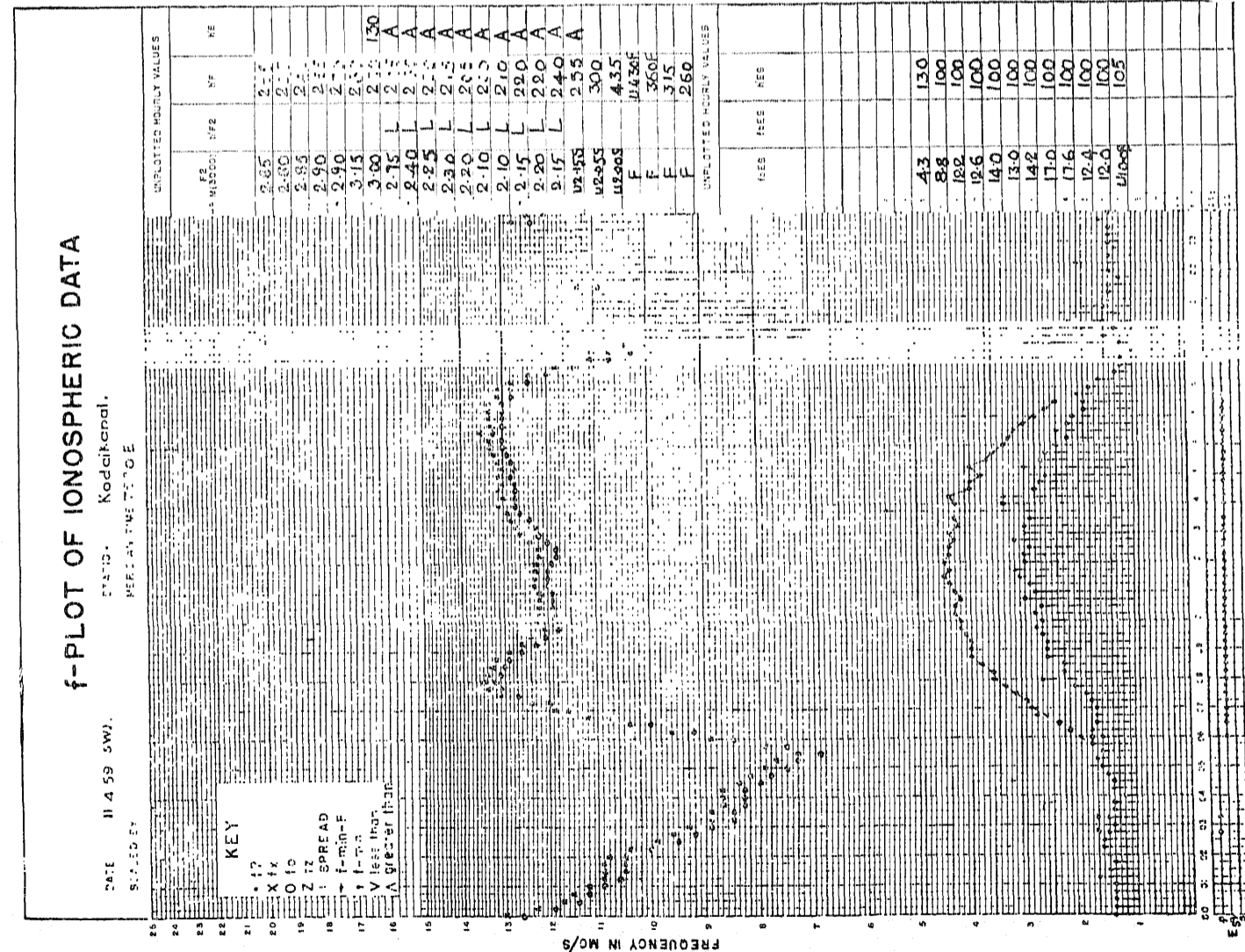
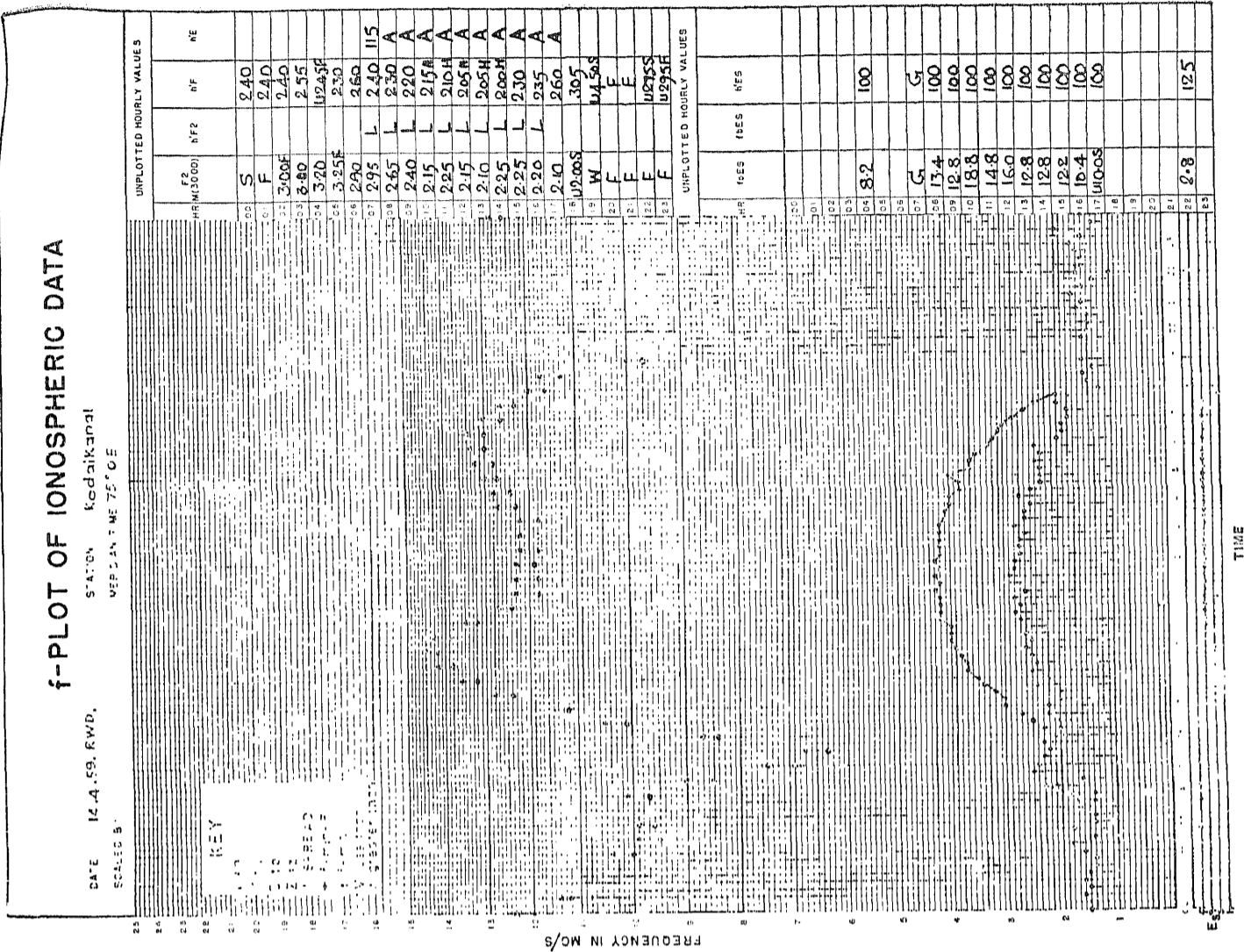


