CRPL-F131

FOR OFFICIAL USE

IONOSPHERIC DATA

ISSUED
JULY 1955

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

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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	18	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:

Republica Argentina, Ministerio de Marina:
Buenos Aires, Argentina
Decepcion I.

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

University of Sao Paulo:
Sao Paulo, Brazil

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):
Dakar, French West Africa
Djibouti, French Somaliland

National Laboratory of Radio-Electricity (French Ionospheric Bureau):
Casablanca, Morocco
Poitiers, France

The Royal Netherlands Meteorological Institute:
De Bilt, Holland

Icelandic Post and Telegraph Administration:
Reykjavik, Iceland

Ministry of Postal Services, Radio Research Laboratories, Tokyo, Japan:
Akita, Japan
Tokyo (Kokubunji), Japan
Wakkanai, Japan
Yamagawa, Japan

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

South African Council for Scientific and Industrial Research:
Capetown, Union of South Africa
Johannesburg, Union of South Africa

Research Institute of National Defence, Stockholm, Sweden:
Upsala, 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):
Anchorage, Alaska
Fairbanks, Alaska (Geophysical Institute of the University of Alaska)
Guam I.
Maui, Hawaii
Narsarssuak, Greenland
Panama Canal Zone
Puerto Rico, W. I.
San Francisco, California (Stanford University)
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 June 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, 93, and 94 list, respectively, the sudden ionosphere disturbances observed at Washington, D. C., for June 1955; at Point Reyes, California, for June 1955; and at Talara, Peru, for May 1955.

RADIO PROPAGATION QUALITY FIGURES

Tables 95a and 95b give for May 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 96 through 98 give the observations of the solar corona during June 1955, obtained at Climax, Colorado, by the High Altitude Observatory of Harvard University and the University of Colorado. Tables 99 through 101 list the coronal observations obtained at

Sacramento Peak, New Mexico, during June 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 96 gives the intensities of the green (5303A) line of the emission spectrum of the solar corona; table 97 gives similarly the intensities of the first red (6374A) coronal line; and table 98, the intensities of the second red (6702A) coronal line; all observed at Climax in June 1955.

Table 99 gives the intensities of the green (5303A) coronal line; table 100, the intensities of the first red (6374A) coronal line; and table 101, the intensities of the second red (6702A) coronal line; all observed at Sacramento Peak in June 1955.

The following symbols are used in tables 96 through 101; 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.

Table 102 gives details of the Sacramento Peak, New Mexico, observations from January through June 1955. The columns list in order the Greenwich date of observation; the threshold or lowest observable intensity of 5303A for each spectrum plate centered at the astronomical position angle indicated, the observer, and person responsible for the intensity estimates of the observation. This table continues the presentation of coronal data in the manner of table 1 of CRPL-1-4 and appears in the F series regularly at intervals of six months.

RELATIVE SUNSPOT NUMBERS

Table 103 lists the daily provisional Zürich relative sunspot number, R_Z, for June 1955, as communicated by the Swiss Federal Observatory. Table 104 contains the daily American relative sunspot number, R_A', for May 1955, as compiled by the Solar Division, American Association of Variable Star Observers.

OBSERVATIONS OF SOLAR FLARES

Table 105 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 106 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) — June 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	4.0					3.5	3.1
01	260	3.8					3.1	3.1
02	260	3.4					3.1	3.1
03	260	2.8					2.9	3.15
04	280	2.6					3.0	3.1
05	250	3.2	---	---	---	<1.6	3.6	3.2
06	330	3.9	220	3.4	110	2.1	3.8	3.2
07	380	4.5	220	3.8	100	2.5	4.6	3.0
08	340	5.0	210	4.0	100	2.9	5.4	3.1
09	340	5.1	200	4.2	100	3.1	5.0	3.1
10	340	5.2	200	4.3	100	3.2	4.8	3.1
11	400	5.2	200	4.4	100	3.3	4.9	2.9
12	370	5.3	200	4.4	100	3.3	4.4	3.0
13	380	5.4	200	4.4	100	3.3	4.6	2.9
14	380	5.2	200	4.3	100	3.2	4.5	3.0
15	360	5.4	200	4.2	100	3.2	4.4	3.0
16	350	5.5	200	4.1	100	3.0	4.3	3.0
17	320	5.7	210	3.9	100	2.7	4.0	3.1
18	290	5.8	220	3.5	110	2.3	3.8	3.1
19	250	5.8	230	---	---	<1.6	4.3	3.2
20	240	6.0					3.7	3.2
21	240	5.4					4.0	3.15
22	250	4.8					3.7	3.1
23	260	4.3					3.4	3.1

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

Table 2

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	(3.6)					3.6	(3.0)
01	290	(3.6)					4.4	(3.0)
02	290	(3.5)					4.0	(3.0)
03	300	(3.8)	250	---	---	---	3.8	3.0
04	340	4.0	240	(3.0)	120	---	4.1	3.0
05	390	4.1	220	3.2	110	(1.9)	4.7	2.9
06	380	4.3	210	3.5	100	2.2	4.4	2.9
07	400	4.3	210	3.7	100	(2.5)	3.5	2.8
08	430	4.4	200	3.8	100	(2.6)	3.4	2.8
09	430	4.4	200	3.9	100	(2.8)	3.8	2.8
10	420	4.5	200	4.0	100	(2.8)	3.8	2.85
11	410	4.7	200	4.0	100	(3.0)	3.2	2.9
12	380	4.8	200	4.1	100	(3.0)	3.4	3.0
13	400	4.7	200	4.1	100	(2.9)	3.6	2.9
14	390	4.7	200	4.0	100	(2.8)	3.3	2.9
15	380	4.7	210	4.0	100	(2.8)	<3.0	3.0
16	370	4.6	210	3.9	100	(2.6)	3.0	3.1
17	340	4.6	220	(3.7)	110	(2.4)	<2.9	3.1
18	300	4.5	230	(3.5)	110	(2.2)	2.8	3.2
19	280	4.5	230	---	120	(1.8)	3.4	3.2
20	260	4.5	230	---	130	(1.4)	3.3	3.2
21	<260	4.4	---	---	---	---	4.0	3.2
22	250	(3.7)	---	---	---	---	2.8	(3.2)
23	260	(3.9)					3.9	(3.2)

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

Table 3

Narsarssuak, Greenland (61.2°N, 45.4°W) — May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	310	(3.4)					4.4	(3.0)
01	(320)	3.0					3.9	(3.1)
02	(300)	3.0					4.0	(3.15)
03	(280)	(3.3)					4.5	(3.1)
04	(300)	3.3	---	---	---	---	4.3	3.2
05	280	3.7	240	---	---	---	3.7	3.2
06	320	4.0	230	3.6	110	2.2	3.5	3.1
07	350	4.2	230	3.7	110	2.6	<2.9	3.15
08	340	4.6	220	3.9	110	2.6		3.2
09	340	4.6	210	4.0	110	2.8		3.1
10	350	4.8	210	4.1	110	2.9		3.1
11	360	4.8	210	4.1	110	3.0		3.05
12	370	4.9	200	4.1	110	3.0		3.0
13	380	4.8	210	4.1	110	3.0		2.95
14	350	4.9	210	4.1	110	3.0		3.0
15	360	4.9	210	4.0	110	2.8		3.0
16	350	4.8	220	3.9	110	2.7		3.0
17	330	4.6	220	3.8	110	2.5	3.6	3.1
18	320	4.5	240	3.6	110	2.2	3.8	3.1
19	290	4.4	240	3.4	120	2.0	4.0	3.2
20	280	4.4			---	---	4.5	3.2
21	270	(3.8)					5.6	3.2
22	280	(3.6)					5.2	3.2
23	290	3.5					6.2	3.1

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

Table 4

Oslo, Norway (60.0°N, 11.1°E) — May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.6					3.0	2.95
01	260	3.0					2.0	2.9
02	260	2.8						2.9
03	260	2.9	---	---	---	---	1.1	2.9
04	260	3.4	250	---	130	1.4	1.4	3.0
05	(340)	3.7	240	3.1	110	1.8		3.0
06	365	4.1	230	3.6	105	2.2	2.9	3.0
07	390	4.5	220	3.8	105	2.4	2.0	2.95
08	395	4.5	210	4.0	105	2.6	3.5	2.9
09	360	5.1	210	4.0	100	2.8	3.6	3.05
10	345	5.2	210	4.2	100	2.9	3.6	3.05
11	345	5.4	205	4.2	100	3.0	3.6	3.1
12	345	5.2	205	4.2	100	3.0	3.4	3.1
13	345	5.2	205	4.2	105	3.0	3.6	3.1
14	345	5.3	210	4.2	100	2.9	3.3	3.1
15	340	5.2	210	4.2	105	2.8	3.0	3.05
16	330	5.2	210	4.0	105	2.8	3.1	3.1
17	310	5.2	215	3.0	105	2.6	3.1	3.1
18	295	5.4	235	3.7	110	2.2	3.0	3.1
19	265	5.3	240	(3.4)	115	1.9	3.1	3.2
20	250	5.2	250	---	135	---	2.6	3.15
21	250	5.6					3.0	3.1
22	250	4.7					3.4	3.1
23	250	4.3					3.4	3.1

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

Table 5

Upsala, Sweden (59.8°N, 17.6°E) — May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	3.5					2.5	3.0
01	275	3.4						3.0
02	280	3.0					2.1	3.0
03	270	3.2			---	E	1.9	3.0
04	260	3.6	235	2.9	---	1.5	2.9	3.0
05	300	4.0	230	3.3	115	1.9	2.8	3.1
06	340	4.3	220	3.6	110	2.2	3.3	3.1
07	340	4.6	215	3.9	105	2.5	3.6	3.1
08	370	4.8	205	4.0	105	2.7	3.5	3.05
09	345	5.1	205	4.1	105	2.0	3.5	3.1
10	340	5.3	205	4.2	105	3.0	3.6	3.1
11	340	5.4	200	4.2	105	3.0	3.8	3.2
12	340	5.3	195	4.3	105	3.0	3.5	3.2
13	340	5.2	200	4.2	105	3.0	4.0	3.2
14	340	5.3	205	4.2	105	3.0	3.5	3.15
15	330	5.2	210	4.1	105	2.9	3.4	3.15
16	320	5.2	210	4.0	105	2.7	3.2	3.2
17	310	5.2	225	3.8	105	2.5	3.5	3.2
18	290	5.3	235	3.4	110	2.2	3.4	3.2
19	260	5.4	240	3.0	125	1.7	3.2	3.2
20	245	5.3	---	---	---	E	2.7	3.2
21	240	5.5			---	---	2.7	3.15
22	240	4.0						3.1
23	255	4.2					2.3	3.1

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

Table 6

Adak, Alaska (51.9°N, 176.6°W) — May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.8					2.3	3.0
01	270	3.5					<1.2	3.0
02	280	3.5					2.2	3.0
03	280	3.3					2.3	3.0
04	300	3.5	260	2.6	130	1.3	1.8	3.0
05	350	4.2	240	3.2	120	1.9	3.0	2.9
06	370	4.7	230	3.6	110	2.3	2.9	2.8
07	340	5.0	230	3.8	110	2.6	4.5	2.9
08	370	5.2	220	4.0	110	2.7	5.6	2.9
09	360	5.0	210	4.1	110	2.9	5.4	3.0
10	370	5.2	210	4.2	110	3.0	5.2	3.0
11	370	5.2	200	4.2	110	3.0	5.2	2.9
12	390	5.0	200	4.3	110	3.0	5.1	3.0
13	360	5.1	200	4.2	110	3.0	4.6	3.0
14	370	5.1	210	4.2	110	2.8	4.6	2.95
15	360	4.9	220	4.1	110	2.8	3.6	3.0
16	340	4.8	220	4.0	110	2.7	3.3	3.0
17	320	4.9	230	3.8	110	2.4	4.7	3.1
18	300	5.0	240	---	120	2.1	4.4	3.1
19	280	5.3	250	---	130	1.5	4.0	3.2
20	250	5.8					3.1	3.2
21	240	5.8					3.0	3.1
22	250	5.3					2.5	3.1
23	240	4.5					2.4	3.1

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

Table 7

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.4					2.7	2.9
01	300	3.4					2.5	2.9
02	290	3.4					2.6	2.9
03	270	3.3					2.4	3.0
04	270	3.2					2.9	3.0
05	270	3.3					2.8	3.1
06	300	4.4	240	---	120	2.0	3.6	3.2
07	310	5.2	220	3.8	110	2.4	4.3	3.1
08	320	5.6	200	4.1	110	2.8	4.4	3.0
09	330	5.8	200	4.2	110	3.0	5.4	3.0
10	360	5.8	200	4.4	110	3.2	6.5	2.9
11	370	6.0	200	4.4	100	3.3	5.0	2.9
12	360	6.2	200	4.5	100	3.3	4.8	2.8
13	350	6.6	200	4.4	110	3.3	4.7	2.9
14	340	6.8	210	4.4	110	3.2	4.4	2.9
15	320	6.8	220	4.2	110	3.1	4.3	3.0
16	310	6.6	230	4.1	110	2.8	4.2	3.0
17	300	6.4	230	3.8	110	2.5	3.6	3.1
18	280	6.5	240	---	120	2.0	3.4	3.1
19	250	6.6					3.2	3.2
20	230	6.4					3.8	3.2
21	240	4.6					3.8	3.1
22	280	3.9					3.5	3.0
23	300	3.6					3.8	2.9

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

Table 8

Okinawa I. (26.3°N, 127.8°E) May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	320	(4.8)					4.4	(2.9)
01	300	(4.9)					4.7	---
02	280	(4.5)					4.2	(3.2)
03	260	(4.5)					>3.7	(3.4)
04	270	(4.0)					3.7	(3.25)
05	260	3.8					3.6	3.4
06	240	5.5	240	---	120	2.0	3.6	3.5
07	250	5.9	240	---	110	2.5	5.2	3.5
08	290	5.7	230	4.3	110	3.0	5.1	3.3
09	320	5.8	230	4.5	110	3.2	5.6	3.0
10	380	6.1	220	4.5	110	3.4	6.4	2.8
11	390	7.3	220	4.5	120	3.5	5.5	2.7
12	370	8.0	230	4.5	120	(3.5)	5.2	2.8
13	340	9.1	240	4.6	120	(3.4)	5.3	2.85
14	340	9.6	230	4.4	120	(3.3)	5.2	2.9
15	320	10.3	240	4.3	120	3.2	5.3	(3.0)
16	310	10.4	240	4.2	120	2.9	6.3	3.15
17	290	10.6	240	---	110	2.4	6.0	3.1
18	260	>9.0	260	---	130	1.8	5.3	(3.2)
19	240	8.5					4.6	(3.25)
20	250	(6.8)					4.0	(3.1)
21	290	(6.0)					4.3	(2.9)
22	320	(5.5)					>3.8	(2.8)
23	320	(5.4)					4.3	(2.85)

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

Table 9

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	6.0					4.4	2.7
01	280	5.9					4.0	3.0
02	260	5.8					4.2	3.1
03	240	---					3.1	---
04	240	(4.0)					3.4	(2.95)
05	220	(3.9)					3.2	(3.3)
06	220	5.4					3.1	3.35
07	230	5.7			100	2.5	4.4	3.5
08	260	6.0	220	4.2	100	3.0	4.6	3.2
09	320	6.2	220	4.6	100	3.2	5.8	3.1
10	360	6.8	240	4.7	100	3.3	6.0	2.8
11	350	8.3	210	4.7	100	3.3	5.2	2.9
12	340	8.8	---	---	---	---	4.2	2.75
13	310	10.2	220	---	100	---	4.4	3.1
14	300	11.2	220	4.5	100	---	4.0	3.1
15	280	11.8	220	4.4	100	3.2	5.5	3.2
16	270	12.1	210	4.2	---	---	4.7	3.2
17	240	12.0	230	4.1	---	---	4.9	3.4
18	220	11.4					4.6	3.4
19	200	9.2					4.3	3.5
20	230	7.6					4.4	3.2
21	240	6.4					3.8	3.2
22	280	6.2					3.4	2.9
23	280	6.4					4.0	3.0

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

Table 10

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	320	5.0					3.7	2.7
01	320	5.1					3.4	2.75
02	280	5.0					3.0	3.0
03	300	3.8					2.8	2.9
04	310	3.4					2.6	2.8
05	310	3.2					2.2	2.8
06	300	4.1	280	---			2.7	2.9
07	330	5.3	260	3.9	130	2.2	4.4	2.9
08	360	5.8	240	4.3	130	2.7	4.9	2.7
09	430	6.6	230	4.5	120	3.0	5.3	2.4
10	480	7.4	230	4.5	120	3.2	6.0	2.4
11	470	8.3	220	4.5	120	3.4	5.2	2.4
12	440	9.3	220	4.5	120	3.4	5.5	2.5
13	410	10.3	240	4.5	120	3.4	5.2	2.6
14	380	10.5	250	4.5	120	3.3	5.3	2.7
15	370	10.7	250	4.4	120	3.2	4.4	2.7
16	350	11.1	250	4.3	120	3.0	3.9	2.8
17	320	11.3	270	4.0	130	2.6	4.3	2.9
18	300	10.5	270	3.5	140	2.1	4.0	3.0
19	270	9.4					3.1	3.05
20	270	7.4					3.4	2.9
21	300	6.6					3.8	2.7
22	310	5.6					3.9	2.7
23	340	5.2					3.7	2.6

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

Table 11

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	200	5.0					<2.2	3.0
01	260	5.0					<1.8	3.1
02	240	4.8					<1.9	3.15
03	250	4.0					2.4	3.1
04	260	3.9					2.1	3.1
05	250	3.6					2.5	3.2
06	240	4.0	270	---			2.6	3.4
07	250	5.1	220	---	110	2.2	3.2	3.5
08	200	5.4	210	4.1	110	2.6	3.8	3.35
09	330	5.6	200	4.3	110	3.0	4.1	3.1
10	360	5.8	200	4.4	110	3.2	4.0	2.9
11	370	6.4	220	4.5	110	3.4	4.2	2.8
12	350	7.7	220	4.5	110	3.4	4.4	2.9
13	330	0.8	220	4.5	110	3.5		2.9
14	320	9.0	220	4.4	110	3.4	4.2	2.9
15	300	9.5	230	4.3	110	3.2	4.4	3.0
16	290	9.3	220	4.2	110	3.0	4.4	3.1
17	280	9.4	220	3.9	110	2.6	4.2	3.1
18	260	9.3	230	---	110	---	4.0	3.2
19	230	0.5	---	---			3.2	3.3
20	240	6.0					2.9	3.1
21	250	5.0					2.9	3.0
22	270	5.2					2.9	3.0
23	270	5.1					2.2	3.0

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

Table 12

Guam I. (13.6°N, 144.9°E) May 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	330	4.0					2.3	2.0
01	320	3.6					2.1	2.8
02	300	3.8					2.5	3.0
03	280	3.7					2.3	3.0
04	270	3.5					<1.6	3.25
05	220	3.2					2.2	3.5
06	240	4.1					2.7	3.5
07	240	5.9	220	---	120	2.2	3.4	3.5
08	280	6.4	220	---	110	(2.7)	3.9	3.25
09	310	7.1	210	4.3	110	3.1	4.8	3.0
10	350	7.2	220	4.4	110	3.3	4.7	2.7
11	300	7.6	190	4.5	110	3.4	5.0	2.5
12	390	0.1	210	4.5	110	3.4	4.8	2.5
13	380	8.5	200	4.5	110	3.4	4.8	2.5
14	370	9.0	210	4.4	110	3.4	4.5	2.6
15	350	9.2	210	4.4	110	3.2	4.8	2.6
16	340	9.3	220	4.2	110	3.0	4.7	2.6
17	310	9.8	220	---	110	2.5	4.5	2.7
18	270	10.0	240	---	---	---	3.0	2.9
19	240	9.5					3.8	3.1
20	250	8.4					3.7	2.9
21	270	7.2					2.8	2.95
22	290	6.0					2.6	2.9
23	330	4.8					2.3	2.8

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

Table 13

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	5.8					1.7	3.1
01	250	5.0					2.3	3.1
02	260	4.6					1.9	3.0
03	270	4.5					1.8	3.1
04	240	4.6					2.1	3.3
05	220	3.8					2.6	3.45
06	240	3.6	---	---	---	---	2.6	3.35
07	250	5.0	220	3.8	120	2.2	3.9	3.3
08	330	5.4	200	4.2	110	2.7	3.8	3.0
09	380	6.0	210	4.4	110	3.1	3.8	2.8
10	400	6.7	200	4.4	110	3.3	4.3	2.7
11	400	8.1	210	4.5	110	3.5	4.4	2.7
12	380	9.0	220	4.5	110	3.5	4.5	2.8
13	370	9.8	210	4.5	110	3.5	4.5	2.8
14	350	10.7	210	4.4	110	3.4	4.6	2.9
15	330	11.0	220	4.3	110	3.2	4.5	3.0
16	300	11.6	220	4.1	110	2.9	4.2	3.1
17	270	11.4	220	3.9	110	2.4	3.7	3.2
18	240	10.3	220	---	---	---	3.7	3.2
19	220	9.0					3.3	3.2
20	230	8.0					2.5	3.0
21	250	7.2					2.5	3.0
22	250	6.4					1.8	3.0
23	250	6.2					<1.6	3.0

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

Table 14

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	3.2			110	1.3		3.1
01	250	3.2			120	1.2		3.1
02	250	3.0			---	1.1		3.2
03	260	3.0	---	---	120	1.1		3.2
04	250	3.2	220	---	110	1.4		3.2
05	290	3.2	240	3.0	110	1.6		3.05
06	340	3.4	230	3.1	110	1.8		3.1
07	350	3.5	230	3.1	105	2.0		3.0
08	380	3.4	230	3.1	105	2.1		3.0
09	400	3.6	230	3.2	105	2.3		2.8
10	500	3.8	230	3.3	105	2.4		G
11	440	3.8	220	3.3	105	2.4		2.4
12	440	3.9	230	3.3	105	2.5		2.8
13	500	3.8	220	3.4	105	2.5		G
14	420	3.7	230	3.4	105	2.4		G
15	410	4.0	220	3.2	105	2.3		2.8
16	400	4.0	220	3.2	105	2.3		2.85
17	380	4.0	220	3.1	105	2.1		2.9
18	320	4.0	230	3.0	110	2.0		3.1
19	290	3.8	230	3.0	110	1.8		3.1
20	270	3.8	230	---	110	1.7		3.1
21	250	3.8	240	---	110	1.5		3.2
22	250	3.4	---	---	110	1.2		3.2
23	250	3.1			110	1.3		3.1

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

Table 15

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	240	3.1			110	0.9	5.6	3.1
01	240	3.0			120	0.9	4.4	3.1
02	260	2.7			110	1.0	4.0	3.0
03	260	2.6			120	1.0	4.3	3.0
04	280	2.6	---	---	110	1.4	4.0	3.0
05	270	3.0	---	---	105	1.7	4.2	3.1
06	270	3.3	230	3.0	105	2.0	4.6	3.2
07	290	3.4	220	3.1	105	2.3	5.6	3.2
08	370	3.9	200	3.3	105	2.6	5.2	3.0
09	440	3.9	220	3.7	105	3.0	3.9	2.4
10	480	4.1	240	3.8	100	3.3	4.6	2.7
11	480	4.2	260	3.8	100	3.2	5.0	2.7
12	480	4.2	240	3.9	105	3.2	3.8	2.7
13	470	4.3	220	3.9	105	3.0	3.4	2.7
14	420	4.6	220	3.8	105	3.0		2.8
15	400	4.6	220	3.8	105	2.9		2.9
16	370	4.7	230	3.6	105	2.6		3.0
17	350	4.5	240	3.5	105	2.8		3.0
18	300	4.2	240	3.2	105	2.4	4.0	3.1
19	270	4.0	240	3.0	105	2.0	4.0	3.1
20	260	3.8	250	---	110	1.7	6.0	3.2
21	240	3.6			110	1.3	6.8	3.1
22	240	3.4			110	1.2	5.0	3.1
23	240	3.2			105	1.0	4.1	3.1

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

Table 16

Reykjavik, Iceland (64.1°N, 21.8°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					4.0	---
01	---	---					4.0	---
02	---	---					4.3	---
03	(320)	(2.1)					4.4	---
04	(310)	(2.1)					3.7	(3.0)
05	(250)	(2.8)			---	---	1.6	(3.3)
06	260	3.2	---	---	120	---		3.2
07	240	3.6	---	---	110	2.0		3.2
08	300	3.9	220	3.4	110	---		3.1
09	360	4.0	220	3.7	110	2.6		3.05
10	380	4.2	210	3.8	110	2.6		3.0
11	370	4.4	220	3.8	110	---		3.1
12	390	4.5	210	3.8	110	---		2.9
13	380	4.5	210	3.9	110	---		3.0
14	380	4.5	220	3.9	120	---		3.0
15	370	4.5	230	3.8	120	---		3.0
16	350	4.6	230	3.7	110	2.6		3.0
17	330	4.4	230	3.5	110	2.3		3.1
18	290	4.2	230	---	110	---		3.1
19	280	4.0	---	---	120	---	3.3	3.1
20	250	3.8			---	---	4.2	(3.1)
21	(270)	---					4.2	---
22	(280)	---					4.0	---
23	(290)	---					3.8	---

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

Table 17

Churchill, Canada (58.8°N, 94.2°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	(270)	(3.0)					7.1	---
01	290	3.0			---	---	6.5	---
02	290	2.9			---	---	5.0	
03	330	2.6			---	---	4.8	
04	(310)	(2.9)			---	---	5.0	
05	300	3.0	---	---	---	---	4.7	---
06	350	3.5	280	3.6	110	2.6	4.8	G
07	380	<3.8	260	3.6	110	2.8	5.2	G
08	560	<4.0	240	3.7	105	2.8	5.2	G
09	580	4.0	240	3.8	115	3.0	5.0	2.4
10	580	4.0	220	3.8	110	3.0	5.0	2.2
11	600	4.0	220	3.9	110	3.0	5.0	2.4
12	500	4.1	220	3.9	110	3.0	5.0	2.5
13	470	4.3	220	3.9	110	3.0	4.5	2.75
14	450	4.4	230	3.9	110	3.0	4.1	2.8
15	410	4.5	220	3.8	110	2.9	4.4	2.8
16	380	4.7	240	3.8	110	2.8	4.8	3.0
17	340	4.4	240	3.5	110	2.6	4.5	3.0
18	300	4.3	250	3.0	110	2.4	4.2	3.1
19	290	4.0	---	---	110	2.0	4.2	3.0
20	300	3.4			---	(2.4)	5.2	(3.3)
21	300	3.5			---	---	6.8	---
22	300	3.3			---	---	7.4	---
23	260	3.0					6.9	---

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

Table 18

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.0						2.7
01	280	2.8						2.7
02	280	2.6						2.8
03	270	2.5						2.9
04	260	2.6						2.9
05	250	3.3	225	---	---	1.6		3.1
06	240	3.8	230	3.5	120	2.0		3.2
07	330	4.3	225	3.6	110	2.4		3.1
08	320	4.5	210	3.9	110	2.7		3.1
09	360	4.8	210	4.0	110	2.9		3.05
10	320	5.2	210	4.2	105	3.0	3.1	3.15
11	320	5.4	200	4.2	105	3.1	3.2	3.2
12	330	5.2	200	4.2	105	3.1	3.2	3.1
13	330	5.2	210	4.2	105	3.1		3.1
14	310	5.3	220	4.2	110	3.0		3.1
15	290	5.4	220	4.0	110	2.8		3.2
16	290	5.6	225	3.8	110	2.6		3.2
17	260	5.4	230	3.4	120	2.2		3.2
18	240	5.3	240	2.8	---	1.8	1.8	3.2
19	230	5.6						3.2
20	240	5.2						3.1
21	240	4.0						3.1
22	260	3.5						3.0
23	270	3.2						2.9

Time: 0.0°.
Sweep: 0.8 Mc to 20.0 Mc in 20 seconds.

Table 19

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	2.2						3.0
01	320	2.2					2.2	2.9
02	340	2.3					2.8	(2.9)
03	330	2.3					3.2	(2.8)
04	(300)	2.4					3.0	---
05	300	2.3					2.7	(3.0)
06	270	2.9	---	---	130	1.8		3.2
07	270	3.5	220	3.5	120	2.2		3.1
08	400	3.8	220	3.7	120	2.5		2.9
09	490	<3.9	210	3.8	115	2.8		G
10	540	4.0	200	3.9	115	2.9		G
11	510	4.2	200	3.9	110	3.0		2.7
12	420	4.2	200	4.0	115	3.0		2.8
13	440	4.2	200	4.0	110	3.0		2.7
14	430	4.6	220	4.0	110	3.0		2.8
15	420	4.7	220	3.9	120	3.0		2.7
16	380	4.8	230	3.8	120	2.8		2.9
17	340	4.7	230	3.7	120	2.5		3.0
18	300	4.6	240	3.2	120	2.1		3.1
19	260	4.4	---	---	130	1.8		3.2
20	260	3.8						3.1
21	270	3.2						3.0
22	280	2.6						3.0
23	280	2.4						2.9

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

Table 20

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.0						3.2
01	300	3.0						3.2
02	280	3.0						3.2
03	280	3.0						3.3
04	260	2.8						3.3
05	240	2.8						3.4
06	200	3.4			---	---		3.8
07	200	4.0	---	---	100	2.1		3.7
08	300	4.4	200	3.7	100	2.4		3.55
09	300	4.8	200	3.9	100	2.8		3.6
10	300	5.3	200	4.1	100	2.9		3.5
11	300	5.5	200	4.1	100	3.0		3.6
12	300	5.6	200	4.2	100	3.0		3.45
13	300	5.4	200	4.2	100	3.0		3.5
14	300	5.4	200	4.2	100	3.0		3.4
15	300	5.6	200	4.1	100	3.0		3.5
16	300	5.5	200	4.0	100	2.7		3.5
17	200	5.8	200	3.8	100	2.5		3.5
18	210	5.9	---	---	100	2.0		3.55
19	210	6.1						3.6
20	200	5.9						3.6
21	200	5.0						3.6
22	200	3.9						3.6
23	260	3.4						3.3

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

Table 21

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	320	2.2						3.0
01	350	1.9						(2.9)
02	330	1.6						(2.9)
03	360	1.9						---
04	(330)	1.7						---
05	280	2.3			---	---		3.1
06	250	3.2	230	---	130	1.8		3.4
07	270	3.7	220	3.5	110	2.3		3.3
08	360	4.1	220	3.7	110	2.8		2.9
09	390	4.3	220	3.9	110	3.0		3.0
10	440	4.6	210	4.0	105	3.3	3.3	2.8
11	400	4.8	200	4.1	105	3.3	3.3	3.0
12	380	4.9	220	4.1	105	3.4	3.6	3.0
13	390	5.0	210	4.1	105	3.3	3.4	3.0
14	360	5.0	220	4.1	105	3.2	3.2	3.0
15	350	5.0	230	4.0	105	3.0		3.0
16	340	5.0	230	3.8	110	2.7		3.0
17	300	5.0	230	3.5	110	2.3		3.1
18	280	5.0	240	3.0	130	1.9		3.1
19	250	5.0						3.1
20	240	4.3						3.2
21	250	3.2						3.2
22	280	2.5						3.0
23	300	2.4						3.0

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

Table 22

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	2.6						3.0
01	270	2.4						3.0
02	(270)	2.2						3.1
03	260	2.1						3.1
04	250	1.9						3.2
05	250	2.4						3.2
06	240	3.6	220	---	120	1.9		3.4
07	280	4.0	220	3.6	110	2.3		3.4
08	330	4.5	210	3.8	110	2.6	2.7	3.2
09	330	4.9	200	4.0	110	2.8	2.8	3.2
10	320	5.0	190	4.2	110	3.0	3.0	3.2
11	340	5.3	190	4.2	110	3.1		3.1
12	350	5.4	190	4.3	110	(3.2)		3.05
13	340	5.4	190	4.3	110	(3.1)		3.1
14	320	5.5	200	4.2	110	3.1		3.2
15	320	5.3	210	4.0	110	2.9		3.2
16	300	5.4	220	3.8	110	2.6		3.2
17	280	5.4	220	(3.5)	110	2.2		3.1
18	250	5.4	240	---	---	---	1.9	3.2
19	230	5.8	---	---				3.2
20	220	5.0						3.3
21	240	3.9						3.2
22	240	3.2						3.1
23	260	2.8						3.1

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

Table 23

San Francisco, California (37.4°N, 122.2°W) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	(3.4)					(3.2)	(2.85)
01	280	(3.4)					(2.3)	(2.9)
02	270	(3.3)					(2.5)	(3.0)
03	260	(3.3)					2.2	(3.0)
04	260	(3.2)					(2.4)	(3.0)
05	270	(3.0)						(2.9)
06	260	(3.9)	250	---	---	---	(2.0)	(3.15)
07	340	(4.4)	240	(3.5)	(120)	(2.1)	(2.4)	3.0
08	330	4.9	230	(3.9)	(120)	(2.6)	(2.8)	3.0
09	360	5.0	220	(4.0)	(120)	(3.0)	(3.4)	3.0
10	370	5.0	220	(4.2)	(110)	(3.0)	3.5	2.9
11	400	5.5	(210)	(4.2)	---	---	3.9	2.8
12	370	5.6	220	(4.3)	---	---	(3.5)	2.8
13	390	5.8	220	(4.3)	---	---	(3.4)	2.8
14	360	5.5	220	(4.2)	(110)	---	3.8	2.9
15	340	5.6	230	(4.1)	(120)	(2.9)	(2.9)	2.9
16	310	5.6	230	(3.9)	(120)	---	(2.7)	3.1
17	290	5.3	240	(3.5)	---	---	(2.4)	3.1
18	250	5.2	(250)	---	---	---	(2.0)	3.2
19	240	4.8					(2.9)	(3.2)
20	240	4.4					(2.2)	3.1
21	260	(3.7)					(2.9)	(3.0)
22	270	(3.4)					(2.6)	(2.9)
23	280	(3.4)					(2.7)	(2.9)

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

Table 24

Leopoldville, Belgian Congo (4.4°S, 15.2°E) April 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M2000)F2
00	220	4.8						2.6
01	230	3.8						2.4
02	230	3.0					2.0	2.6
03	250	2.1					2.0	2.7
04	250	2.0					2.3	2.8
05	240	3.6			---	---	2.8	2.7
06	240	5.9	230	---	120	2.2	3.2	2.8
07	280	6.3	220	---	110	2.7	3.6	2.6
08	300	7.3	215	4.3	110	3.1	4.1	2.4
09	320	8.0	210	4.4	110	3.3	3.0	2.2
10	360	9.0	200	4.5	110	3.4	2.8	2.2
11	340	10.6	210	4.5	110	3.5	2.9	2.2
12	310	11.8	215	4.4	110	3.4	3.6	2.3
13	295	11.6	225	4.4	110	3.3	3.9	2.3
14	300	11.0	230	4.2	110	3.0	3.8	2.2
15	300	11.1	240	---	110	2.7	3.8	2.3
16	280	11.5	240	---	120	2.1	3.2	2.4
17	250	11.4					2.8	2.5
18	230	11.0					3.0	2.6
19	210	10.1					2.0	2.7
20	205	8.0						2.6
21	215	6.0						2.5
22	245	5.3						2.2
23	235	5.0						2.4

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

Table 25

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs*	(M2000)F2
00	235	2.6						2.5
01	250	2.6						2.4
02	245	2.2						2.6
03	250	2.2						2.6
04	240	2.8						2.5
05	230	5.6	230	---	125	2.0		2.8
06	250	6.4	220	---	115	2.6		2.7
07	272	7.0	220	4.2	110	3.0		2.5
08	280	7.6	220	4.3	110	3.1		2.45
09	295	7.8	225	4.5	110	3.3		2.3
10	310	8.3	230	4.5	110	3.3		2.3
11	300	8.5	250	4.6	110	3.3		2.3
12	290	8.7	235	4.4	110	3.2	4.1	2.3
13	300	8.8	240	4.2	110	3.0	4.4	2.3
14	280	9.4	250	---	115	2.8	4.0	2.4
15	255	9.0	240	---	120	2.2	3.6	2.5
16	230	8.6	---	---			2.8	2.5
17	220	7.6					2.3	2.6
18	215	6.2					2.3	2.7
19	220	4.3					1.9	2.7
20	245	3.0					2.2	2.4
21	260	3.0					1.8	2.4
22	250	2.9						2.5
23	250	2.7					1.9	2.45

Time: 0.0°.
Sweep: 1.0 Mc to 16.0 Mc in 7 seconds.
*Data missing 00 through 12.

Table 26

Anchorage, Alaska (61.2°N, 149.9°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	E						2.85
01	---	E						(2.7)
02	---	E					1.9	(2.6)
03	---	E					1.5	(2.7)
04	---	E						(2.7)
05	---	E					1.4	(2.8)
06	290	2.2	---	---	130	---		3.0
07	260	3.0	240	---	130	1.8		3.2
08	(300)	3.6	240	3.2	120	2.0		3.3
09	320	3.8	220	3.3	120	2.2		3.1
10	350	4.4	220	3.5	120	2.3		3.15
11	300	4.5	220	(3.6)	120	2.4		3.2
12	320	4.6	220	3.6	120	2.5		3.2
13	320	4.7	230	3.6	120	2.4		3.1
14	290	4.6	230	3.6	120	2.4		3.2
15	280	4.8	230	3.4	120	2.3		3.25
16	260	4.8	240	---	120	2.1		3.3
17	240	4.6	240	---	120	1.8		3.4
18	240	4.2	---	---	---	---		3.2
19	240	3.5						3.1
20	240	2.9						3.05
21	270	1.9						2.9
22	290	(1.6)						2.9
23	320	1.3						3.0

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

Table 27

Wakkanai, Japan (45.4°N, 141.7°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.6						
01	280	3.8						
02	260	3.6						
03	260	3.5						
04	240	3.2						
05	250	3.1						
06	240	3.8						
07	240	4.9						
08	260	5.6						
09	270	5.9						
10	270	6.5						
11*	280	6.5						
12	290	6.5						
13	280	6.7						
14	270	6.3						
15	270	6.0						
16	250	6.0						
17	240	5.5						
18	240	4.8					2.3	
19	250	4.5						
20	260	4.2						
21	260	4.0						
22	280	3.8						
23	290	4.0						

Time: 135.0°E.
Sweep: 1.0 Mc to 22.0 Mc in 1 minute.

Table 28

Akita, Japan (39.7°N, 140.1°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	3.6						
01	260	3.6					2.0	
02	250	3.6					2.2	
03	250	3.4					2.2	
04	220	3.2					2.2	
05	240	2.8					1.8	
06	220	3.8					2.2	
07	240	5.1						
08	240	5.7						
09	250	6.0					3.5	
10	270	6.3					3.5	
11	280	6.9					3.8	
12	270	6.8					4.0	
13	270	7.2					3.5	
14	260	6.6					3.5	
15	250	6.4					3.2	
16	240	6.1					3.2	
17	240	5.8					3.0	
18	220	5.2					2.5	
19	220	4.4					2.3	
20	240	4.1					2.3	
21	250	3.8					2.1	
22	270	3.6					2.0	
23	280	3.6					1.8	

Time: 135.0°E.
Sweep: 0.85 Mc to 22.0 Mc in 2 minutes.

Table 29

San Francisco, California (37.4°N, 122.2°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	(3.3)					(3.2)	(3.0)
01	260	(3.2)					(3.2)	(3.0)
02	260	(3.2)					(3.3)	(3.0)
03	260	(3.1)					2.2	(3.0)
04	250	(3.1)					(2.2)	(3.1)
05	260	(3.0)						(3.0)
06	250	(3.1)						(3.1)
07	250	4.5	240	---	(120)	(2.0)	(2.5)	3.4
08	270	5.3	230	(3.6)	120	(2.2)	(3.1)	3.3
09	280	5.4	210	(3.9)	(120)	(2.8)	(2.9)	3.2
10	320	5.8	200	(4.1)	(120)	(2.9)	(3.1)	3.0
11	320	6.4	210	(4.2)	(120)	(3.1)	(3.2)	3.0
12	300	6.8	210	(4.3)	---	(3.2)	3.6	3.0
13	300	6.6	220	(4.3)	(120)	(3.0)		3.1
14	300	6.4	210	(4.2)	(120)	(3.0)	(2.8)	3.1
15	290	6.2	220	(4.0)	(120)	(3.0)	(2.4)	3.2
16	270	5.8	220	(3.7)	(120)	(2.6)	(2.5)	3.3
17	250	5.3	230	---	(120)	(2.1)	(3.0)	3.3
18	220	4.8			---	---	(2.9)	3.5
19	220	(3.7)					(2.8)	3.3
20	240	(3.2)					(3.0)	(3.1)
21	260	(3.0)					(2.9)	(3.2)
22	260	(3.0)					(2.6)	(3.0)
23	260	(3.1)					(2.2)	(3.0)

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

Table 30

Tokyo, Japan (35.7°N, 139.5°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	3.5					1.7	2.9
01	270	3.5					2.5	3.0
02	250	3.4					2.5	3.0
03	240	3.3					2.5	3.1
04	230	3.0					2.5	3.2
05	250	2.7					2.4	3.0
06	230	4.0			150	1.6	2.2	3.4
07	230	5.4	240	3.4	120	2.0	2.7	3.5
08	250	5.9	230	4.0	110	2.5	3.0	3.5
09	260	6.0	220	4.1	110	2.8	3.2	3.4
10	280	6.4	210	4.3	110	3.0	3.5	3.2
11	290	7.0	200	4.4	110	3.1	3.2	3.2
12	280	7.5	200	4.4	110	3.2	3.2	3.1
13	280	7.5	230	4.4	110	3.2	3.5	3.2
14	270	7.2	230	4.3	110	3.0	3.5	3.2
15	260	6.7	230	4.0	110	2.8	3.1	3.3
16	250	6.2	230	3.5	120	2.5	3.2	3.4
17	240	5.9	240	2.8	120	1.9	2.9	3.4
18	230	5.5					2.5	3.4
19	230	4.6					2.6	3.25
20	250	3.8					2.4	3.1
21	270	3.6					2.4	3.0
22	270	3.4					2.5	2.9
23	290	3.4					1.8	2.9

Time: 135.0°E.
Sweep: 1.0 Mc to 17.2 Mc in 2 minutes.

Table 31

Yamagawa, Japan (31.2°N, 130.6°E) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.5					2.3	
01	290	3.4					2.3	
02	260	3.3					2.3	
03	250	3.2					2.3	
04	250	3.1					2.3	
05	250	2.7					2.1	
06	270	2.8					2.1	
07	240	4.8						
08	240	5.8						
09	270	6.0						
10	280	6.5						
11	310	6.7						
12	300	8.0						
13	300	9.2						
14	280	9.2						
15	270	8.3						
16	260	7.0					3.4	
17	250	6.5					3.3	
18	240	6.5					2.7	
19	230	5.9					2.4	
20	230	4.6					2.4	
21	290	3.7					2.3	
22	280	3.8					2.3	
23	300	3.4					2.3	

Time: 135.0°E.
Sweep: 1.0 Mc to 22.0 Mc in 1 minute.

Table 32

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	3.4					1.8	3.1
01	250	3.5					1.6	3.1
02	240	3.4					1.4	3.2
03	230	3.1					1.6	3.2
04	240	2.7						3.2
05	250	2.6						3.0
06	250	3.1						3.2
07	230	4.9	240	---	110	2.0		3.4
08	270	5.8	230	3.9	110	2.6		3.3
09	280	6.4	220	4.2	110	2.9	3.8	3.2
10	290	6.5	200	4.3	110	3.1	3.9	3.2
11	310	6.9	200	4.4	110	3.2	4.0	3.1
12	310	7.0	200	4.5	110	3.3	3.6	3.1
13	310	7.1	190	4.5	110	3.3	3.6	3.1
14	300	7.0	200	4.4	110	3.2	3.6	3.0
15	300	6.8	220	4.3	110	3.1	3.8	3.1
16	280	6.9	220	4.0	110	2.8	3.7	3.2
17	260	6.7	230	3.6	110	2.4	3.4	3.2
18	230	6.6	---	---	---	1.8	2.9	3.3
19	220	5.7					2.4	3.3
20	220	4.6					1.9	3.3
21	250	3.5						3.1
22	260	3.6					2.0	3.0
23	250	3.6					1.9	3.1

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

Table 33

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.4						3.0
01	260	3.4						2.9
02	260	3.4					1.6	3.0
03	250	3.4					1.7	3.1
04	250	3.3					2.0	3.1
05	250	3.1						3.1
06	250	2.8						3.0
07	240	4.0	---	---	---	---		3.3
08	260	4.9	230	3.6	120	2.2		3.3
09	300	5.6	230	4.0	120	2.6		3.25
10	300	5.9	230	4.2	110	2.9		3.2
11	320	6.1	220	4.3	110	3.1	3.9	3.1
12	320	6.5	210	4.4	110	3.2	4.0	3.0
13	320	7.1	210	4.4	110	3.2	3.7	3.0
14	320	7.0	200	4.4	110	3.2	3.6	3.0
15	300	7.0	220	4.3	110	3.1	3.6	3.0
16	300	6.9	230	4.1	110	3.0	3.4	3.1
17	280	6.5	230	3.8	110	2.7	3.1	3.2
18	250	6.0	230	3.3	120	2.3	3.0	3.3
19	230	5.6	---	---	---	---	2.1	3.35
20	230	5.0					1.8	3.2
21	<250	3.9					1.8	3.15
22	≤250	3.5						3.1
23	250	3.4						3.1

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

Table 34

Buenos Aires, Argentina (34.5°S, 58.5°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	4.0						3.0
01	300	3.8					2.4	3.0
02	290	3.7					2.2	3.1
03	260	3.9					2.8	3.35
04	240	3.5					2.8	3.4
05	260	3.2					1.4	3.3
06	230	3.8					2.0	3.5
07	220	5.0	---	---				3.5
08	250	5.6	220	---			3.3	3.5
09	270	6.0	210	---			3.8	3.4
10	300	6.3	200	---			4.2	3.25
11	300	7.2	200	4.3			4.5	3.1
12	290	8.5	200	4.3			4.8	3.1
13	280	9.2	200	---			4.2	3.2
14	290	9.8	200	---			4.8	3.3
15	270	9.7	220	---			4.0	3.4
16	260	9.2	220	---			3.4	3.4
17	240	8.4	220	---			3.6	3.5
18	220	8.5	---	---				3.5
19	210	6.6						3.4
20	220	5.0						3.3
21	280	4.2						3.1
22	290	4.0						3.0
23	300	4.0						3.0

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 35

Oecepcion I. (63.0°S, 60.7°W) March 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.7						(3.1)
01	300	3.5						3.1
02	300	3.4						(3.1)
03	300	3.3						(3.1)
04	300	3.2						3.2
05	290	3.3						3.1
06	240	3.9						(3.4)
07	220	4.2					2.3	3.6
08	240	4.8					3.2	3.5
09	230	5.1					3.4	(3.6)
10	230	5.4					3.6	(3.5)
11	230	5.9					3.4	(3.5)
12	230	6.1					3.4	(3.5)
13	230	5.8					3.3	3.6
14	220	5.6					3.2	3.7
15	220	5.0					2.9	(3.7)
16	230	5.1					2.6	(3.6)
17	230	5.0					2.2	(3.6)
18	230	5.1					2.3	(3.5)
19	250	5.0						(3.4)
20	260	5.2						(3.3)
21	250	5.0						(3.3)
22	290	3.9						(3.25)
23	300	3.7						(3.1)

Time: 60.0°W.
Sweep: 1.5 Mc to 16.0 Mc in 15 minutes, manual operation.

Table 36

Buenos Aires, Argentina (34.5°S, 58.5°W) February 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	(5.3)						(2.9)
01	300	5.0						3.0
02	280	5.0					2.8	3.0
03	260	4.7					2.8	3.1
04	260	4.5					2.2	3.2
05	260	4.0						3.2
06	220	4.4	---	---	110	2.1	2.7	3.5
07	240	5.2	220	---	110	2.6	3.3	3.4
08	300	5.4	210	---	100	2.8	3.6	3.3
09	320	5.9	200	---	---	---	3.9	3.0
10	320	6.6	200	4.4	---	---	4.3	3.0
11	300	7.7	200	4.3	---	---	4.5	3.0
12	300	8.2	200	4.4	---	---	4.5	3.0
13	310	8.0	200	4.3	---	---	4.4	3.0
14	300	9.0	200	4.3	---	---	4.4	3.0
15	300	8.9	210	4.2	---	---	4.2	3.1
16	280	8.4	210	---	---	---	4.0	3.3
17	270	8.0	220	---	---	---	3.4	3.2
18	250	7.4	220	---			3.0	3.3
19	250	7.4						3.3
20	240	6.6						3.2
21	280	6.2						3.0
22	290	5.8						3.0
23	300	5.5						(2.9)

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 37

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

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	---					4.2	---
01	---	(2.4)					4.4	(2.9)
02	---	(2.4)					4.1	(2.95)
03	---	2.4					3.5	3.0
04	(280)	2.2					2.4	3.1
05	(285)	2.0					1.8	3.1
06	(260)	1.5					1.7	3.1
07	(260)	1.6					1.8	3.1
08	255	1.8					1.3	3.1
09	240	2.7			---	---		3.2
10	235	3.7			---	---	1.4	3.35
11	220	4.4			---	---	1.7	3.5
12	220	4.4			---	---	1.4	3.5
13	215	4.2			---	---	1.3	3.45
14	215	3.7			---	---		3.45
15	225	3.2			---	---	1.4	3.35
16	235	2.2					1.4	3.2
17	(235)	2.1					2.2	3.2
18	---	---					3.8	---
19	---	---					3.7	---
20	---	---					4.3	---
21	---	---					4.0	---
22	---	---					3.7	---
23							3.9	

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

Table 38

Buenos Aires, Argentina (34.5°S, 58.5°W) January 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	5.4					2.4	2.9
01	270	5.1					2.5	2.9
02	250	4.8					2.8	3.0
03	250	4.4					2.7	3.0
04	240	3.8					1.3	3.0
05	250	4.1			---	---		3.1
06	230	4.7	220	---	120	2.2	3.2	3.2
07	270	5.3	230	---	110	2.6	3.7	3.1
08	310	5.8	220	4.0	100	3.0	4.3	3.0
09	350	6.7	220	4.2	110	3.1	4.5	2.8
10	340	7.7	220	4.3	---	---	4.3	2.85
11	350	8.0	210	4.4	---	---	4.8	2.7
12	350	8.5	200	4.4	---	---	4.8	2.8
13	350	8.9	200	4.4	---	---	4.8	2.8
14	320	9.2	200	4.3	---	---	4.0	2.9
15	300	9.6	200	4.2	---	---	3.8	3.1
16	290	8.4	200	4.1	100	3.0	4.2	3.1
17	280	7.6	220	---	---	---	3.7	3.1
18	270	6.9	230	---			3.4	3.1
19	260	6.5					2.8	3.1
20	270	6.4						3.0
21	300	6.1					2.8	2.8
22	300	(5.8)						(2.8)
23	300	5.5						2.8

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 39

Decepcion I. (63.0°S, 60.7°W) January 1955

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	6.4					2.6	(3.15)
01	270	6.0					2.0	(3.1)
02	280	5.6						(3.15)
03	280	5.4					2.3	(3.1)
04	260	5.2					2.5	(3.2)
05	270	5.4					3.3	(3.2)
06	270	5.2					3.5	(3.3)
07	260	5.4					4.0	(3.3)
08	260	5.0					4.1	(3.35)
09	300	5.1					5.0	(3.4)
10	(280)	(4.9)					5.2	(3.5)
11	---	(6.1)					5.9	(3.4)
12	---	---					5.4	---
13	(240)	(6.3)					5.5	(3.5)
14	(250)	(4.0)					5.1	(3.6)
15	(280)	(5.5)					5.4	(3.5)
16	300	5.1					4.6	(3.4)
17	260	5.4					3.8	(3.35)
18	250	5.1					4.2	(3.4)
19	250	5.4					3.9	(3.3)
20	270	5.5					3.2	(3.3)
21	280	5.6					2.4	(3.2)
22	280	5.9					2.4	(3.2)
23	270	5.8						(3.2)

Time: 60.0°W.
Sweep: 1.5 Mc to 16.0 Mc in 15 minutes, manual operation.

