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FOR OFFICIAL USE

IONOSPHERIC DATA

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U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

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CONTENTS

SYMBOLS, TERMINOLOGY, CONVENTIONS

Beginning with data reported for January 1952, the symbols, terminology, and conventions for the determination of median values used in this report (CRPL-F series) conform as far as practicable to those adopted at the Sixth Meeting of the International Radio Consultative Committee (C.C.I.R.) in Geneva, 1951. Excerpts concerning symbols and terminology from Document No. 626-E of this Meeting are given on pages 2-7 of the report CRPL-F89, "Ionospheric Data," issued January 1952. Reprints of these pages are available upon request.

Beginning with data for January 1945, median values are published wherever possible. Where averages are reported, they are, at any hour, the average for all the days during the month for which numerical data exist.

The following conventions are used in determining the medians for hours when no measured values are given because of equipment limitations and ionospheric irregularities. Symbols used are those given in Document No. 626-E referred to above, plus an additional symbol, R: "Scaling of characteristic is influenced or prevented by absorption in the neighborhood of the critical frequency," (May 1955).

a. For all ionospheric characteristics:

Values missing because of A, C, F, L, M, N, Q, R, S, or T are omitted from the median count.

b. For critical frequencies and virtual heights:

Values of foF2 (and foE near sunrise and sunset) missing because of E are counted as equal to or less than the lower limit of the recorder. Values of h'F2 (and h'E near sunrise and sunset) missing for this reason are counted usually as equal to or greater than the median. Other characteristics missing because of E are omitted from the median count.

Values missing because of G are counted:

1. For foF2, as equal to or less than foF1.
2. For h'F2, as equal to or greater than the median.

The symbol W is included in the median count only when it replaces a height characteristic; the symbol D, only when it replaces a frequency characteristic.

Values missing for any other reason are omitted from the median count.

c. For MUF factor (M-factors):

Values missing because of G or W are counted as equal to or less than the median.

Values missing for any other reason are omitted from the median count.

d. For sporadic E (Es):

Values of fEs missing because of E or G (and B when applied to the daytime E region only) are counted as equal to or less than the median foE, or equal to or less than the lower frequency limit of the recorder.

Values of fEs missing for any other reason, and values of h'Es missing for any reason at all are omitted from the median count.

Beginning with data for November 1945, doubtful monthly median values for ionospheric observations at Washington, D. C., are indicated by parentheses, in accordance with the practice already in use for doubtful hourly values. The following are the conventions used to determine whether or not a median value is doubtful:

1. If only four values or less are available, the data are considered insufficient and no median value is computed.

2. For the F2 layer, if only five to nine values are available, the median is considered doubtful. The E and F1 layers are so regular in their characteristics that, as long as there are at least five values, the median is not considered doubtful.

3. For all layers, if more than half of the values used to compute the median are doubtful (either doubtful or interpolated), the median is considered doubtful.

The same conventions are used by the CRPL in computing the medians from tabulations of daily and hourly data for stations other than Washington, beginning with the tables in IRPL-F18.

The tables and graphs of ionospheric data are correct for the values reported to the CRPL, but, because of variations in practice in the interpretation of records and scaling and manner of reporting of values, may at times give an erroneous conception of typical ionospheric characteristics at the station. Some of the errors are due to:

a. Differences in scaling records when spread echoes are present.

b. Omission of values when foF2 is less than or equal to foF1, leading to erroneously high values of monthly averages or median values.

c. Omission of values when critical frequencies are less than the lower frequency limit of the recorder, also leading to erroneously high values of monthly average or median values.

These effects were discussed on pages 6 and 7 of the previous F-series report IRPL-F5.

Ordinarily, a blank space in the fEs column of a table is the result of the fact that a majority of the readings for the month are below the lower limit of the recorder or less than the corresponding values of foE. Blank spaces at the beginning and end of columns of h'F1, foF1, h'E, and foE are usually the result of diurnal variation in these characteristics. Complete absence of medians of h'F1 and foF1 is usually the result of seasonal effects.

The dashed-line prediction curves of the graphs of ionospheric data are obtained from the predicted zero-muf contour charts of the CRPL-D series publications. The following points are worthy of note:

a. Predictions for individual stations used to construct the charts may be more accurate than the values read from the charts since some smoothing of the contours is necessary to allow for the longitude effect within a zone. Thus, inasmuch as the predicted contours are for the center of each zone, part of the discrepancy between the predicted and observed values as given in the F series may be caused by the fact that the station is not centrally located within the zone.

b. The final presentation of the predictions is dependent upon the latest available ionospheric and radio propagation data, as well as upon predicted sunspot number.

c. There is no indication on the graphs of the relative reliability of the data; it is necessary to consult the tables for such information.

The following predicted smoothed 12-month running-average Zürich sunspot numbers were used in constructing the contour charts:

Month	Predicted Sunspot Number										
	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945
December		11	15	33	53	86	108	114	126	85	38
November		10	16	38	52	87	112	115	124	83	36
October		10	17	43	52	90	114	116	119	81	23
September		8	18	46	54	91	115	117	121	79	22
August		8	18	49	57	96	111	123	122	77	20
July		8	20	51	60	101	108	125	116	73	
June		9	21	52	63	103	108	129	112	67	
May	16	10	22	52	68	102	108	130	109	67	
April	13	10	24	52	74	101	109	133	107	62	
March	14	11	27	52	78	103	111	133	105	51	
February	14	12	29	51	82	103	113	133	90	46	
January	12	14	30	53	85	105	112	130	88	42	

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 78 and figures 1 to 156 were assembled by the Central Radio Propagation Laboratory for analysis and correlation, incidental to CRPL prediction of radio propagation conditions. The data are median values unless otherwise indicated. The following are the sources of the data in this issue:

Australian Department of Supply and Shipping, Bureau of Mineral Resources, Geology and Geophysics:
- Watheroo, Western Australia

Meteorological Service of the Belgian Congo and Ruanda-Urundi:
- Elisabethville, Belgian Congo
- Leopoldville, Belgian Congo

British Department of Scientific and Industrial Research, Radio Research Board:
- Falkland Is.
- Ibadan, Nigeria (University College of Ibadan)
- Inverness, Scotland
- Port Lockroy
- Singapore, British Malaya
- Slough, England

Defence Research Board, Canada:
- Baker Lake, Canada
- Churchill, Canada
- Ottawa, Canada
- Resolute Bay, Canada
- Winnipeg, Canada

Radio Wave Research Laboratories, National Taiwan University, Taipeh, Formosa, China:
- Formosa, China

French Ministry of National Defense (Section for Scientific Research):
- Fribourg, Germany

Institute for Ionospheric Research, Lindau Uber Northeim, Hannover, Germany:
- Lindau/Harz, Germany

The Royal Netherlands Meteorological Institute:
- De Bilt, Holland

Icelandic Post and Telegraph Administration:
- Reykjavik, Iceland

All India Radio (Government of India), New Delhi, India:
- Bombay, India
- Delhi, India
- Madras, India
- Tiruchy (Tiruchirapalli), India

Norwegian Defence Research Establishment, Kjeller per Lillestrom, Norway:
- Oslo, Norway
- Tromso, Norway

Manila Observatory:
- Baguio, P. I.

South African Council for Scientific and Industrial Research:
- Capetown, Union of South Africa
- Johannesburg, Union of South Africa
- Nairobi, Kenya (East African Meteorological Department)

Research Institute of National Defence, Stockholm, Sweden:
- Upsala, Sweden

Royal Board of Swedish Telegraphs, Radio Department, Stockholm, Sweden:
- Lulea, Sweden

Post, Telephone and Telegraph Administration, Berne, Switzerland:
- Schwarzenburg, Switzerland

United States Army Signal Corps:
- Adak, Alaska
- Ft. Monmouth, New Jersey
- Okinawa I.
- White Sands, New Mexico

National Bureau of Standards (Central Radio Propagation Laboratory):

- Fairbanks, Alaska (Geophysical Institute of the University of Alaska)
- Guam I.
- Huancayo, Peru (Instituto Geofisico de Huancayo)
- Maui, Hawaii
- Narsarssuak, Greenland
- Panama Canal Zone
- Point Barrow, Alaska
- Puerto Rico, W. I.
- Talara, Peru (Instituto Geofisico de Huancayo)
- Washington, D. C.

HOURLY IONOSPHERIC DATA AT WASHINGTON, D. C.

The data given in tables 79 through 90 follow the scaling practices given in the report IRPL-C61, "Report of International Radio Propagation Conference," pages 36 to 39, and the median values are determined by the conventions given above under "Symbols, Terminology, Conventions." Beginning with September 1949, the data are taken at Ft. Belvoir, Virginia.

IONOSPHERIC STORMINESS AT WASHINGTON, D.C.

Table 91 presents ionosphere character figures for Washington, D. C., during May 1955, as determined by the criteria given in the report IRPL-R5, "Criteria for Ionospheric Storminess," together with Cheltenham, Maryland, geomagnetic K-figures, which are usually covariant with them.

SUDDEN IONOSPHERE DISTURBANCES

Tables 92 and 93 list respectively the sudden ionosphere disturbances observed at Washington, D. C., for May 1955 and in the Netherlands for April 1955.

RADIO PROPAGATION QUALITY FIGURES

Tables 94a and 94b give for April 1955 the radio propagation quality figures for the North Atlantic area, the relevant CRPL advance and short-term forecasts, a summary geomagnetic activity index and sundry comparisons, specifically as follows:

(a) radio propagation quality figures, Qa, separately for each 6-hour interval of the Greenwich day, viz., 00-06, 06-12, 12-18, 18-24 hours UT (Universal Time or GCT).

(b) whole-day radio quality indices (beginning October 1952). Each index is a weighted average of the four quarter-day Qa-figures, before rounding off, with half weight given to quality grades 5 and 6. This procedure tends to give whole-day indices suitable for comparison with whole-day advance forecasts which designate whenever possible the days when significant disturbance or unusually quiet conditions will occur.

(c) short-term forecasts, issued by CRPL every six hours (nominally one hour before 00^h, 06^h, 12^h, 18^h UT) and applicable to the period 1 to 13 (especially 1 to 7) hours ahead. Note that new scoring rules have been adopted beginning with October 1952 data.

(d) advance forecasts, issued semiweekly (CRPL-J reports) and applicable 1 to 3 or 4 days ahead, 4 or 5 to 7 days ahead, and 8 to 25 days ahead. These forecasts are scored against the whole-day quality indices.

(e) half-day averages of the geomagnetic K indices measured by the Cheltenham Magnetic Observatory of the U. S. Coast and Geodetic Survey.

(f) illustration of the comparison of short-term forecasts with Qa-figures and also with estimates of radio quality based on CRPL observations only.

(g) illustration of the outcome of advance forecasts (1 to 3 or 4 days ahead) and, for comparison, the outcome of a type of "blind" forecast. For the latter the frequency for each quality grade, as determined from the distribution of quality grades in the four most recent months of the current season, is partitioned among the grades observed in the current month in proportion to the frequencies observed in the current month.

These radio propagation quality figures, Qa, are prepared from radio traffic data reported to CRPL by American Telephone and Telegraph Company, Mackay Radio and Telegraph Company, RCA Communications, Inc., Marconi Company, British Admiralty Signal and Radar Establishment, and the following agencies of the U. S. Government:--Coast Guard, Navy, Army Signal Corps, and U. S. Information Agency. The method of calculation, summarized below, is similar to that described in a 1946 report, IRPL-R31, now out of print. Only reports of radio transmission on North Atlantic paths closely approximating New York-London are included in the estimation of quality.

The original reports are submitted on various scales and for various time intervals. The observations for each 6-hour interval are averaged on the quality scale of the original reports. These 6-hour indices are then adjusted to the 1 to 9 quality-figure scale by a conversion table prepared by comparing the distribution of these indices for at least four months, usually a year, with a master distribution determined from analysis of the reports originally made on the 1 to 9 quality-figure scale. A report whose distribution is the same as the master is thereby converted linearly to the Q-figure scale. The 6-hourly quality figures are (subjectively) weighted means of the reports received for that period. These 6-hourly quality figures replace, beginning January 1953, the half-daily quality figures which formerly appeared in this table. (These forecasts and quality indices are prepared by the North Atlantic Radio Warning Service, the CRPL forecasting center at Ft. Belvoir, Virginia.)

These quality figures are, in effect, a consensus of reported radio propagation conditions. The reasons for low quality are not necessarily known and may not be limited to ionospheric storminess. For instance, low quality may result from improper frequency usage for the path and time of day. Although, wherever it is reported, frequency usage is included in the rating of reports, it must often be an assumption that the reports refer to optimum working frequencies. It is more difficult to eliminate from the indices conditions of low quality because of multipath, interference, etc. These considerations should be taken into account in interpreting research correlations between the Q-figures and solar, auroral, geomagnetic or similar indices.

Note: A tabulation of forecasts for the North Pacific area and comparisons with observed radio propagation conditions will appear in a later issue.

OBSERVATIONS OF THE SOLAR CORONA

Tables 95 through 97 give the observations of the solar corona during May 1955, obtained at Climax, Colorado, by the High Altitude Observatory of Harvard University and the University of Colorado. Tables 98 through 100 list the coronal observations obtained at

Sacramento Peak, New Mexico, during May 1955, derived by Harvard College Observatory as a part of its performance of a research contract with the Upper Air Research Observatory, Geophysical Research Directorate, Air Force Cambridge Research Center. The data are listed separately for east and west limbs at 5-degree intervals of position angle north and south of the Solar Equator at the limb. The time of observation is given to the nearest tenth of a day, GCT.

Beginning with January 1, 1955, the Climax, Colorado, coronal measurements are reported in absolute units rather than on the arbitrary relative scale that has been used in the past. Absolute intensities are given in millionths of the intensity in one angstrom of the spectrum of the center of the solar disk at the wavelength of the coronal line. Two conversion tables from arbitrary relative to absolute units were published in CRPL-F127, March 1955. One table gave the green-line conversions to absolute units applicable for all readings made since 1943. The other table gave the red-line conversions applicable for the years 1952 to the present. For earlier years a table is available from the High Altitude Observatory, Boulder, Colorado, showing changes in red-green sensitivity. Absolute yellow-line (λ5694) intensities may be obtained approximately by multiplying the values in the λ5303 table by 0.75. Absolute far red (λ6702) may be obtained approximately by multiplying the values in the λ6374 table by 0.9.

The Sacramento Peak measurements will continue to be on an arbitrary relative scale.

Table 95 gives the intensities of the green (5303A) line of the emission spectrum of the solar corona; table 96 gives similarly the intensities of the first red (6374A) coronal line; and table 97, the intensities of the second red (6702A) coronal line; all observed at Climax in May 1955.

Table 98 gives the intensities of the green (5303A) coronal line; table 99, the intensities of the first red (6374A) coronal line; and table 100, the intensities of the second red (6702A) coronal line; all observed at Sacramento Peak in May 1955.

The following symbols are used in tables 95 through 100; a, observation of low weight for whole limb (if in date column) or for portion of limb indicated; -, corona not visible; and X, no observation for whole limb (if in date column) or for portion of limb indicated.

RELATIVE SUNSPOT NUMBERS

Table 101 lists the daily provisional Zürich relative sunspot number, R_Z, for May 1955, as communicated by the Swiss Federal Observatory. Table 102 contains the daily American relative sunspot number, R_A', for April 1955, as compiled by the Solar Division, American Association of Variable Star Observers.

OBSERVATIONS OF SOLAR FLARES

Table 103 gives the preliminary record of solar flares reported to the CRPL. These reports are communicated on a rapid schedule at the sacrifice of detailed accuracy. Definitive and complete records are published later in the Quarterly Bulletin of Solar Activity, I.A.U., in various observatory publications, and elsewhere. The present listing serves to identify and roughly describe the phenomena observed. Details should be sought from the reporting observatory.

Reporting directly to the CRPL are the following observatories: Mt. Wilson, McMath-Hulbert, U. S. Naval, Wendelstein, Kanzel and High Altitude at Sacramento Peak, New Mexico. The remainder report to Meudon (Paris) and the data are taken from the Paris-URSIgram broadcast, monitored fairly regularly by the CRPL. The data on solar flares reported from Sacramento Peak, New Mexico, communicated by the High Altitude Observatory at Boulder, Colorado, are provided by Harvard University as the result of work undertaken on an Air Materiel Command Research and Development Contract administered by the Air Force Cambridge Research Laboratories.

The table lists for each flare the reporting observatory, date, times of beginning and ending of observation, duration (when known), total area (corrected for foreshortening), and heliographic coordinates. For the maximum phase of the flare is given the time, intensity, area relative to the total area, and the importance. The column "SID observed" is to indicate when a sudden ionosphere disturbance, noted elsewhere in these reports, occurred at the time of a flare. Times are in Universal Time (GCT).

INDICES OF GEOMAGNETIC ACTIVITY

Table 104 lists various indices of geomagnetic activity based on data from magnetic observatories widely distributed throughout the world. The indices are: (1) preliminary international character-figures, C; (2) geomagnetic planetary three-hour-range indices, Kp; (3) daily "equivalent amplitude" Ap; (4) magnetically selected quiet and disturbed days.

The C-figure is the arithmetic mean of the subjective classification by all observatories of each day's magnetic activity on a scale of 0 (quiet) to 2 (storm). The magnetically quiet and disturbed days are selected by the international scheme outlined on pages 219-227 in the December 1943 issue of Terrestrial Magnetism and Atmospheric Electricity. The details of the currently used method follow. For each day of a month, its geomagnetic activity is assigned by weighting equally the following three criteria: (1) the sum of the eight Kp's; (2) the greatest Kp; and (3) the sum of the squares of the eight Kp's.

Kp is the mean standardized K-index from 11 observatories between geomagnetic latitudes 47 and 63 degrees. The scale is 0 (very quiet) to 9 (extremely disturbed), expressed in thirds of a unit, e.g., 5- is 4 2/3, 5o is 5 0/3, and 5+ is 5 1/3. This planetary index is designed to measure solar particle-radiation by its magnetic effects, specifically to meet the needs of research workers in the ionospheric field. A complete description of Kp has appeared in Bulletin 12b, "Geomagnetic Indices C and K, 1948," published in Washington, D. C., 1949, by the Association of Terrestrial Magnetism and Electricity, International Union of Geodesy and Geophysics.

Ap indicates magnetic activity on a linear scale rather than the quasi-logarithmic scale of the K-indices. The column headed Ap gives the daily average for the eight values ap per day, where ap is defined as one-half the average gamma range of the most disturbed of the three force components, in the three-hour interval at standard stations. Ap is computed from the 8 indices Kp per day, see IATME Bulletin No. 12h (for 1953), p. VIII f. Values of Ap (like Kp and Cp) have been published for the Polar Year 1932/33 and currently since January 1937.

The Committee on Characterization of Magnetic Disturbance, ATME, IUGG, has kindly supplied this table. The Meteorological Office, De Bilt, Holland, collects the data and compiles C and selected days. The Chairman of the Committee computes the planetary index. Current tables are also published quarterly in the Journal of Geophysical Research along with data on sudden commencements (sc) and solar flare effects (sfe).

TABLES OF IONOSPHERIC DATA

Table 1

Washington, D. C. (38.7°N, 77.1°W) May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.3					<1.7	3.0
01	280	3.0					<1.7	3.1
02	280	2.8					<1.6	3.1
03	280	2.5					<1.6	3.1
04	(280)	2.2					<1.6	3.1
05	250	2.8					<1.6	3.3
06	250	4.0	220	3.2	110	(1.9)	3.4	3.4
07	320	4.5	210	3.7	100	2.4	3.9	3.25
08	300	4.9	200	4.0	100	2.7	4.4	3.3
09	310	5.0	200	4.2	100	2.9	4.6	3.2
10	360	5.2	200	4.3	100	3.1	4.6	3.1
11	360	5.2	200	4.3	100	3.2	4.7	3.1
12	380	5.3	200	4.3	100	(3.2)	4.4	3.0
13	350	5.5	200	4.3	100	3.3	3.9	3.0
14	340	5.6	200	4.3	100	3.2	3.6	3.0
15	330	5.6	210	4.2	100	3.0	4.5	3.1
16	320	5.7	210	4.1	100	2.9	3.2	3.1
17	300	5.7	220	3.8	100	2.5	3.7	3.1
18	270	6.0	230	3.2	110	2.1	3.5	3.2
19	240	6.6	---	---			3.3	3.2
20	230	6.2					2.6	3.3
21	220	5.1					<1.6	3.3
22	240	4.4					<1.6	3.2
23	250	3.8					<1.7	3.1

Time: 75.0°W..
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 2

Tromso, Norway (69.7°N, 19.0°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					4.6	---
01	---	---						
02	---	---						
03	---	---						
04	---	---						
05	---	---						
06	---	---						
07	(435)	3.9	240	3.5	110	2.2	2.9	(2.95)
08	(390)	4.2	215	3.6	110	2.4	3.0	3.05
09	390	4.2	220	3.8	105	2.5	2.6	3.0
10	380	4.4	215	3.8	105	2.6		3.0
11	350	4.5	210	3.8	105	2.6		3.1
12	350	4.4	210	3.8	110	2.7		3.1
13	350	4.4	210	3.8	110	2.7		3.1
14	350	4.3	210	3.8	110	2.6		3.1
15	(315)	4.3	220	3.7	110	2.4	2.0	3.15
16	(300)	4.4	235	3.5	110	2.3	2.6	3.1
17	(285)	4.2	240	---	110	2.1	2.8	3.15
18	(265)	4.0	245	---	110	2.0	3.6	3.2
19	(255)	4.0	---	---	---	---	3.7	3.1
20	(250)	3.7					4.2	3.05
21	---	(4.0)					4.2	(3.05)
22	---	(3.7)					4.0	(3.0)
23	---	---					4.1	

Time: 15.0°E.
Sweep: 0.7 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 3

Fairbanks, Alaska (64.9°N, 147.8°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(320)	(2.6)					5.2	(3.0)
01	(320)	(2.2)					5.4	(3.0)
02	(350)	(2.3)					6.0	(2.9)
03	(320)	(2.7)					5.0	(2.95)
04	(320)	(2.6)			---	---	5.8	(3.0)
05	(250)	(3.0)	260	---	---	---	4.1	(3.0)
06	480	3.4	240	3.2	110	(1.9)	4.0	(2.6)
07	530	3.6	220	3.4	110	2.2	3.3	(2.6)
08	(620)	3.6	210	3.6	110	2.4	2.7	(2.3)
09	(650)	3.9	220	3.6	100	2.6	2.6	(2.2)
10	520	4.0	210	3.8	100	2.6	3.6	2.6
11	480	4.2	200	3.8	100	2.7	2.8	2.7
12	440	4.3	210	3.8	100	2.8	4.5	2.8
13	420	4.4	210	3.9	100	2.8	3.8	2.85
14	<400	4.4	210	3.9	100	2.6	2.9	2.9
15	370	4.4	210	3.8	100	2.5	3.5	3.1
16	370	4.3	220	(3.7)	110	2.4	2.6	3.1
17	<350	4.2	220	---	110	2.1	2.3	3.2
18	290	4.1	230	---	120	(1.7)	1.9	3.2
19	250	(3.7)	230	---	140	(1.2)	2.2	(3.2)
20	260	(3.2)			---	---	3.4	(3.1)
21	270	(3.2)					2.6	(3.1)
22	270	(3.1)					4.1	(3.1)
23	280	(2.7)					4.6	(3.0)

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 4

Narsarssuak, Greenland (61.2°N, 45.4°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	(2.3)					3.9	---
01	---	(2.4)					3.4	---
02	---	---					4.3	---
03	---	---					4.0	---
04	---	---					4.7	---
05	(270)	(3.0)					4.1	(3.35)
06	320	<3.4	220	3.3	---	---	3.6	3.3
07	G	3.6	250	3.5	120	2.1		2.7
08	410	3.9	230	3.6	120	2.3		2.9
09	410	4.2	210	3.8	110	2.4		2.9
10	400	4.2	220	3.0	110	(2.4)		3.0
11	400	4.4	220	3.9	110	---		2.9
12	380	4.5	210	3.9	110	---		3.0
13	380	4.5	220	3.9	110	---		3.0
14	370	4.6	220	3.9	110	(2.4)		3.0
15	360	4.6	220	3.8	110	2.4		3.0
16	360	4.4	230	3.7	110	2.2		3.05
17	330	4.4	240	3.5	120	2.1		3.1
18	300	4.2	230	3.2	120	1.9	3.7	3.2
19	300	3.0			---	---	4.0	3.2
20	200	(3.4)					4.9	(3.2)
21	290	(3.1)					5.0	3.2
22	(270)	2.9					4.2	3.2
23	(300)	2.4					4.4	(3.1)

Time: 45.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 5

Oslo, Norway (60.0°N, 11.1°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	2.5						2.95
01	(300)	2.0						2.9
02	290	2.0					1.2	2.85
03	300	1.8					1.4	2.85
04	290	2.0			---	---	2.5	2.95
05	260	2.7	---	---	120	1.4	1.2	3.15
06	255	3.4	235	---	115	1.7		3.2
07	(280)	3.7	225	3.6	110	2.1	1.6	3.2
08	350	4.1	215	3.6	110	2.4	2.4	3.1
09	390	4.2	210	3.8	105	2.6	2.5	3.0
10	370	4.6	210	4.0	105	2.7	2.9	3.0
11	350	4.7	210	4.0	105	2.8	2.9	3.1
12	350	4.8	200	4.0	105	2.8		3.1
13	340	4.8	210	4.0	105	2.8	2.5	3.2
14	330	4.8	205	4.0	105	2.8		3.1
15	350	4.8	215	4.0	105	2.7		3.05
16	310	4.8	220	3.8	110	2.5		3.15
17	295	4.9	230	3.6	110	2.3	1.4	3.2
18	(265)	4.8	240	---	115	1.9	2.1	3.2
19	250	4.8	250	---	120	1.6	1.8	3.2
20	250	4.5					(2.8)	3.2
21	250	3.9						3.2
22	250	3.0						3.1
23	---	2.9						3.0

Time: 15.0°E.
Sweep: 0.7 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 6

Upsala, Sweden (59.8°N, 17.6°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	310	(2.4)					2.0	2.9
01	330	(2.3)						2.9
02	330	(2.0)					2.2	2.9
03	330	(1.9)			---	---	2.5	2.9
04	290	2.3			---	E	2.1	3.0
05	250	3.0	---	---	---	E	2.3	3.2
06	260	3.5	225	(3.1)	115	1.8	2.7	3.2
07	390	3.9	220	3.5	115	2.2	3.0	3.1
08	380	4.3	215	3.7	110	2.4	3.2	2.9
09	360	4.5	210	3.9	110	2.6	3.4	3.1
10	340	4.8	210	4.0	105	2.8	3.4	3.2
11	340	5.0	200	4.0	105	2.8	3.4	3.15
12	330	5.0	200	4.1	105	2.8	3.1	3.1
13	350	5.0	205	4.0	105	2.8	3.0	3.1
14	335	4.9	210	4.0	105	2.8	3.1	3.15
15	320	4.9	220	3.9	105	2.6	3.1	3.1
16	300	4.9	225	3.7	110	2.4	3.1	3.2
17	280	4.8	235	3.4	115	2.2	2.8	3.2
18	260	4.8	240	(2.9)	120	1.8	2.8	3.2
19	240	4.6	---	---	---	E	1.9	3.2
20	240	4.5			---	E		3.1
21	240	4.2						3.1
22	270	2.9					2.0	3.0
23	300	(2.5)						3.0

Time: 15.0°E.
Sweep: 1.4 Mc to 17.0 Mc in 6 minutes, automatic operation.

Table 7

Adak, Alaska (51.9°N, 176.6°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.4						3.0
01	270	3.2						3.0
02	280	3.0						2.9
03	280	3.0						2.9
04	280	3.0					2.0	3.0
05	270	3.4	260	---	140	1.5		3.05
06	270	4.0	230	3.3	120	1.9		3.15
07	360	4.1	220	3.6	110	2.3	2.6	3.0
08	360	4.5	220	3.9	110	2.6	3.2	3.0
09	380	4.6	220	4.0	110	2.8	3.6	3.0
10	350	4.8	210	4.1	110	2.9	5.0	3.1
11	340	5.1	200	4.2	110	3.0	3.8	3.1
12	320	5.5	200	4.2	110	3.0	4.4	3.1
13	300	5.4	210	4.2	110	2.9	5.0	3.2
14	310	5.6	210	4.1	110	2.8	3.7	3.25
15	290	5.4	220	3.9	110	2.7	3.8	3.3
16	270	5.3	220	3.7	110	2.5	3.3	3.3
17	250	5.2	230	---	110	2.1	2.6	3.35
18	240	5.0	---	---	120	1.7	2.4	3.4
19	240	5.0					2.4	3.2
20	240	4.8					2.1	3.1
21	240	4.6					2.2	3.2
22	240	4.1						3.2
23	250	3.6						3.1

Time: 180.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 8

White Sands, New Mexico (32.3°N, 106.5°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	3.5						2.9
01	290	3.5						2.9
02	270	3.4						3.0
03	250	3.4						3.1
04	260	3.2						3.1
05	270	3.1						3.0
06	240	3.9	240	---	---	---		3.3
07	280	4.6	230	3.5	110	2.2	2.8	3.3
08	300	5.2	210	4.0	100	2.6	3.3	3.25
09	320	5.4	200	4.2	100	2.9	3.4	3.2
10	350	5.4	200	4.3	100	3.1	3.6	3.0
11	370	5.6	200	4.4	100	3.2	4.0	2.9
12	360	5.8	200	4.4	110	3.3	3.8	3.0
13	340	6.3	200	4.3	100	3.2	3.3	2.95
14	330	6.6	210	4.3	100	3.2	3.4	3.0
15	300	6.5	220	4.2	100	3.0	3.5	3.1
16	300	6.2	220	4.0	110	2.7	3.2	3.1
17	270	6.3	230	3.6	110	2.3	3.0	3.25
18	250	6.0	240	---	---	---	2.7	3.4
19	220	5.6						3.4
20	220	4.5						3.2
21	240	3.5						3.0
22	270	3.6						3.0
23	<280	3.3						2.9

Time: 105.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 9

Okinawa I. (26.3°N, 127.8°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	4.1					2.4	2.9
01	280	(4.2)					2.4	(3.05)
02	250	4.2					2.2	3.3
03	220	3.5					2.3	(3.5)
04	270	2.5					2.3	3.0
05	290	2.6					2.0	3.0
06	250	4.8			140	2.0	2.6	3.5
07	250	5.8	240	---	120	2.4	3.6	3.6
08	270	6.0	240	4.1	120	2.8	3.9	3.5
09	290	6.5	230	4.4	110	3.1	4.0	3.3
10	330	7.2	220	4.6	120	3.3	4.3	3.0
11	340	8.2	220	4.6	120	(3.3)	4.4	2.9
12	340	9.4	220	4.6	120	3.4	4.2	2.95
13	320	10.6	230	4.6	120	3.3	4.0	3.0
14	300	11.0	230	4.5	110	3.3	3.8	3.1
15	300	10.6	230	4.4	110	3.1	3.8	3.1
16	290	10.5	240	4.1	110	2.8	3.6	(3.1)
17	280	11.0	260	---	120	2.4	3.7	(3.3)
18	250	(10.8)	---	---			3.2	(3.4)
19	230	(8.3)					2.4	(3.3)
20	230	5.7					2.4	3.3
21	270	4.2					2.3	2.9
22	320	(4.1)					2.4	2.8
23	320	(4.1)					2.2	2.8

Time: 127.5°E.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 10

Formosa, China (25.0°N, 121.5°E) April 1955

Time	h'F2	foF2	b'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	5.8					2.9	3.0
01	240	5.4					2.4	3.15
02	220	4.9					2.6	3.3
03	240	3.9					2.4	3.1
04	250	3.0					2.1	3.1
05	260	2.7					2.0	3.1
06	230	4.6					2.4	3.3
07	220	6.1	---	---	100	2.2	3.4	3.8
08	240	6.7	220	4.1	100	2.9	3.7	3.5
09	260	6.7	220	4.3	100	3.1	3.8	3.3
10	300	7.7	210	4.6	100	3.3	3.6	3.1
11	320	9.2	210	4.6	100	3.4	3.8	3.1
12	300	10.0	200	4.6	100	3.4	3.9	3.0
13	280	11.5	220	4.6	100	3.2	4.1	3.2
14	280	12.2	220	4.6	100	3.3	3.9	3.3
15	260	12.6	220	4.4	100	3.1	3.2	3.3
16	260	12.3	220	4.2	---	---	3.3	3.2
17	240	11.8	230	4.0	110	---	3.5	3.5
18	220	11.1					3.3	3.6
19	200	9.8					2.8	3.6
20	200	7.0					2.6	3.4
21	220	6.0					2.3	3.2
22	280	5.0					2.2	2.9
23	280	5.4					2.8	3.0

Time: 120.0°E.
Sweep: 1.1 Mc to 19.5 Mc in 15 minutes, manual operation.

Table 11

Maui, Hawaii (20.8°N, 156.5°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	4.5						2.85
01	280	4.0						3.0
02	260	3.5						3.1
03	290	3.0						2.85
04	320	2.6						2.7
05	320	2.5						2.8
06	300	3.2						2.9
07	280	5.6	270	---	130	2.1	2.4	3.2
08	310	6.6	260	(4.0)	120	2.6	4.7	3.1
09	320	7.0	240	4.4	120	3.0	4.9	2.9
10	360	7.2	230	4.6	120	3.2	5.6	2.7
11	420	8.3	220	4.7	120	3.3	5.3	2.5
12	410	9.7	220	4.6	120	3.4	4.8	2.6
13	370	11.0	220	4.6	120	3.4	5.0	2.7
14	340	11.4	240	4.5	120	3.3	5.0	2.8
15	340	11.0	260	4.5	120	3.2	5.0	2.8
16	320	11.2	260	4.3	120	2.9	4.0	2.9
17	300	10.8	270	4.0	(130)	2.5	4.2	3.0
18	280	10.2	280	---	130	1.8	4.2	3.1
19	260	9.0					3.4	3.1
20	250	6.4					2.8	3.0
21	290	4.8					2.2	2.7
22	320	4.6					2.0	2.65
23	340	4.5					2.0	2.6

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 12

Puerto Rico, W. I. (18.5°N, 67.2°W) April 1955

Time	h'F2	foF2	b'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	4.4						3.05
01	270	4.4						3.1
02	250	4.2						3.15
03	240	3.9						3.2
04	240	3.4						3.2
05	260	3.1						3.15
06	250	3.2						3.3
07	240	4.9	230	---	120	2.0	2.4	3.6
08	260	5.2	220	3.9	110	2.5		3.5
09	300	5.4	210	4.2	110	2.9	3.2	3.2
10	330	5.9	210	4.4	110	3.1	3.4	3.1
11	340	6.6	220	4.5	110	3.3		3.0
12	310	7.5	230	4.5	110	3.4		3.0
13	300	8.6	220	4.5	110	3.4		3.1
14	300	8.8	240	4.4	110	3.3	4.5	3.2
15	280	8.4	230	4.4	110	3.2		3.2
16	290	8.1	230	4.2	110	2.9	4.4	3.2
17	280	8.2	240	3.9	110	2.5	4.0	3.25
18	250	8.1	240	---	110	1.8	3.2	3.3
19	230	7.2					2.8	3.4
20	230	5.9					2.2	3.1
21	260	4.9					2.4	3.0
22	280	4.6						2.9
23	280	4.4						2.9

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 13

Guam I. (13.6°N, 144.9°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	5.4						2.9
01	280	5.3						3.1
02	250	5.2						3.2
03	250	4.5						3.3
04	240	3.8						3.4
05	240	3.6					2.0	3.5
06	220	3.6					2.0	3.4
07	230	5.8	---	---	110	1.9	3.0	3.6
08	250	6.6	220	---	110	2.5	3.2	3.45
09	280	7.6	210	---	110	2.9	3.8	3.05
10	320	8.3	200	4.4	100	3.1	3.5	2.75
11	340	8.4	200	4.5	100	3.3		2.5
12	360	8.8	200	4.5	(110)	3.4	3.5	2.45
13	350	9.0	200	4.5	(100)	(3.4)	3.9	2.5
14	340	9.4	200	4.5	100	3.3	3.4	2.6
15	320	9.9	210	4.4	110	3.1	3.8	2.8
16	310	10.3	220	4.2	110	2.8	3.4	2.9
17	280	11.1	220	---	110	2.4	3.4	3.0
18	260	12.0	240	---	120	1.7	3.0	3.2
19	230	10.4					2.6	3.2
20	240	8.5						3.1
21	260	7.4					2.0	3.0
22	260	6.9					2.2	3.0
23	270	6.2						3.0

Time: 150.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 14

Panama Canal Zone (9.4°N, 79.9°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	4.6					1.9	3.0
01	250	4.5					2.2	3.2
02	240	4.2					2.0	3.3
03	240	3.6					2.8	3.3
04	240	3.2					1.9	3.2
05	230	3.0					2.2	3.5
06	250	3.1					3.2	3.3
07	240	4.8	210	---	120	2.0	3.7	3.5
08	300	5.4	210	(4.2)	110	2.6	3.6	3.2
09	370	6.1	210	4.5	110	3.0	4.0	2.9
10	360	7.8	220	4.5	110	3.2	4.4	2.85
11	360	8.7	220	4.5	110	3.4	4.5	2.9
12	350	9.8	210	4.5	110	3.5	4.7	2.9
13	340	10.6	220	4.5	110	3.5	4.5	2.9
14	320	11.4	220	4.4	110	3.4	4.6	3.0
15	300	11.8	230	4.4	110	3.2	4.4	3.1
16	280	12.4	220	4.2	110	(2.9)	4.4	3.3
17	250	11.6	230	(3.9)	110	2.4	4.0	3.4
18	230	9.8	---	---	---	---	3.6	3.5
19	220	7.6					3.7	3.3
20	240	6.1					2.6	3.05
21	260	5.8					2.7	3.0
22	250	5.6					2.3	3.1
23	250	4.8						3.1

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 15

Resolute Bay, Canada (74.7°N, 94.9°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	2.8					3.3	3.2
01	250	2.4						3.1
02	250	2.8						3.2
03	260	2.6					1.8	3.1
04	260	2.5			---	---	3.0	3.2
05	250	2.6	---	---	---	---	3.3	3.2
06	260	2.7	---	---	110	1.2	3.0	3.25
07	260	3.0	250	---	110	1.4		3.2
08	260	3.2	240	3.0	110	1.7		3.2
09	300	3.4	240	3.0	110	1.8		3.2
10	350	3.6	240	3.0	110	2.0		3.0
11	370	3.5	230	3.0	110	2.0		2.9
12	360	3.9	230	3.0	110	2.1		3.1
13	400	3.5	230	3.1	110	2.1		2.7
14	360	3.8	230	3.1	110	2.0		3.0
15	380	3.4	230	3.0	110	2.0		3.0
16	280	3.5	230	3.0	110	1.8		3.1
17	270	3.5	230	2.8	110	1.6		3.2
18	260	3.4	---	---	110	1.4		3.2
19	250	3.3	---	---	120	1.2		3.2
20	240	3.3			120	1.1		3.1
21	250	2.9			---	---	2.3	3.1
22	250	2.9					3.0	3.1
23	250	2.6						3.2

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 16

Point Barrow, Alaska (71.3°N, 156.8°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(270)	(2.9)					6.3	(3.2)
01	(320)	(2.8)					7.0	(3.0)
02	(280)	(2.7)					5.4	(3.1)
03	---	(2.8)					4.8	---
04	---	---					4.3	---
05	---	---					3.8	---
06	---	---					4.0	---
07	---	(3.0)					4.1	(3.0)
08	(320)	(3.3)	---	---	---	---	4.3	(2.85)
09	(340)	3.5	250	---	---	---	4.3	3.0
10	(400)	(3.8)	240	3.3	---	---	3.8	3.0
11	360	(3.9)	230	3.4	110	2.1	2.6	3.0
12	(340)	(4.0)	220	3.4	110	(2.3)	2.7	3.1
13	300	(4.0)	210	(3.4)	110	2.3		3.0
14	300	4.2	230	3.4	110	(2.2)		3.1
15	330	4.1	250	(3.2)	120	2.0		3.05
16	300	(4.3)	260	(3.1)	120	(1.7)		(3.1)
17	270	(4.0)	250	---	---	---	2.2	(3.1)
18	260	(4.0)	---	---	---	---	2.8	(3.1)
19	250	(3.0)			---	---	2.8	(3.1)
20	260	(2.7)					3.8	3.05
21	(270)	(2.5)					4.2	(3.0)
22	---	(2.7)					6.4	---
23	---	(2.7)					7.6	---

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 17

Tromso, Norway (69.7°N, 19.0°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					4.2	---
01	---	---						
02	---	---						
03	---	---						
04	---	---						
05	---	---						
06	---	---	---	---	---	---		---
07	---	3.4	240	---	---	1.8	3.0	(3.1)
08	(255)	3.8	230	---	110	2.0	2.6	(3.35)
09	---	4.2	220	---	110	2.1	2.8	(3.3)
10	---	4.3	220	---	110	2.2	2.6	(3.15)
11	(295)	4.4	215	3.6	120	2.4	2.7	3.35
12	290	4.4	220	3.6	120	2.4		3.3
13	280	4.4	215	3.6	120	2.4		3.35
14	(260)	4.3	225	---	115	2.2		3.3
15	(255)	4.2	230	---	120	2.0	3.0	3.35
16	250	4.0	235	---	115	1.9	3.0	3.3
17	245	3.8	235	---	120	1.7	3.0	3.3
18	245	3.4			115	1.3	3.4	3.1
19	(240)	(3.2)					3.6	(3.1)
20	---	(2.8)					3.6	(3.05)
21	---	(2.6)					4.4	(3.05)
22	---	(2.6)					3.8	(3.0)
23	---	---					3.8	---

Time: 15.0°E.
Sweep: 0.7 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 18

Lulea, Sweden (65.6°N, 22.1°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	340	1.8						
01								
02	(350)	(1.7)					1.8	
03								
04	340	(2.0)			---	---		
05								
06	260	2.7	---	---	---	1.7		
07								
08	250	3.7	220	3.5	120	2.1	2.3	
09								
10	270	4.3	200	3.5	110	2.4	2.4	
11								
12	280	4.6	200	3.6	110	2.4		
13								
14	260	4.6	200	3.5	125	2.3		
15								
16	240	4.3	---	---	140	1.9		
17								
18	250	3.8			---	---		
19								
20	270	2.5						
21								
22	280	(2.2)						
23								

Time: 15.0°E.
Sweep: 1.5 Mc to 10.0 Mc in 6 minutes, automatic operation.

Table 19

Fairbanks, Alaska (64.9°N, 147.8°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(350)	(1.8)					4.9	(2.85)
01	(370)	(2.0)					5.2	(2.85)
02	<400	(2.3)					5.4	---
03	(330)	(2.0)					4.5	(2.9)
04	<360	(1.9)					4.9	(2.85)
05	340	(2.2)					5.4	(2.95)
06	270	(2.6)	---	---	---	---	4.3	(3.1)
07	270	3.2	240	---	---	---	2.2	3.3
08	250	3.7	230	---	110	2.0	2.1	3.3
09	350	3.9	210	3.4	110	2.2	2.2	(3.3)
10	320	4.0	210	3.5	110	2.4		3.0
11	(360)	4.2	210	3.6	110	2.4	2.5	(3.1)
12	290	4.8	210	3.6	110	2.5	2.6	3.3
13	340	4.5	210	3.6	110	2.5		3.1
14	280	4.6	220	3.6	110	(2.4)		3.3
15	<260	4.5	210	3.5	110	2.2		3.3
16	240	4.8	240	---	120	(2.0)		3.35
17	240	4.5	240	---	130	(1.6)		3.4
18	240	4.0						3.3
19	240	(3.5)						(3.2)
20	260	(2.8)					3.9	(3.0)
21	290	(2.1)					4.4	(3.1)
22	300	(2.0)					4.4	(3.1)
23	(310)	(2.2)					5.0	(3.2)

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 20

Baker Lake, Canada (64.3°N, 96.0°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	2.6			110	1.0	5.3	3.1
01	260	2.4			125	1.0	5.0	3.1
02	260	2.3			120	1.0	5.7	3.1
03	280	2.2			140	1.0	4.8	3.0
04	270	2.2			120	1.2	5.4	3.1
05	280	2.4			110	1.3	5.1	3.05
06	280	2.5			110	1.6	5.0	3.1
07	280	3.1	---	---	105	2.0	6.0	3.3
08	270	3.5	220	3.0	110	2.4	5.3	3.3
09	290	3.8	250	3.3	105	2.8	5.6	3.2
10	320	4.2	250	3.5	105	2.9	6.0	3.1
11	340	4.3	250	3.5	105	3.0	5.4	3.0
12	350	4.3	240	3.7	105	3.0	6.0	3.1
13	360	4.6	240	3.7	105	2.9	5.5	3.0
14	360	4.8	230	3.6	105	2.8	5.2	3.0
15	350	4.3	240	3.4	110	2.6	5.1	3.1
16	300	4.3	240	3.2	105	2.6	5.8	3.15
17	290	4.0	270	3.1	110	2.4	5.0	3.15
18	260	3.9	260	---	110	2.0	5.0	3.2
19	260	3.3	---	---	115	1.5	5.4	3.2
20	250	3.1			115	1.3	5.0	3.1
21	250	2.9			110	1.2	6.3	3.1
22	250	2.6			130	1.1	9.0	3.1
23	250	2.5			120	1.0	5.2	3.1

Time: 90.0°W.
Sweep: 0.6 Mc to 10.0 Mc in 16 seconds.

Table 21

Reykjavik, Iceland (64.1°N, 21.8°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					4.3	---
01	---	---					3.8	
02	---	---					4.7	---
03	---	---					4.4	---
04	---	---					3.7	
05	---	---					3.2	---
06	(280)	(2.7)					(2.8)	---
07	(250)	(3.0)			---	---		(3.25)
08	270	3.5	230	---	---	---		3.3
09	300	3.9	220	3.3	---	---		3.3
10	290	4.2	200	3.5	---	---		3.2
11	300	4.5	210	3.6	---	---		3.3
12	300	4.7	220	3.6	---	---		3.3
13	300	4.6	220	3.7	---	---		3.3
14	300	4.6	230	3.6	---	---		3.2
15	300	4.4	220	3.6	---	---		3.2
16	300	4.3	240	3.5	---	---		3.2
17	260	4.0	260	---	---	---		3.2
18	260	4.0			---	---	3.2	3.2
19	270	(3.5)					6.4	(3.1)
20	(260)	(3.2)					6.8	---
21	---	---					4.8	---
22	---	---					4.4	
23	---	---					4.9	

Time: 15.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 16.2 seconds.

Table 22

Churchill, Canada (58.8°N, 94.2°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	2.9					7.4	---
01	(300)	(2.0)					7.0	---
02	280	2.6					6.0	---
03	(300)	(2.7)					5.3	
04	---	---					5.0	---
05	---	---					5.0	
06	---	(2.8)			---	---	5.0	---
07	310	3.3	---		---	(2.5)	5.0	(3.2)
08	280	3.7	---	---	110	2.4	5.0	3.2
09	380	4.0	240	3.7	110	2.7	5.4	3.0
10	400	4.2	230	3.7	110	2.7	5.2	3.0
11	440	4.2	230	3.8	120	2.8	5.0	3.0
12	410	4.4	220	3.8	110	2.8	4.6	3.0
13	390	4.5	230	3.8	110	2.9	4.6	3.0
14	380	4.6	240	3.8	120	2.8	4.8	3.0
15	360	4.6	240	3.6	120	2.7	4.6	3.0
16	330	4.8	250	3.5	120	2.5	4.5	3.2
17	300	4.2	250	3.1	120	2.3	4.5	3.2
18	280	4.0	---	---	120	(2.2)	4.3	3.2
19	280	3.6			---	2.5	4.4	(3.1)
20	310	3.5			---	---	4.5	(2.9)
21	290	3.0			---	---	5.0	---
22	280	3.0			---	---	6.3	---
23	280	2.8					7.3	---

Time: 90.0°W.
Sweep: 0.6 Mc to 10.0 Mc in 16 seconds.

Table 23

De Bilt, Holland (52.1°N, 5.2°E) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	2.8						2.9
01	280	2.6						2.8
02	280	2.7						2.7
03	280	2.5						2.9
04	<280	2.4						2.9
05	250	2.1						3.0
06	240	2.8	---	---	---	---		3.1
07	230	3.8	220	2.6	120	1.9		3.4
08	270	4.5	220	3.6	110	2.3		3.3
09	280	4.9	220	3.8	110	2.6	3.2	3.3
10	280	5.2	200	4.0	110	2.8	3.2	3.3
11	280	5.2	200	4.0	110	2.8	3.2	3.3
12	280	5.7	210	4.1	110	2.9	3.0	3.3
13	280	5.6	215	4.0	110	2.9		3.3
14	270	5.5	210	4.0	110	2.7		3.3
15	260	5.2	220	3.6	110	2.5		3.3
16	250	5.3	230	3.3	110	2.3		3.3
17	240	5.0	230	2.7	120	1.9		3.3
18	240	4.8						3.2
19	240	4.7						3.1
20	240	4.1						3.1
21	250	3.4						3.0
22	260	3.0						3.0
23	<280	2.8						2.9

Time: 0.0°.
Sweep: 1.4 Mc to 11.2 Mc in 6 minutes, automatic operation.

Table 24

Lindau/Harz, Germany (51.6°N, 10.1°E) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	2.8					2.0	3.1
01	265	2.6					2.0	3.05
02	265	2.6					2.0	3.0
03	265	2.6					2.0	3.0
04	260	2.6					2.0	3.1
05	250	2.2					2.0	3.1
06	250	2.2					2.0	3.25
07	230	3.5	220	---	---	E	2.0	3.5
08	250	4.2	220	---	120	2.0	2.1	3.5
09	260	4.6	205	3.6	105	2.3	3.0	3.4
10	275	5.0	205	3.8	105	2.6	3.4	3.4
11	280	5.4	200	3.9	105	2.8	3.5	3.4
12	285	5.4	200	4.0	105	2.8	3.5	3.4
13	275	5.6	200	4.0	105	2.8	3.5	3.4
14	265	5.6	210	3.8	105	2.7	3.4	3.4
15	260	5.4	215	3.8	105	2.6	3.2	3.5
16	250	5.3	215	---	110	2.3	3.0	3.4
17	240	5.1	225	---	120	2.0	2.0	3.4
18	230	4.9	---	---	---	E	2.0	3.4
19	235	5.0					2.0	3.2
20	240	4.5					2.0	3.2
21	240	3.8					2.0	3.2
22	255	3.2						3.15
23	275	2.9					2.0	3.1

Time: 15.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 8 minutes.

Table 25

Winnipeg, Canada (49.9°N, 97.4°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(330)	2.0						---
01	---	2.0					2.8	---
02	---	2.2					3.0	---
03	---	(2.0)					3.5	(2.9)
04	---	(2.0)					3.2	---
05	---	(2.1)					3.2	---
06	---	2.2						---
07	250	2.9			---	---		3.2
08	260	3.8	230	3.5	120	2.1		3.2
09	340	4.0	220	3.7	120	2.5		3.1
10	380	4.3	220	3.8	115	2.8		2.9
11	370	4.5	210	3.9	115	2.9		3.0
12	360	4.7	210	4.0	115	3.0		3.0
13	360	4.8	220	4.0	115	3.0		2.9
14	340	4.9	220	3.9	115	3.0		3.0
15	340	4.9	230	3.9	115	2.8		3.1
16	320	4.9	230	3.7	120	2.6		3.1
17	280	4.6	230	3.2	120	2.3		3.2
18	260	4.5	240	---	130	(2.0)		3.2
19	240	4.1			---	---		3.1
20	260	3.3						3.0
21	270	2.7						3.0
22	270	2.5						3.0
23	300	2.0						(3.0)

Time: 90.0°W.
Sweep: 1.0 Mc to 10.0 Mc in 16 seconds.

Table 26

Schwarzenburg, Switzerland (46.8°N, 7.3°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.2						3.3
01	290	3.0						3.3
02	280	2.9						3.3
03	280	2.8						3.3
04	260	2.9						3.3
05	240	2.7						3.5
06	230	2.4						3.6
07	200	3.4			---	---		3.9
08	200	4.4	---	---	100	2.0		3.85
09	200	4.7	200	3.6	100	2.4		3.8
10	250	5.2	200	4.0	100	2.7		3.7
11	270	5.3	200	4.0	100	2.8		3.7
12	260	5.6	200	4.1	100	2.9		3.7
13	250	5.7	200	4.1	100	2.9		3.8
14	260	5.6	200	4.0	100	2.8		3.7
15	230	5.5	200	4.0	100	2.7		3.8
16	200	5.6	200	3.7	100	2.5		3.85
17	200	5.3	---	---	100	2.2		3.8
18	200	5.4			---	---		3.8
19	200	5.2						3.7
20	200	5.0						3.6
21	200	4.3						3.6
22	210	3.8						3.5
23	240	3.2						3.4

Time: 15.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 30 seconds.

Table 27

Ottawa, Canada (45.4°N, 75.9°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	320	2.0						3.0
01	(370)	1.9						---
02	(360)	1.8						---
03	(360)	2.0						(3.0)
04	(350)	(1.9)					2.0	(2.95)
05	(350)	2.0					2.2	(3.0)
06	290	2.1						3.1
07	240	3.3	230	---	120	2.0		3.4
08	280	4.0	220	3.5	110	2.3		3.3
09	360	4.2	210	3.7	110	2.7		3.0
10	350	4.6	200	4.0	110	2.9		3.1
11	370	4.8	200	4.0	110	3.0		3.0
12	370	4.7	210	4.0	110	3.2	3.2	3.0
13	360	4.9	210	4.0	110	3.1	3.1	3.0
14	340	5.0	220	3.9	110	3.0		3.1
15	340	5.0	230	3.8	110	2.8		3.05
16	300	4.9	230	3.7	120	2.5		3.15
17	280	4.9	240	3.3	120	2.0		3.2
18	250	4.8	---	---	---	1.7		3.2
19	240	4.4						3.2
20	250	3.5						3.1
21	270	2.8						3.1
22	300	2.5						3.0
23	300	2.1						3.0

Time: 75.0°W.
Sweep: 1.0 Mc to 10.0 Mc in 15 seconds.

Table 28

Ft. Monmouth, New Jersey (40.0°N, 74.0°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	2.3						3.0
01	---	2.3						2.9
02	---	2.2						3.0
03	270	2.2						3.0
04	(260)	2.2						3.1
05	---	2.1						3.1
06	250	2.7	---	---				3.2
07	260	3.9	240	---	120	1.9		3.4
08	290	4.3	220	3.6	120	2.3	2.3	3.4
09	320	4.6	210	3.8	110	(2.6)		3.25
10	350	4.9	200	4.0	110	2.8		3.1
11	360	5.0	200	4.1	110	2.9		3.1
12	350	5.1	200	4.1	110	3.0		3.1
13	350	5.2	210	4.1	110	3.0		3.1
14	330	5.3	220	4.0	110	2.9		3.0
15	320	5.4	220	3.9	110	2.7		3.1
16	300	5.4	230	3.6	120	2.4		3.2
17	260	5.1	240	---	120	2.0		3.2
18	240	5.0	---	---				3.3
19	240	4.5						3.2
20	240	3.7						3.2
21	250	3.2						3.1
22	<260	2.7						3.0
23	(260)	2.5						3.05

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 29

Baguio, P. I. (16.4°N, 120.6°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	6.4						3.15
01	240	6.1						3.3
02	210	6.1						3.6
03	200	4.4						3.6
04	210	3.0					1.8	3.6
05	230	1.9					2.3	3.5
06	250	3.0					2.5	3.3
07	230	5.4	---	---	110	2.0	3.8	3.5
08	(270)	6.7	210	---	110	2.5	4.0	3.2
09	300	7.7	200	---	110	3.0	4.3	3.0
10	320	8.6	200	4.3	100	3.2	5.2	2.7
11	330	9.3	190	4.4	100	3.2	4.8	2.5
12	330	9.2	190	4.4	100	3.3	4.0	2.5
13	320	9.4	190	4.3	100	3.3	4.0	2.5
14	320	10.0	190	---	100	3.2	4.1	2.8
15	300	10.6	200	---	100	3.0	3.8	3.0
16	280	11.0	220	---	110	2.7	3.8	3.2
17	250	11.0	220	---	110	2.2	4.0	3.4
18	230	10.5					3.0	3.3
19	230	10.0					2.3	3.2
20	220	9.3					1.9	3.2
21	220	8.4						3.2
22	230	7.7						3.1
23	260	7.1						3.05

Time: 120.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 30

Leopoldville, Belgian Congo (4.3°S, 15.4°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M2000)F2
00	220	4.2						2.5
01	250	3.4						2.3
02	260	3.1						2.4
03	245	2.9						2.6
04	230	2.6					1.6	2.8
05	230	3.4					2.3	2.75
06	235	5.8	225	---	115	2.1	3.1	3.0
07	260	6.0	210	---	110	2.7	2.9	2.7
08	300	6.2	210	4.4	110	3.1		2.4
09	360	7.1	205	4.4	110	3.3		2.1
10	375	8.9	200	4.5	110	3.4		2.1
11	360	10.0	200	4.5	110	3.5		2.1
12	350	10.9	210	4.5	110	3.4		2.1
13	335	11.5	220	4.4	110	3.3		2.2
14	310	12.0	220	4.3	110	3.1		2.3
15	290	12.0	230	---	110	2.8	3.3	2.3
16	280	11.6	230	---	115	2.3	3.0	2.4
17	250	10.7	250	---			2.7	2.4
18	240	11.0					1.9	2.4
19	230	10.7						2.6
20	215	9.5						2.6
21	210	7.8						2.7
22	210	6.2						2.5
23	215	4.7						2.4

Time: 0.0°.
Sweep: 1.0 Mc to 16.0 Mc in 7 seconds.

Table 31

Talara, Peru (4.6°S, 81.3°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	200	7.8					3.5	3.5
01	210	6.4					3.2	3.4
02	220	5.0					3.1	3.4
03	220	3.8					3.1	3.5
04	230	2.8					2.4	3.4
05	240	2.4					1.8	3.4
06	250	(2.2)			100	---	3.4	(3.3)
07	240	5.0			110	1.8	2.9	3.5
08	(270)	6.6	220	---	110	2.5	3.5	3.2
09	300	7.5	200	---	110	3.0	4.4	2.8
10	340	7.9	200	4.3	100	3.3	4.7	2.6
11	370	8.1	200	4.4	100	3.4	4.0	2.4
12	370	8.4	200	4.4	100	3.5	3.6	2.4
13	370	8.6	200	4.4	100	3.5	3.9	2.3
14	350	8.8	200	4.4	100	3.4	4.6	2.5
15	320	9.0	200	4.2	100	3.2	5.0	2.65
16	290	9.6	200	4.1	100	3.0		2.8
17	(270)	9.7	220	---	100	2.6	3.3	2.8
18	240	9.2			110	2.1	3.0	2.9
19	240	9.1					2.2	2.9
20	270	8.7						2.9
21	250	8.8						3.1
22	220	9.0						3.4
23	210	8.8					2.8	3.4

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 32

Elisabethville, Belgian Congo (11.6°S, 27.5°E) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M2000)F2
00	230	3.0						2.6
01	(240)	2.7					1.5	2.4
02	(270)	2.4					1.7	2.4
03	260	2.3					1.8	2.5
04	250	2.8					1.8	2.6
05	240	5.4	230	---	120	1.9	2.8	2.8
06	250	6.2	220	---	110	2.6	3.4	2.7
07	280	6.3	220	4.3	110	3.0	3.8	2.5
08	300	6.9	220	4.4	110	3.2		2.4
09	300	7.5	220	4.6	105	3.4		2.4
10	330	7.6	220	4.6	105	3.5		2.2
11	320	8.0	240	4.6	105	3.5		2.2
12	320	8.5	250	4.5	105	3.3		2.2
13	305	9.0	240	4.4	110	3.1	3.2	2.3
14	290	9.1	230	4.2	110	2.9	4.0	2.4
15	265	8.8	230	---	115	2.5	3.5	2.4
16	245	8.2	240	---	120	1.8	2.9	2.5
17	230	7.7					2.5	2.5
18	230	7.0					2.2	2.55
19	225	6.0					1.8	2.6
20	240	4.5					1.6	2.4
21	240	3.6					1.6	2.35
22	255	3.4						2.5
23	240	3.6					2.4	2.5

Time: 0.0°.
Sweep: 1.0 Mc to 16.0 Mc in 7 seconds.

Table 33

Huancayo, Peru (12.0°S, 75.3°W) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	230	6.8						3.3
01	230	6.3						3.3
02	220	5.0						3.4
03	230	3.8						3.4
04	240	2.5						3.4
05	250	2.0						3.4
06	260	3.3			---	E	4.5	3.2
07	(260)	6.3	230	---	110	2.2	5.8	3.5
08	(280)	7.6	210	---	110	2.7	9.4	3.3
09	310	8.1	200	4.3	110	---	11.3	2.9
10	340	8.0	200	4.4	100	---	11.9	2.6
11	350	7.2	190	4.4	100	---	12.0	2.6
12	360	7.2	190	4.4	100	---	12.0	2.6
13	350	7.4	190	4.4	100	---	11.5	2.6
14	340	7.6	190	4.3	100	---	11.9	2.6
15	310	8.0	190	4.2	110	---	11.2	2.7
16	(290)	8.4	190	---	110	---	10.5	2.7
17	(260)	8.4	200	---	110	2.4	8.0	2.8
18	250	8.4			120	(1.8)	4.6	2.8
19	270	8.0						2.8
20	270	7.8						2.9
21	240	8.0						3.2
22	230	7.6					2.7	3.3
23	220	7.2						3.3

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 34

Watheroo, W. Australia (30.3°S, 115.9°E) — March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.6					2.0	3.0
01	270	3.5					2.6	3.0
02	250	3.6					2.2	3.0
03	250	3.5					2.0	3.15
04	240	3.2					1.6	3.2
05	250	3.0					1.3	3.1
06	250	3.2				---	1.4	3.2
07	240	4.3	---	---		1.8		3.5
08	280	5.0	230	3.8		2.4	2.8	3.3
09	300	5.4	210	4.2		2.8	3.8	3.3
10	290	5.8	200	4.3		3.0	3.8	3.35
11	320	6.0	200	4.4		3.2	3.7	3.2
12	320	6.5	200	4.4		3.2	3.6	3.1
13	310	6.5	200	4.4		3.3	3.7	3.1
14	300	6.6	200	4.4		3.2	3.7	3.1
15	300	6.8	220	4.2		3.0	3.6	3.2
16	280	6.7	220	4.0		2.8	3.7	3.3
17	260	6.5	230	3.6		2.3	3.5	3.4
18	240	6.0	---	---		(1.8)	1.9	3.5
19	220	(5.0)				---		(3.4)
20	220	4.0						3.3
21	250	3.9						3.0
22	250	3.6						3.0
23	260	3.5						3.0

Time: 120.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 2 minutes.

