

Kodaikanal Observatory

Bulletin No. CLXVI

PART I

Summary of Prominence and Calcium Flocculus Observations for the First Half of 1961

The results of observations of prominences and calcium flocculi made at Kodaikanal Observatory during the first half of 1961 supplemented by data derived from photographs supplied by Mount Wilson and Meudon Observatories for those days on which Kodaikanal had imperfect or no observations due to cloudy sky conditions are summarised in Part I of this Bulletin. Our thanks are due to the co-operating observatories for the photographs supplied by them.

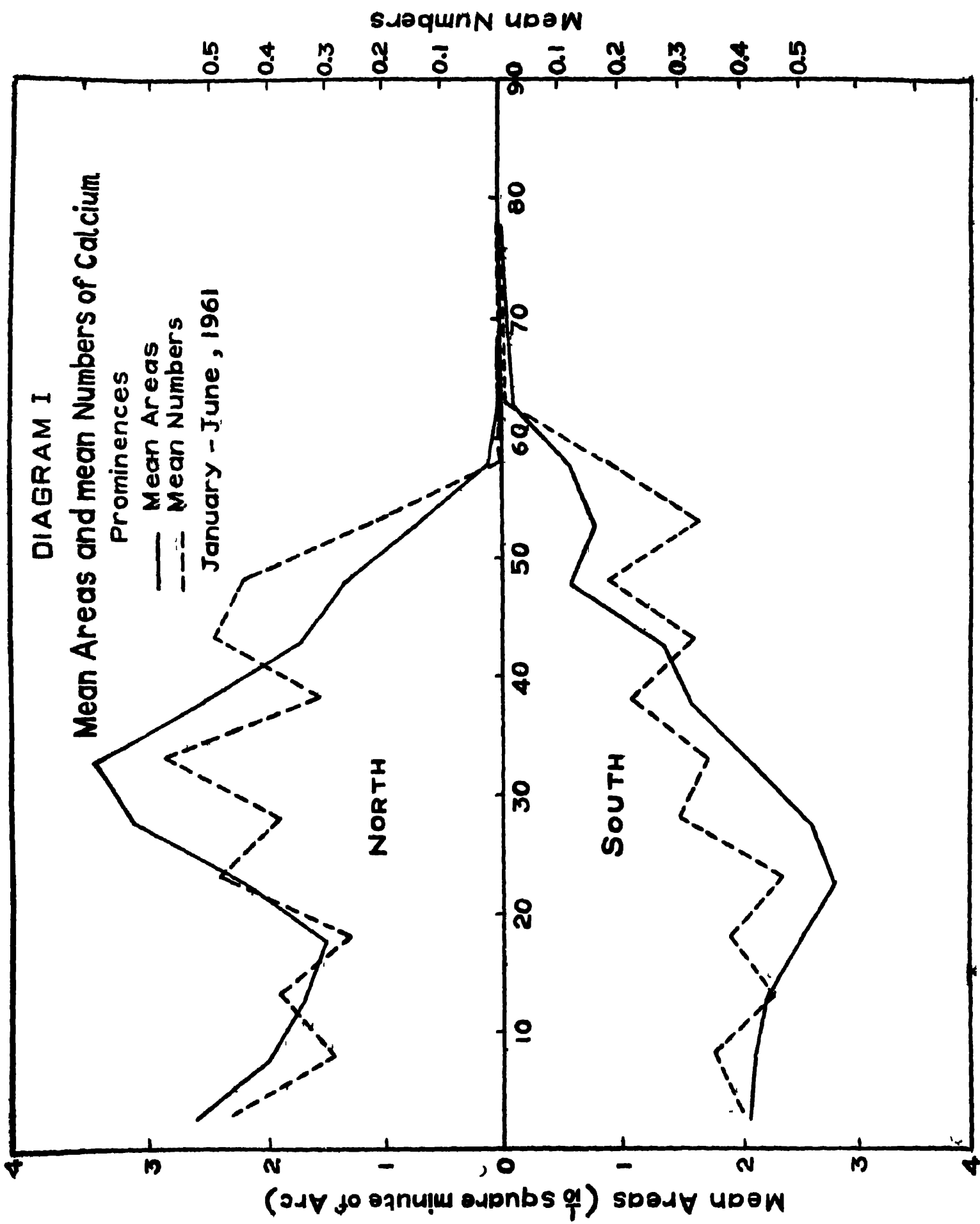
Calcium prominences on the limb.—During the half-year under review, photographs of calcium prominences were secured at Kodaikanal on 129 days which were counted as 107½ effective days after giving due weightage according to their quality. Spectroheliograms for 32 days were obtained from the Mount Wilson Observatory and for 36 days from the Meudon Observatory. In all complete observations were available for 143½ 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 as follows :—

	Combined data	
	Mean daily areas	Mean daily numbers
North	2.29	4.3
South	2.14	4.0

These figures, when compared with the corresponding values of the previous half year, indicate a decrease of 7.9% in areas and 5.3% in numbers.

The distribution of areas and numbers in five degree ranges of latitude as obtained from the combined data is represented in diagram I. In the curves for area, there is a broad peak of activity in the northern hemisphere in the latitude belt 25°-35° while in the southern hemisphere the maximum activity is in the zone 20°-30°. In the curves for numbers, the peak of activity in the northern hemisphere is in the latitude belt 30°-35°.



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

1961/months	No of effective days	Area in Sq minutes	Numbers	Daily Means		Mean height	Mean Extent
				Area Sq minutes	Numbers		
January	27½	133 1	198	4 8	7 1	44 8	4.20
February	21½	81 0	168	3.8	7 8	39.9	3 38
March	27½	109 4	272	3 9	9 9	36.3	3 06
April	22½	108 3	207	4 8	9.1	43.8	3 70
May	23	145 1	196	6.3	8.5	44 3	4 04
June	20½	58 3	150	2 8	7 2	38 1	2 66
1st quarter	76½	323 5	638	4 2	8 3	40 0	3 49
2nd quarter	66½	311 7	553	4 7	8 3	42 4	3 54
1st half year	143½	635 2	1191	4 4	8 3	41 1	3 51

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

1961 January-June

	East	West	Percentage East
Areas (sq minutes)	2898	3448	45 6%
Numbers	576	616	48 3%

Observations with the Hale Spectroheliograph

Details of Doppler displacements in prominences and dark markings observed in the light of the H-alpha line are given in table II.

TABLE II

	North	South	East	West	Displacements to red and violet
Displacements in prominences	45	19	33	31	64
Displacements in dark-markings	3	4	7	5	12

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 Kodakanal on 129 days which were counted as 99½ effective days after giving due weightage according to their quality. Spectroheliograms for 31 days were received from the Mount Wilson Observatory and for 37 days from the Meudon Observatory. On the whole, records were available for 140½ effective days.

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

Combined data		
	Mean daily area (Millionths of the sun's visible hemis- phere)	Mean daily numbers
North	1859	11.0
South	1325	8.6
Total	3184	19.6

Compared to the previous half-year, there has been an appreciable decrease in the activity, the decrease being 40.3% in areas and 38.6% in numbers.

The distribution of the areas of the absorption markings in 5° ranges of latitude as obtained from the combined data is shown in the diagram II. The peak of activity in the northern hemisphere is in the latitude belt 25-35°.

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

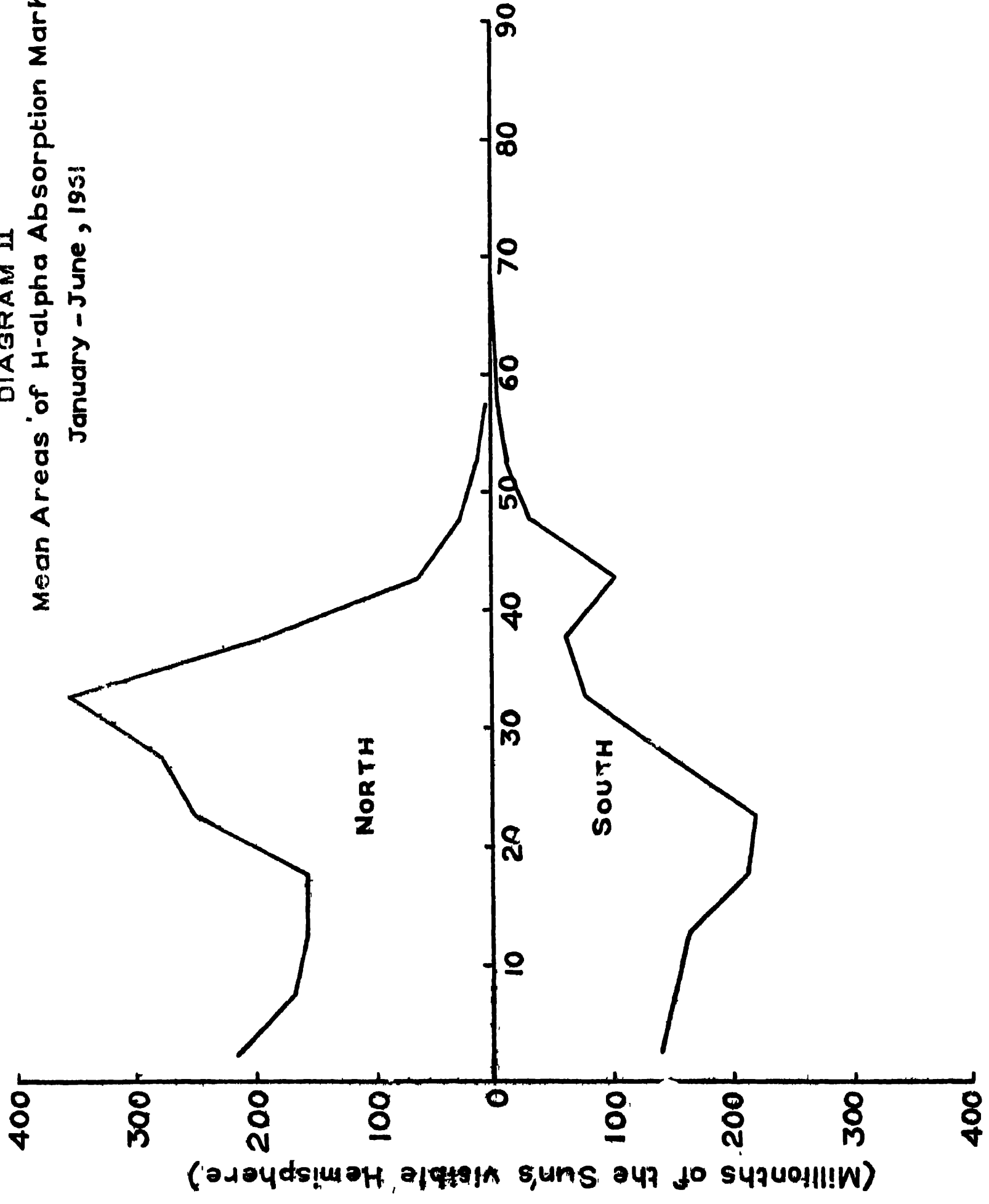
	East	West	Percentage East
Total area (in millionths of the sun's visible hemisphere uncorrected for foreshortening)	2,134,38	2,388,13	47.2
Total numbers	1,363	1,397	49.4

Particulars of solar flares, sudden disappearances of prominences and dark markings, surges and active prominences are given in tables III-V. The hours of solar patrol with the spectrohelioscope and the Lyot monochromatic heliograph are shown in the accompanying charts.

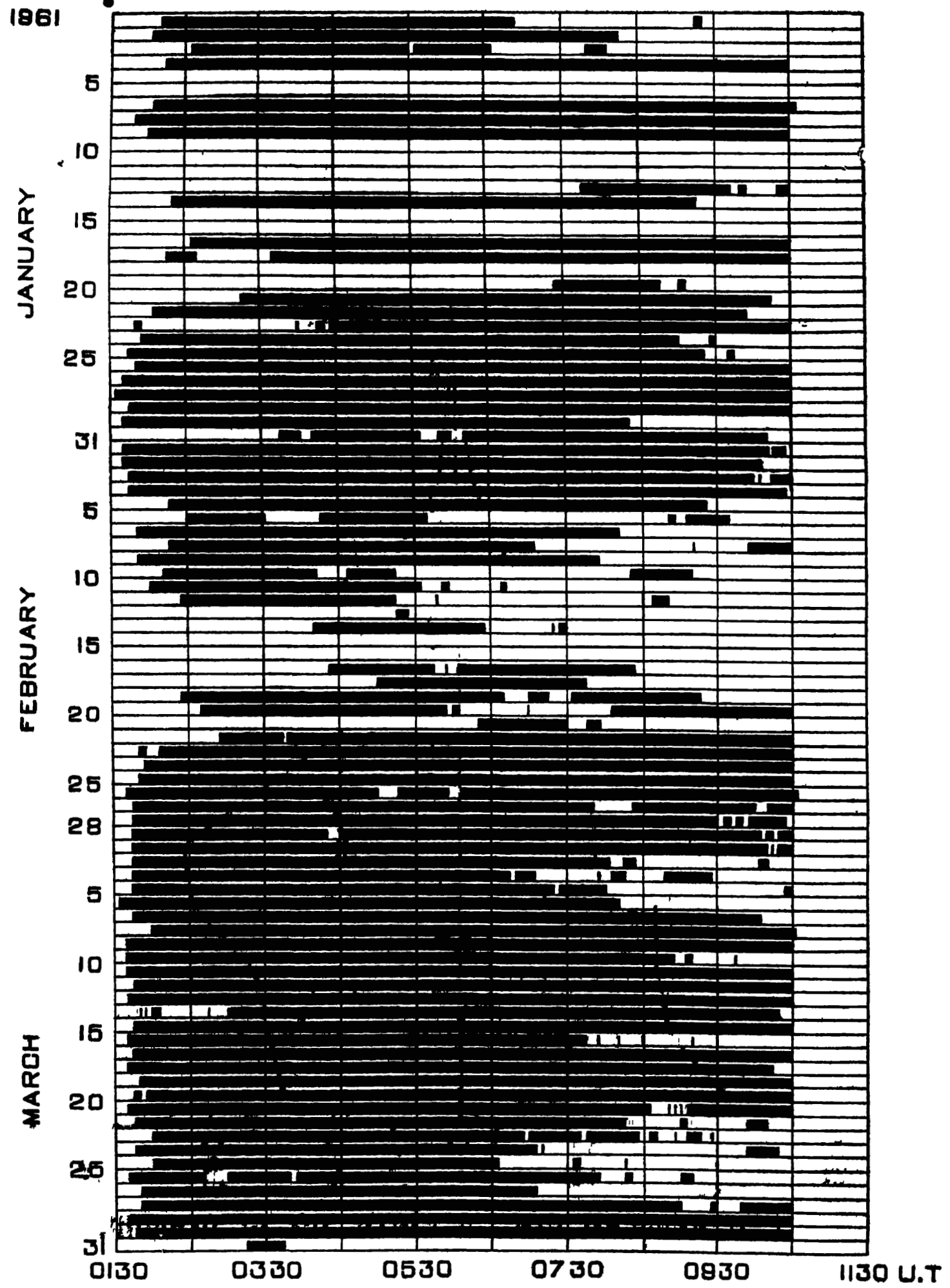
Calcium flocculus

During the period under review, calcium flocculus spectroheliograms were taken on 150 days at Kodakanal. Calcium disc spectroheliograms for 18 days were received from the Mount Wilson Observatory and for 36 days from the Meudon Observatory. In all complete observations were available for 149½ effective days.

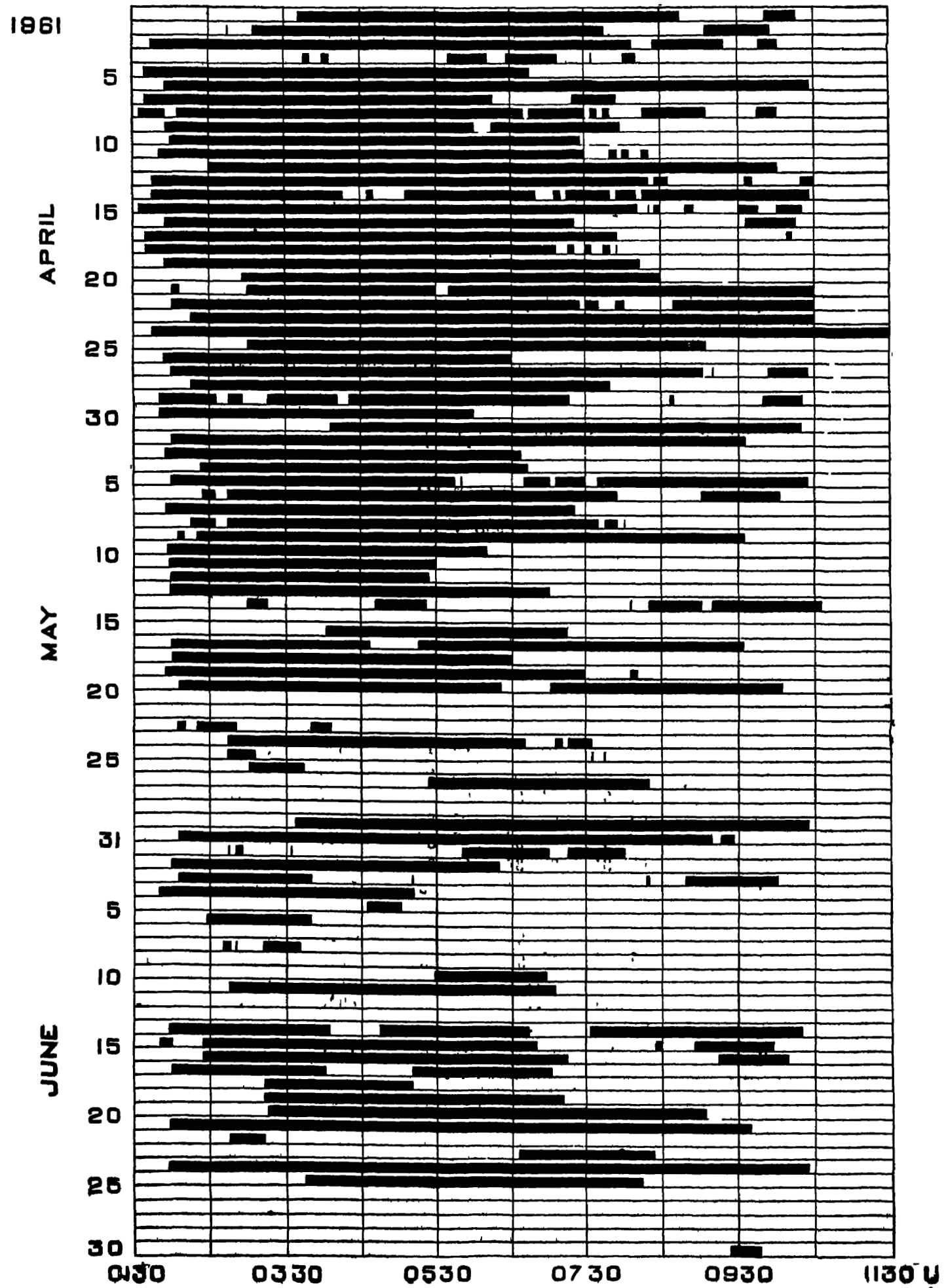
DIAGRAM II
Mean Areas of H-alpha Absorption Markings
January - June, 1951



EFFECTIVE HOURS OF SOLAR PATROL WITH
SPECTROHELIOSCOPE AND LYOT FILTER



EFFECTIVE HOURS OF SOLAR PATROL WITH
SPECTROHELIOSCOPE AND LYOT FILTER



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

		Combined data
		Mean daily area (millionths of the sun's visible hemisphere)
North		5059
South		4101
Total		9160

Compared to the previous half-year there has been an appreciable decrease in the mean daily area, the decrease being 49.2%.

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)	6,880,62	6,751,25	50.47

TABLE III
Solar flares

Date/1961	Time in UT			Mean Latitude	Mean Longitude	Importance	Maximum width of H-alpha line observed Å
	Beg h m	Max h m	End h m				
<i>January</i>							
1	02 57	02 57	03 17	10°N	39°W	1	
17	04 45	04 55	05 02	08°S	45°W	2	2 4
27	04 36	04 38	04 48	09°N	51°E	1	1 6
29	05 11	05 28	05 34	05°N	31°W	1	1 56
29	06 31	06 36	06 36	06°N	38°W	1	
30	06 31	06 32	06 36	10°N	11°E	1	2 1
31	07 52	07 52	07 53	10°N	03°W	1—	
<i>February</i>							
1	02 30	02 35	02 40	08°N	15°W	1—	
1	06 08	06 35	06 53	23°N	27°E	1—	
1	07 08			10°N	15°W	1	
1	08 39			08°S	75°E	1—	
1	09 52			22°N	27°E	1—	
8	02 35	02 37	02 45	12°S	13°E	1	1 44

TABLE III (Contd)

Solar flares

Date/1961	Time in U T			Mean Latitude	Mean Longitude	Importance	Maximum width of H-alpha line observed Å
	Beg h m	Max h m	End h m				
<i>March</i>							
18	05 58	06 07	06 12	04°N	16°E	1	1 32
23	02 45			09°N	38°E	1-	1 36
29	01 39		01 55	15°S	34°E	1-	1 40
30	02 53	03 06	03 12	13°S	20°E	1-	1 44
<i>April</i>							
1	04 00	04 00	04 09	14°S	06°E	1-	
6	02 10	02 10	02 30	15°N	03°W	1	1 56
6	04 10	04 11	04 30	15°N	03°W	1-	
7	01 50		02 05	13°N	16°W	1-	
9	03 02	03 07	03 12	12°N	42°E	1-	1 48
16	03 39			03°N	16°E	1-	
19	02 02			12°N	39°W	1-	
27	02 44	02 50	03 15	08°S	45°E	1	1 52
30	02 26		02 35	05°S	04°E	1-	1 36
<i>May</i>							
1	07 10		07 35	04°N	10°W	1-	
3	01 55	01 55	02 11	03°N	39°W	1-	1 52
3	05 42		05 51	03°N	39°W	1-	
13	05 57		05 59	03°N	10°W	1-	
16	04 14		04 18	05°N	49°W	1..	1 52
20	03 15	03 15	03 25	03°N	30°W	1-	1 44
24	04 26	04 30	05 00	17°N	18°E	2	2 00
30	03 47		03 52	04°N	47°W	1..	
<i>June</i>							
2	04 40	04 46	04 48	07°S	67°E	1+	1 8
3	02 20	02 23	02 37	07°S	55°E	1	1 52
3	02 45	02 48	02 58	07°N	48°W	1-	1 52
4	02 25	02 35	02 35	07°S	35°E	1-	
17	02 00	02 03	02 14	03°N	23°W	1-	
24	02 42	02 44	02 47	15°N	60°W	1	

TABLE IV

Sudden disappearances

1961 Date and pheno- menon	Time when ob- ject last observed before activation	Time when disin- tegration first observed	Time when object has disap- peared	Approximate position of centre		Greatest extension of pro- minence/ Dark marking	Importance	Remarks
				Lat	Long			
	UT	UT	UT					
January 22 Dark-marking	09 51			30°N	33°E	25°	2	Actual disintegration not observed. The dark-marking was not seen on 23rd
January 25 Prominence	04 37	04 37	08 16	20°S	90°E	10°	1+	Most of the prominence disappeared by 0816 UT
January 30 Dark-marking	08 20			14°S	33°W	25°	2	Actual disintegration not observed. The dark-marking was not seen on 31st
March 5 Dark-marking	10 30			09°N	21°E	10°	1	Actual disintegration not observed. The dark-marking was not seen on 6th
March 18 Prominence	07 29	07 29	09 05	25°N	90°W	10°	1+	Most of the prominence disappeared by 0905 UT
April 1- Dark-marking	10 30			24°N	05°W	11°	1	Actual disintegration not observed. The dark-marking was not seen on 23rd
May 7 Prominence	03 35	03 35	07 25	11°N	90°W	13°	1	Prominence almost disappeared at 0725 UT

TABLE V

Surges, active prominences etc.

Date/1961	Phenomenon	Importance	Time in U.T.		Position (Helio-graphic)		Direction of out flow	Remarks*
			Beg h m	End h m	Latitude	Longitude		
<i>January</i>								
9	APR	1	06 10	07 29	10°N	90°W	1	J
14	APR	2	02 30	10 55	20°S	90°W	1	K
25	APR	1	03 40	07 50	17°N	90°E	r	Displaced to red 1.0 A° to violet 1.0 A° at 0340 U.T.
26	APR	1	04 10	08 00	24°S	90°E	1	K
29	DSD	1	03 15	07 00	08°N	21°E	..	
<i>February</i>								
2	APR	1	02 45	08 40	12°N	90°E	rs	J
2	BSL	1	02 35	02 44	05°N	90°W	r	..
2	BSL	1	07 15	07 35	12°N	90°W	.	..
27	APR	1	04 25	05 55	08°N	90°E	r	..
<i>March</i>								
1	APR	1	06 00	06 28	17°N	90°E	1	..
9	APR	1	03 55	06 50	33°N	90°W	rn	.
15	APR	1	03 25	03 40	23°S	90°E	rn	..
16	APR	1	04 25	07 00	03°N	90°E	r	.
18	APR	3	07 29	09 05	25°N	90°E	r	..
21	APR	1	03 45	06 15	30°S	90°W	rn	..
<i>April</i>								
3	APR	2	02 20	07 40	30°S	90°W	r	..
7	APR	1	02 30	07 27	05°S	90°W	r	..
24	BSL	1	02 10	05 05	11°N	90°E	.	.
27	DSD	1	02 10	04 35	19°S	46°E	.	..
29	APR	1	03 12	03 30	23°N	90°W	rn	..
<i>May</i>								
7	APR	1	03 35	07 15	11°N	90°W	1n	..
8	APR	1	02 36	06 50	13°S	90°W	1s	Displaced to red 1.2 A° to violet 1.6 A° at 0245 U.T.
13	DSD	1	02 35	03 01	04°N	13°W	.	.

*The symbols used are the same as those given in the I G Y. Instruction Manual.

APR—Active Prominence Region.

DSD—Dark Surge on the Disc.

BSL—Bright Surge at the limb.

PART II

Magnetic observations for the first half of 1961

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

The adopted values of the scale coefficients for the horizontal force were 29 γ /cm during the first quarter and 28 γ /cm during the second quarter of 1961. The scale coefficients for the vertical force were 120 γ /cm during the first quarter and 115 γ /cm during the second quarter of 1961. The scale coefficient for the declination was 14'/cm for the first half of 1961.

PART III

Ionospheric Observations for the first half of 1961

A description of the system of ionospheric observations at Kodaikanal 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 eleven ionospheric parameters viz., foF₂, foF₁, foE, foE_s, fbE_s, fmin, h'F₂, h'F₁, h'E, h'E_s and (M3000)F₂ with symbols and terminology as recommended by the Special Committee on World-wide Ionospheric Soundings to the URSI/AGU in its First Report (Brussels, September 2, 1956).

KODAIKANAL OBSERVATORY,
August, 1964

M.K. VAINU BAPPU
Director

IONOSPHERIC DATA

Characteristic foF2
Unit Mc
Month : January 1961

TABLE 1
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude . 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	8.2	7.4	6.7	6.0	4.8	3.4	4.0	7.6	8.8	8.5	8.6	8.6
2	8.4	7.6	6.2	5.3	4.1	E	3.9	7.7	9.6	9.0	8.2	8.4
3	F	5.2	4.7	4.0	u2.9R	E	3.8	8.1	9.6	8.8	8.5	8.9
4	6.7	7.0	6.4	6.4	5.8	u2.7R	3.9	7.7	9.9	9.7	8.4	8.5
5	6.4	5.6	4.8	3.6	E	E	3.5	7.3	9.4	8.8	8.0	8.2
6	6.9	5.6	4.0	3.7	4.4	3.3	4.2	8.0	9.4	8.6	8.3	8.3
7	6.4	4.9	4.3	4.1	4.0	2.9	3.7	7.2	9.8	10.8	9.8	8.8
8	7.5	7.0	6.6	6.5	5.4	2.9	3.6	7.3	9.4	10.3	10.6	9.8
9	6.9	7.0	6.4	6.2	6.9	5.3	5.2	7.6	9.2	8.8	8.8	9.2
10	7.7	6.9	6.5	6.4	6.9	6.2	6.3	8.6	9.4	9.4	9.2	9.3
11	7.2	6.6	5.9	4.9	4.1	E	3.5	7.3	9.4	10.6	10.4	9.8
12	7.8	7.8	7.6	5.1	3.3	E	3.4	7.3	9.4	10.2	9.6	8.6
13	7.6	7.5	6.2	5.1	4.1	2.9	3.4	7.1	9.6	10.2	9.9	9.2R
14	5.2	4.8	4.7	4.7	3.4	2.5	3.5	6.8	8.2	8.2	8.0	8.0
15	6.6	6.2	4.7	4.0	3.1	R	3.5	6.8	9.0	9.9	9.6	9.0
16	6.1	5.3	4.2	2.7	E	E	3.0	6.3	7.2	7.9	8.2	8.0
17	6.4	5.7	4.6	3.3	E	E	2.9	6.7	8.8	9.3	9.4	9.1
18	5.7	5.8	5.7	5.4	4.2	2.2	3.0	6.5	8.4	9.7	10.0	10.3
19	5.2	4.4	4.2	3.3	3.1	E	2.5	6.4	8.6	9.2	8.8	9.3
20	F	F	F	F	4.4	3.6	u3.4R	7.6	8.2	8.2	9.0	10.2
21	7.9	7.3	6.2	4.7	3.0	E	3.1	7.0	8.3	8.3	8.3	8.0
22	u6.1s	6.4	5.3	u4.3R	E	E	2.9	7.1	8.9	8.8R	8.0	8.0
23	7.9	7.6	5.1	u3.1R	E	E	u2.9R	7.0	8.4	7.9	7.3	7.1
24	6.3R	F	F	4.4	4.3	R	3.1R	6.8	8.5	u9.1R	7.5	7.4
25	u6.0R	6.2	6.3	4.9	3.6	E	u3.0R	6.8	8.4	9.1	9.9	11.0
26	4.8	4.8	4.6	3.7	3.0	u2.7R	R	7.0	8.3	9.0	8.7	8.6
27	7.0	6.4	5.7	4.7	4.3	3.7	3.4	6.9	9.0	9.5	u3.3R	8.8
28	6.8	6.7	6.5	4.4	R	E	2.8	7.2	8.8	9.5	8.4	8.8
29	6.9	5.8	4.7	3.9	u3.7R	3.6	4.0	7.6	9.7	9.8	9.5	8.8
30	6.5	5.9	4.8	4.2	3.6	E	3.0	7.0	9.5	8.6	8.1	8.7
31	u7.1s	6.6	5.8	4.6	4.0	3.5	4.0	7.0	8.8	8.7	8.4	8.4
Count	29	29	29	30	30	29	30	31	31	31	31	31
Median	6.8	6.4	5.7	4.5	3.8	2.2	3.4	7.1	9.0	9.1	8.7	8.8
Mean	6.8	6.3	5.5	4.6	4.2	3.4	3.5	7.2	9.0	9.2	8.9	8.8

Sweep 1.0 Mc to 25 Mc in 27 seconds.

Characteristic foF2		TABLE 1										Latitude + 10 N	
Unit . Mc		Ionospheric Data										Longitude 77.5 E	
Month January 1961		75 0°E Mean Time											
12	13	14	15	16	17	18	19	20	21	22	23	Hour/Date	
8.6	8.8	9.2	9.2	8.6	8.4	8.0	7.5	J6.7F	U6.4F	6.4	7.5	1	
8.7	8.5	9.0	9.8	9.9	10.0	9.6	10.2	9.8	8.8	7.5	6.6	2	
9.8	10.2	10.6	10.9	10.6	10.1	8.9	U8.2R	F	F	F	F	3	
8.8	9.1	C	9.7	9.7	9.0	8.7	8.0	7.3	7.1	6.8	7.0	4	
9.0	9.3	9.8	10.4	10.8	10.7	10.4	9.8	10.3	11.0	9.6	8.0	5	
9.0	9.8	10.4	10.6	11.2	11.0	10.6	10.6	10.2	9.4	8.4	7.0	6	
9.4	9.6	9.9	9.9	9.7	9.2	8.9	8.8F	8.6	9.0	8.9	8.0	7	
9.3	8.9	9.3	9.9	10.7	11.0	11.0	9.9	9.6	9.4	8.6	7.4	8	
9.7	10.3	10.8	11.0	10.8	9.4	8.6	8.0	8.6	8.9	8.4	8.0	9	
9.8	10.1	10.4	10.8	11.4	11.2	10.6	9.4	9.2	8.8	8.4	8.0	10	
10.4	11.0	10.8	11.0	11.2	10.4	9.8	9.0	8.5	8.2	7.8	7.6	11	
9.0	9.2	9.8	10.4	11.0	10.7	9.4	8.6	8.7	7.9	7.2	7.6	12	
9.2	9.5	10.3	11.2	11.4	10.9	10.4	10.0	10.5	9.1	7.5	6.1	13	
7.8	8.0	8.3	8.7	8.8	8.6	8.5	C	8.6	8.3	7.5	6.7	14	
9.0	9.4	10.2	11.2	11.4	10.7	11.0	10.8	10.6	9.2	6.9	6.2	15	
8.1	8.8	9.8	10.6	10.6	10.4	9.3	8.1	8.0	U8.5F	7.8	7.4	16	
9.4	10.2	11.3	11.5	11.1	10.9	10.8	10.3	10.1	9.5	7.2	6.1	17	
10.2	10.6	11.5	12.0	U12.0S	U11.3R	10.3	U7.6F	F	F	U7.4F	6.8	18	
9.6	10.0	10.6	11.2	11.4	10.8	9.6E	9.4	9.0	8.0	J7.3S	F	19	
10.5	11.2	11.6	12.2	U12.0S	11.4	10.6	U9.6S	9.0	F	J10.4R	FH	20	
7.8	8.6	C	10.8	11.2	10.9	10.2	9.8	8.5	8.4	J7.4S	6.4	21	
8.2	9.4	10.4	10.8	10.3	9.7	10.0	10.1	9.8	9.8	8.0	U7.2S	22	
7.3	8.1	8.7	9.6	10.6	10.4	9.1	U7.6R	F	F	F	6.1F	23	
7.4	7.5	8.0	8.6	8.8	8.7	8.8	8.7	8.9	8.2	7.0	U6.1S	24	
11.3	11.4	11.3	10.8	11.1	10.9	U9.6S	U9.4S	8.5	9.1	6.9	5.5	25	
8.6	8.9	9.4	9.8	9.6	9.2	8.4	7.5	7.6	7.7	7.4	U7.2S	26	
8.1	8.2	8.6	9.0	8.7	8.6	8.4	8.0	F	F	F	7.8	27	
9.3	9.8	10.3	10.8	10.7	9.9	9.0	7.4F	F	6.7	F	7.2	28	
9.2	9.3	10.1	10.1	10.0	9.8	9.1	8.7	F	F	F	9.6	29	
8.9	9.2	9.5	9.4	8.8	8.0	7.7	7.1	F	F	U7.6F	7.2	30	
8.6	9.2	9.6	10.6	11.1	10.8	10.4	9.0	F	F	F	U9.3F	31	
31	31	29	31	31	31	31	30	23	23	26	28	Count	
9.0	9.3	10.1	10.6	10.7	10.4	9.6	8.9	8.9	8.8	7.5	7.2	Median	
9.0	9.4	10.0	10.4	10.5	10.1	9.5	9.0	9.0	8.6	7.8	7.2	Mean	

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foF2
Unit - Mc
Month January 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	7.8	7.1	6.5	5.9	4.1	2.6	5.8	8.4	8.8	8.4	8.6	8.5
2	8.9	7.0	5.6	4.5	u3.9R	E	6.2	8.9	9.6	8.6	8.2	8.6
3	5.8F	5.0	4.4	3.3	u2.5R	E	6.3	9.2	C	8.4	8.7	9.3
4	7.0	6.7	6.5	6.4	4.4	E	6.0	9.1	10.0	8.8	8.4	8.5
5	6.0	5.3	4.1	3.3	E	E	5.7	8.7	9.6	8.5	8.0	8.6
6	6.5	4.7	3.8	4.1	4.3	u2.5R	6.3	9.1	9.3	8.7	8.2	8.7
7	5.7	4.4	4.4	4.1	3.3	E	5.9	8.5	10.8	10.6	9.4	9.2
8	7.9	6.8	6.8	5.9	4.1	1.8	5.7	8.9	10.3	10.4	10.3	9.3
9	7.1	7.0	6.0	6.6	6.5	4.5	6.5	8.6	9.0	8.4	9.0	9.4
10	7.1	6.8	6.4	6.7	6.6	5.9	7.4	9.2	9.6	9.6	9.5	9.3
11	6.7	6.7	5.4	4.6	3.7	E	5.7	8.7	10.2	10.7	10.0	10.1
12	8.0	8.1	6.2	3.9	2.4	E	5.4	8.5	9.8	10.0R	9.1	8.9
13	7.6	7.1	5.8	4.6	3.4	E	5.5	8.4	10.2	10.1R	9.7	9.1
14	4.8	4.8	4.6	3.7	3.0	E	5.3	7.7	8.4	8.0	8.4	7.8
15	6.5	5.3	4.6	3.5	2.7	R	5.4	7.8	9.9	9.8	9.0	9.2
16	5.8	4.5	3.6	E	E	E	4.9	6.9	7.4	8.3	8.0	8.0
17	5.7	5.5	3.5	u2.8R	E	E	5.2	8.1	9.5	9.3	9.3	9.0
18	5.7	5.7	5.4	5.3	2.9	E	5.2	7.3	9.2	9.8	10.0	10.0
19	4.4	4.4	3.7	J3.1R	3.0	E	4.6	7.5	9.2	9.1	9.0	9.3
20	F	u7.4R	5.3	u4.7F	4.5	2.6	5.6	8.0	8.2	8.4	9.8	10.1
21	7.4	6.8	5.5	u3.8R	u2.7R	E	5.4	7.7	8.6	8.4	8.2	7.9
22	6.3	u6.0R	4.7	3.2	E	E	5.3	8.3	9.0R	8.3	8.0	8.2
23	8.4	6.6	u4.5R	R	E	E	5.4	7.6	8.5R	7.7	7.1	7.0
24	F	F	F	4.3	u3.9R	E	5.4	7.7	9.0	7.8	7.5	7.3
25	6.3	6.2	5.8	3.9	u2.9R	E	5.3	7.5	8.8	9.4	10.5	11.2
26	4.7	5.0	4.3	u3.1R	u2.7R	R	5.3	7.7	8.7	9.0	8.7	8.5
27	6.4	6.3	5.1	4.6	4.0	3.0	5.3	8.0	9.3	9.1	9.1	8.4
28	6.5	6.6	5.7	u3.3R	E	E	5.3	8.0	9.4	8.8	8.5	9.1
29	6.5	5.1	4.4	3.9	3.7	u3.3R	5.9	8.7	10.1	10.3	8.8	9.1
30	6.4	5.1	4.5	3.9	2.8	E	5.2	8.4	9.0	8.3	8.3	8.7
31	6.6	6.5	5.1	4.2F	3.8	3.2	5.6	8.1	9.0	8.4	8.4	8.6
Count	29	30	30	30	31	29	31	31	30	31	31	31
Median	6.5	6.2	5.1	4.0	3.0	E	5.4	8.3	9.2	8.8	8.7	8.9
Mean	6.5	6.0	5.1	4.3	3.6	3.3	5.6	8.2	9.3	9.0	8.8	8.9

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF2		TABLE I—Cont'd											Latitude 10.2°N	
Unit Mc		Ionospheric Data											Longitude 77.5°E	
Month January 1961		75.0°E Mean Time												
1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date		
8.6	9.0	9.2	8.8	8.5	8.2	7.9	7.1	6.8	F	6.7	8.4		1	
8.7	8.7	9.4	9.9	10.0	9.8	9.7	10.3	9.3	8.0	7.0	6.8 _W		2	
10.0	10.5	10.6	10.7	10.3	9.4	8.6	10.9 _W	F	F	6.6	10.5 _W		3	
9.0	9.3	C	9.7	9.5	8.7	8.2	7.7	10.1 _W	10.1 _W	6.9	6.8		4	
9.3	9.5	10.0	10.6	10.6	10.3	10.0	9.9	10.6	10.6	8.6	7.7		5	
9.3	10.0	10.8	11.1	11.0	10.8	10.7	10.7	10.0 _W	9.1	7.6	6.6		6	
9.5	9.8	9.9	9.8	9.4	9.0	9.0	8.8 _W	8.4	9.2	8.5	7.6		7	
9.3	8.8	9.6	10.4	11.0	11.0	10.4	9.8	9.8	9.3	7.9	7.0		8	
10.2	10.4	10.9	11.0	10.4	9.0	8.1	8.1	8.8	8.4	8.4	8.1		9	
10.0	10.0	10.7	11.0	11.4	11.0	10.2	8.8	8.4	9.0	8.3	7.8		10	
10.8	10.8	10.8	11.2	10.8	10.2	9.4	8.5	8.6	8.1	7.8	7.6		11	
9.0	9.6	10.0	10.8	10.9	10.2	9.0	8.3	8.7	7.5	7.3	7.9		12	
9.4	10.0	11.0	11.5	11.4	10.6	10.0	10.5	10.0	8.3	6.8	5.7		13	
7.9	8.2	8.5	9.0	8.8	8.6	8.2	C	8.4	7.8	7.1	6.6		14	
9.3	9.8	11.1	11.6	11.2	10.6	10.7	C	10.2	7.8	6.3	6.2		15	
8.4	9.2	10.4	11.0	10.4	9.8	8.6	7.9	8.4	8.5	7.8	7.1		16	
9.5	10.5	11.5	11.3	10.7	10.7	10.7	9.9	10.2	8.1	6.1	5.7		17	
10.6	10.9	11.8	12.2	11.8 _W	10.9	9.0	F	F	F	10.7 _W	10.5 _W		18	
9.8	10.2	11.0	11.4	11.2	10.3	9.2 _W	10.7 _W	10.0 _W	10.7 _W	F	F		19	
11.0	11.8	11.9	12.3	11.6	10.8	10.3	F	10.1 _W	10.0	10.8 _W	8.8		20	
8.1	8.8	10.2	11.2	11.2	10.4	10.2	9.2	8.5	8.1	6.6	6.2		21	
8.8	10.0	10.8	10.8	9.8	9.8	9.8	10.0	9.6	9.0	10.1 _W	10.2 _W		22	
7.9	8.5	9.2	10.3	10.5	10.6 _W	8.6	F	F	F	F	6.6		23	
7.4	7.6	8.4	8.8	8.9	8.7	8.8	8.9	8.9	7.9	6.5	6.2		24	
11.6	11.0	11.1	10.9	11.2	10.3	10.7 _W	9.0	9.0	8.5	6.0	5.3		25	
8.6	9.1	9.5	9.9	9.5	8.8	7.8	7.4	7.8	7.8	7.3	7.0		26	
8.1	8.5	8.8	8.9	8.8	8.4	8.5	7.4 _W	F	F	7.7	7.2		27	
9.6	10.1	10.4	10.8	10.3	10.5 _W	8.2	7.0	10.6 _W	F	10.7 _W	10.1 _W		28	
9.1	9.7	10.1	10.1	9.8	9.3	8.7	10.4 _W	F	F	9.6	7.4		29	
8.9	9.5	9.6	9.3	8.5	7.7	7.1	6.8	F	7.6	10.7 _W	10.3 _W		30	
8.8	9.4	10.0	10.7	11.2	11.0	9.5	10.6 _W	F	F	10.6 _W	F		31	
9.1	9.1	9.0	9.1	9.1	9.1	9.1	26	24	23	29	29		Count	
9.3	9.7	10.3	10.8	10.5	9.8	9.0	8.7	8.8	8.1	7.3	7.0		Median	
9.2	9.7	10.2	10.5	10.3	9.8	9.2	8.7	8.8	8.4	7.5	7.0		Mean	

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF1
 Unit, Mc
 Month, January 1961

TABLE 2
 Ionospheric Data
 75 °E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date/Hour	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	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
12								L	L	L	L	4 9
13									L	L	L	5 1
14								L	L	L	u4 9L	L
15								L	L	L	L	L
16								L	L	L	L	L
17									L	L	L	L
18									L	L	L	L
19									L	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22									L	L	L	L
23									L	L	u4 7L	u4 7L
24									L	L	LH	LH
25									L	L	L	4 9
26									L	L	L	u5 0L
27									L	L	L	u4 9L
28									L	L	L	L
29									L	L	u4 9L	L
30									L	L	L	L
31									L	LH	LH	L
Count											3	6
Median												4 9
Mean												4 9

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foF1
 Unit · Mc
 Month January 1961

TABLE 2
 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	Hour/Date
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
L	L	C	L	L								4
L	L	L	L	L								5
L _H	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	L							11
L	L	L	L	L	L	L						12
L _{4.9}	L	L	L	L	L	L	L					13
L	L	L	L	L	L	L						14
L	L	L	L	L	L	L						15
L	L	L	L	L	L	L						16
L	L _H	L _{4.8H}	L _A	L	L	L						17
L	L	L	L	L	L	L						18
L	L	L	L	L	L	L						19
L	L	L	L	L	L	L						20
L	L	A	L	L	L	L						21
L	L	L _A	L	L	L	L						22
L	L _H	L _A	L	L	L	L						23
L	L	L _H	L	L	L	L						24
L	L	L	L	L	L	L						25
L	L	L	L	L	L	L						26
L	L	L	L	L	L	L						27
L	L	L	L	L	L	L						28
L	L	L	L	L	L	L						29
L _H	L	L	L	L	L	L						30
L	L	L	L	L	L	L						31
1		1										Count
												Median
												Mean

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

Characteristic foF1
Unit Mc
Month : January 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	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	C	L	L	L
4								L	L	L	L	L
5								L	L	L	L	L
6								L	L	L	L	LH
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	v5 0L	L
12								L	L	L	L	L
13								L	L	L	4 9	5 2
14								L	L	L	L	L
15								L	L	L	L	L
16								L	L	4 7	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	v4 8L	L	v4 8L
24								L	L	4 8H	LH	L
25								L	L	L	v4 9L	v4 9L
26								L	L	L	L	L
27								L	L	L	v5 0L	v4 8L
28								L	L	L	L	L
29								L	L	L	L	L
30								L	L	L	L	L
31								L	L	LH	LH	L
Count										9	4	4
Median												
Mean												

Sweep 1 0 Mc to 25.0 Mc in 27 seconds

Characteristic *FoF1*
 Unit · Mc
 Month January 1961

TABLE 2—*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	Hour/Date
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
L	L	C	L	L								4
L _H	L	B	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	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
L	L	L	L	L	L		L					16
L _H	L	L	L	L	L		L					17
L	L	L	L	L	L		L					18
L	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 _H	L	L	L	L	L		L					23
L _H	L _H	L	L	L	L		L					24
A	L	A	A	A	L		L					25
L	L	L	L	L	L		L					26
L	L	L	L	L	L		L					27
L	L	L	L	L	L	L						28
L	L	L	L	L	L	L						29
L	L	L	L	L	L	L						30
L	L	L	L	L	L							31
												Count
												Median
												Mean

Sweep 1.0 Mc. to 25.0 Mc in 27 seconds

Characteristic f_oE **TABLE 3** Latitude $10^{\circ}N$
 Unit Mc Ionospheric Data Longitude $77^{\circ}E$
 Month January 1961 $75^{\circ}Q^{\circ}E$ Mean Time

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	A	A
2									R	R	A	R
3								R	R	R	A	A
4									A	A	A	A
5									3.4	A	A	A
6									A	A	A	A
7									3.2	A	A	A
8									2.9	3.3	A	A
9								2.3	A	A	A	A
10									R	R	A	A
11									3.0	R	A	A
12									A	A	A	A
13									R	B	A	A
14								2.2	A	A	A	A
15									2.6	3.4	A	A
16									A	B	A	A
17									B	B	B	B
18									R	R	A	A
19									R	R	R	R
20									R	B	3.8m	A
21									R	R	A	A
22									R	R	A	A
23									R	A	A	A
24									R	A	A	A
25											A	A
26									F	R	A	A
27									R	R	A	A
28								2.1m	R	R	A	A
29									B	A	A	A
30									B	B	A	A
31								R	R	R	R	R
Count								3	5	2	1	1
Median									3.0			
Mean									3.0			

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic foE
 Unit . Mc
 Month January 1961

TABLE 3
 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	Hour/Date
A	A	A	R	2.8								1
A	A	R	FR	F								2
A	A	R	R	u3.2R								3
A	A	C	u3.5R	A								4
A	B	u3.8R	B	u3.0R								5
A	A	3.8	A									6
A	A	A	A	A								7
A	A	A	A	A								8
A	A	A	A	A					R			9
A	A	A	B	A								10
A	A	3.5	A	A								11
A	A	A	A	A								12
A	A	3.6	3.2	A								13
A	A	A	A	A								14
A	3.4	3.1	B	2.8								15
A	A	3.3	B	2.8								16
A	u3.5R	3.5	A	A					R			17
R	A	R	R	u2.7R								18
u3.9R	R	R	B	A								19
B	R	R	B	A								20
A	A	A	A	u3.0R					R			21
A	B	B	B	B					R			22
A	u4.0A	A	A	A					A			23
A	A	A	A	A					u2.9R			24
A	A	A	A	A								25
A	A	u3.5A	A	A								26
A	A	A	A	u3.0R								27
A	A	A	A	A								28
A	A	u3.6R	B	3.5								29
A	A	A	A	A					A			30
u4.0R	R	u3.4R	B									31
2	3	10	2	9	1							Count
		3.5		3.0								Median
		3.5		3.0								Mean

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

Characteristic foE
 Unit Mc
 Month January 1961

TABLE 3—contd
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1									A	A	A	A
2									R	A	A	A
3									C	A	A	A
4									A	A	A	A
5								v3.3R	3.4	A	A	A
6								A	A	A	A	A
7								2.9	A	A	A	A
8								2.6	3.1	A	A	A
9								A	A	A	A	A
10									A	A	A	A
11								2.5	3.1	A	A	A
12								2.7	A	A	A	B
13									3.0	A	A	A
14								2.7	A	A	A	A
15								2.4	3.0	A	A	A
16								R	A	A	A	A
17									B	A	A	A
18								v2.3R	R	R	A	A
19									R	A	R	v3.9R
20								R	B	A	A	A
21								R	R	A	A	A
22								R	R	A	A	A
23								R	A	A	A	A
24									R	A	A	A
25										R	A	A
26								F	R	A	A	A
27									v2.9R	A	A	A
28								R	R	A	A	A
29										A	A	A
30									B	A	A	A
31								R	R	A	R	R
Count								8	6			1
Median								2.6	3.0			
Mean								2.7	3.1			

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foE
Unit : Mc
Month January 1961

TABLE 3—*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	Hour/Date
A	A	R	3 2	..								1
A	A	v3 9 _R	R	R								2
A	R	R	R	..								3
A	A	C	A									4
A	A	B	3 3									5
A	A	A	A	A								6
A	A	A	A	A								7
A	A	A	2 2	A								8
A	A	A	A	A								9
A	A	R	A	A								10
A	A	A	F	A								11
A	A	A	3 0	A								12
A	A	3 3	3 1	A								13
A	A	A	A	A								14
A	3 3	B	B									15
A	3 4	R	B	2 5								16
v3·7 _R	v3 3 _R	A	A	A								17
A	R	B	R	R								18
R	j3 2 _R	R	R	R								19
R	A	B	A	A								20
A	A	A	A	R								21
R	B	B	B	v2·7 _R								22
A	A	A	A	A								23
A	A	A	A	A								24
A	A	A	A	2·6								25
A	A	v3 5 _R	A									26
A	A	A	v3 1 _R	R								27
A	A	A	A	R								28
A	A	R	v3 1 _R	A								29
A	3·3	A	A	3 5								30
R	R	B										31
1	5	3	7	4								Count
	3·3		3 1									Median
	3 3		3 0									Mean

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

Characteristic foEs
 Unit : Mc
 Month January 1961

TABLE 4
 Ionospheric Data
 75 0°E Mean Time

Latitude . 10 2°N
 Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									6.7	7.8	8.8	8.8
2									G	G	8.2	8.0
3								G	G	G	8.6	8.4
4								G	6.9	7.8	9.0	9.4
5									G	6.2	9.0	8.2
6									3.8	3.8	8.4	9.2
7									G	8.4	9.2	9.4
8									G	G	8.4	8.0
9								G	3.6	3.9	8.2	8.7
10									6.8	G	7.8	7.6
11									G	G	8.4	8.6
12								2.9	3.8	3.8	8.4	8.2
13									G	G	6.0	7.8
14								G	3.8	3.9	8.0	8.2
15									G	G	8.2	8.8
16									3.4	G	8.0	8.2
17									G	G	8.5	9.2
18									G	G	8.0	8.4
19								2.5	G	6.8	8.4	8.2
20									G	G	8.8	6.8
21		2.8							G	G	8.4	9.6
22									G	G	7.9	7.2
23									G	7.0	8.2	8.2
24			4.4						G	3.6	8.8	7.8
25											4.0	8.0
26								8.6	8.0	G	9.2	9.0
27									G	G	8.2	8.2
28								G	G	7.0	8.0	8.2
29										5.8	8.2	8.5
30									G	G	8.8	8.6
31								G	G	6.8	9.4	8.4
Count		1	1					8	29	30	31	31
Median								G	G	G	8.4	8.2
Mean									5.2	5.9	8.2	8.4

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

Characteristic foEs
Unit Mc
Month January 1961

TABLE 4
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	Hour/Date
8 2	8 6	8 4	G	G								1
07 00	8 4	8 7	G	G		2 0			4 4			2
9 2	8 3	7 4	G	G								3
9 6	9 2	G	G	7 7		6 6						4
8 4	7 8	G	G	G								5
9 4	7 8	7 0	8 2									6
9 0	8 4	8 8	8 4	8 0			2 2		7 0			7
8 6	8 8	8 0	8 1	8 4	8 4							8
8 7	7 8	7 2	3 6	3 6	G			2 8				9
7 8	7 6	7 3	G	6 0						1 2		10
7 7	7 4	8 0	7 2	6 8								11
7 8	7 4	8 2	4 5	3 6								12
7 8	7 8	G	G	4 6			8 2					13
7 6	7 8	7 8	6 3	6 4			G					14
7 8	G	G	G	G					5 7			15
8 3	5 8	G	G	3 3	2 7							16
8 3	G	6 8	8 5	8 1	G			6 7	5 1			17
8 2	8 0	G	4 2	G								18
G	G	G	G	4 6								19
G	5 6	G	G	4 0	2 6							20
8 2	8 6	17 0	4 2	G	G		2 4					21
8 0	G	G	G	G	G							22
8 2	9 2	11 2	11 8	9 0	10 2					3 0		23
8 2	8 2	8 0	7 6	7 0	G	9 4						24
10 0	8 6	12 0	11 8	8 0	6 4	3 4	2 8					25
9 0	8 6	8 0	8 0	8 0								26
8 2	8 2	8 0	G	7 0								27
8 4	8 0	8 0	7 6	8 0							5 2	28
8 2	7 9	5 8	G	G								29
8 7	7 8	7 0	7 6	7 7	4 5							30
8 2	G	G	G	3 9	3 0							31
31	31	30	31	30	12	4	4	2	4	2	1	Count
8 2	7 8	7 2	8 6	4 6	2 6							Median
8 4	8 0	8 5	7 4	6 4	5 4							Mean

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

Characteristic foEs
Unit Mc
Month January 1961

TABLE 4—*contd*
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

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

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

Characteristic f_oE_s
 Unit · Mc
 Month · January 1961

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

Sweep 1·0 Mc to 25 0 Mc in 27 seconds

Characteristic : fbEs
 Unit Mc
 Month January 1961

TABLE 5
 Ionospheric Data
 75 0°E Mean Time

Latitude 10.2°N
 Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									3 1	3 9	3 8	4 1
2									G	G	4 0	4 2
3									G	G	3 9	4 1
4								G	3 3	3 7	4 0	4 1
5									G	3 7	4 0	4 1
6									3 1	3 8	3 8	4 1
7									G	3 7	3 8	3 9
8									G	G	3 9	4 0
9								G	3 0	3 6	3 8	3 8
10									G	3 7	3 8	3 8
11									G	G	3 7	3 8
12								2 4	3 2	3 6	3 6	3 8
13									G	G	3 7	3 8
14								G	3 0	3 4	3 6	3 8
15									G	G	3 6	3 7
16									3 0	G	3 6	3 7
17									G	G	3 7	3 9
18									G	G	3 7	3 8
19								2.5	G	G	3 8	3 8
20									G	G	3 6	3 7
21									G	G	3 8	3 8
22									G	G	3 6	3 8
23									G	3 7	3 8	3 9
24			2 9						G		3 8	3 8
25											3 8	4 0
26									3 1	G	3 7	4 0
27									G	G	3 9	4 0
28								G	G	3 8	4 0	4 0
29									G	3 6	3 9	3 9
30									G	G	4 1	4 1
31								G	G		3 8	4 0
Count		1						7	28	27	30	31
Median								G	G	G	3 8	3 9
Mean									3 1	3 7	3 8	3 9

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

Characteristic fbEs
Unit Mc
Month - January 1961

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . fbEs
Unit · Mc
Month January 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								2.8	3.4	3.7	4.0	4.0
2										3.8	3.9	4.1
3								G	G	3.9	4.0	4.2
4										3.5	3.7	4.0
5								G	G	4.1	3.9	4.0
6								2.9	3.5	3.5	4.0	4.2
7								G	3.5	3.7	3.8	4.1
8								G	G	3.6	4.1	4.1
9								2.7	3.2	3.6	3.9	3.9
10									3.2	3.5	3.7	3.8
11								G	G	3.6	3.7	4.0
12								G	3.4	3.4	3.8	
13									G	3.4	3.6	3.7
14								G	3.3	3.4	3.8	3.8
15								G	G	3.5	3.7	3.9
16								G	3.1	3.5	3.7	3.8
17									G	3.7	3.8	3.9
18								G	G	G	3.7	3.8
19									G	3.6	4.0	3.8
20								G	G	3.5	3.8	3.8
21		2.8						G	G	3.7	4.0	3.9
22								G	G	3.5	4.0	4.0
23								G	3.4	3.8	3.8	4.0
24									G	3.4	3.8	4.0
25										G	4.0	4.2
26								G	G	3.6	4.0	4.0
27									G	3.6	3.9	4.0
28								G	G	3.8	4.0	4.0
29										3.7	3.9	4.3
30									G	3.8	4.3	4.2
31								G		3.8	4.0	4.0
Count		1						20	26	31	31	30
Median								G	G	3.6	3.9	4.0
Mean									3.4	3.6	3.9	4.0

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fbEs
 Unit Mc
 Month January 1961

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

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

Characteristic : fmin
 Unit : Mc
 Month January 1961

TABLE 6
 Ionospheric Data
 75°0'E Mean Time

Latitude 10 2°N
 Longitude . 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	19	17	26	20	16	22	21	30	22	30	28	31
2	19	22	14	15	19	E	20	27	25	29	29	32
3	22	18	18	18	18	E	22	24	27	32	28	30
4	22	19	21	22	18	21	25	26	27	31	26	30
5	22	19	20	21	E	E	23	25	23	26	26	31
6	16	21	22	20	20	21	20	25	22	25	26	30
7	24	21	24	21	21	21	25	25	25	30	30	30
8	15	16	16	17	19	18	19	25	26	29	26	28
9	21	23	21	22	22	18	21	18	22	26	27	29
10	20	23	24	16	23	24	24	25	24	28	28	29
11	20	20	21	19	19	E	19	25	25	30	28	30
12	19	20	18	18	14	E	18	18	22	29	28	30
13	26	22	22	21	21	23	19	25	23	37	29	29
14	20	21	19	23	18	19	19	18	23	28	29	29
15	19	20	19	20	22	25	18	26	24	28	27	30
16	23	24	19	20	E	E	18	23	24	35	27	29
17	21	21	24	20	E	E	18	25	31	36	41	28
18	24	19	18	18	15	19	16	24	24	27	28	29
19	21	22	22	20	19	E	20	23	24	29	28	29
20	23	21	23	24	18	19	18	24	27	36	26	31
21	24	21	21	24	19	E	17	25	24	28	28	31
22	24	24	16	21	E	E	21	25	25	29	25	27
23	20	22	20	20	E	E	20	26	25	28	28	28
24	28	18	24	24	20	19	24	26	23	27	26	28
25	15	19	19	19	18	E	22	24	32	36	26	29
26	24	20	19	22	18	22	26	24	24	28	28	30
27	17	20	22	20	20	20	16	24	25	25	26	28
28	19	22	22	24	26	E	19	20	24	28	26	32
29	23	21	21	23	25	20	27	26	33	27	28	29
30	24	21	22	23	23	E	23	29	35	39	32	32
31	25	22	22	22	20	18	17	21	24	32	29	31
Count	31	31	31	31	31	31	31	31	31	31	31	31
Median	21	21	21	20	19	18	20	25	24	29	28	30
Mean	21	21	21	21	19	20	20	24	25	30	28	30

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

Characteristic fmin
Unit Mc
Month January 1961

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

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

Characteristic *f*_{min}
 Unit, Mc
 Month January 1961

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

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 0 Mc to 25 0 Mc in 27 Seconds

Characteristic fmin
 Unit Mc
 Month January 1961

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

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

Characteristic $h' F_2$
 Unit . Km
 Month January 1961

TABLE 7
 Ionospheric Data
 75.0°E Mean Time

Latitude 10 2°N
 Longitude 77.5°E

Date/Hour	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	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
11									L	L	L	L
12								L	L	L	L	300
13									L	L	L	300
14								L	L	L	310	L
15								L	L	L	L	310
16								L	L	L	L	L
17									L	L	L	L
18									L	L	L	L
19									L	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22									L	L	L	L
23									L	L	v300L	v300L
24									L	L	L	L
25								..	L	L	L	300
26									L	L	L	v320L
27									L	L	L	v320L
28									L	L	L	L
29									L	L	300	L
30									L	L	L	L
31									L	LH	LH	L
Count											9	7
Median												300
Mean												305

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . h'F₂
 Unit Km
 Month January 1961

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	Hour/Date
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
L	L	C	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	L							11
L	L	L	L	L	L	L						12
305	L	L	L	L	L	L						13
L	L	L	L	L	L	L						14
L	L	285	L	L	L	L						15
L	L	L	L	L	L	L						16
L	320	300	v300A	L	L	..						17
L	L	L	L	L	L	L						18
L	L	L	L	L	L	L						19
L	L	L	L	L	L	L						20
L	L	A	v300L	L	L	L						21
L	L	L	L	L	L	L						22
LH	LH	A	L	L	L	A						23
L	L	L	L	L	L	L						24
L	L	A	A	L	L	L						25
L	L	L	L	L	L	L						26
L	L	L	L	L	L	L						27
L	L	L	L	L	L	L						28
L	L	L	L	L	L	L						29
L	L	L	L	L	L	L						30
L	L	L	L	L								31
1	1	2	2									Count
												Median
												Mean

Sweep 1 0 Mc to 25.0 Mc. in 27 seconds

Characteristic h'F2 TABLE 7—Contd Latitude 10 2°N
 Unit · Km Ionospheric Data Longitude 77 5°E
 Month January 1961 75·0°E Mean Time

Date/Hour	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
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	295	L
12								L	L	L	L	L
13								L	L	L	315	330
14								L	L	L	L	L
15								L	L	L	L	310
16								L	L	315	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	320L	L	320L
24								L	L	320	L	L
25								L	L	L	310L	310L
26								L	L	L	L	L
27								L	L	L	340L	320L
28								L	L	L	L	L
29								L	L	L	L	L
30								L	L	L	L	L
31								L	L	LH	LH	LH
Count										3	4	5
Median												320
Mean												320

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F2 Latitude 10 2°N
 Unit Km Ionospheric Data Longitude 77 5°E
 Month January 1961 75 0°E Mean Time

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
L	L	L	L	L								1
L	L	L	L	L								2
L	L	L	L	L								3
L	L	G	L	L								4
L	L	B	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	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
L	L	L	L	L	L	L						16
L	L	L	L	L	L	L						17
L	L	L	L	L	L	L						18
L	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
LH	L	L	L	L	L	L						23
L	L	L	L	L	L	L						24
A	L	A	A	A	L	L						25
L	L	L	L	L	L	L						26
L	L	L	L	L	L	L						27
L	L	L	L	L	L	L						28
L	L	L	L	L	L	L						29
L	L	L	L	L	L	L						30
L	L	L	L	L	L	L						31
1												Count
1												Median
1												Mean

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

Characteristic h'F
Unit Km
Month January 1961

TABLE 8
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	240	240	260	230	230	230	280	250	220	215	200	205
2	230	230	225	220	230	E	265	240	220	215	205	200
3	230	235	240	240	240	E	280	240	220	210 _r	190	180
4	250	260	295	260	220	230	270	240	220	210	205	195
5	230	240	240	240	E	E	290	240	220	200	190	180
6	225	230	265	270	240	235	260	235	210	210	200	200
7	230	235	265	250	235	240	280	230	220	210	200	195
8	230	280	280	240	210	225	270	240	220	210	200	200
9	250	270	300	305	250	225	265	235	210	200	195	195
10	240	260	265	275	240	250	260	240	220	205	195	185
11	240	245	230	240	225	E	260	230	210	200	180 _r	180
12	240	240	225	215	215	E	270	230	215	200	180 _r	190
13	240	245	225	215	215	255	250	230	205	200	180 _r	185 _r
14	240	270	240	240	240	260	270	230	200	200	200	185
15	210	210	220	220	255	300 _r	265	235	220	205	200	190
16	230	235	235	245	E	E	305 _r	245	230	210	180	185
17	225	220	220	245	E	E	270	240	220	220	210	195
18	270	280	280	270	210	260 _r	270	240	220	215 _c	200	185
19	220	260	255	260	310 _r	E	335	240	220	200	200	200
20	265	240 _r	250	235	240	225	275	240	225	210	180 _r	175 _r
21	240	240	255	240	240	E	265	235	220	220	200 _r	185 _r
22	320	320	240	230	E	E	300	235	200	200	180 _r	170 _r
23	265	235	220	240	E	E	290	230	215	200	190	190
24	280	250	F	300 _r	230	220	300	230	200	200	180 _r	180 _r
25	250	260	250	240	235	E	300	230	220	215	205	200
26	240	240	230	240	240	260	L	240	220	210	190	200
27	240	240	230	250	245	220	250	235	220	200	200	200
28	250	240	220	240	300	E	290	230	220	200	200	180
29	230	220	245	260	260	245	245	240	220	205	200	190
30	225	230	255	265	265	E	300	240	220	205	205	195
31	225	230	240	250	250	245	260	240	220	200	190	190
Count	31	31	30	31	31	30	30	31	31	31	31	31
Median	240	240	240	240	240	260	270	240	220	205	200	190
Mean	240	245	245	245	240	240	275	235	215	205	195	190

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month January 1961

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	Hour/Date
200	200	205	215	230	245	295	360 ^r	340	310	300	260	1
195	190	200	220	230	250	265	295	260	260	250	240	2
200	200 ^h	200	220	220	250	280	340	F	F	u280 ^h	260	3
200	200	C	220	235	255	290	345	335	260	230	230	4
185	195	200	220	225	250	270	305	290	240	230	240	5
205	200	200	A	230	260	280	u300 ^h	u240 ^r	235	225	230	6
190	200	A	205	225	250	275	u290 ^r	F	255	225	240	7
200 ^h	195 ^h	195	220	225	245	270	300	275	235	215	220	8
200	180	195	205	220	245	280	310	260	215	215	225	9
180	175	170 ^h	215	220	240	270	305	290	245	225	230	10
185	180	200	A	220	230	260	280	290	245	230	235	11
170 ^h	195	200	205	220	230	265	290	295	285	260	240	12
200	195	195	205	220	235	255	360	235	220	220	225	13
180	185	200	205	215	230	270	C	260	240	230	220	14
180	185	205	200	215	235	250	240	230	225	220	230	15
180	205	180 ^h	210	210	235	265	310	300	240	215	225	16
180	180 ^h	205 ^h	A	u260 ^A	240	260	260	260	225	230	250	17
200	190 ^h	195	200	220	225 ^h	260 ^h	F	F	u240 ^h	225 ^r	235	18
200	200	200	200	210	240	260	275	240	265	u320 ^r	F	19
190	A	200	210	220	240	260	310	u320 ^r	300 ^h	240	225	20
180 ^h	200	A	220	215	240	260	255	240	240	255	300	21
180 ^h	160 ^h	200	200	215	240	265	275	260	255	270	260	22
180 ^h	180 ^h	A	A	u250 ^A	A	265	360 ^h	420 ^r	340 ^r	F	260	23
200	200	190 ^h	200	220	240	u280 ^A	255	225	220	230	240	24
200	200	A	A	240	250	260	290	265	220	220	230	25
190	180 ^h	180	200	210	240	270	300	270	240	240	225	26
180	180	200	200	220	240	270	355	F	320 ^r	270	240	27
200	210	210	210	220	240	280	360 ^r	320 ^r	300	260	240	28
195	200	A	210	220	245	265	320	350	F	240	215	29
200 ^h	u230 ^A	200	200	210	245	280	335	350	270	260	225	30
195	195	200	210	220	240	270	350	F	F	260	225	31
31	30	26	26	31	30	31	29	26	28	30	30	Count
195	195	200	210	220	240	270	300	270	210	230	230	Median
190	195	195	210	225	240	270	305	285	255	240	235	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month January 1961

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

Latitude 10 3°N
Longitude 77.5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	240	245	245	230	225	270	270	290	220	200	200	200
2	225	235	235	210	230	E	255	235	215	205	200	200
3	225	240	230	240	210	E	255	230	C	195	180	200
4	260	260	280	240	215	L	250	220	210	215	200	200
5	210	215	240	210	L	L	250	235	210	200	180H	180
6	235	240	295	260	230	270	250	210	210	190	200	200
7	230	240	260	215	255	L	215	230	215	205	195	190
8	260	290	210	210	215	260	245	225	220	200	210H	200
9	270	280	220	280	230	240	260	225	205	195	200	200
10	255	260	275	265	225	240	260	220	205	200	190	180
11	215	240	230	230	225	E	235	215	205	195	190	195
12	210	240	215	210	235	L	240	220	195H	195	200	180H
13	250	235	220	225	220	L	240	220	215	180	170H	180H
14	270	250	240	230	210	L	250	215	215	200	200	180
15	210	210	215	220	275	1300L	210	220	210	200	200	195
16	230	235	215	E	E	E	255	230	210	200	180H	180H
17	230	220	230	240	E	E	240	230	220	220	190	195
18	280	285	280	225	240	E	250	230	220	205	195	185
19	230	250	260	280	240	L	250	225	205	200	200	195
20	2260F	230	240F	250	235	235	255	240	220	195	200	180
21	240	240	250	240	2300L	E	255	235	215	205H	200	175H
22	315	270	220	240	E	E	240	220	180H	180H	200	200
23	240	220	220	2270L	E	E	240	220	210	200	190	180
24	260F	240F	F	270	225	E	225	220	200C	180H	180H	200
25	260	260	245	240	240	E	240	230	210	200	205	200
26	210	240	235	240	260	260	250	220	200	200	200	200
27	240	240	235	240	240	250	240	225	210	200	200	190
28	250	230	220	240	E	E	250	220	210	200	200	190
29	225	245	250	245	240	250	245	225	215	215	195	200
30	240	245	265	265	265	L	255	230	210	200	200	200
31	220	230	240	250	240	260	260	230	250	190	200	190
Count	31	31	30	31	30	30	31	31	30	31	31	31
Median	240	240	240	240	240	E	250	225	210	200	200	195
Mean	245	245	245	245	240	260	250	225	210	200	195	190

Sweep 1.0 Mc to 25.0 Mc, in 27 sec cond.