Table 40

Sao Paulo, Brazil (23.5°S, 46.5°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	(5.4)						(3.2)
01	240	5.8						(3.2)
02	220	5.0					2.6	(3.3)
03	240	(4.0)					2.9	(3.2)
04	220	3.0					3.2	3.1
05	220	3.6						3.5
06	210	5.2			---	---	3.1	3.5
07	270	5.8	200	---	100	2.7	3.6	3.3
08	300	5.8	200	4.1	100	---	3.7	3.0
09	380	6.4	180	4.3	100	---	3.7	2.8
10	400	7.3	180	4.3	100	---	3.8	2.8
11	410	7.7	180	4.4	100	---	3.8	2.8
12	380	8.3	180	4.4	100	---		2.85
13	350	8.8	---	4.4	100	---	3.8	3.0
14	330	9.3	190	4.3	100	---	4.3	3.1
15	300	10.0	200	4.2	100	---	3.8	3.3
16	270	10.0	200	4.0	100	2.8	3.6	3.3
17	260	9.0	200	---	110	---	3.2	3.4
18	220	8.8	---	---			2.6	3.3
19	240	7.8						3.2
20	270	6.9						3.15
21	270	6.6					3.0	3.1
22	260	6.1						3.1
23	260	(4.3)						(3.2)

Time: Local.
Sweep: 1.75 Mc to 20.0 Mc in 7 minutes 18 seconds.

Table 41

Buenos Aires, Argentina (34.5°S, 58.5°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	290	(5.7)					3.0	(3.0)
01	280	5.8					2.6	3.1
02	250	5.5					3.0	(3.1)
03	240	5.0						3.15
04	270	(4.3)					1.3	(3.0)
05	250	4.2	---	---	---	---	2.7	3.25
06	270	5.2	230	---	110	2.3	3.6	3.1
07	300	6.0	220	---	110	2.8	4.2	3.0
08	370	6.4	(220)	4.1	110	3.0	4.7	2.8
09	400	7.2	210	4.2	110	3.2	4.5	2.7
10	390	7.8	200	4.3	110	3.3	4.3	2.75
11	400	8.8	200	4.4	---	---	4.4	2.7
12	360	9.4	200	4.4	---	---	4.2	2.9
13	320	10.0	200	4.3	---	---	4.2	3.0
14	300	10.4	210	4.2	110	3.3	4.2	3.1
15	280	10.2	210	4.2	---	---	4.4	3.3
16	270	7.9	210	4.0	110	3.0	3.8	3.25
17	270	7.8	210	---	---	---	3.8	3.3
18	280	6.4	220	---	---	---	3.8	3.3
19	270	6.4					3.2	3.1
20	300	6.5					3.7	3.0
21	300	6.7					3.0	2.95
22	300	(6.8)					4.3	(3.0)
23	300	(6.2)					3.3	(2.95)

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 42

Decepcion I. (63.0°S, 60.7°W) December 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	6.4	---	---			2.3	(3.1)
01	250	6.4	---	---				(3.1)
02	260	6.4	---	---				(3.1)
03	250	6.4	---	---				(3.1)
04	260	6.4	---	---			2.7	(3.1)
05	250	6.5	---	---			3.8	(3.2)
06	250	6.4	210	4.2			4.3	(3.2)
07	260	6.4	200	4.2			5.0	(3.3)
08	260	6.6	---	---			5.6	(3.3)
09	250	6.5	---	---			6.1	(3.3)
10	250	6.6	---	---			6.7	(3.4)
11	(250)	(6.4)	---	---			7.0	(3.4)
12	(250)	(6.0)	---	---			6.8	(3.3)
13	(250)	(6.4)	---	---			6.8	(3.4)
14	250	6.1	---	---			6.0	(3.5)
15	250	6.0	210	3.7			5.8	(3.45)
16	240	6.3	220	3.2			5.6	(3.4)
17	260	6.4	200	3.6			5.7	(3.4)
18	260	6.3	---	---			5.3	(3.3)
19	260	6.4	---	---			4.6	(3.3)
20	260	6.6	---	---			4.5	(3.3)
21	250	6.2	---	---			3.6	(3.2)
22	260	6.4	---	---			3.1	(3.2)
23	260	6.3	---	---			2.0	(3.2)

Time: 60.0°W.
Sweep: 1.5 Mc to 16.0 Mc in 15 minutes, manual operation.

Table 43

Sao Paulo, Brazil (23.5°S, 46.5°W) November 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	5.8						3.1
01	240	6.2						3.4
02	220	5.1						3.3
03	220	4.5						3.3
04	220	4.2						3.25
05	230	4.9						3.5
06	210	5.8	---	---	120	2.0		3.5
07	220	5.9	200	---	100	2.5	3.2	3.2
08	300	6.1	200	---	100	2.8	3.7	2.95
09	340	7.0	180	4.2	100	3.1		2.8
10	350	7.7	---	---	100	---		2.8
11	380	8.3	---	---	100	---		2.8
12	360	8.8	---	---	100	---		2.9
13	330	9.7	---	---	100	---		(3.0)
14	320	10.6	200	---	100	---		3.1
15	280	11.6	200	4.1	100	2.9	4.2	3.3
16	240	11.6	200	4.0	100	2.8	4.0	3.5
17	240	10.8	200	---	100	---	3.7	3.4
18	220	10.2			---	---	3.8	3.4
19	220	8.4					3.2	3.3
20	240	8.4					3.0	3.3
21	230	7.3					3.0	3.2
22	250	6.0					3.1	3.1
23	270	5.8						3.0

Time: Local.
Sweep: 1.75 Mc to 20.0 Mc in 7 minutes 18 seconds.

Table 44

Buenos Aires, Argentina (34.5°S, 58.5°W) November 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	5.4					2.6	2.9
01	300	5.3					2.5	3.0
02	300	5.2					2.8	3.0
03	270	5.1					2.0	3.0
04	270	4.6						3.1
05	240	5.1	---	---	---	---	1.7	3.4
06	230	5.5	210	---	110	2.2	3.0	3.4
07	280	6.0	220	---	110	2.7	3.7	3.3
08	300	6.3	210	---	110	2.9	3.9	3.0
09	320	6.5	210	4.3	100	3.2	4.0	2.9
10	380	7.6	200	4.3	---	---	4.3	2.8
11	370	8.9	200	4.4	---	---	4.4	2.85
12	330	9.6	200	4.4	110	3.4	4.4	3.0
13	310	10.1	210	4.3	100	3.3	4.2	3.0
14	300	10.7	210	4.2	100	3.3	4.2	3.1
15	290	10.9	210	4.2	---	---	3.9	3.2
16	280	10.6	210	---	---	---	3.9	3.3
17	260	9.5	230	---			4.0	3.3
18	260	8.5	240	---			3.5	3.4
19	230	7.5					2.7	3.2
20	240	6.7					2.8	3.2
21	290	6.0					2.9	3.0
22	300	5.7					2.9	2.9
23	300	5.8					3.1	2.9

Time: 60.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 45

Decepcion I. (63.0°S, 60.7°W) November 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	5.7						(3.1)
01	270	6.1						(3.1)
02	260	5.9						(3.1)
03	250	5.8						(3.1)
04	260	6.1	---	---			2.6	(3.1)
05	250	5.8	---	---			2.5	(3.2)
06	250	6.1	220	3.2			4.0	(3.2)
07	260	5.9	200	3.6			3.8	(3.3)
08	250	5.7	210	3.6			4.1	(3.3)
09	260	5.8	200	3.8			4.3	(3.3)
10	250	5.9	---	---			4.6	(3.4)
11	260	5.8	200	4.2			4.5	(3.4)
12	250	6.0	---	---			4.6	(3.35)
13	250	6.0	---	---			4.6	(3.4)
14	260	5.4	210	3.6			4.6	(3.3)
15	260	5.6	---	---			4.6	(3.35)
16	250	5.8	---	---			3.8	(3.3)
17	250	5.5	---	---			4.3	(3.3)
18	260	5.6	---	3.1			4.0	(3.3)
19	250	5.6	---	---			3.7	(3.2)
20	250	5.8	---	---			3.6	(3.2)
21	260	5.6	---	---			2.6	(3.2)
22	250	5.6					2.6	(3.2)
23	250	5.3					1.6	(3.2)

Time: 60.0°W.
Sweep: 1.5 Mc to 16.0 Mc in 15 minutes, manual operation.

Table 46

Poitiers, France (46.6°N, 0.3°E) April 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<290	3.2						2.9
01	<300	3.1						2.85
02	<275	3.0					1.8	2.9
03	<275	2.8						2.95
04	260	2.8			---	---	2.0	3.0
05	250	3.1			---	E	2.2	3.2
06	235	3.6	230	2.2	---	1.8	2.2	3.5
07	270	4.2	225	3.4	<120	2.3	2.3	3.4
08	300	4.5	225	3.8	110	2.6	2.6	3.35
09	310	5.0	215	4.0	110	2.8	3.0	3.35
10	320	5.2	210	4.1	105	2.9	3.2	3.25
11	335	5.2	205	4.2	105	3.0	3.3	3.25
12	330	5.2	200	4.2	105	2.9	3.4	3.15
13	330	5.2	200	4.2	105	3.0	3.6	3.2
14	325	5.3	230	4.2	110	3.0	3.4	3.2
15	300	5.4	230	4.0	110	2.8	3.4	3.2
16	300	5.4	235	3.9	110	2.6	3.0	3.2
17	290	5.4	240	3.5	120	2.2	2.6	3.2
18	265	5.5	250	2.8	---	1.6	2.3	3.15
19	250	5.9			---	E	2.3	3.25
20	235	5.6					2.4	3.2
21	230	4.5					2.0	3.3
22	245	3.8					1.9	3.1
23	260	3.2						2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 47

Casablanca, Morocco (33.6°N, 7.6°W) April 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.0					1.9	2.9
01	---	3.0					1.9	2.9
02	---	2.8					1.9	3.0
03	---	2.9					2.1	3.15
04	---	2.8					2.2	3.25
05	---	2.5					2.0	3.2
06	225	3.3					2.2	3.4
07	235	4.5	230	(3.3)	115	1.9	2.6	3.65
08	250	5.0	220	3.7	105	2.4	3.2	3.6
09	270	5.1	210	4.0	105	2.8	3.5	3.5
10	300	5.2	205	4.2	100	2.9	3.4	3.4
11	320	5.6	200	4.3	100	3.1	3.4	3.15
12	320	5.6	210	4.4	100	3.2		3.15
13	325	6.2	(200)	4.3	100	3.2		3.1
14	320	6.4	225	4.3	100	3.2		3.15
15	300	6.8	240	4.2	105	3.0		3.2
16	290	6.9	230	4.1	105	2.8	4.0	3.2
17	280	7.4	240	3.8	105	2.5	3.7	3.25
18	260	7.7	240	3.4	115	2.0	3.4	3.4
19	230	7.9	---	---			3.1	3.5
20	205	6.6					2.8	3.6
21	---	3.9					2.6	3.25
22	---	3.4					2.3	2.9
23	---	3.0					2.2	2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 48

Poitiers, France (46.6°N, 0.3°E) March 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<280	3.0						2.9
01	<290	3.0					1.9	2.95
02	<280	2.9					2.0	2.95
03	<270	2.9					2.0	3.0
04	250	2.7						3.05
05	---	2.3						3.25
06	250	2.8	---	---	---	E		3.2
07	245	4.0	230	2.2	---	1.8	1.9	3.5
08	255	4.5	220	3.4	120	2.3		3.45
09	280	4.9	220	3.8	110	2.6	2.8	3.45
10	300	5.1	215	4.0	110	2.8	3.1	3.3
11	290	5.4	210	4.1	110	2.8	3.1	3.4
12	300	5.4	200	4.1	110	2.9	3.5	3.3
13	285	5.6	210	4.1	110	2.9	2.9	3.4
14	285	5.4	225	4.0	110	2.8		3.35
15	280	5.4	230	3.9	110	2.7	2.9	3.3
16	270	5.4	235	3.5	115	2.4	2.6	3.35
17	250	5.3	240	2.9	---	2.0	2.4	3.4
18	240	5.2	---	2.0			2.4	3.3
19	<235	4.6					2.4	3.2
20	245	4.2					1.8	3.1
21	250	3.7					1.9	3.15
22	250	3.2						3.0
23	265	3.1						2.95

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 49

Casablanca, Morocco (33.6°N, 7.6°W) March 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.0					2.2	3.0
01	---	2.9					2.2	3.0
02	---	2.9					2.2	3.0
03	---	2.9					2.1	3.1
04	---	2.9					1.9	3.3
05	---	2.6					2.0	3.3
06	---	2.3						3.35
07	230	4.0	(225)	(2.3)	120	(1.6)		3.7
08	240	4.8	220	3.4	110	2.2	2.4	3.65
09	260	5.3	215	3.8	105	2.6	3.2	3.6
10	270	5.6	205	4.1	105	2.8		3.5
11	275	6.0	210	4.2	100	3.0		3.35
12	280	6.4	200	4.3	100	3.2		3.4
13	285	6.5	200	4.3	105	3.1		3.35
14	275	6.5	225	4.2	100	3.1		3.45
15	270	6.5	225	4.1	105	3.0		3.5
16	260	6.3	225	3.9	105	2.7	3.5	3.5
17	250	6.1	230	3.6	105	2.3	3.5	3.5
18	235	5.9	235	(3.0)	120	1.8	2.9	3.6
19	<220	5.5					2.2	3.5
20	---	4.2					1.8	3.35
21	---	3.6					1.7	3.05
22	---	3.3					2.3	3.0
23	---	3.0					2.3	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 50

Poitiers, France (46.6°N, 0.3°E) February 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<260	3.2						3.0
01	260	3.2						(3.05)
02	260	3.2						(3.0)
03	260	3.0						(3.1)
04	<255	2.8						(3.1)
05	<250	2.5						---
06	---	2.1						---
07	230	3.4	---	---	---	E		3.5
08	225	4.5	200	2.4	---	1.6	1.8	3.7
09	235	4.8	210	3.2	110	2.2	2.2	3.7
10	250	5.2	210	3.6	105	2.4	2.4	3.6
11	255	5.6	220	3.8	105	2.7	3.0	3.7
12	255	5.4	215	3.9	105	2.8		3.6
13	250	5.4	220	3.9	110	2.8		3.55
14	250	5.4	210	3.7	110	2.7		3.5
15	245	5.3	230	3.5	110	2.4	2.4	3.6
16	230	5.2	220	2.8	120	2.0	2.3	3.55
17	220	4.8	220	2.0	---	E	2.2	3.6
18	220	3.9						3.35
19	240	3.8						3.25
20	<235	3.5						3.2
21	<250	3.2						3.0
22	250	3.2						3.05
23	255	3.2						(3.1)

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 51

Casablanca, Morocco (33.6°N, 7.6°W) February 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.2						3.05
01	---	3.1						3.05
02	---	3.1						3.1
03	---	3.0						3.1
04	---	3.1					1.9	3.3
05	---	2.9					1.8	3.55
06	---	2.3						3.3
07	225	3.0						3.4
08	230	4.7	225	---	115	1.8	2.7	3.75
09	240	5.0	210	3.5	110	2.4	3.1	3.7
10	260	5.4	215	3.9	105	2.7	3.3	3.55
11	260	6.0	210	4.0	105	2.9	3.5	3.6
12	255	5.8	210	4.1	100	3.0		3.6
13	260	5.7	200	4.1	100	3.0	3.6	3.6
14	260	6.0	210	4.0	105	2.9		3.5
15	250	5.8	215	3.9	105	2.8	3.5	3.6
16	245	5.8	225	3.7	110	2.5	3.1	3.65
17	240	5.8	235	3.1	110	2.1	3.2	3.6
18	220	5.2					2.7	3.65
19	<210	4.2					2.3	3.45
20	---	3.8					1.8	3.15
21	---	3.6					2.0	3.1
22	---	3.4					2.0	3.1
23	---	3.2						3.05

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 52

Poitiers, France (46.6°N, 0.3°E) January 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	255	3.4					2.0	---
01	260	(3.4)					1.9	---
02	255	3.4						(3.15)
03	255	3.4						(3.2)
04	<250	3.2						(3.25)
05	220	3.0						
06	<220	2.4						---
07	210	2.4						---
08	210	4.2	160	2.0	---	1.6	1.8	3.8
09	220	5.2	200	2.5	120	2.1	2.4	3.8
10	225	5.6	215	3.4	110	2.4	2.5	3.7
11	230	5.7	220	3.6	110	2.5	2.7	3.7
12	225	5.6	205	3.6	110	2.6	2.6	3.8
13	230	5.4	210	3.6	110	2.5		3.7
14	225	5.3	220	3.4	110	2.4	2.5	3.65
15	225	5.2	220	2.9	115	2.1	2.2	3.7
16	210	4.8	210	2.0	---	E	2.1	3.65
17	205	4.0					2.0	3.5
18	220	3.6					2.4	3.3
19	225	3.4					2.1	3.35
20	220	3.2					2.1	3.3
21	240	3.3					2.0	(3.1)
22	250	3.4					2.0	(3.1)
23	250	3.4						(3.1)

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 53

Casablanca, Morocco (33.6°N, 7.6°W) January 1954

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.2					2.6	3.15
01	---	3.0					2.6	3.15
02	---	3.0					2.2	3.1
03	---	3.0					1.8	3.2
04	---	2.9						3.4
05	---	2.8						3.8
06	---	2.2						3.4
07	---	2.6						3.4
08	215	4.6			---	1.6	2.2	3.8
09	220	5.0	210	(3.2)	110	2.2	3.2	3.8
10	245	5.4	210	3.8	110	2.6	>3.4	3.7
11	245	6.5	210	4.0	105	2.8	3.6	3.65
12	240	6.2	210	4.1	105	2.9	3.5	3.7
13	245	5.7	200	4.1	100	2.9		3.7
14	250	5.4	200	3.9	105	2.9		3.6
15	250	5.6	220	3.8	105	2.6		3.6
16	240	5.4	225	3.5	110	2.3	3.0	3.65
17	220	5.0	210	2.8	110	1.8	2.7	3.7
18	200	3.9			---	---	2.3	3.6
19	---	3.4					2.3	3.3
20	---	3.6					2.4	3.4
21	---	3.1					2.6	3.3
22	---	3.1					2.5	3.1
23	---	3.2					2.5	3.1

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 54

Poitiers, France (46.6°N, 0.3°E) December 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	3.3					2.2	3.1
01	255	3.1					2.0	3.1
02	260	3.2					2.1	3.1
03	<255	3.0					2.0	3.1
04	<240	2.8					1.9	3.3
05	225	2.6						(3.5)
06	<250	2.3						(3.3)
07	<230	2.5						(3.2)
08	210	4.4	180	2.0	---	E	2.2	3.75
09	210	5.1	200	2.5	120	2.0	2.6	3.8
10	225	5.6	210	3.2	115	2.4	2.5	3.7
11	230	5.8	215	3.6	110	2.5	2.9	3.6
12	225	5.8	205	3.6	<115	2.6	2.6	3.75
13	225	5.5	220	3.4	115	2.5		3.7
14	225	5.4	215	3.0	120	2.3	2.9	3.7
15	220	5.1	220	2.3	130	2.0	2.6	3.7
16	215	4.9	---	---	---	E	2.4	3.65
17	205	3.5					2.4	3.5
18	230	2.8					2.2	3.3
19	230	3.0					2.1	3.2
20	230	3.1					2.2	3.25
21	235	3.1						3.3
22	250	3.2						3.0
23	255	3.3						3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 55

Casablanca, Morocco (33.6°N, 7.6°W) — December 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.2					2.5	3.1
01	---	3.1					2.3	3.1
02	---	3.0					2.2	3.2
03	---	3.0					2.1	3.3
04	---	3.0						3.4
05	---	2.7						3.6
06	200	2.2						3.3
07	<250	2.6						3.25
08	220	4.8			130	1.6	2.4	3.7
09	225	5.6	220	3.3	110	2.3	3.3	3.8
10	235	5.8	215	3.8	105	2.6	3.5	3.8
11	235	5.8	200	3.9	105	2.0	3.5	3.8
12	245	5.9	200	4.0	105	2.9	3.5	3.7
13	250	5.8	200	4.0	105	2.9		3.7
14	245	5.4	205	3.9	105	2.8		3.7
15	240	5.3	215	3.6	105	2.6		3.6
16	230	5.5	220.	3.0	110	2.2		3.65
17	210	5.0	---	---	---	---	2.7	3.75
18	---	3.8					2.4	3.55
19	---	3.2					2.0	3.4
20	---	3.0					2.1	3.2
21	---	3.2					2.0	3.2
22	---	3.1					2.2	3.1
23	---	3.1					2.2	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 56

Poitiers, France (46.6°N, 0.3°E) — November 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<280	3.0					2.2	(2.9)
01	275	3.3					2.2	(2.95)
02	<275	3.3					2.3	3.0
03	<275	3.2					2.2	(3.05)
04	<260	2.9					1.9	---
05	<235	2.6						---
06	<235	2.4						---
07	<240	3.4	---	---			2.0	3.3
08	230	4.5	200	2.4	---	E	2.0	3.6
09	235	5.1	230	3.2	120	2.1	2.0	3.65
10	245	5.5	220	3.6	120	2.4	2.9	3.55
11	250	5.7	215	3.7	110	2.5	3.5	3.5
12	250	6.0	210	3.7	120	2.6	3.4	3.55
13	250	5.8	220	3.6	120	2.6	3.0	3.45
14	250	5.5	240	3.4	120	2.3	2.6	3.4
15	240	5.7	240	2.8	125	2.0	2.7	3.55
16	225	5.2	---	---	---	E	2.5	3.6
17	220	4.0			---	---	2.4	3.5
18	235	3.0					2.2	3.2
19	<250	3.0					2.2	3.05
20	245	3.0						3.1
21	260	2.0					2.2	(2.95)
22	265	3.0					2.2	2.9
23	<290	3.0					2.2	2.85

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute.

Table 57

Casablanca, Morocco (33.6°N, 7.6°W) — November 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.2					2.3	3.0
01	---	3.2					2.2	3.05
02	---	3.2					2.2	3.05
03	---	3.2					2.1	3.15
04	---	3.2					2.1	3.3
05	---	3.2						3.55
06	---	2.4						3.1
07	240	3.4						3.35
08	225	5.2	220	(2.6)	120	1.9	2.0	3.75
09	230	5.8	220	3.5	110	2.4	3.4	3.7
10	250	6.4	210	3.9	105	2.7	3.4	3.65
11	250	6.6	210	4.1	100	2.9	3.5	3.6
12	250	6.0	200	4.1	100	3.0	3.5	3.6
13	260	6.2	220	4.1	105	2.9	3.5	3.5
14	250	6.4	225	4.0	105	2.0	3.5	3.6
15	245	6.4	220	3.7	105	2.6	3.5	3.6
16	235	6.2	220	3.5	110	2.2	3.5	3.7
17	215	5.8	---	---	---	---	3.3	3.7
18	<210	3.0					2.9	3.6
19	---	3.1					2.3	3.3
20	---	3.2					2.3	3.1
21	---	3.2					2.0	3.1
22	---	3.3					2.0	3.1
23	---	3.2					2.0	3.1

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 58

Poitiers, France (46.6°N, 0.3°E) — October 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<285	3.2						2.9
01	290	3.2					2.0	2.9
02	<280	3.3						3.0
03	275	3.3					2.0	2.95
04	<260	3.2					2.0	3.05
05	<235	2.8						3.35
06	<240	2.9					2.1	3.25
07	230	4.5	215	2.2	---	1.9	2.0	3.6
08	240	5.2	220	3.1	110	2.2	2.6	3.6
09	250	5.8	215	3.8	110	2.6	3.0	3.55
10	250	6.2	210	4.0	105	2.8	3.5	(3.45)
11	250	6.6	220	4.0	105	2.8	3.9	3.5
12	255	6.3	210	4.1	105	2.8	3.9	(3.4)
13	250	6.3	210	4.0	105	(2.8)	3.6	3.5
14	250	6.1	230	4.0	110	2.8	3.5	3.4
15	250	6.4	235	3.6	115	2.5	3.5	3.5
16	245	6.0	245	(3.4)	---	2.0	2.8	3.4
17	230	5.5	---	---	---	---	2.6	3.4
18	225	4.8					2.3	3.2
19	230	4.6					2.3	3.3
20	<230	3.8					2.2	3.3
21	250	3.6						3.1
22	255	3.4					2.0	3.0
23	265	3.2						2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 59

Casablanca, Morocco (33.6°N, 7.6°W) — October 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	---	3.1					2.3	2.95
01	---	3.1					2.4	2.9
02	---	3.1					2.3	2.9
03	---	3.1					2.3	3.0
04	---	3.2					2.6	3.15
05	---	3.0					2.1	3.3
06	---	2.4					2.1	3.25
07	230	4.3	---	---	---	---	2.9	3.6
08	230	5.0	225	3.2	110	2.2	3.3	3.7
09	240	6.1	220	3.8	105	2.6	3.5	3.6
10	255	6.7	210	4.2	105	2.8	3.5	3.5
11	260	6.8	215	4.3	105	3.0	3.8	3.5
12	265	6.0	200	4.4	100	3.1	4.0	3.4
13	270	6.0	220	4.4	105	3.1	3.8	3.4
14	270	6.8	235	4.3	105	3.0	3.8	3.35
15	275	7.0	225	4.1	105	2.9	3.6	3.35
16	260	7.4	240	4.0	110	2.6	3.5	3.4
17	240	7.7	240	3.6	115	2.0	3.5	3.5
18	225	7.3	---	---			3.5	3.6
19	210	5.6					3.2	3.55
20	---	3.8					3.0	3.3
21	---	3.5					2.0	3.1
22	---	3.1					2.3	3.0
23	---	3.1					2.0	2.95

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 60

Poitiers, France (46.6°N, 0.3°E) — June 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	265	4.4					2.4	3.0
01	< 280	4.2					2.6	2.9
02	< 275	3.9					3.2	2.95
03	265	3.6					2.8	3.0
04	255	3.4					3.1	3.0
05	275	4.0	245	3.0	---	1.6	3.4	3.1
06	365	4.6	240	3.7	110	2.2	4.1	---
07	315	5.0	240	4.0	105	2.6	5.1	(3.25)
08	320	5.2	215	4.0	105	2.8	5.6	(3.2)
09	320	5.2	210	4.2	105	3.0	5.0	(3.2)
10	360	5.3	210	4.4	100	3.1	5.2	(3.1)
11	320	5.5	205	4.4	100	3.2	5.4	---
12	370	5.2	200	4.5	105	3.2	4.4	---
13	360	5.4	205	4.4	100	3.2	4.6	(3.0)
14	360	5.1	220	4.4	100	3.2	4.9	---
15	370	5.3	215	4.2	105	3.0	4.1	(3.05)
16	340	5.5	225	4.1	105	2.9	4.4	3.1
17	320	5.6	225	4.0	110	2.6	4.2	3.1
18	300	5.9	225	3.6	110	2.2	4.6	3.1
19	270	(6.2)	245	2.9	---	1.7	3.4	3.0
20	250	(6.5)					3.2	---
21	250	(6.2)					3.5	---
22	245	5.2					2.5	3.05
23	250	4.8					2.2	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 61

Casablanca, Morocco (33.6°N, 7.6°W) June 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<260	5.0					3.0	2.95
01	<275	4.9					3.2	3.0
02	<245	4.7					3.5	3.0
03	<260	4.5					4.0	3.05
04	<260	4.0					3.6	3.05
05	<255	3.7					3.9	3.15
06	250	4.2	250	---	125	1.7	3.6	3.35
07	260	5.2	230	3.7	110	2.3	3.6	3.4
08	270	5.3	215	3.9	105	2.8	4.8	3.45
09	280	5.4	210	4.2	105	3.0	5.4	3.45
10	330	5.2	205	4.3	100	3.2	5.0	3.3
11	360	5.4	200	4.4	100	3.3	4.6	3.05
12	400	5.5	220	4.4	100	3.4	3.8	2.9
13	375	5.8	225	4.4	100	3.4	3.9	2.85
14	350	6.3	215	4.3	105	3.4	4.1	2.95
15	345	6.7	250	4.2	100	3.3	4.7	3.0
16	320	7.1	240	4.1	105	3.1	5.6	3.05
17	300	7.5	230	3.9	105	2.8	4.6	3.1
18	280	7.6	230	3.6	110	2.3	4.6	3.2
19	260	7.6	230	3.1	125	1.8	3.7	3.2
20	240	7.5	---	---			4.2	3.15
21	240	6.1					3.4	3.1
22	<250	5.5					3.3	3.05
23	<275	5.3					3.1	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 62

Poitiers, France (46.6°N, 0.3°E) May 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.6						3.0
01	275	3.5						2.9
02	275	3.4					2.0	2.9
03	<275	3.3					2.0	3.0
04	255	3.2					2.2	3.0
05	260	3.8	250	3.0	---	1.8	2.6	3.2
06	290	4.5	230	3.4	110	2.2	2.6	3.3
07	320	4.8	225	3.8	105	2.5	3.1	3.3
08	335	5.1	215	4.1	105	2.8	3.4	3.2
09	350	5.2	210	4.2	100	3.0	3.6	3.3
10	340	5.4	200	4.3	100	3.1	3.6	3.2
11	360	5.2	200	4.4	100	3.2	3.6	3.2
12	355	5.5	200	4.4	100	3.2	3.6	3.2
13	350	5.4	205	4.4	100	3.2	3.6	3.2
14	365	5.5	210	4.4	100	3.1	3.6	3.1
15	350	5.5	215	4.2	100	3.0	3.6	3.1
16	320	5.8	225	4.0	105	2.8	3.6	3.1
17	305	5.8	235	3.8	110	2.5	3.6	3.1
18	295	6.0	240	3.4	115	2.0	3.4	3.2
19	255	6.1	240	2.6	---	---	2.4	3.2
20	240	6.0					2.2	3.2
21	230	5.2					2.1	3.2
22	240	4.4						3.1
23	260	4.0						3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 63

Casablanca, Morocco (33.6°N, 7.6°W) May 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<280	3.8					2.7	2.9
01	<300	3.6					2.9	2.9
02	<260	3.5					3.0	3.0
03	<265	3.5					2.8	3.0
04	<270	3.2					3.0	3.0
05	<250	3.0					2.7	3.1
06	245	4.2	---	---	120	1.8	3.0	3.4
07	250	5.1	230	3.5	110	2.2	3.7	3.5
08	270	5.3	225	3.9	105	2.6	3.7	3.5
09	285	5.0	210	4.1	105	2.9		3.5
10	320	5.4	215	4.3	105	3.2		3.2
11	350	5.4	215	4.4	105	3.3		3.0
12	410	5.4	210	4.4	100	3.4		2.8
13	365	5.9	210	4.4	105	3.3		2.9
14	350	6.6	245	4.3	100	3.3		3.0
15	320	7.0	230	4.2	105	3.1		3.0
16	300	7.5	230	4.1	105	3.0		3.1
17	290	7.5	230	3.9	105	2.6		3.2
18	275	7.8	240	3.6	115	2.2	3.6	3.2
19	250	7.5	230	2.8	130	1.7	3.8	3.3
20	230	6.6					>3.3	3.2
21	<220	6.0					2.3	3.2
22	<255	4.2					2.6	3.0
23	<275	3.9					2.8	2.8

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 64

Poitiers, France (46.6°N, 0.3°E) April 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<295	3.4						2.8
01	<295	3.4						2.8
02	290	3.3					1.8	2.85
03	<275	3.0					2.0	2.9
04	<270	3.0						3.0
05	255	2.8					2.4	3.1
06	245	3.8	215	2.0	---	1.9	2.2	3.3
07	295	4.3	225	3.5	115	2.2		3.5
08	310	4.7	215	4.0	105	2.6		(3.5)
09	330	5.0	220	4.1	105	2.9	2.3	3.2
10	325	5.5	210	4.4	105	3.0	3.5	3.15
11	330	5.5	200	4.4	105	3.1	3.6	3.2
12	320	5.8	210	4.4	105	3.2	3.6	3.2
13	315	6.0	220	4.4	100	3.1	3.6	3.2
14	310	6.0	215	4.3	105	3.0	3.5	3.2
15	300	5.9	225	4.2	105	3.0	3.4	3.2
16	290	5.9	230	4.0	110	2.7	2.8	3.2
17	275	5.7	240	3.6	115	2.3	2.4	3.2
18	250	5.7	240	2.3	---	1.8	2.3	3.2
19	240	5.8					2.2	3.2
20	240	5.4					2.0	3.1
21	<240	4.6					2.0	3.2
22	250	3.9						3.0
23	275	3.6					2.0	2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 65

Casablanca, Morocco (33.6°N, 7.6°W) April 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	300	3.4					1.8	2.8
01	<300	3.4						2.8
02	<270	3.3					2.0	2.8
03	<275	3.2					2.0	3.0
04	<250	3.2					1.8	3.2
05	<250	2.8					1.8	3.2
06	<235	3.1			---	---	2.2	3.4
07	230	4.5	220	---	120	1.9		3.6
08	235	4.9	220	3.6	105	2.5		3.6
09	280	5.2	210	4.0	105	2.8		3.5
10	310	5.4	200	4.2	100	3.1		3.2
11	330	6.0	205	4.4	100	3.3		3.1
12	305	7.0	220	4.5	100	3.3		3.2
13	300	7.3	225	4.5	100	3.3		3.2
14	300	7.4	230	4.4	105	3.3		3.2
15	290	8.0	220	4.4	105	3.2		3.3
16	280	7.6	230	4.2	105	3.0		3.3
17	275	7.2	230	3.9	110	2.6		3.3
18	250	7.6	240	3.5	115	2.1	3.0	3.4
19	240	7.6	---	---			2.6	3.4
20	220	6.5					2.2	(3.4)
21	<210	4.2						3.1
22	<270	3.6						2.8
23	<280	3.5						2.8

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 66

Djibouti, French Somaliland (11.5°N, 43.1°E) April 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	285	---					<2.0	---
01	250	>5.5						---
02	230	4.8						(3.4)
03	230	3.9						3.35
04	230	3.2						3.5
05	285	2.4						(3.25)
06	235	6.0	---	---	---	2.2	3.3	3.45
07	270	>7.4	225	---	105	2.7	3.0	3.35
08	300	8.6	210	---	---	3.2	3.7	3.0
09	330	8.9	210	4.6	---	---	4.2	2.75
10	330	8.6	208	4.8	---	---	7.0	2.7
11	330	8.6	205	4.7	---	---	6.8	2.7
12	322	9.0	202	4.8	---	---	6.6	2.75
13	320	9.6	210	4.6	---	---	6.2	2.8
14	315	>10.0	210	4.6	---	3.2	4.1	(2.7)
15	300	>10.0	210	4.4	---	3.2	4.0	(2.75)
16	275	>10.0	215	---	---	2.8	3.7	<2.95
17	250	>10.0	225	---	---	2.2	3.3	---
18	250	>10.0					3.1	---
19	262	> 9.0						(3.1)
20	270	(9.0)					<2.0	(3.0)
21	305	<7.0						2.95
22	302	(6.2)						---
23	302	>6.0						---

Time: 35.6°E.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes, automatic operation.

Table 67

Dakar, French W. Africa (14.6°N, 17.4°W) — March 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	270	7.7					2.8	3.0
01	250	7.5					3.0	3.2
02	230	5.9					2.2	3.4
03	220	3.9					2.2	3.3
04	220	3.1					2.2	3.2
05	<240	2.6					3.1	3.1
06	<260	3.2					2.6	3.2
07	240	6.0	235	---	119	2.0	2.2	3.6
08	265	7.1	225	---	111	2.7	4.0	3.5
09	285	8.4	220	4.3	105	3.0	3.9	3.3
10	300	9.6	210	4.5	103	3.2	3.5	3.1
11	290	11.6	210	4.5	103	3.4		3.0
12	290	>11.8	210	4.5	103	3.5		3.1
13	290	11.6	210	4.5	101	3.4		2.9
14	305	11.4	210	4.4	101	3.3	3.2	2.9
15	300	11.8	225	4.3	105	3.1	3.4	3.0
16	285	11.8	225	---	108	2.8	3.4	3.0
17	260	11.6	235	---	112	2.4	3.5	3.1
18	250	11.1	---	---			3.4	3.0
19	262	10.5					3.3	2.9
20	270	10.6					2.2	2.9
21	278	9.3						2.9
22	280	8.1					2.8	2.8
23	290	8.0					2.4	2.9

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

Table 68

Dakar, French W. Africa (14.6°N, 17.4°W) — February 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	265	7.8					2.2	2.95
01	250	7.5						3.1
02	240	7.3						3.2
03	225	5.4						3.55
04	220	4.3					1.4	3.45
05	<230	3.2					2.1	3.2
06	250	2.4					3.1	3.15
07	240	5.4	---	---	125	2.0	3.4	3.5
08	275	7.1	230	---	111	2.6	3.4	3.35
09	280	8.6	220	4.4	109	2.9	3.5	3.2
10	290	10.2	215	4.4	108	3.2	4.0	3.15
11	292	11.6	205	4.5	106	3.4	3.5	3.1
12	308	11.2	210	4.5	---	3.4	3.5	3.0
13	300	11.4	210	4.5	107	3.4	3.4	2.85
14	300	11.2	220	4.4	107	3.2	3.5	2.95
15	300	11.4	225	4.4	109	3.1	3.8	3.0
16	292	11.5	225	---	111	2.8	3.5	3.1
17	270	11.8	240	3.9	120	2.3	3.5	3.2
18	245	11.1	---	---			3.4	3.1
19	255	10.8					3.2	2.95
20	245	10.8						2.9
21	252	>9.4					3.3	2.95
22	265	>9.0					2.8	(3.0)
23	270	8.2					2.2	3.05

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

Table 69

Dakar, French W. Africa (14.6°N, 17.4°W) — January 1953

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	278	5.7						3.0
01	260	5.9						3.15
02	230	5.2						3.4
03	<220	4.4						3.55
04	<220	2.3						3.1
05	275	1.8						3.05
06	270	1.9					2.7	2.9
07	250	5.3	250	---	123	1.8	2.7	3.3
08	290	7.9	230	---	111	2.5	3.0	3.2
09	290	10.5	222	4.3	111	2.9	3.4	3.2
10	285	10.6	215	4.4	109	3.2	3.5	3.0
11	298	10.4	210	4.5	111	3.4	3.4	2.85
12	305	10.5	220	4.6	111	3.4		2.8
13	290	10.8	225	4.5	109	3.4	3.2	3.05
14	275	10.3	225	4.4	109	3.3	3.4	3.15
15	282	9.6	230	4.3	110	3.0	3.5	3.2
16	270	9.1	232	---	111	2.7	3.4	3.3
17	250	8.5	245	---	116	2.1	3.3	3.35
18	248	7.9			---	---	3.4	3.2
19	<245	7.8					3.5	3.05
20	248	7.8					3.2	2.9
21	250	7.5					2.2	2.95
22	260	6.5					2.1	3.1
23	260	5.2					2.0	2.95

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

Table 70

Poitiers, France (46.6°N, 0.3°E) — December 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	250	3.4					2.0	3.0
01	<260	3.6					2.0	2.9
02	270	3.4						2.9
03	<260	3.4					2.0	3.0
04	<250	2.6						3.2
05	235	2.7						3.3
06	<225	2.5						(3.4)
07	225	2.8					2.0	3.1
08	215	4.7	205	2.0	---	E	2.1	3.6
09	215	5.7	205	2.6	125	2.2	2.2	3.8
10	225	6.5	220	3.3	120	2.4	2.3	3.6
11	225	6.7	225	3.6	120	2.6	2.8	3.8
12	230	6.0	220	3.6	120	2.6	2.0	3.7
13	230	6.2	220	3.3	120	2.5	2.0	3.6
14	230	6.0	220	3.0	120	2.4	2.1	3.6
15	225	5.7	200	2.3	130	2.0	2.4	3.6
16	220	5.3	---	---	---	---	2.2	3.6
17	220	4.2					2.5	3.4
18	230	3.6					2.5	3.3
19	245	3.4					2.4	3.2
20	230	3.2					2.6	3.2
21	<250	3.2					2.1	2.9
22	<255	3.4					1.8	2.9
23	<255	3.5						3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.8 Mc in 1 minute.

Table 71

Casablanca, Morocco (33.6°N, 7.6°W) — December 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<250	3.3					2.4	2.9
01	<250	3.3					2.4	2.9
02	<250	3.4					1.9	3.0
03	<250	3.4					2.0	3.1
04	<230	3.3					1.8	3.2
05	<200	3.0						3.4
06	---	2.7						3.2
07	---	3.2			---	---		3.2
08	225	5.9	---	---	125	1.6		3.7
09	225	6.5	220	3.6	115	2.4		3.7
10	230	6.6	210	4.0	110	2.7		3.6
11	240	6.9	200	4.2	105	2.9		3.6
12	250	6.9	200	4.2	105	3.0		3.6
13	250	6.6	200	4.2	105	3.0		3.6
14	250	6.5	210	4.2	105	2.9		3.5
15	245	6.5	220	3.8	110	2.7		3.6
16	230	6.7	225	---	115	2.3		3.6
17	220	6.0			125	1.8	2.7	3.6
18	200	4.9					2.6	3.6
19	<220	3.7					1.8	3.2
20	<220	3.7						3.2
21	---	3.3						3.2
22	<250	3.2						3.0
23	---	3.3					2.2	2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 72

Dakar, French W. Africa (14.6°N, 17.4°W) — December 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	265	6.8					2.0	3.0
01	260	6.3					2.0	3.0
02	252	5.7					2.0	3.1
03	230	>5.0					2.6	3.5
04	230	4.0					2.0	3.3
05	250	2.4					3.2	3.1
06	280	3.0					2.2	3.0
07	250	6.1	245	---	130	2.0	3.4	3.4
08	280	8.0	230	---	113	2.7	4.3	3.3
09	282	10.3	212	4.3	111	3.0	4.0	3.3
10	280	11.2	210	4.5	109	3.2	4.0	3.3
11	290	11.1	200	4.6	109	3.3	4.2	3.1
12	300	10.2	218	4.6	110	3.4	3.4	2.9
13	310	10.9	210	4.6	103	3.4	4.3	3.0
14	290	11.2	215	4.4	105	3.2	3.8	3.1
15	280	10.8	230	---	109	2.9	4.2	3.1
16	270	10.3	235	---	115	2.6	3.5	3.1
17	250	10.2	245	---	125	2.0	3.5	>3.0
18	245	10.2					3.5	>3.2
19	245	9.8					3.5	3.0
20	238	9.0					3.5	3.1
21	240	8.3					3.5	3.0
22	255	8.6					3.4	3.0
23	270	6.9					3.3	2.9

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

Table 73

Poitiers, France (46.6°N, 0.3°E) November 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	265	3.4					2.2	2.9
01	<265	3.5					2.1	2.9
02	255	3.4					2.0	2.9
03	255	3.4					2.0	3.0
04	250	3.1						3.1
05	225	2.9					1.9	3.3
06	<220	2.6						3.2
07	215	4.1	---	1.6			2.0	3.5
08	210	5.4	200	2.4	130	2.0	2.2	3.6
09	220	6.0	215	3.1	115	2.4	2.6	3.7
10	230	6.7	210	3.6	115	2.7	2.7	3.6
11	230	6.9	210	3.8	120	2.7	2.8	3.7
12	225	6.9	220	3.8	115	2.8	2.6	3.7
13	235	6.6	220	3.7	120	2.7	2.6	3.6
14	235	6.6	230	3.6	120	2.5	2.3	3.6
15	225	6.4	230	---	125	2.2	2.6	3.6
16	215	5.9	---	---	---	---	2.6	3.7
17	215	4.7					2.6	3.5
18	225	4.1					2.4	3.3
19	225	3.6					2.1	3.3
20	<230	3.4					2.0	3.2
21	240	3.0					2.0	3.0
22	<260	3.2					2.0	3.0
23	<255	3.3					2.0	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.6 Mc in 1 minute.

Table 74

Casablanca, Morocco (33.6°N, 7.6°W) November 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<250	3.4					2.2	2.9
01	---	3.2					2.2	2.9
02	---	3.2					2.2	2.9
03	---	3.2					2.1	3.0
04	<250	3.3						3.3
05	<220	3.2						3.5
06	<250	2.5						3.2
07	230	3.6			---	1.4	2.2	3.3
08	225	6.1	225	---	125	2.0		3.7
09	240	6.6	220	(3.6)	110	2.5		3.6
10	240	7.2	210	4.1	110	2.8		3.6
11	250	7.3	200	4.3	106	3.0		3.6
12	250	7.3	200	4.3	105	3.1		3.6
13	250	7.1	205	4.4	100	3.1		3.6
14	250	7.3	225	4.4	100	3.0		3.5
15	250	7.0	230	4.0	100	2.8		3.5
16	250	7.0	230	(3.6)	110	2.4	3.4	3.6
17	225	6.6			125	1.8	3.6	3.6
18	210	5.2					3.0	3.5
19	<220	3.9					2.4	3.2
20	---	3.6					2.6	3.1
21	<250	3.4					2.4	3.0
22	---	3.3					2.2	3.0
23	<250	3.4					2.2	3.0

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 75

Dakar, French W. Africa (14.6°N, 17.4°W) November 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	255	8.1					3.2	3.1
01	258	7.2					3.0	3.3
02	235	6.7					3.4	3.4
03	225	5.0					3.3	3.3
04	240	4.1					3.3	3.2
05	250	2.9					3.3	3.1
06	260	3.9			---	---	3.3	3.2
07	245	7.4	235	(4.0)	117	(2.2)	3.4	3.4
08	272	9.0	228	(4.4)	111	2.7	4.2	3.3
09	280	10.7	220	4.6	107	3.1	3.6	3.3
10	275	11.7	210	4.5	105	3.3	4.4	3.2
11	280	12.0	210	4.6	105	3.4	4.6	3.2
12	285	11.4	(220)	4.7	103	3.4	3.6	3.1
13	285	11.2	215	4.6	106	3.4	4.5	3.0
14	290	11.1	218	4.6	103	3.2	4.3	3.0
15	292	11.2	225	(4.4)	105	2.9	4.6	3.0
16	280	11.6	235	(4.2)	109	2.5	3.7	3.1
17	258	11.8	---	---	---	1.9	3.7	3.1
18	260	11.5					3.7	3.0
19	252	11.5					3.5	3.0
20	230	11.0					3.5	(3.0)
21	245	10.1					3.5	(3.0)
22	250	9.4					3.5	(3.1)
23	255	8.2					3.4	3.1

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

Table 76

Poitiers, France (46.6°N, 0.3°E) October 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	260	3.4					2.3	2.9
01	<275	3.3					2.1	2.9
02	<260	3.2					2.3	2.9
03	<270	3.2					2.2	2.9
04	240	3.1					2.2	3.1
05	220	2.7					2.1	3.3
06	<240	3.2			---	---	2.2	3.2
07	230	4.9	205	2.1	150	1.9	2.3	3.6
08	230	5.4	215	2.8	110	2.3	2.6	3.6
09	230	6.2	206	3.8	105	2.6	3.2	3.5
10	250	6.8	205	4.0	105	2.7	3.5	3.5
11	250	7.0	200	4.1	105	2.6	3.6	3.5
12	245	7.2	220	4.1	100	2.9	3.7	3.5
13	250	6.9	210	4.0	110	2.9	3.2	3.5
14	250	6.6	230	4.0	110	2.7	2.8	3.5
15	245	6.6	230	---	115	2.6	3.0	3.4
16	235	6.6	230	3.0	120	2.2	2.9	3.5
17	220	6.2	---	---	---	---	3.0	3.5
18	220	5.4					2.7	3.2
19	225	5.0					2.4	3.3
20	230	4.0					2.2	3.2
21	250	3.6					2.0	3.0
22	<250	3.4					1.9	3.0
23	250	3.4					2.0	2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.6 Mc in 1 minute.

Table 77

Casablanca, Morocco (33.6°N, 7.6°W) October 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	<300	3.4					2.2	2.9
01	<300	3.4					2.0	2.9
02	<270	3.3					2.2	2.9
03	<270	3.4					2.2	3.0
04	<250	3.3					2.0	3.2
05	<220	3.1						3.3
06	<226	2.8						3.2
07	226	4.8	220	---	---	1.7	2.2	3.6
08	225	6.2	225	3.5	110	2.3	2.8	3.7
09	235	6.6	215	4.0	100	2.6		3.6
10	250	6.6	200	4.3	100	3.0		3.5
11	250	7.1	200	4.4	100	3.1		3.4
12	260	7.5	200	4.4	100	3.2		3.4
13	270	7.8	225	4.5	100	3.2		3.3
14	270	7.8	235	4.5	100	3.1		3.3
15	260	7.6	230	4.3	100	2.9		3.4
16	250	6.4	240	4.0	105	2.6	3.4	3.4
17	240	8.7	240	(3.5)	110	2.1	3.6	3.5
18	220	7.5			---	---	3.1	3.6
19	200	5.2					2.6	3.4
20	---	4.3					2.6	3.1
21	<260	3.7					2.3	3.0
22	---	3.4					2.0	2.9
23	<270	3.3					2.4	2.9

Time: 0.0°.
Sweep: 1.6 Mc to 16.0 Mc in 1 minute 15 seconds.

Table 78

Dakar, French W. Africa (14.6°N, 17.4°W) October 1952

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	(M3000)F2
00	280	7.6					2.3	2.9
01	255	7.6						3.2
02	240	6.3					2.3	3.4
03	230	4.9					2.3	3.2
04	240	3.9					3.3	3.1
05	270	2.6					3.3	3.2
06	250	4.6					3.3	3.2
07	245	7.4	235	---	111	2.2	3.0	3.4
08	270	9.3	230	---	109	2.8	3.4	3.3
09	275	10.4	225	(4.5)	106	3.1	3.5	3.2
10	290	12.2	212	4.6	103	3.4	3.6	3.0
11	295	12.6	208	4.7	102	3.4		2.9
12	300	12.5	---	---	101	3.5		2.6
13	302	12.4	215	4.6	101	3.4	3.5	2.6
14	300	12.6	225	4.5	103	3.2		3.0
15	278	13.0	235	---	105	3.0	3.6	3.0
16	280	12.3	235	---	111	2.7	3.5	3.0
17	260	11.6	240	---	---	2.1	3.5	3.0
18	260	11.4					3.5	2.6
19	280	11.4					3.4	2.6
20	265	11.1					3.4	2.6
21	260	10.4					2.2	2.9
22	272	9.5						2.9
23	275	8.6					2.7	2.8

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

TABLE 79

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

Form adopted June 1946

IONOSPHERIC DATA

h'F2 (Characteristic), Km (Unit), June (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., N.B.