Table 35

Point Barrow, Alaska (71.3°N, 156.8°W) — February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	(2.6)					5.6	(3.4)
01	---	(2.5)					7.0	---
02	---	(2.9)					6.5	---
03	---	(2.5)					6.0	(3.1)
04	---	---					4.7	---
05	---	---					4.2	---
06	---	---					4.2	---
07	---	---					4.2	---
08	---	---					4.4	---
09	(260)	(3.0)					4.4	(3.2)
10	(250)	3.6	---	---			3.5	3.3
11	270	3.8	---	---	---	---	2.6	3.3
12	270	4.0	---	---	---	---		3.3
13	250	4.3	220	---	---	---		3.4
14	250	4.7	230	---	---	---		3.4
15	240	4.9	---	---	---	---		3.3
16	250	(4.5)			---	---		(3.3)
17	250	(3.9)			---	---	2.5	(3.2)
18	250	(3.0)					3.4	(3.2)
19	(240)	(2.2)					3.5	(3.3)
20	---	(1.9)					4.1	(3.3)
21	---	---					4.3	---
22	---	---					4.6	---
23	---	---					5.8	---

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 36

Reykjavik, Iceland (64.1°N, 21.8°W) — February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00							3.8	
01	---	---					5.2	---
02	---	---					5.0	---
03	---	---					5.0	---
04	---	---					4.2	
05	---	---					3.6	---
06	(320)	(2.2)					3.2	(3.1)
07	(300)	(2.1)					2.8	---
08	270	2.6						3.2
09	250	3.5						3.3
10	250	4.1	---	---	---	---		3.35
11	260	4.3	---	---	---	---		3.4
12	260	4.5	230	---	---	---		3.3
13	260	4.6	210	---	---	---		3.4
14	270	4.6	240	---	---	---		3.3
15	250	4.4	---	---	---	---		3.3
16	260	4.0	---	---	---	---		3.3
17	250	(3.8)					1.9	3.2
18	260	(3.4)					4.2	(3.1)
19	(280)	---					3.9	---
20	---	(2.5)					5.0	---
21	---	---					4.0	
22	---	---					4.1	---
23	---	---					3.9	

Time: 15.0°.
Sweep: 1.0 Mc to 25.0 Mc in 16.2 seconds.

Table 37

Lindau/Harz, Germany (51.6°N, 10.1°E) February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	275	2.8					2.0	3.1
01	250	3.0					2.0	3.1
02	250	2.9					2.0	3.1
03	250	2.9					2.0	3.1
04	255	2.8					2.0	3.1
05	250	2.2					2.0	3.1
06	300	1.9					2.0	3.15
07	250	2.4					2.0	3.3
08	225	4.1	210		---	E	2.2	3.6
09	230	4.8	205		120	2.0	2.0	3.6
10	230	5.4	205		110	2.4	3.0	3.6
11	240	5.6	205		105	2.6	3.1	3.5
12	240	5.9	200		105	2.6	3.1	3.5
13	235	5.7	205		105	2.6		3.5
14	240	5.7	205		105	2.5	3.0	3.5
15	240	5.8	210		110	2.4	3.0	3.4
16	225	5.6	215		120	2.0	2.6	3.6
17	215	5.1	---		---	E	2.0	3.5
18	215	4.6					2.0	3.3
19	230	4.2					2.0	3.3
20	230	3.7					2.0	3.3
21	240	3.2					2.0	3.2
22	255	2.9					2.0	3.2
23	270	2.8					2.0	3.1

Time: 15.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 8 minutes.

Table 38

Talara, Peru (4.6°S, 81.3°W) February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	230	6.8					3.9	3.35
01	230	6.7					2.4	3.4
02	210	5.7						3.6
03	210	3.5						3.55
04	220	3.3						3.5
05	230	3.0						3.4
06	240	(2.5)			110	---	2.0	(3.3)
07	240	5.0			110	1.7		3.4
08	(270)	6.8	230	---	100	2.5		3.3
09	300	7.6	210	4.1	100	2.9		3.1
10	320	8.3	200	4.3	100	3.2		2.95
11	350	8.4	200	4.4	100	3.4	3.7	2.6
12	380	8.5	190	4.5	100	3.5	3.5	2.4
13	370	8.4	190	4.5	100	3.5		2.5
14	350	8.7	190	4.4	100	3.5		2.6
15	330	9.3	200	4.3	100	3.3	4.1	2.8
16	300	9.6	200	---	100	3.1		2.9
17	270	9.5	200	---	100	2.6	5.2	3.0
18	230	9.2	230	---	100	---	4.5	3.0
19	230	8.9						3.2
20	230	8.0					2.8	3.2
21	230	7.3					2.8	3.2
22	230	7.3					3.4	3.3
23	220	7.3					3.7	3.4

Time: 75.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 39

Johannesburg, Union of S. Africa (26.2°S, 28.1°E) February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	3.7						3.0
01	250	3.7					1.8	3.0
02	240	3.6					1.8	3.15
03	240	3.3					2.1	3.1
04	240	3.1					1.8	3.1
05	250	2.9						3.0
06	240	3.8			120	1.6		3.3
07	270	4.8	230	3.6	110	2.2		3.2
08	330	5.6	230	4.1	110	2.7	3.0	3.1
09	330	6.1	220	4.3	110	3.1	4.0	3.0
10	320	6.8	210	4.4	110	3.2	4.0	3.0
11	310	7.2	200	4.5	110	3.4	4.1	3.05
12	300	7.6	200	4.6	110	3.4	3.8	3.05
13	300	7.0	190	4.6	110	3.4	3.7	3.1
14	320	6.6	190	4.5	100	3.4	3.7	3.05
15	310	6.6	200	4.4	110	3.2		3.0
16	300	6.6	210	4.2	110	3.0	3.6	3.1
17	280	6.2	220	3.9	110	2.6	3.5	3.1
18	260	6.2	230	3.3	120	2.1	2.8	3.2
19	230	6.4					2.3	3.2
20	230	5.8					2.0	3.2
21	230	4.9					1.8	3.1
22	240	4.2					1.7	3.1
23	250	3.8					1.7	3.0

Time: 30.0°E.
Sweep: 1.0 Mc to 15.0 Mc in 7 seconds.

Table 40

Capetown, Union of S. Africa (34.2°S, 18.3°E) February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.7					1.9	2.9
01	260	3.5					1.9	3.0
02	260	3.6					2.1	3.0
03	250	3.5					2.5	3.1
04	250	3.6					1.9	3.0
05	250	3.3						3.0
06	250	3.4						3.1
07	250	4.5	240	3.2	130	1.9		3.2
08	310	5.0	240	3.9	120	2.5		3.1
09	330	5.6	230	4.1	110	2.9		3.0
10	340	5.9	220	4.3	110	3.1	3.3	3.0
11	330	6.2	220	4.4	110	3.3	3.6	3.0
12	340	6.5	210	4.5	110	3.4	3.8	2.9
13	340	6.4	210	4.5	110	3.4	3.8	2.9
14	340	6.6	200	4.4	110	3.3	3.8	2.9
15	340	6.6	210	4.4	110	3.2	3.7	2.95
16	320	6.3	210	4.3	110	3.1	3.6	3.0
17	300	6.0	230	4.1	110	2.9	3.7	3.1
18	290	5.7	230	3.6	120	2.6	3.2	3.1
19	260	5.7	240	2.8	120	2.0	2.7	3.2
20	230	5.3					1.9	3.2
21	230	5.0					1.5	3.2
22	240	4.2						3.2
23	250	3.8						3.1

Time: 30.0°E.
Sweep: 1.0 Mc to 15.0 Mc in 7 seconds.

Table 41

Point Barrow, Alaska (71.3°N, 156.8°W) January 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					5.6	---
01	---	---					5.8	---
02	---	---					6.5	---
03	---	(1.7)					5.0	(3.1)
04	---	---					4.7	---
05	---	---					4.6	
06	---	(3.2)					4.5	---
07	---	---					4.7	---
08	---	(2.2)					4.6	---
09	---	(2.3)					4.5	(3.0)
10	(290)	(2.8)					4.0	(3.1)
11	250	(3.4)	---	---	---	---	3.5	(3.3)
12	250	3.8	---	---	---	---	3.3	3.3
13	240	(4.1)	---	---	---	---	2.8	(3.3)
14	230	(4.0)	---	---	---	---	2.4	3.3
15	240	(4.0)	---	---	---	---	3.5	3.2
16	250	(3.5)					3.2	(3.2)
17	240	(2.8)					(4.3)	(3.3)
18	(250)	(2.0)					3.5	3.2
19	---	(1.6)					3.7	(3.25)
20	---	(1.6)					3.7	(3.2)
21	(290)	(2.6)					3.8	(3.2)
22	---	---					4.4	---
23	---	---					5.8	---

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 42

Point Barrow, Alaska (71.3°N, 156.8°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00							4.8	
01	---	---					5.4	---
02	---	---					5.2	---
03	---	---					4.5	
04	---	---					4.3	---
05	---	---					4.4	
06	---	---					4.4	
07	---	---					4.8	---
08	---	---					4.6	---
09	---	(2.0)					4.5	(3.1)
10	280	(2.2)					4.0	(3.1)
11	250	(3.0)					3.8	(3.3)
12	250	(3.4)					3.5	(3.2)
13	230	(3.8)					3.2	(3.2)
14	240	(3.5)					3.2	(3.2)
15	230	(3.1)					3.3	(3.3)
16	(250)	(2.4)					2.8	(3.2)
17	250	(2.0)					3.7	(3.3)
18	---	(1.5)					3.9	(3.3)
19	---	(1.4)					3.8	---
20	---	---					3.8	---
21	---	---					3.9	---
22	---	---					4.0	---
23							4.8	

Time: 150.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 43*

Inverness, Scotland (57.4°N, 4.2°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	305	(1.9)						2.8
01	305	1.7						2.9
02	290	1.8						2.8
03	300	1.6					1.9	2.8
04	290	(1.5)					2.4	2.9
05	290	1.4					2.4	2.9
06	280	1.4					2.5	3.1
07	280	1.5					2.0	3.1
08	270	(2.0)					2.4	3.1
09	210	3.6			(150)	(1.6)	2.7	3.5
10	215	4.6			135	1.8	2.6	3.6
11	215	4.9			130	1.9	2.4	3.7
12	215	5.2	210	2.9	130	2.0	2.4	3.7
13	215	5.2	(210)	(2.6)	130	2.0	2.3	3.7
14	215	4.9			135	1.8	2.4	3.6
15	210	4.6			145	1.7	2.4	3.7
16	210	4.1					2.0	3.5
17	230	3.0						3.3
18	250	2.2						3.3
19	290	1.8						3.0
20	305	1.7						3.0
21	295	1.7						2.9
22	320	(1.6)					2.3	2.9
23	335	(1.6)					2.4	(2.8)

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 44*

Slough, England (51.5°N, 0.6°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	265	3.1					2.6	3.0
01	255	3.0					2.6	3.0
02	260	3.2					2.6	3.0
03	260	2.8					2.6	3.0
04	255	2.5					2.6	3.0
05	245	2.3					2.7	3.1
06	250	2.2					2.6	3.15
07	255	2.2					2.6	3.2
08	230	3.6			145	1.5	2.6	3.5
09	220	4.7			130	1.8	3.2	3.65
10	225	5.1	220	3.0	125	2.1	3.6	3.65
11	230	5.5	220	3.3	120	2.3	3.9	3.6
12	230	5.6	220	3.3	125	2.3	3.7	3.6
13	225	5.2	215	3.2	125	2.3	3.6	3.65
14	225	5.3	215	2.9	125	2.1	3.3	3.6
15	225	5.0			135	1.8	3.1	3.55
16	225	4.3					2.9	3.5
17	220	3.3					2.6	3.35
18	230	2.6					2.3	3.1
19	255	2.5					2.6	3.1
20	260	2.7					2.2	3.15
21	255	2.6					2.4	3.1
22	255	2.7					2.4	3.0
23	265	2.8					2.6	3.0

Time: 0.0°.
Sweep: 0.55 Mc to 16.5 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 45*

Singapore, British Malaya (1.3°N, 103.8°E) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	2.9						3.1
01	270	2.6						2.8
02	285	2.5						2.8
03	275	2.4					1.7	3.0
04	260	2.4					2.0	(3.3)
05	250	2.2					2.0	(3.3)
06	250	3.5			160	1.4	2.2	3.2
07	240	5.8	235		120	2.1	3.1	3.2
08	(285)	6.5	215		120	2.7	3.8	2.9
09	390	6.8	210	4.2	115	3.0	4.0	2.5
10	440	6.9	210	4.3	110	3.2	5.9	2.3
11	455	7.5	205	4.4	110	3.3	5.4	2.1
12	450	7.8	200	4.4	110	3.4	5.0	2.1
13	420	7.8	200	4.4	110	3.3	4.7	2.2
14	395	8.1	200	4.3	110	3.2	4.8	2.3
15	360	8.2	210	4.2	110	3.0	3.9	2.3
16	(340)	8.3	220		115	2.7	3.6	2.4
17	255	8.2	240		125	2.2	3.5	2.5
18	260	7.8			145	1.6	2.7	2.6
19	285	7.0					2.7	2.8
20	285	6.4					2.9	2.9
21	265	6.2					2.1	3.0
22	225	6.7						3.4
23	225	3.6						3.5

Time: 105.0°E.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, wich are median values.

Table 46

Nairobi, Kenya (1.3°S, 36.8°E) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<220	4.4						3.15
01	240	3.4						2.95
02	260	3.2						3.0
03	<260	3.3						3.0
04	<250	2.9						3.2
05	<250	2.8						3.2
06	<240	2.8						3.2
07	240	4.8	230	---	120	2.0	2.6	3.3
08	300	>6.0	220	4.0	110	2.6	3.4	3.2
09	340	6.4	210	4.2	110	2.9		2.9
10	360	>7.5	200	4.4	100	3.2		2.8
11	360	8.4	200	4.5	100	3.4	3.9	2.8
12	380	8.7	200	4.5	100	3.4		2.8
13	390	9.0	---	---	110	---	3.8	2.7
14	380	8.8	200	---	100	3.3	3.8	2.8
15	370	8.6	200	4.3	100	3.2		2.8
16	350	8.7	210	4.2	110	3.0	3.7	2.8
17	350	8.6	220	3.9	110	2.6	3.6	2.8
18	320	8.6	250	3.5	---	---	3.1	2.8
19	280	>7.0					2.6	2.9
20	300	>5.8						(2.8)
21	300	>6.4						(2.9)
22	250	>6.4						3.2
23	210	>7.1						3.2

Time: 45.0°E.
Sweep: 1.0 Mc to 15.0 Mc in 7 seconds.

Table 47*

Falkland Is. (51.7°S, 57.8°W) November 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	275	5.8					2.3	2.9
01	290	5.8					2.8	2.8
02	290	5.6					2.8	2.8
03	270	5.4					1.8	2.9
04	260	5.5				1.4		2.9
05	270	6.1	245		120	1.7	2.7	3.1
06	290	5.8	235		110	2.3	3.7	3.1
07	300	5.9	240	4.0	110	2.6	4.0	3.0
08	305	6.0	(235)	4.1	110	2.8	4.8	3.1
09	325	6.4	(215)	4.1	105	3.0	6.0	3.0
10	315	6.6	(215)	4.4	105	3.1	5.9	3.0
11	315	6.6	(220)	4.4	105	3.1	5.3	3.1
12	315	6.8	215	4.4	105	3.2	4.9	3.1
13	300	6.5	215	4.4	105	3.1	5.0	3.1
14	300	6.3	220	4.3	105	3.1	4.6	3.2
15	300	5.9	230	4.2	105	2.9	4.2	3.2
16	295	6.1	230	4.0	110	2.7	3.9	3.2
17	280	6.4	(235)	3.8	115	2.4	5.0	3.3
18	275	6.6	(245)	(3.5)	130	2.0	3.8	3.1
19	260	6.9					3.5	3.0
20	265	6.8					4.0	3.0
21	275	6.8					3.6	2.8
22	270	6.6					2.9	2.9
23	280	6.3					3.0	2.9

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 48*

Port Lockroy (64.8°S, 63.5°W) November 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	7.0						2.8
01	265	6.6						2.7
02	270	6.6						2.7
03	270	6.5	265		145	1.6		2.7
04	255	6.3	255		135	1.7	2.5	2.8
05	275	6.3	245		125	1.9	2.5	2.8
06	295	5.9	240	3.5	110	2.3	3.5	2.9
07	310	6.0	235	3.8	100	2.4	4.0	2.9
08	295	5.8	220	3.9	100	2.6	4.5	3.0
09	320	5.3	220	4.0	100	2.7	5.4	2.9
10	310	5.2	215	4.1	100	2.8	5.0	2.9
11	330	5.1	220	4.1	100	2.8	5.1	3.0
12	320	5.3	220	4.1	100	2.9	5.2	3.0
13	315	5.1	215	4.1	100	2.9	5.5	3.0
14	330	5.0	230	4.1	100	2.8	4.9	3.0
15	310	5.1	230	3.9	100	2.7		3.1
16	310	5.2	230	3.9	105	2.6	4.1	3.1
17	295	5.2	245		105	2.5	3.0	3.0
18	300	5.6	240		115	2.3	3.7	3.0
19	285	6.1	245		115	1.9	3.1	2.9
20	265	6.6			130	1.7	2.6	2.8
21	265	7.0						2.8
22	260	7.3					2.1	2.8
23	255	7.2						

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 49*

Ibadan, Nigeria (7.4°N, 4.0°E) September 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	5.4					1.8	3.0
01	255	5.0					2.2	3.1
02	240	4.0					1.9	3.3
03	250	2.8					2.0	3.4
04	240	2.3					2.1	3.4
05	245	1.5					2.0	3.4
06	245	4.9	---	---	122	1.8	4.9	3.4
07	---	6.4	230	---	110	2.5	4.9	3.3
08	305	7.3	210	4.1	110	3.0	6.6	3.0
09	340	7.7	203	4.3	102	3.3	9.0	2.6
10	375	7.0	200	4.4	101	3.4	10.2	2.4
11	380	6.7	188	4.4	101	3.5	10.2	2.5
12	370	7.0	196	4.4	101	3.5	10.0	2.6
13	355	7.5	197	4.4	104	3.5	9.3	2.6
14	335	7.6	200	4.2	104	3.3	9.2	2.6
15	315	8.1	200	4.1	108	3.0	6.6	2.6
16	---	8.1	211	---	110	2.6	4.7	2.6
17	---	8.6	245	---	120	1.9	4.9	2.7
18	255	8.7	---	---	(140)	(1.4)	3.7	2.8
19	275	8.2						2.8
20	265	7.7						3.1
21	250	7.2						3.3
22	240	6.6						3.3
23	250	5.8						3.2

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 50*

Ibadan, Nigeria (7.4°N, 4.0°E) August 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	(3.2)					1.4	---
01	305	(2.2)					1.0	---
02	290	(1.8)					1.9	---
03	270	(2.3)					2.3	---
04	250	(1.7)					2.1	---
05	260	(1.6)					4.4	---
06	250	4.5	(250)		130	1.7	4.0	3.3
07	(265)	6.1	235		110	2.4	4.4	3.3
08	310	6.9	220	4.1	110	3.0	5.4	3.1
09	340	7.2	210	4.3	105	3.3	6.6	2.9
10	370	7.0	205	4.3	105	3.4	8.2	2.6
11	390	7.0	200	4.3	105	3.4	9.0	2.5
12	400	6.6	200	4.3	105	3.4	9.2	2.5
13	380	6.8	205	4.3	105	3.4	9.0	2.5
14	375	6.9	200	4.2	110	3.3	6.8	2.5
15	355	7.0	200	4.1	110	3.1	6.7	2.6
16	325	7.4	210	(3.9)	115	2.6	6.4	2.6
17	(290)	7.6	225		125	2.1	4.9	2.8
18	255	7.9	---		(135)	(1.3)	4.1	2.9
19	255	7.2					2.6	3.0
20	265	6.4					2.2	3.0
21	255	5.1					2.0	3.2
22	260	4.4					2.0	3.1
23	260	3.8					2.0	3.1

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values exept foF2 and fEs, which are median values.

Table 51*

Ibadan, Nigeria (7.4°N, 4.0°E) July 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	(3.3)					1.2	---
01	280	---					1.3	---
02	280	---					1.2	---
03	310	---					1.3	---
04	280	---					1.3	---
05	(330)	---					2.0	---
06	245	4.3	---	---	(125)	(1.7)	3.9	3.4
07	285	5.7	235	---	110	2.5	5.0	3.3
08	330	6.4	215	3.9	110	3.0	5.2	3.1
09	355	6.8	205	4.1	110	3.3	5.5	2.8
10	400	6.7	200	4.2	(110)	3.4	8.8	2.5
11	420	6.2	195	4.3	(110)	3.4	9.0	2.5
12	425	6.2	200	4.3	(105)	3.4	9.0	2.5
13	405	6.1	200	4.2	110	3.4	6.8	2.5
14	385	6.4	200	4.1	110	3.4	6.7	2.6
15	360	6.6	200	4.0	110	3.0	6.6	2.7
16	320	6.9	215	3.6	110	2.8	5.1	2.8
17	290	7.2	235	---	110	2.1	5.2	2.9
18	250	7.2	---	---	(135)	(1.5)	4.6	3.0
19	250	6.8					4.6	3.2
20	255	6.0					2.2	3.3
21	260	4.6					2.0	3.3
22	275	3.8					1.8	3.3
23	285	(3.8)					2.0	---

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 52

Delhi, India (28.6°N, 77.1°E) June ** 1954

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	4.9						---
01	---	4.8						3.25
02	---	4.8						3.4
03	---	---						---
04	---	4.4						3.55
05	260	4.4						3.4
06	260	4.7						3.4
07	260	5.4						3.4
08	280	>6.2						3.3
09	280	5.9						3.3
10	280	6.2						3.15
11	320	6.6						2.95
12	320	>6.8						2.95
13	320	>6.9						3.05
14	320	7.2						3.05
15	300	7.4						3.05
16	280	>7.0						3.15
17	280	6.8						3.15
18	280	7.0						3.3
19	250	6.6						3.45
20	240	6.3						3.55
21	260	5.3						3.45
22	280	5.2						3.4
23	(280)	5.0						3.35

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 53

Bombay, India (19.0°N, 73.0°E) June ** 1954

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06								
07	270	5.0						3.2
08	300	5.9						3.05
09	300	6.3						3.0
10	330	6.8						2.9
11	360	7.8						2.75
12	360	8.2						2.7
13	390	8.9						2.65
14	360	9.1						2.8
15	360	9.2						2.75
16	360	9.0						2.8
17	330	8.2						2.85
18	330	7.8						2.9
19	300	7.4						3.05
20	280	6.2						3.2
21	270	5.2						3.35
22	240	4.2						3.5
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 54

Madras, India (13.0°N, 80.2°E) June ** 1954

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06	330	5.2						3.0
07	360	6.1						2.8
08	390	6.6						2.7
09	390	6.8						2.6
10	420	6.5						2.5
11	420	6.4						2.5
12	420	6.6						2.45
13	420	6.8						2.45
14	420	7.0						2.45
15	420	7.1						2.5
16	420	7.4						2.5
17	420	7.7						2.55
18	390	>7.5						2.65
19	390	>6.9						2.7
20	380	>5.9						2.75
21	330	5.1						2.95
22	---	---						
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 55

Tiruchy, India (10.8°N, 78.8°E) June 1954

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06	380	4.8						2.65
07	390	6.0						2.6
08	420	6.4						2.55
09	420	6.5						2.45
10	450	6.2						2.4
11	450	6.2						2.3
12	460	5.9						2.3
13	480	6.1						2.3
14	480	6.3						2.35
15	480	6.7						2.35
16	450	7.0						2.4
17	450	7.2						2.5
18	420	7.5						2.6
19	390	7.0						2.65
20	(420)	(6.9)						2.75
21	---	---						2.85
22								
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 56*

Ibadan, Nigeria (7.4°N, 4.0°E) June 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(255)	(4.0)						---
01	---	---					1.3	---
02	---	---					1.2	---
03	---	---					1.2	---
04	---	---						---
05	---	---					1.3	---
06	250	4.3			(110)	(1.5)	2.6	3.4
07	290	5.6	(230)		(110)	(2.5)	4.5	3.3
08	320	6.3	220	4.0	110	3.0	4.7	3.2
09	340	6.6	210	4.0	(110)	(3.3)	5.1	2.9
10	380	6.8	200	4.2	110	3.3	8.0	2.6
11	405	6.6	200	4.2	(110)	(3.4)	8.5	2.5
12	400	6.4	200	4.2	110	3.4	8.7	2.6
13	405	6.1	(200)	(4.2)	(110)	(3.4)	8.8	2.6
14	365	6.8	200	4.1	110	3.2	6.7	2.7
15	(340)	(6.8)	(200)	(3.9)	(110)	(3.0)	5.7	2.8
16	310	7.1	(215)		(110)	(2.4)	4.8	2.9
17		7.0	(230)		(110)	(2.0)	4.4	3.0
18	250	7.1			---	---	2.2	3.1
19	(240)	(6.4)					2.2	---
20	250	(5.2)					1.2	3.3
21	250	(4.6)						3.3
22	260	(4.1)						---
23	(245)	(4.2)						---

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 57*

Ibadan, Nigeria (7.4°N, 4.0°E) May 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	295	---						---
01	345	---						---
02	314	(1.8)					1.0	---
03	(295)	(1.1)					1.2	---
04	270	(1.3)					1.0	---
05	(345)	---					1.0	---
06	245	4.6	---	---	115	1.7	2.4	3.4
07	(275)	6.3	240	---	110	(2.5)	4.0	3.3
08	300	>6.8	225	4.1	110	2.8	4.8	3.2
09	330	7.5	220	4.3	110	3.3	6.6	2.8
10	345	7.8	215	4.3	105	3.3	7.6	2.7
11	345	8.2	205	4.4	110	3.4	8.3	2.6
12	345	8.0	200	4.4	105	3.4	8.2	2.7
13	340	8.5	200	4.3	110	3.4	6.0	2.7
14	335	8.6	195	4.3	110	3.2	5.5	2.7
15	310	9.0	205	(4.2)	110	3.0	6.0	2.9
16	300	8.6	220		110	2.7	4.6	2.9
17	(270)	8.8	(230)		110	1.9	5.2	3.1
18	255	8.5	---		105	(1.5)	2.1	3.1
19	250	7.5					1.3	3.2
20	255	6.2						3.2
21	255	(5.3)						3.2
22	270	(3.9)						3.2
23	290	(3.5)						---

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes.
*Average values except foF2 and fEs, which are median values.

Table 58

Fribourg, Germany (48.1°N, 7.8°E) May 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	3.6					2.0	2.9
01	270	3.4					2.0	2.9
02	270	3.2					1.8	2.9
03	270	3.2					2.0	2.9
04	<270	3.1					2.1	2.9
05	320	3.8	255	2.8	131	1.7	2.5	3.0
06	325	4.2	240	3.4	115	2.2	3.1	3.1
07	350	4.7	230	3.7	109	2.4	3.6	3.0
08	340	5.2	225	4.0	105	2.8	3.8	3.1
09	340	5.1	215	4.1	105	2.9	4.0	3.0
10	365	5.2	215	4.2	103	3.1	4.2	3.1
11	350	5.3	215	4.3	103	3.2	3.8	3.1
12	352	5.2	225	4.3	103	3.2	3.8	3.1
13	350	5.4	220	4.3	104	3.2	3.9	3.1
14	368	5.1	230	4.2	105	3.1	3.6	3.0
15	355	5.1	225	4.1	105	3.0	3.5	3.0
16	342	5.4	230	4.0	109	2.8	3.5	3.0
17	315	5.5	240	3.8	110	2.5	3.5	3.1
18	290	5.8	250	3.4	112	2.1	3.3	3.1
19	265	6.2	255	---	---	1.6	2.7	3.1
20	240	6.2					2.1	3.2
21	240	5.6					2.0	3.1
22	245	4.7					2.0	3.1
23	262	4.0					1.9	2.9

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 59

Delhi, India (28.6°N, 77.1°E) May 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00	---	---						3.0
01	---	---						3.2
02	---	---						3.1
03								
04	280	3.9						3.2
05	280	4.4						3.3
06	260	5.4						3.4
07	260	6.2						3.4
08	280	6.4						3.3
09	280	6.6						3.2
10	280	7.0						3.2
11	300	7.8						3.0
12	320	8.7						3.0
13	320	9.1						3.0
14	300	> 9.2						3.0
15	300	> 9.5						3.0
16	300	8.8						3.2
17	300	> 8.4						3.2
18	(280)	> 7.6						3.3
19	---	> 6.5						3.5
20	---	---						3.2
21	(280)	> 5.2						3.2
22	(300)	(4.8)						3.2
23	(280)	> 4.0						3.2

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 60

Bombay, India (19.0°N, 73.0°E) May 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06								
07	330	6.3						3.0
08	360	7.4						2.8
09	360	7.9						2.7
10	390	8.7						2.6
11	390	9.6						2.6
12	420	10.6						2.5
13	420	10.8						2.4
14	450	11.4						2.4
15	450	11.6						2.4
16	420	11.4						2.5
17	390	10.6						2.6
18	390	9.6						2.6
19	360	9.4						2.7
20	360	8.2						2.8
21	330	7.2						3.0
22	320	6.6						3.0
23	300	6.0						3.0

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 61

Madras, India (13.0°N, 80.2°E) May 1953 **

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06	320	5.6						3.0
07	360	7.1						2.9
08	390	7.6						2.7
09	420	7.8						2.6
10	420	7.7						2.4
11	450	7.4						2.4
12	450	7.4						2.4
13	450	>7.8						2.4
14	420	8.2						2.4
15	420	9.1						2.5
16	420	9.4						2.6
17	420	>10.0						2.6
18	390	>9.4						2.6
19	390	>8.0						2.7
20	360	>7.5						2.8
21	360	>6.2						2.8
22								
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; othsr columns, median values.

Table 62

Tiruchy, India (10.8°N, 78.8°E) May 1953 **

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06	360	5.1						2.8
07	420	7.0						2.6
08	450	7.5						2.4
09	480	7.4						2.3
10	500	7.0						2.2
11	510	6.9						2.2
12	510	7.0						2.2
13	510	7.4						2.2
14	510	7.7						2.2
15	510	8.1						2.2
16	510	8.3						2.2
17	510	8.5						2.3
18	480	8.4						2.3
19	480	8.0						2.4
20	450	7.5						2.4
21	420	6.9						2.6
22								
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 63

Fribourg, Germany (48.1°N, 7.8°E) April 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	3.2					1.8	2.8
01	290	3.3					1.8	2.8
02	280	3.1						2.8
03	<275	2.9					1.7	2.9
04	<270	2.7					1.9	2.9
05	260	2.8	---	---			1.8	3.2
06	252	3.8	240	---	125	1.6	2.3	3.3
07	302	4.1	230	3.4	114	2.2	2.7	3.2
08	350	4.5	<230	3.8	111	2.6	3.1	3.1
09	335	5.0	220	4.0	107	2.8	3.3	3.1
10	335	5.5	212	4.1	105	3.0	3.4	3.2
11	325	5.6	215	4.2	107	3.0	3.6	3.1
12	322	5.8	210	4.3	105	3.2	3.7	3.2
13	325	5.8	225	4.2	107	3.1	3.7	3.1
14	318	5.8	230	4.2	107	3.0	3.5	3.2
15	305	5.8	225	4.0	109	2.8	3.4	3.2
16	302	5.6	240	3.8	111	2.6	3.1	3.2
17	282	5.7	240	3.4	115	2.2	2.9	3.2
18	255	5.6	250	---	121	1.7	2.0	3.3
19	250	5.8					2.2	3.2
20	240	5.4					2.2	3.1
21	245	4.7					2.0	3.1
22	250	3.9					1.9	3.0
23	282	3.4					1.8	2.9

Tims: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 64

Delhi, India (28.6°N, 77.1°E) April 1953 **

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.6						3.1
01	300	3.5						3.1
02	(300)	(3.0)						(3.2)
03								
04	280	3.4						3.2
05	280	3.9						3.3
06	260	5.1						3.5
07	240	6.4						3.6
08	260	6.7						3.4
09	280	7.2						3.3
10	300	8.2						3.1
11	320	9.8						3.1
12	300	>10.9						3.1
13	300	>11.2						3.2
14	280	>11.2						3.2
15	280	>10.7						3.3
16	260	9.7						3.4
17	260	9.1						3.4
18	250	8.2						3.5
19	240	7.1						3.5
20	260	4.7						3.3
21	280	4.2						3.2
22	320	3.9						3.1
23	320	3.8						3.1

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutss, manual operation.
*Height at 0.83 foF2.
**Avsrage values; other columns, median values.

Table 65

Bombay, India (19.0°N, 73.0°E) April 1953 **

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06								
07	300	6.6						3.1
08:30	330	7.4						2.9
09	360	7.9						2.6
10	375	9.0						2.7
11	390	10.2						2.6
12	420	11.2						2.5
13	420	11.7						2.5
14	450	12.2						2.4
15	450	12.0						2.4
16	450	12.2						2.4
17	420	11.5						2.5
18	390	10.6						2.6
19	360	9.9						2.8
20	360	8.6						2.6
21	330	7.2						3.0
22	300	6.1						3.0
22:30	300	5.4						3.1

Time: 75.0°E.
Swsep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Avsrage values; other columns, median values.

Table 66

Madras, India (13.0°N, 80.2°E) April 1953 **

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00								
01								
02								
03								
04								
05								
06	300	5.7						3.0
07	360	7.4						2.9
08	390	8.2						2.6
09	420	7.9						2.5
10	420	7.6						2.5
11	420	7.9						2.5
12	450	8.2						2.4
13	450	8.6						2.4
14	420	9.4						2.5
15	420	>9.8						2.5
16	420	10.4						2.5
17	420	11.2						2.6
18	420	10.3						2.6
19	390	9.5						2.6
20	390	>8.8						2.7
21	360	>8.0						2.8
22	---	>8.2						(2.8)
23								

Tims: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutss, manual operation.
*Hsight at 0.83 foF2.
**Avorage values; other columns, msdian values.

Table 67

Tiruchy, India (10.8°N, 78.8°E) April 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06	360	4.8						2.8
07	420	7.3						2.6
08	450	7.9						2.4
09	480	7.5						2.3
10	510	7.5						2.2
11	510	7.5						2.2
12	540	7.8						2.2
13	540	7.9						2.2
14	540	8.2						2.2
15	510	8.8						2.2
16	510	9.4						2.2
17	510	10.0						2.2
18	480	9.3						2.3
19	480	9.2						2.3
20	480	8.4						2.4
21	450	7.6						2.4
22								
23								

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 68

Fribourg, Germany (48.1°N, 7.8°E) March 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<280	2.9						2.9
01	280	2.8					1.6	2.9
02	275	2.7					1.5	2.8
03	270	2.5					1.8	2.8
04	260	2.4					1.7	2.9
05	252	2.1					1.7	3.1
06	245	2.8	---	---	---	E	2.0	3.2
07	240	3.9	230	---	123	1.9	2.0	3.3
08	270	4.4	225	3.4	117	2.2	2.3	3.4
09	285	4.8	222	3.8	113	2.5	3.3	3.3
10	310	5.2	220	3.9	111	2.7	3.4	3.3
11	305	5.3	212	4.0	111	2.8	3.2	3.3
12	305	5.4	220	4.1	111	2.9	3.3	3.2
13	305	5.4	220	4.0	111	2.8	2.5	3.2
14	295	5.4	225	3.9	111	2.8	2.6	3.2
15	280	5.4	230	3.8	113	2.6	2.4	3.3
16	275	5.4	235	3.5	117	2.4	2.3	3.3
17	250	5.4	240	---	119	2.0	2.0	3.3
18	240	5.0	---	---	---	E	2.0	3.2
19	230	4.9						3.2
20	240	4.3					1.7	3.1
21	245	3.8						3.0
22	270	3.3					1.8	2.9
23	268	3.1						2.9

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 69

Delhi, India (28.6°N, 77.1°E) March 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00	280	3.0						3.1
01	290	3.0						3.1
02	(300)	(2.9)						(3.1)
03								
04	280	2.6						3.2
05	260	>3.0						3.4
06	260	3.7						3.4
07	240	5.4						3.6
08	240	6.0						3.4
09	280	6.6						3.3
10	260	7.6						3.3
11	280	>8.4						3.2
12	280	9.2						3.2
13	280	9.8						3.3
14	260	9.7						3.4
15	260	9.4						3.4
16	260	>9.0						3.4
17	250	7.6						3.4
18	240	6.7						3.6
19	240	6.1						3.8
20	240	4.3						3.6
21	280	3.6						3.3
22	280	3.6						3.3
23	280	3.2						3.2

Time: Local.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 70

Bombay, India (19.0°N, 73.0°E) March 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06								
07	300	6.1						3.1
08:30	330	7.4						2.9
09	360	7.9						2.8
10	360	8.8						2.8
11	390	10.0						2.6
12	390	10.8						2.6
13	420	11.3						2.6
14	420	11.8						2.5
15	420	12.1						2.5
16	420	12.0						2.5
17	390	11.4						2.6
18	360	10.6						2.8
19	360	9.8						2.8
20	330	8.5						2.9
21	300	7.4						3.0
22	300	6.4						3.0
22:30	300	5.5						3.1

Time: Local.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 71

Madras, India (13.0°N, 80.2°E) March 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06								
07	300	5.9						3.0
08	360	7.3						2.8
09	390	8.3						2.6
10	420	8.5						2.6
11	420	8.2						2.4
12	420	8.1						2.5
13	420	8.1						2.5
14	420	8.6						2.4
15	420	9.0						2.5
16	420	9.7						2.6
17	420	10.2						2.6
18	420	10.2						2.5
19	390	>9.4						2.6
20	390	8.7						2.6
21	360	8.7						2.8
22	360	8.4						2.8
23								

Time: Local.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 72

Tiruchy, India (10.8°N, 78.8°E) March 1953

Time	*	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2 **
00								
01								
02								
03								
04								
05								
06	360	4.6						2.8
07	390	6.5						2.6
08	450	7.5						2.4
09	480	7.8						2.3
10	510	7.7						2.2
11	510	7.6						2.2
12	540	7.6						2.2
13	540	7.7						2.2
14	540	7.8						2.2
15	540	8.5						2.2
16	540	8.9						2.2
17	510	8.7						2.2
18	510	8.4						2.2
19	510	8.0						2.2
20	480	8.0						2.3
21	465	7.6						2.4
22	465	7.4						2.4
23								

Time: Local.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.
**Average values; other columns, median values.

Table 73

Fribourg, Germany (48.1°N, 7.8°E) February 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	255	3.0						2.9
01	255	3.2						2.9
02	<265	3.1						2.9
03	265	3.2						2.9
04	260	2.9						3.0
05	250	2.3						3.1
06	240	2.3						3.2
07	230	3.4						3.4
08	220	4.7	222	---	121	1.8	1.8	3.6
09	225	5.3	220	---	115	2.2	2.1	3.6
10	245	5.7	215	3.6	111	2.5	2.6	3.5
11	258	5.8	220	3.8	113	2.7	2.2	3.4
12	255	5.9	220	3.9	113	2.8	2.2	3.5
13	250	5.7	230	3.8	117	2.8	2.0	3.5
14	250	5.5	225	3.6	117	2.6	1.7	3.5
15	240	5.7	230	---	117	2.4	1.8	3.4
16	235	5.7	230	---	121	2.1	2.0	3.5
17	222	5.2	---	---	---	---	1.8	3.5
18	220	4.2						3.2
19	240	4.2						3.2
20	235	3.8						3.2
21	240	3.2						3.1
22	260	2.9						3.0
23	252	3.1						3.0

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 74

Fribourg, Germany (48.1°N, 7.8°E) January 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.0					1.6	3.0
01	265	3.1						2.9
02	<270	3.0						3.0
03	260	3.0						3.0
04	255	2.8						3.1
05	240	2.4						3.2
06	240	2.2						3.2
07	245	2.5						3.1
08	220	4.8	---	---	<141	1.6	2.4	3.5
09	220	6.0	230	---	113	2.1	2.2	3.6
10	235	6.3	230	---	111	2.4	1.9	3.6
11	240	6.7	230	---	111	2.6	1.9	3.5
12	235	6.6	222	3.5	117	2.6		3.5
13	240	6.4	225	---	---	2.6		3.5
14	240	6.3	230	---	120	2.4		3.5
15	230	6.0	230	---	121	2.2	2.0	3.5
16	220	5.4	---	---	<128	1.8	2.0	3.6
17	220	4.4					1.9	3.4
18	235	3.7						3.2
19	235	3.2						3.2
20	<260	2.9						3.0
21	275	3.0					1.9	3.0
22	275	3.0						2.9
23	270	2.9						2.9

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutee, automatic operation.

Teble 75

Fribourg, Germany (48.1°N, 7.8°E) December 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.3						2.9
01	< 266	3.1					1.8	2.9
02	266	3.2						2.9
03	270	3.0						2.9
04	260	2.7						3.0
05	245	2.4						3.0
08	< 235	2.3						3.2
07	235	2.5					2.0	3.2
08	216	4.5			---	1.5	2.3	3.6
09	220	5.5	225	---	121	2.0	2.1	3.5
10	225	5.6	228	---	<117	2.3	2.5	3.6
11	225	8.7	225	---	113	2.6	2.6	3.5
12	225	8.4	220	3.4	121	2.5	2.7	3.5
13	230	6.3	228	---	121	2.5	2.5	3.5
14	230	6.3	235	---	122	2.3	2.8	3.6
15	225	8.0	232	---	124	2.0	2.1	3.6
15	220	6.0	---	---	---	1.5	2.1	3.4
17	220	4.4					2.5	3.3
18	235	3.5					2.0	3.2
19	240	3.2					2.0	3.2
20	235	3.2					1.8	3.2
21	256	3.0						3.0
22	270	3.2						3.0
23	260	3.2						2.9

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 mimutee, automatic operation.

Teble 76

Fribourg, Germany (48.1°N, 7.8°E) November 1962

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	< 275	3.1					2.3	2.9
01	276	3.2					2.0	2.9
02	265	3.2						2.9
03	256	3.2						3.0
04	< 250	2.9						3.0
06	< 245	2.5						3.2
05	225	2.4						3.2
07	230	3.9						3.4
08	215	5.3	226	---	123	1.8	2.0	3.5
09	226	6.0	225	---	<119	2.3	2.8	3.5
10	235	6.7	230	---	115	2.5	3.3	3.6
11	235	7.0	225	---	115	2.6	3.2	3.5
12	235	6.8	220	---	112	2.7	3.4	3.6
13	235	5.5	225	---	119	2.5	3.1	3.6
14	240	6.6	235	---	118	2.6	2.4	3.5
16	230	5.5	235	---	121	2.2	2.4	3.6
15	220	6.7			---	1.8	2.6	3.5
17	218	4.5					2.5	3.4
18	230	3.9					2.1	3.2
19	230	3.8					1.7	3.2
20	235	3.2						3.2
21	245	3.0						3.0
22	272	3.0						3.0
23	270	3.2					2.1	2.9

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 mimutee, automatic operation.

Teble 77

Fribourg, Germany (48.1°N, 7.8°E) October 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	3.2					2.0	2.8
01	290	3.2					1.9	2.8
02	290	3.1					2.1	2.9
03	280	3.1					2.0	2.9
04	276	3.0					2.0	2.9
06	235	2.7					2.1	3.2
05	250	2.9			---	---		3.1
07	235	4.5	230	---	121	1.8	2.3	3.4
08	235	5.6	232	3.4	116	2.3	3.1	3.5
09	255	6.0	230	3.8	113	2.5	3.7	3.4
10	260	6.4	220	4.0	110	2.8	3.8	3.5
11	255	7.1	222	4.1	111	2.8	4.1	3.4
12	255	6.9	222	4.0	111	3.0	3.7	3.3
13	255	5.7	225	4.0	111	2.8	3.5	3.4
14	255	7.0	230	3.9	109	2.8	3.4	3.4
16	250	6.7	240	---	111	2.5	3.3	3.4
18	240	6.6	240	---	113	2.2	3.1	3.4
17	230	6.3	---	---	---	1.8	2.8	3.4
18	235	5.8					2.9	3.2
19	235	5.4					2.6	3.3
20	235	4.1					2.1	3.2
21	255	3.4					2.4	3.0
22	270	3.4					2.2	2.9
23	286	3.2					2.2	2.8

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 mimutee, automatic operation.

Table 78

Fribourg, Germany (48.1°N, 7.8°E) September 1962

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.6					1.9	2.8
01	290	3.5					1.7	2.8
02	<280	3.4					2.0	2.8
03	270	3.1					2.0	2.8
04	270	3.0					2.0	2.8
05	<256	2.8					2.0	3.0
06	245	3.8	240	---	131	1.6	2.5	3.2
07	255	4.7	240	3.4	113	2.2	3.2	3.4
08	295	4.8	230	3.8	111	(2.6)	3.4	3.3
09	320	6.2	225	4.1	110	2.8	3.6	3.1
10	305	6.0	215	4.3	109	(3.0)	4.1	3.2
11	300	5.9	215	4.4	109	(3.1)	3:5	3.3
12	308	5.9	215	4.4	109	3.2	3.5	3.2
13	290	8.0	220	4.4	107	3.2	3.4	3.2
14	285	6.0	220	4.3	107	3.0	3.2	3.3
15	290	5.1	225	4.1	109	2.8	3.1	3.2
16	270	6.3	235	3.9	109	2.5	3.2	3.3
17	258	5.2	245	---	116	2.2	2.8	3.2
18	245	6.4	260	---	---	<1.6	2.8	3.2
19	240	6.4					3.0	3.1
20	240	6.7					3.1	3.2
21	240	4.9					2.4	3.2
22	252	4.2					2.2	3.0
23	270	3.7					2.3	2.8

Time: Local.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Form adopted June 1946

TABLE 79

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D C

IONOSPHERIC DATA

h'F2 (Characteristic), Km (Unit), May (Month), 1955

Observed at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(280)S	(310)S	(280)S	260	(280)S	250	220	350	350F	380H	350	350	390	380	330	320	320	300	270	240	220	220	250	270
2	290	280	260	260	(300)S	240	230	270	280	270	290	350	360	310	300	310	300	270	260	220	210	230	240	240
3	270	280	280	290	(300)S	250	260	280	280	280	340	330	380	350	300	270	280	290	260	220	220	220	(260)A	260
4	260	260	240	250	250	250	230	260	280	310	310	320	330	310	290	320	300	280	[260]A	230	230	210	220	240
5	[280]A	(320)A	A	A	(320)S	250	220	370	[380]S	360	360	410	380H	340	320	330	310	300	260	350	280	240	230	240
6	270	270	300	(280)S	(290)S	260	240	340	330	G	G	500	(490)S	GK	520K	GK	500K	(660)SK	330K	270K	240K	240K	250K	250K
7	290K	280	260	230	(260)S	280	230	250	(270)L	290	280	280	360	320	310	300	300	260	260	230	210	230	270	270
8	(300)S	(280)S	(280)SK	(270)SK	(280)SK	(230)SK	220K	LK	GK	GK	500K	370K	390K	360K	360K	300K	350K	310K	260K	230K	200K	220K	(290)AK	280K
9	(290)SK	[300]AK	(300)AK	280K	270K	(280)AK	LK	430FK	370K	(390)SK	400K	GK	GK	520K	390K	380K	370K	350K	290K	250K	240K	AK	AK	AK
10	AK	(300)AK	280	290	(290)S	280	340	330	300	L	410	360	330	340	390	320	320	280	240	220	(260)A	240	240	250
11	280	280	310	(290)S	280	250	230	L	440	[470]A	500	GK	GK	AK	420K	380K	340K	300K	280K	280K	240K	250A	[250]AK	250K
12	250K	270K	(300)S	280	(290)S	A	L	(270)L	300	310	330	380	370	330	300	280	280	280	260	240	(220)A	230	220	220
13	(240)S	270	260	260	(280)S	260	G	360	350	310	290	350	370	340	350	300	300	280	260	230	220	200	220	270
14	280	270	260	270	(280)S	(250)A	300	320F	330	350	450	390	440	G	410K	[450]AK	[420]AK	340K	270K	230K	220K	210K	250K	(280)SK
15	(280)SK	(260)S	(280)S	[280]A	(290)S	(300)A	L	340	420	470	390	510	G	(470)SK	410K	400HK	400K	330K	290K	260K	250K	230K	250K	240K
16	280K	270K	230	(280)S	[290]S	300	340	L	450	340	370	460	430	G	(520)S	430K	380K	320K	260K	(230)AK	210K	210K	250K	270K
17	(290)SK	300K	(300)SK	(300)SK	(300)SK	220K	250K	270K	310K	300K	(500)SK	G	440	410	380	370	330	310	270	250	220	210	240	250
18	300	300	300	280	300	230	240	260	280H	280H	[330]S	360	330	320	310	340	330	280	270	240	230	220	240	240
19	(300)A	250	A	230	250	230	250H	360H	300	300	300	300	310	300	300	330	300	280	260	230	220	220	240	240
20	240	250	260	290	280	240	300	410	270	(320)A	310H	340	340H	320H	330H	330	300	300	260	240	220	210	220	260
21	270	270	270	260	250	230	300H	340	330	A	(470)A	450	420	390	350	320	330	310	270	240	220	210	(240)A	(250)A
22	(290)A	A	C	C	C	C	260	260	280	(290)H	310	310	320	350	320	300	310	280	270	240	230	220	230	240
23	260	270	250	240	230	230H	260	250	250	300	300	320	350	380	330	310	300	280	270	(240)A	210	260	250	270
24	250	250	250	250	250	230	(240)L	260	280	300	360	320	330	320	330	310	290	290	(270)A	250	250	(220)A	230	260
25	(270)A	A	A	260	(240)A	220	230	350H	280	280	360	310	350	340	340	350	320	280	270	250	260	240	300	280
26	(270)SK	[300]SK	(330)SK	(340)SK	(300)SK	280K	GK	GK	350K	380K	GK	GK	AK	450K	(460)AK	390K	400K	350K	320K	270K	240K	250K	250K	250K
27	220K	240K	250K	(270)SK	(310)S	240	230	330	330	320	340	350H	430	320	410	340	330	320	280	230	230	230	270	270
28	(330)A	280	(290)S	(280)S	290	240	L	A	A	A	530	[500]AK	460K	GK	GK	500K	400K	340K	200HK	270K	(240)AK	(300)AK	240K	250K
29	(280)SK	(290)S	[300]A	300	(290)A	240	L	300	370	360	(430)F	320H	380H	360	360	340	380	330	300	240	240	(220)A	230	250
30	260	260	270	260	260	250	L	270	300	290	C	400	390	380	330	330	300	280	270	250	240	(230)A	280	250
31	270	280	[280]A	280	260	270	280	290	290	270	310	390	340	330	320	330	320	290	260	260	(230)A	240	(250)S	A
Median	280	280	280	280	(280)	250	250	320	300	310	360	360	380	350	340	330	320	300	270	240	230	220	240	250
Count	30	29	27	29	30	29	25	27	30	28	30	31	30	30	31	31	31	31	31	31	31	30	30	29

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 835048

Form adopted June 1946

TABLE 80

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

IONOSPHERIC DATA

foF2 (Characteristic), Mc (Unit), May (Month), 1955

Observed at Washington, D.C.

Lat 38.7°N, Long. 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(2.3)F	(2.1)F	(2.2)F	(2.4)F	2.1	2.5	3.8	4.2	4.5F	4.7H	4.9	5.0	5.0	5.0	5.5	5.4	5.4	5.4	5.7	6.2	5.8	4.2	3.2F	2.8F
2	2.5F	2.6F	2.5F	2.3F	(2.1)FS	2.8	4.4	5.5	6.2	6.4V	6.0	5.5	5.8	6.1	6.3	5.9	5.9	6.3	6.6	7.1	6.0	5.2	4.5	4.0
3	3.3	2.8	2.5	2.3	2.2	2.8	4.3	4.9	5.4	4.9	5.2	5.4	5.3	5.9	6.7	6.8	6.3	5.7	6.2	6.6	6.0	4.8	3.8	3.5
4	3.3	3.0	2.8	2.5	2.3	2.8	4.3	5.2	5.4	5.2	5.6	6.0	6.1	6.4	6.3	6.0	6.4	6.5	[6.8]A	7.1	6.4	5.6	4.1	2.9F
5	(2.5)JA	(2.1)AS	(2.2)A	[2.0]A	1.9F	2.7F	3.4	4.1	[4.4]S	5.0	5.1	5.0	5.3H	5.5	5.7	5.6	5.4	5.6	5.8	6.2	5.8JS	6.4	4.9	4.1
6	3.3	2.7	2.2	2.1	2.0JS	2.4	3.5	4.1	4.9F	<4.0G	<4.1G	4.3	(4.8)FH	<4.2GK	4.4K	<3.9GK	4.3K	(3.9)SK	4.9K	(5.6)SK	5.6K	4.8K	3.9K	3.8K
7	3.2K	3.2	3.0	2.5	1.8	2.3	3.7	5.2	5.0	5.9	6.8	6.3	6.3	6.3	6.8	6.6	7.0	7.4	6.6	7.1	7.0	5.2	4.4	4.1
8	(3.5)SF	(3.2)PF	K(3.0)PF	K(2.5)PF	(2.2)FK	K(2.5)FS	3.5FK	(3.9)FS	<3.7GK	<3.9GK	4.7K	5.1K	5.0K	5.5K	5.8K	6.0K	5.7K	6.8K	7.5K	7.4K	6.2K	K(4.1)JS	K(3.0)AS	2.7FK
9	2.4FK	[2.4]AK	2.3FK	2.1K	2.0K	2.5K	3.8K	(4.0)SK	4.4K	(4.8)SK	4.6K	<4.2GK	<4.3GK	4.6K	4.9K	4.9K	4.9K	4.8K	5.0K	5.3K	5.4K	AK	AK	AK
10	AK	3.3K	2.8F	2.6	2.3	2.5	3.8	4.5	4.7	4.5H	4.7	5.2	5.3H	5.2	5.1	5.7	5.9	6.4	6.6	5.8	5.0JF	4.2	(3.3)FS	2.6F
11	(2.7)F	2.4F	2.4F	2.4F	2.3F	2.7F	3.8	4.1	4.3	[4.4]A	4.6	<4.2GK	<4.2GK	K4.5JA	4.8K	4.9K	5.0K	5.0K	5.0K	4.9K	4.8K	4.4K	[3.8]AK	3.5K
12	3.0K	2.6FK	2.2F	2.2	2.1	2.8	3.8	4.4	4.8	4.9	4.9	5.1	5.4	6.0	6.3	6.7	6.7	6.8	7.4	7.2	7.0	(5.2)PS	4.5	3.7
13	3.2F	(2.7)FS	2.5F	2.5	2.2F	2.7	<3.4G	4.0	4.4	4.8	5.3	5.2	5.2	5.3	5.6	6.2	6.4	6.6	7.0	7.5	7.2	6.0	3.7	3.0
14	3.1	2.8	2.8	(2.6)PS	(2.4)PF	3.0	4.0	(4.2)FS	4.5F	(4.8)F	4.5	4.8	4.7	<4.2G	4.7K	[4.6]AK	[4.6]AK	5.0K	5.5K	K(6.2)FS	K(5.8)FS	K(4.6)JF	K[3.7]FS	K(2.8)FS
15	2.6K	2.6	2.4	[2.3]A	(2.2)FS	2.6	3.6	4.1	4.6	4.4	4.6	4.6	<4.2G	4.6K	4.6K	4.7HK	4.6K	4.9K	5.0K	5.5K	5.9K	5.4K	4.5K	4.0K
16	3.5K	3.2K	2.9F	(2.2)FS	(1.6)JS	2.4	3.7	4.2	4.3	4.9	5.0	4.7	4.7	<4.3G	4.5	4.6K	5.0K	5.2K	5.4K	5.5K	5.3K	4.0K	2.9K	2.5FK
17	2.2FK	2.1FK	2.0K	(1.9)SK	1.9FK	2.9K	4.1HK	4.8K	4.9K	5.0K	4.6K	<4.3G	4.8	5.0	5.0	5.0	5.2	5.3	5.6	6.3	6.2	4.7	3.5	2.8
18	2.4	2.4	2.1F	2.3F	2.1F	3.0	4.4	4.9	5.1H	5.0H	[5.2]S	5.2	5.5	5.9	5.6	5.5	5.6	5.7	6.0	6.6	6.3	5.2	4.6	4.2
19	3.7F	3.8F	(3.6)A	2.8F	(2.5)PS	3.5	4.6H	4.8	5.7	5.8	6.0	5.8	5.9	5.8	5.7	5.3	5.6	5.6	5.7	5.8	6.6	5.2	4.4	4.0
20	3.8	3.4F	(3.0)FS	2.9	(2.6)PS	2.9	4.0	4.5	5.8	5.6	(5.6)H	5.6	5.6H	5.9H	5.7H	5.5	5.9	6.0	6.4	6.7	7.2	6.0	4.4	3.6
21	3.4	3.2	3.1	3.1	2.9	3.2	4.4H	4.5	4.6	[4.7]A	(4.7)A	4.8	4.9	5.0	5.3	5.4	5.2	5.2	5.4	5.4	(5.8)S	(5.0)S	4.2	3.3
22	3.1	3.1	C	C	C	C	4.7	5.4	5.1	(5.7)H	5.7	6.1	5.9	5.8	6.0	6.1	6.0	6.4	6.8	7.0	7.0	5.6	4.8	4.0
23	3.6	3.5F	3.3	2.9	2.8	3.7H	4.8	5.5	5.9	6.0	6.0	6.0	5.4	5.5	6.0	6.0	5.8	5.7	6.0	6.6	6.6	5.2	(4.8)PS	(4.6)PS
24	4.3	3.6F	3.2F	(2.5)FS	(2.4)FS	(3.2)S	4.7	5.2	5.6	5.5	5.5	5.8	6.1	6.1	6.4	6.7	6.3	6.2	6.4	6.9	7.0	5.8	4.3	3.8
25	3.5	[3.4]A	(3.2)A	3.3	2.9	(3.3)FS	4.2H	4.7H	5.5	5.8	5.2	5.8	5.6	6.0	6.3	6.8	8.0	9.0	9.2	(9.0)S	9.8	(7.6)FS	(5.0)FS	4.3
26	K(3.8)FS	FSK	FSK	FSK	FSK	2.8K	<3.1GK	<3.6GK	4.4K	4.4K	<4.2GK	<4.2GK	AK	4.7K	(4.8)AK	4.9K	4.7K	4.6K	4.6K	4.8K	5.0K	K(4.7)PS	K(4.8)PS	4.3K
27	K(3.9)FS	K(3.0)FS	K(2.6)FS	2.3FK	1.9F	3.1	4.1	4.8	5.4H	5.7F	5.9	6.0H	5.5	5.9	5.6	6.2	6.4	6.6	7.6	7.1	6.7	5.0F	4.2	4.2
28	3.8	3.7FS	(3.5)FS	(3.4)FS	3.0	3.3	3.8	A	A	A	4.6	[4.6]AK	4.7K	<4.3GK	<4.2GK	4.6K	4.8K	4.9K	4.9HK	5.0K	5.4K	4.8K	4.2K	K(3.8)FS
29	K(3.3)FS	2.6F	3.2	(2.7)JF	(2.5)PA	3.3	4.2	(4.5)H	4.7F	5.0F	5.2F	5.4H	5.2H	5.3	5.3	5.4	5.0	5.2	5.4	6.2	6.0	5.0JS	(4.8)JS	4.0
30	(3.3)FS	(3.2)FS	[3.0]F	(2.9)FS	(3.0)JF	3.6	4.6	5.4	5.8	6.2	[6.0]C	5.8	5.7	5.9	6.0	6.2	6.6	6.7	7.0	7.1	6.8	(5.2)FS	4.5	4.2
31	4.0F	3.6F	[3.4]A	(3.1)FS	3.0	3.3	4.5	5.3	5.5	6.0	5.6	5.4	5.7	5.7	6.1	5.6	6.0	6.3	6.3	6.8	6.3	5.0	[4.6]S	(4.3)A
Median	3.3	3.0	2.8	2.5	2.2	2.8	4.0	4.5	4.9	5.0	5.2	5.2	5.3	5.5	5.6	5.6	5.7	5.7	6.0	6.6	6.2	5.1	4.4	3.8
Count	30	30	29	29	29	30	31	30	30	30	31	31	30	31	31	31	31	31	31	31	31	30	30	30

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 81

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

IONOSPHERIC DATA

foF2 (Characteristic) . Mc (Unit) May (Month), 1955

Observed at Washington, D.C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
1	(2.2)F	(2.2)F	(2.3)JF	(2.2)F	(2.1)F	3.3	3.9	4.5F	4.5H	4.7F	4.9	4.9	5.0H	5.0	5.4	5.3	5.4	[5.5]C	5.8	6.2	5.0	4.0	3.1F	2.7
2	2.6F	2.5F	2.4F	(2.1)JS	2.1	3.8	5.0	6.0	6.7	6.0	6.0V	5.6	6.1	6.3	6.1	[5.9]C	6.0	6.5	7.2	6.8	5.6	4.6	4.0	3.5
3	3.0	2.7	2.5	2.2	2.3	3.7	4.9	5.0	5.8	5.3	5.3	5.3	5.6	6.5	6.8	6.7	5.8	5.8	6.5	6.4	5.4	4.2	3.6	3.4
4	3.2	3.0	2.7	2.4	2.2	3.7	4.6	5.3	5.3	5.7	5.5	(6.1)S	6.3	6.4	(6.1)JS	6.0	6.6	6.7	7.0	6.8	6.3	4.6F	3.3	[2.7]A
5	2.4	2.1	2.2	2.2A	2.1F	3.2	3.8	4.4	4.8	5.3	5.0	5.2	5.4	5.6	5.5	5.6	5.5	5.6	5.8	6.2	(6.2)JS	5.8JS	4.5	3.5
6	3.0	2.4JS	2.2	2.1	2.0	3.1	3.9	(4.2)S	(4.5)S	<4.0G	<4.1G	4.6	4.7	K<4.1G	K 4.3	K 4.2	K 4.3	K 4.5	K 5.2	K 5.8JS	K(6.0)JS	K 4.6	K 3.9	K 3.4
7	3.1	3.0	2.8	2.1	1.8JS	3.1	4.5	5.0	5.6	6.6	6.7	6.0	6.3	6.4	6.8	6.7	7.3	6.6	6.8	7.1	5.7	4.4	4.2	3.5
8	3.4	(2.7)JF	K(2.9)JF	K 2.3F	K(2.0)FS	K 3.2F	K 3.5F	K<3.7G	K<3.9G	K<4.0G	K 5.0	K 5.0	K 5.2	K 5.8	K 6.0	K 5.8	K 6.0	K 7.4	K 8.0	K 7.1	K 5.2	K(3.5)FS	K 2.8F	K 2.6F
9	K(2.4)JS	2.4K	2.2FK	2.0FK	[2.2]AK	3.2K	4.0K	4.3K	(4.6)SK	<4.2GK	<4.3GK	4.4K	4.5K	4.7K	4.8K	4.8K	4.8K	5.0K	5.1K	5.5K	4.9K	A K	A K	A K
10	A K	2.9F	2.6F	2.4	2.3F	3.2	4.1	4.8	4.5F	4.7	4.8	(5.0)S	5.1	5.0	5.5	5.7	6.2	6.6	5.9	5.3	4.6F	3.5F	2.8F	(2.6)FS
11	2.4F	2.4F	(2.3)F	2.3F	2.2F	3.3F	4.2	4.3	4.5	4.4	<4.2G	<4.2GK	<4.2GK	4.6K	4.9K	5.0K	5.0K	4.9K	4.9K	5.0K	4.6K	4.0K	3.7K	3.3K
12	2.8FK	2.5	(2.2)FS	2.2	2.2	3.3	4.3VH	4.7	4.9	4.9	5.0	5.0	5.6	6.3	6.6	6.6	6.6	7.0	7.2	7.4	6.0	5.2	4.3	3.5JS
13	(3.2)FS	(2.6)F	2.4	2.3	2.1	3.1	3.6	4.4	4.7JS	5.0	4.9	5.3	5.4	5.2	6.2	6.3	6.8	6.6	7.2	7.4	6.8	4.6	3.3	3.0
14	3.0F	2.8F	2.4	2.4	2.4	3.5	3.9	4.3	(4.7)F	4.7F	4.6	4.9	4.8	<4.1G	K 4.8	K 4.6F	K 4.6F	K 5.4	K 5.8	K(6.4)FS	K(4.8)PS	K[3.8]FS	K(2.7)JS	K(2.7)JF
15	2.7	2.4	2.3	[2.3]A	2.3	[3.1]A	4.0	4.1	4.3	<4.1G	<4.2G	<4.2G	4.7	[4.6]AK	4.8K	4.6K	4.6K	5.0K	5.2K	(6.0)SK	(5.9)SK	4.8K	4.3K	3.6K
16	3.4K	3.0	2.7	(1.9)JS	1.8	3.0	4.0	4.2	4.5	5.0	4.7	<4.4G	<4.3G	<4.2G	4.7	4.8K	5.2K	5.3K	5.5K	5.8K	4.5K	3.2K	2.7K	2.3FK
17	2.2FK	2.1FK	K(1.9)JF	2.0K	2.1K	3.7K	4.4K	4.8HK	5.3HK	4.9K	4.5	4.6	4.9	4.9	5.0	5.2	5.4	5.6	5.8	6.4	5.6	3.7	3.2	2.4
18	2.4	2.2F	2.2F	2.1F	(2.3)FS	4.2	4.5	5.3H	5.6	5.4	5.1	5.5	5.8	5.6	5.7	5.8	5.7	5.8	6.4	6.8	6.2	5.2	4.3	4.0
19	3.9F	(3.7)JA	3.6	2.8	2.8	4.3	4.5	5.4	5.7	5.7	5.9	5.8	5.6	5.8	5.5	5.6	5.6	5.6	5.6	6.4	6.0	4.9	4.3	4.0
20	3.7	3.2F	2.8	2.8FS	2.6	3.8	[4.3]A	(4.9)A	(6.0)A	(5.8)AH	5.4	5.5	5.8H	5.8H	5.7	5.7	6.0	6.2	6.6	7.0	(6.9)S	5.0	4.0	3.5
21	3.2	3.1	3.1	2.8	2.8	(4.0)S	4.7	4.9	(4.5)A	4.7	4.8	4.9	5.0	5.2	5.4	5.2	5.3	5.3	5.3	5.7	5.6JS	4.5	3.7	3.1
22	3.1	C	C	C	C	C	5.2	5.3	5.8H	5.8	6.3	6.0	6.0	6.0	6.0	6.0	6.3	6.6	6.8	7.0	6.6	5.2	4.2	3.8
23	3.5	3.4	3.1	2.8	3.0	4.4	4.9	6.3	6.0	5.9	5.8	5.6	5.8	5.8	6.1	6.0	5.7	5.8	6.2	6.8	5.8	4.9	(4.8)S	(4.5)S
24	3.9	3.3	2.8F	2.6F	2.6F	4.2	(4.9)F	5.2	5.6	5.4	5.8	5.9	6.3	6.0	6.6	6.5	6.2	6.1	6.4	7.1	6.4	5.0	3.9	3.7
25	3.5	[3.4]A	(3.3)JA	(3.2)S	[2.9]A	3.7F	4.4	5.4	5.6	(5.5)H	[5.3]A	5.9	5.7	6.1	6.2	7.4	8.9	9.4	8.6	8.5	9.4	(6.2)JF	(4.8)FS	4.2FS
26	F SK	F SK	K(2.3)FS	F SK	B K	3.0K	3.5K	3.7K	4.9K	<4.2GK	<4.2GK	A K	A K	4.7K	4.8K	4.6K	4.6K	4.7K	4.6K	5.0K	5.0K	4.6K	(4.5)SK	K(4.0)FS
27	K(3.6)FS	K(2.7)FS	K 2.4	(2.0)FS	2.2	3.9	4.5	5.0H	5.6	5.6F	5.9	5.9F	5.6	5.8	5.7	6.2	6.4	7.0	7.6	6.8	6.6F	4.0F	(4.0)FS	3.9F
28	3.7F	3.6FS	3.8FS	(3.2)FS	3.0FS	3.5F	<4.0G	A	A	A	(4.5)A	K[4.6]A	K[4.7]A	K<4.2G	K<4.1G	K 4.7	K 4.9	K 5.0	K 4.9	K 5.4	K 5.2	K 4.5	K(4.0)FS	K(3.3)FS
29	(2.9)FS	(3.0)FS	(2.7)FS	[2.6]A	(2.8)F	(3.5)FS	(4.4)FH	(4.3)F	4.8F	5.1F	(5.3)H	5.0F	5.3	5.1	5.2F	5.2JS	5.2	5.3	5.8	6.2	5.8	5.0JS	(4.1)JS	(3.6)FS
30	(3.3)FS	(3.1)JF	(3.0)FS	(2.9)JF	(3.1)FS	4.1	5.0	5.6	6.3	C	C	5.5	6.0	6.2	6.0	6.3	6.7	6.7	7.1	6.8	6.0	4.7FS	4.4	3.9F
31	3.8F	3.5F	3.3	3.1FS	(2.9)A	3.8	4.8	[5.4]A	5.6	5.4	5.2	5.6	[5.7]A	5.8	6.0	5.7	6.3	6.5	[6.4]A	6.8	5.9	4.8	4.3	4.3
Median	3.1	2.8	2.6	2.3	2.3	3.5	4.4	4.8	5.1	5.1	5.0	5.2	5.5	5.6	5.7	5.7	5.7	5.8	6.2	6.4	5.8	4.6	4.0	3.5
Count	29	29	30	29	29	30	31	30	30	29	30	30	30	31	31	31	31	31	31	31	31	30	30	3.0

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 82

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

IONOSPHERIC DATA

h'F1 (Characteristic), Km (Unit), May (Month), 1955

National Bureau of Standards (Institution)

Observed at Washington, D. C.