Characteristic h'F
Unit Km
Month January 1961

TABLE 8—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	Hour/Date
195	200	210	220	240	265	320	F	F	F	285	240	1
185	185	230	225	240	255	300	280	260	∇250r	240	235	2
205	200	210	220	235	265	320	380r	∇280r	F	260	250	3
195	190	C	235	240	270	320	350	305	230	240	230	4
190H	195	B	225	235	260	300	300	265	230	225	240	5
200	195	230	220	240	270	300	∇270r	245F	230	230	225	6
200	210	A	215	235	260	310	∇240r	∇260r	240	230	245	7
195	180	215	220	235	260	280	290	250	220	215	230	8
195	190	195	215	225	260	305	280	230	215	220	230	9
175	175H	210	220	230	255	295	300	265	220	225	240	10
195	185	A	215	A	250	275	280	280	240	230	245	11
180H	180H	210	210	220	250	285	285	300	270	255	235	12
185	195	205	210	225	245	A	240	225	215	225	230	13
180H	195H	200	210	225	250	275	C	240	225	225	220	14
200	180H	200	215	240	250	245	C	220	230	225	225	15
180	200	230	215	220	240	280	305	270	220	220	225	16
185H	205	A	205	240	245	255	∇280A	240	220	210	260	17
185H	190H	A	210	200H	250H	F	320	∇265r	∇240r	220	235	18
200	200	200	205	225	245	270	260	260	300	∇320F	260r	19
180H	200	200	220	220	245	280	F	∇310F	260F	235	240	20
165H	200	225	220	230	240	260	240	240	240	280	320	21
180H	200	200	200	225	260	265	265	240	230	265	270	22
180H	∇240A	∇240A	A	∇260A	250	300	400F	420F	290r	270F	270	23
200	200	200	210	230	250	250	240	220	225	240	250	24
A	200	A	A	230	245	270	280	235	210	220	230	25
180H	200	205	210	220	260	285	300	240	230	240	235	26
180	200	200	210	220	255	285	360F	340r	260	240	245	27
210	200	200	220	220	260	310	320F	F	270	240	230	28
195	190	A	200	230	260	300	335	F	260F	220	220	29
200	220	200	210	230	260	300	340	F	255	235	225	30
205	200	205	215	220	255	305	∇380F	∇360F	∇280F	240	210	31
30	31	29	29	30	31	29	27	27	29	31	31	Count
190	200	205	215	230	255	285	290	260	230	235	235	Median
190	195	210	215	230	255	290	300	270	240	240	240	Mean

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

Characteristic h'E
Unit Km
Month January 1961

TABLE 9
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	A	A
2									115	105	A	105
3								140	115	105	A	A
4									A	A	A	A
5									105	A	A	A
6									A	A	A	A
7									110	A	A	A
8									110	100	A	A
9								105	A	A	A	A
10									100	100	A	A
11									110	105	A	A
12									105	A	A	A
13									105	B	A	A
14								105	A	A	A	A
15									110	110	A	A
16									A	B	A	A
17									B	B	B	A
18									120	110c	A	A
19									110	110	110	115
20									110	B	105	A
21									105	110	A	A
22									110	105	A	A
23									110	115	110	A
24									110	A	A	A
25											A	A
26									110	110	A	A
27									110	105	A	A
28								120	115	110	A	A
29										A	A	A
30									B	B	A	A
31								120	110	110	110	105
Count								5	21	15	4	3
Median								120	110	110		
Mean								120	110	105		

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic $\cdot h' E$
Unit Km
Month January 1961

TABLE 9—*Contd*
Ionospheric Data
73 0°E Mean Time

Latitude 10.2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1									A	A	A	A
2									105	A	A	100
3								115	C	A	A	A
4									A	A	A	A
5								110	105	A	A	A
6								A	A	A	A	A
7								100	A	A	A	A
8								120	105	A	A	A
9								A	A	A	A	A
10									A	A	A	A
11								110	105	A	A	A
12								105	A	A	A	B
13									110	A	A	A
14								105	A	A	A	A
15								110	110	105	A	A
16								110	A	A	A	A
17									B	A	A	A
18								120	115	105	A	A
19									110	A	110	110
20								120	B	A	A	A
21								115	110	A	A	A
22								120	105	A	A	A
23								115	110	A	110	A
24									100	A	A	A
25										110	A	A
26								115	115	120	A	A
27									110	A	A	A
28								110	110	A	A	110
29										A	A	A
30									B	A	A	A
31								420	110	A	105	105
Count								17	16	4	3	4
Median								115	110			
Mean								115	110			

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic : h'E
 Unit . Km
 Month . January 1961

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

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

Characteristic h'Es
Unit Km
Month January 1961

TABLE 10
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									100	100	100	100
2									G	G	100	100
3								G	G	G	100	100
4									100	100	100	100
5									G	100	100	100
6									100	100	100	100
7									G	100	100	100
8									G	G	100	100
9								G	105	100	100	100
10									100	G	100	100
11									G	G	100	100
12								110	110	100	100	100
13									G	G	100	100
14								G	100	100	100	100
15									G	G	100	100
16									100	G	100	100
17								..	G	G	100	100
18								..	G	G	100	100
19								145	G	100	100	100
20								..	G	G	100	100
21	110							.	G	G	100	100
22									G	G	100	100
23									G	100	100	100
24		100							G	100	100	100
25											100	100
26								100	100	G	100	100
27									G	G	100	100
28								G	G	100	100	100
29										100	100	100
30									G	G	100	100
31								G	G	100	100	100
Count	1	1						3	9	14	31	31
Median									100	100	100	100
Mean									100	100	100	100

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

TABLE 10
 Ionospheric Data
 75 0°E Mean Time
 Latitude 10 2°N
 Longitude 77 5°E

Characteristic	h'Es											Latitude	10 2°N
Unit	Km											Longitude	77 5°E
Month	January 1961												
	12	13	14	15	16	17	18	19	20	21	22	23	Hour/Date
100	100	100	G	G									1
100	100	100	G	G			130						2
100	100	100	G	G									3
100	100	C	G	100			105						4
100	100	G	G	G									5
100	100	100	100										6
100	100	100	100	100				130		100			7
100	100	100	135	100		100							8
100	100	100	100	100		G			115				9
100	100	100	G	100							100		10
100	100	100	100	105									11
100	100	100	100	100									12
100	100	G	G	105				100					13
100	100	100	100	100									14
100	G	G	G	G						100			15
100	100	G	G	100	115								16
100	G	130	100	100	G				100	100			17
100	100	G	125	G									18
G	G	G	G	100	100								19
G	120	G	G	100	120								20
100	100	100	125	G	G			100					21
100	G	G	G	G	G								22
100	100	110	100	100	100						105		23
100	100	100	100	100	G		115						24
100	100	100	100	100	110		110	100					25
100	100	100	100	100									26
100	100	100	G	100									27
100	100	100	100	100							100		28
100	100	120	G	G									29
100	100	100	100	100	110								30
100	G	G	G	115	110								31
29	26	21	16	21	7	4	4	2	3	2	1		Count
100	100	100	100	100	110								Median
100	100	105	105	100	110								Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic	h'Es	TABLE 10— <i>contd</i>											Latitude	10 2°N
Unit	Km	Ionospheric Data											Longitude	77 5°E
Month	January 1961	75°E Mean Time												
Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130		
1								105	100	100	100	100		
2									100	100	100	100		
3								G	G	100	100	100		
4									100	100	100	100		
5								G	G	100	100	100		
6								100	100	100	100	100		
7								G	100	100	100	100		
8								G	G	100	100	100		
9								105	100	100	100	100		
10									100	100	100	100		
11								G	G	100	100	100		
12								G	100	100	100	100		
13									G	100	100	100		
14								G	100	100	100	100		
15								G	G	100	100	100		
16								G	100	100	100	100		
17									G	100	100	100		
18								G	G	G	100	100		
19									G	100	100	100		
20								G	G	100	100	100		
21		120	115					G	G	100	100	100		
22								G	G	100	100	100		
23								G	100	100	100	100		
24		110	100	100					G	100	100	100		
25										G	100	100		
26								G	G	100	100	100		
27									G	100	100	100		
28								G	G	100	100	100		
29									G	100	100	100		
30									G	100	100	100		
31								G	100	100	100	100		
Count		2	2	1					8	12	29	31	31	
Median										100	100	100	100	
Mean										100	100	100	100	

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

Characteristic h'Es
 Unit Km
 Month January 1961

TABLE 10—*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
100	100	G	G	115								1
100	100	100	G	G				125	110			2
100	100	G	G	G								3
100	100	C	100									4
100	100	B	G									5
100	100	100	100	100		115	130	115				6
100	100	100	130	100	130							7
100	100	100	100	G								8
100	100	G	100	100								9
100	100	100	G	105								10
100	100	100	115	110		100						11
100	100	100	100	100			C					12
100	G	G	G		125		C		100			13
100	G	G	G	115			100					14
G	G	100	100	100								15
100	G	120	G	G								16
100	G	G	G	115								17
100	120	G	100	115								18
100	100	100	130	G								19
G	G	G	G	G								20
100	100	110	100	100								21
100	100	100	100	G		130						22
95	100	100	100	120	105							23
100	100	100	100	120								24
100	100	G	100	G								25
100	100	100	G	G								26
100	100	110	100	G								27
100	100	120	G	G								28
100	120	100	100	G								29
G	G	G	120	110								30
												31
27	24	19	18	13	3	3	2	2	2			Count
100	100	100	100	105								Median
100	100	105	105	105								Mean

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

Characteristic . (M3000)F₂

TABLE 11

Latitude 10 2°N

Unit —

Ionospheric Data

Longitude 77 5°E

Month January 1961

75°E Mean Time

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	3 05	3 05	3 10	3 25	3 30	3 40	2 90	2 85	2 60	2 50	2 30	2 30
2	3 10	3 20	3 10	3 25	3 40	E	3 00	3 25	2 90	2 55	2 55	2 50
3	F	3 15	3 15	3 40	u3 40R	E	3 00	3 15	2 80	2 60	2 60	2 50
4	2 80	2 80	2 65	2 80	3 30	u3 50R	3 05	3 30	3 00	2 45	2 45	2 45
5	3 10	3 20	3 25	3 35	E	E	2 90	3 10	2 65	2 50	2 55	2 40
6	3 30	3 30	3 20	3 20	3 30	3 40	2 95	3 05	2 60	2 50	2 50	2 40
7	3 40	3 30	3 10	3 25	3 40	3 60	3 05	3 30	3 15	2 75	2 40	2 40
8	2 95	2 90	2 90	3 15	3 45	3 55	3 00	3 40	3 10	2 75	2 55	2 30
9	3 00	2 95	2 80	2 75	3 05	3 05	3 10	2 80	2 70	2 45	2 60	2 50
10	3 10	3 00	2 95	2 85	3 10	3 15	3 10	2 90	2 85	2 50	2 60	2 50
11	3 05	3 20	3 25	3 30	3 35	E	3 05	3 30	3 15	2 80	2 45	2 60
12	3 15	3 20	3 35	3 40	3 50	E	3 00	3 30	3 10	2 70	2 40	2 60
13	3 10	3 20	3 35	3 45	3 50	3 45	3 15	3 40	3 20	3 00	2 60	2 45R
14	3 15	3 20	3 40	3 40	3 35	3 55	2 90	2 95	2 60	2 60	2 60	2 60
15	3 40	3 45	3 40	3 30	3 35	R	3 00	3 25	3 10	2 85	2 45	2 65
16	3 30	3 45	3 45	3 55	E	E	2 70	3 10	2 70	2 55	2 50	2 60
17	3 40	3 30	3 50	3 30	E	E	3 15	3 40	3 20	3 10	2 55	2 70
18	3 10	3 10	3 10	3 20	3 65	3 70	3 00	3 30	3 05	2 90	2 75	2 70
19	3 25	3 25	3 30	3 25	3 15	E	3 00	3 20	3 10	2 70	2 75	2 70
20	F	F	F	F	3 30	3 60	u3 10R	3 00	2 80	2 85	2 60	2 80
21	3 20	3 20	3 15	3 40	3 50	E	3 00	3 20	2 80	2 65	2 65	2 60
22	j2 75h	2 75	3 30	u3 45R	E	E	3 00	3 25	2 90	2 45R	2 60	2 70
23	3 10	3 35	3 30	u3 50R	E	E	u3 10R	3 30	2 90	2 65	2 60	2 50
24	3 10R	F	F	2 90	3 35	R	u3 15R	3 50	3 20	u2 50R	2 70	2 55
25	u3 30h	3 20	3 20	3 35	3 40	E	u3 10R	3 50	3 30	3 00	2 85	2 80
26	3 40	3 50	3 50	3 40	3 40	u3 50R	R	3 25	2 90	2 65	2 55	2 60
27	3 20	3 35	3 35	3 30	3 35	3 50	3 10	3 40	3 25	2 90	2 40	2 60
28	3 05	3 20	3 30	3 50	R	E	3 15	3 20	2 85	2 60	2 50	2 55
29	3 25	3 30	3 25	3 20	u3 40R	3 20	3 10	3 30	3 10	2 65	2 50	2 60
30	3 30	3 35	3 20	3 20	3 20	E	3 10	3 10	2 70	2 60	2 60	2 40
31	u3 30h	3 20	3 25	3 20	3 30	3 30	3 00	3 10	2 80	2 65	2 55	2 60
Count	29	29	29	30	25	15	30	31	31	31	31	31
Median	3 15	3 20	3 25	3 30	3 35	3 50	3 00	3 25	2 90	2 65	2 55	2 60
Mean	3 15	3 20	3 20	3 25	3 35	3 45	3 05	3 20	2 95	2 65	2 55	2 55

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F₂
 Unit —
 Month January 1961

TABLE 11
 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
2 30	2 25	2 30	2 30	2 30	2 30	2 35	2 30	j2 40 _F	u2 25 _F	2 45	2 75	1
2 40	2 50	2 45	2 50	2 55	2 70	2 70	2 70	2 85	2 85	2 95	3 05	2
2 45	2 50	2 50	2 50	2 45	2 40	2 40	u2 35 _R	F	F	F	F	3
2 40	2 45	C	2 40	2 30	2 45	2 40	2 35	2 40	2 80	2 90	3 15	4
2 40	2 40	2 45	2 60	2 70	2 65	2 60	2 60	2 75	3 00	3 25	3 20	5
2 50	2 45	2 50	2 50	2 55	2 65	2 55	2 50	2 70	3 00	3 20	3 25	6
2 50	2 40	2 35	2 30	2 40	2 40	2 40	2 45 _F	2 60	2 80	2 95	2 95	7
2 40	2 30	2 30	2 40	2 55	2 65	2 60	2 55	2 70	2 95	3 20	3 20	8
2 50	2 45	2 50	2 45	2 30	2 30	2 40	2 35	2 70	3 25	3 00	3 10	9
2 40	2 45	2 45	2 55	2 60	2 60	2 40	2 45	2 35	2 55	3 15	3 15	10
2 60	2 60	2 50	2 55	2 55	2 55	2 50	2 50	2 55	2 85	3 05	3 10	11
2 50	2 50	2 55	2 65	2 75	2 65	2 40	2 55	2 60	2 80	2 95	3 15	12
2 60	2 65	2 60	2 80	2 80	2 70	2 60	2 75	3 10	3 30	3 35	3 25	13
2 40	2 40	2 50	2 50	2 50	2 60	2 50	C	2 70	3 10	3 15	3 20	14
2 55	2 60	2 80	2 90	3 00	3 00	2 90	3 00	3 20	3 35	3 40	3 30	15
2 50	2 65	2 75	2 80	2 70	2 60	2 35	2 40	2 45	u2 80 _F	3 15	3 30	16
2 60	2 75	2 90	3 00	3 05	2 95	2 85	2 85	3 00	3 35	3 40	3 35	17
2 60	2 65	2 70	2 90	u3 00 _s	u2 80 _R	2 45	u2 20 _F	F	F	u3 35 _F	3 30	18
2 65	2 65	2 70	2 85	2 90	2 70	2 45 _R	2 45	2 80	2 90	j2 75 _s	F	19
2 80	2 80	2 90	3 00	u2 90 _s	2 60	2 45	u2 45 _s	2 50	F	j3 10 _R	FR	20
2 65	2 60	C	2 95	3 00	2 75	2 60	2 65	2 95	3 15	j3 05 _s	2 80	21
2 60	2 90	3 00	3 05	3 00	2 80	2 70	2 75	3 00	3 30	3 15	u3 10 _s	22
2 60	2 50	2 65	2 65	2 80	2 80	2 60	u2 35 _R	F	F	F	3 25 _F	23
2 45	2 45	2 50	2 55	2 55	2 65	2 75	2 85	3 00	3 20	3 20	u3 25 _s	24
2 70	2 60	2 55	2 70	2 70	2 65	u2 60 _s	u2 50 _s	2 75	3 10	3 30	3 35	25
2 45	2 55	2 60	2 60	2 55	2 50	2 50	2 50	2 75	2 90	3 05	u3 20 _s	26
2 50	2 50	2 50	2 50	2 50	2 55	2 60	2 40	F	F	F	3 10	27
2 50	2 50	2 55	2 60	2 50	2 50	2 30	2 30	F	2 70	F	3 15	28
2 40	2 50	2 55	2 50	2 45	2 35	2 45	2 20	F	F	2 95	3 35	29
2 40	2 40	2 40	2 40	2 40	2 35	2 50	2 40	F	F	u2 90 _F	3 20	30
2 50	2 50	2 55	2 70	2 75	2 70	2 45	2 40	F	F	F	u3 30 _F	31
31	31	29	31	31	31	31	30	23	23	26	28	Count
2 50	2 50	2 55	2 60	2 55	2 65	2 50	2 45	2 70	2 95	3 10	3 20	Median
2 50	2 55	2 55	2 65	2 65	2 60	2 55	2 50	2 75	2 95	3 10	3 15	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . (M3000)F2
Unit :—
Month January 1961

TABLE 11—contd
Ionospheric Data
75°E Mean Time

Latitude : 10 3°N
Longitude : 77 5°E

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

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

Characteristic (M3000)F2
 Unit —
 Month January 1961

TABLE 11—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 25	2 25	2 30	2 30	2 25	2 30	2 30	2 20	2 40	F	2 60	2 90	1
2 40	2 45	2 45	2 50	2 60	2 65	2 65	2 80	2 95	2 95	3 10	3 15 _F	2
2 55	2 50	2 50	2 45	2 40	2 40	2 40	2 30 _F	F	F	2 70	3 00	3
2 40	2 30	C	2 35	2 35	2 40	2 40	2 30	2 50	2 90	3 05	3 10	4
2 45	2 40	2 60	2 70	2 70	2 60	2 65	2 65	2 90	3 15	3 20	3 20	5
2 40	2 45	2 55	2 55	2 60	2 60	2 50	2 60	2 90 _F	3 10	3 30	3 30	6
2 40	2 40	2 30	2 30	2 40	2 50	2 40	2 40 _F	2 65	2 90	2 95	2 90	7
2 40	2 20	2 30	2 50	2 65	2 65	2 55	2 60	2 85	3 15	3 20	3 15	8
2 40	2 40	2 50	2 40	2 25	2 40	2 40	2 50	2 95	3 20	3 10	3 15	9
2 45	2 50	2 50	2 55	2 60	2 50	2 35	2 30	2 65	2 85	3 10	3 10	10
2 60	2 55	2 50	2 55	2 55	2 55	2 50	2 55	2 65	2 95	3 10	3 05	11
2 55	2 60	2 65	2 70	2 70	2 55	2 35	2 60	2 70	2 80	3 05	3 20	12
2 65	2 60	2 70	2 80	2 80	2 65	2 55	2 90	3 25	3 30	3 35	3 30	13
2 40	2 50	2 45	2 50	2 55	2 50	2 50	C	2 90	3 15	3 20	3 30	14
2 50	2 75	2 85	2 95	3 00	2 95	2 95	C	3 25	3 40	3 30	3 25	15
2 50	2 65	2 80	2 75	2 65	2 45	2 40	2 40	2 60	2 90	3 25	3 30	16
2 70	2 75	3 00	3 05	3 00	2 90	2 80	2 95	3 25	3 30	3 40	3 15	17
2 65	2 70	2 80	2 95	3 00 _s	2 60	2 20	F	F	F	3 40 _F	3 30 _s	18
2 60	2 60	2 75	2 90	2 85	2 60	2 40 _s	2 65 _s	3 00 _s	3 75 _F	F	F	19
2 80	2 90	2 95	2 90	2 75	2 50	2 45	F	2 70 _s	2 90	3 20 _s	3 20	20
2 55	2 60	2 85	3 00	2 85	2 70	2 65	2 85	3 00	3 05	2 90	2 75	21
2 70	2 90	2 90	3 05	2 90	2 70	2 70	2 80	3 20	3 20	3 10 _s	3 10 _s	22
2 55	2 60	2 70	2 75	2 85	2 70 _s	2 40	F	F	F	F	3 10	23
2 45	2 55	2 60	2 55	2 65	2 65	2 70	2 95	3 20	3 30	3 25	3 20	24
2 65	2 60	2 60	2 70	2 70	2 60	2 55 _s	2 70	2 85	3 30	3 35	3 35	25
2 55	2 55	2 60	2 60	2 50	2 50	2 55	2 60	2 90	3 00	3 05	3 15	26
2 40	2 50	2 50	2 50	2 55	2 50	2 60	2 40	F	F	2 90	3 10	27
2 55	2 55	2 55	2 60	2 50	2 45	2 30	2 50	2 50 _F	F	3 10	3 15	28
2 40	2 50	2 55	2 45	2 45	2 50	2 40	2 35 _F	F	F	3 20	3 40	29
2 45	2 40	2 30	2 30	2 30	2 30	2 45	2 35	F	2 90	3 15 _F	3 20 _s	30
2 50	2 55	2 65	2 70	2 75	2 60	2 35	2 25 _F	F	F	3 20 _F	F	31
31	31	30	31	31	31	31	26	24	23	29	29	Count
2 50	2 55	2 60	2 60	2 65	2 55	2 45	2 60	2 90	3 05	3 15	3 15	Median
2 50	2 55	2 60	2 65	2 65	2 55	2 50	2 55	2 85	3 05	3 15	3 15	Mean

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

Characteristic foF2
 Unit Mc
 Month . February 1961

TABLE 12
 Ionospheric Data
 75°E Mean Time

Latitude : 10.2°N
 Longitude . 77.5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	v7 8 _v	v7 2 _v	5 0	3 2	E	E	2 7	6 8	8 4	8 6	9 0	9.4
2	E	8 2	F	4 9	v3-3 _v	v3 1 _x	3 3	7 3	8 9	9 7	9.0	8.5
3	7 3	v5 9 _v	v4 5 _x	R	E	E	2 9	6 7	8 3	7 7	7.6	7.8
4	6 3	5 4	4 8	4 0	3 4	E	v3 3 _x	6 9	8 6	7 8	7.8	7.8
5	v7 8 _v	F	v2 7 _x	E	E	E	4 0	8 2	10 0	10 3	10.4	10.0
6	5 6	5 7	F	F	4 5	R	3 1	6 8	8 4	9 6	9 6	8 0
7	7 7	5 8	F	4 7	4 4	4 0	4 0	7 0	8 8	10 1	8 6	8 2
8	7 7	7 8	6 6	6 4	6 2	F	F	F	9 5	10 2	10 2	8 8
9	F	6 7	5 9	5 7	4 6	3 8	4 0	7 2	8 9	10 1	10 6	8 8
10	8 6	7 5	6 1	5 1	4 6	3 8	3 8	7 2	9 0	10.2	9.8	9.4
11	F	9 2	7 8	5 9	C	4 6	4 8	7.1	9.0	10 0	10 3	9 3
12	7 0	6 9	5 9	5 0	4 7	4 7	4 9	7 5	9.2	10 3	10 3	9 1
13	v3 5 _v	8 0	6 9	4 9	3 7	R	3 3	6 6	8 4	8.0	8.4 _x	8 7
14	8 4	7 8	4 9	3 3	C	E	2 9	6 8	9 2	9 3	9 2	9.2
15	F	9 4	7 4	5 8	4 4	3 5	3 5	6 4	7 5	7.9	7 8	8 1
16	8 2 _v	7 8	6 4	4 3	4 0	2 5	3 0	6 9	9 0	10 0	8 8	7.6
17	6 5	5 6	4 9	v3 6 _x	2 6	E	3 1	7 0	v3 9 _v	9 4	8 8	8.8
18	7 6	v7 7 _v	6 4	5 9	4 9	3 7	3 7	7 6	8.1	10 4	11.4 _x	9 2
19	8 0	7 3	v6 0 _v	3 9	2 3	E	3 2	7 8	10.0	10 8	10 0	9.2
20	6 4	6 3	5 7	4 2	2 5	E	3 0	7 6	9 7	10 4	10 5	9 3
21	7 7	v7 5 _v	6 4	v6 2 _v	5 5	4 9	v5 0 _v	8 2	10 1	v11 0 _v	10 8 _x	9.0
22	7 4	6 9	6 4	5 5	5 1	4 9	5 2	8 1	9 1	9 6	C	C
23	8 6	8 2	7 6	6 9	5 2	v2 8 _x	3 5	7 7	9 3	10 2	9 0	8 4
24	8 7	8 7	7 6	6 1	5 1	4 5	4 9	7 9	9 6	10 8	10.0 _x	8 8
25	7 9 _v	8 2	7 8	7 1	v6 3 _v	5 3	4 8	7 6	9 3	10 8	10 8	9 4
26	F	F	v7 5 _v	5 6	4 4	F	3 6	7 7	9 5	10 3	C	C
27	F	8 9	v6 8 _v	6 3	4 8	4 0	4 2 _x	7 8	9 4	10.7	10 8	9.4
28	8 1	F	6 5	v5 6 _v	4 8	4 7	4 1	7 7	9 6	10 4	9 3	9.2
Count	22	25	25	26	26	24	27	27	28	28	26	26
Median	7 8	7 5	6 4	5 3	4 4	3 6	3 6	7 3	9 2	10 2	9 7	8 9
Mean	7 6	7 4	6 2	5 2	4 4	4 0	3 8	7 3	9 1	9.8	9 6	8.8

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

Characteristic foF2
Unit : Mc
Month February 1961

TABLE 12
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	Hour/Date
10.4	11.2	11.5	11.8	11.7	11.4	11.1	v9.6s	F	F	F	F	1
8.8	9.6	10.1	10.9	11.3	11.1	11.3	F	10.8	F	F	8.3	2
8.3	9.0	C	C	C	10.0	v9.6s	v8.3r	F	F	v9.6r	8.4	3
8.5	8.9	9.5	10.5	11.3	11.2	11.1	v9.7s	F	F	F	v9.2s	4
10.3	8.9	8.6	9.0	8.7	8.2	7.8	7.5	J7.2s	7.8	7.8	v6.2s	5
7.8	7.6	7.8	8.7	9.6	10.4	10.4	9.6	8.9	F	F	v9.8s	6
8.6	9.0	9.8	9.9	9.8	9.5	9.4	9.0	9.2	9.2	9.6	8.6	7
8.5	8.4	C	C	9.4	9.8	10.0	8.4	F	F	F	8.1	8
8.4	8.6	9.0	9.5	10.0	10.0	10.0	8.7	8.4	F	F	9.5	9
8.7	8.5	8.8	8.8	9.2	9.4	9.2	8.0	F	F	8.0r	8.6	10
8.3	8.3	8.0	8.6	8.9	9.0	9.4	9.4	8.9	8.6	8.0	7.4	11
C	9.2	9.4	9.8	10.0	10.9	11.2	10.4	9.2	v8.7r	F	F	12
9.2	9.3	9.9	9.8	9.7	10.4	9.7	8.7	8.8	9.2r	9.4	v9.0r	13
10.2	10.4	11.2	11.4	11.7	11.7	11.0	10.2	F	v9.4r	F	8.8	14
8.6	9.4	10.7	11.0	11.4	11.5	11.0	9.5	F	F	F	F	15
7.6	7.6	8.2	8.6	9.3	9.4	v10.3s	8.4	F	F	F	7.8	16
8.8	9.2	9.7	10.1	10.4	9.8	C	9.4	10.2	9.7	9.0	8.0	17
9.0	9.4	9.6	9.7	10.6	10.6	10.8	10.4	10.2	10.2	9.4	8.1	18
9.1	9.4	10.1	10.4	10.8	10.8	10.9	10.9	v11.6s	11.4	9.2	7.3	19
9.1	8.9	9.2	9.8	10.0	10.3	10.2	10.0	10.5	10.0	8.7	7.9	20
8.5	8.7	9.1	9.4	9.4	9.4	9.4	8.8	9.0	9.4	8.8	8.0	21
C	C	C	C	C	10.6	10.4	9.8	10.1	9.8	9.3	8.9	22
8.5	9.0	9.6	10.2	10.9	11.1	10.3	8.6	7.7r	v8.7r	9.0r	v8.0s	23
8.8	9.6	9.7	10.1	9.8	9.1	8.4	7.9	7.5	7.4	7.7	v8.0s	24
8.9	9.3	9.6	9.9	10.6	10.7	10.6	9.0	F	F	F	v9.3r	25
C	C	C	10.4	11.1	v11.6s	11.4	10.7	F	F	F	F	26
9.4	9.4	9.7	10.0	10.0	v10.2s	10.2	9.4	8.2	F	v8.6r	F	27
8.9	9.2	9.4	9.8	9.9	10.2	10.4	9.0	F	F	F	8.7	28
25	26	24	25	26	28	27	27	17	14	15	23	Count
8.8	9.1	9.6	9.9	10.0	10.4	10.3	9.4	9.0	9.3	9.0	8.3	Median
8.8	9.1	9.5	9.9	10.2	10.3	10.2	9.2	9.2	9.2	8.8	8.3	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month February 1961

TABLE 12—*contd*
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	j6 2 _F	4 2	R	E	E	5 0	7 6	8 6	8 8	9 1	10 0
2	F	7 6	F	4 3 _F	u3 5 _R	2 6	5 5	8 1	9 5	9 6	8 6	8 6
3	6 8	5 7	3 5	E	E	E	5 1	8 0	7 8	7 6	7 6	7 9
4	5 5	5 1	4 4	3 6	u2 9 _R	E	5 3	8 2	8 3	7 9	7 6	8 3
5	u6 4 _F	3 6	E	E	E	E	6 9	9 1	10 1	10 4	10 3	9 9
6	5 5	5 5 _F	F	5 2	3 8	E	5 2	7 7	9 1	9 8	8 8 _R	7 9
7	6 5	5 2	4 8	4 6	4 4	3 5	5 8	8 0	9 4	10 0	8 2	8 4
8	7 5	7 6	6 4	6 2	6 8	F	F	8 7	9 7	10 2	9 2	8 7
9	7 5	6 4	5 7	5 0	4 4	3 3	5 7	7 9	9 7	10 4	9 6	8 4
10	8 1	6 8	5 6	4 7	4 3	3 2	5 6	8 2	9 6	10 1	9 8	9 1
11	9 1	8 7	6 6	5 6	C	4 3	6 0	8 0	9 7	10 4	10 0	8 7
12	6 8	6 6	C	4 8	4 8	4 4	6 4	8 2	9 7	10 5	9 7	8 7
13	8 4	7 5	6 0	4 1	3 0	E	5 2	7 6	8 5	8 2	8 4	8 9
14	8 6	6 4	3 9	u2 7 _R	E	E	5 3	8 3	9 4	9 4	9 2	C
15	F	8 4	6 6	u5 1 _C	3 7	u3 0 _R	u5 1 _S	7 1	7 6	7 9	7 9	8 4
16	8 2	7 3	5 0	3 9	3 2	R	5 3	8 0	9 8	10 0	8 2	7 4
17	u6 2 _F	5 6	4 0	3 1	2 1	E	5 3	8 3	9 5	9 1	8 7	8 9
18	7 6	u7 4 _S	6 2	5 9	4 0	3 2	6 0	7 3	9 2	11 4	u10 1 _R	8 7
19	7 8	6 7	4 9	3 0	E	E	5 8	8 9	10 6	10 5	9 7	9 0
20	6 4	u6 1 _S	5 0	3 3	E	E	5 8	8 8	10 3	10 7	9 9	9 2
21	7 7	7 0	6 3	5 9	5 4	4 7	6 7	9 4	10 4	11 2	9 5	8 8
22	u7 1 _S	6 9	5 8	5 1	4 9	4 7	6 9	8 8	9 4	9 7	C	C
23	8 4	8 4	7 0	6 1	4 1 _R	2 3	u5 8 _S	8 9	10 0	10 0 _R	8 6	8 3
24	8 7	8 4	6 6	5 3	4 9	4 5	6 5	9 0	10 4	10 6	9 0	8 7
25	7 7 _F	7 9	u7 4 _S	6 8	5 7 _F	4 6	6 4	8 8	10 1	11 3	9 9	9 0
26	8 3	8 0	6 5	4 8	3 8	u2 7 _R	5 9	8 5	9 9	10 1	C	C
27	9 3	8 1	F	5 5	4 2	3 4	6 2	8 6	10 4	10 8	C	9 4
28	8 0	7 5 _F	u6 3 _F	5 0	u4 9 _F	4 0	6 0	8 7	10 3	u9 8 _R	9 5	8 9
Count	25	28	24	27	27	26	27	28	28	28	25	25
Median	7 7	7 0	5 8	4 8	3 8	2 8	5 8	8 2	9 7	10 0	9 2	8 7
Mean	7 5	6 9	5 6	4 8	4 2	3 6	5 8	8 3	9 5	9 9	9 1	8 7

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

Characteristic foF2
Unit Mc
Month February 1961

TABLE 12—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	Hour/Date
10 9	11 2	11 5	11 7	11 5	11 4	10 4 _H	F	F	F	F	F	1
9 2	10 0	10 5	11 4	11 3	11 4	10 6 _R	10 7	10 8	F	8 6	8 0	2
8 7	9 3	C	C	C	10 0	9 3	F	F	F	9 6 _F	6 9	3
8 6	9 2	A	11 0	11 3	11 2	10 6	F	F	F	F	8 5 _F	4
9 4	8 7	8 8	9 1	8 4	7 8	7 6	7 5	7 5	7 8	10 0 _F	5 9	5
7 6	7 6	8 1	9 2	10 2	10 6	9 7	9 1	F	F	F	8 9	6
8 8	9 6	10 0	10 0	9 6	9 4	9 2	9 0	9 4	9 4	9 2	8 0	7
8 3	8 6	9 0	9 1	9 6	9 9	9 3	7 6	F	F	F	8 2	8
8 3	8 8	9 4	9 8	10 2	10 3	9 6	8 1	8 4	F	9 4	9 4	9
8 6	8 6	8 6	9 0	9 3	9 4	8 8	6 8	C	F	8 4 _F	10 7 _F	10
8 4	8 1	8 1	8 8	8 9	9 5	9 4	9 2	8 7	8 4	7 8	7 4	11
9 2	9 3	9 5	10 0	10 5	11 3	10 8	9 7	9 0	F	10 6 _F	10 4 _F	12
9 4	9 6	9 8	9 7	10 0	10 4	9 1	7 8	8 8 _F	9 2	9 2	8 2	13
10 3	10 6	11 3	11 6	11 7	11 4	10 5	9 9	10 8 _F	F	10 3 _F	10 0 _F	14
9 0	9 8	11 0	11 9	11 4	11 6	10 5	8 8 _F	F	F	F	8 3 _F	15
7 5	7 7	8 6	9 7	9 2	9 8	9 6	7 4	F	9 5	F	7 5	16
9 0	9 5	9 8	10 4	10 3	9 8	9 4	10 0	9 8	9 5	8 6	8 1	17
9 2	9 4	9 7	10 2	10 7	10 6	10 7	10 4	10 0	9 8	8 7	8 2	18
9 2	9 6	10 2	10 6	10 7	10 8	11 0	11 0	11 7 _s	10 4	8 3	6 6	19
8 8	9 0	9 4	10 3	10 1	10 4	9 8	10 1	10 3	9 6	8 0	7 9	20
8 3	8 8	9 3	9 5	9 7	10 6 _s	9 2	8 6	10 5 _s	9 4	8 5	7 6	21
C	C	C	C	10 7	10 6	9 8	9 9	9 8	9 6	9 4	9 3	22
8 7	9 3	9 7	10 6	10 9	10 7	10 6 _s	7 8 _F	7 9 _F	10 8 _F	8 3	8 2	23
9 3	9 7	9 9	9 9	9 4	8 7	8 1	7 4	10 2 _s	7 2	7 9	10 9 _F	24
9 0	9 4	9 8	10 1	10 8	10 3	10 3	F	F	F	F	F	25
C	C	C	10 7	11 4	11 6	11 4	F	F	F	F	10 0 _F	26
9 4	9 6	9 9	10 0	10 0	10 2	10 2	8 7	F	F	9 0	8 1	27
9 1	9 3	9 5	9 8	10 0	10 4	10 1	F	F	F	F	10 7 _F	28
26	26	24	26	27	28	28	22	16	13	19	26	Count
9 0	9 3	9 7	10 0	10 2	10 4	9 8	8 9	9 4	9 4	8 6	8 2	Median
8 9	9 2	9 6	10 1	10 3	10 4	9 8	8 9	9 3	9 1	8 6	8 1	Mean

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

Characteristic · foF1
 Unit Mc
 Month February 1961

TABLE 13
 Ionospheric Data
 75°E Mean Time

Latitude · 10 2°N
 Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	L	L
2									L	L	LH	L 9
3									L	L	LH	LH
4									L	L	L	L
5									L	L	LH	L
6									L	L	L	L
7									L	L	L	L
8									L	L	L	L
9									L	L	L	L
10									L	L	L	L
11									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
17									L	L	L	L
18									L	LH	L	L
19									L	L	L	L
20									L	L	L	L 9L
21									L	L	L	L
22									L	L	L	L
23									L	L	L	LH
24									L	L	L	L
25									L	L	L	L
26									L	L	L	L
27									L	L	L	L
28								L	L	L	L	L
Count												2
Median												
Mean												

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

Characteristic : foF1
 Unit Mc
 Month February 1961

TABLE 13
 Ionospheric Data
 75°E Mean Time

Latitude : 10 3°N
 Longitude : 77 5°E

12	13	14	15	16	17	18	19	20	21	22	23	Hour/Date
L	L	L	L	L	L							1
LH	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	L							4
5 3	u5 0 _R	u5 1 _R	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
LC	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	LH	L	L	L	L							18
L	L	L	L	L	L							19
L	L	LH	L	L	L							20
L	L	L	L	L	L							21
LC	LH	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
C	C	C	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28
												Count
												Median
												Mean

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

Characteristic foF1 TABLE 13—Cont'd Latitude 10 2°N
 Unit . Mc Ionospheric Data Longitude 77 5°E
 Month February 1961 75 0°E Mean Time

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	L 4 9	L
3								L	L	L	LH	L 5 0
4								L	L	L	L	L
5								L	L	L	LH	L
6									L	L	L	L
7									L	L	L	L
8								L	L	L	L	L
9									L	L	L	L
10								L	L	L	L	L
11									L	L	L	L
12								L	L	L	L	L
13								L	L	L	L	L
14								L	L	L	LH	L
15							L	L	L	L	L	L
16								L	L	L	L	L
17								L	L	L	L	L
18								L	L	LH	LH	L
19								L	L	L	LH	L
20								L	L	L	L	L u5 0r
21								L	L	L	L	L
22								L	L	L	L	L
23								L	L	L	L	LH
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 4 8	L	L 4 9
Count										1	1	3
Median												
Mean												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · fo F1
 Unit Mc
 Month February 1961

TABLE 13—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	Hour/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
5 3	U5 0m	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								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	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	U4 7L	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
C	C	C	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28
1	2											Coun.
												Median
												Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic : foE
 Unit Mc
 Month February 1961

TABLE 14
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude , 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1								R	R	B	u3 9R	3 9
2									A	A	A	A
3									A	B	A	A
4									R	R	A	A
5									B	B	u3 7R	B
6									R	A	A	A
7									2 4	A	A	B
8									R	R	A	A
9											A	A
10									R	R	A	A
11									2 7	3 2	A	A
12									2 9	A	A	A
13								A	A	A	A	A
14								R	R	A	A	A
15								A	A	A	A	A
16									R	R	A	R
17									C	R	A	R
18									u3 0R	R	R	A
19											R	R
20										R	A	A
21										R	A	A
22									R	R	C	C
23									R	R	u3 7R	R
24									u2 9R	A	A	A
25									u2 8R	A	A	A
26									u2 8R	A	C	C
27								u2 5R	3 0	R	A	R
28								2 3H	A	A	A	A
Count								2	8	1	3	1
Median									2 8			
Mean									2 8			

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

Characteristic foE
Unit Mc
Month February 1961

TABLE 14
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

12	13	14	15	16	17	18	19	20	21	22	23	Hour/Date
B	B	B	A	A								1
A	B	B	A	A								2
A	A	O	C	C								3
A	A	A	B	R								4
3 8	R	R	R	R	v2 7B							5
A	A	A	3 4	3 0	R							6
B	B	A	3 5	A	A							7
A	A	C	C	R	A							8
A	A	A	R	3 0								9
A	A	A	A	3 1								10
A	A	A	A	A								11
C	A	A	A	A								12
A	3 4	A	3 3	A								13
B	A	3 4	A	A								14
A	A	3 3	B	A								15
R	R	A	R	R								16
R	R	R	R	R								17
R	R	R	R	R								18
R	B	v3 4x	B	A	A							19
A	A	A	A	R								20
A	A	A	A	F								21
C	C	C	C	C								22
R	R	R	R	R								23
A	A	A	A	A								24
A	A	A	A	A								25
C	C	C	A	A								26
R	R	R	R	R								27
A	A	A	A	A								28

1	1	3	3	4								Count
												Median
												Mean

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

Characteristic foE
Unit : Mc
Month February 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								R	u3 4 _r	R	3 9	R
2								A	A	A	A	A
3								A	A	A	A	A
4								F	R	A	A	A
5								u2 8 _r	R	u3 5 _r	R	R
6									A	A	A	A
7								R	A	A	A	B
8									R	A	A	A
9										A	A	A
10								2 6	R	A	A	A
11									R	A	A	A
12								2 6	3 0	A	A	A
13								A	A	A	A	A
14								2 5	3 4	A	A	C
15								A	A	A	A	A
16									R	F	A	R
17								u2 7 _r	u3 0 _r	A	A	A
18								R	u3 2 _r	R	R	A
19										A	R	R
20										A	A	A
21								R	A	A	A	A
22								R	u3 2 _r	A	C	C
23								R	R	F	R	R
24									u3 0 _r	A	A	A
25									u2 9 _r	A	A	A
26								u2 6 _r	A	A	C	C
27								2 7	R	A	C	R
28								u2 6 _r	A	A	A	A
Count								8	8	1	1	
Median								u2 6	u3 1			
Mean								u2 6	u3 1			

Sweep 1 0 Mc to 25.0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month February 1961

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

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

Characteristic : foEs
 Unit Mc
 Month February 1961

TABLE 15
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1								G	6 6	7 6	9 2	G
2									6 6	8 6	8 2	8 5
3									7.7	G	8 4	8 7
4									G	G	7 8	8 0
5									G	G	8 2	G
6									G	G	8 6	7 7
7									G	6 8	8 0	7 8
8									G	G	8 2	8 2
9									2 8		8 5	8 4
10									G	G	8 0	7 8
11									G	G	9 6	9 4
12	8 2			3 4					G	7 0	8 6	8 8
13								3 1	6 6	7 6	8 6	8 0
14									G	G	8 6	8 0
15									7 6	8 0	9 0	8 8
16									G	7 5	9 6	7 7
17									7 0a	7 6	8 8	8 2
18		4 3							G	G	8 0	8 0
19											8 0a	9 5
20										G	8 6	8 7
21						2 8				G	8 8	8 8
22		3 6	5 8	4 2					G	5 6	C	C
23									G	7 8	9 6	8 2
24									G	7 8	8 4	9 1
25									G	6 6	9 2	9 6
26									G	7 8	C	C
27								G	G	7 6	9 6	8 8
28								G	7.6	8 4	10 4	9 6

Count	1	2	1	2	1			4	25	26	26	26
Median									G	6 7	8 6	8 3
Mean									6 6	7 5	8 7	8 5

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

Characteristic . foEs
 Unit Mc
 Month February 1961

TABLE 15
 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	Hour/Date
G	G	4 6	4 6	9 0								1
8 8	8 6	G	4 1									2
8 8	8 7	C	C	C								3
7 8	8 3	7 2	G	G								4
G	G	G	G	G		5 8			2 8			5
7 8	8 4	8 4	4 2	3 5	G							6
8 6	8 0	8 0	5 7	3 8	5 4							7
8 0	8 5	C	7 4	G	3 8							8
8 4	9 5	8 6	7 6	3 4								9
8 6	8 6	8 6	8 2	7 6								10
9 4	9 6	9 0	7 8	8 2	3 3	3 3	3 0	6 8	2 9			11
C	8 4	7 6	11 4	10 4				2 8	3 2			12
7 6	G	7 0	G	6 6								13
7 0	7 4	G	8 0	6 5								14
9 4	8 2	G	G									15
8 0	7 8	8 2	7 6	G	4 7							16
8 6	8 6	u7 0a	G	6 8								17
G	G	6 2	G		3 4							18
8 4	8 0	7 5	G	7 6	4 7							19
8 6	8 6	9 0	8 0	7 6								20
8 6	8 4	8 6	6 8	G								21
C	C	C	C	C						4 8	3 4	22
8 2	8 0	7 8	G	G								23
8 4	8 9	8 7	8 1	7 8	6 8							24
9 6	10 4	9 1	9 2	9 6	6 9							25
C	C	C	6 6	6 4								26
9 6	9 6	9 6	9 3	8 6	u7 2S						3 6	27
9 7	9 1	8 8	8 2	7 8	6 8							28

25	26	24	26	23	11	2	1	2	3	1	2	Count
8 4	8 4	7 9	6 7	6 5	4 7							Median
8 5	8 6	8 0	7 4	7 1	5 3							Mean

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

Characteristic fo Es
 Unit Mc
 Month February 1961

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

Count	3	2	2				1	17	25	28	25	25
Median								G	G	8 5	8 6	8 6
Mean									5 8	8 7	8 6	8 6

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foEs
Unit Mc
Month February 1961

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	Date
G	G	G	5.8	6.0								1
8.3	7.0	G	G									2
8.2	8.9	G	C	C								3
8.6	7.8	12.8	G									4
G	G	G	G					2.7				5
8.4	8.4	5.6	3.6	G	3.1							6
7.8	7.7	7.4	7.4	5.8								7
8.4	8.7	7.7	7.4	G	4.2							8
9.4	8.8	7.8	5.6	3.4								9
8.8	9.6	7.8	7.6									10
9.6	9.6	7.8	8.4	4.0	..	3.2	5.1	3.8				11
8.4	8.6	8.4	12.2	6.4								12
7.0	8.0	7.8	G	6.4								13
7.8	G	G	7.4	5.8		..		2.3				14
9.8	G	6.4	G									15
8.0	8.2	6.8	G									16
7.6	8.5	G	6.8									17
8.0	6.0	G	G						..			18
8.2	7.8	G	7.2	6.8								19
9.0	8.6	8.0	7.8	6.6								20
8.2	8.8	7.2	7.0									21
C	C	C	C							7.0		22
8.6	7.6	G	G									23
7.8	8.1	8.1	7.6	7.1								24
9.7	9.8	8.7	8.6	7.7								25
C	C	C	6.9	3.6						2.7		26
9.3	9.0	9.4	9.8	7.2 _s								27
10.3	9.8	9.2	8.2	7.3 _s	4.0							28

26	26	25	26	16	3	1	1	3	2		Count
8.4	8.3	7.4	7.0	6.2							Median
8.6	8.4	8.1	7.5	6.0							Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f_bEs
Unit . Mc
Month February 1961

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

Count	1	2	1	2	1		4	22	23	25	23
Median								G	3 3	3 7	4 0
Mean								3 1	3 5	3 8	4 0

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fbEs
Unit Mc
Month February 1961

TABLE-16
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
G	G	4.2	4.0	5.3								1
4.0		G	3.7									2
4.3	4.0	C	C	C								3
4.0	3.9	3.6	G	G								4
G	G	G	G	G		2.4			2.6			5
4.0	4.0	4.0	3.6	3.1	G							6
		3.7	4.6	3.4	4.8							7
4.1	3.8	C	C	C	3.2							8
3.8	3.9	3.8	3.6	3.2								9
3.9	4.1	3.8	3.7									10
3.9	3.8	3.8	3.6	3.6	2.5	2.6	2.3	2.8				11
C	3.8	3.8	5.9	4.5								12
3.9	G	3.8	G	3.0				2.0				13
4.0	4.0	G	3.8	3.5								14
4.0	4.0	G	G									15
4.0	u4.0c	3.7		G	3.0							16
4.0	4.0	3.9	G									17
G	G		G		3.0							18
	4.0		G	3.8	3.0							19
4.2	3.8	3.8	3.8	3.2								20
4.0	4.0	3.8	3.6	G								21
C	C	C	C	C						2.6		22
4.0			G	G								23
4.0	4.3	4.0	3.6	3.2	2.6							24
4.2	4.2	4.0	3.5	3.3	2.9							25
C	C	C	3.8	3.5							2.0	26
4.1	4.0	3.8	3.7	3.2								27
4.1	4.2	3.8	3.7	3.3	2.9							28

22	23	21	24	21	10	2	1	2	1	1	1	Count
4.0	4.0	3.8	3.6	3.2	3.0							Median
4.0	3.8	3.8	3.9	3.5	3.1							Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic fb Es
Unit Mc
Month February 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								G	G	3.8		G
2									3.4	3.9	4.1	4.1
3								2.9	3.5	3.8	3.9	4.4
4								G	G	3.7	3.8	4.0
5								G	G	3.6	G	G
6									3.5	3.5	3.9	4.0
7								G	3.0	3.7	3.8	
8									G	3.5	3.8	4.0
9										3.6	3.8	3.9
10								G	G	3.5	3.8	4.0
11									G	3.5	4.0	3.8
12	2.3	..	C					G	G	3.5	3.8	3.9
13							2.1	2.8	3.4	3.5	3.6	3.8
14								G	G	3.7	3.9	C
15								2.8	3.3	3.6	4.0	3.9
16									G	3.6	4.0	4.0
17								G	G	3.7	3.8	4.0
18	2.1		2.5					G	G	3.6	4.0	4.0
19										3.8		4.0
20										3.6	4.0	4.2
21									G	3.7	3.9	4.0
22		2.8	2.8					G	G	3.6	C	C
23								G	3.4	3.6	4.0	4.0
24									G	3.6	3.9	4.0
25									G	3.6	3.9	4.2
26								G	3.3	3.6	C	C
27								G	C	3.8	C	4.0
28								G	3.3	3.7	4.0	4.1
Count	2	1	2				1	17	24	28	23	24
Median								G	G	3.6	3.9	4.0
Mean									3.3	3.6	3.9	4.0

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic f_oF₂
 Unit Mc
 Month February 1961

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	Hour/Date
G	G	G	5 0	4.6								1
	4 0	G	G	C								2
4 0	3 9	C	C	C								3
G	G	A	G									4
		G	G									5
4 0	3 8	4 4	3 6	C	2 4							6
		3 7	3 4	3 2								7
3 8	3 8	3 8	3 4	G	2.3							8
3 8	3 7	3 8	3 4	3 0	..							9
	3 9	3 7										10
4 0	3 8	3 4	3 2	3.2		2 6	2 0	2 6				11
3 7	3 8	3 7	7 7	3 4								12
3 9	3 9	3 7	G	2 8								13
4 1	G	G	4 1	3 0								14
4 1	G	3 8	G									15
4 0	4 0		G									16
3 8	3 9	G										17
4 2		G	G									18
4 0		G	3 8	4 0								19
4 0	4 0	3 9	3 5	2.9								20
4 0	3 9	3 9	3 4									21
C	C	C	C	..								22
		G	G									23
4 2	3 9	3 8	3 3	2 9								24
4 1	4 0	3 7	3 5	3 0								25
C	C	C	3 8	3 2						2 0		26
4 0	4 0	3 8	3 4									27
4 3	4 2	3 8	3 5	3 0	2 4							28

21	21	23	24	15	3	1	1	1	1	Count
4 0	3 9	3 7	3 4	3 0						Median
4 0	3 9	3 8	3 9	3 2						Mean

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f_{min}
Unit Mc
Month February 1961

TABLE-17
Ionospheric Data
75.0°E Mean Time

Latitude $\cdot 10^2$ °N
Longitude 77 5°E

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

Count	28	28	28	28	26	28	28	28	28	28	26	26
Median	2 2	2 1	2 1	2 0	2 0	1 8	1 9	2 5	2 4	2 9	2 8	3 0
Mean	2 1	2 1	2 1	2 0	2 0	2 0	1 9	2 5	2 5	3 0	2 8	3 1

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic f min
 Unit Mc
 Month February 1961

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

25	26	24	26	26	28	27	28	28	28	28	28	Count
3 2	3 1	3 0	2 9	2 6	2 6	1 9	2 1	2 2	2 2	2 1	2 0	Median
3 3	3 2	3 1	3 0	2 6	2 6	2 0	2 2	2 2	2 2	2 1	2 1	Mean

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

Characteristic f_{min}
Unit Mc
Month February 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	1.9	2.0	2.6	2.5	E	E	2.6	3.0	3.0	3.0	3.3	3.5
2	1.9	2.1	2.1	2.3	2.7	2.1	2.1	2.7	2.6	2.8	3.1	3.1
3	2.1	2.6	2.3	E	E	E	2.9	2.3	2.9	3.2	3.4	3.3
4	2.2	2.2	1.9	2.1	2.2	E	2.1	2.5	2.5	2.6	2.7	3.1
5	2.4	2.1	E	E	E	E	2.4	2.4	2.7	2.8	3.0	3.9
6	2.3	2.4	2.3	2.2	2.3	E	2.5	2.9	2.7	2.7	3.0	3.0
7	1.6	1.9	2.4	1.6	1.7	1.9	2.1	1.9	2.4	2.6	2.8	4.0
8	1.8	2.5	2.2	2.2	2.4	2.3	2.3	2.8	2.7	2.8	2.9	3.1
9	2.3	2.5	2.6	2.5	2.0	1.9	2.4	2.9	3.3	2.6	2.9	3.2
10	2.0	2.2	2.2	2.1	1.8	2.2	2.2	2.2	2.6	2.7	2.9	3.2
11	2.4	2.2	2.1	2.2	C	2.0	2.2	3.0	3.2	2.5	2.8	2.9
12	2.2	2.2	C	2.4	1.8	1.8	2.3	2.1	2.6	2.5	2.7	2.9
13	2.1	2.3	2.4	2.0	1.8	E	1.6	2.1	2.6	2.4	2.8	2.9
14	2.2	1.8	1.7	1.8	E	E	2.1	2.2	2.5	2.6	2.8	C
15	1.9	2.7	2.1	1.9	1.8	2.4	2.1	2.0	2.5	2.6	2.9	3.0
16	1.9	1.8	1.9	1.9	2.1	1.8	2.2	3.0	2.6	2.7	2.9	3.0
17	1.8	1.8	2.0	1.7	1.8	E	1.9	2.1	2.6	2.6	2.6	3.0
18	1.7	1.9	1.7	2.0	2.0	1.8	2.2	2.3	2.6	2.7	3.0	3.0
19	2.2	2.1	1.9	2.0	E	E	2.3	2.7	3.3	2.8	3.1	2.9
20	2.0	1.9	1.8	1.6	E	E	2.5	2.7	3.3	2.6	2.8	3.2
21	1.7	1.8	1.9	2.2	2.3	2.0	2.1	2.8	2.8	2.5	3.0	3.0
22	2.0	1.7	1.7	2.2	2.0	2.0	2.2	2.4	2.6	2.7	C	C
23	2.2	2.3	1.8	1.9	1.9	1.9	1.9	2.0	2.9	2.8	3.1	3.3
24	2.5	2.4	2.5	2.4	1.8	2.3	2.5	3.1	2.8	2.7	3.0	3.1
25	1.9	1.8	1.5	2.6	1.7	1.6	2.2	2.7	2.3	2.5	3.0	3.2
26	1.8	1.8	1.6	1.7	1.7	1.8	2.1	2.3	2.3	2.6	C	C
27	2.0	2.0	1.9	1.4	2.2	1.5	2.3	2.3	2.8	2.7	C	3.1a
28	1.8	1.6	1.8	1.9	1.6	1.6	2.1	2.0	2.5	2.8	3.0	3.0

Count	28	28	27	28	27	28	28	28	28	28	25	26
Median	2.0	2.1	1.9	2.0	1.8	1.8	2.2	2.4	2.6	2.7	2.9	3.1
Mean	2.0	2.1	2.0	2.0	2.0	1.9	2.2	2.5	2.7	2.7	2.9	3.2

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

Characteristic f_{min}
Unit : Mc
Month : February 1961

TABLE 17—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	Hour/Date
4.4	3.4	4.2	3.4	3.0	2.5	1.7	2.6	2.1	2.0	2.1	2.6	1
4.1	4.0	4.0	2.7	3.1	2.3	1.8	2.2	2.3	2.0	1.8	2.5	2
4.2	3.0	C	C	C	2.3	2.3	2.5	2.4	2.3	2.0	2.1	3
3.2	3.0	2.6	3.0	3.0	2.2	1.7	2.2	2.5	2.2	2.3	2.1	4
4.0	3.1	3.0	3.2	3.1	2.3	1.8	2.2	2.2	2.5	2.1	2.0	5
3.3	3.1	3.3	3.0	2.4	1.7	1.7	1.8	1.9	1.7	1.6	1.8	6
4.1	4.0	3.7	2.5	2.6	2.4	1.6	2.3	2.4	2.4	2.6	2.1	7
3.0	2.9	2.8	2.5	2.8	2.2	1.9	2.8	2.8	2.8	2.3	2.5	8
3.2	3.0	3.2	2.8	2.4	2.3	2.2	2.7	2.4	2.7	2.6	2.3	9
4.1	3.1	2.8	2.8	3.0	2.4	1.8	2.4	C	2.4	1.9	2.3	10
3.1	3.0	2.7	2.5	2.5	2.3	1.8	2.0	1.8	2.1	2.4	2.5	11
2.8	2.7	2.8	2.8	2.8	2.3	1.8	2.0	2.2	2.3	2.2	2.2	12
3.0	3.2	2.9	3.5	2.8	2.2	1.7	1.9	2.4	2.0	2.5	2.2	13
3.0	3.1	3.3	2.2	2.1	2.3	2.0	1.6	1.7	2.1	2.1	2.4	14
3.0	2.9	2.6	2.9	2.5	2.4	2.0	2.1	2.1	2.3	2.3	1.8	15
3.0	3.0	2.9	2.8	3.2	2.8	1.7	2.7	2.6	2.2	2.3	2.4	16
3.1	2.9	3.1	2.7	2.9	2.3	2.2	2.2	2.2	2.2	2.3	2.2	17
3.1	2.9	3.0	3.8	3.1	2.5	1.9	2.2	2.2	2.3	2.3	2.5	18
3.3	4.0	4.0	2.8	2.7	2.3	2.1	2.3	2.0	1.8	1.9	2.2	19
3.0	3.0	3.2	2.8	2.4	2.3	2.0	2.4	2.3	2.3	2.1	1.8	20
2.8	2.8	2.8	2.5	2.8	2.2	1.6	2.2	2.1	1.7	2.0	1.6	21
C	C	C	C	3.0	2.3	1.6	1.9	1.9	2.0	1.7	2.0	22
3.0	3.0	2.9	2.7	2.9	2.6	1.9	2.1	2.7	2.2	2.2	2.2	23
3.2	3.1	2.9	2.7	2.3	2.3	1.4	1.6	1.7	1.6	1.8	1.9	24
3.2	3.1	3.1	2.7	2.6	2.5	1.6	1.9	2.1	2.1	1.9	2.1	25
C	C	C	2.4	2.6	2.4	1.6	2.2	2.0	2.0	1.7	1.7	26
3.0	2.9	2.9	2.6	2.5	2.3	2.0	1.8	1.9	2.0	2.3	2.1	27
3.1	3.2	2.8	2.5	2.5	1.9	1.7	2.0	2.0	2.2	2.4	1.8	28

26	26	25	26	27	8	28	28	27	28	28	28	Count
3.1	3.0	2.9	2.8	2.8	2.3	1.8	2.2	2.2	2.2	2.2	2.2	Median
3.3	3.1	3.1	2.8	2.7	2.3	1.8	2.2	2.2	2.2	2.1	2.1	Mean

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

Characteristic h'F2
Unit Km
Month February 1961

TABLE 18
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									L	L	L	L
2									L	L	L	L 300
3									L	L	L	L
4									L	L	L	L
5									L	L	LH	L
6									L	L	L	L
7									290	L	L	L
8									280	L	L	L
9									L	L	L	L
10									L	290	L	L
11									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
16									L	L	L	L
17									L	L	L	L
18									L	L	L	L
19									LH	L	L	L
20									L	L	L	u285L
21									L	L	L	L
22									L	L	L	L
23									L	L	L	LH
24									L	L	L	L
25									L	L	L	LJ
26									LJ	L	QJ	C
27								L	L	L	L	L
28								L	L	L	320	L
Count									2	1	1	2
Median												
Mean												

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

Characteristic h'F2
Unit Km
Month February 1961

TABLE 18
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
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
420	455	465	410	u960L	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

1	1	1	1	1								Count
												Median
												Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F2
 Unit Km
 Month February 1961

TABLE 18 (contd.)
 Ionospheric Data
 75°E Mean Time

Latitude 16 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	320	L
3							..	L	L	L	L	340
4								L	L	L	L	L
5								L	L	L	v340z	385
6							L	L	L	L
7							L	L	L	L
8							L	L	L	L
9							L	L	L	L
10							.	.	L	L	L	L
11									L	L	L	L
12								L	L	L	L	L
13								L	L	L	L	L
14							L	L	L	L	L	C
15								L	LH	LH	L	L
16							L	L	L	L
17							L	L	L	L
18									L	285	L	L
19									L	L	L	LH
20									L	L	L	v300z
21								L	L	L	L	L
22								L	L	L	L	C
23								L	L	L	L	LH
24								L	L	L	L	L
25							L	L	L	L
26									L	L	C	C
27								L	L	L	C	L
28								L	L	310	L	320

Count			1	1	2	4
Median			..	.	..
Mean						

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic - n'F2 TABLE 18 (contd) Latitude 10 2°N
 Unit Km Ionospheric Data Longitude 77 5°E
 Month February 1961 75°E Mean Time

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
440	460	455	v375L	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								11
L	L	L	L	L								12
LH	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	L							17
L	L	L	L	L	L							18
L	L	L	L	L	L							19
L	v285L	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
C	C	C	L	L	L							26
L	L	L	L	L	L							27
L	L	L	L	L	L							28

1	2	1	1	Count
				Median
				Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month February 1961

TABLE 19
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date	00	01	02	03	04	05	06	07	08	09	10	11
1	215	215	220	240	E	E	330	245	225	220	200	200
2	270	245	230	230	240	245	265	240	225	215	205	180
3	225	220	215	240	E	E	300	240	220	200	185 _{II}	170 _{II}
4	230	240	240	230	240	E	275	240	220	205 _{II}	195	200
5	210	210	250	E	E	E	305	250	230	220	220	210
6	300	310	300	270	230	245	340 _L	285	215	210	200	180
7	220	225	245	235	240	240	240	240	220	195 _{II}	180 _{II}	160 _{II}
8	230	235	235	250	265	260	230	240	215	215	210	200
9	220	220	225	230	250	245	250	240	215	200	200	195
10	220	220	220	225	230	240	250	230	220	200	190	200
11	240	215	210	230	C	250	280	230	220	205	200	190
12	220	225	240	240	260	265	240	235	220	205	200	190
13	240 _w	220	220	235	240	260	270	240	220	200	190	195
14	220	225	240	245	C	E	280	240 _L	225	220	200	210
15	240 _w	210	220	220	220	240	270	240	225	210	205	200
16	220	220	215	225	220	240	255	240	220	220	200	190
17	230	240	235	240	240 _v	E	280	240	220 _Q	210	200	200
18	230	245	255	260	220	225	240	245	235	220	215	200 _{II}
19	230	230 _Q	230	240	L	E	280	240	220	210	200	200
20	230	225	235	240	240	E	300	235	215	210	210	200
21	230	235	235	260	270	240	240	235	215	200	200	190
22	225	230	280 _A	260	260	265	250	240	220	210	C	C
23	240	230	220	225	210	240	270	240	220	215	200	190 _{II}
24	240	225	220	225	245	260	250	240	220	205	200	200
25	235	220	210	220	225	220	230	235	215	200	190	195
26	235	225	215	220	220	235	255	240	215	200	C	C
27	225	215	210	220	235	230	245	235	220	210	200	195
28	240	220	220	240	250	240	260	240	220	215	205	200

Count	28	28	28	28	25	28	28	28	28	28	26	26
Median	230	225	230	235	240	240	260	240	220	210	200	200
Mean	230	230	230	235	240	245	265	240	220	210	200	195

Sweep 1 0 Mc to 25 0 Mc in 27 Seconds

Characteristic h'F
 Unit Km
 Month February 1961

TABLE 19
 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
200	200	210	225	A	250	280	370 _F	F	F	F	245	1
175 _H	195	200	210	220	245	275	300	256	275	270 _r	240	2
200	185	C	C	C	235	280	F	F	F	230	215	3
200	190	190	200	220	240	280	F	F	265	235 _r	220	4
200	205	210 _H	225	240 _L	255	300	335	300 _F	275	245	280	5
185	195	200	220	220	240	265	315	315	F	250	225	6
200	200	205	A	220	A	265	300	270	255	240	235	7
200	180	C	C	220	240	270	360	F	F	265	225	8
180	180	180	220	225	240	260	310	330	325	250	225	9
180	200	200	215	210	230	260	365	F	350	265	250	10
185	185	185	205	220	240	255	270	270	240	230	225	11
C	180 _H	195 _H	A	A	225	260	305	320	230 _F	225 _F	226 _F	12
200	180 _H	205	210	215	235	270	315	230 _F	280 _F	240	230	13
210	200	210	225	250 _A	240 _F	270	300	F	270 _r	260	250	14
205	200	200	215	220	235	260	305	234 _F	2315 _F	2250 _r	2290 _r	15
180 _H	200 _C	185	200	215	240	270	400	F	2290 _F	230	220	16
195	200	200	200	210	240	265	265	250	230	220	220	17
200 _H	220 _H	200	200	230	250	260	270	250	225	220	240	18
200	195 _H	200	215	250	245	260	260	210	220	225	220	19
200	200	180 _H	210	200	210	260	270	235	240	220	230	20
190	180 _H	200	205	210	240	260	300	260	220	220	220	21
C	C	C	C	C	230	260	300	300	260	210	210	22
185	195	195 _H	200	225	240	270	350	2360 _r	2300 _F	245	250	23
195	200	200	205	220	240	270	320	340	300	280	260	24
200	200	200	200	220	240	260	355	F	F	2280 _F	2240 _F	25
C	C	C	200	220	230	270	330	F	F	2250 _F	2260 _r	26
190	190	195	200	225	245	275	340	2360 _F	320 _F	250	235	27
200	200	200	220	225	255	270	360	F	F	F	240	28

25	26	24	23	24	27	27	26	18	21	26	28	Count
200	200	200	210	220	240	270	310	300	275	245	235	Median
195	195	200	210	220	240	270	320	295	275	245	235	Mean

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

Characteristic h'F
Unit Km
Month February 1961

TABLE 19 (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	215	215	240	∇250L	E	E	260	240	220	200	200	210
2	260	235	230	F	260	∇260M	260	230	220	215	190	185
3	220	225	215	E	E	E	250	225	205	190	175M	200
4	245	235	240	240	245	E	255	230	200	200	195	195
5	220	235	E	E	E	E	260	240	225	205M	215	220
6	300	310	290	230	230	E	240	225	210	200	200	195
7	220	235	240	230	245	240	245	230	200	180	170M	200
8	230	230	240	265	265	255	250	230	220	205	200	190
9	220	230	230	240	245	240	245	225	210	205	195	185
10	220	215	220	230	230	245	245	225	215	200	200	185
11	225	210	220	240	C	260	250	230	220	200	200M	190
12	225	220	C	260	260	250	250	220	210	200	195	185
13	220	225	225	235	245	E	250	230	210	195M	180M	180
14	225	225	240	250	E	E	255	230	210	200M	210	C
15	230F	215	220	220	240	270	260	230	220	205M	200	190
16	220	215	220	235	240	∇260L	250	230	220	210	200	185M
17	220	230	235	240	280	E	255	230	220	200	195	205
18	245	225	250	230	240	240	250	240	230	220	210	220
19	235	235	220	240	E	E	245	225	215	200	∇200C	200
20	225	230	220	230	E	E	240	220	210	200	200	205
21	220	220	240	260	255	240	240	230	210	210	195	195
22	220	240	280	270	270	240	255	230	220	205	C	C
23	225	230	230	270	225	280	250	240	210	200	200M	180
24	240	225	220	240	250	245	245	225	210	205	195	200
25	230	215	215	230	220	220	250	220	215	195	180	200
26	230	220	210	225	225	235	250	225	205	200	C	C
27	220	205	220	220	240	230	250	220	215	200	C	185
28	225	220	230	250	240	225	255	230	220	205	200	200

Count	28	28	27	27	27	28	28	28	28	28	25	25
Median	225	225	230	235	240	240	250	230	215	200	200	195
Mean	230	230	230	240	245	245	250	230	215	200	195	195

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 1961 75°E Mean Time

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
∓210m	200	∓220m	A	A	265	310	F	∓345r	∓320r	275r	F	1
180	200	210	220	225	260	300r	290	270	255	260	230	2
200	200	C	C	C	255	320	F	F	∓260r	215	220	3
200	190	A	210	235	260	∓315r	F	F	∓280r	220	220	4
200	220	210	220	∓240L	275	320	310	F	260	250	300	5
190	180	A	220	230	260	300	325	280	265	220	220	6
210	200	210	210	230	250	280	290	270	240	230	235	7
185	180m	215	220	225	250	300	410	380	∓360r	240	220	8
180	180	220	215	225	255	280	325	325	320	230	220	9
200m	200	205	220	220	245	310	340r	C	295	265	255	10
200	195	180	220	235	250	270	270	265	230	235	220	11
180	180m	210	A	245	250	275	315	325	∓300r	∓280r	∓250r	12
185	180m	200	210	220	255	285	∓325r	300r	240	235	235	13
205	230	220	∓250A	235	255	280	310r	∓260r	∓280r	260	250	14
200	200	200	210	240	255	280	∓340r	∓320r	∓260r	∓240r	220	15
180m	200	200	210	240	255	315	445	F	240	220	220	16
195	195	215	220	235	250	275	250	235	220	220	230	17
210	210	210m	∓240m	240	260	260	260	235	220	230	235	18
200m	200	∓220m	240	∓260A	255	260	250	230	220	225	240	19
200	200	200	205	230	245	260	260	240	230	220	230	20
190	190	215	210	230	250	280	300	220	220	220	220	21
C	C	C	C	220	245	280	300	280	250	240	240	22
200	200	200	200	230	255	300	380	∓300r	260	250	240	23
200	185	200	210	225	260	280	325	320	290	265	250	24
200	200	200	200	225	250	290	F	F	F	F	225	25
C	C	C	220	220	255	290	F	F	F	280r	220	26
195	200	200	200	235	260	300	360	∓340r	∓280r	235	240	27
200	200	210	220	240	260	305	F	F	F	∓240r	240	28

26	26	23	24	26	28	28	22	20	25	27	27	Count
200	200	210	220	230	255	290	310	280	260	235	230	Median
195	195	205	215	230	255	290	315	285	265	240	235	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
Unit Km
Month February 1961

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

Count	9	18	14	7	6
Median		110	110	110	110
Mean		110	110	110	110

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

Characteristic h'E
Unit : Km
Month February 1961

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

6	7	8	11	13	2	Count
105	105	110	110	110		Median
110	110	115	110	115		Mean

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

Characteristic h'E TABLE 20—Contd Latitude 10 2°N
 Unit Km Ionospheric Data Longitude 77 5°E
 Month February 1961 75°E Mean Time

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								115	120	115	115	115
2								A	A	A	A	A
3								A	A	A	A	A
4								F	100	A	A	A
5								120	110	110	120	130
6									A	A	A	A
7								105	100	A	A	B
8									100	A	A	A
9									A	A	A	A
10								110	105	A	A	A
11									R	A	A	A
12								110 _π	105	A	A	A
13							A	A	A	A	A	A
14								115	105	A	A	C
15								A	A	A	A	A
16									105	105	A	105
17								110	105	A	A	A
18								115	115	105	100	100
19									A	A	100 _α	110
20									A	A	110	A
21									120	A	A	A
22								115	110	A	C	C
23								110	110	115	105	105
24									110	A	A	A
25									105	A	A	A
26								120	A	A	C	C
27								120	115	A	G	115
28								115	A	A	A	A

Count	13	17	5	6	7
Median	115	105	110	110	110
Mean	115	110	110	110	110

Sweep 1 0 Mc. to 25.0 Mc in 27 seconds

Characteristic h'E
Unit Km
Month February 1961

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

Latitude : 10 2°N
Longitude 77 2°

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

6	8	8	14	6	Count
100	110	110	110	120	Median
105	110	115	115	115	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic : h'Es
 Unit : Km
 Month February 1961

TABLE 21
 Ionospheric Data
 75°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Count	1	2	1	2	1			1	8	15	26	24
Median									100	100	100	100
Mean									105	100	100	100

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic : h'Es
 Unit Km
 Month February 1961

TABLE 21
 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	Hour/Date
G	G	130	110	120								1
100	100	G	100									2
100	100	C	C	C								3
100	100	100	G	G								4
G	G	G	G	G		120			100			5
												6
100	100	100	120	110	G							7
100	100	100	115	115	105							8
100	100	C	100	G	115							9
100	100	100	100	120								10
100	100	100	100	100								11
100	100	100	100	100	115	135	135	115	115			12
C	100	100	100	100								13
100	G	100	G	100				100	100			14
100	100	G	100	100								15
100	100	G	G									16
100	100	100	100	G	95							17
100	100	100	G	100								18
G	G	100	G		120							19
100	100	100	G	100	100							20
100	100	100	100	100								21
100	100	100	100	G								22
C	C	C	C	C						105	110	23
100	100	100	G	G								24
100	100	100	100	100	100							25
100	100	100	100	100	100							26
C	C	C	100	100								27
100	100	100	100	100	110							28
100	100	100	100	100	100							28

22	22	20	18	17	10	2	1	2	3	1	2	Count
100	100	100	100	100	100							Median
100	100	100	100	105	105							Mean

Sweep 1 0 Mc to 25.0 Mc in 27 seconds

Characteristic · h'Es
 Unit : Km
 Month . February 1961

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

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic : h'Es
 Unit . Km
 Month February 1961

TABLE 21—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	Hour/Date
G	G	G	120	120								1
100	100	G	G									2
100	100	C	.									3
100	100	100	G	..								4
G	G	G	G	..	..	120	..	110				5
100	100	120	120	G	105	..	..	..				6
100	100	100	110	110								7
100	C	100	100	G	110	..	..	..				8
100	100	100	115	120	..	..	..	..				9
100	100	100	100		..	..	..	.				10
100	100	100	100	120	..	130	120	110				11
100	100	100	100	100				..				12
100	100	100	G	100				..				13
100	G	G	100	100				105				14
100	G	100	G									15
100	100	100	G	..								16
100	100	100	100	..								17
100	100	G	G									18
100	100	G	100	100								19
100	100	100	100	100								20
100	100	100	100	.								21
C	C	C	C							110		22
100	100	G	G							.		23
100	100	100	100	100						..		24
100	100	100	100	100						.		25
C	C	C	100	100						100		26
100	100	100	100	100								27
100	100	100	100	100	120							28

24	21	18	18	14	9	2	1	3		2		Count
100	100	100	100	100			.	.	.			Median
100	100	100	105	105			.	.	..	.	..	Mean

Sweep 1.0 Mc 25.0 Mc, in 27 seconds.