TABLE XII.

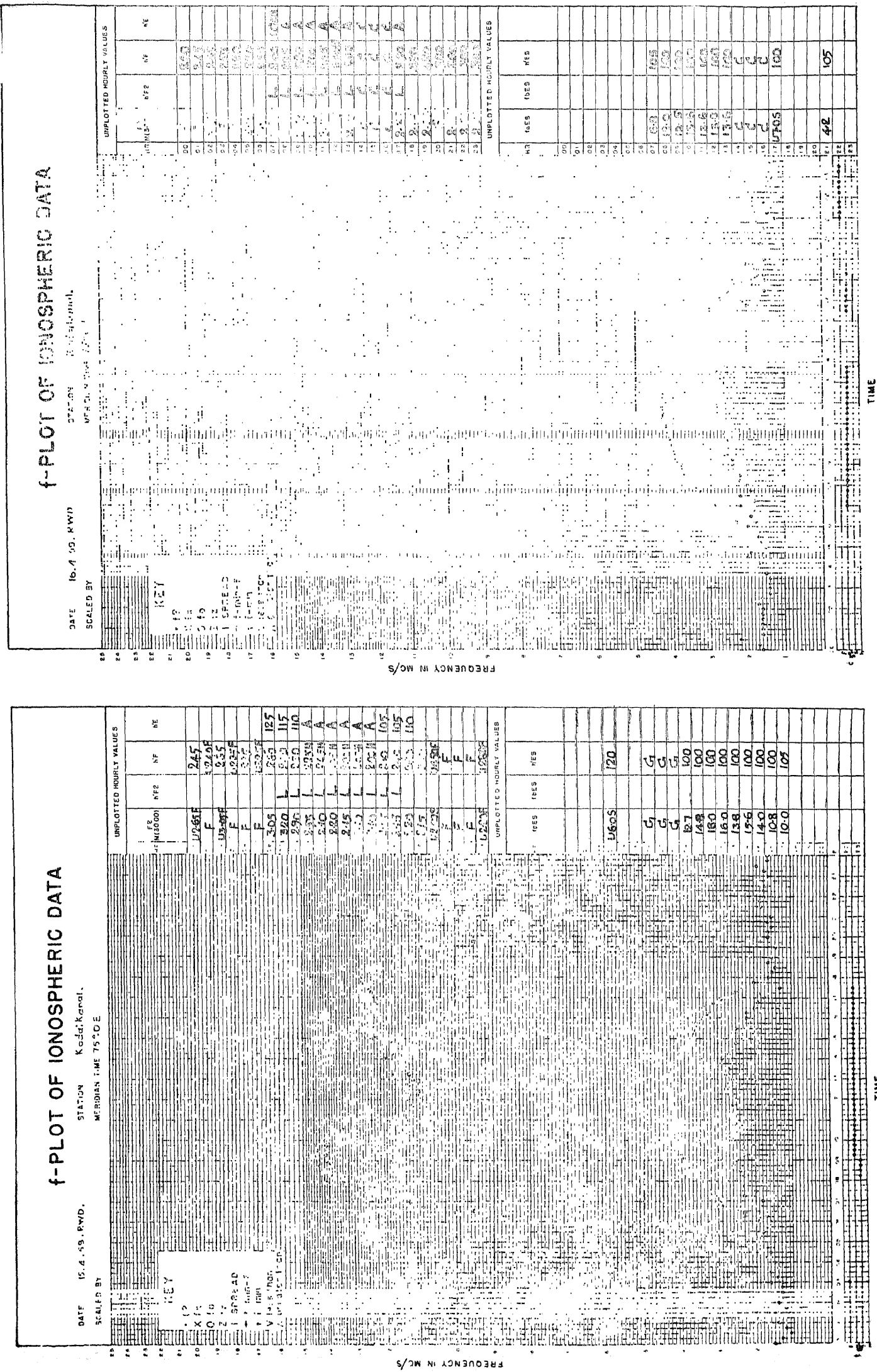


TABLE XIII.