Lat 38.7°N, Long 77.1°W

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

75°W Mean Time

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	210	190^{F}	190	200	190^{H}	190^{H}	200	200^{H}	210	210	220	220					
2							Q	220	200	200^{H}	180	180^{H}	180^{H}	230	220	210^{H}	210	220^{H}	240					
3							220	200	200^{H}	200^{H}	$(220)^{S}_{H}$	220	220^{H}	200^{H}	200^{H}	200	210	200	240					
4							Q	$(220)^{A}$	200^{H}	190^{H}	190	190^{H}	$(220)^{A}$	$(200)^{A}$	$(200)^{A}$	210^{H}	200^{H}	A	A					
5							Q	220	200	200	$[200]^{A}$	190^{H}	200^{H}	H A	190^{H}	200^{H}	210	$[220]^{A}$	230					
6							Q	220	210	200	200	180^{H}	180^{H}	180^{H}_{K}	220^{H}_{K}	240_{K}	220_{K}	220^{H}_{K}	240_{K}	K				
7							Q	210	200^{H}	210^{H}	200^{H}	200^{H}	$(200)^{A}$	$(200)^{A}$	180^{H}	$[220]^{A}$	$(250)^{A}$	200^{H}	220					
8							Q K	200_{K}	210_{K}	180^{H}_{K}	190^{H}_{K}	180_{K}	230_{K}	190_{K}	200_{K}	220_{K}	210_{K}	220^{H}_{K}	240^{H}_{K}	K				
9							230_{K}	$(220)^{A}_{K}$	210^{H}_{K}	200^{A}_{K}	A K	190_{K}	180^{H}_{K}	190_{K}	210^{H}_{K}	210^{H}_{K}	240^{H}_{K}	230_{K}	240_{K}	K				
10							230	210	200^{H}	190^{H}	200^{H}	180^{H}	180^{H}	H A	220	220^{H}	A	200	230					
11							Q	210	210	$[200]^{A}$	190	190_{K}	210_{K}	200_{K}	$[220]^{A}_{K}$	240_{K}	210^{H}_{K}	230^{H}_{K}	A K	K				
12							220	210	210	190	210	$(200)^{A}$	190	200	200	210	200	210	A					
13							230	210^{H}	200	200	200	210	200	180^{H}	190^{H}	210	220	A	230					
14							220	220	200	200	200^{H}	170	210	210	260_{K}	A K	A K	$(230)^{A}_{K}$	220_{K}	K				
15							A	220	200	180^{H}	180^{H}	200	180^{H}	200_{K}	200^{H}_{K}	200_{K}	$[210]^{A}_{K}$	220^{H}_{K}	230_{K}	K				
16							$(230)^{A}$	210	$[200]^{A}$	200^{H}	210^{H}	200	$[200]^{A}_{H}$	200	190^{H}	210_{K}	210^{H}_{K}	210^{H}_{K}	220^{H}_{K}	K				
17							220_{K}	220_{K}	200_{K}	200_{K}	190_{K}	180^{H}	190	200	210	220^{H}	200	210	$(220)^{A}$					
18							210	210	200	190^{H}	180^{H}	180^{H}	200^{H}	200^{H}	180^{H}	200^{H}	200	190	220	230				
19							210	200	200	200	200^{H}	220^{H}	220^{H}	210	190	190^{H}	190^{H}	200^{H}	220					
20							A	A	A	A	$(210)^{A}_{H}$	$(200)^{H}$	200^{H}	$(190)^{H}$	210^{H}	200^{H}	$(210)^{S}$	220	$(220)^{A}$					
21							$(200)^{A}$	$(200)^{A}$	A	A	180^{H}	190	190^{H}	190^{H}	200^{H}	210	210	200^{H}	200^{H}					
22							$(210)^{A}$	200	190^{H}	180^{H}	$(190)^{H}$	230	230	200	210	220^{H}	200^{H}	$[230]^{A}$	260					
23							230	200	220	$(200)^{A}$	180	210	200^{H}	180	240	200	210	200	200					
24							220	210	200^{H}	200^{H}	200^{H}	200^{H}	$[200]^{A}$	$(200)^{A}$	$(200)^{A}$	$(200)^{A}_{H}$	200^{H}	A	A					
25							190	A	A	$(210)^{A}$	$(200)^{A}$	200	A	A	240^{H}	$(230)^{A}$	220	220	230					
26							220^{H}_{K}	230_{K}	200_{K}	180^{H}_{K}	200_{K}	200_{K}	A K	A K	240_{K}	210_{K}	220_{K}	210^{H}_{K}	210_{K}	K				
27							Q	210	220^{H}	$(230)^{A}$	210	200	210	200^{H}	190^{H}	210	210^{H}	220	230					
28							250	A	A	$(210)^{A}$	$(190)^{A}$	$[200]^{A}_{K}$	210^{H}_{K}	$(230)^{A}_{K}$	200^{H}_{K}	230_{K}	220^{H}_{K}	220^{H}_{K}	A K	K				
29							A	220	A	A	170^{H}	190^{H}	190	170^{H}	$(200)^{A}$	200	210	200	A					
30							210	210	A	200	$[190]^{C}$	180^{H}	180^{H}	190	180^{H}	220	200	A	A					
31							A	A	A	A	$(180)^{A}$	$[210]^{A}$	A	A	A	$(230)^{A}_{H}$	210^{H}	220	A					
Median							220	210	200	200	200	200	200	200	200	210	210	220	230	—				
Count							18	27	24	27	30	31	28	26	30	30	29	27	23	1				

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

TABLE 83

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

IONOSPHERIC DATA

Form adopted June 1946

foFl (Characteristic) . Mc (Unit) May (Month), 1955

Observed at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	3.6	3.8F	4.2	4.2	4.3H	4.3H	4.2	4.2H	4.2	4.0	3.8	3.2					
2							Q	3.7	4.0	4.2H	4.3	4.5H	4.4H	4.3	4.3	4.3H	4.0	3.7H	L					
3							L	3.6	4.0H	4.1H	4.2H	4.4	4.4H	4.4H	4.3H	4.1	4.0	L	L					
4							Q	(3.5)L	4.1H	4.3H	4.3	4.5H	4.5	4.4	4.4	4.4H	4.1H	A	A					
5							Q	3.7	4.0	4.0	4.4	4.3H	4.3H	4.4H	4.3H	4.3H	4.1	(3.8)L	L					
6							Q	3.5	3.9F	4.0	4.1	4.1H	4.1H	4.2HK	4.0HK	3.9K	3.8K	3.5HK	(3.2)LK	K				
7							Q	L	3.9H	4.2H	(4.3)H	4.4H	(4.5)A	(4.5)A	4.3H	[4.2]A	(4.1)A	(3.6)H	L					
8							QK	LK	3.7FK	3.9HK	4.1HK	4.2K	4.3K	4.3K	4.2K	4.2K	4.1K	3.7HK	(3.3)LK	K				
9							LK	3.8K	3.9HK	(4.0)SK	(4.2)AK	4.2K	4.3HK	4.2K	4.2HK	4.0HK	4.0HK	3.7K	(3.2)LK	K				
10							3.2	3.6	4.0H	(4.2)L	4.3H	4.3	(4.2)S	4.2H	4.2	4.1H	4.0	3.7	L					
11							Q	(3.8)L	3.8	[4.0]A	4.2	4.2K	4.2K	4.2K	(4.1)AK	(4.0)SK	4.0HK	3.8HK	AK	K				
12							L	(3.6)L	3.9	4.2	4.3	4.3	4.3	4.3	4.2	4.1	4.0	3.7	A					
13							3.4	3.6H	3.7	4.0	4.2	4.2	4.3	4.2H	4.2H	4.1	4.0	A	L					
14							L	(3.5)L	(3.9)S	(4.0)S	4.1H	4.1	4.1	4.2	4.1K	AK	AK	3.7K	LK	K				
15							3.2	3.6	3.8	4.0H	4.2H	4.2	4.2H	4.2K	4.1HK	4.1K	(4.0)AK	3.7HK	3.3K	K				
16							3.2	3.8	3.9	4.0H	4.2H	4.3	4.2H	4.3	4.2H	4.2K	3.9HK	3.7HK	3.4HK	K				
17							LK	3.8K	3.9K	4.2K	4.3K	4.3H	4.3	4.3	4.2	4.1H	4.1	3.7	3.2					
18							L	(3.6)L	4.1	4.0H	4.4H	4.3H	4.3H	4.4H	4.4H	4.2H	4.1	3.7	3.3	L				
19							L	4.2	4.2	4.2	4.3H	4.4H	4.4H	4.4	4.3	4.2H	4.2H	3.8H	L					
20							(3.3)L	3.8	A	A	4.3H	4.4H	4.5H	(4.5)H	(4.5)H	4.3H	(4.2)S	3.8	L					
21							(3.6)L	3.7	[4.0]A	(4.2)A	4.3H	4.3	4.3H	4.3H	4.3H	4.2	4.1	3.8H	(3.2)L					
22							L	3.8	4.0H	(4.4)H	4.4H	4.5	4.5	4.6	4.5	4.3H	4.2H	A	L					
23							L	L	4.2	4.3	4.4	4.4	4.4H	4.5	4.4	4.3	4.2	3.9	L					
24							L	3.8	4.0H	4.3H	4.4H	4.4H	[4.4]A	4.4	4.5	4.4H	4.1H	A	A					
25							L	(3.8)A	[4.0]A	4.2	4.2	4.3	A	A	4.4H	4.3	4.1	4.0	L					
26							3.1HK	3.6K	3.9K	4.1HK	4.2K	4.2K	AK	AK	4.2K	4.1K	4.0K	3.7HK	(3.4)LK	K				
27							Q	3.9	4.1H	4.3	4.3	4.4	4.4	4.4H	4.4H	4.2	4.2H	3.8	L					
28							(3.4)L	A	A	(4.0)A	4.1	[4.2]AK	4.2HK	4.3K	4.2HK	4.1K	4.0HK	3.8HK	LK	K				
29							L	3.7	4.0JA	4.2	4.3H	4.4H	4.4	4.4H	4.3	4.1	4.1	(3.8)L	A					
30							L	L	4.2	4.3	[4.4]C	4.4H	4.5H	4.5	4.3H	4.3	4.1	3.8	L					
31							L	A	A	(4.2)A	4.3	4.4	A	A	A	4.2H	4.2H	3.8	A					
Median							3.2	3.7	4.0	4.2	4.3	4.3	4.3	4.3	4.3	4.2	4.1	3.8	3.2	—				
Count							8	25	28	30	31	31	28	28	30	30	30	26	10					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

TABLE 84

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

Form adopted June 1946

IONOSPHERIC DATA

h'E (Characteristic), Km (Unit), May (Month), 1955

Observed at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							A	(100)A	100H	100	100	100H	100	100	100	100	100	100	120					
2							120	110	100H	100	100	100	100	100	100	100	100H	110	110H					
3							120	100	100	100	100	100	100	100	[100]A	100	100H	(110)B	S					
4							(120)SH	100H	100	100	100	100	100	100	(100)A	(100)A	100	100	110					
5							(120)A	100	100	100	100	100	100	100	(100)A	100H	100	100	110H					
6							120	100H	100H	100	100H	100	100H	100K	K(100)BH	(100)BK	100K	110K	K(110)SH	K				
7							A	110H	100H	100	100	100	100	100	100	(100)B	100	110	(120)S					
8							K(110)SH	100K	100K	100K	100K	100K	100K	100K	100K	100K	100K	100K	BK	K				
9							AK	AK	100HK	100K	AK	AK	AK	100K	100K	100K	100K	110K	120K	K				
10							A	A	A	A	A	A	A	100	100H	100	100	100	110					
11							110	100H	100	100	100	100K	100K	100K	100K	100K	100K	110K	120K	K				
12							A	110H	100	100	100	100	100	100	100	100	100	100H	A					
13							100	100	100	100	100	100	100H	100	100H	100	100	100	110					
14							S	110	100	100	100	100	100	100	100K	100K	100K	100K	(110)S	K				
15							S	100	100	100	100	100	100	100K	100K	100K	100K	100K	110K	K				
16							110	110	100	100	100	100	100	100H	100	100K	100K	100K	110K	K				
17							110HK	100HK	100K	100K	100HK	100	100	100	100	100	100	100H	110					
18							110	100	100H	100	100	100	100	100	100	100	100	100H	110	S				
19							110	100	100	100	100	100	100	100	100	100	100	100H	100					
20							110	100	100	100	100	[100]A	100H	100	100	100H	100	100H	A					
21							110	100H	100	A	A	100H	A	A	A	100	100H	100	110					
22							110	100	100H	100	100	100	100	100	100H	100H	100	100	110					
23							110H	100	100	100	100	100	100	100	100	100	100	100	100					
24							110	100	[100]A	100	100	100	A	A	A	A	A	A	A					
25							110	100	100	100	100	100	100	100	100	100	100	100	110					
26							100K	100K	100K	100K	100K	100K	100K	100K	100K	100K	100K	100K	110K	K				
27							100	100	100	100	100	100	100	100	100	100	100	100	110					
28							100	A	A	A	A	AK	AK	AK	AK	AK	AK	AK	AK	K				
29							A	100	A	A	A	100A	100	100	100	100	100	(100)A	110					
30							110	100	100	100	[100]C	100BH	100	100	100	100H	100	100	110					
31							A	100	100	100	100	100	100	100	100	100	100	110	110					
Median							110	100	100	100	100	100	100	100	100	100	100	100	110					
Count							22	28	28	27	26	28	26	28	28	29	29	29	25					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

TABLE 85

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

IONOSPHERIC DATA

Form adopted June 1946

foE (Characteristic), Mc (Unit), May (Month), 1955

Observed at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							A	A	2.7H	[3.0]A	3.2	3.3H	[3.2]A	3.2	3.1	2.9	2.7	2.4	1.9					
2							1.7	2.4	2.7H	3.0	3.2	3.3	3.3	3.3	3.1	3.1	2.9H	2.5	1.9H					
3							(1.8)P	2.4	(2.7)A	(2.8)A	(3.0)A	(3.2)A	(3.2)P	3.3	[3.2]A	3.0	2.9H	(2.4)P	S					
4							(1.8)H	2.4H	2.8	2.8	(3.1)P	(3.1)A	(3.1)P	2.8	A	A	2.9	2.6	1.8					
5							A	2.3	2.6	(2.6)A	(2.8)A	A	A	A	3.3	3.2H	3.0	2.5	A					
6							1.7	2.2H	2.8H	[2.9]A	(3.0)H	(3.1)A	(3.2)H	[3.2]AK	3.1HK	3.0K	2.8K	2.5K	2.1HK	K				
7							A	(2.5)H	(2.8)H	2.9	3.0	3.1	(3.1)A	A	A	(2.7)A	[2.6]A	(2.5)A	(1.9)S					
8							(1.9)HK	2.3K	AK	2.9K	3.1K	3.2K	(3.2)PK	3.3K	3.1K	3.0K	2.8K	2.5K	BK	K				
9							AK	AK	2.6HK	AK	AK	AK	AK	3.3K	3.2K	2.9K	2.8K	2.5K	AK	K				
10							A	A	A	A	A	A	A	A	3.2H	3.1	2.8	2.5	A					
11							A	2.4H	2.6	2.9	3.0	AK	AK	AK	AK	AK	3.0K	2.5K	1.9K	K				
12							A	2.5H	[2.8]A	(3.1)A	A	A	A	A	3.2	3.1	(2.8)A	2.5H	A					
13							A	2.4	2.7	2.9	3.1	3.2	3.2H	3.2	3.2H	3.0	2.9	2.6	2.0					
14							A	2.3	2.6	2.9	3.1	A	A	(3.1)A	[3.0]AK	3.0K	2.8K	2.4K	AK	K				
15							S	A	A	A	A	A	A	AK	3.2K	3.0K	2.8K	2.5K	1.9K	K				
16							(2.0)P	2.4	2.7	2.7	3.0	3.1	(3.1)P	3.2H	2.9	2.8K	2.8K	2.5K	2.1K	K				
17							1.8HK	2.5HK	AK	AK	3.3HK	A	(3.1)P	A	(2.8)P	A	2.7	2.5H	2.0					
18							1.8	2.4	2.6H	2.8	A	A	A	3.3	3.2	3.1	2.9	2.7H	2.1	S				
19							1.9	A	A	A	(3.2)A	A	A	3.5	(3.3)A	(3.2)A	(3.0)A	(2.6)S	2.1					
20							A	2.5	A	A	A	A	(3.3)H	3.4	3.5	3.2H	2.9	2.5H	A					
21							(2.0)A	2.4H	2.5	A	A	3.3H	A	A	A	A	2.9H	[2.6]A	2.2					
22							A	2.5	2.9H	3.0	A	A	A	A	3.4H	3.2H	(2.9)A	2.7	A					
23							(2.0)A	A	A	A	A	A	A	3.5	A	A	A	A	A					
24							A	2.5	[2.8]A	3.1	3.2	A	A	A	A	A	A	A	A					
25							(2.2)A	(2.5)A	(2.9)A	(3.1)A	(3.2)A	A	A	A	A	A	A	2.7	2.1					
26							AK	AK	AK	3.1K	(3.4)AK	AK	AK	AK	AK	AK	AK	2.8K	2.2K	K				
27							A	2.5	(2.9)A	A	A	A	A	3.4	3.2	[3.2]A	3.1	2.7	2.2					
28							A	A	A	A	A	AK	AK	AK	AK	AK	AK	AK	AK	K				
29							A	2.5	A	A	A	A	(3.2)A	A	A	A	A	A	2.2					
30							1.9	2.5	2.8	A	C	3.3H	3.3	3.3	[3.2]A	3.0H	2.9	2.7	2.2					
31							A	2.5	A	A	A	A	A	A	A	A	A	A	A					
Median							(1.9)	2.4	2.7	2.9	3.1	3.2	(3.2)	3.3	3.2	3.0	2.9	2.5	2.1					
Count							13	23	20	18	17	11	13	16	20	20	24	26	18					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 86

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

IONOSPHERIC DATA

Es (Characteristic), Mc-Km (Unit), May (Month), 1955

Observed at Washington, D.C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., B.N., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11
1	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S	25Y 120	3.1Y 100	33 100	35 100	36 100	35 120	40 110
2	<1.6S S	<1.6S S	<1.6S S	<1.2S S	<1.6S S	<1.6S S	20 120	9.0Y 120	G G	G G	G G	G G
3	<1.6S S	<1.6S S	5.0 100	<1.6S S	<1.6S S	<1.6S S	3.1 130	30 110	31Y 110	2.9 110	33 110	33 110
4	<1.7S S	<1.7S S	<1.6S S	<1.5S S	<1.6S S	<1.6S S	50Y H 110	37 120	41 110	52 110	48 110	47 110
5	44 120	2.9 120	29 120	4.2 110	27 120	<1.6S S	30 120	37 110	44 100	45 100	5.5 100	45 100
6	<1.6S S	2.4 110	<1.5S S	<1.6S S	<1.6S S	<1.6S S	29 120	34 H 120	39 S (130)	37Y 100	G G	5.1Y 110
7	<1.6S S	<1.6S S	<1.3S S	<1.6S S	<1.3S S	<1.6S S	19 120	37H S (120)	G G	32Y 100	39 H 120	50Y 120
8	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S	G G	37Y 100	74 100	3.8Y 100	<1.7S 100	10.0Y H 100
9	33 130	3.7 110	49 100	45 100	34 100	35 100	3.6 100	58 100	50 H 100	47 100	90 100	49 100
10	72 100	92 100	4.0 100	2.8 100	24 100	<1.7S S	15.0Y H 100	39 100	11.8 100	40 100	41 100	42 100
11	<1.6S S	2.2 100	30 140	25 120	24 110	<1.6S S	42 H 110	32 110	32 100	63 100	(86)S 100	56 100
12	24 120	24 100	24 100	2.6 100	30 H 100	36 100	33 H 100	38 H 110	39 H 100	48Y 100	46 100	60 H 100
13	<1.6S S	<1.6S S	22 130	23 100	24 100	<1.7S 100	18 100	32Y 110	34Y 110	38Y 110	42Y 110	33 110
14	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S	30Y 110	22 120	86Y 130	3.2 120	33 H 120	33 110	34 100
15	<1.6S S	<1.6S S	28 100	45 H 100	31 110	31 110	4.0 110	39Y 110	50 110	47 110	50 100	47 100
16	20 140	<1.5S S	<1.0E E	<1.5S S	29 110	29 120	34 110	34 H 110	45 100	43 100	33 110	33 110
17	<1.6S S	<1.6S S	<1.6S S	24 100	24 100	<1.6S S	G G	19.0 H 100	49 100	73 H 110	75 110	48 110
18	36 100	2.7 100	32 100	<1.6S S	<1.6S S	<1.6S S	45 100	43 100	58 100	46 100	42 100	50 100
19	35 100	<1.7S S	41 100	25 100	26 100	<1.6S 100	80Y 110	37 H 100	43 H 100	33 100	46 H 100	74Y H 100
20	<1.6S S	28 110	28 100	27 110	<1.6S S	<1.6S S	38 110	(50)S 100	11.8 H 100	90 100	7.2 100	34 100
21	29 100	23Y H 100	<1.5S S	<1.6S S	29 110	29 120	37 110	46 110	57 100	7.2 100	4.5 100	G G
22	35 100	3.6 100	C C	C C	C C	C C	37 110	G G	G G	42Y 110	36 100	50 100
23	21 100	2.9 100	<1.2S S	2.3 100	<1.2S S	<1.6S S	33 H 120	38 100	48 H 110	47 110	34 110	48 H 110
24	22 120	<1.6S S	<1.5S S	<1.3S S	<1.6S S	18 130	30 H 120	68Y 110	42 100	43 110	46 110	37 110
25	36 130	58 120	41 H 100	34 120	45 120	29 110	74 90	46 110	52 110	48 110	(74)S 100	120 100
26	<1.7S S	<1.6S S	<1.6S S	<1.6S S	<1.4S S	<1.7S S	3.2 110	(43)S 110	31 110	90Y 100	35 110	52 100
27	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S	33Y 100	(47)S 100	36Y 100	35 110	50 110	49 100	36 100
28	40 120	40 H 130	<1.6S S	<1.6S S	<1.6S S	<1.6S S	60 H 100	4.9 100	63 100	68 100	70 100	49 100
29	<1.6S S	<1.6S S	48Y H 110	49 H 110	58 110	72 110	48 H 100	40 H 120	52 H 100	49 H 100	72 100	37 110
30	31 100	<1.3S S	<1.2S S	<1.2S S	<1.3S S	<1.6S S	24 120	41 H 110	58 110	3.2 110	C C	3.8 120
31	<1.6S S	44 110	5.2 100	44 100	37 H 100	30 100	68 100	56 110	137 110	11.2 100	52 110	71 H 100
Median	<1.7	<1.7	<1.6	<1.6	<1.6	<1.6	34	3.9	4.4	4.6	46	47
Count	31	31	30	30	30	27	31	31	31	31	30	31

Day	12	13	14	15	16	17	18	19	20	21	22	23
1	39 100	G G	G G	G G	30 140	26 130	3.0 110	<1.5S S	<1.6S S	27 S 100	24 S 100	<1.6S S
2	G G	G G	37 120	G G	G G	39 110	2.9 120	19 110	<1.6S S	<1.6S S	<1.6S S	<1.6S S
3	G G	G G	34 100	G G	G G	G G	G G	(1.9)B B	<1.7S S	<1.6S S	31 110	26Y 110
4	49 100	49 100	48 100	48 H 100	G G	5.3 120	98 110	11.0 110	3.1 110	<1.6S S	<1.6S S	30 120
5	44 100	7.8 100	35 H 100	G G	G G	44 110	33 H 110	47 110	3.2 100	<1.6S S	<1.6S S	<1.6S S
6	19.2Y 120	7.0Y 110	36 120	45 120	41 120	G G	G G	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S
7	4.4Y 110	7.0Y H 100	47 110	47 110	44 110	26 110	G G	<1.7S S	<1.5S S	<1.5S S	<1.6S S	<1.7S S
8	G G	G G	G G	34 130	3.2 130	G G	2.2 120	<1.6S S	2.0 110	<1.6S S	5.6 120	44 140
9	33 100	3.9 130	G G	36 110	3.6 H 110	40 120	37 110	45 110	2.9 110	76 110	80 100	7.2 100
10	50 100	47 100	45 140	45 140	49 120	45 120	3.7 110	30 110	67 100	44 110	<1.6S S	<1.6S S
11	50 100	47 100	54 100	48 100	G G	3.1 H 100	(4.2)S 120	72 110	<1.6S S	3.3 120	63 120	37F 120
12	5.0 100	34 100	(70)S Y 100	G G	2.9 110	G G	44 100	45 100	45 100	44Y 100	1.8 110	2.1 110
13	G G	G G	G G	G G	3.2 130	54 110	3.5 110	28Y 110	<1.6S S	<1.6S S	<1.6S S	<1.2S S
14	43 H 100	4.2Y 100	47 100	5.6 120	60 100	78 100	48 H 110	45 100	5.4 100	32 110	<1.6S S	<1.6S S
15	47 100	42 100	3.6 H 100	44 120	48 120	38 120	36 120	33 110	3.5 100	<1.6S S	<1.6S S	2.0 S (120)
16	78 110	G G	32 110	50 110	30 120	33 110	39 120	3.4 110	26 110	<1.6S S	<1.6S S	<1.6S S
17	44 100	33 100	33 100	4.6 H 100	30 110	33 110	38 110	33 110	30 100	<1.6S S	43 100	29 100
18	40 100	G G	G G	G G	30 130	33 110	3.2 120	G G	3.2 100	31 100	3.1 100	21 100
19	43Y 110	G G	34 110	35 110	35 120	G G	2.8Y 110	18 120	23 120	<1.6S S	<1.6S S	<1.6S S
20	G G	37 120	G G	35 120	42 110	40 110	3.0 110	<1.7S S	<1.6S S	<1.6S S	<1.6S S	31 100
21	36 100	42 100	42 100	67 H 100	G G	38 H 100	G G	<1.6S S	<1.6S S	<1.6S S	3.2 100	37 100
22	49 110	72 H 110	36 120	50 120	45 H 110	58 110	90 100	52 100	80 100	48 100	29 100	27 120
23	42Y 100	G G	42Y 100	49 100	(34)S 110	(48)S 110	(42)S 100	41 100	<1.6S S	42 110	48 110	43 100
24	48 100	47 100	56 100	45 100	41 100	50 100	46 100	37 100	54 100	37 110	<1.6S S	<1.6S S
25	70 100	59 100	50 100	48 110	31 110	G G	G G	<1.8S S	<1.6S S	<1.6S S	<1.6S S	<1.6S S
26	68 100	62 100	54 100	41 100	37Y 100	G G	G G	<1.8B S	<1.6S S	<1.6S S	<1.6S S	<1.6S S
27	36 100	G G	34 120	49 110	G G	G G	G G	<1.8S S	<1.6S S	<1.7S S	<1.7S S	<1.6S S
28	47 100	49 100	44 100	48 100	43 100	38 100	2.9 H 100	34Y H 100	4.8 110	48 110	<1.6S S	<1.6S S
29	3.7 110	37 110	42 110	34 110	(35)S 110	(29)S 110	47 110	38 110	46 110	35 110	<1.6S S	<1.6S S
30	G G	3.7 120	31 100	G G	G G	44 130	3.5 120	47 110	5.4 110	52 110	3.8 110	29 110
31	55 110	105 100	68 100	46 110	40Y 110	37 120	5.6 110	47 100	5.7 100	5.2Y 110	36Y 110	5.8 100
Median	44	3.9	36	45	3.2	3.7	3.5	33	26	<1.6	<1.6	<1.7
Count	31	31	31	31	31	31	31	31	31	30	30	31

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 87

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

IONOSPHERIC DATA

(M1500)F2 (Characteristic), ____ (Unit), May (Month), 1955

Observed at Washington, D.C. Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(1.9)F	(1.9)F	(1.9)F	(2.1)F	2.0	2.3	2.4	2.1	2.1F	2.0H	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.2F	2.2F
2	2.1F	2.0F	2.1F	2.2F	(2.2)FS	2.1	2.3	2.3	2.3	2.3V	2.3	2.1	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1
3	2.0	2.0	2.1	2.1	2.0	2.2	2.2	2.3	2.3	2.4	2.1	2.2	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1
4	2.0	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.2	2.2	2.1	2.0	2.1	2.2	2.0	2.1	2.2	A	2.2	2.1	2.4	2.2	2.1F
5	JA	(2.0)AS	A	A	2.1F	2.3F	2.3	2.0	S	2.0	2.1	1.9	2.0H	2.2	2.2	2.1	2.1	2.1	2.3	2.1	(1.9)JS	2.2	2.1	2.1
6	2.0	2.0	2.0	2.0	(2.1)JS	2.3	3.3	2.2	2.1F	G	G	1.7	(1.8)FH	GK	1.7K	GK	1.7K	(1.5)SK	2.0K	(2.1)SK	2.1K	2.1K	2.1K	2.0K
7	1.9K	2.0	2.0	2.4	2.2	2.2	2.3	2.4	2.2	2.3	2.2	2.3	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.3	2.1	2.0	1.9
8	(1.9)SF	(2.0)PF	K(2.0)PF	K(2.1)PF	K(2.2)F	K(2.5)FS	K2.5F	K(2.3)FS	GK	GK	1.7K	2.0K	2.0K	2.0K	2.0K	2.2K	1.9K	1.9K	2.1K	2.2K	2.1K	JSK	K(2.1)AS	2.1FK
9	2.0FK	AK	2.1FK	2.0K	2.2K	2.2K	2.3K	(1.9)SK	2.0K	(1.9)SK	1.9K	GK	GK	1.7K	2.0K	2.0K	1.9K	1.9K	2.2K	2.2K	2.2K	AK	AK	AK
10	AK	2.1K	2.2F	2.0	2.0	2.1	2.2	2.2	2.3	2.1H	1.9	2.1	2.1H	2.2	1.9	2.1	2.1	2.2	2.3	2.3	(2.2)JF	2.3	(2.2)FS	2.3F
11	(2.1)F	2.1F	1.9F	2.0F	2.1F	2.4F	2.3	2.3	1.8	A	1.7	GK	GK	JAK	1.9K	2.0K	2.1K	2.1K	2.3K	2.2K	2.1K	2.1K	AK	2.1K
12	2.2K	2.1FK	2.0F	2.2	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.0	2.0	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.4	(2.3)PS	2.2	2.2
13	2.2F	(2.1)FS	2.1F	2.2	2.0F	2.2	G	2.1	2.1	2.3	2.4	2.1	1.9	2.1	2.0	2.2	2.0	2.1	2.0	2.3	2.3	2.4	2.2	2.0
14	2.0	2.1	2.1	(2.0)PS	(2.0)PF	2.2	2.2	(2.2)FS	2.2F	(2.1)F	1.8	2.0	1.8	G	1.9K	AK	AK	2.0K	2.2K	K(2.2)FS	K(2.3)FS	JFK	FSK	K(1.9)FS
15	2.1K	2.2	2.1	A	(2.1)FS	2.0	2.1	2.2	1.9	1.8	2.0	1.7	G	1.8K	1.9K	1.9HK	1.9K	2.1K	2.2K	2.2K	2.2K	2.2K	2.0K	2.1K
16	1.9K	2.1K	2.1F	(2.2)FS	JS	2.1	2.1	1.9	1.8	2.2	2.0	1.8	1.9	G	1.6	1.8K	1.9K	2.1K	2.2K	2.3K	2.4K	2.3K	2.2K	2.2FK
17	2.2FK	2.1FK	2.0K	(2.0)SK	2.2FK	2.5K	2.4HK	2.4K	2.2K	2.3K	1.7K	G	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.2	2.2
18	2.0	2.0	2.1F	2.2F	2.0F	2.3	2.4	2.4	2.3H	2.3H	S	2.1	2.2	2.2	2.2	2.0	2.0	2.2	2.2	2.1	2.2	2.3	2.2	2.1
19	2.1F	2.1F	(2.2)A	2.3F	(2.3)PS	2.4	2.3H	2.1	2.1	2.3	2.3	2.3	2.2	2.3	2.2	2.1	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.1
20	2.1	2.1F	(2.0)FS	2.0	(2.0)PS	2.0	2.3	1.9	2.4	2.2	(2.2)H	2.1	2.1H	2.1H	2.2H	2.1	2.2	2.1	2.2	2.1	2.3	2.4	2.3	2.1
21	2.1	2.1	2.1	2.1	2.2	2.4	2.1H	2.1	2.2	A	(1.8)A	1.8	1.9	2.0	2.1	2.2	2.1	2.1	2.3	2.3	(2.2)S	(2.3)S	2.3	2.1
22	2.0	2.1	C	C	C	C	2.3	2.3	2.3	(2.0)H	2.2	2.1	2.1	2.0	2.1	2.2	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.1
23	2.1	2.2F	2.2	2.2	2.2	2.3H	2.4	2.4	2.4	2.3	2.3	2.2	2.1	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	(2.1)PS	(2.1)PS
24	2.1	2.1F	2.1F	(2.1)FS	(2.2)FS	(2.3)S	2.4	2.4	2.3	2.3	2.0	2.2	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.1	2.1
25	2.1	A	(2.1)A	2.2	2.4	(2.5)FS	2.4H	2.1H	2.3	2.5	2.1	2.3	2.1	2.1	2.0	1.8	1.9	2.1	2.0	(1.8)S	1.9	(1.9)FS	(1.8)FS	1.9
26	K(1.9)FS	FSK	FSK	FSK	FSK	2.1K	GK	GK	2.1K	2.1K	GK	GK	AK	1.8K	(1.8)AK	1.9K	1.9K	2.1K	2.1K	2.1K	2.2K	K(2.0)PS	K(1.9)PS	2.0K
27	K(2.2)FS	K(2.1)FS	K(2.0)FS	K1.9F	2.0F	2.3	2.4	2.1	2.1H	2.1F	2.1	2.1H	1.8	2.1	1.8	1.9	2.0	1.9	2.0	2.1	2.1	2.2F	2.0	2.1
28	1.9	1.9FS	(1.9)FS	(1.9)FS	2.0	2.2	1.9	A	A	A	1.7	AK	1.8K	GK	GK	1.7K	1.9K	2.0K	2.1HK	2.1K	2.2K	2.0K	2.1K	K(2.1)FS
29	K(2.0)FS	1.9F	1.7	JF	(2.1)PA	2.4	2.3	(2.2)H	2.0F	2.1F	1.9F	2.2H	2.0H	2.0	2.0	2.1	1.9	2.0	2.1	2.1	2.2	JS	JS	2.0
30	(2.0)FS	(1.9)FS	F	(2.0)FS	JF	2.2	2.3	2.3	2.2	2.2	C	1.9	1.9	1.9	2.1	2.0	2.1	2.2	2.1	2.3	2.3	(2.3)FS	2.0	2.0
31	2.1F	2.0F	A	(2.1)FS	2.1	2.2	2.4	2.3	2.3	2.4	2.2	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.1	S	A
Median	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.1
Count	29	28	26	26	27	30	31	30	29	28	29	30	30	30	31	30	30	31	30	31	31	27	26	29

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 88

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

IONOSPHERIC DATA

M3000)F2 (Characteristic), ____ (Unit), May (Month), 1955

served at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E. J. W., J. W. P., L. F. M., J. J. S.

Calculated by: E. J. W., J. W. P., N. B., J. J. S.

y	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(2.9)F	(2.9)F	(2.9)F	(3.1)F	3.0	3.4	3.4	3.1	3.1F	3.0H	3.1	3.1	3.0	3.0	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.2F	3.2F
2	3.1F	3.0F	3.1F	3.2F	(3.2)FS	3.1	3.4	3.4	3.3	3.3V	3.4	3.1	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.4	3.2	3.2	3.1
3	3.0	3.0	3.1	3.1	3.0	3.2	3.3	3.4	3.4	3.5	3.1	3.2	3.0	3.0	3.2	3.3	3.3	3.2	3.3	3.4	3.3	3.2	3.2	3.1
4	3.0	3.2	3.3	3.3	3.3	3.4	3.5	3.5	3.4	3.2	3.3	3.1	3.0	3.2	3.3	3.0	3.1	3.2	A	3.2	3.1	3.5	3.2	3.1F
5	JA	(3.0)AS	A	A	3.1F	3.3F	3.3	3.0	S	3.0	3.1	2.9	3.0H	3.2	3.2	3.1	3.1	3.1	3.3	3.1	(2.8)JS	3.2	3.1	3.1
6	3.0	3.0	3.0	3.0	(3.1)JS	3.4	3.3	3.2	3.2F	G	G	2.6	(2.7)FH	GK	2.5K	GK	2.6K	(2.2)SK	2.9K	(3.1)SH	3.1K	3.1K	3.1K	3.0K
7	2.9K	3.0	3.0	3.4	3.2	3.2	3.4	3.5	3.3	3.3	3.3	3.3	2.9	3.1	3.2	3.1	3.1	3.3	3.1	3.3	3.3	3.1	3.0	2.9
8	(2.9)SF	(3.0)PF	K(2.9)PF	K(3.1)PF	(3.2)FK	K(3.6)FS	3.6FK	K(3.4)FS	GK	GK	2.5K	3.0K	3.0K	3.0K	3.0K	3.2K	2.9K	2.9K	3.1K	3.3K	3.1K	JSK	K(3.1)AS	3.1FK
9	3.0FK	AK	3.1FK	3.0K	3.2K	3.3K	3.4K	(2.9)SK	3.0K	(2.8)SK	2.9K	GK	GK	2.6K	3.0K	3.0K	2.9K	2.9K	3.2K	3.2K	3.2K	AK	AK	AK
0	AK	3.1K	3.2F	3.0	3.0	3.1	3.2	3.2	3.4	3.1H	2.9	3.1	3.1H	3.2	2.9	3.1	3.1	3.2	3.3	3.4	(3.3)JF	3.3	(3.3)FS	3.3F
1	(3.1)F	3.1F	2.9F	3.0F	3.1F	3.5F	3.4	3.4	2.8	A	2.6	GK	GK	JAK	2.9K	3.0K	3.2K	3.2K	3.4K	3.3K	3.1K	3.2K	AK	3.1K
2	3.3K	3.1FK	3.0F	3.3	3.2	3.2	3.3	3.3	3.4	3.4	3.2	3.0	3.0	3.1	3.2	3.2	3.1	3.1	3.2	3.3	3.5	(3.3)PS	3.2	3.3
3	3.2F	(3.1)FS	3.1F	3.2	3.0F	3.2	G	3.1	3.1	3.4	3.5	3.1	2.9	3.1	3.0	3.2	3.0	3.1	3.0	3.4	3.3	3.4	3.3	3.0
4	3.0	3.1	3.1	(3.0)PS	(2.9)PF	3.3	3.3	(3.2)FS	3.3F	(3.1)F	2.8	3.0	2.8	G	2.9K	AK	AK	3.0K	3.3K	K(3.2)FS	K(3.4)FS	JFK	FSK	K(2.9)FS
5	3.1K	3.2	3.1	A	(3.1)FS	3.0	3.1	3.2	2.8	2.7	3.0	2.6	G	2.7K	2.9K	2.9HK	2.9K	3.1K	3.2K	3.2K	3.2K	3.2K	3.0K	3.1K
6	2.9K	3.1K	3.1F	(3.2)FS	JS	3.1	3.1	2.9	2.8	3.2	3.0	2.8	2.9	G	2.5	2.8K	2.9K	3.1K	3.3K	3.3K	3.5K	3.3K	3.2K	3.2FK
7	3.2FK	3.1FK	3.0K	(3.0)SK	3.2FK	3.6K	3.5HK	3.5K	3.3K	3.4K	2.6K	G	2.8	2.8	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.5	3.3	3.2
8	3.0	3.0	3.1F	3.2F	3.0F	3.3	3.5	3.5	3.3H	3.3H	S	3.1	3.2	3.2	3.2	3.0	3.0	3.2	3.2	3.1	3.2	3.3	3.2	3.1
9	3.1F	3.1F	(3.2)A	3.3F	(3.3)PS	3.4	3.4H	3.1	3.1	3.3	3.3	3.3	3.2	3.3	3.3	3.1	3.2	3.3	3.3	3.3	3.4	3.4	3.3	3.1
0	3.1	3.1F	(3.0)FS	3.0	(3.0)PS	3.0	3.3	2.8	3.5	3.2	(3.2)H	3.2	3.1H	3.1H	3.2H	3.1	3.2	3.1	3.2	3.2	3.3	3.5	3.3	3.1
1	3.1	3.1	3.1	3.1	3.2	3.5	3.1H	3.2	3.3	A	(2.7)A	2.8	2.9	3.0	3.1	3.2	3.1	3.1	3.4	3.3	(3.3)S	(3.4)S	3.3	3.1
2	3.0	3.1	C	C	C	C	3.4	3.4	3.4	(3.0)H	3.3	3.1	3.1	3.0	3.1	3.2	3.1	3.2	3.3	3.3	3.4	3.4	3.2	3.1
3	3.1	3.2F	3.2	3.3	3.2	3.3H	3.4	3.4	3.4	3.3	3.3	3.2	3.1	3.0	3.1	3.1	3.2	3.3	3.3	3.2	3.2	3.3	(3.1)PS	(3.1)PS
4	3.1	3.1F	3.1F	(3.1)FS	(3.2)FS	(3.4)S	3.5	3.5	3.4	3.4	3.1	3.2	3.1	3.1	3.0	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.2	3.1
5	3.1	A	(3.1)A	3.3	3.4	(3.5)FS	3.4H	3.1H	3.4	3.6	3.1	3.4	3.1	3.1	3.0	2.8	2.9	3.1	3.0	(2.8)S	2.9	(2.9)FS	(2.8)FS	2.8
6	K(2.8)FS	FSK	FSK	FSK	FSK	3.1K	GK	GK	3.2K	3.1K	GK	GK	AK	2.7K	(2.7)AK	2.9K	2.9K	3.1K	3.1K	3.1K	3.2K	K(3.0)PS	K(2.9)PS	3.0K
7	K(3.3)FS	K(3.1)FS	K(3.0)FS	2.9FK	3.0F	3.3	3.5	3.2	3.1H	3.2F	3.1	3.1H	2.7	3.2	2.8	2.9	3.0	2.9	3.0	3.1	3.1	3.3F	3.0	3.1
8	2.8	2.9FS	(2.9)FS	(2.9)FS	3.0	3.2	2.9	A	A	A	2.5	AK	2.7K	GK	GK	2.6K	2.9K	3.0K	3.1HK	3.1K	3.2K	3.0K	3.1K	K(3.1)FS
9	K(3.0)FS	2.9F	2.6	JF	(3.2)PA	3.4	3.4	(3.3)H	3.0F	3.1F	2.8F	3.3H	3.0H	3.0	3.0	3.1	2.9	3.0	3.1	3.2	3.2	JS	JS	3.0
0	(3.0)FS	(2.9)FS	F	(3.0)FS	JF	3.3	3.4	3.4	3.3	3.3	C	2.9	2.9	2.9	3.1	3.0	3.1	3.2	3.1	3.4	3.3	(3.4)FS	3.0	3.0
1	3.1F	3.0F	A	(3.1)FS	3.1	3.2	3.5	3.4	3.4	3.5	3.3	3.0	3.1	3.2	3.2	3.1	3.1	3.2	3.3	3.1	3.2	3.1	S	A
ian	3.0	3.1	3.1	3.1	3.1	3.3	3.4	3.25	3.3	3.2	3.1	3.1	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.2	3.1
nt	29	28	26	26	27	30	31	30	29	28	29	30	30	30	31	30	30	31	30	31	31	27	26	29

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

Form adopted June 1946

TABLE 89

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D.C.

IONOSPHERIC DATA

(M3000)F1 (Characteristic), ____ (Unit), May (Month), 1955

National Bureau of Standards (Institution)

Observed at Washington, D.C.

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	3.9	3.8 F	37	38	39 H	38 H	38	3.9 H	37	37	3.5	37					
2							Q	37	37	39 H	41	38 H	38 H	38	37	3.7 H	38	3.7 H	L					
3							L	3.8	3.7 H	40 H	39 H	3.8	3.8 H	3.8 H	3.8 H	39	38	L	L					
4							Q	(39) L	38 H	38 H	39	37 H	3.7	3.9	38	37 H	36 H	A	A					
5							Q	36	38	39	A	39 H	40 H	39 H	39 H	37 H	3.6	L	L					
6							Q	3.6	38 F	39	39	40 H	41 H	40 HK	39 HK	37 K	36 K	3.6 HK	(33) LK	K				
7							Q	L	39 H	36 H	(37) H	37 H	(40) A	(37) A	38 H	A	(37) A	(3.8) H	L					
8							Q K	L K	39 FK	39 HK	39 HK	39 K	3.8 K	3.9 K	37 K	3.7 K	37 K	35 HK	(36) LK	K				
9							L K	36 K	37 HK	(42) SK	(39) AK	40 K	39 HK	40 K	38 HK	3.8 HK	3.6 HK	36 K	(36) LK	K				
10							35	3.7	38 H	(37) L	38 H	41	(4.2) S	38 H	39	3.9 H	37	37	L					
11							Q	(3.7) L	39	A	4.1	40 K	4.1 K	42 K	A K	(38) SK	37 HK	35 HK	A K	K				
12							L	(39) L	38	39	39	40	3.9	39	38	38	3.7	3.7	A					
13							3.5	3.7 H	40	39	40	40	4.0	40 H	38 H	3.7	37	A	L					
14							L	(38) L	(39) S	(39) S	41 H	41	3.9	39	37 K	A K	A K	37 K	L K	K				
15							3.8	39	40	41 H	39 H	41	41 H	40 K	3.8 HK	38 K	A K	36 HK	3.6 K	K				
16							3.6	36	37	39 H	39 H	40	A H	40	3.7 H	3.8 K	37 HK	37 HK	37 HK	K				
17							L K	3.7 K	41 K	39 K	4.0 K	39 H	4.0	40	3.8	38 H	36	3.9	3.8					
18							L	(3.9) L	4.1	43 H	43 H	42 H	39 H	39 H	38 H	39 H	3.8	3.8	37	L				
19							L	3.5	37	39	3.9 H	40 H	39 H	40	40	38 H	36 H	3.7 H	L					
20							(37) L	36	A	A	40 H	39 H	40 H	(41) H	(4.0) H	39 H	(39) S	3.8	L					
21							(38) L	38	A	A	39 H	4.1	40 H	3.8 H	3.8 H	39	3.8	38 H	(3.8) L					
22							L	39	40 H	(3.9) H	39 H	3.9	38	3.8	3.9	3.6 H	37 H	A	L					
23							L	L	39	40	4.1	40	41 H	40	3.7	37	3.7	38	L					
24							L	40	3.9 H	39 H	39 H	3.9 H	A	40	37	38 H	3.9 H	A	A					
25							L	A	A	41	4.1	41	A	A	39 H	38	37	3.5	L					
26							3.8 HK	3.8 K	3.9 K	4.1 HK	42 K	41 K	A K	A K	3.8 K	3.9 K	3.8 K	37 HK	(3.6) LK	K				
27							Q	36	3.8 H	39	4.1	41	39	39 H	38 H	39	3.6 H	37	L					
28							(3.5) L	A	A	(41) A	41	A K	42 HK	3.8 K	4.0 HK	3.8 K	37 HK	38 HK	L K	K				
29							L	3.8	JA	36	3.9 H	41 H	40	3.8 H	3.9	40	38	(37) L	A					
30							L	L	38	39	C	4.1 H	39 H	40	3.8 H	37	36	38	L					
31							L	A	A	A	40	3.9	A	A	A	3.8 H	37 H	3.7	A					
Median							3.6	3.8	3.8	3.9	3.9	4.0	4.0	3.9	3.8	3.8	3.7	3.7	36	—				
Count							8	24	25	27	29	30	26	28	29	29	29	25	10					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 90

Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

Form adopted June 1946

IONOSPHERIC DATA

11500) E (Characteristic), ______ (Unit), May (Month), 1955

served at Washington, D. C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

National Bureau of Standards (Institution)

Scaled by: E.J.W., J.W.P., L.F.M., J.J.S.

Calculated by: E.J.W., J.W.P., N.B., J.J.S.

y	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
							A	A	4.3 H	A	4.5	46 H	A	4.5	44	4.5	44	4.4	44					
							4.5	44	45 H	4.5	4.5	4.4	45	4.5	4.3	4.3	44 H	44	44 H					
							(44) P	4.5	(45) A	(4.6) A	(46) A	(4.6) A	(45) P	45	A	45	44 H	(4.5) P	S					
							(42) H	44 H	45	4.6	(46) P	(4.6) A	(45) P	45	A	A	45	45	4.5					
							A	45	45	A	A	A	A	A	43	4.4 H	44	4.5	A					
							45	45 H	45 H	A	(45) H	(4.4) A	(45) H	A K	44 HK	4.4 K	44 K	4.4 K	42 HK	K				
							A	(42) H	(43) H	43	4.3	4.4	(4.5) A	A	A	(44) A	A	(4.3) A	(44) S					
							(43) HK	45 K	A K	4.5 K	45 K	4.5 K	(4.5) PK	4.5 K	45 K	44 K	44 K	45 K	B K	K				
							A K	A K	46 HK	A K	A K	A K	A K	4.4 K	4.3 K	4.4 K	43 K	4.5 K	A K	K				
							A	A	A	A	A	A	A	A	45 H	44	4.4	44	A					
							A	43 H	44	4.4	4.4	A K	A K	A K	A K	A K	45 K	44 K	45 K	K				
							A	43 H	A	(4.4) A	A	A	A	A	4.4	45	(44) A	44 H	A					
							A	44	45	45	45	4.4	44 H	4.5	44 H	44	4.4	44	45					
							A	44	45	44	44	A	A	(45) A	A K	43 K	43 K	44 K	A K	K				
							S	A	A	A	A	A	A	A K	4.4 K	4.4 K	44 K	44 K	44 K	K				
							(45) P	45	44	4.5	45	4.5	(45) P	45 H	4.5	45 K	4.4 K	4.5 K	45 K	K				
							45 HK	44 HK	A K	A K	4.5 HK	A	(45) P	A	(45) P	A	45	4.6 H	44					
							45	45	44 H	4.5	A	A	A	44	45	45	4.5	45 H	44	S				
							45	A	A	A	(45) A	A	A	44	(4.4) A	(44) A	(44) A	(4.4) S	44					
							A	4.5	A	A	A	A	(45) H	45	42	43 H	4.6	45 H	A					
							(45) A	45 H	47	A	A	45 H	A	A	A	A	46 H	A	43					
							A	45	42 H	4.5	A	A	A	A	43 H	44 H	(4.4) A	45	A					
							(45) A	A	A	A	A	A	A	45	A	A	A	A	A					
							A	44	A	46	4.5	A	A	A	A	A	A	A	A					
							(44) A	(4.5) A	(45) A	(45) A	(4.5) A	A	A	A	A	A	A	4.4	44					
							A K	A K	A K	45 K	(4.5) AK	A K	A K	A K	A K	A K	A K	44 K	44 K	K				
							A	45	(44) A	A	A	A	A	44	44	A	44	44	4.4					
							A	A	A	A	A	A K	A K	A K	A K	A K	A K	A K	A K	K				
							A	44	A	A	A	A	(45) A	A	A	A	A	A	4.4					
							44	4.4	45	A	C	46 H	45	45	A	4.4 H	4.4	4.5	44					
							A	45	A	A	A	A	A	A	A	A	A	A	A					
an							(45)	45	45	45	45	4.5	(45)	45	4.4	44	4.4	4.4	44					
nt							13	23	18	15	16	11	12	15	17	19	23	25	18					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

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GPO 836048

Table 91

Ionospheric Storminess at Washington, D. C.

May 1955

Day	Ionospheric character*		Principal storms		Geomagnetic character**	
	00-12 GCT	12-24 GCT	Beginning GCT	End GCT	00-12 GCT	12-24 GCT
1	3	2			2	1
2	1	2			1	2
3	1	2			2	2
4	0	3			1	2
5	3	1			2	3
6	1	5	1300	----	4	4
7	1	3	----	0000	4	3
8	2	3	0200	----	4	4
9	3	5	----	----	2	2
10	2	2	----	0100	3	2
11	2	5	1100	----	2	1
12	1	1	----	0100	2	2
13	1	2			3	2
14	1	4	1400	----	3	2
15	2	4	----	0000	2	2
			1300	----		
16	3	5	----	0100	4	1
			1500	----		
17	4	3	----	1000	2	1
18	3	2			1	2
19	0	2			1	1
20	1	2			2	2
21	2	3			1	2
22	2	1			2	2
23	1	1			1	1
24	1	2			2	2
25	2	1			1	5
26	3	5	0000	----	6	2
27	1	1	----	0300	2	4
28	2	5	1100	----	5	3
29	2	2	----	0000	3	2
30	1	1			1	2
31	2	1			2	2

*Ionosphere character figure (I-figure) for ionospheric storminess at Washington, D. C., during 12-hour period, on an arbitrary scale of 0 to 9, 9 representing the greatest disturbance.

**Average for 12 hours of Cheltenham, Maryland, geomagnetic K-figures on an arbitrary scale of 0 to 9, 9 representing the greatest disturbance.

----Dashes indicate continuing storm.

Erratum: In table 91 of F129, the storm listed as beginning at 0200 on the 25th began at 0200 on the 26th of April.

Table 92

Sudden Ionosphere Disturbances Observed at Washington, D. C.

May 1955

1955 Day	GCT		Location of transmitters	Relative intensity at minimum*	Other phenomena
	Beginning	End			
May 27	1545	1630	Ohio, England, Mexico, North Dakota	0.02	Solar flare** 1540

*Ratio of received field intensity during SID to average field intensity before and after, for station KQ2XAU (formerly W8XAL), 6080 kilocycles, 600 kilometers distant.

**Time of observation at Sacramento Peak, New Mexico.

Table 93

Sudden Ionosphere Disturbances Reported by the Netherlands Postal and Telecommunication Services, as Observed at Nederhorst den Berg, Netherlands

April 1955

1955 Day	GCT		Location of transmitters	Other phenomena
	Beginning	End		
April 26	1706	1718	Washington, Paramaribo, Karachi	Reinforcement (of atmospheric long-wave noise) 1706-1712

Note: Observers are invited to send to the CRPL information on times of beginning and end of sudden ionosphere disturbances for publication as above. Address letters to the Central Radio Propagation Laboratory, National Bureau of Standards, Boulder, Colorado; Attention: Mr. Vaughn Agy.