Characteristic (M3000)F2
 Unit —
 Month February 1961

TABLE 22
 Ionospheric Data
 75°E Mean Time

Latitude : 10 2°N
 Longitude : 77.5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	u3 45r	u3 60r	3 45	3 50	E	E	3 00	3 00	2 70	2 70	2 70	2 70
2	F	3 30	F	3 40	u3 60r	u3 50r	3 00	3 00	2 95	2 50	2 50	2 50
3	3 30	u3 45r	u3 60r	R	E	E	3 00	3 00	2 75	2 60	2 55	2 40
4	3 25	3 20	3 35	3 40	3 40	E	u2 90r	3 10	2 55	2 50	2 55	2 55
5	u3 50r	F	u3 50r	E	E	E	2 70	3 20	3 10	2 70	2 40	2 40
6	3 00	2 95	F	F	3 40	R	3 05	3 35	3 10	2 80	2 25rr	2 40
7	3 20	3 20	F	3 20	3 20	3 20	2 95	3 30	3 10	2 60	2 40	2 50
8	3 25	3 20	3 20	3 05	3 05	F	F	F	3 15	2 75	2 35	2 40
9	F	3 20	3 30	3 30	3 20	3 35	3 05	3 25	3 10	2 75	2 20	2 40
10	3 30	3 30	3 30	3 40	3 30	3 30	3 00	3 20	2 95	2 70	2 60	2 40
11	F	3 45	3 30	3 30	C	3 30	3 10	3 00	3 15	3 00	2 65	2 30
12	3 40	3 30	3 25	3 20	3 20	3 10	3 30	3 30	3 15	2 85	2 50	2 60
13	3 20r	3 40	3 30	3 50	3 45	R	3 00	3 15	2 95	2 90	2 55	2 70
14	3 30	3 25	3 35	3 40	C	E	3 05	3 00	2 90	2 70	2 60	2 60
15	F	3 40	3 40	3 45	3 40	3 30	3 20	3 40	2 70	2 75	2 80	2 65
16	3 40r	3 35	3 50	3 45	3 40	3 50	3 10	3 50	3 20	2 80	2 45	2 65
17	3 20	3 30	3 45	u3 45r	3 50	E	3 10	3 10	u2 85r	2 70	2 65	2 60
18	3 30	u3 25r	3 25	3 20	3 40	3 40	3 10	3 65	3 40	2 90	2 50rr	2 40
19	3 30	3 40	u3 45r	3 50	3 45	E	3 00	3 35	3 25	2 90	2 60	2 60
20	3 35	3 40	3 40	3 50	3 55	E	3 05	3 45	3 30	3 05	2 50	2 60
21	3 30	u3 20r	3 30	u3 20r	3 20	3 40	u3 30r	3 40	3 30	u2 90r	2 30rr	2 65
22	3 35	3 25	3 20	3 20	3 10	3 20	3 35	3 10	2 85	2 70	C	C
23	3 20	3 20	3 30	3 40	3 60	u3 70r	3 05	3 30	3 10	2 65	2 55	2 50
24	3 05	3 30	3 40	3 45	3 30	3 30	3 40	3 30	3 10	2 75	2 25rr	2 50
25	3 00r	3 20	3 30	3 30	u3 40r	3 30	3 25	3 35	3 15	2 80	2 35	2 55
26	F	F	u3 45r	3 35	3 45	F	3 00	3 40	3 10	2 65	C	C
27	F	3 40	u3 50r	3 35	3 40	3 40	3 00rr	3 40	3 20	2 95	2 50	2 45
28	3 10	F	3 30	u3 30r	3 20	3 25	3 25	3 25	3 05	2 45	2 50	2 50

Count	22	25	25	25	23	16	27	27	28	28	26	26
Median	3 30	3 30	3 40	3 40	3 40	3 30	3 05	3 30	3 10	2 75	2 50	2 50
Mean	3 25	3 30	3 40	3 35	3 35	3 35	3 10	3 25	3 05	2 75	2 50	2 50

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

Characteristic (M3000)F2
 Unit —
 Month February 1961

TABLE 22
 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	Hour/Date
2 80	2 85	2 80	2 80	2 75	2 65	2 45	2 30	F	F	F	F	1
2 50	2 55	2 65	2 80	2 95	2 95	2 75	F	2 75	F	F	3 15	2
2 40	2 45	C	C	C	2 50	u2 50s	u2 30r	F	F	u2 90r	3 25	3
2 50	2 60	2 55	2 65	2 75	2 80	2 70	u2 35s	F	F	F	u3 40s	4
2 35	2 45	2 50	2 70	2 85	2 80	2 70	2 65	j2 85s	3 00	3 10	u3 10s	5
2 20	2 40	2 35	2 60	2 70	2 80	2 75	2 55	2 55	F	F	u3 15s	6
2 40	2 40	2 45	2 40	2 35	2 45	2 50	2 55	2 70	2 85	3 10	3 25	7
2 40	2 35	C	C	2 45	2 50	2 50	2 40	F	F	F	3 15	8
2 40	2 30	2 40	2 40	2 50	2 55	2 50	2 50	2 40	F	F	3 20	9
2 40	2 40	2 40	2 50	2 50	2 65	2 50	2 20	F	F	2 80p	3 00	10
2 40	2 50	2 50	2 40	2 50	2 75	2 85	2 80	2 90	3 10	3 30	3 35	11
C	2 55	2 55	2 70	2 80	2 90	2 85	2 65	2 60	u2 70F	F	F	12
2 70	2 60	2 55	2 60	2 65	2 60	2 45	2 40	2 50	2 65p	3 00	u3 30p	13
2 65	2 70	2 70	2 75	2 85	2 70	2 65	2 55	F	u2 60k	F	2 95	14
2 60	2 55	2 70	2 80	2 95	2 90	3 10	2 60	F	F	F	F	15
2 45	2 55	2 55	2 50	2 70	2 80	u2 75s	2 40	F	F	F	3 30	16
2 55	2 55	2 60	2 60	2 55	2 55	C	2 75	2 95	3 10	3 30	3 40	17
2 65	2 50	2 60	2 65	2 60	2 65	2 65	2 75	2 95	3 15	3 20	3 35	18
2 60	2 55	2 70	2 70	2 80	2 70	2 55	2 70	u3 00s	3 20	3 30	3 35	19
2 55	2 65	2 55	2 60	2 65	2 60	2 60	2 70	2 90	3 05	3 25	3 30	20
2 50	2 55	2 60	2 60	2 60	2 50	2 60	2 60	2 85	3 20	3 30	3 40	21
C	C	C	C	C	2 55	2 55	2 50	2 50	2 70	2 85	3 05	22
2 60	2 65	2 60	2 55	2 60	2 55	2 45	2 20	2 45r	u2 35r	2 90r	u2 95s	23
2 50	2 50	2 45	2 40	2 40	2 35	2 50	2 45	2 55	2 60	2 70	u2 90s	24
2 50	2 50	2 45	2 50	2 55	2 50	2 45	2 25	F	F	F	u3 00s	25
C	C	C	2 70	2 75	u2 70s	2 65	2 50	F	F	F	F	26
2 50	2 50	2 45	2 50	2 45	u2 50s	2 50	2 45	2 45	F	u2 90k	F	27
2 40	2 45	2 40	2 35	2 50	2 50	2 50	2 30	F	F	F	3 00	28

25	26	24	25	26	28	27	27	17	14	15	23	Count
2 50	2 50	2 55	2 60	2 60	2 60	2 55	2 50	2 70	2 90	3 10	3 20	Median
2 50	2 50	2 55	2 60	2 65	2 65	2 60	2 50	2 70	2 90	3 05	3 20	Mean

Sweep 1 0 Mc to 25.0 Mc in 27 seconds

Characteristic : (M3000)F₂
 Unit —
 Month February 1961

TABLE 22—Cont'd
 Ionospheric Data
 75°E Mean Time

Latitude : 10 2°N
 Longitude . 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	3 45 _F	3 50	R	E	E	3 00	2 90	2 70	2 75	2 70	2 75
2	F	3 40	F	3 40 _r	3 40 _r	3 40	3 20	3 10	2 75	2 60	2 50	2 50
3	3 35	3 55	3 60	E	E	E	3 25	3 00	2 55	2 50	2 45	2 50
4	3 15	3 25	3 25	3 40	3 55	E	3 05	2 85	2 45	2 55	2 65	2 50
5	3 40 _r	3 40	E	E	E	E	3 00	3 10	2 90	2 60	2 40	2 45
6	2 95	2 80	F	3 30	3 40	E	3 35	3 25	2 95	2 50	2 25 _H	2 30
7	3 20	3 30	3 30	3 30	3 20	3 40	3 30	3 20	2 85	2 30	2 45	2 45
8	3 20	3 30	3 10	3 00	3 15	F	F	3 30	3 00	2 50	2 40	2 30
9	3 30	3 20	3 25	3 25	3 30	3 40	3 15	3 20	2 95	2 50	2 30	2 50
10	3 30	3 35	3 40	3 30	3 30	3 45	3 20	3 05	2 80	2 55	2 50	2 40
11	3 30	3 45	3 40	3 30	C	3 25	3 00	3 15	3 10	2 90	2 45	2 35
12	3 40	3 20	C	3 20	3 10	3 25	3 30	3 25	3 00	2 60	2 55	2 60
13	3 30	3 50	3 50	3 50	3 45	E	3 20	3 00	2 75	2 65	2 60	2 70
14	3 30	3 35	3 25	3 50 _C	E	E	3 00	2 95	2 80	2 70	2 65	C
15	F	3 45	3 40	3 50 _C	3 40	3 50 _r	3 10 _r	2 90	2 80	2 75	2 70	2 60
16	3 35	3 40	3 50	3 40	3 50	R	3 40	3 40	3 10	2 45	2 55	2 70
17	3 35 _r	3 35	3 40	3 45	3 60	E	3 15	3 00	2 65	2 65	2 55	2 55
18	3 20	3 40 _r	3 25	3 35	3 40	3 50	3 40	3 55	3 20	2 75	2 35 _H	2 60
19	3 30	3 40	3 50	3 60	E	E	3 30	3 35	3 05	2 60	2 55	2 70
20	3 30	3 40 _r	3 45	3 55	E	E	3 30	3 45	3 10	2 75	2 70	2 60
21	3 25	3 25	3 20	3 20	3 30	3 30	3 40	3 30	3 05	2 70	2 55	2 50
22	3 35 _r	3 25	3 15	3 15	3 10	3 30	3 20	2 95	2 85	2 60	C	C
23	3 20	3 30	3 30	3 50	3 50 _r	3 45	3 20 _r	3 20	2 90	2 35 _H	2 60	2 35
24	3 25	3 25	3 40	3 30	3 30	3 40	3 30	3 20	2 95	2 45	2 60	2 55
25	3 15 _r	3 35	3 30 _r	3 30	3 30 _r	3 50	3 30	3 20	3 00	2 60	2 50	2 55
26	3 30	3 30	3 50	3 40	3 50	3 50 _r	3 30	3 15	2 90	2 40	C	C
27	3 40	3 50	F	3 40	3 40	3 60	3 30	3 30	3 10	2 65	C	2 50
28	3 20	3 30 _r	3 30 _r	3 15	3 20 _r	3 35	3 35	3 15	2 80	2 40 _r	2 50	2 50

Count	25	28	23	25	21	16	27	28	28	28	25	25
Median	3 30	3 35	3 40	3 35	3 40	3 40	3 25	3 20	2 90	2 60	2 55	2 50
Mean	3 25	3 35	3 40	3 35	3 35	3 40	3 20	3 15	2 90	2 60	2 50	2 55

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic (M3000)F₂
 Unit —
 Month February 1961

TABLE 22—*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	Hour/Date
2 80	2 85	2 80	2 75	2 70	2 55	2 35	F	F	F	F	F	1
2 50	2 70	2 75	2 90	2 95	2 90	2 80 _x	2 75	2 80	F	3 00	3 25	2
2 45	2 50	C	C	C	2 45	2 40	F	F	F	3 20 _w	3 25	3
2 60	2 55	A	2 70	2 80	2 75	2 55	F	F	F	F	3 25	4
2 40	2 50	2 60	2 80	2 85	2 75	2 65	2 75	2 85	3 10	3 10 _s	3 00	5
2 30	2 50	2 70	2 70	2 75	2 80	2 70	2 50	F	F	F	3 20	6
2 40	2 40	2 40	2 35	2 40	2 50	2 50	2 60	2 75	3 00	3 10	3 20	7
2 45	2 45	2 40	2 50	2 50	2 50	2 45	2 20	F	F	F	3 25	8
2 50	2 40	2 40	2 50	2 50	2 55	2 50	2 50	2 50	F	3 10	3 30	9
2 40	2 35	2 45	2 45	2 55	2 60	2 40	2 40	C	F	2 80 _w	3 10 _r	10
2 50	2 60	2 45	2 55	2 70	2 80	2 80	2 90	3 00	3 25	3 30	3 40	11
2 60	2 60	2 60	2 70	2 90	2 95	2 75	2 70	2 65	F	3 00 _r	3 10 _w	12
2 70	2 60	2 55	2 60	2 70	2 60	2 45	2 60	2 55 _w	2 80	3 20	3 35	13
2 70	2 70	2 80	2 85	2 80	2 70	2 50	2 50	2 60 _w	F	3 25 _r	3 00 _w	14
2 55	2 65	2 80	2 90	2 95	2 90	2 80	2 45 _w	F	F	F	3 30 _w	15
2 55	2 65	2 55	2 60	2 80	2 80	2 60	2 30	F	3 10	F	3 30	16
2 55	2 55	2 60	2 60	2 50	2 55	2 65	2 90	3 05	3 20	3 35	3 35	17
2 50	2 55	2 70	2 60	2 60	2 65	2 75	2 80	3 00	3 25	3 30	3 35	18
2 55	2 65	2 70	2 75	2 70	2 60	2 60	2 90	3 20 _s	3 25	3 35	3 30	19
2 50	2 60	2 60	2 65	2 65	2 60	2 60	2 80	3 00	3 10	3 30	3 20	20
2 65	2 50	2 50	2 65	2 55	2 55 _s	2 65	2 65	3 10 _s	3 25	3 40	3 30	21
C	C	C	C	2 60	2 60	2 55	2 50	2 75	2 75	3 05	3 00	22
2 55	2 55	2 50	2 60	2 60	2 55	2 35 _s	2 05 _F	2 45	2 85 _w	2 95	3 05	23
2 55	2 55	2 45	2 40	2 40	2 45	2 55	2 50	2 50 _s	2 65	2 75	3 05 _w	24
2 50	2 45	2 45	2 55	2 55	2 45	2 40	F	F	F	F	F	25
C	C	C	2 70	2 75	2 70	2 55	F	F	F	F	3 30 _w	26
2 50	2 50	2 50	2 45	2 45	2 50	2 45	2 35	F	F	3 00	3 15	27
2 40	2 40	2 35	2 45	2 50	2 45	2 40	F	F	F	F	3 05 _w	28

26	26	24	26	27	28	28	22	16	13	19	26	Count
2 50	2 55	2 55	2 60	2 65	2 60	2 55	2 55	2 80	3 10	3 10	3 25	Median
2 50	2 55	2 55	2 60	2 65	2 65	2 55	2 55	2 80	3 05	3 10	3 20	Mean

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

Characteristic foF2
Unit . Mc
Month March 1961

TABLE 23
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	F	8.5	F	7.4	7.0	6.2	6.3	8.5	9.4	8.7	8.7	8.7
2	8.0	7.4	7.2	6.6	5.4	4.3	4.9	7.9	9.9	11.0	11.1	9.9
3	F	9.4	8.6 _F	6.5	4.8	3.2	4.1	7.5	9.1	9.0	9.1	9.0
4	F	9.6	F	5.6 _F	3.7	2.7 _F	3.6	7.3	8.8	8.6	8.1	8.2
5	10.0	F	F	4.7	3.8	2.3 _F	3.8	7.0	8.2	7.9	C	8.5
6	F	F	5.6	F	E	E	C	7.2	8.8	11.7	11.6	11.3 _F
7	9.2	8.4	6.9	5.2	4.1	3.3	4.2	7.6	9.0	9.9	9.4	8.8
8	F	F	F	5.6 _F	5.6	5.0	4.9	7.9	9.8	10.9	10.8 _F	9.9
9	10.6 _F	11.1	10.5	9.5	7.6	6.7 _F	F	9.0 _F	9.8	10.7	10.9 _F	9.6
10	11.1	10.7	9.0	6.7	5.4	4.6 _F	F	7.8	9.8	10.3	9.8	10.6
11	4.7	4.6	3.0	2.1	1.8 _F	E	3.9	7.6	9.6	10.6	11.0	11.4
12	10.6	10.6	9.6	8.6	7.4	5.8	4.9	7.8	9.6	9.8	9.2	9.4
13	9.6	9.8	10.2	9.2	6.4	4.8	4.5	8.0	9.3	9.6 _F	8.3	8.1
14	F	8.9	6.5	4.3	3.0	2.1 _F	3.9	7.3	8.6	8.2	8.8	8.5
15	9.6	9.4	8.6	6.4	4.5	3.0	4.2	7.4	8.7	8.3	8.4	9.0
16	F	8.6	7.0	4.1	3.2	2.9	4.6	7.5	8.8	8.8	8.4	8.3
17	9.8	9.9	7.2	5.4	4.5	3.9	4.8	7.8	8.8	8.2	8.1	7.8
18	9.2	7.7	5.6	4.0	2.7	E	4.4	7.8	9.7	10.4 _F	8.6	8.4
19	9.9	9.3	8.3	6.4	3.7	2.3	4.3	7.7	C	8.0	7.5	7.7
20	6.8	7.2	6.4	4.0	3.2	E	4.6	8.1	10.2	10.0	8.6	8.8
21	10.4	9.6	6.9	5.5	4.5	3.1	4.6	8.2	10.0	9.8	8.7	8.7
22	10.4	10.3	9.8	7.0 _F	5.6	3.7	4.8	8.2	10.0	10.8	10.4	8.9
23	10.6	10.4	8.4	6.3	5.3	3.7	4.8	8.3	9.8	9.8	8.8	8.4
24	F	F	7.6 _F	6.2 _F	4.4	3.0	4.8	8.1	9.7	9.6	9.2	8.9
25	F	F	8.6	6.1	4.7	2.8 _F	4.7	8.3	10.3	10.6	9.5	9.7
26	9.7 _F	8.8	7.3 _F	5.3	3.2 _F	E	4.8	8.3	10.0	9.9 _F	8.5	8.6
27	10.3	9.5 _F	7.6	5.5	3.0	2.3 _F	4.8	8.4	10.3	10.8	9.6	8.8
28	11.8 _F	S	F	F	5.8 _F	6.9	F	9.8	11.8	11.7	11.2	11.2
29	12.2	11.4	F	F	5.5	2.9 _F	5.1	8.4	10.4	9.9	9.3	9.0
30	F	9.1 _F	F	F	7.0	F	5.3	8.5	10.1	9.4	9.8	9.8
31	F	F	F	F	6.0	4.5	5.7	8.9	10.5	10.7	9.8	9.8
Count	20	24	23	26	31	30	27	31	30	31	30	31
Median	10.0	9.4	7.6	6.2	4.5	3.0	4.7	7.9	9.8	9.9	9.2	8.9
Mean	9.7	9.2	7.7	6.0	4.9	3.8	4.6	8.0	9.6	9.8	9.4	9.2

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foF2
Unit . Mc
Month . March 1961

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

Sweep 1.0 Mc. to 25.0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month March 1961

TABLE 23—Contd
Ionospheric Data
75°E Mean Time

Latitude : 10°2'N
Longitude : 77 5'E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	8.3	8.2r	7.0	6.6	5.7	7.4	9.1	9.9	8.4	8.7	8.7
2	7.5	7.3	6.9	6.3	4.7	4.0	6.7	9.3	10.5	11.2	10.4	9.7
3	9.1	9.0	7.6F	5.6	4.0	2.8	6.0	8.6	9.3	8.9	9.0	8.8
4	9.5	9.0	F	4.4	F	J2.2R	5.8	8.3	8.8	8.3	8.1	8.2
5	10.0	F	F	4.1r	3.1	E	5.6	8.1	8.1	8.1	8.4	8.8
6	9.1	8.0	F	F	E	E	6.1	7.9	10.4	11.8	11.2	10.6
7	9.0	7.9	6.0F	4.7	3.7	2.8	6.0	8.4	9.5	9.7	9.1	8.7
8	U9.1F	F	F	6.2	5.4	4.4	6.7	8.9	10.7	11.0	10.0	10.2
9	U11.0F	11.0	9.9	9.0	6.9	F	U8.4F	U9.4F	10.6	11.0	9.8	9.4
10	11.0	10.4	U7.4F	5.9	5.0	U4.8r	6.0	9.0	10.3	10.1	10.1	10.9
11	4.9	4.0	2.4	2.0	2.6	E	6.0	9.0	10.2	10.8	11.3	11.8
12	U10.8R	10.2	9.3	8.0	6.8	4.6	6.4	8.8	9.8	9.6	9.2	9.6
13	U9.6S	10.3	10.0F	7.6	5.4	4.0	6.4	8.9	9.6R	8.6	8.2	8.2
14	F	8.2	5.2	3.6	2.5	E	6.0	8.1	8.4	8.4	8.8	8.5
15	9.6	9.2	7.6	5.4	3.7	2.4	U6.2a	8.4	8.5	7.9	8.7	9.2
16	U9.4S	7.8	5.3	3.5	3.0	2.9	6.3	8.4	8.8	8.8	8.2	8.5
17	9.9	8.2	6.2	5.1	4.1	3.6	6.4	8.6	8.6	8.0	8.0	7.7
18	8.6	6.7	4.8	3.4	3.0	E	6.6	8.7	10.4	9.8R	8.4	8.5
19	9.4	8.8	7.4	4.9	2.7	C	6.4	8.2	8.2	7.8	7.7	7.5
20	7.0	6.9F	5.1	3.7	2.9	E	6.5	9.4	10.4	8.8	8.8	9.0
21	F	8.6	6.1	5.0	4.0	E	6.6	9.2	10.4	9.2	8.4	8.6
22	10.5	U9.6S	8.6	6.6	1.7	2.9	6.8	9.2	10.5	U10.8R	9.4	9.0
23	10.6	U9.4S	U7.4S	5.7	4.5	3.0	6.9	9.1	10.0	9.2	8.5	8.7
24	9.3	8.0	7.2	5.3	3.6	2.7	6.7	9.1	9.8	9.3	9.0	9.0
25	F	F	7.6	5.5	3.6	E	6.7	9.4	10.7	10.3	9.5	9.9
26	F	8.0	6.6	4.1	2.5	E	6.8	9.1	10.4	8.8	8.5	8.7
27	10.1	8.4	U7.1S	3.6	2.7	E	7.0	9.4	10.7	10.7	9.1	9.0
28	U11.5S	S	F	F	7.8	F	U8.8R	11.0	11.8	11.4	11.0	10.9
29	12.0	F	F	6.8	3.9	U2.8R	7.0	9.6	10.6	9.7	9.2	9.2
30	F	8.4	F	7.6	F	3.4	7.1	9.5	10.2	9.4	9.8	9.8
31	F	F	U7.1F	U6.5F	5.3	3.9	7.6	9.9	10.8	9.8	9.7	9.8
Count	24	25	24	29	28	31	31	31	31	31	31	31
Median	9.6	8.4	7.2	5.4	3.9	2.8	6.6	9.0	10.2	9.4	9.0	9.0
Mean	9.5	8.5	6.9	5.4	4.2	3.5	6.6	9.0	9.9	9.5	9.2	9.2

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic foF2 TABLE 23—Cont'd Latitude 10 2°N
 Unit Mc Ionospheric Data Longitude 77 5°E
 Month March 1961 75°E Mean Time

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

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

Characteristic f_oF1
Unit Mc
Month . March 1961

TABLE 24
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	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	C	L	
6									L	L	L	L	
7									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	
12									L	L	L	L	
13								L	L	L _h	L	L _h 5L	
14									L	L	L	L	
15									L	L	L	L	
16									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	L	
21									L	L	L	L	
22									L	L	L	L	
23									L	L	L _h	L	
24								L	L	L _h	L	L	
25									L	L	L	L	
26									L	L	L	L	
27									L	L	L	L	
28									L	L	L	L	
29									L	L	L	L	
30									L	L	L	L	
31								L	L	L	L	L	
Count													1
Median													
Mean													

SWEEP 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic	foF1	TABLE 24											Latitude	
Unit	Mc	Ionospheric Data											10 2°N	
Month	March 1961	75°E Mean Time											Longitude	
		12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L	L	L								1
L	L	L	L	L	L	L								2
L	L	L	L	L	L	L								3
L	L	L	L	L	L	L								4
L	L	L	L	L	L	L								5
L	C	L	L	L	L	L	L							6
L	L	L	L	L	L	L	L							7
L	L	L	L	L	L	L	L							8
L	L	L	L	L	L	L	L							9
L	L	L	L	L	L	L	L							10
L	L	L	L	L	L	L	L							11
L	L _H	L _H	A	L	L	L	L							12
L	L	L	L	L	L	L	L							13
L	L	L	L	L	L	L	L							14
L	L	L	L	L	L	L	L							15
L	L	L	A	L	L	L	L							16
L	L	L	L	L	L	L	L	L						17
L	L	L	L	L	L	L	L	L	L					18
L	L	L	L	L	L	L	L	L	L					19
L	L	L	L	L	L	L	L	L	L					20
L	L	L	L	L	L	L	L	L	L					21
L	C	L	L	L	L	L	L							22
L	L	L	L	L	L	L	L							23
L	L	L	L	L	L	L	L							24
L	L	L	L	L	L	L	L							25
L	L	L	L	L	L	L	L							26
L	L	L	L	L	L	L	L							27
L	L	L	L	L	L	L	L							28
L	L	L	L	L	L	L	L							29
L	L	L	L	L	L	L	L							30
L	L	L	L	L	L	L	L							31
														Count
														Median
														Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF1
 Unit Mc
 Month March 1961

TABLE 24—Contd
 Ionospheric Data
 75°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Hour/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	4 9
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	L
9							L	L	L	L	L	L
10							L	L	L	L	L	L
11								L	L	L	L	L
12								L	L	L	L	L
13								L	L ^H	L	L	5 3L
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	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 ^H	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
Count												2
Median												
Mean												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF1,
Unit Mc
Month March 1961

TABLE 24—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,	Hour/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								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
												Count
												Median
												Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
Unit Mc
Month March 1961

TABLE 25
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Hour/Date	00	01	02	03	04	05	06	07	08	09	10	11
1									A	A	A	A
2								2 4	3 0	A	A	B
3									2 9 _m	A	A	A
4									3 0	A	A	A
5								R	A	A	C	A
6									B	B	A	A
7									2 8	A	A	A
8								2 3	A	A	A	B
9									A	A	A	A
10								2.5	F	A	A	A
11								2.4 _m	A	A	R	R
12								R	A	A	A	A
13								A	A	R	A	A
14								R	A	A	A	A
15								R	A	A	A	A
16								R	3 3 _m	R	R	R
17								R	A	A	A	A
18									3 2	3 6	A	B
19								2 5	C	A	A	A
20									3 0	A	A	A
21								R	3.0	A	A	B
22									R	B	R	R
23									R	B	B	B
24								R	R	R	A	R
25								2 6 _m	A	A	B	B
26									A	A	B	A
27									A	A	A	A
28								2 6 _m	R	R	R	B
29								2 6 _m	A	B	R	B
30									A	A	A	A
31									A	B	A	B
Count								8	8	1		
Median								2 5	3 0			
Mean								2 5	3 0			

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foE
 Unit Mc
 Month March 1961

TABLE 25—*contd*
 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/Hour
A	A	A	A	A								1
B	B	B	A	A								2
A	A	A	A	A								3
A	A	A	3 4	3 1	2 5							4
A	A	A	A	A	A							5
A	C	A	B	B								6
A	A	3 5	3 1	2 8								7
A	A	A	A	2 8	2 6							8
B	B	B	A	3 0								9
R	B	R	B	R								10
A	A	A	A	u3 2x								11
A	A	R	A	A								12
A	A	A	A	A								13
A	R	A	A	B								14
R	u3 5x	B	A	B								15
A	R	A	A	A								16
B	B	B	A	B	2 5							17
A	A	3 3	A	A	A							18
A	A	A	3 2	R	A							19
A	A	A	3 4	A	A							20
B	u3 9x	B	A	R								21
C	R	B	B	R								22
R	B	B	R	A								23
B	B	B	A	A								24
A	A	A	A	B								25
C	A	A	A	A								26
B	B	B	B	R								27
B	B	B	B	A								28
A	A	B	A	A	A							29
A	A	A	A	A	A							30
A	A	A	A	A	A							31
	2	2	4	5	3							Count
				3.0								Median
				3.0								Mean

Sweep 1.0° MUF to 25.0° MUF in 27 seconds

Characteristic fo E TABLE 25—*contd* Latitude 10 2°N
 Unit Mc Ionospheric Data Longitude 77°5'E
 Month March 1961 75 0°E Mean Time

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo E
Unit Mc
Month March 1961

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	Hour/Date
A	A	A	A	A								1
B	B	A	A	A								2
A	A	A	A	A								3
A	A	A	3 3	2 9								4
A	A	A	A	A								5
A	A	3 4	B	B								6
A	A	A	A	A								7
A	A	A	3 0	A								8
A	A	A	A	A								9
B	B	B	3 0									10
B	B	R	R	B								11
A	A	u3 6R	A	A								12
A	A	R	R	R								13
A	C	A	R									14
u3 7R	A	A	B									15
B	u3 8R	B	A									16
A	R	A	A									17
B	B	A	A	2 7								18
A	A	A	A	A								19
A	A	A	R									20
A	A	A	A	A								21
B	B	A	3 3									22
C	R	3 4	R	R								23
R	R	R	u3 4R									24
B	B	B	A									25
A	A	A	B									26
A	A	A	A									27
B	B	A	B									28
B	C	B	A	A								29
A	A	u3 3R	3 2	A								30
A	A	A	A	A								31
1	1	4	6	2								Count
			3 2									Median
			3 2									Mean

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

Characteristic fo Es
Unit Mc
Month March 1961

TABLE 26
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Hour/Date	00	01	02	03	04	05	06	07	08	09	10	11
1									8 0	8 2	5 4	9 4
2								G	G	8 0	8 6	8 2
3									7 6	8 0	9 0	9 2
4									8 2	8 3	8 8	9 0
5								G	7 8	8 4	C	9.2
6									G	G	9 0	9.2
7									6 8	8 2	8 6	9 6
8	4 0							G	6 0	7 2	8 6	8 0
9									6 6	8 0	8 8	9 0
10								G	G	7 0	10 4	8 8
11								6 4	7 2s	8 2	7 7	8 3
12						2 7		5 5	7 7	9 0	9 8	10 2
13	u5.2s	4 0						4 6	8 0	8 4	9 6	9 6
14								G	8 4	8 6	9 6	10 4
15								u6 4s	7 5	8 1	9 3	9 6
16								u6 0S	8 0	8 3	8 6	8 5
17								G	7 4	7 8	8 0	8 2
18	3 4								G	7 8	8 1	8 0
19		3 0						G	C	7 2	8 3	8 2
20									7 4	8 6	8 4	8 7
21								G	7 4	7 8	8 5	7 8
22									G	G	8 7	8 8
23									7 2	7 6	8 1	8 4
24								G	7 2	7 9	9 6	8 8
25								G	7 3	7 8	8 8	9.1
26									8 0	8 2	8 5	8 7
27									6 4	7 6	8 7	8 9
28				3 4	2 5			G	6 5	8 0	8 0	8 4
29	7 1							G	7 7	8 2	8 4	8 8
30									8 3	8 3	9 6	9 8
31									7 6	9 0	9 0	9 2
Count	4	2	1	1	1			17	30	31	30	31
Median								G	7 4	8 0	8 7	8 8
Mean								5 8	7 4	8 1	8 8	8 9

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo Es
Unit Mc
Month March 1961

TABLE 26—*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	Hour/Date
86	94	90	82	78								1
80	80	82	84	80					44			2
94	96	90	90	78								3
98	90	82	G	G	G					20		4
88	88	74	60	66	54							5
86	C	84	G	80	70							6
90	96	88	90	78							25	7
96	80	84	80	74								8
96	96	98	96	82	68							9
G	100	96	82	G								10
77	78	G	G	G	64				24	23	28	11
97	97	88	82	69								12
97	104	80	76	G							33	13
102	105	88	72	G						55	58	14
96	78	86	75	G		C						15
86	87	G	118	G	66							16
78	82	83	66	C						32	30	17
86	84	76	96	G	G							18
76	78	G	77	77	38							19
89	86	86	74	64								20
82	82	86	74	65	40							21
90	86	80	76	76								22
C	92	75	61	64								23
86	94	93	80	80								24
86	77	67	64	73								25
8.7	88	84	64	G	56							26
C	96	87	75	78								27
8.0	80	80	76	G								28
83	88	74	G	63	34						35	29
89	85	G	56	6.5	56				3.1			30
88	84	81	74	76	46							31
29	30	31	31	30	13				3	4	5	Count
86	88	83	75	66	54						30	Median
88	88	84	78	73	54						30	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic fo Es
Unit Mc
Month March 1961

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

Latitude 10 2°N
Longitude 77 5°E

Hour/Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								G	8 4	9 6	9 4	9 0
2								G	6 8	8 4	8 4	8 4
3									8 2	9 6	9 0	9 0
4								6 4	8 2	8 6	9 2	9 2
5								6 8	8 0	8 4	9 0	9 0
6								7 6	G	8 6	8 6	9 4
7								5 8	7 4	8 2	9 6	9 4
8								2 8	7 0	8 6	8 6	8 8
9								G	6 8	8 6	9 2	9 2
10							G	6 6	8 2	9 0	8 8	10 4
11			2 2				G	6 5	8 0	8 2	8 2	8 6
12					2 1		G	6 6	8 2	9 6	10 8	9 8
13	05 48	05 48						5 8	8 7	9 0	9 8	10 4
14								7 6	9 4	10 6	9 6	10 5
15								8 0	8 1	9 6	10 0	9 0
16								8 0	8 0	8 1	8 4	8 7
17							G	7 0	7 8	8 6	7 8	8 4
18									7 5	7 8	8 2	8 2
19	6 6							6 5	7 5	7 8	7 8	8 6
20								G	8 0	8 8	8 1	8 4
21							G	6 6	7 8	8 3	8 4	8 2
22								G	7 2	8 5	9 4	8 8
23								6 0	7 7	8 2	7 8	8 6
24								6 8	7 9	8 8	9 2	9 0
25								4 0	8 1	8 8	8 3	8 6
26									8 3	8 8	9 0	8 5
27									7 6	9 0	8 6	9 0
28	2 4		1 9	2 8			6 5	G	7 8	7 6	8 4	8 8
29	4 0							6 8	7 6	8 8	9 8	8 4
30								7 2	8 0	09 20	9 4	9 2
31							3 2	G	8 2	8 8	9 7	9 8
Count	4	1	2	1	1		7	27	31	31	31	91
Median							G	6 5	8 0	8 6	9 0	8 8
Mean								6 5	7 9	8 7	8 9	9 0

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo Es
 Unit Mc
 Month March 1961

TABLE 26—*Conid*
 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	Hour/Date
8 4	8 8	8 4	8 2	6 4								1
8 0	8 4	8 4	7 8	6 6				4 4				2
9 0	9 0	8 8	8 4	7 6								3
9 2	8 0	7 6	G	G					3 3			4
9 2	8 2	6 0	6 0	6 0	3 2							5
9 0	8 4	7 0	G	7 8								6
9 6	10 4	9 4	8 6	6 7							6 4	7
8 8	8 6	8 4	7 8						2 1			8
8 4	9 0	9 6	8 4	6 6								9
7 8	8 4	8 2	7 8									10
7 5	G	7 4	G	6 4				2 8		2 5	2 9	11
10 2	9 5	8 5	7 4	6 6								12
9 6	9 0	8 8	G								2 7	13
9 6	C	9 8	G						U6 0s	3 2	3 9	14
7 4	8 6	9 2	G									15
8 6	7 8	G	8 0									16
8 4	6 8	7 6	9 6		3 6					3 2	4 3	17
8 4	8 2	6 6	8 0	G								18
8 0	8 6	5 7	7 8	5 6								19
9 4	8 8	8 4	G	6 2								20
8 1	7 7	8 1	7 0	5 4								21
8 8	8 4	6 0	6 9									22
C	8 2	6 7	G									23
9 6	8 8	9 2	8 2									24
7 8	7 3	7 2	6 1									25
8 5	8 6	8 2	7 7	6 1	5 7							26
9 8	8 8	8 3	8 0									27
8 0	7 7	8 6	7 4									28
8 8	7 7 6a	8 1	5 6	6 3						3 4	3 4	29
8 7	8 8	G	7 3	6 2							3 6	30
8 8	7 8	7 8	8 0	6 4								31
30	30	31	31	19	3			2	3	4	7	Count
8 8	8 4	8 2	7 4	6 3							3 6	Median
8 7	8 4	8 0	7 7	6 4							3 9	Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic fb Es
 Unit Mc
 Month March 1961

TABLE 27
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

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

Characteristic fb Es
 Unit Mc
 Month March 1961

TABLE 27—*cont'd*
 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	Hour/Date
4 1	4 1	4 0	3 6	3 2								1
4 2	4 1	4 0	3 8	3 4					2 4			2
4 2	4 1	3 9	3 6	3 2								3
4 0	4 1	3 9	G	G	G					2 2		4
4 1	4 0	3 8	3 5	3 6	3 1							5
4 0	C	3 8	G	B								6
4 0	4 1	3 8	3 6	3 1								7
4 0	4 0	3 8	3 5	3 3							2 2	8
4 0	4 0	3 8	3 4	3 2								9
G	B	B	3 5	G								10
		G	G	G					2 1			11
4 1	4 0	3 7	6 5	3 0								12
4 0	3 8	4 0	3 5	G								13
4 0	4 0	4 2	4 1	G							2 8	14
3 9		4 0	3 6	G		C						15
		G	5 4	G	3 2							16
4 2		4 0	3 6	C						2 3		17
			5 2	G	G							18
4 2	4 2	G	4 0	3 6	2 9							19
4 0	4 2	4 1										20
4 4	4 3	4 1	3 7	3 6	3 0							21
			3 9									22
												23
			3 8	3 4								24
												25
4 4	4 5	4 0	3 8	G	4 5							26
C	4 4	4 1	3 7	3 2								27
			G	G								28
			4 2	3 7	3 0							29
4 5	4 4	G	4 2	3 3	2 8							30
4 3	4 4	4 1	3 8	3 8	3 0							31
21	18	23	27	25	9				2	3	1	Count
4 1	4 1	3 9	3 6	3 2	3 0							Median
4 1	4 2	4 0	4 0	3 4	3 2							Mean

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

Characteristic fb Es
Unit Mc
Month March 1961

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

Latitude 10 2°N
Longitude 77 5°E

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

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

Characteristic fb Es TABLE 27—Contd. Latitude 10 2°N
 Unit · Mc Ionospheric Data Longitude 77 5°E
 Month March 1961 75·0°E Mean Time

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fmin
Unit Mc
Month March 1961

TABLE 28
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Hour/Date	00	01	02	03	04	05	06	07	08	09	10	11
1	18	20	20	21	16	19	19	24	22	29	27	30
2	18	18	18	17	16	17	16	22	26	29	34	42
3	20	18	17	18	21	20	22	27	31	30	30	34
4	20	18	20	24	28	18	20	25	26	29	30	31
5	20	20	19	21	19	20	20	18	27	34	C	30
6	21	18	24	22	E	E	C	26	32	36	30	32
7	20	19	14	16	18	17	22	26	27	26	30	31
8	17	18	20	17	16	20	18	21	24	26	30	40
9	20	19	19	18	19	20	17	25	23	27	27	30
10	20	19	19	17	13	19	20	18	23	30	31	34
11	22	20	17	15	15	E	17	19	21	29	26	30
12	17	17	20	16	16	18	18	18	21	28	28	30
13	16	18	18	20	17	17	20	18	22	28	32	31
14	22	15	17	20	17	14	17	25	22	30	30	32
15	20	18	17	17	16	16	17	17	23	26	29	30
16	24	22	17	18	20	20	19	24	27	28	31	32
17	19	21	14	17	17	14	19	18	23	28	31	34
18	16	18	18	19	20	E	18	28	25	31	34	43
19	17	21	18	14	19	19	24	22	C	30	31	32
20	20	19	20	20	18	E	20	28	26	31	32	33
21	17	18	16	19	16	24	23	21	26	31	30	42
22	18	21	17	20	17	22	20	28	27	37	34	38
23	18	19	19	17	18	23	28	28	27	39	41	43
24	18	17	18	22	17	19	21	21	26	30	27	38
25	20	19	18	18	21	19	21	19	28	33	44	15
26	19	20	16	25	20	E	21	28	27	32	43	38
27	23	23	22	24	20	19	22	28	28	32	32	36
28	16	14	13	15	19	12	22	23	24	30	34	42
29	22	20	18	20	17	20	22	24	26	38	33	43
30	24	23	19	18	17	23	23	27	26	30	33	32
31	23	21	18	20	19	19	26	27	27	40	32	38
Count	31	31	31	31	31	31	30	31	30	31	30	31
Median	20	19	18	18	17	19	20	24	26	30	31	34
Mean	20	19	18	19	18	19	20	23	25	31	32	35

Sweep 20 Mc to 250 Mc in 27 seconds

Characteristic fmin
Unit Mc
Month March 1961

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fmin
 Unit Mc
 Month March 1961

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

Latitude : 10 2°N
 Longitude : 77 5°E

Hour/Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	19	2.1	19	18	18	20	22	22	25	28	28	31
2	17	17	18	17	17	21	22	21	26	29	32	42
3	19	23	15	16	18	18	23	31	29	30	32	34
4	18	21	23	21	18	20	22	22	26	30	31	31
5	17	20	23	20	18	E	22	24	28	32	30	36
6	21	21	21	22	E	E	22	24	36	30	33	33
7	21	17	18	18	17	22	23	22	25	27	32	30
8	20	20	20	21	22	17	23	20	24	25	27	41
9	20	17	15	20	18	16	21	22	23	26	28	30
10	18	20	17	17	18	19	17	19	28	31	32	31
11	19	15	15	17	23	E	17	21	23	27	32	30
12	21	14	18	16	18	20	16	21	26	25	30	32
13	19	17	18	17	15	19	20	24	25	28	31	32
14	19	17	18	16	14	E	23	21	25	28	30	31
15	17	20	24	15	22	18	21	19	25	26	29	32
16	20	19	22	20	21	27	27	28	27	29	3.2	30
17	18	17	18	18	18	17	17	21	26	28	31	36
18	18	20	15	17	25	E	24	30	30	31	40	42
19	19	20	18	18	19	C	23	25	31	30	31	32
20	18	21	15	18	17	E	22	23	28	31	33	34
21	23	20	18	16	22	E	18	25	28	30	32	34
22	22	21	17	19	17	19	25	25	30	38	36	43
23	21	16	22	19	23	18	26	26	32	32	40	42
24	18	21	21	24	22	18	23	22	28	32	34	35
25	19	19	19	14	22	E	24	23	37	32	45	45
26	23	20	17	20	17	E	24	31	31	31	44	36
27	23	19	23	25	20	E	25	30	30	32	33	36
28	19	14	14	14	14	15	19	20	26	31	37	44
29	24	20	19	24	22	21	24	26	32	32	41	43
30	22	21	16	19	13	21	24	25	31	C	32	34
31	21	21	19	20	20	21	22	26	37	31	30	38
Count	31	31	31	31	31	30	31	31	31	30	31	31
Median	19	20	18	18	18	18	22	23	28	30	32	34
Mean	20	19	19	19	19	19	22	24	28	30	33	35

Sweep 10 Mc to 250 Mc in 27 seconds.

Characteristic fmin
 Unit Mc
 Month March 1961

TABLE 28--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	Hour/Date
3 2	3 1	3 0	2 5	2 4	2 3	1 7	2 0	2 0	2 1	1 9	2 1	1
4 2	4 0	3 2	3 0	3 0	2 6	1 9	2 0	2 0	2 2	1 9	1 9	2
3 4	3 3	3 0	2 8	3 1	2 6	2 0	2 0	2 0	2 0	2 0	1 8	3
3 0	3 0	2 9	2 6	2 3	2 3	1 6	2 2	2 2	1 7	2 0	1 8	4
3 3	3 2	2 5	2 2	2 0	1 8	1 8	2 0	2 0	2 1	2 0	1 7	5
3 2	3 1	2 8	3 4	3 5	3 0	2 4	2 2	2 0	2 4	2 1	1 9	6
3 2	3 1	3 0	2 6	2 3	2 3	2 0	1 9	2 0	2 0	2 1	1 6	7
3 4	3 1	3 0	2 6	2 9	2 2	1 8	1 7	2 0	1 7	1 8	2 0	8
2 7	3 3	2 8	2 5	2 4	2 2	1 8	2 0	2 1	2 0	2 0	2 0	9
4 1	4 1	3 7	2 7	3 0	2 5	2 1	2 2	2 3	2 3	2 0	1 8	10
4 2	3 9	3 1	2 8	3 0	C	1 4	1 7	1 4	2 0	1 6	1 9	11
3 0	2 9	2 8	2 3	2 4	2 1	1 5	1 6	1 8	1 9	2 2	2 0	12
3 2	2 8	2 5	2 8	2 9	2 2	1 6	2 1	2 1	2 2	2 3	1 9	13
3 1	C	2 6	2 6	3 0	2 4	1 5	2 1	2 2	1 9	1 8	2 3	14
3 3	2 9	2 6	3 2	2 9	C	1 4	2 1	2 3	2 4	2 3	2 2	15
4 2	3 3	3 8	2 9	3 2	2 4	1 6	2 3	2 4	2 8	2 3	2 0	16
3 4	3 3	3 1	2 4	2 8	2 2	1 8	2 5	2 3	1 9	1 9	1 8	17
4 2	4 2	3 1	2 8	2 4	2 3	1 9	2 4	2 3	2 5	2 2	2 3	18
4 2	2 8	2 6	2 4	2 3	2 3	1 8	2 3	2 0	2 3	2 4	1 7	19
3 3	3 2	3 2	2 6	3 0	2 6	2 0	1 9	1 9	1 9	2 6	2 3	20
3 3	3 2	3 2	2 6	2 6	2 8	1 9	2 3	2 2	2 2	1 8	2 0	21
4 3	4 1	3 1	3 0	3 1	2 3	1 8	2 2	1 8	2 2	1 8	1 8	22
C	3 2	2 8	2 5	2 4	u3 Om	1 8	2 3	2 0	2 2	2 0	2 0	23
3 2	3 4	3 2	2 8	3 2	2 5	1 8	2 0	2 4	2 6	2 2	1 8	24
4 6	4 2	4 2	3 3	3 2	2 5	1 9	2 1	2 0	2 2	2 6	2 0	25
3 8	3 3	3 2	5 7	3 5	2 7	2 2	2 6	2 1	2 1	2 1	2 6	26
3 9	3 7	3 2	2 8	2 8	2 5	2 0	1 9	2 0	1 8	1 6	1 6	27
4 3	4 4	3 0	3 5	3 2	3 7	2 3	2 1	2 4	2 5	2 4	2 4	28
4 5	u4 4c	4 0	2 7	2 3	2 4	1 8	2 3	2 4	C	2 4	2 2	29
3 6	3 6	2 8	3 0	2 9	2 6	1 6	1 9	2 1	2 2	1 8	1 9	30
3 5	3 0	3 1	2 4	2 2	2 6	1 7	1 9	2 1	2 0	2 0	1 9	31
3 0	3 0	3 1	3 1	3 1	2 9	3 1	3 1	3 1	3 0	3 1	3 1	Count
3 4	3 3	3 0	2 7	2 9	2 4	1 8	2 1	2 1	2 2	2 0	1 9	Median
3 6	3 4	3 1	2 8	2 8	2 5	1 8	2 1	2 1	2 1	2 1	2 0	Mean

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

Characteristic h'F2
 Unit Km
 Month March 1961

TABLE 29
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Hour/Date	00	01	02	03	04	05	06	07	08	09	10	11
1									L	L	300	L
2									285	300	300	L
3									L	L	320	340
4									L	L	300	315
5									L	L	C	320
6									L	L	L	L
7									L	L	L	L
8								L	L	L	L	L
9								L	L	L	L	L
10								L	L	L	L	L _H
11									L	L	L	L
12									L	L	L	L
13								L	L	L	L	360
14									L	L	L	L
15									L	L	L	L
16									L	L	L	L
17								L	L	L	L	L
18								L	L	L	L	L
19								L	C	L	L	L
20								L	L	L	L	L
21									L	L	L	L
22									L	L	L	L
23									L	L	L _H	L _H
24								L	L	L	L	L
25									L	L	L	L
26									L	L	L	L
27									L	L	L	L
28									L	L	L	L
29									L	L	L	L
30									L	L	L	L
31								L	L	L	L	L
Count									1	1	4	4
Median												
Mean												

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic : h'F2
 Unit Km
 Month March 1961

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	Hour/Date
L	L	L	L	L	L							1
L	L	L	L	L	L							2
320	L	L	L	L	L							3
L	L	L	L	L	L							4
300	300	L	L	L	L							5
L	C	L	L	L	L							6
L	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L _M	L	L	L							9
L	L	L	L	L	L							10
L	L	L	L	L	L							11
L	L _M	L _M	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	A	L	L							16
L	L	L	L	L	C				L			17
L	L	L	L	L	L				L			18
L	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	L	L	L	L				L			26
L	L	L	L	L	L				L			27
L	L	L	L	L	L				L			28
L	L	L	L	L	L				L			29
L	L	L	L	L	L				L			30
L	L	L	L	L	L				L			31
2	1	-										Count
												Median
												Mean

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

Characteristic h'F2 TABLE 29--Contd. Latitude 10 2°N
 Unit Km Ionospheric Data Longitude 77 5°E
 Month March 1961 75 0°E Mean Time

Hour/Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	
1								L	L	300	300	L	
2								L	300	300	300	305	
3								L	L	L	305	315	
4								L	L	L	L	L	
5								L	L	320	320	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	
11							.	L	L	L	L	L	
12								L	L	L	L	L	
13								L	L	L	L	350	
14							.	L	L	L	L	L	
15								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	
20								L	L	L	L	340	
21								L	L	L	L	L	
22								L	L	L	L	L	
23								L	L	L	L _{EX}	L _{EX}	
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	
Count										1	3	4	4
Median													
Mean													

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

Characteristic h'F2
Unit Km
Month March 1961

TABLE 29—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	Hour 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
320	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 _h	L	L	L	L								12
L	L	L	L	L								13
L	C	L	L	L								14
L	L	L	L	L								15
L	L	L	L	L								16
L	L	L	L	L								17
330	L	L	L	L		L						18
L	L	L	L	L		L						19
L	L	L	L	L								20
L	L	L	L	L								21
L	L	L	L	L								22
C	L	L	L	L								23
L	L	L	L	L								24
L	L	L	L	L								25
L	L	L	A	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		L						31
2												Count
												Median
												Mean

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

TABLE 30
Ionospheric Data
75 0°E Mean Time

Characteristic h'F
Unit Km
Month March 1961

Latitude 10 2°N
Longitude 77.5°E

12	13	14	15	16	17	18	19	20	21	22	23	Hour Date
200	200	200	200	220	240	275	360	340	275	240	220	1
200	200	B	B	225	250	270	340	360	F	F	245	2
200	200	200	200	220	245	265	370	300	F	F	260	3
190 _H	200 _H	200	200	210	240	270	390	F	320	280	255	4
200	200	200	200	A	245	260	320	360	F	220	260	5
200	C	220	230	245	260	280	300	300	215	240	250	6
205	205	200	200	215	240	270	315	F	F	300 _F	240 _F	7
200	200	200	205	220	240	270	300	325	340 _F	280 _F	260 _F	8
200	195	200	200 _H	230	250 _F	270	335	340 _F	305 _F	250 _F	240	9
200	205	220	205	235	250	280	315	245	215	230	230	10
215	210	205	210	220	240	265	280	315	280 _F	270	260 _F	11
220	200	200	A	190 _H	240	265	300	330	320 _F	280	270	12
200	195 _H	220	220	225	245	275	325	F	F	280 _F	280	13
200	210	240 _A	245 _A	220	260	260	280	265	260	270	270	14
200	220	230 _A	220	220	255	C	340	F	320 _F	265	260	15
200	220	215	A	230	260	275	300	280	260	240	240	16
195	205	215	215	C	240	280	375	F	260	230	230	17
215	200	205	A	230	240	270	360	F	270	245	240	18
205	200	215	240	235	245	280	360	300	230	220	245	19
200	200	200	200	230	250	280	330	325	270	235	230	20
200	205	200	220	240	255	275	380	F	280	250	240	21
200	200	200	220	220	250	270	320	260	310	270	260	22
C	180	200	200	215	250	280	395	350 _F	325 _F	260	240	23
220	210	220	200	225	250	280	420	F	F	275 _F	260 _F	24
215 _B	200 _B	200	220	220	255	290	365	F	300 _F	315 _F	235	25
200	220	210	220	B	290 _A	290	420	F	F	250	230	26
C	210	200	210	230	255	290	420	F	330	F	260	27
B	220	220	230	220	260	270	340	360 _F	350 _F	F	260 _F	28
205	220 _B	210	220	235	260	285	415	350 _F	300 _F	260	245	29
200	235 _A	230 _B	250	235	245	290	380	F	F	250	260	30
210	220	200	215	260 _A	260	280 _H	F	380 _F	300 _F	260 _F	255	31
28	30	30	27	28	31	30	30	19	23	28	31	Count
200	200	200	215	225	250	275	340	325	300	260	250	Median
205	205	210	215	225	250	275	350	320	290	260	250	Mean

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

Characteristic $h'F$
 Unit Km
 Month March 1961

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

Latitude 10.2°N
 Longitude 77 5°E

Hour Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	225	225	240	245	260	240	260	235	215	200	200	200
2	220	220	235	235	240	260	240	230	215	200	200	200
3	220	215	210	220	235	275	260	240	220	205	200	205
4	225	215	215	230	240	260	250	230	220	200	200	200
5	220	200	220	220	235	E	240	235	220	200	200	200
6	∩235 _F	205	∩220 _F	F	E	E	255	245	235	220	200	210
7	235	230	240	240	245	260	255	235	220	205	195	220
8	∩230 _r	∩225 _F	225 _r	240	240	225	245	235	220	205	200	200
9	245	230	235	225	240	∩235 _r	245	235	220	210	205	200
10	240	225	220	240	280	∩280 _F	250	240	220	210	210	205
11	260	240	∩300 _L	∩320 _r	∩315 _L	E	260	240	230	220	200	205
12	245	225	230	240	240	220	260	230	220	205	200	200
13	265	250	225	215	225	220	245	22 _{III}	220	200	200	205
14	240	220	220	225 _H	235	E	245	220	210	200	200	200
15	260	240	225	220	240	260	255	235	210	200 _{IX}	200	215
16	240	220	220	255	∩270 _L	L	260	240	220	205	200	220
17	235	220	225	235	245	240	245	225	215	205	200	200
18	245	230	225	230	∩280 _L	F	240	225	205	205	200	200
19	275	245	225	225	245	C	250	230	215	210	200	205
20	270	250	220	240	240	E	250	225	220	220	200	200
21	225	220	240	240	245	E	250	225	220	210	210	200
22	250	235	220	240	235	240	255	230	220	220	220	210
23	250	220	230	230	240	240	255	235	220	220	220 _H	220
24	230	220	230	240	260	265	255	235	230	220	∩240 _r	200
25	250	240	220	230	240	E	260	245	230	220	B	∩220 _B
26	225	220	225	240	255	E	260	240	220	210	210	200
27	230	230	230	250	260	E	260	235	220	215	210	215
28	260	280	270	260	240	240	260	240	220	215	220	215
29	260	240	230	230	240	∩320 _L	255	240	230	220	210	210
30	240	240	250	245	235	240	260	230	220	220	205	200
31	260	250	250	235	230	240	250	230	220	220	205	215
Count	31	31	31	30	31	28	31	31	31	31	30	31
Median	240	225	225	240	240	240	255	235	220	210	200	205
Mean	240	230	230	240	250,	250	255	235	220	210	205	205

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month March 1961

TABLE 30—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	Hour Date
190	200	200	215	235	260	305	400	300	240	240	225	1
200	200	B	205	240	260	300	360	360	360	F	240	2
200	200	200	200	235	260	300	380	290	320	240	245	3
180 _H	200	195	205	225	260	300	F	380	270	260	260	4
200	190	205	200	A	255	280	360	F	F	260	270 _F	5
220	210	210	230	260	270	295	305	270	240	245	245	6
205	200 _H	200	205	225	260	300	400 _r	F	F	250 _F	245 _r	7
200	200	205	205	225	255	290	315	360 _F	300 _r	270 _F	260	8
205 _H	200 _U	200 _H	200	225	260	290	360	360 _F	285 _F	240	250	9
210	215	200	200	240	265	300	285	220	220	230	260	10
215	210	215	210	225	C	260	300	315 _F	270 _F	270	260	11
200	200 _H	205	240 _A	240	255	290	305	360	295	280	270	12
185 _H	200	235 _A	220	235	260	290	F	F	275	265 _F	260 _r	13
215	C	A	220	230	265	275	280	270	265	270	280	14
215	215	240 _A	220	230	C	300	F	320	275	260 _r	255	15
200	200	220	230	240	260	280	300	280	250	240	240	16
200	210	230	A	235	255	320	F	305 _F	225	225	240	17
205	200	A	A	230	255	305	400 _F	F	285	285	260	18
225	210	220	A	245	265	315	370	240	225	240	265	19
200	200	200	220	235	265	310	320	300	240	240	230	20
210	200	200	220	255	205	315	405	F	280	240	240	21
205	200	200	225	240	260	300	255	240	280	255	260	22
C	210	205	210	240	265 _H	310	440	315	300	235	235	23
220	220	205	220	240	260	325	420	F	250	F	260	24
220 _B	215	220	220	240	270	340	F	F	290	F	240	25
200	215	220	A	260	270	340	445 _F	F	F	230	245	26
210	220	220	220	230	270	340	430	F	330	250	260	27
210 _H	220 _B	240	215	240	265	300	360	F	340 _r	260 _F	255	28
220 _B	210	220	220	240	270	340	380 _F	F	C	260	245	29
200	215	225	A	240	270	335	420 _F	F	F	270	260	30
210	200	215	230 _A	250	280	350	F	380 _F	F	260	245	31
30	30	28	26	30	29	31	25	19	25	28	31	Count
205	200	210	220	240	260	300	360	305	275	250	255	Median
205	205	210	215	240	265	305	360	310	270	250	250	Mean

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

Characteristic h'Es
 Unit Km
 Month March 1961

TABLE 31
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Hour	00	01	02	03	04	05	06	07	08	09	10	11
Date												
1									A	A	A	A
2								120	115	A	A	B
3									105	A	A	A
4									105	A	A	A
5								105	A	A	C	A
6									B	B	A	A
7									115	110	A	A
8								125	A	110	A	B
9									A	115	110	A
10								120	∇120 _v	A	A	A
11								120	A	120	110	120
12								120	120	120	120	A
13								A	115	120	A	120
14								∇130 _m	120	120	120	120
15								120	A	115	A	115
16								130	120	120	120	120
17								110	A	A	A	A
18									110	105	A	B
19								120	C	A	A	A
20									115	A	A	A
21								120	115	A	A	B
22									120	B	120	∇120 _m
23									120	B	B	B
24								120	120	120	120	120
25								120	A	A	B	B
26									A	A	B	A
27									A	A	A	A
28								135	115	120	120	B
29								130	A	B	120	B
30									A	A	A	A
31									A	B	A	B
Count								16	16	12	9	7
Median								120	115	120	120	120
Mean								120	115	115	120	120

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
Unit Km
Month March 1961

TABLE 31—Cont'd
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	Hour Date
A	A	A	A	A								1
B	B	B	A	A								2
A	A	A	A	A								3
A	A	A	105	115	120							4
A	A	A	A	A	A							5
A	C	A	B	B ^m								6
A	A	A	A	A								7
A	A	120	120	115								8
A	A	A	120	120	125							9
B	B	B	A	130								10
120	B	120	B	120								11
120	120	120	A	120								12
120	120	105	A	130								13
120	120	A	A	120								14
A	120	A	A	B								15
120	B	B	A	B								16
A	115	A	A	C								17
B	B	B	A	B	140							18
A	A	110	A	A	A							19
A	A	A	115	120								20
A	A	110	115	A	A							21
B	B	B	A	120								22
C	120	115	B	120								23
120	120	B	125									24
B	B	B	A	A								25
A	A	A	A	B								26
C	A	A	A	A								27
B	B	B	B	120								28
B	B	B	B	A	A							29
A	A	B	120	A	A							30
A	A	A	A	A	A							31
6	7	7	7	12	3							Count
120	120	115	120	120								Median
120	120	115	115	120								Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
 Unit Km
 Month March 1961

TABLE 31—Contd
 Ionospheric Data
 75.0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic	h' E					TABLE 31—Cont'd							Latitude
Unit	Km					Ionospheric Data							10° 2' N
Month	March 1961					75° E Mean Time							Longitude
	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour
													Date
A	A	A	A	A	A								1
B	B	A	A	A	Aj								2
A	A	A	A	A	A								3
A	A	A	A	110	120								4
A	A	A	A	A	Aj								5
A	A	120	B	B	B								6
A	A	A	A	A	120								7
A	A	A	A	120									8
110	A	120	120	120	120								9
B	B	B	125										10
B	B	120	120	B	B								11
120	120	120	A	A									12
120	115	A	120										13
120	C	A	110										14
120	A	A	B										15
B	120	B	A										16
A	115	A	A										17
B	B	A	A	120									18
A	A	A	A	A									19
A	A	A	115										20
A	A	A	A	A									21
B	B	A	125										22
C	120	115	120	125									23
115	120	120	120										24
B	B	B	A										25
A	A	A	B										26
A	A	A	A										27
B	B	A	B										28
B	C	B	A	A									29
A	A	115	120	A									30
A	A	A	A	A									31
												Count	
6	6	7	12	5								Median	
120	120	120	120	120								Mean	
120	120	120	120	120									

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

Characteristic h'Es
 Unit Km
 Month March 1961

TABLE 32
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

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

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

Characteristic h'Es		TABLE 32 Ionospheric Data 75 0°E Mean Time										Latitude 10 2°N Longitude 77 5°E			
Unit	Km											Hour	Date		
Month	March 1961	12	13	14	15	16	17	18	19	20	21	22	23		
100	100	100	100	100	100										1
100	100	100	100	100	100						105		..		2
100	100	100	100	100	100										3
100	100	100	G	G	G							105			4
100	100	100	100	100	100										5
100	C	100	G	100	100										6
100	100	100	100	100	105								120		7
100	100	100	105	100	100										8
100	100	100	100	100	105										9
G	100	100	100	G											10
100	100	G	G	G	110										11
100	100	100	100	110				..		110	110	125			12
100	100	100	100	G									110		13
100	100	100	100	G								110			14
100	100	100	100	G			C								15
100	100	G	100	G	100										16
100	100	100	100	C								110	115		17
100	100	100	100	G	G										18
100	100	G	100	100	100										19
100	100	100	100	105	105										20
100	100	100	100	100											21
100	100	100	100	100	100										22
C	100	100	100	100	100										23
100	100	105	100	105											24
100	100	100	100	100											25
100	100	100	100	G	120										26
C	100	100	100	100											27
100	100	100	100	G											28
100	100	100	G	100	100								125		29
100	100	G	135	130	100						130				30
100	100	100	100	100	100										31
28	30	27	27	20	11						3	4	5		Count
100	100	100	100	100	100								120		Median
100	100	100	100	105	100								120		Mean

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

Characteristic h'Es
 Unit Km
 Month March 1961

TABLE 32—*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	100	100	100	100
2								G	100	100	100	100
3									100	100	100	100
4								100	100	100	100	100
5								105	100	100	100	100
6								110	G	100	100	100
7								105	100	100	100	100
8								100	100	100	100	100
9								G	100	100	100	100
10							G	100	100	100	100	100
11				110			G	110	100	100	100	100
12						100	G	110	105	100	100	100
13		120	120					110	110	100	100	100
14								115	105	100	100	100
15								110	110	100	100	100
16								110	110	110	100	100
17							G	105	105	100	100	100
18									100	100	100	100
19		100						105	105	100	100	100
20								G	100	100	100	100
21							G	105	100	100	100	100
22								G	105	100	100	100
23								105	105	100	100	100
24								110	105	100	100	100
25								130	105	100	100	100
26									100	100	100	100
27									100	100	100	100
28		120		120	115		195	G	100	100	100	100
29		120						110	110	100	100	100
30								100	100	100	100	100
31							135	G	100	100	100	100
Count	4	1	2	1	1		2	20	30	31	31	31
Median								110	100	100	100	100
Mean								110	105	100	100	100

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

Characteristic h'Es
Unit Km
Month March 1961

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								1
100	100	100	100	100								2
100	100	100	100	105								3
100	100	100	G	G					105			4
100	100	100	100	100	100							5
100	100	100	G	100								6
100	100	100	100	105							105	7
100	100	100	105						115			8
100	100	100	105	110								9
100	100	100	105									10
100	G	100	G	110				120		105	120	11
100	100	100	100	110								12
100	100	100	G								115	13
100	G	100	G						115	110	115	14
100	100	100	G									15
100	100	G	100									16
100	100	100	100		145					110	110	17
100	100	100	100	G								18
100	100	100	100	100								19
100	100	100	G	110								20
100	100	100	100	100								21
100	100	105	100									22
C	100	100	G	G								23
100	100	105	105									24
100	100	100	100									25
100	100	100	120	120	140							26
100	100	100										27
100	100	100	100									28
100	100	100	100	100						120	120	29
100	100	G	125	130							115	30
100	100	100	100	100								31
90	29	29	22	16	8			1	3	4	7	Count
100	100	100	100	100							115	Median
100	100	100	105	105							115	Mean

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

Characteristic (M3000)F2
 Unit : —
 Month March 1961

TABLE 33
 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	3 20	F	3 40	3 10	3 10	3 20	3 00	2 55	2 45	2 65	2 55
2	3 30	3 30	3 35	3 40	3 35	3 20	3 15	3 25	3 15	2 80	2 50	2 50
3	F	3 40	3 45 _F	3 40	3 30	3 40	2 95	3 10	2 75	2 55	2 60	2 50
4	F	3 30	F	3 45 _F	3 45	3 60 _r	2 95	3 20	2 75	2 50	2 60	2 50
5	3 20	F	F	3 40	3 40	3 40 _r	2 90	3 00	2 60	2 50	C	2 60
6	F	F	3 45	F	E	E	C	3 50	3 05	3 00	2 60	2 25 _{EX}
7	3 10	3 20	3 30	3 35	3 40	3 50	2 95	3 20	2 90	2 65	2 55	2 50
8	F	F	F	3 30 _r	3 40	3 50	3 30	3 40	3 10	2 80	2 45 _{EX}	2 60
9	3 00 _F	3 20	3 30	3 30	3 25	3 25 _F	F	3 25 _F	3 15	2 75	2 40 _{EX}	2 60
10	3 10	3 30	3 40	3 30	3 10	3 00 _F	F	3 15	2 95	2 50	2 65	2 60
11	3 20	3 40	3 35	3 20	3 40 _r	E	2 80	3 05	2 95	2 70	2 65	2 70
12	3 10	3 20	3 30	3 20	3 30	3 50	3 40	3 10	2 80	2 60	2 65	2 60
13	3 00	3 00	3 25	3 45	3 40	3 50	3 30	3 30	3 00	2 45 _{EX}	2 55	2 60
14	F	3 40	3 50	3 50	3 60	3 50 _r	3 20	3 20	2 65	2 70	2 55	2 45
15	3 10	3 30	3 40	3 30	3 50	3 50	3 10	3 00	2 55	2 50	2 75	2 55
16	F	3 40 _s	3 50	3 50	3 35	3 30	3 20	3 10	2 55	2 55	2 50	2 60
17	3 15	3 40	3 30	3 30	3 30	3 25	3 20	2 95	2 55	2 50	2 50	2 40
18	3 20	3 20	3 30	3 40	3 40	E	3 10	3 40	3 10	2 60 _{EX}	2 45	2 40
19	3 00	3 15	3 25	3 40	3 40	3 45	3 00	2 90	C	2 50	2 55	2 30
20	2 95	3 00	3 25	3 35	3 25	E	3 05	3 10	2 80	2 20	2 45	2 30
21	3 20	3 40	3 20	3 25	3 30	3 45	3 10	3 05	2 70	2 40	2 30	2 40
22	3 10	3 30	3 40	3 30 _s	3 35	3 45	3 15	3 20	3 05	2 65	2 35	2 50
23	3 15	3 30	3 35	3 40	3 40	3 40	3 20	3 10	2 80	2 40	2 50	2 55
24	F	F	3 30 _s	3 40 _s	3 30	3 40	3 20	3 05	2 70	2 50	2 50	2 45
25	F	F	3 35	3 40	3 30	3 35 _r	3 20	3 20	2 90	2 40	2 40	2 40
26	3 40 _s	3 30	3 40 _s	3 30	3 40 _r	E	3 10	3 25	2 75	2 30 _{EX}	2 45	2 50
27	3 30	3 30 _s	3 35	3 50	3 40	3 50 _r	3 20	3 20	2 85	2 50	2 30	2 50
28	3 10 _F	S	F	F	3 30 _F	3 25	F	3 10	2 80	2 45	2 55	2 45
29	3 20	3 20	F	F	3 50	3 50	3 10	3 00	2 70	2 50	2 50	2 55
30	F	3 10 _s	F	F	3 30	F	3 20	3 10	2 70	2 60	2 50	2 40
31	F	F	F	F	3 40	3 60	3 30	3 00	2 70	2 35	2 40	2 40
Count	20	24	23	26	30	25	27	31	30	31	30	31
Median	3 10	3 30	3 35	3 40	3 40	3 45	3 15	3 10	2 80	2 50	2 50	2 50
Mean	3 15	3 25	3 35	3 35	3 35	3 40	3 15	3 15	2 80	2 55	2 50	2 50

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F2
 Unit . —
 Month March 1961

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 45	2 55	2 45	2 45	2 45	2 45	2 50	2 25	F	2 80	2 90	3 15	1
2 50	2 55	2 55	2 50	2 50	2 40	2 40	2 35	2 30	F	F	2 80	2
2 55	2 55	2 50	2 50	2 55	2 55	2 50s	2 30	F	F	F	F	3
2 60	2 55	2 60	2 60	2 70	2 65	2 50	2 30	F	F	F	3 00r	4
2 55	2 55	2 60	2 60	2 65	2 70	2 60	2 55	F	F	F	F	5
2 50	C	2 50	2 50	2 55	2 60	2 55	2 40	2 50	2 80	3 05	3 10	6
2 55	2 60	2 60	2 55	2 50	2 55	2 60	2 40	F	F	F	F	7
2 65	2 65	2 60	2 65	2 60	2 65s	2 50	2 35	2 30r	F	F	F	8
2 55	2 65	2 55	2 45	2 40	2 55	2 65	2 45	2 30r	F	2 90	3 00	9
2 65	2 60	2 35	2 35r	2 50	2 70	2 60	2 55	2 90	3 30	2 30	3 20	10
2 65	2 70	2 75	2 80	2 80	2 80	2 60	2 55s	2 55	2 65	2 80r	F	11
2 60	2 60	2 60	2 70	2 70	2 65	2 55	2 50	2 35	2 40r	2 55	2 70r	12
2 55	2 55	2 70	2 80	2 95	2 95s	2 80s	2 55	F	F	F	2 10s	13
2 60	2 70	2 70	2 85	2 90	2 85	2 80	2 80	2 90r	3 00	3 05	3 10	14
2 55	2 65	2 65	2 70	2 80	2 65	C	2 40r	F	F	F	F	15
2 55	2 55	2 65	2 80	2 80s	2 85	2 70	2 60	2 70	2 90	3 10	3 20	16
2 35	2 60	2 60	2 60	C	2 70	2 55	2 30	F	F	F	3 15	17
2 40	2 45	2 50	2 60	2 75	2 85	2 75	2 40	F	F	F	3 00	18
2 65	2 60	2 50	2 60	2 50	2 50	2 35	2 25	2 40	2 90	3 20	3 00	19
2 45	2 45	2 40	2 40	2 50	2 50	2 40	2 30	2 45	2 60	2 95	3 15	20
2 40	2 35	2 30	2 50	2 50	2 60	2 50	2 20	F	F	2 80	F	21
2 50	2 45	2 55	2 60	2 60	2 60	2 45	2 40	2 35r	2 60r	2 80	3 10r	22
C	2 50	2 50	2 55	2 60	2 50	2 45	2 15r	F	F	F	3 10	23
2 45	2 45	2 40	2 50	2 50	2 45	2 40	2 05r	F	F	2 90r	F	24
2 50	2 50	2 50	2 55	2 55	2 50	2 30	2 10r	2 30r	F	F	F	25
2 45	2 45	2 50	2 55	2 60	2 65	2 50	2 20	F	F	3 20	3 30	26
C	2 40	2 45	2 40	2 40	2 35	2 30	2 05	F	F	F	F	27
2 30	2 40	2 40	2 50	2 60	2 60	2 50	2 50s	2 35	2 55	F	F	28
2 45	2 45	2 50	2 50	2 60s	2 55	2 70	2 40r	F	F	F	2 30r	29
2 35	2 30	2 35	2 50	2 50	2 55	2 50	2 30	F	F	2 90r	F	30
2 45	2 60	2 45	2 60	2 60	2 60	2 35	F	F	F	F	2 30s	31
29	30	31	31	30	31	30	30	14	11	15	19	Count
2 50	2 55	2 50	2 55	2 60	2 60	2 50	2 40	2 40	2 80	2 90	3 10	Median
2 50	2 55	2 50	2 55	2 60	2 60	2 55	2 35	2 50	2 75	2 95	2 05	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F2