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]^{A}	260	250	270	270	240	220	400	320	290	320	390	350	330	320	320	300	290	280	250	220	220	260	[280]^{A}
2	290	260	260	250	250	250	L^{H}	280	330	330	400	300	310	320	340	310	330	270	C	C	C	C	C	C
3	C	(250)^{A}	(300)^{A}	240	270	250	[280]^{A}	310	360	290	360	420^{H}	380	330	340	330	360	290	290	(250)^{A}	220	240	230	240
4	260	250	260	(290)^{S}	(250)^{S}	(240)$^{S}_{H}$	(250)^{L}	[260]^{A}	280	310^{H}	[350]^{A}	[400]$^{A}_{H}$	360^{H}	380	340	(320)^{A}	310	310	270	[260]^{A}	(250)^{A}	(240)^{A}	(260)^{A}	A
5	(270)^{A}	A	A	A	A	250	(350)^{A}	320	290	400	520	G	490	380	330	310	300	320	260	230	240	260	250	250
6	260	270	240	230	280	240	L	340^{H}	260	310	340	400	410	370	390	350	300	340	280	250^{K}	240^{K}	240^{K}	270^{K}	290^{K}
7	280^{K}	250^{K}	240^{K}	260^{K}	(330)$^{S}_{K}$	310^{K}	L$^{H}_{K}$	520^{K}	G^{K}	370^{K}	410^{K}	530^{K}	440^{K}	370^{K}	380^{K}	430^{K}	370^{K}	340^{K}	290^{K}	260^{K}	240^{K}	(280)$^{A}_{K}$	250^{K}	260^{K}
8	300^{K}	280^{K}	280^{K}	240^{K}	(270)$^{S}_{K}$	280^{K}	G^{K}	G^{K}	380^{K}	[380]$^{A}_{K}$	370^{K}	360^{K}	340^{K}	[360]$^{A}_{K}$	390^{K}	400^{K}	420^{K}	370^{K}	330^{K}	270^{K}	(290)$^{A}_{K}$	250^{K}	240^{K}	270^{K}
9	(270)$^{A}_{K}$	270$^{F}_{K}$	270	280	280	250	310^{H}	(280)$^{F}_{K}$	330	300	510	490	380	370	410	390	410	330	280	250	240	240	[240]^{A}	(240)^{S}
10	A	A	280	290	(260)^{S}	220	L	380	310	380	340	390	330	350	360	(370)^{S}	300	300	260	250	230	230	240	250
11	250	240	(250)^{A}	(250)^{A}	(270)^{A}	240	(270)^{L}	350	360	420	320	330	320	320	(410)^{S}	340	330	310	280	250	220	230	240	240
12	230	260	280	280	280	(260)^{S}	L	G	440	530^{K}	520^{K}	480^{K}	G^{K}	A^{K}	G^{K}	430^{K}	350^{K}	340^{K}	280^{K}	250^{K}	260^{K}	250^{K}	240^{K}	250^{K}
13	260^{K}	240^{K}	230^{K}	(300)^{A}	A	260	L	500	360	370	430	400	380	350	470	370	350	310	290	270	250	240	220	260
14	280	260	280	290	290	250	G	G	G	420	330^{K}	(510)$^{H}_{K}$	(350)$^{S}_{K}$	620^{K}	410$^{H}_{K}$	480^{K}	[460]$^{A}_{K}$	370^{K}	300^{K}	270^{K}	240^{K}	(260)$^{A}_{K}$	[300]$^{A}_{K}$	(290)$^{A}_{K}$
15	280^{K}	250^{K}	250	(260)^{S}	310	270	390	470	400	390	310	430	510	470	390	420	370	350	330	270	250	250	270	260
16	230	250	240	250	290	250	310^{H}	400	360	300^{F}	330	320	410	400^{F}	380	360	360	320	290	250	240	230	250	270
17	260	260	270	250	240	250	280	370	320	320	320	[380]$^{S}_{H}$	340	380	400	330	(380)^{A}	310	300	230	240	230	250	250
18	270	270	220	270	300	250	(450)^{S}	520	520	620	400	570^{H}	G	510	[440]^{C}	470	410	350	300	260	250	240	260	(300)^{A}
19	270	290	250	[260]^{A}	(300)^{A}	(250)^{A}	(570)^{S}	430	320	460	G	650	G	620^{K}	480^{K}	470^{K}	400^{K}	A^{K}	A^{K}	A^{K}	250^{K}	240^{K}	240^{K}	A^{K}
20	240^{K}	240^{K}	260	310	270	250	280	340	280	260	290	[340]^{A}	360	360	310	310	300	300	280	250	240	240	250	[280]^{A}
21	(270)^{A}	230	260	250	(290)^{A}	270	L	290	320	310	[340]^{A}	370	320	330	[320]^{C}	320	330	320	300	250	230	230	270	260
22	270	260	240	250	280	270	L	300	290	270^{H}	320	370	430^{H}	350	300	310	C	C	290	270	220	260	250	(280)^{A}
23	(280)^{A}	A	280	260	240	250	250	L^{H}	340	380	340	A	A	(390)^{A}	340	310	(370)^{S}	340	290	250	220^{K}	220^{K}	250^{K}	270^{K}
24	290^{K}	280^{K}	270^{K}	(280)$^{A}_{K}$	300^{K}	250^{K}	G^{K}	G^{K}	G^{K}	G^{K}	520^{K}	430^{K}	520^{K}	420^{K}	(450)$^{C}_{K}$	(480)$^{A}_{K}$	A^{K}	A^{K}	A^{K}	A^{K}	(240)$^{A}_{K}$	(250)$^{A}_{K}$	260^{K}	260^{K}
25	310^{K}	260^{K}	A	A	280	(260)^{A}	420	320	280^{H}	430^{H}	360	320	370	440	410	350	320	330	280	270	260	240	260	260
26	280	250	250	(230)^{A}	240	A	L	320	290	310	[310]^{A}	310	310	410	370	370	370	330	290	A	A	270	250	A
27	A	240	240	280	(280)^{S}	(280)^{A}	330	460	420	320	340	390	440^{H}	500	420	380	320	280	260	250	250	270	250	230
28	240	270	250	260	(300)^{S}	A	A	A	A	A	420	440	320^{H}	470	430	360	350	320	[300]^{A}	270	240	250	260	240
29	260	270	260	270	260	280	S	G	350	330	330	400	370	390	370	340	330	320	300	250	250	250	260	240
30	250	260	[280]^{A}	290	(290)^{S}	230	440^{H}	380	350	340^{H}	340	320	360	570^{H}	320	370	330	320	310	270	240	230	240	280
31																								
Median	270	260	260	260	280	250	330	380	340	340	340	400	370	380	380	360	350	320	290	250	240	240	250	260
Count	27	27	28	28	28	28	19	28	29	29	30	29	29	29	30	30	28	27	27	26	28	29	29	26

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 80

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

Form adopted June 1946

IONOSPHERIC DATA

foF2 (Characteristic), Mc (Unit), June (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., N.B.,

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	39	(39)^{S}	32	27	25	33	37	45	53	63	57	56	60	63	64	63	61	64	68	72	72	57	48	44
2	43	42	38	34	29	33	40^{H}	49	52	58	60	64	64	56	58	60	58	63	C	C	C	C	C	C
3	C	(39)$^{F}_{S}$	34	30^{F}	29^{F}	36	42	50	49	52	51	52^{H}	53	56	56	54	55	58	57	64	67	58	49	43
4	39	35	31	24	23	(30)^{H}	41	[46]^{A}	50	(51)$^{A}_{H}$	[50]^{A}	(49)^{H}	52^{H}	54	56	57	60	58	60	(57)^{A}	58	50	46$^{J}_{A}$	(41)$^{P}_{A}$
5	39	A	A	A	A	29	(38)^{A}	45	50	48^{F}	(47)^{S}	<43^{G}	48	54	57	57	57	52	55	50	49	43	41	38
6	34	32	28	23	22	32	38	43^{H}	54	51	49	51	53	54	53	62	72	70	78	69^{K}	67^{K}	62^{K}	43^{K}	43^{K}
7	41^{K}	38^{K}	33^{K}	22$^{F}_{K}$	18^{K}	27^{K}	32$^{H}_{K}$	39^{K}	<37$^{G}_{K}$	48^{K}	46^{K}	44^{K}	48^{K}	50^{K}	49^{K}	48^{K}	49^{K}	50^{K}	52^{K}	55^{K}	58^{K}	51^{K}	42^{K}	36^{K}
8	32^{K}	29^{K}	30^{K}	25^{K}	21^{K}	28^{K}	<37$^{G}_{K}$	<39$^{G}_{K}$	46^{K}	[50]$^{A}_{K}$	54^{K}	56^{K}	57^{K}	[56]$^{A}_{K}$	51^{K}	47^{K}	47^{K}	47^{K}	48^{K}	48^{K}	55^{K}	51^{K}	43^{K}	39^{K}
9	39^{K}	32$^{F}_{K}$	29^{F}	26^{F}	24^{F}	36^{F}	43^{H}	49^{H}	50	49	46	46	50	50	49	49	48	53	56	55	55	50	[44]^{A}	(38)$^{A}_{S}$
10	(32)$^{F}_{S}$	(31)$^{F}_{S}$	27^{F}	24^{F}	(23)$^{A}_{S}$	34	41	47	47	50	52	52	55	58^{F}	57	56	60	58	57	58	60	55	46	44
11	41	38	34	27	23	36	43	45	48	50	61	55	57	(54)$^{A}_{S}$	(53)^{S}	56	58	60	67	67	60	56	49	45
12	38	30	28	28	24	26	33	<36^{G}	42	45^{K}	48^{K}	47^{K}	<42$^{G}_{K}$	A^{K}	<43$^{G}_{K}$	49^{K}	53^{K}	^{K}(52)$^{P}_{S}$	^{K}(52)$^{P}_{S}$	49^{K}	48^{K}	^{K}(49)$^{P}_{S}$	43^{K}	38^{K}
13	32^{K}	29^{K}	29^{K}	21^{F}	[23]^{A}	30	(38)^{S}	42	48	48	49	53	55	55	49	55	56	56	63	56	54	57	(45)^{S}	(38)$^{F}_{S}$
14	40	37	31^{F}	28^{F}	27	29	<33^{G}	<37^{G}	<40^{G}	47	50^{K}	(48)$^{H}_{K}$	^{K}(52)$^{P}_{S}$	46^{K}	50$^{H}_{K}$	^{K}(49)$^{A}_{S}$	^{K}[47]$^{A}_{S}$	49^{K}	52^{K}	51^{K}	55^{K}	^{K}(49)$^{P}_{A}$	[45]$^{A}_{K}$	^{K}(42)$^{P}_{A}$
15	42^{K}	37$^{F}_{K}$	35	31	26	33	38	(45)$^{P}_{S}$	(50)^{S}	51	58	53	49	50	50	51	51	51	50	56	(61)^{S}	(57)^{S}	(49)^{S}	(58)$^{J}_{S}$
16	(47)$^{S}_{D}$	43	(38)$^{F}_{S}$	26^{F}	(24)$^{F}_{S}$	35	(42)$^{S}_{H}$	48	52	(60)$^{F}_{S}$	58	56	(54)$^{F}_{S}$	54^{F}	54^{F}	57	56	62	62	62	(62)^{S}	54	48	43
17	42	39	36	32	29	36	(47)$^{P}_{S}$	47	54	58	58	[57]^{H}	56	56	56	57	56	64	65	66	66	60$^{J}_{S}$	51	(45)^{S}
18	42	42	35	32	27	33	(38)$^{F}_{S}$	(40)^{S}	(44)^{S}	(44)^{S}	49	(49)^{H}	<45^{G}	49	[50]^{C}	(50)^{S}	49	50	54	56	(53)^{S}	[50]^{S}	47$^{J}_{S}$	47
19	47	(43)$^{F}_{S}$	39$^{J}_{S}$	(33)$^{A}_{F}$	27	30	(38)^{S}	46	55	46	<45^{G}	46	<45^{G}	47^{K}	49^{K}	48^{K}	51^{K}	[52]$^{A}_{K}$	52^{K}	[54]$^{A}_{K}$	61^{K}	58^{K}	^{K}(53)$^{J}_{S}$	47^{K}
20	48$^{F}_{K}$	42$^{F}_{K}$	37^{F}	32^{F}	30^{F}	35	48	54	67	69	69	[62]^{A}	63	62	71	72	68	68	65	72	73	66	58	[50]^{A}
21	(48)$^{A}_{3}$	(50)^{S}	37	32^{F}	30	35	44	(52)$^{P}_{S}$	58	60	[58]^{A}	57	63	63	[62]^{C}	63	58	60	64	68	67	52	(48)$^{P}_{S}$	47
22	44	41	42^{F}	35^{F}	33^{F}	37	44	52	63	71^{H}	59^{F}	59	56^{H}	63	69	63	C	C	67	72	70	63	54	(43)^{S}
23	49	50^{F}	42^{F}	42^{F}	37^{F}	38	41	42^{H}	50	53	55	59$^{J}_{A}$	[56]^{A}	54	58	62	(57)^{S}	66	78	77	72	56^{K}	(41)$^{S}_{K}$	42^{K}
24	(42)$^{S}_{K}$	38^{K}	36^{K}	32^{K}	27^{K}	31^{K}	<35$^{G}_{K}$	<37$^{G}_{K}$	<38$^{G}_{K}$	<39$^{G}_{K}$	43^{K}	46^{K}	46^{K}	49^{K}	47^{K}	(48)$^{A}_{K}$	A^{K}	A^{K}	A^{K}	A^{K}	58^{K}	^{K}(55)$^{P}_{S}$	49^{K}	48^{K}
25	48$^{F}_{K}$	^{K}(42)$^{A}_{S}$	A	A	31^{F}	32^{F}	(39)^{S}	48	46^{H}	48^{H}	52	54	56	50	(50)$^{A}_{S}$	55	(54)^{S}	53	52	54	54	(56)$^{F}_{S}$	46^{F}	(47)$^{F}_{S}$
26	39	(42)$^{F}_{S}$	42^{F}	(33)$^{F}_{S}$	29^{F}	[35]^{A}	41	49	57	56	55	54	54	49	52	50	52	58	65	[67]^{A}	[64]^{A}	50	48	A
27	A	37^{F}	30	24	23^{F}	31^{F}	38	40	44	55	58	47	48^{H}	47	50	52	55	60	54	54	54	53	52	47
28	(38)$^{J}_{S}$	(31)$^{J}_{S}$	29	27^{F}	22	29	(40)$^{J}_{A}$	A	A	(54)$^{J}_{A}$	53	50	50^{H}	48	50	53	54	56	62	63	63	54	48	40
29	35	33^{F}	32^{F}	(31)$^{F}_{S}$	26^{F}	30	S	<37^{G}	47	52	54	52	52	52	52	54	55	55	60	68	60	54	49	(44)$^{S}_{D}$
30	39	31	[28]^{A}	25^{F}	21^{F}	31	36^{H}	43	48	(48)$^{S}_{H}$	52	54	49	48^{H}	52	50	52	50	52	58	60	54	(41)$^{A}_{S}$	35
31																								
Median	40	38	34	28	26	32	39	45	50	51	52	52	53	54	52	54	55	57	58	58	60	54	48	43
Count	28	29	28	28	29	30	29	29	29	30	30	30	30	27	30	30	28	28	28	28	29	29	29	28

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

TABLE 81

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

Form adopted June 1946

28

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

IONOSPHERIC DATA

National Bureau of Standards (Institution)

Observed at Washington, D.C.

Lat 38.7°N, Lang 77.1°W

75°W Mean Time

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

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

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	3.8	3.7	2.9	2.5	2.7	3.6	(4.0)^{S}	5.1	5.9	6.1	5.5	5.9	6.1	6.2	6.2	6.2	6.2	6.5	6.8	7.5	6.3	5.1	4.5	4.3
2	4.3	4.2	3.5	3.2	3.0	3.7	4.7	4.8^{H}	5.8	5.8	6.4	7.0	6.1	5.6	6.0	5.7	6.2	6.2	C	C	C	C	C	C
3	C	3.7^{F}	3.5$^{F}_{S}$	(3.0)$^{F}_{S}$	2.8	4.1	4.6	4.8	5.3	(5.3)$^{H}_{S}$	5.4	(5.1)^{A}	(5.4)^{A}	5.7	5.5	5.1	5.6	5.6	6.3	6.3	6.0	(5.2)^{S}	4.6	4.2
4	3.9	3.3	2.8	2.5	2.7	3.7^{H}	(4.3)^{H}	(4.8)^{A}	(5.1)^{H}	(5.0)^{H}	(5.0)^{H}	5.0	[5.3]^{A}	5.4	5.7	5.9	6.0	5.9	5.8	6.0$^{J}_{A}$	5.3	4.8	[4.4]^{A}	(4.0)$^{P}_{S}$
5	3.8	A	A	A	A	[3.4]^{A}	4.2^{H}	4.8	5.0	5.3	< 4.3^{G}	4.4	5.3	5.4	5.9	5.7	5.5	5.3	5.3	4.9	4.7	4.2	4.0	3.6
6	3.2	3.1	2.6^{F}	2.3	2.6^{F}	3.5^{H}	4.2	4.9	5.0	4.6	5.2	5.2	5.2	5.5	5.8	7.0	7.1	7.9	7.1	6.8^{K}	5.9^{K}	4.8^{K}	4.3^{K}	4.1^{K}
7	4.0^{K}	3.5^{K}	(2.6)$^{F}_{S}$	1.8$^{F}_{K}$	2.4^{K}	2.9^{K}	< 3.3$^{G}_{K}$	(3.9)$^{J}_{S}$	4.5^{K}	4.9^{K}	4.2^{K}	4.8^{K}	4.9^{K}	5.0^{K}	4.7^{K}	4.8^{K}	4.9^{K}	5.2^{K}	5.3^{K}	5.8^{K}	5.8^{K}	[4.6]$^{A}_{K}$	4.0^{K}	3.5^{K}
8	3.2^{K}	3.1^{K}	3.2^{K}	(2.2)$^{J}_{S}$	2.5$^{F}_{S}$	3.3^{K}	A^{K}	A^{K}	4.6^{K}	[4.8]$^{C}_{K}$	5.0$^{H}_{K}$	5.6$^{H}_{K}$	5.8^{K}	5.5^{K}	4.8^{K}	4.3^{K}	4.6^{K}	5.0$^{H}_{K}$	4.9^{K}	(5.1)$^{S}_{K}$	5.4^{K}	4.9^{K}	4.0^{K}	3.9^{K}
9	3.5^{K}	2.9^{F}	(2.5)$^{J}_{S}$	2.5^{F}	2.6^{F}	4.3^{H}	4.4	4.8	5.3	[4.8]^{A}	[4.6]^{A}	4.8	5.2	5.0	5.0	4.9	5.0	5.4	5.6	5.3	(5.0)^{S}	4.7	[4.2]^{A}	(3.6)$^{F}_{S}$
10	(3.3)$^{F}_{S}$	(3.0)$^{F}_{S}$	2.5	2.3	(2.2)$^{A}_{S}$	3.6^{F}	4.7	4.7	4.8	5.7	5.2	5.5	5.5	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.8	4.7	4.2^{H}	4.2
11	3.9	3.7	3.0	2.5	2.8	4.1	4.2	4.6	4.8	5.5	5.8	5.5	5.6^{H}	(5.2)^{S}	5.4	5.7	6.0	6.6	6.5	6.5	5.7	[5.2]^{S}	4.9	4.2
12	3.3	2.9	2.9	2.4	2.4	2.9	3.4	<3.7^{G}	< 4.1^{G}	4.7^{K}	4.7^{K}	4.7^{K}	A^{K}	4.5^{K}	4.7^{K}	5.0^{K}	5.3^{K}	5.2^{K}	5.0^{K}	4.6^{K}	5.1^{K}	4.8^{K}	3.9^{K}	3.3^{K}
13	3.0^{K}	3.1^{K}	2.6$^{F}_{K}$	[2.4]^{A}	2.3	3.5	4.2	4.5	(4.8)^{A}	4.9	4.9	5.2	5.7	5.0	5.4	5.6	5.5	5.5	5.2	5.6	5.6	5.4	3.8	3.1
14	3.8	3.4^{F}	3.1^{F}	2.8^{F}	2.8	3.3	(3.7)^{S}	<3.8^{G}	(4.3)^{S}	5.1	< 4.3$^{G}_{H}$	5.1^{K}	(4.7)$^{H}_{K}$	4.9^{K}	5.0^{K}	(4.7)$^{A}_{K}$	4.9^{K}	5.3^{K}	[5.2]$^{A}_{K}$	5.2$^{J}_{S}$	(5.2)$^{J}_{A}$	(4.9)$^{P}_{A}$	(4.0)$^{P}_{A}$	(4.2)$^{J}_{A}$
15	4.2^{K}	3.8	3.2	2.8	2.9	3.7	(4.1)^{S}	4.6	5.0	6.0^{H}	5.7	[5.0]^{S}	4.9	5.0	5.2	4.9	5.0	5.0	5.2	6.2	(6.2)$^{J}_{S}$	(4.7)$^{J}_{S}$	(5.0)^{S}	(5.0)$^{J}_{S}$
16	(4.5)$^{P}_{S}$	(3.8)$^{F}_{S}$	3.2	(2.6)$^{F}_{S}$	2.6	3.8	4.8	5.4	5.4	6.0$^{F}_{S}$	[5.6]$^{F}_{S}$	5.5	5.2	5.3	5.4	5.6	5.9	6.2	6.5	6.0	(5.8)$^{J}_{S}$	4.8	4.7	4.2
17	4.1	3.9	3.5	3.3	3.1	4.0	(4.6)$^{J}_{S}$	5.0^{H}	5.4^{H}	6.3^{F}	(5.8)^{H}	5.6^{H}	5.6^{H}	5.6	5.8	5.8	(6.0)^{J}	6.3	6.7	6.6	6.4	5.5	4.8	4.4
18	4.2	4.1	(3.1)$^{J}_{S}$	2.9	2.9	3.7^{F}	3.9$^{J}_{S}$	4.4	(4.5)^{S}	4.7^{H}	4.9	(4.9)$^{P}_{S}$	5.0	5.0	5.0	5.0	5.0	5.3^{F}	5.4	5.2	(5.9)$^{J}_{S}$	4.9	4.7	4.8
19	(4.2)$^{P}_{S}$	(3.9)$^{J}_{S}$	3.6$^{J}_{S}$	2.9	2.9	3.1	[4.0]^{A}	5.0	4.9	4.7	<4.5^{G}	<4.5^{G}	4.7	4.9^{K}	4.8^{K}	5.0^{K}	5.2^{K}	[5.2]$^{A}_{K}$	[5.2]$^{A}_{K}$	5.6^{K}	(6.1)$^{J}_{S}$	5.5^{K}	4.8^{K}	4.8$^{F}_{K}$
20	4.4$^{F}_{K}$	4.1^{F}	3.2	3.2^{F}	3.1	4.3	4.9	5.9	6.5	6.2	6.3	6.0	6.4	6.6	7.1	7.0	6.8	(6.6)^{A}	6.8	7.2	6.7	5.8	5.4	(5.0)$^{J}_{S}$
21	5.2	3.8$^{F}_{S}$	3.5^{F}	3.0^{F}	3.1	4.0	5.0	5.5	6.3	(5.9)^{A}	A	6.3	6.2	6.3	6.3	5.8	5.9	6.0	6.7	6.3	6.3	(4.8)$^{F}_{S}$	4.7	(4.4)$^{F}_{S}$
22	(4.3)$^{J}_{S}$	4.1	3.7^{F}	3.2^{F}	3.2^{F}	4.2	4.8	5.6	6.5	6.3	5.6	5.3	5.5	6.7	6.8	C	C	6.4	6.6	7.8	6.7	6.2	4.9	(4.3)^{S}
23	5.0^{F}	4.4^{F}	4.2^{F}	4.1	3.8	4.1	4.1^{H}	4.5	5.0	5.5	5.7	A	A	5.6	6.1	6.7^{H}	5.8	7.1	7.6	7.4	6.0^{K}	4.8$^{J}_{S}$	4.0^{K}	4.2^{K}
24	4.0^{K}	3.8^{K}	3.5^{K}	2.9^{K}	2.9^{K}	3.4^{K}	< 3.5$^{G}_{K}$	4.0^{K}	<3.9$^{G}_{K}$	4.4^{K}	4.5^{K}	4.7^{K}	4.7^{K}	4.7^{K}	C^{K}	A^{K}	A^{K}	(5.2)$^{A}_{K}$	5.4^{K}	5.5^{K}	6.0$^{J}_{S}$	(5.2)$^{S}_{K}$	4.9^{K}	4.8^{K}
25	^{K}(4.2)$^{A}_{S}$	3.6	[3.4]^{A}	3.2	3.0	3.9	<(3.6)$^{G}_{F}$	4.5	(4.9)^{S}	5.3	5.4	5.4^{H}	5.2	5.1^{F}	[5.2]^{A}	5.8	(5.2)^{S}	5.2	4.9	5.4	(5.8)$^{J}_{S}$	(4.8)$^{A}_{S}$	(4.5)$^{F}_{S}$	4.1$^{J}_{S}$
26	3.9^{F}	4.2	(4.0)$^{F}_{S}$	3.0$^{F}_{S}$	[3.4]^{A}	(3.7)$^{A}_{S}$	4.5	5.2	5.4	5.4	5.8	5.5	5.0	5.2^{H}	5.3	5.2	5.6	6.2	6.6	7.0	5.9	4.5^{F}	4.7	A
27	3.9	3.3	2.6	2.5	2.6^{F}	3.3^{F}	4.0	(4.0)$^{J}_{S}$	5.2	5.7	5.6	4.8	4.7	5.0	5.1	5.5	5.6	5.7	5.4	5.4	5.2	5.2	(4.1)$^{J}_{S}$	4.2^{F}
28	3.4^{F}	(3.2)$^{F}_{S}$	2.7^{F}	2.4	(2.3)^{A}	[3.4]^{A}	<3.8^{G}	A	5.2	[5.4]^{A}	5.6^{H}	5.7	[4.9]^{A}	[4.9]^{A}	5.0	5.3	5.5	5.6	6.6	6.6	5.8	5.0	4.5	3.8
29	(3.2)$^{F}_{S}$	3.1^{F}	3.1^{F}	2.8^{F}	2.4^{F}	3.3^{H}	4.2	4.5	4.9	5.5^{H}	5.3	5.2^{H}	5.3	5.0	5.4	5.4	5.6	5.5	6.6	6.4	6.0	5.3	4.6	4.1
30	3.5	2.8	2.7^{F}	2.1^{F}	2.4	3.4	4.2	4.7	5.2	5.4	5.3	5.5	4.9	4.9	5.2	5.2	5.1	5.2	5.6	6.2	5.8	4.9$^{J}_{S}$	3.8	3.5
31																								
Median	3.9	3.7	3.1	2.8	2.8	3.6	4.2	4.8	5.0	5.4	5.3	5.2	5.2	5.2	5.4	5.6	5.6	5.6	5.7	6.0	5.8	4.9	4.5	4.2
Count	29	29	29	29	29	30	29	28	30	30	29	29	28	30	29	28	28	30	29	29	29	29	29	28

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 82

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

Form adopted June 1946

IONOSPHERIC DATA

h'F1 (Characteristic), Km (Unit), June (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., N.B.

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	Q	230	A	A	A	200	200 H	190 H	200 H	210	210	210	A	Q				
2						Q	200 H	200	230 H	[230] A	(230) A	200 H	200 H	210 H	210	180 H	200 H	210 H	C	Q				
3						Q	A	220	[200] A	190	190	A	A	A	(220) A	200 H	190 H	180 H	(200) A	Q				
4						Q	220	A	A	A	A	(210) A H	(220) A	(220) A	210	A	A	A	230 H	Q				
5						Q	A	(220) A	A	190	200 H	200	200 H	210	210 H	200 H	200	200 H	210	210				
6						Q	230	(220) A	(210) A	190 H	180 H	180	210 H	200 H	200 H	200	200 H	210 H	220	230 K				
7						220 K	210 H K	220 K	(210) A K	200 H K	210 K	200 K	180 H K	190 H K	190 H K	200 K	220 K	240 K	A K	Q K				
8						210 K	240 K	A K	A K	A K	A H K	180 H K	200 H K	A K	A K	210 K	200 H K	190 H K	250 K	A K				
9						Q	210	200 H	220 H	180 H	A	A	A	A	200	A	A	210	230	230				
10						Q	200	210	190	220	190 H	200	210	(220) A	210	(220) A	200	A	A	230				
11						Q	210	200	210	180	220	200 H	220	[210] A	200	250	210	210 H	220	Q				
12						Q	210	220	[220] A	210 K	200 K	180 H K	200 K	A K	200 K	210 K	210 K	210 H K	210 K	(230) A K				
13						Q	(230) A	210 H	A	200 H	200 H	200	180 H	190 H	170 H	210	200 H	220	A	250				
14						Q	210 H	220	(210) A	190 H	(200) A K	(230) A K	(190) A K	190 H K	(210) A K	[210] A K	(210) A K	240 K	(240) A K	(250) A K				
15						Q	(220) A	220 H	210	200 H	180 H	180 H	180 H	220	210	200	200	220	220	250				
16						Q	240	200	200	200	210 H	200	210	190	200	200 H	220 H	220 H	(230) A	230				
17						Q	210	200	190 H	190 H	200	200 H	210 H	190	(200) A H	220	[220] A	(230) A H	A	A				
18						Q	230	(230) A	(220) A	[210] A	(200) A	200	200 H	200	[200] C	190 H	(230) A	220 H	A	A				
19						Q	A	A	A	210	190 H	200 H	190 H	200 K	220 H K	(230) A K	A K	A K	A K	A K				
20						Q	A	A	(240) A	200 H	A	A	210	210 H	210	(220) A H	210 H	A	A	A				
21						A	230	A	A	A	A	A	190 H	200	[220] C	200	200 H	180 H	200	240				
22						A	230	230	[220] A	210	(200) A	190 H	180 H	200	200 H	220	C	C	240	Q				
23						240	220	220	210	200	220	A	A	A	A	200	[200] A	(210) S	220 H	220				
24						Q K	220 K	210 H K	220 K	(200) A K	200 K	(220) A K	(220) A K	A K	C K	A K	A K	A K	A K	A K				
25						A	220	200	210	200	200	210 H	200	200	(200) A	[200] A	200	(200) A	220	A				
26						A	(220) A	(240) A	180 H	(200) A	[200] A	200 H	190	190	190	190	180 H	A	A	A				
27						A	250	200 H	[210] A	220 H	[200] A	180 H	190 H	200	190	210 H	210	200 H	A	A				
28						A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
29						200	230	200 H	(200) A	200	180 H	190 H	190 H	200 H	220 H	200	200	210 A	220 H	A				
30						Q	220	210	200	200	190	170	230	200 H	200	200	(220) A	220	A H	A				
31																								
Median						—	220	220	210	200	200	200	200	200	200	200	200	210	220	230				
Count						4	24	24	22	25	23	24	26	23	26	26	24	22	16	11				

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

CPO-N36048

TABLE 83

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

Form adopted June 1946

IONOSPHERIC DATA

foF1 (Characteristic), Mc (Unit), June (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., N. B.

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	Q	3.6	4.0	4.1	[4.3]^{A}	4.5	4.4^{H}	4.3^{H}	4.3^{H}	4.3	4.2	3.9	A	Q				
2						Q	3.7^{H}	3.9	4.1^{H}	4.1	4.5	4.5^{H}	4.5^{H}	4.5^{H}	4.3	4.2^{H}	4.1^{H}	3.9^{H}	C	Q				
3						Q	A	3.8	(4.0)^{A}	4.1	4.2	4.4	A	A	(4.2)^{A}	4.2^{H}	(3.9)^{H}	3.7^{H}	3.2	Q				
4						Q	L	A	(4.1)^{A}	A	A	(4.3)^{H}	4.3	(4.3)^{A}	4.2	A	A	A	(3.3)^{L}	Q				
5						Q	A	3.8	A	4.1	4.3^{H}	4.3	4.2^{H}	4.3	4.2^{H}	4.1^{H}	4.0	3.8^{H}	3.4	L				
6						Q	3.3	3.8	4.0	4.2^{H}	4.3^{H}	4.3	4.4^{H}	4.3^{H}	4.3^{H}	4.2	4.1^{H}	4.0^{H}	3.3	L^{K}				
7						L^{K}	L^{K}	3.5^{K}	3.7^{K}	4.0$^{H}_{K}$	4.2^{K}	4.2^{K}	4.2$^{H}_{K}$	4.2$^{H}_{K}$	4.2$^{H}_{K}$	4.2^{K}	4.0^{K}	3.9^{K}	A^{K}	Q^{K}				
8						L^{K}	3.7^{K}	3.9^{K}	4.0^{K}	[4.1]$^{A}_{K}$	4.2$^{H}_{K}$	4.2$^{H}_{K}$	4.2$^{H}_{K}$	[4.2]$^{A}_{K}$	4.3^{K}	4.1^{K}	4.0$^{H}_{K}$	3.7$^{H}_{K}$	3.4^{K}	A^{K}				
9						Q	3.6	3.9^{H}	4.1^{H}	4.2^{H}	4.2	A	A	A	4.3	(4.2)^{A}	4.0	3.9	(3.5)^{L}	L				
10						Q	L	4.1	4.1	4.2	4.4^{H}	4.4	4.3	4.4	4.2	4.2	4.1	3.9	L	L				
11						Q	L	3.8	4.1	4.3	4.4	4.4^{H}	4.5	[4.4]^{A}	(4.3)^{S}	4.3	4.1	3.9^{H}	L	Q				
12						Q	L	3.6	[3.8]^{A}	4.1^{K}	4.3^{K}	4.3$^{H}_{K}$	4.2^{K}	A^{K}	4.3^{K}	4.2^{K}	(4.0)$^{S}_{K}$	4.0$^{H}_{K}$	3.4^{K}	L^{K}				
13						Q	3.5	3.8^{H}	(4.2)^{A}	4.2^{H}	4.3^{H}	4.3	4.5^{H}	4.3^{H}	4.3^{H}	4.2	4.2^{H}	4.0	3.5	L				
14						Q	3.3^{H}	3.7	4.0	4.1^{H}	4.2^{K}	4.3^{K}	(4.3)$^{S}_{H}$	4.4$^{H}_{K}$	4.3^{K}	[4.2]$^{A}_{K}$	(4.1)$^{A}_{K}$	3.9^{K}	L^{K}	L^{K}				
15						Q	3.4	3.9^{H}	4.0	4.2^{H}	4.4^{H}	(4.4)$^{S}_{H}$	4.5^{H}	4.3	4.3	4.3	4.1	4.1	3.5^{F}	L				
16						Q	L	4.0	4.2	4.3^{F}	(4.3)^{S}	4.5^{F}	4.5^{F}	4.4^{F}	(4.5)^{S}	4.4^{H}	4.3^{H}	4.0^{H}	L	L				
17						Q	3.5	3.8	3.9^{H}	4.3^{H}	(4.4)^{A}	(4.6)^{H}	4.6^{H}	4.5	(4.4)^{H}	4.3	[4.2]^{A}	(4.0)^{H}	A	A				
18						Q	3.3^{F}	3.6	(4.0)^{A}	(4.2)^{A}	4.3	(4.4)^{A}	4.5^{H}	4.5	[4.4]^{C}	4.3^{H}	4.2^{H}	4.1^{H}	A	A				
19						Q	3.3	A	A	4.2	4.5^{H}	4.4^{H}	4.5	4.5^{K}	4.4$^{H}_{K}$	(4.2)$^{A}_{K}$	A^{K}	A^{K}	A^{K}	A^{K}				
20						Q	L	4.2	4.2	4.5^{H}	A	A	4.6	(4.5)^{A}	4.5	4.5^{H}	4.3^{H}	A	A	A				
21						A	L	A	A	A	A	A	(4.5)$^{S}_{H}$	4.6	[4.5]^{C}	4.4	4.3^{H}	4.0^{H}	3.7	L				
22						A	L	4.0	[4.2]^{A}	4.4	(4.5)^{A}	4.7^{H}	4.7^{H}	4.5	(4.5)$^{S}_{H}$	4.3	C	C	3.6	Q				
23						L	L	4.0	4.1	4.2	4.5	A	A	A	A	4.4	[4.2]^{A}	4.1	3.6^{H}	L				
24						Q^{K}	3.5^{K}	3.7$^{H}_{K}$	3.8^{K}	3.9^{K}	4.2^{K}	4.2^{K}	4.3^{K}	4.3^{K}	C^{K}	A^{K}	A^{K}	A^{K}	A^{K}	A^{K}				
25						A	3.6	3.6	(3.8)^{F}	4.2	4.3	(4.4)$^{S}_{H}$	(4.4)^{S}	4.4	4.3	[4.2]^{A}	4.1	4.0	3.4	A				
26						A	L	3.9	3.9^{H}	4.2	[4.3]^{A}	4.4^{H}	4.3	4.4	4.3	4.4	4.1^{H}	3.8	A	A				
27						A	3.4	3.7^{H}	3.9	4.1^{H}	4.2^{A}	4.3^{H}	4.4^{H}	4.3	4.3	4.3^{H}	4.0	3.8^{H}	L	A				
28						A	A	A	A	A	A	A	A	(4.4)^{A}	4.4	4.2	4.1	A	A	A				
29						L	3.4	3.7^{H}	3.9	4.2	4.2^{H}	4.3^{H}	4.4^{H}	4.4^{H}	4.3^{H}	4.2	4.1	3.8	3.5^{H}	A				
30						Q	3.3	3.7	3.9	4.1	4.3	4.3	4.6	4.4^{H}	4.3	4.2	4.0	3.8	3.5^{H}	A				
31																								
Median						—	3.4	3.8	4.0	4.2	4.3	4.4	4.4	4.4	4.3	4.2	4.1	3.9	3.5	—				
Count							15	26	26	27	26	25	26	26	28	28	26	24	15					

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Monual ☐ Automatic ☒

GPO 836048

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), June (Month), 1955

National Bureau of Standards (Institution)

Observed at Washington, D.C.

Lat 38.7°N, Long 77.1°W — 75°W Mean Time

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

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

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						S	110 H	100	100	100	100	100	100	100	100	100 H	100	100	100	S				
2						S	110 H	100 H	100	100	(100) A	100	100	100	100	100	100	100	C	C				
3						S	110	100	100	100	100	100	100	100	100	100	100 H	100	110	S				
4						S	A	100	100	100	100	100	100	100	100	100	100	100	100	S				
5						S	110	100	100	100	100	100	100	100	100	100	100	110	100	S				
6						S	100	100	100	100	100	100	100	100	100	100	100	110	110	S K				
7						S K	110 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	110 K	S K				
8						S K	(100) S K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	110 K	S K				
9						S	110	100	100	100	100	100	100	100	100	100	100	100	110	S				
10						S	A	100	100	100	100	100	100	100	100	100	100	100	110	S				
11						S	100	100	100	100	100	100	100	100	100	100	100	100	100	S				
12						S	100	100	100	100 K	100 H K	100 K	100 K	100 K	100 K	100 K	100 K	110 K	S K	S K				
13						S	100	100	100	100	100	100	100	100	100	100 H	100	100	100 H	S				
14						S	100	100	100	100	100 K	100 K	100 K	100 K	100 K	100 K	100 K	110 K	110 H K	A K				
15						S	110	100	100	100	100	100	100	100	100	100	100 H	110	110	S				
16						S	110	100	100	100	100 H	100 H	100	100	100	100	100	100 H	110 H	(120) S				
17						S	100	100	(100) S	100	A	A	100	100	100	100	100	110 H	110	S				
18						S	110	110 H	110	100	100	100	100 H	100 H	[100] C	100	100	110	110	S				
19						S	110	110	100	100	100	100	100	100 K	100 K	100 K	100 K	100 K	110 K	110 K				
20						S	100	100	100	100	100	A	A	100	(100) S	110	110	100	110	S				
21						S	110	100	100	100	100	100	100	100	[100] C	100	100	100	110	S				
22						S	100	100	100	100	100	(100) A	100	100	100 H	(100) A H	C	C	110	S				
23						S	110 H	100 H	100	100	100	100	100	100	100	100	100	100	110	S				
24						S K	110 K	100 K	100 K	100 K	100 K	100 K	100 K	100 K	C K	100 K	100 K	100 K	110 K	(110) S K				
25						(110) S	110	100	100	100	100	100	100	100	100	100	100	100	110	S				
26						S	110	100	100	100	100	100	100	100	100	100	100	100	110	A				
27						S	100 H	100	100	100	100	100	100	100	100	100	100 H	100 H	110	S				
28						S	110	100	100	100	100	100	100 H	100	100	100	100	110	A	120				
29						S	110	100	100	100	100	100	100	100	100	100	100	110	110	S				
30						S	110	100	100	100	100	100	100	100	100	100	100	110	110	S				
31																								
Median						—	110	100	100	100	100	100	100	100	100	100	100	100	110	—				
Count						1	28	30	30	30	29	28	29	30	29	30	29	29	27	4				

Sweep 1.0 Mc to 25.0 Mc in 135 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 85

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

Form adopted June 1946

IONOSPHERIC DATA

foE (Characteristic), Mc (Unit), June (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., N.B.

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						S	2.1 H	(2.5) A	2.7	A	A	(3.3) P	(3.3) P	A	A	3.2 H	2.9	2.5	A	S				
2						S	2.0 H	2.6 H	A	A	A	3.4	3.5	3.4	A	A	A	2.7	C	S				
3						S	A	2.5	2.7	A	A	A	(3.3) A	3.3	3.2	3.1	3.0 H	(2.6) S	(2.2) S	S				
4						S	A	A	(2.7) A	A	A	3.1	A	A	A	A	(2.8) A	A	A	S				
5						S	(2.2) A	(2.5) A	A	A	3.2 F	3.2	3.3	3.1	3.1	3.1	4	A	A	S				
6						S	2.1	(2.5) S	A	A	A	A	3.4	3.3	3.2	(3.1) A	(2.9) P	2.6	2.1	S K				
7						S K	2.1 K	2.5 K	2.7 K	2.9 K	3.1 K	(3.1) A K	A K	A K	A K	A K	2.9 K	[2.4] A K	2.0 K	S K				
8						S K	(2.0) S K	2.5 K	2.5 K	2.9 K	3.0 K	3.3 K	3.3 K	3.3 K	3.1 K	3.0 K	2.9 K	2.6 K	2.1 K	S K				
9						S	1.9	2.5	A	A	3.2	3.3	3.3	[3.2] A	(3.1) P	A	A	2.6	2.3	S				
10						S	A	A	A	A	3.4	[3.4] A	3.3	[3.3] A	3.3	3.2	3.1	A	A	S				
11						S	A	A	A	3.1	3.4	(3.5) S	3.3	(3.3) A	(3.3) A	(3.3) A	A	A	2.3	S				
12						S	A	A	2.9	3.1 K	3.2 H K	(3.3) S K	3.2 K	3.3 K	3.2 K	3.0 K	A K	A K	S K	S K				
13						S	A	A	2.9	3.1	3.2	3.3	3.2	A	3.2	3.2 H	A	2.8	2.3 H	< 1.6 S				
14						S	2.1	2.5	(2.9) A	3.1	A K	(3.3) A K	(3.4) A K	3.5 K	3.4 K	(3.3) A K	(3.1) A K	(2.8) A K	2.3 H K	4 K				
15						S	A	(2.5) A	(2.9) A	3.0	3.1	(3.2) P	3.4	[3.3] A	(3.2) S	3.1	3.1 H	2.8	2.2	< 1.6 S				
16						< 1.5 S	2.1	2.7	2.9	3.2 F	3.2 H	3.3 H	3.3	3.2	3.4	3.3	3.1	2.8 H	2.3 H	1.7				
17						< 1.6 S	A	2.7	3.1	(3.2) A	A	A	A	A	A	3.3	3.1	2.8 H	2.4	< 1.6 S				
18						< 1.6 S	(2.2) A	(2.7) H	(3.2) A	(3.3) A	(3.3) A	(3.4) A	(3.3) A H	(3.3) A H	[3.3] C	3.3	(3.1) A	(2.8) A	(2.4) A	< 1.6 S				
19						S	(2.2) A	2.7	A	A	3.4	3.4	A	A K	A K	3.3 K	3.2 K	(2.9) A K	2.5 K	1.7 K				
20						< 1.6 S	A	2.6	[2.8] A	3.1	A	A	A	A	A	3.3	3.2	2.9	2.3	< 1.6 S				
21						< 1.6 S	A	A	3.0	3.2	(3.2) P	(3.3) P	3.3	2.9	[3.2] C	3.3	A	A	2.4	< 1.6 S				
22						< 1.6 S	A	A	(2.9) A	A	A	A	A	A	3.3 H	3.2 H	C	C	2.3	< 1.6 S				
23						< 1.6 S	2.2 H	2.7 H	A	A	(3.3) A	3.3	A	A	A	A	A	(3.0) S	(2.3) A	< 1.6 S				
24						< 1.6 S K	A K	A K	A K	A K	A K	A K	A K	A K	C K	A K	3.1 K	(2.8) A K	A K	A K				
25						A	A	A	(2.9) A	3.0	(3.3) A	A	A	A	A	A	A	A	2.5	< 1.6 S				
26						S	2.0	A	A	A	A	A	A	A	A	A	A	A	A	A				
27						< 1.6 S	2.0 H	[2.6] A	2.9	A	(3.2) A	A	A	A	A	2.9	2.9 H	2.7 H	2.3	< 1.6 S				
28						< 1.6 S	2.1	2.6	2.9	3.0	A	A	3.2 H	A	A	A	3.0	2.7 F	A	< 1.6 S				
29						< 1.6 S	(2.1) A	[2.5] A	2.9	A	A	A	3.3	3.2	[3.2] A	3.2	3.0	2.7	2.3	< 1.6 S				
30						< 1.6 S	A	(2.3) A	A	A	A	A	3.3	3.3	[3.2] A	3.2	(2.8) A	(2.6) A	2.3	< 1.6 S				
31																								
Median						< 1.6	2.1	2.5	2.9	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.0	2.7	2.3	< 1.6				
Count						12	16	20	19	14	16	18	19	16	17	21	19	21	21	15				

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 86

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

Form adopted June 1946

IONOSPHERIC DATA

F s (Characteristic), Mc-Km (Unit), June (Month), 1955

National Bureau of Standards (Institution)

Observed at Washington, D.C.

Lat 38.7°N, Long 77.1°W — 75°W Mean Time

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

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

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	5.6 100	2.8 110	2.9 110	2.8Y H 110	2.7Y 110	<1.8S S	2.3 130	3.6 120	5.3 110	5.2 100	6.8 100	5.0 110	4.7 110	3.4 100	4.0 110	3.7 110	G G	G G	4.1 100	3.0 100	<1.6S S	2.8 110	3.9 100	5.1 100
2	3.5 100	4.3 100	3.3 100	2.4 100	<1.4S S	<1.9S S	G G	3.6 120	3.2 110	4.9 100	5.5 100	3.5 110	G G	3.4 100	4.5 100	4.5 100	4.0 100	G G	C C	C C	C C	C C	C C	C C
3	C C	5.0 100	3.7 100	4.8 100	3.1 110	4.2 110	5.2 100	(3.8)S 110	5.4 110	4.9Y 100	4.7 110	5.1 100	6.3 110	5.7 110	4.8 110	G G	G G	4.3Y 120	4.2 120 H	6.4 110	3.4 110	2.7 110	2.6 110	2.7 100
4	2.4 100	<1.6S S	<1.6S S	<1.6S S	<1.5S S	<1.6S S	3.1 110 H	5.4 110	6.4 90 H	6.3 100	7.2 100	6.8Y 110	7.4Y 110 H	8.3 100	9.2 100	7.1 100	5.4 100	5.3 100	3.8 100	6.2 110	4.9 110	3.4 110	5.4 110	4.7 110
5	4.2 120	4.7 110	6.1 110	8.4Y 100	8.5 100	4.6Y 100	7.8Y 110	4.7 110	5.1 100	6.8 100	4.9 100	5.4 100	3.6 130	G G	8.8 110	3.8 100 H	3.8 100	3.4 110	3.5 110	3.0Y 110	5.6 100	4.2 110	3.2 100	<1.6S S
6	3.5 100	3.9 100	3.4 100	5.0 100	2.4 100	(8.0) (110) S	3.4 130	6.0 100 H	5.3 100	4.3 100	4.6 100	3.5 100	3.5 120	G G	3.0 100	3.8 100	G G	2.7 140	2.3 140	1.7 130	<1.6S S	<1.6S S	2.1 130	<1.6S S
7	<1.6S S	2.1 120	<1.3S S	2.9 120	7.2Y 110	2.7 120	G G	5.4 110	5.2 100	4.5 100	4.4 100	4.9 100	4.5 100	3.3 100	5.8 100	3.0 110	G G	4.3 130	4.7 120	5.4 110	7.6 110	5.7 110	3.5 120 H	<1.6S S
8	<1.6S S	<1.6S S	<1.6S S	<1.6S S	<1.3S S	G G	3.8 120	7.2 110 H	5.5 110	6.9 100	4.9 110	4.5 100	5.1 110	10.0 100	5.3 110	3.7 110	3.4 130	G G	3.8 130	4.0 110	4.3 110	4.0 120	2.4 120	3.1 110
9	4.2 100	3.9 110	3.9 100	3.5 100	3.0 H S (3.0)	1.7 120	4.7 110 H	4.6 110	5.6 100	5.0 100 H	4.8 120	(7.0)S 120 H	5.8 110	7.8 110	(7.8)S 100	5.6 100	(7.0)S 100	4.0 120	3.6 110	3.0 120	3.4 110	6.6Y 100	7.0 100	7.0 100
10	5.8 100	4.4 100	3.1 100	4.3 100	3.6 100	4.8 100	3.8F 100	6.6 110 H	7.0 100 H	4.2 110	G G	7.0Y 100	4.6 110	4.9 110	G G	4.8 120	4.6 120	5.4 110	3.8 110	G G	<1.6S S	<1.6S S	<1.5S S	3.2 100 H
11	4.3 100 H	3.1 120	3.7 120	3.7 110	4.3 100	3.3 100	3.8 100	4.3 100	19.0 100	3.3 120	4.0 110	G G	4.6 110	5.6 110	4.0 120	3.8 120	3.8 120	(3.0)S 100	G G	G G	2.4 120	<1.6S S	<1.6S S	<1.6S S
12	<1.6S S	<1.3S S	<1.3S S	<1.3S S	<1.6S S	1.7 110	2.2 110	3.8 100	4.9 110	4.9 110	7.2 110 H	3.9 110	4.0 110	4.9 110	3.7 110	4.8 110	3.8 110	3.8 100 H	2.5 110	3.0 110	5.0 110	4.0 110	2.4 110	2.4 110
13	<1.6S S	3.7 100	<1.2S S	2.8 100	3.9 100	4.0 100	3.7 100	7.6 110 H	7.0 100	6.2 100	4.2 100	3.8 110	3.4 110	3.4 110	G G	G G	3.6 100 H	3.7 110	4.0 110	3.2 110	4.4 100	4.4 100 H	<1.6S S	3.0 100
14	2.5 100	3.1 100	<1.6S S	<1.6S S	<1.6S S	2.6 110	3.3 110	3.9 110	4.2 110	3.3 120	6.8Y 110	4.9 100	3.6Y 100	G G	4.1 120	7.0 110 H	8.0Y 100 H	4.7Y 120 H	4.6 110	4.4 110	2.9 120	5.4 110	6.8 110	7.1 100
15	3.1Y 110	<1.5S S	<1.5S S	<1.6S S	<1.3S S	<1.8S S	4.0 110	3.8 110	4.0 110	4.3 100 H	4.0 110	3.7 100	G G	3.2 110	3.3 100	G G	G G	G G	3.0F 130	5.0 120	4.3 110	2.3 130	3.7 110	2.4 110
16	3.1 100	<1.6S S	1.9 100	<1.5S S	<1.6S S	(4.0)S 110	G G	G G	3.1 110	6.2Y 100	3.5 110	4.2 140	G G	G G	G G	G G	5.0 120	6.7 120	4.1 110	3.4 110	3.5 110	<1.6S S	<1.6S S	<1.6S S
17	<1.6S S	<1.6S S	<1.3S S	<1.5S S	<1.6S S	G G	8.0Y 100	4.4 100	G G	3.4 120	4.6 100	3.6 100	3.8 110	3.7 110	3.9 130	4.8 120	7.1 110	4.6 130	5.6 120	3.1 120	3.7 110	<1.6S S	3.6 110	3.7 100
18	3.1 110	2.8Y 120	2.2Y 110	<1.6S S	10.0Y 110	3.7Y 120 H	3.5 120	6.6 120	5.2 110	5.1 110	4.9 110	3.9 110	3.6 110	4.9 100	C C	G G	8.2Y 120	3.6 130	5.1 120	4.3 110	4.5 110	3.5Y 110	4.1Y 110	3.8 100
19	3.1 110	4.7 100	<1.5S S	4.8 100	3.7 100	3.9Y 100	7.0 120 H	5.4 110	7.0Y 110 H	4.4 110	3.9 110	7.0 110	3.6 100	3.9 110	4.5 110	4.9 120	6.6 120	11.3 120	9.8 110	11.5 110	3.8 110	3.0 110	4.1 100	5.2 100
20	3.6 100	4.8 100	4.0 100	4.5 100	3.9 100	2.7 120	5.8 110	4.8 110	7.4 110	4.3 110	8.0 100	9.4 100	7.0 100	5.6 110	3.9 110	4.1 120	3.9 130	9.0 110	6.0 110	6.6 110	3.7 110	3.7 100	3.7 110	10.0 110
21	7.8 100	4.2 110	2.8 110	2.4 130	5.6 120	5.6 120	7.4 110 H	5.4 110	7.2 110	5.4 110	8.4Y 100	6.6 100	9.6 100	6.0 110	C C	3.9 120	4.0 110	6.8Y 110	2.6 120	3.0 110	2.9 110	4.0 100	4.7 110	4.1 110
22	4.2 100	2.9 100	3.1 100	2.9 100	3.7 100	4.5 100	3.6 100 H	4.2 120	9.0 100	7.2 110	7.0 100	7.7 100	4.6 100	4.3 100	4.6 100	3.8 100	C C	C C	G G	3.4 120	3.1 110	5.2 110	4.2 110	4.7 110
23	4.8 100	4.9 100	3.8 100	2.0 100	<1.6S S	<1.6S S	5.0 120	3.6 110 H	3.9 110	(7.0)S 110 H	4.8 110	6.6 110	8.6 100	7.0 100	5.6 100	4.7 100	5.3 100	G G	2.4 120	G G	<1.6S S	<1.6S S	<1.5S S	<1.6S S
24	2.7 120	2.9 110	3.3 110	3.1 110	<1.3S S	1.8 110	3.1 110	6.8 100	4.8 110	5.0 100	4.1 100	4.9 100	5.0 100	5.0 100	C C	6.2 110	7.3 100	7.6 100	9.0 100	7.6 100	3.7 100	3.4 100	6.6 100	3.5 100
25	4.9 100	8.4 100	10.5 100	8.4 100	4.3 100 H	3.6 110	3.8 110 H	3.8 110	(6.8)S 120	4.1 110	7.4Y 110	4.0 110	3.8 110	(8.6)S 110 H	5.2 100	5.8 100	(4.9)S 100	3.7 110	2.7 140	4.5 110	3.5 110	4.8 110	4.4 110	3.3 110
26	3.1 100	3.1 100	4.7 100	3.5 100	3.0 100	7.0 110	(8.0)S 110	20.0 110	8.0 100	7.0 100 H	8.8 100	4.9 100 H	4.3 100	4.4 100	4.7 100	4.9 100	4.3 100	7.2 110	7.0 110	7.0 100	14.0 100	5.8 100	4.8 100	8.6 100
27	7.0 100	2.7 100	4.3 100	2.9 130	2.9 120	3.5 100 H	7.8 100 H	3.6 100	4.5 110	4.3 110	5.6 110	5.0 110	5.0 100	3.7 100	4.3 110	6.3Y 100 H	5.6 110 H	3.2 130	4.6 120	5.3 110	3.8 110	4.3 100 H	3.7 100 F	2.4 100
28	3.9 110	2.3 110	2.4 100	3.4 130	4.3 100 H	7.6 100 H	5.4 110	6.4 110	11.5 110	11.0 110	8.4 110	10.5 100 H	6.7 100	8.0 100	6.6 100	4.6 110	4.8 120	7.5 120	6.6 110	5.2 110	4.7 110	7.6 100	4.8 110	3.5 110
29	3.7 110	3.4 110	4.6 130	3.0 H 110	3.2 120	4.5 100 H	3.5 120	6.6 110	7.4 100 H	7.2 100	4.5 100	4.4 100	4.1 110	4.8 100	4.8 120	6.8 110	G G	4.1 120	3.4 120	5.6 110	5.2 110	5.4 110	5.4 110	3.4 110
30	2.5 110	3.1 110	5.6 110	8.0 110	5.8 110	4.6 120	3.6 110	4.6 110	4.3 110	3.9 110	4.1 110	4.1 110	(3.8)S 110	3.7 120	4.8 100	4.2 120	4.7 110	3.3 120	3.7 120	4.3 110	3.7 110	4.2 110	5.0 110	4.2 110
31																								
Medion	3.5	3.1	3.1	2.9	3.0	3.6	3.8	4.6	5.4	5.0	4.8	4.9	4.4	4.6	4.5	4.4	4.3	4.0	3.8	4.3	3.7	4.0	3.7	3.4
Count	29	30	30	30	30	30	30	30	30	30	30	30	30	30	27	30	29	29	29	29	29	29	29	29

Sweep 1.0 Mc to 25.0 Mc in 1.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 87

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

Form adopted June 1946

IONOSPHERIC DATA

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

National Bureau of Standards (Institution)

Observed at Washington, D.C.