Table 94a

Radio Propagation Quality Figures

(Including Comparisons with Short-Term and Advance Forecasts)

North Atlantic Path - April 1955

Day	North Atlantic 6-hourly quality figures				Short-term forecasts issued about one hour in advance of:				Whole day quality index	Advance forecasts (J-reports) for whole day; issued in advance by:			Geomag-netic K_{Ch}	
	00 to 06	06 to 12	12 to 18	18 to 24	00	06	12	18		1-4 days	4-7 days	8-25 days	Half Day (1)	Half Day (2)
1	(4)	(4)	6	6	(4)	(4)	6	6	5	(4)	6		3	2
2	(4)	(3)	6	6	5	5	6	6	(4)	(4)	6		3	3
3	(4)	(4)	6	6	5	5	6	6	5	5	5		3	2
4	(4)	(4)	7	6	5	5	7	6	5	5	5		2	3
5	5	(3)	7	6	5	(4)	6	6	5	6	5		3	3
6	5	(4)	6	7	5	(4)	7	6	5	(4)	(4)	X	3	2
7	5	(4)	6	7	6	(4)	7	6	6	(4)	(4)	X	(4)	2
8	5	(4)	7	7	5	5	7	6	6	5	5		2	2
9	5	(4)	7	7	6	5	7	7	6	6	6		2	1
10	6	(4)	7	7	6	6	7	7	6	6	6		1	2
11	6	5	7	7	7	6	7	7	6	6	6		3	2
12	5	(4)	7	6	6	6	7	7	6	6	5		3	2
13	5	(4)	7	6	6	6	7	6	5	6	5		3	3
14	5	5	7	7	6	5	7	6	6	6	5		3	1
15	6	6	7	7	6	6	7	7	6	6	7		2	2
16	6	5	7	7	7	6	7	7	7	6	7		1	2
17	7	5	7	7	7	6	7	7	7	6	6		2	2
18	7	(4)	7	7	7	6	7	7	6	6	6		0	1
19	7	5	7	7	7	6	7	7	7	6	6		1	1
20	6	5	7	7	7	5	7	7	6	6	6		3	2
21	6	5	7	7	6	5	7	7	6	6	6		2	2
22	6	6	7	7	7	6	7	7	7	6	6		3	2
23	6	5	7	7	7	6	7	7	7	6	6		1	1
24	7	5	7	7	7	6	7	6	7	7	7		2	(4)
25	6	6	7	7	5	5	7	7	6	7	7		2	2
26	5	(4)	6	6	6	5	6	6	5	6	6		3	3
27	5	(4)	6	(4)	5	(4)	6	6	5	6	6		3	(4)
28	(2)	(2)	5	5	(3)	(2)	(4)	(4)	(3)	6	6		(4)	(4)
29	(3)	(3)	6	6	(2)	(2)	5	5	(4)	(3)	6		(4)	3
30	(3)	(2)	6	7	(4)	(4)	6	6	(4)	(4)	6		(4)	3
Score:														
Quiet Periods				P	11	5	25	20		12	12			
				S	12	7	5	9		13	13			
				U	0	0	0	0		0	0			
				F	0	0	0	0		1	1			
Disturbed Periods				P	1	5	0	0		2	0			
				S	6	7	0	0		1	0			
				U	0	2	0	0		0	0			
				F	0	4	0	1		1	4			

Scales:

Q-scale of Radio Propagation Quality
- (1) - useless
- (2) - very poor
- (3) - poor
- (4) - poor to fair
- 5 - fair
- 6 - fair to good
- 7 - good
- 8 - very good
- 9 - excellent

K-scale of Geomagnetic Activity
0 to 9, 9 representing the greatest disturbance; $K_{Ch} \geqslant 4$ indicates significant disturbance, enclosed in ( ) for emphasis

Scoring: (beginning October 1952)
- P - Perfect: forecast quality equal to observed
- S - Satisfactory: (beginning October 1952) forecast quality one grade different from observed
- U - Unsatisfactory: forecast quality two or more grades different from observed when both forecast and observed were $\geqslant 5$, or both $\leqslant 5$
- F - Failure: other times when forecast quality two or more grades different from observed

Symbols:
X - probable disturbed date

Note: All times are UT (Universal Time or GCT)

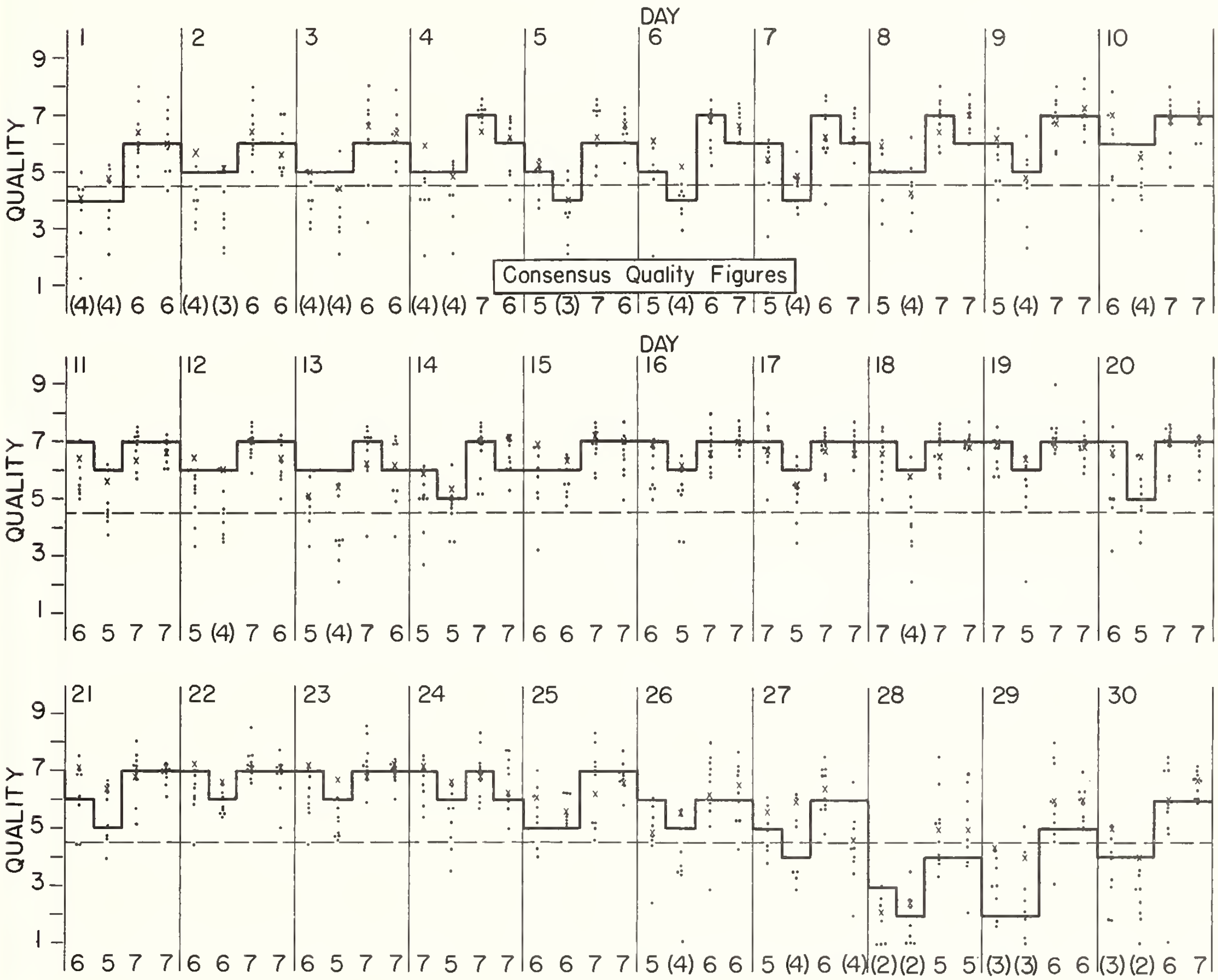
Table 94b

Short-Term Forecasts — April 1955

— Forecast

× CRPL observation (not in consensus)

● Individual reports of quality (adjusted to CRPL scale)



Outcome of Advance Forecasts (1 to 4 Days Ahead) — April 1955

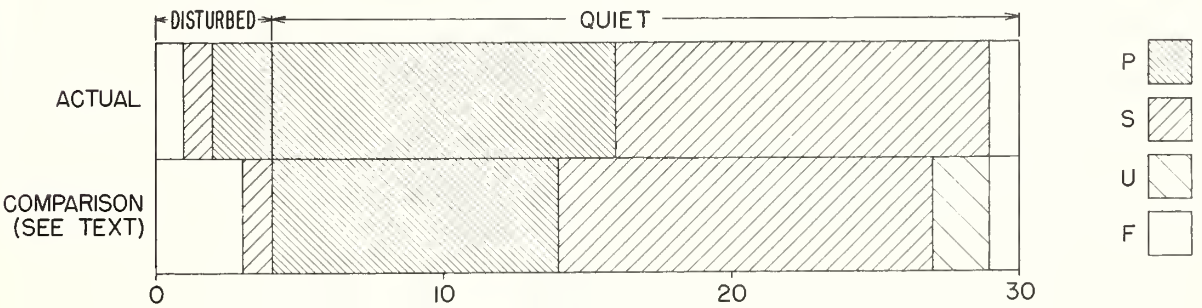


Table 95a

Coronal observations at Climax, Colorado (5303A), east limb
(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date	Degrees north of the solar equator																		0°	Degrees south of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	15	21	6	3	1	1	-	-	-	-	-	-	-
2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	22	29	12	-	-	-	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	2	1	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X
10.x																																					
11.6	-	-	-	-	-	-	-	1	2	1	1	1	-	-	-	-	-	-	-	-	-	-	1	2	3	1	1	-	-	-	-	-	-	-	-	-	-
12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	7	11	3	4	-	-	-	-	-	-	-	-	-	-
13.x																																					
14.7	X	X	-	-	-	-	-	-	-	-	-	1	2	5	2	2	1	1	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	X	X	X	X
15.6	-	-	-	-	-	-	-	-	-	-	2	4	5	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7a	-	-	-	-	-	-	-	-	-	-	3	6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.x																																					
22.x																																					
23.6	-	-	-	-	-	-	1	1	1	4	9	19	28	24	3	-	-	-	-	-	-	-	-	1	1	2	1	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	X	X	-	-	-	-	1	2	2	2	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.x																																					
28.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	25	23	13	-	-	-	-	-	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	5	2	1	1	-	-	-	-	-	-	-	-
31.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	8	11	8	3	-	-	-	-	-	-	-	-	-

Table 96a

Coronal observations at Climax, Colorado (6374A), east limb
(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date	Degrees north of the solar equator																		0°	Degrees south of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	1	1	-	-	-	-	-	-	-	-	-	-	1	1	2	2	2	1	1	1	3	2	2	2	5	8	2	-	-	-	-	-	-	-	-	-	1
2.9	-	-	-	-	-	-	-	-	-	1	2	2	2	2	1	1	1	1	1	2	1	2	2	5	3	4	-	-	-	-	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	1	2	2	2	2	3	2	2	3	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	1	1	-	-	-	-	-	-	-	-	-	-	-	3	2	2	2	2	2	2	2	2	2	1	1	1	1	-	-	-	-	-	-	1	1	1	1
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	1	1	3	3	3	2	1	1	1	1	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	1	2	3	2	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	X	X
10.x																																					
11.6	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	1	1	3	1	1	1	1	1	1	2	1	1	-	-	-	-	-	-	-	-
12.6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1
13.x																																					
14.7	X	X	-	-	-	-	-	-	-	-	-	-	-	1	3	1	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X
15.6	1	1	1	-	-	-	-	-	-	-	-	-	1	1	4	3	3	3	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7a	1	1	-	-	-	-	-	-	-	1	3	2	5	15	17	9	4	4	7	7	7	5	7	3	1	-	-	-	-	-	-	-	-	-	-	-	-
21.x																																					
22.x																																					
23.6	1	1	-	-	-	-	-	-	-	-	-	3	4	5	5	6	4	2	2	2	2	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	X	X	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2	3	3	2	2	3	3	3	3	1	1	-	-	-	-	-	-	-	-	-	-
27.x																																					
28.7	1	-	-	-	-	-	-	-	-	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
29.7	-	-	-	-	-	-	-	-	-	1	2	2	3	3	3	3	2	2	5	4	3	2	2	3	16	11	4	3	1	-	-	-	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	3	4	1	-	-	-	-	-	-	-	-	-
31.7a	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-

Table 95b

Coronal observations at Climax, Colorado (5303A), west limb

(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	-	-	-	-	-	-	-	-	-	1	3	2	1	-	-	-	-	-	-	1	1	3	3	3	4	2	4	4	2	-	-	-	-	-	-	-	-
2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	2	2	-	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	2	2	1	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	6	5	3	1	-	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	4	6	3	3	2	-	-	-	-	-	-	-	-	-
10.x																																					
11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	1	1	1	-	-	-	-	-	-
12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	3	1	-	-	-	-	-	-	-	-
13.x																																					
14.x																																					
15.6	-	-	-	-	-	-	-	-	-	-	1	8	7	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.x																																					
22.x																																					
23.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27.x																																					
28.7	-	-	-	-	-	-	-	-	-	-	1	2	2	1	-	-	-	-	-	-	-	10	20	27	27	20	13	4	4	-	-	-	-	-	-	-	-
29.7	-	-	-	-	-	-	-	-	-	-	-	1	2	3	3	1	-	-	-	-	3	19	30	49	43	25	11	5	6	6	2	1	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	31	25	10	10	5	2	2	-	-	-	-	-	-	-
31.7a	-	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	21	17	16	5	2	-	-	-	-	-	-	X	X	X	X

Table 96b

Coronal observations at Climax, Colorado (6374A), west limb

(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	3	2	2	3	1	1	1	1	1	-	-	-	-	-	-	-	-	-	1	1	1
2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2	1	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	1	1	1	-	-	-	-	-	1	1	2	3	2	2	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1	2	2	3	2	1	1	1	1	2	1	1	1	1	-	-	-	-	-	-	-	1	1
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2	3	2	2	2	3	3	3	2	1	1	-	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	X	X	-	-	-	-	-	-	-	-	1	1	1	1	1	2	1	3	1	1	1	5	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-
10.x																																					
11.6	-	-	-	-	-	-	-	-	-	-	1	1	1	3	3	3	2	2	2	1	4	15	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-
12.6	1	-	-	-	-	-	-	-	-	-	-	1	1	1	2	2	2	3	3	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
13.x																																					
14.x																																					
15.6	-	-	-	-	-	-	-	-	-	-	6	7	6	2	2	2	2	3	3	4	3	3	2	2	1	-	-	-	-	-	-	-	-	-	-	1	1
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	2	3	2	2	2	2	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1
21.x																																					
22.x																																					
23.6	-	-	-	-	-	-	-	-	1	1	3	1	1	1	1	2	3	1	3	2	2	2	3	3	1	-	-	-	-	-	-	-	-	-	-	1	1
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27.x																																					
28.7	-	-	-	-	-	-	-	-	-	-	1	1	1	4	4	4	4	4	3	2	4	10	6	20	23	2	1	1	2	1	-	-	-	-	-	1	1
29.7	-	1	1	-	-	-	-	1	1	1	-	-	-	-	2	2	3	3	3	3	3	4	4	4	10	10	2	-	-	3	-	-	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	3	3	2	2	2	2	18	25	22	19	3	2	-	-	-	-	-	-	-	-	-	-
31.7a	-	-	-	-	X	X	X	X	X	X	X	X	3	3	3	3	6	6	6	3	3	3	7	3	3	-	-	-	-	-	-	-	-	X	X	X	X

Table 97a

Coronal observations at Climax, Colorado (6702A), east limb

(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date UT	N 90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	0°	S 5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X
10.x																																					
11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.x																																					
14.7	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X
15.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.x																																					
22.x																																					
23.6	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.x																																					
28.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(N = Degrees north of the solar equator; S = Degrees south of the solar equator)

Table 98a

Coronal observations at Sacramento Peak, New Mexico (5303A), east limb
(Arbitrary Scale)

Date UT	N 90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	0°	S 5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	-	-	-	-	2	-	3	3	4	4	5	4	3	2	3	2	2	-	-	2	2	3	2	5	20	39	40	12	8	5	7	7	4	-	-	-	-
4.6	-	-	-	-	-	-	-	-	2	2	3	3	2	3	2	-	-	-	-	-	-	2	3	4	5	11	14	13	8	5	6	5	4	-	-	-	-
5.x																																					
6.x																																					
7.7	-	-	-	-	-	2	3	4	5	6	5	4	4	5	3	2	2	-	-	-	-	-	-	-	-	2	3	4	5	5	6	5	4	-	-	-	-
8.x																																					
9.6	-	-	-	-	2	3	3	4	5	8	9	8	7	4	4	3	2	-	-	-	-	-	-	-	2	3	4	4	4	3	2	2	-	-	-	-	-
10.x																																					
11.x																																					
12.6a	-	-	-	-	-	2	4	6	5	7	7	6	5	7	5	13	11	8	3	2	-	2	3	6	16	18	15	8	5	5	4	3	-	-	-	-	-
13.7	-	-	-	-	-	3	4	5	5	6	6	7	8	9	11	10	7	4	3	-	-	2	3	8	14	16	15	7	5	4	3	2	-	-	-	-	-
14.8a	-	-	-	-	-	-	-	3	3	2	3	3	3	4	5	4	3	-	-	-	-	-	-	-	3	4	5	4	3	3	-	-	-	-	-	-	-
15.7a	-	-	-	-	-	2	2	3	2	3	4	5	8	8	7	5	4	-	-	-	-	-	-	-	-	2	3	3	2	3	4	4	3	-	-	-	-
16.6	-	-	-	-	-	-	2	3	4	4	8	11	14	16	18	13	5	3	-	-	-	-	-	2	3	4	5	7	5	3	2	-	-	-	-	-	-
17.7	-	-	-	-	-	2	2	3	3	4	5	8	11	18	32	36	5	3	2	-	-	-	3	2	3	3	4	5	5	4	3	2	-	-	-	-	-
18.x																																					
19.x																																					
20.6	-	-	-	2	3	3	3	5	8	8	9	13	16	14	11	7	4	2	..	-	-	-	-	2	3	4	8	6	5	3	3	2	-	-	-	-	-
21.6	-	-	-	-	-	2	4	5	4	8	9	11	14	20	16	13	8	3	-	-	-	-	-	-	2	2	3	4	3	3	2	-	-	-	-	-	-
22.7a	-	-	-	-	-	-	-	2	3	4	5	8	11	20	23	16	11	3	-	-	-	-	-	-	-	-	2	2	3	2	2	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	2	3	3	4	6	8	11	13	11	3	2	-	-	-	-	-	-	-	-	2	3	3	2	2	-	-	-	-	-	-
24.7a	-	-	-	-	-	-	-	-	3	3	4	6	7	6	6	5	4	4	3	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	-	-	-	-	-	-	-	3	4	5	6	6	5	4	3	2	-	-	-	-	-	-	-	-	-	2	3	3	2	-	-	-	-	-	-	-	-
27.6	-	-	-	-	-	-	2	4	8	5	7	6	3	3	2	-	-	-	-	-	-	-	-	2	2	3	5	6	4	3	2	2	-	-	-	-	-
28.x																																					
29.x																																					
30.x																																					
31.7a	-	-	-	-	-	-	-	-	-	2	2	2	3	3	2	-	-	-	-	-	-	-	2	3	3	5	12	11	5	3	2	2	-	-	-	-	-

(N = Degrees north of the solar equator; S = Degrees south of the solar equator)

Table 97b

Coronal observations at Climax, Colorado (6702A), west limb

(Absolute values in millionths of the brightness of one angstrom at the center of the solar disk)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.x																																					
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.x																																					
9.6a	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.x																																					
11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.x																																					
14.x																																					
15.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.x																																					
17.x																																					
18.x																																					
19.x																																					
20.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.x																																					
22.x																																					
23.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.9	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27.x																																					
28.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	1	-	-	-	-	-	-	-	-	-	-
29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2	1	-	-	-	-	-	-	-	-	-	-
31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.7a	-	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X

Table 98b

Coronal observations at Sacramento Peak, New Mexico (5303A), west limb
(Arbitrary Scale)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	-	-	-	-	-	-	-	2	3	5	5	6	7	8	7	6	4	3	-	2	3	4	5	5	6	8	13	16	18	14	10	7	4	-	-	-	-
4.6	-	-	-	-	-	-	-	2	3	3	3	4	5	11	7	4	3	2	-	-	2	3	3	3	4	4	5	8	9	5	4	3	-	-	-	-	-
5.x																																					
6.x																																					
7.7	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	x	X	X	X	X	X	X	X	X	X	X	X	-	-	-
8.x																																					
9.6	-	-	-	-	-	-	2	3	4	3	2	3	3	2	2	-	-	-	-	2	3	4	5	23	32	28	32	16	14	8	5	6	4	3	-	-	-
10.x																																					
11.x																																					
12.6	-	-	-	-	-	-	2	2	3	2	2	3	3	3	2	-	-	-	-	-	-	-	3	4	5	6	8	11	12	11	8	8	4	-	-	-	-
13.7	-	-	-	-	-	2	2	3	2	2	3	4	3	2	-	-	-	-	-	-	-	-	2	3	3	5	6	7	5	5	6	5	3	-	-	-	-
14.8a	-	-	-	-	-	-	-	-	-	2	3	3	3	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.7a	-	-	-	-	-	-	-	2	3	3	4	5	11	16	14	11	3	2	-	-	-	-	-	2	2	2	2	2	3	3	3	3	2	-	-	-	-	-
16.6	-	-	-	-	-	2	3	4	3	4	6	14	41	39	16	3	-	-	-	-	-	-	-	-	2	2	2	3	3	3	3	2	2	-	-	-	-
17.7	-	-	-	-	-	2	2	3	4	3	5	11	20	16	11	5	3	-	-	-	-	-	-	2	3	2	2	2	2	2	2	2	3	2	-	-	-
18.x																																					
19.x																																					
20.6	-	-	-	-	-	2	5	6	8	7	7	6	5	3	-	-	-	-	-	-	-	-	-	2	3	2	-	2	2	3	2	2	-	-	-	-	-
21.6	-	-	-	-	-	2	3	4	3	5	4	4	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	3	2	-	-	-
22.7a	-	-	-	-	-	-	-	2	2	3	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	2	2	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	2	2	3	3	2	2	2	-	-	-	-	-	-	-	-	-	-	2	3	2	3	3	4	5	4	3	-	-	-	-
24.7a	-	-	-	-	-	-	-	-	-	2	3	3	2	2	2	-	-	-	-	-	-	-	-	-	2	3	4	3	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	-	-	-	-	-	-	-	-	2	2	3	4	5	6	5	3	2	-	-	-	2	3	5	8	14	16	15	10	7	4	3	4	2	-	-	-	-
27.6	-	-	-	-	-	-	-	-	2	3	4	12	14	17	18	11	4	3	-	-	2	3	11	23	42	43	41	14	11	8	6	5	3	2	-	-	-
28.x																																					
29.x																																					
30.x																																					
31.7a	-	-	-	-	-	-	-	2	3	3	3	2	2	-	-	-	-	-	-	-	2	3	5	23	32	24	17	11	8	6	5	6	5	3	-	-	-

Table 99a

Coronal observations at Sacramento Peak, New Mexico (6374A), east limb
(Arbitrary Scale)

Date	Degrees north of the solar equator																	0°	Degrees south of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	3	3	2	2	3	4	3	3	3	5	8	7	5	5	6	7	8	8	11	12	13	13	14	14	16	17	15	5	3	-	2	-	2	2	3	3	3
4.6	3	2	2	3	2	2	3	-	2	3	5	4	3	4	9	11	12	11	10	8	9	9	10	11	12	12	11	4	2	2	-	3	2	2	2	2	3
5.x																																					
6.x																																					
7.7	3	3	2	2	3	2	2	2	2	2	3	4	3	4	4	8	11	10	11	10	8	8	7	8	9	11	5	4	3	3	3	2	2	3	3	4	3
8.x																																					
9.6	3	3	3	3	2	2	3	2	2	3	4	3	4	4	5	6	8	7	7	7	8	7	5	4	3	2	4	5	4	3	3	2	2	-	2	3	2
10.x																																					
11.x																																					
12.6a	3	3	2	3	3	3	3	2	3	3	4	5	4	3	5	4	3	5	6	11	14	10	9	4	4	8	14	8	5	3	3	3	2	3	3	4	3
13.7	3	3	3	3	2	2	2	2	3	2	7	4	3	3	2	2	4	6	8	9	8	8	6	4	3	2	5	3	3	2	2	2	3	3	4	3	3
14.8a	-	-	-	-	-	-	-	-	-	3	3	3	2	3	3	3	3	5	7	6	5	4	3	3	-	2	-	-	-	-	-	-	-	-	-	-	-
15.7a	2	2	2	2	-	-	-	-	-	-	2	-	-	3	4	6	5	4	5	4	3	4	3	2	-	-	-	2	3	2	2	2	-	-	-	2	3
16.6	3	3	3	2	3	3	2	4	5	2	2	2	4	6	8	7	8	8	6	7	6	8	7	4	3	3	2	3	3	2	2	2	2	2	3	3	3
17.7	3	3	3	2	2	3	3	5	4	2	2	3	3	14	17	14	13	13	11	12	12	13	11	5	4	3	3	2	2	2	3	2	2	3	4	2	3
18.x																																					
19.x																																					
20.6	4	3	3	3	3	3	2	2	3	3	6	7	8	11	16	13	10	8	11	12	13	14	13	12	11	5	3	2	2	2	3	3	2	3	3	4	3
21.6	3	2	2	-	2	-	-	-	2	2	4	3	5	8	16	18	4	4	6	8	7	5	4	4	4	3	3	2	-	2	2	2	-	-	2	3	3
22.7a	3	2	2	-	2	-	2	2	2	2	3	-	11	14	16	8	8	9	10	9	8	6	5	4	4	3	4	5	3	2	2	-	-	-	2	2	2
23.7a	2	2	-	2	-	2	-	2	-	3	2	4	3	5	6	11	14	13	11	11	9	8	8	7	6	5	4	4	3	2	2	2	-	-	2	2	-
24.7a	-	-	-	-	-	-	-	-	2	3	-	3	2	2	2	11	7	8	7	7	6	5	4	4	3	3	4	3	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	2	2	2	3	2	2	2	2	3	2	-	2	2	3	3	5	6	8	7	7	6	5	5	6	8	6	5	4	2	3	2	2	2	2	3	2	2
27.6	3	4	3	3	3	2	3	3	3	5	3	4	7	8	11	12	14	16	11	12	9	8	9	10	11	14	5	5	3	3	2	3	2	3	3	3	3
28.x																																					
29.x																																					
30.x																																					
31.7a	2	2	2	-	2	-	-	2	3	2	3	4	4	5	4	5	4	5	5	6	4	6	7	6	5	4	5	4	3	2	-	2	-	-	3	3	2

Table 100a

Coronal observations at Sacramento Peak, New Mexico (6702A), east limb
(Arbitrary Scale)

Date	Degrees north of the solar equator																	0°	Degrees south of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	-	-	-	-	-	-	-	-	-
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.x																																					
7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.x																																					
9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.x																																					
11.x																																					
12.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.7	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.x																																					
19.x																																					
20.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.6	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.7a	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.x																																					
29.x																																					
30.x																																					
31.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 99b

Coronal observations at Sacramento Peak, New Mexico (6374A), west limb
(Arbitrary Scale)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	3	3	2	4	3	4	2	3	3	4	4	2	3	3	3	5	8	14	13	12	11	6	4	3	3	2	2	2	2	3	3	3	3	3	2	5	3
4.6	3	3	2	4	4	3	3	2	3	4	3	3	4	3	2	4	5	8	10	11	8	7	5	3	4	3	3	4	2	3	3	2	2	2	2	3	3
5.x																																					
6.x																																					
7.7	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	2	3	3
8.x																																					
9.6	2	2	2	-	-	2	3	3	2	3	2	3	5	6	4	5	4	8	7	8	10	7	16	22	19	14	16	4	3	-	2	2	-	2	2	3	3
10.x																																					
11.x																																					
12.6	3	3	2	2	3	2	2	2	3	3	4	4	5	6	7	12	14	11	10	10	11	11	10	8	9	7	5	3	2	3	3	3	3	3	3	4	3
13.7	3	3	2	2	2	3	2	3	3	3	4	3	5	7	8	11	12	13	11	11	12	11	10	9	8	8	5	3	2	3	2	2	2	2	3	4	3
14.8a	-	-	-	-	-	-	-	-	-	-	3	4	5	5	5	4	5	4	4	5	6	5	5	4	3	3	4	-	-	-	-	-	-	-	-	-	-
15.7a	3	-	-	-	-	-	-	-	-	-	-	16	17	15	13	11	8	7	6	6	6	7	5	5	4	4	5	2	2	2	2	3	2	2	-	2	2
16.6	3	3	3	3	2	2	2	-	3	-,	-	20	23	16	14	15	14	12	11	8	7	6	7	8	7	5	6	3	3	2	2	3	3	3	4	3	3
17.7	3	4	3	3	3	2	2	3	2	-	8	20	21	12	8	9	11	14	11	10	8	7	8	9	8	3	5	4	3	3	2	2	2	3	3	3	3
18.x																																					
19.x																																					
20.6	3	2	3	3	2	3	2	2	4	4	4	4	5	9	10	11	12	14	13	11	12	11	11	10	5	4	4	4	4	5	4	3	2	3	2	4	4
21.6	3	2	2	-	2	2	2	2	2	2	3	4	5	7	4	5	8	7	8	9	8	8	7	5	4	2	2	3	3	2	2	3	-	-	2	2	3
22.7a	2	2	2	-	-	2	2	3	3	2	4	5	4	3	3	5	6	7	8	9	8	8	8	7	6	5	4	3	3	2	3	2	2	3	2	3	3
23.7a	-	-	-	X	X	X	X	-	-	2	2	3	4	4	3	3	4	5	4	5	5	5	5	5	8	8	6	2	2	3	2	2	2	-	-	2	2
24.7a	-	-	-	-	-	-	-	-	-	2	3	4	4	5	5	4	4	5	6	6	4	5	4	5	5	4	4	3	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	2	2	3	2	-	2	-	-	2	-	3	3	4	2	2	-	3	3	8	7	6	5	6	10	11	11	5	2	2	-	2	-	-	-	2	2	2
27.6	3	3	3	3	3	2	3	3	3	3	3	4	3	4	8	7	10	13	14	13	14	14	16	28	36	39	20	2	3	3	3	3	4	3	3	4	3
28.x																																					
29.x																																					
30.x																																					
31.7a	2	2	3	2	3	2	-	2	2	2	2	3	2	3	-	-	5	8	9	8	8	7	11	20	16	14	13	2	-	2	3	2	2	2	-	2	2

Table 100b

Coronal observations at Sacramento Peak, New Mexico (6702A), west limb
(Arbitrary Scale)

Date	Degrees south of the solar equator																		0°	Degrees north of the solar equator																	
UT	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1955																																					
May 1.x																																					
2.x																																					
3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-
4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.x																																					
6.x																																					
7.7	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
8.x																																					
9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	-	-	-	-	-	-	-	-	-
10.x																																					
11.x																																					
12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.6	-	-	-	-	-	-	-	-	-	-	2	2	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.x																																					
19.x																																					
20.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
27.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	5	3	2	-	-	-	-	-	-	-	-	-
28.x																																					
29.x																																					
30.x																																					
31.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5	4	2	2	-	-	-	-	-	-	-	-	-

Table 101

Zürich Provisional Relative Sunspot Numbers

May 1955

Date	R_Z*	Date	R_Z*
1	23	17	29
2	21	18	32
3	32	19	34
4	45	20	45
5	44	21	60
6	28	22	51
7	20	23	55
8	17	24	50
9	0	25	46
10	0	26	47
11	9	27	47
12	7	28	47
13	0	29	45
14	0	30	36
15	7	31	24
16	16	Mean:	29.6

* Dependent on observations at Zürich Observatory and its stations at Locarno and Arosa.

Table 102

American Relative Sunspot Numbers

April 1955

Date	R_A'	Date	R_A'
1	12	17	5
2	2	18	0
3	6	19	0
4	7	20	3
5	21	21	2
6	32	22	1
7	29	23	1
8	26	24	1
9	15	25	0
10	9	26	2
11	3	27	14
12	0	28	21
13	1	29	25
14	0	30	26
15	13	Mean:	9.7
16	13		

Table 103

Solar Flares, May 1955

Observatory	Date 1955	Time Observed Beginning (GCT)	Time Observed Ending (GCT)	Duration (Min)	Area (Mill) (of) (Visible) (Hemisph)	Position Latitude (Deg)	Position Longitude Diff (Deg)	Time of Maximum (GCT)	Int. of Maximum	Relative Area of Maximum (Tenths)	Importance	SID Observed
S. Peak	May 6	1530	1605	35	40	S34	E42	1551	13	0.5	(1-)	No-Wash.
S. Peak	May 26	1640	1655	15	90	N30	E34	1650	11	0.2	(1-)	No-Wash.
S. Peak	May 27	1540	1605	25	98	N31	E22	1546	15	0.6	(1)	Yes
S. Peak	Jan 23*	1845	1910	25	37	N30	E14	1855	10	0.8	(1-)	
S. Peak	Jan 23*	2230	2245	15	102	N30	E12	2234	12	0.6	(1)	

* The two small flares of Jan. 23 should have appeared in CRPL-126.

S. Peak = Sacramento Peak.

( ) Importance rating deduced by CRPL from the reported observations.

Table 104

Indices of Geomagnetic Activity for April 1955

Preliminary values of international character-figures, C;
Geomagnetic planetary three-hour-range indices, Kp;
Daily "equivalent amplitude", Ap;
Magnetically selected quiet and disturbed days

Apr. 1955	C	Values Kp, Three-hour Gr. interval: 1	2	3	4	5	6	7	8	Sum	A_p	Final Selected Days
1	1.1	3+	3+	3-	3o	2o	1o	1+	5o	22-	16	Five
2	1.1	3o	3+	3-	3-	4-	3o	3o	4o	25+	17	Quiet
3	0.8	2+	3-	3-	3+	3o	3-	2+	2-	21-	12	
4	1.0	2o	2o	2-	4-	3-	3+	4-	4o	23o	15	16
5	1.0	4+	3o	4-	3o	5-	2-	3o	2-	25o	19	17
												18
6	0.9	4-	4-	2o	4-	3o	3-	1o	4-	23+	16	19
7	1.0	4+	4o	3+	4o	2+	2o	3-	3-	25+	18	23
8	0.4	2o	3-	3o	1o	1+	2o	1+	2+	16-	8	
9	0.3	2-	2+	1+	1+	0+	0+	1-	3o	11o	6	
10	0.6	1o	0+	0+	4-	4o	3o	1+	2+	16o	11	
11	0.4	2o	3+	3-	2-	2o	2o	1+	2-	17-	8	Five
12	0.7	3o	3+	2+	2+	3o	1+	2+	3-	20+	12	Disturbed
13	1.0	4o	4o	3-	2o	2o	2+	2+	4o	23+	16	
14	0.2	3-	3o	2+	2+	2-	1-	0+	1-	14-	7	5
15	0.4	1+	1+	1+	1o	2+	2o	1o	1o	11+	5	7
												27
16	0.1	1-	1o	1o	1-	1+	1-	2o	2-	9o	4	28
17	0.2	1-	1-	2o	2o	2+	1o	2-	1-	11o	5	29
18	0.1	0+	0o	0o	1-	1o	2-	1-	0+	5-	2	
19	0.0	1+	2o	1-	0+	1-	1-	1o	1o	8-	4	Ten
20	0.5	2o	3-	4-	1-	2-	2o	2-	1+	15-	8	Quiet
21	0.4	1+	2-	2+	2-	3-	2o	1+	2o	15o	7	9
22	0.6	2+	3+	2-	2o	1o	1o	2+	1+	15o	5	14
23	0.0	0o	0+	0+	1+	1+	1o	0+	0+	5o	3	15
24	1.3	2-	2o	2-	2-	5o	4o	4-	4+	24o	19	16
25	0.9	3-	3+	2-	1+	3-	3-	3+	3-	20+	12	17
												18
26	1.0	4-	3+	3+	4-	2o	2-	3o	4o	25-	17	19
27	1.7	4-	3+	3-	1-	1+	5-	8-	7+	31+	54	21
28	1.6	7o	4-	5-	4o	3-	3+	4+	6-	35+	44	22
29	1.3	5o	4-	3+	4-	4-	4-	4+	4+	32-	27	23
30	0.9	4+	4o	2+	3+	2o	2o	3-	3+	24o	16	
Mean:	0.72									Mean:	14	

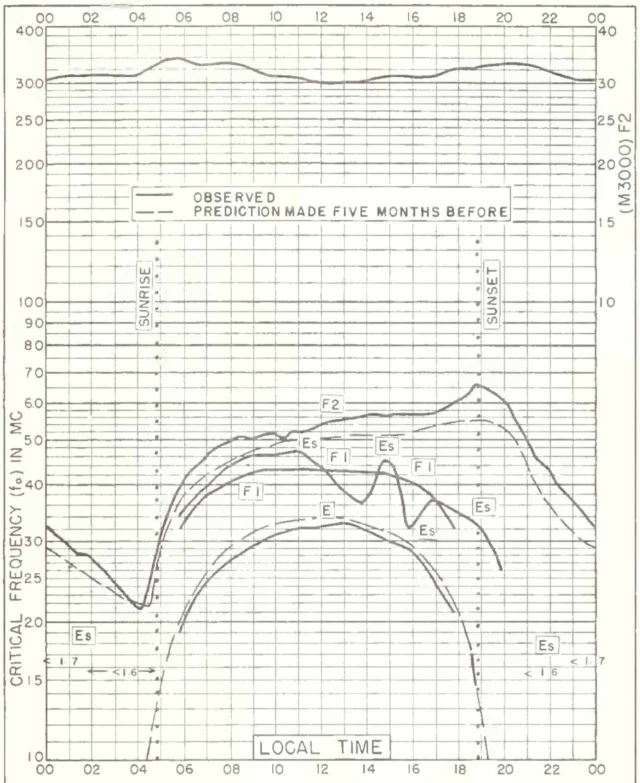


Fig. 1. WASHINGTON, D. C.
38.7°N, 77.1°W MAY 1955

Fig. 2. WASHINGTON, D.C. MAY 1955

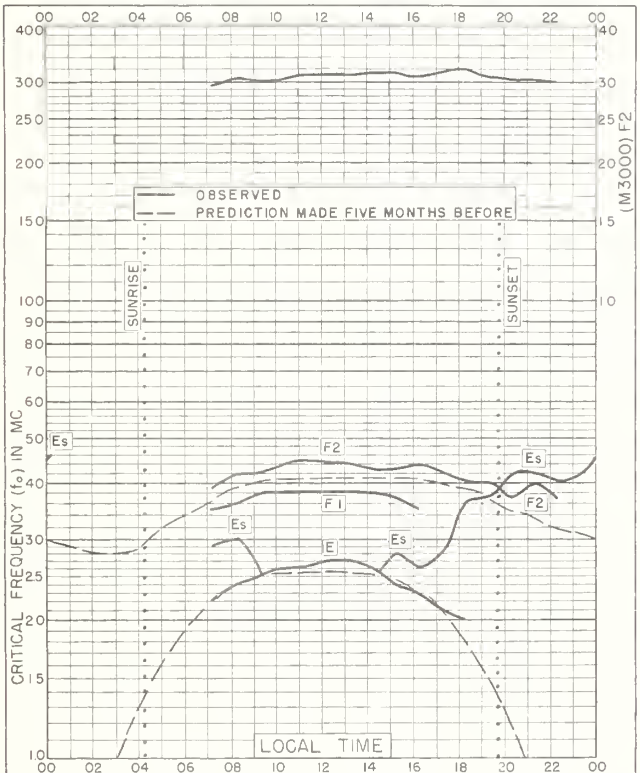


Fig. 3. TROMSO, NORWAY
69.7°N, 19.0°E APRIL 1955

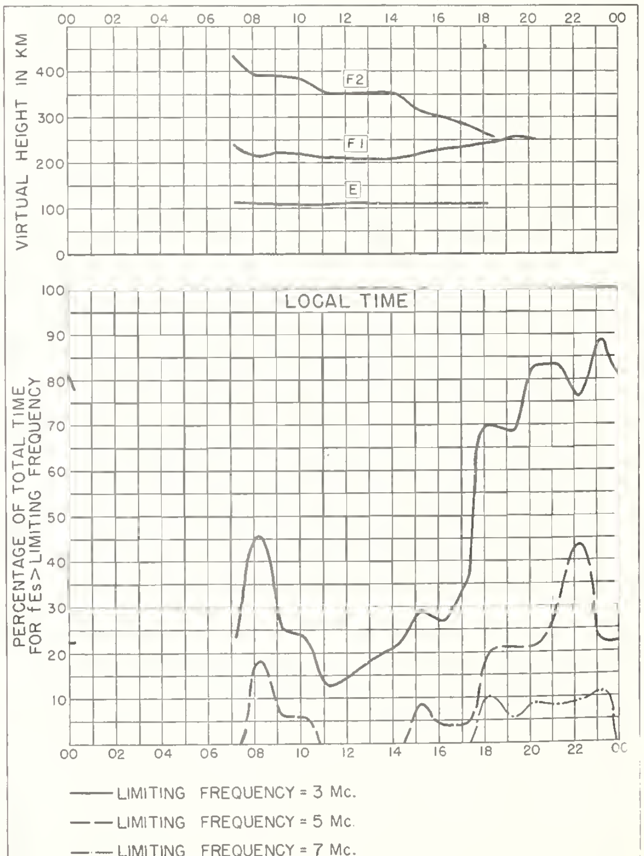


Fig. 4. TROMSO, NORWAY APRIL 1955

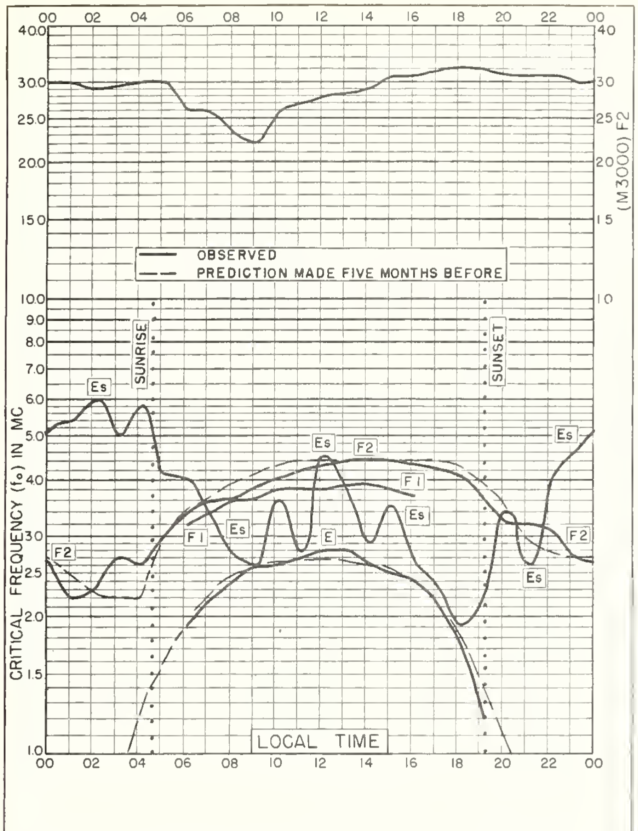


Fig. 5. FAIRBANKS, ALASKA
64.9°N, 147.8°W APRIL 1955

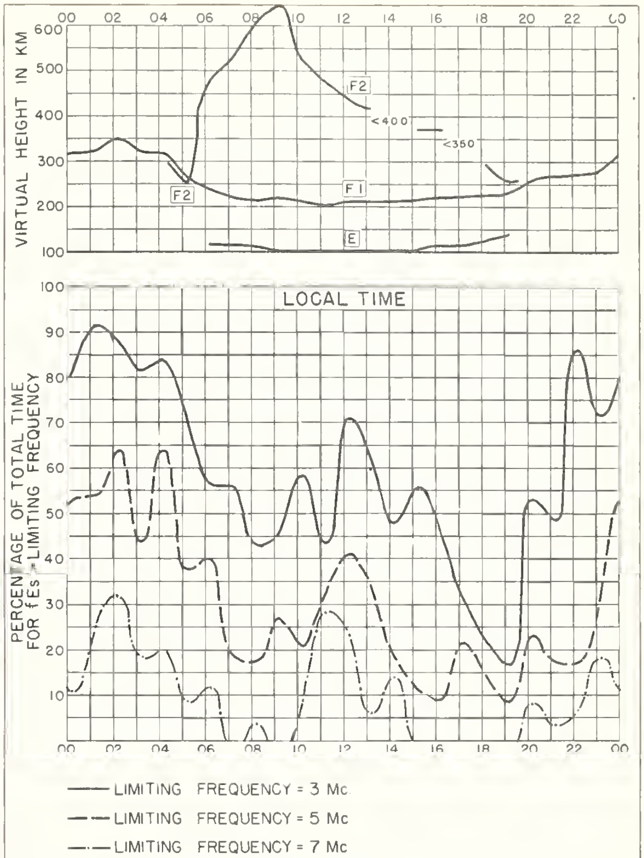


Fig. 6. FAIRBANKS, ALASKA APRIL 1955

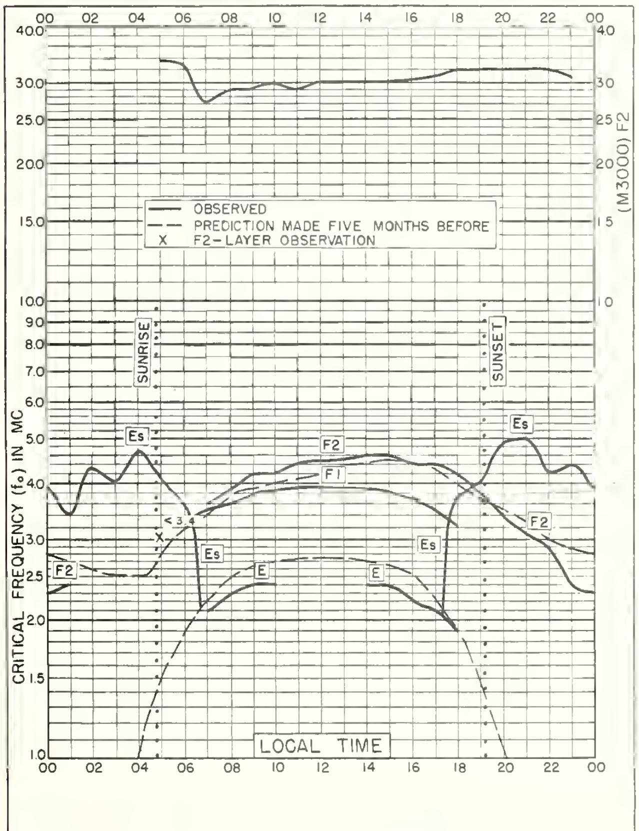
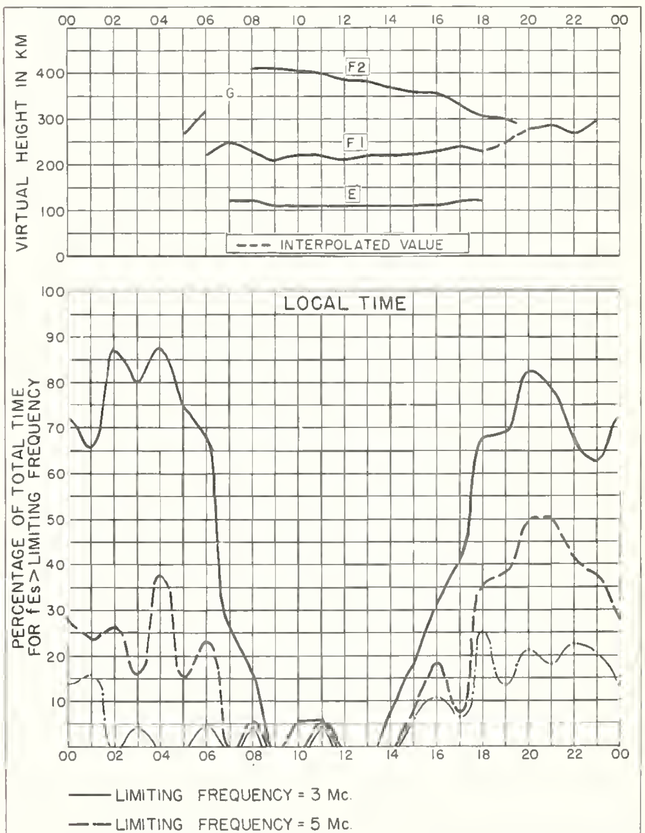


Fig. 7. NARSARSSUAK, GREENLAND
61.2°N, 45.4°W APRIL 1955



APRIL 1955
Fig. 8. NARSARSSUAK, GREENLAND

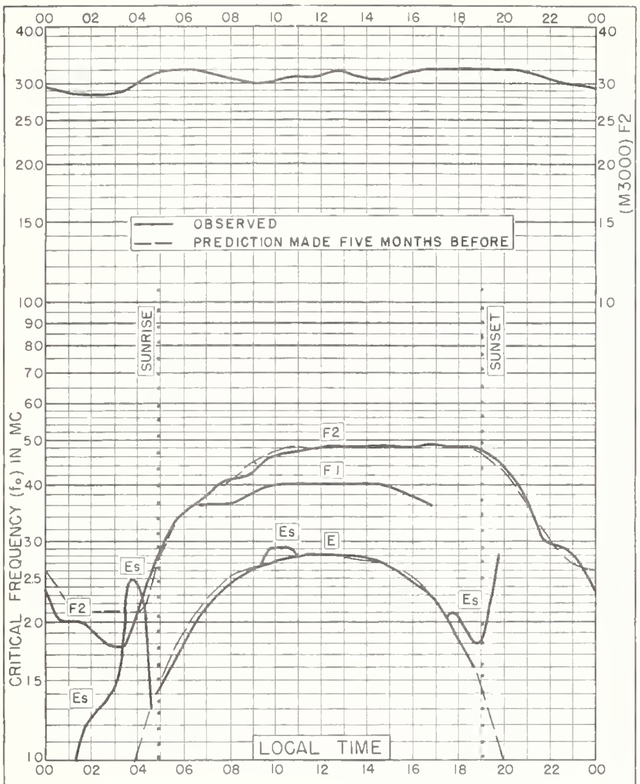


Fig. 9. OSLO, NORWAY
60.0°N, 11.1°E APRIL 1955

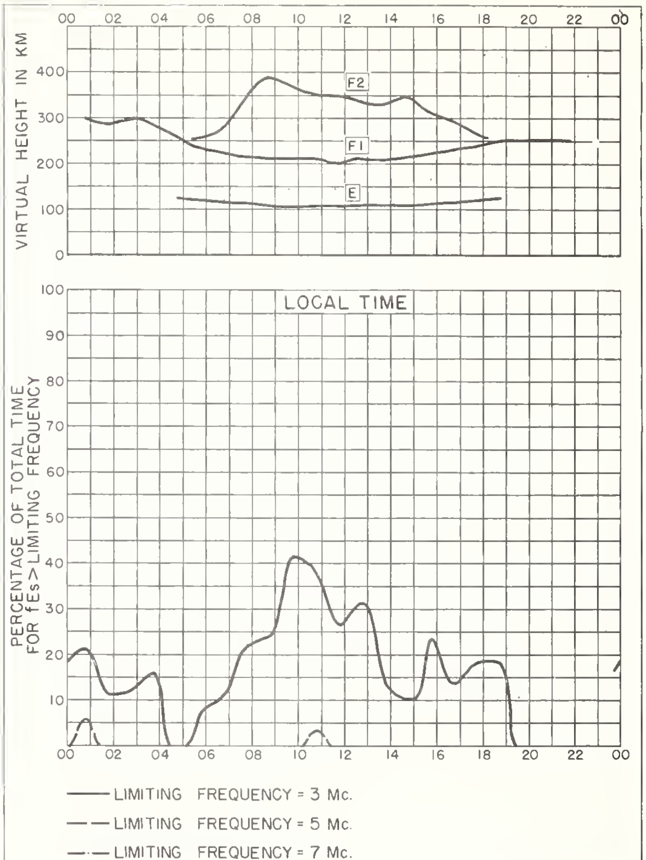


Fig. 10. OSLO, NORWAY APRIL 1955

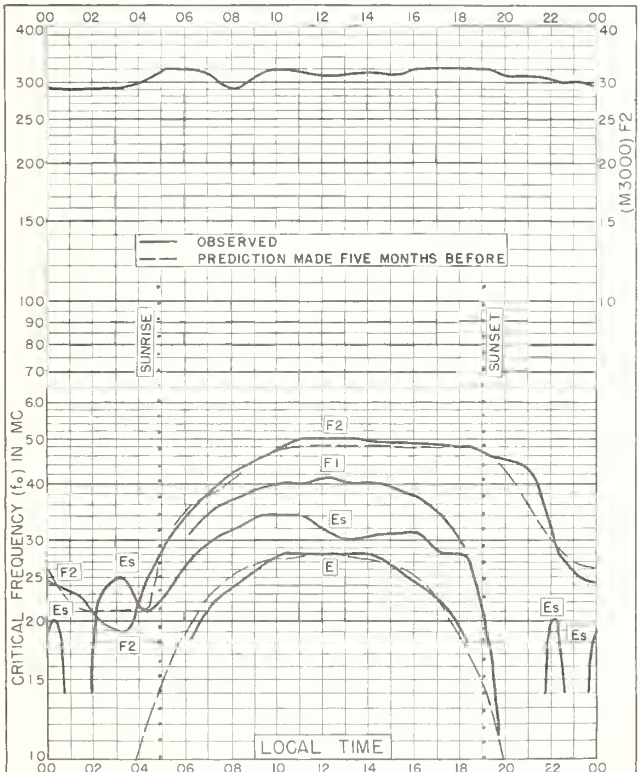


Fig. 11. UPSALA, SWEDEN
59.8°N, 17.6°E APRIL 1955

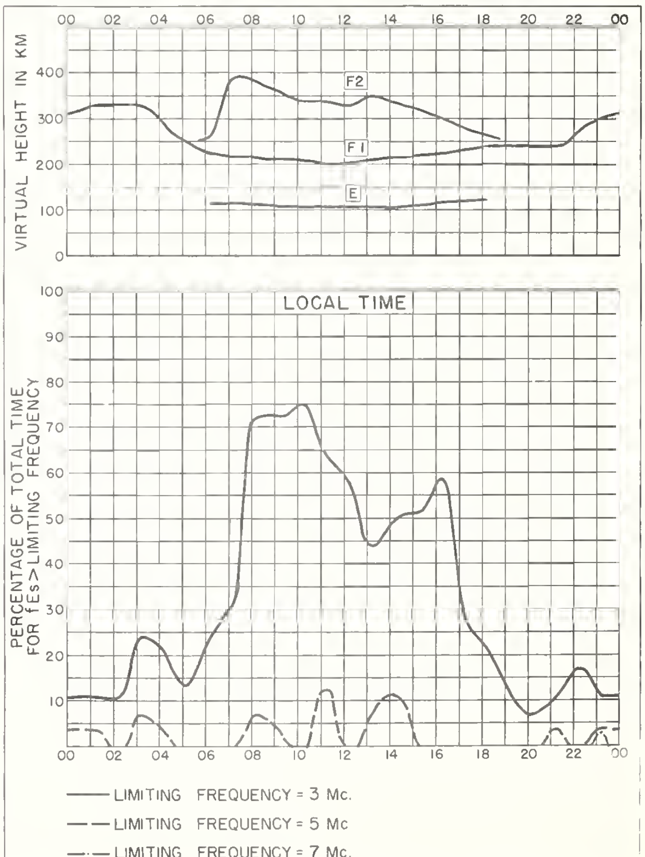


Fig. 12. UPSALA, SWEDEN APRIL 1955

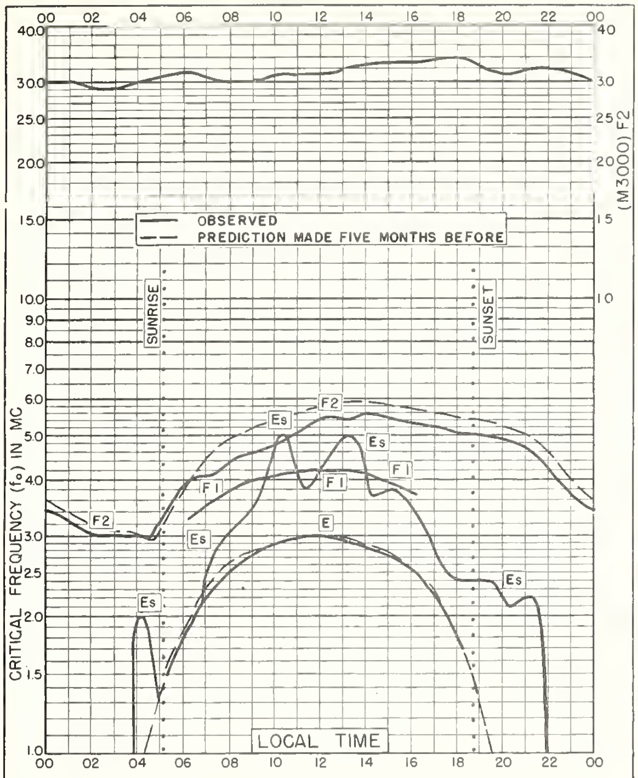


Fig. 13. ADAK, ALASKA
51.9°N, 176.6°W APRIL 1955

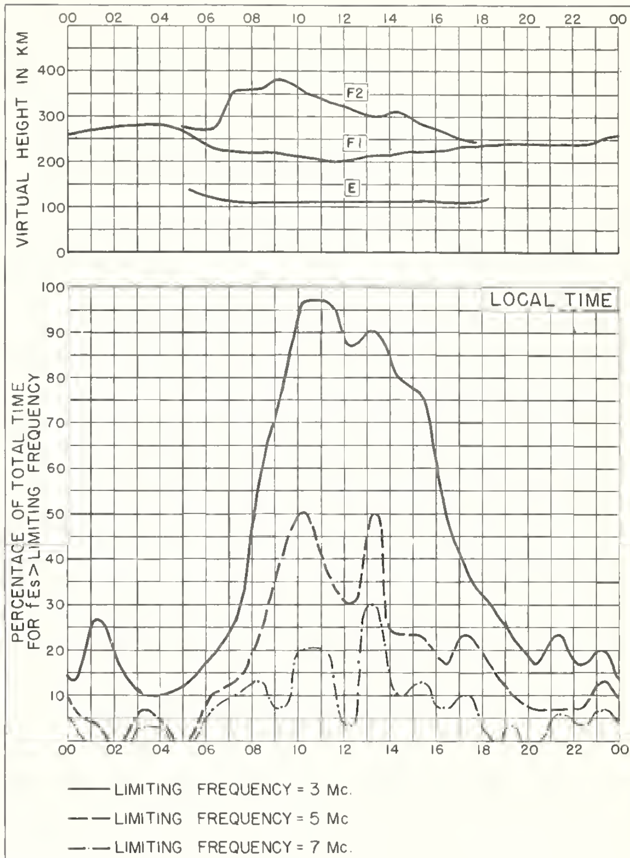


Fig. 14. ADAK, ALASKA APRIL 1955

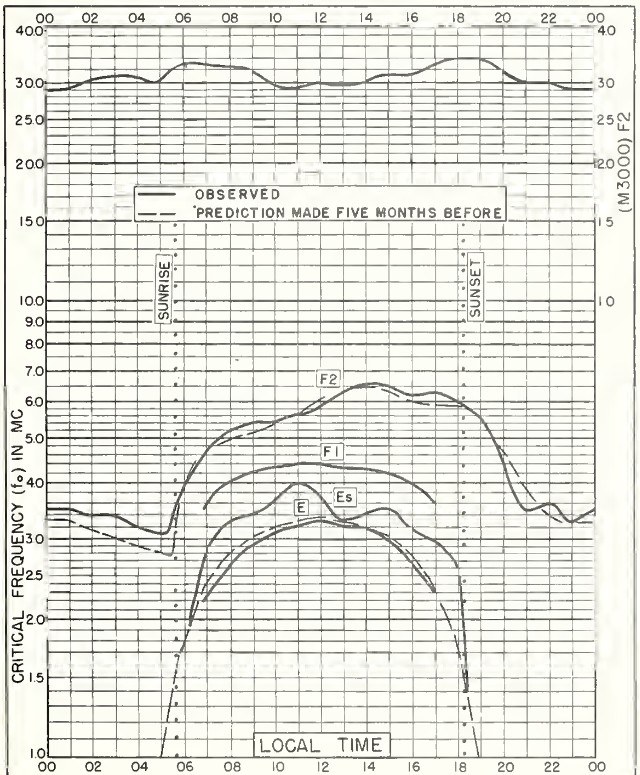
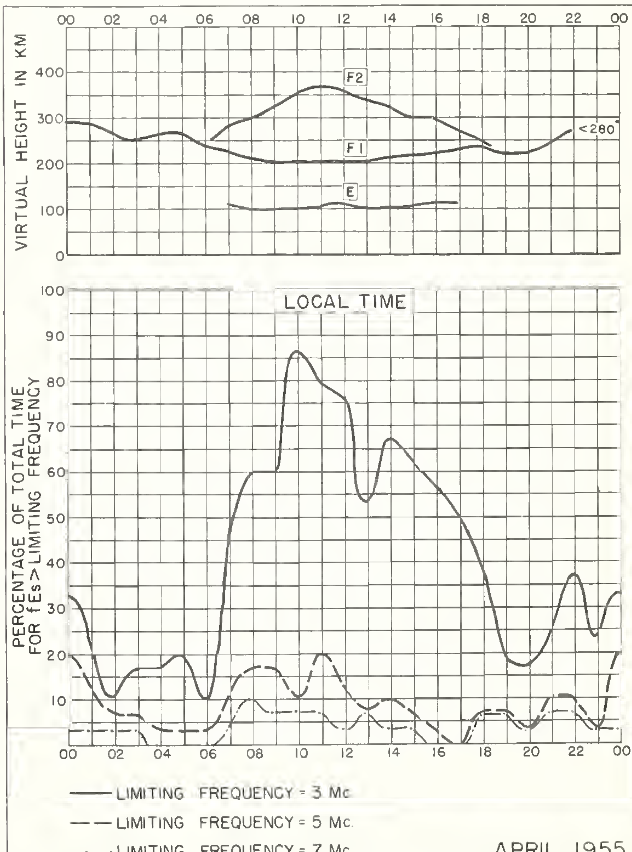