TABLE 33—Contd

Latitude 10 2°N

Unit —

Ionospheric Data

Longitude 77 5°E

Month March 1961

75 0°E Mean Time

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

Sweep 1 0 Mc to 25 0 Mc in 27 seco ds

Characteristic (M3000)F2
Unit —
Month March 1961

TABLE 33—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	Hour/Date
2 45	2 50	2 50	2 45	2 45	2 50	2 40	F	2 60F	2 85	F	3 20	1
2 50	2 60	2 55	2 50	2 45	2 40	2 40	2 30	F	F	F	F	2
2 50	2 55	2 45	2 50	2 50	2 50	2 45	F	F	F	F	F	3
2 50	2 55	2 60	2 65	2 65	2 60	2 40	F	F	F	∩3 10r	3 05	4
2 60	2 55	2 55	2 60	2 70	2 65	2 60	F	F	F	F	F	5
2 50	2 55	2 55	2 55	2 60	2 65	2 45	2 45	2 65	2 90	3 10	3 10	6
2 55	2 60	2 55	2 50	2 50	2 60	2 60	∩2 30F	F	F	F	F	7
2 70	2 65	2 70	2 65	2 60	2 55	2 40	2 35	F	F	F	∩3 10F	8
2 60	2 60	2 50	2 40	2 45	2 60	2 60	2 40	F	F	F	3 00	9
2 65	2 45	2 40	2 40	2 60	2 70	2 60	2 70	3 20	3 30	∩3 45F	3 00	10
2 70	2 75	2 75	2 80	2 80	C	2 55	∩2 60R	2 60	2 70	∩2 90R	3 00	11
2 60	2 60	2 65	2 70	2 65	2 60	2 50	2 45	∩2 35F	2 55	2 70	∩2 95r	12
2 55	2 60	2 80	2 90	∩2 95R	2 95	2 70	2 50	F	F	∩3 10R	F3	13
2 70	C	2 80	2 85	∩2 90R	2 85	∩2 75R	∩2 80R	2 95	3 05	3 10	3 00	14
2 60	2 65	2 70	2 70	2 80	∩2 60R	2 45	F	F	F	F	F	15
2 50	2 60	2 70	2 80	2 85	2 80	S	2 65	2 75	3 00	3 15	3 15	16
2 55	2 60	2 60	2 65	2 70	2 65	∩2 45R	2 30	F	F	3 10	3 20	17
2 40	2 45	2 55	2 70	2 80	2 80	2 60	F	F	F	3 05	3 00	18
2 65	2 60	2 55	2 50	2 50	2 40	2 30	F	2 65	3 10	3 10	2 95	19
2 50	2 40	2 40	2 45	2 50	2 50	2 30	2 40	∩2 55F	2 90	3 05	3 20	20
2 45	2 30	2 35	2 55	2 55	2 60	2 30	F	F	F	∩3 00F	3 05	21
2 40	2 50	2 60	2 65	2 60	2 50	2 40	∩2 30F	∩2 40F	2 70	2 85	3 10	22
C	2 50	2 50	2 80	2 60	2 50	∩2 35R	F	F	F	3 00	3 20F	23
2 45	2 40	2 45	2 45	2 50	S	∩2 30R	2 20F	F	F	F	F	24
2 50	2 50	2 55	2 60	2 60	2 40	2 15	F	F	F	F	3 20	25
2 45	2 45	2 50	2 65	2 65	2 60	2 30	F	F	F	3 25	F	26
2 40	2 45	2 40	2 45	2 40	2 30	2 20	F	F	F	F	∩3 10F	27
2 35	2 40	2 40	2 50	2 55	∩2 60R	2 50	2 30	2 40	∩2 80F	F	S	28
2 45	2 40	2 50	2 50	2 50	∩2 75R	2 50	F	F	C	F	3 20	29
2 30	2 35	2 40	2 55	2 60	2 50	2 35	F	F	F	F	3 00	30
2 45	2 70	2 50	2 60	2 55	2 70	2 25	F	F	F	F	3 20F	31
30	30	31	31	31	29	30	16	11	11	17	22	Count
2 50	2 55	2 55	2 60	2 60	2 60	2 40	2 40	2 60	2 90	3 10	3 10	Median
2 50	2 50	2 55	2 60	2 60	2 60	2 45	2 45	2 65	2 90	3 05	3 10	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic . foF2
Unit Mc
Month . April 1961

TABLE 34
Ionospheric Data
75 0°E Mean Time

Latitude . 10 2°N
Longitude . 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	F	09 4 _F	F	06 0 _F	5 9 _F	4 8	5 8	8 8	10 3	11 0	10 7	9 4
2	11 6 _F	8 1	6 6	5 9	5 4	5 0	6 1	9 1	11 4	11 9	11 0 _R	9 6
3	12 4	8 5	5 9	3 8	E	E	5 4	8 5	10 6	R	9 2	9 9
4	11 6	8 4	6 4	4 8	3 2	R	5 4	8 8	9 9	8 8	8 6	8 6
5	10 4	7 4	5 8	4 2	02 5 _R	E	5 0	8 2	9 8	10 4	9 2	8 8
6	F	F	06 9 _F	6 6 _R	4 8	R	5 1	8 4	9 8	10 0 _R	8 2	8 0
7	F	F	07 5 _F	5 7	3 7 _F	2 9 _F	5 3	8 3	10 0	8 5	8 4	8 8
8	10 8	8 4	6 7	5 0	3 6	2 4	5 5	8 6	10 1	10 5	9 4	9 6
9	12 0	9 3	6 7	4 8	3 1	E	5 1	7 8	9 0	8 6	8 6	8 8
10	11 0	10 0	8 2	6 5	5 7	4 9	6 3	8 6	10 1	11 1	10 9	9 7
11	F	F	9 5	6 4	4 1	2 6	5 4	8 2	9 4	9 6	8 4	8 8
12	7 9	8 2	F	F	4 4	2 9	5 1	8 1	9 2	8 2	8 0	8 2
13	9 2	7 6	5 4	3 8	02 2 _R	E	5 3	7 8	9 0	09 0 _R	8 0	7 6
14	09 4 _s	7 8	6 4	4 8	3 4	02 8 _R	5 1	8 0	9 4	8 2	7 8	8 2
15	F	07 9 _F	06 7 _F	5 4	02 7 _R	E	06 0 _s	8 6	10 8	11 2	10 4	10 8
16	10 0	8 3	07 0 _s	5 6	4 8	3 3	5 7	8 6	11 0	11 6	010 6 _R	9 8
17	9 4	8 6	7 5	05 9 _s	4 4	3 3	6 0	8 9	10 9	11 5	10 3 _R	8 8
18	10 8	8 5	7 6	07 6 _s	07 0 _s	5 3	6 3	8 4	10 4	11 2	R _R	8 8
19	F	08 0 _F	6 7	5 6	5 1	3 8	6 2	8 6	9 9	C	C	C
20	10 5	09 3 _s	8 0	7 1	5 2	3 4	5 8	8 5	10 0	10 4	9 8 _R	8 3
21	10 6	09 0 _R	7 7	F	5 6	4 4	6 0	8 3	9 4	10 2	10 2 _R	8 8
22	10 0	8 6	7 6	07 0 _s	6 2	4 9	6 6	8 7	9 7	10 0	9 7	9 1
23	09 6 _F	9 0	7 0	5 7	F	F	05 8 _R	9 0 _F	10 4	11 4	R	9 0
24	F	09 8 _s	8 0	07 3 _s	6 5	4 6	6 5	8 8	9 9	10 9	12 0	12 0
25	09 8 _s	8 1	7 5	7 6	F	6 3	8 0	9 8	10 6	011 0 _R	9 7	9 3
26	8 6	8 0	07 3 _s	7 3	6 5	4 0	6 3	9 1	10 0	9 8	9 4	9 0
27	8 1	07 2 _s	6 9	6 8	6 0	3 9	6 4	8 7	9 5	9 1	9 0	9 3
28	9 8	8 7	8 5	8 1	07 5 _s	5 4	6 8	9 0	10 4	10 7	9 6	9 5
29	F	F	F	F	C	C	C	C	C	C	C	C
30	8 6	7 8	6 8	5 8	3 4	02 5 _R	6 4	8 8	9 7	10 4 _R	9 0	9 3
Count	22	26	27	27	27	26	29	29	29	27	27	28
Median	10 0	8 4	7 0	5 9	4 8	3 4	5 8	8 6	10 0	10 4	9 4	9 0
Mean	10 1	8 5	7 1	6 0	4 7	4 0	5 9	8 6	10 0	10 2	9 4	9 1

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
 Unit . Mc
 Month April 1961

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	Hour/Date
9 2	9 6	10 6	11 7	12 7	12 6	11 8	10 6	F	F	h	h	1
9 6	9 9	10 3	11 5	12 6	12 5	11 8	10 3	F	F	u11 2 _F	12 8	2
10 5	10 3	10 9	11 8	12 8	12 7	12 0	11 3	C	11 0	12 7	u13 0 _F	3
8 5	8 9	9 6	10 5	11 4	11 8	11 4	F	F	F	u10 2 _F	11 0 _F	4
8 7	9 1	10 4	11 1	11 1	11 6	11 6	F	F	F	h	F	5
8 9	9 3	9 8	10 8	11 2	11 3	11 0	F	h	F	F	F	6
9 0	9 2	10 0	10 7	11 0	10 4	10 6	9 3	7 6	F	F	h	7
9 8	9 7	10 3	10 8	11 2	11 4	11 8	10 7	10 2	10 4	F	12 0	8
9 1	9 3	9 6	10 1	10 4	10 8	11 6	11 7	9 5	9 8	8 6	8 4	9
10 4	10 7	11 1	11 8	12 6	12 2	11 6	9 8	9 0	F	F	F	10
9 4	10 2	10 6	10 8	10 8	10 4	9 5	8 4	7 6	F	u7 8 _F	F	11
8 4	9 0	9 6	10 5	11 5	11 2	10 4	8 8	7 7	u7 8 _F	F	9 3	12
7 8	8 4	9 1	9 8	10 6	11 0	11 2	10 0	9 4	F	F	10 4 _F	13
8 4	8 8	9 2	9 7	10 8	u12 0 _s	12 3	10 6	F	F	F	h	14
9 8	10 8	11 3	12 4	12 4	12 6	11 6	11 6	10 8	11 0	11 4	11 0	15
9 8	9 8	10 4	10 9	12 0	12 6	u12 0 _s	10 7	F	F	h	h	16
8 5	8 6	8 9	9 7	10 4	11 0	u11 8 _s	u10 1 _s	u9 7 _F	F	11 1	u12 0 _s	17
8 7	8 8	8 9	9 9	10 5	10 8	10 5	9 3	F	F	h	F	18
C	8 6	9 0	C	C	12 5	u11 8 _s	10 8	C	F	F	h	19
8 2	8 5	8 8	9 6	10 4	11 0	11 1	9 8	F	F	u9 5 _F	F	20
8 6	8 6	8 6	8 8	9 6	10 0	10 8	9 8	F	F	9 2	10 0	21
8 8	8 8	8 8	9 4	10 4	11 3	11 1	10 6	F	10 8 _F	10 0	F	22
8 8	8 9	9 0	9 7	10 0	9 8	10 0	u 9 5 _s	8 7	8 8 _F	F	F	23
11 4	10 6	10 4	10 4	10 6	10 9	11 4	10 0	9 3 _F	8 6	9 1	u9 8 _s	24
9 5	9 4	9 5	9 7	9 8	10 3	10 7	u9 6 _s	8 9	8 7	9 3	9 1	25
9 4	9 8	9 7	9 8	10 1	10 5	12 5	10 4	u9 6 _s	9 5	9 3	9 8	26
9 4	10 0	10 5	11 2	11 6	11 3	8	9 4	9 3 _F	u9 3 _F	10 4	9 9	27
10 3	10 8	11 0	10 8	10 6	10 8	11 1	10 5	10 1	F	F	F	28
9 3	9 3	9 4	9 5	9 8	9 8	11 1	10 8	10 1	F	8 8	9 0	29
C	9 6	10 1	10 7	10 6	11 0	11 4	10 3	9 6	9 2	8 6	8 6	30
28	30	30	29	29	30	29	27	17	12	16	16	Count
9 2	9 3	9 8	10 5	10 8	11 1	11 4	10 3	9 4	9 4	9 4	10 0	Median
9 2	9 5	9 8	10 5	11 0	11 3	11 3	10 2	9 2	9 6	9 8	10 4	Mean

interesting at this

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

Characteristic foF2
Unit Mc
Month April 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	F	F	F	6 0 _F	F	4 0	7 4	9 7	10 8	11 0	10.1	9.1
2	9 9	7 2	6 1	5 7	u5.2 _s	4 8	7 8	10 2	12.0	11.6	9 7	9.6
3	10 7	7 0	5 0	2 7	E	2 9	7 2	9 3	11.1	9.9 _H	9.6	10.4
4	9 5	7 3	5 6	3 9	2 8	2 8	7 3	9 6	9 5	8 5	8.6	8.5
5	8 9	6 4	5 4	3 2	u1 9 _R	2.5	7.0	9.0	10 2	10 0 _H	9.0	8 7
6	F	F	6 8	5 5	3 6	2 8	7 0	9 3	10.0	8.4	7.9	8.4
7	F	u8 4 _r	F	u4 4 _F	3 4	3 5	6 9	9.6	9 6	8 4	8.5	8.9
8	9 9	7 3	6.1	4.5	2.9	3 1	7.2	9.4	10 4	10 4	9 4	9 8
9	11.0	7 6	5 6	3 8	2 4	2.8	6 6	8 6	9.0	8.6	8.5	9.0
10	11 0	8 9	7 2	6 0	5.5	4 6	7 6	9 2	10.7	11.2	10 4	10 0
11	F	10 1	8 0	5 1	3 2	3 3	7 0	9 0	9 8	u9.1 _H	8 8	9 1
12	7.9	F	F	F	3 7	3 1	6.7	8 9	8 8	7.9	8.0	8.2
13	8 6	6 8	4 6	2 8	E	u2 9 _R	7.0	8 3	9 4 _H	8 4	7 8	7 6
14	8 6	u7 2 _s	5 5	4 1	2 7	2 9	6 8	9 0	8 9	8 0	8 0	8.3
15	F	u7 1 _s	u6 0 _s	3 9	E	3 4	7 5	10.0	11 1	10 6	10.5	10.2
16	8 2	7 4	u6 1 _s	5 1	4 2	3 7	7 2	10.0	11 2	11 3	9 8	9 7
17	9 0	8 1	6 5	5 1	3 9	3 8	7 6	9 9	11 4	u11 1 _H	9 3	8 7
18	9 6	8 0	7 4	7 4	6 4	4 8	7 5	9 6	11 0	11.1	9 5	8 6
19	u9 4 _F	7 0	F	5 4	4.4 _H	u4 0 _R	7 5	9 3	10 5	C	C	C
20	u10 2 _s	8 7	7 4	6 4	4 0 _F	3 8	7 4	9 0	10 3	10 2 _H	8 7	8 2
21	S	8 3	7 6	F	5 1	4 5	7 4	8 9	10.0	10 5	RH	8 8
22	u9 8 _s	8 0	u7 3 _s	G 7	5.8	5 1	7 9	9 3	9 9	u10 1 _R	9.4	8 9
23	u9 6 _r	8 1	u6 3 _R	5 0	F	FH	7 2 _F	9 7	11 0 _F	11 2	u9 6 _H	8 8
24	10.4	9 0	7 4	7 0	5 3	4.7	7 7	9 4	10 4	11 6	12 0	11 8
25	8 7	7 7	7 6	7 5	F	6.5	9 1	10.3	11.0	10.7	9.2	9.5
26	8 4	u7 5 _s	7 4	7 2	5 4	4 5	8.0	9.7	10.4	9.7	8.3	9 2
27	7 5	6 9	u7 1 _s	6 6	4 9	4 6	7 6	9 3	9 4	9.0	8 3	9.2
28	9 1	8 7	8 4	7 8	6 4	5.3	C	9 5	10 3	10 6 _H	9 6	9.8
29	F	F	F	C	C	C	C	C	C	9.4	8 5	C
30	8 1	7 1	6 6	4 8	u2 8 _R	4 0	7 6	9 3	10 1	10.1 _H	8.8	C
Count	23	26	25	27	26	28	28	29	29	29	28	27
Median	9 4	7 6	6 6	5 1	3 8	3 8	7 4	9 3	10 4	10 1	9 3	9.0
Mean	9 3	7 8	6 6	5 3	3.7	3 9	7 4	9 4	10 3	10 0	9 2	9 1

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month April 1961

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	Hour/Date
9.3	10.1	11.0	12.3	12.7	12.4	11.3	F	F	F	F	F	1
9.8	10.1	10.8	12.0	12.7	12.4	11.5	F	F	F	12.4 _r	13.0	2
10.4	10.4	11.3	12.4	12.8	12.4	11.6	11.1	11.0	11.8	12.7	12.6 _F	3
8.6	9.2	9.9	10.9	11.7	11.6	10.7	F	F	F	11.1 _r	11.3	4
8.7	9.6	10.9	11.1	11.4	11.8	10.6	F	F	F	F	F	5
8.9	9.5	10.5	11.1	11.0	11.1	10.4	F	F	F	F	F	6
9.2	9.5	10.5	11.0	10.6	10.5	10.1	8.4	F	F	F	F	7
9.7	9.8	10.6	11.2	11.3	11.6	11.4	10.4	10.4	10.5	F	12.4	8
9.2	9.4	10.0	10.4	10.6	10.8	11.6	10.6	9.5	9.4	8.2	9.8	9
10.4	10.9	11.2	12.3	12.6	11.8	10.8	9.3	F	F	F	F	10
9.9	10.4	10.6	10.8	10.7	10.0	9.2	7.9	F	F	F	F	11
8.7	9.3	10.0	11.2	11.4	11.0	9.9	8.6	F	F	F	9.4	12
8.2	8.8	9.5	10.4	11.0	11.3	10.7	9.7	10.1 _F	F	F	10.3 _r	13
8.8	8.8	9.3	10.2	11.4	12.4	11.6	F	F	F	F	F	14
10.0	11.0	11.8	12.4	12.4	12.2	12.0 _s	11.1	10.8	11.4	11.2	10.8	15
9.8	10.0	10.8	11.4	12.4	12.3	11.3	10.0	F	F	F	F	16
8.5	8.6	9.1	10.1	10.7	11.8 _s	10.9	10.8 _r	F	10.6	11.6	11.4	17
8.7	8.9	9.6	10.3	10.6	10.8	10.0	F	F	F	F	F	18
8.5	8.8	9.6	C	C	12.1	11.4	9.9	F	F	F	F	19
8.4	8.6	9.3	9.8	10.8	11.1	10.5	F	F	F	F	F	20
8.6	8.5	8.7	9.3	9.9	10.4	10.4	9.2	F	9.2 _r	9.3	10.4	21
8.7	8.9	9.0	9.8	11.0	11.2	11.2	10.2	10.4 _r	F	9.8	F	22
8.8	8.9	9.2	9.8	9.9	9.8	9.8	9.0	8.7	F	F	F	23
10.8	10.6	10.2	10.4	10.8	11.3	11.0	9.7	8.8	8.6	10.8 _s	10.0	24
9.5	9.3	9.7	9.8	9.8	10.6	10.3	9.1	8.8	9.1	9.1	8.9	25
9.7	9.8	9.8	10.0	10.3	11.7	11.8	10.7 _s	9.5	9.4	9.6	9.1	26
9.7	10.3	10.9	11.7	11.5	11.2	10.1	9.4	9.4	10.0	10.1	9.8	27
10.5	10.9	10.8	10.7	10.6	11.3	10.7	10.2	10.8 _s	8.8	F	F	28
9.3	9.4	9.3	9.7	9.8	10.5	10.7	10.4	9.6	9.4	8.7	9.0	29
C	9.8	10.3	10.6	10.8	11.4	11.0	9.8	9.5	8.8	8.6	9.1	30
29	30	30	29	29	30	30	22	14	13	14	16	Count
9.2	9.5	10.1	10.7	11.0	11.3	10.8	9.8	9.5	9.4	9.8	10.2	Median
9.3	9.6	10.1	10.8	11.1	11.4	10.8	9.7	9.7	9.8	10.2	10.5	Mean

Sweep 1 0 Mc. to 25.0 Mc in 27 seconds

Characteristic · foF1
Unit Mc
Month · April 1961

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	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	5.1	L
10								L	L	L	L	L
11									L	L	4.9	4.9
12								L	L	L	5.0	4.9
13								L	L	u4 5L	u5 1L	4.7 _H
14								L	L	L	L	L
15									L	L	L	L
16								L	L	L	L	L
17								L	L	L	L	L
18								L	L	L	5.0	L
19								L	L	C	C	C
20								L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	u5 0L	L
23								L	L	L _H	u4 9L	L _H
24								L	L	L	L	L
25								LH	L	L	L	L
26								L	L	L	L	L
27								L	L	L	L	L
28								L	L	L	L	L
29								C	C	C	L	C
30									L	L	L	L
Count										1	7	3
Median											5.0	.
Mean											5.0	

Sweep 1.0 Mc. to 25.0 Mc. in 27 second

Characteristic foF1
Unit Mc
Month April 1961

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								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
5 0	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
4 9	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
u ⁴ 7 ^h	u ⁴ 7 ^h	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
C	L	L	L	C	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
C	L	L	L	L	L							30
3	1											Count
												Median
												Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · foF1
 Unit · Mc
 Month April 1961

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

Latitude 10 2°N
 Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	
1							L	L	L	L	L	L	
2								L	L	L	L	L	
3								L	L	L	L	L	
4							L	L	L	L	L	L	
5								L	L	L	L	L	
6								L	L	L	L	L	
7							L	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	4.7	5.1	
12							L	L	L	L	4.9	L	
13								L	L	v5 1L	v5.2L	L	
14								L	L	L	v4.8L	v4.7L	
15								L	L	L	L	L	
16								L	L	L	L	L	
17								L	L	L	L	L	
18							L	L	L	4.8	L	L	
19							L	L	L	C	C	C	
20								L	L	L	L	L	
21								L	L	L	v5 1L	v5 0L	
22								L	L	L	v5 0L	L	
23								L	L	L	v4.9L	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	L	
28								L	L	L	L	L	
29								L	L	L	L	L	
30								L	L	L	L	C	
Count											2	7	3
Median												4.9	
Mean												5.0	--

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF1
 Unit' Mc
 Month April 1961

TABLE 35—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	Hour/Date
L	L	A	L									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	L								6
L	L	L	L	L								7
4.9	L	L	L	L								8
L	L	L	L	L								9
L	L	L	L	L								10
4.9	L	L	L	L								11
L	L	L	L	L								12
L	L	L	L	L								13
4.8	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
C	L	L	L	L								30
3												Count
												Median
												Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic of E
Unit : Mc
Month . April 1961

TABLE 36
Ionospheric Data
75 0°E Mean Time

Latitude : 10 2°N
Longitude . 77.5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1								2 5	S 1	A	A	A
2									A	A	A	A
3									A	A	A	A
4								2 5	A	A	A	B
5									A	A	A	A
6								2 6	A	A	3 7	A
7								2 5	S 1	A	A	B
8									A	A	A	A
9								R	A	A	A	B
10										B	A	A
11									S 1	3 4	A	A
12								R	A	B	A	B
13								U2 6 _m	R	R	R	B
14									U3 3 _m	B	B	B
15										B	B	B
16									R	U3 9 _m	A	U4 0 _m
17								..	A	B	B	B
18								.	R	A	A	B
19									A	C	C	C
20								2.4	B	R	R	B
21										B	A	A
22									A	R	A	B
23								U2 8 _m	R	B	B	J3 4 _m
24										B	A	B
25									A	A	A	A
26								U2 9 _m	A	A	B	B
27								A	B	A	A	A
28									A	A	A	A
29								C	C	C	B	C
30									A	A	A	A
Count								8	4	2	1	2
Median								2.6				
Mean								2.6				..

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

Characteristic : fo E
 Unit : Mc
 Month : April 1961

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	Hour/Date
A	A	A	A	3 1								1
A	A	A	A	R	3.0							2
A	A	A	A	3 4	2.8							3
A	A	A	A	A	2.8							4
												5
A	3.7	A	3 5	2 9								6
B	B	3 4	A	A								7
B	B	A	A	A	A							8
B	B	A	A	A	A							9
B	A	A	A	-	-							10
B	B	A	A	2 7	A							11
B	A	A	A	A	A	A						12
B	RH	R	3 4m	3 0m	-							13
B	B	B	A	A	A							14
B	B	B	R	A	A							15
B	B	A	A	A	A							16
B	3 7	R	R	R	A							17
B	B	B	B	B	B							18
B	B	B	C	C								19
B	A	R	R	3 0	A							20
B	A	A	A	R	..							21
R	B	R	B	R	A							22
B	B	B	R	A	A							23
B	B	R	R	R	A							24
A	A	A	A	A	A							25
B	B	A	A	A	A							26
B	A	A	A	A	A							27
A	A	A	A	A	A							28
B	A	A	A	3.1m	A							29
C	A	A	A	A	..							30
..	2	1	3	9								Count
.	.	.	.	3 0								Median
..	.	.	.	2 9	.	.						Mean

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

Characteristic $f_o E$
 Unit Mc
 Month - April 1961

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

Latitude 16 2°N
 Longitude 77 5°E
 :

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								3 0	3 5	A	A	A
2								A	2 9	A	A	A
3								2 9	3 4	A	A	A
4								A	A	A	B	B
5								A	A	A	A	A
6							2 5	2 9	A	A	3 8	A
7							2 1	3 0	A	A	A	B
8								A	A	A	A	B
9							R	2 9	A	A	B	B
10							"	"	B	B	A	B
11								3 0	A	3 5	A	B
12								R	B	A	B	B
13								u2 9m	u3 9R	R	R	B
14								B	B	R	B	B
15									R	R	B	B
16									R	A	A	R
17								R	R	B	B	B
18									R	A	B	B
19									A	C	C	C
20							R	R	B	R	B	B
21									A	R	A	A
22									R	A	B	B
23								j3 2R	R	B	B	B
24									B	R	R	B
25								A	A	A	A	A
26							R	A	A	A	B	B
27							R	A	A	A	A	B
28								A	A	A	A	A
29								A	A	B	A	A
30								C	A	A	A	C
Count							2	8	4	1	1	
Median								3 0				
Mean								3 0				

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

Characteristic . fo E
Unit Mc
Month . April 1961

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

Latitude . 10.4°N
Longitude . 77.5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
A	A	A	3 3									1
A	A	A	A									2
4 2	A	R	R									3
A	A	3 4	3 0									4
A	A	A	A									5
A	3 7	A	3 2									6
B	B	3 4	A									7
R	A	A	A	A	A							8
B	A	A	A	A								9
B	A	A	A									10
3 8	A	A	A									11
B	A	A	A	A	A							12
R	RH	u3 6m	A									13
B	B	R	A									14
B	B	R	u3 2m	A								15
B	B	A	A									16
B	R	R										17
B	B	B										18
B	B	A	C									19
B	B	R	A	A								20
A	A	A	3-2									21
B	B	B	B	A								22
B	B	R	A	J2 8m								23
B	R	R	u3 4m	A								24
A	A	A	A	A								25
B	B	A	A	A	A							26
B	A	A	A	A	A							27
A	A	A	A	A	A							28
A	A	A	A	A	A							29
C	A	A	A	R								30
2	1	3	6	1								Count
			3 2									Median
			3 2									Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic : fo Es
Unit : Mc
Month April 1961

TABLE 37
Ionospheric Data
75°0'E Mean Time

Latitude : 10°2'N
Longitude : 77°5'E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1							3 4	3 9	G	8 0	9 2	9 2
2									6 4	7 8	8 8	8 8
3									7 4	8 0	8 6	8 8
4								G	7 6	7 8	8 6	8 0
5										8 3	8 4	8 2
6								G	7 6	8 2	8 4	8 4
7								G	7 0	7 8	8 2	7 7
8									7 0	7 2	8 2	8 2
9								G	7 7	8 3	8 1	8 6
10									..	7 6	8 2	8 4
11									5 8	8 0	8 4	8 2
12								G	7 4	7 2	8 3	7 6
13								G	7 9	7 4	8 4	8 4
14									7 5	8 0	8 2	8 2
15									6 6	8 1	9 0	8 4
16									5 9	7 6	8 4	8 4
17									8 1	7 0	8 0	8 4
18									G	9 2	8 4	8 6
19									7 0	C	C	C
20	3.1	..	..	..		.	..	3 8	G	8 2	9 2	8 2
21	..	4.4	.					..	7 0	8 0	9 0	8 8
22	..		..		5 0				7 0	7 4	9 0	9 0
23	..		..	4 0				G	6 4	8 0	8 4	9 0
24								.	G		12 0	9 3
25									7 2	8 0	8 4	9 0
26									6 8	8 2	8 4	9 0
27							3 3	6 8	B	8 5	8 6	8 2
28									8.0	7 6	8.7	9 1
29	3 4	4 2	2 6	3 8	C	C	C	C	C	C	7 9	C
30									7.2	7 9	8 6	8 8
Count	2	2	1	2	1		2	11	25	28	29	28
Median								G	7 0	8 0	8 4	8 4
Mean	.			.			.	.	7.2	7 9	8 6	8 5

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic : fo Es
 Unit : Mc
 Month : April 1961

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	Hour/Date
9.4	8.8	8.2	6.1	G								1
9.0	9.2	8.0	6.0									2
8.8	8.2	8.0	G	G								3
8.3	8.4	8.6	6.9	G								4
8.6	8.6	8.4	7.8	G	6.0							5
8.2	9.0	8.8	7.4	6.4								6
8.5	8.6	8.2	8.2	7.6								7
8.6	7.6	7.6	9.2	8.6	7.4	3.0						8
8.0	8.0	7.8	7.8	6.4	7.8							9
7.4	7.8	6.3	8.4	5.6								10
8.6	7.8	8.0	8.4	7.3								11
8.0	8.4	8.0	11.0	11.6	6.8	11.0						12
8.4	8.7	8.2	G	G								13
8.8	8.7	8.2	9.2									14
7.9	8.2	8.0	6.6	7.0	6.8	6.6	3.0			4.6		15
8.2	8.4	7.8	9.2	8.0	3.7							16
8.3	8.4	8.0	7.8									17
8.0	8.2	8.2	8.0		3.8	6.0	3.6					18
C	8.4	7.0	C	C			3.9					19
8.6	9.0	8.6	8.0	7.0	4.2				2.0	4.6		20
8.6	8.6	8.0	8.2	7.2	2.8	3.8			3.6			21
8.6	8.2	8.4	7.6	G	4.0	6.0			4.0	3.0	4.0	22
9.2	9.4	8.5	9.6	7.8								23
8.8	8.7	9.0	8.6	8.0	4.2	u6.0a						24
9.4	8.2	8.6	8.2	7.6								25
9.3	9.4	8.6	8.0	7.7	6.8	8.8	2.8		..	3.9		26
7.9	7.9	7.7	9.9	8.8	7.6	4.1						27
8.9	9.7	8.2	9.6	10.2	8.7	u7.0a				4.6	4.4	28
8.4	8.4	9.3	8.6	8.2	5.6	10.2						29
C	8.7	8.6	8.5	7.7		8.1						30
28	30	30	29	25	15	12	4		3	5	2	Count
8.6	8.5	8.2	8.2	7.3	6.0	6.3				4.6		Median
8.5	8.5	8.1	8.3	7.8	5.7	6.7				4.1		Mean

Sweep 1.0 Mc to 25.0 Mc, in 27 seconds.

Characteristic fo Es
Unit, Mc
Month April 1961

TABLE 37—*cont'd*
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0910	1030	1130
1								G	7 4	9 6	8 8	9 6
2								9 8	6 4	9 4	9 2	9 6
3								7 0	7 8	9 0	9 6	8 6
4								7 2	7 6	8 4	8 4	8 2
5									7 6	8 6	8 4	9 4
6							G	7 2	8 1	9 4	8 4	8 6
7							G	6 8	7 5	8 3	8 6	8 7
8								6 2	7 0	8 4	8 0	8 3
9							G	G	8 0	8 2	8 3	7 8
10									7 2	8 1	8 7	8 3
11								G	7 6	8 4	8 4	8 3
12								6 4	6 6	8 5	7 8	7 8
13								7 0	7 6	8 3	7 8	8 5
14								6 6	8 0	8 4	8 2	8 8
15									6 8	8 4	8 8	8 6
16									6 8	9 0	8 4	8 4
17								G	8 0	8 1	8 2	8 5
18									7 0	9 8	8 4	8 6
19								4 0	7 6	C	C	C
20							G	4 0	8 4	8 3	8 6	8 8
21								3 8	7 0	8 2	8 6	9 0
22									7 8	8 0	8 8	8 8
23								G	6 2	8 2	8 0	8 6
24									G	7 6	8 6	8 0
25								7 1	8 1	8 7	8 9	8 8
26							G	7 8	8 3	8 9	9 6	8 6
27							G	7 2	8 2	8 6	8 7	8 6
28								6 2	7 6	8 8	9 1	8 3
29	3 4		3 1					C	C	G	8 4	C
30									6 8	8 6	8 5	C
Count	1		1				0	21	29	29	29	27
Median							G	6 2	7 6	8 4	8 5	8 6
Mean								6 1	7 5	8 6	8 6	8 6

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

Characteristic fo Es
 Unit - Mc
 Month April 1961

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

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic . fbEs
 Unit Mc
 Month April 1961

TABLE 38
 Ionospheric Data
 75°E Mean Time

Latitude · 10 2°N
 Longitude · 77 5°E

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

Sweep 1 0 Mc to 25 0 Mc 27 seconds

Characteristic: fbEs
 Unit: Mc
 Month: April 1961

TABLE 38
 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	Hour/Date
		4.2	4.3	3.7	G								1
		4.3	4.1	3.6									2
				G	G								3
4.2		4.2	3.9	3.6	G	3.2							4
													5
			4.0										6
			4.1	3.6	3.2								7
			4.0	3.8	3.3	2.8	2.2						8
4.2	4.0	4.1	4.5	3.5		4.0							9
				4.5									10
4.1		3.9	3.4	3.0									11
		4.0	3.9	4.8	5.0	2.6	2.5						12
	4.1		G	G									13
			4.4	4.4									14
				3.2	3.3	3.6	2.6				2.6		15
		4.0	4.4	3.5	2.8								16
	4.3	4.0	3.6										17
		4.0	3.8		2.8	2.8	3.2						18
C	4.2	4.0	C										19
4.3	4.4	4.0	3.7	3.2	3.0						2.3		20
4.4	4.4	4.0	3.7	3.2	3.0	2.6							21
4.6	4.1	4.2	3.6	G	3.2	2.6				2.6		2.6	22
		4.4	3.7	3.2			3.1						23
4.1	4.2	3.9	3.6	3.1									24
													25
		4.0	3.6	3.7	3.1	3.0	2.7				2.7		26
	4.1	4.0	4.7	3.8	3.2	2.4							27
4.3	4.0	4.2	3.8	3.6	3.8	2.4					2.2	2.6	28
	4.4	4.2	3.7	3.1	2.8	2.7							29
C	4.1	4.0	3.6	3.3	3.3	3.3							30
	8	15	23	25	20	14	12	4		1	4	2	Count
	4.2	4.2	4.0	3.7	3.2	3.2	2.6						Median
	4.3	4.2	4.1	3.8	3.4	3.3	2.8						Mean

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

Characteristic fbEs
 Unit Mc
 Month April 1961

TABLE 38—cont'd
 Ionospheric Data
 75°E Mean Time

Latitude 10.2°N
 Longitude 77.5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	
1								G		4.0	4.2	4.4	
2								3.0		3.8	4.1	4.2	
3								3.1		3.8			
4								3.1	3.5	3.8			
5										3.8	4.2		
6													
7							G	3.1	3.6	3.9	4.3		
8								3.0	3.6	3.9	4.0		
9							G	G	3.5	3.7	4.1		
10										3.8	4.0	4.2	
11								G	3.5	3.8	4.0	4.0	
12								2.9	3.6	3.8	4.1		
13								3.0			4.2		
14										3.8			
15													
16										3.9	4.1		
17								G	3.8	3.9	4.0		
18									3.8	4.2	4.2		
19									3.8	C	C	C	
20							G	3.4	3.8	3.6	4.2	4.4	
21								3.3	3.7	3.9	4.2	4.4	
22									3.9	4.0	4.0	4.6	
23								G			4.5	4.7	
24									G		4.4		
25								3.1	3.7	3.9	4.2	4.4	
26							G	3.2	3.7	3.8			
27							G	3.3	3.9	4.2	4.4		
28								3.2	3.8	4.0	4.2	4.1	
29	2.4		2.4							G	4.2	C	
30									3.8	4.0	4.1	C	
Count	1		1					5	18	21	24	23	10
Median								G	3.0	3.7	3.8	4.2	4.4
Mean									3.1	3.6	3.9	4.2	4.3

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic	fbEs	TABLE 38—contd											Latitude	
Unit	Mc	Ionospheric Data											10°2'N	
Month	April 1961	75°E Mean Time											Longitude	
		1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
4.3	4.0			7.2	G									1
				3.9	3.3	3.2								2
				G	G									3
4.4	4.0			3.9	G									4
														5
			4.0		3.4									6
				3.7	3.5		2.5	2.2						7
			3.9	3.8	3.4	3.1	3.1		2.2					8
			4.2	3.9	3.3	3.2	3.2							9
4.2	4.0		4.0	4.0	3.8		3.0							10
														11
4.0	4.0		3.7		3.2		2.4							12
	4.1		3.7		4.2									13
					G									14
G					3.8									15
					G									16
						3.1	3.8	2.4		2.6		2.6		17
														18
	4.2		3.8		6.2	3.2								19
			3.8				4.0	2.2						20
4.1	4.1		4.1											21
4.4	4.2		3.8		3.6	3.3					2.6			22
														23
4.4	4.0		3.8		3.6			2.6		2.2	2.4			24
4.4	4.2		3.8		3.8	3.8	2.8	2.2						25
					3.4									26
							2.8							27
4.2	4.1		3.9		3.3	3.0								28
														29
	4.1		3.9		3.4	3.5	2.9	2.6						30
4.2	4.1		4.0		4.4	3.3	3.0			2.5				31
4.2	4.3		4.2		5.4	4.4	2.8	3.0			2.3	3.3		32
C	4.0		3.9		3.5	3.0	3.1	3.1						33
			3.9		3.4	G		3.1						34
12	18	23	25	14	13	9			3	2	3	1		Count
4.2	4.1	3.9	3.4	3.2	3.0	2.6								Median
4.2	4.1	4.0	3.8	3.3	3.0	2.6								Mean

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

Characteristic fmin
Unit : Mc
Month April 1961

TABLE 39
Ionospheric Data
75°E Mean Time

Latitude 10.2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	21	23	25	16	23	20	23	23	28	27	31	34
2	23	19	17	18	20	20	22	27	25	39	31	28
3	25	24	23	23	E	E	20	28	29	38	40	43
4	20	22	23	22	24	19	21	22	27	31	32	40
5	22	27	19	21	18	E	23	30	34	32	34	44
6	18	19	18	17	19	25	20	23	27	30	32	31
7	19	19	19	21	17	18	20	22	26	31	30	40
8	22	22	24	28	22	19	22	27	26	28	31	32
9	22	22	20	22	17	E	21	24	28	34	33	42
10	23	22	19	19	19	25	23	30	34	39	30	32
11	22	18	17	22	17	17	21	28	28	31	32	36
12	23	19	18	22	22	20	22	23	26	37	36	41
13	22	23	22	22	17	E	24	22	27	32	32	40
14	20	24	18	18	22	26	22	27	31	38	40	44
15	17	19	25	24	22	E	26	29	33	38	41	41
16	19	19	19	17	18	19	23	28	30	29	37	39
17	19	22	18	24	21	22	22	28	27	39	42	44
18	24	26	22	22	17	24	24	30	28	27	32	44
19	19	19	16	20	18	21	24	28	25	C	C	C
20	18	18	20	19	20	18	22	22	36	34	32	42
21	21	24	20	19	18	20	20	28	28	40	34	34
22	20	17	17	15	18	19	24	32	28	30	30	40
23	28	26	18	22	20	21	23	26	30	40	44	36
24	22	20	23	19	20	20	24	30	25	38	30	43
25	20	25	17	19	18	20	24	26	25	32	35	36
26	19	14	21	19	19	19	27	23	29	32	44	43
27	20	25	22	22	18	20	19	21	40	34	33	32
28	20	18	21	22	21	19	23	28	29	36	33	38
29	17	22	18	18	C	C	C	C	C	C	42	C
30	18	20	22	21	23	17	25	28	36	38	33	36
Count	30	30	30	30	29	29	29	29	29	28	29	28
Median	20	22	20	21	19	19	23	27	28	34	33	40
Mean	21	21	20	20	20	20	23	26	29	34	35	38

Sweep 10 Mc to 250 Mc. in 27 seconds

Characteristic . fmin
 Unit . Mc
 Month April 1961

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

Sweep 1 0 Mc to 25 0 Mc in 27 second s.

Characteristic	TABLE 39— <i>contd</i>											
Unit	Ionospheric Data											
Month	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	21	19	18	19	21	19	25	27	32	31	32	34
2	18	20	17	21	19	21	27	24	28	31	34	36
3	24	22	22	25	E	23	26	26	30	34	42	44
4	22	20	24	24	26	22	27	24	27	30	38	47
5	22	26	21	26	17	20	30	31	30	30	42	42
6	23	23	20	16	23	22	22	25	28	32	34	44
7	18	18	18	17	18	20	18	23	28	33	34	43
8	21	24	28	22	17	23	24	23	30	29	30	42
9	23	19	18	18	19	24	19	26	32	32	41	42
10	19	20	19	19	22	27	28	30	36	38	32	42
11	20	20	18	19	18	18	25	24	30	32	33	41
12	18	20	22	24	21	22	24	28	36	30	40	40
13	24	21	18	18	E	22	26	25	30	30	34	41
14	20	19	21	21	22	22	26	32	36	38	42	42
15	16	18	22	21	E	26	25	30	29	28	41	40
16	18	20	18	18	19	20	28	34	25	30	38	32
17	18	22	24	22	24	20	27	26	28	39	40	44
18	23	22	19	20	17	20	26	30	26	30	42	44
19	17	18	19	19	22	25	25	28	26	C	C	C
20	24	26	19	19	19	22	22	24	38	32	42	44
21	20	22	18	19	18	20	26	30	28	32	36	36
22	19	20	16	15	19	22	25	30	31	32	42	46
23	19	22	25	20	21	21	27	26	31	43	45	47
24	20	21	22	18	18	22	29	34	42	30	31	47
25	20	18	20	19	19	22	27	22	28	34	33	36
26	19	18	21	20	21	24	21	25	32	33	44	46
27	23	23	24	22	17	21	25	24	33	31	34	41
28	21	20	21	29	19	20	C	31	31	33	38	37
29	16	19	20	C	C	C	C	C	C	41	38	C
30	18	20	22	20	19	21	25	30	35	36	33	C
Count	30	30	30	29	29	29	28	29	29	29	29	27
Median	20	20	20	20	19	21	26	26	30	32	38	42
Mean	20	21	20	20	20	22	25	27	31	33	37	41

Sweep 10 Mc to 250 Mc in 27 seconds.

Characteristic	TABLE 39— <i>cont'd</i>											Latitude	
Unit	Ionospheric Data											10 2°N	
Month	75°E Mean Time											Longitude	
April 1961	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
3 2	3 2	3 0	3 2	3 1	2 4	1 8	2 1	2 2	2 2	2 3	2 0		1
4 2	4 4	2 4	2 6	2 8	2 4	1 6	2 0	2 1	2 4	2 7	2 4		2
3 8	4 2	4 0	3 5	3 0	2 1	2 0	2 4	2 1	1 6	2 6	2 4		3
3 4	3 4	3 1	2 6	3 1	2 2	1 5	2 2	2 1	2 2	2 1	2 4		4
4 3	4 1	4 0	3 5	3 0	2 8	1 7	2 0	2 2	2 0	2 1	1 8		5
4 3	3 2	4 0	2 6	3 1	2 3	2 9	2 1	2 0	2 0	2 1	2 1		6
4 2	4 0	3 1	2 9	3 0	2 2	2 1	2 3	2 1	2 4	2 8	2 2		7
3 3	3 2	2 8	2 2	2 1	1 9	1 9	2 0	1 4	2 4	2 4	2 6		8
4 2	2 9	2 8	2 6	2 3	2 3	2 8	3 1	2 8	2 3	2 3	1 8		9
4 2	3 0	2 7	2 1	2 9	1 9	1 8	1 8	2 4	2 3	2 4	2 2		10
3 4	3 2	3 0	2 6	3 1	2 9	1 8	2 1	2 0	2 4	2 6	2 1		11
4 1	3 0	2 6	2 7	2 4	2 3	1 6	1 4	2 2	2 2	1 8	2 1		12
3 4	3 2	3 1	2 8	2 8	2 6	2 6	1 9	2 1	2 0	2 1	2 2		13
4 2	4 0	2 7	2 5	3 2	2 5	2 2	1 9	2 2	2 1	2 2	2 2		14
4 3	4 2	3 0	2 5	1 9	1 7	1 3	2 3	1 9	2 2	2 0	2 6		15
4 2	4 1	2 7	2 6	2 6	2 1	1 8	1 9	2 2	2 3	2 6	1 8		16
4 2	3 2	3 0	3 6	3 0	2 2	2 0	2 0	2 4	2 0	2 3	2 4		17
4 2	4 1	3 8	3 5	3 0	1 7	2 0	2 4	2 4	2 1	2 2	1 8		18
4 1	4 1	2 8	C	C	2 8	2 1	2 2	2 2	2 1	2 8	2 0		19
4 4	1 2	3 2	2 5	2 1	2 1	1 6	2 0	2 8	1 7	2 2	2 4		20
3 6	3 2	3 0	2 6	3 0	2 6	1 5	2 4	1 1	1 6	1 9	2 0		21
4 4	4 2	3 8	3 8	2 2	1 8	1 4	2 2	1 3	2 1	2 1	2 7		22
4 4	4 4	3 2	2 8	2 6	2 3	2 2	2 5	2 2	1 9	3 2	1 3		23
4 6	3 8	3 0	3 0	3 0	2 2	2 2	2 1	2 2	2 0	2 1	2 1		24
3 7	3 7	3 2	2 7	2 3	2 1	1 5	2 1	1 8	2 2	1 9	2 0		25
4 2	4 0	3 1	3 0	2 6	2 1	1 7	2 2	2 6	2 3	2 2	2 6		26
4 3	3 5	3 1	2 3	2 0	1 8	1 9	2 3	2 4	2 4	2 5	2 2		27
3 8	3 3	3 0	2 8	2 6	2 1	1 9	2 1	2 1	1 8	1 9	1 8		28
3 8	3 8	3 4	2 8	2 6	1 9	1 7	2 9	2 6	2 7	2 8	2 2		29
C	3 8	3 1	3 0	2 5	2 3	2 4	2 8	2 9	2 6	2 7	2 8		30
29	30	30	29	29	30	30	30	30	30	30	30		Count
4 2	3 8	3 0	2 7	2 8	2 3	1 8	2 2	2 2	2 2	2 2	2 2		Median
4 0	3 7	3 1	2 8	2 7	2 2	1 9	2 2	2 2	2 2	2 3	2 2		Mean

Sweep 1 0 Mc to 2 5 0 Mc in 27 seconds.

Characteristic hF2
 Unit Km
 Month . April 1961

TABLE 40
 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								L	L	L	L	L
2								L	L	L _H	L	L
3								L	L	L	L _H	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	335	L
10								L	L	L	L	L
11								L	L	L	340	330
12								L	L	L	340	330
13								L	L	L	u340L	340 _H
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	320	L
19								L	L	C	C	C
20								L	L	L	L	L
21								L	L	L	L	L
22								L	L	L	u330L	L
23								L	L	L _H	u320L	L _H
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								C	L	C	L	C
30								L	L _H	L _H	L	L
Count											7	3
Median											335	
Mean											330	

Sweep 1 Mc to 25 Mc in 27 seconds

Characteristic hF2
 Unit : Km
 Month : April 1961

TABLE 40
 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
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	L							7
915	L	L	L	L	L							8
L	L	L	L	L	L							9
L	L	L	L	L	L							10
920	L	L	L	L	L							11
L	L	L	L	L	L							12
L	L	L	L	L	L							13
v320L	v320L	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
C	L	L	C	C	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L							21
L	L	L	L	L	L							22
L _H	L _H	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
3	1											Count
												Median
												Mean

Sweep 1 Mc to 25 Mc in 27 seconds.

Characteristic . h'F2
Unit . Km
Month April 1961

TABLE 40—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	L	
2								L	L	L	L	L _H	
3								L	L	L	L	L	
4							L	L	L	L	L	L	
5								L	L	L	L	L	
6								L	L	L	L	L	
7							L	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	305	340	
12							L	L	L	L	350	L	
13								L	L	L	v330L	v340L _H	
14								L	L	L	v340L	v320L	
15								L	L	L	L	L	
16								L	L	L	L	L	
17								L	L	L	L	L	
18							L	L	L	300	L	L	
19							L	L	L	C	C	C	
20								L	L	L	L	L	
21								L	L	L	360	v340L	
22								L	L	L	340L	L	
23								L	L	L	L _H	v330L _H	
24								L	L	L	L	L	
25								L	L	L	L	L	
26								L	L	L	L	L	
27							L	L	L	L	L	L	
28								L	L	L	L	L	
29								C	C	L	L	C	
30								L	L	L _H	L	C	
Count											2	7	3
Median												340	
Mean												340	

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · h'F2
 Unit . Km
 Month April 1961

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	Date
L	L	A	L									1
L	L	L	L									2
L	L	L	L									3
L	L	L	L									4
L	L	L	L	I.								5
L	L	L	L	L	I.							6
L	L	L	L	L	I.	L						7
310	L	L	L	L	I.							8
L	L	L	L	L	I.							9
L	L	L	L	L	I.							10
315	L	L	L	L	I.							11
330	L	L	L	L	I.							12
L	L	L	L	L	I.							13
u330r	L	L	L	L	I.							14
L	L	L	L	L	I.							15
L	L	L	L	L	I.							16
L	L	L	L	L	I.							17
L	L	L	L	L	I.							18
L	320	L	L	L	I.							19
L	L	L	L	L	I.							20
L	L	L	L	L	I.							21
L	L	L	L	L	I.							22
L _h	L	L	L	L	I.							23
L	L	L	L	L	I.							24
L	L	L	L	L	I.							25
L	L	L	L	L	I.							26
L	L	L	L	L	I.							27
L	L	L	L	L	I.							28
L	L	L	L	L	I.							29
C	L	L	L	L	I.							30
4	1											Count
												Median
												Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
 Unit Km
 Month April 1961

TABLE 41
 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	250 ^w	240	250 ^w	245	255	230	265	245	230	215	210	210
2	240	240	280	280	265	250	265	240	220	220	215	215
3	235	220	250	250	E	E	265	240	225	220	210	220
4	240	240	245	250	270	280	270	240	230	220	215	210
5	230	230	235	225	240	E	260	240	230	230	220	220
6	220	240	265	240	235	275	260	240	220	210	210	220
7	260	230	230	230	240	280	265	245	215	220	210	205
8	230	225	235	230	250	275	255	240	225	210	200	200
9	230	220	225	240	245	E	265	240	220	215	210	205
10	265	260	250	285	280	250	260	240	230	220	220	210
11	250	220	220	235	240	270	265	245	230	220	220	225
12	280	275	240	230	210	255	265	240	225	210	220	215
13	255	235	230	240	260	E	260	240	225	220	220	200
14	270	260	225	230	240	u300L	260	240	220	220	220	u230M
15	280	260	260	240	u275L	E	260	250	220	235	230	220
16	280	260	245	240	240	250	255	240	220	215	210	210
17	280	260	240	240	250	260	260	240	225	210	215	215
18	240	260	270	275	240	230	250	240	220	230	210	210
19	240	230	260	260	240	240	260	230	215	C	C	C
20	260	255	280	270	230	240	250	240	230	220	220	200
21	250	255	240	240	240	240	250	240	A	220	220	210
22	270	270	250	240	240	240	260	235	220	230	220	210
23	280	255	230	250	u370 ^w	u385 ^w	260	250	230	220	225	205
24	276	260	240	245	235	250	260	240	235	220	220	215
25	295	300	310	280	250	245	260	225	230	220	220	215
26	300	310	310	280	230	240	270	250	240	220	u240M	u240M
27	320	340	290	250	240	240	265	245	u250M	230	240	220
28	280	265	260	255	245	230	260	240	230	230	215	220
29	325 ^w	F	F	F	C	C	C	C	C	C	220	C
30	280	270	245	220	245	260	260	240	225	225	215	220
Count	30	29	29	29	29	29	29	29	28	28	29	28
Median	265	255	245	240	240	245	260	240	225	220	220	210
Mean	265	255	250	250	250	260	260	240	225	220	220	215

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
 Unit Km
 Month April 1961

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	Date
205	210	240	220	225	255	290	400	F	F	u280F	u250F	1
200	210	215	210	240	260	290	u360F	F	u300F	u270F	240	2
230	215	240	230	235	260	u290F	310	C	280	215	255F	3
B	220	200	220	225	250	280	u100F	F	u290F	u260F	u250F	1
220	200	220	210	230	255	280	u105F	F	F	u280F	u240F	5
210	200	220	220	225	250	280	380	u405F	u360F	F	u270F	6
200	200	200	225	230	250	275	360	420	370F	F	285	7
220	200	200	220	230	250	275	335	355	320	300	265	8
200	200	210	200	225	270	270	250	260	255	260	260	9
215	205	230	A	230	250	275	345	395	F	330	295	10
210	210	215	215	220	240	275	360	370	320	300	280	11
200	210	210	A	A	245	275	360	360	330	295	270	12
u220M	205	200	220	230	250	270	340	355	360	310	280	13
u200M	210	210	A	235	250	270	360	u400F	u360F	F	u320F	11
230	220	235	240	240	260	u280A	320	315	u300F	280	280	15
u220M	200	210	A	240	250	275	360	F	F	315F	300	16
200	210	200	210	220	245	280	350	340F	300F	270	240	17
200	210	210	220	230	240	280	395	425F	280	280F	260	18
C	220	200	C	C	250	270	340	C	340F	300	280F	19
220	220	210	210	230	250	280	360	390	280	310	280	20
210	220	200	200	225	250	280	370	350F	F	320	280	21
220	205	220	210	235	250	280	320	F	300	300	300	22
220	210	u240A	215	230	255	280	360	370	380	350	300	23
u240M	u235M	u235L	215	225	250	280	340	F	u360F	300	280	24
210	215	215	220	230	260	280	320	350	360F	330	320	25
220	220	215	215	260	260	280	300	340	340F	325	300	26
215	210	215	A	260	260	280	345	380	315	300	300	27
210	210	215	240	260	290	275	300	320	380F	u380F	u345F	28
220	210	210	220	220	250	270	300	305	F	300	295	29
C	210	210	215	230	260	270	290	305	320	315	310	30
27	30	30	24	28	30	30	30	21	24	27	30	Count
215	210	210	220	230	250	280	350	355	320	300	280	Median
215	210	215	220	235	255	280	345	360	325	300	280	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month April 1961

TABLE 41—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	250	u240 _F	255 _F	250	245	240	250	235	225	205	220	220
2	230	260	275	265	260	240	255	230	220	210	210	200
3	230	235	240	300	E	330	250	235	220	205	220	235
4	240	240	260	260	260	325	250	235	230	220	210	B
5	225	230	230	270	260	340	250	230	230	220	220	210
6	225	u260 _F	260	235	245	220	250	230	220	210	200	220
7	240	225	220	235	240	300	250	230	225	220	205	210
8	220	230	240	240	245	300	250	230	220	215	210	200
9	220	220	225	240	265	L	250	235	215	210	210	210
10	260	245	265	280	260	260	255	240	225	220	220	220
11	240	225	225	235	260	280	255	240	230	215	190 _H	220
12	275	260	240	240	240	285	245	230	225	215	210	200
13	240	230	230	245	E	u305 _L	255	235	225	220	220	195 _H
14	280	240	225	240	260	300	245	230	220	210	220	215
15	260	255	240	240	E	u320 _L	255	240	230	235	235	215
16	260	255	240	240	245	260	240	230	215	215	210	205
17	270	250	240	240	260	270	250	230	220	210	200	210
18	240	265	280	260	230	240	240	230	220	220	220	205
19	225	245	260	250	240	265	240	210	215	C	C	C
20	260	270	280	240	230	260	245	210	220	215	210	220
21	260	245	240	210	240	240	240	225	220	215	215	220
22	280	270	240	240	210	255	240	230	220	220	210	u240 _A
23	260	225	240	295	F	305	260	210	220	230	u240 _A	u240 _A
24	270	250	245	240	210	270	250	210	u240 _B	230	225	B
25	290	305	300	260	250	240	255	225	220	220	215	220
26	300	315	300	260	225	260	260	210	230	220	u240 _B	u240 _B
27	340	310	270	250	230	280	250	235	240	235	240	205
28	275	260	260	245	235	245	C	210	225	220	215	210
29	F	F	F	C	C	C	C	J	C	220	220	C
30	280	260	240	220	250	260	240	235	220	205	215	C
Count	29	29	29	29	28	28	28	29	29	29	29	25
Median	260	250	240	240	240	270	250	230	220	220	215	215
Mean	255	250	250	250	245	275	250	230	225	215	215	215

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

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

Latitude 10 25'N
Longitude 77 5'E

Characteristic	h'F	TABLE 41—Contd											Latitude	
Unit	Km	Ionospheric Data											10 25'N	
Month	April	75 0°E Mean, Time											Longitude	
	1961	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Day
210	210	A	220	240	270	340	u320r	u380r	F	u300r	u250r	u250r	1	
205	230	210	210	250	265	u320r	u380r	F	u290r	255r	235	2		
215	235	210	230	240	270	320	330	290	260	215	255	3		
220	210	210	230	225	260	u325r	u390r	F	u280r	u260r	240	4		
205	205	230	240	235	270	340	u410r	u380r	u280r	u260r	225	5		
210	205	225	220	230	260	345	u370r	F	F	F	260	6		
200	210	210	225	240	255	300	990	435	F	915	250	7		
200	200	200	220	230	265	300	330	340	305	280	245	8		
200	220	220	215	240	265	260	250	260	260	260	260	9		
205	210	240	250	245	280	300	380	F	340	325	270	10		
210	205	200	220	240	255	320	975	365	325	300	280	11		
205	225	215	A	240	260	310	365	380	320	280	260	12		
u220v	u215L	220	220	240	260	310	350	360	340	280	280	13		
u220a	210	210	u240A	240	260	900	u400i	u380r	u360r	u320i	900	14		
u290a	u235a	230	235	245	u270A	280	920	F	295	280	280	15		
205	210	215	A	245	260	900	380	u380r	u300r	310r	290	16		
200	210	200	220	230	260	900	380r	320r	285	245	240	17		
215	205	200	220	210	280	320	400	360r	360r	280	260	18		
210	210	220	C	240	260	300	370	360	310r	300r	270	19		
220	220	220	220	240	260	310	400	380	F	300	270	20		
220	200	200	225	240	260	310	360r	375	280r	400	275	21		
205	200	200	240	u260A	260	300	360r	280r	300	300	900	22		
220	220	210	220	250	260	310	380	F	370	325	280	23		
u240a	u240r	210	220	240	275	285	375r	F	320	280	295	24		
220	220	220	215	240	270	290	340	360	360	320	900	25		
220	215	220	225	260	280	270	320	F	320	300	310	26		
225	220	220	A	250	280	305	370	350	305	320	900	27		
210	220	u240A	A	A	265	285	330	u345r	u370r	F	u335r	28		
215	215	215	220	235	270	290	300	340	300	305	285	29		
C	210	215	220	235	265	275	295	310	315	320	300	30		
29	90	29	25	28	30	30	90	21	27	28	30	Count		
210	210	215	220	210	265	900	370	360	305	300	270	Mean		
215	215	215	225	210	265	905	360	350	315	290	275	Mean		

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic h'E
 Unit Km
 Month April 1961

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
 Unit: Km
 Month: April 1961

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

Latitude 10 2°N
 Longitude 77 5°E

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

Sweep: 1.0 Mc to 25.0 Mc in 27 seconds

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

Latitude 16 2°N
 Longitude 77 5°E

Characteristic	h'E	Unit	Km'	Month	April	1961	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
115	A	A	120																1
A	A	A	A																2
110	A	R	R																3
A	120	120	120																4
A	A	A	A																5
A	120	A	120																6
B	B	120	A																7
110	A	A	A																8
B	A	A	A																9
B	A	A	A																10
120	A	120	115																11
B	A	A	A																12
120	120	120	120																13
B	B	115	A																14
B	B	120	120																15
B	B	A	A																16
B	120	120																	17
B	B	B																	18
B	B	A	C																19
B	B	R	115																20
120	120	120	120																21
B	B	B	B																22
B	B	120	120																23
B	120	120	120																24
A	A	A	A																25
B	B	A	A																26
B	A	A	A																27
A	A	A	A																28
A	A	A	A																29
C	A	A	A																30
6	6	10	10																Count
120	120	120	120																Median
115	120	120	120																Mean

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

Characteristic h'Es
 Unit Km
 Month April 1961

TABLE 43
 Ionospheric Data
 75 0°E Mean Time

Latitude 10°2'N
 Longitude 77 5'E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1							135	125	G	105	100	100
2									105	105	100	100
3									105	105	100	100
4								G	110	105	100	100
5										105	105	100
6								G	110	105	100	105
7								G	105	105	100	100
8									105	100	100	100
9								G	105	105	100	100
10										105	105	105
11									110	105	105	105
12								G	105	100	100	100
13								G	110	105	105	100
14									110	105	100	100
15									105	105	100	100
16									100	100	100	100
17									110	100	100	100
18									G	110	100	100
19									110	C	C	C
20								150	G	100	100	100
21												
22		120							110	110	100	100
23									110	110	100	100
24					115	120		G	110	105	100	100
25										G	115	100
26									100	100	100	100
27								110	110	100	100	100
28							115		B	100	100	100
29	125	130	120	115	G	C	C	C	100	100	100	100
30									C	C	100	C
									100	100	100	100
Count	1	2	1	2	1		2	4	22	27	29	28
Median	..								105	105	100	100
Mean									105	105	100	100

Sweep 1 0 Mc to 25.0 Mc in 27 seconds

TABLE 43
 Ionospheric Data
 75 0°E Mean Time

Latitude 10 2°N
 Longitude 77 5°E

Characteristic	h'Es											Hour/Date		
Unit	Km													
Month	April 1961													
		12	13	14	15	16	17	18	19	20	21	22	23	
100	105	105	145											1
100	100	100	100											2
100	100	100	G	G										3
100	100	110	110	G										4
100	100	100	110	G	105									5
100	105	105	105	110										6
100	100	100	100	100										7
100	100	100	110	100	100	100								8
100	100	100	100	125	100									9
105	105	115	105	105										10
100	100	100	100	105										11
100	105	100	105	100	105	100								12
100	100	100	G	G										13
105	100	100	100	100										14
100	100	100	100	100	130									15
100	100	105	110	100	100	100	105				115			16
100	100	100	110											17
100	100	100	100		100	100	100							18
C	110	100	C	C			110							19
100	100	100	100	100	105					100	120			20
100	100	110	110	110	110	100				140				21
100	100	100	110	G	100	100				130	130	120		22
100	100	100	110	115										23
100	100	100	105	115	115	125								24
100	100	100	100	100										25
100	100	100	100	100	100	100	100				120			26
100	100	100	100	100	100	100								27
100	100	100	100	110	115	120					135	125		28
100	100	100	100	100	100	100								29
C	100	100	100	100										30
28	30	30	27	19	15	12	4			3	5	2		Count
100	100	100	100	100	100	100					120			Median
100	100	100	105	105	105	105					125			Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic $h' E_s$
Unit Km
Month April 1961

TABLE 43—Cont'd
Ionospheric Data
75 °E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								G	105	105	100	100
2								105	105	105	100	100
3								110	103	100	100	100
4								110	110	100	100	100
5									105	100	100	100
6							G	115	110	100	100	100
7							G	105	105	100	100	100
8								105	100	100	100	100
9							G	G	105	100	100	100
10									105	105	105	105
11								G	105	105	105	100
12								100	100	100	100	100
13								115	110	105	100	100
14								110	100	100	100	100
15									100	100	100	100
16									105	105	100	100
17								G	110	100	100	100
18									110	110	100	100
19								140	110	C	C	C
20							G	140	100	100	100	100
21								140	110	100	100	100
22									110	110	100	100
23								G	100	105	100	100
24									G	100	100	100
25								120	100	100	100	100
26							G	100	100	100	100	100
27							G	100	100	100	100	100
28								110	100	100	100	100
29	125		115						G	100	C	C
30									100	100	100	C
Count	1	.	1					16	28	28	29	27
Median								110	105	100	100	100
Mean								115	105	100	100	100

Sweep 1 0 Mc to 25 0 Mc in 2/ seconds

TABLE 43—Cont'd
 Ionospheric Data
 75 0°E Mean Time
 Latitude 10 2°N
 Longitude 77 5°E

Characteristic	h'Es	Unit	Month	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
	100	105	120				G									1
	100	100	100				110	130								2
	100	100	G				G									3
	100	100	105				G									4
	105	105	110				105									5
	100	100	110				105									6
	100	100	100				100		100	110						7
	100	100	100				100	100	100		130					8
	100	100	100				100	100	100							9
	100	105	110				105		125							10
	100	100	100				105									11
	100	100	100				105	100	110							12
	100	100	100				G		160	100			120			13
	100	100	100				100		100	100						14
	G	100	105				G	100	100	100		120		115		15
	100	100	105				100	120								16
	100	100	100				100		150							17
	100	100	100				110		100	110						18
	100	105	110				C	C								19
	100	100	100				110	110					100	120	120	20
	100	100	110				110			100		130	120			21
	100	100	110				105	100	100	100		100		130		22
	100	100	100				115	110								23
	100	100	110				110	110								24
	100	100	100				100	115								25
	100	100	100				100	100	100	100						26
	100	100	100				100	100	100				125	120		27
	100	100	100				110	115	120	115			130	130	125	28
	100	100	100				100	100	100	100						29
	C	100	100				100	G		115						30
	28	30	29	23	14	15	10					4	5	5	2	Count
	100	100	100	105	100	100	100						120	120		Median
	100	100	105	105	105	110	105						120	125		Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic (M3000)F2
Unit
Month : April 1961

TABLE 44
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1	F	u3 25F	F	u3 15F	3 30F	3 45	3 20	3 05	2 75	2 50	2 30	2 40
2	3 30F	3 15	2 95	2 90	2 90	3 20	3 30	3 20	3 00	2 70	2 20H	2 45
3	3 40	3 35	3 25	3 40	E	E	3 15	3 25	2 85	R	2 60	2 60
4	3 30	3 20	3 30	3 30	3 35	R	3 20	3 10	2 65	2 50	2 50	2 55
5	3 40	3 35	3 40	3 45	u3 70R	E	3 30	3 35	3 10	2 50	2 50	2 60
6	F	F	u3 10F	3 25H	3 45	R	3 40	3 25	2 85	2 30H	2 55	2 55
7	F	F	u3 35F	3 10	3 45F	3 15F	3 00	3 00	2 50	2 40	2 50	2 50
8	3 25	3 30	3 20	3 20	3 25	3 35	3 10	3 20	2 85	2 40	2 40	2 45
9	3 25	3 30	3 30	3 35	3 35	E	3 10	2 95	2 55	2 40	2 45	2 50
10	3 10	3 10	3 00	2 85	2 90	3 25	3 25	3 20	2 95	2 65	2 25	2 40
11	F	F	3 30	3 20	3 20	3 25	3 00	3 10	2 85	2 35	2 45	2 40
12	2 90	2 95	F	F	3 30	3 45	3 05	2 95	2 55	2 45	2 45	2 45
13	3 20	3 30	3 40	3 50	u3 60R	E	3 25	3 20	2 85	u2 35H	2 60	2 55
14	u3 00s	3 20	3 30	3 40	3 45	u3 50R	3 20	3 10	2 60	2 55	2 55	2 50
15	F	u3 20R	u3 20F	3 40	u3 40R	E	u3 30s	3 30	3 05	2 55	2 40	2 50
16	2 90	3 10	u3 30s	3 30	3 20	3 40	3 35	3 30	3 10	2 70	u2 35RH	2 50
17	3 00	3 00	3 25	u3 35s	3 30	3 40	3 30	3 30	3 15	2 70	2 30H	2 45
18	3 35	3 15	3 05	u3 10s	u3 20s	3 50	3 40	3 30	3 10	2 75	RH	2 50
19	F	u3 30F	3 10	3 20	3 30	3 40	3 35	3 40	3 10	C	C	C
20	3 20	3 20	3 00	3 10	3 40	3 50	3 35	3 35	3 10	2 55	2 35H	2 35
21	3 10	u3 30R	3 20	F	3 30	3 40	3 40	3 30	3 15	2 80	2 30H	2 40
22	3 00	3 00	3 20	u3 30s	3 30	3 35	3 20	3 20	2 90	2 55	2 35	2 50
23	u3 10F	3 25	3 30	3 35	F	F	u3 10H	3 10F	2 95	2 70	R	2 35
24	F	u3 20F	3 25	u3 20s	3 40	3 30	3 25	3 30	3 10	2 90	2 75	2 50
25	u2 90s	2 90	2 80	2 95	F	3 30	3 20	3 10	2 80	u2 40R	2 30	2 50
26	2 80	2 80	u2 85s	3 05	3 30	3 40	3 20	3 00	2 60	2 45	2 40	2 45
27	2 70	u2 75s	2 90	3 30	3 45	3 30	3 05	2 90	2 60	2 40	2 60	2 40
28	3 00	3 10	3 20	3 25	u3 25s	3 40	3 30	3 10	2 90	2 45	2 45	2 45
29	F	F	F	F	C	C	C	C	C	C	2 50	C
30	2 95	3 10	3 20	3 45	3 40	u3 60R	3 40	3 30	3 00	2 45H	2 45	2 45
Count	22	26	27	27	26	21	29	29	29	27	27	28
Median	3 10	3 20	3 20	3 25	3 30	3 40	3 25	3 20	2 90	2 50	2 45	2 50
Mean	3 10	3 15	3 15	3 25	3 30	3 35	3 25	3 20	2 90	2 55	2 45	2 45

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

Characteristic (M3000)F2

TABLE 44

Latitude 10 2°N

Unit

Ionospheric Data

Longitude 77.5°E

Month April 1961

75 0°E Mean Time

12	13	14	15	16	17	18	19	20	21	22	23	Hour/Date
2 45	2 45	2 50	2 60	2 70	2 70	2 60	2 30	F	F	F	F	1
2 50	2 50	2 45	2 60	2 70	2 70	2 60	2 30	F	F	u2 75w	3 10	2
2 50	2 30	2 45	2 65	2 80	2 80	2 65	2 45	C	2 80	3 00	u3 10w	3
2 60	2 50	2 55	2 55	2 65	2 65	2 45	F	F	F	u3 05w	3 20	4
2 55	2 50	2 60	2 70	2 70	2 70	2 60	F	F	F	F	F	5
2 60	2 50	2 50	2 55	2 60	2 55	2 50	F	F	F	F	F	6
2 40	2 40	2 40	2 40	2 45	2 40	2 40	2 30	2 15	F	F	F	7
2 40	2 40	2 40	2 50	2 55	2 55	2 50	2 40	2 45	2 60	F	3 00	8
2 40	2 45	2 40	2 40	2 40	2 60	2 80	3 00	3 00	2 95	2 95	2 95	9
2 50	2 55	2 50	2 55	2 60	2 50	2 40	2 30	2 30	F	F	F	10
2 45	2 50	2 40	2 10	2 40	2 40	2 35	2 30	2 20	F	u2 50w	F	11
2 45	2 60	2 50	2 50	2 60	2 60	2 40	2 20	2 20	u2 35w	F	2 85	12
2 55	2 50	2 65	2 70	2 80	2 90	2 85	2 65	2 60	F	F	2 95w	13
2 55	2 55	2 60	2 60	2 75	u2 90s	2 90	2 60	F	F	F	F	14
2 45	2 60	2 60	2 60	2 60	2 70	2 80	2 70	2 70	2 75	2 90	2 90	15
2 50	2 50	2 55	2 60	2 75	2 80	u2 80s	2 55	F	F	F	F	16
2 50	2 40	2 50	2 60	2 70	2 70	2 80	2 55	u2 65w	F	2 90	u3 25s	17
2 45	2 50	2 45	2 50	2 60	2 65	2 60	2 40	F	F	F	F	18
C	2 40	2 50	C	C	2 95	2 95	2 65	C	F	F	F	19
2 40	2 45	2 45	2 50	2 60	2 75	2 75	2 45	F	F	u2 85w	F	20
2 50	2 40	2 45	2 50	2 60	2 70	2 70	2 50	F	F	2 70	2 90	21
2 45	2 45	2 50	2 40	2 60	2 80	2 75	2 65	F	2 80w	2 80	F	22
2 40	2 40	2 45	2 40	2 50	2 50	2 55	u2 45s	2 35	2 45w	F	F	23
2 30	2 35	2 35	2 40	2 40	2 50	2 60	2 50	2 45w	2 50	2 65	u2 80s	24
2 40	2 45	2 50	2 40	2 40	2 45	2 60	u2 50s	2 50	2 50	2 60	2 75	25
2 40	2 40	2 40	2 40	2 45	2 55	2 60	2 60	u2 55s	2 60	2 70	2 90	26
2 45	2 60	2 50	2 50	2 60	2 50	S	2 25	2 25w	u2 60w	2 70	2 80	27
2 50	2 55	2 45	2 40	2 40	2 45	2 50	2 55	2 50	F	F	F	28
2 50	2 55	2 50	2 45	2 45	2 50	2 65	2 70	2 70	F	2 75	2 80	29
C	2 40	2 50	2 50	2 50	2 50	2 65	2 70	2 70	2 65	2 70	2 80	30
28	30	30	29	29	30	29	27	17	12	16	16	Count
2 45	2 50	2 50	2 50	2 60	2 60	2 60	2 50	2 50	2 60	2 75	2 90	Median
2 45	2 45	2 50	2 50	2 60	2 65	2 65	2 50	2 50	2 65	2 80	2 95	Mean

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

Characteristic (M3000)F2 TABLE 44—Contd Latitude 10 2°N
 Unit Ionospheric Data Longitude 77 5°E
 Month April 1961 75 0°E Mean Time