Lat 38.7°N, Long 77.1°W

75°W Mean Time

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

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

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	2.0	(2.1)^{S}	2.1	2.1	2.1	2.3	2.4	1.9	2.1	2.2	2.2	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.2	2.3	2.2	2.1	A
2	2.0	2.0	2.1	2.2	2.1	2.2	2.0^{H}	2.3	2.1	2.1	1.8	2.1	2.1	2.2	2.1	2.2	2.1	2.2	C	C	C	C	C	C
3	C	^{F}(2.2)^{S}	2.2	2.1^{F}	2.1^{F}	2.3	2.3	2.2	2.0	2.4	2.1	1.9^{H}	2.0	2.1	2.1	2.1	1.9	2.2	2.1	2.2	2.2	2.2	2.2	2.0
4	2.1	2.0	2.1	2.0	2.1	(2.1)^{H}	2.6	A	2.4	^{A}(2.3)^{H}	A	H	2.1^{H}	1.9	2.1	2.1	2.1	2.1	2.2	(2.2)^{A}	2.2	2.3	^{J}(2.2)^{A}	^{P}(2.1)^{A}
5	2.1	A	A	A	A	2.2	(2.1)^{A}	2.2	2.3	1.9^{F}	(1.6)^{S}	G	1.7	1.9	2.1	2.2	2.2	2.0	2.3	2.3	2.2	2.1	2.2	2.2
6	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2^{H}	2.3	2.2	2.2	1.9	1.9	2.0	1.9	1.9	2.1	1.8	2.2	1.9$_K$	2.0$_K$	2.1$_K$	1.9$_K$	1.9$_K$
7	1.9$_K$	2.1$_K$	2.3$_K$	2.2$^{F}_{K}$	2.1$_K$	2.1$_K$	2.3$^{H}_{K}$	1.7$_K$	G$_K$	2.1$_K$	1.9$_K$	1.7$_K$	1.8$_K$	2.0$_K$	2.0$_K$	1.8$_K$	2.0$_K$	2.0$_K$	2.2$_K$	2.1$_K$	2.2$_K$	2.0$_K$	2.1$_K$	2.0$_K$
8	1.9$_K$	1.9$_K$	2.0$_K$	2.3$_K$	2.1$_K$	2.2$_K$	G$_K$	G$_K$	2.0$_K$	A$_K$	1.9$_K$	1.9$_K$	2.1$_K$	A$_K$	1.9$_K$	1.9$_K$	1.8$_K$	1.9$_K$	2.0$_K$	2.1$_K$	2.1$_K$	2.1$_K$	2.2$_K$	2.0$_K$
9	2.2$_K$	2.2$^{F}_{K}$	1.9^{F}	2.0^{F}	2.1^{F}	2.3^{F}	2.2^{H}	2.2^{H}	2.2	2.4	1.7	1.8	2.0	2.0	1.9	2.0	1.9	2.0	2.1	2.2	2.2	2.1	A	^{A}(2.1)^{S}
10	^{F}(2.1)^{S}	^{F}(2.2)^{S}	2.1^{F}	2.1^{F}	^{A}(2.1)^{S}	2.3	2.2	2.0	2.3	2.0	2.1	2.0	2.2	2.1^{F}	2.1	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2
11	2.1	2.1	2.3	2.3	2.2	2.4	2.4	2.1	2.1	1.9	2.1	2.2	2.2	^{A}(2.2)^{S}	(1.8)^{S}	2.0	2.0	2.1	2.2	2.2	2.2	2.3	2.0	2.1	2.1
12	2.2	2.1	1.9	2.0	2.0	2.1	2.6	G	1.9	1.6$_K$	1.7$_K$	1.7$_K$	G$_K$	A$_K$	G$_K$	1.8$_K$	2.0$_K$	^{P}(2.1)$^{S}_{K}$	^{P}(2.3)$^{S}_{K}$	2.2$_K$	2.0$_K$	^{P}(2.2)$^{S}_{K}$	2.2$_K$	2.2$_K$
13	2.1$_K$	2.0$_K$	2.3$_K$	2.0^{F}	A	2.0	(2.0)^{S}	1.9	2.1	2.1	1.9	1.9	2.0	2.1	1.8	2.0	2.0	2.1	2.1	2.1	2.0	2.1	(2.2)^{S}	^{F}(2.1)^{S}
14	2.0	2.1	2.0^{F}	2.0^{F}	2.0	2.1	G	G	G	1.9	2.2$_K$	(1.7)$^{H}_{K}$	^{P}(2.2)$^{S}_{K}$	1.5$_K$	1.9$^{H}_{K}$	^{A}(1.7)$^{S}_{K}$	A$_K$	2.0$_K$	2.1$_K$	2.1$_K$	2.1$_K$	^{P}(2.0)$^{A}_{K}$	A$_K$	^{P}(2.4)$^{A}_{K}$
15	2.0$_K$	2.0$^{F}_{K}$	2.0	2.0	1.9	2.0	1.7	^{P}(1.7)^{S}	(1.9)^{S}	1.9	2.2	1.8	1.7	1.8	2.0	1.9	2.0	2.0	2.0	2.0	(2.2)^{S}	(2.2)^{S}	(2.1)^{S}	J S
16	^{S}(2.2)^{P}	2.1	^{F}(2.4)^{S}	2.2^{F}	^{F}(1.9)^{S}	2.1	^{S}(2.2)^{H}	1.9	2.0	^{F}(2.1)^{S}	2.2	2.2	^{F}(1.9)^{S}	1.9^{F}	2.0^{F}	2.0	2.0	2.1	2.1	2.2	(2.1)^{S}	2.1	2.1	2.1
17	2.0	2.0	2.0	2.2	2.1	2.4	^{P}(2.3)^{S}	2.0	2.2	2.1	2.2	H	2.1	2.0	1.9	2.1	2.0	2.1	2.1	2.1	2.1	^{J}(2.1)^{S}	2.0	(2.0)^{S}
18	2.0	2.0	2.3	2.1	2.0	2.2	^{F}(1.9)^{S}	(1.7)^{S}	(1.7)^{S}	(1.5)^{S}	1.9	(1.5)^{H}	G	1.7	C	(1.8)^{S}	1.9	2.1	2.1	2.1	(2.3)^{S}	S	^{J}(2.0)^{S}	1.9
19	3.0	^{F}(2.0)^{S}	J S	^{A}(2.1)^{F}	2.0	2.0	(1.6)^{S}	1.8	2.2	1.8	G	1.5	G	1.5$_K$	1.7$_K$	1.8$_K$	1.9$_K$	A$_K$	1.9$_K$	A$_K$	2.0$_K$	2.2$_K$	^{J}(2.2)$^{S}_{K}$	2.0$_K$
20	2.1$^{F}_{K}$	2.3$^{F}_{K}$	2.1^{F}	2.2^{F}	2.1^{F}	2.2	2.3	2.0	2.3	2.3	2.2	A	1.9	1.9	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.0	A
21	^{A}(2.2)^{S}	(2.3)^{S}	2.1	2.2^{F}	2.1	2.3	2.1	^{P}(2.3)^{S}	2.1	2.2	A	2.0	2.2	2.1	C	2.0	2.1	2.0	2.0	2.2	2.1	2.3	^{P}(2.2)^{S}	2.1
22	2.1	2.2	2.3^{F}	2.2^{F}	2.0^{F}	2.1	2.3	2.2	2.3	2.2^{H}	2.5^{F}	2.0	1.7^{H}	2.0	2.2	2.1	C	C	2.0	2.1	2.2	2.1	2.3	(2.2)^{S}
23	2.0	2.0^{F}	2.0^{F}	2.0^{F}	2.3^{F}	2.3	2.4	2.3^{H}	2.1	2.0	2.1	JA	A	1.9	2.1	2.1	(1.9)^{S}	1.9	2.1	2.1	2.4$_K$	2.0$_K$	(2.0)$^{S}_{K}$	1.9$_K$
24	(1.9)$^{S}_{K}$	1.9$_K$	2.0$_K$	1.9$_K$	2.0$_K$	2.3$_K$	G$_K$	G$_K$	G$_K$	G$_K$	1.7$_K$	1.9$_K$	1.7$_K$	1.9$_K$	1.8$_K$	(1.7)$^{A}_{K}$	A$_K$	A$_K$	A$_K$	A$_K$	2.2$_K$	^{P}(1.9)$^{S}_{K}$	2.0$_K$	2.0$_K$
25	1.9$^{F}_{K}$	^{A}(2.0)$^{S}_{K}$	A	A	2.0^{F}	2.1^{F}	(1.9)^{S}	2.2	2.2^{H}	1.8^{H}	2.0	2.2	2.0	1.9	^{A}(1.9)^{S}	2.0	(2.1)^{S}	2.1	2.3	2.1	2.1	^{F}(2.2)^{S}	2.1^{F}	^{F}(1.9)^{S}
26	1.9	^{F}(2.1)^{S}	2.1^{F}	^{F}(2.2)^{S}	2.2^{F}	A	2.2	2.2	2.3	2.2	2.3	2.3	2.2	2.0	2.0	2.0	1.9	2.0	2.1	A	A	2.2	2.1	A
27	A	2.2^{F}	2.2	2.0	2.2^{F}	2.2^{F}	2.1	1.8	1.9	2.2	2.1	2.0	1.8^{H}	1.7	1.8	1.9	2.1	2.3	2.2	2.2	2.2	2.0	2.0	2.2
28	J S	J S	2.2	2.2^{F}	2.2	2.3	J A	A	A	J A	1.9	1.8	2.3^{H}	1.8	1.8	2.0	2.0	2.0	2.1	2.1	2.2	2.2	1.9	2.3
29	2.1	2.1^{F}	2.1^{F}	^{F}(2.2)^{S}	2.2^{F}	2.2	S	G	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.1	2.0	2.0	2.3	2.1	2.0	2.1	^{S}(2.3)^{P}
30	2.3	2.1	A	2.2^{F}	2.2^{F}	2.2	1.9^{H}	2.0	2.1	^{S}(2.1)^{H}	2.1	2.2	2.1	1.5^{H}	2.2	2.0	2.1	2.2	2.1	2.2	2.3	2.2	^{A}(2.2)^{S}	2.1
31																								
Median	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.0	2.1	2.1	2.1	1.9	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.1
Count	27	28	26	28	28	29	28	28	29	28	28	26	29	28	28	30	27	27	28	26	28	28	27	25

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 836048

TABLE 88

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

Form adopted June 1946

IONOSPHERIC DATA

(M3000)F2 (Characteristic), ____ (Unit), June (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., N.B.

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	30	(31)^{S}	32	31	32	33	34	29	31	33	32	29	30	30	30	30	31	31	30	32	33	32	31	A
2	30	30	31	32	31	32	30^{H}	34	31	31	28	31	31	32	31	33	31	33	C	C	C	C	C	C
3	C	(32)$^{F}_{S}$	32	31^{F}	32^{F}	34	33	32	30	35	31	29^{H}	30	32	31	31	28	32	31	32	32	32	33	30
4	31	30	31	30	31	(30)^{H}	37	A	35	(33)$^{A}_{H}$	A	H	31^{H}	29	31	31	31	31	32	(32)^{A}	33	33	(32)$^{J}_{A}$	(32)$^{P}_{A}$
5	31	A	A	A	A	33	(31)^{A}	32	34	29^{F}	(25)^{S}	G	26	29	31	32	32	30	34	33	32	31	32	32
6	31	31	33	32	32	33	33	33^{H}	34	33	32	28	29	30	29	28	31	27	32	29^{K}	30^{K}	31^{K}	29^{K}	28^{K}
7	29^{K}	31^{K}	34^{K}	32$^{F}_{K}$	31^{K}	31^{K}	33$^{H}_{K}$	26^{K}	G^{K}	31^{K}	29^{K}	26^{K}	27^{K}	30^{K}	30^{K}	28^{K}	30^{K}	30^{K}	32^{K}	31^{K}	32^{K}	30^{K}	31^{K}	30^{K}
8	28^{K}	29^{K}	30^{K}	33^{K}	31^{K}	32^{K}	G^{K}	G^{K}	30^{K}	A^{K}	29^{K}	29^{K}	31^{K}	A^{K}	29^{K}	29^{K}	28^{K}	29^{K}	30^{K}	31^{K}	31^{K}	31^{K}	32^{K}	30^{K}
9	32^{K}	32$^{F}_{K}$	29^{F}	30^{F}	31^{F}	33^{F}	32^{H}	32^{H}	32	35	26	27	30	30	28	30	28	30	31	32	32	32	A	(32)$^{A}_{S}$
10	(31)$^{F}_{S}$	(32)$^{F}_{S}$	31^{F}	31^{F}	(31)$^{A}_{S}$	34	32	30	34	30	32.	30	32	31^{F}	31	30	32	33	33	33	32	32	31	32
11	31	31	33	33	32	35	34	32	31	28	31	32	32	(33)$^{A}_{S}$	(27)^{S}	30	30	31	32	33	34	30	31	32
12	33	31	29	30	30	31	37	G	28	25^{K}	26^{K}	26^{K}	G^{K}	A^{K}	G^{K}	27^{K}	30^{K}	^{K}(31)$^{P}_{S}$	^{K}(33)$^{P}_{S}$	32^{K}	30^{K}	^{K}(32)$^{P}_{S}$	32^{K}	32^{K}
13	31^{K}	30^{K}	33^{K}	30^{F}	A	30	(30)^{S}	26	31	31	28	29	30	31	27	29	30	31	31	31	30	31	(32)^{J}	(31)$^{F}_{S}$
14	30	31	30^{F}	30^{F}	30	31	G	G	G	28	33^{K}	(26)$^{H}_{K}$	^{K}(32)$^{P}_{S}$	23^{K}	29$^{H}_{K}$	^{K}(26)$^{A}_{S}$	A$^{S}_{K}$	30^{K}	32^{K}	31^{K}	31^{K}	^{K}(30)$^{P}_{A}$	A^{K}	^{K}(34)$^{P}_{A}$
15	30^{K}	30$^{F}_{K}$	30	30	28	30	26	(26)$^{P}_{S}$	(29)^{S}	29	33	27	26	27	30	28	30	30	30	30	(32)^{S}	(32)^{S}	(31)^{S}	J^{S}
16	(32)$^{S}_{P}$	31	(34)$^{F}_{S}$	33^{F}	(29)$^{F}_{S}$	31	(32)$^{S}_{H}$	28	30	(31)$^{F}_{S}$	32	33	(29)$^{F}_{S}$	29^{F}	30^{F}	30	30	31	31	32	(31)^{S}	31	31	31
17	30	30	30	32	31	35	(34)$^{P}_{S}$	30	33	31	33	H	32	30	29	32	30	31	31	31	31	(32)$^{J}_{S}$	30	(30)^{S}
18	30	30	33	31	29	32	(28)$^{F}_{S}$	(26)^{S}	(26)^{S}	(23)^{S}	29	(24)^{H}	G	26	C	(27)^{S}	29	31	31	31	(33)^{S}	S	(30)$^{J}_{S}$	29
19	29	(30)$^{F}_{S}$	S^{J}	(31)$^{A}_{F}$	30	30	(23)^{S}	28	33	27	G	23	G	23^{K}	26^{K}	27^{K}	28^{K}	A^{K}	29^{K}	A^{K}	30^{K}	32^{K}	^{K}(32)$^{J}_{S}$	30^{K}
20	31$^{F}_{K}$	33$^{F}_{K}$	31^{F}	32^{F}	31^{F}	32	33	30	33	34	32	A	29	28	31	30	31	31	30	31	31	31	30	A
21	(32)$^{A}_{S}$	(34)^{S}	31	32^{F}	31	34	31	(33)$^{P}_{S}$	31	33	A	30	32	31	C	30	31	30	30	32	31	33	(32)$^{P}_{S}$	31
22	31	32	33^{F}	32^{F}	30^{F}	31	33	32	33	32^{H}	32^{F}	30	26^{H}	30	32	31	C	C	30	31	32	31	33	(32)^{S}
23	30	30^{F}	30^{F}	30^{F}	33^{F}	33	35	33^{H}	31	30	32	A^{S}	A	29	31	32	(29)^{S}	29	31	32	35	30^{K}	(30)$^{S}_{K}$	29^{K}
24	(29)$^{S}_{K}$	29^{K}	30^{K}	29^{K}	30^{K}	34^{K}	G^{K}	G^{K}	G^{K}	G^{K}	26^{K}	29^{K}	26^{K}	29^{K}	28^{K}	(27)$^{A}_{K}$	A^{K}	A^{K}	A^{K}	A^{K}	32^{K}	^{K}(29)$^{P}_{S}$	30^{K}	30^{K}
25	28$^{F}_{K}$	^{K}(30)$^{A}_{S}$	A	A	30^{F}	31^{F}	(29)^{S}	32	32^{H}	27^{H}	30	33	30	28	(28)$^{A}_{S}$	30	(31)^{S}	31	34	31	31	(32)$^{F}_{S}$	31^{F}	(29)$^{F}_{S}$
26	29	(31)$^{F}_{S}$	31^{F}	(32)$^{F}_{S}$	32^{F}	A	33	32	34	33	34	34	33	30	30	30	29	30	31	A	A	33	31	A
27	A	32^{F}	33	30	32^{F}	32^{F}	31	28	29	32	31	30	27^{H}	26	28	29	31	33	32	32	32	30	30	32
28	S^{J}	S^{J}	33	32^{F}	32	33	A^{J}	A	A	A^{S}	28	28	33^{H}	27	28	30	30	30	31	31	32	32	28	33
29	31	31^{F}	31^{F}	(32)$^{F}_{S}$	33^{F}	32	S	G	31	31	31	30	30	29	30	31	31	30	30	33	31	30	31	(33)$^{S}_{P}$
30	33	31	A	32^{F}	32^{F}	32	28^{H}	30	31	(31)$^{S}_{H}$	31	33	32	23^{H}	32	30	32	32	31	33	33	32	(32)$^{A}_{S}$	31
31																								
Median	31	31	31	31.5	31	32	32	30	31	31	31	29	30	29	30	30	30	31	31	32	32	31.5	31	31
Count	27	28	26	28	28	29	28	28	29	28	28	26	29	28	28	30	27	27	28	26	28	28	27	25

Sweep 1.0 Mc to 25.0 Mc in 13.5 sec.

Manual ☐ Automatic ☒

GPO 831-048

TABLE 89

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

Form adopted June 1946

IONOSPHERIC DATA

(M3000)F1 (Characteristic), ____ (Unit), June (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., N.B.

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	Q	37	38	A	A	39	39 H	41 H	38 H	36	37	35	A	Q						
2						Q	37 H	37	36 H	38	36	37 H	39 H	39 H	39	38 H	38 H	37 H	C	Q						
3						Q	A	37	A	41	41	A	A	A	(41) A	40 H	(38) H	37 H	40	Q						
4						Q	L	A	A	A	A	(38) H	40	(38) A	40	A	A	A	(38) L	Q						
5						Q	A	37	A	41	40 H	41	40 H	38	39 H	39 H	40	38 H	38	L						
6						Q	38	36	37	39 H	39 H	40	39 H	41 H	41 H	37	37 H	39 H	36	L K						
7						L K	L K	37 K	38 K	38 H K	39 K	40 K	41 H K	39 H K	39 H K	38 K	38 K	35 K	A K	Q K						
8						L K	36 K	36 K	36 K	A K	36 H K	39 H K	40 H K	A K	38 K	38 K	39 H K	38 H K	35 K	A K						
9						Q	38	38 H	38 H	40 H	38	A	A	A	40	A	39	35	(35) L	L						
10						Q	L	35	39	39	40 H	41	41	39	41	40	40	37	L	L						
11						Q	L	39	38	40	39	40 H	39	A	(41) S	37	38	36 H	L	Q						
12						Q	L	38	A	39 K	40 K	43 H K	42 K	A K	40 K	38 K	(39) S K	36 H K	37 K	L K						
13						Q	A	H	A	37 H	40 H	42	39 H	40 H	40 H	39	38 H	35	A	L						
14						Q	36 H	36	39	38 H	39 K	38 K	S K	39 H K	38 K	A K	(37) A K	37 K	L K	L K						
15						Q	37	36 H	39	38 H	39 H	(40) S	39 H	40	39	38	38	34	36 F	L						
16						Q	L	37	38	43 F	(42) S	40 F	38 F	39 F	(40) S	39 H	37 H	37 H	L	L						
17						Q	38	38	41 H	37 H	(39) A	(39) H	38 H	40	(37) H	40	A	(37) H	A	A						
18						Q	37 F	38	(39) A	A	42	(42) A	41 H	41	C	39	37 H	35 H	A	A						
19						Q	A	A	A	39	38 H	41 H	41	40 K	38 H K	(39) A K	A K	A K	A K	A K						
20						Q	L	35	37	37 H	A	A	39	(39) A	39	39 H	37 H	A	A	A						
21						A	L	A	A	A	A	A	(40) H S	39	C	41	41 H	36 H	36	L						
22						A	L	37	A	40	(40) A	39 H	38 H	40	(39) S H	40	C	C	35	Q						
23						L	L	35	36	38	38	A	A	A	A	37	A	34	35 H	L						
24						Q K	35 K	38 H K	39 K	40 K	38 K	40 K	39 K	41 K	C K	A K	A K	A K	A K	A K						
25						A	39	39	(39) F	40	41	(40) S H	(40) S	40	39	A	38	35	37	A						
26						A	L	36	38 H	39	A	39 H	42	42	39	37	37 H	37	A	A						
27						A	36	37 H	36	40 H	A	40 H	40 H	39	39	37 H	39	39 H	L	A						
28						A	A	A	A	A	A	A	A	(39) A	37	37	36	A	A	A						
29						L	37	37 H	39	38	40 H	40 H	40 H	40 H	40 H	39	38	36	34 H	A						
30						Q	39	38	39	39	41	43	39	40 H	41	40	40	37	36 H	A						
31																										
																		36								
Median						—	37	37	38	39	39	40	40	40	39	39	38		36	—						
Count							13	25	21	24	23	24	25	24	26	25	24	24	14							

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

(M1500)F , ____ June , 1955
(Characteristic) (Unit) (Month)

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 , Lang 77.1°W 75°W Mean Time

Calculated by: E.J.W., N.B. , ____

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						S	4.2 H	(4.5) A	4.5	A	A	(4.4) P	(4.4) P	A	A	4.4 H	4.4	4.5	A	S						
2						S	4.4 H	4.3 H	A	A	A	4.4	4.4	4.4	A	A	A	4.4	C	S						
3						S	A	4.4	4.6	A	A	A	(4.6) A	4.4	4.4	4.2	4.3 H	(4.4) S	(4.3) S	S						
4						S	A	A	(4.4) A	A	A	4.4	A	A	A	A	(4.5) A	A	A	S						
5						S	(4.4) A	(4.6) A	A	A	4.4 F	4.5	4.5	4.6	4.5	4.4	A	A	A	S						
6						S	4.5	(4.5) S	A	A	A	A	4.5	4.4	4.4	(4.4) A	(4.4) P	4.4	4.4	S K						
7						S K	4.5 K	4.4 K	4.5 K	4.5 K	4.5 K	(4.6) A K	A K	A K	A K	A K	4.5 K	A K	4.5 K	S K						
8						S K	(4.3) S K	4.5 K	4.4 K	4.4 K	4.4 K	4.3 K	4.5 K	4.5 K	4.5 K	4.4 K	4.3 K	4.3 K	4.4 K	S K						
9						S	4.4	4.5	A	A	4.5	4.4	4.4	A	(4.4) P	A	A	4.4	4.4	S						
10						S	A	A	A	A	4.5	A	4.5	A	4.4	4.4	4.4	A	A	S						
11						S	A	A	A	4.4	4.4	(4.4) S	4.4	(4.3) A	(4.3) A	(4.3) A	A	A	4.3	S						
12						S	A	A	4.4	4.4 K	4.5 H K	(4.5) S K	4.5 K	4.4 K	4.5 K	4.5 K	A K	A K	S K	S K						
13						S	A	A	4.5	4.4	4.5	4.5	4.5	A	4.5	4.6 H	A	4.4	4.5 H	S						
14						S	4.5	4.5	(4.5) A	4.5	A K	A K	A K	4.4 K	4.4 K	A K	A K	(4.3) A K	4.4 H K	A K						
15						S	A	A	A	4.6	4.5	(4.4) P	4.5	A	(4.4) S	4.5	4.3 H	4.4	4.4	S						
16						S	4.4	4.4	4.4	4.3 F	4.4 H	4.4 H	4.4	4.4	4.3	4.4	4.4	4.4 H	4.4 H	4.4						
17						S	A	4.4	4.4	A	A	A	A	A	A	4.3	4.2	4.4 H	4.4	S						
18						S	A	(4.4) H	A	A	A	(4.4) A	A H	(4.5) A H	C	4.4	(4.5) A	(4.4) A	(4.3) A	S						
19						S	A	4.5	A	A	4.5	4.5	A	A K	A K	4.4 K	4.4 K	(4.4) A K	4.4 K	4.5 K						
20						S	A	4.4	A	4.4	A	A	A	A	A	4.3	4.4	4.4	4.4	S						
21						S	A	A	4.4	4.4	(4.5) P	(4.5) P	4.5	4.5	C	4.4	A	A	4.5	S						
22						S	A	A	(4.5) A	A	A	A	A	A	4.3 H	4.3 H	C	C	4.4	S						
23						S	4.5 H	4.4 H	A	A	(4.4) A	4.4	A	A	A	A	A	(4.3) S	(4.4) A	S						
24						S K	A K	A K	A K	A K	A K	A K	A K	A K	C K	A K	4.4 K	(4.4) A K	A K	A K						
25						A	A	A	(4.4) A	4.5	(4.4) A	A	A	A	A	A	A	A	4.4	S						
26						S	4.4	A	A	A	A	A	A	A	A	A	A	A	A	A						
27						S	4.4 H	A	4.4	A	(4.5) A	A	A	A	· A	4.5	4.4 H	4.4 H	4.4	S						
28						S	4.4	4.4	4.4	4.5	A	A	4.5 H	A	A	A	4.4	4.4 F	A	S						
29						S	(4.4) A	A	4.5	A	A	A	4.5	4.4	A	4.3	4.4	4.4	4.5	S						
30						S	A	(4.5) A	A	A	A	A	4.4	4.5	A	4.4	(4.4) A	(4.4) A	4.3	S						
31																										
Median						—	4.4	4.4	4.4	4.4	4.5	4.4	4.5	4.4	4.4	4.4	4.4	4.4	4.4	—						
Count							14	17	16	12	15	16	17	13	13	20	18	20	21	2						

Sweep 1.0 Mc to 25.0 Mc in 1.35 sec.

Manual ☐ Automatic ☒

GPO 836048

Table 91

Ionospheric Storminess at Washington, D. C.

June 1955

Day	Ionospheric character* 00-12 GCT	12-24 GCT	Principal storms Beginning GCT	End GCT	Geomagnetic character** 00-12 GCT	12-24 GCT
1	2	1			2	2
2	2	1			2	2
3	2	1			2	3
4	2	1			2	2
5	1	3			2	2
6	2	3	1900	----	2	3
7	4	4	----	----	3	3
8	4	5	----	----	3	4
9	2	2	----	0100	2	3
10	2	2			2	2
11	1	2			2	2
12	3	5	0900	----	3	3
13	3	3	----	0230	2	3
14	2	4	1000	----	3	3
15	2	3	----	0100	4	3
16	3	2			3	3
17	2	1			3	3
18	1	3			3	2
19	2	4	1300	----	5	2
20	1	3	----	0100	2	2
21	1	2			2	2
22	1	2			2	3
23	2	2	2100	----	4	3
24	4	4	----	----	4	3
25	2	2	----	0100	3	2
26	1	2			1	1
27	1	3			2	2
28	1	2			2	2
29	2	2			2	2
30	2	2			1	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.

Table 92

Sudden Ionosphere Disturbances Observed at Washington, D. C.

1955 Day	GCT Beginning	GCT End	Location of transmitters	Relative intensity at minimum*	Other phenomena
June 18	1229	1246	Ohio, England, Mexico	0.005	Solar flare*** 1226
18	1906	1932	Ohio, England, Mexico	(<0.1)**	Solar flare*** 1906

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

**Possible QRM.

***Time of observation at McMath-Hulbert Observatory, Pontiac, Michigan.

Table 93

Sudden Ionosphere Disturbances Reported by RCA Communications, Inc., as Observed at Point Reyes, California

1955 Day	GCT Beginning	GCT End	Location of transmitters
June 18	1912	1930	Australia, Formosa, Hawaii, Japan, Korea, Philippine Is.

Table 94

Sudden Ionosphere Disturbances Reported by Instituto Geofisico de Huancayo as Observed at Talara, Peru

1955 Day	GCT Beginning	GCT End	Location of transmitters
May 27	1546	1605	Washington, D. C.

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 95a

Radio Propagation Quality Figures

(Including Comparisons with Short-Term and Advance Forecasts)

North Atlantic Path - May 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:			Geomagnetic 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)	Day (2)
1	5	(3)	7	6	5	(4)	6	6	5	(4)	6		2	1
2	6	5	7	7	5	5	6	6	6	5	6		1	2
3	6	6	7	7	6	5	7	7	6	6	5		2	2
4	6	5	6	7	6	6	7	7	6	6	5		1	2
5	6	6	7	7	6	6	7	7	7	6	5		2	3
6	6	5	6	6	6	5	7	5	6	6	6		(4)	(4)
7	5	(4)	7	7	(4)	(4)	6	6	5	7	6		(4)	3
8	5	(4)	6	6	6	(4)	6	6	5	7	6		(4)	(4)
9	5	5	7	7	5	(4)	6	6	6	6	6		2	2
10	6	5	7	7	6	6	7	7	6	6	6		3	2
11	6	5	7	7	6	5	7	6	6	6	6		2	1
12	6	6	7	7	6	6	7	7	7	6	6		2	2
13	6	6	7	7	7	6	7	7	7	7	7		3	2
14	7	6	7	6	7	6	7	7	6	7	7		3	2
15	6	6	7	7	6	6	7	7	7	7	7		2	2
16	6	5	6	7	7	6	6	6	6	7	7		(4)	1
17	6	5	7	7	5	5	7	6	6	5	7		2	1
18	7	6	7	7	7	6	8	7	7	6	7		1	2
19	7	6	7	7	7	7	7	7	7	6	7		1	1
20	7	7	7	7	7	6	7	7	7	7	7		2	2
21	7	7	7	7	7	6	7	7	7	7	7		1	2
22	7	6	7	7	7	6	7	7	7	7	6		2	2
23	7	6	7	7	7	6	7	7	7	7	6		1	1
24	7	6	7	7	7	6	7	6	7	5	5		2	2
25	7	7	7	6	6	6	7	5	7	(3)	(3)	X	1	(5)
26	(3)	(2)	5	6	(4)	(2)	5	5	(4)	(3)	(3)	X	(6)	2
27	6	6	7	7	(4)	5	7	6	6	(3)	(4)	X	2	(4)
28	5	5	6	6	6	(4)	6	5	6	(4)	5		(5)	3
29	6	6	7	7	5	5	6	7	6	5	5		3	2
30	7	6	7	7	6	6	7	7	7	5	6		1	2
31	7	6	7	7	7	7	7	7	7	7	6		2	2

Score:

Quiet Periods	P	19	14	23	18	13	11	
	S	10	13	8	13	10	15	
	U	0	0	0	0	4	2	
	F	1	0	0	0	3	2	
Disturbed Periods	P	0	3	0	0	0	0	
	S	1	1	0	0	1	1	
	U	0	0	0	0	0	0	
	F	0	0	0	0	0	0	

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; $K_{Ch} \geq 4$ 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 ≥ 5, or both ≤ 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)

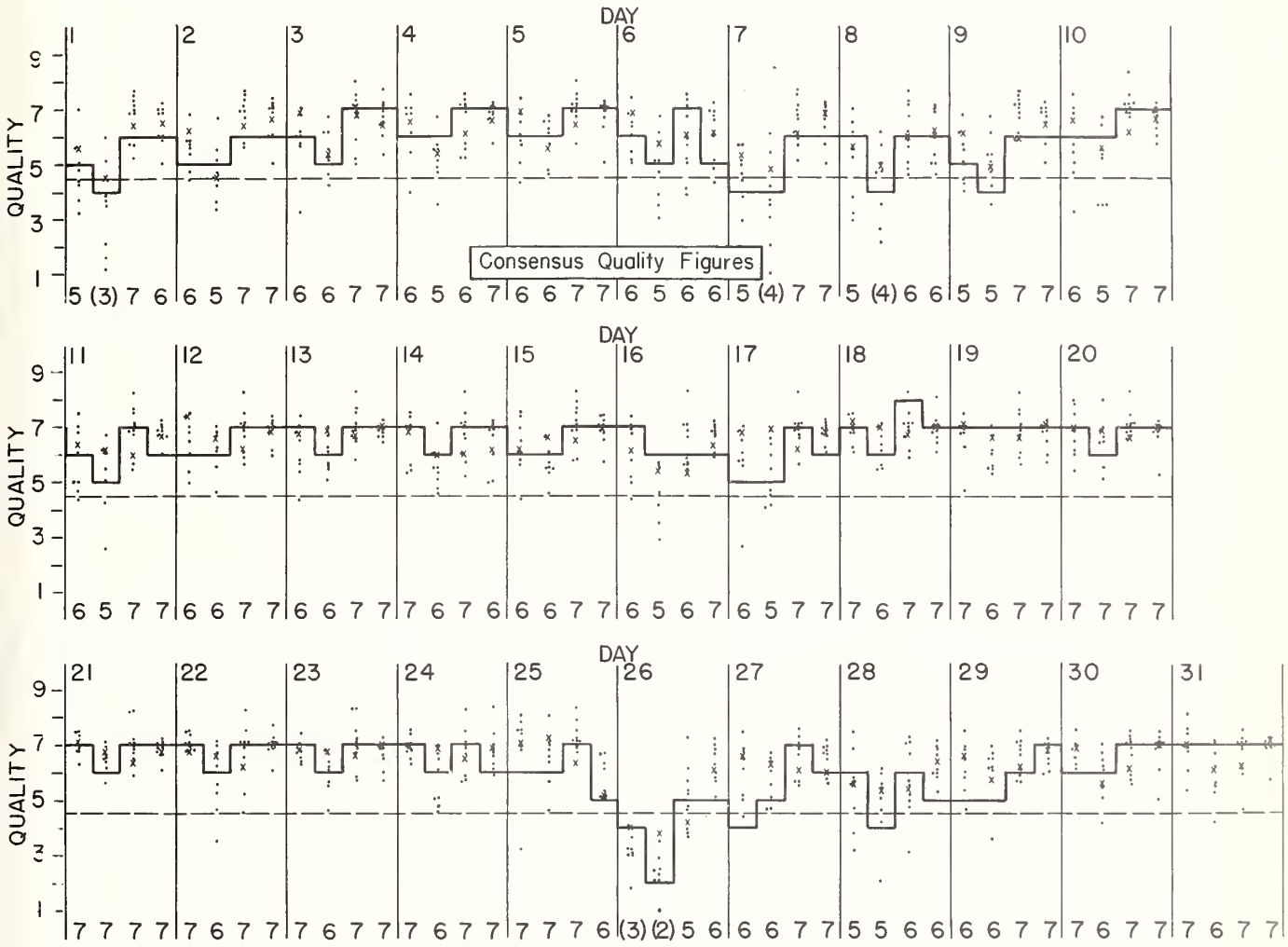
Table 95b

Short-Term Forecasts — May 1955

— Forecast

× CRPL observation (not in consensus)

• Individual reports of quality (adjusted to CRPL scale)



Outcome of Advance Forecasts (1 to 4 Days Ahead) - May 1955

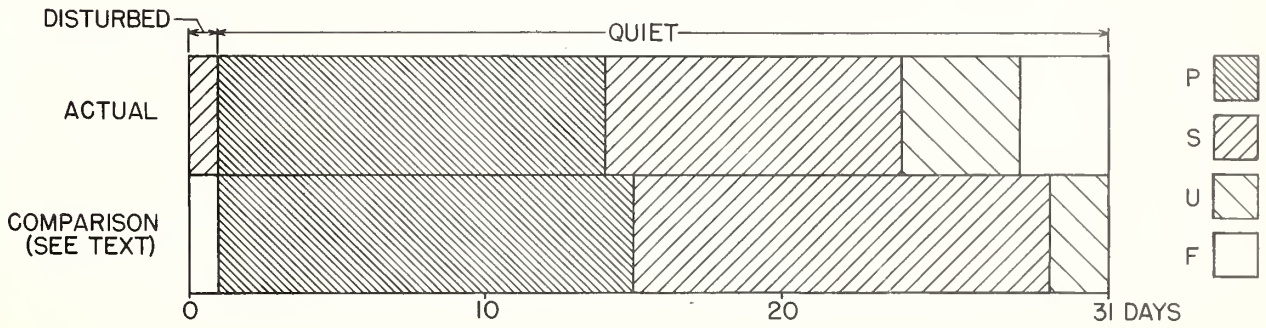


Table 96a

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 UT	Degrees north of the solar equator																		0°	Degrees south of the solar equator															
	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																																				
Jun 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	6	2	1	-	-	-	-	-	-	-
2.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-
3.x																																				
4.x																																				
5.x																																				
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	1	5	5	3	11	13	23	11	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.6	-	-	-	-	-	-	-	4	10	5	2	1	1	-	-	-	-	-	-	-	1	3	4	4	4	1	-	-	-	-	-	-	-	-	-	-
9.6	-	-	-	-	2	2	1	4	13	30	20	14	28	11	2	1	1	-	-	-	-	3	9	9	7	2	1	-	-	-	-	-	-	-	-	-	-
10.7	-	-	-	3	4	4	2	15	17	12	5	33	46	31	10	2	-	-	-	-	-	10	31	23	15	13	-	-	-	-	-	-	-	-	-	-
11.6	-	-	-	3	5	4	3	6	6	5	5	17	29	19	7	5	-	-	-	-	2	7	8	10	5	2	2	1	-	-	-	-	-	-	-	-
12.9a	-	-	-	-	-	-	-	-	-	3	6	12	26	24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	1	3	7	8	4	1	2	5	8	15	12	9	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8	-	-	-	1	2	4	5	3	2	2	2	10	20	15	7	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
15.x																																				
16.6	-	-	-	-	1	3	4	4	4	4	5	9	9	8	4	2	1	-	-	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-
17.x																																				
19.0	-	-	-	-	-	-	-	-	-	1	2	6	8	6	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.6	-	-	-	-	-	-	-	-	-	-	-	3	16	16	16	5	-	-	-	-	2	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-
20.6	-	-	-	-	-	-	-	1	2	2	7	21	20	6	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.7a	-	-	-	-	-	-	-	-	-	1	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.6	-	-	-	-	-	-	-	-	2	3	3	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																				
26.x																																				
27.6a	-	-	-	-	-	-	-	-	-	2	2	2	6	-	-	-	-	-	-	-	-	-	2	3	6	9	3	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	-	3	6	3	-	-	-	-	-	-	-	-	-	4	6	5	-	-	-	-	-	-	-	-	-	-	-
29.6a	-	-	-	-	-	-	-	-	-	-	-	9	6	5	-	-	-	-	-	-	-	-	1	3	4	9	3	1	-	-	-	-	-	-	-	-	-
30.6	-	-	-	-	-	-	-	-	-	-	6	18	15	10	3	-	-	-	-	-	-	2	4	2	4	5	7	2	2	3	-	-	-	-	-	-	-

Table 97a

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 UT	Degrees north of the solar equator																		0°	Degrees south of the solar equator															
	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																																				
Jun 1.6	1	1	1	1	1	1	1	1	1	1	2	3	5	7	2	3	3	4	5	5	8	6	8	5	6	6	2	-	-	-	-	-	-	-	1	1
2.6a	-	-	-	-	-	-	-	-	-	-	1	2	5	5	5	5	5	5	5	6	6	10	17	13	5	3	-	-	-	-	-	-	-	-	-	-	-
3.x																																				
4.x																																				
5.x																																				
6.7	-	-	-	-	-	-	-	1	2	3	1	1	1	4	1	2	2	2	2	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	1
7.6	1	1	-	-	-	-	-	7	15	9	3	3	1	4	4	3	3	4	4	6	5	5	8	7	7	5	3	2	1	1	-	-	-	-	-	2	1
8.6	-	-	-	-	-	-	-	-	12	5	-	-	2	2	1	1	1	1	3	4	7	10	12	5	6	4	2	1	-	-	-	-	-	-	-	-	-
9.6	1	-	-	-	-	-	-	5	17	16	2	7	3	11	1	2	1	3	3	1	2	7	17	7	2	1	1	1	-	-	-	-	-	-	-	1	1
10.7	-	-	-	-	-	-	-	1	3	7	-	-	-	17	15	2	1	3	7	2	7	4	12	6	2	-	-	-	-	-	-	-	-	-	-	-	-
11.6	1	-	-	-	-	-	1	4	5	3	3	2	8	9	5	1	1	3	5	5	2	1	3	6	2	1	1	1	2	2	-	-	-	-	-	1	1
12.9a	-	-	-	-	-	-	-	-	-	1	3	4	6	8	2	2	2	2	3	4	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	1	2	1	2	3	7	3	4	4	4	5	5	4	3	1	1	1	1	1	1	1	1	1	1	1	2	2	
14.8	-	-	-	-	-	-	-	-	-	-	-	-	2	6	5	7	5	3	3	3	4	4	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15.x																																				
16.6	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	5	4	4	3	4	4	3	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-
17.x																																				
19.0	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2	2	1	1	2	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
19.6	-	-	-	-	-	-	-	-	-	-	-	1	3	3	3	9	2	-	-	-	-	-	1	3	4	3	4	4	4	3	5	5	3	2	-	-	-
20.6	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	3	3	3	3	4	4	4	6	5	4	2	1	1	-	-	-	-	-	-	-	-	-
21.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	2	4	5	4	4	5	3	4	2	-	-	-	-	-	-	-	-	-	-	1
22.6	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2	2	2	3	3	3	2	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	2	4	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	5	5	4	2	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																				
26.x																																				
27.6a	-	-	-	-	-	-	-	-	-	5	5	7	13	10	4	4	2	3	4	4	4	3	3	3	4	5	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	6	6	8	10	5	3	4	4	4	3	3	3	3	3	3	15	15	-	-	-	-	-	-	-	-	-	-
29.6a	-	-	-	-	-	-	-	-	-	-	-	7	19	17	9	10	10	5	5	10	10	8	3	8	10	5	5	-	-	-	-	-	-	-	-	-	-
30.6	1	-	-	-	-	-	-	-	-	-	1	3	20	13	4	5	5	5	5	5	5	5	4	5	5	7	5	5	-	-	-	-	-	-	-	-	-

Table 96b
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 UT	Degrees south of the solar equator																			0°	Degrees north of the solar equator																
	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																																					
Jun 1.6	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	12	29	35	29	21	10	6	4	3	1	-	-	-	-
2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	3	8	7	7	7	5	2	1	-	-	-	-	-	-
3.x																																					
4.x																																					
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	18	27	20	26	24	5	1	1	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	1	5	15	20	26	32	10	4	2	1	-	-	-	-
8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	1	3	4	5	2	2	1	-	-	-	-	-	-
9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	1	1	3	4	2	2	1	-	-	-	-	-	-
10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.9a	-	-	-	-	-	-	-	-	-	-	8	10	8	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	-	-	1	1	4	9	1	-	-	-		-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-
14.8	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	X	X	X	X
15.x																																					
16.6	-	-	-	-	-	-	-	-	-	2	4	5	-	-	-	-	-	-		-	-	-	-	-	-	5	15	8	-	-	-	-	-	-	-	-	-
17.x																																					
19.0	-	-	-	-	-	-	-	-	-	-	-	2	5	2	-	-	-	-		-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	-	-	-
19.6	-	-	-	-	-	-	-	-	-	-	-	-	-	5	7	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.6	-	-	-	-	-	-	-	-	-	-	-	1	4	2	1	-	-	-		-	-	5	13	10	2	-	-	-	-	-	-	-	-	-	-	-	-
21.7	-	-	-	-	-	-	-	-	-	-	-	1	2	3	2	2	1	-		-	-	1	1	1	1	-	-	1	1	1	2	-	-	-	-	-	-
22.6	-	-	-	-	-	-	-	-	-	-	-	3	8	15	23	13	4	1		-	-	2	4	4	2	3	3	5	4	1	2	1	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	10	20	15	25	25	10	3		-	-	-	5	7	7	7	3	3	1	1	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	3	4	7	7	11	6	-	-		-	-	-	2	10	20	3	4	10	3	-	-	-	-	-	-	-	-
25.x																																					
26.x																																					
27.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	10	30	10	-	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	4	6	9	-	-	-	1	2	5	-	-	-	-	-
29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	1	3	7	5	2	1	1	1	1	1	2	1	-	-	-
30.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	1	1	4	4	5	5	5	2	1	-	-	-	-	-	-	-

Table 97b
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 UT	Degrees south of the solar equator																			0°	Degrees north of the solar equator																
	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																																					
Jun 1.6	1	1	1	1	1	-	-	-	-	-	-	-	-	1	1	2	3	4		4	3	2	5	11	8	10	8	-	-	-	-	-	-	-	-	-	1
2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	3		3	2	1	1	1	1	1	3	1	-	-	-	-	-	-	-	-	-
3.x																																					
4.x																																					
5.x																																					
6.7	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2	2	3		3	3	1	-	-	1	3	1	2	1	-	-	-	-	-	-	-	-	-
7.6	1	1	1	1	1	-	-	-	-	2	5	7	6	7	5	3	4	5		7	7	2	1	1	1	1	-	-	-	-	-	1	1	1	-	-	1	1
8.6	-	-	-	-	-	-	-	-	-	-	-	1	1	3	4	5	5	4		3	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.6	1	1	1	1	-	-	-	-	-	-	1	1	2	3	3	4	5	6		5	5	5	3	2	-	-	-	-	-	-	-	-	-	-	1	1	1
10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	2	2	1		1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
11.6	1	1	1	-	-	-	-	-	-	-	1	1	2	3	3	3	5	5		4	3	4	4	3	3	3	2	-	-	-	-	-	-	-	-	1	1
12.9a	-	-	-	-	-	-	-	-	-	-	-	2	2	4	5	6	3	-		-	-	-	-	2	2	4	6	3	-	-	-	-	-	-	-	-	-
13.7	2	2	-	-	-	-	-	-	-	-	-	-	-	4	6	5	5	4		4	3	2	2	2	2	7	6	4	1	1	-	-	-	-	-	-	-
14.x																																					
15.x																																					
16.6	-	-	-	-	-	-	-	-	-	-	-	2	3	3	3	5	4	4		3	3	4	5	5	5	20	6	2	4	-	-	-	-	-	-	-	-
17.x																																					
19.0	-	-	-	-	-	-	-	-	-	-	-	2	5	11	4	-	-	-		-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	-	-	-
19.6	-	-	-	-	-	-	-	-	-	2	5	7	8	12	3	2	2	1		3	4	4	5	5	4	3	1	1	-	-	-	-	-	-	-	-	-
20.6	-	-	-	-	-	-	-	-	-	-	2	3	4	1	3	3	2	2		2	3	3	4	5	1	1	1	2	1	-	-	-	-	-	-	-	-
21.7	1	1	-	-	-	-	-	-	-	-	-	-	2	6	5	4	4	7		7	4	3	4	3	2	6	5	2	2	2	-	-	-	-	-	-	-
22.6	1	1	-	-	-	-	-	-	-	-	-	-	-	8	10	4	2	4		4	3	3	2	2	2	4	3	2	3	2	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	8	12	8	-	-		-	-	-	-	4	7	6	5	5	3	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	7	19	28	12	-	-		-	-	-	-	5	20	15	-	-	5	5	-	-	-	-	-	-	-
25.x																																					
26.x																																					
27.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	10	20		20	15	10	10	20	20	10	5	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	-	-	10	5	5	10	10			10	10	10	15	15	5	-	-	-	-	-	-	-	-	-	-	-	-
29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	8	6			6	7	5	5	5	6	3	-	-	-	-	-	-	-	-	-	-	-
30.6	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	4	4		4	4	4	4	2	2	2	1	-	-	-	-	-	-	1	1	1	1