Fig. 15. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W APRIL 1955



APRIL 1955
Fig. 16. WHITE SANDS, NEW MEXICO

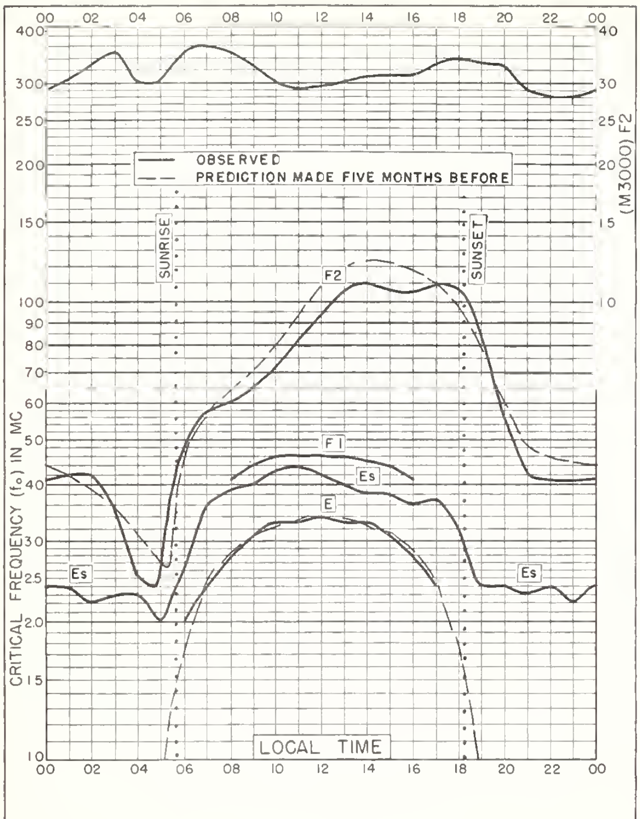


Fig. 17. OKINAWA I.
26.3°N, 127.8°E APRIL 1955

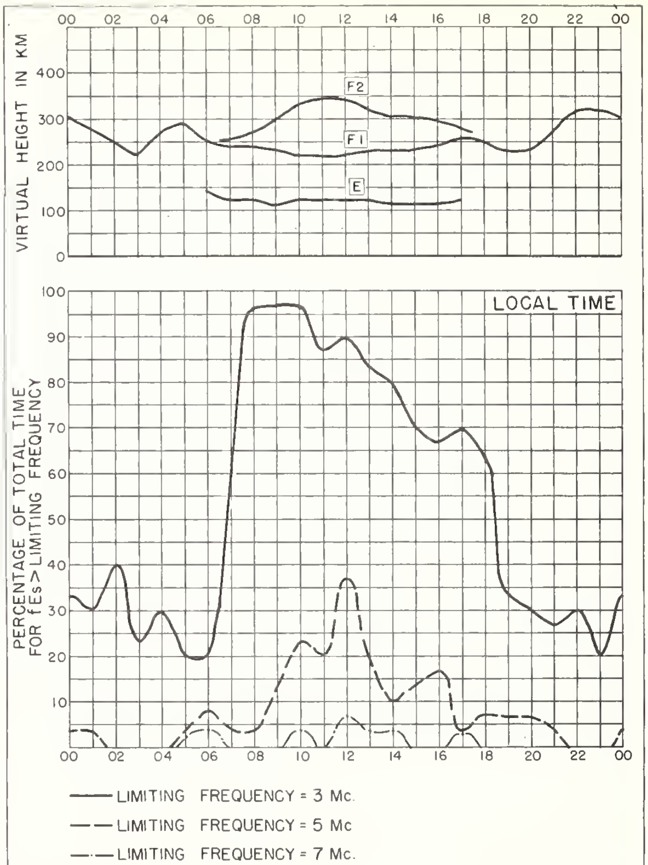


Fig. 18. OKINAWA I. APRIL 1955

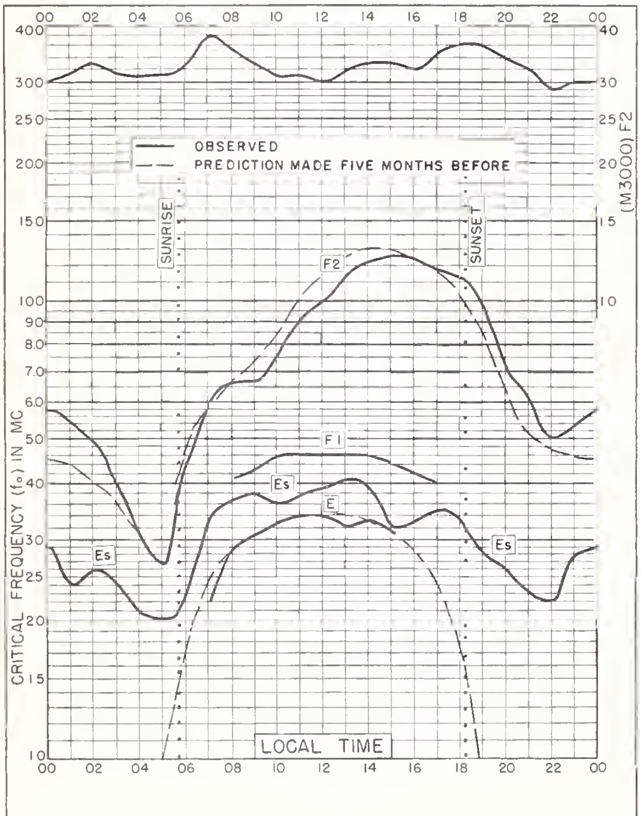


Fig. 19. FORMOSA, CHINA
25.0°N, 121.5°E APRIL 1955

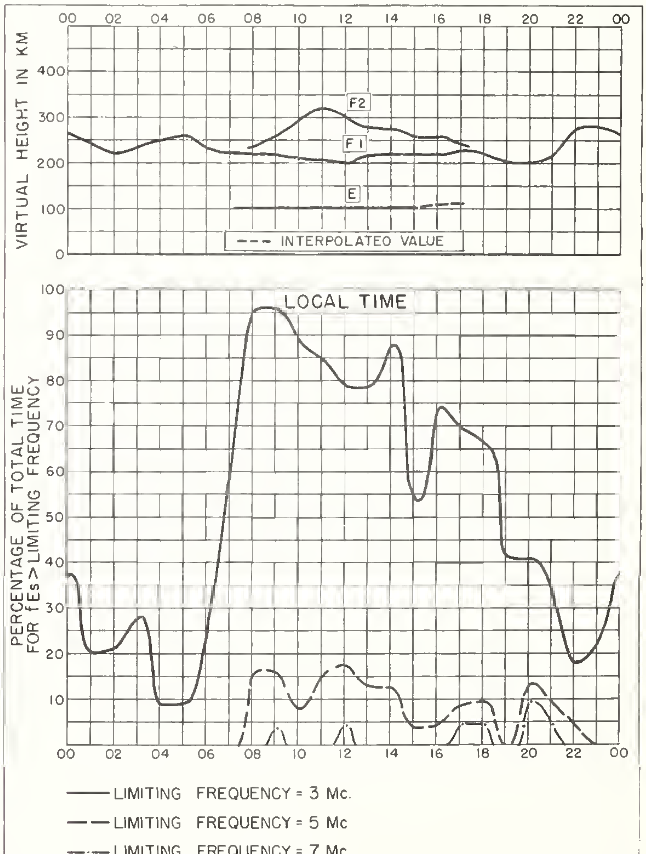


Fig. 20. FORMOSA, CHINA APRIL 1955

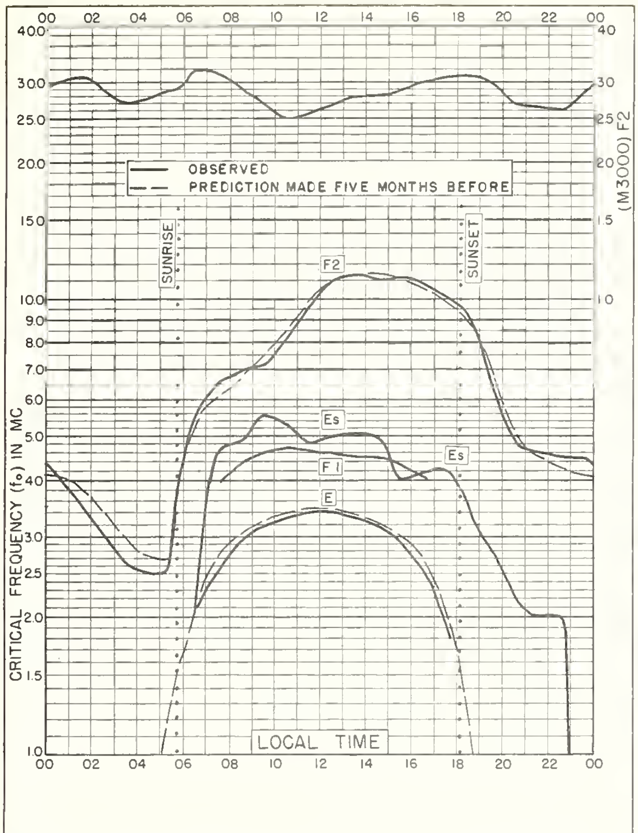


Fig. 21. MAUI, HAWAII
20.8°N, 156.5°W APRIL 1955

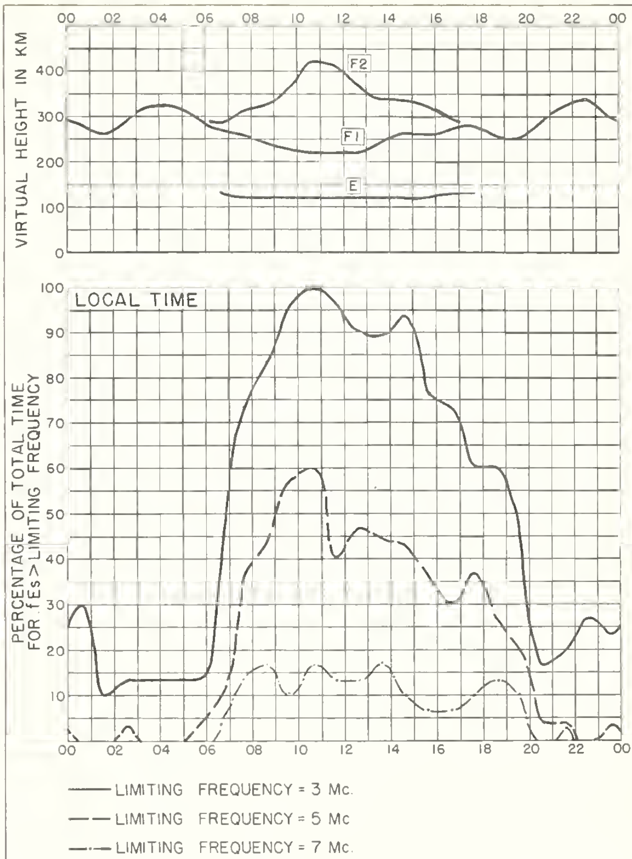


Fig. 22. MAUI, HAWAII APRIL 1955

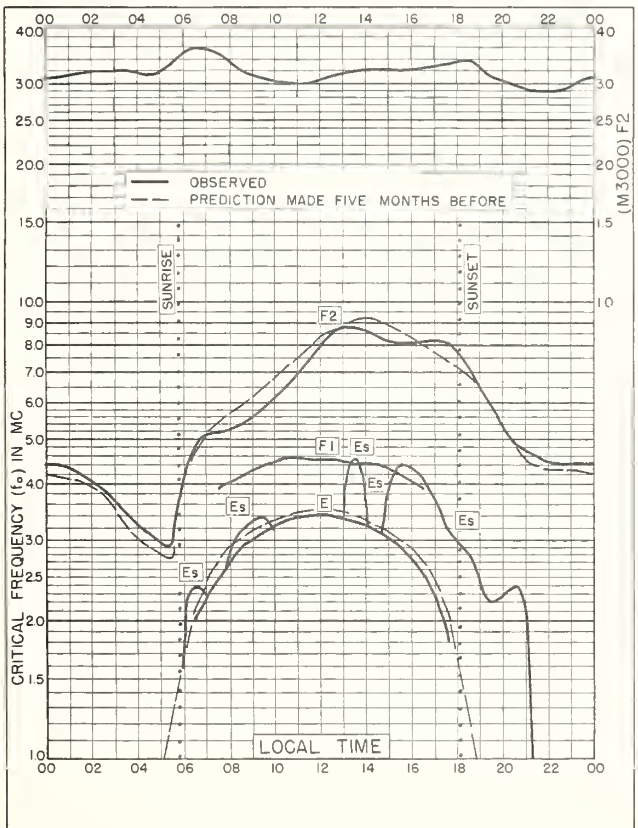


Fig. 23. PUERTO RICO, W. I.
18. 5°N, 67. 2°W APRIL 1955

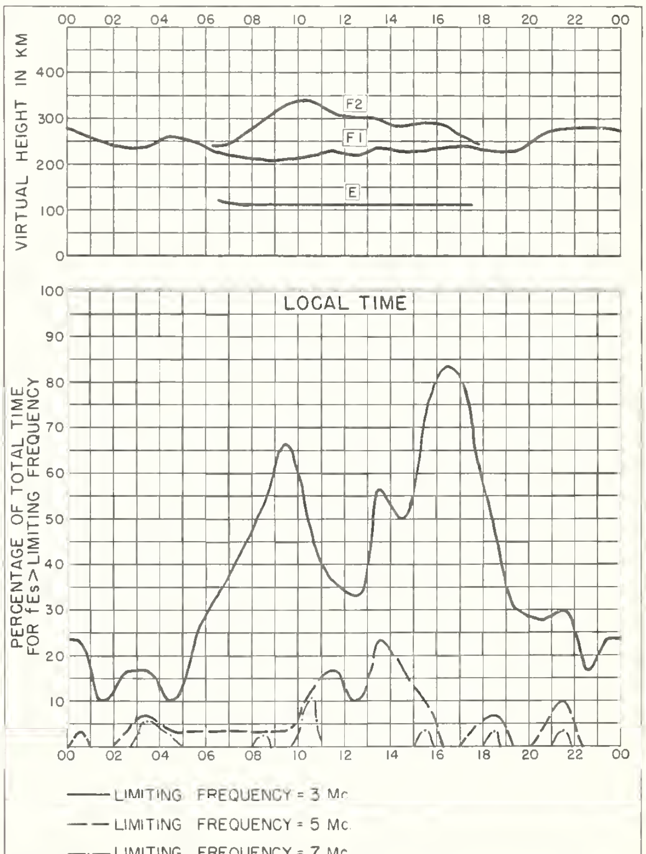


Fig. 24. PUERTO RICO, W. I. APRIL 1955

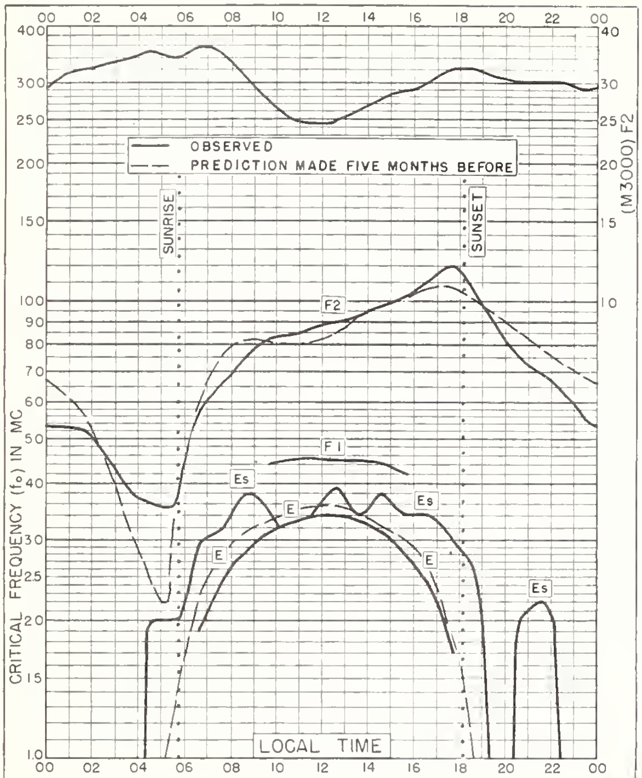


Fig. 25. GUAM I.
13.6°N, 144.9°E APRIL 1955

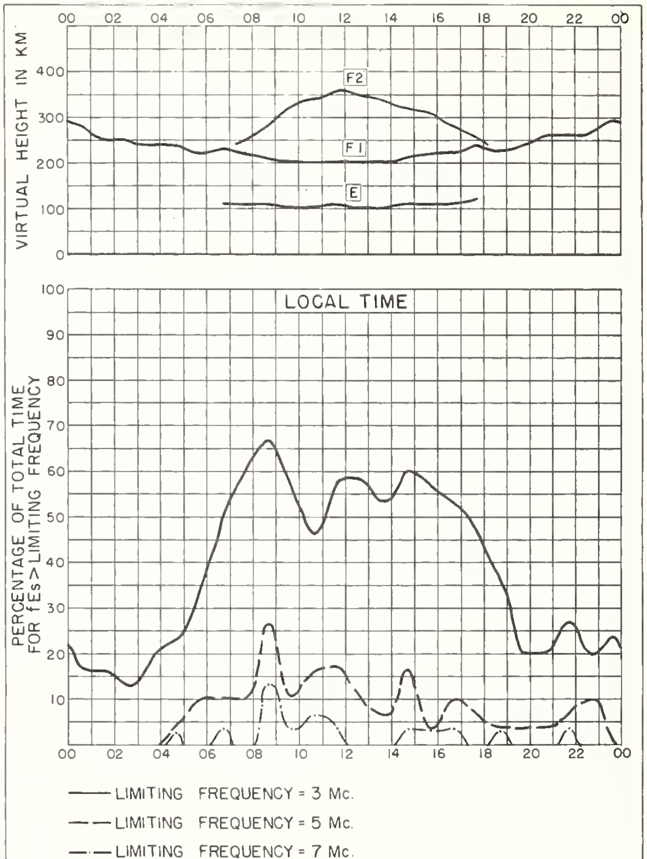


Fig. 26. GUAM I. APRIL 1955

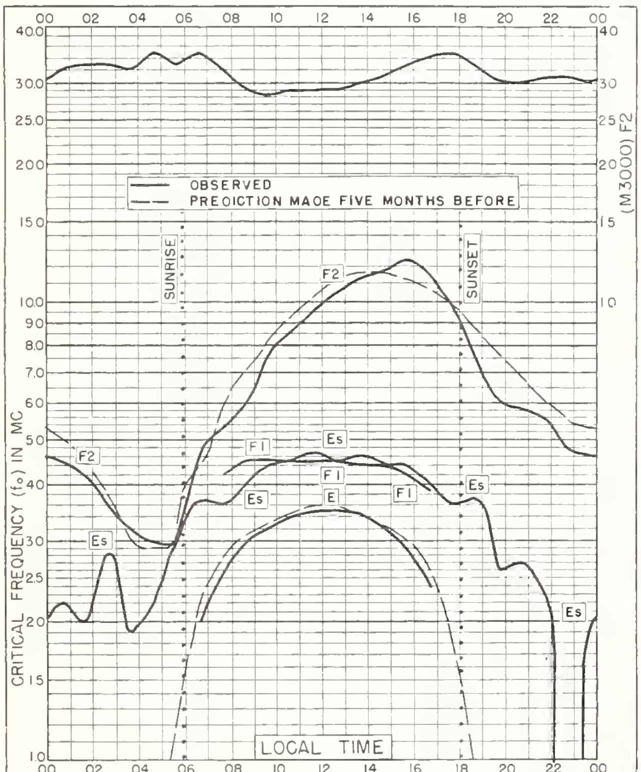


Fig. 27. PANAMA CANAL ZONE
9.4°N, 79.9°W APRIL 1955

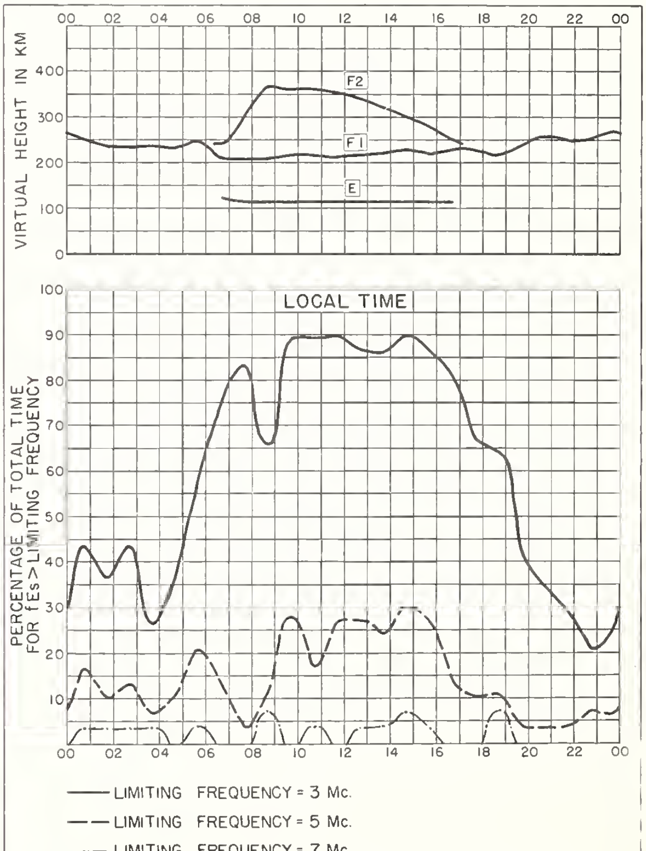


Fig. 28. PANAMA CANAL ZONE APRIL 1955

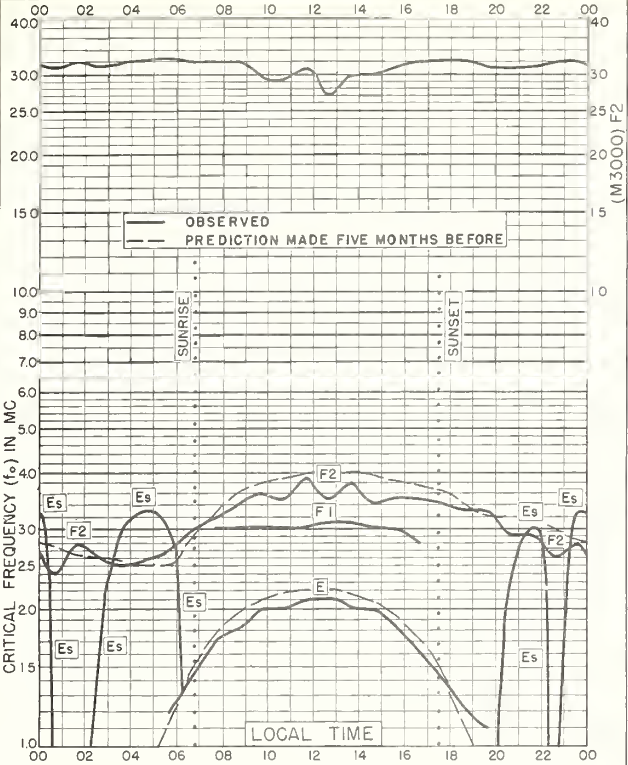


Fig. 29. RESOLUTE BAY, CANADA
74.7°N, 94.9°W MARCH 1955

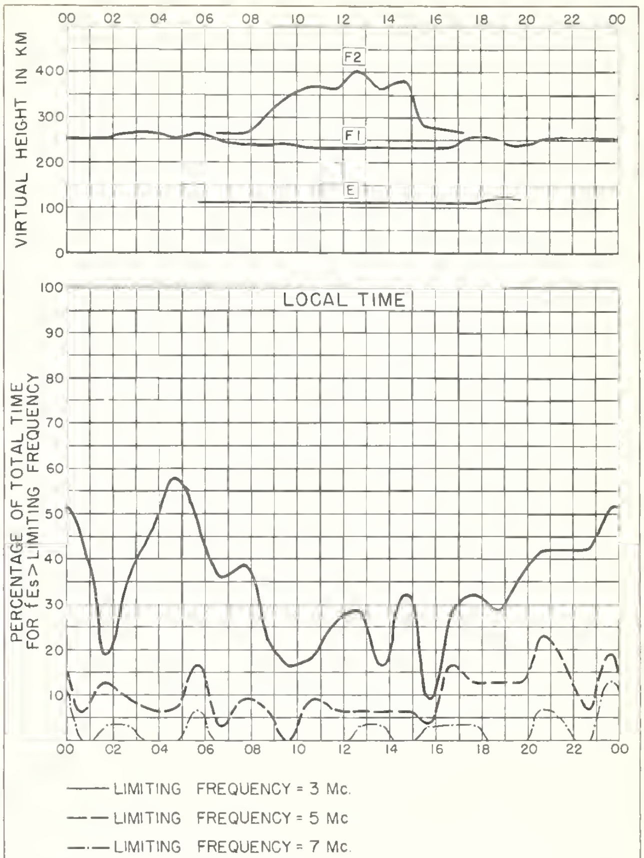


Fig. 30. RESOLUTE BAY, CANADA MARCH 1955

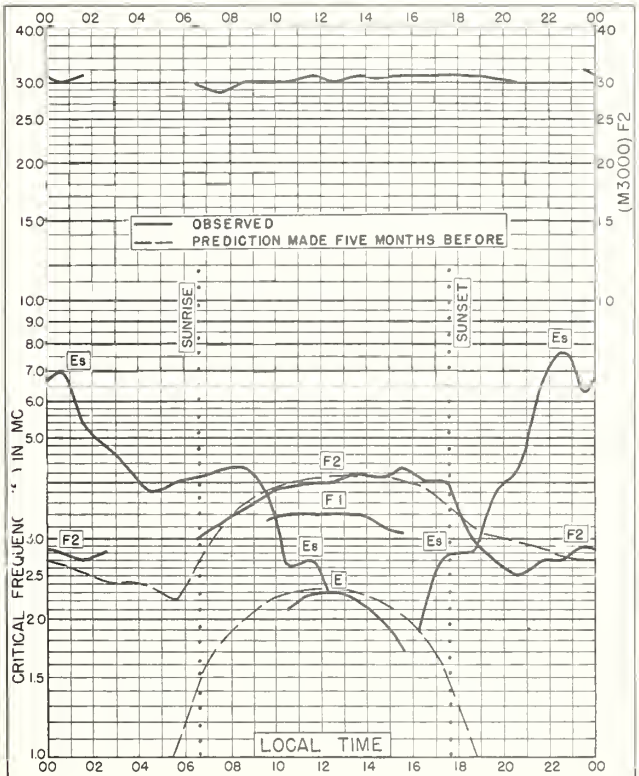


Fig. 31. POINT BARROW, ALASKA
71.3°N, 156.8°W MARCH 1955

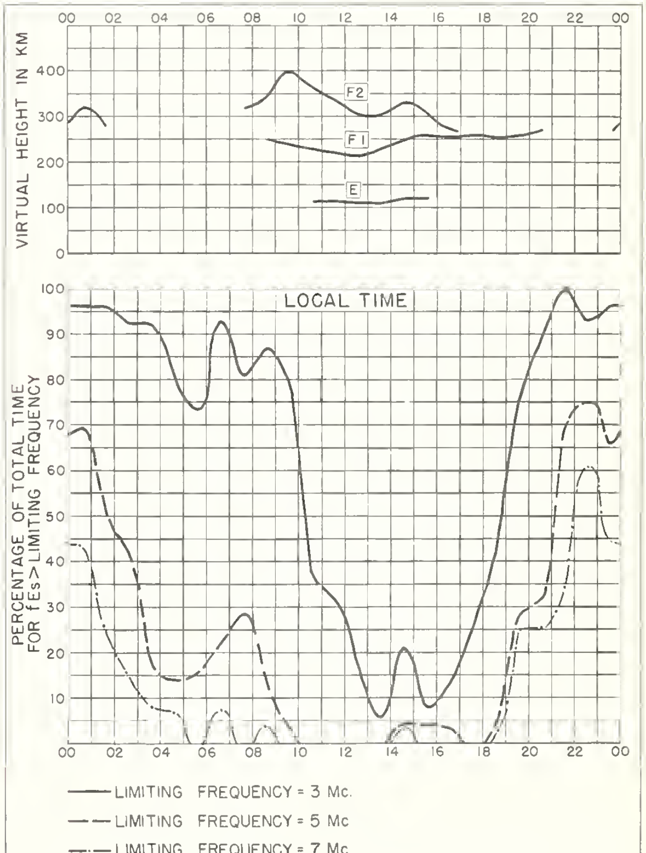


Fig. 32. POINT BARROW, ALASKA MARCH 1955

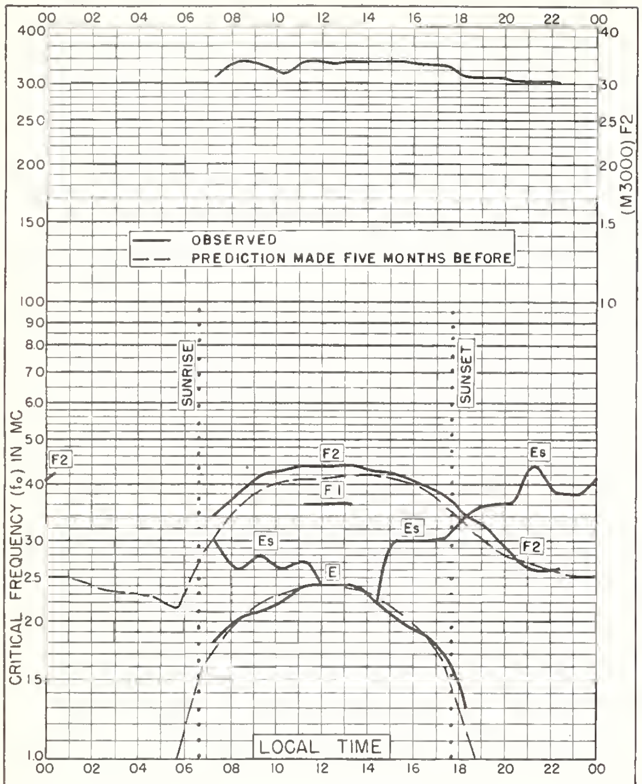


Fig. 33. TROMSO, NORWAY
69.7°N, 19.0°E MARCH 1955

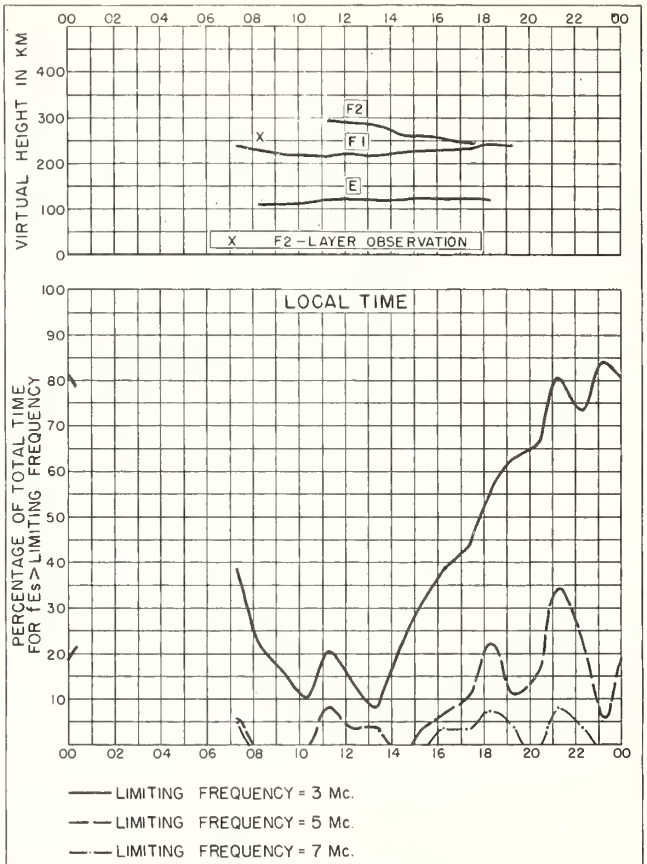


Fig. 34. TROMSO, NORWAY MARCH 1955

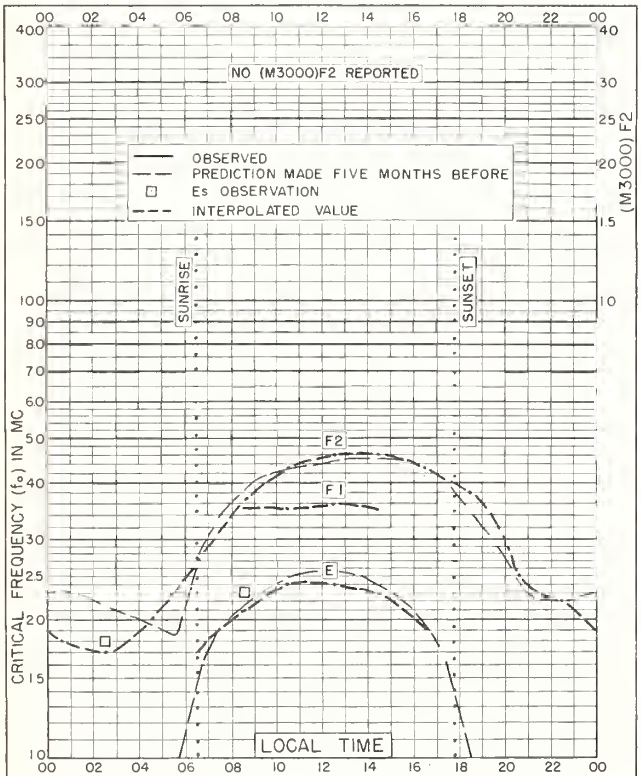


Fig. 35. LULEA, SWEDEN
65.6°N, 22.1°E MARCH 1955

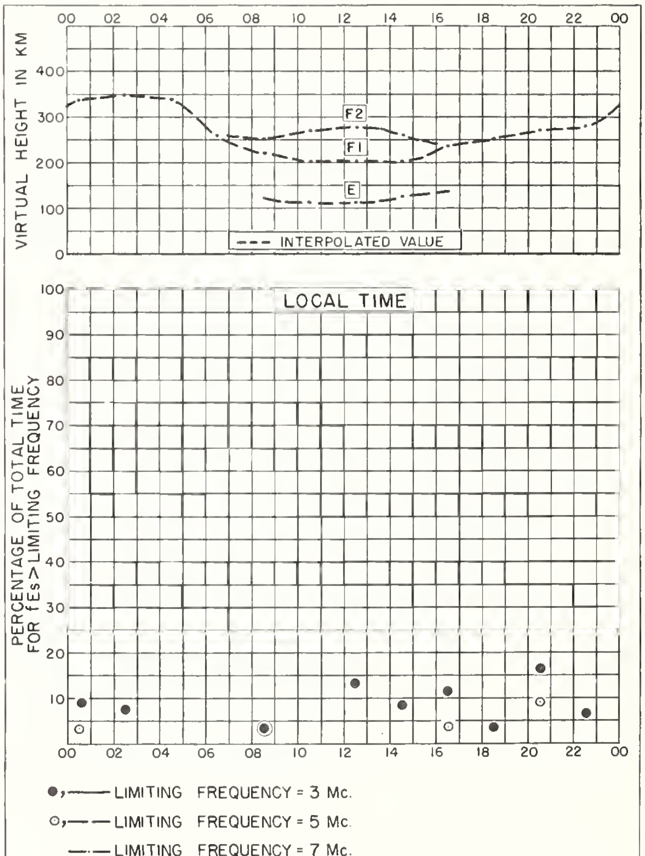


Fig. 36. LULEA, SWEDEN MARCH 1955

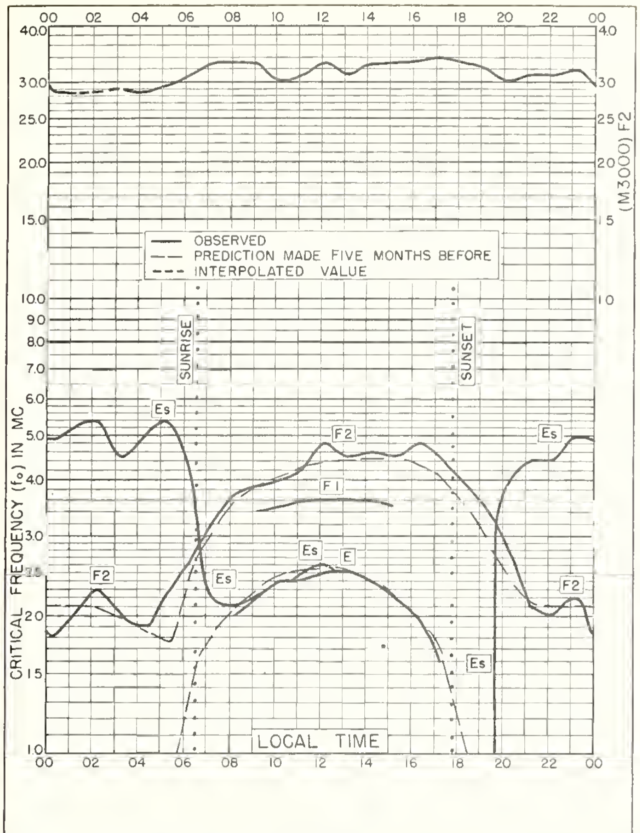


Fig. 37. FAIRBANKS, ALASKA
64.9°N, 147.8°W MARCH 1955

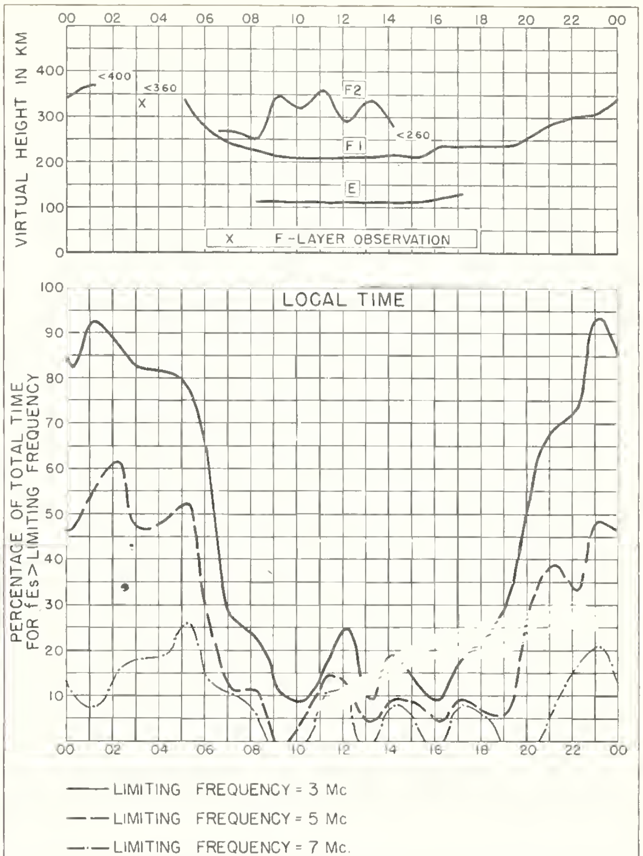


Fig. 38. FAIRBANKS, ALASKA MARCH 1955

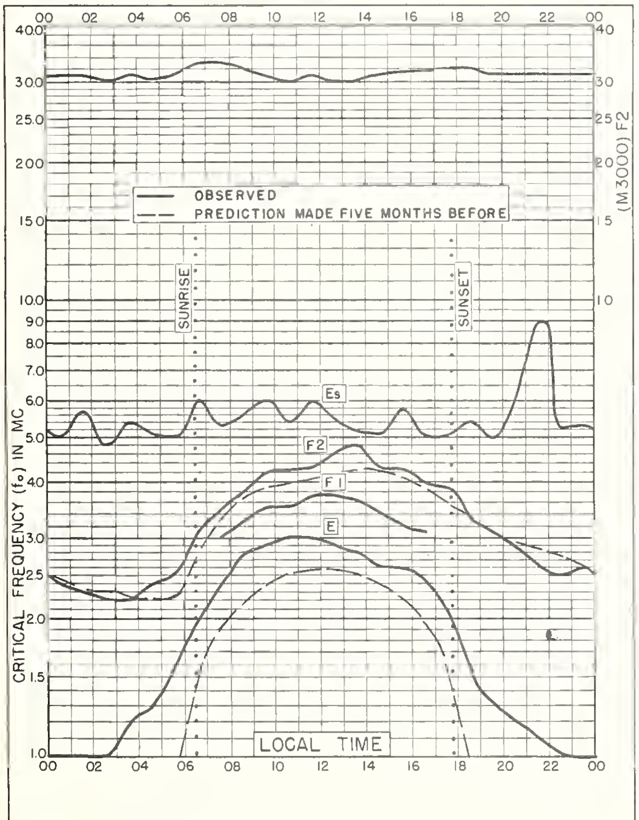


Fig. 39. BAKER LAKE, CANADA
64.3°N, 96.0°W MARCH 1955

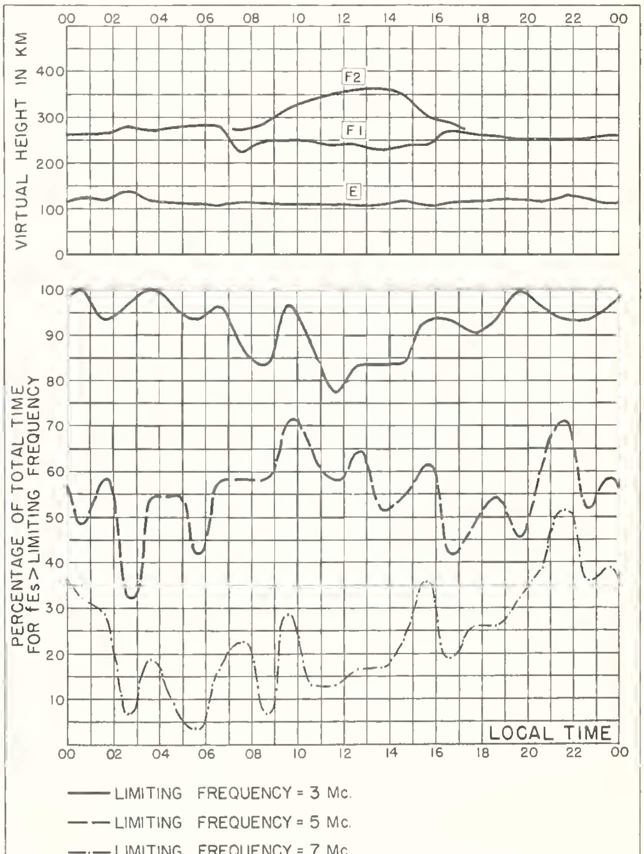


Fig. 40. BAKER LAKE, CANADA MARCH 1955

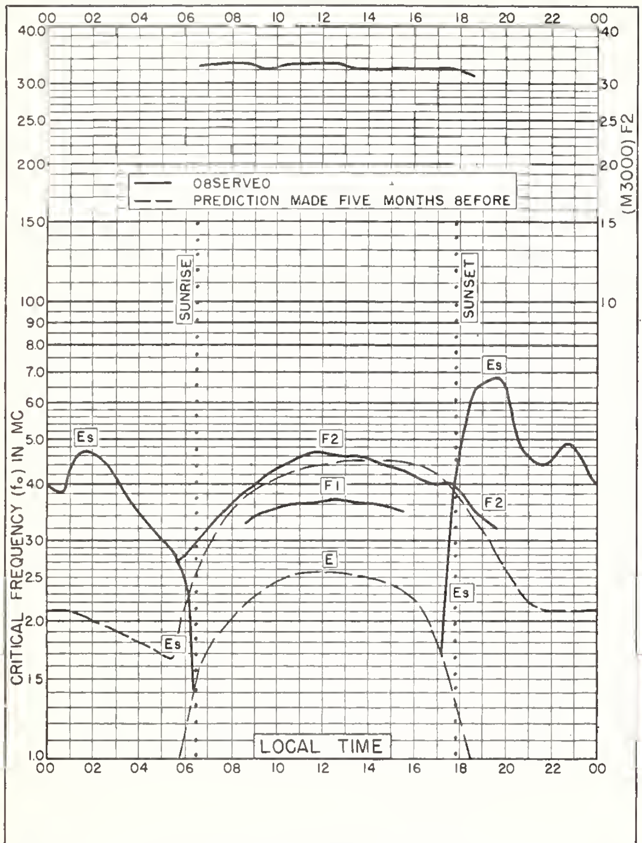


Fig. 41. REYKJAVIK, ICELAND
64.1°N, 21.8°W MARCH 1955

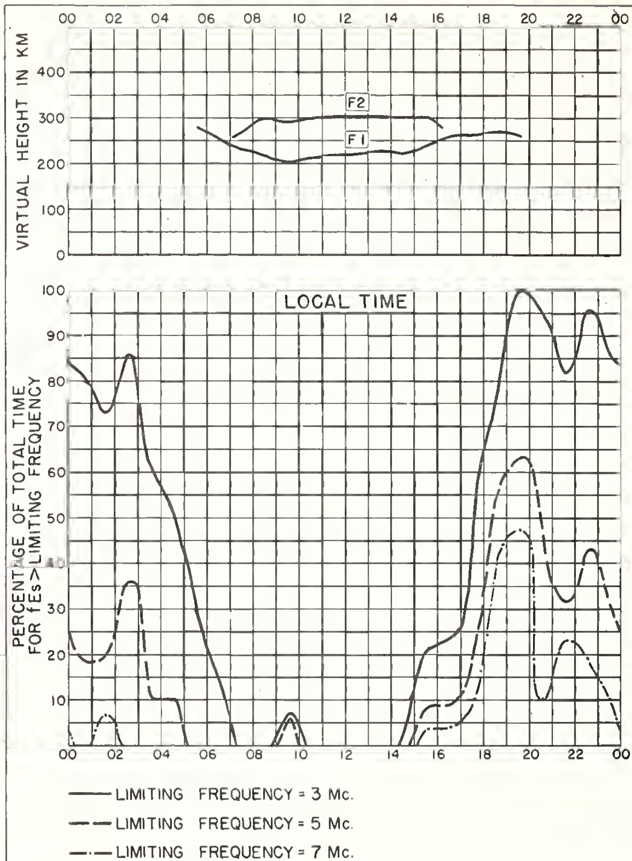


Fig. 42. REYKJAVIK, ICELAND MARCH 1955

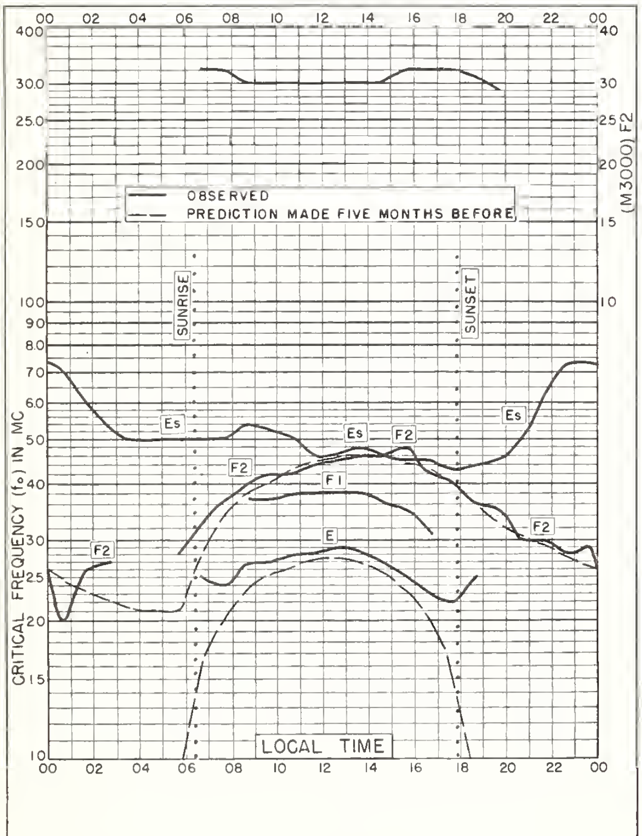


Fig. 43. CHURCHILL, CANADA
58.8°N, 94.2°W MARCH 1955

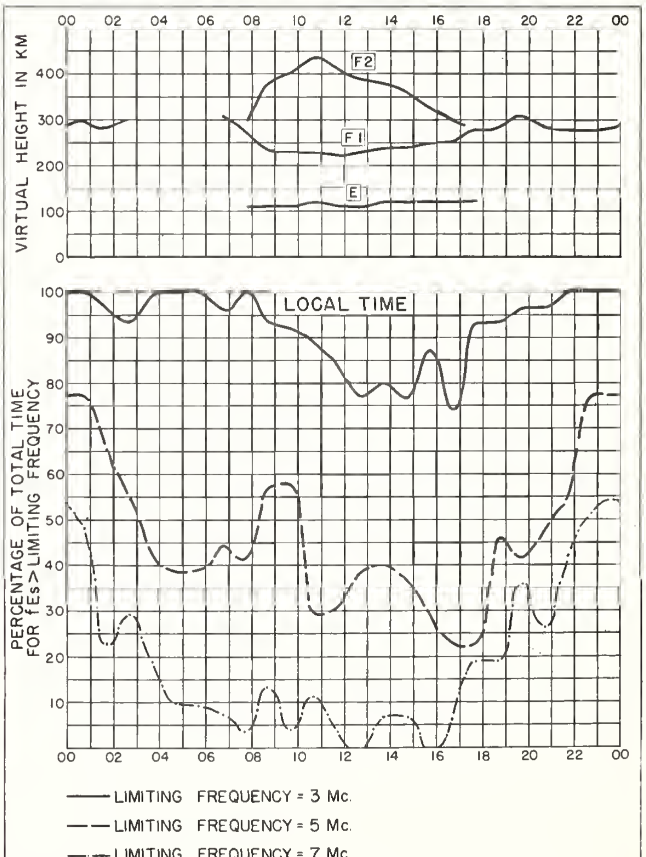


Fig. 44. CHURCHILL, CANADA MARCH 1955

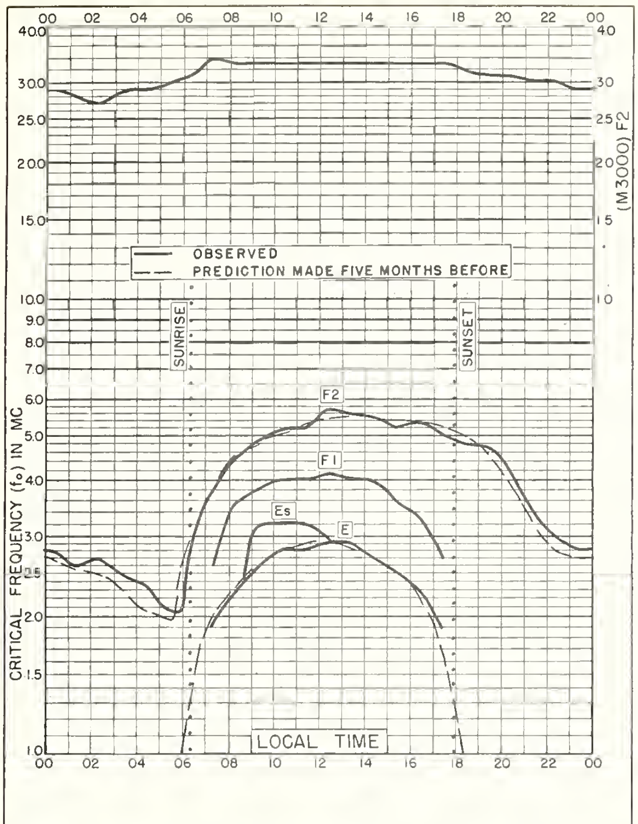


Fig. 45. De BILT, HOLLAND
52.1°N, 5.2°E MARCH 1955

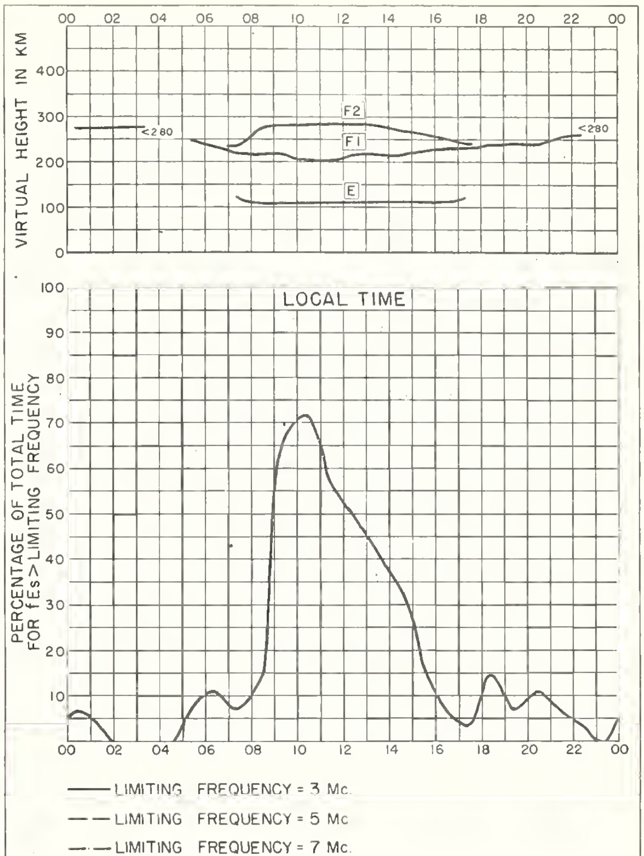


Fig. 46. De BILT, HOLLAND MARCH 1955

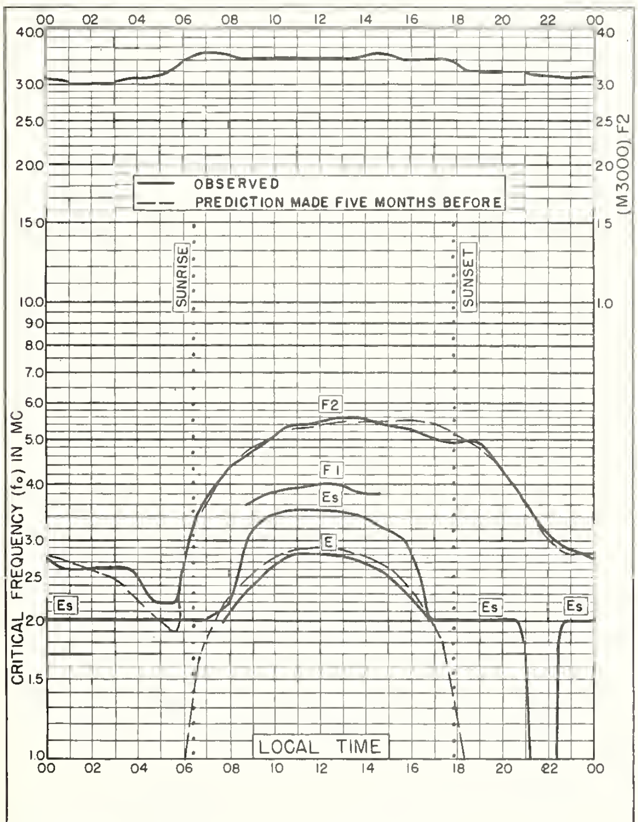


Fig. 47. LINDAU/HARZ, GERMANY
51.6°N, 10.1°E MARCH 1955

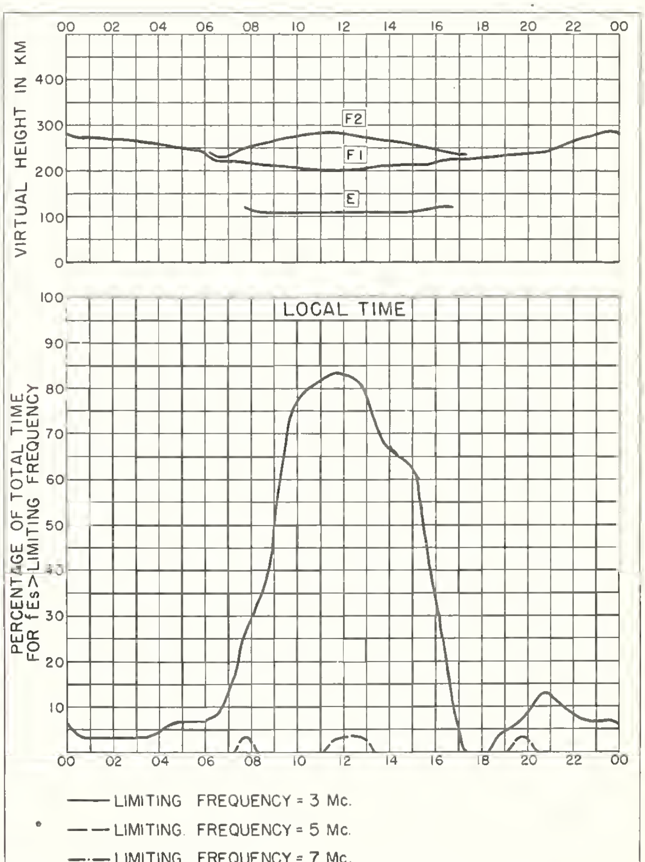


Fig. 48. LINDAU/HARZ, GERMANY MARCH 1955

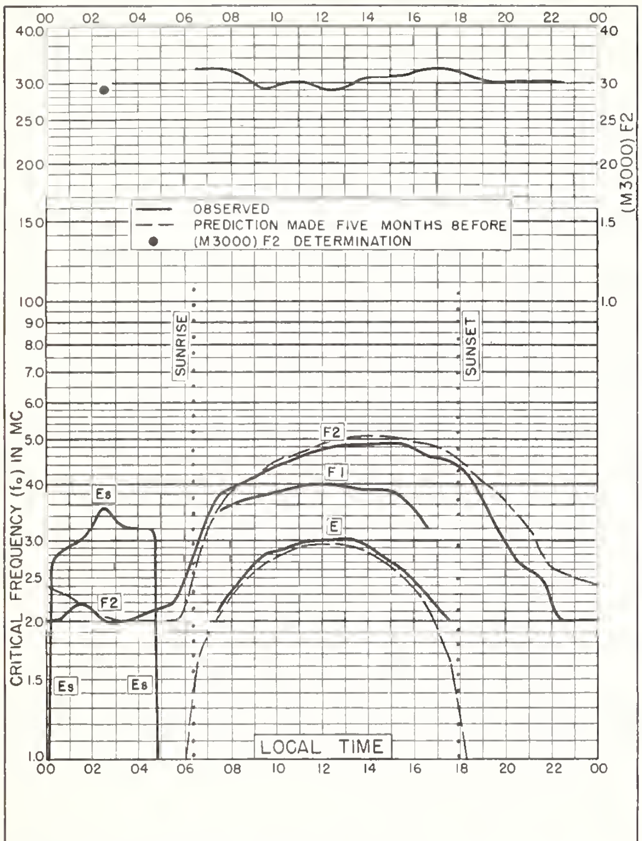


Fig. 49. WINNIPEG, CANADA
49.9°N, 97.4°W MARCH 1955

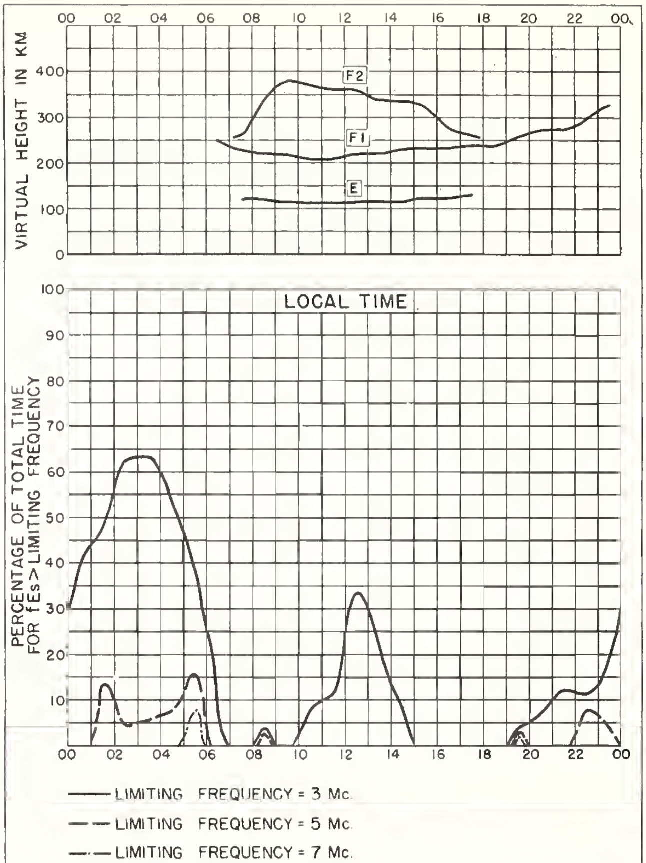


Fig. 50. WINNIPEG, CANADA MARCH 1955

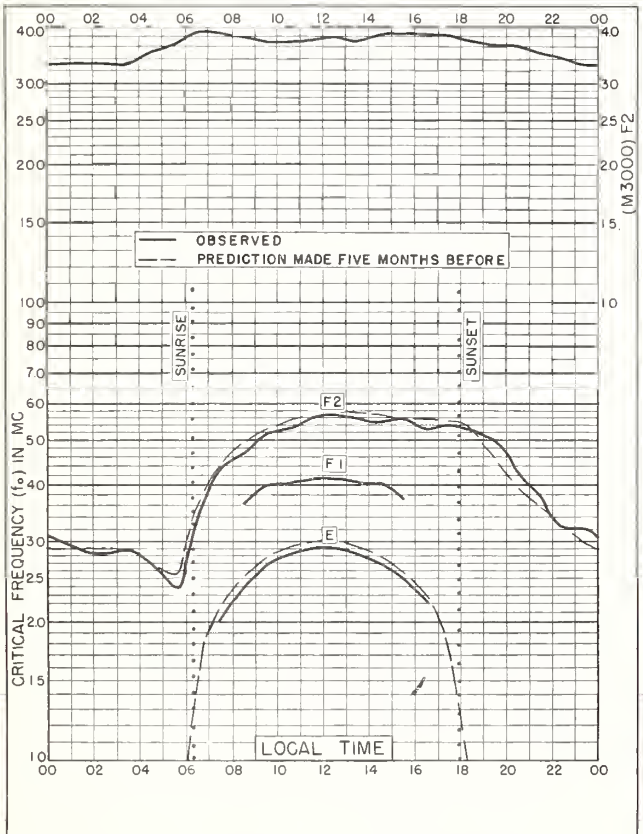
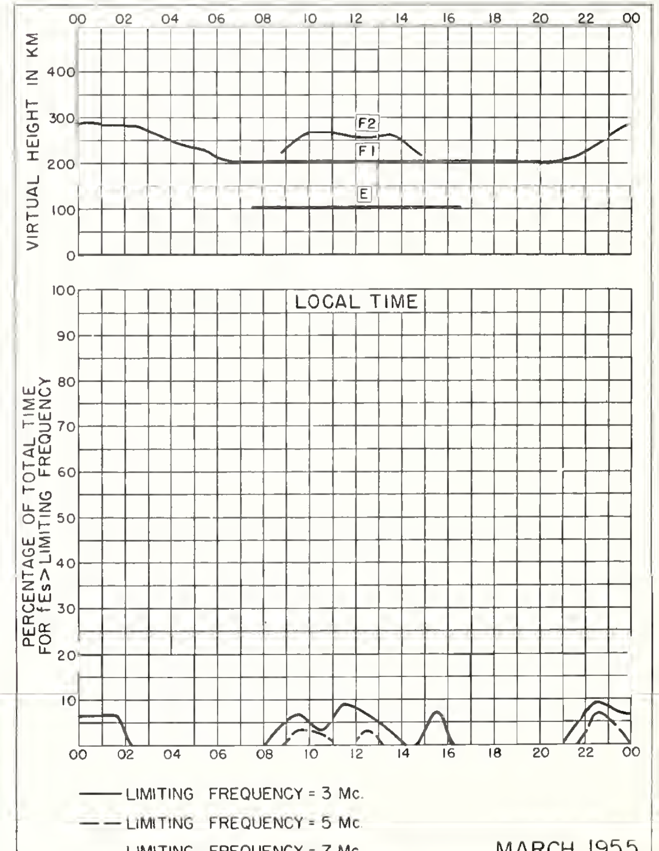