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	10'0	1130
1	F	F	F	3 15 _F	F	3 40	3 25	2 90	2 65	2 45	2 30	2 45
2	3 20	3 10	3 00	3 00	2 90	3 30	3 30	3 10	2 90	2 45	2 45	2 50
3	3 35	3 25	3 30	3 50	E	2 80	3 30	3 10	2 65	2 35 _H	2 65	2 50
4	3 35	3 20	3 20	3 30	3 30	2 95	3 20	2 90	2 45	2 55	2 50	2 60
5	3 45	3 40	3 45	3 40	3 60 _R	3 05	3 40	3 20	2 80	2 30 _R	2 50	2 50
6	F	F	3 15	3 40	3 50	3 00	3 35	3 10	2 55	2 50	2 55	2 55
7	F	3 45 _F	F	3 25 _F	3 30	2 80	3 10	2 80	2 25	2 45	2 50	2 45
8	3 30	3 25	3 30	3 30	3 40	2 90	3 20	3 00	2 60	2 15	2 50	2 35
9	3 35	3 35	3 35	3 30	3 30	2 90	3 00	2 75	2 40	2 35	2 60	2 45
10	3 20	3 10	2 95	2 85	3 00	3 20	3 25	3 10	2 80	2 50	2 15	2 45
11	F	3 30	3 30	3 30	3 25	2 95	3 20	3 05	2 65	2 25 _H	2 35	2 45
12	3 00	F	F	F	3 35	3 00	3 10	2 80	2 30	2 50	2 45	2 45
13	3 35	3 10	3 50	3 45	E	3 20 _R	3 30	3 05	2 50 _H	2 45	2 55	2 50
14	3 00	3 30 _S	3 35	3 50	3 40	3 15	3 20	2 90	2 40	2 50	2 55	2 55
15	F	3 20 _S	3 35 _S	3 30	F	3 00	3 30	3 20	2 80	2 35	2 45	2 40
16	3 00	3 15	3 30 _S	3 30	3 20	3 10	3 10	3 20	2 90	2 40	2 60	2 50
17	3 00	3 10	3 30	3 30	3 30	3 10	3 35	3 25	2 95	2 40 _H	2 45	2 55
18	3 20	3 10	3 10	3 20	3 40	3 30	3 35	3 25	2 95	2 50	2 45	2 50
19	3 50 _F	3 20	F	3 20	3 25 _H	3 30	3 35	3 30	2 95	C	C	C
20	3 25 _S	3 05	3 00	3 30	3 40 _F	3 15	3 40	3 20	2 95	2 30 _H	2 40	2 40
21	C	3 20	3 20	F	3 35	3 30	3 35	3 20	2 95	2 55	RH	2 40
22	3 00 _S	3 15	3 25 _S	3 30	3 40	3 30	3 20	3 10	2 70	2 35 _R	2 45	2 45
23	3 20 _F	3 25	3 30 _R	3 15	F	3 25 _F	3 10	2 85 _F	2 50	2 30 _H	2 45	2 45
24	3 05	3 25	3 20	3 30	3 40	3 20	3 30	3 20	3 00	2 80	2 60	2 35
25	3 00	2 80	2 85	3 10	F	3 15	3 15	2 90	2 65	2 20	2 40	2 45
26	2 80	2 80 _S	2 90	3 20	3 45	3 25	3 15	2 80	2 50	2 35	2 35	2 45
27	2 70	2 90	3 10 _S	3 30	3 40	3 10	2 95	2 80	2 45	2 55	2 40	2 45
28	3 05	3 20	3 15	3 20	3 40	3 20	C	3 00	2 65	2 25 _H	2 50	2 45
29	F	F	F	C	C	C	C	C	C	2 40	2 55	C
30	3 05	3 10	3 40	3 50	3 50 _R	3 20	3 25	3 20	2 80	2 20 _H	2 55	C
Count	23	26	25	27	23	28	28	29	29	29	28	27
Median	3 20	3 20	3 25	3 30	3 40	3 10	3 25	3 10	2 65	2 40	2 50	2 45
Mean	3 15	3 20	3 20	3 25	3 35	3 10	3 25	3 05	2 70	2 40	2 45	2 45

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F2
 Unit
 Month . April 1961

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

Latitude 10 2°N
 Longitude 77 5°E

1230	1330	1430	1520	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
2 40	2 50	2 60	2 70	2 75	2 65	2 40	F	F	F	F	F	1
2 45	2 50	2 50	2 70	2 75	2 65	2 35	F	F	F	2 95	3 35	2
2 40	2 35	2 55	2 70	2 80	2 70	2 50	2 50	2 70	2 95	3 00	3 25	3
2 50	2 55	2 50	2 60	2 70	2 60	2 35	F	F	F	3 20r	3 30	4
2 50	2 55	2 70	2 65	2 65	2 70	2 45	F	F	F	F	F	5
2 55	2 50	2 50	2 55	2 60	2 50	2 35	F	F	F	F	F	6
2 50	2 35	2 40	2 40	2 40	2 40	2 40	2 25	F	F	F	F	7
2 35	2 45	2 50	2 55	2 55	2 40	2 10	2 40	2 50	2 70	F	3 10	8
2 40	2 45	2 40	2 40	2 50	2 70	2 90	3 00	2 95	3 00	3 00	3 00	9
2 55	2 50	2 55	2 55	2 55	2 50	2 30	2 25	F	F	F	F	10
2 50	2 45	2 40	2 35	2 10	2 45	2 30	2 20	F	F	F	F	11
2 60	2 50	2 50	2 55	2 60	2 50	2 40	2 10	F	F	F	3 00	12
2 55	2 55	2 70	2 75	2 90	2 90	2 70	2 60	2 60r	F	F	3 10	13
2 60	2 55	2 60	2 70	2 70	2 90	2 80	F	F	F	F	F	14
2 65	2 65	2 60	2 60	2 65	2 70	2 75	2 65	2 70	2 80	2 90	2 85	15
2 50	2 55	2 55	2 65	2 80	2 80	2 65	2 45	F	F	F	F	16
2 50	2 50	2 60	2 60	2 70	2 80	2 70	2 60r	F	2 80	3 00	3 20	17
2 45	2 45	2 45	2 55	2 60	2 65	2 15	F	F	F	F	F	18
2 40	2 40	2 60	C	C	2 90	2 70	2 55	F	F	F	F	19
2 40	2 50	2 45	2 55	2 70	2 80	2 60	F	F	F	F	F	20
2 45	2 40	2 45	2 55	2 65	2 70	2 60	2 50	F	2 70	2 70	2 90	21
2 45	2 50	2 45	2 55	2 70	2 85	2 70	2 60	2 70	F	2 75	F	22
2 35	2 45	2 40	2 45	2 55	2 55	2 50	2 40	2 45	F	F	F	23
2 35	2 35	2 40	2 40	2 45	2 55	2 60	2 45	2 45	2 55	2 70	2 90	24
2 40	2 50	2 45	2 40	2 40	2 45	2 50	2 45	2 50	2 55	2 70	2 80	25
2 55	2 45	2 35	2 40	2 45	2 60	2 70	2 60	2 60	2 65	2 80	2 80	26
2 50	2 50	2 50	2 55	2 50	2 40	2 25	2 20	2 30	2 60	2 80	3 00	27
2 55	2 55	2 40	2 35	2 45	2 15	2 55	2 55	2 60	2 45	F	F	28
2 50	2 50	2 45	2 40	2 50	2 60	2 70	2 70	2 70	2 70	2 70	2 90	29
C	2 40	2 55	2 55	2 50	2 60	2 65	2 70	2 70	2 70	2 70	2 85	30
29	30	30	29	29	30	30	22	14	13	14	16	Count
2 50	2 50	2 50	2 50	2 60	2 60	2 50	2 50	2 60	2 70	2 80	3 00	Median
2 50	2 50	2 50	2 55	2 60	2 65	2 55	2 55	2 60	2 70	2 85	3 00	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo F2
Unit Mc
Month May 1961

TABLE 45
Ionospheric Data
75 0°E Mean Time

Latitude 102°N
Longitude 77 5°E

Date/1 hour	00	01	02	03	04	05	06	07	08	09	10	11
1	9 0 _r	F	F	υ7 2 _p	7 5	5 6	6 8	8 6	9 0 _h	8 6	9 1	9 4
2	υ9 7 _s	υ9 3 _s	υ8 1 _s	7 0	6 1	υ3 5 _r	5 9	8 4	10 1	10 9	10 8	10 2 _h
3	F	F	F	F	5 6	4 7	6 5	8 5	9 5	9 7 _h	8 6	8 6
4	F	υ7 4 _s	6 2	5 5	5 3	4 0	6 1	8 6	9 2	9 3	8 3	8 8
5	F	F	υ6 0 _s	4 6	E	R	6 0 _s	8 1	9 5	9 8 _h	8 9	9 4
6	F	F	5 9	F	F	υ4 4 _p	6 3 _h	8 2	9 0	8 4	9 2	8 2
7	7 8	6 5	υ5 7 _s	5 3	4 4	υ3 4 _r	6 0	8 3	10 0	10 3 _h	9 8 _h	9 0
8	8 4	7 6	6 5	6 9	6 0	4 3	6 2	8 3	8 5	7 9	8 0	8 4
9	7 5	υ5 9 _s	4 7	4 7	R	υ3 3 _r	5 9	7 5	7 8	7 5	7 3	7 4
10	7 9	6 8	5 4	4 6	4 4	υ3 4 _r	6 0	7 5	8 7	8 9	7 5	7 7
11	5 8	4 9	υ5 0 _s	5 0	υ4 2 _r	E	5 5	7 7	9 0	9 6	8 8	8 2
12	5 6	3 9	υ3 2 _r	υ3 3 _p	υ3 0 _r	υ3 1 _r	5 8	8 4	9 0	8 9	8 0	7 8
13	5 1	4 1	υ3 5 _p	υ3 4 _p	3 5	E	5 7	8 2	9 2	8 8 _h	7 8	8 2
14	4 7	υ4 2 _p	F	F	4 0	3 1	6 0	8 4	9 2	8 6 _h	8 4	8 4
15	5 0	3 9	3 6	3 6	E	E	5 7	8 0	8 6	8 2	8 1	8 5
16	5 2	R	υ2 8 _r	E	E	E	5 7	8 1	C	9 7	REH	7 8
17	9 0	7 7	4 3	3 3	E	E	6 4	8 4	10 0	10 3	10 1	8 6
18	6 8	4 9	3 4	3 0	A	E	5 9	8 4	9 9	10 4	10 9	10 0
19	7 1	5 7	4 8	4 4	4 3	3 7	6 1	8 2	9 4	9 8	9 4	8 4
20	F	3 6	3 3 _p	F	F	2 9	6 2	8 6	9 3	9 2 _h	8 2	8 6
21	4 6	3 2	Λ	Λ	A	A	6 0	8 4	9 2	9 7	8 8	8 6
22	8 0	7 0	6 3	5 7	4 9	4 6	6 8	9 0	9 8	10 6	10 1	8 8
23	6 2	5 3	4 3	F	F	3 6 _p	6 4	8 7	9 6	9 8	8 9	9 4
24	6 2	5 7	4 8	4 5	4 1	3 6	6 6	9 0	9 9	10 6	10 8 _h	10 7
25	F	F	F	F	4 1	2 8	6 3	8 1	8 7	9 6	9 9	8 5
26	6 6	5 4	4 2	F	F	3 2 _p	6 0	8 0	9 0	9 6	10 6	10 6
27	5 0	5 0 _p	F	F	4 1	2 4	6 4	8 3	8 8	7 8	7 8	8 2
28	4 8	3 6	3 1	2 7	2 6	2 3	6 0	7 2	8 0	7 9	7 8	8 2
29	3 6	F	F	F	F	F	5 8	7 4	C	C	C	C
30	F	F	F	F	F	F	6 2	8 0	9 3	C	7 8	7 6
31	4 6	3 3	2 4	F	F	R	5 5	7 8	8 6	8 4	7 6	7 6
Count	24	29	23	19	21	26	31	31	29	29	29	30
Median	6 2	5 3	4 7	4 6	4 1	3 2	6 0	8 3	9 2	9 6	8 8	8 5
Mean	6 4	5 4	4 7	4 7	4 6	3 6	6 1	8 2	9 2	9 3	8 9	8 7

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic fo F2
 Unit Mc
 Month May 1961

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	Hour/Date
9 0	8 9	8 8	9 0	9 0	9 8	10 3	v9 5s	9 1	8 6	8 2	8 6	1
9 6	9 3	9 1	9 8	10 9	v11 8s	11 3	10 0	F	F	F	F	2
8 7	8 9	9 1	10 0	11 4	11 0	10 4	9 1	8 4 _F	F	F	F	3
9 3	9 6	9 9	10 7	11 0	12 0	12 0s	10 1	F	F	F	F	4
9 9	10 1	11 2	11 5	12 0s	12 8	12 8	11 2	F	v9 4s _F	F	F	5
9 8	10 9	11 6	11 6	11 6	11 6	12 2	10 8	10 8	10 5	9 4	8 1	6
8 9	9 0	9 7	11 0	11 5	12 0	12 1	10 7	9 7	9 0	9 4	9 1	7
8 7	9 0	9 5	10 0	10 1	10 3	10 9	10 8	10 1	9 7	8 7	8 1	8
7 9	8 6	9 2	9 7	9 7	10 5	11 0	v10 3s	8 8	7 3	v7 1s	8 2	9
8 1	8 5	9 0	10 0	10 3	10 8	11 5	10 8	9 0	8 1	7 5	6 8	10
8 8	9 8	10 0	10 6	11 4	11 4	11 6	11 0	10 3	9 2	7 6	6 6	11
8 2	8 6	8 9	9 8	11 1	11 2	v11 7s	10 5	9 0	7 7	7 0	6 0	12
8 5	9 0	9 8	10 4	A	10 8	11 4	10 9	9 2	8 2	7 2	5 9	13
9 0	9 4	9 8	A	10 8	11 7	v11 6s	10 6	v9 4s	F	6 9	6 6	14
8 8	9 4	9 4	9 6	10 6	11 6	11 0	10 4	v9 4s	8 2	7 8	v7 4s	15
8 2	9 0	10 5	11 2	11 4	10 8	10 6	R	R	F	F	9 0	16
8 4	8 6	9 9	9 6	9 6	9 6	10 1	10 5	9 6	8 6	8 2	8 4	17
9 2	9 0	9 3	9 6	9 8	10 0	10 0	10 0	8 9	8 6	8 4	8 4	18
8 4	8 6	9 0	9 5	10 1	10 6	10 9	10 4	8 8	7 4	6 3	F	19
9 4	10 6	11 0	11 0	11 0	11 8	12 4	11 4	9 6	8 2	6 8	6 0	20
8 4	8 5	8 8	9 0	9 2	9 4	9 4	8 8	8 3	7 8	7 2 _F	8 0 _F	21
8 7	8 8	10 0	10 4	10 6	11 0	10 8	10 6	9 5	7 8	7 2	7 0	22
9 4	9 8	10 4	10 9	11 0	12 4	11 8	10 9	9 5	8 2	7 6	6 8	23
10 2	10 1	10 4	10 6	11 0	11 4	11 4	11 4	9 4	7 7	6 3	F	24
8 4	9 6	11 0	12 0	11 2	10 8	10 8	9 6	F	C	8 4	7 6	25
11 0	11 8	12 6	12 8	13 0	13 6	12 0	11 0	9 2	7 7	7 6	5 6	26
9 0	10 0	10 0	C	11 0	11 2	11 6	11 0	C	8 0	7 0	6 0	27
8 6	8 8	9 2	9 4	10 0	10 6	11 3	10 7	8 8	7 0	5 5	4 5	28
9 0	9 8	C	11 0	10 6	v11 6s	10 8	10 2	8 9	8 1	v7 5s	v7 6s	29
7 9	8 0	8 5	8 9	9 4	10 4	10 6	v9 3s	v7 2s	6 4	v6 1s	5 6	30
7 9	8 7	9 4	10 0	9 9	10 4	v10 3s	8 4	7 7	6 3	v5 0s	v5 0s	31
31	31	30	29	30	31	31	30	25	25	26	25	Count
8 8	9 0	9 6	10 0	10 8	11 0	11 3	10 6	9 2	8 1	7 4	7 0	Median
8 9	9 3	9 8	10 3	10 7	11 1	11 2	10 4	9 1	8 1	7 4	7 1	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
 Unit Mc
 Month May 1961

TABLE 45—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	u8 5F	F	7 3F	7 3R	7 2	5 6	7 9	9 0H	8 4	8 8	9 4	9 2
2	9 4	8 6	J7 4s	6 5	4 8	4 0	7 1	9 3	10 6	10 6	10 6H	9 8
3	F	F	F	u5 8F	u5 1R	4 9	7 9	9 0	10 0	u9 0RH	8 6	8 6
4	u7 6F	u7 1s	5 8	5 5	4 8	4 4	7 7	9 0	9 2	8 5	8 5	9 2
5	F	F	5 3	3 5	2 4	4 2	7 7	9 1	9 9	C	9 0	9 8
6	F	6 4	u5 8s	u6 2R	F	F	7 5	8 8	8 8	9 0	8 8H	8 6
7	u7 5s	6 0	5 7	4 8	3 8	4 7	7 6	9 2	10 5	10 4H	9 0	9 0
8	7 8	u7 0s	6 6	6 8	4 8	5 0	7 5	8 4	8 4	8 0	8 3	8 3
9	6 7	5 5	C	4 7	u3 7R	4 1	6 9	8 0	7 7	7 5	7 2	7 6
10	7 5	6 1	5 0	4 7	4 0	4 6	6 8	8 5	9 3	8 0	7 6	7 8
11	5 1	4 8	5 0	4 9	R	9 9	6 7	8 5	9 4	C	8 2	8 7
12	u1 5R	3 5	3 4	u3 3F	u3 0R	u1 4R	7 2	9 0	9 0	8 4	7 8	8 0
13	4 6	3 9	F	3 6	u2 9R	u3 7R	7 1	8 7	9 4	7 8	7 8	8 4
14	4 4	F	F	F	3 7	4 2	7 4	9 0	u9 3R	8 6	8 4	8 8
15	4 3	3 7	3 5	3 1	L	3 7	7 0	8 4	8 3	8 1	8 3	8 6
16	R	u3 4R	E	E	E	3 7	7 0	8 8	C	9 7H	8 2H	7 8
17	8 8	5 8	3 6	2 8	L	4 4	7 7	9 2	10 3	10 5	9 4H	8 4
18	6 1	4 1	3 0	3 0	A	4 0	7 1	9 2	10 0	10 6	11 0	9 5
19	6 3	5 1	4 5	4 4	4 4	4 7	7 4	9 2	9 6	9 4	8 8	8 4
20	u3 6R	u3 3R	3 4	F	u3 1R	4 4	8 0	9 2	9 5	8 7H	8 4	9 2
21	4 0	A	A	A	A	4 1	7 8	9 0	9 4	9 3	8 6	8 5
22	7 8	6 5	6 0	5 4	4 8	5 4	8 1	9 6	10 2	10 4	9 2	8 6
23	5 7	4 8	3 9	F	u3 5F	u5 0R	7 6	9 2	9 9	9 4	9 0	9 5
24	6 0	5 3	4 6	4 3	3 9	5 0	8 1	9 2	10 6	11 0	10 8	10 7
25	F	F	F	F	3 8	1 4	7 3	8 1	9 2	9 9	9 4	8 0
26	6 0F	4 7	4 0R	3 6	2 9	3 8	7 4	8 8	9 2	10 0	10 6	10 8
27	4 8	F	F	F	4 0	4 1	7 6	8 7	8 4	7 4	7 9	8 6
28	4 1	3 3	2 9	2 6	2 7	4 2	6 6	7 9	7 8	7 8	8 0	8 4
29	3 2	F	F	F	F	3 6R	7 0	7 5	7 9	8 1	C	C
30	F	F	F	F	F	4 8R	u7 1s	8 8	C	RH	7 8	7 8
31	4 0	2 8	2 1	A	F	9 7F	6 9	8 3	8 8	8 3H	7 8	7 8
Count	25	22	22	22	21	30	31	31	29	28	30	30
Median	6 0	5 0	4 6	4 6	3 8	4 4	7 4	9 0	9 3	8 9	8 6	8 6
Mean	5 9	5 1	4 7	4 6	4 0	4 4	7 4	8 8	9 3	9 0	8 7	8 7

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month May 1961

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
8 9	8 8	8 9	9 0	9 4	10 3	10 0	∩9 3s	8 8	8 4	8 2	∩9 2s	1
9 4	8 9	9 4	10 4	11 4	∩11 7s	10 6	∩9 5s	F	F	F	F	2
8 6	9 0	9 4	10 6	∩11 7s	10 3	9 9	8 6	7 9F	F	F	F	3
9 5	9 7	10 1	10 7	10 9	12 5	11 1	9 6	F	F	F	F	4
9 9	10 9	11 3	11 9	12 1	12 9	11 8s	10 4	∩9 4s	F	F	F	5
10 5	11 5	11 6	11 6	11 6	12 0	12 0	11 1	10 9	10 1	8 4	8 0	6
8 8	9 3	10 2	11 1	11 5	12 5	11 6	10 3	9 2	9 4	9 3	8 9	7
8 8	9 3	9 4	10 2	10 1	10 6	11 0	10 3	10 0	9 2	8 3	8 0	8
8 3	9 0	9 6	9 8	10 3	10 3	10 8	11 0	9 5	8 0	∩7 1s	7 6	9
8 3	8 9	9 4	10 2	10 4	11 0	11 3	9 5	8 5	7 8	7 1	6 1	10
9 4	9 8	10 4	10 8	11 4	∩11 6s	∩11 7s	10 8	∩9 6s	8 3	6 9	6 3	11
8 5	8 9	9 4	10 6	11 6	11 7	11 6	9 7	8 2	J7 4s	6 6	5 6	12
8 8	9 4	10 0	A	10 6	11 0	11 4	10 1	8 8	7 8	6 4	5 2	13
9 2	9 7	10 0	10 6	11 2	12 0	11 1	9 8	8 6	J7 3s	6 5	6 0	14
9 0	9 4	9 4	9 8	11 2	11 4	11 0	10 0	8 4	7 8	7 8	∩6 4s	15
∩8 2s	9 8	10 9	11 2	11 0	10 8	10 2	R	F	F	J8 8s	8 6	16
8 4	9 0	9 6	9 6	9 8	9 9	10 6	9 9	9 0	8 4	8 4	7 8	17
8 9	9 2	9 7	9 6	10 0	9 9	10 4	C	8 8	8 4	8 2	7 8	18
8 4	8 8	9 4	9 6	10 4	10 8	10 8	9 4	8 2	6 7	5 9	F	19
10 1	11 1	11 2	11 0	11 4	11 9	11 8	10 6	8 8	7 4	6 2	5 2	20
8 4	8 6	8 9	9 2	9 3	9 4	9 4	8 6	8 0	J7 1s	J7 3s	8 1s	21
8 6	9 4	10 4	10 8	10 6	10 8	10 9	C	9 0	7 6	7 1	6 7	22
9 5	10 0	10 8	10 8	11 5	12 6	11 4	10 4	8 8	7 8	7 4	6 6	23
10 0	10 3	10 4	11 2	11 4	11 9	11 6	10 4	8 6	6 9	F	F	24
9 2	10 4	11 6	11 7	11 0	10 7	10 4	F	F	F	8 0	7 0	25
11 3	12 4	12 7	13 0	13 4	12 8	11 4	10 4	8 3	7 2	6 5	5 5	26
9 0	9 8	10 4	C	11 0	11 6	11 6	10 4	9 2	7 4	6 6	5 6	27
8 6	9 0	9 3	9 7	10 4	11 0	11 1	10 1	7 7	∩6 0s	4 9	4 0	28
9 4	10 4	10 6	10 7	11 1	11 4	10 8	∩9 7s	8 5	∩7 6s	∩7 4s	∩6 9s	29
7 9	8 4	8 8	9 1	9 8	10 9	∩10 2s	8 1	6 8	6 0	5 7	5 5	30
8 2	9 4	9 5	9 8	10 3	10 9	∩9 4s	8 0	6 9	5 7	4 7	4 6	31
31	31	31	29	31	31	31	27	27	25	26	25	Count
8 9	9 4	10 0	10 6	11 0	11 0	11 0	9 9	8 6	7 6	7 2	6 6	Median
9 0	9 6	10 1	10 5	10 9	11 3	10 9	9 8	8 6	7 6	7 2	6 7	Mean

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

Characteristic foF1
 Unit Mc
 Month May 1961

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	L	L
2									L	L	L	L
3									LH	L	L	L
4								L	L	L	u4 8L	8.5
5								L	L	L	L	u5.0L
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	4.8
11									L	L	L	4.7
12									L	L	4.7	4.7
13								L	L	L	L	u4 9L
14								L	L	L	4.8	4.7
15									L	u4 7L	u4 9L	L
16									C	L	L	LH
17									L	L	L	L
18								L	4.5	L	5.0	5.4M
19								L	L	L	L	L
20								L	L	L	L	L
21								L	L	L	L	L
22							4.2	L	L	L	L	L
23							L	L	L	L	L	L
24								L	L	L	4.9	5.0
25								L	L	L	L	L
26							L	L	L	L	L	L
27								L	L	L	L	L
28								L	L	L	L	L
29								L	C	C	C	C
30								L	L	C	u4 8L	4.9
31									L	L	u4 7L	LH
Count							1		1	1	8	10
Median											4.8	4.9
Mean											4.8	5.3

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic . foF1
Unit Mc
Month May 1961

TABLE 46
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

12	13	14	15	16	17	18	19	20	21	22	23	Date
L	L	L	L	L								1
v4 9z	L	L	L	L								2
L	L	L	L	L								3
L	v4 8z	L	L	A	L							4
v4 9z	v4 8z	L	L	A								5
L	L	L	L	L	L							6
4 8	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
4 7	4 7	L	L	L								11
B	L	L	L	H								12
L	v4 8z	v4 5z	A	A	L							13
4 7	v4 7z	L	A	A								14
B	B	L	L	L								15
v4 7z	L	L	L	L								16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
5 1	L	L	L	L	L							19
L	L	L	L	L	L							20
L	L	L	L	L	L	2 5						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	A	L	L	L	L	L						25
L	L	L	L	L	L	L						26
L	L	L	L	L	L	L						27
4 8	L	A	L	L	L							28
4 8	A	C	L	L	L							29
4 7	4 7	4 5	A	L	L							30
4 8	L	v4 5z	LH	L								31
11	6	9	.	.	.	1						Count
4 8	4 8		.	.								Median
4 8	4 8	..	..									Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic foF1
 Unit Mc
 Month May 1961

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	L	L
2								L	L	L	L	L
3								L	L	L	L	u4 9L
4								L	L	L	L	u4 9L
5								L	L	C	L	u4 9L
6								L	L	L	L	L
7								L	L	L	L	4 9
8								L	L	L	L	L
9								L	L	L	L	4 9
10								L	L	L	L	L
11								L	L	C	L	4 7
12								L	L	u4 8L	4 7	B
13								L	L	L	L	4 8
14								L	L	u4 7L	4 7	4 8
15								L	L	u4 8L	4 7	L
16								L	C	L	L	LH
17								L	L	L	L	L
18								L	L	L	4 8	4 9
19								L	L	L	L	L
20							L	L	L	L	5 3	L
21							L	L	L	L	L	L
22							L	L	L	L	L	L
23							L	L	L	L	L	5 1
24							L	L	L	L	5 4H	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	u4 9L	u4 9L
29							L	L	L	L	C	C
30							L	L	G	u4 8L	u4 8L	4 9
31							L	L	L	L	u4 8L	L
Count										4	9	12
Median											4 8	4 9
Mean											4 9	4 9

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF1
Unit Mc
Month May 1961

TABLE 46—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
L	L	L	L	L								1
L	L	L	L	L								2
L	LH	L	L	L								3
u ⁴ 9L	L	L	A	L								4
L	L	L	L	L								5
L	L	L	L	L								6
L	L	L	A	L								7
L	L	L	L	L								8
L	L	L	L	L								9
L	L	L	L	L								10
u ⁴ 7L	4 7	L	L	L								11
4 7	L	L	L	L								12
u ⁴ 9L	u ⁴ 7L	L	A	A								13
4 7	u ⁴ 7L	A	A	L								14
B	L	L	A	L								15
A	L	L	L	L								16
L	L	L	L	L								17
L	L	L	L	L		L						18
5 0	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	O	L]		L]						27
L	A	L	L]	L]		L]						28
4 8	L	L _{max}	L]	L]		L]						29
4 7H	u ⁴ 7L	L	L]	L]		L]						30
4 8	L	L	L	L								31
9	4											Count
4 8	.	.	.	.	.	.	.	.	.	.	.	Median
4 8	.	..	.	.	.	.	.	.	.	.	.	Mean

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

Characteristic foE
 Unit Mc
 Month May 1961

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								R	K	B	B	B
2									R	R	u3 9 ₂	R
3									C	C	C	C
4								A	R	B	C	C
5								R	R	C	R	C
6												
7								2.7	3.2	B	C	C
8								C	C	C	A	C
9									A	C	C	A
10									C	C	A	A
11								C	C	C	C	B
12								R	B	B	C	B
13									C	C	C	C
14								R	C	C	C	C
15								.	C	C	C	C
16												
17									B	C	C	C
18									A	A	A	A
19									3.2	A	A	A
20								A	A	A	A	B
21									4.0	3.7	4.4	4.0
22								A	A	A	A	A
23							A	A	A	A	3.6	A
24								A	A	A	B	A
25								2.5	A	A	A	A
26								A	A	A	A	A
27								A	A	A	A	A
28								A	A	A	A	A
29								A	C	C	C	C
30							R	2.4	A	C	A	A
31									A	A	A	A
Count								3	3	1	3	1
Median												
Mean												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic : foE
 Unit : Mc
 Month May 1961

TABLE 47
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10 2°N
 Longitude : 77 5°E

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

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

Characteristic foE
 Unit Mc
 Month · May 1961

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

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

Characteristic of foB
Unit: Mc
Month May 1961

TABLE 47—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
B	R	R	A	R								1
R	R	u3 6x	A									2
C	C	C	R									3
C	C	A	A									4
C	A	A	A									5
C	A	A	A									6
C	C	C	A									7
A	u3 4x	u3 5x	A	A	A							8
A	A	u3 3x	C	u3 2x								9
A	A	A	C									10
B	B	B	B									11
C	C	A	A	A	A							12
C	A	A	A									13
B	B	A	A									14
B	B	G	A									15
A	C	C	A	2 8								16
B	A	A	A	2 7								17
B	A	A	3 1									18
B	R	3 6	A	2 9								19
B												20
4 3	4 4	4 3	3 8	3 6	3 2							21
A	A	A	A	A	R							22
A	A	A	3 4	A	A							23
A	A	A	A	A	A							24
A	A	A	3 1									25
A	A	A	A	A								26
A	3 8	A	C	A								27
A	A	A	A	2 5								28
A	3 5	R	2 9x	2 6								29
A	A	A	A	R								30
A	u3 5A	A	A	A								31
1	5	5	5	7	1							Count
	3 5	3 6	3 1	2 8								Median
	3 7	3 7	3 3	2 9								Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · foEs
Unit : Mc
Month · May 1961

TABLE 48
Ionospheric Data
75 0°E Mean Time

Latitude : 10·3°N
Longitude : 77 5°E

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

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

Characteristic . foEs
Unit : Mc
Month May 1961

TABLE 48
Ionospheric Data
75 0°E Mean Time

Latitude . 10 s°N
Longitude 77 5°E

12	13	14	15	16	17	18	19	20	21	22	23	Date
88	87	88	84	77								1
92	92	88	76			24		..			42	2
96	88	83	G	58								3
84	84	60	10.6	70								4
90	68	60	82	40	38	34						5
C	G	60	66	78								6
C	C	C	C									7
C	C	C	10.4	7.8	9.7	8.6						8
C	C	C	G	C								9
C	C	C	C	C								10
82	80	66	G	33								11
82	78	78	66	36								12
82	86	G	10.7	17.8	6.6							13
86	80	88	18.0									14
80	80	G	8.0	8.4	8.0							15
G	G	G	G	G								16
96	88	84	78	50	34	84						17
88	82	80	82	64		30	3.4			2.7	3.2	18
94	97	84	76	G						2.8		19
80	78	40	78	66	G							20
98	94	10.4	9.6	8.6	5.8							21
86	9.0	11.2	18.4	8.8	6.2	4.5						22
94	90	8.4	7.7	10.2	6.2		2.2	1.8	2.0	5.6		23
86	84	11.8	12.6	18.0	11.8	8.6	5.2	3.6	2.6	4.1	2.2	24
92	18.8	12.0	G	G			..			3.6		25
8.7	9.6	8.6	4.4	5.4	7.0							26
86	G	G	C	9.0	3.8	8.6		G	3.3	..	..	27
10.0	10.6	12.0	v7.0a	G		6.0				..	3.8	28
88	v17.0a	C	G	G	3.0	5.0						29
12.0	12.0	8.8	v14.0a	8.2	G	4.6		v7.0a				30
11.6	11.0	10.4	8.2	v14.0a	v10.0a	8	5.0		..			31
26	27	26	28	26	15	11	4	8	3	5	4	Count
88	88	84	78	68	6.2	5.0	.	.	..	3.6	..	Median
91	97	86	95	8.3	6.6	5.6	.	.	..	8.8	..	Mean

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

Characteristic . foEs
Unit Mc
Month May 1961

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

Latitude : 10.3°N
Longitude : 77.5°E

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

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f_oE_s
Unit Mc
Month May 1961

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

Latitude : 10 8°N
Longitude : 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Date
8.5	8.8	8.8	8.4	G								1
8.8	9.2	8.2	G		3.8	3.5					4.0	2
9.6	8.8	8.0	G	3.5								3
9.0	7.6	10.0	8.8	4.0								4
	8.0	8.0	5.8	.	6.4							5
8.8	6.8	6.4	6.4	.	4.0							6
C	C	C	C	8.2	8.0	6.6	6.3					7
C	C	C	C	C								8
C	C	C	C	G	G							9
												10
8.2	8.0	G	G									11
7.8	7.8	6.6	G									12
8.4	7.6		14.4	12.7	4.0							13
9.0	10.0	12.0	13.0									14
8.2	7.2	G	10.4	7.0								15
10.0	G	G	G	G								16
9.0	8.5	7.8	7.3	8.4	5.5	9.2	2.6	2.8				17
8.4	8.6	8.2	6.8	G	2.7	3.6	C				7.4	18
8.5	9.2	8.8	6.8							3.1		19
6.8	6.6	G	7.7	3.2			2.8			6.8	3.8	20
9.8	9.7	9.4	8.6	6.8								21
9.4	9.8	11.8	13.0	8.0	4.4	5.4						22
8.6	9.0	7.6	7.7	7.4	2.6	2.4	1.7	2.3	3.4	5.8	7.7	23
8.8	11.6	10.8	16.2	13.6	9.0	7.0	2.4	2.3	2.7	3.8	2.2	24
15.0	12.8	6.6	G		3.0					4.4		25
10.5	5.6	8.0	5.0	7.6	2.8							26
7.8	G	7.6	C	8.0	8.0		6.0	4.6				27
9.8	14.0	8.2	4.2	3.5	3.4	3.6						28
11.6	6.0	6.0	G	G	4.0	4.2	4.0					29
12.2	9.4	12.0	13.0a	5.0	..			4.2				30
11.4	10.0	8.4	12.0	10.6	7.0a	6.0a	4.6					31
26	27	27	27	21	16	10	7	5	2	5	5	Count
8.9	8.6	8.0	7.5	5.0	4.0	4.9	2.8	2.8		5.8	4.0	Median
9.4	8.8	8.6	9.2	7.0	4.7	5.1	3.4	3.2		5.2	5.0	Mean

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

Characteristic . f_oF₂
 Unit Mc
 Month May 1961

TABLE 49
 Ionospheric Data
 75°0E 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												
3												
4								29			40	
5	30								34			
6	26							G	G			
7								C	C			30
8								C	C			C
9									C			40
10									C		39	40
11			28					C	C			
12								G	G			
13												
14								G				
15												
16												
17									G		C	C
18					A				32	35	38	41
19	26	20						30	G	48	42	41
20				19				29	34	39	41	41
21	20	27	A	A	A	A	26	32	39	38	41	42
22			28	20	17			30	35	38	39	43
23							20	28	33	36	40	41
24	28	21	18	19	18			44	35	36		38
25		20	20					G	31	40	40	40
26					18	50	21	29	33	37	41	41
27	19	16	20					29	33	36	37	40
28								22	27	34	36	40
29							22	28	C	C	C	C
30		16			20		G		31	C	36	38
31					16		20	26	33	34	36	38
Count	6	6	5	3	5	1	7	16	17	14	15	16
Median	27	20	20	.	17	.	21	28	33	36	39	40
Mean	26	20	22	.	17	.	22	30	34	38	39	40

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic : fbEs
 Unit : Mc
 Month : May 1961

TABLE 49
 Ionospheric Data
 75 0°E Mean Time

Latitude : 10 3°E
 Longitude : 77 5°N

12	13	14	15	16	17	18	19	20	21	22	23	Date
				3.3							2.6	1
	4.2	4.0	G 5.5	3.8								2
		4.4	6.2	4.2								3
					3.0	3.0						4
												5
C	G		3.6	3.3								6
C	G	C	C	4.8	4.2	3.0	3.7					7
C	G	C	C	C	C							8
4.0	4.1	3.9	C	3.8								9
												10
			G									11
	4.4	G	4.4	4.6	3.0							12
		G										13
												14
												15
G	G	G	G	G								16
4.0	4.0	3.8	3.4	4.0	2.6	7.6						17
	4.0	3.9	3.4	G	2.4	2.2	C					18
4.2	4.2	4.0	3.6	G						1.8	2.4	19
..		4.0	3.5	C						1.7		20
												21
4.3	4.1	3.8	3.7	3.1	2.9	1.9						22
4.1	4.2	4.4	G	3.8	3.2	3.1						23
4.2	4.1	3.9	3.5	3.0	2.8							24
4.1	3.9	4.3	5.6	3.6	4.4	3.6	1.9	1.8	2.0	2.5		25
4.2	3.8	4.4	G	G						2.3	2.2	26
										2.2		27
4.0	4.1	3.9	3.7	3.7	2.6							28
4.0	G	G	C	3.4	3.5	2.9	..	..	2.2	..	..	29
4.0	4.2	4.8	3.8	G		2.6						30
3.8	3.0	C	3.8	G	2.8	2.4						31
3.8	3.6	3.5	5.8	G								32
3.8	3.7	3.6	3.2	3.4	3.6		2.4					33
15	20	21	25	22	14	10	3	2	3	5	3	Count
4.0	4.1	3.9	3.6	3.4	3.0	3.0		..		2.2		Median
4.0	4.2	4.0	4.1	4.1	3.2	3.3			..	2.1		Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds.

Characteristic - f_oE_s
 Unit : Mc
 Month May 1961

TABLE 45—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 8		
2												
3												
4												
5								3 2	4 0	3 8	4 0	
6							3 0	Q				
7								Q	Q	4 1	Q	Q
8								Q	Q	3 8	3 9	4 2
9								Q	Q	3 6	4 0	4 2
10								Q	Q			
11								Q	Q	Q	Q	Q
12								Q	Q	Q	Q	Q
13								3 3	Q	Q	Q	Q
14								3 4	Q	Q	Q	Q
15								Q	Q	Q	Q	Q
16									Q	Q	Q	Q
17									Q	3 8	4 0	3 8
18					A	..		3 0	4 0	3 8	4 1	
19	2 4							3 2		3 8	4 0	4 3
20							G	3 6	3 6	3 8	4 3	
21	2 0	A	A	A	A	3 0	2 6	3 2	3 7	3 9	4 0	4 3
22		2 2		1 9			2 7	3 4	3 6	3 7	3 9	4 0
23				1 5			2 5	3 0	3 5	3 9	4 1	4 2
24			1.7	2 4	1 8		4 6	3 2	3 5	4 0	3 9	3 8
25		2 1					G	3 0	3 4	3 8	4 0	4 0
26		1 4		2 4	1 9	2 3	3 6	3 1	3 6	3 6	3 9	4 2
27	1 7	1 7				..		3 1	3 5	3 6	3 8	4 0
28							2 4	3 0	3 5	3 7	4 0	4 0
29							2 4	3 0	3 6	3 7	Q	Q
30				1 5	1 3		G	3 0	Q	3 6	3 7	3 8
31				A			2 4	3 0	3 3	3 5	3.6	3 8
Count	3	4	1	5	3	2	12	20	15	20	17	14
Median				1 9			2 4	3 1	3 5	3 8	4 0	4 0
Mean				1 9			2 9	3 2	3 6	3 8	4 0	4 0

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

Characteristic f_oF₂
 Unit Mc
 Month May 1961

TABLE 49—*Conid*
 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
				3.4	G							2.6	1
				3.4		3.3							2
				4.5	3.0								3
		4.4	4.4	4.6		4.0							4
			4.6										5
C		3.6	3.9	3.4		2.8							6
C		C	C	5.3									7
4.1		C	C	5.3	4.0	3.0	2.3						8
C		4.0	3.8	C									9
4.0		4.1	G	C	G								10
C		C	G	G									11
C		C	4.0	G									12
C		C	C	3.8	7.4	3.6							13
C		4.4	5.2	3.8									14
C		C	G	5.5	4.6								15
5.4	G	G	G	G	G								16
	4.0	3.7	3.4	3.2	3.4	4.4	4.6	2.4	3.0				17
	4.0	3.8	3.3	G	2.4	2.4	2.2	C				3.4	18
4.3	4.0	3.8	3.4	3.2	3.2						2.2		19
		G	3.4	3.2	3.2			2.1			2.4	2.6	20
4.3	4.1	3.8	3.5	2.9			2.1						21
4.0	4.0	5.3	5.4	3.5	3.0	2.6	2.6						22
4.1	3.8	3.8	3.8	3.4	2.6	1.7			2.0	1.8	2.8	3.1	23
3.9	4.0	4.0	7.0	7.4	3.4	3.1	2.2	2.0	1.9			2.2	24
5.2	5.4	3.7	G	2.4									25
4.3	3.7	4.2	3.5	3.3	2.1	..							26
4.2	G	3.9	C	3.2	3.2	..		2.0	3.4				27
4.0	5.6	4.0	3.2	2.6	2.6	2.4							28
4.0			G	G	2.2	2.6							29
3.8	3.6	3.9	3.7	..	..				1.8				30
3.8	3.7	3.4	3.6	3.3	2.4	2.6	2.2						31
.15	19	24	26	18	16	10	5	5	2	3	5		Count
4.1	4.0	3.8	3.4	3.2	2.9	2.5	2.2	2.0			2.6		Median
4.2	4.1	4.5	4.1	4.0	3.0	2.6	2.2	2.4			2.8		Mean

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f_{min}
Unit . Mc
Month . May 1961

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	2.6	2.4	2.0	2.0	1.9	2.2	2.1	2.4	3.0	4.0	4.2	4.2
2	2.0	2.2	2.0	1.9	1.9	2.4	2.2	3.0	2.5	3.2	2.4	2.8
3	2.1	2.1	2.0	2.0	1.7	1.9	2.2	3.2	C	C	C	C
4	1.8	1.7	1.8	1.8	1.8	2.2	2.2	2.0	3.6	3.8	3.0	C
5	2.3	2.1	2.0	1.9	E	1.9	2.6	2.6	2.6	C	C	C
6	2.3	1.8	1.9	2.0	2.0	2.2	2.2	2.3	2.7	C	C	C
7	2.5	2.0	2.3	2.0	2.0	2.5	3.0	2.8	3.4	3.8	3.2	C
8	2.5	2.1	2.0	2.3	2.8	2.3	2.6	3.0	2.6	C	C	C
9	2.3	2.5	2.5	2.3	2.3	1.9	2.6	2.8	C	C	C	3.2
10	2.0	2.2	1.9	2.3	2.4	2.2	2.0	2.9	C	C	3.0	3.2
11	2.2	2.2	2.4	2.4	2.7	E	2.5	C	2.5	C	C	C
12	1.9	2.7	2.4	2.3	2.5	2.3	2.7	2.6	C	C	C	4.3
13	2.4	2.0	2.5	2.6	2.3	E	2.8	2.1	C	C	C	C
14	2.7	2.2	2.4	2.3	2.4	2.7	2.6	2.6	2.5	C	C	C
15	2.4	2.4	1.9	2.6	E	E	2.3	3.0	C	C	C	C
16	2.5	2.3	2.6	E	E	E	2.6	3.4	C	C	C	C
17	2.8	2.9	2.8	2.0	E	E	2.4	2.9	3.6	2.6	3.1	3.1
18	3.0	2.6	2.2	2.7	1.9	E	2.6	2.8	2.8	2.6	3.4	4.1
19	2.2	1.9	1.8	1.6	2.0	1.6	2.4	2.4	2.8	3.0	3.0	3.4
20	2.2	1.8	1.9	1.8	1.7	1.9	2.1	2.2	2.9	2.8	3.0	4.1
21	1.8	1.7	1.7	1.3	1.3	1.4	1.6	1.8	2.0	2.9	2.8	2.8
22	2.0	1.9	1.6	1.6	1.3	2.0	2.1	1.8	2.4	2.6	2.6	2.9
23	1.8	1.4	1.6	1.4	1.5	1.5	1.5	1.8	2.6	2.6	2.7	3.0
24	2.3	1.7	1.4	1.6	1.3	1.4	2.1	2.2	2.2	2.7	4.2	2.7
25	1.1	1.9	1.4	1.7	1.7	1.7	2.1	1.9	2.4	2.6	2.6	2.9
26	2.6	2.4	1.7	2.4	1.4	1.1	1.3	1.6	2.4	2.7	2.8	3.1
27	1.1	1.3	1.3	1.5	1.5	1.5	2.2	1.9	2.1	2.6	2.4	3.3
28	2.1	1.8	1.9	1.6	1.7	1.6	1.4	1.8	2.1	2.7	2.4	2.8
29	1.5	1.7	F	F	F	2.0	1.4	1.7	C	C	C	C
30	1.4	1.3	1.5	1.5	E	1.5	1.6	1.7	1.8	C	2.4	2.4
31	1.3	1.1	1.3	E	E	1.8	1.5	1.5	1.9	2.2	2.1	2.4
Count	31	31	30	30	30	31	31	30	23	17	19	1.9
Median	2.2	2.0	1.9	2.0	1.7	1.8	2.2	2.4	2.5	2.7	2.8	3.1
Mean	2.1	2.0	2.0	2.0	1.9	1.9	2.2	2.4	2.6	2.9	2.9	3.2

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic : fmin
 Unit · Mc
 Month · May 1961

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

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

Characteristic fmin
Unit Mc
Month May 1961

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

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

Characteristic, fmin
Unit Mc
Month May 1961

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

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

Characteristic h'f2
Unit . Km]
Month May 1961

TABLE 51
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								L	L	L	L	L
2								L	L	L	L	L
3								L	L	L	L	360
4								L	L	L	v340L	L
5								L	L	L	L	v350L
6								L	L	E	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	360
11									L	L	L	350
12									L	L	v355L	380
13								L	L	L	L	370
14								L	L	L	345	v360L
15								L	L	v320L	v345L	360
16									C	L	L	L
17									L	305	L	L
18								L	280	L	350	365
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							370	L	L	L	L	L
24							L	L	L	L	325	330E
25								L	L	L	L	L
26							L	L	L	L	L	L
27								L	L	L	L	L
28										L	L	L
29								L	C	C	C	C
30								L	L	C	v370a	370
31									L	L	v330L	L
Count								1	1	2	8	11
Median											345	360
Mean											345	365

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic : h'f2
 Unit . Km
 Month; May 1961

TABLE 51
 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
L	L	L	L	L	L							1
v330L	L	L	L	L	L							2
L	L	L	L	L	L							3
L	L	L	L	L	L							4
350	v320L	L	L	L	L							5
L	L	L	L	L	L							6
390	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
355	340	v335L	L	L	L							11
L	v335L	325	L	L	L							12
L	v350L	v330L	A	A	L							13
355	L	340	A	A	L							14
360	380	v345L	L	L	L							15
v350L	L	L	320	L	L							16
L	L	L	L	L	L							17
L	L	L	L	L	L							18
390	L	L	L	L	L							19
355	L	L	L	L	L							20
L	L	L	L	L	L		340					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	A	L	315	L	L		L					25
L	L	L	L	L	L		L					26
L	L	L	L	L	L		L					27
360	L	L	L	L	L		L					28
340	A	C	L	L	L		L					29
380	350	310	A	L	L		L					30
380	L	v340L	L	L	L		L					31
13	6	7	2				1					Count
355	350	335										Median
360	350	330										Mean

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

Characteristic h'F2 TABLE 51--*Contd* Latitude 10 2°N
 Unit Km Ionospheric Data Longitude 77 5°E
 Month May 1961 75 0°E Mean Time

Date	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	L	L
2								L	L	L	υ340L	L
3								L	L	L	υ375L	υ360L
4								L	L	L	L	935
5								L	L	C	L	υ350L
6								L	L	L	L	L
7								L	L	L	L	950
8								L	L	L	L	L
9								L	L	L	L	980
10								L	L	L	L	L
11								L	L	C	L	360
12								L	L	υ340L	υ360L	960
13								L	L	L	L	960
14								L	υ310L	υ340L	L	960
15								L	L	L	L	360m
16								L	C	υ325L	L	υ980L
17								L	L	L	L	L
18								L	L	L	335	960
19								L	L	L	L	L
20							L	L	L	L	975	L
21							L	L	L	L	L	L
22							L	L	L	L	L	L
23							L	L	L	L	965	335
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										υ330L	L	960
29								L	L	L	C	C
30								L	C	υ380L	980	480
31								L	L	L	υ360L	L
Count									1	4	9	15
Median											360	360
Mean											360	360

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic · h'F2
Unit · Km
Month May 1961

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	L	L	L								1
L	L	L	L	L								2
u360L	L _H	L	L	L								3
335	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
u350L	330	u320L	L	L								11
u350L	L	L	L	L								12
u360L	u340L	L	A	A								13
365	u345L	A	A	L								14
360	u345L	u320L	A	L								15
A	360	340	L	L								16
L _H	L	L	L	L								17
L	L	L	L	L				L				18
380	L	L	L	L				L				19
360	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	A	L	L	L				L				28
340	L	L _H	L	L				L				29
380	340	L	L	L				L				30
390	L	L	L	L				L				31
12	6	3										Count
360	340											Median
360	345											Mean

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

Characteristic . h'F
Unit . Km
Month May 1961

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	300	280	270	270	240	225	260	230	220	220	220	220
2	250	245	250	260	240	230	260	240	220	220	220	220
3	320	280	270	260	240	235	260	240	220	200	220	240
4	270	250	255	250	240	240	260	235	220	210	220	205
5	280	240	240	240	E	340	260	235	220	210	220	220
6	300	310	310	300	240	240	270	240	235	225	240	220
7	260	240	270	265	275	290	260	245	220	210	210	220
8	290	265	275	265	235	260	265	235	225	225	220	215
9	270	300	340	300	250	245	260	245	230	215	210	205
10	290	260	260	270	260	245	260	240	220	225	210	205
11	295	300	300	265	240	E	260	240	230	225	215	205
12	370	420	420	380	E	285	260	240	240	240	220	220
13	350	380	385	340	250	E	255	240	230	240	220	220
14	400	360	F	300	265	260	260	240	225	220	200	220
15	340	320	275	255	E	E	260	240	225	220	215	S
16	290	275	280	E	E	E	260	240	C	220	215	210
17	280	240	L	275	E	E	250	230	225	205	200	200
18	300	290	295	L	A	E	255	230	220	A	210	210
19	305	320	340	340	300	240	245	230	220	210	200	200
20	F	370	385	380	310	260	255	230	200	220	200	200
21	360	420	A	A	A	A	260	230	240	200	200	200
22	240	240	280	300	270	240	275	230	220	200	190	190
23	285	305	370	380	310	260	245	225	210	205	205	195
24	310	305	300	300	290	250	250	A	215	205	205	190
25	360	365	385	340	245	235	240	225	205	215	200	200
26	280	320	400	F	E	400	270	240	225	220	220	200
27	360	365	F	340	260	220	260	255	220	215	200	200
28	325	320	320	305	290	250	245	200	230	220	200	200
29	405	440	F	F	F	380	250	220	C	C	C	C
30	340	380	400	380	340	280	240	220	205	C	200	200
31	300	350	390	F	F	R	245	230	220	205	195	190
Count	30	31	26	26	25	29	31	30	29	28	30	29
Median	300	305	300	300	265	260	260	235	220	220	210	205
Mean	310	320	320	300	265	265	255	235	220	215	210	205

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

Characteristic . h'F
Unit . Km
Month : May 1961

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
B	v240 _B	220	240	220	260	260	280	280	280	280	275	1
220	210	205	220	230	250	270	320	F	F	F	F	2
205	220	220	200	260	250	280	360	F	F	240	300	3
200	220	200	A	A	240	260	320	360 _F	380 _F	380	390	4
220	220	A	A	A	260	275	320	360 _F	340 _F	F	F	5
220	240	B	225	240	260	265	320	290	260	245	260	6
220	215	220	215	230	260	265	300	325	330	305	300	7
215	220	220	A	v280 _A	A	280	290	30	295	280	290	8
205	210	205	220	220	245	270	295	340	380	340	320	9
210	215	210	220	225	240	260	265	295	285	265	280	10
210	220	220	220	220	260	270	280	280	280	305	340	11
B	v240 _B	240	v240 _A	260	260	260	280	300	305	310	320	12
215	205	220	A	A	270	275	300	320	F	340	360	13
205	240	240	A	230	240	260	290	F	v330 _F	320	320	14
B	B	B	A	A	260	265	295	315	310	300	280	15
C	220	220	240	v260 _C	260	280	340	F	v330 _F	F	300	16
180 _{EX}	200	200	185	A	240	A	275	305	v300 _F	290	305	17
205	210	205	200	200	240	265	280	275	260	260	275	18
200	200	200	200	225	235	260	295	300	320	360	400	19
215	190 _{EX}	205	185 _{EX}	280	240	260	250	270	290	300	340	20
220	200	200	200	200	240	270	320	340	340	320 _F	275	21
190	200	235	A	250	235	270	300	300	285	300	295	22
200	200	200	190 _{EX}	235	245	250	290	320	380	315	305	23
200	295	310	A	A	A	v270 _A	300	310	335	380	360	24
205	A	A	230	230	230	275	340	F	C	300	285	25
200	200	215	220	250	240	285	280	300	300	300	320	26
200	195	200	C	225	260	255	240	C	255	260	325	27
200	220	A	200	220	240	250	240	240	260	310	370	28
200	A	C	280	200	240	250	235	260	270	300	325	29
190	180	190	A	220	240	245	220	230	240	270	280	30
190	200	200	200	240	v260 _A	260	320	320	300	300	280	31
27	28	25	21	25	29	30	31	25	27	28	29	Count
205	210	210	215	230	250	265	295	300	300	300	305	Median
205	210	215	210	230	250	265	290	300	305	300	310	Mean

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

Characteristic h'F
Unit . Km
Month May 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date	0330	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	285	265	270	260	220	240	260	230	220	220	B	220 _m
2	240	250	260	250	235	255	240	235	220	220	220	205
3	300 _r	260	270	250	245	240	240	240	220	220	210	250
4	260	250	260	250	230	250	240	220	210	205	215	210
5	260	240	240	240	220	280	240	220	220	C	220	210
6	300	320	310	270	230	300	250	240	225	225	230	225
7	260	250	265	270	270	280	250	230	215	220	210	215
8	280	275	270	245	245	290	250	225	220	210	210	220
9	280	325	C	280	260	280	250	230	215	215	205	205
10	280	250	255	265	240	265	230	235	220	215	220	205
11	300	305	290	240	245	275	250	235	230	C	215	220
12	400	400	400	F	300	270	250	230	220	220	215	B
13	380	400	400	375	240	280	240	230	220	235	220	235
14	380	F	340	280	265	270	240	225	220	205	200	220
15	340	310	260	240	E	285	245	230	220	220	175 _m	210
16	280	360	E	E	E	285	240	255 _m	C	230	240	205
17	255	240	280	335	E	280	260	B	205	200	200	185 _m
18	285	285	L	305	A	280	240	220	245	210	210	205
19	310	335	345	320	260	255	240	230	220	210	210	200
20	460	420	365	335	260	265	240	230	210	205	220	210 _m
21	360	A	A	A	A	300	240	220	210	220	200	210
22	240	260	290	300	260	250	240	220	200	190	190	180
23	295	340	360	345	280	270	230	215	200 _m	200	210	205
24	305	310	305	305	270	270	A	220	210	205	195	190
25	360	360	380	300	230	245	230	215	215	200	200 _m	190 _m
26	300	360	440	390	380	300	260	230	220	215	200	220
27	370 _r	380 _r	335 _r	300	235	270	250	215	220	205	200	200
28	320	330	320	300	260	270	240	200	220	210	200	200
29	400	F	F	F	F	275	240	210	220	200	C	C
30	340 _r	F	400	360 _r	300	260	235	215	C	195	190 _m	180
31	320	360	410	A	300	270	240	220	210	200	190	180
Count	31	27	27	27	28	31	30	30	29	29	29	29
Median	300	310	310	300	260	270	240	230	220	210	210	205
Mean	315	310	320	295	265	270	245	225	215	210	210	205

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

Characteristic : h'F
Unit : Km
Month May 1961

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
B	220	220	220	245	260	270	285	270	280	280	260	1
210	205	215	235	250	260	300	360 _F	F	F	3385 _F	3360 _F	2
210	220	220	225	260	260	300	360 _F	F	3350 _F	320	280	3
200	200	240 _A	A	230	260	280	340 _F	380 _F	390 _F	360	300	4
220	A	A	240	260	280	300	360	340 _F	360 _F	360 _F	310	5
C	225	230	225	240	265	280	315 _F	265	250	255	265	6
215	225	215	230	250	265	275	320	320	320	300	295	7
205	225	230	A	275	260	270	300	300	280	280	290	8
200	215	220	220	235	260	270	310	370 _F	345 _F	335	305	9
210	215	220	225	235	255	260	280	295	270	275	295	10
220	220	230 _H	210	260	260	270	280	270	300	330	360	11
B	210	240	220	260	265	260	280	300	305	310	325	12
240	220	220 _H	A	A	275	280	320	320 _F	335	360	405	13
235	220 _A	A	A	240	250	270	310	F	340 _F	320	320	14
B	225 _B	280	A	A	260	270	300	F	300	290	290	15
A	C	220	230	220 _C	275	300	F	340 _F	F	300	330 _F	16
220	200	190	180 _H	245	A	300	290	310	295	300	305	17
200	200	205	205	235	255	270	C	270	265	260	300	18
200	185	200	200	220	255	270	300	320	325	385	F	19
205	215	200	230	235	250	240	270	280	300	305	340	20
200	200	200	190	200	250	300	345	330	320 _F	300	260	21
195	200	360 _F	320 _F	240	260	280	C	280	300	305	285	22
200	200	210	225	240	255	270	305	F	310	315	315	23
200	205	220	A	A	270 _A	280	F	315	360	375	345	24
A	A	220	235	245	265	300	F	F	340	280	280	25
220	210	240	220	240	255	280	280	300	300	310	335	26
200	180	215	C	230	270	240	250	260	250	290	320	27
200	A	230 _A	180 _H	235	250	240	240	240	280	340	400	28
210	200	200	200	230	240	260	250	265	280	320	330	29
180	190	A	A	230	250	235	220	240	250	260	300	30
200	200	200	220	240	250	280	340	310	300	280	300	31
25	27	28	23	28	30	31	26	25	29	31	30	Count
205	210	220	220	240	260	270	300	300	300	305	305	Median
205	210	225	220	240	260	275	300	300	305	310	315	Mean

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic · h'E
 Unit : Km
 Month : May 1961

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

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

Characteristic · h'E
Unit : Km
Month May 1961

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

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

Characteristic, h'E
 Unit, Km
 Month May 1961

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

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

Characteristic h'E
Unit Km
Month . May 1961

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
B	120	120	120	120								1
120	115	115										2
C	C	120										3
C	C	A	A									4
C	A	A	A									5
C	A	A	A									6
C	C	C	A									7
A	C	C	A	A	A							8
C	115	115	C									9
A	A	115	C	110								10
B	B	B	B									11
B	B	A	B									12
C	C	C	A	A	A							13
C	A	A	A									14
B	B	C	A	A								15
A	C	C										16
B	A	A	A	140								17
B	A	A	120	120								18
A	A	A	120									19
B	120	120	120	120								20
120	120	125	115	120	150							21
A	A	A	A									22
A	A	A	105	A	R							23
A	A	A	A	A	A							24
A	A	A	120									25
A	A	A	A	A								26
A	120	A	C									27
A	A	A	A	120								28
A	120	120	110	120								29
A	110	A	A	115								30
A	110	110	A	A								31
2	9	9	8	9	1							Count
	120	120	120	120								Median
	115	120	115	120								Mean

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

Characteristic h'Es
Unit Km
Month May 1961

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								110	110	100	100	100
2									105	100	100	100
3									110	100	100	100
4								110	100	100	100	100
5	110	190	..	.				140	100	100	100	100
6	115	-	..	.				G	G	100	100	100
7								G	C	C	100	100
8									100	100	100	100
9								C	100	100	100	100
10									C	100	100	100
11	-	-	115	..				C	C	C	100	100
12								G	G	G	100	100
13											100	100
14								G			100	100
15										110	100	110
16										105	100	100
17									G	100	100	100
18				115	110				105	105	100	100
19	120	120						120	G	100	100	100
20				120				110	100	100	100	100
21	120	120	120	120	120	110	110	110	120	105	100	105
22			120	190	115			120	120	120	120	110
23			115	115			110	105	100	100	100	100
24	110	120	115	110	110			105	105	100	100	100
25	100	125	115					G	105	105	100	100
26					115	110	120	110	120	110	120	120
27	105	120	120					120	120	110	110	120
28				..				120	120	115	120	100
29								120	105	C	C	C
30		110			100			G	100	100	C	100
31	..	..		115	110		120	110	100	100	100	100
Count	7	7	7	7	7	2	6	15	19	24	30	30
Median	110	120	115	115	110		120	110	105	100	100	100
Mean	110	120	115	120	110		115	115	115	105	100	100

Sweep 10 Mc to 25.0 Mc, in 27 seconds

Characteristic h'Es
Unit Km
Month . May 1961

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
100	100	100	100	100								1
100	100	100	100	100		95					120	2
100	100	100	G	100								3
100	100	100	100	100								4
100	100	100	100	100	100	100						5
C	G	100	100	100								6
100	100	100	100	100								7
100	100	C	100	100	100	100						8
100	100	100	G	C								9
100	100	100	C	100								10
100	100	100	G	120								11
100	100	100	100	100								12
100	110	G	100	100	115							13
100	100	115	100									14
100	100	G	100	100	100							15
G	G	G	G	G								16
100	100	100	100	140	140	120						17
100	100	100	105	110		110	105	..	..	120	120	18
100	100	100	100	G						125		19
100	100	130	100	105	G							20
110	110	110	110	110	110							21
110	120	120	110	105	105	100						22
100	100	100	100	105	100							23
100	100	100	100	100	100	100	100	120	100	115	100	24
100	100	100	G	G						120		25
120	110	120	115	120	120							26
120	G	G	C	100	100	130	.	C	125			27
100	100	100	100	G		100	.	..				28
100	100	C	G	G	100	100	.					29
100	100	100	100	100	G	140	.	100	.	.		30
100	100	100	100	100	100	100	100				..	31
29	28	25	23	22	19	12	4	3	3	5	4	Count
100	100	100	100	100	100	100				120		Median
100	100	105	100	105	105	110				120		Mean

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

Characteristic h'Es
Unit : Km
Month May 1961

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

Latitude : 10 2°N
Longitude : 77 5°E

D	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								110	100	100	100	100
2									100	100	100	100
3									110	100	100	100
4								110	100	100	100	100
5		120	120				G	110	100	C	100	100
6							130	G	105	100	100	100
7								C	C	100	C	100
8								C	100	100	100	100
9								C	100	100	100	100
10								C	100	100	100	100
11								C	C	C	100	100
12								G	G	105	100	100
13								120		105	100	100
14								120		100	100	100
15										105	100	100
16										100	100	100
17								B	G	100	100	100
18		125	..	..		110		110	105	100	100	100
19		125	..	..				120	100	100	100	100
20				120			G	100	100	100	100	100
21		120	120	120	120	110	110	110	105	100	105	110
22			110		110		125	120	120	105	120	110
23					105		105	100	100	100	100	100
24		160	125	115	110	105	105	105	100	100	100	100
25		..	115				G	105	100	100	100	100
26		..	120		120	110	110	120	120	120	120	120
27		115	120	110				120	120	110	120	120
28								120	110	110	100	100
29								110	100	100	C	C
30			110	..	110	100	G	100	C	100	100	100
31			..		110			110	105	100	100	100
Count		5	8	4	7	5	2	9	19	22	29	30
Median		120	120		110	110		110	110	100	100	100
Mean		130	120		110	110		115	110	105	100	100

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'Es
 Unit Km
 Month May 1961

TABLE 54—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
100	100	100	100	G								1
100	100	100	G		100	95					120	2
100	100	100	G	100								3
100	100	100	100	100								4
	100	100	100		100							5
												6
100	100	100	100		100							7
100	100	100	100		100	100						8
100	100	120	100	100								9
100	100	100	C									10
100	100	G	C	G								11
100	100	G	G									12
100	100	100	G									13
100	105	100	100	100	100							14
100	115	100	100									15
100	110	G	100	100								16
												17
135	G	G	G	G								18
100	100	100	100	145	130	120	110	120				19
105	105	100	110	G	110	110	C				115	20
100	100	105	105							115		21
100	100	G	105	140			110			110	120	22
												23
110	110	110	110	120								24
110	110	110	85	105	105	105						25
100	100	100	100	100	135	100	100	125	115	115	115	26
100	100	100	100	100	100	100	100	100	100	135	100	27
100	100	100	G	140						120		28
120	125	110	120	120	130							29
130	G	100	C	100	100		120	120				30
100	100	100	100	180	140	100						31
100	120	100	G	G	100	100	115					32
100	100	100	100	100				100				33
100	100	100	100	100	100	100	100					34
100	100	100	100	100	100	100	100					35
30	29	25	21	16	16	10	7	5	2	5	5	Count
100	100	100	100	100	100	100	110	120		115	115	Median
105	105	100	100	115	110	105	110	115		120	115	Mean

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

Characteristic (M 3000) F2
 Unit
 Month May 1961

TABLE 55
 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 90	F	F	u3 10w	3 25	3 40	3 20	2 90	2 35H	2 40	2 40	2 30
2	u3 25s	u3 25s	u3 25s	3 20	3 40	u3 50R	3 30	3 30	3 00	2 75	2 40	2 25H
3	F	F	F	F	3 30	3 50	3 35	3 20	2 90	2 40H	2 40	2 50
4	F	u3 00s	3 20	3 10	3 30	3 50	3 30	3 20	2 80	2 30	2 55	2 55
5	F	F	u3 30s	3 35	E	R	3 30s	3 25	3 00	2 50H	2 45	2 50
6	F	F	2 70	F	F	u3 30w	2 80A	2 80	2 50	2 50	2 40	2 55
7	3 15	3 25	u3 10s	3 25	3 20	u3 20R	3 15	3 20	3 00	2 55H	2 30H	2 40
8	2 85	3 00	2 95	3 10	3 30	3 35	3 10	2 85	2 80	2 40	2 50	2 45
9	2 95	u2 90s	2 30	3 00	R	u3 45R	3 05	2 70	2 55	2 50	2 50	2 45
10	2 85	3 10	2 20	3 15	3 40	u3 50R	3 25	3 05	2 80	2 35	2 50	2 55
11	2 95	3 00	u3 05s	3 15	u3 45R	E	3 20	3 05	2 80	2 50	2 35	2 50
12	2 55	2 60	u2 65R	u2 75w	u3 15R	u3 45R	3 00	2 95	2 70	2 40	2 40	2 30
13	2 70	2 55	u2 65w	u2 90w	3 40	E	3 40	3 15	2 80	2 20H	2 50	2 45
14	2 50	u2 60w	F	F	3 30	3 50	3 30	3 10	2 70	2 35H	2 60	2 50
15	2 75	2 90	3 20	3 40	E	E	3 10	2 90	2 55	2 60	2 55	2 55
16	3 00	R	u3 50R	E	E	E	3 30	3 25	C	2 65	RH	2 40
17	3 05	3 40	3 25	3 00	E	E	3 30	3 20	3 05	2 80	2 25	2 40
18	2 85	2 90	3 00	2 90	A	E	3 20	3 20	3 15	2 80	2 55	2 20
19	2 70	2 70	2 70	2 70	2 95	3 40	3 25	3 15	3 00	2 60	2 20	2 40
20	F	2 35	2 50w	F	F	3 35	3 00	3 20	2 90	2 30H	2 50	2 50
21	2 75	2 70	A	A	A	A	3 10	3 00	2 65	2 75	2 35	2 45
22	3 10	3 15	2 95	2 70	3 00	3 20	3 25	3 25	2 90	2 55	2 35	2 35
23	2 80	2 65	2 45	F	F	3 10w	2 95	2 95	2 70	2 40	2 20	2 50
24	2 65	2 80	2 80	2 85	3 00	3 05	3 05	3 05	2 80	2 60	2 35	2 30
25	F	F	F	F	3 15	3 60	3 40	3 20	2 90	2 55	2 30	2 20
26	3 00	3 00	2 40	F	F	3 00w	3 00	2 95	2 70	2 60	2 60	2 55
27	2 60	2 60w	F	F	3 25	3 70	3 25	3 00	2 45	2 60	2 50	2 60
28	2 65	2 80	2 90	3 00	3 10	3 30	3 10	2 75	2 55	2 60	2 50	2 50
29	2 50	F	F	F	F	F	3 00	2 90	C	C	C	C
30	F	F	F	F	F	F	3 30	3 10	2 90	C	2 45	2 60
31	2 85	2 60	2 60	F	F	R	3 05	2 90	2 80	2 40	2 55	2 50

Count	24	23	23	18	17	20	31	31	29	29	29	30
Median	2 85	2 90	2 95	3 05	3 25	3 40	3 20	3 05	2 80	2 55	2 45	2 50
Mean	2 85	2 85	2 90	3 05	3 25	3 35	3 20	3 05	2 80	2 50	2 45	2 45

Sweep 1 0 Mc to 25 0 Mc in 27 Seconds

Characteristic (M 3000) F2
Unit
Month May 1961

TABLE 55
Ionospheric Data
75°F Mean Time

Latitude 10 2°N
Longitude 77 5°E

12	13	14	15	16	17	18	19	20	21	22	23	Date
2 35	2 35	2 40	2 40	2 45	2 60	2 75	u2 70s	2 75	2 80	2 85	2 90	1
2 45	2 45	2 50	2 50	2 65	2 85	2 90	2 70	F	F	F	F	2
2 50	2 50	2 50	2 50	2 75	2 85	2 80	2 55	2 50F	F	F	F	3
2 55	2 60	2 65	2 70	2 70	2 75	2 80s	2 60	F	F	F	F	4
2 60	2 60	2 70	2 70	2 85s	2 90	2 90	2 70	F	u2 70s	F	F	5
2 70	2 60	2 65	2 65	2 65	2 60	2 55	2 60	2 65	2 95	3 10	3 10	6
2 45	2 50	2 65	2 60	2 70	2 75	2 80	2 70	2 70	2 80	3 85	2 90	7
2 45	2 55	2 50	2 60	2 60	2 70	2 70	2 70	2 75	2 90	3 00	2 95	8
2 55	2 45	2 55	2 60	2 65	2 70	2 80	u2 75s	2 60	2 60	u2 70s	2 75	9
2 55	2 60	2 50	2 60	2 80	2 85	3 00	3 00	3 00	2 95	2 90	3 00	10
2 55	2 60	2 65	2 75	2 85	2 90	2 95	2 95	3 00	2 90	2 70	2 65	11
2 40	2 60	2 50	2 60	2 80	2 90	u3 05s	2 95	2 90	2 85	2 80	2 75	12
2 50	2 50	2 60	2 70	A	2 85	2 90	2 80	2 65	2 75	2 65	2 60	13
2 50	2 50	2 60	A	2 75	2 90	u3 00s	2 90	u2 75s	F	2 80	2 75	14
2 50	2 50	2 55	2 60	2 70	3 00	3 00	2 90	u2 85s	2 80	2 95	3 10s	15
2 60	2 80	2 70	2 80	2 90	2 90	2 80	R	R	F	F	2 80	16
2 25	2 50	2 50	2 50	2 55	2 50	2 60	2 70	2 70	2 80	2 80	2 75	17
2 30	2 30	2 40	2 40	2 50	2 60	2 60	2 70	2 80	2 85	2 90	2 75	18
2 35	2 40	2 40	2 50	2 60	2 70	2 80	2 80	2 70	2 70	2 50	F	19
2 50	2 60	2 50	2 50	2 50	2 50	2 65	2 80	2 80	2 80	2 70	2 65	20
1 40	2 40	2 40	2 40	2 45	2 50	2 50	2 50	2 55	2 55	2 60F	2 90F	21
2 40	2 40	2 60	2 60	2 70	2 90	2 90	2 80	2 95	2 75	2 70	2 80	22
2 40	2 30	2 40	2 45	2 50	2 65	2 70	2 70	2 60	2 55	2 55	2 60	23
2 30	2 20	2 30	2 40	2 60	2 70	2 75	2 70	2 70	2 50	2 50	F	24
2 60	2 60	2 70	2 85	2 90	2 85	2 70	2 50	F	O	2 75	2 80	25
2 60	2 70	2 80	2 90	2 90	3 00	2 95	2 95	2 90	2 70	2 70	2 75	26
2 60	2 70	2 80	C	2 90	2 95	2 90	3 10	C	3 10	2 85	3 75	27
2 55	2 50	2 50	2 55	2 65	2 80	3 00	3 10	3 10	3 00	2 70	2 55	28
2 65	2 70	C	2 95	2 90	u3 00s	3 00	3 00	3 05	3 00	u2 85s	u2 70s	29
2 35	2 45	2 65	2 70	2 85	3 00	3 20	u3 30s	u3 30s	3 15	u3 00s	2 90	30
2 50	2 40	2 50	2 65	2 85	3 00	3 05	2 80	2 80	2 80	u2 90s	u2 80s	31
31	31	30	29	30	31	31	30	25	25	26	25	Count
2 50	2 50	2 50	2 60	2 70	2 85	2 80	2 80	2 75	2 80	2 80	2 75	Median
2 50	2 55	2 55	2 60	2 70	2 80	2 85	2 80	2 80	2 80	2 80	2 80	Mean