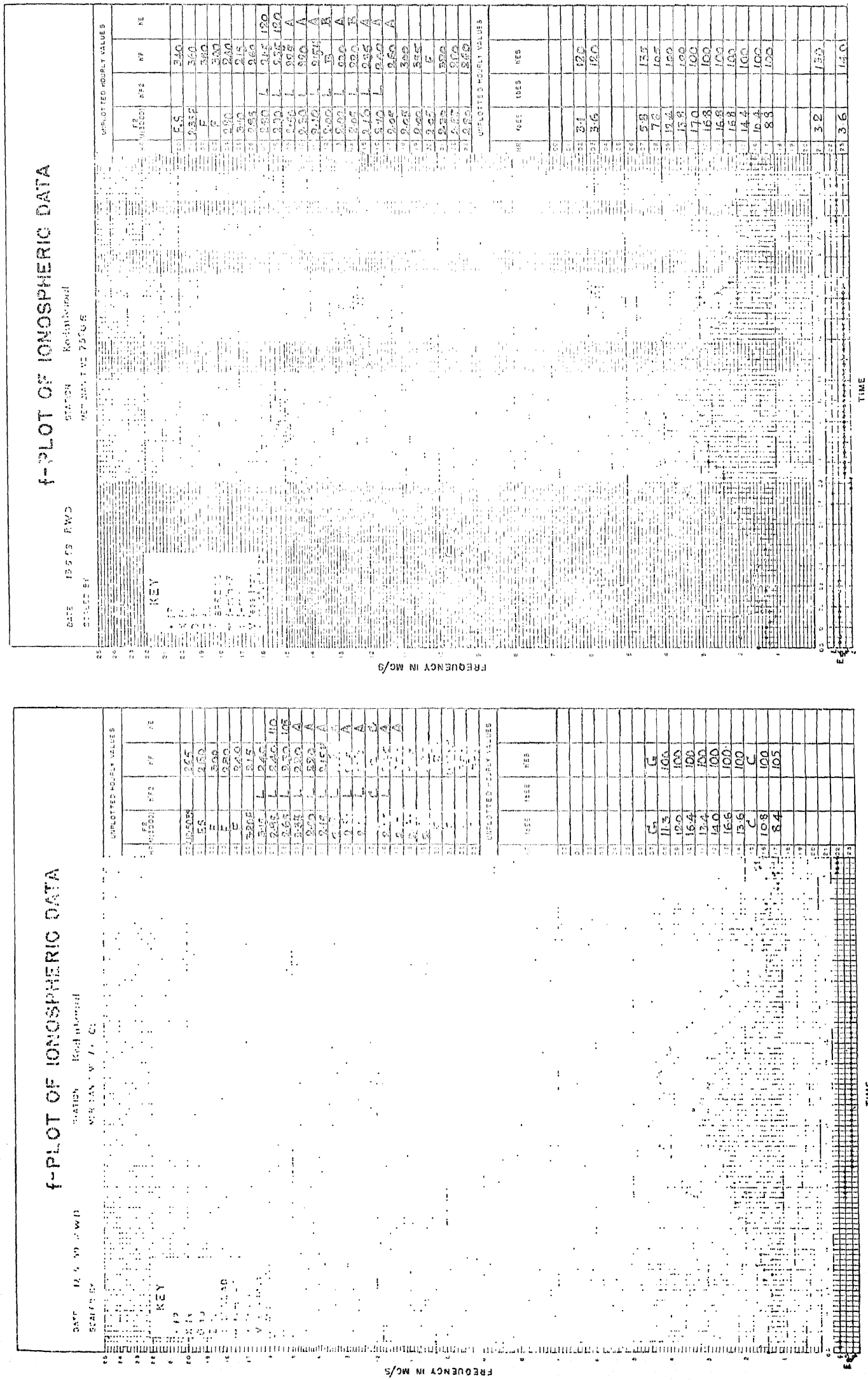


TABLE XIV.