Fig. 51. SCHWARZENBURG, SWITZERLAND
46.8°N, 7.3°E MARCH 1955



MARCH 1955
Fig. 52. SCHWARZENBURG, SWITZERLAND

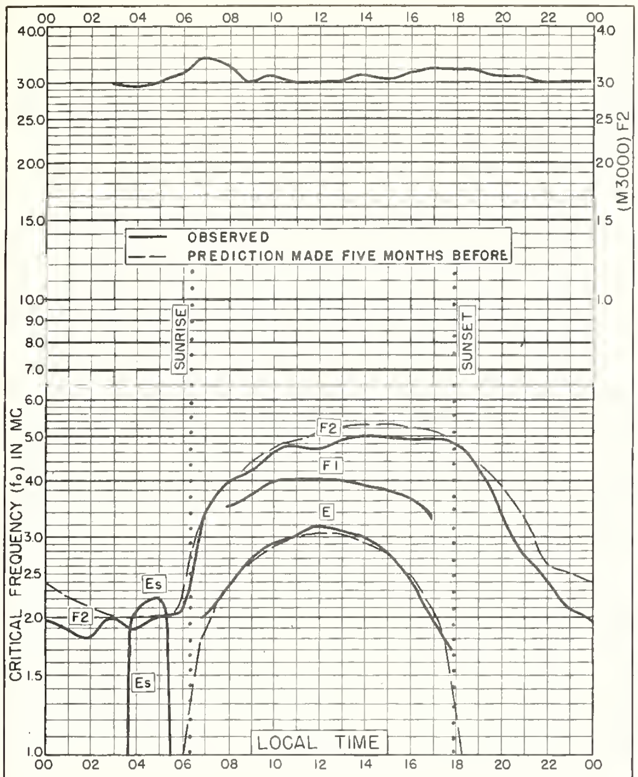


Fig. 53. OTTAWA, CANADA
45.4°N, 75.9°W MARCH 1955

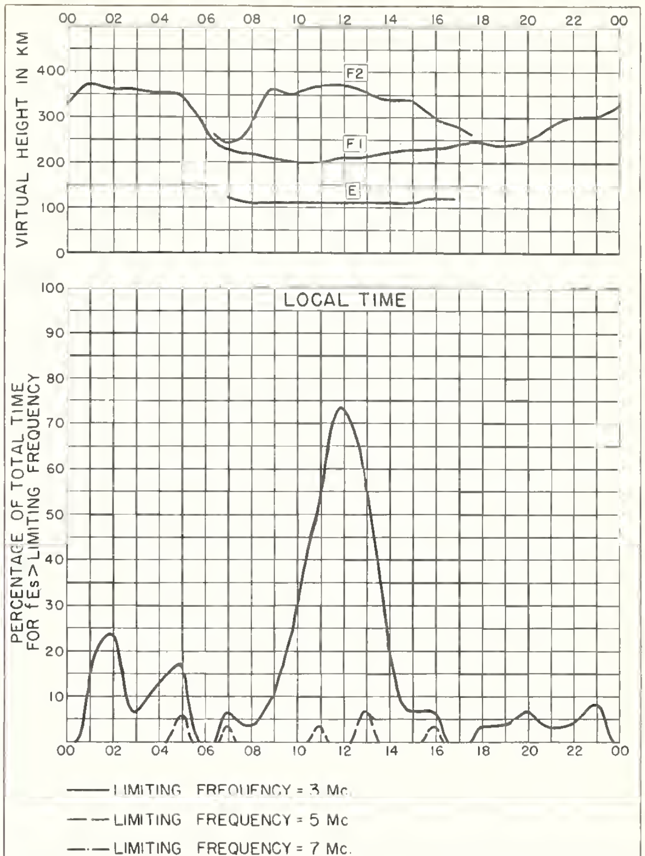


Fig. 54. OTTAWA, CANADA MARCH 1955

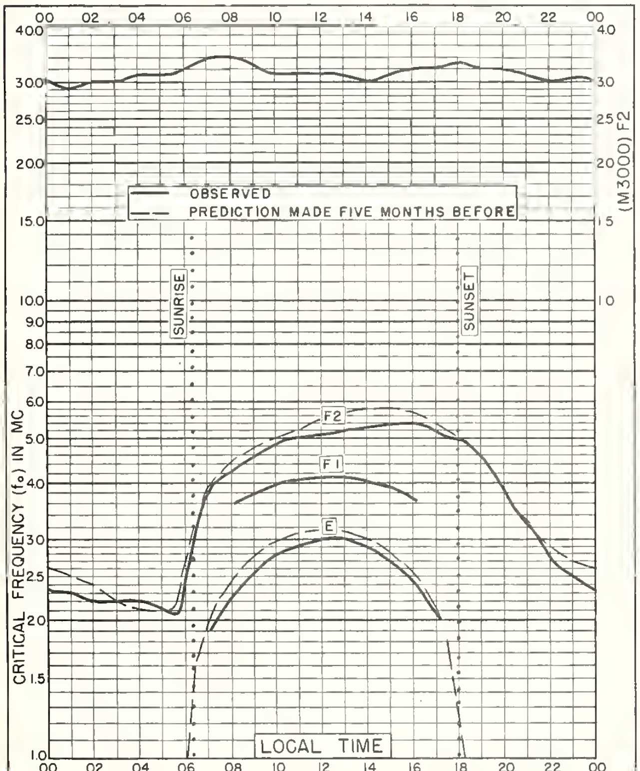
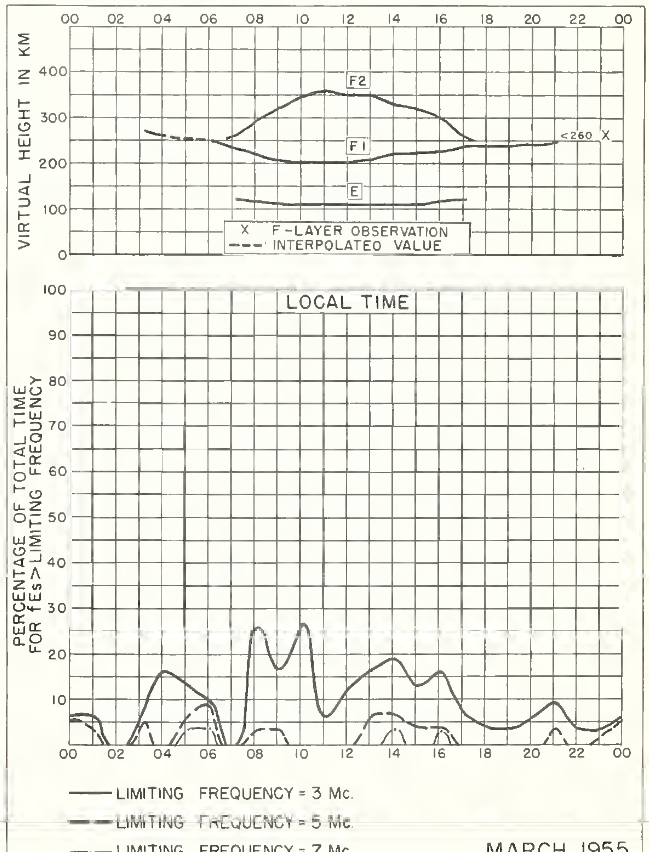


Fig. 55. FT. MONMOUTH, NEW JERSEY
40.0°N, 74.0°W MARCH 1955



MARCH 1955
Fig. 56. FT. MONMOUTH, NEW JERSEY

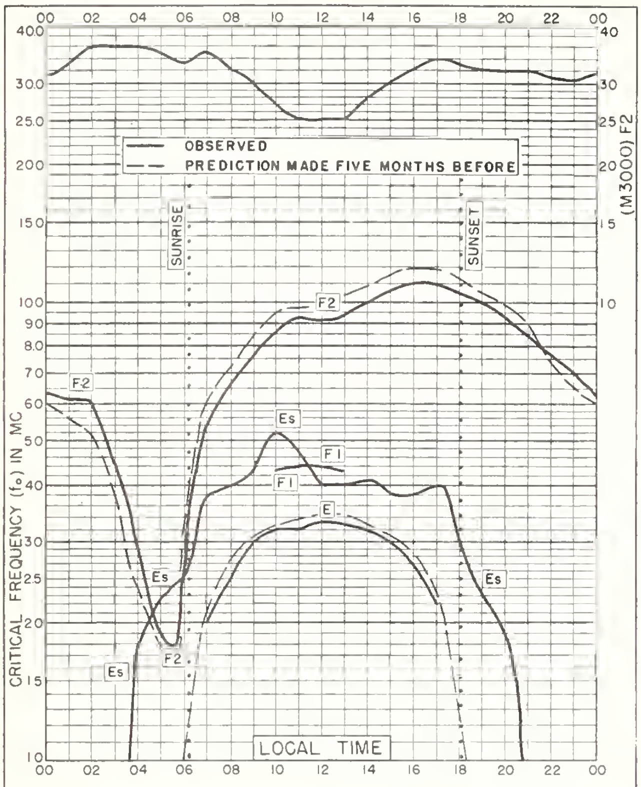


Fig. 57. BAGUIO, P. I.
16.4°N, 120.6°E MARCH 1955

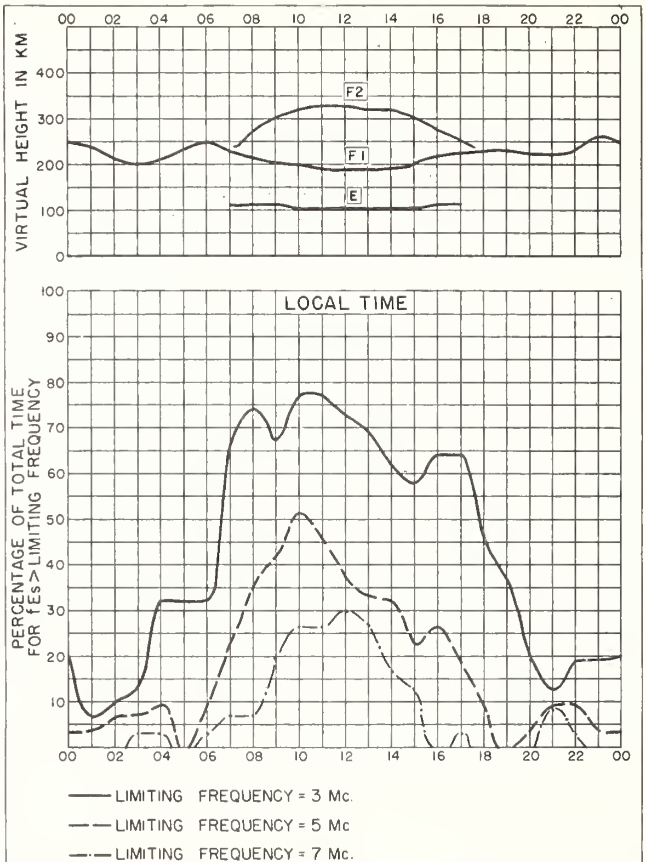


Fig. 58. BAGUIO, P. I. MARCH 1955

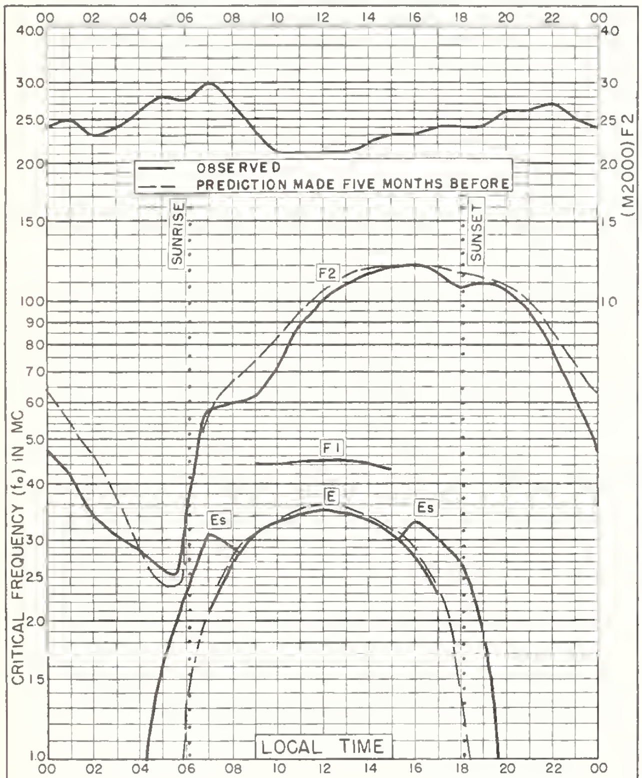
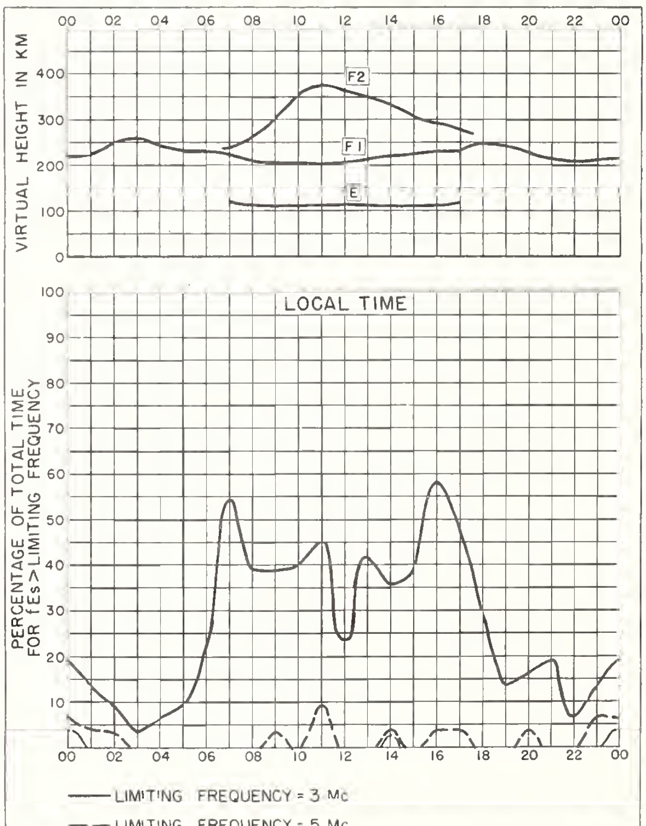


Fig. 59. LEOPOLDVILLE, BELGIAN CONGO
4.3°S, 15.4°E MARCH 1955



LIMITING FREQUENCY = 7 Mc. MARCH 1955

Fig. 60. LEOPOLDVILLE, BELGIAN CONGO

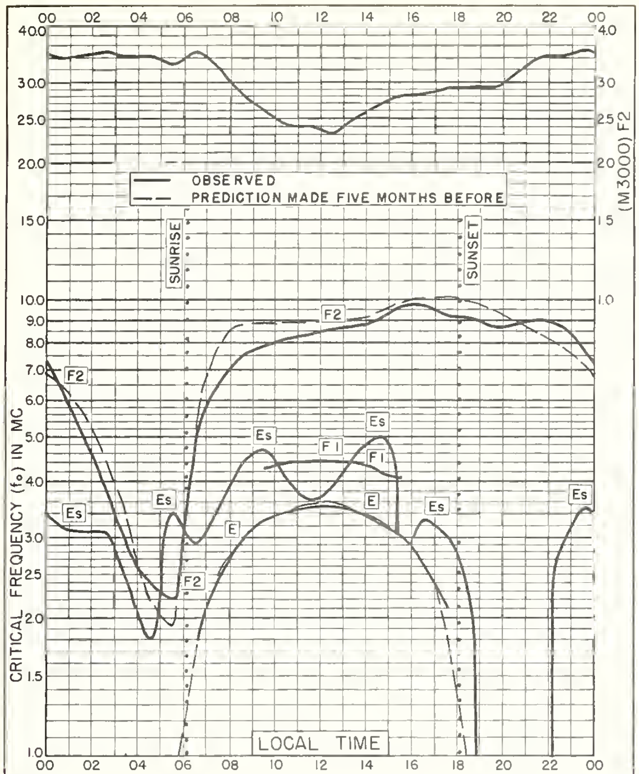


Fig. 61. TALARA, PERU
4.6°S, 81.3°W MARCH 1955

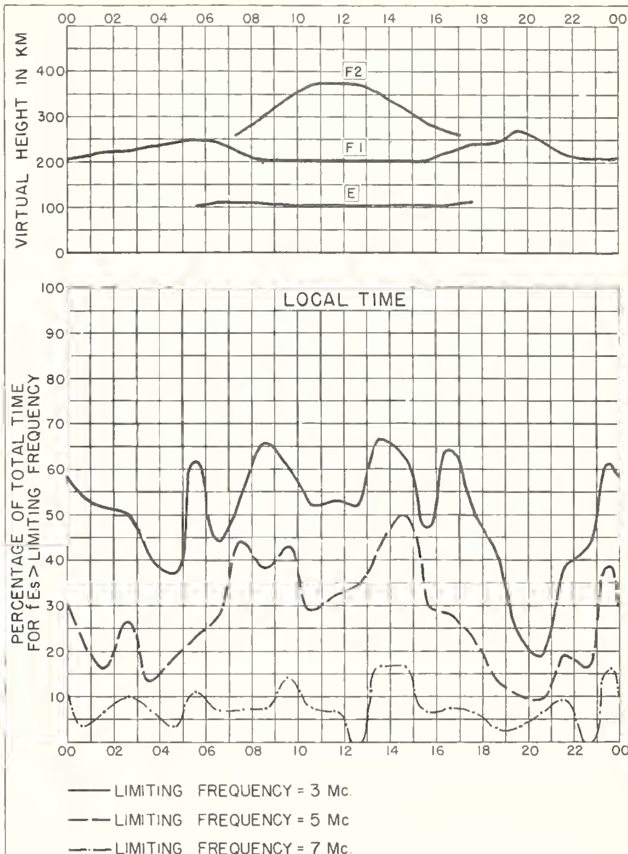


Fig. 62. TALARA, PERU MARCH 1955

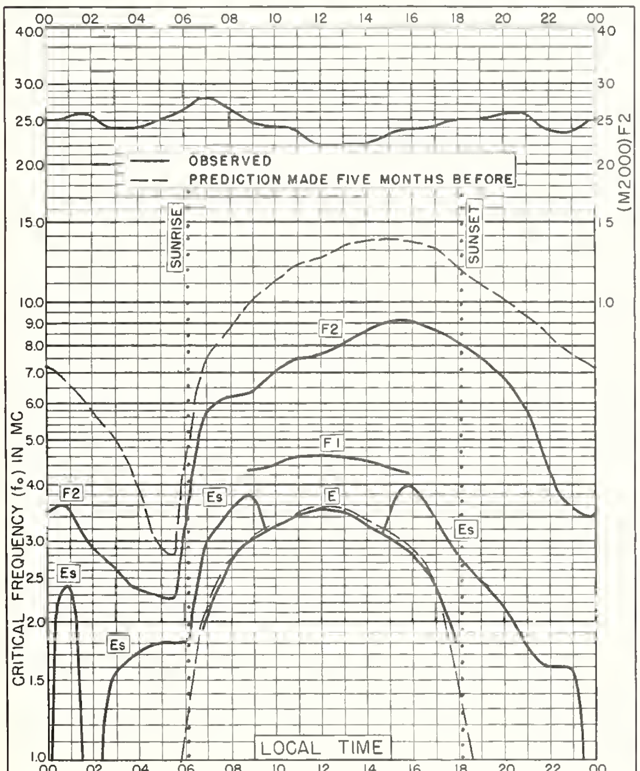
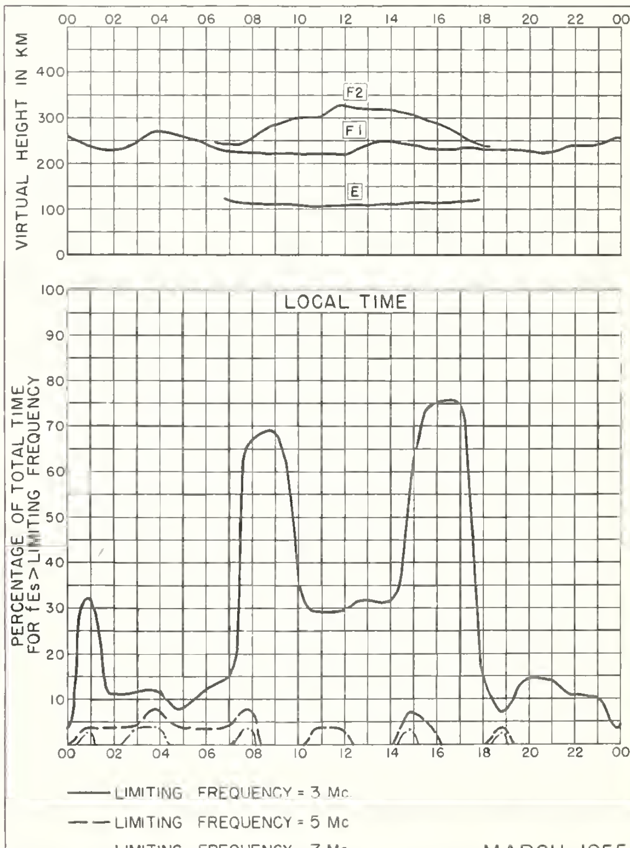


Fig. 63. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E MARCH 1955



MARCH 1955
Fig. 64. ELISABETHVILLE, BELGIAN CONGO

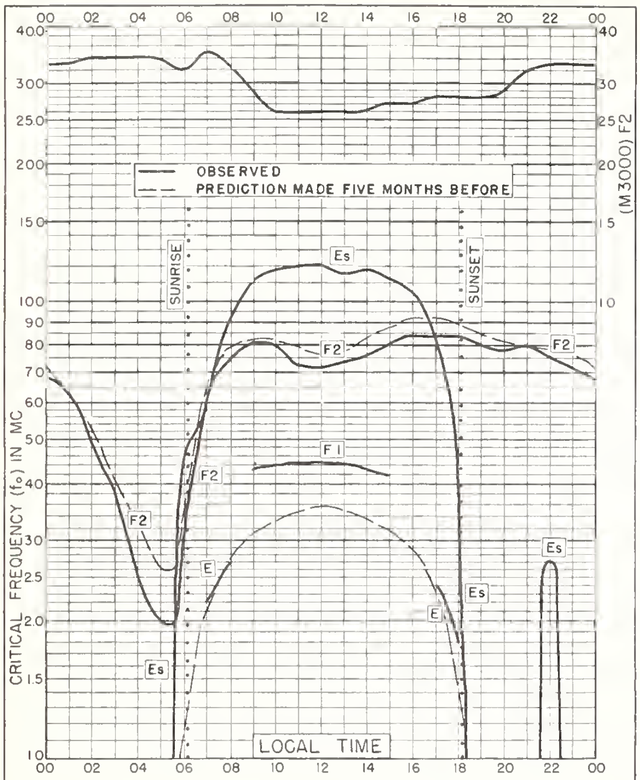


Fig. 65. HUANCAYO, PERU
12.0°S, 75.3°W MARCH 1955

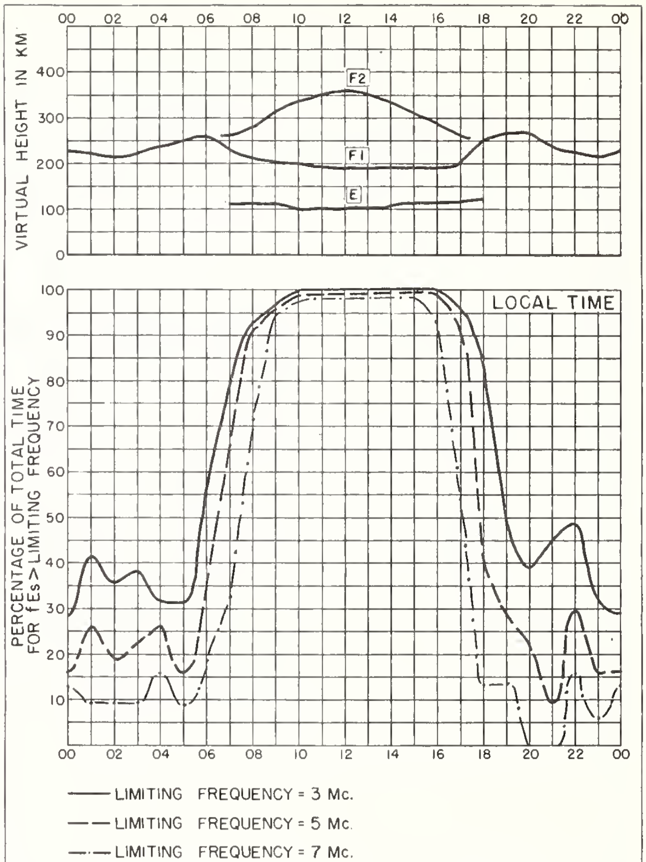


Fig. 66. HUANCAYO, PERU MARCH 1955

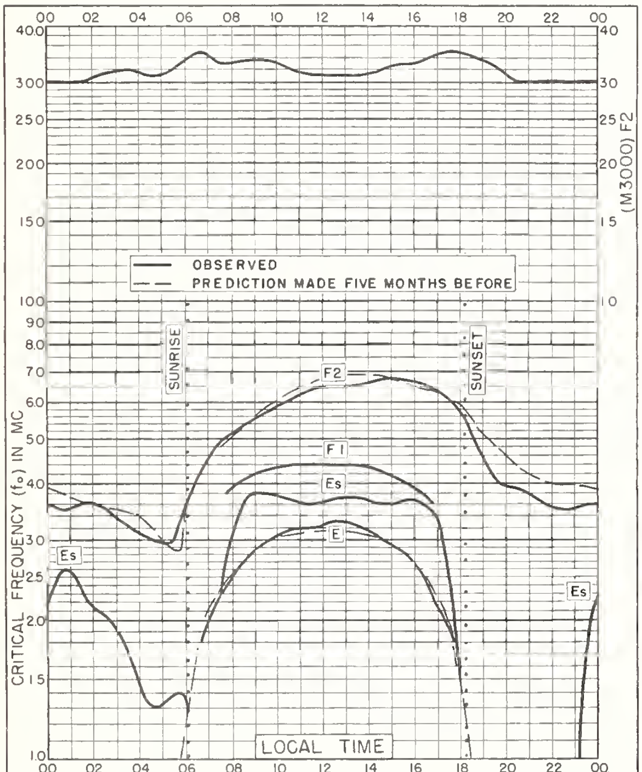


Fig. 67. WATHEROO, W. AUSTRALIA
30.3°S, 115.9°E MARCH 1955

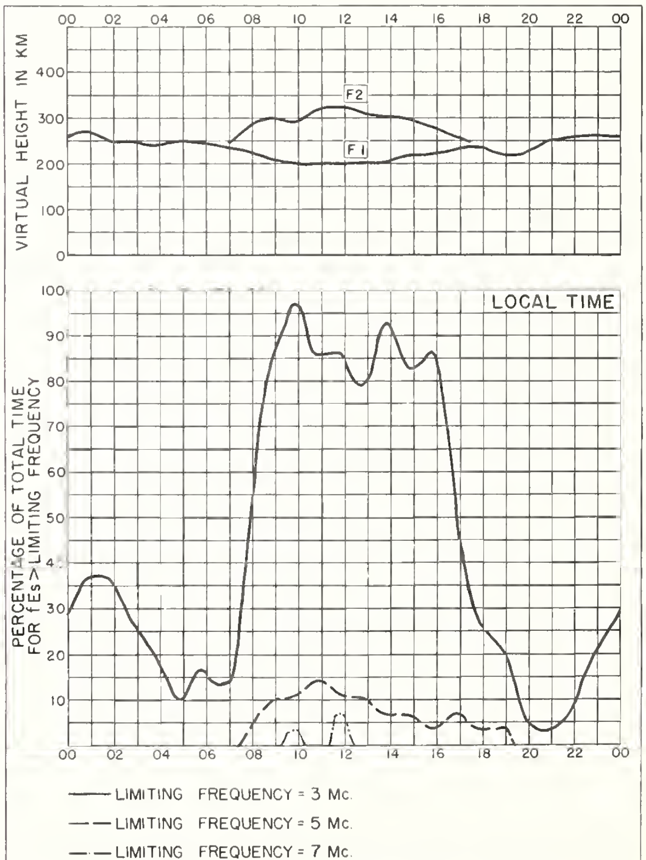


Fig. 68. WATHEROO, W. AUSTRALIA MARCH 1955

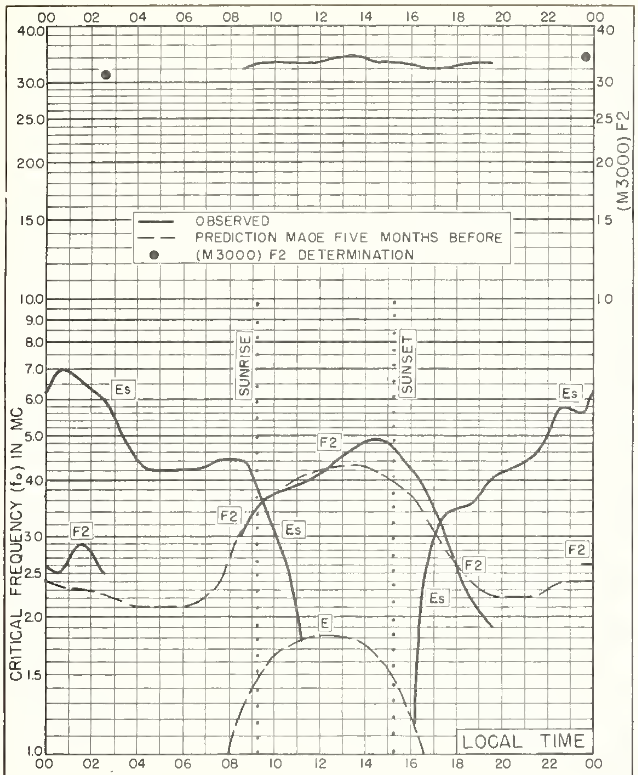
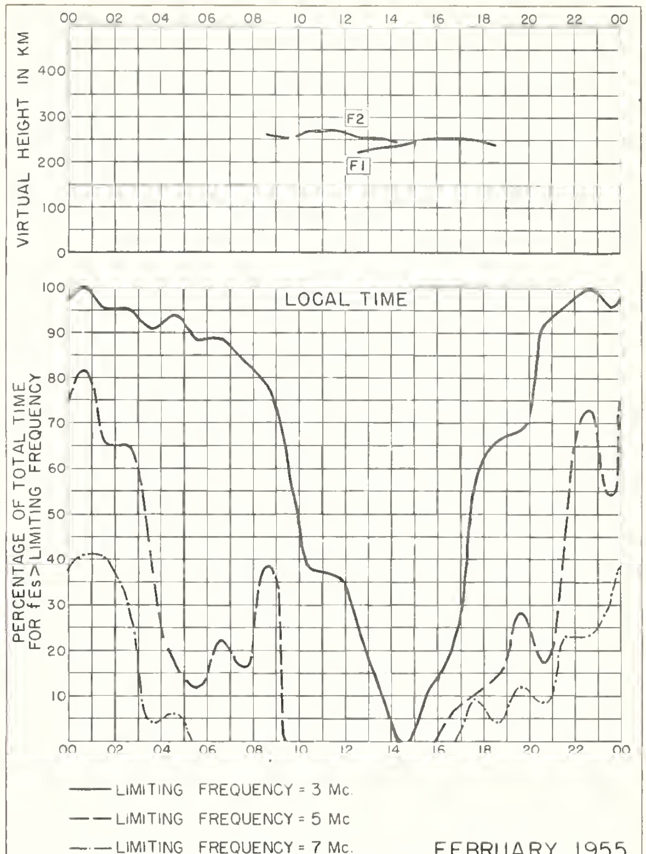


Fig. 69. POINT BARROW, ALASKA
71.3°N, 156.8°W FEBRUARY 1955



FEBRUARY 1955
Fig. 70. POINT BARROW, ALASKA

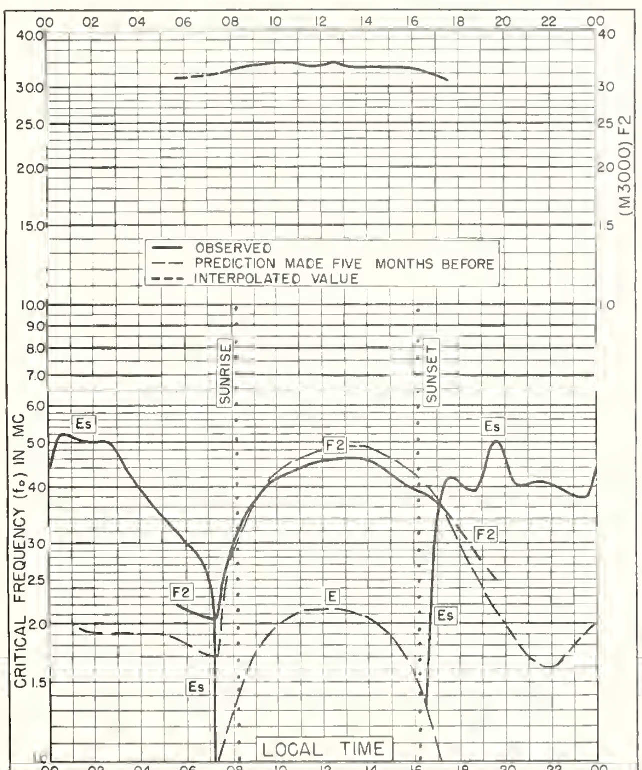


Fig. 71. REYKJAVIK, ICELAND
64.1°N, 21.8°W FEBRUARY 1955

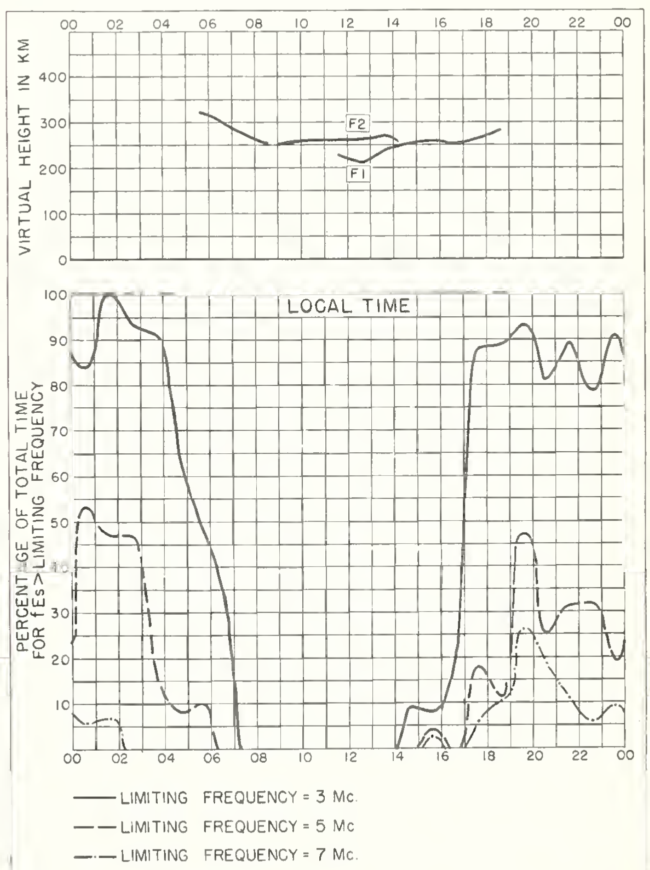


Fig. 72. REYKJAVIK, ICELAND FEBRUARY 1955

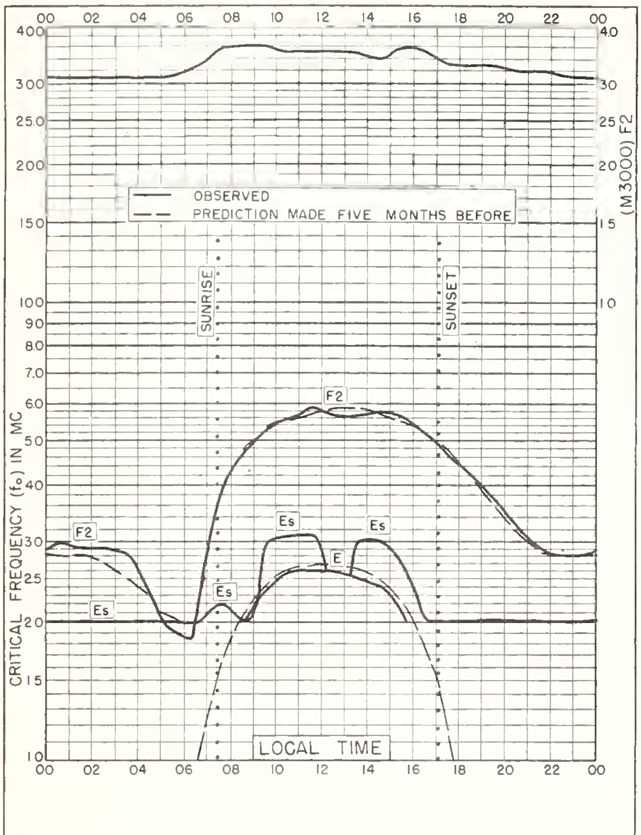
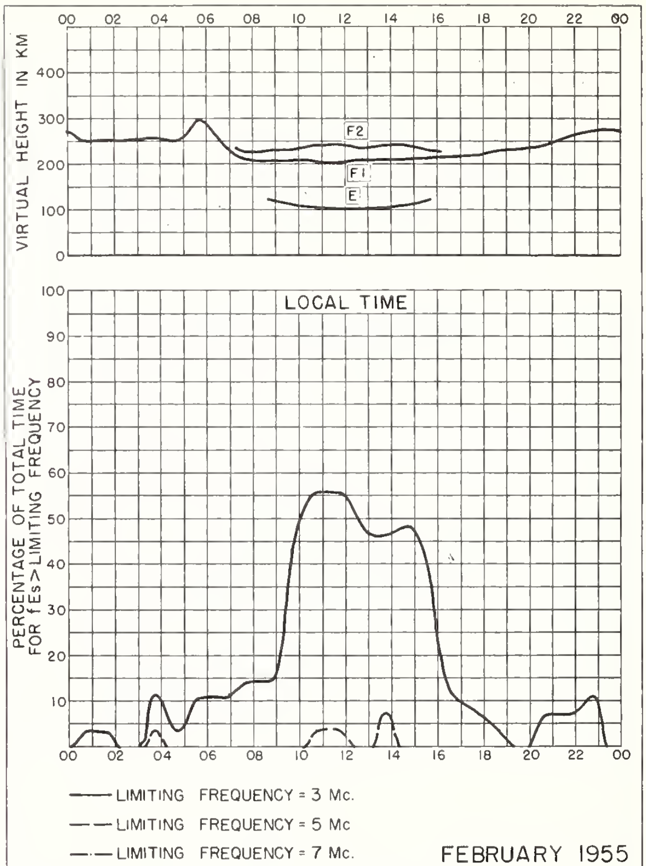


Fig. 73. LINDAU/HARZ, GERMANY
51.6°N, 10.1°E FEBRUARY 1955



FEBRUARY 1955
Fig. 74. LINDAU/HARZ, GERMANY

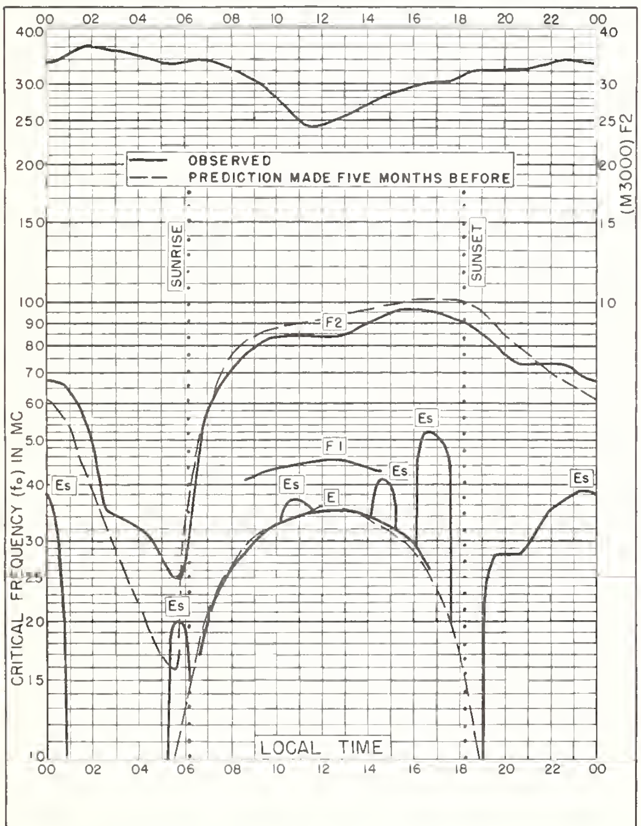


Fig. 75. TALARA, PERU
4.6°S, 81.3°W FEBRUARY 1955

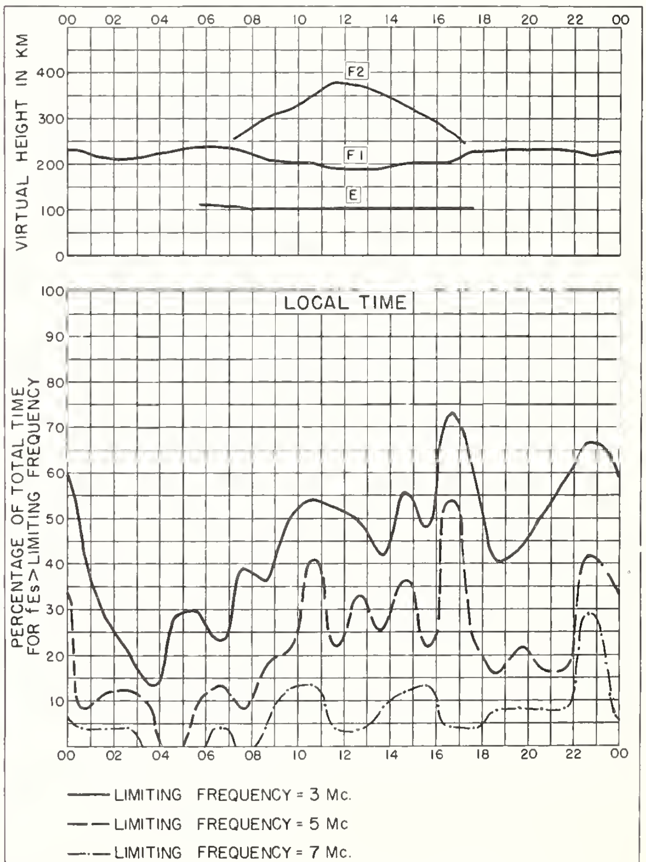


Fig. 76. TALARA, PERU FEBRUARY 1955

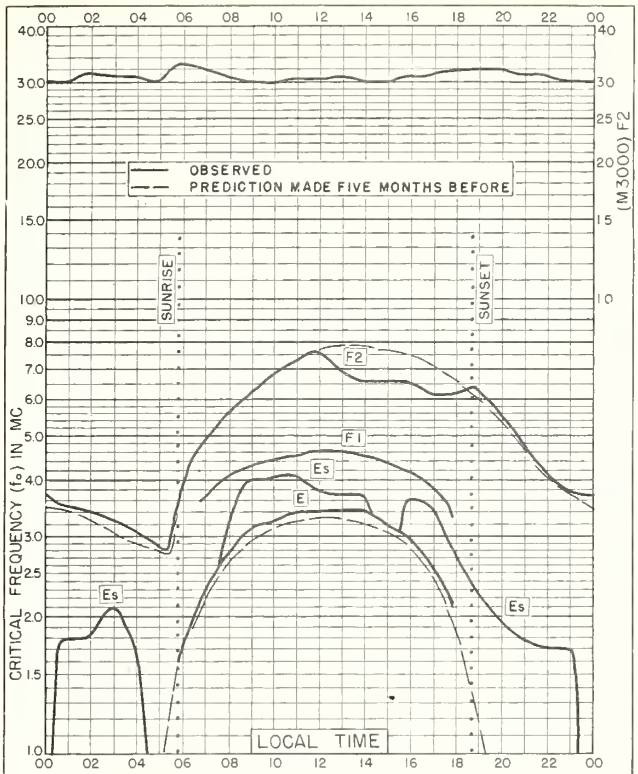
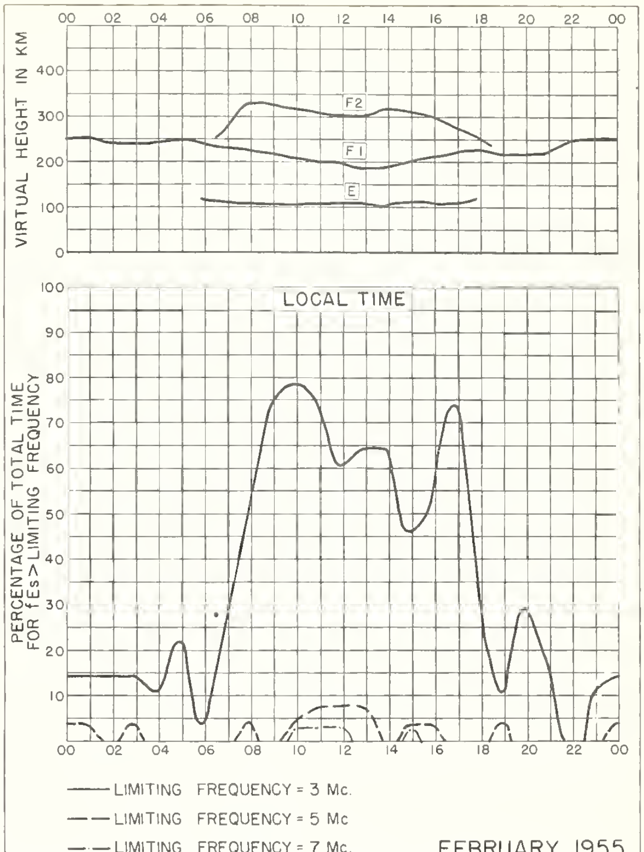


Fig. 77. JOHANNESBURG, UNION OF S. AFRICA
26.2°S, 28.1°E FEBRUARY 1955



FEBRUARY 1955
Fig. 78. JOHANNESBURG, UNION OF S. AFRICA

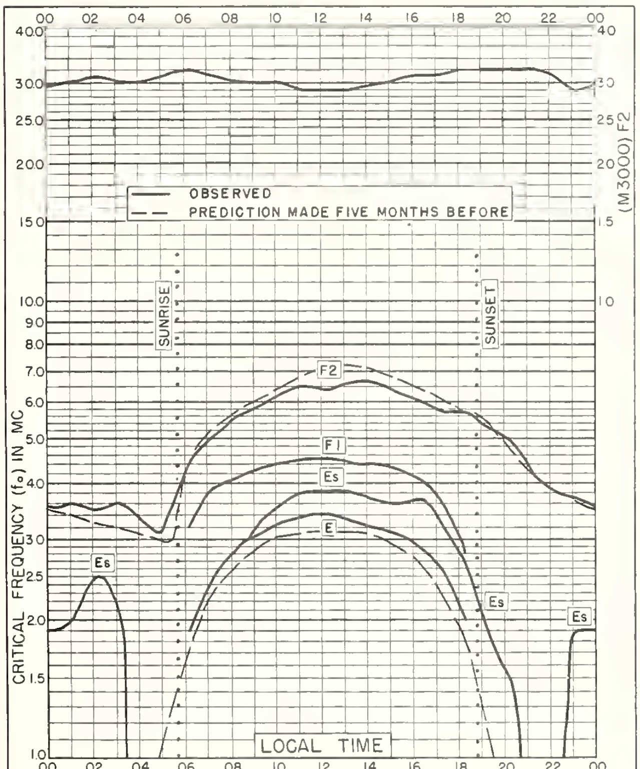
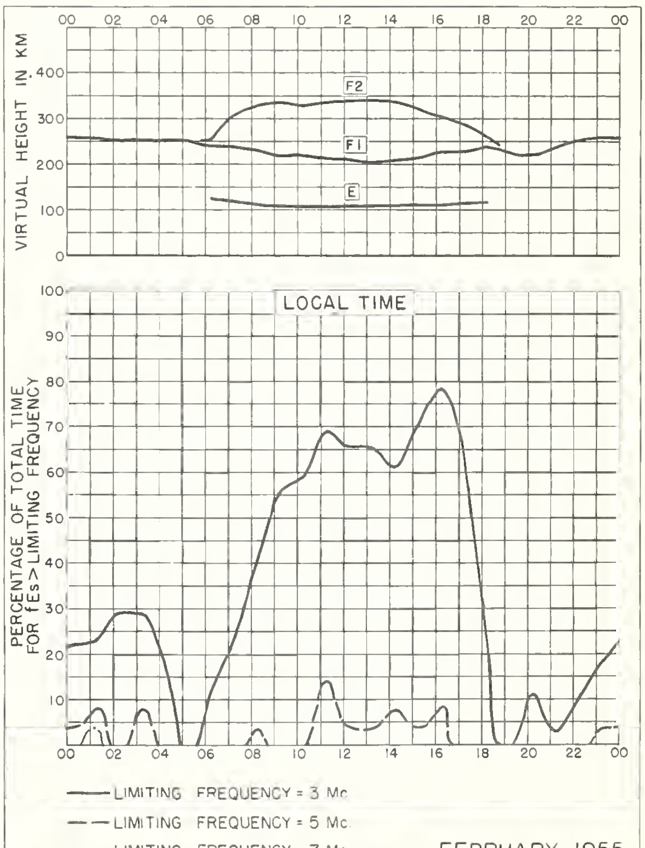


Fig. 79. CAPETOWN, UNION OF S. AFRICA
34.2°S, 18.3°E FEBRUARY 1955



FEBRUARY 1955
Fig. 80. CAPETOWN, UNION OF S. AFRICA

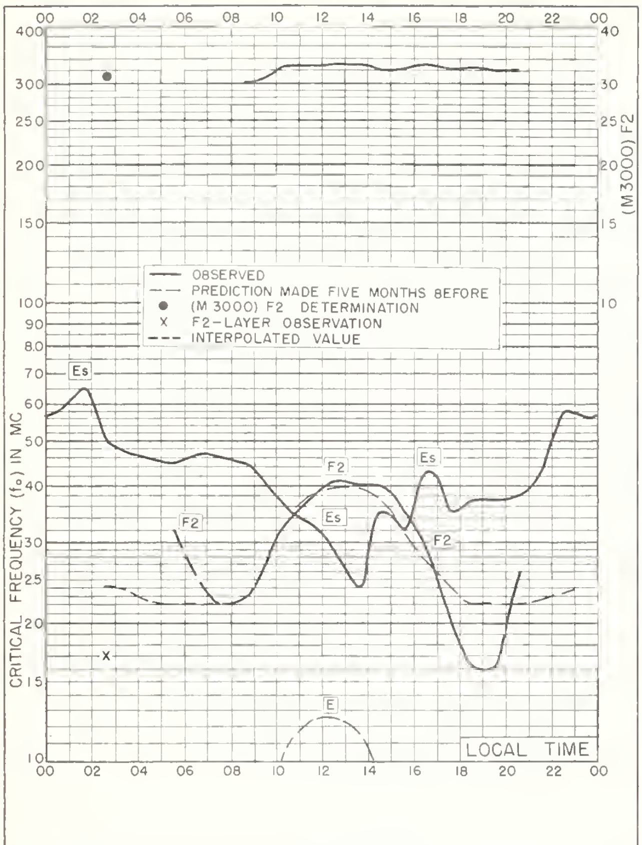
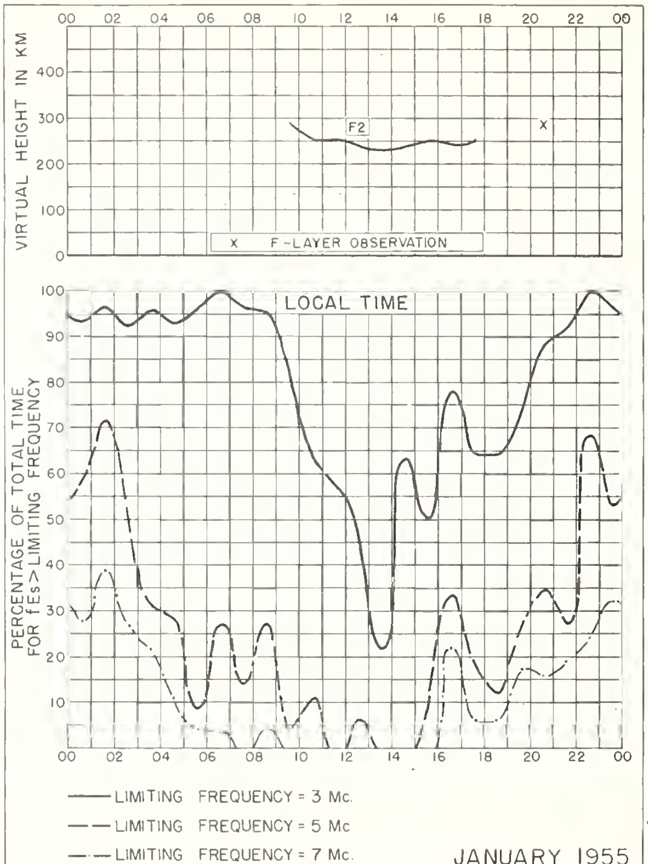


Fig. 81. POINT BARROW, ALASKA
71.3°N, 156.8°W JANUARY 1955



JANUARY 1955
Fig. 82. POINT BARROW, ALASKA

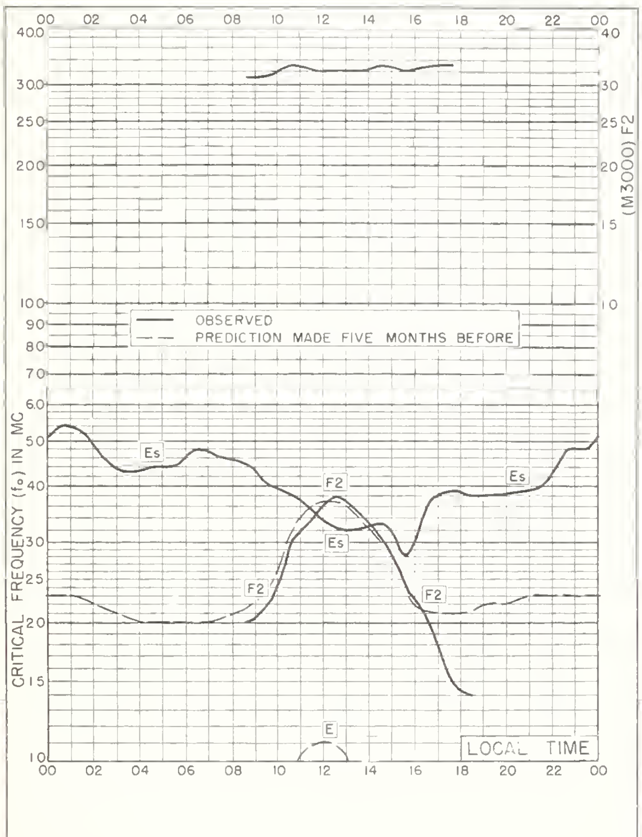
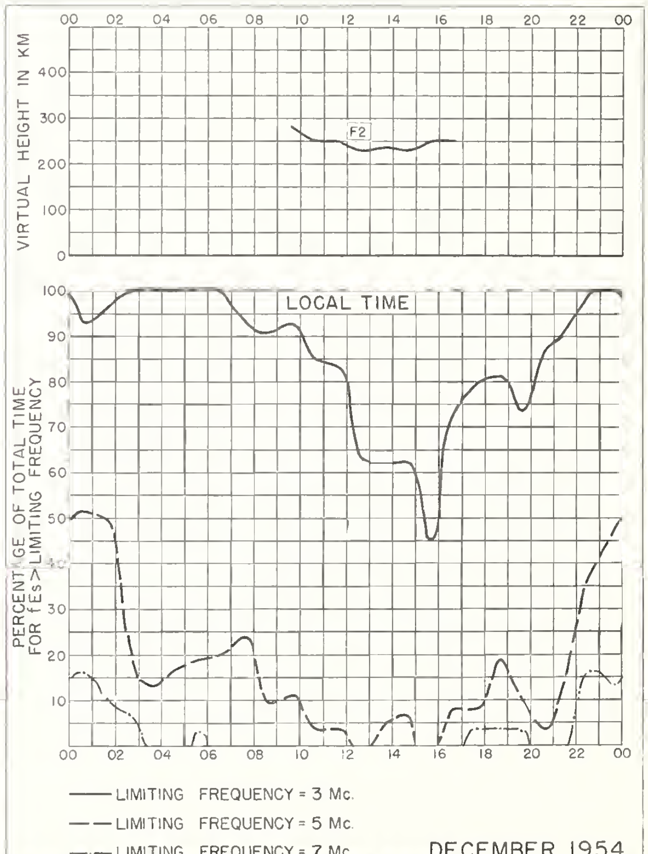