Table 98a
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	Degrees north of the solar equator																			0°	Degrees south of the solar equator																		
	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																																						
Jun 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.x																																						
4.x																																						
5.x																																						
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.6	-	-	-	-	-	-	1	2	2	1	2	2	-	-	-	-	-	-		-	-	-	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
10.7	-	-	-	-	-	-	-	-	-	-	-	1	2	2	1	1	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.6	-	-	-	1	1	1	1	1	1	1	1	1	1	2	1	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.9a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15.x																																						
16.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.x																																						
19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																						
26.x																																						
27.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.6	-	-	-	-	-	-	-	1	1	1	1	1	2	2	1	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 99a
Coronal observations at Sacramento Peak, New Mexico (5303A), east limb
(Arbitrary Scale)

Date UT	Degrees north of the solar equator																			0°	Degrees south of the solar equator																		
	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																																						
Jun 1.x																																						
2.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	4	5	4	3	3	2	2	-	-	-	-	-
3.6	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-		-	-	-	-	-	-	2	4	5	6	5	5	5	6	5	2	-	-	-
4.7a	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	-	-		-	-	-	-	-	-	-	-	-	2	3	3	3	4	5	4	2	-	-
5.7a	X	X	X	X	X	X	X	X	-	-	-	-	-	2	3	3	2	-		-	-	-	-	2	2	2	2	-	4	4	5	4	3	-	-	-	-	X
6.6a	-	-	2	2	3	3	3	2	3	3	3	4	3	3	2	2	-	-		-	-	2	2	3	2	3	2	2	3	4	3	2	-	-	-	-	-	-
7.7a	-	-	-	2	3	4	4	5	6	8	8	9	7	5	4	3	2	-		-	-	-	-	2	2	3	4	3	3	3	2	2	-	-	-	-	-	-
8.7a	-	-	-	-	-	-	3	3	4	4	5	5	4	4	3	3	2	-		-	-	-	-	-	2	3	3	4	3	-	-	-	-	-	-	-	-	-
9.x																																						
10.x																																						
11.x																																						
12.x																																						
13.9	-	-	-	-	3	14	18	20	15	11	14	16	22	41	40	36	13	3		-	-	-	-	2	5	6	5	4	3	4	3	2	-	-	-	-	-	-
14.8a	-	-	-	3	6	5	11	8	5	6	6	7	16	28	28	13	16	3		3	2	-	-	2	3	4	4	4	3	3	3	2	-	-	-	-	-	-
15.6	-	-	2	3	5	6	8	11	10	8	8	11	20	28	30	28	16	8		5	-	-	-	-	-	3	4	6	8	5	4	3	2	-	-	-	-	-
16.7a	-	-	-	-	-	2	3	4	3	3	4	5	8	8	7	6	5	3		-	-	-	-	-	-	-	2	3	5	4	3	-	-	-	-	-	-	-
17.6	-	-	3	2	4	5	8	9	7	5	8	11	16	20	18	16	5	2		-	-	-	-	-	2	3	3	3	4	3	2	2	-	-	-	-	-	-
18.7a	-	-	-	-	-	2	3	3	3	4	3	5	8	15	13	11	8	3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.x																																						
20.x																																						
21.x																																						
22.x																																						
23.x																																						
24.x																																						
25.x																																						
26.x																																						
27.x																																						
28.x																																						
29.7a	-	-	-	-	-	-	4	3	2	2	5	13	20	23	11	3	-	-		-	-	-	-	-	2	3	11	14	16	13	10	7	5	2	-	-	-	-
30.7a	-	-	-	-	-	-	4	5	6	5	4	6	11	22	17	13	3	2		2	-	-	-	-	2	4	5	6	7	8	8	7	6	4	2	-	-	-

Table 98b
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 UT	Degrees south of the solar equator																		0°	Degrees north of the solar equator																
	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																																					
Jun 1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	-	-	-	-	-	-	-	-	-	-	-
2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.x																																					
4.x																																					
5.x																																					
6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.9a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.x																																					
15.x																																					
16.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.x																																					
19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	-	-	
19.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.x																																					
26.x																																					
27.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 99b
Coronal observations at Sacramento Peak, New Mexico (5303A), west limb
(Arbitrary Scale)

Date UT	Degrees south of the solar equator																		0°	Degrees north of the solar equator																
	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																																					
Jun 1.x																																					
2.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5	4	5	6	5	X	X	X	X	X	-	-	-
3.6	-	-	-	-	-	-	-	-	2	3	5	5	4	5	4	3	2	2	-	-	3	5	11	16	20	30	40	32	14	8	5	5	4	3	2	-	-
4.7a	-	-	-	-	-	-	-	2	3	5	7	6	5	5	5	4	3	-	-	-	-	2	3	18	36	44	40	20	12	8	5	4	3	2	-	-	-
5.7a	X	X	X	X	X	X	X	-	-	2	2	-	-	-	-	-	-	-	-	-	-	3	3	11	16	23	20	18	8	6	5	3	-	-	-	-	X
6.6	-	-	-	-	-	-	2	3	3	3	2	3	3	2	-	-	-	-	-	-	3	4	5	20	32	30	28	23	20	14	11	8	6	4	3	-	-
7.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	8	11	14	16	12	11	8	6	5	2	-	-	-
8.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	5	5	4	3	-	-	-	-	-	-	-
9.x																																					
10.x																																					
11.x																																					
12.x																																					
13.9	-	-	-	-	-	-	-	2	4	3	4	14	20	18	5	3	-	-	-	-	-	-	2	3	5	8	14	13	6	5	3	2	-	-	-	-	-
14.8a	-	-	-	-	-	-	2	3	3	4	5	11	13	10	5	3	2	-	-	-	-	-	-	2	4	16	14	11	7	5	3	2	-	-	-	-	-
15.6	-	-	-	-	-	-	-	2	3	4	5	11	12	11	8	3	2	-	-	-	-	-	-	2	5	28	26	10	6	5	3	2	-	-	-	-	-
16.7a	-	-	-	-	-	-	-	2	3	3	4	3	3	2	-	-	-	-	-	-	-	-	-	2	3	6	11	7	4	3	-	-	-	-	-	-	-
17.6	-	-	-	-	-	2	3	3	4	5	6	5	5	12	11	3	2	-	-	-	-	2	3	4	5	12	14	11	5	4	-	-	-	-	-	-	-
18.7a	-	-	-	-	-	-	-	2	2	3	3	2	3	4	2	2	2	-	-	-	-	-	-	-	2	3	3	3	2	-	-	-	-	-	-	-	-
19.x																																					
20.x																																					
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23.x																																					
24.x																																					
25.x																																					
26.x																																					
27.x																																					
28.x																																					
29.7a	-	-	-	-	-	-	-	-	-	2	2	3	3	4	3	2	-	-	-	-	-	-	2	6	14	20	14	11	6	5	3	2	5	8	5	2	-
30.7a	-	-	-	-	-	-	-	-	-	2	3	3	2	2	2	-	-	-	-	-	-	-	5	5	6	6	6	7	5	4	3	2	3	7	8	4	-

Table 100a
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																																							
Jun 1.x																																							
2.7a	-	-	-	-	-	-	-	-	-	2	-	-	3	4	5	5	6	7	8	7	7	6	7	7	6	5	4	3	3	2	-	-	-	-	-	-	-	-
3.6	2	2	3	3	3	3	2	3	4	3	3	4	4	8	13	14	15	16	15	14	14	12	13	14	12	12	11	4	5	5	2	3	2	2	3	3	3
4.7a	2	3	3	3	2	-	2	2	3	3	3	4	5	5	16	11	12	13	11	11	12	7	8	6	5	7	7	7	8	8	3	-	2	3	2	2	2
5.7a	X	X	X	X	X	X	X	3	3	3	2	3	2	3	5	7	8	7	8	8	7	6	5	4	5	5	5	4	5	3	3	2	3	-	-	X	X
6.6a	2	2	2	2	3	3	4	4	5	5	6	4	3	8	11	10	9	8	8	9	7	6	5	5	5	5	4	4	3	3	2	3	2	2	2	2	-
7.7a	2	2	3	3	2	2	2	3	6	11	13	8	4	5	6	8	7	5	4	5	6	8	9	11	12	10	8	4	3	3	-	2	3	3	2	3	2
8.7a	-	-	-	-	-	-	-	-	2	8	9	8	-	3	2	3	3	3	3	4	4	5	6	7	8	7	-	-	-	-	-	-	-	-	-	-	-	-
9.x																																							
10.x																																							
11.x																																							
12.x																																							
13.9	2	3	3	3	2	4	3	4	3	4	4	5	8	16	18	11	14	13	14	15	14	13	12	6	5	4	5	5	4	4	3	4	3	3	5	3	3
14.8a	-	-	-	-	-	2	2	-	3	2	-	3	3	8	7	12	14	13	11	12	12	10	8	5	4	5	4	4	3	4	3	3	3	4	5	5	3
15.6	3	2	3	2	2	2	2	3	2	2	2	4	5	11	12	16	18	11	12	14	14	15	14	13	11	4	3	2	2	3	3	2	2	3	4	4	3
16.7a	2	2	3	2	2	-	2	2	2	-	2	3	3	4	5	13	14	11	10	9	8	7	5	5	6	5	3	3	2	2	2	3	2	-	2	2	2
17.6	3	3	2	-	2	2	3	-	3	2	3	4	18	19	16	14	14	16	15	14	13	12	11	13	14	8	4	-	3	3	2	2	-	3	3	4	3
18.7a	-	-	-	-	-	-	-	-	-	2	2	3	3	6	5	6	8	5	5	6	7	7	6	6	5	3	2	2	2	2	2	-	2	-	2	2	2
19.x																																							
20.x																																							
21.x																																							
22.x																																							
23.x																																							
24.x																																							
25.x																																							
26.x																																							
27.x																																							
28.x																																							
29.7a	-	-	-	-	-	3	2	2	2	2	3	5	15	20	16	13	10	8	7	8	11	12	11	10	8	6	7	9	7	5	3	2	2	-	-	-	-
30.7a	2	2	3	2	3	3	2	2	4	2	2	5	11	20	18	13	11	8	5	6	9	8	7	9	8	5	4	3	2	2	3	3	2	2	2	2	2

Table 101a
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																																							
Jun 1.x																																							
2.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.7a	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X
6.6a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.7a	-	-	-	-	-	-	-	-	2	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.x																																							
10.x																																							
11.x																																							
12.x																																							
13.9	-	-	-	-	-	-	-	-	-	-	-	2	3	4	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8a	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.6	-	-	-	-	-	-	-	-	-	-	-	2	3	4	5	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.6	-	-	-	-	-	-	-	-	-	-	2	2	2	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.x																																							
20.x																																							
21.x																																							
22.x																																							
23.x																																							
24.x																																							
25.x																																							
26.x																																							
27.x																																							
28.x																																							
29.7a	-	-	-	-	-	-	-	-	-	-	-	2	3	3	2	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
30.7a	-	-	-	-	-	-	-	-	-	-	2	3	3	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 100b
Coronal observations at Sacramento Peak, New Mexico (6374A), west limb
(Arbitrary Scale)

Date UT	Degrees south of the solar equator																			0°	Degrees north of the solar equator																		
	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																																						
Jun 1.x																																						
2.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	4	3	2	2	2	3	3	3	6	5	X	X	X	X	X	X	-	-	-	-
3.6	3	3	4	3	4	3	2	2	3	2	2	3	4	5	9	11	12	14	16	13	12	11	8	8	9	14	15	12	8	4	3	2	3	2	3	3	2
4.7a	2	3	3	2	3	3	4	3	2	2	-	-	3	5	6	8	9	11	13	12	13	12	10	7	8	14	13	14	2	3	2	2	2	-	2	2	2
5.7a	X	X	X	X	X	X	X	X	2	2	-	2	2	3	3	3	4	5	5	6	7	4	5	4	5	8	5	5	4	5	4	-	-	2	2	X	X
6.6	-	2	3	3	2	2	-	2	-	2	2	4	3	5	8	7	7	7	8	7	7	6	4	3	8	5	6	5	3	4	3	2	-	2	3	2	2
7.7a	2	2	2	-	2	-	2	3	3	2	2	3	3	2	4	5	6	8	7	8	8	5	3	3	3	3	2	3	3	3	2	2	2	2	2	2	2
8.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	4	3	3	3	3	2	3	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-
9.x																																						
10.x																																						
11.x																																						
12.x																																						
13.9	3	3	3	2	3	2	3	2	2	5	4	5	4	8	16	18	17	16	14	11	10	8	8	9	11	20	13	10	8	5	4	3	3	4	2	3	2
14.8a	3	2	2	3	2	2	2	2	3	3	2	3	4	5	8	14	15	16	11	10	8	10	8	9	11	23	10	5	4	3	2	2	3	3	3	3	-
15.6	3	3	2	3	2	3	-	-	-	2	2	3	8	9	6	12	15	14	13	12	11	10	11	12	14	36	28	8	10	5	4	2	2	3	2	3	3
16.7a	2	2	-	-	-	2	3	2	-	2	3	3	5	6	3	6	8	7	5	6	6	6	5	8	14	16	11	3	5	2	-	2	2	2	2	2	2
17.6	3	3	3	2	2	3	3	-	-	3	4	5	12	14	15	14	12	12	11	12	13	14	15	14	15	16	14	8	6	5	4	5	3	2	2	3	3
18.7a	2	2	2	-	2	2	-	-	-	2	2	3	6	10	12	7	5	5	6	7	7	8	6	5	6	6	5	5	3	2	2	2	2	2	-	-	
19.x																																						
20.x																																						
21.x																																						
22.x																																						
23.x																																						
24.x																																						
25.x																																						
26.x																																						
27.x																																						
28.x																																						
29.7a	-	-	-	-	-	2	2	3	2	2	3	4	4	6	11	12	11	12	12	13	14	13	12	11	8	4	2	2	3	3	2	2	3	2	-	-	-
30.7a	2	3	2	2	3	3	2	2	2	3	-	-	2	3	5	8	8	7	8	8	6	5	5	3	3	4	2	2	-	-	2	3	2	2	-	2	2

Table 101b
Coronal observations at Sacramento Peak, New Mexico (6702A), west limb
(Arbitrary Scale)

Date UT	Degrees south of the solar equator																			0°	Degrees north of the solar equator																		
	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																																						
Jun 1.x																																						
2.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	-	-	-	-
3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	3	2	-	-	-	-	-	-	-	-
4.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	2	-	-	-	-	-	-	-	-
5.7a	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X
6.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	3	2	-	-	-	-	-	-	-	-	-
7.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	-	-	-	-	-	-	-	-
8.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.x																																						
10.x																																						
11.x																																						
12.x																																						
13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.8a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-	-	-
15.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-	-	-
16.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.6	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-
18.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.x																																						
20.x																																						
21.x																																						
22.x																																						
23.x																																						
24.x																																						
25.x																																						
26.x																																						
27.x																																						
28.x																																						
29.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.7a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 102

Particulars of Observations, Sacramento Peak, New Mexico

January - June 1955

Date GCT	Green line threshold intensity at 0°	45°	90°	135°	180°	225°	270°	315°	Obs.	Meas.
1955										
Jan. 1.7	4	4	4	4	4	4	4	4	S	Y
5.8	5	5	4	5	5	4	7	4	R	Y
6.7	3	3	4	3	4	4	4	3	R	Y
7.7	4	4	5	6	5	4	4	4	R	Y
10.7	5	3	4	3	4	3	5	3	S	Y
16.7	5	5	5	6	4	4	4	4	R	Y
18.8	4	3	4	3	5	5	4	4	S	Y
19.9	2	3	3	3	3	3	3	3	R	Y
21.9	6	-	-	-	11	-	-	>15	S	Y
22.9	7	-	-	8	8	8	8	7	R	Y
23.7	4	4	3	4	4	4	4	4	R	Y
24.7	3	2	3	3	3	3	3	2	R	Y
27.7	5	5	5	5	5	5	5	5	S	Y
28.7	6	5	6	5	6	6	6	6	S	Y
29.7	3	4	4	4	5	4	4	4	DeM	Y
31.7	5	5	5	5	5	5	5	5	R	Y
Feb. 1.7	3	3	3	3	3	3	3	3	R	Y
2.7	4	5	4	4	5	5	8	7	R	Y
4.7	7	5	6	6	8	6	6	6	S	Y
5.7	3	4	4	4	4	4	4	4	S	Y
7.8	4	5	6	9	7	6	5	5	DeM	Y
8.7	2	3	3	3	4	5	3	3	DeM	Y
9.7	3	3	3	3	4	4	3	3	DeM	Y
10.7	5	5	5	6	7	6	6	6	R	Y
11.7	3	2	2	2	3	2	2	2	R	Y
12.7	3	3	4	4	5	4	4	4	R	Y
14.7	5	5	6	5	5	5	5	5	S	Y
15.8	5	4	4	4	4	4	5	4	DeM	Y
19.7	4	4	4	4	4	4	4	4	DeM	Y
20.7	5	4	3	3	5	4	3	3	R	Y
21.7	7	6	6	7	7	6	6	6	R	Y
22.7	6	6	6	6	7	6	7	6	S	Y
23.8	6	5	5	5	5	5	5	5	S	Y
24.8	7	6	6	6	5	6	6	6	R	Y
27.7	6	4	3	4	5	4	4	4	DeM	Y
Mar. 1.7	4	4	4	4	4	3	4	4	R	Y
3.7	3	3	3	3	4	4	4	6	S	Y
4.7	5	5	5	5	4	4	4	4	S	Y
8.7	6	8	7	6	5	5	5	5	S	Y
10.7	9	10	10	11	12	10	12	15	R	Y
12.9	7	7	7	7	8	7	7	7	R	Y
13.6	4	3	3	3	4	3	4	3	S	Y
14.6	4	3	3	3	3	4	4	3	S	Y
15.7	6	7	7	7	8	9	9	9	S	Y
22.7	8	7	7	6	7	7	6	6	R	Y
23.7	4	4	4	4	5	5	5	4	R	Y
24.7	6	6	6	6	6	6	6	6	R	Y
25.7	6	7	6	7	7	7	6	6	DeM	Y
29.7	8	8	9	9	8	8	7	7	S	Y
30.7	7	7	8	7	8	8	8	7	R	Y
31.7	12	13	11	12	12	11	12	12	R	Y

Date GCT	Green line threshold intensity at 0°	45°	90°	135°	180°	225°	270°	315°	Obs.	Meas
1955										
Apr. 1.7	11	10	10	10	10	10	10	10	R	Y
2.7	10	9	11	11	11	12	11	10	S	Y
4.7	11	11	10	9	10	10	11	10	DeM	Y
5.7	8	7	7	7	7	7	7	7	DeM	Y
6.7	6	6	6	7	7	6	7	6	R	Y
8.7	9	8	9	9	8	8	8	9	S	Y
9.7	4	4	5	4	5	5	5	4	S	Y
10.7	8	8	8	8	8	8	8	8	DeM	Y
13.9	15	11	12	13	14	12	12	>15	R	Y
14.7	4	4	4	4	6	4	4	4	R	Y
15.7	10	9	7	7	11	8	8	8	R	Y
16.6	7	8	7	5	8	10	8	7	S	Y
20.7	9	9	9	9	10	12	11	8	DeM	Y
23.7	13	11	11	12	13	12	12	13	R	Y
24.7	8	7	7	7	8	7	7	7	R	Y
26.7	11	>15	13	14	>15	14	8	8	S	Y
28.8	13	11	11	12	13	12	13	13	DeM	Y
May 3.6	4	4	4	4	5	4	4	4	S	Y
4.6	6	6	6	6	7	7	7	7	S	Y
7.7	7	7	7	11	-	-	-	-	DeM	Y
9.6	7	7	8	7	7	6	7	6	DeM	Y
12.6	6	6	7	7	6	7	7	6	S	Y
13.7	6	6	6	5	6	6	6	5	S	Y
14.8	12	12	13	13	15	14	14	15	S	Y
15.7	13	13	11	11	11	11	11	10	DeM	Y
16.6	6	6	6	6	6	6	6	6	DeM	Y
17.7	8	8	8	9	8	9	9	9	DeM	Y
20.6	6	5	5	5	5	5	5	4	R	Y
21.6	8	7	7	7	8	7	7	7	R	Y
22.7	10	9	9	10	10	11	11	12	S	Y
23.7	11	12	12	12	11	11	11	11	S	Y
24.7	14	14	14	15	14	14	14	14	S	Y
26.6	6	7	6	6	6	6	6	7	DeM	Y
27.6	6	6	6	7	7	6	5	6	DeM	Y
31.7	11	13	13	13	11	14	11	11	R	Y
June 2.7	11	12	12	13	15	>15	15	-	S	Y
3.6	9	7	5	6	7	7	7	8	DeM	Y
4.7	9	10	10	11	8	9	10	11	S	Y
5.7	-	15	13	15	-	14	15	15	DeM	Y
6.6	11	11	10	11	9	8	9	8	R	Y
7.7	10	9	9	11	10	10	10	10	R	Y
8.7	15	13	13	15	15	14	13	15	S	Y
13.9	5	5	4	4	5	5	5	5	S	Y
14.8	13	9	9	7	7	11	11	10	R	Y
15.6	6	6	5	8	8	6	7	6	R	Y
16.7	12	12	12	11	11	11	11	11	DeM	Y
17.6	6	4	5	7	6	5	5	5	R	Y
18.7	13	12	12	13	13	13	9	11	DeM	Y
29.7	12	10	11	11	12	10	11	11	S	Y
30.7	11	11	10	11	12	11	11	13	DeM	Y

- No observation taken at position angle indicated.

DeM = DeMastus
R = Ramsey
S = Schnable
Y = Yu

Table 103

Zürich Provisional Relative Sunspot Numbers

June 1955

June data not received in time for publication; will be included in Aug. issue.

Table 104

American Relative Sunspot Numbers

May 1955

Date	$R_{A'}$	Date	$R_{A'}$
1	28	17	17
2	25	18	24
3	32	19	29
4	47	20	40
5	35	21	48
6	31	22	48
7	23	23	42
8	8	24	44
9	0	25	44
10	1	26	46
11	0	27	33
12	0	28	36
13	1	29	34
14	0	30	24
15	0	31	20
16	6	Mean:	24.7

Table 105

Solar Flares, June 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	June 8	2043	2059	16	91	N33	W01	2049	10	6	1-	
S. Peak	June 13	-	-	-	100	S22	E50	2045	10	-	1	
McMath	June 14	1250B	-	-	-	S20	E35	-	-	-	1-	
McMath	June 14	2105B	-	-	-	S20	E30	-	-	-	1-	
McMath	June 15	1306	1314	08	-	S22	E20	-	-	-	1-	
McMath	June 17	1259	1320	21	-	S22	E02	-	-	-	1+	
McMath	June 17	1753	1830	37	-	S22	W12	-	-	-	1	
McMath	June 17	1840	1930	50	-	S22	W10	-	-	-	2	
McMath	June 18	1128	1155	27	-	S22	W15	-	-	-	1	
McMath	June 18	1226	1310	44	-	S22	W25	1233	-	-	3-	Yes
McMath	June 18	1340	1352	12	-	S22	W25	-	-	-	1	
McMath	June 18	1906	1945	39	-	S22	W18	-	-	-	3	Yes
McMath	June 19	1405B	-	-	-	S23	W33	-	-	-	1-	
McMath	June 19	1420	1438	18	-	S23	W33	-	-	-	1+	
McMath	June 19	1450	1513	23	-	S24	W40	-	-	-	1+	
McMath	June 19	1647	1706	19	-	S24	W40	-	-	-	1-	
McMath	June 19	1830	1850	20	-	S24	W30	-	-	-	1	
S. Peak	June 19	2334B	2346	-	52	S25	W47	2334	12	7	1-	
S. Peak	June 20	1244B	1248	-	13	S25	W55	1245	12	8	1-	
S. Peak	June 20	1449	1455	06	72	S22	W42	1450	20	8	1	
S. Peak	June 20	1530	1539	09	19	S26	W56	1533	13	6	1-	
S. Peak	June 20	1605	1610	05	10	S23	W45	1608	11	7	1-	
S. Peak	June 20	2312	2318	06	19	S23	W48	2315	12	6	1-	
S. Peak	June 21	1250B	1300	-	26	S22	W61	1252	11	4	1-	
S. Peak	June 21	1530	1615	45	46	S22	W64	1546	14	7	1-	
McMath	June 21	1530B	-	-	-	S22	W70	-	-	-	1-	
S. Peak	June 29	1250B	1305	-	25	S34	E67	1256B	11	-	1-	
S. Peak	June 29	1425	1445	20	36	S34	E67	1440	11	6	1-	
S. Peak	June 29	2230	2235	05	12	S31	E65	2233	9	9	1-	

S. Peak = Sacramento Peak.

B = Flare began before given time.

Table 106

Indices of Geomagnetic Activity for May 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

May 1955	C	Values Kp, Three-hour Gr. interval 1	2	3	4	5	6	7	8	Sum	A_p	Final Selected Days
1	0.2	2+	3-	1o	1o	0+	1-	1+	2o	11+	6	Five
2	0.2	0+	0+	1+	1+	2o	2-	1+	2-	10o	5	Quiet
3	0.2	2o	1+	2-	1o	1o	2o	2o	1+	12+	6	
4	0.3	1+	0+	0+	1+	2o	2-	2o	2+	11+	5	17
5	0.7	2-	2+	2o	2-	3-	3+	2-	2+	18-	9	19
												21
6	1.4	3+	3o	3o	4+	6o	3+	3+	5+	32-	32	23
7	1.3	5-	4+	4+	4+	2+	3-	3o	4o	30-	25	24
8	1.3	4o	5+	4-	4o	5-	4-	4+	4+	34o	32	
9	0.6	2+	2+	2+	2-	2-	2o	2+	2+	17o	8	
10	0.7	3-	3o	2o	3+	1o	2-	2o	3-	18+	10	
11	0.2	1o	1+	2o	1o	1-	1+	1+	1o	10-	5	Five
12	0.4	1o	2-	2-	1+	1o	1+	2o	3+	13+	7	Disturbed
13	0.6	3-	1-	2o	2+	2+	2+	3-	2+	17+	9	
14	0.7	2+	3+	3o	4-	2o	2+	2o	2o	21-	12	6
15	0.2	2o	2+	2o	0+	1-	1o	1+	2o	12-	6	7
												8
16	0.9	4-	5+	2+	3-	1+	1-	1-	1o	18-	14	25
17	0.1	1+	1+	1+	1-	1-	1-	0o	1+	7+	4	26
18	0.2	2-	1+	1-	0o	1o	2o	1o	1-	8+	4	
19	0.0	1-	1-	1+	1-	1-	1-	1-	1-	6o	3	
20	0.4	1-	2o	1o	2o	1o	1+	1+	2-	11o	5	
21	0.2	0+	1-	1-	1-	2-	1o	0+	1+	7-	4	Ten
22	0.2	2-	2-	1-	1-	0+	1o	2o	1o	9o	4	Quiet
23	0.2	0+	0+	0+	1-	1+	1+	0o	0+	5-	3	
24	0.1	0+	1-	1o	1-	1o	1+	1+	1-	7o	4	2
25	1.5	1o	1-	0+	0+	4o	4o	6+	7-	23+	34	11
												17
26	1.5	6+	6o	5-	5+	3-	3+	2o	1+	32-	39	18
27	1.1	2-	1+	2-	1o	4o	5-	5o	4+	24-	21	19
28	1.1	4o	4+	5-	4+	4-	2+	2+	3o	29-	23	21
29	0.4	2+	2o	3-	2o	1+	2+	1-	2-	15o	7	22
30	0.2	1-	0+	2-	1-	1o	2o	1+	1+	9o	4	23
31	0.1	2-	2-	2o	1o	1o	1o	1o	2-	11o	5	24
Mean:	0.55									Mean:	11	30