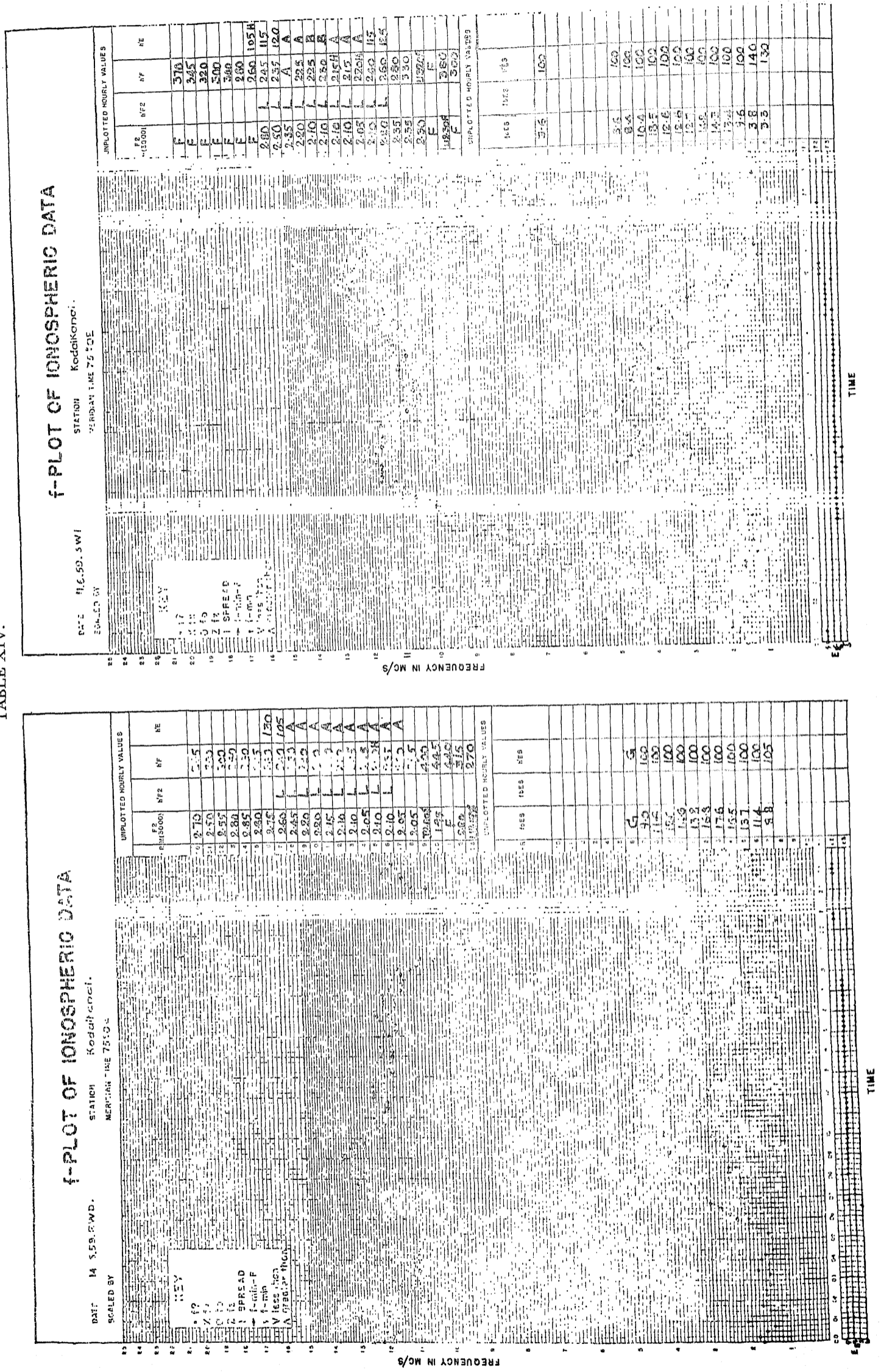


TABLE XV