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

Characteristic (M3000)F2
 Unit —
 Month May 1961

TABLE 55—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 00	F	3 10 _F	3 15 _F	3 45	3 30	3 15	2 50 _H	2 65	2 40	2 40	2 35
2	3 25	3 20	J3 25 _H	3 20	3 40	3 20	3 30	3 20	2 85	2 55	2 25 _H	2 35
3	F	F	F	3 20 _F	3 40 _R	3 40	3 35	3 10	2 70	2 35 _H	2 40	2 50
4	3 10 _F	3 10 _H	3 10	3 20	3 50	3 20	3 30	3 05	2 55	2 40	2 60	2 60
5	F	F	3 20	3 40	3 00	3 10	3 40	3 25	2 80	C	2 55	2 45
6	F	2 80	3 20 _H	3 00 _R	F	F	3 20	2 70	2 40	2 50	2 20 _H	2 70
7	3 30 _H	3 15	3 15	3 10	3 20	3 15	3 10	3 05	2 75	2 25 _H	2 40	2 40
8	2 90	3 10 _H	3 00	3 20	3 30	3 25	2 95	2 70	2 45	2 50	2 50	2 45
9	2 85	2 75	C	3 10	3 25 _R	3 20	2 90	2 70	2 55	2 50	2 55	2 54
10	2 95	3 20	3 15	3 20	3 50	3 30	3 20	3 00	2 60	2 50	2 50	2 50
11	2 85	3 00	3 05	3 35	R	3 20	3 15	2 95	2 65	C	2 45	2 55
12	3 20 _R	2 65	2 65	3 20 _F	R	3 30 _R	3 00	2 90	2 45	2 35	2 25	2 65
13	2 60	2 60	F	3 30	3 60 _R	3 25 _R	3 30	3 00	2 50	2 50	2 45	2 50
14	2 60	F	F	F	3 30	3 25	3 20	2 90	2 40 _R	2 50	2 45	2 50
15	2 75	3 00	3 35	3 55	E	3 00	3 05	2 70	2 50	2 55	2 45	2 55
16	R	3 60 _R	E	E	E	3 25	3 25	3 25	C	2 45 _H	2 25 _H	2 50
17	3 30	3 25	3 15	3 00	E	3 10	3 30	3 15	2 95	2 55	2 25 _H	2 30
18	2 85	3 00	3 00	3 10	A	3 05	3 25	3 15	2 95	2 70	2 30	2 35
19	2 80	2 75	2 70	2 85	3 25	3 20	3 20	3 10	2 80	2 40	2 30	2 40
20	3 35 _F	3 25 _F	2 50	F	3 20 _F	3 10	3 30	3 10	2 65	2 25 _H	2 50	2 50
21	2 60	2 30	A	A	A	2 95	3 10	2 95	2 55	2 40	2 35	2 40
22	3 20	3 05	2 90	2 95	3 20	3 25	3 25	3 05	2 80	2 30	2 35	2 40
23	2 80	2 55	2 50	F	3 00 _F	3 20 _F	3 00	2 85	2 60	2 25	2 50	2 50
24	2 65	2 65	2 75	2 80	3 05	3 10	3 10	2 95	2 80	2 50	2 30	2 30
25	F	F	F	F	3 50	3 30	3 30	3 05	2 75	2 45	2 10	2 40
26	3 10	2 60	2 30	2 40	2 60	3 00	2 90	2 80	2 60	2 60	2 60	2 55
27	2 50	F	F	F	3 40	3 05	3 25	2 70	2 40	2 50	2 50	2 50
28	2 40	2 75	2 90	3 05	3 20	3 10	2 90	2 65	2 55	2 55	2 50	2 55
29	2 85	F	F	F	F	2 95	2 95	2 70	2 50	2 55	C	C
30	F	F	F	F	F	3 20 _F	3 25 _H	3 00	C	RH	2 55	2 45
31	2 65	2 65	2 65	A	F	3 05 _F	3 05	2 90	2 65	2 40 _H	2 60	2 45
Count	25	23	21	21	20	30	31	31	29	28	30	30
Median	2 80	2 80	3 00	3 10	3 30	3 20	3 20	2 95	2 60	2 50	2 45	2 50
Mean	2 90	2 85	2 90	3 10	3 25	3 20	3 15	2 95	2 65	2 45	2 40	2 45

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (M3000)F2
 Unit —
 Month May 1961

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 40	2 40	2 35	2 40	2 50	2 65	2 70	2 70 _s	2 75	2 80	2 80	2 80 _s	1
2 45	2 40	2 50	2 50	2 70	2 95 _s	2 70	2 65 _s	F	F	F	F	2
2 60	2 50	2 50	2 60	2 90	2 80	2 65	2 50	2 50 _r	F	F	F	3
2 55	2 60	2 70	2 70	2 70	2 85	2 70	2 60	F	F	F	F	4
2 60	2 70	2 70	2 75	2 85	2 95	2 85 _s	2 65	2 65 _r	F	F	F	5
2 75	2 70	2 70	2 65	2 55	2 60	2 60	2 50	2 75	3 10	3 00	3 10	6
2 50	2 55	2 60	2 70	2 70	2 90	1 75	2 65	2 90	2 70	2 85	2 85	7
2 50	2 60	2 55	2 60	2 65	2 65	2 75	2 70	2 80	2 90	2 95	2 90	8
2 50	2 55	2 60	2 65	2 65	2 70	2 70	2 65	2 60	2 65 _s	2 75	2 80	9
2 55	2 50	2 60	2 80	2 90	2 95	3 10	3 00	2 95	2 85	2 90	2 95	10
2 55	2 65	2 70	2 80	2 90	2 90 _s	2 95 _s	2 95	2 10 _s	2 85	2 70	2 60	11
2 50	2 50	2 55	2 65	2 90	2 90	3 00	2 90	2 85	2 85 _s	2 80	2 70	12
2 50	2 50	2 65	A	2 80	2 90	2 85	2 80	2 80	2 70	2 60	2 50	13
2 50	2 50	2 60	2 70	2 80	3 00	3 00	2 80	2 70	2 80 _s	2 80	2 75	14
2 50	2 50	2 55	2 60	2 75	3 00	2 95	2 85	2 80	2 80	2 90	2 90 _s	15
2 30 _s	2 65	2 70	2 85	3 00	2 85	2 70	R	F	F	2 80 _s	2 80	16
2 40	2 40	2 50	2 50	2 55	2 50	2 70	2 70	2 70	2 80	2 80	2 70	17
2 85	2 40	2 40	2 45	2 55	2 60	2 70	C	2 85	2 90	2 80	2 80	18
2 35	2 45	2 50	2 50	2 65	2 75	2 80	2 75	2 65	2 60	2 45	F	19
2 50	2 55	2 55	2 55	2 50	2 60	2 75	2 85	2 80	2 75	2 80	2 65	20
2 40	2 40	2 40	2 45	2 50	2 60	2 50	2 50	2 55	2 60 _s	2 55 _r	3 05 _r	21
2 45	2 40	2 55	2 70	2 75	2 90	2 90	C	2 85	2 70	2 80	2 80	22
2 30	2 40	2 40	2 45	2 50	2 80	2 75	2 65	2 60	2 55	2 55	2 70	23
2 25	2 25	2 30	2 55	2 65	2 70	2 70	2 70	2 60	2 45	F	F	24
2 60	2 60	2 75	2 70	2 80	2 75	2 60	F	F	F	2 75	3 00	25
2 60	2 75	2 80	2 85	3 00	2 95	2 90	2 90	2 80	2 80	2 75	2 65	26
2 50	2 65	2 80	C	2 90	2 95	3 05	3 00	3 05	2 95	2 70	2 65	27
2 50	2 50	2 55	2 60	2 75	2 90	3 05	3 20	3 05	2 85 _s	2 75	2 50	28
2 60	2 80	2 85	3 00	2 95	3 05	3 00	2 10 _s	2 95	2 90 _s	2 80 _s	2 80 _s	29
2 45	2 60	2 65	2 75	2 85	3 10	2 35 _s	3 25	3 20	3 00	2 95	2 70	30
2 40	2 55	2 60	2 70	2 80	3 05	2 95 _s	2 80	2 80	2 80	2 80	2 50	31
31	31	31	29	31	31	31	27	27	25	26	25	Count
2 50	2 50	2 60	2 65	2 75	2 90	2 75	2 75	2 80	2 80	2 80	2 80	Median
2 50	2 55	2 60	2 65	2 75	2 85	2 85	2 80	2 80	2 80	2 75	2 80	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic foF2
 Unit Mc
 Month June 1961

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	3.4	2.1	F	E	E	E	5.8	8.6	8.7	9.2	9.2 _{II}	8.4
2	3.4	2.5	1.8	1.5	1.4	2.1	5.6	7.1	8.2	9.3	8.4	8.2
3	C	F	F	F	F	F	6.1	7.9	8.8	9.6	9.4	C
4	5.3	3.5 _F	F	F	F	2.0	5.6	7.4	8.7	8.1	7.8	7.5
5	4.4	2.9	3.1	2.6	F	1.6	5.3	7.3	8.4	8.6 _{II}	7.8	7.5
6	3.4 _r	F	F	F	S	F	5.3	7.3	8.6	8.4	7.9	8.1
7	2.3	S	E	E	E	F	5.3	7.7	7.9	7.2	6.9	7.1
8	3.7 _s	4.6 _F	F	F	F	F	5.3	7.7	8.6	9.3	8.2	7.5
9	3.0 _s	2.2 _s	A	2.7 _F	2.7 _F	2.5 _r	5.7	7.6	8.8	8.7	8.4	8.4
10	4.3	2.7	2.0	A	1.8	2.0	6.0	8.2	9.0	9.1	8.8	8.8
11	3.0 _s	A	2.3	F	2.3	E	5.7	7.5	8.4	8.3	8.4	8.2
12	F	F	F	FS	S	S	5.4	3.9 _s	8.8	8.3	7.5	6.9 _{II}
13	2.7	2.3 _a	2.1 _a	1.8 _a	1.7	H	6.0	7.7	C	8.8	9.2	R
14	2.3	A	A	A	1.8	H	5.7	7.7	9.0	9.5	9.0	8.6
15	3.8	2.8	2.4	FH	F	F	5.9	8.3	9.2	9.1	8.7 _{II}	7.9
16	5.6	5.1	F	3.1 _F	2.9	2.9	5.4	7.6	8.9	9.4	9.4	8.4
17	4.5	3.3	2.8	2.3	2.0	2.3 _{II}	6.0	8.6	9.3	9.5	10.0	9.5
18	4.7	F	F	F	F	F	5.9	8.0	8.5	8.2	C	C
19	6.5	4.7	3.9	2.9	2.5	2.8	6.7	8.5	9.6	9.7	9.9 _{II}	9.3
20	5.2	4.2	3.2 _F	2.5 _v	2.3	2.8	6.4	8.4	9.1	9.1	8.6	8.8
21	7.4	6.4	5.4	4.2	3.6	2.7	6.9	8.4	9.8	9.4	10.3	10.5
22	8.6	7.0	6.1	4.8	2.8	2.5	6.6	8.7	9.8	10.4	10.6	10.7
23	7.1	5.0	F	F	F	F	6.0 _F	8.6	10.4	10.9	10.3	9.4
24	F	F	F	F	4.6 _r	3.0 _F	6.2 _r	8.4	9.3	9.0	8.0	8.2
25	F	F	F	F	F	4.0	6.1	7.6	9.0	9.2	9.0	8.8
26	4.6	3.9	3.2	3.3	3.5	2.6	6.3	8.0	8.8	9.0	9.1	9.0
27	F	F	F	F	F	F	6.0	8.3	8.9	8.8	8.4	8.6
28	3.5	2.9 _{II}	3.1	3.6	3.2	2.9	5.6	8.0	8.7	8.5	8.3	8.3
29	C	3.7	F	F	F	2.5 _F	5.6	8.1	8.7	8.5 _{II}	8.1	7.5
30	3.6	2.8	2.7	2.5	2.3	E	5.4	8.3	8.7	9.1	8.2	8.0
Count	24	20	15	15	18	19	30	30	29	30	29	27
Median	4.6	3.6	2.8	2.6	2.3	2.5	5.8	8.0	8.8	9.1	8.6	8.4
Mean	4.7	3.8	3.2	2.9	2.6	2.6	5.9	8.0	8.9	9.0	8.8	8.4

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic foF2
Unit Mc
Month June 1961

TABLE 56
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
8.2	8.8	9.1	9.6	10.5	10.8	10.9	7.7	6.8	4.8	4.4	3.8	1
8.4	8.5	8.5	8.9	9.6	11.4	10.4	9.6	C	F	F	F	2
9.2	9.8	9.8	9.8	10.1	9.9	10.3	10.2	9.9	8.9	8.2	7.3 _s	3
7.4	7.9	8.7	8.9	9.2	7.9 6 _s	10.2	9.3	9.1	8.7	6.9	6.8	4
7.2	7.1	8.0	8.8	8.6	8.9	7.9 4 _s	9.3	9.0	8.8	6.1	6.5	5
8.3	8.4	8.1	8.6	9.6	10.8	9.8	8.3	7.1	7.6 4 _s	7.5 2 _s	7.4 8 _s	6
7.4	8.2	8.6	9.4	10.1	10.6	10.8	9.6	8.1	7.2	6.8	6.6 1 _s	7
7.3	7.4	8.3	9.2	9.5	9.6	9.2	8.3	7.1	6.5	7.0 6 _s	6.7	8
8.4	9.0	9.3	9.9	10.7	10.4	10.9	10.4	7.9	7.6 0 _s	7.5 2 _s	5.2	9
8.3	8.3	8.8	9.4	9.8	10.9	11.0	9.3	6.0	5.3	4.2	3.8	10
8.7	7.9 1 _s	8.7	9.0	9.6	10.6 _s	10.6	9.9 _s	7.8 3 _s	6.6	4.7	4.2	11
7.7 3 _s	7.7 3 _s	7.1	7.8	7.7 9 _s	A	7.9 2 _s	8.6	7.8	5.5	3.6	3.2	12
7.9	C	8.4	8.5	8.6	9.2 _s	10.1 _s	8.8	8.0	6.5	7.4 3 _s	7.3 4 _r	13
8.5	8.0	8.5	8	7.10 2 _s	9.6 _s	9.9	9.4	8.9	6.4	5.3 _r	4.6 _v	14
7.9	7.9	7.9	8.5	8.8	9.1 _s	7.10 2 _s	9.5 _s	8.4	7.1 _s	6.8	6.7	15
7.8	7.6	8.6	9.0	9.7	10.2	10.2	9.0	7.6	6.6	6.4	5.6	16
9.6	9.4	9.4	9.8	10.4	11.2	11.6	10.3	9.5	7.9	6.9	5.9	17
C	8.2	8.7	9.5	9.9	11.0	11.0	10.4	8.9	7.7 4 _s	6.5	7.1	18
9.4	9.5	10.0	10.8	10.7	11.2	12.6	11.9	9.5	8.0	7.0	7.6 1 _s	19
8.8	9.2	9.1	9.3	10.0	11.0	11.4	10.7	9.0	8.7	9.3	8.5	20
9.6	9.0	9.8	10.4	10.6	11.0	12.8	11.6	9.8	8.6	7.8	7.8	21
10.8	10.2	10.0	10.8	11.2	11.4	11.5	10.1	10.0	9.0	10.0	8.8	22
9.5	10.0	10.9	10.8	11.2	11.0	11.4	11.0 _r	10.0 _r	9.8 _r	8.1	7.4 _i	23
8.0	8.2	8.0	8.4	9.0	10.0	11.0	9.4	7.6 _x	6.4	6.0 _r	F	24
9.4	9.8	10.0	10.4	11.4	11.2	11.0	10.4	9.0	8.0	6.8	5.0	25
9.2	10.2	9.8	10.6	11.3	11.0	11.6	9.8	8.5	7.6	6.6	F	26
9.0	9.4	9.4	9.7	10.8	11.2	10.4	9.5	7.9	7.7 3 _s	7.2	5.8	27
8.3	8.5	8.7	8.8	9.0	10.2	11.0	C	9.0	7.7 5 _s	6.9	5.6	28
8.8	9.6	10.3	10.9	10.3	10.3	11.0	11.1	8.8	6.5	5.5	4.6	29
7.9	8.1	8.7	9.3	9.8	9.8	9.8	9.8	9.4	7.5	6.4	5.5	30
29	29	30	29	30	29	30	29	29	29	29	27	Count
8.4	8.5	8.7	9.4	10.0	10.6	10.8	9.6	8.8	7.3	6.6	5.8	Median
8.5	8.7	9.0	9.5	9.9	10.5	10.7	9.8	8.5	7.3	6.4	5.8	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic : foF2
Unit Mc
Month June 1961

TABLE 56—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	2.8	F	E	E	E	4.0 _F	7.3	8.8	8.9	9.3	9.2	8.5
2	3.1	2.1	1.6	1.4	1.4	3.9	6.6	7.5	9.1	8.6	8.3	8.2
3	F	F	F	F	F	u1.7 _r	7.1	8.6	9.4	9.4	C	9.6
4	4.2	F	F	F	2.3	3.8	7.0	7.9	8.7	8.0	7.5	7.2
5	3.1	2.1	2.9	F	F	3.6	6.3	8.0	8.7	8.5 _H	7.6	7.4
6	F	F	F	S	E	3.7	6.6	8.4	8.5	8.0	7.5	8.1
7	S	S	E	E	A	3.5	6.9	7.7	7.7	7.2	6.7	7.2
8	u5.2 _r	u4.2 _F	F	F	F	3.5	6.7	8.3	8.9	8.8	7.8	7.6
9	u5.0 _s	u3.8 _s	Λ	A	Λ	u3.7 _r	7.0	8.4	8.8	8.5	8.2	8.3
10	3.7	2.2	1.8	1.8	1.4	3.9	7.4	8.8	9.1	9.0	8.8	8.6
11	2.8	2.5 _r	u2.1 _r	F	1.8	3.9	6.8	7.9	8.6	8.3	8.3	8.4
12	F	F	F	S	S	3.6	6.7	8.4	8.6	7.8	7.1	7.1
13	u2.5 _c	u2.2 _c	u2.0 _c	1.8	1.6	4.1	7.1	7.9	8.4	9.0	9.2	8.7 _H
14	A	A	Λ	1.7	1.6	3.9	6.9	8.4	9.7	9.6	9.0	8.4
15	3.3	2.6	2.0 _v	FH	A	4.1	u7.1 _s	9.0	9.4	8.9	8.4	7.7
16	5.1	4.6	3.9	u3.1 _r	2.9	4.3	6.9	8.4	9.2	9.6	8.6	8.0
17	3.6	3.0	2.6	2.0	2.2	4.3	7.9	9.1	9.4	9.9	9.6	9.5
18	F	F	F	F	F	3.9	7.1	8.3	8.5	7.9	C	C
19	5.5	4.3	3.3 _r	2.7	2.3	4.9	7.9	9.0	9.6	10.0	9.1	9.4
20	4.9	3.7 _i	F	2.5	2.3	4.4	7.9	8.5	9.4	9.0	8.8	9.0
21	6.9	6.0	4.8	3.6	3.6	4.6	7.6	8.8	9.8	19.6	10.5	10.8
22	7.6	6.6	5.6	3.9	E	4.8	8.0	9.0	10.0	10.6	11.0	10.6
23	5.6	5.0	F	F	F	4.0 _F	7.1	9.8	10.3	0.6	9.6	9.6
24	F	F	F	F	4.0 _i	4.4 _F	7.2	9.0	9.0	8.4	8.2	8.0
25	F	F	F	F	4.2 _r	5.0	6.8	8.4	9.2	9.1	9.0	9.0
26	4.2	3.4	3.3	3.5	3.2	4.3	7.4	8.5	8.8	9.0	9.3	9.3
27	F	F	F	F	F	4.0	7.3	8.7	8.9	8.4	8.5	8.8
28	2.9	2.9	u3.4 _s	3.3	3.2	4.3	6.9	8.5	8.9	8.7	8.1	8.2
29	4.1	u3.5 _F	F	F	F	u4.0 _F	7.1	8.3	8.5 _H	8.5 _H	7.9	8.3
30	3.1	F	2.7	2.3	u2.1 _r	3.7	6.8	8.5	9.0	8.6 _H	7.9	7.7
Count	21	18	16	15	19	30	30	30	30	30	28	29
Median	4.1	3.4	2.6	2.4	2.2	4.0	7.1	8.4	9.0	8.8	8.4	8.4
Mean	4.0	3.6	3.0	2.6	2.5	4.1	7.1	8.5	9.0	8.9	8.6	8.5

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic : foF2
 Unit : Mc
 Month June 1961

TABLE 56--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
8.6	9.2	9.3	10.0	10.9	11.7	8.9	7.1	5.6	4.6	4.3	3.5	1
8.7	8.2	8.7	9.0	10.4	11.4	9.8	F	F	F	F	F	2
9.6	9.7	9.5	10.1	10.0	10.0 1s	10.0 3s	10.4	10.9 9s	8.4	7.9	6.8	3
7.8	8.4	8.9	9.1	10.9 6s	10.0 3s	10.9 8s	8.8	9.3	6.9	6.9	5.5	4
7.1	7.4	8.3	8.6	9.0	9.5	9.5	9.0	9.5	6.8	10.6 2s	10.6 2s	5
8.3	8.5	8.0	9.2	10.6	10.4	9.8	7.7	10.7 2s	10.6 0s	10.5 0s	10.2 7s	6
7.7	8.4	9.1	9.7	10.3	10.8	10.7	8.6	7.6	6.9	6.7	10.6 0s	7
7.4	7.5	9.1	9.7	9.2	9.8	8.7	8.1	6.8	10.6 5s	6.7	6.2	8
8.6	9.5	10.0	10.4	10.7	10.0 3s	11.4	8.7	10.7 4s	5.7	5.2	10.6 6s	9
8.3	8.5	9.0	9.4	10.4	10.7	10.6	7.6	5.6	4.3	3.9	3.4	10
9.0	8.9	8.8	9.1	10.5	10.6	10.8s	10.9 2s	10.7 5s	5.5	4.4	4.2	11
7.5	10.7 1s	7.5	7.9	8.0	10.8 7s	10.9 1s	8.4	6.9	4.3	3.4	3.1	12
7.8	8.0	8.6	8.5	8.9	9.6s	9.5s	8.4	7.1	5.6	3.9v	2.7	13
8.4	8.4	8.6	9.7	9.9	9.8	10.0	10.0 0s	7.6	10.6 0s	5.0	4.4	14
7.9	7.8	8.3	8.5	8.9	10.9 6s	10.4	9.0	7.6	7.2s	6.8	6.2	15
7.2	8.0	8.7	9.2	9.9	10.4	10.0	8.2	7.1	6.6	5.7	4.9	16
9.4	9.4	9.8	9.8	11.0	11.8	11.0	9.9	8.8	7.3	6.2	5.6	17
C	8.5	9.2	9.8	10.8	11.3	10.6	9.8	8.1	6.8	6.6	7.1	18
9.1	10.0	10.6	10.6	11.0	12.3	12.8	11.2	8.6	7.6	6.6	5.6	19
9.0	9.0	9.2	9.6	10.6	11.2	11.2	10.0	8.6	8.8	9.2	8.0	20
9.3	9.4	10.0	10.6	11.0	11.6	12.4	10.0	8.9	8.4	7.6	8.2	21
10.6	10.0	10.4	11.0	11.0	11.3	10.8	10.2	9.8	9.6	9.4	7.9	22
9.6	10.4	11.0	10.8	11.4	10.8	11.8	10.5	F	8.6	7.4s	7.2s	23
8.0	8.2	8.2	8.8	9.6	11.0	10.4	8.6s	6.8s	6.0	F	F	24
9.3	9.8	10.0	10.9	11.2	11.0	11.2	9.6	8.6	7.4	5.5	5.1	25
9.5	10.1	9.8	10.8	11.4	11.3	11.5	9.0	10.7 6s	6.9	F	F	26
9.3	9.4	9.0	10.2s	11.2	11.1	9.6	8.5	10.7 6s	10.7 2s	6.9	4.9	27
8.3	8.5	8.8	8.9	10.9 6s	10.8	11.0	10.9 6s	8.1	7.2s	6.2s	5.2	28
9.3	10.3	10.8	10.6	10.0	10.8	11.4	9.9	10.7 3s	5.8	10.5 2s	4.1	29
7.8	8.3	9.1	9.6	10.3	9.5	9.8	10.6	8.3	6.8	5.9	10.5 1s	30
29	30	30	30	30	30	30	29	28	29	27	27	Count
8.6	8.5	9.1	9.7	10.4	10.8	10.5	9.0	7.6	6.8	6.2	5.2	Median
8.6	8.8	9.2	9.7	10.2	10.6	10.5	9.2	7.8	6.7	6.1	5.3	Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foF1
 Unit Mc
 Month June 1961

TABLE 57
 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								L	L	L	L	4 8	
2								L	L	L	4 5	L	
3									L	L	L	C	
4									L	L	4 5	4 6	
5							L	L	L	L	4 5	4 6	
6								L	L	L	L	4 6	
7								L	L	L	u ⁴ 7L	u ⁴ 8L	
8								L	L	L	L	L	
9								L	L	L	L	L	
10								L	L	L	L	4 9	
11									LH	L	4 9	4 8	
12									L	L	4 9	L	
13								L	C	4 8	u ⁴ 8L	LH	
14								L	L	L	L	4 8	
15								L	L	4 7	LH	L	
16								L	L	L	L	L	
17							L	L	L	LH	5 2	5 0	
18								L	L	L	C	C	
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	5 0	L	
24							L	L	L	L	L	L	
25							L	L	L	L	L	L	
26							L	L	LH	L	L	4 9	
27								L	L	4 9	L	LH	
28								L	LH	L	LH	LH	
29								L	L	L	4 7	L	
30								L	L	L	LH	L	
Count											3	10	10
Median												4 8	4 8
Mean												4 8	4 8

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic foF1
Unit Mc
Month June 1961

TABLE 57—Cont'd
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 6	L	L	L	L	A							1
L	4 6	L	L	L	L							2
L	4 6	L	L	L	L							3
L	4 7	L	L	L	L							4
4 6	L	4 5	L	L	L							5
L	v4 8L	v4 6L	L	L	L							6
4 6	L	L	L	L	L							7
L	L	L	L	L	L							8
L	L	L	L	L	L							9
4.6	5 8	4 9	L	L	L							10
4 9	4 8	L	A	L	L							11
4 8	4 9	L	L	L	L							12
4 9	C	4 8	L	L	L							13
L _{EX}	4 8	A	A	L	L							14
5 0	v4 9L	L	L	L	L							15
5 1	5 0	4.9	L	L	L							16
5 1	L	L	L	L	L	L						17
C	L	L	L	A	L							18
L	L	L	L	L	L							19
L	L	L	L	L	L	L						20
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	4 9	L	A	L	A							26
L _{EX}	4 7 _{EX}	L	L	L								27
L	L _{EX}	L	L	L								28
L	L _{EX}	L	L	L								29
4 8	4 8	L	L	L	L							30

11	19	5										Count
4 8	4 8	4 8		..	.							Median
4 8	4 8	4 7		..	.							Mean

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

Characteristic foF1
Unit Mc
Month June 1961

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	C	L
4								L	L	L	L	L
5								L	L	L	4.6	L
6							L	L	L	L	4.7	4.6
7							L	L	L	L	L	4.8
8							L	L	L	L	L	L
9							L	L	L	L	L	L
10							L	L	L	L	5.0	4.9
11								L	L _H	L	4.9	4.8
12								L	v ⁴ 7L	L	4.8	4.9
13								L	L	v ⁴ 8L	4.7L	v ⁴ 8L
14								L	L	L	L	4.8
15								L	4.5	L	L	5.0
16							L	L	L	L	L _H	L
17							L	L	L	L	L	5.1
18							L	L	L	L	C	C
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21							L	L	L	L	L	5.2
22							L	L	L	L	L	L
23							L	L	L	L	5.0	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26							L	L	L _H	v ⁴ 9L	L	5.0
27							L	L	L	v ⁴ 9L	4.9	4.9
28							L	L _H	L _H	L	L _H	4.8
29							L	L	L	4.6	4.7	L
30							L	L	L _H	L _H	L	L
Count									2	4	10	13
Median											4.8	4.9
Mean											4.8	4.9

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foF1
 Unit Mc
 Month June 1961

TABLE 57—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	L	L	L								1
L	L	L	L	L								2
L	4.5	L	L	A								3
L	4.5	A	L	L								4
L	L	L	A	L								5
v4.8L	L	L	L	L								6
L	L	L	L	L								7
L	L	L	L	L								8
L	L	L	L	L								9
L	5.1	L	4.9	L	L							10
L	L	L	A	L								11
L	L	L	L	L								12
L	4.9	L	L	L								13
4.9	L	A	L	L								14
L	L _{EX}	L	L	L								15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
Q	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								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								26
4.8 _{EX}	4.6	L	L	A								27
L	L	L	L	L								28
L _{EX}	L	L	L	L								29
4.8	L	L	L	L								30
<hr/>												
4	5		1									Count
<hr/>												
	4.6											Median
<hr/>												
	4.7											Mean
<hr/>												

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic foE
Unit Mc
Month June 1961

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							2 1	2 7	A	A	A	A
2							2 0	2 9	A	A	A	A
3							2 0	A	A	3 3	A	C
4							2 2 _H	2 7	A	A	A	A
5							2 1	2 7	A	A	A	A
6							2 8 _H	2 7 _H	A	A	A	A
7							A	A	A	A	A	A
8							1 8 _H	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
12							A	A	A	A	A	A
13							1 8	2 6	C	A	A	A
14							2 0 _A	A	A	A	A	A
15								-	A	A	A	A
16							A	A	A	A	A	A
17							1 6	A	A	A	A	A
18								A	A	A	C	C
19								A	A	A	A	A
20								A	A	A	A	A
21								2 7	3 0	3 3	A	A
22							2 1	3 0	3 5	3 1	A	A
23								A	3 2	A	A	A
24							A	A	A	A	A	A
25							A	A	A	A	A	A
26								A	A	A	A	A
27								A	A	A	A	A
28							1 9 _H	A	A	A	A	A
29							1 9 _H	2 8 _H	A	A	A	A
30								A	A	A	A	A

Count	13	9	3	3	.
Median	2 0	2 7	-	-	
Mean	2 0	2 8			

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic · foE
Unit Mc
Month June 1961

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
A	A	3 5	3 2	3 0	A							1
A	A	A	u3 3y	2 6	A							2
A	A	A	A	A	A							3
A	A	A	A	A	A							4
A	A	A	A	A	2 3	A						5
A	A	A	A	3 0	2 4							6
A	A	3 6	A	A	A							7
A	A	A	3 2	A	A							8
A	A	A	3 3	2 9	A							9
A	A	A	A	A	A	A						10
u3·8A	u3 7A	u3 4A	3 2	3 0								11
A	A	A	A	A								12
A	C	A	u3 1A	2 9	2 1							13
A	A	A	A	A	A							14
A	A	A	A	A	A							15
A	A	A	A	3 0H	A	A						16
A	A	A	A	A	A	A						17
C	A	A	A	A	A	A						18
A	A	A	A	A	2 5							19
A	A	A	A	3 3	2 6							20
A	A	A	4 0	3 5	.							21
A	A	A	A	A	A							22
A	A	A	A	3 7	.							23
A	A	A	A	A	.							24
A	A	B	B	A	.							25
A	A	A	B	A	A							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	u3·2R	2·5							30

1	1	3	7	11	6							Count
			3 2	3 0	2 4	.						Median
			3 3	3 1	2·4	.						Mean

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

Characteristic foE TABLE 58—*Cont'd* Latitude 10 2°N
 Unit Mc Ionospheric Data Longitude 77 5°E
 Month June 1961 75°0'E Mean Time

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

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

Characteristic : foE
 Unit : Mc
 Month June 1961

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/Hour
A	A	3 4	3 1	2 8								1
A	A	A	3 1	2 4								2
A	A	A	A	A								3
A	A	A	A	A								4
A	A	A	A	2 7	A							5
A	A	A	A	2 7	2 3							6
A	A	A	A	A	A							7
A	A	3 3	A	A								8
A	3 8	3 3	3 1	A								9
A	A	A	A	A	A							10
A	3 5	3 3	B	2.5								11
A	A	A	A	A								12
A	A	A	3 0 _A	2 5 _H								13
A	A	A	A	A								14
A	A	A	A	2 7 _A								15
A	A	A	A	A	A	A						16
A	A	A	A	A	A	A						17
A	A	A	A	A	A							18
A	A	A	A	A	2 4							19
A	A	A	A	2 9	2 3							20
A	A	A	3 7	2 9								21
A	A	A	A	A								22
A	A	A	A	2 9								23
A	A	A	A	A								24
A	A	B	A _b	3.3								25
A	A	3 6	A	A	A							26
A	A	A	A	A								27
A	A	A	A	2.5 _A								28
A	A	A	A	2 7 _H	2.0 _H							29
A	A	A	2 3 _H	2.8								30
	2	5	6	14	4							Count
		3 3	3 1	2 7								Median
		3 4	3 2	2 7								Mean

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic foEs
 Unit . Mc
 Month June 1961

TABLE 59
 Ionospheric Data
 75 0°E Mean Time

Latitude : 20°2'N
 Longitude : 77 3'E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1							G	G	8 4	10 0	11 6	11 4
2	4 2	4 2		1 9		..	5 6	7 0	8 2	10 0	11 4	11 4
3			2 5	3 0			G	9 0	10 0	10 0	12 0	C
4							G	7 2	9 0	11 0	12 0	12 0
5							2 9	G	9 0	10 6	12 0	12 0
6	4 0						2 1	G	8 4	10 4	11 6	12 0
7					6 0	11 0	4 6	7 8	11 0	11 0	12 0	12 2
8						5 0	4 6	7 8	9 8	10 8	12 2	12 2
9	u5 0s	7 6	9 0	8 6	u7 8s	u8 0s	u5 0s	u9 2s	10 4	12 0	12 8	12 7
10	u7 0s	8 4	5 8	5 6	5 6	2 1	3 5	4 6	12 6	11 4	13 0	12 0
11	3 0	5 0		1 6			5 0	8 2	9 4	9 8	12 0	11 2
12	2 6					4 2	4 8	u9 0s	9 0s	10 0	11 0	13 0
13							G	4 2	C	9 0	11 0	12 0
14	3 6	6 4	5 4	9 0	3 2		5 0	7 0	9 0	9 8	11 0	11 8
15			2 0	1 6	3 3	3 4	6 4	4 2	8 4	10 4	11 2	12 0
16	4 2	5 6	7 0	11 0	7 4		5 8	7 8	9 3	12 6	12 4	12 4
17			2 7				2 1	12 2	12 6	10 0	11 4	12 0
18	7 2	4 0					6 6	8 6	9 6	10 6	C	C
19							2 7	3 4	10 6	10 7	11 2	11 6
20							2 6	7 8	8 7	9 5	9 8	10 8
21				3 0			2 8	3 0	G	G	10 4	9 8
22							G	G	G	G	6 8	12 2
23							2 1	3 1	6 8	8 6	12 0	12 8
24							2 8	7 8	9 0	9 6	12 6	12 0
25							4 6	5 0	8 6	9 0	11 0	10 0
26	4 1	u4 0s	3 7				u5 6s	u7 5s	7 6	8 6	10 2	10 1
27	4 8	7 5	5 4				u4 0s	8 2	9 2	9 2	10 5	11 3
28						2 0	G	7 2	8 1	10 2	10 9	12 0
29							G	G	8 2	7 6	11 3	11 2
30							2 7	6 4	8 3	9 0	12 0	11 8
Count	11	9	9	9	7	6	29	30	29	30	29	28
Median	4 2	5 6	5 4	3 0	5 6	4 6	2 9	7 1	9 0	10 0	11 4	12 0
Mean	4 3	5 9	4 8	5 0	5 0	5 6	4 1	6 9	9 2	10 0	11 4	11 7

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic : foEs
Unit Mc
Month June 1961

TABLE 59
Ionospheric Data
75 °E Mean Time

Latitude . 10 2N,
Longitude 177.5°E⁹

12	13	14	15	16	17	18	19	20	21	22	23	Date/hour
12 2	11 2	G	G	G	9 2	4 4						1
12 2	12 0	11 0	5 4	4 8	8 0	8 0	4 2	C				2
10 8	11 0	10 2	10 4	12 0	11 0	6 4	6 0	u9 0s			2 8	3
12 0	11 8	11 2	u9 0s	u9 4s	u10 0s	2 6						4
12 0	12 0	12 2	11 0	u12 0s	7 8	u5 0s	4 2			4 8	3 2	5
12 6	12 0	11 0	10 6	G	G	2 9	2 5					6
12 6	11 0	7 8	9 6	9 6	8 6	8 6	5 8	5 8				7
12 0	13 0	11 0	G	9 6	10 6	10 8					4 4	8
12 8	14 8	7 6	6 8	u9 8s	9 4	u7 0s	u6 4s	4 2		8 4	10 0	9
12 4	8 8	5 0	5 3	6 4	2 3					3 0	3 2	10
10 0	5 6	6 4	7 0	12 6	12 8	u12 4s	u9 4s	u9 0s	9 0	4 4s	u3 0s	11
u19 0s	12 4	12 0	u9 0s	u17 0s	u22 0s	9 0s	u4 2s	4 4s				12
12 0	C	11 4	9 2	6 2	12 6	13 0	10 0	S	u4 8s	4 2	4 6	13
12 4	11 8	15 0	22 0	10 0	9 0	u9 2s	u4 4s	4 0s	S	S	5 0	14
12 0	12 0	11 0	9 2	8 2	5 6	6 6s	6 0	9 0s				15
12 4	12 0	11 6	10 4	6 0	11 6	7 0	3 7					16
11 4	11 0	11 8	9 8	13 0	8 8	8 5	10 4	7 8	7 0	8 3	u 4 4	17
C	10 8	11 0	12 7	17 2	7 8	4 8	4 2		4 4	3 6		18
12 0	11 1	8 8	8 2	8 4	G	2 5		4 6				19
11 0	10 6	11 0	9 0	G	3 5	3 6	3 5	3 2				20
11 4	12 0	12 0	G	4 8	7 0	1 7						21
12 0	12 0	12 0	12 0	9 0	6 0	5 0						22
12 0	12 6	11 8	10 0	G	8 4	2 1	3 6	3 7			3 8	23
12 0	13 0	13 0	11 6	3 8	12 6	8 0	7 0			4 8	4 8	24
10 4	9 0	12 0	8 0	9 0	7 6			7 0				25
7 8	8 1	8 6	B	3 3	5 0	2 4		1 6	1 5		1 8	26
10 1	9 7	9 0	8 2	11 8	8 0	4 0	2 5	2 2				27
12 0	u10 8s	10 8	8 1	u6 9s	G	u7 0s	C	4 7		3 4		28
10 7	11 2	9 3	9 2	8 8	6 4	2 6	2 1					29
12 0	12 0	9 7	9 1	G	G							30
29	29	30	29	30	30	27	19	15	5	9	12	Count
12 0	11 8	11 0	9 1	8 6	8 0	6 4	4 2	4 6	4 8	4 4	4 1	Median
11 7	11 2	10 5	9 6	9 2	8 9	6 2	5 3	5 4	5 3	5 0	4 2	Mean

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

Characteristic : foEs
Unit Mc
Month June 1961

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

Latitude · 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	9.4	10.8	11.8	11.2
2	4.2	4.2	1.9	1.7			6.6	9.0	8.6	10.4	11.0	11.4
3			3.0				6.0	8.0	10.4	11.0	C	12.0
4							6.6	C	9.8	12.0	12.2	12.0
5							G	7.0	9.2	12.0	12.4	12.0
6							4.0	7.0	9.0	12.0	11.0	12.0
7				4.2	5.6	2.1	7.0	9.0	11.0	12.6	12.4	12.6
8					6.6		6.4	9.2	10.8	12.0	12.7	12.8
9	v5.6s	v5.8s	9.8	v7.0s	8.4		v9.0s	v11.6s	10.6	12.8	12.8	12.4
10	8.2	v5.7s	4.8	5.6	3.7	8.0	2.3	5.0	8.4	13.0	12.0	12.0
11	2.5	4.0				2.2	7.0s	9.4	9.2	11.0	11.6	11.8
12				1.7			8.8s	9.0s	9.8	11.2	v12.6s	12.0
13							G	G	8.8	11.6	11.4	12.0
14	7.0	6.0s	5.8	4.0			7.0	10.6	9.6	11.2	11.8	12.0
15			3.0		4.4		7.0	3.6	9.4	11.4	12.0	12.2
16	4.6	4.7	6.6	7.8		4.4	7.6	8.8	11.6	11.6	12.2	12.0
17					5.0		5.2	13.0	9.0	10.7	10.8	12.8
18	4.8			3.0			8.0	9.4	10.5	12.3	C	C
19	2.4					2.1	3.8	9.6	6.6	10.8	11.8	11.6
20							G	7.6	8.6	10.6	10.8	11.8
21	2.1		3.2				2.7	G	G	10.6	11.8	10.4
22							G	G	8.6	5.8	11.0	12.2
23							2.9	3.5	8.4	10.8	12.0	12.0
24							8.0	8.0	8.8	12.0	12.0	12.8
25							6.0	8.1	8.8	12.0	12.0	10.0
26		3.8	4.3				v6.9s	7.1	8.2	9.6	10.2	9.2
27	8.3	7.3					6.8	8.8	9.3	10.8	10.9	10.4
28							6.5	8.6	9.2	11.4	12.0	10.8
29				3.6			G	7.8	8.8	11.9	12.2	9.6
30		2.3		4.2			6.0	8.0	9.6	11.3	12.1	12.4
Count	10	9	9	10	6	5	30	29	30	30	28	29
Median	4.7	4.7	4.3	4.1	5.3	2.2	6.2	8.0	9.2	11.4	12.0	12.0
Mean	5.0	4.9	4.7	4.3	5.6	3.8	6.2	8.3	9.3	11.2	11.8	12.0

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic foEs
 Unit Mc
 Month June 1961

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	Hour/Date
11.4	11.0	G	G	G	6.0							1
12.4	11.6	10.0	5.0	4.4	12.0s	17.0s	3.2					2
11.0	9.0	10.6	11.8	9.0	9.0	16.0s	16.0s	15.0s		2.8		3
12.0	12.0	13.0	13.0	10.0s	8.4							4
12.2	12.4	11.0	13.0s	7.6	16.0s	15.0s	14.8s		16.0s	3.0	3.6	5
12.4	12.0	11.0	8.1	G	G	2.1						6
11.6	11.0	9.2	8.9	9.4	8.7	7.6	15.0s					7
12.4	12.4	G	8.0	9.0	7.6	7.0					14.0s	8
12.0	7.8	3.5	19.4s	8.8	15.4s	18.0s	14.8s				8.8	9
12.0	10.8	4.7	5.4	4.4	6.7					2.2	2.2	10
9.2	4.5	5.4	12.0	12.0	10.0c	7.0s	19.0s	9.0	4.8s	3.0	3.0s	11
12.6	12.2	11.6	10.4s	19.0s	17.0s	18.0s	4.0s	16.0s				12
12.2	11.6	11.0	7.0	7.6	11.2	14.2	9.6	7.0s	4.2	5.0s	4.2	13
11.6	11.2	19.0	11.2	7.0	5.0	7.0	14.4s		S	4.2		14
12.0	11.2	11.0	9.0	8.0	2.9	10.0s	3.4	S				15
12.2	11.0	10.8	9.0	10.0	9.0	4.2		2.0				16
12.0	11.0	11.6	11.0	11.0	7.0	8.2	9.5	6.6	6.0	8.2	9.0	17
C	10.4	10.6	13.0	9.0	5.8	3.8	2.6	3.7	3.8			18
11.6	9.4	10.0	8.2	6.4	G	2.1	2.8	4.2				19
10.8	10.3	10.4	8.6	8.4	3.6	5.6						20
12.4	12.0	7.8	G	4.9	2.9							21
12.0	12.0	11.0	10.0	3.3	7.4							22
11.8	12.2	11.6	8.4	7.8	3.2		3.1					23
12.6	12.4	12.0	9.0	12.0	10.0	6.8	5.0			2.7	3.8	24
9.6	11.6	12.0	12.0	6.0	4.6		4.0	8.6			16.1s	25
7.7	7.9	G	8.0	12.6	10.8	3.3		4.0		14.3s	8.0	26
9.8	9.8	9.8	8.6	18.2	11.2	2.3		2.0		2.6		27
11.6	10.6	9.8	16.4s	G	18.0s	16.7s	14.8s	3.9	12.7s	7.0		28
11.8	7.6	9.2	9.6	G	G	2.9						29
12.2	12.0	10.2	G	G	2.5							30

29	30	30	30	30	30	22	17	12	6	11	10	Count
12.0	11.1	10.5	9.0	7.7	7.0	6.8	4.8	4.6	4.5	3.0	4.1	Median
11.6	10.7	10.3	9.4	8.4	7.2	7.1	5.1	5.2	4.6	4.1	5.3	Mean

Sweep 1.0 Mc, to 25.0 Mc in 27 seconds.

Characteristic fbEs
Unit Mc
Month June 1961

TABLE 60
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1												
2	16	17		11			20	28	30	35	35	36
3			13					27	32	34	36	37
4								27	31	35	36	C
5							20		33	34	36	37
6	15						20	G	31	34	35	36
7						17	19	26	31	34	36	37
8						19	18	27	32	35	35	36
9	17	13	A	20	20	19	21	31	33	34	37	38
10	22	21	13	A	12		20	28	32	42	38	38
11	17	A					23	36	32	34	37	38
12							20	28	32	36	37	39
13										36	38	38
14							21	28	32	35	36	38
15					13		20	37	32	36	38	38
16	18	18	26	26	19		20	28	30	37	37	38
17							21	46	38	35	38	38
18	26	17					21	28	32	35	C	C
19							20	27	34	35	38	38
20							20	36	32	36	37	38
21				16			22	G	G	G	39	39
22							G	G	G	G	37	38
23							19	29	38	40	38	46
24							21	28	32	36	38	39
25							19	28	31	35	35	44
26	17		15				21	28	34	37	36	41
27	18	14	13				20	26	31	34	37	37
28								28	30	35	36	36
29									29	33	36	37
30							20	36	32	35	36	40
Count	9	6	5	4	4	3	24	26	29	30	29	28
Median	17	17	13				20	28	32	35	36	38
Mean	18	17	16				20	30	32	33	37	38

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

Characteristic fbEs
Unit Mc
Month June 1961

TABLE 60—Cont'd
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	Hour/Date
39	37				50	E						1
38	36	39	39	36	31	27	21	C				2
38	36	34	34	41	37	24	18	21				3
38	36	36	33	35	25	19						4
36	36	34	36	35	26	17	12			15	15	5
37	36	35	33	G	G	v1 8s	15					6
36	36	39	33	30	25	29	17	19				7
37	36	35	G	22	35	37					12	8
37	39	36	38	33	25	24	15	17		15	24	9
42	38	42	40	34	27	23				15	14	10
38	38	40	55	42	30	v3 8s	32	S	S		C	11
48	38	36	34	30	A	20						12
38	C	37	34	46	37	36	35	28	21		18	13
38	38	50	70	40	30	26	20	19		21	18	14
39	39	37	34	30	27	18		18				15
38	38	36	34	31	30	26	18					16
38	38	39	35	48	28	28	40	20	24	30	23	17
C	40	37	34	60	26	20	15		18			18
38	38	40	36	32	G			16				19
38	38	36	34	G	29	22	16	19				20
39	40	37	G	31	26	G						21
40	39	38	36	31	26	22						22
44	40	38	35	32	26	G	20	G			21	23
39	39	37	35	31	30	32	37			17	17	24
41	41	51	52	32	27			22			..	25
42	40	41		33	50	24		16	15		18	26
37	36	36	36	37	28	21		15				27
37	37	36	33	30	26	20		20		17		28
37	37	37	35	30	27		13					29
39	38	36	34	..	26			..				30
29	29	29	28	28	29	26	16	14	4	7	10	Count
38	38	37	34	33	27	23	18	19	.	17	18	Median
39	38	38	38	35	31	24	22	19	.	19	18	Mean.

Sweep 10 Mc. to 25.0 Mc. in 27 seconds.

Characteristic fbEs
Unit Mc
Month June 1961

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

Latitude 10 2°N
Longitude 77 5°E

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

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

Characteristic fbEs
Unit Mc
Month June 1961

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	Hour/Date
38	35				29							1
37	37	40	37	29	32	22	20					2
38	35	33	40	40	44	20	24	17				3
37	37	50	36	27	24							4
36	36	34	45	28	22	v1 4s	15		14	15		5
37	36	34	32	G	G	16						6
36	36	34	31	30	27	22	16					7
36	36	G	31	30	28	18					16	8
39	39	35	50	30	21	20	18					9
38	38	38	40	29	23					17	16	10
38	39	44	50	36	31	28	32	28	34		G	11
39	37	36	23	29	33	19		8				12
38	37	25	37	70	33	28	31	22	19	19	20	13
38	38	30	41	43	25	20	21			25		14
40	38	38	32	28	24		18	20				15
38	37	35	32	45	38	22		15				16
38	38	36	34	45	24	28	33	24	25	28	26	17
C	38	36	50	30	24	15	16	17	17			18
38	38	38	34	30	G	14	17	16				19
38	38	36	34	32	27	20						20
38	38	37	G	29	G							21
40	39	36	34	29	22							22
42	39	35	33	32	24		16					23
39	38	35	34	40	22	37	37			19	26	24
40	39	54	46	31	23		18	30			17	25
46	43		34	30	36	17		15		14	15	26
38	36	37	36	37	30	17		14				27
37	36	34	33		27	22	20	21	17	24		28
37	37	35	32	.	.	15	..					29
37	37	34	..	..	21	.	..					30
29	30	28	28	26	29	21	16	12	6	8	8	Count
38	38	36	34	30	24	20	19	18	18	19	18	Median
38	38	39	37	34	27	21	22	20	19	20	20	Mean

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

Characteristic fmin
Unit Mc
Month June 1961

TABLE 61
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Heur	00	01	02	03	04	05	06	07	08	09	10	11
1	1.4	1.1	1.2	E	E	E	1.3	1.9	1.9	2.1	2.1	2.3
2	1.2	1.3	1.1	1.1	1.2	1.2	1.2	1.4	1.7	2.3	2.3	2.4
3	C	1.1	E	1.5	1.8	1.7	1.6	1.5	2.0	2.4	2.1	C
4	1.2	E	1.0	E	1.0	1.1	1.3	1.5	2.0	2.2	2.2	2.5
5	1.5	2.4	1.6	1.3	S	1.2	1.8	1.8	1.8	2.1	2.2	2.2
6	1.2	1.4	v1 5s	S	S	S	2.4	1.3	1.8	2.0	2.2	2.4
7	E	E	E	E	E	E	1.2	1.5	1.7	2.0	2.1	2.3
8	1.2	v1 2s	v1 2S	1.2	1.1	1.1	1.3	1.6	1.9	2.3	2.1	2.2
9	1.1	1.1	1.1	1.7	1.1	1.5	1.3	1.5	1.9	2.3	2.3	2.2
10	1.8	1.7	1.1	1.2	1.0	1.4	1.7	1.6	1.8	2.0	1.9	2.3
11	4.1	1.2	E	1.2c	1.1	E	E	1.1	1.9	2.2	2.2	2.3
12	1.3	F	F	FS	S	S	1.2	1.3	1.7	1.9	2.0	2.6
13	1.5	C	v1 1c	1.4	1.1	1.1	1.4	1.5	C	2.1	2.4	2.6
14	1.6	2.2	2.2	1.9	1.5	1.4	1.3	1.7	1.7	2.0	2.1	2.2
15	1.6	1.3	1.2	E	1.1	1.5	1.3	1.6	1.9	2.2	2.4	2.4
16	1.2	1.4	1.7	1.3	1.9	1.6	1.3	1.5	2.2	2.1	2.3	2.4
17	1.2	1.4	1.4	1.3	1.1	1.1	1.2	1.7	1.9	2.2	2.4	2.4
18	1.6	1.3	1.5	1.1	1.6	1.8	1.5	1.5	1.8	2.1	C	C
19	1.2	1.1	1.4	1.1	1.2	1.0	1.1	1.5	1.7	1.9	2.2	2.2
20	1.3	1.4	1.1	1.2	1.1	1.4	1.3	1.7	2.3	2.5	2.5	2.6
21	1.2	1.4	1.6	1.1	1.1	1.1	1.4	1.9	2.5	2.6	2.5	2.5
22	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.8	2.2	2.7	2.4	2.7
23	2.1	1.8	F	F	F	F	1.5	2.1	2.5	2.4	2.6	2.7
24	F	F	F	F	F	1.9	2.0	1.4	1.7	2.1	2.3	2.4
25	2.1	F	F	F	1.4	1.2	1.1	1.5	1.9	2.4	2.4	2.5
26	1.5	1.2	1.2	1.4	1.3	1.4	1.3	1.4	1.8	2.4	2.3	2.6
27	1.1	1.2	E	1.4	v1 5F	1.4	1.2	1.5	1.8	2.1	2.3	2.4
28	1.4	1.3	1.2	E	1.2	1.3	1.2	1.3	1.8	2.3	2.1	2.6
29	C	1.8	1.4	1.3	1.5	1.4	1.3	1.8	1.7	2.3	2.1	2.5
30	1.5	1.8	1.8	1.4	1.4	E	1.5	1.8	2.2	2.6	2.4	2.4
Count	27	26	26	25	26	27	30	30	29	30	29	28
Median	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.5	1.9	2.2	2.3	2.4
Mean	1.4	1.5	1.4	1.3	1.3	1.4	1.4	1.6	1.9	2.2	2.3	2.4

Sweep 1.0 Mc. to 25.0 Mc. in 27 seconds

Characteristic f min
Unr Mc
Month June 1961

TABLE 61—*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	Hour/Date
2 3	2 4	2 3	2 3	1 9	1 7	1 7	1 5	1 7	1 4	1 2	1 4	1
2 4	2 4	2 3	2 1	1 8	1 5	1 1	1 1	C	1 4	1 5	1 4	2
2 4	2 3	2 3	2 0	1 8	1 7	1 3	1 5	1 1	1 4	1 2	1 5	3
2 6	2 4	2 4	2 2	2 2	1 4	1 4	1 3	1 1	1 1	1 1	1 4	4
2 3	2 3	2 1	2 1	1 9	1 6	1 4	1 2	1 2	1 4	1 3	1 1	5
2 4	2 3	2 4	2 0	1 8	1 9	1 5	1 3	vl 5a	vl 2a	1 2	E	6
2 3	2 2	3 1	2 0	1 8	1 6	1 2	1 2	E	vl 5a	1 3	1 5	7
2 2	2 3	2 2	2 0	1 8	1 5	1 4	1 6	1 2	1 2	1 4	1 1	8
2 3	2 2	2 4	2 2	1 9	1 4	1 3	1 2	1 4	1 5	1 4	1 5	9
2 4	2 3	2 1	2 2	1 8	1 6	1 7	1 8	1 6	1 6	1 1	1 2	10
2 2	2 2	2 2	2 4	2 3	1 6	1 5	vl 2a	C	1 2	1 6	E	11
2 4	2 2	2 2	1 9	1 7	1 3	1 3	1 4	1 9	1 9	1 5	1 4	12
2 6	C	2 3	1 9	1 7	1 7	1 2	1 3	C	1 5	1 9	1 4	13
2 4	2 4	2 2	2 1	1 7	1 9	1 6	C	1 8	1 7	1 4	1 7	14
2 5	2 4	2 2	2 4	1 7	1 5	1 5	1 3	1 7	1 8	1 9	1 5	15
2 5	2 3	2 2	1 9	1 9	1 9	1 2	1 8	1 7	1 5	1 4	1 5	16
2 4	2 4	2 3	2 2	1 7	1 6	1 3	1 7	1 4	1 5	1 2	1 5	17
C	2 6	2 3	2 1	1 7	1 6	1 6	1 2	1 4	1 4	1 3	1 4	18
2 2	2 6	2 2	2 0	1 8	2 2	1 5	1 4	1 1	1 1	1 3	1 4	19
2 7	2 7	2 4	2 3	2 1	2 0	1 4	1 5	1 4	1 4	1 3	1 1	20
2 9	2 5	2 5	2 6	2 2	1 7	1 5	1 4	1 3	1 5	1 7	1 5	21
2 7	2 8	2 4	2 3	1 9	2 1	1 5	1 8	2 2	1 7	2 0	2 5	22
3 0	2 5	2 6	2 4	2 4	1 9	1 8	1 3	1 4	1 6	1 9	2 0	23
2 8	2 7	2 5	2 3	2 1	1 5	1 5	1 5	2 1	1 7	1 5	1 6	24
2 5	2 4	2 2	3 0	1 7	1 2	2 0	1 8	1 3	1 7	1 6	2 2	25
2 5	2 5	2 5	3 7	2 2	1 9	1 5	1 1	E	1 4	E	1 1	26
2 4	2 4	2 5	2 2	1 8	2 3	1 8	1 4	E	1 2	1 3	1 4	27
2 6	2 5	2 3	2 2	2 0	1 5	1 4	C	1 5	1 4	1 5	1 5	28
2 6	vl 2 5c	2 5	2 3	2 0	1 6	2 1	1 1	1 4	1 4	1 7	2 0	29
2 7	2 6	2 3	2 3	2 1	1 8	1 7	1 4	1 4	1 4	1 8	1 7	30
29	29	30	30	30	30	30	28	27	30	30	30	Count
2 4	2 4	2 3	2 2	1 8	1 6	1 5	1 4	1 4	1 4	1 4	1 4	Median
2 5	2 4	2 3	2 3	1 9	1 7	1 5	1 4	1 5	1 5	1 5	1 5	Mean

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

Characteristic · fmin
Unit Mc
Month · June 1961

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

Latitude · 10 2°N
Longitude 77 5°E

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

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

Characteristic f_{min}
Unit Mc
Month June 1961

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	Hours/Date
2 4	2 4	2 3	1 9	1 9	1 6	1 6	1 5	1 4	1 5	1 4	1 3	1
2 5	2 3	2 2	2 0	2 1	1 5	1 1	1 4	1 6	1 6	1 6	1 3	2
2 4	2 3	2 2	1 9	1 8	2 0	1 3	1 4	1 5	1 4	1 3	1 4	3
2 5	2 4	2 3	2 2	1 6	2 0	v1 4s	1 3	1 2	1 1	1 2	1 6	4
2 3	2 3	2 2	2 1	1 8	1 6	v1 2s	1 2	1 2	1 1	1 2	1 6	5
2 2	2 4	2 4	2 1	2 1	1 8	E	v1 5s	v1 5s	v1 1s	1 0	E	6
2 4	2 7	2 3	2 4	1 7	1 4	1 2	2 0	1 7	1 4	1 1	1 2	7
2 5	2 3	2 2	2 4	2 0	2 0	1 2	1 5	1 2	1 2	1 3	1 1	8
2 3	2 3	2 0	1 9	1 7	1 4	1 5	1 2	1 5	1 4	1 6	1 9	9
2 4	2 2	2 4	2 2	1 9	1 5	2 0	2 0	1 6	1 3	1 1	1 2	10
2 4	2 5	2 4	3 4	2 0	1 6	E	E	E	E	1 5	E	11
2 5	2 2	2 1	1 8	1 6	1 3	1 3	1 6	C	1 4	1 8	1 4	12
2 6	2 4	2 1	1 8	1 8	1 6	1 2	1 5	1 7	1 7	1 8	1 3	13
2 3	2 2	2 0	2 0	C	1 6	1 7	1 3	1 6	1 8	1 5	1 5	14
2 6	2 4	2 2	1 9	1 6	1 6	1 3	1 6	1 7	2 2	1 5	1 4	15
2 3	2 2	2 1	1 7	1 9	1 6	1 4	1 4	1 2	1 3	1 4	1 5	16
2 5	2 3	2 2	1 9	1 6	1 6	1 4	1 6	1 2	1 3	1 3	1 3	17
G	2 3	2 1	1 9	2 0	1 8	1 4	1 4	1 4	1 4	1 8	1 4	18
2 3	2 5	2 2	1 7	2 4	1 7	1 4	1 3	1 4	1 3	1 6	1 4	19
2 8	2 7	2 5	2 4	2 0	1 4	1 2	1 5	1 5	1 2	1 2	1 0	20
2 5	2 6	2 8	2 5	2 2	1 9	1 5	1 3	1 3	1 6	1 7	1 4	21
3 0	2 5	2 5	2 1	2 1	2 1	1 4	1 7	1 9	1 7	1 9	2 2	22
2 6	2 7	2 6	2 2	2 7	1 6	1 5	1 3	F	2 0	2 2	2 2	23
2 7	2 5	2 3	2 1	1 8	1 2	1 5	1 5	F	1 2	F	1 8	24
2 6	2 3	2 4	1 8	1 5	1 3	2 0	1 3	1 3	1 5	1 6	1 6	25
2 5	2 4	2 5	2 4	2 1	1 7	1 2	1 4	1 2	1 5	1 3	E	26
2 5	2 4	2 3	2 2	2 2	1 8	1 2	1 2	1 1	1 5	1 4	1 4	27
2 4	2 4	2 2	1 9	1 9	1 4	1 3	1 8	1 3	1 5	1 4	1 4	28
2 6	2 5	2 3	2 0	1 7	1 4	1 2	1 4	1 3	1 9	1 7	1 6	29
2 7	2 5	2 6	2 1	1 8	1 5	1 5	1 3	1 4	1 6	2 1	2 0	30

29	30	30	30	29	30	30	30	27	30	29	30	Count
2 5	2 4	2 3	2 0	1 9	1 6	1 4	1 4	1 4	1 4	1 5	1 4	Median
2 5	2 4	2 3	2 1	1 9	1 6	1 4	1 5	1 4	1 5	1 5	1 5	Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F
Unit Km
Month June 1961

TABL 62
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hours	00	01	02	03	04	05	06	07	08	09	10	11
1	360	460	F	E	E	E	215	220	200H	210	200	195
2	290	300	355	375	C	320	215	230	225	220	205	200
3	C	360	360	320	260	255	250	225	220	220	190	C
4	315	355	380	340	210	300	210	220	205	200	180	195
5	215	250	280	320	F	F	220	210	200	195	180	160
6	u270F	F	F	F	S	F	215	220	200	195H	190H	200
7	190	S	E	E	F	F	215	220	205	200	195	190
8	250	u270F	F	F	F	F	250	220	200H	210	195H	185H
9	240	260	A	A	u300A	340	215	215	200H	180H	205	190
10	265	295	300	A	320	320	245	220	200	260	310	170
11	295	A	320	340C	220	E	210	200H	185H	180	190	180
12	F	F	F	FS	S	S	250	230	210	200	200	190
13	310	u340C	u320C	290	260	280H	210	230	C	200	180	170
14	360	A	A	A	270	400H	240	225	210	200	190	190
15	330	310	340	400	420	290	240	220	200	190	185	180
16	290	300	F	F	310	270	250	220	210	220	200H	190
17	270	250	265	255	245	255	240	A	u230A	200	200	200
18	370	F	F	F	F	F	240	220	205	200	C	C
19	260	265	300	340F	290	210	210	200H	215	180H	195H	160
20	285	320	380	370	340	280	240	210	205	150H	160	180H
21	240	285	300	320	260	250	240	220	200	210	200	200
22	255	240	260	255	210	220	245	230	210	200	215	200
23	240	265	F	F	F	F	250	230	260	215	A	240
24	F	F	F	F	250	215	245	220	205	195	180	180
25	300	F	F	F	260	220	235	215	200	180	180	220
26	320	330	340	280	290	240	245	210	215H	200	200	205
27	F	F	F	F	F	240	240	215	200	190	190	160H
28	220	240	260	260	240	235	245	220	180H	195	180	160H
29	C	u390F	F	325	280	245	240	220	210	205	195	180
30	300	330	350	320	260	F	245	215	215	180	185	200
Count	25	21	17	18	22	23	30	29	29	30	28	28
Median	290	300	320	320	260	280	240	220	205	200	190	150
Mean	290	305	320	320	275	275	240	220	210	200	195	190

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

TABLE 62
 Ionospheric Data
 75 0°E Mean Time
 Latitude 10 2°N
 Longitude 77 5°E

Characteristic	h'F	Unit	Km	Month	June 1961	12	13	14	15	16	17	18	19	20	21	22	23	Hours/Date
180	180II	∞	210II	220	A	240	240	250	275	300	280							1
200	195	∞	A	A	250	260	290	C	F	275	505							2
195	195	185	190II	A	A	260	255	240	255	270	300							3
180	190	200	195	∞	250	240	240	230	215	235	220							4
180II	185	190	190II	A	220	240	250	240	225	240	255							5
180	190	180	190II	225	220	245	275	255	240	255	320							6
200	185II	215	200II	210	230	260	270	280	250	235	240							7
180	180	200	200II	∞220b	A	A	250	250	265	260	230							8
180II	200	200	220	∞220A	230	260	∞250F	∞240F	251F	260	275							9
205	200	A	210	225	235	260	200	180	240	260	285							10
190	180	200A	A	A	A	270	280	280	270	260	300							11
200	185	190	200	210	∞	250	220	220	240	250	270							12
180	C	200	200	A	A	260	255	250	260	215	240							13
185II	190	A	A	A	210	255	240	235	235	280	300							14
180	180II	190	200	200	240	260	270	270	240	280	290							15
190	180II	195II	200	210	A	255	265	300	300	320	315							16
175II	185	200	200	A	230	230	∞255A	260	280	∞330A	330							17
C	200	205	200	A	250	255	270	270	300	310	280							18
180	190	200	215	215	230	250	250	260	255	250	260							19
180	180A	185	195	210	240	245	250	260	260	240	230							20
200	195	190	190	210	235	255	280	280	290	300	300							21
200	200	200	210	220	235	270	270	270	240	245	240							22
230	210	200	200	200	235	255	260	F	290	300	260							23
180	185	190	195	200	230	260	290	300	350	320	340							24
200	200	A	A	210	235	250	260	F	280	300	320							25
200	190	210	∞220n	220	A	260	250	∞250F	(1) ∞.00F	(2) 320	F							26
180II	175II	180	220	∞240A	240	250	260	240	230	225	250							27
190	185	200	195	215	∞235A	260	C	250	260	280	305							28
18	180II	210	220	240	240	255	260	235	235	260	280							29
200	190	190	215	230	230	255	255	245	240	250	280							30
29	29	26	26	21	22	29	29	27	29	30	29							Count
185	190	200	200	215	235	255	255	250	255	265	280							Median
190	190	195	205	215	235	255	255	255	260	275	285							Mean

Sweep 1 0 Mc to 25 0 Mc in 27 second

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

Characteristic h'F
 Unit Km
 Month June 1961

Latitude 10 2°N
 Longitude 77 5°E

Date/Hours	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1	410	F	E	E	E	260	240	220	220	200	200	180 _H
2	290	320	330 _F	380	300	280	240	220	220	220	210	200
3	340	380	340	280	240	270	240	220	220	210	C	200
4	330	370	360	280	200	260	225	210	200	180	180	195 _H
5	235	260	295	F	F	260	220	205	200	180	180	175
6	F	F	F	S	E	255	230	205	200 _H	195	180 _H	195
7	S	S	E	E	A	260	230	200 _H	200 _H	195	180	195
8	270 _F	260 _F	F	F	F	270	230 _H	200 _H	180 _H	200 _H	200	200
9	235	A	A	A	A	275	240	240	225	205	200	180 _H
10	265	300	300	300	360	265	240	205	240 _F	240	240	185
11	300	310	320	270	230	260	230	200	190 _H	190	195	180
12	F	F	F	S	S	260	235	220	205	200	190	200
13	340 _C	360 _C	300 _C	280	260	260	240	210	200	200	180	175
14	A	A	A	300	240	260	230	220	200	200	190	190
15	350	330	380	410	A	260	230	210	200	190	180	185
16	300 _F	320	F	350	280	275	230	220	215	195 _H	200	190
17	250	245	245	260	240	270	235	230	210	190	200	195
18	F	F	F	F	360	265	230	220	200	200	C	C
19	260	270	340 _F	320	265	250	190 _H	210	210	210	190	180
20	300	355	380	370	305	270	230	210	200	190	175 _H	170 _H
21	255	300	310	290	240	240	225	200	215	210	200	190
22	240	280	250	230	E	240	240	220	200	205	220	200
23	260	275	F	F	F	270	235	225	230	200	A	270
24	F	F	F	F	235	265	230	210	200	190	180	180
25	F	F	F	270	220	260	220	205	200	180	180	200
26	320	340	320	250	220	270	230	195 _H	210 _H	200	200	195
27	F	F	F	F	F	270	230	205	195	185	185	180
28	235	255	265	250	225	265	230	200 _H	205 _H	190	180 _H	195
29	400 _F	F	345	F	240	265	235	215	195	190	195	180
30	305	F	345	300	260	270	240	220	190 _H	280 _H	220	205
Count	22	18	19	20	22	30	30	30	30	30	27	29
Median	295	305	340	295	250	265	230	210	200	200	190	190
Mean	295	305	320	300	250	265	230	210	210	200	195	190

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

TABLE 62—*Contd*
 Ionospheric Data
 75 0°E Mean Time
 Latitude . 10 2°N
 Longitude 77 5°E

Characteristic	h'F	Unit	Km	Month	June	1961	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hours/Date
200	200	195	200 _{ix}	230	260	240	240	260	270	300	280								1
210	200	A	240	225	A	275	F	220	F	300	310								2
190 _{ix}	185	195	A	A	A	245	260	245	260	275	300								3
195	200	A	A	220	240	260	240	220	215	225	205								4
175	181	180	A	210	240	240	260	240	220	240	265								5
190	181	180 _{ix}	200 _{ix}	220	240	245	260	250	240	270	370								6
195	200	215	215 _{ix}	230	260	255	280	270	245	240	245								7
180	205	200 _{ix}	220	230	255	250	240	260	265	250	225								8
190 _{ix}	200	205	A	230	245	260	u240 _r	u250 _r	260	260	270								9
185	190	205	255	240	245	260	180	240	250	270	270								10
180	200	A	A	A	270	260	280	S	260	280	310								11
190	185	190	200	235	260	240	220	220	240	270	280								12
170	200	200	220A	A	260A	240	250	280	250	280	260								13
180	190	A	A	220	210	240	220	250	310	300	300								14
180	195	190	200	210	240	260	260	250	280	280	285								15
190	190 _{ix}	200	200	A	A	255	280	300	300	325	300								16
180	195	180 _{ix}	200	A	240	260	275	260	300	330	345								17
G	200	200	A	225	240	260	265	285	315	300	265								18
190	190 _{ix}	200	210	220	215	250	270	260	255	260	280								19
175	175	180 _{ix}	200	220	240	250	250	260	240	290	225								20
190	195	195	215	260	250	260	280	290	290	315	275								21
200	200	210	210	210	250	280	265	250	255	240	290								22
210	210	200	195	225	240	255	260	F	300	320	360								23
180	180	190	210	260	280	270	310 _r	F	350	F	340 _r								24
190	200	A	300	210	230	255	270 _r	300 _r	280	300	325								25
A	u210A	180	215	230	u260A	250	260	u270 _r	300	F	F								26
180 _{ix}	180	180	235	A	u250A	245	u260 _r	285	290	250	220								27
190	195	205	205	210	A	260	265	260	260	300	315								28
175 _{ix}	220	215	220	230	245	255	250	225	250	260	300								29
190	195	205	210	220	240	260	260	290	240	270	300								30
28	30	25	23	24	26	30	29	27	29	28	29								Count
190	195	200	210	225	215	255	260	250	260	270	285								Median
185	195	195	215	225	250	255	260	255	265	280	290								Mean

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

Characteristic . h'F₂
Unit . Kms
Month June 1961

TABLE 63
Ionospheric Data
75 0°E Mean Time

Latitude ' 10 2°N
Longitude 77 5°E

Date/Hours	00	01	02	03	04	05	06	07	08	09	10	11
1								L	L	L	355	350
2								L	L	330	320	360
3									L	v390z	310	C
4									L	L	340	340
5								L	L	320	340	L
6							L	L	L	L	L	375
7								L	L	L	350	420
8								L	L	L _H	L _H	L
9								L	L	L _H	L	L
10								L	L	L	L	360
11									L _H	L	370	360
12									L	L	400	L
13								L	L	L	320	350
14								L	L	L	L	360
15								L	L	300	L _H	L
16								L	L	L	L	L
17							L	L	L	L _H	345	325
18								L	L	L	C	C
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	320	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26							L	L	v340z	L	L	340
27							L	L	L	320	L	360
28							L	L	L	L	L	L
29								275	350	320	380	355
30								L	L	L	L	L
Count								1	2	7	12	12
Median										320	350	360
Mean										315	350	360

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F₂
Unit Kms
Month June 1961

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	Hours/Date
L	L	310	330	L	L							1
L	L	L	320	L	L							2
325	340	310	L	L	L							3
380	370	355	L	L	L							4
380	420	360	300	L	L							5
L	360	330	L	L	L							6
355	L _{EX}	L	L	L	L							7
L	350	L	L	L	L							8
L	L	L	L	L	L							9
955	420	400	L	L	L							10
370	360	L	L	L	L							11
400	460	420	L	L	L							12
360	C	400	L	L	L							13
L _{EX}	360	A	A	300	L							14
420	410	L	L	L	L							15
405	400	380	L	L	L							16
370	L	L	L	L	L	L						17
C	L	L	L	L	A	L						18
L	L	L	L	L	L	L						19
L	L	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
340	350	L	L	L	L	L						26
L _{EX}	320 _{EX}	L	350	345	L	L						27
380	L	380	L	L	L	L						28
355	365	390	340	L	L	L						29
395	380	L	L	L	L	L						30
15	15	11	5	2								Count
380	370	380	330									Median
375	380	365	315									Mean

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'F2
Unit Kms
Month June 1961