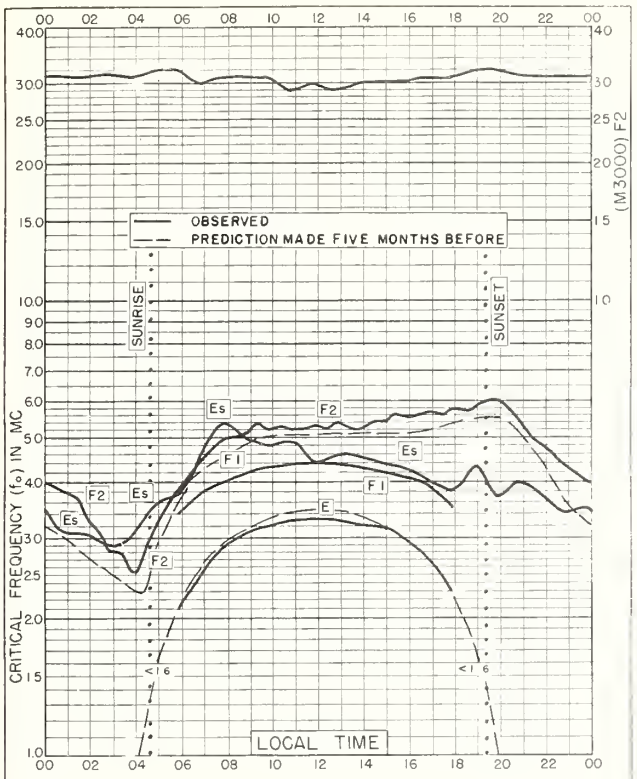


Fig. 1. WASHINGTON, D. C.
38.7°N, 77.1°W JUNE 1955

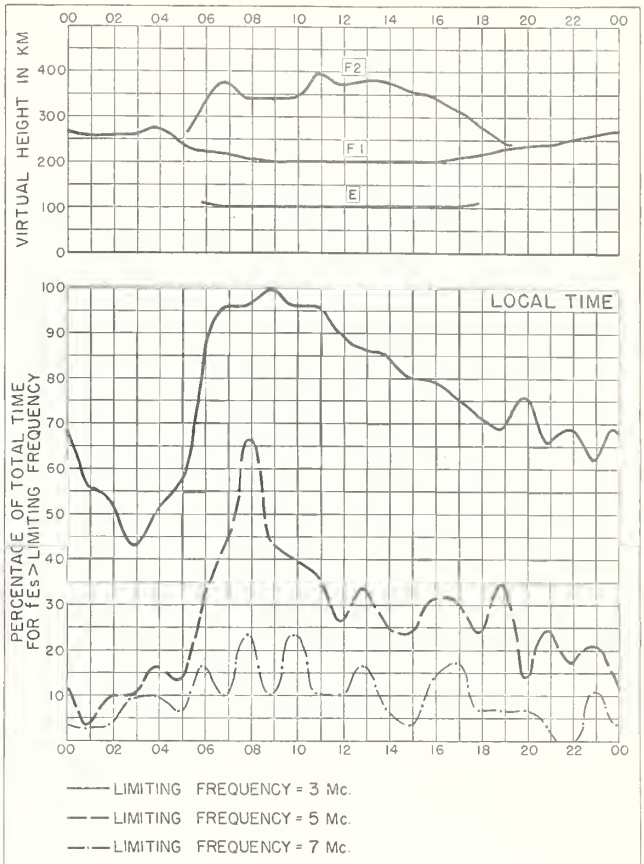


Fig. 2. WASHINGTON, D. C. JUNE 1955

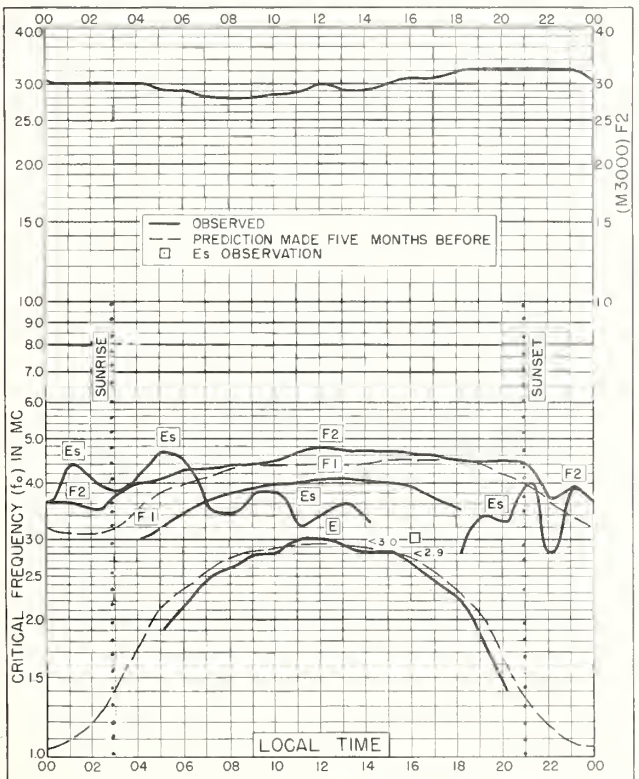


Fig. 3. FAIRBANKS, ALASKA
64.9°N, 147.8°W MAY 1955

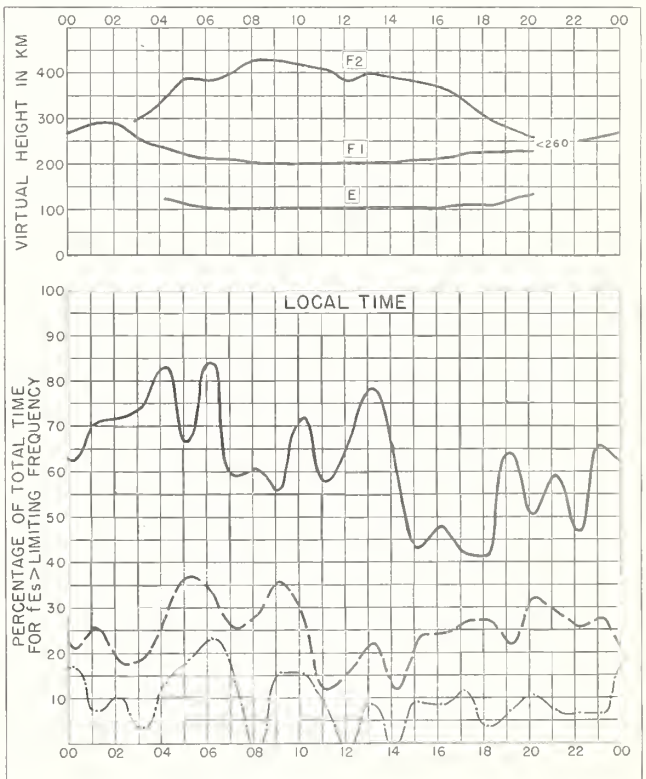


Fig. 4. FAIRBANKS, ALASKA MAY 1955

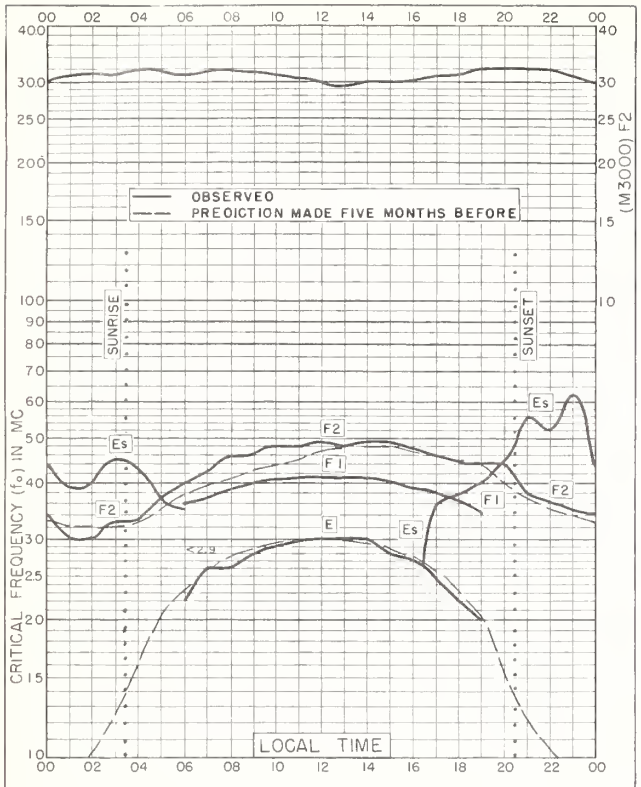


Fig. 5. NARSARSSUAK, GREENLAND
61.2°N, 45.4°W MAY 1955

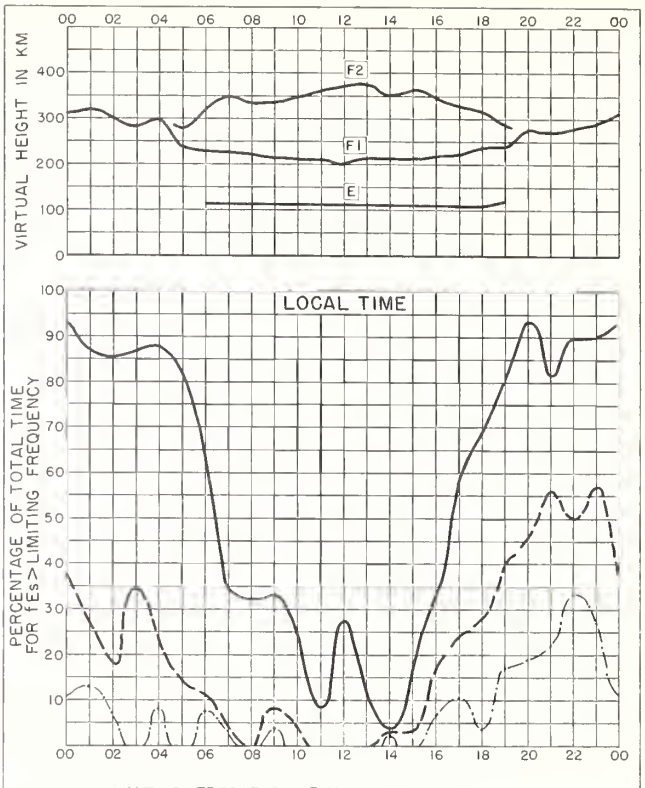


Fig. 6. NARSARSSUAK, GREENLAND MAY 1955

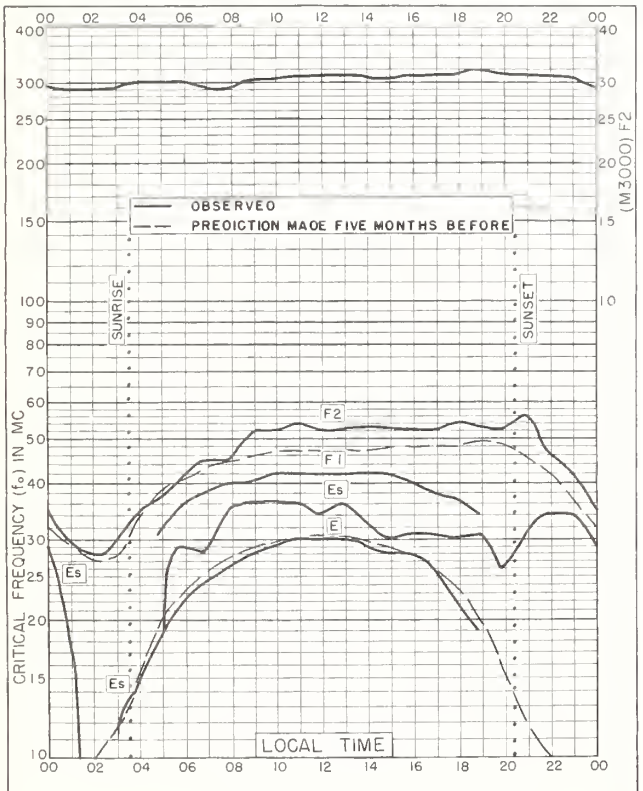


Fig. 7. OSLO, NORWAY
60.0°N, 11.1°E MAY 1955

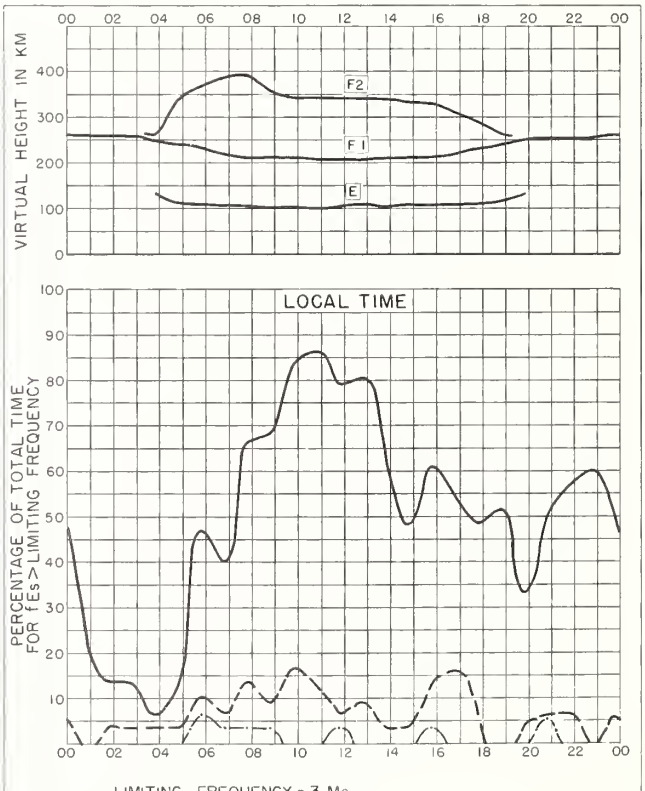


Fig. 8. OSLO, NORWAY MAY 1955

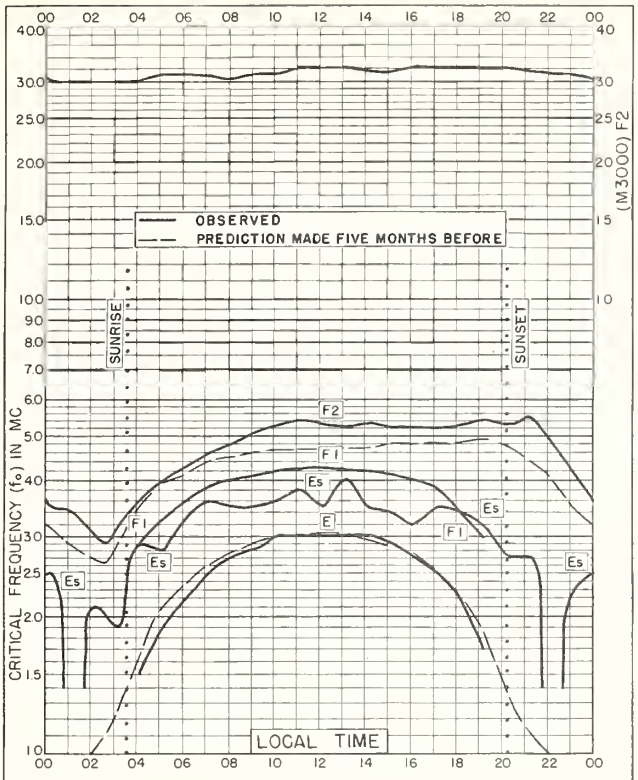


Fig. 9. UPSALA, SWEDEN
59.8°N, 17.6°E MAY 1955

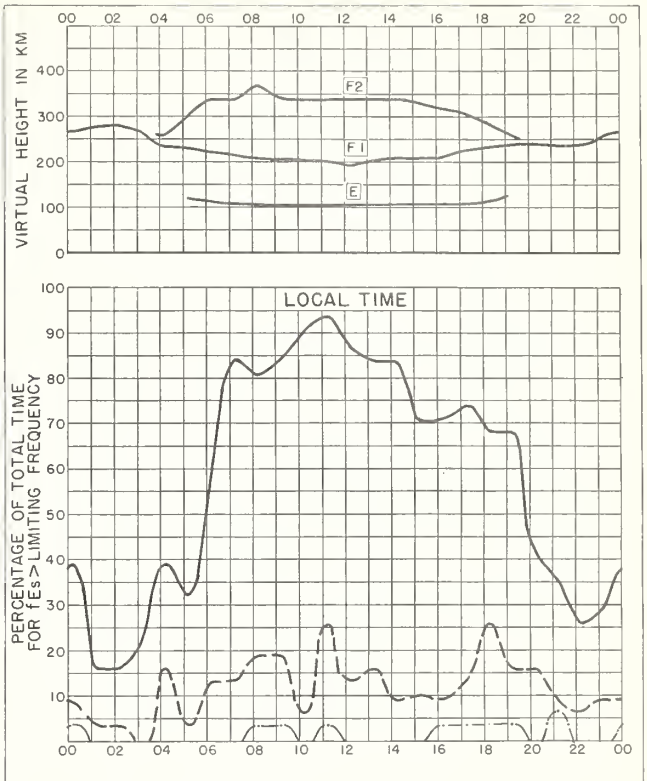


Fig. 10. UPSALA, SWEDEN MAY 1955

NBS 490

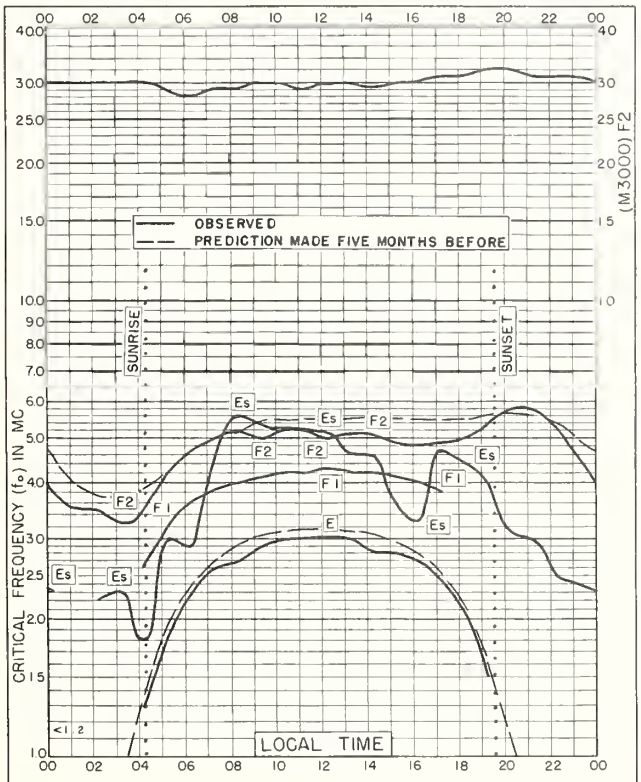


Fig. 11. ADAK, ALASKA
51.9°N, 176.6°W MAY 1955

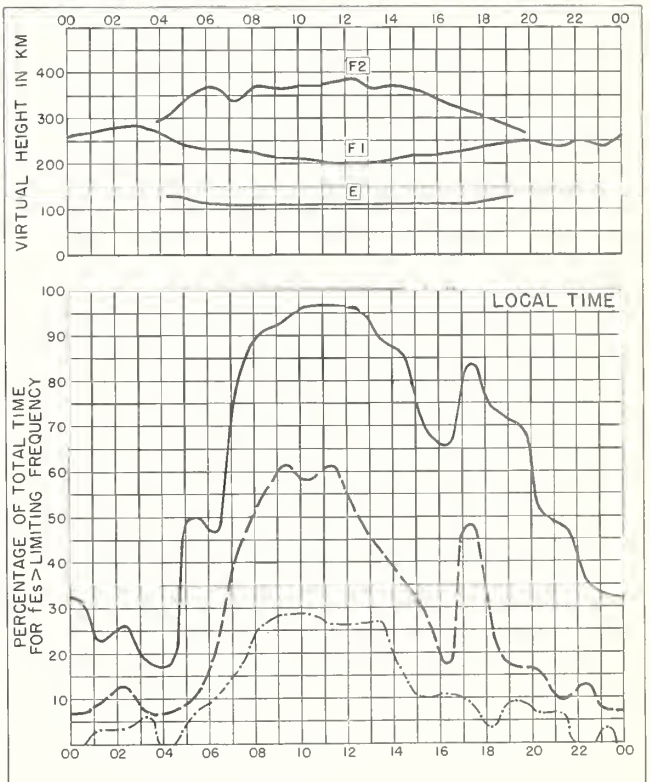


Fig. 12. ADAK, ALASKA MAY 1955

NBS 490

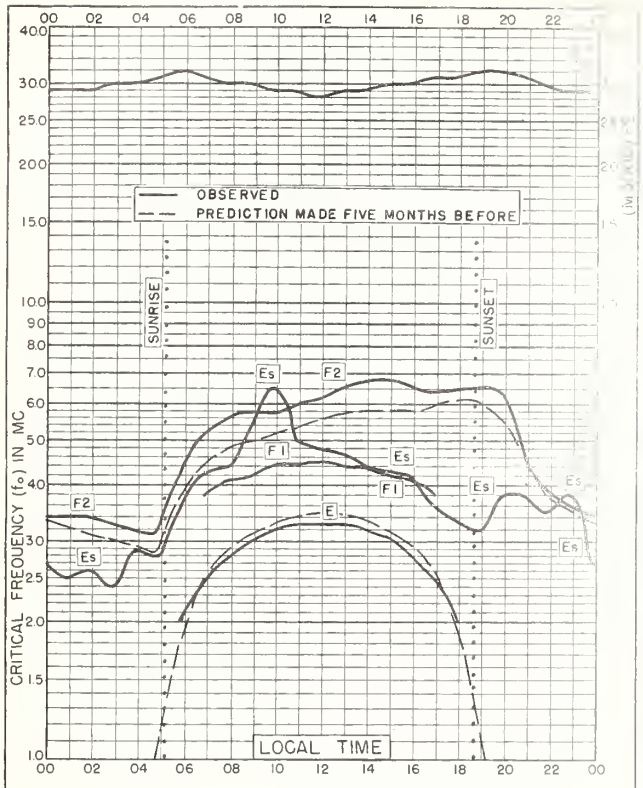


Fig. 13. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W MAY 1955

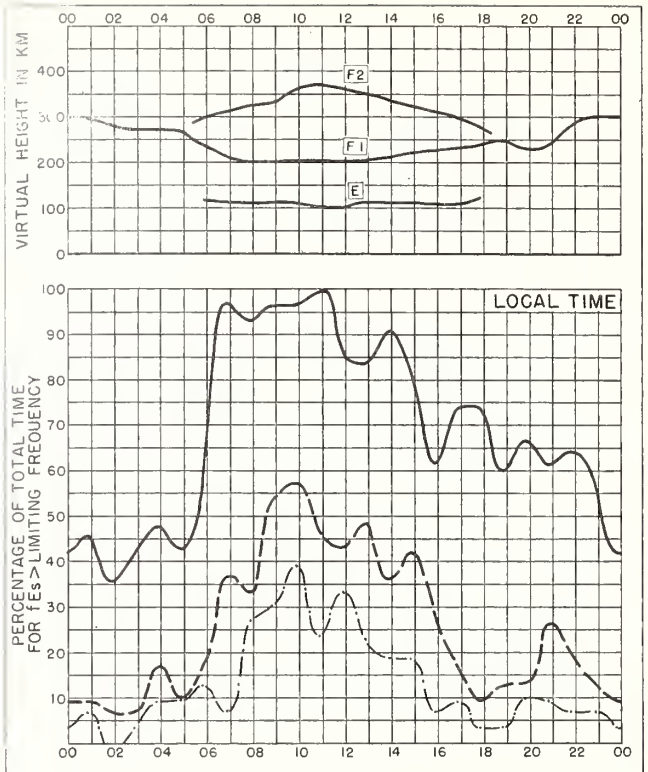


Fig. 14. WHITE SANDS, NEW MEXICO MAY 1955

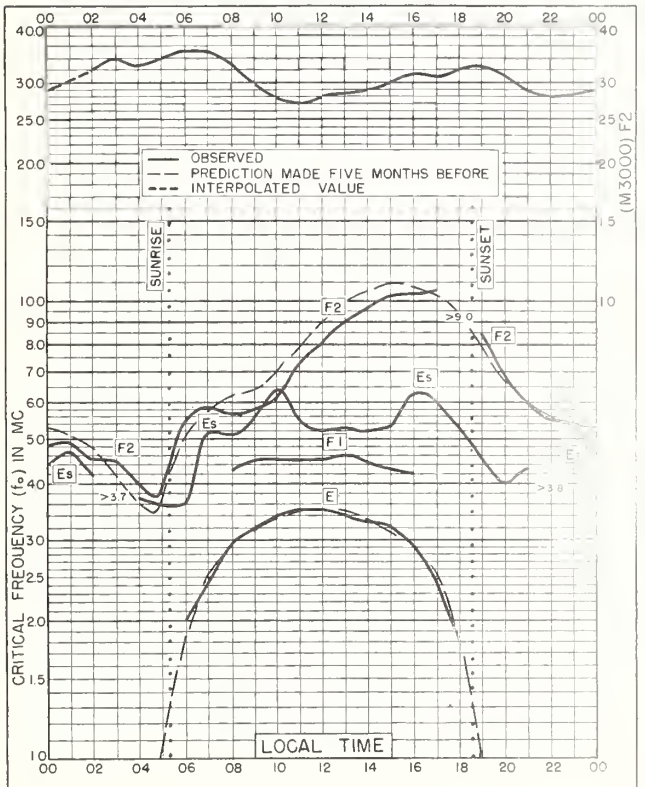


Fig. 15. OKINAWA I.
26.3°N, 127.8°E MAY 1955

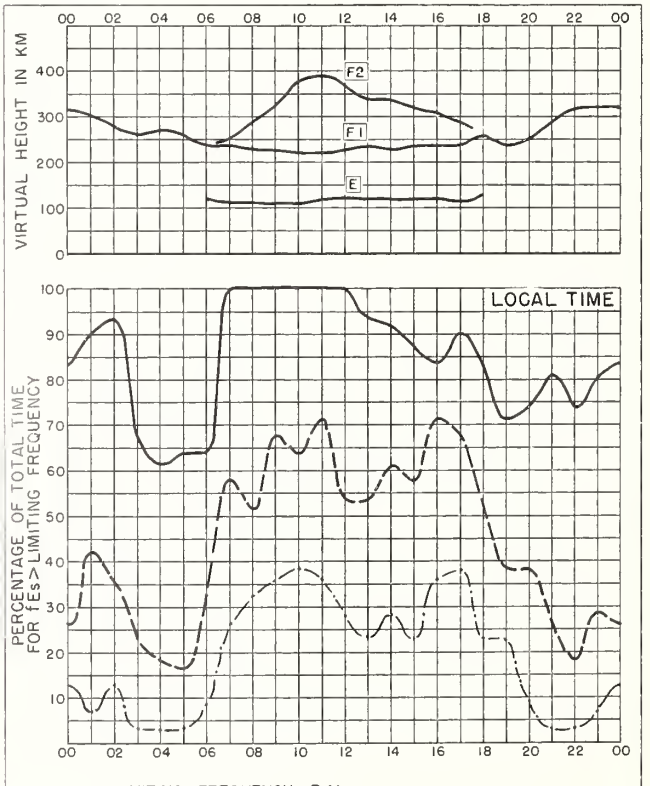


Fig. 16. OKINAWA I. MAY 1955

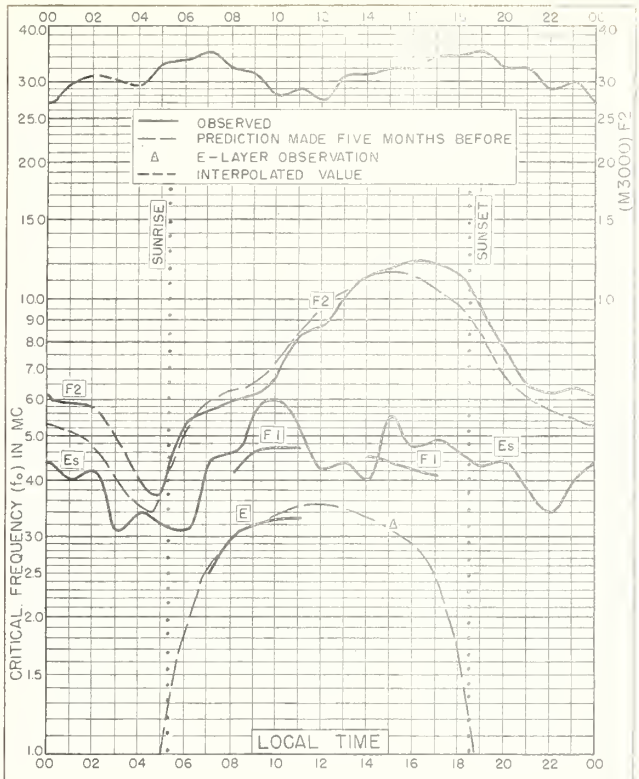


Fig. 17. FORMOSA, CHINA
25.0°N, 121.5°E MAY 1955

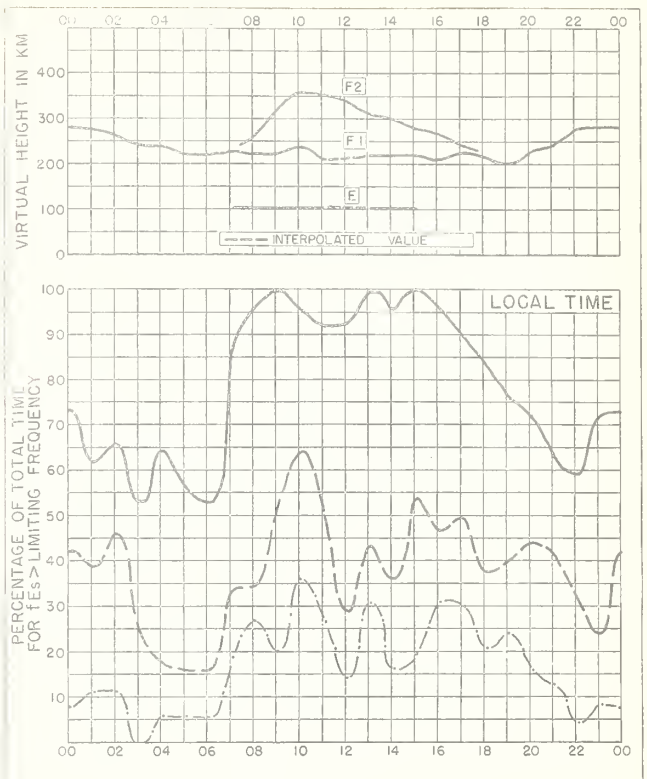


Fig. 18. FORMOSA, CHINA MAY 1955

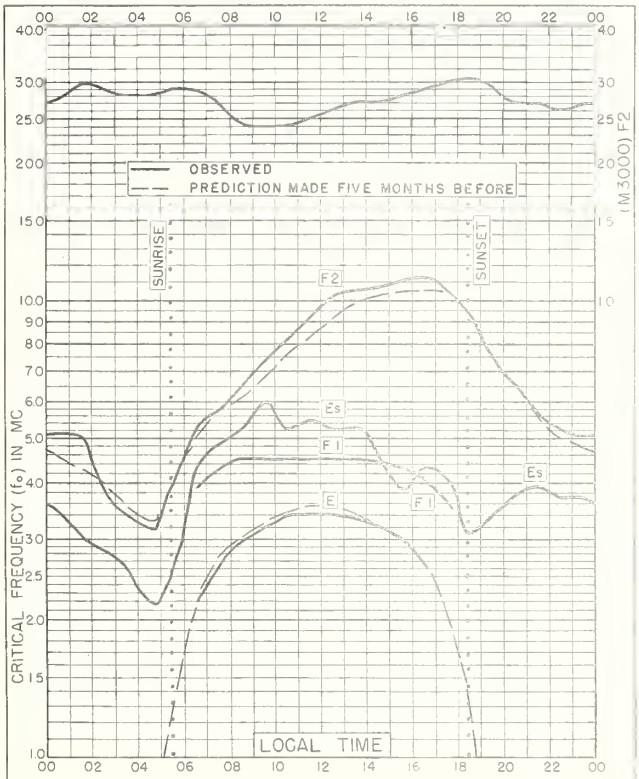


Fig. 19. MAUI, HAWAII
20.8°N, 156.5°W MAY 1955

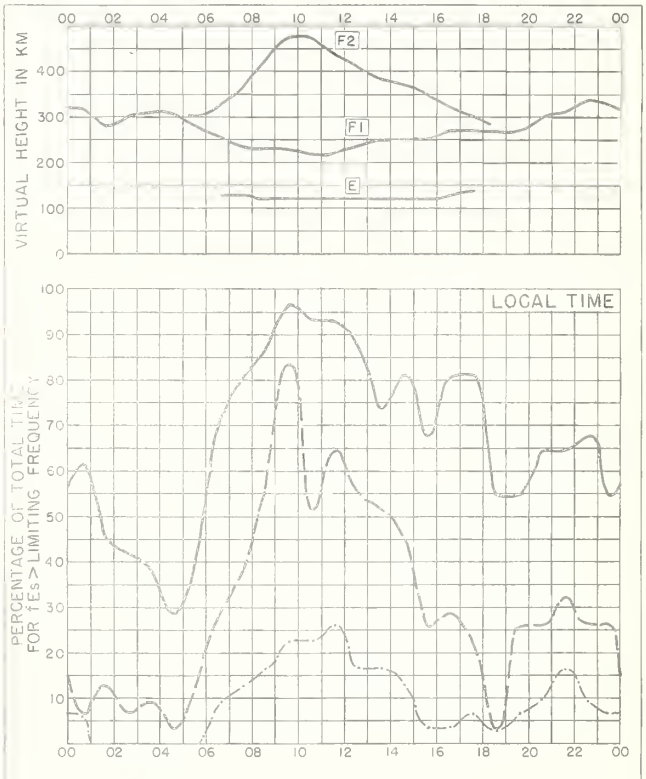


Fig. 20. MAUI, HAWAII MAY 1955

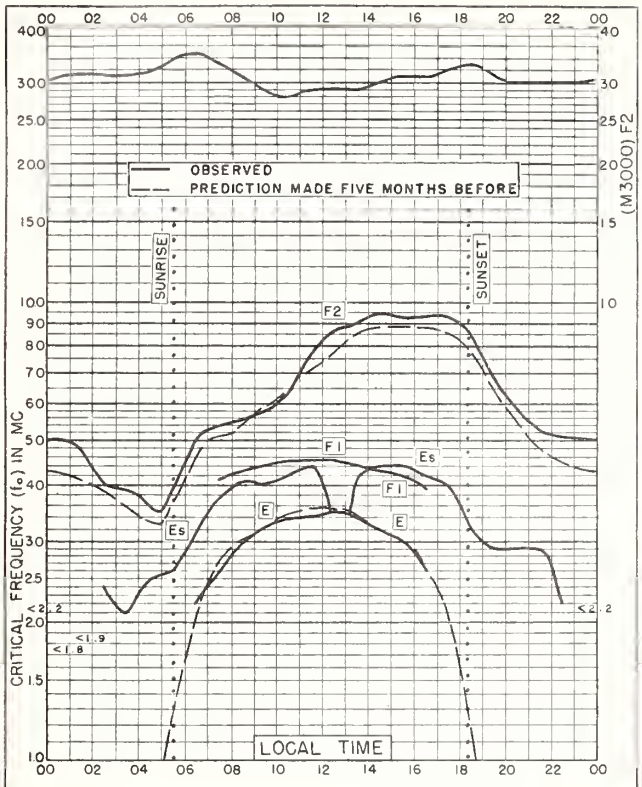


Fig. 21. PUERTO RICO, W. I.
18.5°N, 67.2°W MAY 1955

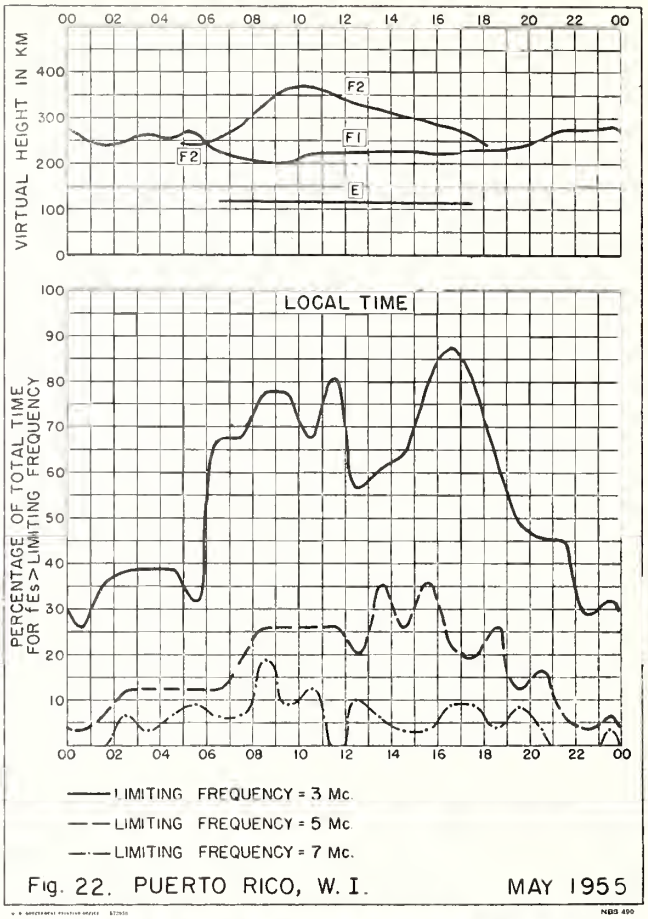


Fig. 22. PUERTO RICO, W. I. MAY 1955

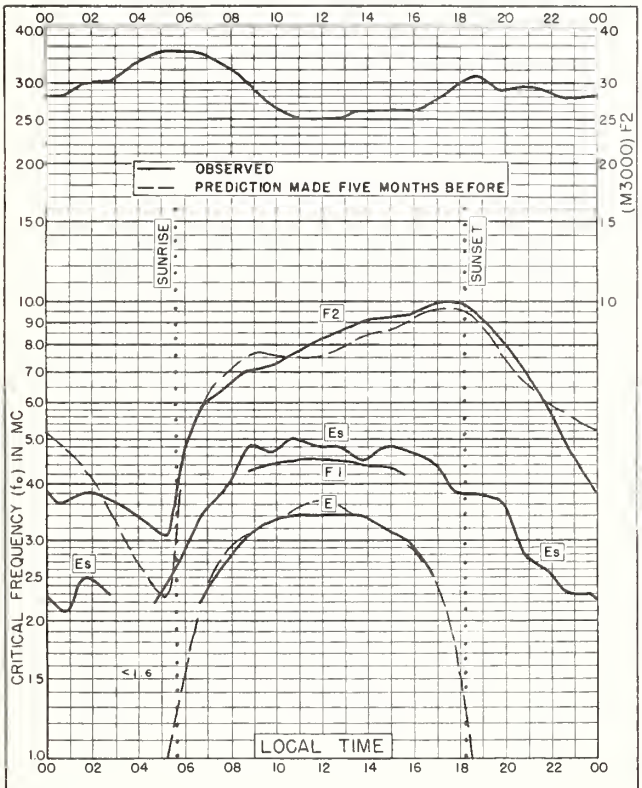


Fig. 23. GUAM I.
13.6°N, 144.9°E MAY 1955

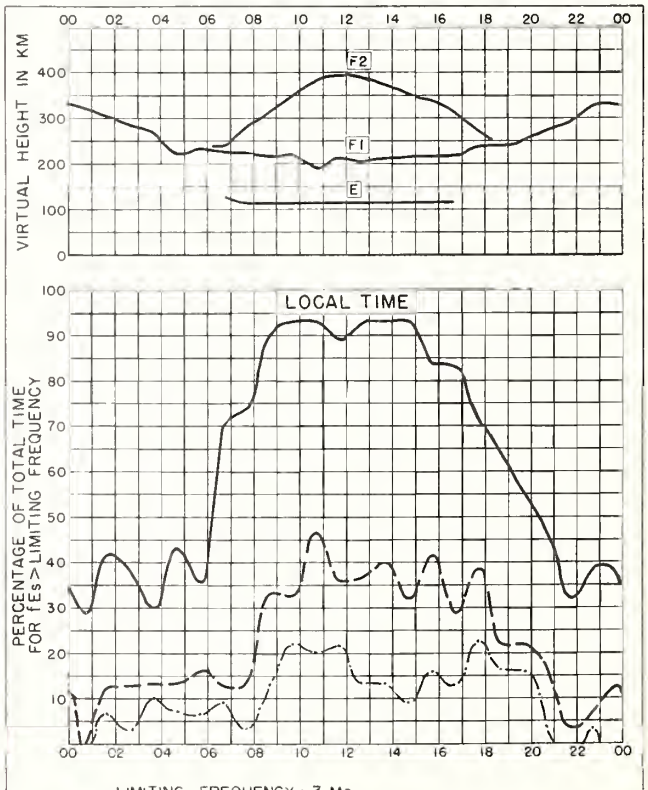


Fig. 24. GUAM I. MAY 1955

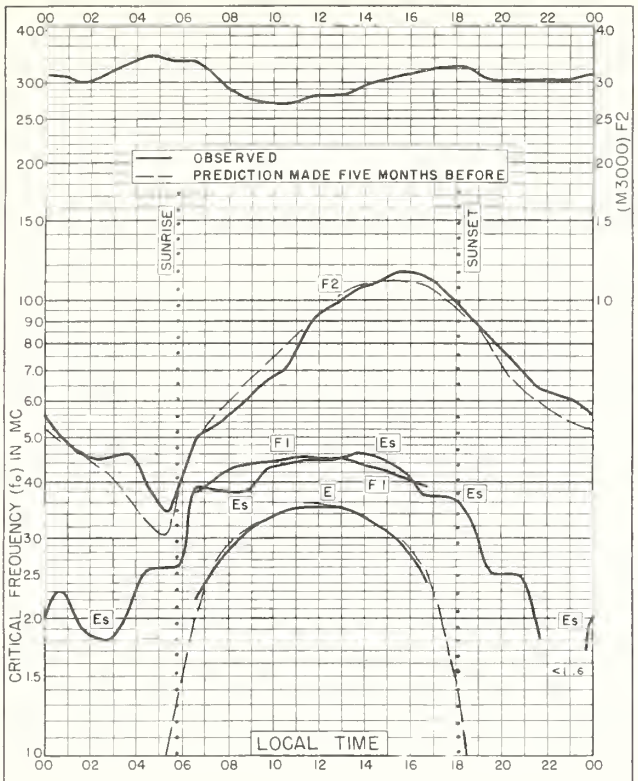


Fig. 25. PANAMA CANAL ZONE
9.4°N, 79.9°W MAY 1955

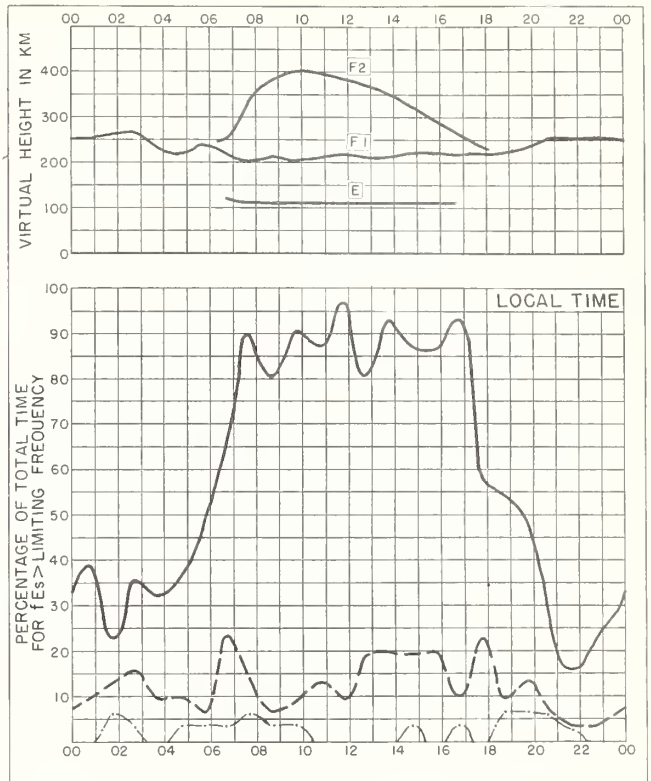


Fig. 26. PANAMA CANAL ZONE MAY 1955

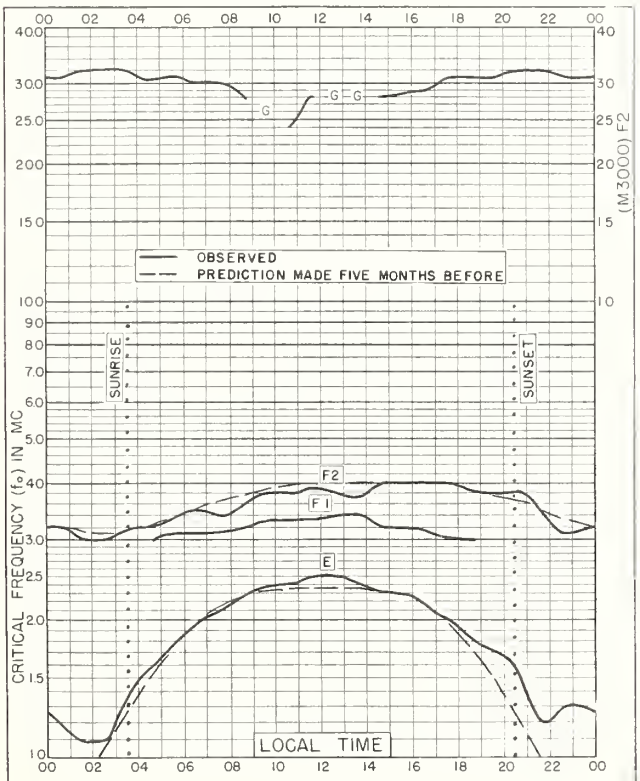


Fig. 27. RESOLUTE BAY, CANADA
74.7°N, 94.9°W APRIL 1955

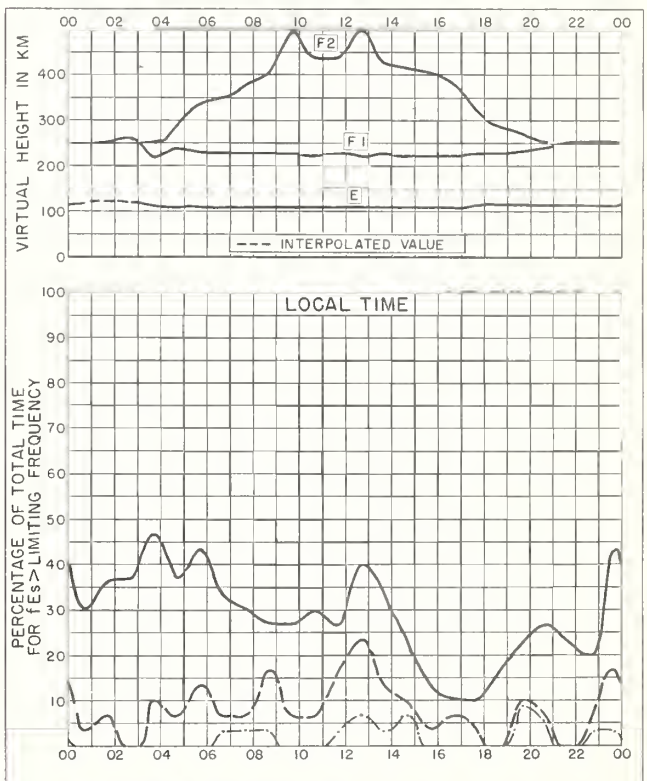


Fig. 28. RESOLUTE BAY, CANADA APRIL 1955

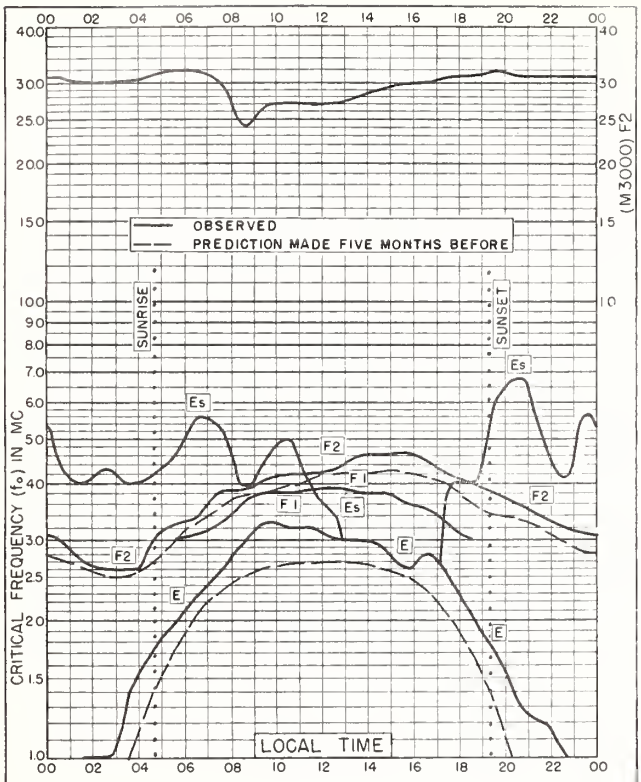


Fig. 29. BAKER LAKE, CANADA
64.3°N, 96.0°W APRIL 1955

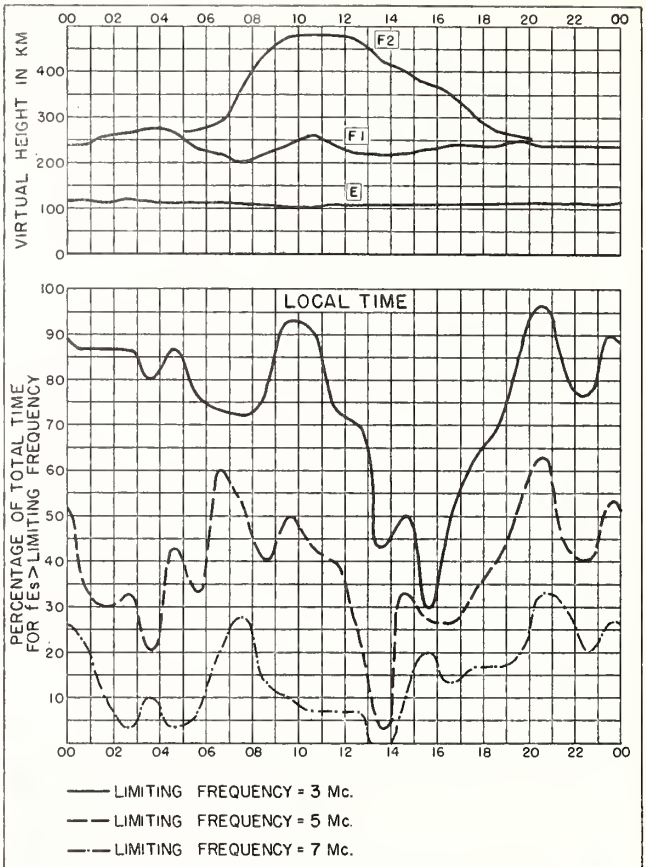


Fig. 30. BAKER LAKE, CANADA APRIL 1955

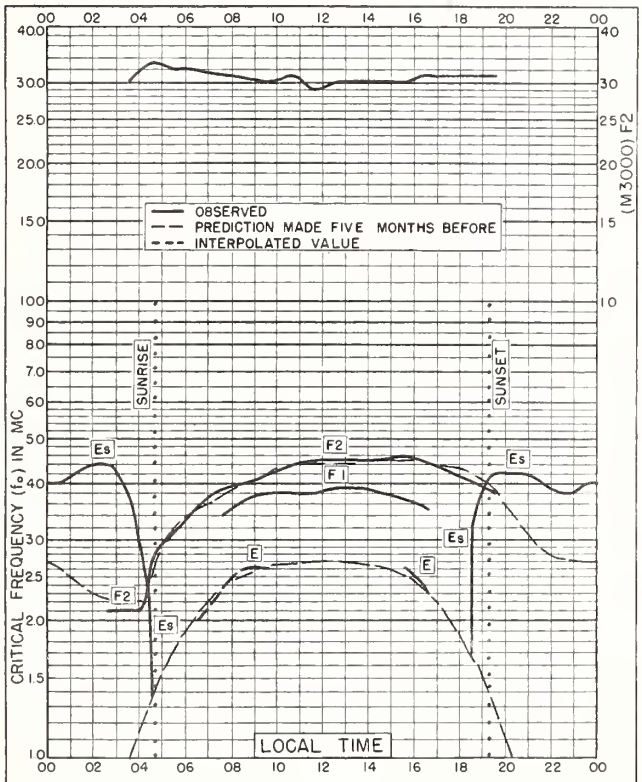


Fig. 31. REYKJAVIK, ICELAND
64.1°N, 21.8°W APRIL 1955

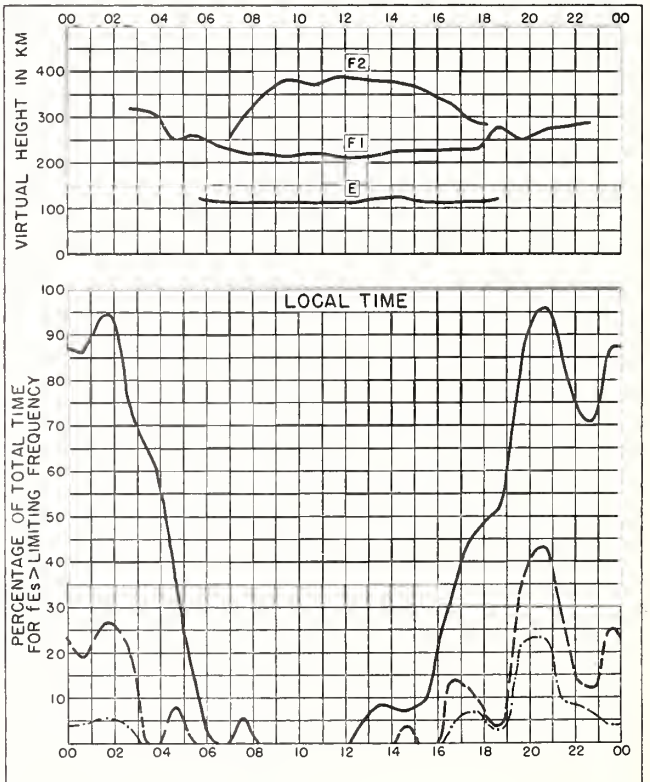


Fig. 32. REYKJAVIK, ICELAND APRIL 1955

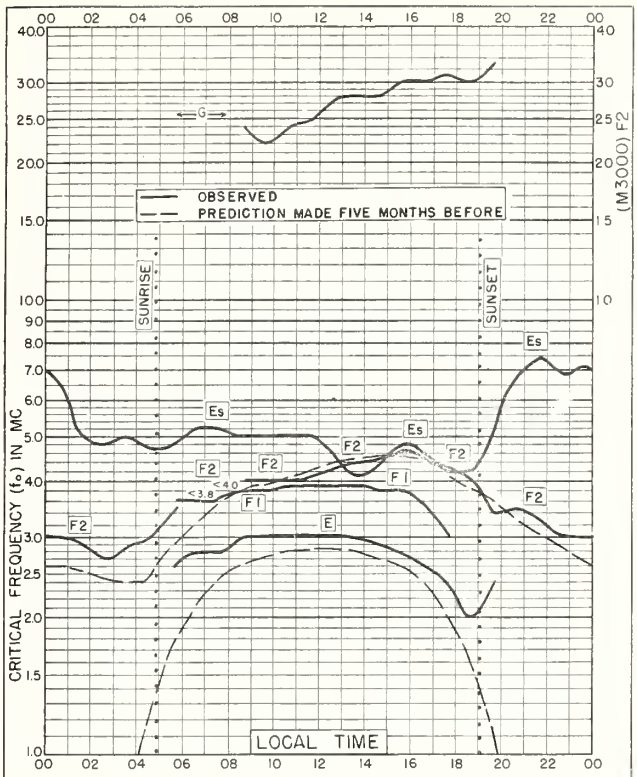


Fig. 33. CHURCHILL, CANADA
58.8°N, 94.2°W APRIL 1955

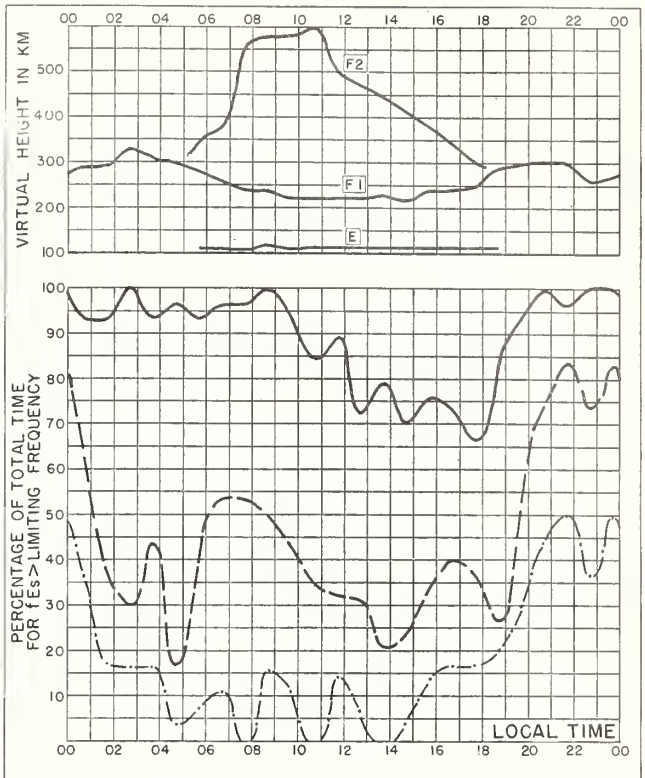


Fig. 34. CHURCHILL, CANADA APRIL 1955

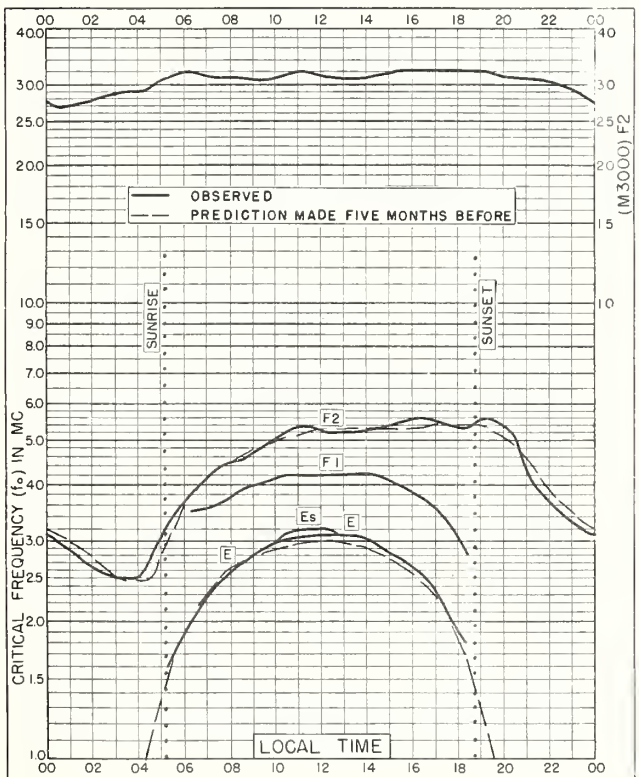


Fig. 35. De BILT, HOLLAND
52.1°N, 5.2°E APRIL 1955

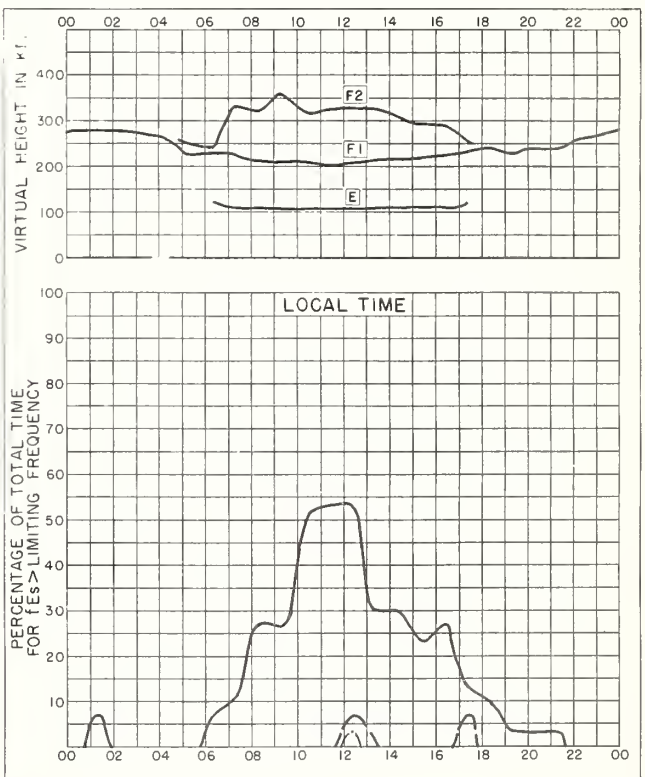


Fig. 36. De BILT, HOLLAND APRIL 1955

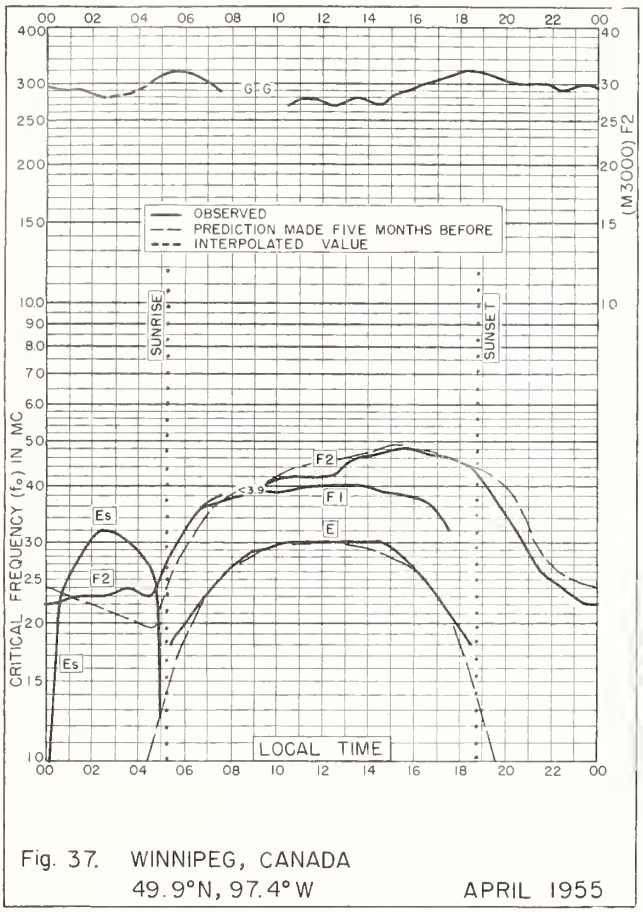


Fig. 37. WINNIPEG, CANADA
49.9°N, 97.4°W APRIL 1955

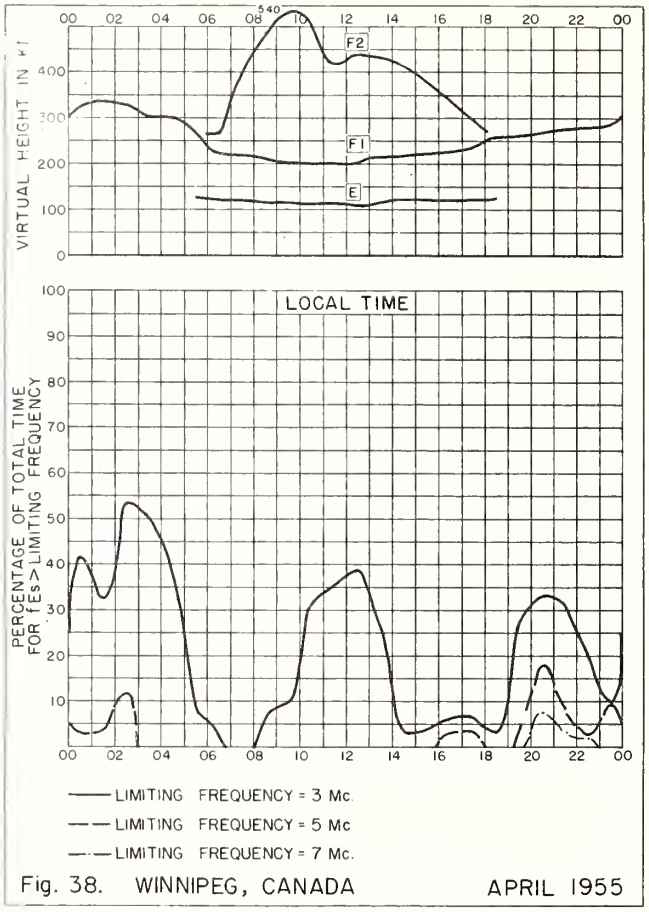


Fig. 38. WINNIPEG, CANADA APRIL 1955

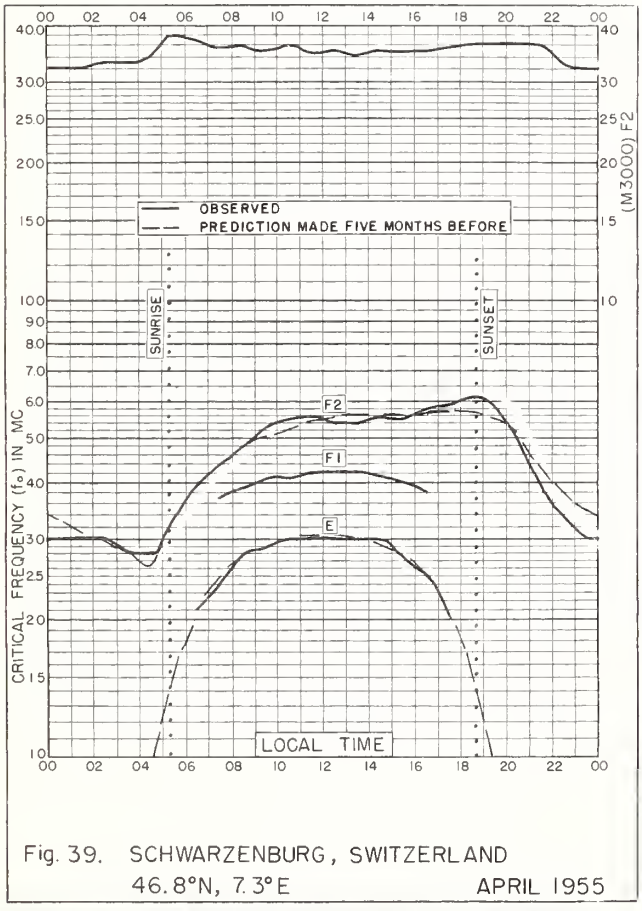


Fig. 39. SCHWARZENBURG, SWITZERLAND
46.8°N, 7.3°E APRIL 1955

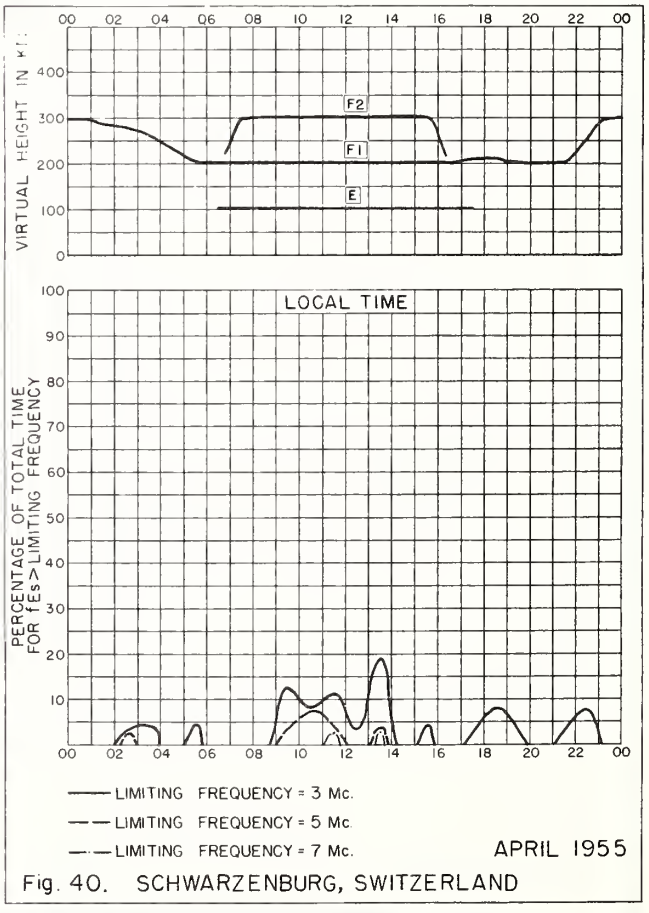


Fig. 40. SCHWARZENBURG, SWITZERLAND APRIL 1955

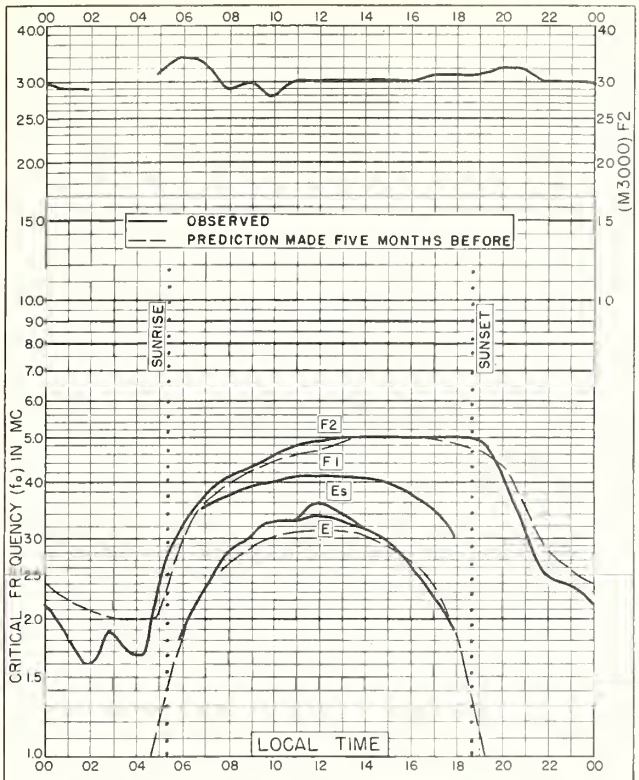


Fig. 41. OTTAWA, CANADA
45.4°N, 75.9°W APRIL 1955

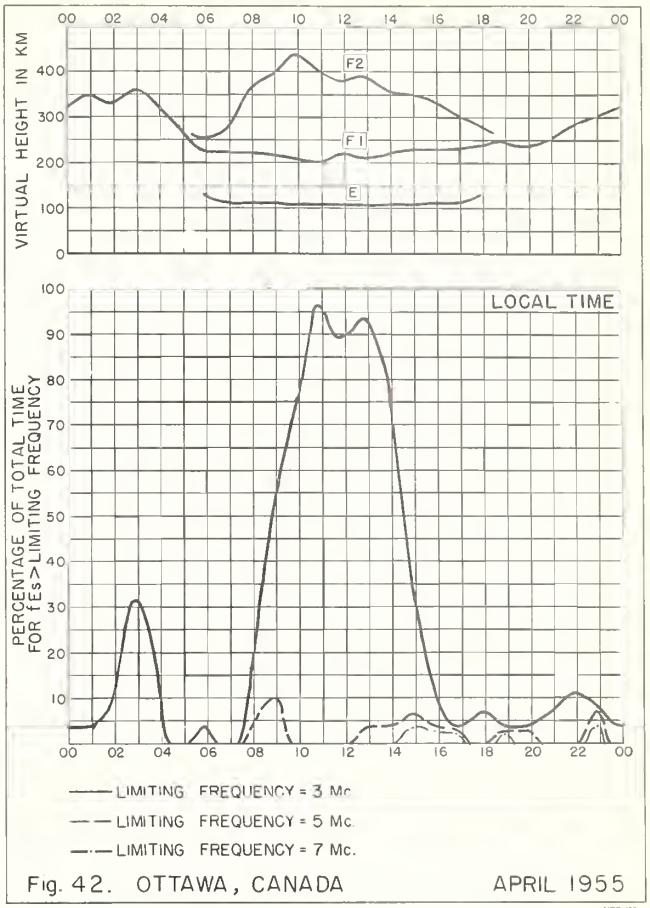


Fig. 42. OTTAWA, CANADA APRIL 1955

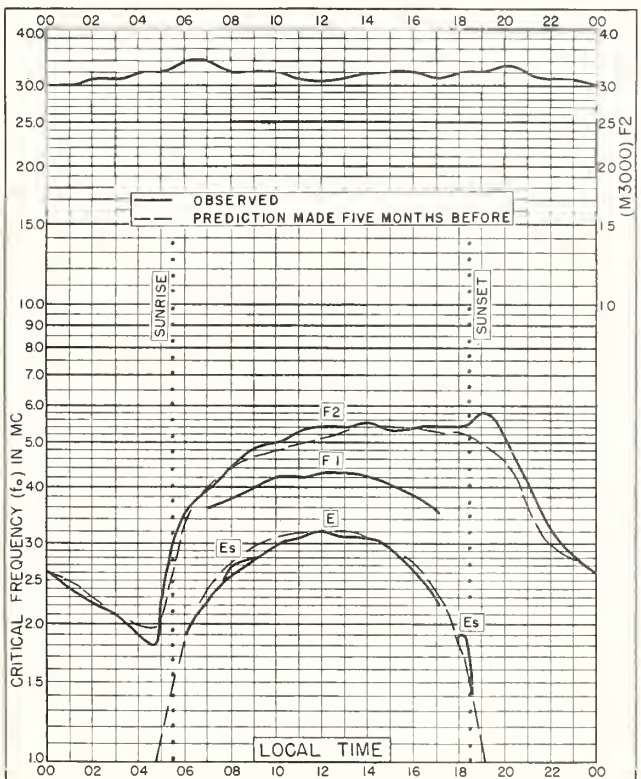


Fig. 43. FT. MONMOUTH, NEW JERSEY
40.0°N, 74.0°W APRIL 1955

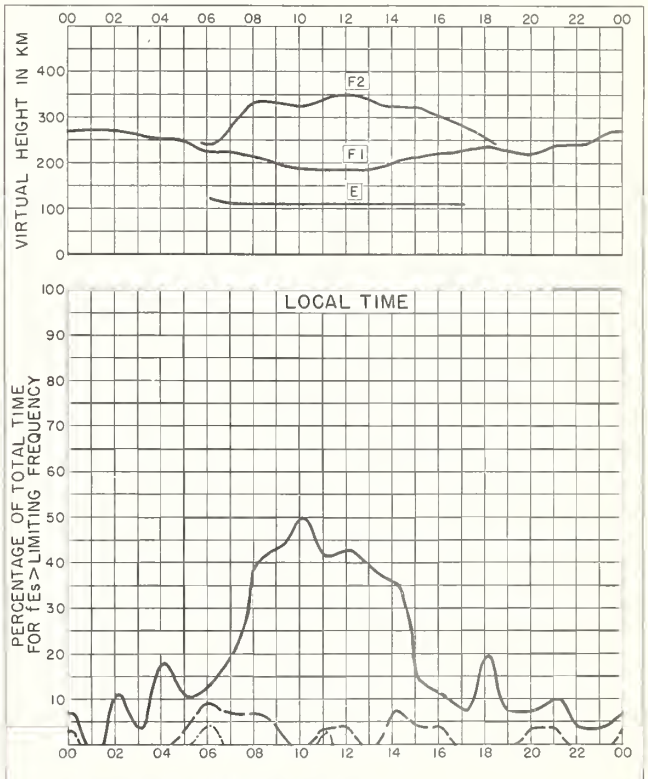


Fig. 44. FT. MONMOUTH, NEW JERSEY APRIL 1955

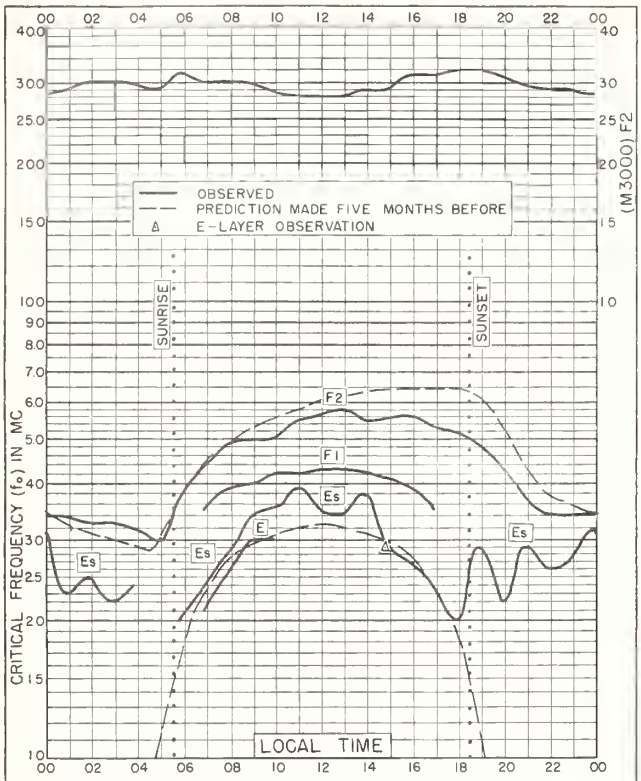
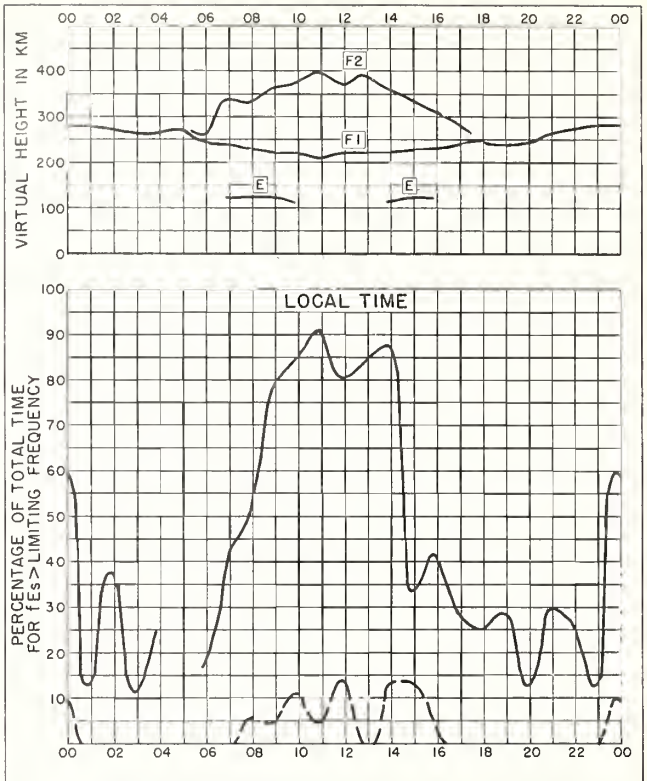