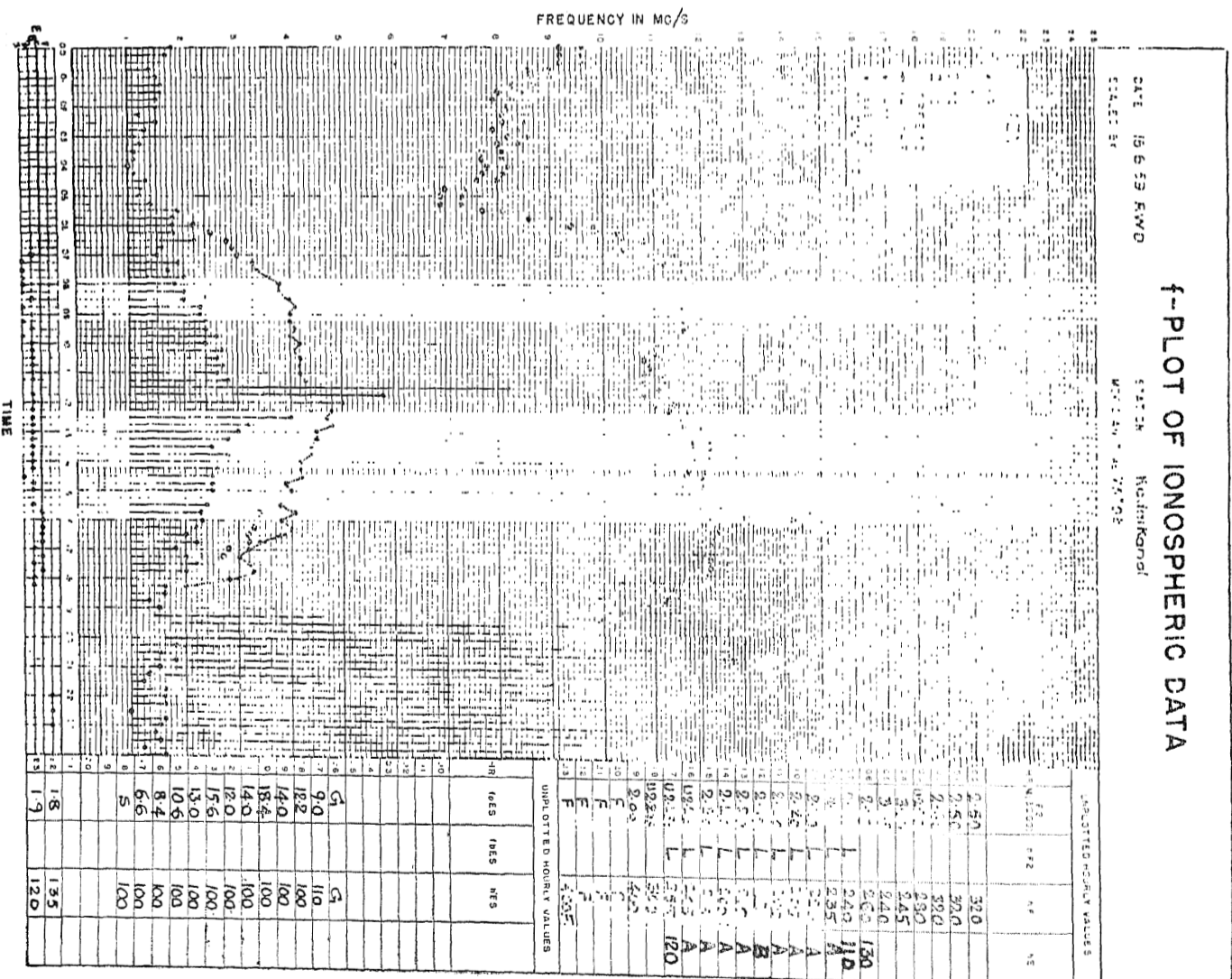