Fig. 83. POINT BARROW, ALASKA
71.3°N, 156.8°W DECEMBER 1954



DECEMBER 1954
Fig. 84. POINT BARROW, ALASKA

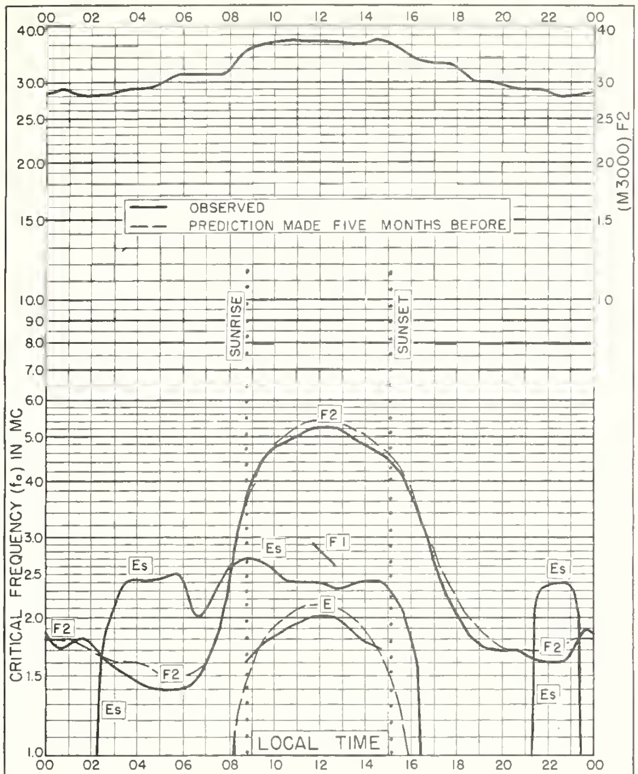


Fig. 85. INVERNESS, SCOTLAND
57.4°N, 4.2°W DECEMBER 1954

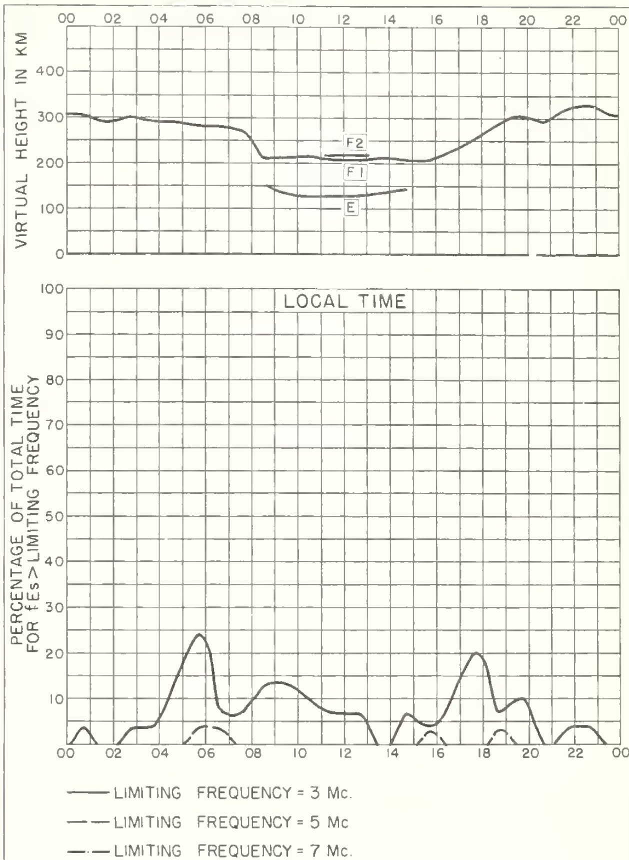


Fig. 86. INVERNESS, SCOTLAND DECEMBER 1954

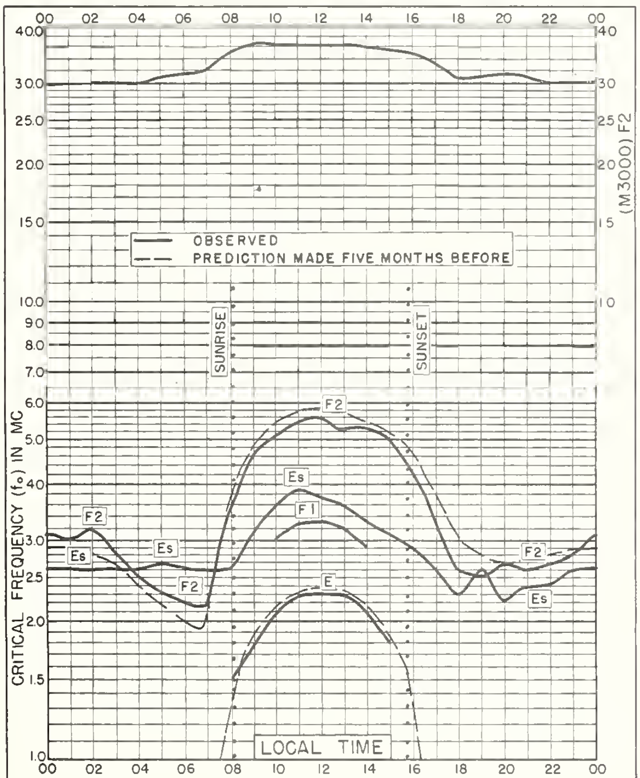


Fig. 87. SLOUGH, ENGLAND
51.5°N, 0.6°W DECEMBER 1954

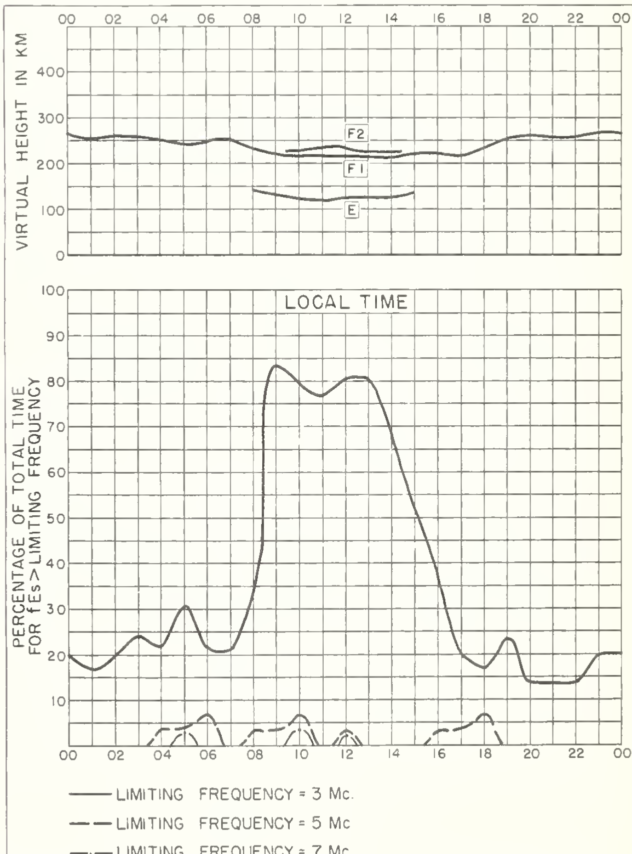


Fig. 88. SLOUGH, ENGLAND DECEMBER 1954

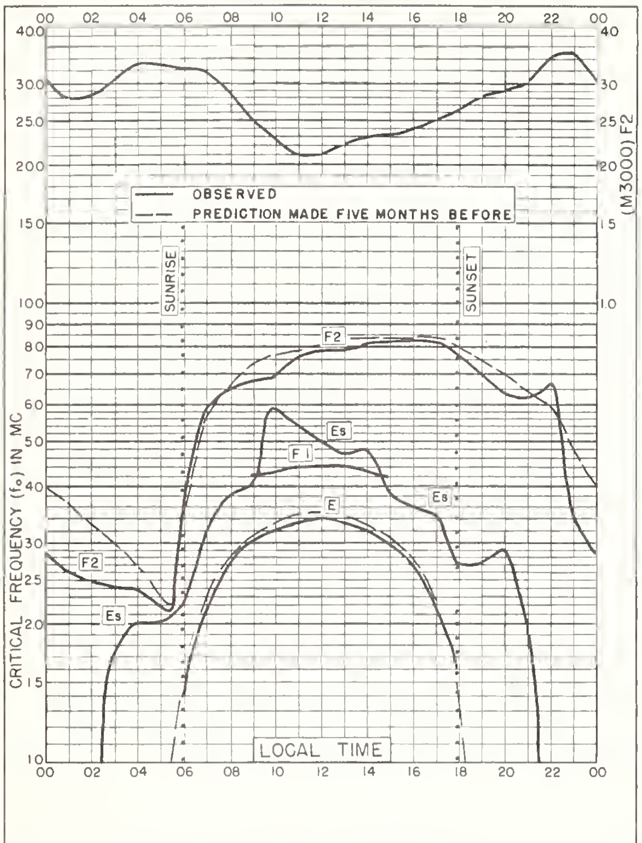


Fig. 89. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E DECEMBER 1954

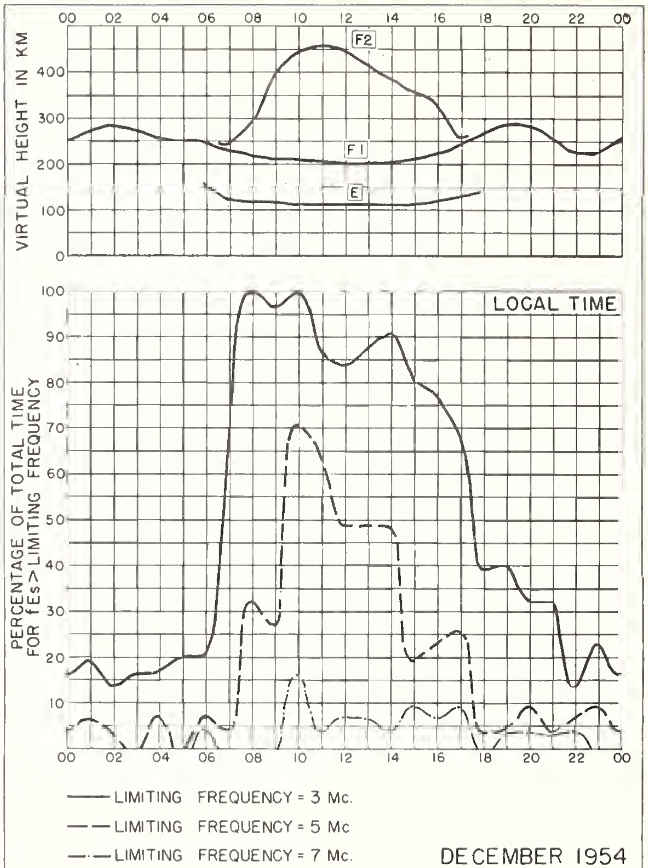


Fig. 90. SINGAPORE, BRITISH MALAYA

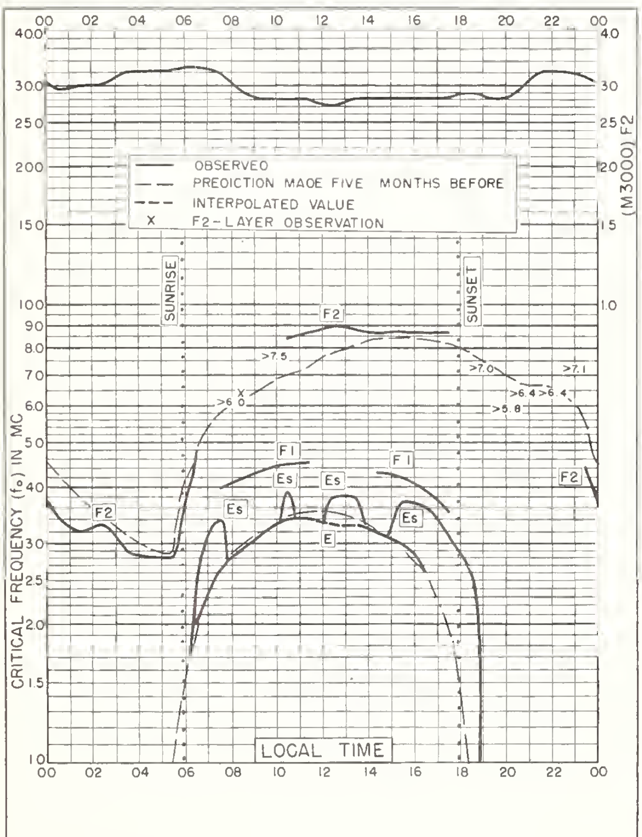


Fig. 91. NAIROBI, KENYA
1.3°S, 36.8°E DECEMBER 1954

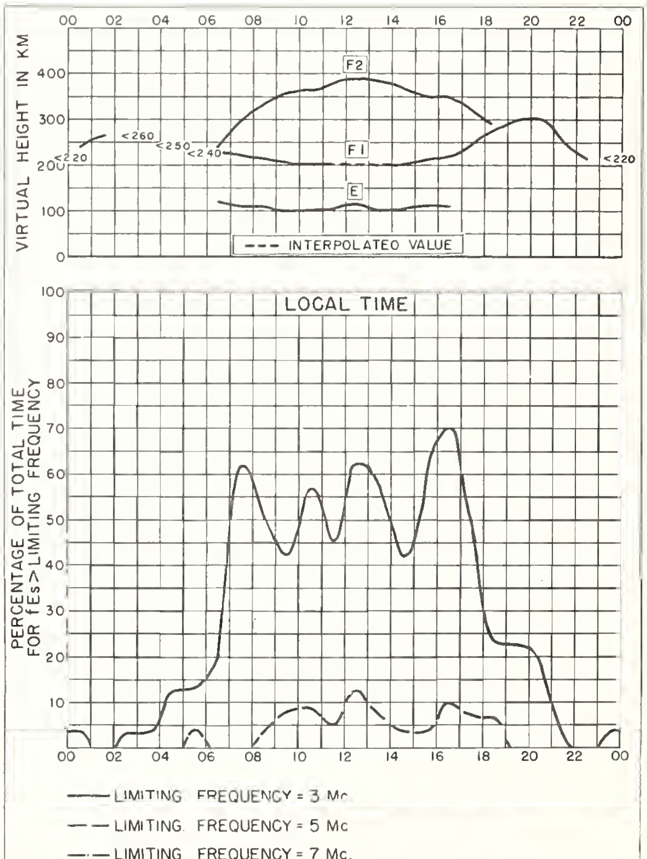


Fig. 92. NAIROBI, KENYA DECEMBER 1954

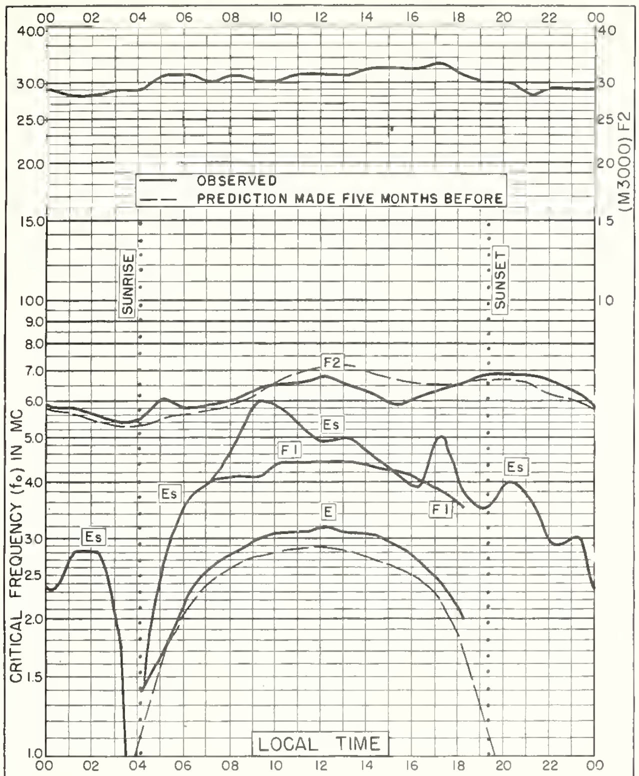


Fig. 93. FALKLAND IS.
51.7°S, 57.8°W NOVEMBER 1954

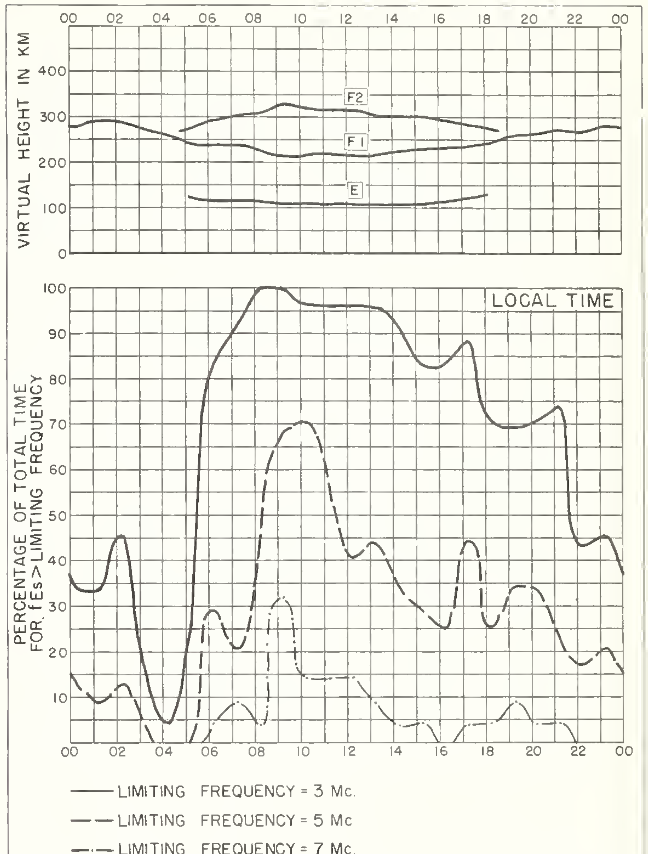


Fig. 94. FALKLAND IS. NOVEMBER 1954

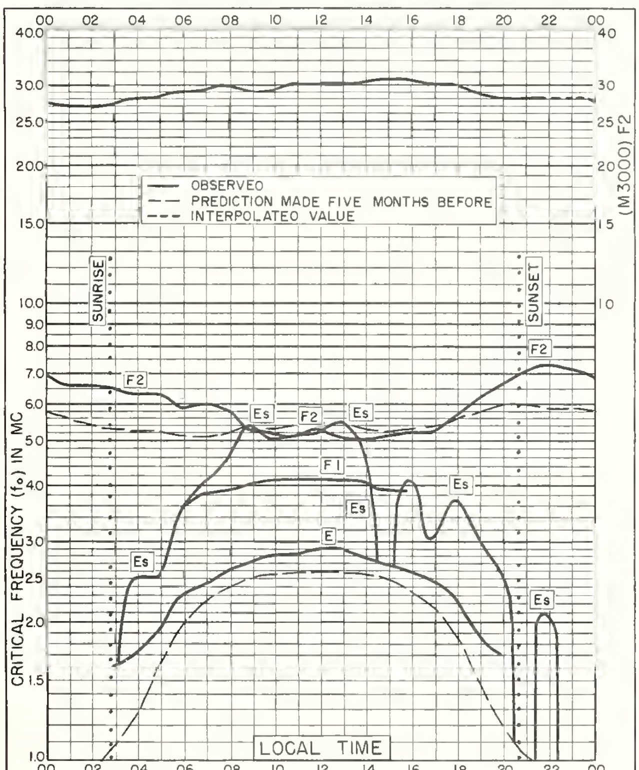


Fig. 95. PORT LOCKROY
64.8°S, 63.5°W NOVEMBER 1954

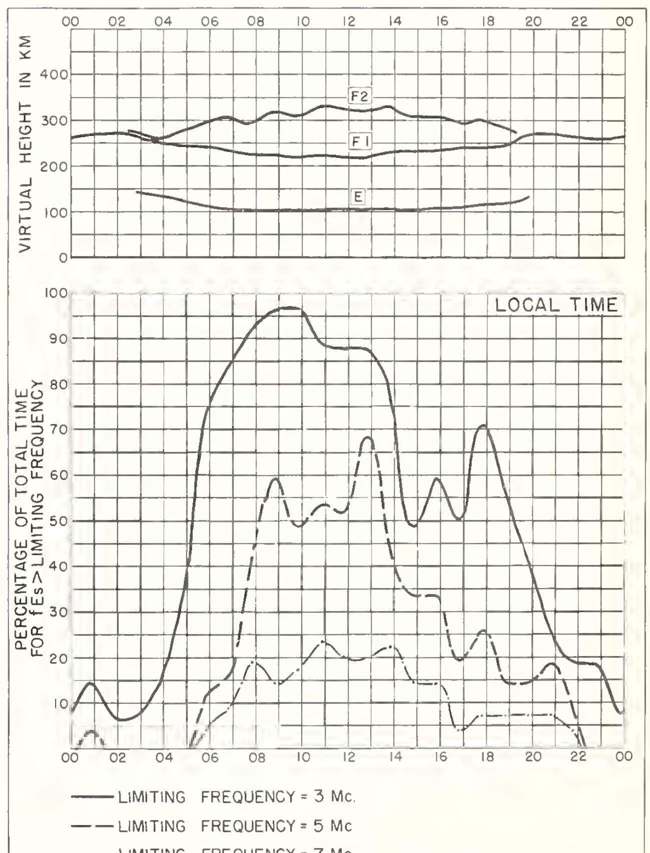


Fig. 96. PORT LOCKROY NOVEMBER 1954

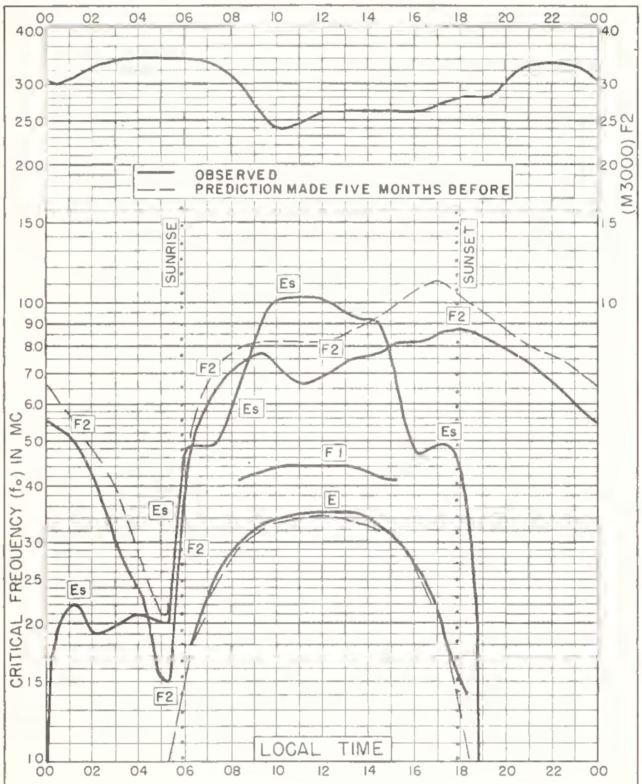


Fig. 97. IBADAN, NIGERIA
7.4°N, 4.0°E SEPTEMBER 1954

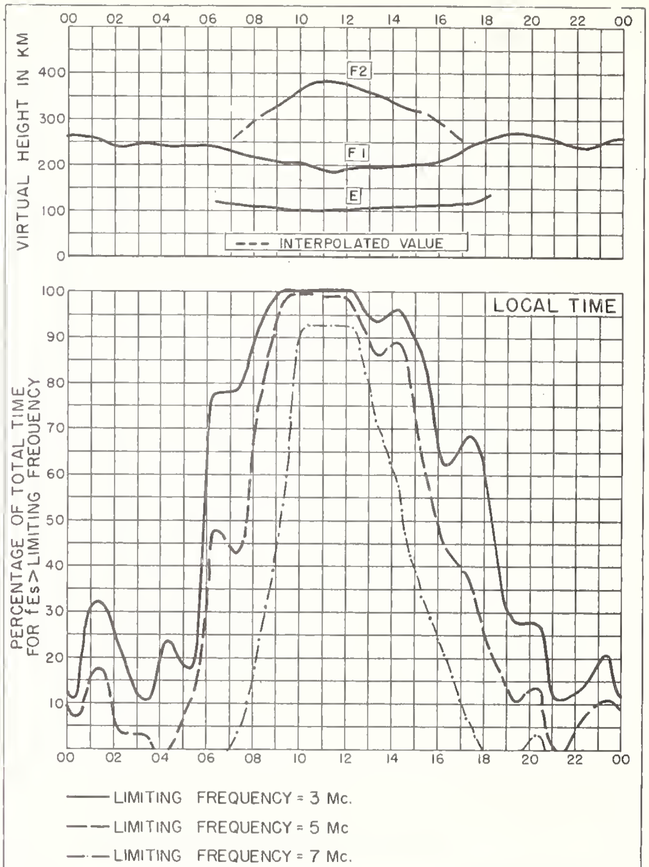


Fig. 98. IBADAN, NIGERIA SEPTEMBER 1954

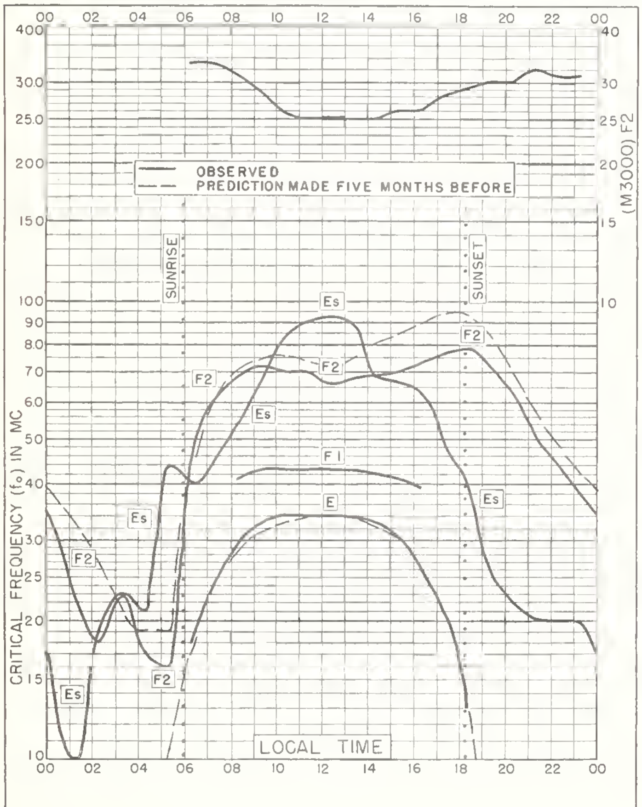


Fig. 99. IBADAN, NIGERIA
7.4°N, 4.0°E AUGUST 1954

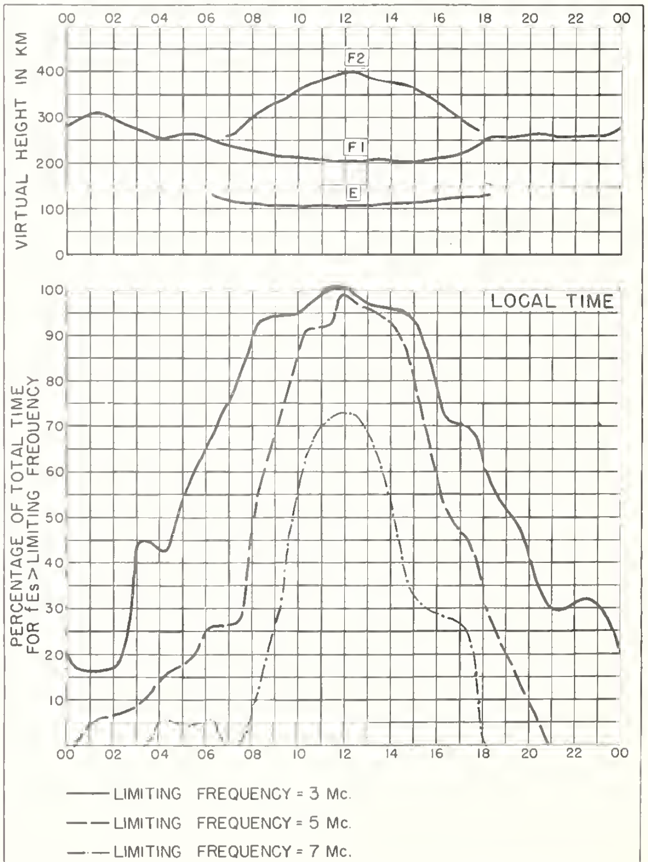


Fig. 100. IBADAN, NIGERIA AUGUST 1954

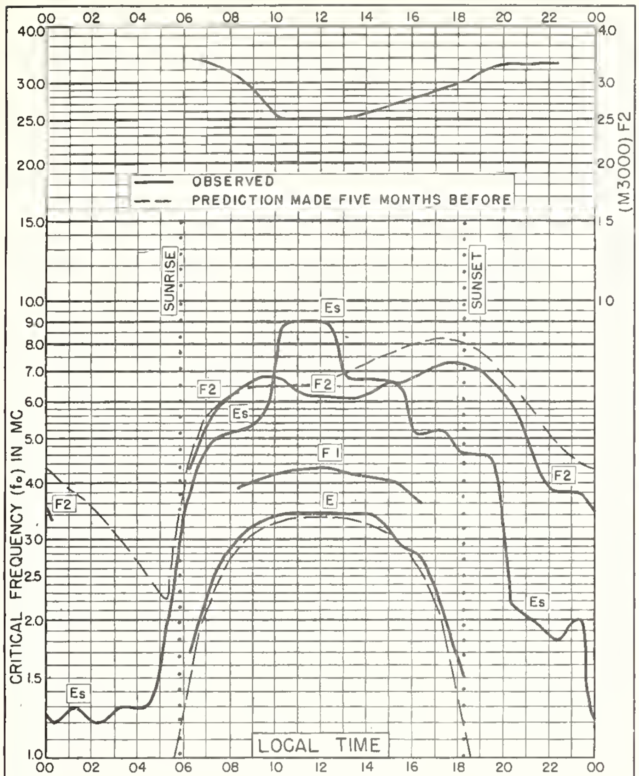


Fig. 101. IBADAN, NIGERIA
7.4°N, 4.0°E JULY 1954

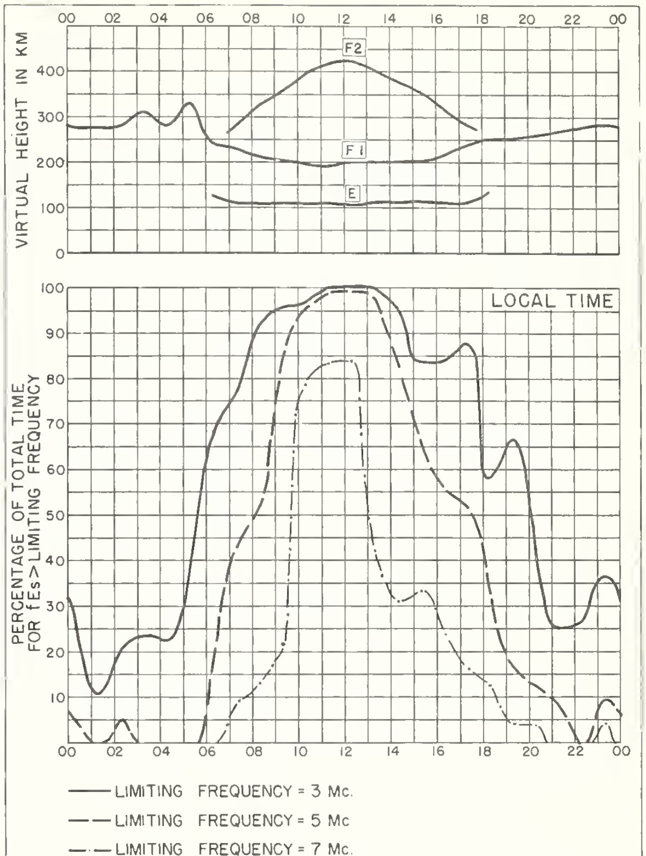


Fig. 102. IBADAN, NIGERIA JULY 1954

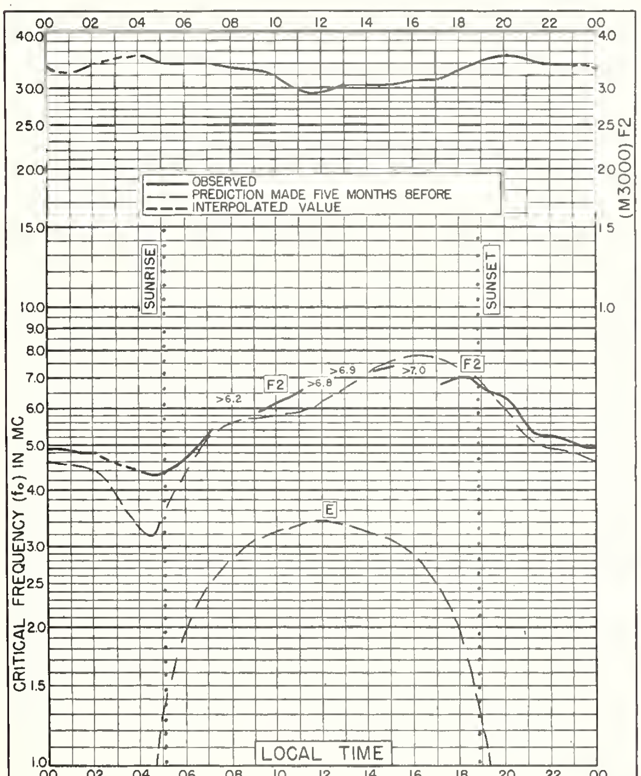


Fig. 103. DELHI, INDIA
28.6°N, 77.1°E JUNE 1954

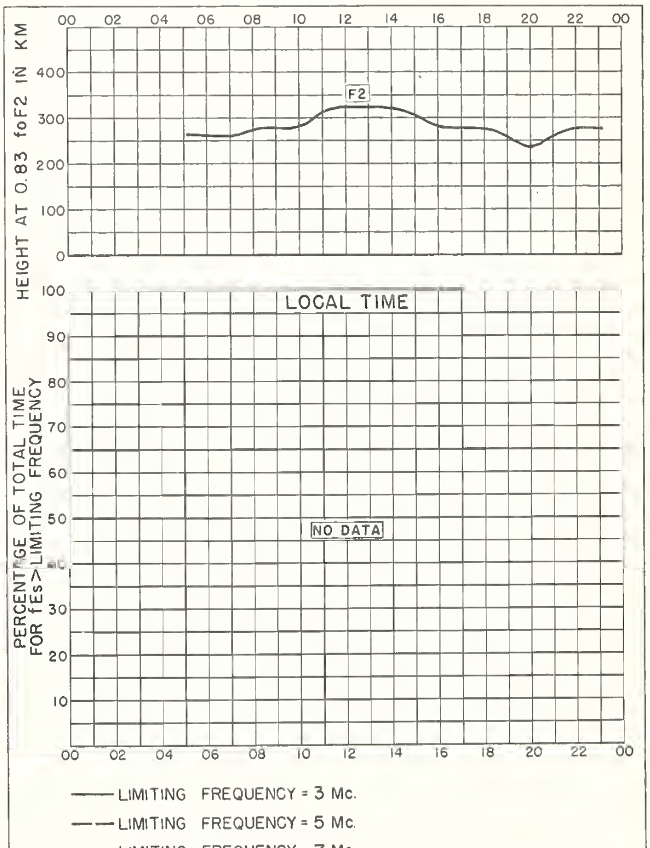


Fig. 104. DELHI, INDIA JUNE 1954

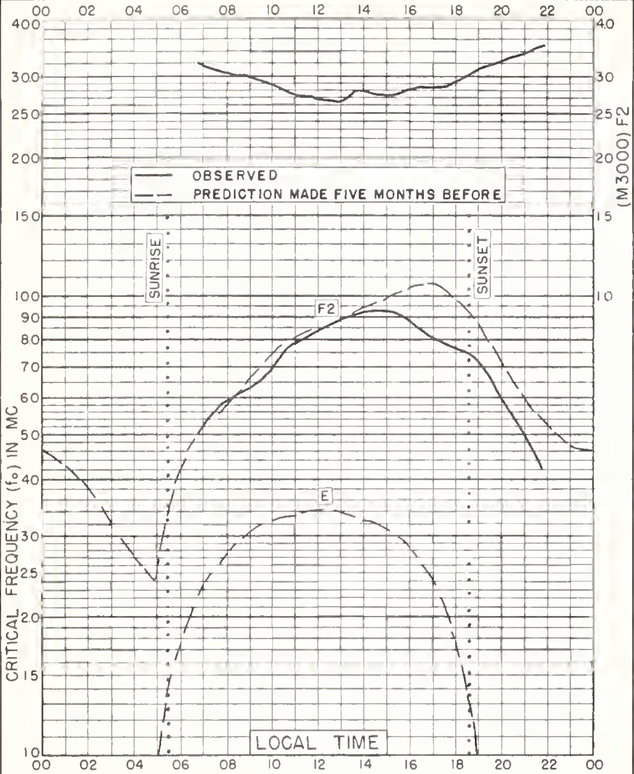


Fig. 105. BOMBAY, INDIA
19.0°N, 73.0°E JUNE 1954

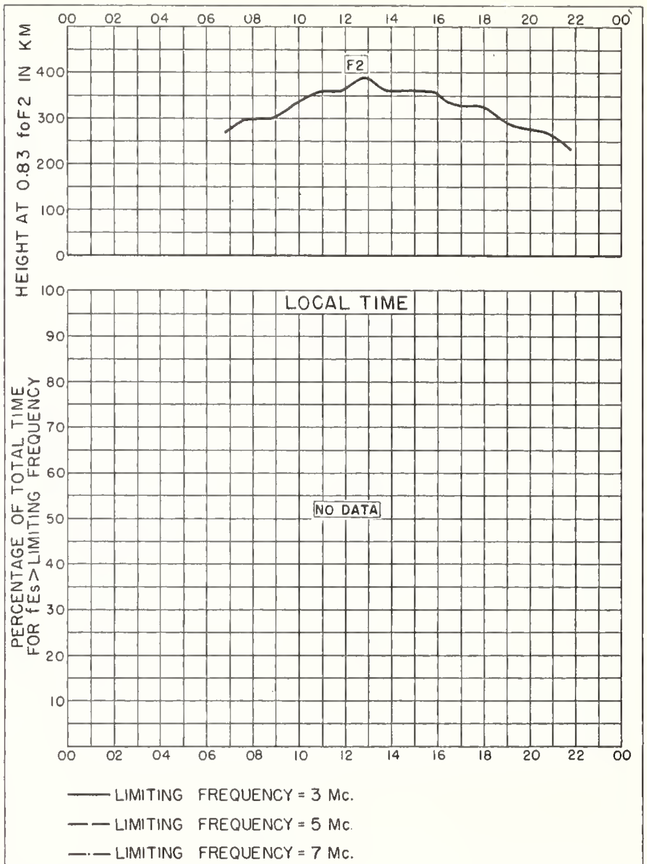


Fig. 106. BOMBAY, INDIA JUNE 1954

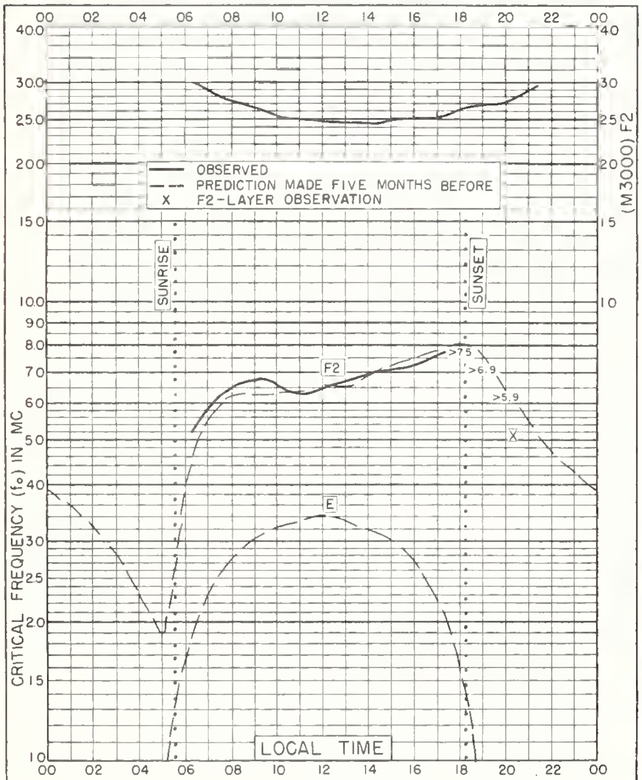


Fig. 107. MADRAS, INDIA
13.0°N, 80.2°E JUNE 1954

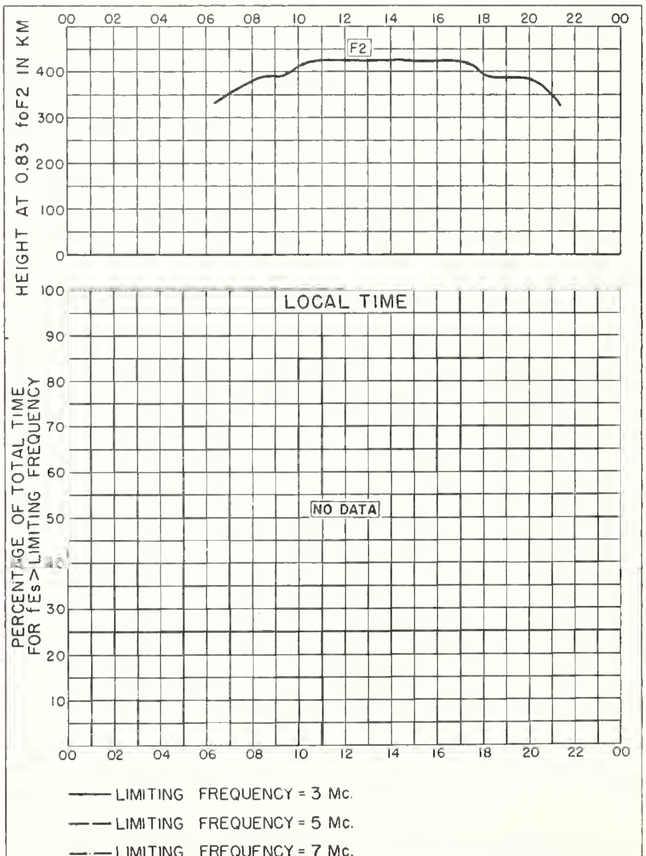


Fig. 108. MADRAS, INDIA JUNE 1954

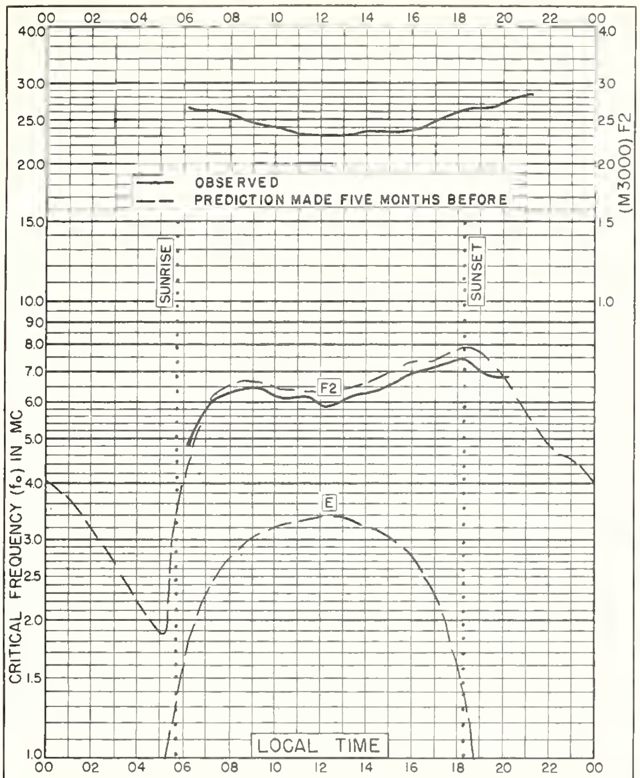


Fig. 109. TIRUCHY, INDIA
10.8°N, 78.8°E JUNE 1954

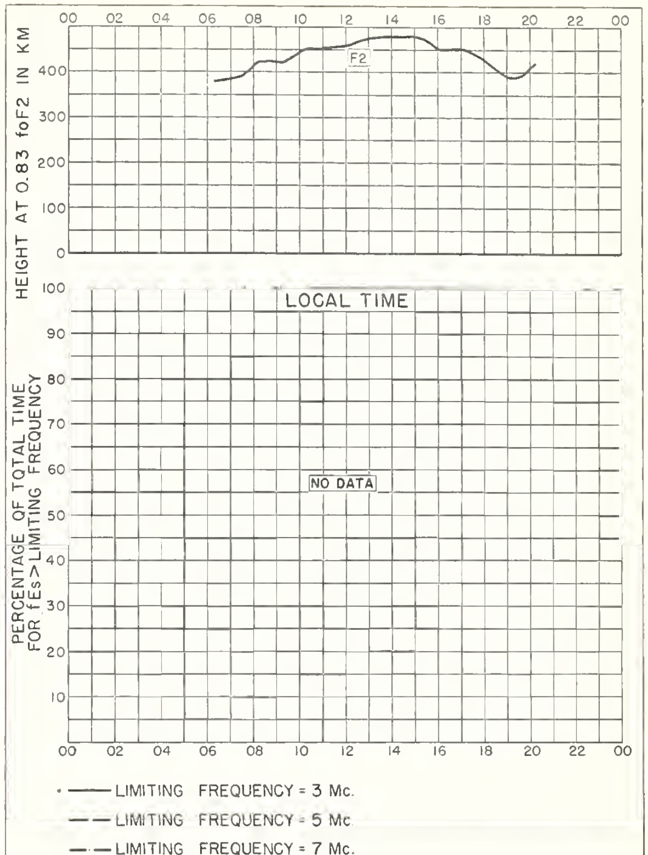


Fig. 110. TIRUCHY, INDIA JUNE 1954

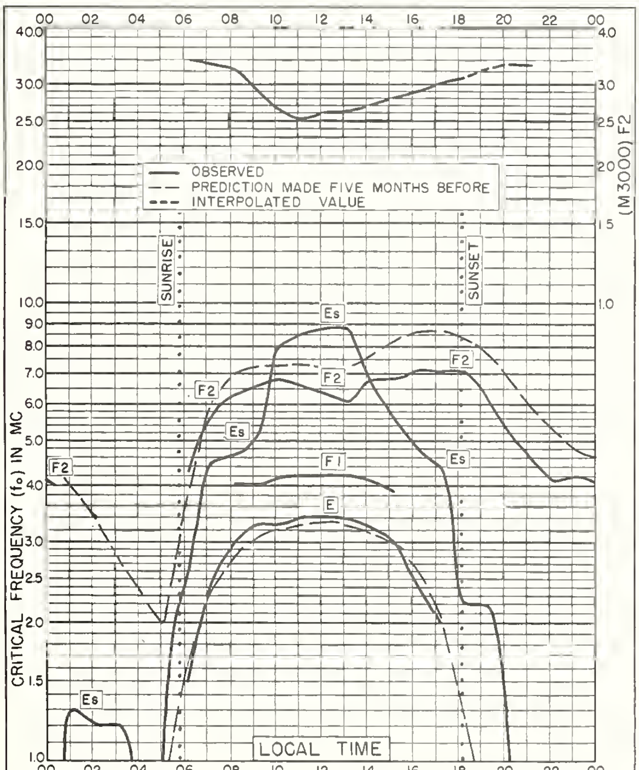


Fig. 111. IBADAN, NIGERIA
7.4°N, 4.0°E JUNE 1954

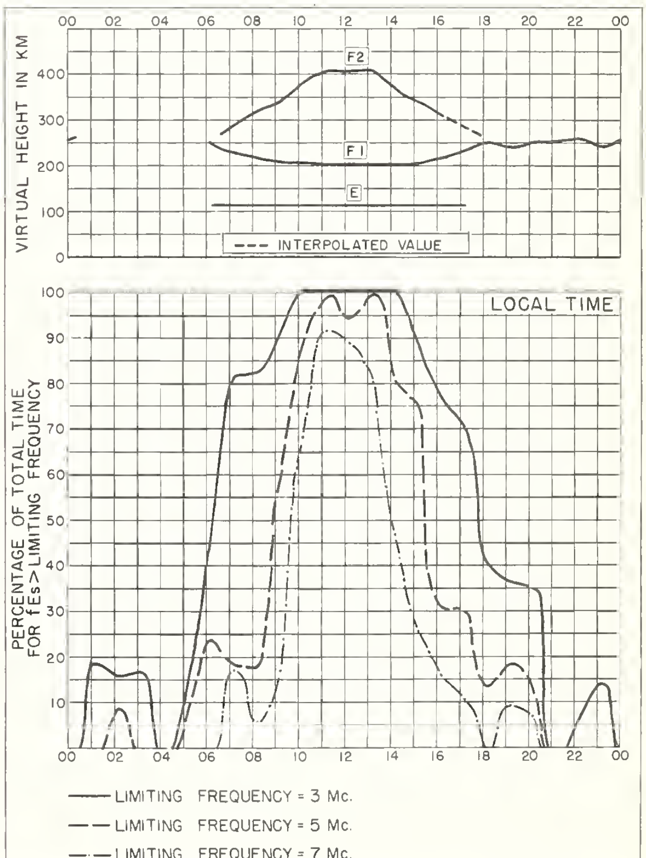


Fig. 112. IBADAN, NIGERIA JUNE 1954

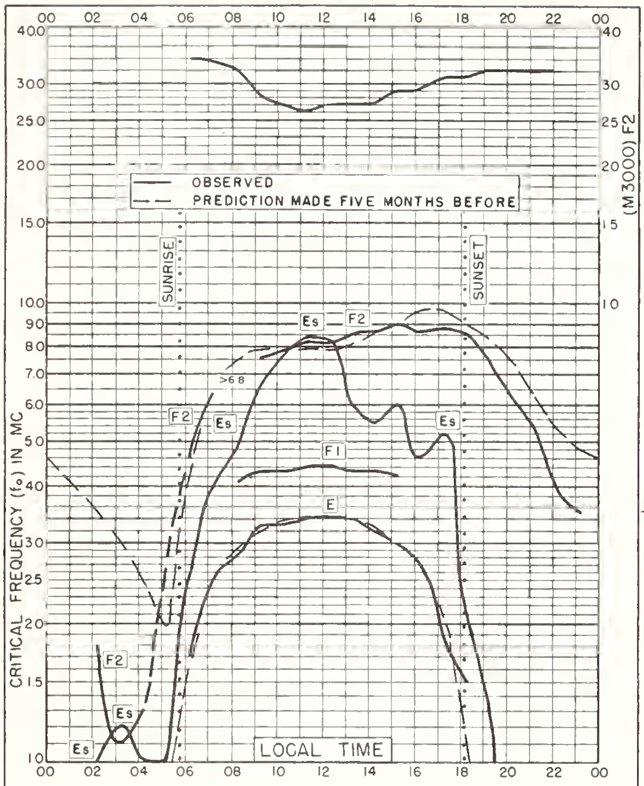


Fig. 113. IBADAN, NIGERIA
7.4°N, 4.0°E MAY 1954

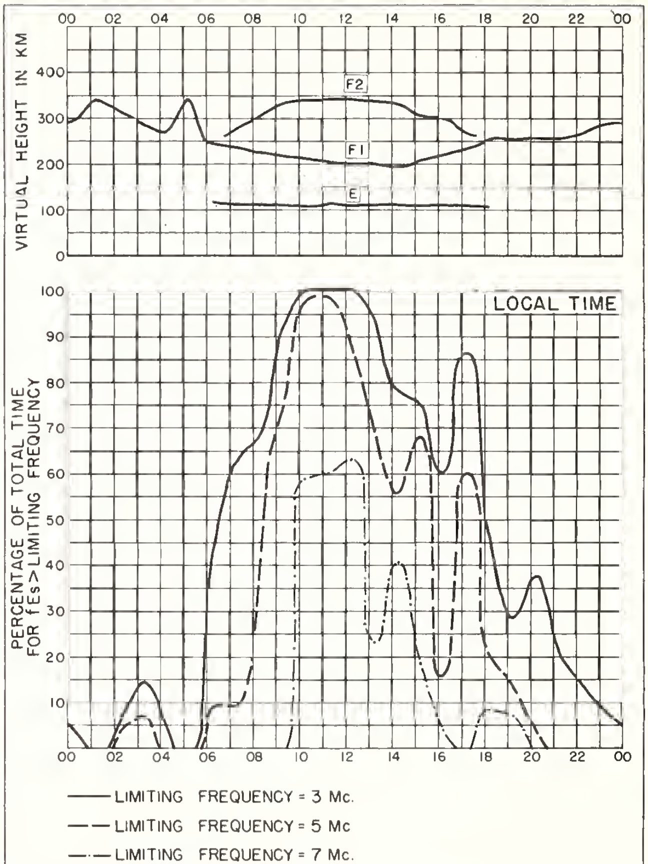


Fig. 114. IBADAN, NIGERIA MAY 1954

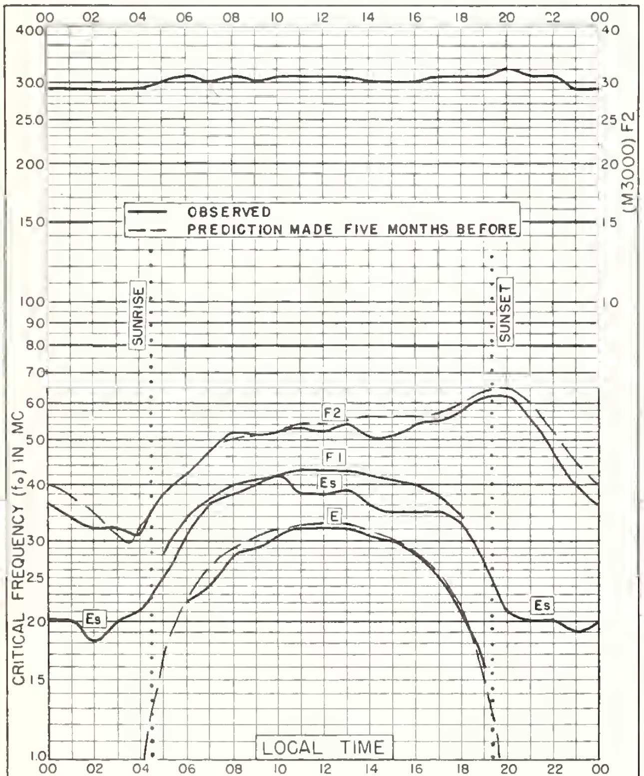


Fig. 115. FRIBOURG, GERMANY
48.1°N, 7.8°E MAY 1953

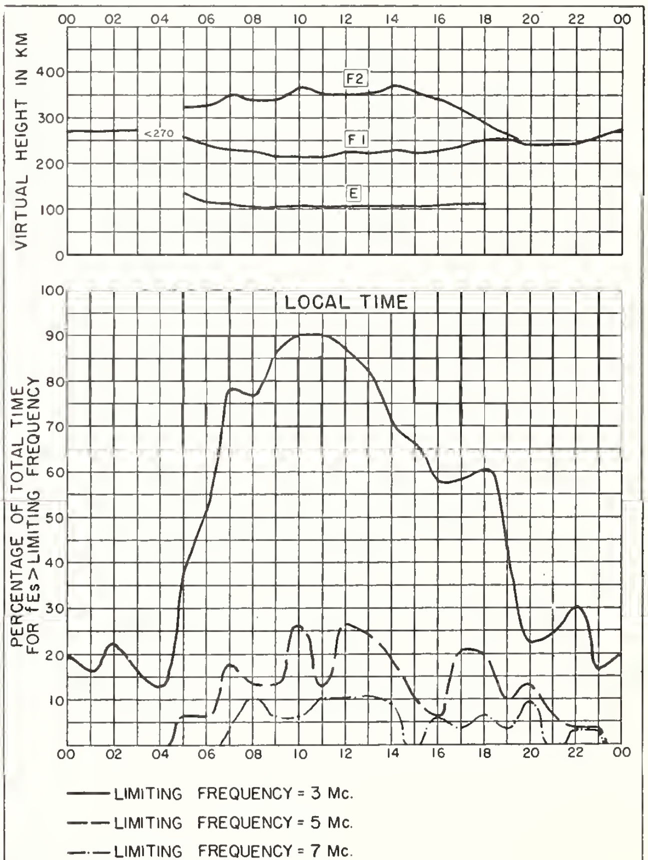


Fig. 116. FRIBOURG, GERMANY MAY 1953

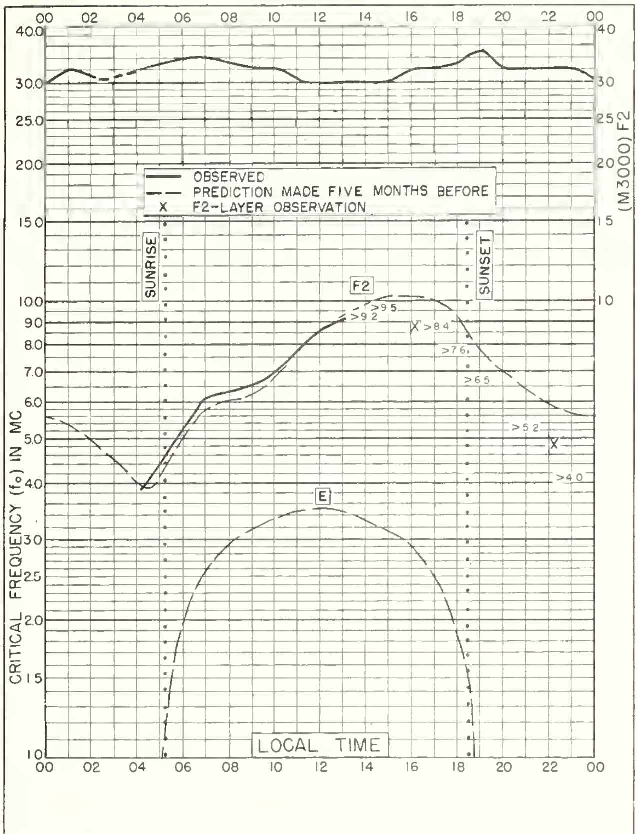


Fig. 117. DELHI, INDIA
28.6° N, 77.1° E MAY 1953

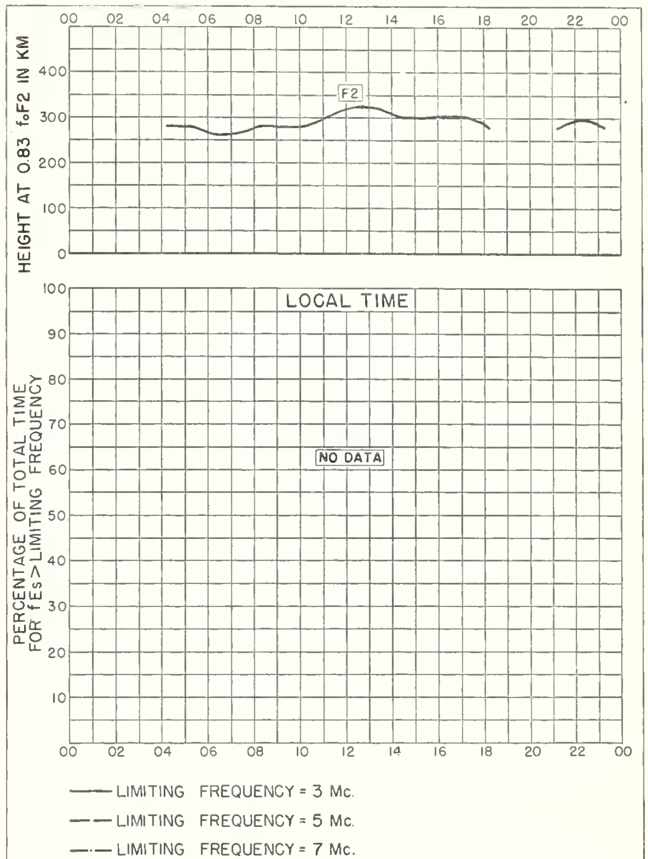


Fig. 118. DELHI, INDIA MAY 1953

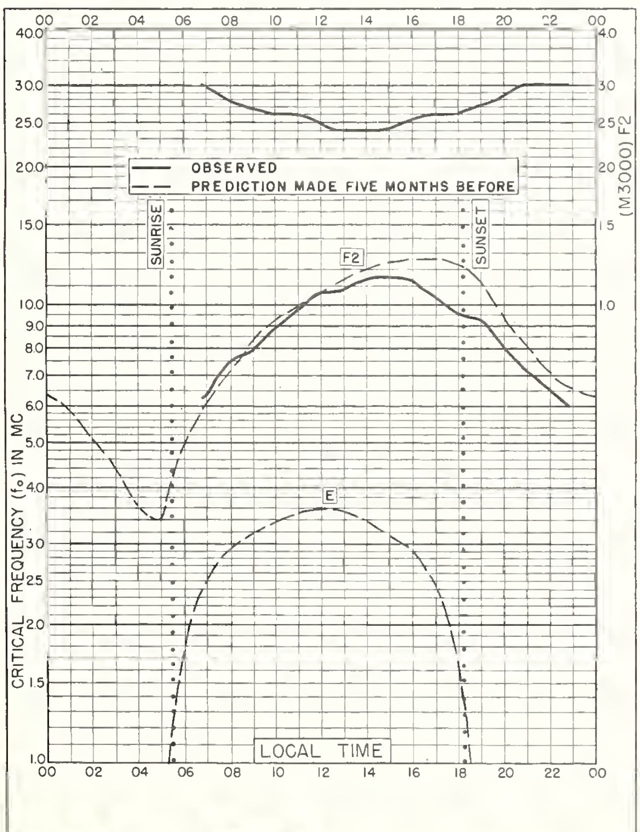


Fig. 119. BOMBAY, INDIA
19.0° N, 73.0° E MAY 1953

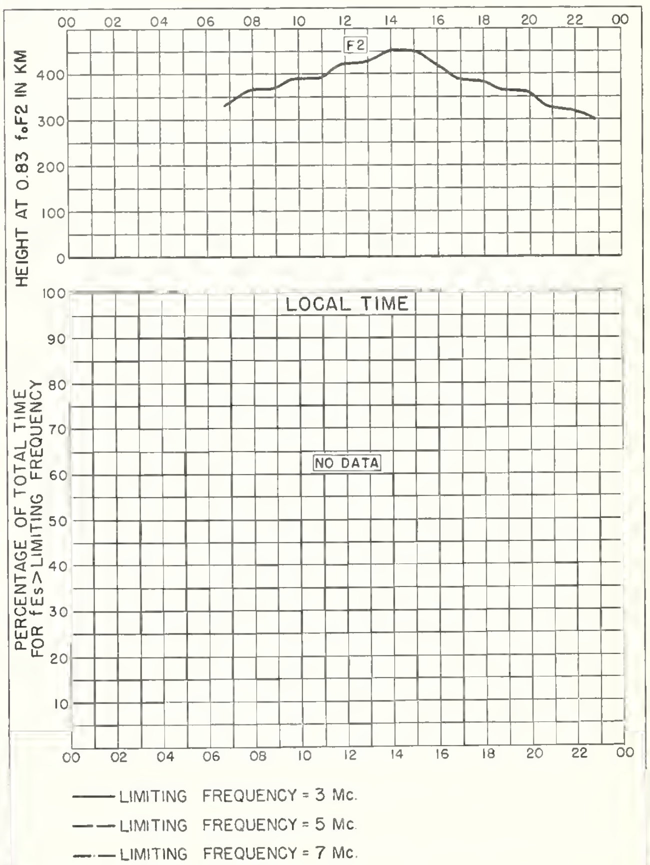


Fig. 120. BOMBAY, INDIA MAY 1953

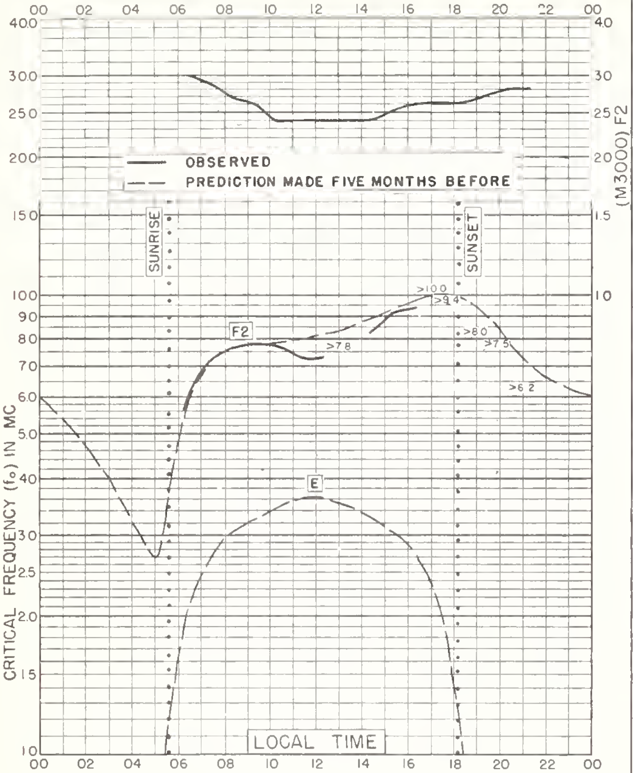


Fig. 121. MADRAS, INDIA
13.0° N, 80.2° E MAY 1953

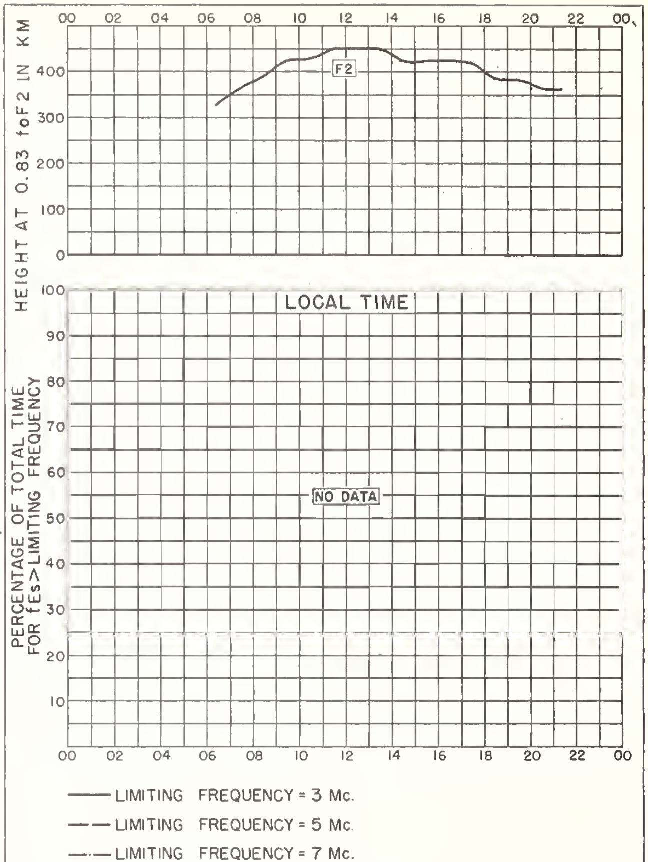


Fig. 122. MADRAS, INDIA MAY 1953

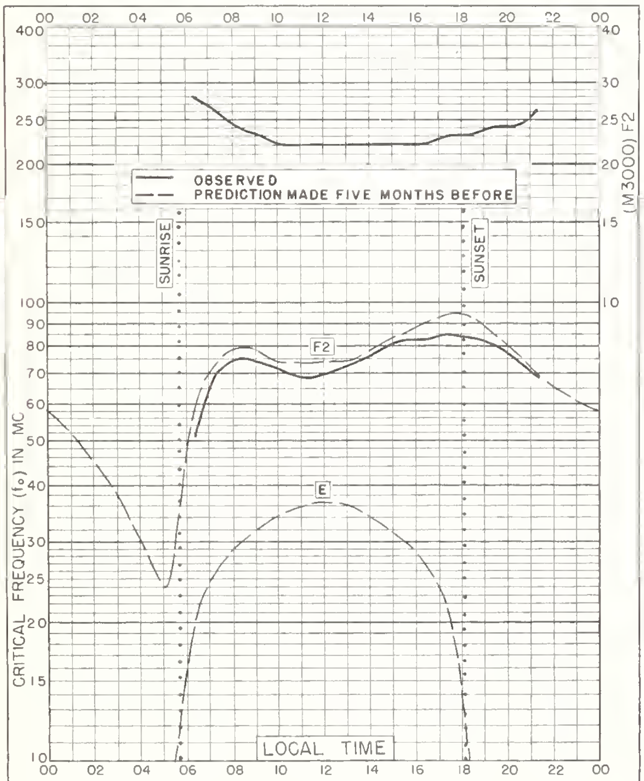
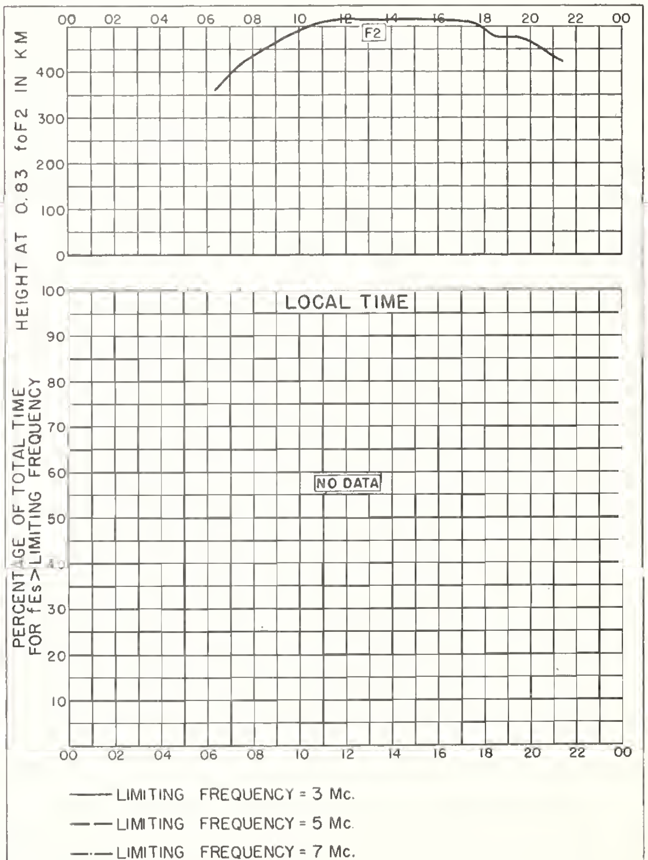