Fig. 45. SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W APRIL 1955



APRIL 1955

Fig. 46. SAN FRANCISCO, CALIFORNIA

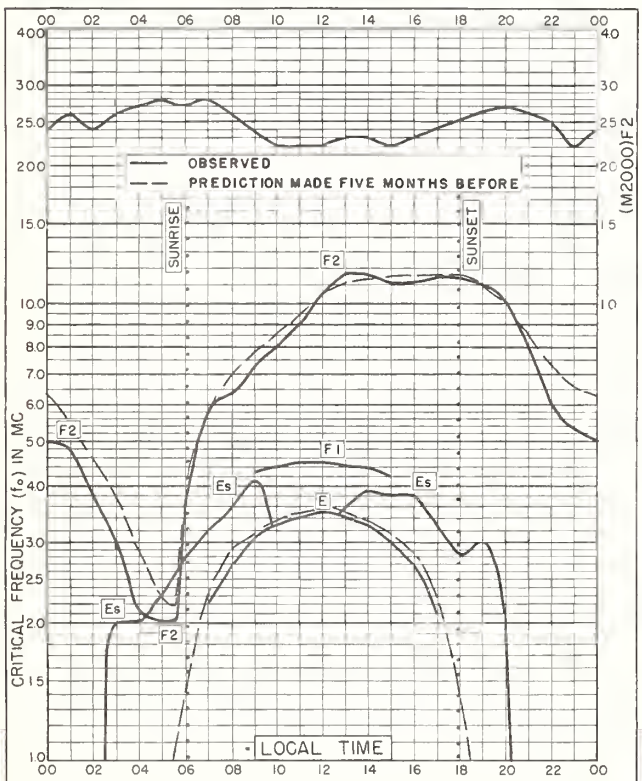
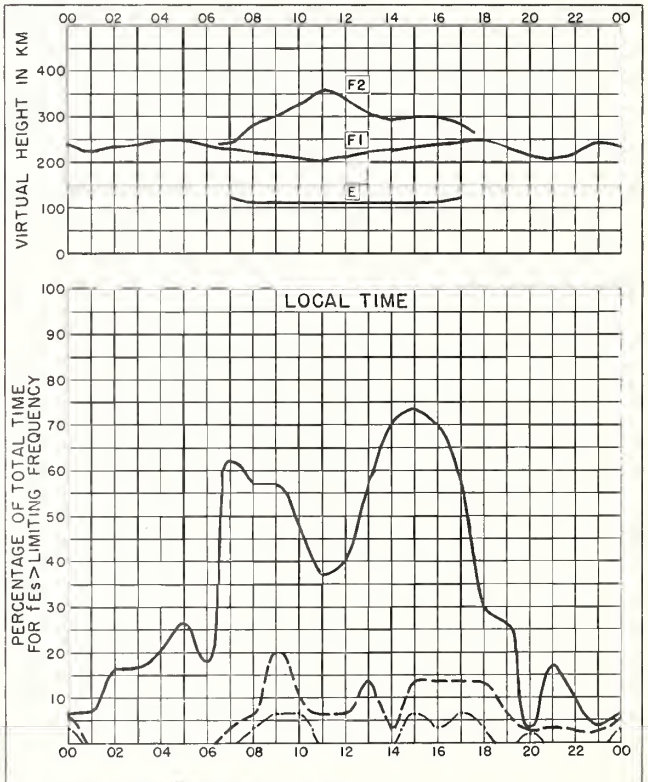


Fig. 47. LEOPOLDVILLE, BELGIAN CONGO
4.4° S, 15.2°E APRIL 1955



APRIL 1955

Fig. 48. LEOPOLDVILLE, BELGIAN CONGO

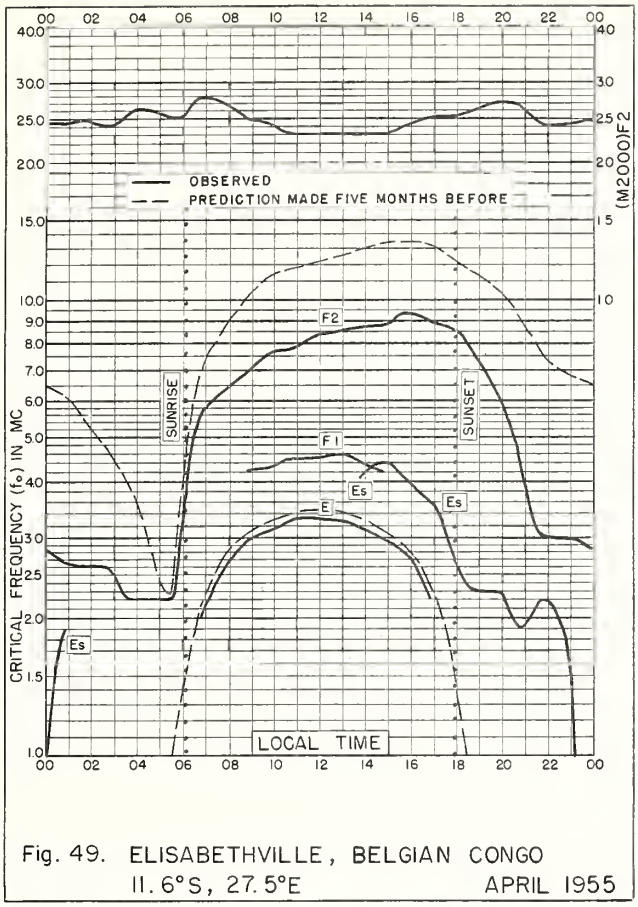


Fig. 49. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E APRIL 1955

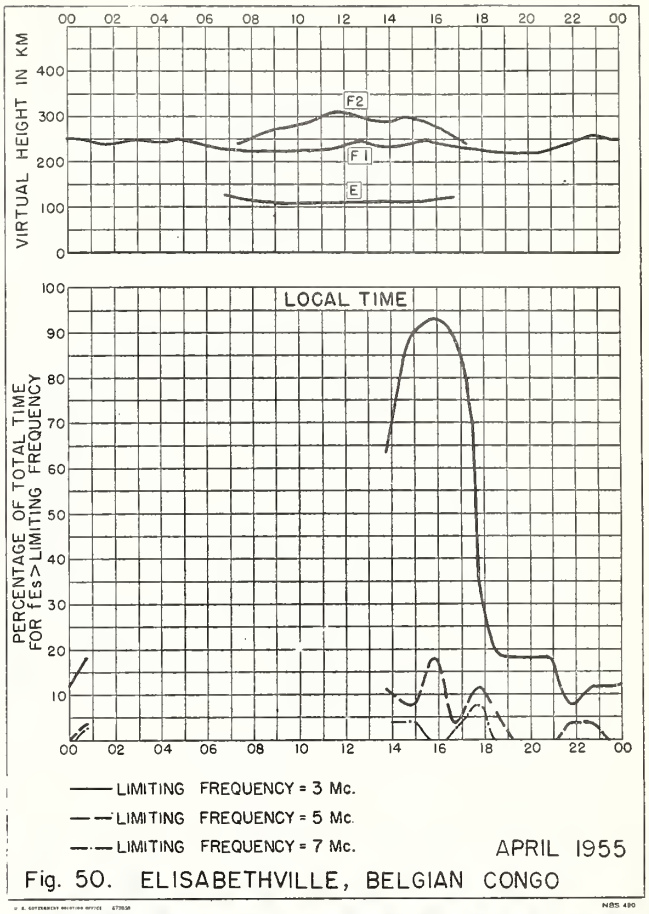


Fig. 50. ELISABETHVILLE, BELGIAN CONGO APRIL 1955

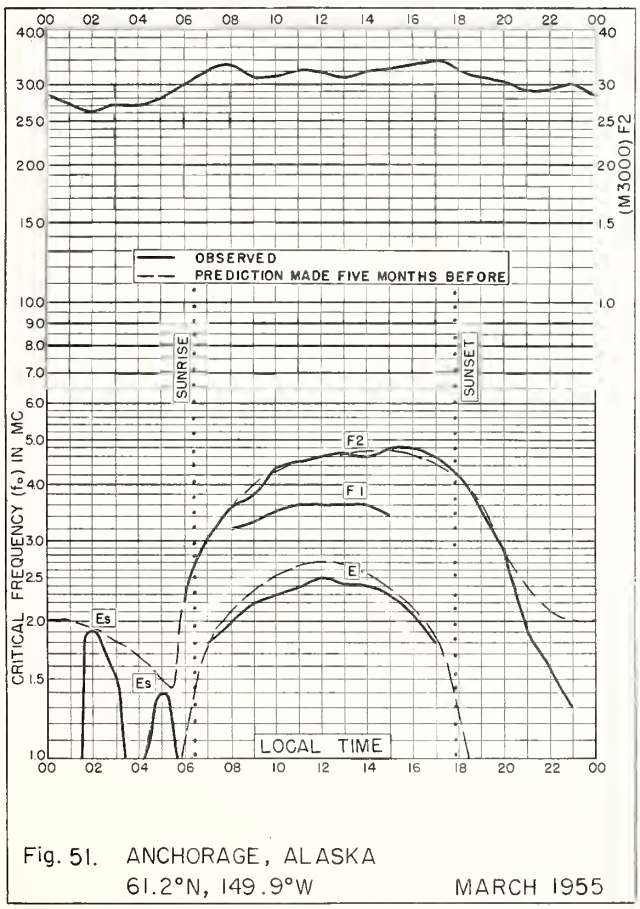


Fig. 51. ANCHORAGE, ALASKA
61.2°N, 149.9°W MARCH 1955

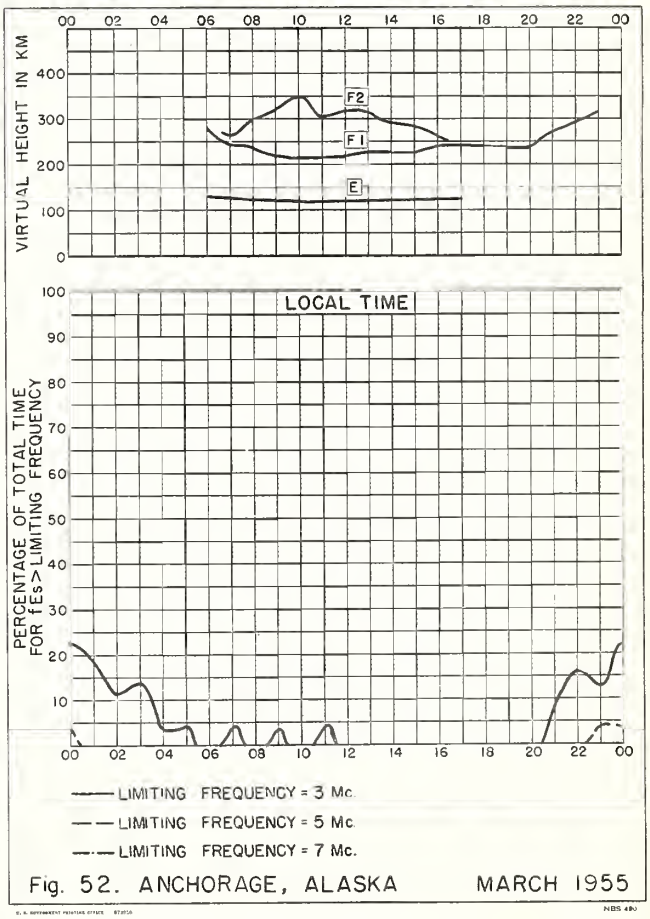


Fig. 52. ANCHORAGE, ALASKA MARCH 1955

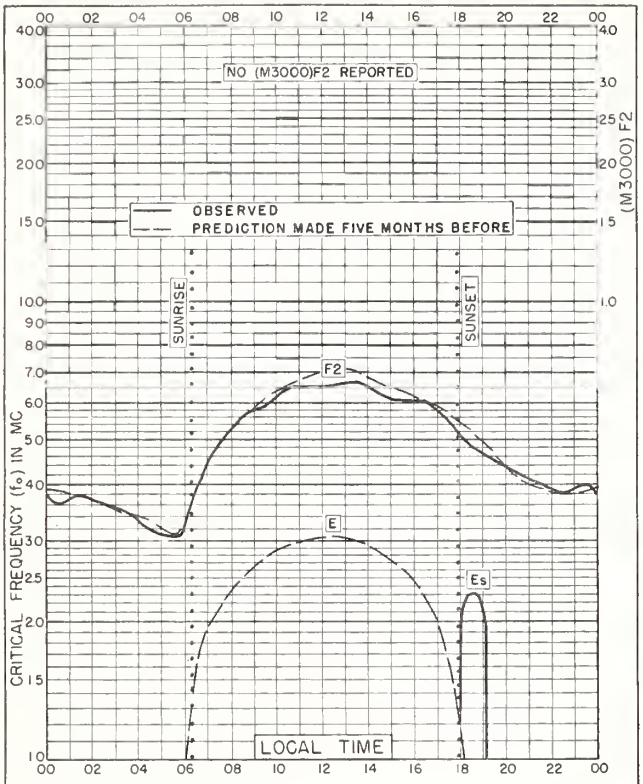


Fig. 53. WAKKANAI, JAPAN
45.4°N, 141.7°E MARCH 1955

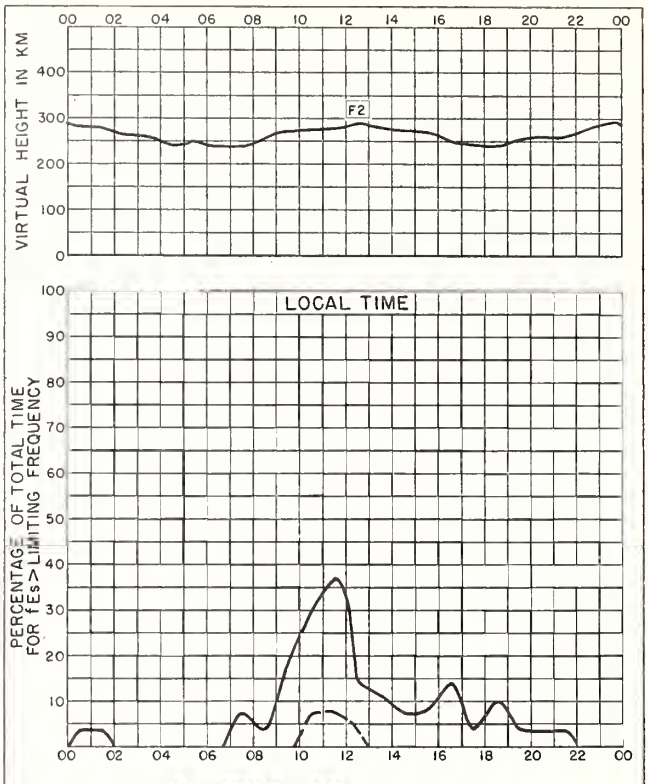


Fig. 54. WAKKANAI, JAPAN MARCH 1955

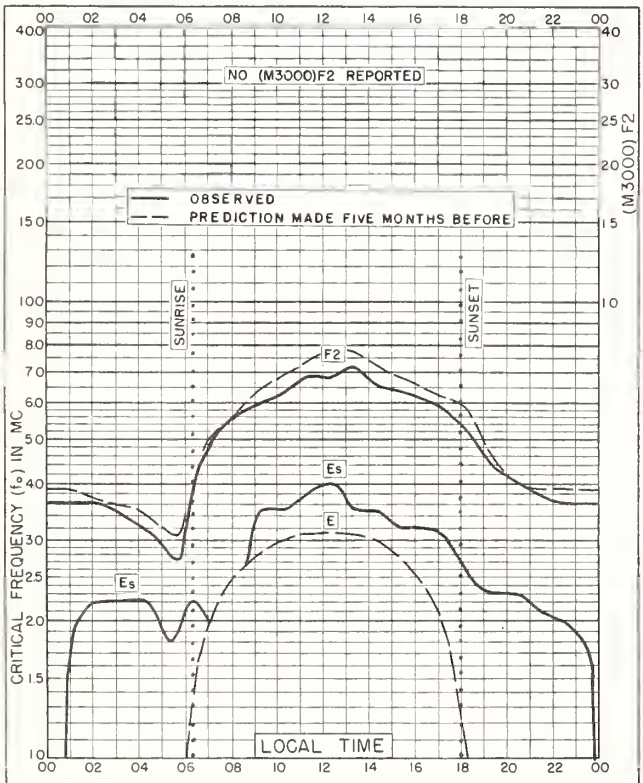


Fig. 55. AKITA, JAPAN
39.7°N, 140.1°E MARCH 1955

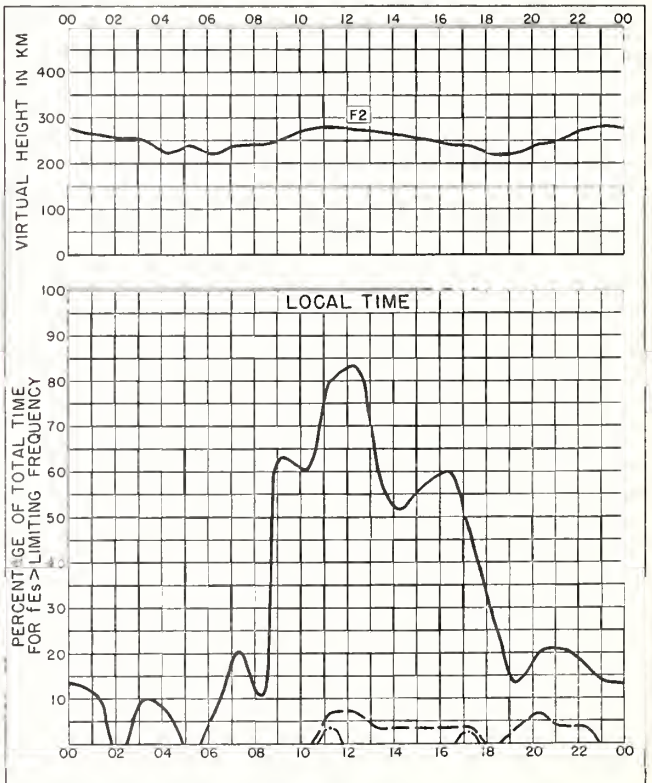


Fig. 56. AKITA, JAPAN MARCH 1955

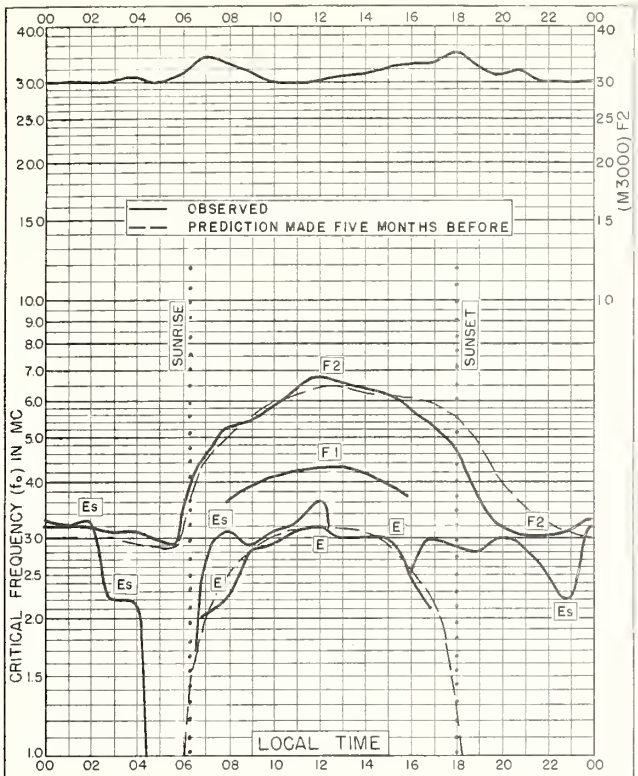
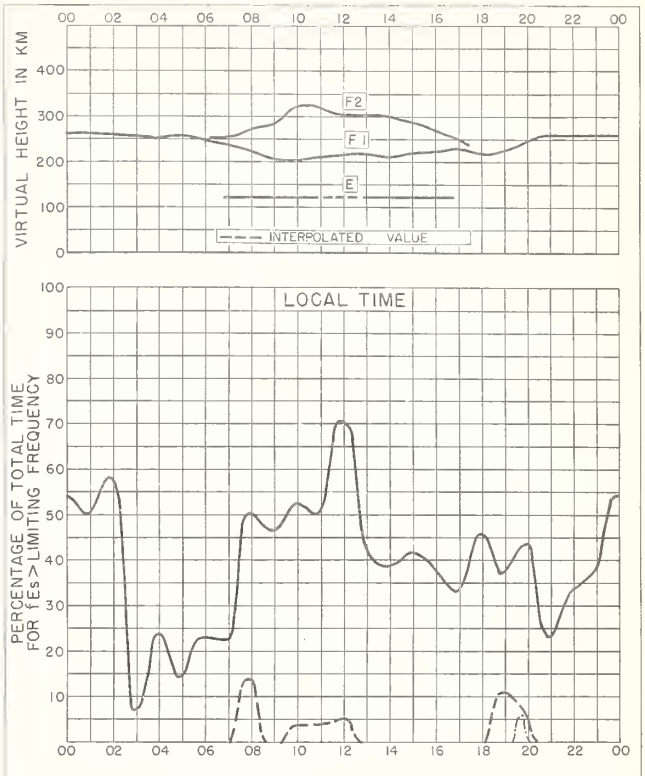


Fig. 57. SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W MARCH 1955



MARCH 1955
Fig. 58. SAN FRANCISCO, CALIFORNIA

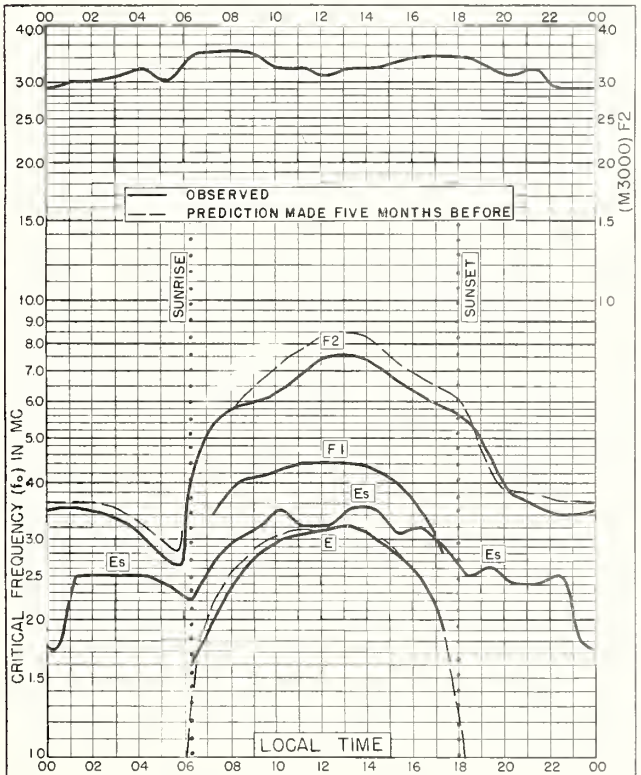


Fig. 59. TOKYO, JAPAN
35.7°N, 139.5°E MARCH 1955

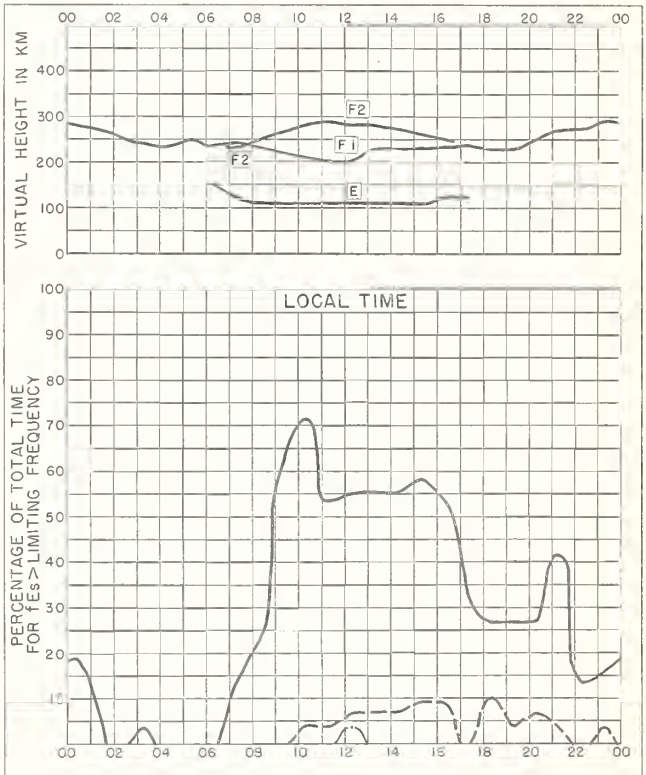


Fig. 60. TOKYO, JAPAN MARCH 1955

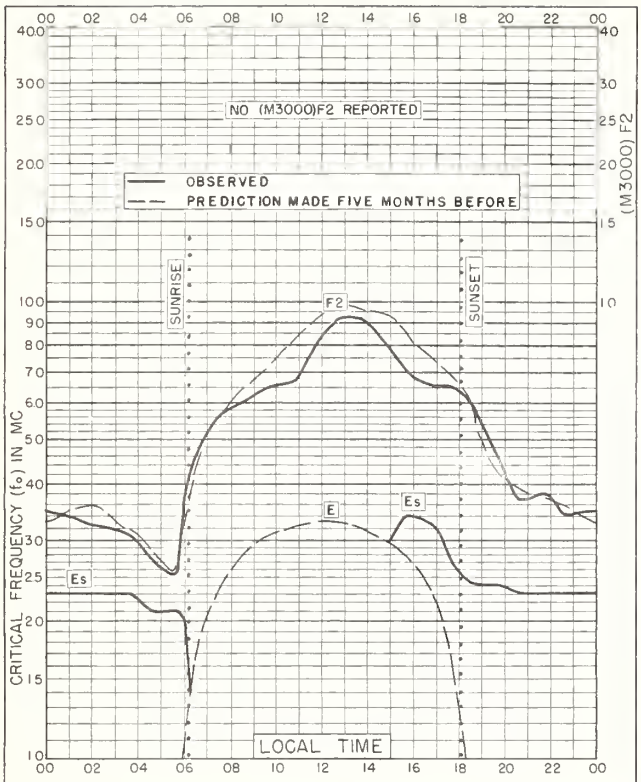


Fig. 61. YAMAGAWA, JAPAN
31.2°N, 130.6°E MARCH 1955

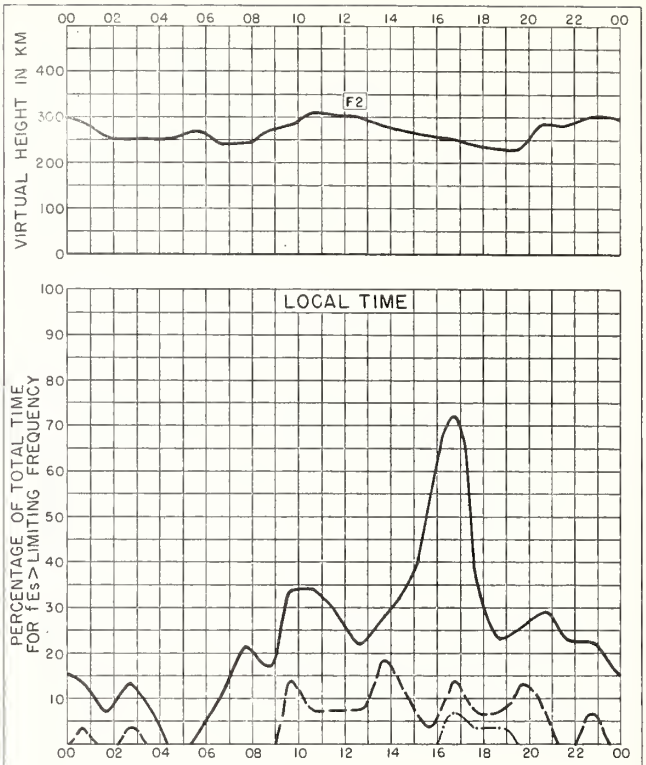


Fig. 62. YAMAGAWA, JAPAN MARCH 1955

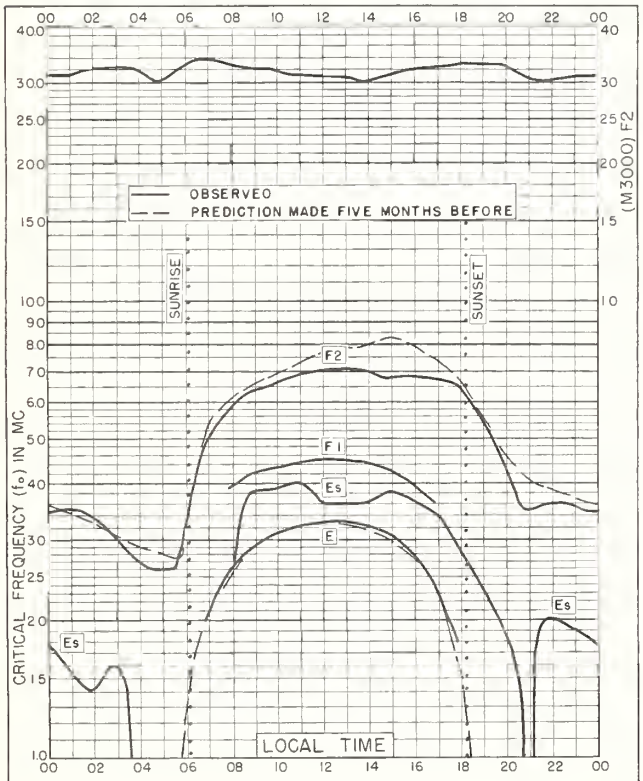
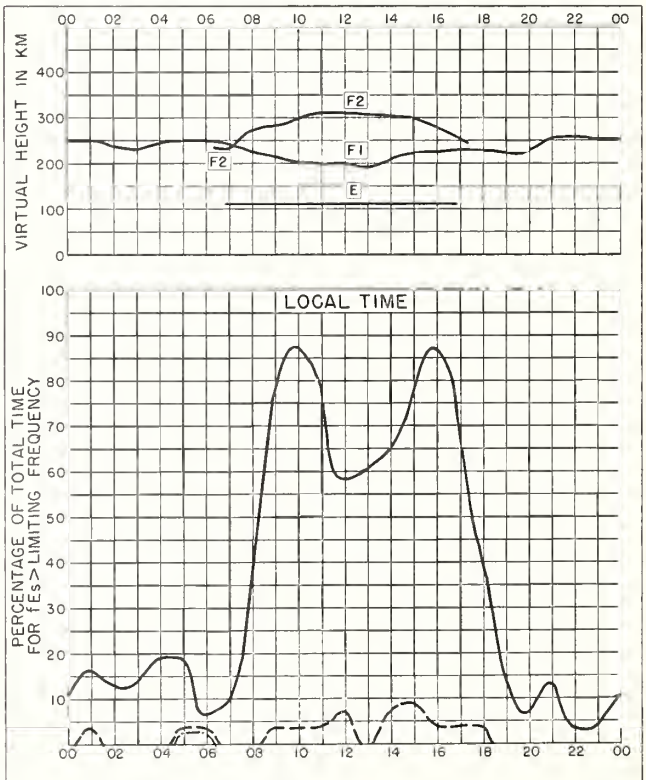


Fig. 63. JOHANNESBURG, UNION OF S. AFRICA
26.2°S, 28.1°E MARCH 1955



MARCH 1955

Fig. 64. JOHANNESBURG, UNION OF S. AFRICA

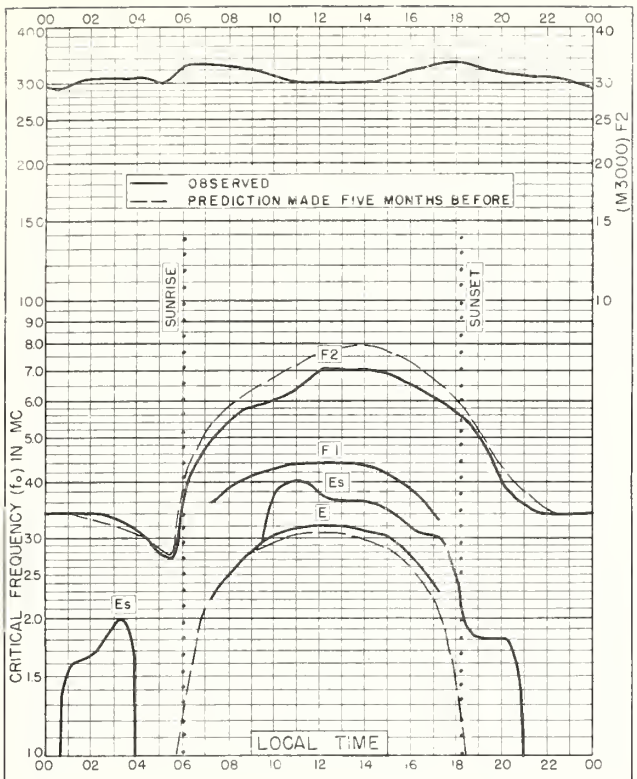
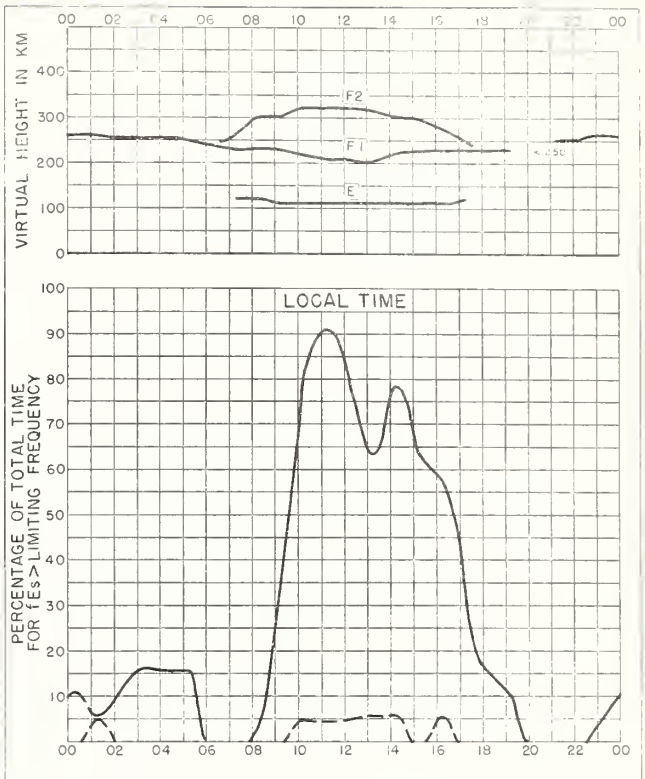


Fig. 65. CAPETOWN, UNION OF S. AFRICA
34.2°S, 18.3°E MARCH 1955



MARCH 1955

Fig. 66. CAPETOWN, UNION OF S. AFRICA

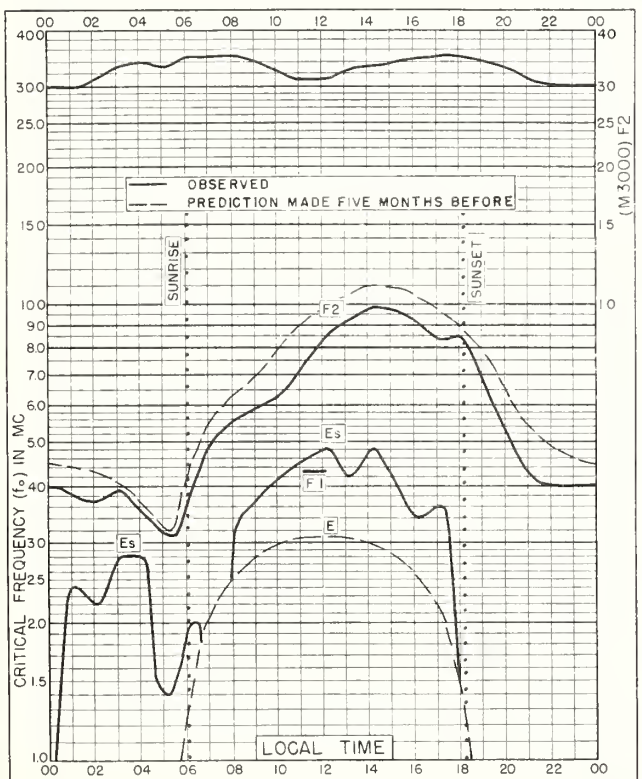
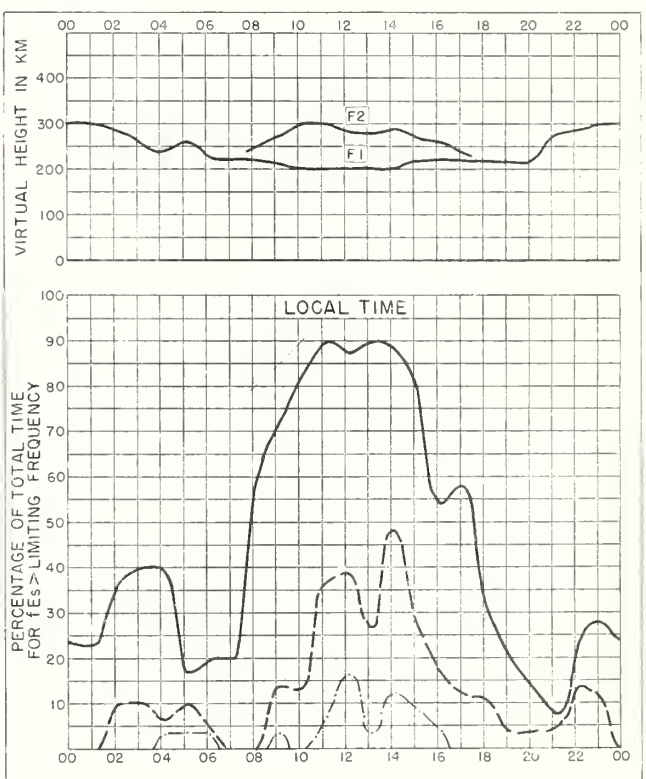


Fig. 67. BUENOS AIRES, ARGENTINA
34.5°S, 58.5° W MARCH 1955



MARCH 1955

Fig. 68. BUENOS AIRES, ARGENTINA

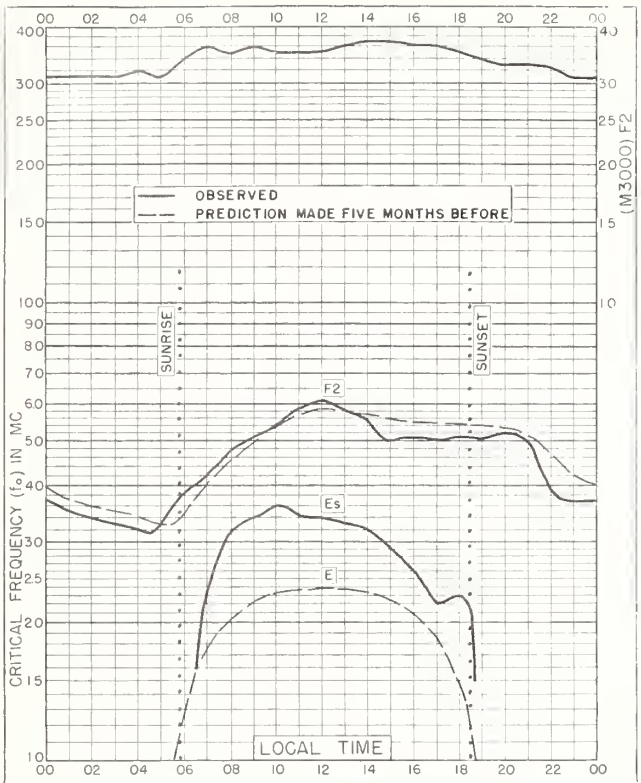


Fig. 69. DECEPCION I.
63.0°S, 60.7° W MARCH 1955

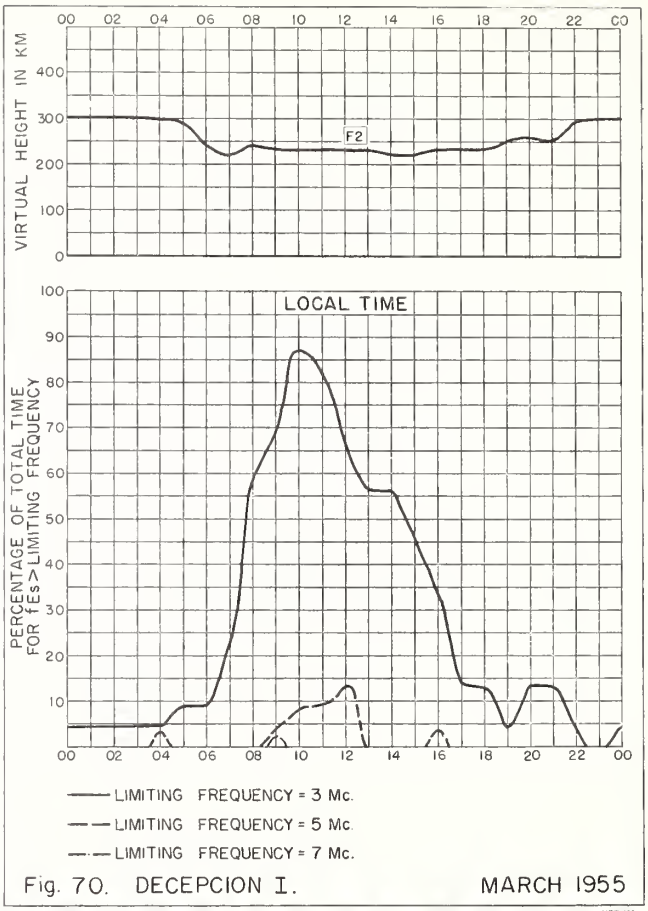


Fig. 70. DECEPCION I. MARCH 1955

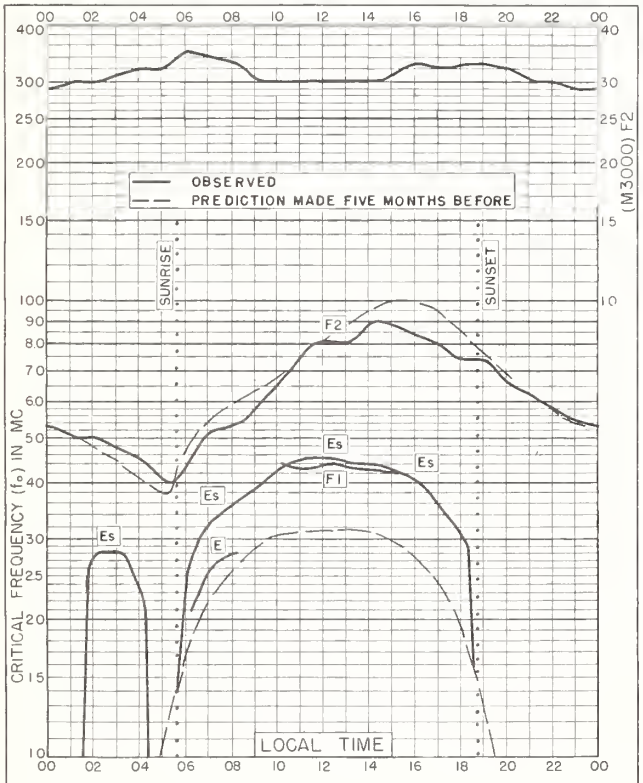


Fig. 71. BUENOS AIRES, ARGENTINA
34.5°S, 58.5° W FEBRUARY 1955

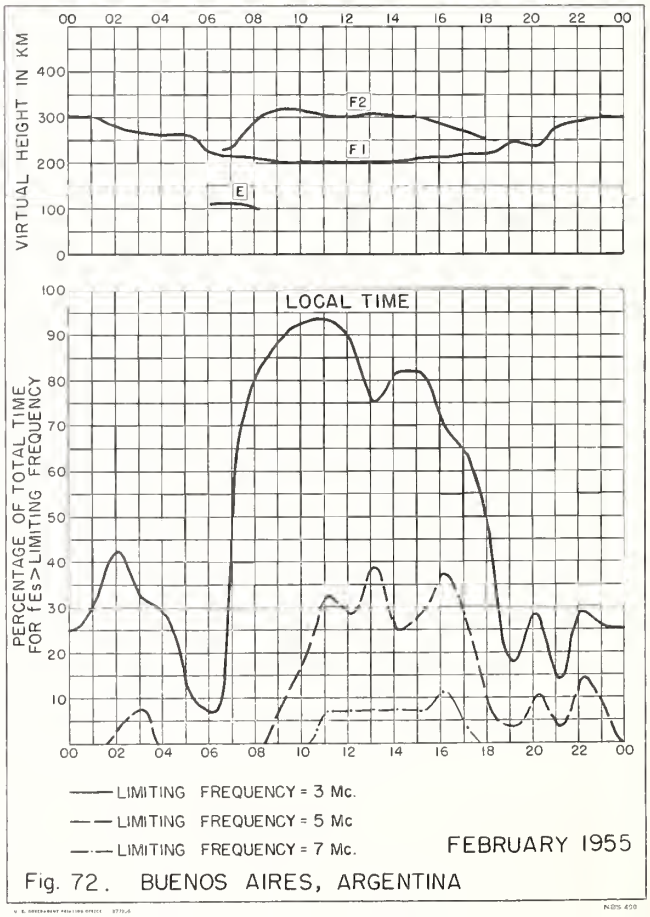


Fig. 72. BUENOS AIRES, ARGENTINA FEBRUARY 1955

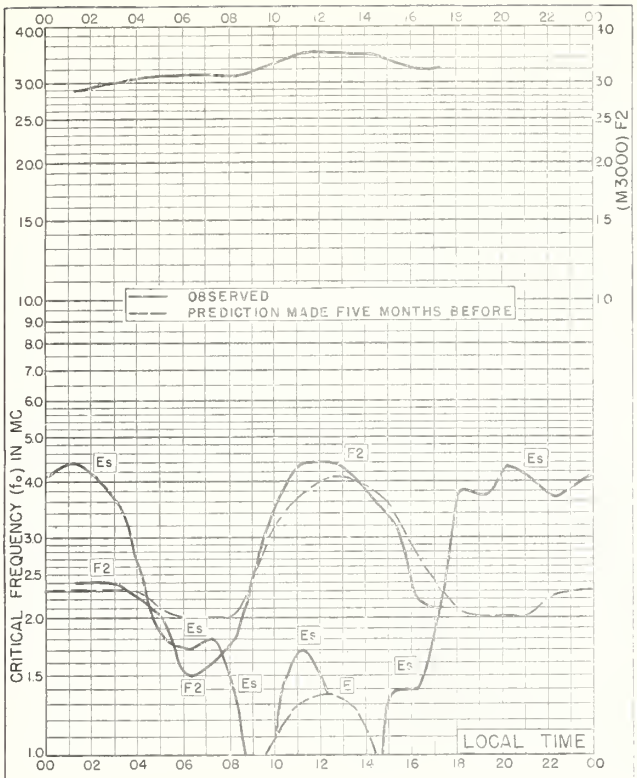


Fig. 73. TROMSO, NORWAY
69.7°N, 19.0°E JANUARY 1955

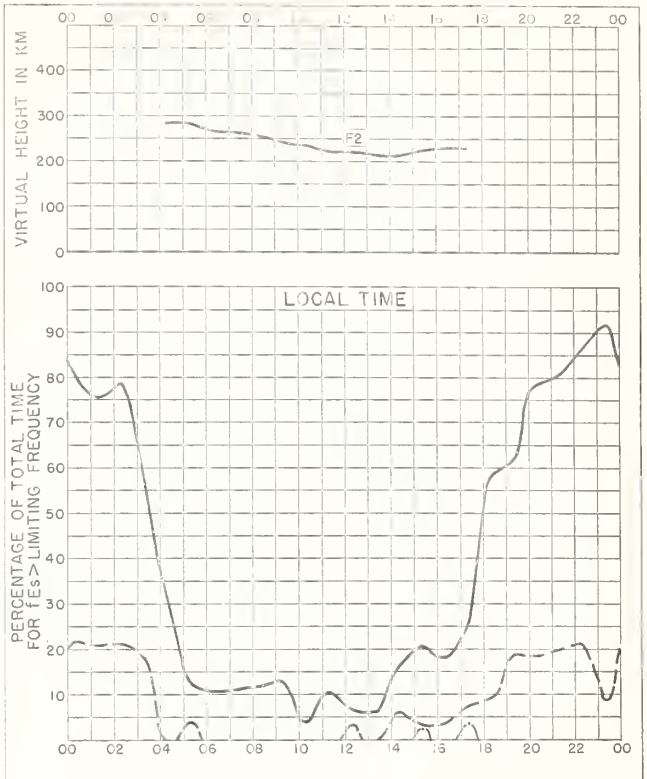


Fig. 74. TROMSO, NORWAY JANUARY 1955

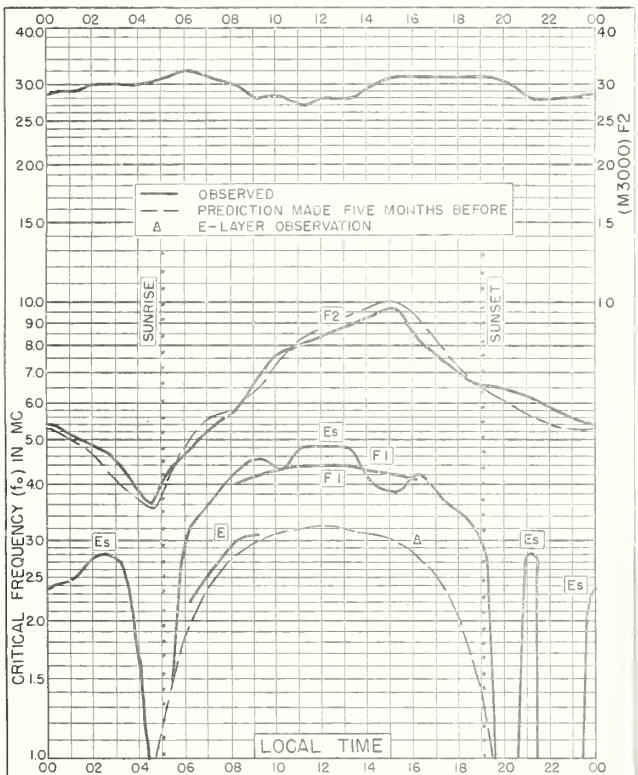
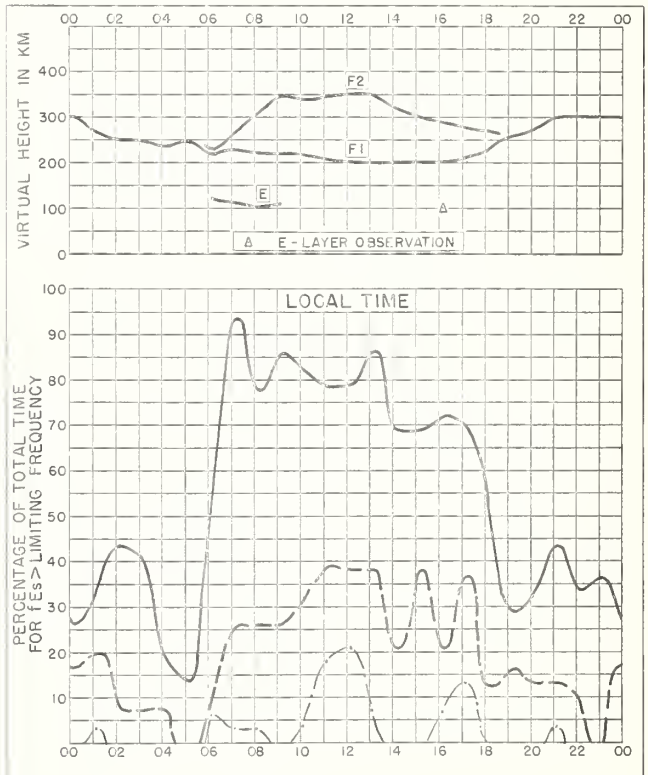