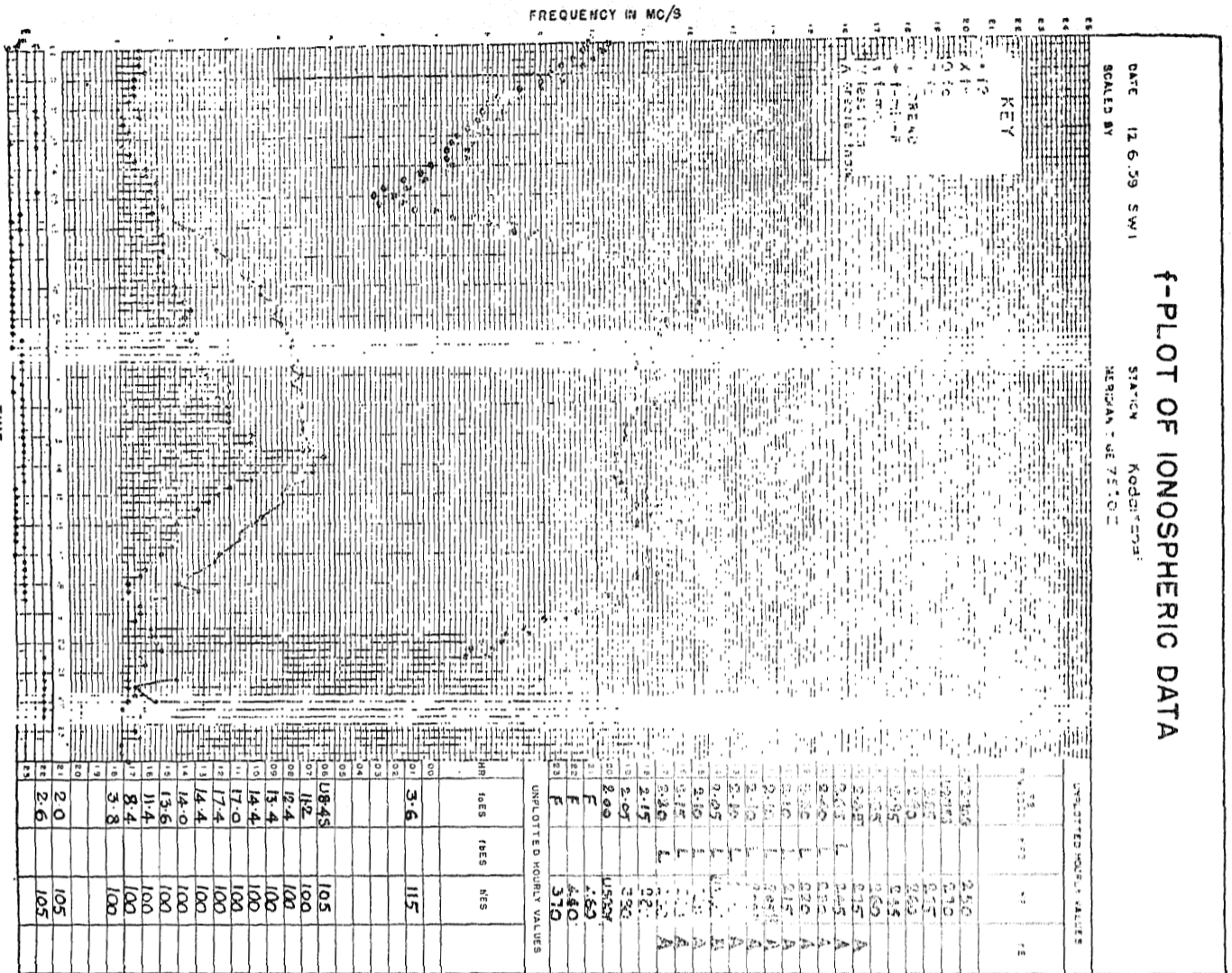
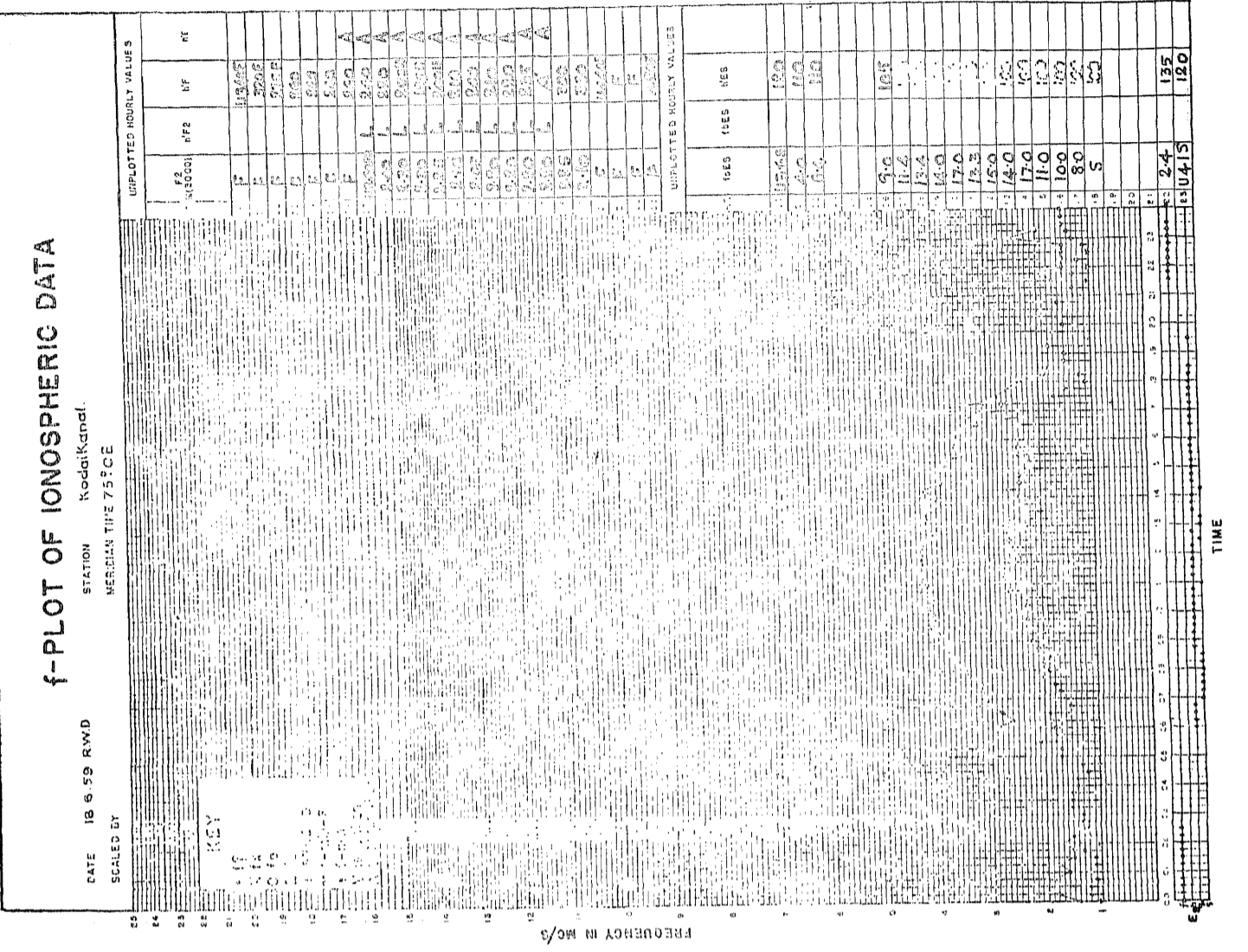