TABLE 63
Ionospheric Data
75 0°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hours	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1								L	L	L	350	L
2								L	v215L	320	350	360
3								L	L	310	C	330
4								L	300	375	L	395
5								L	L	360	350	370
6							L	L	L	L _H	365	340
7							L	L	L	L	L	365
8							L	L	L	L	L _H	380
9							L	L	L	L _H	L	L
10							L	L	L	L	400	355
11								L	L _H	L	370	360
12								L	320	380	L	420
13								L	300	340	L	v380L
14								L	320	340	L	L
15								L	280	350	L	395
16							L	L	L	L	L	L
17							L	L	L	L	L _H	350
18							L	L	L	L	C	C
19							L	L	L	L	L	L
20							L	L	L	L	L	L
21							L	L	L	L	L	365
22							L	L	L	L	L	L
23							L	L	L	L	305	L
24							L	L	L	L	L	L
25							L	L	L	L	L	L
26							L	L	L	340	L	360
27							L	L	L	340	360	365
28							L	L	L	L	v270L	350
29							L	320	L	L	L	360
30								L	L	340	L	L
Count								1	6	11	9	18
Median									300	340	350	360
Mean									290	345	345	365

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'F2
Unit Kms
Month June 1961

TABLE 63
Ionospheric Data
75°E Mean Time

Latitude 102°N
Longitude 77 5°E

1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Hour/Date
375	340	335	L	L								1
∩355L	L	∩320L	L	∩320L								2
350	320	305	L	L								3
405	L	A	L	L								4
395	390	320	L	L								5
370	380	L	L	L								6
L	L	360	L	L								7
430	385	340	L	L								8
L _H	L	350	L	L								9
L	400	L	395	L	L							10
370	L	L	L	L								11
L	L	L	L	L								12
L	430	L	L	A								13
365	L	A	320	L								14
L	L _H	390	L	L								15
L	L	L	L	L	L							16
L	L	L	L	L	L							17
C	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								21
L	L	L	L	L								22
L	L	L	L	L	L							23
L	L	L	L	L								24
L	L	L	L	L								25
∩355L	390	L	345	L								26
355	320	L	350 _H	300								27
L	L	∩345L										28
360	370	360	∩325L	L								29
365	370	360	330	L								30
13	11	11	6	2								Count
365	370	345	335									Median
375	365	345	345									Mean

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic . h'E
Unit .Km
Month June 1961

TABLE 64
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	02	03	04	05	06	07	08	09	10	11
1							110	110	105	105	A	A
2							120	105	A	A	A	A
3							120	A	A	105	A	C
4							105 _{Hz}	100	A	A	A	A
5							135	100	A	A	A	A
6							110	100	100	A	A	A
7							110	105	A	A	A	A
8							120	110	A	A	A	A
9							120	A	A	A	A	A
10							A	A	A	A	A	A
11									110	110	A	A
12							115	A	A	A	A	A
13							120	110	C	A	A	A
14							120	110	A	A	A	A
15									110	110	A	A
16							120	105	A	A	A	A
17							115	A	A	A	A	A
18								A	A	A	C	C
19								A	A	A	A	A
20								A	A	A	A	A
21									105	105	105	A
22									105	100	105	A
23										115	A	A
24							A	A	A	A	A	A
25							A	A	A	A	A	A
26							A	A	A	A	A	A
27								A	A	A	A	A
28							110	A	A	A	A	A
29							120	115	A	A	A	A
30								A	A	A	A	A
Count							17	13	7	6		
Median							120	105	105	105		
Mean							115	105	105	105		

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

Characteristic h'E
Unit Km
Month June 1961

TABLE 64
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	Hour/Date
A	A	105	105	110	A							1
A	A	A	105	105	A							2
A	A	A	A	A	A							3
A	A	A	A	A	A							4
A	A	A	A	A	105	A						5
A	A	A	A	100	120							6
A	A	120	110	A	A							7
A	A	A	110	A								8
A	A	105	110	110								9
A	A	A	A	A	A	A						10
A	120	120	110	120								11
A	A	A	110	110								12
A	C	110	110	110	115							13
A	A	A	A	A	A							14
A	A	A	110	110	..							15
A	A	A	A	105	A	A						16
A	A	A	A	A	A	A						17
C	A	A	A	A	A							18
A	A	A	A	A	A	120						19
A	A	A	A	110	120							20
A	A	A	110	110	..							21
A	A	A	A	A	..							22
A	A	A	A	110								23
A	A	A	A	A	A							24
A	A	B	B	A	.							25
A	A	A	B	105	A							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	120	115							30
	1	5	10	14	6							Count
		110	110	110	120							Median
		110	110	110	115							Mean

Sweep 1.0 Mc to 25.0 Mc. in 27 seconds

Characteristic h'E
Unit Km
Month June 1961

TABLE 60—*contd*
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

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

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'E
 Unit Km.
 Month June 1961

TABLE 60—*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	Hour/Date
A	A	105	105	115								1
A	A	A	105	110								2
A	A	A	A	A								3
A	A	A	A	A								4
A	A	A	A	105	A							5
A	A	A	105	115	140							6
A	A	110	A	A	A							7
A	A	110	120	A								8
A	105	105	110	A								9
A	A	A	A	A	A							10
120	120	110	B	120								11
A	A	115	A	A								12
A	A	A	110	110								13
A	A	A	A	A								14
A	A	A	110	110								15
A	A	A	A	A	A	A						16
A	A	A	A	A	A	A						17
C	A	A	A	A	A	A						18
A	A	A	A	A	A	125						19
A	A	A	A	110	120							20
A	A	A	110	110								21
A	A	A	A	A								22
A	A	A	A	120								23
A	A	A	A	A								24
A	B	A	125									25
A	A	105	105	110	A							26
A	A	A	A	A								27
A	A	A	A	115								28
A	A	A	A	150	150							29
A	A	A	115	115								30
1	2	7	11	14	4							Count
		110	110	110								Median
		110	110	115								Mean

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

Characteristic · h'Es
Unit Kms
Month June 1961

TABLE 65
Ionospheric Data
75°E Mean Time

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	00	01	03	02	04	05	06	07	08	09	10	11
1							G	G	100	100	100	100
2	100	100		100			115	100	100	100	100	100
3			120	120			G	110	105	100	100	C
4							G	100	100	100	100	100
5							100	G	100	100	100	100
6	120						150	G	100	100	100	100
7					110	100	100	100	100	100	100	100
8						110	120	105	100	100	100	100
9	120	120	110	105	105	105	105	100	100	100	100	100
10	105	110	115	110	105		125	110	110	115	110	115
11	100	110		120			110	110	100	100	100	100
12	120					140	110	100	100	100	100	100
13							G	100	C	100	100	100
14	125	120	125	115	100		110	100	100	100	100	100
15			100	100	120	140	110	110	100	100	100	100
16	100	105	100	100	100		105	100	100	100	100	100
17			135				120	100	100	100	100	100
18	100	100					105	100	100	100	C	C
19							100	100	100	100	100	100
20							115	100	100	100	100	100
21				120			110	120	G	G	110	100
22							G	G	G	G	100	100
23							120	110	170	100	110	110
24							120	110	105	105	105	105
25							100	100	100	100	100	100
26	110	115	105				100	100	100	100	100	100
27	115	100	120				100	100	100	100	100	100
28					100		G	100	100	100	100	100
29							G	G	100	100	100	100
30							120	100	100	100	100	100
Count	11	9	9	9	7	5	23	25	27	28	29	28
Median	110	110	115	110	105	110	110	100	100	100	100	100
Mean	110	110	115	110	105	120	110	105	105	100	100	100

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic h'Es
Unit : Kms
Month June 1961

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

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

Characteristic · h'Es
Unit Km
Month · June 1961

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

Latitude 10 2°N
Longitude 77 5°E

Date/Hour	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
1							G	G	100	100	100	100
2	100	100	100	100			105	100	100	100	100	100
3			130				100	105	100	100	C	100
4							100	100	100	100	100	100
5							G	100	100	100	100	100
6							140	100	100	100	100	100
7				115	100	105	100	100	100	100	100	100
8					130		105	100	100	100	100	100
9	120	110	110	105	105		105	100	100	100	100	100
10	105	110	110	105	105	125	115	110	105	105	110	110
11	120	140				120	110	100	100	100	100	100
12				120			100	100	100	100	100	100
13							G	G	100	100	100	100
14	125	120	120	110			105	100	100	100	100	100
15			100		110		110	110	100	100	100	100
16	110	105	105	100		120	100	100	100	100	100	100
17					160		110	100	100	100	100	100
18	100			110			100	100	100	100	C	C
19	110					115	110	100	100	100	100	100
20							G	100	100	100	100	100
21	120		120				130	G	G	110	105	100
22							G	G	105	105	100	100
23							105	130	105	100	105	105
24							105	105	100	105	105	105
25							100	100	100	100	100	100
26		110	100				100	100	100	100	100	100
27	120	100					100	100	100	100	100	100
28							100	100	100	100	100	100
29				120			G	100	100	100	100	100
30		100		105			100	100	100	100	100	100
Count	10	9	9	10	6	5	24	26	29	30	28	29
Median	115	110	110	110	110	120	105	100	100	100	100	100
Mean	115	110	110	110	120	115	105	105	100	100	100	100

Sweep 10 Mc to 25 0 Mc in 27 seconds

Characteristic . h'Es
 Unit . Km
 Month . June 1961

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

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

Characteristic (M3000)F₂
 Unit —
 Month June 1961

TABLE—66
 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 20	2 25	F	E	E	E	3 20	3 20	3 00	2 70	2 20 _x	2 45
2	2 90	2 90	2 70	2 65	2 90	2 65	3 10	3 00	2 80	2 50	2 35	2 40
3	C	F	F	F	F	F	3 00	3 00	2 90	2 70	2 50	C
4	2 70	2 60 _r	F	F	F	2 80	3 20	3 00	2 80	2 60	2 50	2 45
5	3 45	3 15	3 05	2 80	F	2 95	3 20	3 15	2 85	2 30	2 60	2 55
6	3 05	F	F	F	S	F	3 20	3 05	2 80	2 55	2 30	2 50
7	2 35	S	E	E	E	F	3 00	2 90	2 55	2 50	2 50	2 35
8	2 30 _s	2 20 _r	F	F	F	F	3 00	3 00	2 75	2 50	2 20	2 20
9	2 15 _s	2 95 _s	A	2 00 _r	2 0 _r	2 85 _r	3 10	2 95	2 65	2 40	2 45	2 35
10	3 35	3 30	3 10	A	2 50	2 80	3 20	3 20	3 05	2 70	2 40	2 35
11	2 00 _s	A	FS	F	3 60	E	3 10	2 85	2 70	2 50	2 40	2 60
12	F	F	F	FS	S	S	3 20	2 05 _s	2 70	2 40	2 35	2 40 _x
13	2 70	C	2 80 _c	3 10 _c	3 20	H	3 35	3 40	C	3 05	2 75	R
14	2 80	A	A	A	3 30	H	3 25	3 15	2 90	2 65	2 45	2 40
15	2 65	2 70	2 80	FH	F	F	3 10	3 15	2 95	2 60	2 15 _x	2 30 _w
16	2 70	2 80	F	2 75	3 00	3 20	3 10	2 90	2 75	2 65	2 35	2 20
17	2 70	3 20	3 15	3 35	3 30	2 65 _x	3 05	3 10	2 80	2 50	2 45	2 45
18	2 55	F	F	F	F	F	2 90	2 75	2 50	2 40	C	C
19	2 95	3 05	2 85	2 65	2 90	2 90	3 20	3 20	3 00	2 60	2 20 _x	2 35
20	2 80	2 75	2 50 _r	2 70 _v	2 70	2 95	3 10	3 00	2 75	2 30	2 50	2 35
21	3 10	2 90	2 90	2 70	2 90	3 45	3 30	3 30	3 20	2 95	2 65	2 30
22	2 90	3 00	2 85	3 20	3 65	2 65	3 35	3 30	3 15	2 75	2 60	2 25
23	3 25	3 10	F	F	F	F	3 05 _r	3 05	2 85	2 65	2 45	2 40
24	F	F	F	F	2 90 _r	3 50 _r	3 10 _r	2 90	2 80	2 35	2 45	2 40
25	F	F	F	F	F	3 45	2 90	2 95	2 80	2 65	2 50	2 50
26	2 75	2 60	2 55	2 90	3 30	3 35	3 10	3 05	2 70	2 55	2 45	2 55
27	F	F	F	F	F	F	3 05	3 10	2 80	2 40	2 50	2 60
28	3 40	3 00	3 10	3 00	3 20	3 35	3 00	2 95	2 75	2 45	2 45	2 40
29	C	2 60	F	F	F	2 20 _r	3 20	3 25	2 80	2 75 _x	2 40	2 70
30	2 90	2 90	2 80	2 90	3 20	E	3 20	3 00	2 70	2 30	2 40	2 40
Count	24	19	13	13	16	16	30	30	29	30	29	27
Median	2 90	2 90	2 85	2 90	3 10	2 95	3 10	3 05	2 80	2 55	2 45	2 40
Mean	2 90	2 90	2 85	2 90	3 10	3 05	3 15	3 05	2 80	2 55	2 45	2 40

Sweep 1 0 Mc to 25 0 Mc in 27 seconds

Characteristic (Mg000)F₂ TABLE 66 Latitude -10.2°N
 Unit — Ionospheric Data Longitude - 77 5°E
 Month June 1961 75 0°E Mean Time

12	13	14	15	16	17	18	19	20	21	22	23	Date
2 40	2 50	2 55	2 60	2 80	2 90	3 10	3 05	2 75	2 95	2 80	2 90	1
2 45	2 45	2 45	2 55	2 65	2 80	2 90	2 95	C	F	F	F	2
2 55	2 60	2 55	2 55	2 65	2 65	2 70	2 85	2 95	2 90	2 85	2 80	3
2 40	2 45	2 65	2 75	2 80	2 90	2 95	3 00	3 10	3 40	3 00	3 40	4
2 45	2 45	2 45	2 80	2 85	2 95	2 85	2 90	3 05	3 40	3 20	3 20	5
2 50	2 30	2 45	2 50	2 70	3 00	3 05	3 00	2 95	3 10	3 10	2 15	6
2 60	2 55	2 50	2 60	2 70	2 90	2 90	2 90	2 80	2 90	2 95	3 10 _s	7
2 40	2 45	2 35	2 65	2 80	2 90	2 95	2 80	2 90	2 80	2 95 _s	3 10	8
2 40	2 45	2 60	2 70	2 85	3 00	3 00	3 15	2 95	2 85 _s	2 90 _s	3 05	9
2 35	2 45	2 60	2 70	2 80	2 90	3 05	3 20	3 20	3 15	2 90	3 10	10
2 65	2 75	2 60	2 60	2 75	2 95	2 90	2 90	2 90 _s	2 80	3 00	2 90	11
2 50 _s	2 50 _s	2 45	2 45	2 70 _s	A	3 00 _s	3 15	3 10	3 25	3 30	3 10	12
2 40	C	2 40	2 55	2 65	2 80 _s	3 00	3 10	3 15	3 10	2 80 _s	2 70 _s	13
2 45	2 40	2 40	S	2 90	2 85 _s	3 05	3 05	3 30	3 10	3 00 _s	2 80 _v	14
2 40	2 35	2 35	2 50	2 55	2 65 _s	2 80 _s	2 95 _s	3 00	2 90 _s	2 85	2 90	15
2 45	2 30	2 40	2 50	2 50	2 60	2 80	2 80	2 70	2 65	2 55	2 50	16
2 40	2 30	2 35	2 40	2 55	2 80	2 95	2 90	2 90	2 80	2 60	2 65	17
C	2 35	2 40	2 50	2 60	2 75	2 80	2 75	2 80	2 70 _s	2 60	2 85	18
2 30	2 30	2 45	2 55	2 60	2 70	2 90	3 00	2 95	2 85	2 90	2 85 _s	19
2 25	2 40	2 30	2 30	2 45	2 70	2 85	2 90	2 80	2 90	3 00	3 10	20
2 40	2 30	2 35	2 50	2 60	2 65	2 90	2 90	2 70	2 70	2 70	2 70	21
2 15	2 30	2 30	2 35	2 50	2 60	2 60	2 65	2 80	2 85	3 10	3 30	22
2 40	2 40	2 45	2 45	2 60	2 75	2 75	2 95 _r	2 80 _s	2 75 _s	2 80	2 55 _s	23
2 45	2 40	2 40	2 40	2 60	2 80	3 00	2 85	2 65 _s	2 60	2 55 _s	F	24
2 55	2 55	2 50	2 60	2 75	2 95	3 00	3 00	2 90	2 85	2 70	2 80	25
2 50	2 80	2 65	2 65	2 75	2 85	3 00	3 00	2 85	2 70	2 65	F	26
2 45	2 50	2 75	2 60	2 90	3 20	3 20	3 10	3 00	3 15 _s	3 30	3 45	27
2 50	2 35	2 40	2 55	2 65	2 75	2 85	C	3 05	3 05 _s	2 90	2 75	28
2 75	2 80	2 70	2 85	2 80	2 90	3 00	3 05	3 15	3 10	3 00	3 05	29
2 40	2 60	2 50	2 65	2 80	2 90	3 00	3 05	3 20	3 25	3 10	2 85	30
29	29	30	29	30	29	30	29	29	29	29	27	Count
2 45	2 45	2 45	2 55	2 70	2 85	2 95	2 95	2 95	2 90	2 90	2 90	Median
2 45	2 45	2 50	2 55	2 70	2 85	2 95	2 95	2 95	2 95	2 90	2 90	Mean

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

Characteristic (M3000)F₂
 Unit —
 Month June 1961

TABLE 66--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	2.10	F	E	E	E	u3 15 _F	3.20	3.10	2.85	2.50	2.35 _{EX}	2.40
2	2.95	2.70	2.60	2.75	3.00	2.90	3.10	2.90	2.70	2.60	2.40	2.45
3	F	F	F	F	F	u3 05 _F	3.10	3.00	2.80	2.50	C	2.65
4	2.75	F	F	F	3.30	3.15	3.25	3.00	2.55	2.50	2.40	2.55
5	3.35	3.10	2.95	F	F	3.10	3.20	3.00	2.55	2.25 _{EX}	2.55	2.05
6	F	F	F	S	E	3.20	3.15	3.00	2.70	2.35	2.50	2.60
7	S	S	E	E	A	2.95	2.95	2.75	2.40	2.45	2.55	2.50
8	u3 00 _F	u2 95 _F	F	F	F	2.95	2.95	2.85	2.60	2.35	2.30	2.45
9	u3 15 _s	u2 90 _s	A	A	A	u2 70 _F	3.15	2.80	2.45	2.30	2.50	2.30
10	3.45	3.35	3.00	3.15	2.80	3.10	3.20	3.15	2.90	2.50	2.40	2.40
11	2.90	2.85 _F	2.70 _F	F	3.40	3.00	3.05	2.85	2.60	2.40	2.60	2.60
12	F	F	F	S	S	3.15	3.10	2.90	2.50	2.40	2.35	2.50
13	u2 60 _C	u2 60 _C	u3 10 _C	3.20	3.40	3.25	3.45	3.40	3.15	2.80	2.50	2.25 _{EX}
14	A	A	A	3.00	3.60	3.10	3.25	3.05	2.80	2.50	2.25	2.45
15	2.60	2.75	2.65	F	A	3.25	3.10 _s	3.10	2.80	2.40	2.20 _W	2.45
16	2.75	2.65	2.40	u2 65 _F	3.30	2.85	3.05	2.85	2.75	2.50	2.45	2.25
17	3.10	3.20	3.30	3.25	3.30	3.05	3.15	2.95	2.70	2.40	2.40	2.45
18	F	F	F	F	F	2.95	2.90	2.65	2.40	2.40	C	C
19	3.05	2.90	3.60 _F	2.75	3.10	3.20	3.25	3.05	2.80	2.35	2.40	2.40
20	2.85	2.55	F	2.50	2.90 _F	3.05	3.10	2.90	2.45	2.45	2.40	2.30
21	3.05	2.85	2.65	3.00	3.45	3.30	3.20	3.25	3.20	2.80	2.50	2.05
22	3.10	2.90	2.90	3.35	E	3.25	3.40	3.20	2.90	2.70	2.50	2.20
23	3.10	3.00	F	F	F	2.80 _F	3.05	2.95	2.75	2.50	2.55	2.35
24	F	F	F	F	3.20 _F	3.10 _F	3.05	2.85	2.50	2.40	2.35	2.50
25	F	F	F	F	3.40 _F	3.15	3.00	2.80	2.70	2.60	2.50	2.50
26	2.70	2.60	2.75	3.10	3.50	3.10	3.15	2.85	2.55	2.50	2.45	2.55
27	F	F	F	F	F	u3 20 _F	3.10 _s	2.95	2.60	2.50	2.55	2.50
28	3.25	3.15	u3 10 _W	3.20	3.25	3.15	3.00	2.80	2.60	2.30	2.50	2.50
29	2.60	u2 60 _F	F	F	F	u3 30 _F	3.25	3.00	2.55 _{EX}	2.55 _{EX}	2.30	2.70
30	2.85	F	3.85	3.15	u3 30 _{EX}	3.05	3.05	2.90	2.55	2.55 _{EX}	2.35	2.35
Count	21	18	14	13	16	30	30	30	30	30	28	29
Median	2.95	2.90	2.80	3.10	3.30	3.10	3.10	2.95	2.65	2.50	2.40	2.45
Mean	2.90	2.85	2.80	3.00	3.25	3.10	3.15	2.95	2.70	2.50	2.45	2.45

Sweep 1.0 Mc to 25.0 Mc in 27 seconds

Characteristic (M3000)F₂ Latitude 10 2°N
 Unit — Ionospheric Data Longitude 77 5°E
 Month June 1961 75 0°E Mean Time

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

Sweep 1.0 Mc to 25.0 Mc in 27 seconds.

TABLE 19
Principal Magnetic Storms

Observatory	Greenwich Date 1961	Storm Time		Sudden commencements			Maximal Activity on K-scale Oto 9			Ranges				
		G.M.T. ₂ of Beginn- ing	G.M.T. of Ending (i)	Type (ii)	Amplitude (iii)			C-figure Degree of Activity (iv)	Green- wich day	Green- wich 3 h Index	K- Index	D	H	Z
					D	H	Z							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		h m d h			r	r							r	r
Astrophysical Observatory Kodaikanal	February 4	18 25	5 18	S C	<1	32	18	m	5			3	144	60
	February 16	00 39	18 20	S C.	1	14	7	ms	17			6	276	72
	March 9	13 27	10 23	S C.	1	23	13	ms	10			8	316	60
	March 27	14 59	28 15	S C	<1	22	12	m	28			4	199	48
	April 13	14 50	15 18	S C	<1	29	17	ms	15			9	259	58
	May 25	02 14	25 19					m	25			4	188	51
	June 20	16 06	22 23					m	22			6	231	69

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

- (i) Approximate time of ending of storm 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 250 r)
(ms)—for moderately severe (when range is between 251r and 400r)
(s)—for severe (when range is above 400r)

MAGNETIC DATA

TABLE 1
 Hourly Values of Declination (Westerly), 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2° plus tabular quantities

JANUARY

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

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

TABLE 1
 Hourly Values of Declination (Westerly), 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2° puls tabular quantities

JANUARY

Hours GMT										Maximum		Minimum		Range	Date	
15	16	17	18	19	20	21	22	23	24	Time	Mag	Time	Mag			
										H	M	H	M			
37 8	38 1	38 2	38 1	38 1	38 1	38 2	38 2	38 2	38 2	07	15	38 9	10	37	37 4	1 5
37 6	38 1	38 1	38 2	38 2	38 2	38 3	38 5	38 5	38 6	05	00	40 4	10	00	36 0	4 4
37 9	38 1	38 2	38 2	38 2	38 1	38 2	38 2	38 2	38 3	05	25	39 9	10	45	36 0	3 9
37 7	38 2	38 3	38 4	38 4	38 4	38 6	38 9	39 0	39 0	05	45	41 2	11	30	37 6	3 6
37 7	38 2	38 3	38 4	38 6	38 6	38 6	38 7	38 9	38 5	06	00	39 7	09	40	36 6	3 1
37 3	37 6	38 0	38 2	38 2	38 2	38 3	38 6	38 6	38 5	06	00	40 5	11	15	36 6	3 9
37 3	37 6	38 2	38 3	38 4	38 6	38 9	39 0	38 9	38 6	05	25	41 0	14	00	36 9	4 1
36 9	37 3	37 6	37 2	37 6	38 2	38 2	38 6	38 7	38 2	05	15	40 0	11	58	36 6	3 4
35 8	36 2	36 2	36 2	36 3	36 9	37 0	37 3	37 7	37 2	02	00	39 0	14	00	35 8	3 2
37 3	37 5	37 7	38 2	38 3	38 3	38 3	38 4	38 6	38 2	06	00	40 7	09	00	36 9	3 8
37 7	38 0	38 1	38 3	38 3	38 4	38 4	38 5	38 7	38 3	07	15	39 8	09	15	37 0	2 8
38 1	38 1	38 0	38 1	38 1	38 1	38 3	38 4	38 7	38 6	06	45	41 1	11	00	37 7	3 4
37 7	37 7	37 7	37 7	37 7	37 7	37 7	37 7	37 7	38 3	06	25	40 4	14	00	37 7	2 7
38 8	38 3	38 3	38 3	38 1	37 8	37 8	38 3	38 4	38 5	02	00	39 1	20	40	37 7	1 4
37 9	37 9	38 0	38 2	38 3	38 3	38 4	38 6	39 1	39 0	05	23	39 8	08	15	36 2	3 6
37 6	37 6	37 9	38 1	38 5	38 5	38 8	38 8	38 6	38 1	01	30	39 7	07	45	35 8	3 9
37 6	37 6	38 3	38 2	38 2	38 3	38 3	38 5	38 6	37 9	00	01	38 8	07	25	36 9	1 9
37 4	38 0	38 1	38 1	38 1	38 2	38 4	38 5	38 9	38 3	06	00	40 2	14	05	36 7	3 5
37 3	37 3	36 7	37 3	37 3	37 7	37 3	37 3	38 2	37 9	05	40	39 5	16	30	36 6	2 9
35 9	36 2	36 5	37 1	37 3	37 3	37 3	37 8	37 8	37 5	06	14	39 4	11	00	35 8	3 6
37 2	36 4	37 1	37 2	37 2	37 5	37 9	37 9	37 9	37 4	06	00	39 4	16	00	35 8	3 6
37 8	37 9	38 3	38 1	38 2	38 0	38 2	38 2	38 2	37 8	05	30	40 0	11	25	35 5	4 5
37 4	37 6	38 0	38 0	38 0	38 0	38 1	38 3	38 4	38 0	06	00	40 5	11	00	36 3	4 2
36 9	37 0	37 3	38 0	37 8	37 6	37 7	37 8	38 0	37 9	05	00	39 5	12	30	36 4	3 1
37 1	37 7	37 7	37 8	37 9	37 8	37 9	38 4	38 5	37 4	07	00	39 9	03	56	36 4	3 5
37 1	37 2	37 5	37 8	37 8	38 1	38 4	38 5	38 6	38 1	06	45	39 6	12	35	36 8	2 8
37 7	37 8	37 9	38 1	38 4	38 4	38 5	38 5	38 5	38 2	06	30	39 8	04	00	37 1	2 7
37 7	37 7	37 8	37 9	38 4	38 1	38 2	38 5	38 9	37 9	23	30	39 1	03	50	35 6	3 5
37 9	38 2	38 0	37 9	37 8	37 9	37 7	38 2	38 5	38 8	09	00	40 7	14	00	37 7	3 0
38 2	38 3	38 5	38 5	38 5	38 5	38 6	38 6	38 9	38 2	23	35	39 2	04	10	36 9	2 3
38 0	38 0	38 2	38 2	38 3	38 5	38 5	38 6	38 6	38 8	06	00	40 6	10	15	37 8	2 8
37 5	37 7	37 8	37 9	38 0	38 1	38 2	38 3	38 5	38 2						3 2	Mean
37 7	38 1	38 2	39 3	38 4	38 4	38 5	38 6	38 8							Mean†	
36 7	37 0	37 1	37 2	37 3	37 6	37 6	37 8	38 1							Mean††	

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

TABLE 2
 Hourly Values of Declination (Westerly), 1961
 (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†	38 6	39 0	39 6	39 6	39 4	39 6	38 7	37 6	36 5	36 2	36 4	36 9	38 2	38 2	37 9
2†	38 6	38 7	39 3	39 1	38 5	39 1	40 3	40 6	39 5	38 1	37 2	37 1	37 8	38 4	37 9
3	38 5	38 5	38 8	38 4	39 1	40 0	41 3	40 9	39 5	38 4	36 5	36 4	37 2	38 2	37 5
4††	39 1	39 1	39 2	40 2	40 9	41 3	41 2	40 9	39 6	38 2	37 6	37 0	37 1	37 5	37 0
5	37 0	37 1	37 1	36 9	36 6	37 0	38 0	38 0	36 9	36 9	34 9	34 9	35 6	36 3	36 0
6	37 4	37 4	37 0	37 0	37 5	38 5	39 9	40 4	39 7	38 0	36 9	36 4	36 3	36 7	36 6
7	37 4	37 0	37 0	36 7	37 1	38 5	39 8	39 9	39 9	39 1	37 9	37 1	37 0	37 1	37 2
8	36 7	36 3	36 0	36 5	37 1	38 5	40 0	40 6	40 5	39 5	38 5	38 4	38 4	38 1	37 4
9	37 5	37 5	37 2	37 5	38 3	39 7	41 1	41 5	41 0	39 9	38 6	37 9	37 6	37 5	37 8
10	38 3	38 3	37 9	37 6	37 2	37 2	38 7	40 1	40 0	39 5	38 8	38 3	38 0	38 1	38 0
11	38 8	39 7	39 7	39 4	39 0	39 4	40 1	40 2	40 2	39 5	38 4	37 2	36 9	37 7	37 3
12†	38 7	38 7	38 4	38 4	38 1	38 2	38 2	38 9	40 1	40 1	39 5	38 8	38 7	38 5	38 1
13	38 8	38 8	39 2	39 4	39 4	39 4	39 4	39 1	39 1	39 8	38 9	37 7	37 3	37 3	36 8
14	38 7	38 8	38 8	39 2	38 9	39 0	39 5	38 9	38 6	38 3	38 2	38 1	38 1	38 1	37 8
15	38 9	38 9	39 2	39 0	38 9	39 0	38 9	38 6	38 1	37 4	37 1	36 7	37 1	37 6	37 9
16††	38 9	39 2	39 3	38 7	38 7	38 8	39 8	40 1	39 5	38 0	36 6	36 1	37 1	36 6	35 9
17††	38 4	38 7	38 9	38 8	37 5	38 8	38 8	38 9	38 8	38 7	38 8	38 2	38 1	38 1	38 0
18††	39 6	40 2	38 4	37 3	37 3	37 4	37 8	38 2	38 1	37 3	36 4	35 8	36 7	36 6	36 8
19	38 5	38 5	38 6	37 6	37 6	37 4	39 3	39 3	38 7	38 1	37 4	37 0	36 7	36 7	37 7
20††	38 7	38 7	38 7	38 6	38 6	38 1	38 8	39 7	38 4	38 7	38 3	37 4	37 0	36 9	37 3
21	38 7	38 7	38 3	37 4	37 9	38 3	38 8	39 5	40 0	39 7	38 7	38 3	37 4	36 9	37 3
22	38 7	38 6	38 7	38 3	38 7	39 3	40 0	40 1	39 7	39 3	38 7	38 1	38 1	37 9	37 9
23	38 7	38 7	38 6	38 3	38 4	39 0	39 7	10 0	40 0	39 7	39 5	38 8	38 6	38 3	38 0
24	38 8	38 8	38 6	38 0	37 9	38 5	38 7	39 4	40 1	40 1	39 4	39 3	38 7	38 5	38 0
25†	38 6	38 3	38 2	37 2	37 1	38 4	39 5	40 0	40 7	40 0	39 1	38 5	38 5	38 5	38 2
26†	38 5	38 4	38 4	37 7	37 9	38 6	39 6	39 7	39 6	40 1	38 7	38 3	38 3	38 3	38 3
27	38 6	38 6	38 6	38 2	38 2	38 8	39 3	39 5	39 5	39 6	39 2	38 8	38 2	38 2	37 8
28	38 2	38 1	37 9	37 4	36 7	36 7	37 3	37 7	38 1	37 7	37 5	37 3	37 4	37 4	37 4
Mean	38 4	38 5	38 4	38 2	38 2	38 7	39 4	39 6	39 3	38 8	38 0	37 5	37 6	37 7	37 5
Mean†	38 6	38 6	38 8	38 4	38 2	38 8	39 3	39 4	39 3	38 9	38 2	37 9	38 3	38 4	38 1
Mean††	38 9	39 2	38 9	38 7	38 6	38 9	39 3	39 6	38 9	38 2	37 5	36 9	37 2	37 1	37 0

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

TABLE 2
 Hourly Values of Declination (Westerly), 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

FEBRUARY 2° 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		
										H	M	H	M		
37 9	38 2	38 2	38 0	38 2	38 0	38 3	38 6	38 6	38 2	01 55	39 9	08 45	36 1	9 8	1†
38 1	38 1	38 4	38 4	38 5	38 5	38 4	38 5	38 4	38 6	06 25	40 7	11 00	37 1	3 6	2†
37 7	37 9	37 8	37 8	37 9	37 9	38 1	38 1	38 5	38 4	06 00	41 4	10 20	35 8	5 6	3
36 7	36 5	36 3	36 0	36 3	35 7	35 6	36 1	36 3	38 0	05 05	41 9	20 24	34 9	7 0	4††
36 2	36 3	36 7	36 7	37 0	37 0	37 1	37 1	37 4	36 7	06 35	38 4	10 30	34 8	3 6	5
35 8	36 3	37 0	37 0	37 0	37 0	37 0	37 0	37 4	06 55	41 2	15 15	35 5	5 7	6	
37 2	37 4	37 7	37 7	37 4	37 2	37 1	37 0	36 8	37 7	07 00	40 0	03 10	36 4	3 6	7
37 4	37 2	37 5	37 7	37 5	37 7	37 7	37 8	37 7	37 9	06 15	40 7	02 00	36 0	4 7	8
37 8	37 5	37 8	37 8	37 9	37 9	37 9	38 0	38 2	38 4	06 52	41 7	02 00	37 3	4 4	9
37 9	38 0	38 1	38 1	38 0	38 1	38 1	38 4	38 6	38 3	07 00	40 1	03 20	37 2	2 9	10
37 6	37 9	38 0	38 1	38 3	38 4	38 7	38 7	38 7	38 7	06 36	40 4	12 00	36 9	3 5	11
38 1	38 2	38 1	38 4	38 4	38 7	38 8	38 8	38 8	38 7	08 15	40 2	03 20	38 0	2 2	12†
36 7	36 6	36 1	36 6	36 8	37 4	37 4	38 0	38 1	38 1	08 15	40 1	15 38	35 6	4 5	13
38 1	38 1	38 2	38 5	38 5	38 3	38 5	38 6	38 9	38 5	05 45	39 6	13 45	37 6	2 0	14
38 1	38 1	38 2	38 3	38 5	38 5	38 5	38 5	38 8	38 3	02 30	39 6	11 00	36 7	2 9	15
36 7	37 0	37 0	37 4	37 4	37 7	38 0	38 1	38 2	38 0	06 55	40 3	14 10	35 6	4 7	16††
37 7	38 1	38 1	37 8	38 0	38 7	38 7	39 6	39 4	38 5	22 08	39 9	17 35	37 4	2 5	17††
37 1	37 4	37 5	38 2	38 2	38 1	38 1	38 4	38 2	37 7	00 40	40 3	10 35	35 4	4 9	18††
37 9	37 9	38 0	38 1	37 4	37 4	38 3	38 3	38 6	38 0	06 15	39 4	12 25	36 5	2 9	19
37 3	37 9	38 1	38 3	38 3	38 3	38 4	38 7	38 7	38 2	07 00	39 7	12 15	36 7	3 0	20††
37 9	37 7	37 9	38 3	38 3	38 3	38 4	38 6	38 6	38 3	08 00	40 0	12 55	36 6	3 4	21
37 7	38 0	38 3	38 3	38 3	38 1	38 4	38 4	38 7	38 6	06 45	40 4	15 00	37 7	2 7	22
38 0	38 0	38 4	38 4	38 4	38 6	38 7	38 7	38 8	38 8	07 35	40 1	14 00	37 9	2 2	23
38 0	38 2	38 3	38 5	38 5	38 5	38 5	38 5	38 6	38 7	08 30	40 6	03 15	36 6	4 0	24
38 2	38 2	38 4	38 4	38 2	38 1	38 1	38 4	38 4	38 6	07 50	40 9	03 05	37 0	3 9	25†
37 9	37 7	37 9	38 0	38 2	38 3	38 3	38 3	38 3	38 5	09 00	40 1	03 25	37 6	2 5	26†
37 8	37 9	38 2	38 1	38 1	38 1	38 2	38 2	38 2	38 5	09 00	39 6	14 00	37 8	1 8	27
37 4	37 4	37 5	37 5	37 5	37 5	37 4	37 5	37 5	37 5	08 00	38 2	03 32	36 6	1 6	28
37 5	37 6	37 8	37 9	37 9	37 9	38 0	38 0	38 3	38 2				3 6		Mean
38 0	38 1	38 2	38 2	38 3	38 3	38 4	38 5	38 6							Mean†
37 1	37 4	37 4	37 5	37 6	37 7	37 8	38 2	38 2							Mean††

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

TABLE 3
Hourly Values of Declination (Westerly), 1961
(Average for sixty minutes centred at the full hours of Greenwich Mean time)

MARCH

2° plus tabular quantities

Date	Hours GMT														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
1	37.8	38.1	38.5	38.2	38.5	39.1	39.5	39.9	39.6	39.5	38.9	38.4	37.8	37.5	37.4
2	37.7	37.7	37.4	36.6	36.3	36.5	36.7	37.4	38.0	38.6	38.0	37.9	38.0	38.0	37.7
3†	37.6	38.0	38.7	38.7	38.4	38.1	38.1	38.3	38.4	38.1	38.0	37.9	37.9	37.6	37.9
4†	38.4	38.6	39.0	38.6	38.1	38.6	38.8	38.8	38.7	38.0	37.7	37.6	38.0	38.0	37.7
5	38.0	38.1	38.4	38.6	38.8	40.0	40.8	40.1	39.5	38.8	38.0	37.3	37.3	37.4	37.7
6††	37.6	37.6	37.4	36.8	36.1	36.5	36.5	36.8	36.9	36.5	36.4	36.5	36.5	35.9	36.1
7†	37.2	37.5	37.9	37.5	37.2	37.6	38.0	38.3	37.9	37.3	36.9	36.5	36.6	37.2	37.5
8†	37.5	37.5	37.8	37.1	37.2	37.9	37.9	37.9	37.9	37.8	37.8	37.8	37.8	37.8	37.6
9	37.3	37.5	37.2	36.9	37.4	37.9	37.9	36.6	36.6	36.7	36.9	37.2	37.6	37.9	38.0
10††	38.0	38.3	38.1	38.3	38.1	38.2	38.7	37.9	37.6	35.0	33.1	32.5	33.2	34.9	35.8
11	37.2	37.3	37.6	37.2	37.2	37.2	37.3	37.4	37.0	36.7	36.5	36.6	36.6	36.6	36.6
12	37.9	37.4	37.4	37.7	38.2	38.9	39.5	39.6	38.9	38.1	37.5	37.4	37.5	37.5	37.5
13	37.7	37.3	36.7	37.0	37.5	38.7	39.5	39.6	38.2	36.8	36.4	36.6	37.4	37.8	37.8
14††	38.1	38.0	38.0	38.1	38.9	39.8	39.9	38.8	37.4	36.7	35.6	35.6	36.1	36.7	36.7
15††	37.7	37.4	37.4	37.5	37.9	38.2	38.9	38.6	38.2	37.5	35.7	35.5	36.1	36.9	36.8
16	38.2	37.4	36.9	37.4	38.1	39.2	39.5	39.2	38.2	38.2	38.1	37.5	37.2	37.4	37.8
17	38.1	38.1	37.4	37.2	37.9	38.9	39.6	39.6	38.9	38.1	37.2	36.8	36.9	37.4	37.4
18	38.1	37.5	36.8	36.8	37.6	39.1	40.1	40.4	39.7	39.3	38.3	37.9	37.9	37.7	37.3
19††	38.1	38.0	37.7	38.2	39.0	39.4	39.6	38.3	38.3	37.6	37.2	37.2	37.5	37.5	37.3
20	37.9	37.6	37.6	37.9	38.3	38.9	39.4	39.4	39.6	38.7	37.0	36.5	36.6	36.9	36.5
21	37.7	37.9	38.0	38.2	38.9	39.4	39.6	40.1	39.6	38.9	38.3	37.6	37.6	38.0	37.9
22	37.6	37.6	37.9	38.3	38.4	39.2	39.8	40.4	39.4	39.1	38.4	38.0	37.6	37.6	38.7
23	37.8	37.7	37.3	38.4	37.6	38.0	38.4	39.1	39.0	38.3	37.7	37.8	37.7	37.7	37.4
24	38.4	38.4	38.4	38.4	38.7	39.4	40.2	40.5	40.2	39.4	39.9	37.7	37.6	37.7	38.0
25†	38.3	37.7	37.0	37.0	38.1	39.1	39.7	39.8	39.5	39.0	38.4	38.4	38.4	38.3	38.1
26	38.4	38.0	37.6	38.1	38.6	39.5	40.2	40.7	40.2	39.2	37.8	37.5	37.8	38.2	38.4
27	38.1	37.8	37.1	37.7	38.5	39.9	40.5	39.3	40.6	39.3	38.5	38.4	37.9	37.7	37.8
28	37.7	37.4	37.7	38.0	37.9	38.6	39.2	39.4	39.4	38.9	38.6	38.3	38.3	38.2	38.2
29	37.9	37.8	37.3	37.8	38.3	38.6	39.4	39.9	39.6	38.6	38.2	38.5	38.5	38.5	38.6
30	38.5	38.2	38.2	38.3	38.4	38.8	39.7	39.7	39.0	38.6	38.0	37.6	38.1	38.4	38.6
31	38.4	38.3	38.1	38.4	38.7	39.0	39.5	40.1	40.1	39.3	38.7	38.6	38.6	38.7	38.7
Mean	37.9	37.8	37.7	37.8	38.0	38.7	39.1	39.1	38.8	38.1	37.5	37.3	37.4	37.5	37.6
Mean‡	37.8	37.9	38.1	37.8	37.8	38.3	38.5	38.6	38.5	38.0	37.8	37.6	37.7	37.8	37.8
Mean††	37.9	37.9	37.7	37.8	38.0	38.4	38.7	38.1	37.7	36.7	35.6	35.5	35.9	36.4	36.5

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

TABLE 3
Hourly Values of Declination (Westerly), 1961
(Average for sixty minutes centred at the full hours of Greenwich Mean time)

MARCH

2° 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					
										H	M	H	M					
37.5	37.7	37.8	37.7	37.5	37.5	37.5	37.4	37.3	38.2	06	45	40	1	23	00	37.1	3.0	1
37.6	37.9	37.9	37.9	37.9	37.7	37.7	37.6	37.4	37.6	08	30	38.7	03	35	36	2	2.5	2
37.6	37.7	37.9	38.0	38.0	38.0	38.0	38.0	38.0	38.0	02	50	38.8	00	01	37.6	1.2	3†	
37.4	37.6	37.9	38.0	37.9	37.7	37.9	37.9	37.9	38.1	06	30	39.0	15	00	37.4	1.6	4†	
38.0	38.0	38.0	37.9	38.0	37.6	37.7	37.4	37.3	38.3	06	00	40.8	11	00	37.3	3.5	5	
36.5	36.8	36.9	37.3	37.3	37.2	37.2	37.3	37.2	36.8	02	25	37.8	12	52	35.5	2.3	6††	
37.5	37.5	37.8	37.6	37.5	37.5	37.3	37.6	37.3	37.4	06	30	38.5	11	00	36.5	2.0	7†	
37.5	37.5	37.3	37.1	37.1	36.9	37.1	37.1	37.1	37.5	06	45	38.0	03	12	36.8	1.2	8†	
38.0	37.6	37.4	37.3	37.2	37.2	37.0	37.2	37.7	37.4	13	30	38.1	07	15	36.0	2.1	9	
35.8	35.6	36.0	36.6	36.7	36.9	37.2	37.3	37.3	36.6	04	50	39.3	11	02	32.0	7.3	10††	
36.7	37.2	37.0	37.4	37.2	36.9	37.2	37.3	37.4	37.1	06	45	37.6	10	00	36.5	1.1	11	
37.7	37.8	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.9	06	25	39.8	11	00	37.4	2.4	12	
37.4	37.3	37.4	37.7	37.7	37.5	38.0	38.1	38.1	37.7	06	52	40.1	10	00	36.3	3.8	13	
36.7	37.0	36.7	36.7	37.3	37.3	37.3	37.3	37.8	37.8	03	30	40.3	11	12	35.3	5.0	14††	
37.5	37.5	37.8	37.8	37.8	37.9	38.2	38.3	38.2	37.6	05	45	39.2	10	00	35.4	3.8	15††	
37.8	37.9	37.8	37.8	37.8	37.8	37.9	38.1	38.1	38.0	06	25	39.6	02	12	36.8	2.8	16	
37.4	37.5	37.5	37.6	37.8	37.8	37.8	38.1	38.2	37.9	06	30	40.2	11	00	36.8	3.4	17	
37.3	37.0	37.0	37.2	37.9	37.9	37.9	38.3	38.3	38.0	07	02	40.5	02	38	36.5	4.0	18	
37.9	37.9	37.5	37.5	37.5	37.6	37.7	37.6	37.9	37.9	05	34	40.1	17	10	36.9	3.2	19††	
37.3	37.6	37.9	37.7	37.9	38.2	37.7	37.7	37.7	37.9	08	00	39.6	10	25	36.3	3.3	20	
37.6	37.6	37.7	37.9	37.7	37.7	37.6	37.6	37.7	38.2	07	00	40.1	15	07	37.3	2.8	21	
38.0	38.0	38.0	38.0	37.8	37.8	38.0	38.0	38.0	38.3	07	05	40.9	13	00	37.4	3.5	22	
37.7	38.1	38.3	38.1	38.0	38.0	38.0	38.1	38.3	38.0	07	30	39.2	03	05	36.5	2.5	23	
38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.1	38.4	38.6	07	00	40.6	11	00	37.0	3.6	24	
38.4	38.4	38.4	38.3	38.3	38.1	38.4	38.4	38.4	38.4	07	00	39.8	02	30	36.7	3.1	25†	
38.5	38.5	38.5	38.5	38.4	38.4	38.2	38.5	38.5	38.6	06	46	40.9	10	34	37.2	3.9	26	
37.9	37.9	37.0	36.7	36.7	37.0	37.1	37.2	37.5	38.1	07	10	40.9	17	25	36.5	4.4	27	
38.2	37.9	38.0	38.0	37.9	37.8	38.2	37.9	37.9	38.2	07	30	39.6	01	15	37.1	2.5	28	
38.6	38.6	38.6	38.2	38.0	37.8	37.8	37.9	38.3	38.4	06	55	40.0	02	00	37.3	2.7	29	
38.4	38.3	38.3	38.1	37.9	37.9	37.9	38.0	38.0	38.4	06	05	40.0	11	00	37.6	2.4	30	
38.7	38.7	38.8	38.7	38.7	38.6	38.7	38.7	38.7	38.8	07	00	40.1	01	15	37.9	2.2	31	
37.6	37.7	37.7	37.7	37.7	37.7	37.7	37.8	37.9	37.9						3.0		Mean	
37.7	37.7	37.9	37.8	37.8	37.6	37.7	37.8	37.7									Mean†	
36.9	37.0	37.0	37.2	37.3	37.4	37.5	37.7	37.7									Mean††	

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

TABLE 4
Hourly Values of Declination (Westerly), 1961
(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	38 7	38 7	38 6	38 7	38 7	39 3	39 8	39 7	39 4	38 3	37 3	36 9	37 2	37 4	37 9
2	38 7	38 4	38 4	38 7	38 7	38 7	39 1	39 8	40 2	39 4	38 3	37 7	37 9	38 0	38 0
3††	37 4	37 9	37 9	38 3	38 6	38 7	39 7	40 7	39 5	37 4	36 9	37 3	37 9	37 6	37 4
4†	37 3	37 3	37 3	38 0	38 8	40 0	40 9	41 1	40 7	39 8	38 7	38 3	38 1	38 3	38 3
5†	37 9	37 9	37 9	37 7	38 7	39 3	40 0	40 7	40 1	39 4	38 4	37 4	37 9	38 1	38 3
6	38 0	38 0	38 1	38 6	40 0	41 4	42 1	41 6	40 8	39 4	38 6	38 1	38 3	38 4	38 4
7	37 9	37 4	37 3	37 7	38 4	38 6	39 0	39 5	39 4	38 6	38 0	37 4	37 9	38 0	38 1
8	38 1	37 9	37 6	38 0	38 6	39 0	39 7	40 1	39 5	39 7	38 8	38 0	38 4	38 6	38 6
9††	38 3	38 0	38 0	38 3	38 6	38 7	39 3	40 0	39 7	39 0	38 0	36 2	37 0	38 1	38 6
10	38 6	38 6	38 3	38 2	38 8	39 1	38 9	39 1	38 8	38 1	37 4	37 5	38 4	38 2	38 1
11††	38 5	38 7	38 7	38 8	38 9	39 1	40 2	40 2	40 3	39 8	38 7	38 1	38 1	37 8	37 8
12	38 1	37 7	38 0	38 2	37 6	39 7	40 6	40 9	40 0	38 6	38 8	38 2	38 2	38 2	38 1
13	38 6	38 2	37 5	37 1	37 5	38 5	39 7	40 3	40 8	40 2	39 5	38 9	38 8	38 6	38 1
14††	38 3	38 5	38 1	37 9	38 6	40 0	41 1	41 5	41 9	41 0	39 6	38 6	38 3	38 4	38 4
15††	34 1	33 5	35 4	36 8	37 2	38 2	38 4	39 0	39 1	39 1	38 6	38 2	37 6	37 6	37 6
16	37 9	37 3	37 0	37 3	38 4	39 1	40 4	41 2	40 8	40 1	39 1	38 5	37 8	37 7	37 8
17†	37 8	37 7	37 0	37 0	37 7	39 0	40 1	41 1	41 2	40 5	39 9	39 1	38 4	38 3	38 3
18†	38 3	38 3	37 8	37 8	37 8	38 6	39 2	39 9	39 9	39 2	38 8	38 4	38 4	38 6	38 6
19	39 1	38 8	38 5	38 1	38 1	39 1	40 5	40 3	40 0	40 6	39 5	39 2	39 2	39 2	39 2
20	39 1	39 2	39 2	39 1	39 2	39 8	40 9	41 9	41 2	40 5	39 3	38 9	38 5	38 8	38 8
21†	38 8	38 8	38 4	38 4	38 5	39 2	40 5	41 3	41 3	41 3	40 5	39 2	39 2	38 6	38 8
22	38 8	38 6	38 4	38 4	38 8	39 5	40 5	40 6	40 6	40 5	40 1	39 1	38 7	38 4	38 4
23	38 4	38 0	37 4	37 3	37 7	38 4	39 7	40 9	41 1	40 5	39 7	38 8	38 3	38 3	38 7
24	37 8	37 6	37 3	37 1	37 6	38 4	39 5	40 5	40 5	40 1	39 7	38 8	38 1	38 3	38 3
25	37 7	37 3	36 9	37 4	38 4	39 1	40 5	41 1	40 5	39 8	39 1	38 8	38 4	38 4	38 7
26	37 7	37 4	37 3	37 1	37 8	38 8	40 0	40 7	40 6	40 2	40 0	39 8	38 8	38 4	38 4
27	38 5	38 1	38 5	39 0	39 7	40 1	41 5	41 8	41 3	40 4	39 9	39 3	38 9	38 3	38 5
28	38 0	37 8	37 5	37 4	37 9	38 3	39 5	39 5	39 5	39 4	38 8	38 1	38 0	39 6	38 7
29	38 6	38 1	37 9	38 4	39 1	40 1	40 6	41 3	41 0	40 5	39 5	38 7	38 1	38 2	38 8
30	38 7	37 5	36 3	36 9	38 8	40 0	40 7	41 1	40 9	40 2	39 7	39 6	39 5	39 2	39 3
Mean	38 1	37 9	37 8	37 9	38 4	39 2	40 1	40 6	40 3	39 7	39 0	38 4	38 3	38 3	38 4
Mean†	38 0	38 0	37 7	37 8	38 3	39 2	40 1	40 8	40 6	40 0	39 3	38 5	38 4	38 4	38 5
Mean††	37 3	37 3	37 6	38 0	38 4	38 9	39 7	40 3	40 1	39 3	38 4	37 7	37 8	37 9	38 0

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

TABLE 4
 Hourly Values of Declination (Westerly), 1961
 (Average for sixty minutes centred at the full hours of Greenwich Mean time)
 2° plus tabular quantities

April										Maximum		Minimum		Date	
Mean										Range					
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
										H M.		H M.			
37 9	37 7	37 6	37 4	37 9	38 1	38 6	38 4	38 6	38 3	06 07	40 0	11 00	36 9	3 1	1
38 0	38 0	37 4	37 6	37 9	37 9	37 7	37 3	37 3	38 3	07 52	40 7	18 00	37 6	3 1	2
37 3	37 0	36 9	36 9	36 9	36 9	37 2	37 3	37 3	37 8	07 15	41 2	09 35	36 5	4 1	3†
38 3	38 3	38 1	38 1	38 0	38 0	38 0	38 0	37 9	38 6	06 02	41 2	00 01	37 3	3 9	4†
38 3	38 0	38 3	38 3	38 0	38 0	38 3	38 1	38 1	38 5	07 00	40 7	11 15	37 3	3 4	5†
38 6	38 6	38 3	38 1	37 9	37 9	37 9	37 9	37 6	38 9	06 00	42 1	22 55	37 4	4 7	6
38 1	38 1	38 3	38 3	38 3	38 3	38 3	38 4	38 4	38 2	07 00	39 5	01 42	37 2	2 3	7
38 6	38 1	38 6	38 4	38 6	38 6	38 3	38 3	38 3	38 3	06 30	40 4	02 00	37 6	2 8	8
38 1	38 3	38 4	38 1	38 3	38 1	38 3	38 7	38 6	38 4	07 00	40 6	11 15	36 0	4 6	9†
38 5	38 5	38 7	38 5	38 5	38 4	38 2	38 4	38 5	38 1	04 52	39 5	10 00	37 1	2 4	10†
38 1	37 1	37 4	37 7	38 0	38 0	38 0	38 1	38 2	38 5	08 00	40 3	17 00	37 1	3 2	11††
38 1	38 2	38 3	38 3	38 5	38 5	38 6	38 6	38 8	38 6	06 25	41 2	01 00	37 6	3 6	12
38 1	38 5	38 5	38 5	38 5	38 3	38 5	38 5	38 5	38 7	07 00	40 3	03 00	36 9	3 4	13
38 3	38 0	37 6	37 2	37 2	36 2	35 1	34 4	34 4	38 3	07 45	42 4	22 12	36 1	6 3	14††
37 5	37 0	37 3	37 3	37 5	37 6	37 6	37 6	38 2	37 4	07 50	39 7	01 00	33 0	6 7	15††
38 1	37 8	38 3	38 3	38 3	37 8	37 7	37 8	38 0	38 4	07 00	41 2	02 25	36 9	4 3	16
38 4	38 4	38 4	38 4	38 1	38 1	38 0	38 1	38 3	38 6	08 00	41 2	02 30	36 9	4 3	17†
38 8	38 8	38 8	38 8	38 9	38 6	38 6	38 6	38 8	38 7	07 15	40 2	03 03	37 7	2 5	18†
39 2	39 2	39 2	38 8	38 6	38 6	38 5	38 8	38 9	39 1	06 40	41 4	03 00	37 1	4 3	19
38 9	38 8	38 8	38 8	38 6	38 5	38 5	38 5	38 8	39 3	06 45	42 0	12 00	38 5	3 5	20
38 9	39 1	39 1	38 8	38 8	38 8	38 8	38 8	38 6	38 8	07 00	41 3	02 00	38 4	2 9	21†
38 4	38 1	38 3	38 0	37 8	37 8	37 8	38 3	38 7	38 9	07 08	40 8	21 21	37 7	3 1	22
38 7	38 4	38 3	38 3	38 0	37 8	37 7	37 8	37 8	38 6	07 30	41 2	02 20	37 1	4 1	23
38 4	38 3	37 8	37 7	37 8	37 7	37 7	37 7	38 0	38 4	07 00	40 5	03 00	37 0	3 5	24
38 7	38 5	38 3	38 0	37 8	37 7	37 7	37 7	37 8	38 5	06 45	41 2	01 45	36 6	4 6	25
38 1	37 9	38 5	38 5	38 4	38 5	38 4	38 6	38 6	38 7	07 30	41 2	02 30	36 8	4 4	26
38 7	38 7	38 6	38 5	38 2	37 9	37 8	37 9	38 0	39 1	06 50	42 0	21 00	37 8	4 2	27
38 8	38 8	38 7	38 7	38 7	38 7	38 6	38 6	38 6	38 6	07 17	39 8	03 19	37 3	2 5	28
39 1	39 1	39 2	39 2	38 9	38 9	38 7	38 7	38 7	38 7	07 15	41 5	01 45	37 8	3 7	29
39 2	39 2	39 2	39 0	38 9	38 5	38 2	38 3	38 6	39 1	07 00	41 1	02 20	36 0	5 1	30
38 4	38 3	38 3	38 2	38 2	38 1	38 0	38 1	38 2	38 6				3 8		Mean
38 5	38 5	38 5	38 5	38 4	38 3	38 3	38 3	38 3	38 4						Mean†
37 9	37 5	37 5	37 4	37 6	37 4	37 2	37 2	37 3							Mean††

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

TABLE 5
 Hourly Values of Declination (Westerly), 1961
 (Average 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	38 5	38 1	37 6	37 5	38 9	40 0	41 0	41 6	41 3	40 0	40 2	39 3	38 9	38 5	38 9
2	37 8	37 4	37 6	37 7	38 9	40 3	40 8	41 1	41 2	40 7	38 4	38 3	39 1	38 7	38 9
3†	38 4	38 3	38 2	38 0	39 0	40 2	41 5	41 9	41 2	40 1	39 2	38 5	38 1	38 7	39 2
4	38 7	38 5	38 1	38 2	38 9	39 3	39 9	40 0	39 6	39 5	38 9	38 5	38 5	39 1	39 5
5	38 5	38 2	37 9	38 0	39 3	40 0	40 6	40 6	40 3	39 9	39 1	39 2	38 5	39 2	39 3
6††	38 6	38 0	38 2	38 2	39 1	40 7	40 1	40 6	39 7	39 3	38 5	38 0	38 2	38 2	38 3
7††	38 7	38 5	38 3	38 1	39 2	40 0	40 7	40 0	40 8	40 5	40 2	38 5	38 2	38 5	38 9
8	38 5	38 5	38 2	38 4	39 6	40 0	40 6	40 9	40 9	39 6	39 2	39 1	39 2	39 3	39 5
9	38 5	38 2	38 2	38 5	39 6	40 5	41 2	41 3	40 6	39 5	38 5	38 5	38 8	38 6	39 1
10	38 4	38 1	38 2	38 1	39 3	40 5	41 2	40 9	40 8	39 7	38 4	38 1	38 1	38 5	39 0
11	38 4	38 0	37 0	38 4	39 5	40 6	41 2	41 2	40 6	39 8	39 4	38 7	38 5	39 2	39 4
12	38 4	38 1	38 0	38 0	39 8	40 8	41 2	41 2	40 5	39 7	39 8	38 1	38 1	39 1	39 4
13	38 1	37 6	37 3	38 2	39 3	40 5	41 1	40 5	37 7	38 9	38 9	38 2	37 9	38 3	39 0
14	38 3	37 9	37 6	37 7	38 9	41 2	41 9	41 8	40 5	39 6	38 9	37 5	37 9	38 3	38 7
15†	38 3	37 7	37 6	38 2	39 3	40 4	40 7	40 5	40 3	39 3	39 0	38 7	38 7	39 0	39 3
16††	38 0	37 9	37 7	38 3	39 6	41 1	41 7	41 0	40 8	39 7	38 0	38 6	39 0	39 0	38 9
17	38 2	38 0	37 6	38 2	39 3	41 0	41 8	41 8	41 2	40 5	40 3	39 4	39 0	38 9	38 9
18†	38 4	38 2	37 7	37 9	38 9	40 3	41 4	41 8	41 9	40 7	40 8	39 1	39 0	39 0	39 0
19	38 4	38 2	37 9	38 3	39 1	40 5	41 2	41 9	41 8	40 8	40 1	39 4	38 9	39 1	39 6
20	38 2	37 9	36 9	37 0	37 2	38 6	38 7	39 7	39 7	39 1	38 9	38 0	38 2	38 6	38 7
21†	38 0	37 5	37 3	37 5	38 2	39 4	40 4	41 2	41 1	40 4	39 6	38 9	38 6	39 1	39 6
22	38 2	37 5	37 2	37 5	39 0	40 3	41 7	42 2	41 8	41 0	40 0	39 3	39 0	39 7	40 3
23	38 2	37 6	37 0	37 1	38 9	39 2	39 9	39 7	39 7	38 9	38 3	37 5	37 5	37 8	38 8
24	38 5	38 3	37 9	38 1	38 2	39 5	40 0	40 6	40 4	39 6	39 5	38 8	38 2	38 3	38 9
25††	38 9	38 2	38 3	38 1	38 8	39 6	39 5	38 8	38 5	37 5	36 3	36 3	36 7	36 7	38 0
26	37 8	38 1	38 1	37 6	39 1	39 3	39 5	39 7	40 1	39 4	39 0	38 7	38 3	38 6	39 0
27	38 1	37 7	37 6	37 9	39 8	40 4	42 2	42 5	41 1	40 5	39 4	38 7	38 7	38 8	39 0
28	37 9	36 7	36 5	37 9	38 6	40 0	41 3	42 0	41 8	41 5	40 7	39 7	39 3	39 3	39 3
29†	38 0	36 9	36 8	37 6	38 9	40 1	40 7	40 7	40 3	39 7	39 0	38 6	38 6	39 2	39 3
30	37 9	37 5	37 1	37 1	38 4	39 9	41 0	41 7	41 3	40 0	39 8	38 6	38 5	38 8	39 6
31††	38 2	37 2	37 0	37 0	38 5	39 5	40 5	40 0	40 0	39 3	37 9	36 7	37 1	37 9	38 6
Mean	38 3	37 9	37 6	37 9	39 0	40 1	40 8	40 9	40 6	39 8	39 2	38 5	38 4	38 7	39 1
Mean††	38 2	37 7	37 5	37 8	38 9	40 1	40 9	41 2	41 0	40 0	39 4	38 8	38 7	39 0	39 3
Mean††	38 5	38 0	37 9	38 0	39 1	40 2	40 5	40 1	40 0	39 3	38 3	37 6	37 8	38 1	38 5

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

TABLE 5
Hourly Values of Declination (Westerly), 1961
(Average for sixty minutes centred at the full hours of Greenwich Mean time)

MAY

2° plus tabular quantities

Hours B M T									Maximum		Minimum		Date		
15	16	17	18	19	20	21	22	23	Time	Mag	Time	Mag		Range	
									II'	M'	'H	M'			
39 2	39 2	38 9	38 6	38 6	38 5	38 2	38 2	38 2	39 1	07 30	42 0	02 25	37 4	4 6	1
39 1	39 1	39 0	39 0	39 0	38 7	38 6	38 6	38 7	39 0	07 40	41 2	00 45	37 2	4 0	2
39 4	39 5	39 4	39 4	39 2	39 1	39 0	39 0	38 8	39 3	07 10	42 0	02 40	37 8	4 2	3†
39 9	39 9	39 9	39 5	39 2	39 1	38 5	38 5	38 5	39 1	06 50	40 0	02 40	37 7	2 3	4
39 4	39 3	39 0	39 3	39 4	39 2	38 9	39 0	38 7	39 2	07 00	40 7	02 30	37 9	2 8	5
39 2	39 4	39 4	39 3	39 2	39 3	39 2	39 2	38 9	39 0	04 55	41 4	08 40	37 8	3 6	6††
39 2	39 3	39 3	39 9	39 2	39 2	39 1	39 1	39 1	39 3	06 15	40 7	01 30	37 9	2 8	7††
39 6	39 5	39 3	39 2	39 2	39 1	39 1	38 9	38 8	39 3	07 10	41 0	01 50	37 9	3 1	8
39 2	39 3	39 2	39 1	38 9	38 8	38 5	38 5	38 5	39 2	07 00	41 6	02 00	37 7	3 9	9
39 2	39 7	39 7	39 7	39 5	39 4	39 2	39 1	38 7	39 2	06 30	41 2	00 10	38 0	3 2	10
39 5	39 5	39 4	39 2	39 1	39 1	39 0	39 0	38 8	39 3	06 45	41 3	01 30	37 7	3 6	11
39 7	39 5	39 4	39 1	39 0	39 0	39 1	39 1	38 7	39 3	05 20	41 8	01 50	37 3	4 5	12
39 0	38 9	38 7	38 9	38 7	38 7	38 6	38 3	38 3	38 8	06 00	41 1	02 00	36 8	4 3	13
38 9	39 1	39 3	39 0	39 0	39 1	38 7	38 6	38 4	39 0	06 20	42 2	10 45	37 3	4 9	14
39 7	39 6	39 4	39 4	39 3	39 1	38 4	38 3	38 3	39 1	06 25	40 8	02 15	37 5	3 3	15†
38 7	39 3	39 0	39 1	38 9	38 9	38 6	38 4	38 3	39 1	06 10	41 8	02 15	37 2	4 6	16††
39 3	39 3	39 1	39 0	38 9	38 9	38 4	38 4	38 3	39 3	06 00	41 9	01 55	37 5	4 4	17
39 1	39 3	39 4	39 6	39 3	39 0	39 0	38 9	38 7	39 4	07 30	42 1	02 15	37 6	4 5	18†
39 7	39 7	39 6	39 3	39 3	38 9	38 6	38 3	38 4	39 5	07 00	42 2	02 10	37 6	4 6	19
39 1	39 4	39 3	39 0	39 1	39 0	39 0	38 6	38 4	38 6	07 30	40 0	02 30	36 8	3 2	20
39 7	39 7	39 7	39 6	39 4	39 0	38 9	38 3	38 3	39 2	07 50	41 8	02 00	37 2	4 6	21†
40 1	40 0	39 7	39 7	39 6	39 4	38 9	38 4	38 2	39 5	07 00	42 4	02 00	36 9	5 5	22
38 8	38 8	38 9	39 0	39 2	38 9	38 9	38 8	38 8	38 6	06 30	40 2	02 30	36 7	3 5	23
38 8	39 2	39 5	39 2	39 2	39 0	39 0	39 0	39 0	39 0	06 30	41 0	02 30	37 6	3 4	24
38 1	38 1	38 1	38 4	38 1	37 8	37 8	37 8	37 7	38 0	05 00	38 6	10 30	36 3	2 3	25††
39 3	39 1	39 1	39 0	38 8	38 7	38 7	38 7	38 3	38 8	08 10	40 1	01 30	36 6	3 5	26
39 0	39 1	39 1	38 7	38 7	38 6	38 9	38 0	38 0	39 2	07 15	42 8	02 00	37 4	5 4	27
39 3	39 3	38 9	38 7	38 5	38 0	37 9	37 9	38 2	39 1	07 15	42 1	02 00	36 4	5 7	28
39 3	39 3	39 3	39 2	38 7	38 6	38 6	38 6	38 5	38 9	07 40	40 8	01 35	36 8	4 0	29†
39 6	39 5	39 5	39 2	39 1	38 9	38 9	38 8	38 6	39 1	07 10	42 0	01 40	36 7	5 3	30
39 2	39 2	39 1	38 8	38 5	38 5	38 4	38 5	38 5	38 5	06 00	40 5	10 40	36 4	4 1	31††
39 3	39 3	39 2	39 1	39 0	38 9	38 7	38 6	38 5	39 1				4 0		Mean
39 4	39 5	39 4	39 4	39 2	39 0	38 8	38 6	38 5							Mean†
38 9	39 1	39 0	39 0	38 8	38 7	38 6	38 6	38 5							Mean††

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

TABLE 6
 Hourly Values of Declination (Westerly), 1961
 (Average for sixty minutes centred at the full hours of Greenwich Mean time)
 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††	37.8	37.5	37.2	37.4	38.5	39.8	40.0	39.9	38.6	37.8	37.2	37.5	37.0	37.9	38.6
2††	37.8	37.1	37.0	37.1	37.9	38.8	40.0	40.9	39.6	38.9	38.6	38.4	38.5	37.9	
3	37.8	37.4	37.1	37.7	38.4	39.8	40.5	41.3	41.3	40.4	39.4	39.2	39.0	39.0	39.0
4	37.8	37.8	37.7	37.3	36.9	38.3	39.4	39.8	39.7	39.4	38.8	38.7	38.5	38.5	39.0
5	39.4	37.7	37.4	37.3	38.1	38.7	38.3	40.4	40.8	39.7	39.5	39.5	39.4	39.7	39.2
6	38.1	37.6	36.9	36.4	37.7	38.0	38.4	40.5	40.2	39.2	39.0	39.1	39.2	39.1	39.1
7	38.3	37.3	36.9	36.9	38.3	39.1	39.5	39.8	39.7	39.0	38.4	38.1	38.4	39.0	38.4
8	38.5	37.7	36.9	37.0	37.6	38.7	39.9	40.5	40.2	38.8	38.1	37.4	37.7	38.1	38.5
9	37.7	37.0	36.9	36.9	39.3	39.7	40.4	40.3	39.8	38.9	38.3	38.2	38.6	38.7	38.5
10†	37.9	37.5	37.3	37.3	37.7	38.7	39.1	39.6	39.1	38.9	38.6	37.7	37.6	38.2	38.7
11†	38.3	37.6	37.3	37.5	38.2	39.7	40.4	40.0	39.3	39.0	38.7	38.6	39.4	38.6	39.0
12	38.6	38.3	38.0	38.2	38.6	39.4	40.1	40.9	40.5	39.8	38.9	37.6	37.0	37.6	38.2
13†	38.2	37.0	35.9	35.5	37.2	35.0	40.3	40.3	40.0	39.2	38.1	38.2	37.9	37.9	38.3
14	37.9	37.5	37.1	37.1	38.1	39.3	40.2	40.3	39.7	39.0	38.6	38.3	37.8	38.3	38.9
15	38.1	37.4	37.1	36.8	37.3	38.5	39.5	40.2	40.2	39.4	38.5	38.7	39.8	38.8	39.8
16	37.3	36.3	36.6	37.1	38.4	39.1	40.1	40.5	40.2	39.5	38.5	38.1	38.2	38.4	38.4
17	37.4	37.3	36.3	36.0	37.0	39.1	38.7	39.4	39.4	39.3	39.3	38.7	38.7	38.6	38.7
18	37.2	36.9	36.9	37.2	38.0	39.8	40.5	40.7	40.4	40.0	39.3	38.7	38.6	38.7	39.3
19	36.7	35.9	35.9	36.6	37.6	38.8	39.7	40.8	41.1	40.1	38.8	38.4	37.9	38.1	38.4
20	37.3	36.7	36.6	36.5	37.9	38.7	40.4	40.8	40.7	40.7	39.7	39.3	38.8	38.7	38.8
21††	35.9	34.5	33.7	34.8	36.5	38.6	40.1	40.8	40.8	40.5	39.3	38.3	37.6	37.4	37.9
22††	36.6	35.9	34.5	34.9	35.1	36.9	38.8	40.0	39.3	38.4	38.1	37.4	37.3	37.3	37.4
23	36.5	35.9	35.8	36.7	38.3	39.5	40.2	40.8	40.7	40.2	39.5	38.6	38.0	37.9	38.0
24	37.2	36.3	35.9	36.2	37.2	38.0	39.0	39.4	39.4	39.4	38.7	37.9	37.7	37.9	38.1
25	37.6	36.6	36.6	37.8	38.7	39.7	40.6	40.8	40.7	39.4	38.3	37.2	37.2	37.8	38.0
26	37.5	36.4	35.8	36.5	37.2	37.9	38.6	39.2	39.0	38.6	38.0	37.8	37.8	38.0	38.6
27	37.8	36.6	36.4	36.6	36.6	37.2	37.5	38.0	39.4	40.0	39.3	38.6	38.5	38.0	37.9
28†	37.9	37.8	37.2	36.9	37.8	38.0	38.6	39.4	40.3	39.4	39.0	38.0	37.3	37.6	37.8
29††	37.9	37.6	36.5	36.4	37.4	38.6	38.5	39.1	39.2	38.6	37.9	37.7	37.4	37.7	37.8
30†	37.2	36.5	35.7	35.8	36.3	37.4	38.5	39.3	40.5	39.9	39.2	38.4	37.9	37.8	37.9
Mean	37.6	37.0	36.6	36.7	37.6	38.7	39.5	40.1	40.0	39.4	38.7	38.3	38.1	38.3	38.4
Mean†	37.9	37.3	36.7	36.6	37.4	38.6	39.4	39.7	39.8	39.3	38.7	38.2	37.8	38.0	38.3
Mean††	37.2	36.5	35.8	36.1	37.1	38.5	39.5	40.1	39.8	39.0	38.3	37.9	37.5	37.8	37.9

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

TABLE 6
 Hourly Values of Declination (Westerly), 1961
 (Average for sixty minutes centred at the full hours of Greenwich Mean time)
 2° plus tabular quantities