Fig. 123. TIRUCHY, INDIA
10.8° N, 78.8° E MAY 1953



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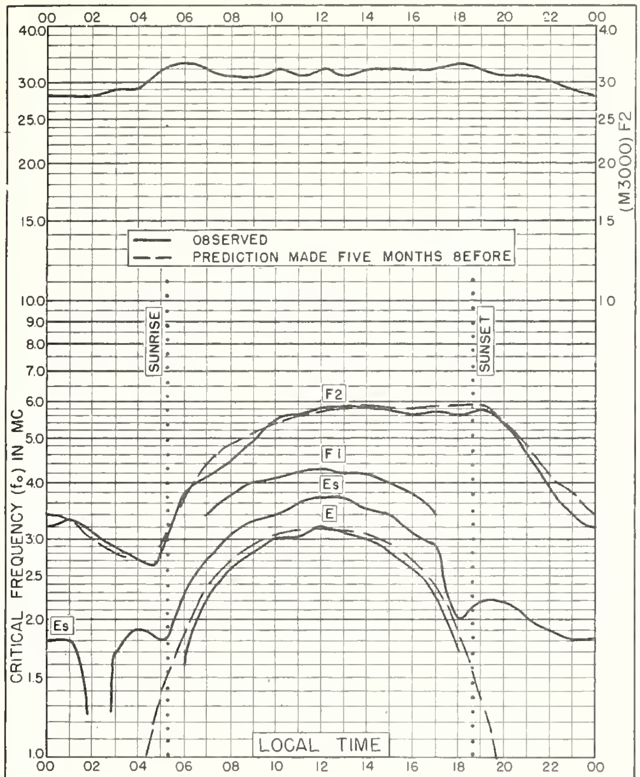

Fig. 125. FRIBOURG, GERMANY
48.1°N, 7.8°E APRIL 1953

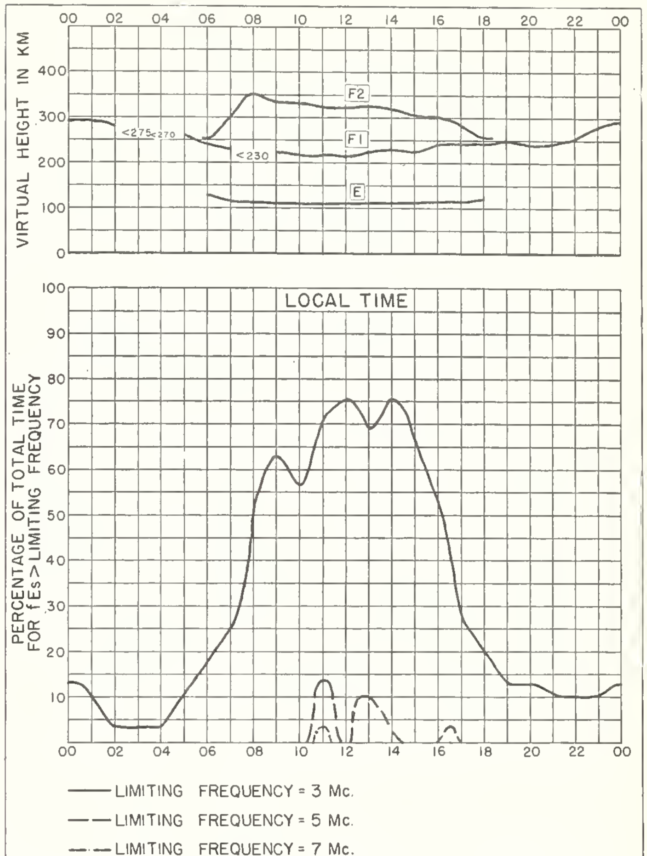

Fig. 126. FRIBOURG, GERMANY APRIL 1953

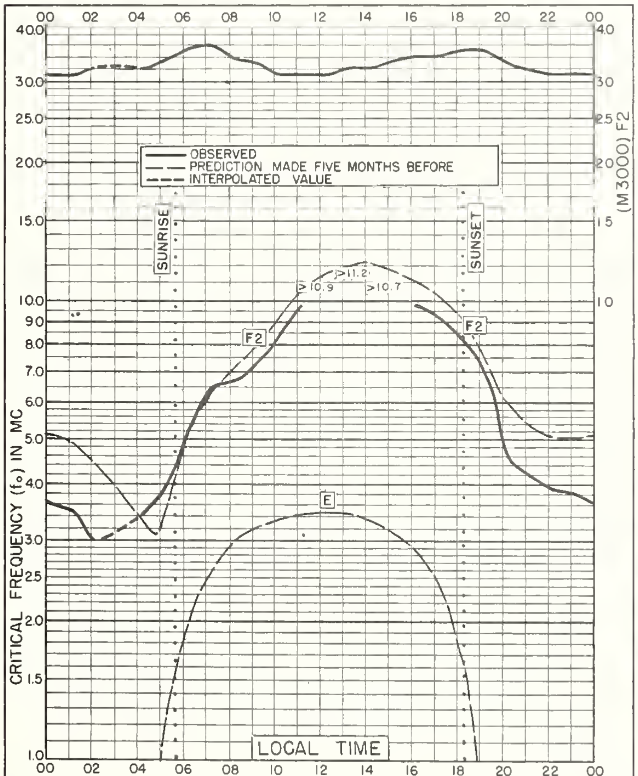

Fig. 127. DELHI, INDIA
28.6°N, 77.1°E APRIL 1953

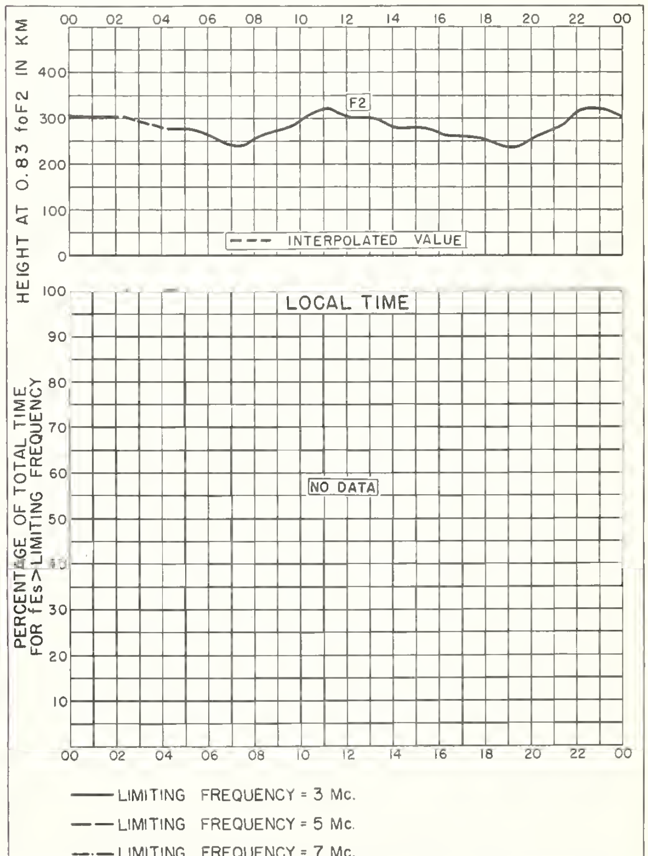

Fig. 128. DELHI, INDIA APRIL 1953

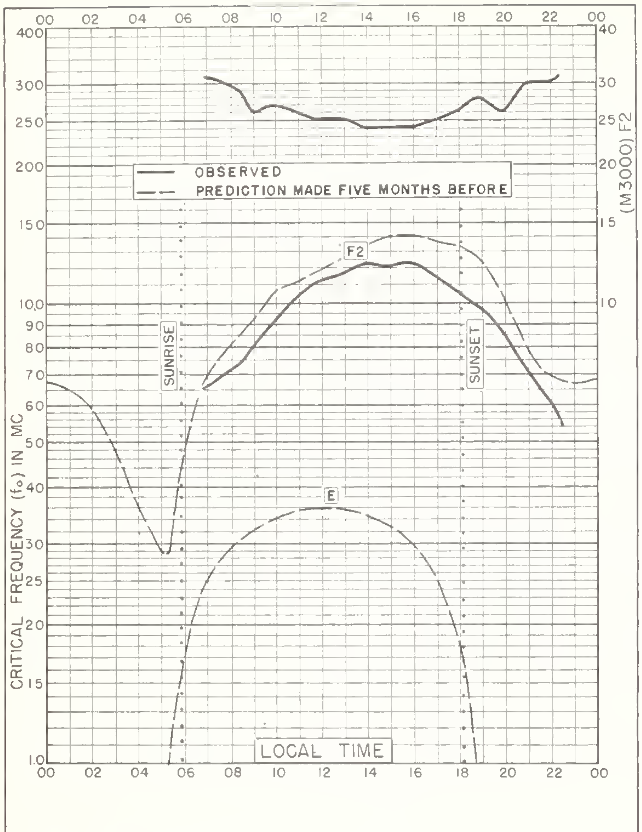

Fig. 129. BOMBAY, INDIA
19.0° N, 73.0° E
APRIL 1953

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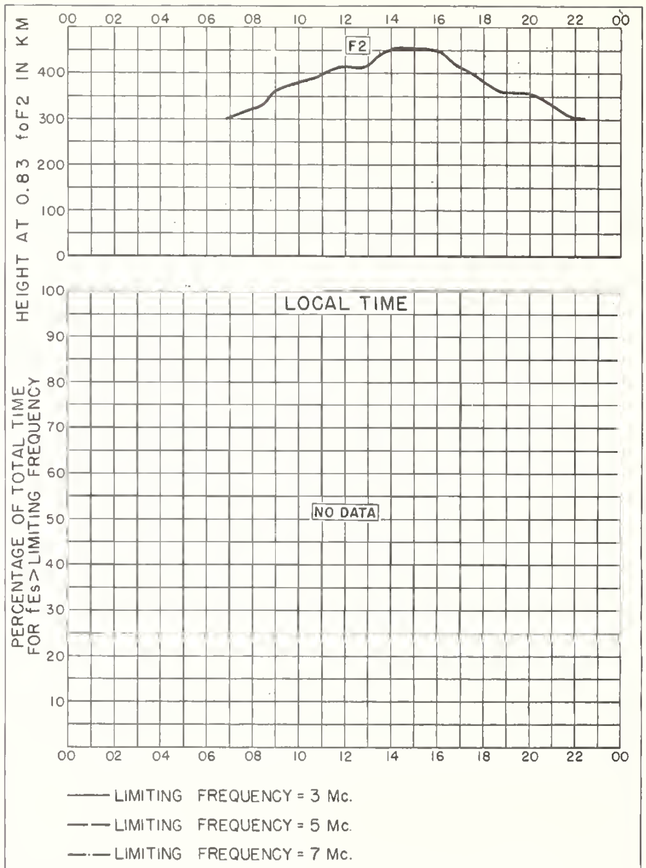

Fig. 130. BOMBAY, INDIA
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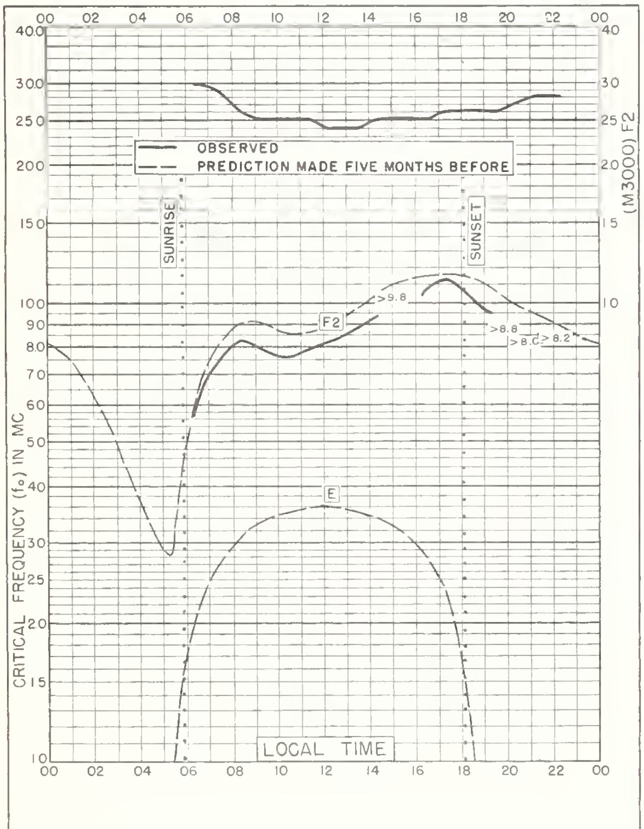

Fig. 131. MADRAS, INDIA
13.0° N, 80.2° E
APRIL 1953

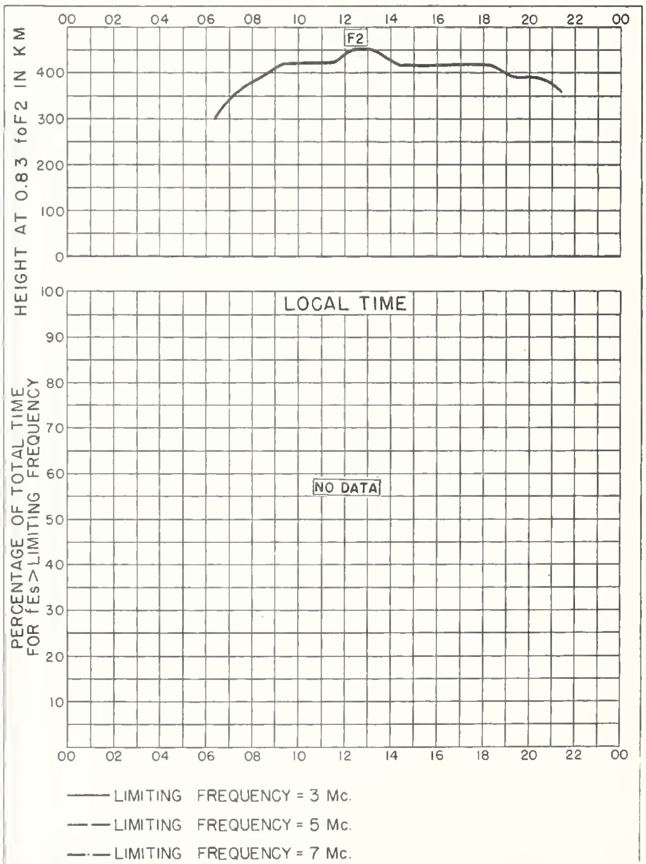

Fig. 132. MADRAS, INDIA
APRIL 1953

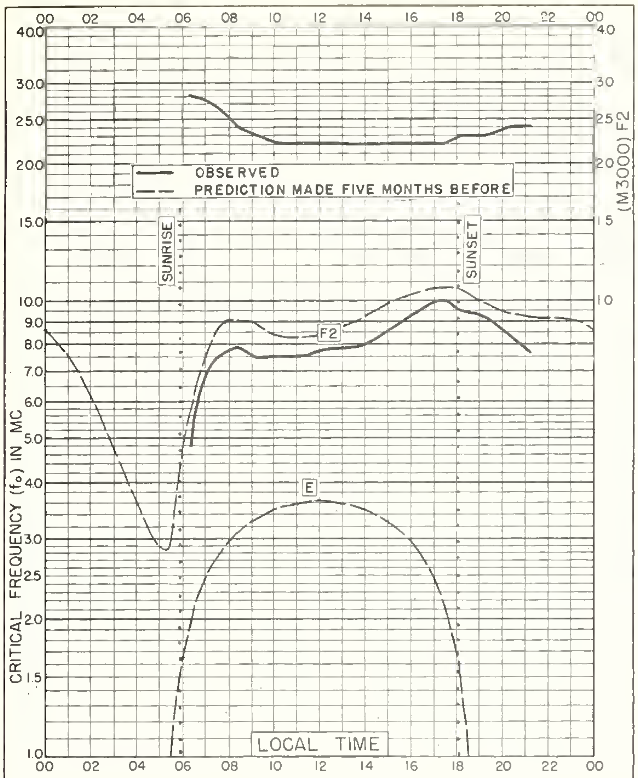

Fig. 133. TIRUCHY, INDIA
10.8°N, 78.8°E APRIL 1953

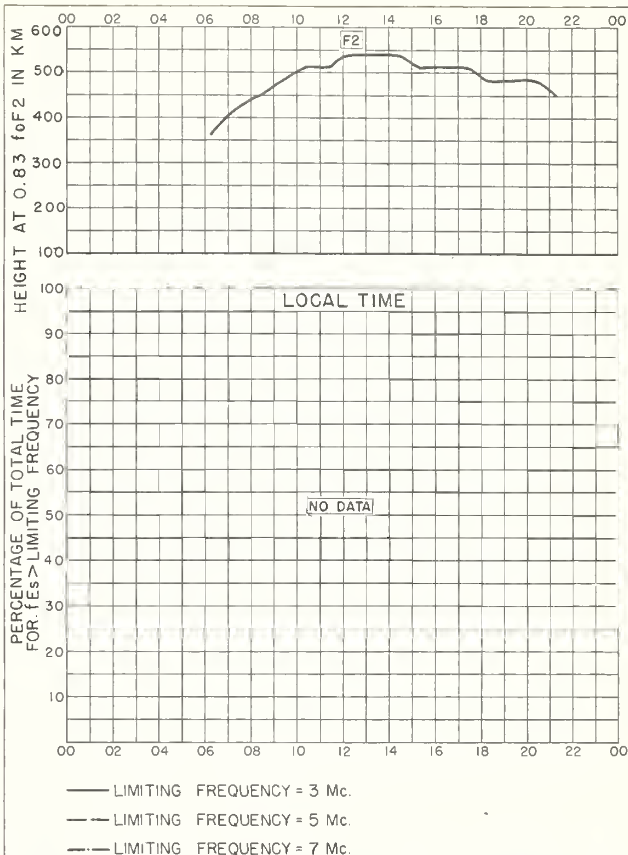

Fig. 134. TIRUCHY, INDIA APRIL 1953

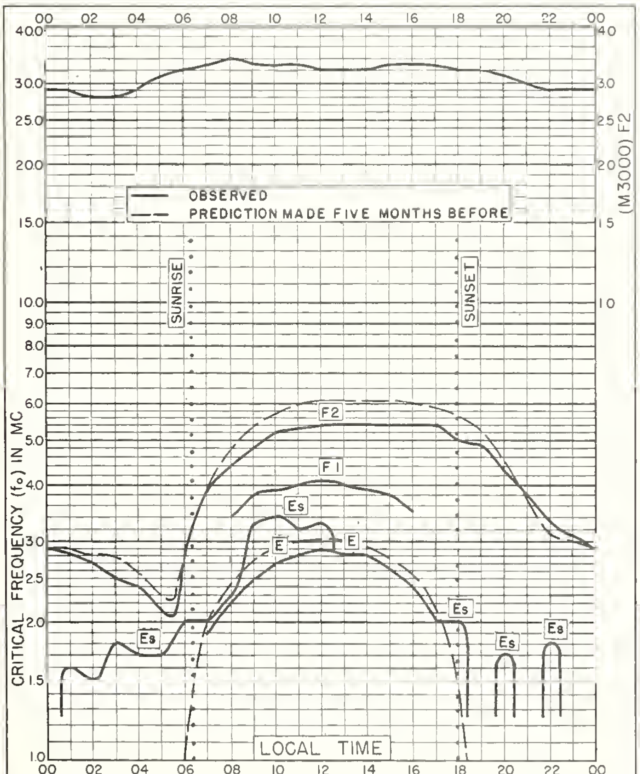

Fig. 135. FRIBOURG, GERMANY
48.1°N, 7.8°E MARCH 1953

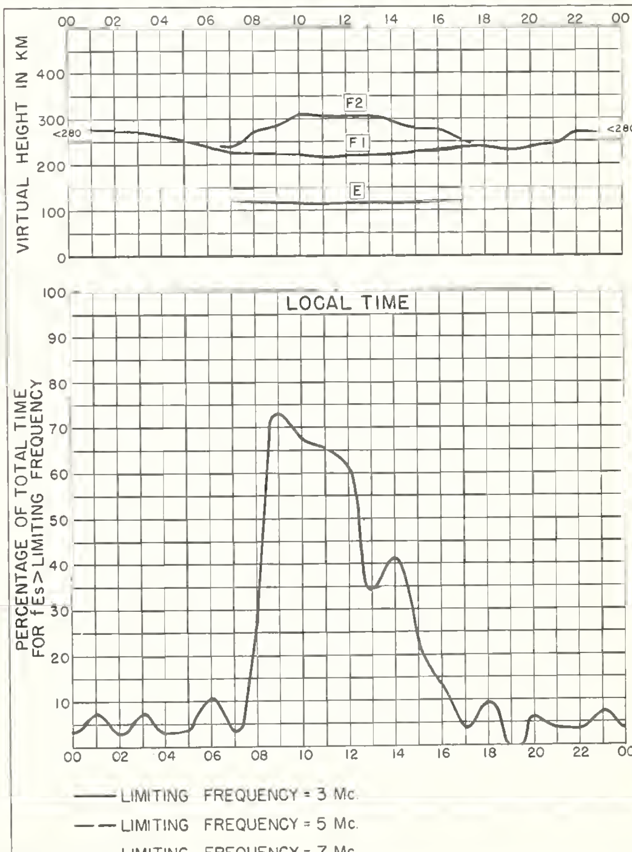

Fig. 136. FRIBOURG, GERMANY MARCH 1953

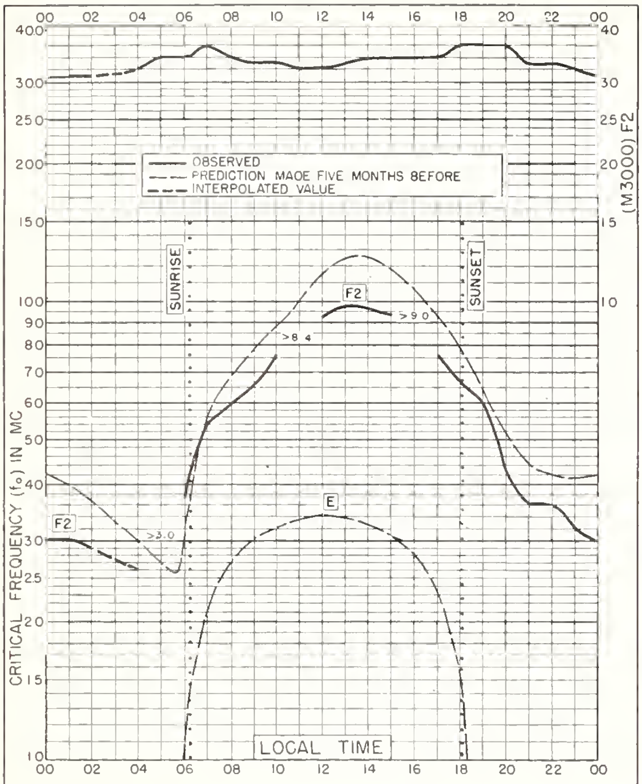

Fig. 137. DELHI, INDIA
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MARCH 1953

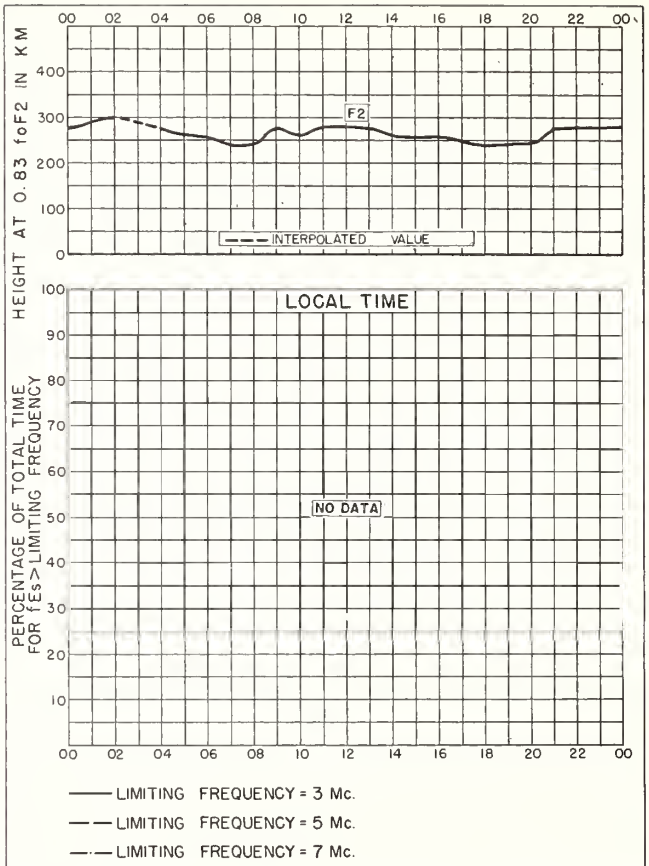

Fig. 138. DELHI, INDIA
MARCH 1953

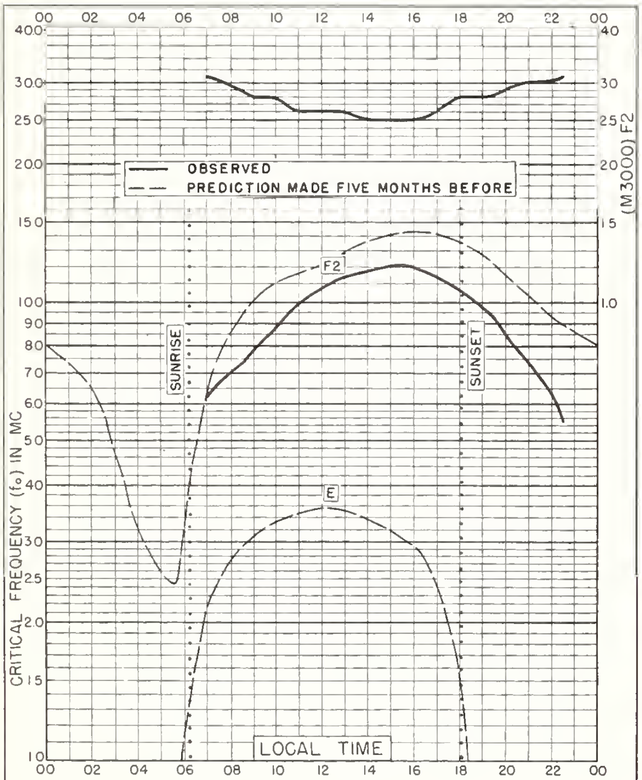

Fig. 139. BOMBAY, INDIA
19.0°N, 73.0°E
MARCH 1953

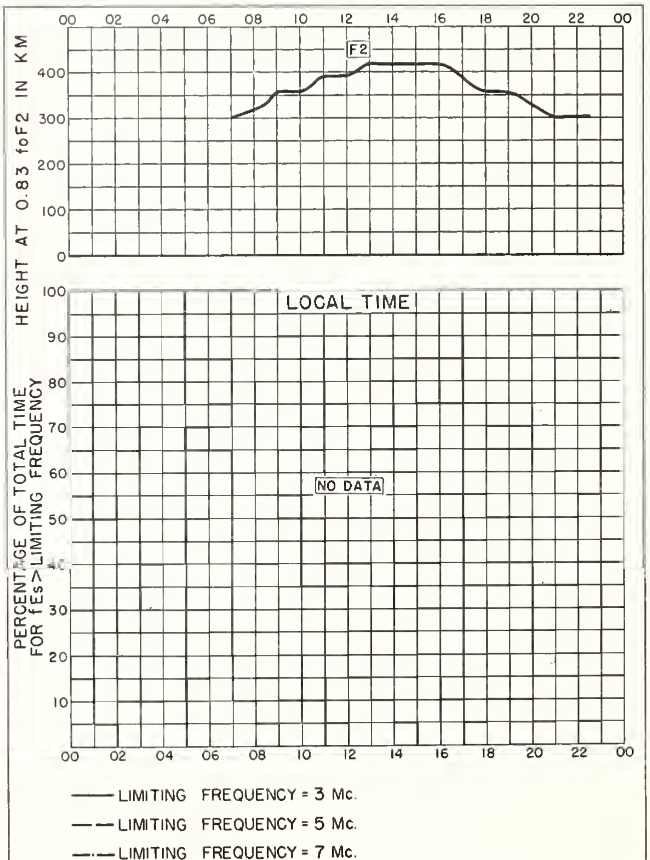

Fig. 140. BOMBAY, INDIA
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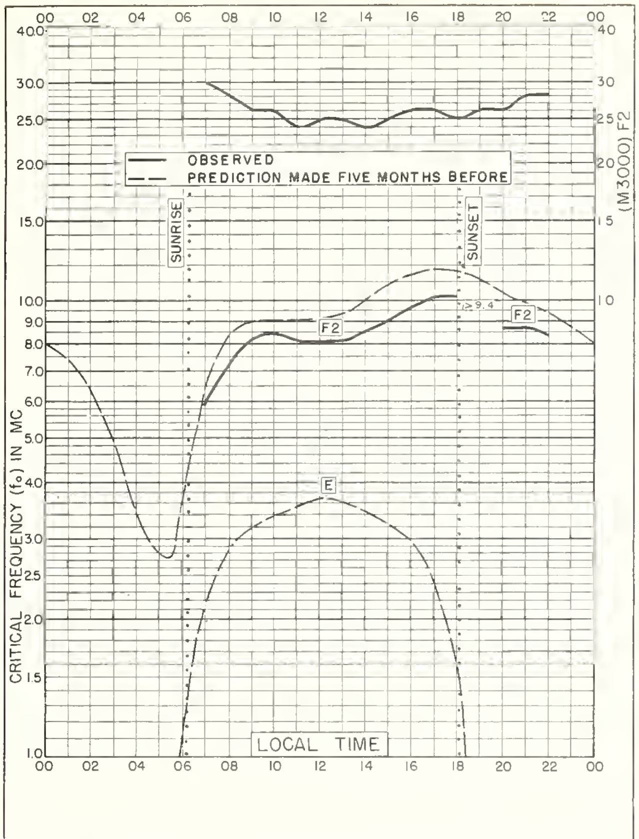

Fig. 141. MADRAS, INDIA
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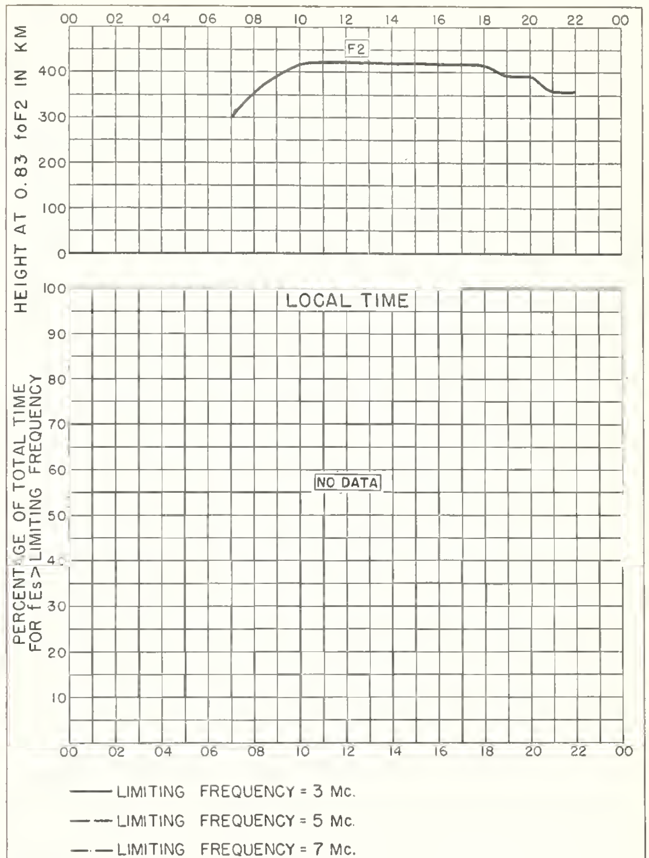

Fig. 142. MADRAS, INDIA
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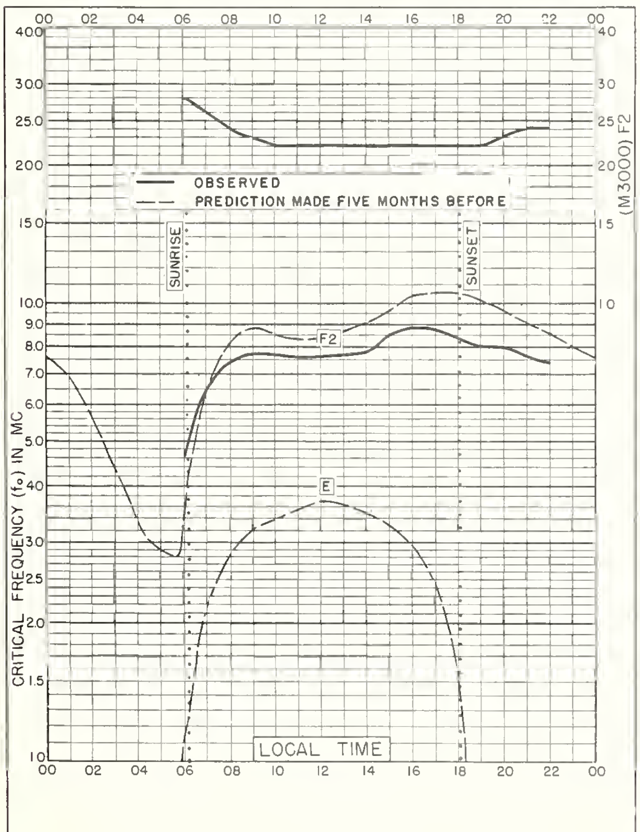

Fig. 143. TIRUCHY, INDIA
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MARCH 1953

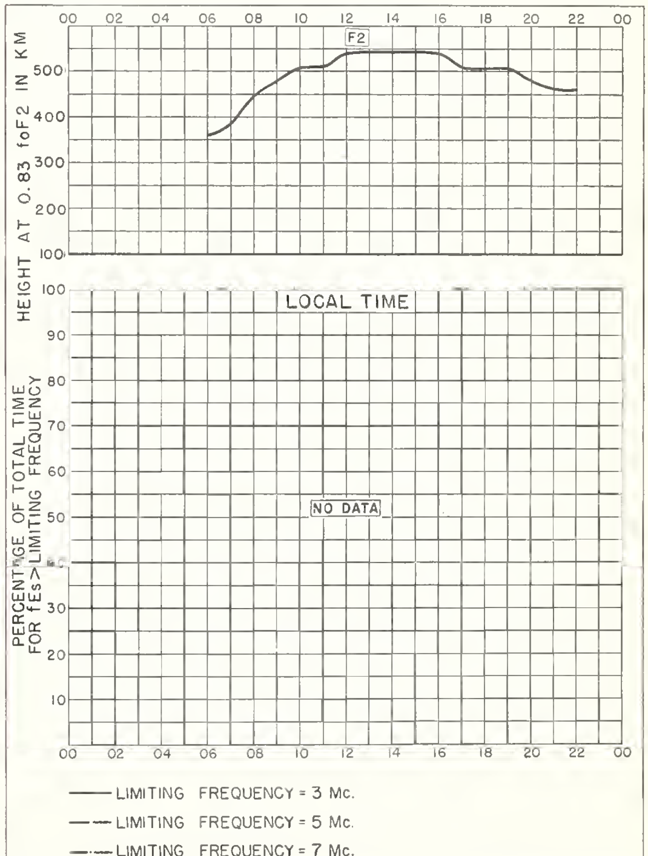

Fig. 144. TIRUCHY, INDIA
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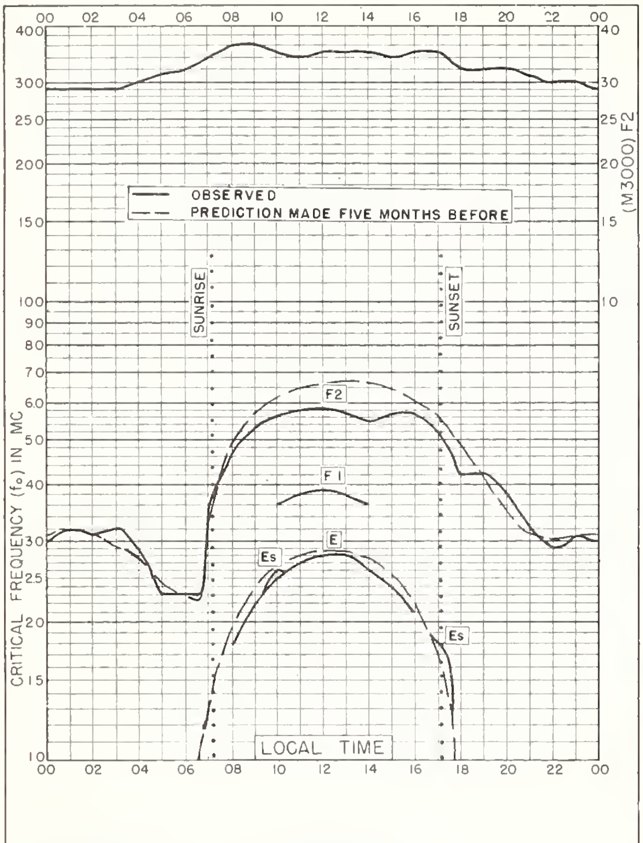


Fig. 145. FRIBOURG, GERMANY
48.1°N, 7.8°E FEBRUARY 1953

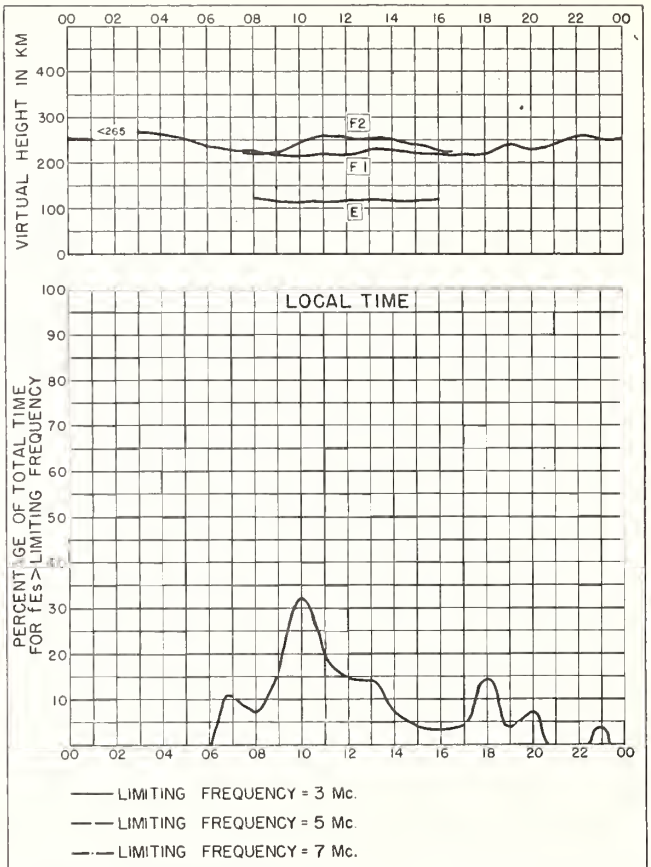
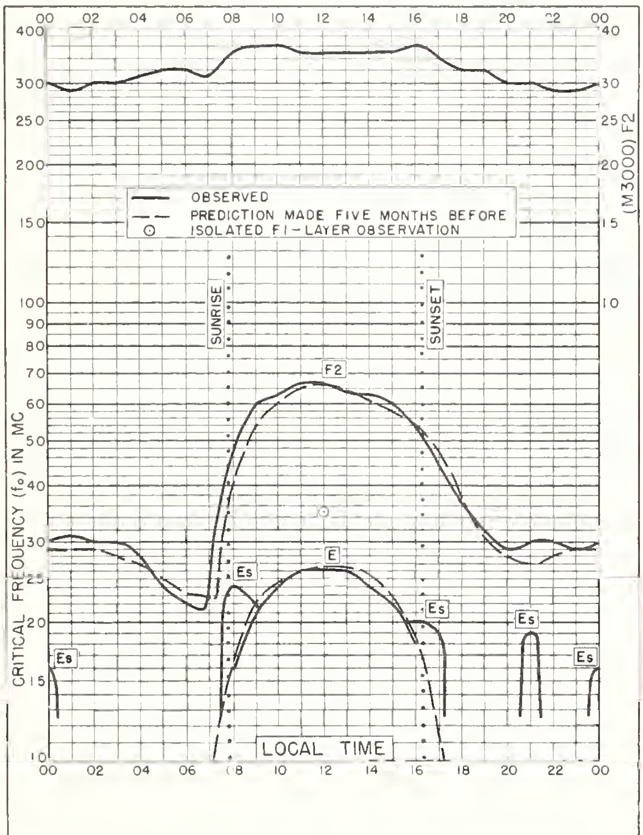


Fig. 146. FRIBOURG, GERMANY FEBRUARY 1953



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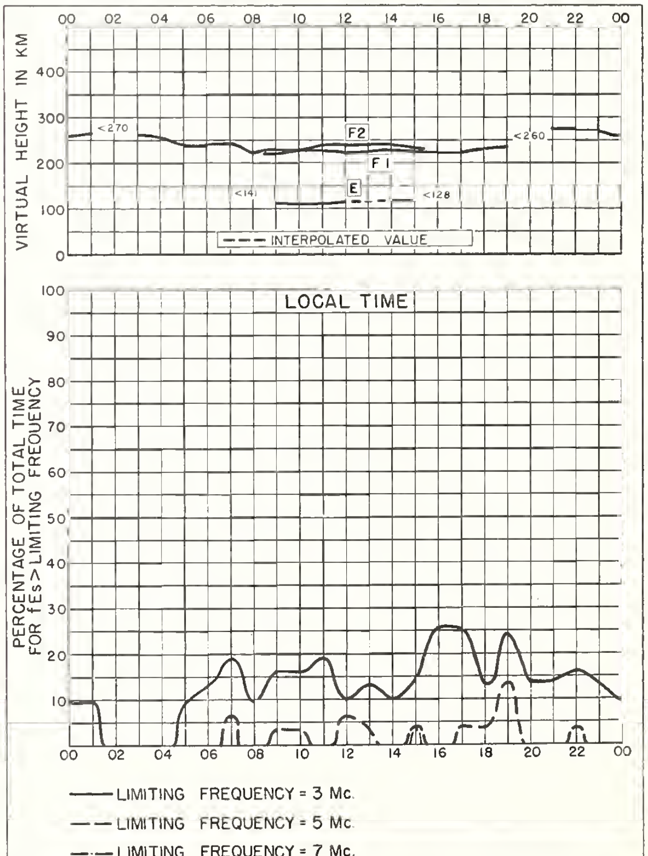
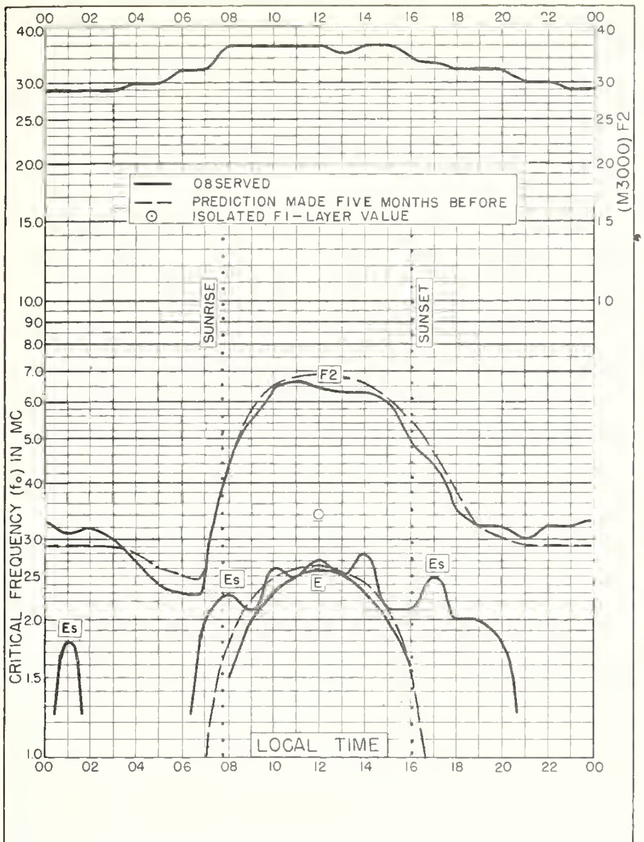


Fig. 148. FRIBOURG, GERMANY JANUARY 1953



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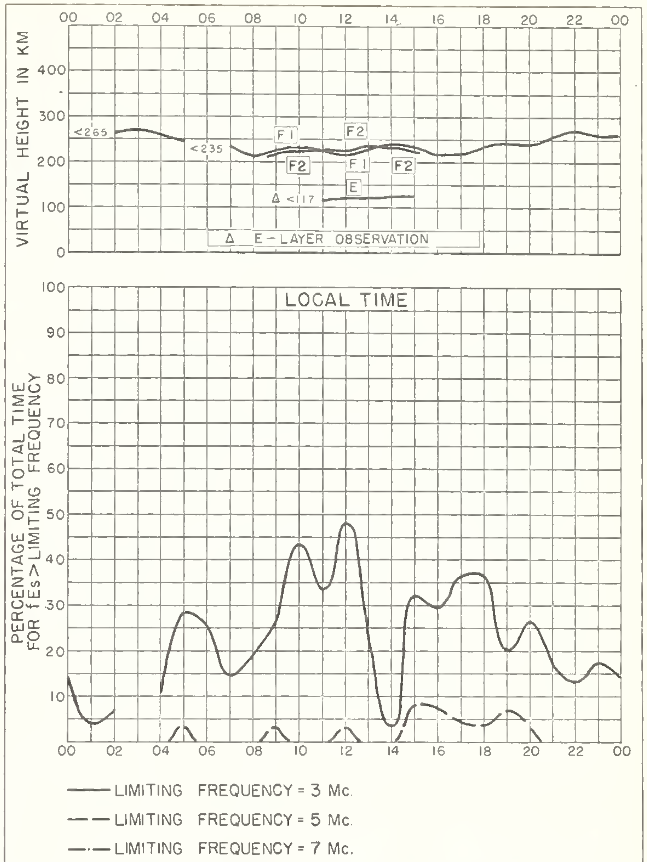
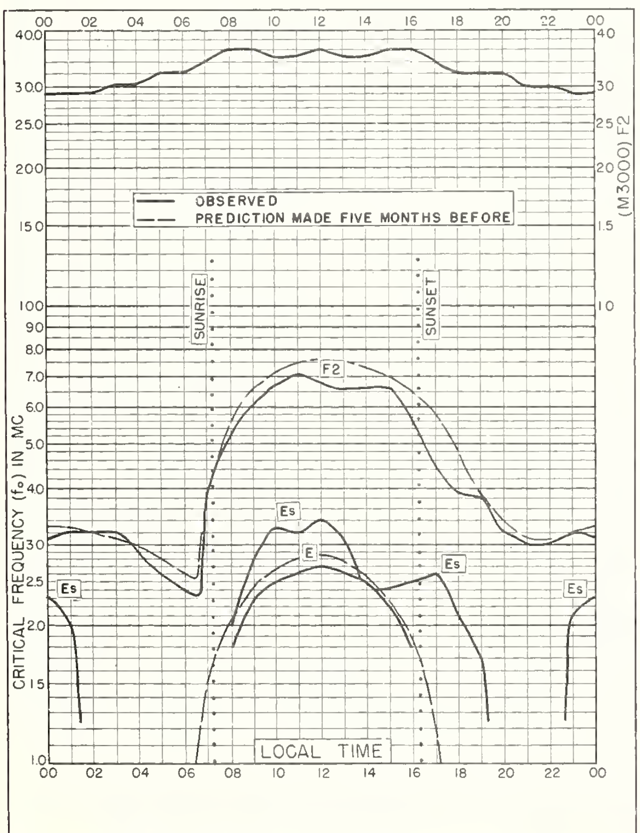


Fig. 150. FRIBOURG, GERMANY DECEMBER 1952



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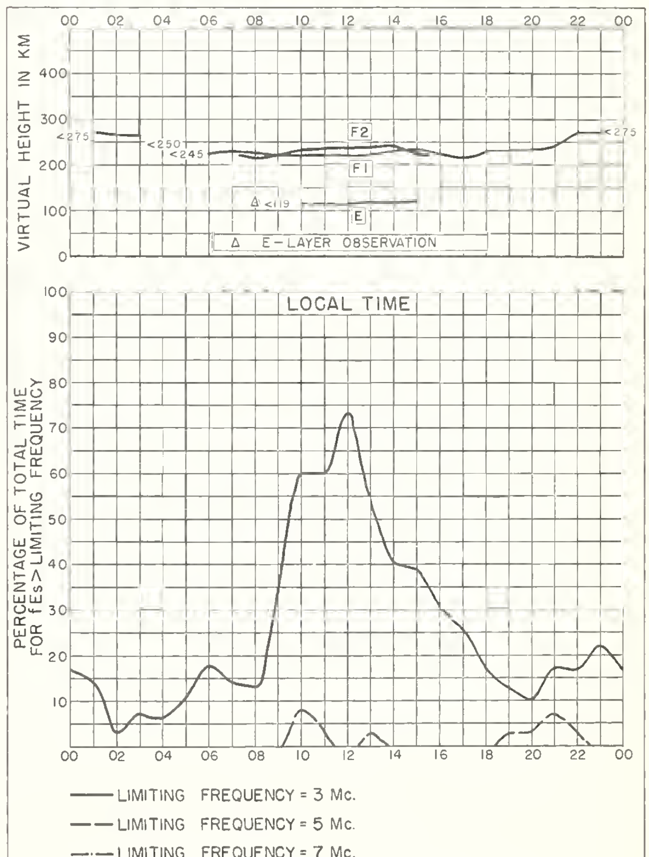

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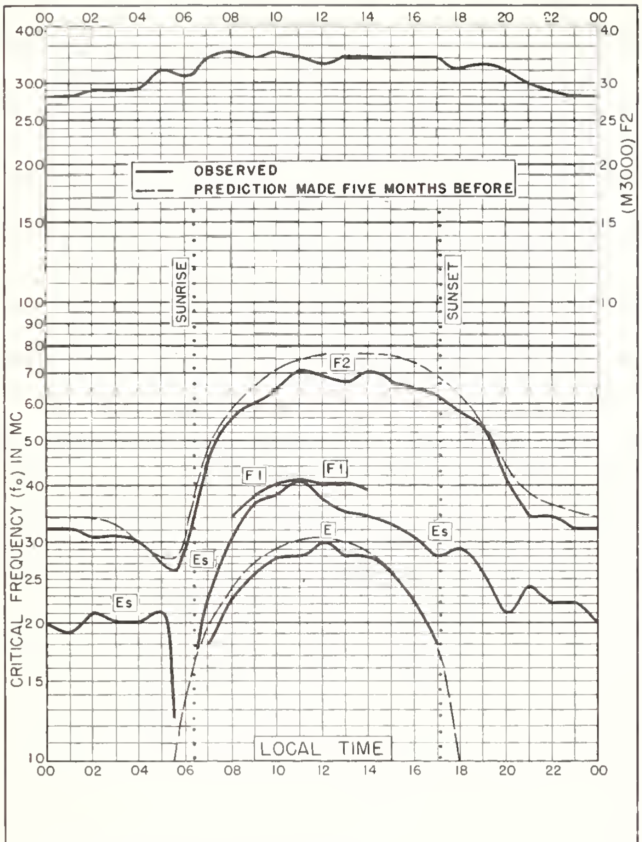

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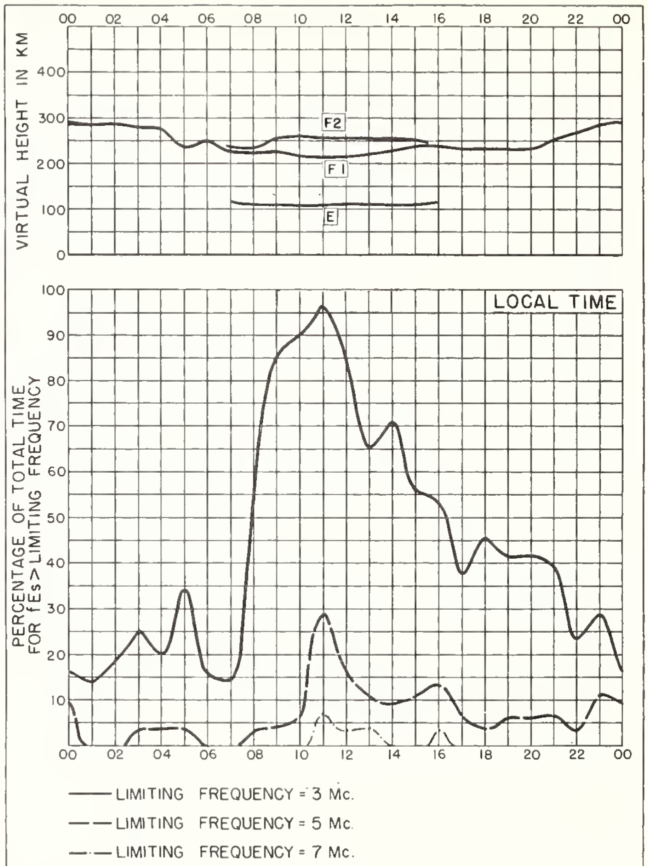

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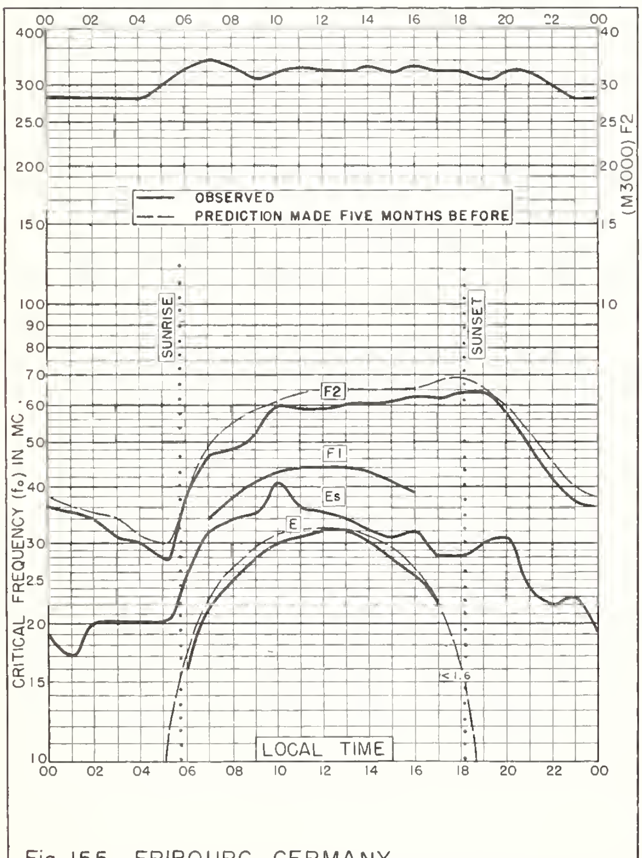

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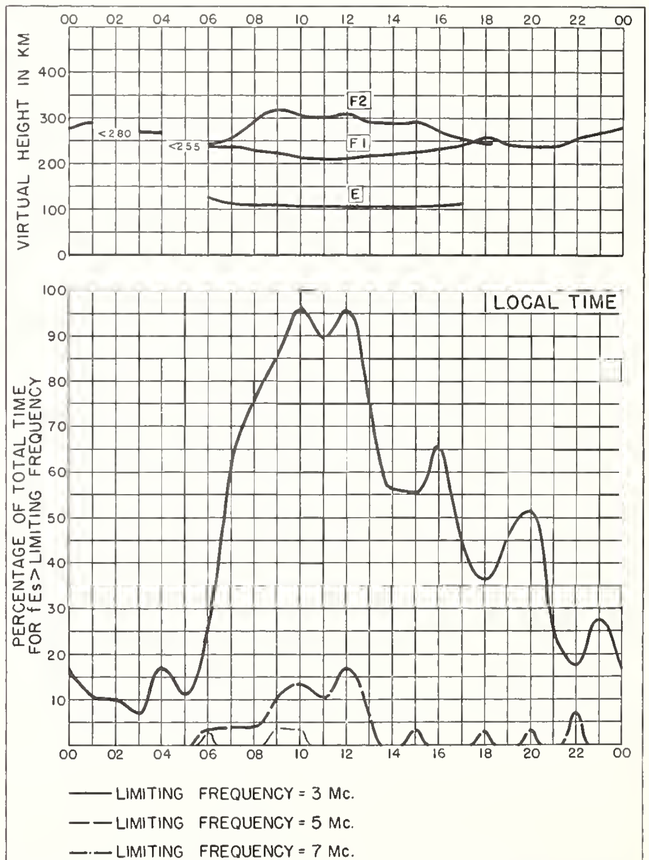

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[A detailed list of CRPL publications is available from the Central Radio Propagation Laboratory upon request]

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Monthly:

CRPL—D. Basic Radio Propagation Predictions—Three months in advance. (Dept. of the Army, TB 11–499–, monthly supplements to TM 11–499; Dept. of the Navy, DNC 13 ( ) series; Dept. of the Air Force, TO 16-1B-2 series.) On sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Members of the Armed Forces should address cognizant military office.

CRPL—F. Ionospheric Data. Limited distribution. This publication is in general disseminated only to those individuals or scientific organizations which collaborate in the exchange of ionospheric, solar, geomagnetic or other radio propagation data or in exchange for copies of publications on radio, physics and geophysics for the CRPL library.

Circulars of the National Bureau of Standards pertaining to Radio Sky Wave Transmission:

NBS Circular 462. Ionospheric Radio Propagation.

NBS Circular 465. Instructions for the Use of Basic Radio Propagation Predictions.

These circulars are on sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Members of the Armed Forces should address the respective military office having cognizance of radio wave propagation.

The publications listed above may be obtained without charge from the Central Radio Propagation Laboratory, unless otherwise indicated.