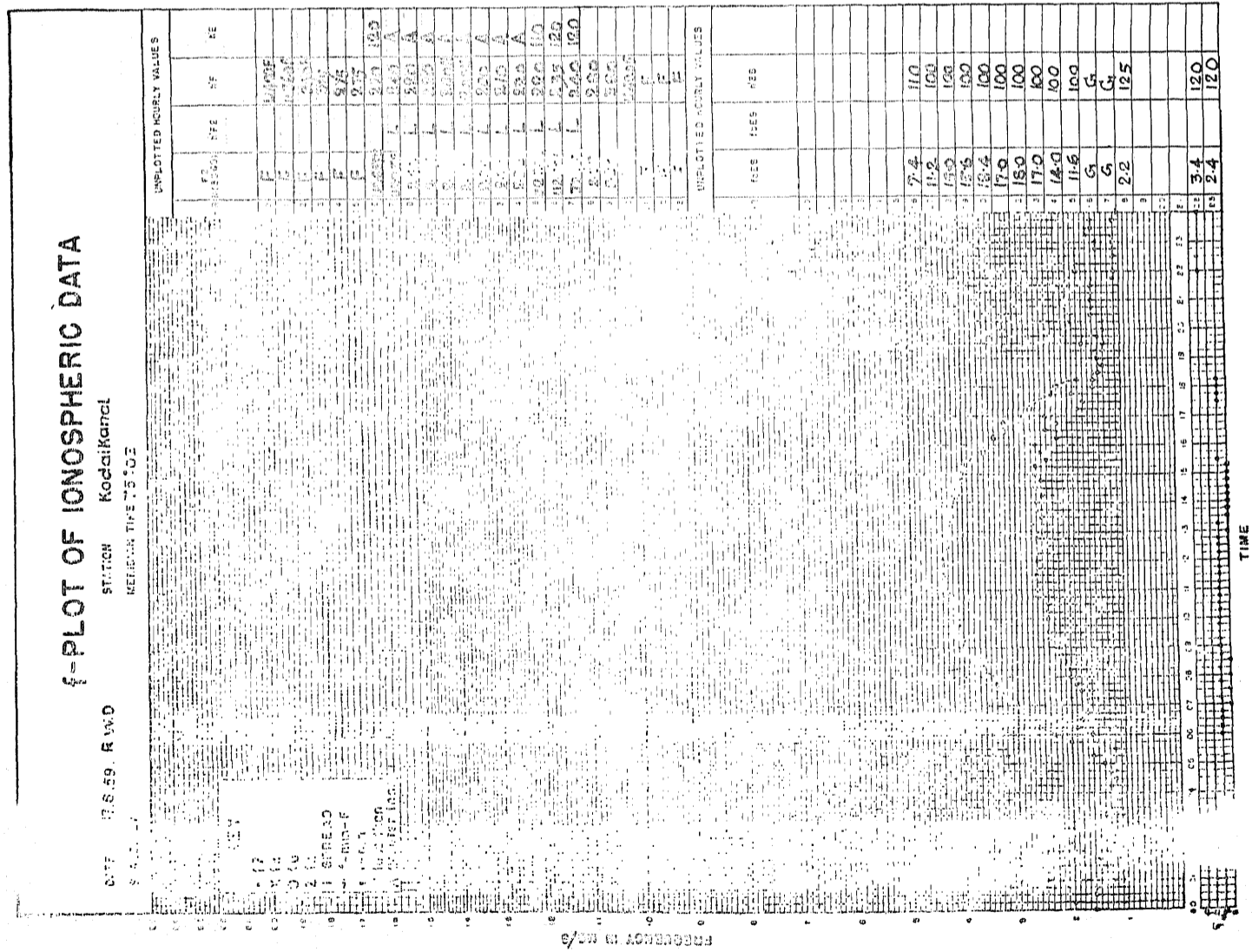