JUNE										Hours G M T.				Maximum		Minimum		Range		Date	
15	16	17	18	19	20	21	22	23		Mean		Time	Mag.	Time	Mag.						
										H	M	H	M.								
38.9	38.9	38.8	38.6	38.5	38.5	38.5	38.4	38.4	38.3	06	00	40	0	12	15	36	8	3	2	1††	
38.5	38.4	38.2	38.6	38.6	38.5	38.5	38.5	38.4	38.6	07	30	41	3	02	00	37	0	4	3	2††	
39.1	39.0	39.0	39.0	38.8	38.8	38.7	38.5	38.4	39.0	07	25	41	6	01	45	36	9	4	7	3	
38.8	39.0	38.8	38.7	38.5	38.4	38.4	38.4	38.4	38.5	07	00	39	8	03	30	36	7	3	1	4	
39.1	39.1	39.0	39.0	38.8	38.5	38.4	38.4	38.4	38.9	08	00	41	2	03	00	37	3	3	9	5	
39.2	39.7	39.5	38.8	38.7	38.3	38.4	38.5	38.4	38.7	07	30	40	8	02	45	36	3	4	5	6	
38.8	38.7	38.4	38.8	38.8	38.8	38.5	38.8	38.7	38.6	07	00	39	8	03	15	36	6	3	2	7	
38.7	39.0	38.7	38.4	38.4	38.7	38.4	38.4	38.3	38.4	07	45	41	2	02	00	36	9	4	3	8	
39.0	39.0	38.7	38.7	38.7	38.4	38.2	38.0	37.9	38.6	06	00	40	4	02	00	36	9	3	5	9	
38.9	39.0	39.0	38.9	38.7	38.7	38.6	38.6	38.3	38.4	07	15	39	7	03	00	36	9	2	8	10†	
39.0	39.0	39.0	39.0	39.0	38.9	38.9	38.7	38.7	38.8	06	00	40	4	02	00	37	3	3	1	11†	
38.4	38.7	38.9	38.7	38.7	38.6	38.4	38.4	38.3	38.7	07	30	41	1	12	00	37	0	4	1	12	
38.3	38.5	38.8	38.9	38.5	38.5	38.2	38.2	38.1	38.3	07	00	41	3	03	00	35	3	6	0	13†	
38.9	38.9	38.9	39.0	38.9	38.9	38.8	38.5	38.3	38.6	07	00	40	3	03	00	36	8	3	5	14	
38.7	38.7	38.7	38.4	38.0	38.0	37.4	37.4	37.4	38.4	07	50	40	5	03	00	36	6	3	9	15	
38.4	38.2	38.5	38.4	38.4	38.2	38.1	37.8	37.5	38.3	07	00	40	5	01	50	36	0	4	5	16	
38.7	38.7	38.3	38.0	37.7	37.3	37.3	37.3	37.3	38.1	07	30	39	7	03	00	35	8	3	9	17	
39.3	38.7	38.6	38.3	37.6	37.3	37.3	37.2	37.0	38.5	07	30	40	8	01	10	36	7	4	1	18	
38.6	38.7	38.7	38.6	38.7	38.0	38.1	38.0	38.3	38.0	08	00	41	1	01	30	35	6	5	5	19	
39.0	38.7	38.6	38.0	37.6	37.4	37.4	37.2	36.7	38.4	07	00	40	8	02	30	36	5	4	3	20	
38.0	38.4	38.0	37.3	36.9	36.7	36.9	36.5	36.6	37.6	08	45	41	5	01	45	33	4	8	1	21††	
37.9	37.7	37.6	37.9	37.9	37.3	37.3	37.0	36.6	37.3	07	00	40	1	02	30	33	8	6	3	22††	
38.0	38.0	37.7	37.6	37.4	37.6	37.4	37.3	37.3	38.1	07	00	40	8	01	45	35	2	5	6	23	
38.3	38.4	38.0	38.0	38.0	38.0	38.0	37.9	37.9	38.0	07	15	39	5	02	00	35	9	3	6	24	
38.6	38.3	38.3	38.0	37.9	37.9	37.9	37.8	37.6	38.3	07	00	40	8	01	45	36	5	4	3	25	
38.3	38.2	37.9	38.0	37.9	37.9	37.9	37.9	37.8	37.9	07	00	39	2	02	00	35	8	3	4	26	
37.8	37.9	38.6	38.6	38.3	38.2	38.0	38.0	37.9	38.0	09	00	40	0	02	00	36	4	3	6	27	
38.0	38.3	38.6	38.6	38.6	38.5	38.5	38.2	38.3	38.3	08	00	40	3	02	45	36	5	3	8	28†	
37.9	37.8	37.7	37.7	37.7	37.7	37.5	37.5	37.7	37.8	08	00	39	2	02	30	36	4	2	8	29†	
38.1	38.1	37.9	37.8	37.8	37.8	37.8	37.8	37.7	37.9	08	00	40	5	02	30	35	3	5	2	30†	
38.6	38.6	38.5	38.4	38.3	38.1	38.1	38.0	37.9	38.3							4		2		Mean	
38.5	38.6	38.7	38.6	38.5	38.5	38.4	38.3	38.2													Mean†
38.2	38.2	38.1	38.0	37.9	37.7	37.7	37.6	37.5													Mean††

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

TABLE 7
 Hourly Values of Horizontal Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 39,000γ plus tabular quantities

JANUARY

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	505	507	527	552	580	598	597	593	581	572	559	548	542	531	529
2†	528	529	540	571	606	644	657	655	622	586	558	539	534	537	535
3	533	533	548	575	614	628	624	606	577	562	557	553	553	545	541
4†	533	532	543	576	612	641	641	629	609	587	568	556	545	540	539
5†	551	557	569	605	629	656	659	640	611	571	548	552	554	554	551
6	542	541	567	617	621	647	645	610	578	549	531	517	517	533	538
7	549	545	543	572	599	632	646	619	608	591	582	567	566	548	532
8††	535	528	532	551	572	593	612	600	593	566	538	522	510	500	491
9††	512	516	537	564	581	582	586	584	553	517	517	501	478	454	437
10	496	495	508	531	566	586	594	587	567	538	528	529	528	515	511
11†	526	521	524	543	565	579	575	574	572	557	550	543	539	537	534
12	540	540	548	564	602	621	641	636	603	581	567	561	555	551	546
13	540	538	539	551	571	589	609	600	579	543	531	526	522	512	514
14	533	536	550	568	589	612	626	620	600	585	568	561	552	548	543
15	533	534	542	556	581	601	609	597	563	545	550	550	542	537	533
16	544	546	555	571	593	608	609	582	540	517	521	529	535	533	531
17	542	537	543	539	570	596	592	565	535	520	520	525	537	535	528
18	519	520	559	577	601	621	633	613	607	566	525	540	540	505	491
19††	548	556	564	556	575	581	578	575	562	545	538	549	557	552	532
20††	504	497	508	534	556	568	545	511	502	482	473	480	489	475	460
21	507	513	524	547	571	589	609	588	555	514	489	486	477	496	506
22††	516	521	533	566	602	632	632	584	526	504	502	499	489	503	514
23	519	521	529	552	585	623	632	618	585	552	534	529	529	528	528
24	543	540	544	575	584	608	618	605	592	585	569	546	525	516	509
25	524	528	519	529	550	544	576	584	577	562	546	524	515	503	508
26	537	541	552	568	592	613	619	609	593	578	569	556	539	519	512
27	531	528	529	545	556	593	616	626	602	584	559	550	545	537	530
28	541	542	551	560	558	626	618	602	583	563	561	558	546	534	527
29	537	537	537	564	590	614	618	606	583	569	564	552	540	539	543
30	532	539	558	582	611	628	626	602	575	572	573	566	558	551	542
31†	547	552	559	582	616	645	653	626	602	573	555	551	559	556	550
Mean	531	535	541	563	584	610	616	601	578	556	544	538	538	527	522
Mean†	537	538	547	575	606	633	637	625	603	575	556	548	546	545	542
Mean††	523	524	535	554	577	591	591	571	547	523	514	510	505	497	487

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

TABLE 7
Hourly Values of Horizontal Force, 1961
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
39,000γ plus tabular quantities

JANUARY

Hours G M T										Maximum		Minimum		Date	
15	16	17	18	19	20	21	22	23	Mean		Range				
Y	Y	Y	Y	Y	Y	Y	Y	Y	Time	Mag	Time	Mag	Y	Y	
528	527	529	530	531	531	531	528	528	545	05 45	610	00 40	502	108	1
535	535	532	533	532	534	535	531	532	560	06 59	661	00 01	527	134	2†
536	531	533	529	529	531	534	534	533	556	05 30	630	16 18	528	102	3
533	537	545	545	549	554	554	554	553	566	05 40	646	15 10	530	116	4†
548	545	546	547	545	540	539	541	543	571	05 30	662	21 06	535	127	5†
537	534	534	536	538	539	540	540	540	558	05 22	651	11 36	510	141	6
524	528	533	536	541	544	552	552	543	564	05 29	648	15 12	523	125	7
492	498	489	469	465	495	505	503	506	528	05 18	625	18 45	454	171	8γ†
427	421	425	428	438	451	461	469	500	497	05 40	598	16 15	421	177	9γ†
511	511	516	519	519	520	524	526	527	531	05 48	597	00 20	493	104	10
533	532	531	533	535	537	538	539	539	544	05 10	582	01 26	519	63	11†
545	537	537	535	534	537	544	548	543	563	06 30	647	18 45	531	116	12
512	523	525	528	537	533	527	532	534	543	06 12	611	12 38	509	102	13
539	536	538	536	532	526	522	525	528	557	06 00	630	21 30	520	110	14
534	533	536	538	540	539	541	560	557	552	06 37	636	14 30	527	109	15
528	526	524	526	528	539	550	540	542	546	05 33	620	08 56	515	105	16
528	529	535	540	540	542	543	543	542	542	04 58	605	09 42	516	89	17
510	518	519	521	521	529	531	534	541	548	06 20	643	15 01	481	162	18
524	519	499	482	496	508	493	505	516	538	05 38	592	18 16	470	122	19††
445	435	441	473	493	493	497	498	502	494	05 18	580	16 25	426	134	20††
498	481	487	495	499	505	509	511	511	519	06 05	618	15 53	469	149	21
514	519	525	512	518	523	525	524	522	534	05 33	651	11 36	479	172	22††
525	530	529	530	530	533	541	543	544	549	05 29	637	01 18	516	121	23
500	497	503	525	516	512	518	522	526	545	05 25	622	15 44	494	128	24
506	512	517	524	529	527	527	534	537	538	07 15	593	12 49	499	94	25
501	509	515	524	527	522	524	529	530	549	05 34	622	14 52	497	125	26
534	530	532	539	539	538	539	541	543	553	07 00	637	01 40	526	111	27
522	524	526	529	536	521	522	526	535	550	05 18	639	15 35	518	121	28
545	541	528	519	515	528	529	532	533	553	05 36	622	19 15	513	109	29
546	544	543	542	544	545	546	546	546	563	05 11	631	00 05	532	99	30
544	543	541	539	543	547	548	547	546	568	05 56	660	17 48	538	122	31†
519	519	520	521	524	527	529	531	533	546				122	Mean	
539	538	539	539	541	542	543	542	543						Mean†	
480	478	576	473	482	494	496	500	509						Mean††	

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

TABLE 8

Hourly Values of Horizontal Force, 1961
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
39,000y plus tabular quantities

FEBRUARY

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†	548	559	582	598	612	610	591	572	563	561	563	566	567	556	547
2†	551	532	569	589	622	662	675	651	690	558	531	536	557	538	556
3	548	555	573	611	651	683	679	651	616	602	547	560	563	547	514
4††	547	552	567	602	636	663	655	642	601	561	532	523	527	531	509
5	436	427	436	431	462	482	461	461	418	402	377	395	432	446	452
6	482	487	505	528	568	613	651	685	696	576	524	507	504	514	499
7	493	492	496	520	559	592	597	590	570	549	529	510	503	501	502
8	507	501	494	506	540	573	597	600	587	562	549	536	526	519	513
9	519	517	523	541	563	603	621	621	601	571	549	538	529	524	520
10	526	526	532	543	561	581	606	613	602	581	564	550	543	542	538
11	537	544	547	559	580	612	634	643	638	617	582	540	517	514	522
12†	539	537	540	552	570	595	601	601	592	570	550	540	543	545	542
13	548	551	564	588	608	610	608	599	610	564	506	479	460	449	464
14	517	522	536	556	548	591	592	577	561	539	531	534	539	535	530
15	531	536	555	577	603	627	613	591	554	529	515	516	529	526	
16††	536	544	547	564	604	639	677	689	636	578	517	482	459	466	447
17††	511	517	582	548	572	593	602	604	596	575	564	533	491	523	523
18††	485	491	477	477	521	560	563	563	555	517	491	478	473	473	483
19	516	517	521	520	560	588	598	594	569	554	529	526	511	502	516
20††	522	524	522	540	554	572	601	616	598	572	552	532	514	502	511
21	518	515	515	524	556	587	607	614	599	582	560	544	524	512	527
22	521	521	534	540	566	587	600	591	572	564	553	542	532	521	519
23	536	535	541	561	595	623	634	605	578	566	552	548	544	535	534
24	538	539	542	561	591	600	593	574	576	576	569	564	552	538	539
25†	534	531	535	547	571	610	624	623	610	587	567	560	558	549	543
26†	540	537	543	564	597	630	648	633	611	587	573	563	560	556	532
27	551	550	554	567	593	624	640	631	621	609	595	576	565	556	553
28	544	543	545	568	583	614	628	629	608	577	560	541	522	519	520
Mean	524	526	533	550	577	604	615	610	589	565	541	528	523	520	518
Mean†	542	543	554	570	594	621	628	616	598	573	557	553	557	553	548
Mean††	520	526	529	546	577	603	620	622	597	561	531	506	493	499	495

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

TABLE 8
Hourly Values of Horizontal Force, 1961
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
39,000γ plus tabular quantities

FEBRUARY										Hourly Values of Horizontal Force, 1961						Date
Hours G M T										Maximum		Minimum		Range		
										Mean						
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag			
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	H	M	Y	H	M	Y	Y
545	544	540	542	542	544	546	550	552	562	04	30	617	16	34	538	79
555	554	552	552	552	549	548	548	547	571	05	56	680	10	24	527	153
521	538	531	529	535	538	538	539	542	571	05	30	689	14	29	501	188
474	473	467	459	460	383	370	369	407	521	05	06	678	20	30	347	331
456	458	466	472	474	477	479	481	483	449	07	09	499	10	26	372	127
469	493	488	493	490	495	499	496	489	529	06	41	731	15	10	454	277
501	505	502	501	512	507	504	495	513	523	06	05	605	01	25	490	115
501	500	511	514	515	513	513	525	522	530	07	00	602	02	03	491	111
518	513	514	516	520	520	523	524	527	542	06	48	630	15	52	511	119
534	532	530	529	530	529	529	531	534	550	06	50	615	00	30	525	90
525	526	527	527	527	530	534	534	537	556	06	53	647	12	40	512	135
539	537	538	537	539	540	542	544	545	553	06	32	609	16	00	584	75
443	457	452	457	473	487	498	502	509	520	07	40	624	15	22	434	90
528	525	528	531	524	520	525	521	524	539	05	15	608	00	13	515	93
524	522	524	526	527	530	530	533	535	549	05	48	640	11	32	505	135
459	474	486	488	490	500	508	509	511	533	06	55	709	14	09	436	273
504	507	508	510	504	501	499	520	512	533	06	44	622	20	25	471	151
488	488	497	529	511	507	508	512	512	506	05	32	592	02	14	456	136
511	516	514	509	529	522	524	526	524	533	05	22	612	12	45	496	116
500	533	515	512	528	519	515	520	523	537	07	00	627	15	23	476	151
522	512	513	525	526	519	526	527	521	541	06	30	632	12	49	499	133
524	523	529	521	521	523	528	529	532	541	05	30	612	16	00	515	97
527	526	528	528	529	536	538	536	537	553	05	43	643	15	50	523	120
531	529	530	530	530	531	532	534	535	551	04	34	619	16	09	527	92
543	543	541	541	541	540	541	541	545	559	06	30	628	00	42	529	99
545	537	533	534	539	542	544	546	547	565	06	08	651	17	05	530	121
545	547	545	542	544	547	548	549	548	571	06	05	645	18	20	539	106
524	526	528	526	526	530	528	531	530	552	06	08	634	12	38	513	121
513	516	516	517	519	517	518	520	523	541					137	Mean	
515	543	541	541	543	543	544	546	547						Mean†		
485	495	495	500	499	482	480	486	493						Mean††		

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

TABLE 9

Hourly Values of Horizontal Force, 1961

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

MARCH

99,000γ 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	533	534	549	581	616	630	643	635	610	594	577	558	538	521	528
2	536	533	529	558	577	598	612	614	597	594	581	572	565	556	551
3†	531	539	560	586	618	641	650	641	621	600	580	567	560	553	545
4†	555	560	577	608	644	664	669	651	622	597	578	569	570	562	546
5	542	548	567	607	640	662	664	641	618	591	571	557	556	555	553
6††	470	460	457	474	493	526	530	515	493	468	447	455	455	441	451
7†	513	517	531	555	586	620	635	622	603	583	568	554	541	534	531
8†	525	522	528	547	572	590	594	587	574	563	560	552	548	545	540
9	527	528	531	554	590	610	624	601	586	578	567	555	549	547	555
10††	556	556	551	575	594	608	600	590	579	504	426	368	341	397	416
11	491	493	505	521	534	540	546	543	536	528	517	517	515	507	499
12	507	504	521	542	565	583	586	583	566	545	532	533	533	528	522
13	527	523	531	561	597	626	640	627	589	541	527	529	547	547	538
14††	544	536	556	581	602	629	633	587	570	551	515	494	500	499	494
15††	530	538	561	593	620	610	607	581	564	543	513	516	524	519	525
16	526	519	535	568	602	631	625	597	552	530	524	528	524	531	533
17	540	542	550	580	623	658	668	650	574	552	522	526	533	533	531
18	536	533	535	570	622	661	675	659	628	586	554	543	545	512	523
19††	543	551	568	608	653	659	665	583	565	540	528	535	537	526	512
20	522	523	531	565	608	640	654	637	617	584	538	520	517	517	507
21	531	531	545	576	609	649	665	667	643	613	572	555	554	552	541
22	533	535	539	561	586	627	633	638	596	570	558	554	541	533	537
23	541	541	554	580	621	655	655	641	612	574	560	558	556	536	536
24	545	545	560	592	624	641	653	653	636	613	594	568	564	557	547
25†	544	543	556	589	626	652	650	641	618	600	587	584	577	568	559
26	554	554	571	614	667	698	714	696	662	615	573	566	572	571	560
27	557	564	574	605	650	700	692	677	645	596	575	567	547	535	535
28	522	529	567	589	599	628	636	613	602	584	572	556	554	546	538
29	534	538	556	590	619	649	660	642	616	594	566	560	563	557	558
30	546	547	577	610	620	643	652	629	589	558	547	542	550	550	545
31	546	546	570	609	646	664	667	651	624	598	578	572	576	574	565
Mean	532	533	547	576	607	632	639	622	597	571	549	540	537	533	530
Mean†	534	536	550	577	609	633	640	628	608	589	575	565	559	552	544
†† Mean††	529	528	539	566	592	606	607	571	554	521	486	474	471	476	480

†Five international quiet days

††Five international disturbed days

ΔLoss of record, day omitted for means

TABLE 9
 Hourly Values of Horizontal Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 39,000γ plus tabular quantities

MARCH										39,000γ plus tabular quantities						Date	
Hours G M T										Maximum		Minimum		Range			
15	16	17	18	19	20	21	22	23	Mean	Time	Mag	Time	Mag				
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	H	M.	Y	H	M	Y	Y	
533	534	533	533	526	529	534	529	528	559	06	19	649	12	53	518	131	1
547	542	541	539	540	542	540	537	536	560	06	30	628	02	12	523	103	2
543	543	546	548	547	550	548	547	550	571	05	38	655	00	01	530	125	3†
536	539	542	543	543	542	542	543	544	577	05	51	672	15	10	534	138	4†
559	558	548	551	546	528	535	501	486	570	05	36	670	23	45	468	202	5
466	473	483	488	493	497	502	507	509	481	06	05	542	13	12	438	104	6††
528	526	528	528	528	519	526	528	529	551	05	50	638	00	01	512	126	7†
535	525	516	514	511	510	517	516	525	542	05	33	603	20	15	509	94	8†
534	521	518	509	522	529	527	520	537	551	06	01	631	17	42	504	127	9
415	423	446	466	475	481	484	487	489	493	06	35	634	11	03	307	327	10††
502	504	503	508	508	502	506	506	508	514	06	50	557	00	15	489	68	11
521	520	524	523	524	525	525	526	524	536	05	36	592	00	55	501	91	12
522	520	522	527	531	531	534	536	538	550	06	10	647	16	4	513	134	13
500	506	506	512	525	523	528	533	532	540	05	33	655	13	30	488	167	14††
525	520	525	526	530	533	538	542	535	547	05	45	636	10	06	566	130	15††
533	522	524	528	530	533	533	536	538	546	04	55	643	01	02	514	129	16
526	527	526	526	533	535	533	536	535	557	06	23	681	10	06	515	166	17
516	525	510	523	525	529	536	536	541	559	05	45	682	17	30	506	176	18
519	514	505	506	502	513	526	522	525	550	05	31	691	17	00	498	198	19††
517	522	524	520	531	543	535	530	531	551	06	28	666	13	45	503	163	20
538	537	535	531	536	537	532	532	533	567	06	37	677	17	38	526	151	21
540	537	538	538	539	539	540	540	540	558	07	18	651	13	12	529	122	22
536	536	538	538	542	539	542	543	545	566	05	20	669	13	48	527	142	23
542	539	538	536	539	538	542	540	544	573	06	03	663	17	42	534	129	24
556	557	555	554	551	552	556	556	555	579	05	22	659	01	10	543	116	25†
557	554	551	550	551	552	555	551	556	590	06	10	722	22	19	546	176	26
542	517	465	468	485	489	501	506	515	563	04	45	709	17	30	450	249	27
535	531	527	527	522	529	535	534	535	559	05	20	651	18	59	518	133	28
558	556	555	550	539	536	545	547	548	572	05	40	678	19	50	531	147	29
542	542	541	538	539	541	546	546	546	566	05	31	661	17	55	535	126	30
569	569	576	569	575	572	572	571	572	589	05	15	673	00	40	543	130	31
529	527	525	526	529	530	533	532	533	555						146	Mean	
540	538	537	537	536	535	538	538	541								Mean†	
485	487	493	500	505	509	516	518	518								Mean††	

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

TABLE 10
 Hourly Values of Horizontal Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 39,000γ plus tabular quantities

APRIL

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
1	569	557	579	608	624	664	675	651	604	560	527	519	526	529	529
2	548	545	552	580	619	683	637	622	597	554	524	517	524	521	521
3††	530	525	535	561	583	580	589	585	557	507	488	507	520	520	507
4†	520	526	547	580	613	637	649	625	602	570	549	543	543	539	535
5†	535	531	543	574	612	644	665	649	616	584	559	541	548	551	547
6	540	541	555	593	637	671	671	649	618	588	565	557	556	551	551
7	532	556	572	592	629	648	649	631	611	596	577	567	562	557	551
8	551	554	564	593	626	642	636	641	613	593	576	565	564	559	556
9††	561	562	574	605	635	653	651	654	631	617	557	481	485	518	525
10	533	548	553	566	594	615	587	581	571	557	540	551	547	531	526
11††	548	547	548	572	601	607	603	588	586	574	563	560	550	521	514
12	531	539	557	593	626	652	655	614	585	563	548	545	543	543	532
13	540	538	552	582	613	647	662	644	614	580	556	543	549	552	538
14††	557	562	580	619	656	649	643	636	608	577	521	497	495	490	477
15††	472	465	480	506	518	543	532	508	510	513	500	492	496	496	492
16	507	504	512	544	577	600	615	605	580	548	524	515	518	520	516
17†	515	513	517	549	586	620	640	637	617	587	560	540	532	533	529
18†	527	527	532	561	600	639	656	648	624	586	562	545	537	536	532
19	533	530	532	530	609	658	644	670	638	581	549	538	544	549	547
20	536	537	544	574	617	652	675	668	631	600	574	552	546	547	546
21†	542	539	542	566	600	639	660	665	648	620	588	565	550	548	551
22	545	547	556	576	606	633	651	654	638	619	593	574	561	547	550
23	528	525	530	557	592	622	643	641	621	595	569	545	527	522	525
24	526	525	526	547	567	593	617	622	611	602	586	569	552	547	541
25	527	547	553	566	603	614	621	626	600	579	565	565	547	539	537
26	530	535	554	578	604	630	633	621	615	605	591	579	564	549	540
27	539	544	558	593	608	621	637	646	615	591	581	583	572	542	538
28	538	540	548	571	599	606	611	596	587	580	568	562	552	544	540
29	538	541	545	576	609	632	643	643	629	604	587	571	554	550	548
30	538	529	530	565	620	639	643	636	618	591	580	567	555	543	542
Mean	535	536	546	573	606	629	638	629	606	581	558	545	541	536	533
Mean†	528	527	536	566	602	636	654	645	621	589	564	547	542	541	539
Mean††	534	532	543	573	599	606	604	594	578	558	546	507	509	509	503

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

TABLE 10
 Hourly Values of Horizontal Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 APRIL 39,000γ 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	γ	H	M	γ	γ	
525	520	515	522	530	538	546	539	546	563	05	32	686	10	53	511	175	1
523	516	516	520	544	541	538	529	526	532	05	52	647	10	47	513	134	2
495	482	483	488	490	508	512	522	517	525	07	15	611	09	45	473	138	3††
534	534	535	534	533	536	538	540	539	558	05	34	656	00	30	518	138	4†
540	542	544	543	542	544	545	545	544	566	05	45	666	00	36	529	137	5†
554	549	538	525	531	533	549	551	540	571	05	22	680	18	14	523	157	6
544	545	548	547	549	550	552	554	555	575	05	24	657	14	47	542	115	7
552	550	553	553	556	559	563	560	562	578	05	38	660	15	45	548	112	8
527	526	526	529	530	528	535	542	533	562	06	48	669	11	21	462	207	9††
580	534	532	548	548	542	545	546	545	533	05	18	629	13	43	520	109	10
512	533	512	521	523	529	529	528	529	550	04	58	612	17	04	500	112	11††
526	527	539	546	541	540	541	548	543	562	05	33	664	15	15	521	143	12
544	538	544	548	549	535	555	554	557	569	05	56	667	14	47	531	136	13
473	465	457	466	499	487	473	478	471	535	05	11	700	16	46	451	249	14††
490	478	485	492	496	507	511	505	507	500	05	24	566	01	10	450	116	15††
512	513	525	518	521	524	516	522	520	536	05	47	623	01	17	501'	122	16
529	527	525	525	524	527	527	528	527	531	06	19	647	01	40	511	136	17†
531	532	538	532	533	533	533	533	534	539	05	40	665	00	32	524	141	18†
546	547	541	547	544	543	544	544	537	564	06	32	634	01	15	527	167	19
542	536	536	536	536	541	545	544	542	569	06	15	679	18	22	535	144	20
547	545	544	544	544	545	542	544	544	572	06	25	668	01	15	536	132	21†
514	514	513	511	511	523	523	526	525	563	06	52	659	18	02	508	151	22
527	524	526	527	524	522	523	527	525	533	05	58	632	20	20	518	134	23
529	517	518	522	532	528	529	525	528	532	06	40	626	16	07	514	112	24
537	537	534	532	528	526	531	535	532	557	07	08	630	19	33	523	107	25
526	527	537	538	535	539	539	537	537	564	05	53	640	16	05	523'	117	26
538	531	534	537	535	531	530	540	538	567	05	55	688	20	48	527	161	27
538	537	538	538	546	547	548	545	540	539	06	35	633	18	07	536	97	28
547	552	552	555	555	547	540	539	546	571	06	17	645	01	30	531	114	29
538	543	544	548	550	546	544	533	548	567	06	25	648	01	32	523	125	30
529	527	528	530	533	534	535	536	535	557							138	Mean
537	536	531	536	535	532	528	538	538								Mean†	
499	497	493	499	508	512	512	513	513								Mean††	

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

TABLE 11

Hourly Values of Horizontal Force, 1961

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

MAY

39,000γ 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	541	545	569	586	607	613	641	645	628	605	578	546	590	511	524
2	595	525	529	548	579	621	636	634	618	582	552	536	524	526	528
3†	530	528	537	570	609	636	644	635	615	581	551	539	541	546	544
4	545	549	561	594	623	634	632	617	592	564	551	546	547	551	551
5	524	525	536	572	612	619	620	597	562	551	550	543	550	557	550
6††	541	553	571	592	622	671	583	556	541	535	524	512	512	510	507
7††	536	531	543	571	603	622	634	604	573	561	551	538	529	524	523
8	543	545	551	580	602	615	620	609	590	557	551	554	555	552	545
9	551	562	578	602	623	640	627	600	573	540	530	549	554	550	541
10	540	546	553	582	615	634	635	623	600	570	551	546	537	538	542
11	555	569	578	597	616	642	634	621	601	570	555	552	550	542	543
12	548	556	561	588	609	637	630	623	598	570	545	543	545	550	548
13	567	529	535	570	596	614	623	616	589	561	543	527	525	540	536
14	538	542	557	566	595	613	621	614	593	573	545	520	535	542	538
15†	532	560	589	599	616	630	624	614	600	579	560	553	557	560	557
16††	541	543	548	570	611	651	638	578	579	542	517	523	541	545	523
17	539	545	549	561	585	606	620	610	599	589	581	565	549	544	538
18†	547	548	547	562	584	609	624	623	611	594	575	562	558	552	550
19	559	555	556	571	603	626	630	639	627	606	579	567	552	559	564
20	565	570	561	590	604	618	592	575	564	552	556	548	537	528	529
21†	551	556	564	591	616	637	642	635	626	613	602	585	570	567	563
22	538	559	576	597	630	670	690	685	660	619	595	571	573	584	587
23	564	576	582	600	640	620	616	619	605	586	572	551	542	542	543
24	554	549	546	560	578	591	610	614	603	586	567	555	551	549	556
25††	564	555	551	577	597	640	623	536	524	486	474	490	495	487	487
26	528	535	549	563	567	573	577	567	553	552	544	544	544	541	541
27	546	552	569	596	618	626	621	596	564	546	540	541	547	547	540
28	541	547	566	585	603	612	611	609	591	584	577	564	561	553	553
29†	550	559	578	598	611	611	598	584	559	547	550	557	563	560	558
30	561	562	572	592	643	665	666	664	631	589	567	564	560	565	576
31††	583	590	588	597	619	624	627	611	594	566	520	491	509	528	528
Mean	548	551	560	582	608	626	625	611	592	570	553	545	543	544	542
Mean†	546	550	563	584	607	625	626	618	602	583	568	549	558	557	554
Mean††	553	554	560	581	610	642	621	597	562	538	537	511	516	519	514

†Five international quiet days

††Five international disturbed days

Δ Loss of record, day omitted for means

TABLE 11
 Hourly Values of Horizontal Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 39,000γ plus tabular quantities

MAY										39,000γ plus tabular quantities						Date	
Hours G M T.										Maximum		Minimum		Range			
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	γ		
530	533	534	532	533	536	537	540	556	562	05	58	650	12	57	508	142	1
530	527	530	527	527	528	530	532	530	551	05	41	642	12	09	521	121	2
542	541	541	539	539	541	543	545	542	562	05	42	648	00	43	527	121	3†
553	556	557	553	548	542	526	526	521	564	05	19	636	22	50	515	121	4
539	537	514	524	523	526	531	534	533	551	05	52	630	17	19	505	125	5
522	526	526	528	528	529	535	536	536	546	04	58	709	19	30	498	211	6††
528	537	539	540	543	540	541	545	546	554	06	17	646	13	50	519	127	7††
543	543	540	550	551	543	546	551	548	562	05	05	630	17	22	536	94	8
536	538	541	539	538	512	539	538	536	561	05	09	650	09	25	517	133	9
547	547	549	550	553	556	563	560	556	566	05	30	637	11	45	536	101	10
541	538	544	540	562	557	553	518	518	569	05	17	662	15	50	533	129	11
545	545	547	543	546	546	544	516	545	565	05	24	658	10	15	539	119	12
535	533	535	540	540	537	538	539	539	554	06	19	630	11	44	516	114	13
537	539	541	542	543	544	544	546	549	557	05	59	656	10	55	515	141	14
552	552	551	551	549	532	545	546	544	570	05	10	633	23	59	541	92	15†
520	539	540	536	533	538	541	541	543	553	05	20	662	09	50	511	151	16††
543	541	539	541	542	544	546	545	548	561	06	29	623	14	19	535	88	17
548	549	551	552	555	555	556	556	559	568	06	05	631	01	38	545	86	18†
559	558	554	555	555	555	555	558	564	575	07	18	642	11	45	549	93	19
530	539	540	542	546	556	551	551	551	558	05	48	629	13	40	526	103	20
560	560	558	556	563	563	563	565	562	582	06	00	645	00	04	551	94	21†
584	585	572	564	566	560	556	553	556	594	05	45	699	21	36	552	147	22
539	546	543	545	546	551	554	554	554	570	04	40	674	15	05	535	139	23
556	553	554	557	562	562	565	565	562	567	07	06	616	02	00	542	74	24
484	483	490	515	510	510	517	520	521	526	04	45	652	09	40	470	182	25††
539	543	545	547	549	549	554	550	548	550	05	40	581	00	01	526	55	26
540	539	538	538	540	540	539	538	539	558	04	29	658	14	28	536	122	27
553	546	536	551	547	537	541	539	549	565	05	39	617	17	01	531	86	28
558	561	558	560	561	564	563	564	563	568	04	49	617	09	15	541	76	29†
569	570	567	571	577	575	577	574	578	589	06	42	674	12	28	556	110	30
534	533	528	539	538	537	539	539	537	558	05	37	638	10	41	487	151	31††
542	543	542	544	546	546	546	547	547	563						118		Mean
552	553	552	552	553	555	554	555	554									Mean†
518	524	525	532	530	531	535	536	537									Mean††

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

TABLE 12

Hourly Values of Horizontal Force, 1961

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

JUNE

39,000γ 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††	540	545	549	564	588	610	620	617	596	558	527	539	499	520	590
2††	545	547	555	572	591	610	620	622	609	560	535	526	523	531	519
3	550	555	555	563	581	574	572	579	579	561	550	554	551	550	546
4	549	556	562	578	598	618	619	621	601	577	556	552	552	546	551
5	551	553	558	582	597	599	617	621	603	576	550	550	557	561	557
6	558	560	568	582	600	619	616	626	616	599	578	565	563	563	563
7	549	554	557	578	604	631	624	607	602	567	547	531	540	543	526
8	552	548	552	567	585	615	624	624	602	565	536	527	532	535	535
9	553	558	566	586	611	627	623	610	587	555	543	543	550	553	548
10†	548	549	556	567	586	603	616	616	600	573	554	541	539	547	552
11†	554	564	570	586	604	614	608	601	592	578	557	548	562	567	568
12	567	574	580	600	631	656	628	631	621	597	573	541	528	529	529
13†	549	548	542	555	587	623	646	643	629	601	574	556	547	547	545
14	560	569	571	587	609	630	636	631	618	595	564	548	551	556	558
15	585	588	590	581	611	643	654	665	653	625	595	585	562	556	553
16	563	572	573	566	589	617	644	649	631	605	581	562	554	554	554
17	554	561	567	582	593	600	608	624	621	610	598	572	554	558	564
18	555	565	575	601	632	655	663	644	612	584	557	545	546	554	561
19	542	543	546	563	589	610	617	612	585	564	549	536	537	542	546
20	554	561	565	590	612	624	652	639	628	621	594	574	568	571	571
21††	553	550	539	538	561	615	650	646	633	602	576	514	478	466	492
22††	506	499	476	503	531	568	577	572	551	522	488	477	461	462	465
23	521	514	519	535	557	575	583	586	584	571	553	532	526	526	525
24	523	530	539	561	595	622	638	636	623	598	560	531	526	539	543
25	546	554	561	576	596	604	602	597	586	570	550	550	537	546	546
26	546	554	563	580	598	608	602	596	594	585	564	551	547	554	557
27	549	557	567	585	608	609	620	594	575	564	548	531	524	522	522
28†	550	549	561	569	598	615	620	615	604	575	553	543	548	551	548
29††	560	574	580	558	604	621	543	522	527	532	523	519	517	517	521
30†	529	540	550	567	594	615	630	622	602	578	554	539	542	543	544
Mean	549	553	557	571	595	614	619	616	602	579	556	542	537	540	541
Mean†	546	550	556	569	594	614	624	619	605	581	558	545	548	551	551
Mean††	541	543	540	547	575	605	602	596	583	555	530	514	496	499	505

†Five international quiet days

††Five international disturbed days

ΔLoss of record, day omitted for means

TABLE 12

Hourly Values of Horizontal Force, 1961

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

JUNE

39,000γ 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	γ	H	M	γ	γ	
529	526	521	533	534	536	541	540	541	550	06	40	631	12	15	480	151	1††
518	526	522	536	543	544	544	544	547	554	07	14	691	14	34	509	122	2††
545	543	546	548	548	547	547	547	547	556	04	35	588	15	52	541	47	3
548	544	543	543	543	546	549	554	554	565	05	17	627	16	48	540	87	4
553	552	554	554	557	552	550	554	557	567	06	36	625	10	22	544	81	5
561	561	555	532	541	544	540	547	551	571	06	31	630	17	50	514	106	6
515	524	531	537	546	541	540	549	550	558	04	46	641	14	44	509	132	7
541	542	543	543	546	551	554	552	551	559	07	14	643	11	16	424	119	8
546	545	545	548	551	549	549	551	550	564	04	44	632	10	57	540	92	9
552	553	553	555	556	556	557	556	555	564	06	30	627	11	47	538	89	10†
565	564	565	566	567	567	568	569	567	574	04	55	620	10	36	542	78	11†
533	539	547	550	551	551	551	551	551	571	05	20	663	14	12	515	128	12
548	550	550	556	556	558	559	558	556	570	06	10	650	02	02	540	110	13†
559	562	563	566	570	570	568	568	567	578	06	05	648	11	11	547	91	14
549	550	553	557	551	551	552	556	557	584	07	00	669	15	10	546	123	15
549	546	547	549	552	550	552	549	551	573	06	48	652	16	10	543	109	16
563	563	563	563	561	557	556	560	554	575	07	18	628	12	28	551	77	17
561	560	560	553	551	554	546	548	543	576	05	32	665	11	28	540	125	18
543	543	546	549	547	549	557	557	554	559	06	20	627	11	33	533	94	19
567	566	568	563	560	569	574	566	561	584	06	05	662	23	59	554	108	20
496	502	495	483	464	473	490	477	486	532	06	40	683	19	34	453	230	21††
478	481	487	507	543	542	536	531	532	512	05	31	585	02	31	455	130	22†
521	521	523	524	526	531	529	523	522	539	06	10	589	01	15	509	180	23
542	540	540	540	542	548	548	547	544	561	06	28	642	00	01	523	119	24
546	537	535	532	531	538	541	542	546	556	04	30	617	10	55	526	91	25
551	544	537	538	543	546	547	547	549	563	05	14	617	17	30	536	81	26
521	534	535	539	543	545	548	550	549	556	05	50	628	13	36	519	109	27
548	551	553	554	556	559	559	557	561	567	05	40	623	11	00	540	83	28††
520	515	516	522	526	526	528	528	531	539	04	50	639	06	45	503	136	29††
543	543	542	545	548	550	552	557	555	562	06	20	632	00	01	529	103	30†
540	541	541	543	545	547	548	548	548	561						111		Mean
551	552	553	555	557	558	559	559	559									Mean†
508	510	508	516	522	524	528	524	527									Mean††

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

TABLE 13

Hourly Values of Vertical Force, 1961

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

JANUARY

2000γ 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	257	257	256	252	255	245	237	233	234	238	239	244	245	252	257
2†	258	257	256	261	260	257	252	245	235	234	240	243	246	246	251
3	261	262	261	256	249	241	243	239	240	246	256	256	256	256	257
4†	261	262	258	257	255	246	244	240	235	238	245	247	250	256	257
5†	258	263	256	250	238	221	222	233	235	246	261	263	256	255	256
6	261	263	261	259	256	246	245	245	246	245	251	257	257	261	263
7	263	264	257	257	246	234	227	232	233	235	240	241	250	248	247
8††	260	265	257	248	253	247	244	244	234	234	235	246	247	250	251
9††	264	266	264	259	258	258	263	260	250	245	246	236	235	239	242
10	264	259	258	263	268	253	248	251	252	251	257	257	252	253	258
11†	263	269	264	258	247	236	235	235	244	239	248	253	253	259	259
12	268	269	266	262	259	247	234	229	234	240	247	251	248	253	258
13	258	258	259	263	260	257	246	245	244	245	258	257	247	252	258
14	258	258	258	258	258	253	247	234	235	239	241	245	247	257	258
15	258	259	262	263	260	247	247	250	250	253	248	251	245	251	257
16	253	252	251	249	246	238	230	229	234	245	248	254	256	257	258
17	259	258	258	270	270	260	253	252	252	257	257	253	252	257	257
18	259	259	260	269	259	252	251	247	252	245	251	263	252	241	246
19††	262	258	257	251	242	240	245	249	255	260	257	251	252	258	252
20††	258	251	253	257	258	249	246	258	269	266	259	257	259	258	252
21	265	269	263	259	247	235	228	223	230	246	252	249	241	259	263
22††	269	266	270	269	252	235	233	234	258	275	273	252	241	253	259
23	259	261	264	260	253	237	228	228	235	240	246	248	249	254	258
24	260	264	265	250	230	215	206	201	210	221	230	236	240	247	247
25	260	265	264	259	254	264	261	258	255	253	253	243	247	247	253
26	260	260	259	264	255	247	238	238	237	238	243	241	242	247	248
27	259	259	260	261	259	248	235	224	225	231	235	246	249	253	253
28	258	259	261	268	260	242	236	237	236	236	237	237	242	247	248
29	259	259	256	254	250	241	237	230	232	237	247	248	249	260	260
30	255	257	260	263	254	238	235	236	237	237	236	236	245	250	254
31†	256	260	254	249	248	238	232	235	241	249	250	252	255	256	255
Mean	260	261	260	259	254	244	240	238	241	244	248	249	249	253	255
Mean†	259	262	258	255	250	240	237	238	238	241	249	252	252	254	256
Mean††	263	261	260	257	253	246	246	249	253	256	254	248	245	252	251

† Five international quiet days

†† Five international disturbed days

Δ Loss of record, day omitted for means.

TABLE 13
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

JANUARY
 2000γ 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	γ	H	M	γ	γ	
257	257	258	261	259	259	258	257	258	251	18	00	261	07	00	233	28	1
256	256	257	259	259	260	260	261	261	253	02	50	262	09	00	233	29	2†
256	257	257	257	258	258	261	261	259	254	21	10	264	07	15	234	30	3
256	257	258	258	261	262	259	259	259	253	01	00	264	08	30	237	27	4†
257	256	257	258	257	257	256	257	259	251	10	15	268	05	30	221	47	5†
259	258	258	261	261	261	261	259	258	256	01	02	264	05	30	245	19	6
247	253	257	258	258	259	262	263	259	250	21	00	266	08	00	227	39	7
253	257	253	246	247	262	263	259	259	251	00	50	268	08	45	229	39	8††
245	246	252	258	258	260	260	263	272	254	23	45	277	12	00	234	43	9††
258	258	260	260	258	258	259	259	259	257	03	30	270	05	30	247	23	10
259	259	259	259	259	259	259	260	266	254	01	10	270	06	30	234	36	11†
258	258	258	258	258	258	260	259	259	254	01	00	269	06	45	227	42	12
263	259	260	262	268	259	258	259	259	256	18	50	268	08	15	241	27	13
258	258	260	260	258	258	257	258	258	253	17	05	265	07	30	233	32	14
258	258	259	262	260	259	258	269	262	256	22	20	277	12	10	244	33	15
258	257	258	258	258	262	265	257	259	251	20	45	270	06	00	227	43	16
258	259	259	259	259	259	259	258	258	258	03	00	274	07	30	231	23	17
258	259	259	259	259	259	258	258	259	256	03	05	270	09	30	235	35	18
252	253	248	247	259	264	253	260	261	254	19	35	272	04	00	236	36	19††
249	248	255	271	271	267	263	261	265	258	18	20	277	06	00	242	35	20††
259	254	258	260	260	264	263	265	265	253	01	00	269	06	35	222	47	21
259	259	259	254	259	260	260	260	260	257	09	20	279	06	15	230	49	22††
258	259	259	259	259	259	261	260	260	252	01	10	266	06	30	225	41	23
247	248	253	261	269	255	258	259	260	243	18	13	271	07	12	200	71	24
255	259	260	261	261	260	260	260	260	257	01	10	271	11	15	242	29	25
248	254	258	260	259	255	255	259	258	251	03	07	266	08	07	236	30	26
258	254	259	259	259	259	259	259	259	251	02	50	265	07	16	234	31	27
248	251	253	253	258	249	250	255	259	249	03	05	272	06	00	236	36	28
260	260	252	252	251	260	260	259	257	251	20	00	262	08	12	229	33	29
254	254	257	259	256	254	255	256	256	250	03	15	266	06	35	230	36	30
254	254	255	256	260	261	261	260	260	252	20	00	261	06	22	229	32	31†
255	256	257	258	259	259	259	260	260	253						36		Mean
256	256	257	258	259	260	259	259	261									Mean†
252	253	253	255	259	263	260	261	263									Mean††

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

TABLE 14
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2000γ plus tabular quantities

FEBRUARY

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†	260	260	255	257	261	251	249	250	249	247	248	238	232	255	254
2†	247	256	254	271	263	248	236	231	238	249	261	263	255	249	253
3	254	251	250	257	242	225	215	226	237	239	242	239	248	242	238
4††	251	251	244	239	232	222	215	215	227	238	249	251	250	251	249
5	267	258	262	257	250	250	249	249	251	255	261	263	263	262	262
6	262	266	269	263	256	248	238	233	220	227	239	249	249	251	249
7	251	256	261	261	250	230	233	238	239	238	249	250	251	251	256
8	258	257	251	250	244	238	227	226	222	228	239	240	249	251	253
9	256	256	257	257	252	239	227	227	233	241	251	252	252	252	252
10	261	258	262	259	252	239	222	214	213	221	228	240	250	252	256
11	253	252	253	268	269	264	252	241	238	238	239	234	238	241	251
12†	257	255	252	252	253	250	245	241	240	241	251	253	258	258	259
13	259	259	257	262	257	251	258	263	265	252	235	235	239	242	254
14	264	263	258	257	252	245	246	247	246	246	251	251	253	254	254
15	263	260	254	258	260	254	253	262	264	264	263	253	250	253	253
16††	262	265	263	261	264	249	241	230	219	219	218	224	234	246	242
17††	261	261	264	266	265	254	253	254	253	249	252	242	234	259	258
18††	249	260	269	259	254	247	237	234	237	241	242	244	253	254	259
19	264	264	261	261	256	252	242	235	235	241	243	253	243	244	255
20††	256	258	260	258	256	254	248	242	236	232	236	242	242	243	254
21	254	253	254	255	250	241	231	218	212	219	227	231	242	244	255
22	255	255	255	253	253	243	231	230	232	237	238	243	244	245	254
23	259	257	256	257	245	233	225	219	222	231	239	244	245	252	256
24	257	256	256	257	251	234	228	230	231	231	237	237	244	249	255
25†	256	257	258	262	257	246	249	249	244	243	240	243	244	250	255
26†	256	256	256	258	257	244	236	232	234	244	249	249	246	251	255
27	257	258	263	267	262	246	238	232	231	232	233	237	244	246	255
28	256	257	258	262	255	248	244	237	232	233	236	238	238	246	255
Mean	257	258	258	259	254	244	238	236	236	238	243	244	246	250	254
Mean†	255	257	255	260	258	248	243	241	241	245	250	249	247	253	255
Mean††	256	259	260	257	254	245	239	235	234	236	239	241	243	251	252

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

TABLE 14
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

FEBRUARY 2000γ 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				
248	250	250	251	249	248	248	256	255	251	06	40	267	11	45	227	40	1†
253	253	253	255	256	255	254	255	256	253	03	15	274	06	30	230	44	2†
249	261	255	255	257	257	255	254	252	246	16	00	261	05	50	214	47	3
238	249	250	250	255	227	238	239	263	241	23	20	276	06	00	215	61	4††
262	261	261	262	262	262	261	261	262	259	00	01	267	07	00	245	22	5
238	254	251	255	252	256	260	257	251	250	01	20	270	07	58	209	61	6
252	258	256	256	262	261	258	251	263	251	22	45	264	05	05	227	37	7
251	252	259	258	257	258	258	263	262	248	18	20	264	07	30	221	43	8
253	253	253	256	256	255	255	257	261	250	23	05	262	06	00	227	35	9
255	253	253	255	257	256	256	255	256	247	02	00	262	08	00	219	49	10
251	252	253	252	253	253	253	253	257	250	03	15	274	07	46	235	99	11
257	254	256	256	257	257	258	259	259	253	14	00	259	08	05	239	20	12†
247	260	253	254	263	265	265	264	264	255	16	12	270	10	30	230	40	13
256	254	257	262	254	253	257	256	260	254	00	01	264	05	02	244	20	14
253	253	254	259	259	259	259	258	263	258	01	12	265	11	45	246	19	15
253	264	265	264	261	264	264	263	264	250	00	58	268	10	10	210	58	16††
251	254	254	257	253	252	252	260	258	255	22	18	271	11	45	230	41	17††
260	259	264	272	258	256	255	261	262	254	17	36	283	06	35	232	51	18††
253	256	255	255	265	258	259	260	259	253	18	45	266	07	55	231	35	19
250	249	254	255	260	255	254	255	255	250	16	05	271	08	55	231	40	20††
254	248	255	259	256	254	256	256	255	245	21	30	260	08	00	212	48	21
255	254	256	255	256	256	259	259	259	249	16	30	262	07	02	226	36	22
255	255	256	256	257	260	257	257	257	248	21	20	263	06	45	215	48	23
255	255	255	255	255	255	256	256	256	248	00	40	258	05	52	226	32	24
256	256	256	256	256	256	256	256	257	252	03	20	267	10	00	239	28	25
255	251	251	256	256	257	256	256	256	251	03	25	266	07	00	232	34	26†
254	256	256	256	256	256	256	256	256	250	03	05	268	08	02	230	38	27
256	257	257	256	257	257	256	256	256	250	03	00	262	08	30	231	31	28
253	255	255	257	257	256	256	257	258	251						39		Mean
254	253	253	255	255	255	254	256	257									Mean†
250	255	257	260	257	251	253	256	260									Mean††

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

TABLE 15

Hourly Values of Vertical Force, 1961

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

MARCH

2000γ plus tabular quantities

Date	Hours GMT														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
1	256	255	255	262	256	249	245	244	243	239	240	243	244	246	257
2	257	257	258	265	267	257	254	254	249	250	251	249	245	254	255
3†	254	255	262	267	267	260	250	245	243	243	243	242	244	250	253
4†	260	257	256	263	260	245	237	233	238	244	244	247	247	249	249
5	257	256	256	256	255	251	248	248	245	254	255	254	253	254	255
6††	244	249	249	257	261	248	213	243	242	238	242	244	248	248	256
7†	260	259	268	275	277	266	256	255	254	249	248	243	244	249	254
8†	256	256	257	262	257	256	257	256	256	255	250	250	255	256	256
9	257	257	258	263	261	255	246	244	239	234	237	244	249	255	258
10††	267	257	255	257	258	251	258	258	247	241	233	222	232	256	258
11	258	257	258	268	269	269	269	268	267	264	258	256	255	253	256
12	258	257	257	258	259	258	253	250	247	246	250	256	256	257	258
13	259	259	257	256	251	245	235	234	234	246	256	258	258	257	257
14††	259	258	257	248	245	234	224	226	239	245	245	245	246	247	253
15††	259	259	259	252	242	233	235	236	236	242	240	247	248	248	259
16	259	259	253	219	246	235	224	222	228	243	258	258	249	259	260
17	259	259	259	260	259	248	236	224	224	231	241	249	255	254	259
18	261	261	266	270	261	248	243	236	232	237	248	259	260	253	249
19††	261	261	261	261	253	237	225	225	238	241	249	253	254	259	257
20	263	263	262	266	263	255	249	240	238	238	238	243	251	256	255
21	266	264	262	263	263	258	252	240	239	239	250	252	256	257	257
22	264	264	264	264	263	252	240	234	227	241	253	262	257	259	263
23	264	264	264	265	259	252	239	230	230	241	246	252	253	253	255
24	265	264	264	268	266	260	234	253	253	253	254	252	259	264	262
25†	268	268	272	276	271	265	260	265	266	266	265	262	261	265	265
26	268	271	272	278	274	262	255	244	244	239	254	256	265	266	266
27	271	278	272	271	271	260	242	231	231	232	242	248	253	256	263
28	278	279	280	278	272	271	256	244	245	256	256	256	256	262	266
29	272	272	273	275	271	263	254	244	249	255	255	257	265	267	268
30	272	278	280	279	273	267	251	244	248	268	268	269	269	270	269
31	278	280	281	279	278	274	263	256	255	255	256	263	268	268	268
Mean	262	262	263	265	262	254	247	243	243	246	249	251	253	256	259
Mean†	260	259	263	259	266	258	252	251	251	251	250	249	250	254	255
Mean††	258	257	256	255	252	241	237	238	240	241	242	242	246	252	257

†Five international quiet days

††Five international disturbed days

Δ Loss of record, day omitted for means

TABLE 15
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2000γ plus tabular quantities

MARCH										2000γ plus tabular quantities						Date		
Mean										Maximum		Minimum		Range				
15	16	17	18	19	20	21	22	23	24	Time	Mag	Time	Mag	Y	Y			
257	258	257	257	257	257	260	257	257	252	08	05	267	09	00	239	28	1	
255	254	255	256	257	257	256	256	256	255	08	20	268	12	00	245	23	2	
254	255	256	259	257	260	260	259	257	254	08	30	271	08	00	248	28	3†	
249	255	255	256	259	260	260	259	256	252	09	12	267	06	45	232	35	4†	
256	256	255	256	255	254	244	248	245	253	02	20	259	21	15	243	16	5	
260	262	262	261	261	260	260	261	260	252	17	30	263	08	18	236	27	6††	
254	255	256	256	259	256	259	257	257	257	08	20	280	11	00	243	37	7†	
256	255	255	256	256	256	261	262	258	256	22	18	268	10	00	250	18	8†	
254	254	255	255	261	267	260	257	262	253	23	55	272	09	00	234	38	9	
258	262	268	269	268	264	258	258	258	255	18	00	269	11	35	220	49	10††	
257	258	257	258	257	256	257	258	258	260	09	00	270	12	45	252	18	11	
258	258	259	259	259	258	258	259	259	256	23	30	260	09	00	246	14	12	
253	257	258	259	260	259	259	259	259	254	19	10	263	07	00	234	29	13	
258	260	259	260	269	263	263	263	259	251	19	00	270	06	30	222	48	14††	
259	259	260	260	260	260	259	259	258	251	14	18	269	04	30	231	38	15††	
260	259	260	260	261	261	261	260	260	252	18	45	263	07	25	211	52	16	
259	261	261	261	264	265	261	265	262	253	21	45	266	07	25	213	53	17	
250	260	253	261	260	264	266	262	262	255	02	55	272	08	02	230	42	18	
261	261	262	262	261	268	272	266	266	255	20	25	274	06	20	214	60	19††	
262	263	267	266	270	274	268	264	264	257	19	48	275	08	11	237	38	20	
259	262	262	262	264	264	263	263	263	258	00	35	267	08	35	238	29	21	
264	264	264	264	264	264	265	265	264	258	01	36	265	08	00	228	42	22	
259	264	265	265	266	265	267	266	266	256	21	00	267	07	48	229	38	23	
265	265	267	267	267	270	268	267	271	262	28	00	272	10	40	248	24	24	
265	266	266	267	267	268	270	270	268	267	03	25	277	06	00	250	17	25†	
267	267	267	268	268	267	268	267	269	263	08	44	279	07	00	244	35	26	
268	261	248	261	272	272	278	277	277	260	20	25	280	07	35	230	50	27	
266	267	267	268	268	272	275	273	274	266	02	02	291	07	30	242	49	28	
269	268	272	271	268	268	274	274	274	266	03	15	279	06	35	243	36	29	
269	273	275	274	278	278	279	279	276	270	01	45	281	07	00	244	37	30	
272	274	279	274	279	274	273	270	272	270	01	30	282	08	15	254	28	31	
260	261	261	262	264	264	264	263	263	257						35		Mean	
256	257	258	259	260	260	262	261	259										Mean†
259	261	262	262	264	263	262	261	260										Mean††

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

TABLE 16
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2000γ plus the tabular quantities

APRIL

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	247	248	257	262	258	251	236	226	224	231	235	244	245	245	245
2	255	250	256	265	265	252	244	241	236	235	245	246	248	248	249
3††	250	251	252	251	247	241	241	237	235	237	257	259	259	253	249
4†	259	259	257	255	248	258	227	220	224	230	238	247	248	250	250
5†	259	260	263	263	261	259	238	228	228	236	245	247	251	250	250
6	255	255	251	251	240	231	224	228	240	248	249	251	249	251	252
7	260	260	259	248	241	234	228	230	229	231	238	245	248	250	250
8	261	262	260	260	254	250	240	231	243	240	246	251	253	253	254
9††	263	262	257	254	252	242	236	241	240	240	228	219	242	263	263
10	263	266	265	266	264	253	241	247	253	253	250	251	251	251	254
11††	262	262	261	261	256	241	237	242	245	246	250	253	250	246	251
12	263	263	261	256	252	239	228	224	229	238	241	249	250	254	253
13	261	262	264	263	253	240	228	221	226	234	241	250	252	250	252
14†††	257	261	257	253	244	232	225	214	217	225	229	240	247	244	245
15††	261	260	254	252	238	248	237	233	246	241	240	249	253	253	259
16	260	262	262	259	255	253	244	236	237	242	250	254	260	259	255
17†	255	259	259	258	250	248	238	227	223	224	232	246	250	252	252
18†	258	260	266	272	264	257	241	234	231	230	237	241	246	251	252
19	259	261	271	275	276	271	247	236	236	236	246	254	257	252	252
20	258	259	269	272	272	262	245	234	230	235	245	248	252	251	251
21†	258	263	271	269	263	255	243	234	224	224	235	244	248	250	252
22	257	258	262	264	261	256	248	240	238	236	243	249	249	246	243
23	256	262	262	262	255	245	232	222	221	221	230	237	243	248	253
24	256	258	261	262	266	259	254	245	241	237	237	244	248	253	253
25	256	260	254	247	240	231	220	219	225	231	241	248	252	252	253
26	258	258	259	252	246	234	228	229	229	235	240	245	250	246	243
27	254	253	252	258	252	251	252	246	242	239	244	246	250	243	250
28	257	259	258	259	252	242	239	241	242	242	243	244	242	246	250
29	251	256	249	249	250	239	230	228	228	231	239	241	248	250	250
30	251	261	261	240	237	233	233	230	236	237	241	244	248	248	249
Mean	257	259	260	259	254	246	237	232	233	236	241	246	250	250	251
Mean†	258	260	263	263	257	251	237	229	226	229	237	245	249	251	251
Mean††	259	259	256	254	247	241	235	233	237	238	241	244	250	252	253

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

TABLE 16
Hourly Values of Vertical Force, 1961
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

APRIL 2000γ plus the tabular quantities

										Maximum		Minimum		Range		Date	
										Mean							
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag				
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	H	M	H	M	Y	Y		
245	247	249	255	257	257	257	249	252	247	02	15	263	08	00	223	40	1
253	251	257	258	264	258	257	251	249	251	03	48	271	09	00	235	36	2
249	246	250	256	256	260	258	259	259	250	19	50	264	08	15	231	33	3††
251	254	257	258	258	258	259	258	258	248	00	01	259	06	48	219	40	4†
251	253	254	255	255	258	259	258	258	252	02	23	267	07	30	226	41	5†
255	254	251	249	255	256	261	260	254	249	21	10	265	06	00	224	41	6
250	253	256	256	257	256	257	261	262	248	01	30	262	06	00	228	34	7
254	256	261	261	263	263	264	263	263	254	19	05	265	07	30	230	35	8
262	263	263	263	262	262	264	264	261	253	13	00	265	10	40	215	50	9††
255	262	262	266	263	262	263	262	262	258	18	05	273	06	00	241	32	10
251	253	262	263	263	264	263	262	262	254	17	25	269	05	30	232	37	11††
254	261	262	264	262	261	261	262	261	252	17	40	267	07	00	222	45	12
256	255	262	262	263	263	262	261	261	252	19	55	269	07	00	220	49	13
251	251	253	261	271	263	259	263	261	247	18	50	278	06	48	208	70	14††
254	253	261	262	262	263	263	260	253	20	30	268	06	34	228	40	15††	
257	259	262	260	260	261	258	260	259	255	01	35	265	07	00	236	29	16
254	255	258	259	259	259	260	260	259	250	02	48	261	08	30	222	39	17†
253	256	258	259	259	258	259	258	258	252	02	55	275	09	00	230	45	18†
254	258	256	259	258	258	259	258	257	256	03	00	277	08	45	231	46	19
251	252	256	258	258	259	259	259	258	254	03	05	278	07	40	228	50	20
252	255	256	257	257	257	257	257	257	252	03	00	271	08	45	223	48	21†
247	251	256	256	257	262	260	257	256	252	03	00	266	08	30	235	31	22
235	254	256	256	256	255	255	255	255	248	02	40	264	09	00	219	45	23
251	251	254	256	260	255	256	254	255	253	04	00	267	09	00	237	30	24
253	254	257	254	255	253	255	259	255	247	01	00	261	07	00	219	42	25
242	247	254	256	252	253	252	252	252	246	01	35	263	07	00	229	34	26
252	252	254	257	257	256	256	260	257	251	03	15	264	09	00	238	26	27
250	251	252	252	258	256	256	252	251	250	03	05	263	06	30	238	25	28
251	253	256	256	257	252	251	251	248	246	22	30	259	07	00	228	31	29
250	252	254	257	256	255	255	252	252	247	01	15	263	07	04	229	34	30
252	254	257	258	259	258	259	258	258	251							39	Mean
252	255	257	258	258	258	259	258	258								Mean†	
253	253	258	261	263	262	261	262	261								Mean††	

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

TABLE 17
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centered at the full hours of Greenwich Mean Time)
 2000γ plus tabular quantities

MAY	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	251	255	248	246	239	235	234	232	232	230	228	234	239	241	250
	2	255	268	261	242	244	248	240	231	230	230	237	248	253	250	249
	3†	255	261	259	262	257	247	240	239	235	236	242	250	250	248	248
	4	258	261	264	262	258	247	242	240	242	249	253	254	253	250	252
	5	252	261	262	261	262	245	239	234	241	248	250	252	253	249	246
	6††	255	257	260	246	237	227	213	230	239	244	241	241	246	245	245
	7††	254	257	259	253	248	241	234	222	225	234	240	239	242	244	245
	8	258	252	247	239	231	228	225	223	223	228	237	246	247	247	247
	9	255	259	253	241	234	230	221	221	226	230	237	252	253	252	247
	10	255	259	259	258	252	247	242	243	248	247	254	258	254	252	250
	11	258	265	263	260	253	242	238	241	241	242	248	254	254	249	251
	12	255	260	254	254	242	233	227	227	238	243	248	251	251	248	248
	13	257	258	254	249	236	239	241	242	248	246	247	246	245	251	250
	14	257	258	260	255	249	243	235	238	242	245	251	256	260	254	252
	15†	260	260	258	254	248	241	240	242	243	243	242	251	254	251	250
	16††	258	260	260	252	253	246	225	235	248	249	253	257	257	253	242
	17	255	257	254	255	248	239	231	230	241	246	242	242	244	247	247
	18†	255	259	259	256	253	252	241	239	240	239	238	240	247	248	248
	19	258	258	259	260	260	256	255	253	252	251	255	258	258	254	252
	20	263	263	264	256	247	247	241	243	249	251	252	251	246	245	247
	21†	258	261	258	255	245	238	233	228	229	233	238	239	242	245	246
	22	233	257	260	257	250	248	244	231	238	239	240	244	250	250	251
	23	257	258	257	259	263	244	246	244	243	247	247	249	250	245	243
	24	258	255	254	262	252	241	241	240	240	241	243	251	253	250	251
	25††	256	252	256	271	260	252	231	239	241	242	267	268	263	248	252
	26	260	258	255	254	252	253	260	262	262	262	262	259	254	253	253
	27	259	260	262	245	228	224	229	231	241	258	267	266	259	254	253
	28	258	256	252	253	245	240	239	239	241	253	257	259	260	252	254
	29†	262	261	261	254	242	241	250	254	264	269	267	264	259	252	253
	30	259	260	261	262	255	244	240	230	231	241	252	262	261	255	256
	31††	264	263	254	249	247	246	252	248	241	240	239	245	256	254	250
	Mean	257	259	257	254	248	242	238	237	240	244	248	251	252	250	249
	Mean†	258	260	259	256	249	244	241	240	242	244	245	249	250	249	251
	Mean††	257	258	256	254	249	242	231	235	239	244	248	250	253	249	247

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

TABLE 17
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
 2000γ plus tabular quantities

MAY										2000γ plus tabular quantities						Date		
										Maximum		Minimum		Range				
Mean										Time	Mag	Time	Mag					
15	16	17	18	19	20	21	22	23	24	25	H	M	γ	H	M	γ	γ	
252	255	257	256	257	257	256	256	257	246	16	55	262	09	10	226	36	1	
251	252	254	255	257	257	256	255	254	249	01	45	263	07	50	228	35	2	
249	251	253	253	254	255	256	257	254	250	02	50	267	06	30	232	35	3†	
252	254	255	254	255	253	248	254	250	252	02	30	265	06	45	239	26	4	
245	246	239	248	252	256	255	254	253	250	01	50	265	07	10	233	32	5	
253	254	253	254	254	253	255	256	255	246	01	45	259	05	52	207	52	6††	
251	253	253	253	254	253	255	254	253	246	01	30	259	06	55	217	42	7††	
248	251	252	253	254	253	255	256	255	244	18	25	260	06	45	223	37	8	
248	253	254	253	254	255	254	252	253	245	00	30	258	05	45	218	41	9	
253	255	255	256	256	257	260	258	257	254	10	15	261	05	30	241	20	10	
253	254	256	255	264	260	255	256	255	253	19	00	268	05	30	234	34	11	
251	253	255	255	257	258	257	255	256	249	01	25	260	07	00	220	40	12	
253	253	253	257	254	252	255	255	256	250	01	00	260	04	00	232	28	13	
253	255	254	255	255	256	257	257	258	252	11	30	261	06	10	232	29	14	
248	249	255	255	256	258	254	256	255	251	00	50	260	06	00	235	25	15†	
249	259	256	255	254	254	255	254	255	252	11	30	260	06	10	219	41	16††	
252	254	253	254	255	256	257	256	255	249	01	15	259	06	55	229	30	17	
249	252	253	253	254	254	255	254	256	250	01	15	260	07	15	234	26	18†	
253	253	254	255	255	258	258	254	259	256	03	30	260	14	15	250	10	19	
252	254	253	258	260	262	256	255	254	253	02	30	264	06	45	241	23	20	
250	251	252	253	257	257	254	255	254	247	01	00	262	07	30	224	38	21†	
251	252	248	247	251	252	252	253	254	249	01	45	265	06	35	225	40	22	
244	252	251	252	251	252	253	254	255	251	03	15	263	04	58	236	27	23	
252	251	252	253	254	255	254	253	254	250	03	00	262	09	35	239	23	24	
252	253	259	268	259	261	262	262	261	256	03	06	276	05	55	228	48	25††	
254	259	260	260	260	261	262	258	256	258	00	30	266	04	35	250	13	26	
254	255	254	255	255	255	255	253	253	251	10	00	267	04	45	218	49	27	
256	254	253	262	257	255	255	256	261	253	17	55	267	05	15	239	28	28	
254	255	254	255	259	257	256	255	255	256	08	45	269	05	00	237	32	29†	
254	254	254	261	263	261	261	257	263	254	23	30	264	07	15	229	35	30	
255	256	254	261	259	259	260	259	257	253	00	50	265	10	05	233	32	31††	
251	253	253	255	256	256	256	255	256	251							32	Mean	
250	252	253	254	256	250	255	255	255										Mean†
252	255	255	258	256	256	257	257	256										Mean††

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

TABLE 18
Hourly Values of Vertical Force, 1961
(Averages for sixty minutes centred at the full hours of Greenwich Mean Time)
2000γ plus tabular quantities

Date	Hours G M T														
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
1††	264	264	265	265	259	252	252	252	250	249	257	267	252	256	254
2††	263	259	253	252	247	249	243	240	234	229	246	251	251	249	247
3	261	258	253	251	241	234	245	245	242	245	247	254	253	252	252
4	258	259	260	258	256	240	238	234	234	237	239	241	248	248	252
5	258	261	263	260	253	241	239	232	234	240	248	253	253	253	252
6	261	258	258	255	243	250	245	239	244	245	245	250	250	250	251
7	255	250	240	239	233	228	232	237	240	238	240	247	251	251	245
8	259	252	251	251	251	240	238	237	239	244	255	252	255	254	251
9	257	262	260	257	257	255	251	252	252	260	260	255	251	250	250
10†	255	261	262	261	261	262	260	251	249	253	260	259	254	254	253
11†	257	258	256	256	258	254	256	262	260	261	262	260	256	251	250
12	253	252	251	252	245	231	226	224	223	224	228	236	243	244	244
13†	253	258	260	260	245	244	247	245	247	244	244	242	245	249	250
14	258	258	258	258	260	256	256	253	254	257	260	261	260	254	252
15	265	262	262	262	252	244	238	231	225	229	230	236	236	240	246
16	260	261	252	258	246	246	241	232	236	238	238	240	247	252	251
17	258	261	260	254	247	243	239	237	240	245	247	243	247	251	251
18	258	257	257	252	237	230	230	233	237	245	247	255	259	254	255
19	258	258	254	255	255	252	245	239	246	255	259	260	259	254	252
20	257	260	260	265	262	262	257	251	252	252	252	257	260	257	252
21††	261	262	262	260	254	255	254	247	238	241	245	240	238	239	251
22††	270	268	257	262	257	258	245	243	236	231	230	240	245	250	255
23	255	257	258	252	250	251	257	257	254	247	240	247	251	251	250
24	253	257	254	251	245	237	233	231	230	228	333	239	248	252	251
25	255	259	255	255	255	257	258	255	262	263	263	262	263	260	254
26	262	261	259	257	257	257	257	261	255	251	252	252	252	252	251
27	259	261	259	244	244	242	232	232	229	231	246	251	249	245	251
28†	250	249	250	260	253	249	249	249	246	251	251	253	254	250	249
29††	253	256	261	251	256	226	224	238	238	258	242	244	244	244	243
30†	252	257	258	254	251	244	237	235	243	240	239	249	250	250	250
Mean	258	259	257	256	251	246	244	242	242	244	247	250	251	251	250
Mean†	253	257	257	258	254	251	250	248	250	250	251	253	252	251	250
Mean††	262	262	260	258	255	248	244	244	239	238	244	248	246	248	250

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

TABLE 18
 Hourly Values of Vertical Force, 1961
 (Averages for sixty minutes centred at the full hours of Greenwich Mean Time)

JUNE
 2000γ plus tabular quantities

Mean										Maximum		Minimum		Range		Date	
15	16	17	18	19	20	21	22	23	Y	Time	Mag	Time	Mag	Y	Y		
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	H	M	H	M	Y	Y		
254	255	254	263	263	263	262	261	260	258	10	45	270	12	15	241	29	1††
251	255	253	259	261	259	259	258	259	251	00	01	263	09	00	229	34	2††
252	253	253	254	254	254	255	259	254	251	00	00	261	05	00	230	31	3
253	253	253	253	254	256	258	259	258	250	00	30	261	07	30	233	28	4
252	253	253	254	255	259	253	253	255	251	02	45	264	07	45	230	34	5
252	251	244	252	255	255	257	257	257	251	00	01	261	07	00	238	23	6
245	252	257	258	260	252	252	257	257	246	19	00	260	05	00	228	32	7
254	253	254	255	258	258	259	255	254	251	00	30	260	07	30	233	27	8
252	252	255	257	257	254	252	253	254	255	01	00	262	13	30	249	13	9
253	254	254	256	254	254	252	252	254	256	05	00	262	08	00	249	13	10†
251	251	252	252	253	251	252	251	251	255	08	00	266	14	00	250	16	11†
249	251	253	253	253	252	251	251	249	249	17	00	259	05	40	219	34	12
251	251	251	251	254	256	254	254	254	250	02	30	262	11	00	242	20	13†
253	256	256	256	257	256	253	253	253	256	02	45	262	13	45	250	12	14
250	252	255	258	257	258	257	259	259	248	00	01	265	07	25	222	43	15
251	252	253	257	258	255	257	254	254	250	00	15	262	07	00	229	33	16
252	253	257	257	255	254	254	255	253	251	01	15	262	06	45	236	26	17
257	258	258	257	257	257	252	255	255	250	11	50	259	05	15	228	31	18
252	254	257	257	255	255	257	257	255	254	11	30	262	07	00	239	23	19
253	254	257	257	257	259	261	259	258	257	02	45	267	07	00	250	17	20
251	254	252	250	243	253	260	257	262	251	23	30	268	08	55	222	46	21††
263	263	263	277	270	268	266	259	260	256	18	15	289	09	30	228	61	22††
250	251	252	252	252	253	252	251	252	252	02	00	259	10	00	240	19	23
251	252	252	252	252	255	255	253	254	247	01	30	258	09	00	228	30	24
254	252	255	252	257	259	261	260	261	258	09	00	265	15	45	251	14	25
252	251	251	251	254	255	255	257	258	255	00	30	263	13	00	250	13	26
252	254	256	254	254	253	253	253	250	248	01	00	261	08	15	226	35	27
248	249	250	251	252	253	253	256	256	251	02	45	261	08	00	246	15	28†
243	245	247	250	252	251	250	250	251	246	02	00	262	05	40	215	47	29††
251	251	252	256	256	256	256	257	256	250	01	45	262	06	00	235	27	30†
252	253	254	255	256	256	256	255	256	252							28	Mean
251	251	252	254	254	254	253	254	254								Mean†	
252	254	254	260	258	259	259	257	258								Mean††	

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