TABLE XVI



ERRATA
 COLLECTION TO COLIA
 Part I.

Page	Line/Column	for	read
1	1st sentence	fluccalurs	flucculus
3	Table I-4th quarter 2nd half year	2nd column	81 $\frac{1}{2}$ 170 $\frac{1}{2}$
7	Table IV-11th November last column	to red and	to red 1.44
11	Table VI-August 22, 4th column.	not clear	00 50
12	Table VI-4th column-Heading	Prominence r	Prominence
12	Table VI-November 18, 3rd column	08 58	07 58

13

Part II.

Date	Page	Hour	Read	For
13	25	23	34.9	34.2
14	25	23	34.2	34.7
15	25	23	34.7	33.7
16	25	23	33.7	34.8
17	25	23	34.8	34.5
18	25	23	34.5	35.0
19	25	23	35.0	35.2
20	25	23	35.2	34.6
21	25	23	34.6	35.5
22	25	23	35.5 35.5	34.9
23	25	23	34.9	35.4
Mean	26	9	35.6	...
30	27	20	35.6	35.7
2	32	3	558 556	558
31	34	3	558	552
4	34	13	449	49
Mean +	35	22	530	529
Mean ++	35	22	473	471
3	35	Mean	503	508
28	38	9	514	54
31	38	14	528	523
10	48	14	298	208
11	48	14	300	301
5	50	13	281	381
13	50	13	312	3.2

Date	Page	Hour	Air Reading	Wind
14	50	13	305	370
17	50	13	306	310
18	50	13	304	300
19	50	13	302-301	300
20	50	13	304-307	300
22	50	13	306	307
23	50	13	304	300
24	50	13	304	300
25	50	13	304	300
26	50	13	307	303
27	50	13	306	300
28	50	13	303	303
29	50	13	303	300
30	50	13	297	300
31	50	13	302	300
Mean	50	13	304	300
Mean†	50	13	307	300
Mean††	50	13	298	300
5	50	14	268	368
17	50	14	310	310
Mean††	50	14	298	308

Part III.

Page	Date	Column	For	Wind
<u>JULY 1959</u>				
55	29	12	1.0	100
63	25	15	U7R	100
<u>AUGUST 1959</u>				
98	Mean	00	0.7	100
106	20	11	A	100
118	20	11	0	100
128	2	1130	20	100
	12	1130	190	100
<u>SEPTEMBER 1959</u>				
145	Median	2130	12.0	100
	"	2230	12.5	100
	Mean	2130	12.2	100
	"	2230	12.7	100
162	3	11	3.6	100

...
170	1	1	4.7	4.3	
	5	1	1.2	3.5	
	7	11	2.8	4.1	
171	10	11	2.8	4.1	
185	11	12	3.1	4.5	
186	16	12	12.0	12.0	
187	17	11	10.2	10.0	
187	21	19	5	SH	
188	11	20	HS	SH	
	6	1	10.0F	11.0F	
	15	1	10.5S	10.5S	
	19	1	-	12.7	
	25	1	9.2	9.2	
189	25	23	10.1F	10.2F	
202	29	12	4.1	4.2	
	31	12	4.0	4.1	
214	14	12	900	200	
	30	12	900	200	
215	31	2	8.25 ⁰⁰	10.5 ⁰⁰	
227		19	1.5	SH	
		20	1.2	SH	

bsf01/...

E R R A T A.

Kodaikanal Observatory Bulletin No. CLVIII.

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

PART - II.

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

PART-III.

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

Contd. 2.

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