Fig. 75. BUENOS AIRES, ARGENTINA
34.5°S, 58.5°W JANUARY 1955



JANUARY 1955
Fig. 76. BUENOS AIRES, ARGENTINA

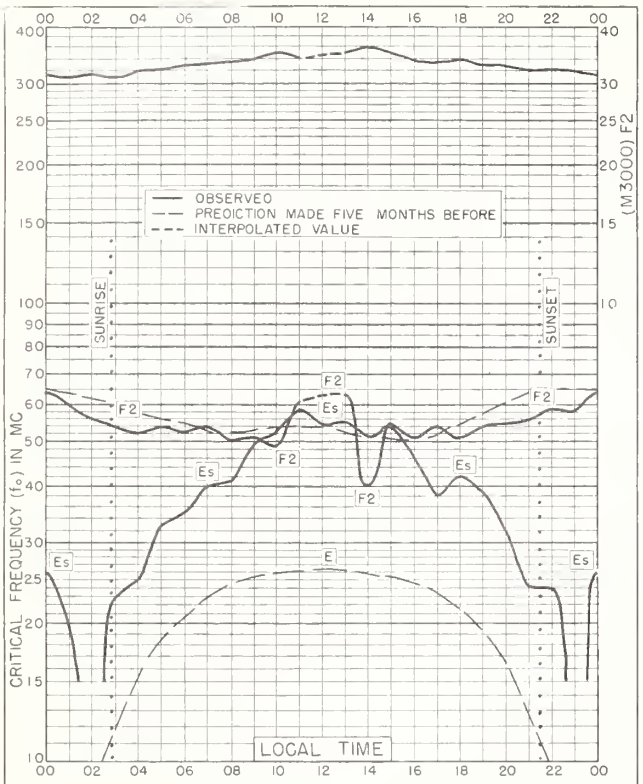


Fig. 77. DECEPCION I.
63.0°S, 60.7°W JANUARY 1955

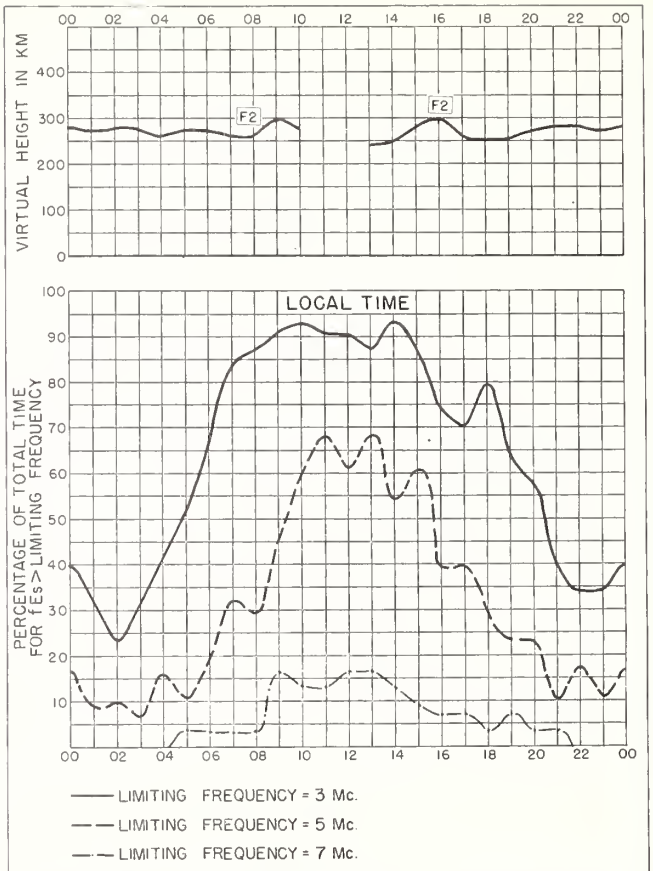


Fig. 78. DECEPCION I. JANUARY 1955

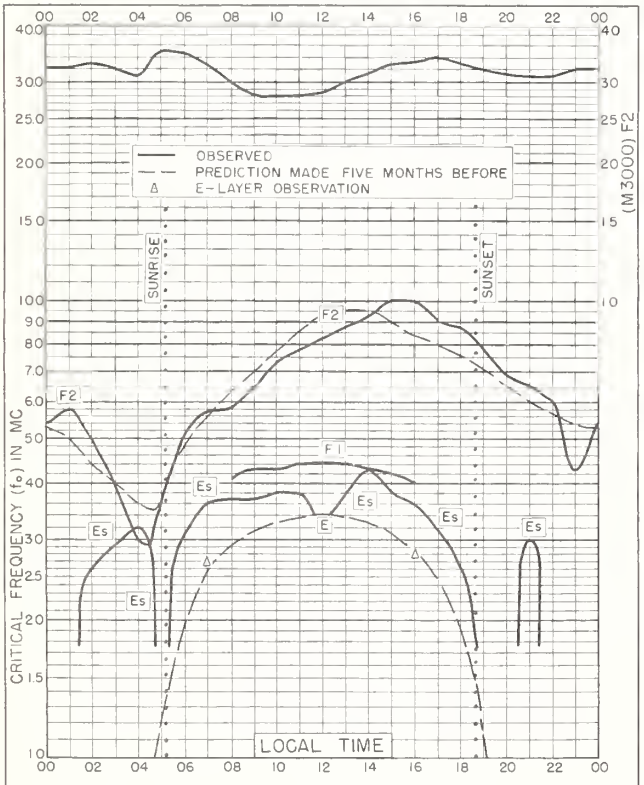


Fig. 79. SAO PAULO, BRAZIL
23.5°S, 46.5°W DECEMBER 1954

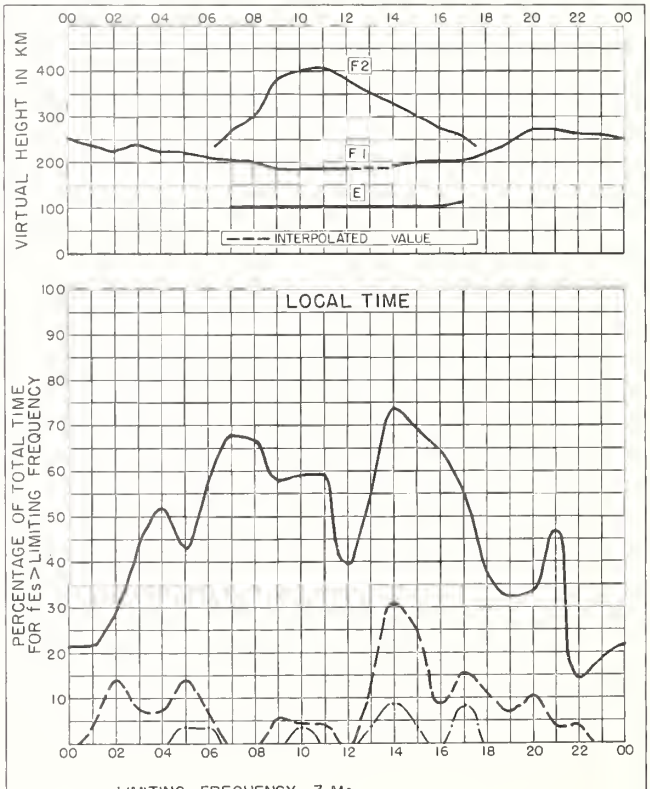


Fig. 80. SAO PAULO, BRAZIL DECEMBER 1954

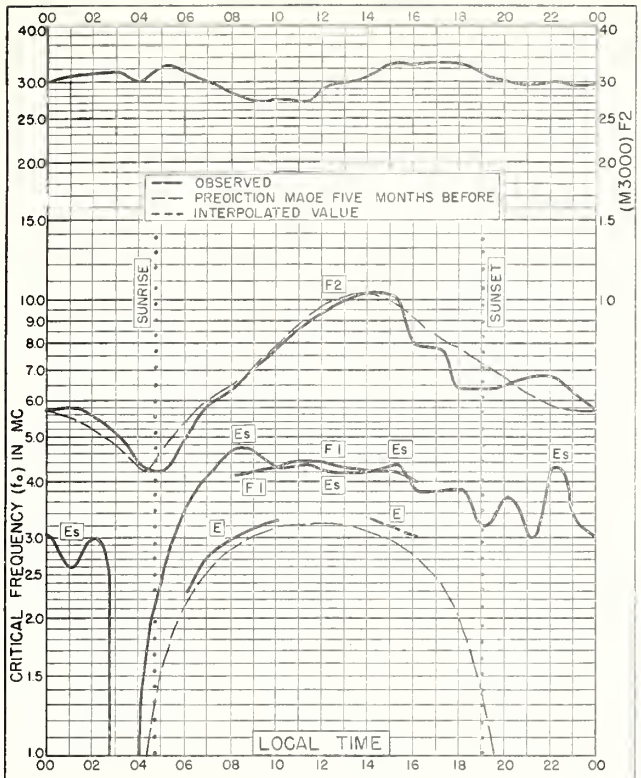


Fig. 81. BUENOS AIRES, ARGENTINA
34.5° S, 58.5° W DECEMBER 1954

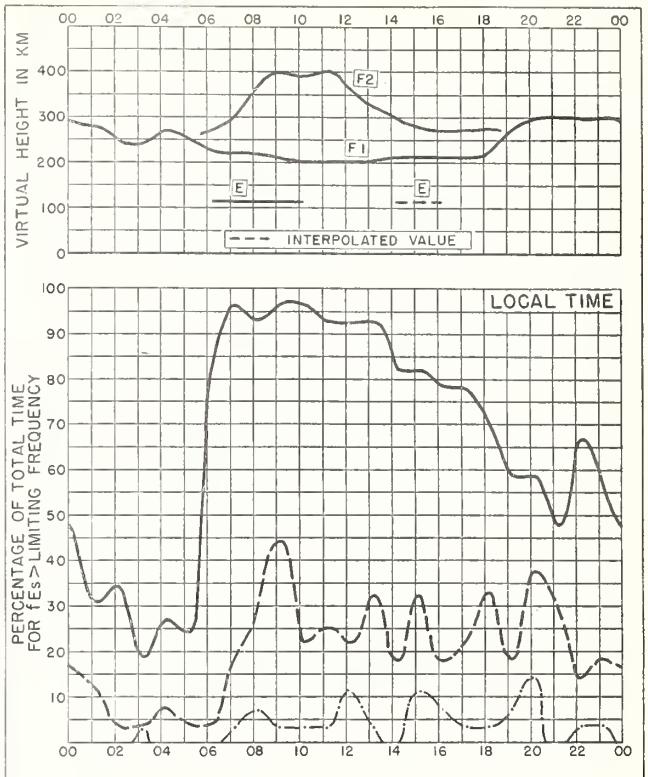


Fig. 82. BUENOS AIRES, ARGENTINA DECEMBER 1954

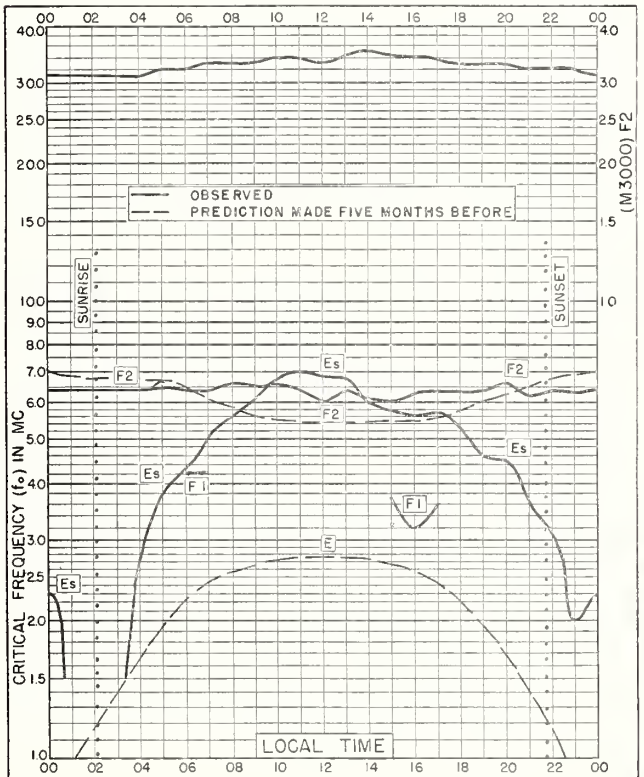


Fig. 83. DECEPCION I.
63.0° S, 60.7° W DECEMBER 1954

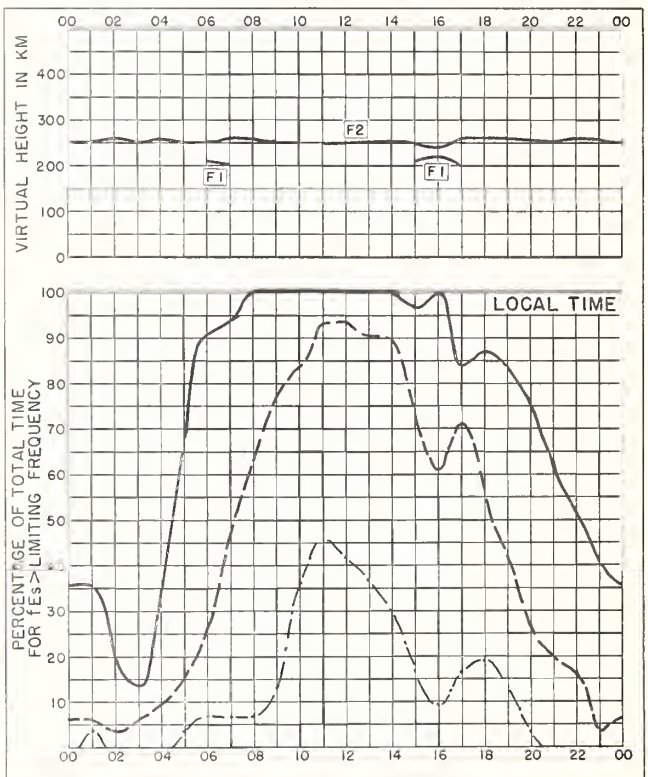


Fig. 84. DECEPCION I. DECEMBER 1954

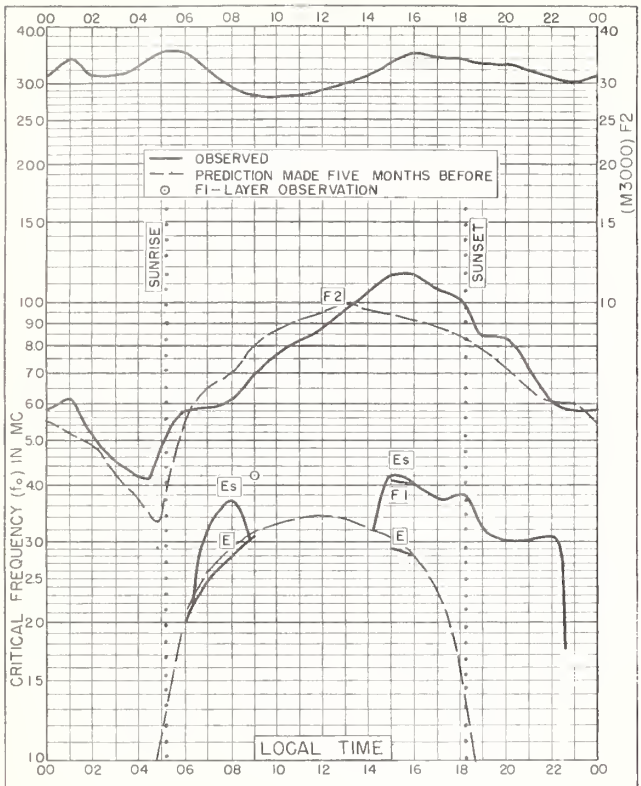


Fig. 85. SAO PAULO, BRAZIL
23.5°S, 46.5°W NOVEMBER 1954

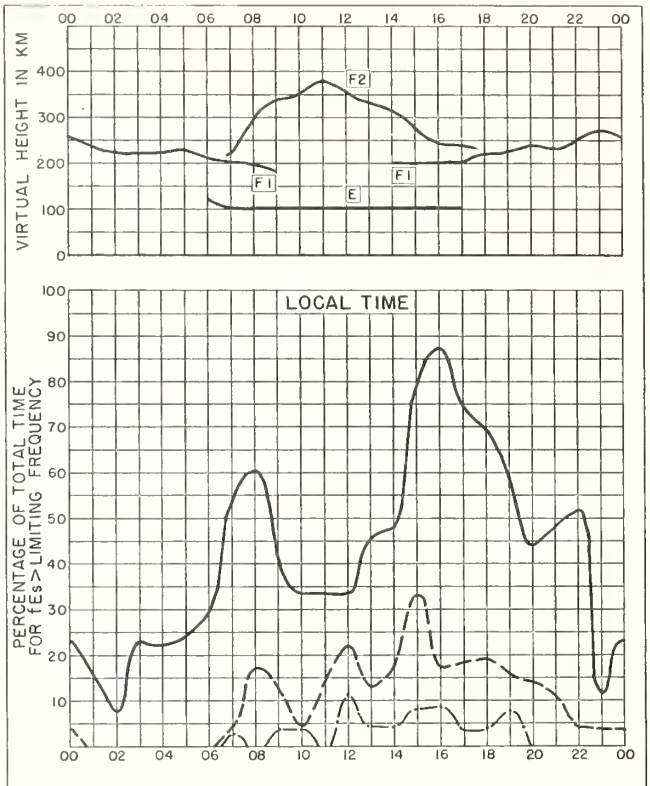


Fig. 86. SAO PAULO, BRAZIL NOVEMBER 1954

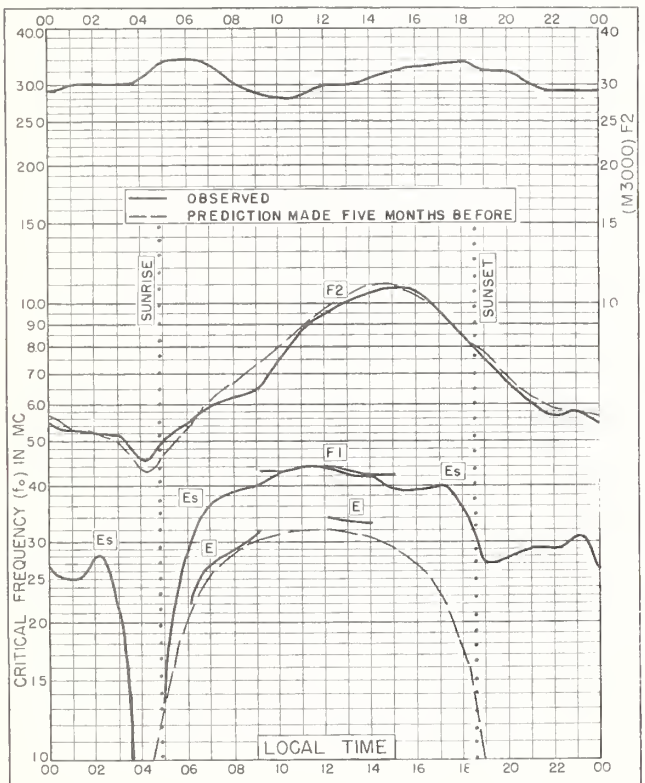


Fig. 87. BUENOS AIRES, ARGENTINA
34.5°S, 58.5°W NOVEMBER 1954

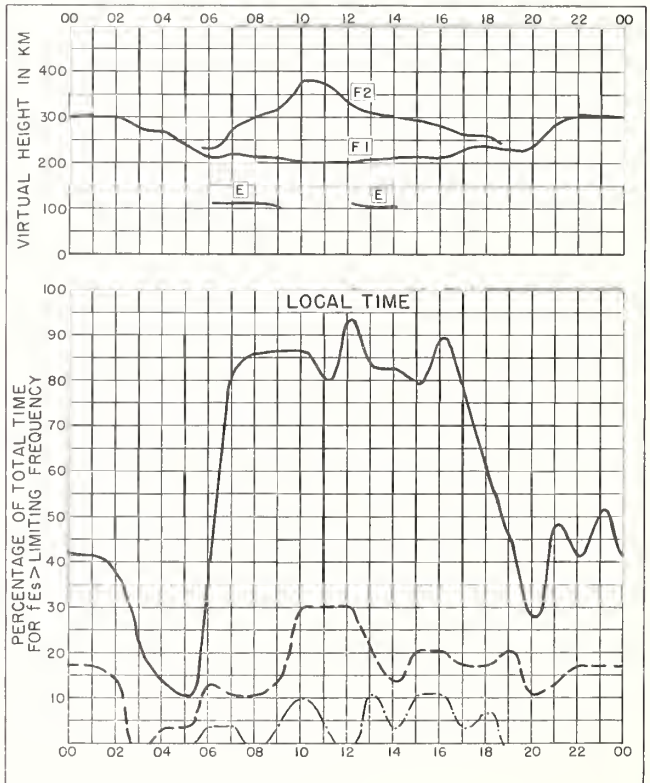


Fig. 88. BUENOS AIRES, ARGENTINA NOVEMBER 1954

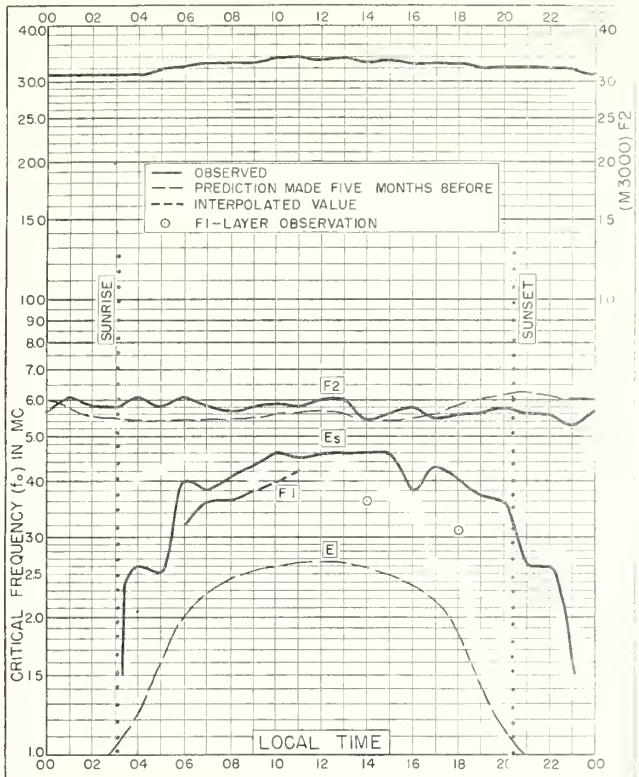


Fig. 89. DECEPCION I.
63.0°S, 60.7°W NOVEMBER 1954

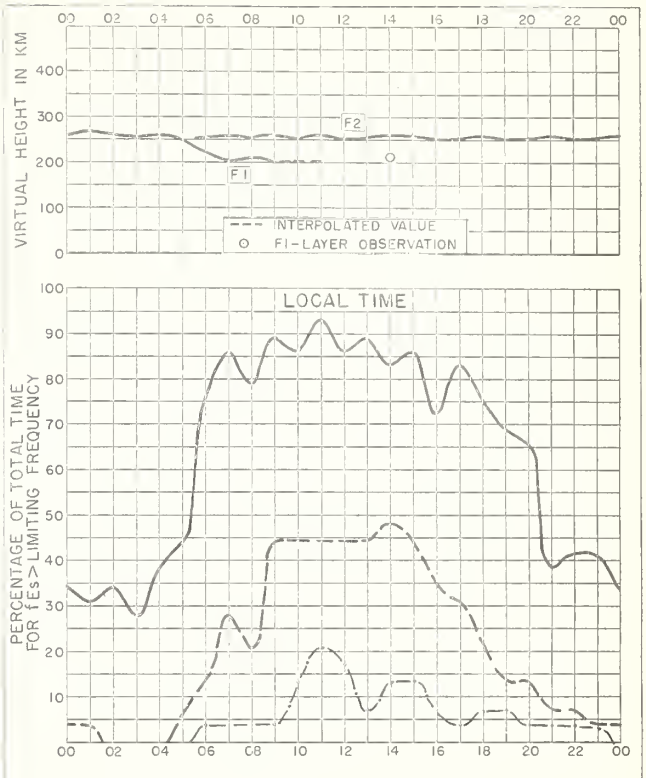


Fig. 90. DECEPCION I. NOVEMBER 1954

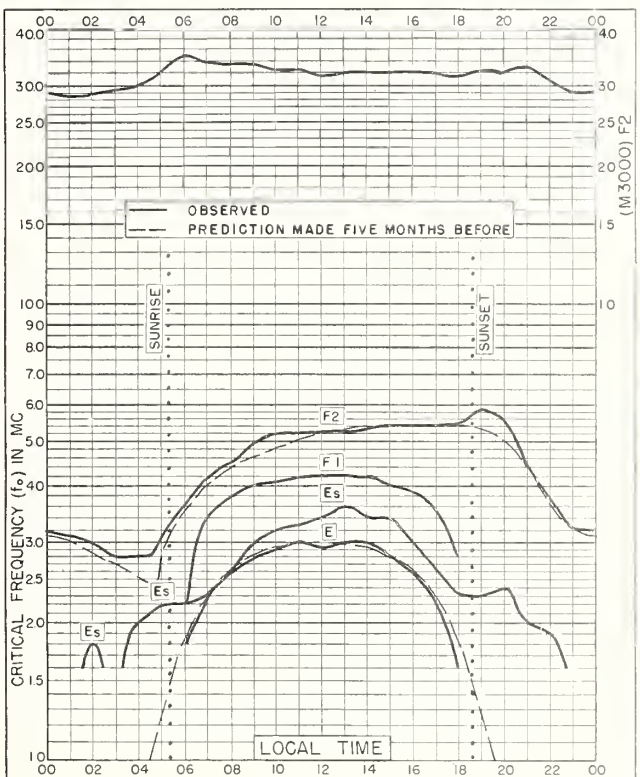


Fig. 91. POITIERS, FRANCE
46.6°N, 0.3°E APRIL 1954

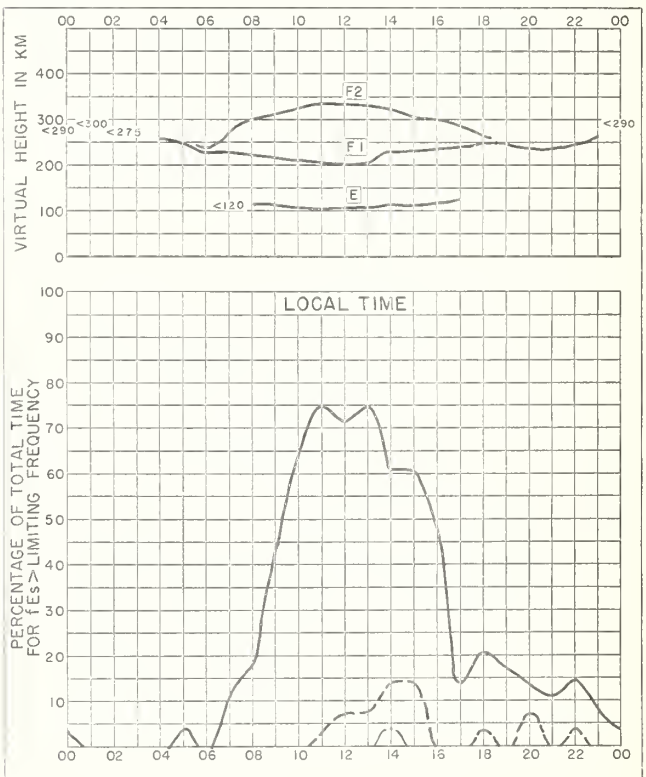


Fig. 92. POITIERS, FRANCE APRIL 1954

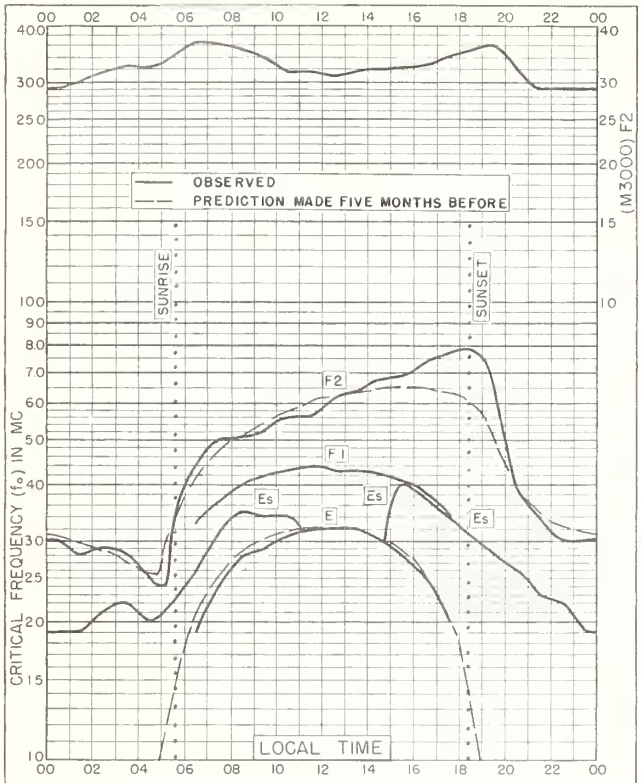


Fig. 93. CASABLANCA, MOROCCO
33.6°N, 7.6°W APRIL 1954

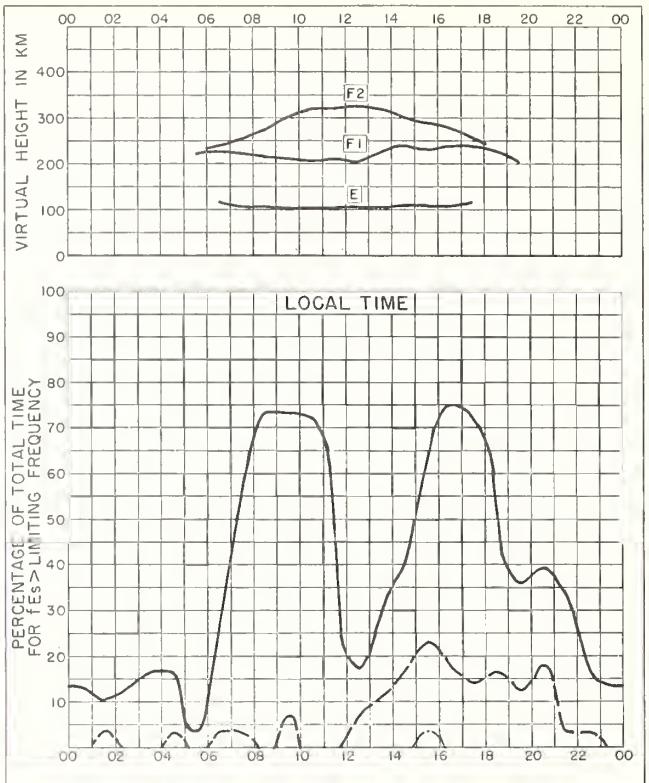


Fig. 94. CASABLANCA, MOROCCO APRIL 1954

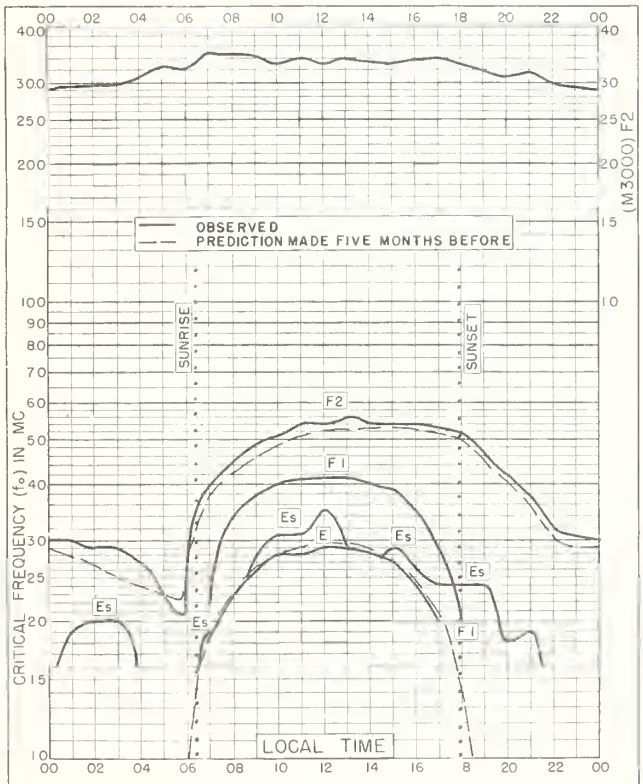


Fig. 95. POITIERS, FRANCE
46.6°N, 0.3°E MARCH 1954

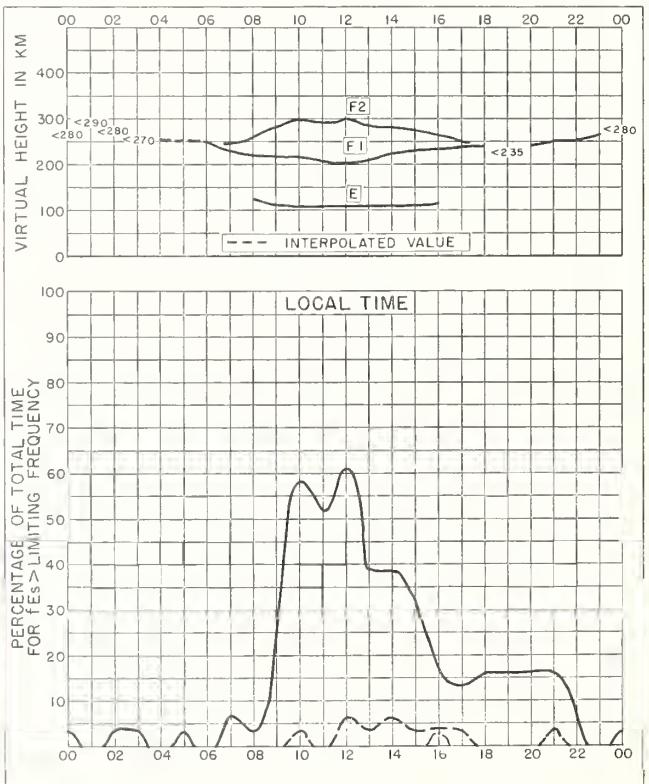


Fig. 96. POITIERS, FRANCE MARCH 1954

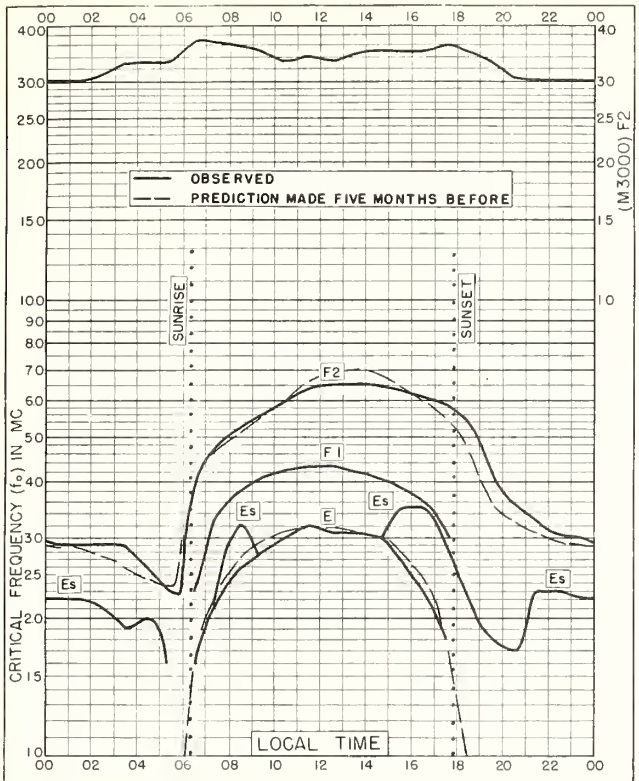


Fig. 97. CASABLANCA, MOROCCO
33.6°N, 7.6°W MARCH 1954

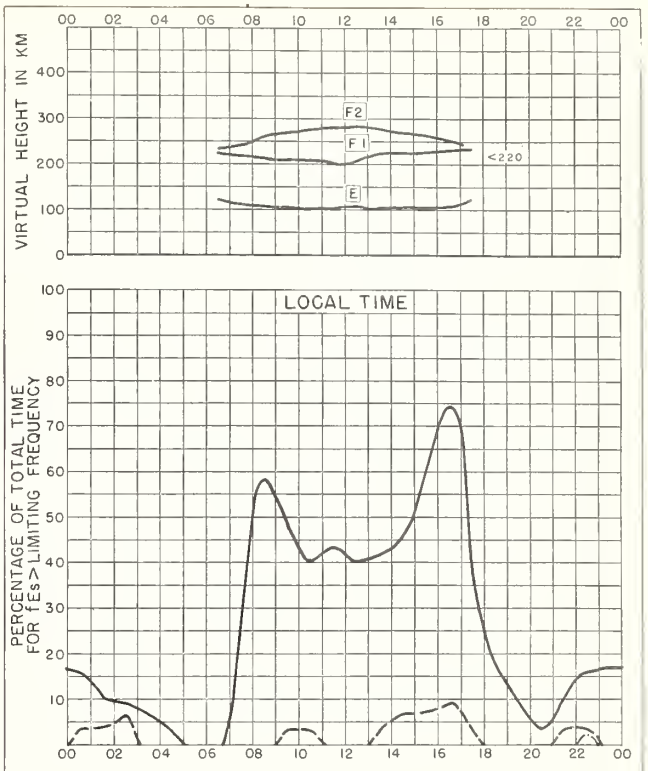


Fig. 98. CASABLANCA, MOROCCO MARCH 1954

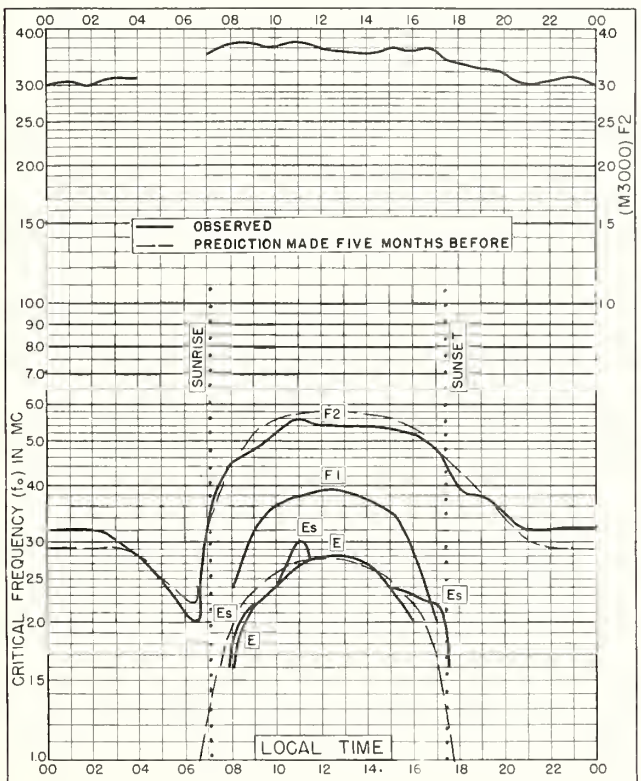


Fig. 99. POITIERS, FRANCE
46.6°N, 0.3°E FEBRUARY 1954

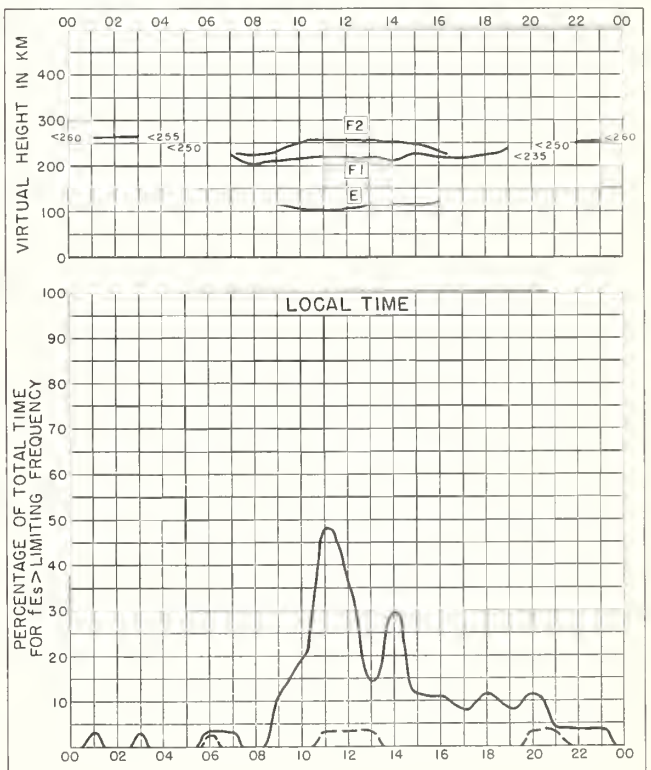


Fig. 100. POITIERS, FRANCE FEBRUARY 1954

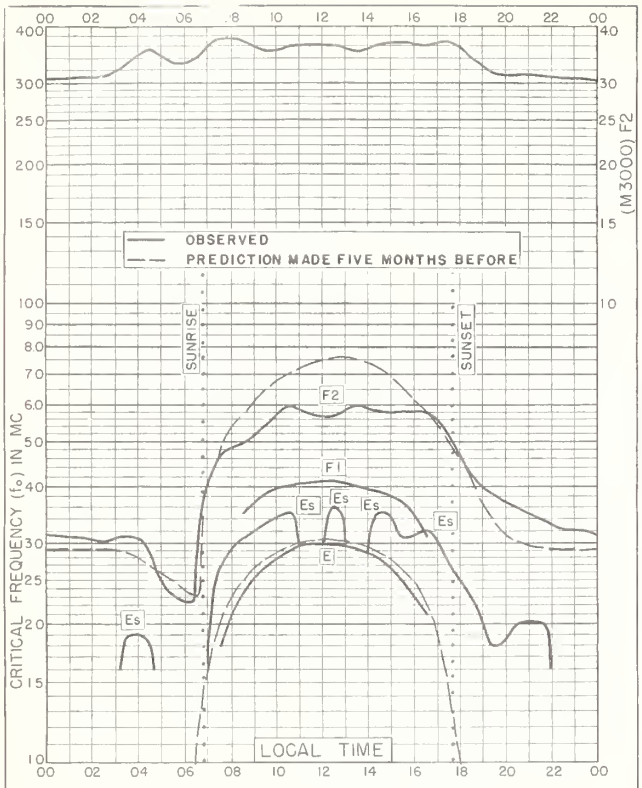


Fig. 101. CASABLANCA, MOROCCO
33.6°N, 7.6° W FEBRUARY 1954

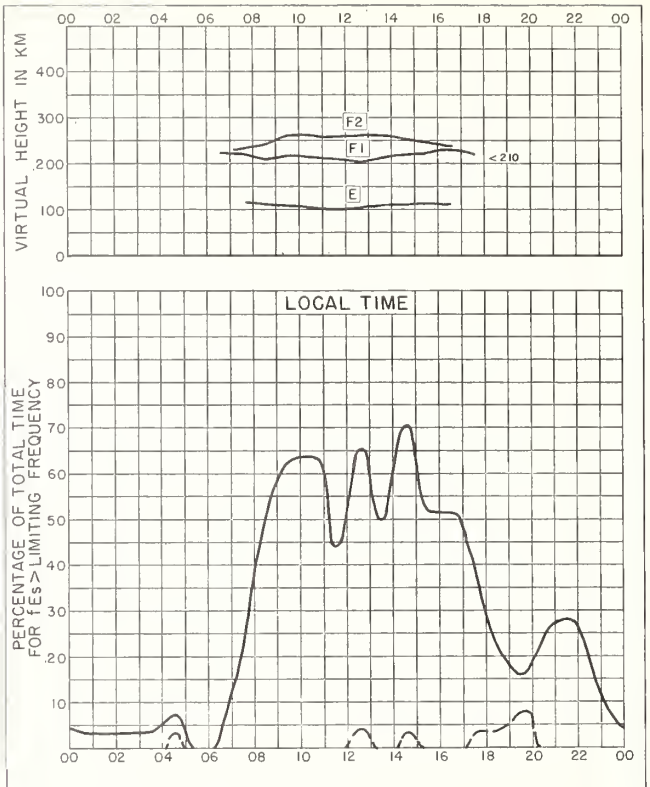


Fig. 102. CASABLANCA, MOROCCO FEBRUARY 1954

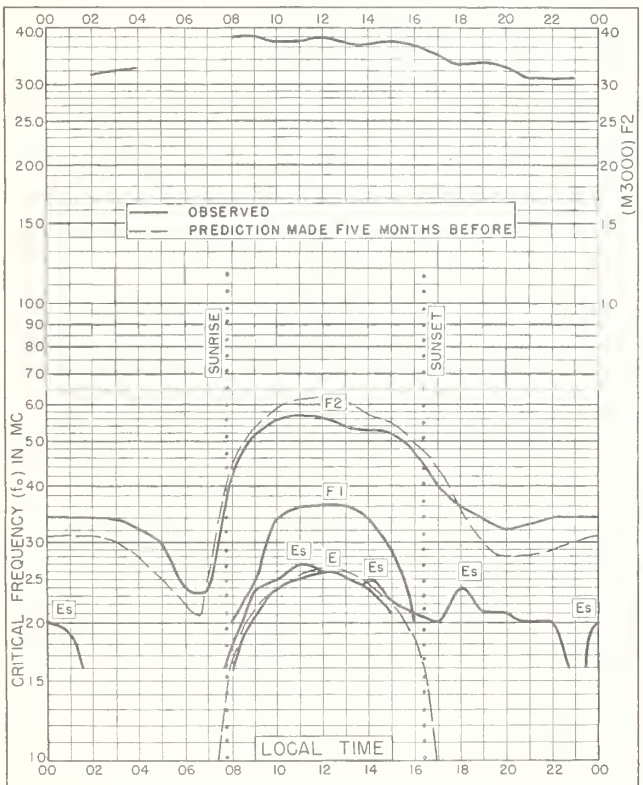


Fig. 103. POITIERS, FRANCE
46.6°N, 0.3°E JANUARY 1954

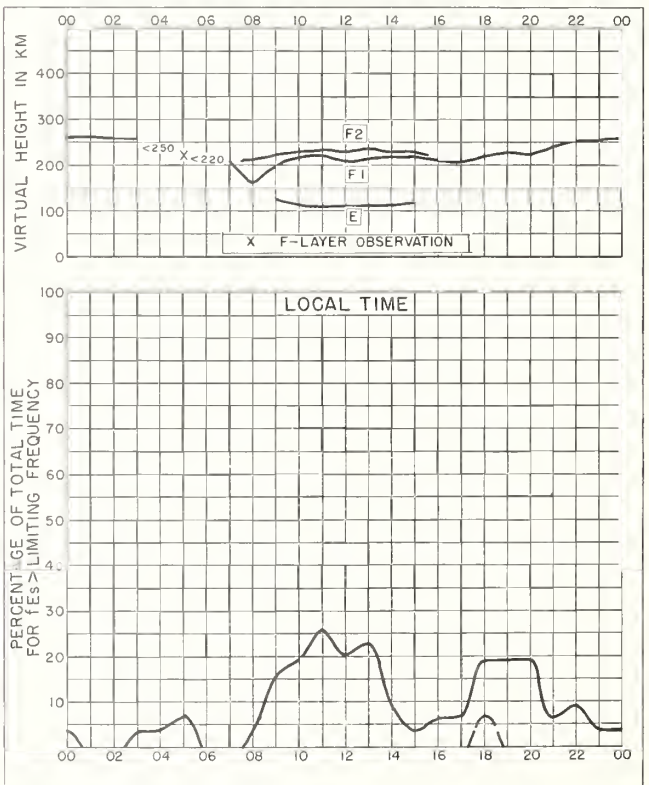


Fig. 104. POITIERS, FRANCE JANUARY 1954

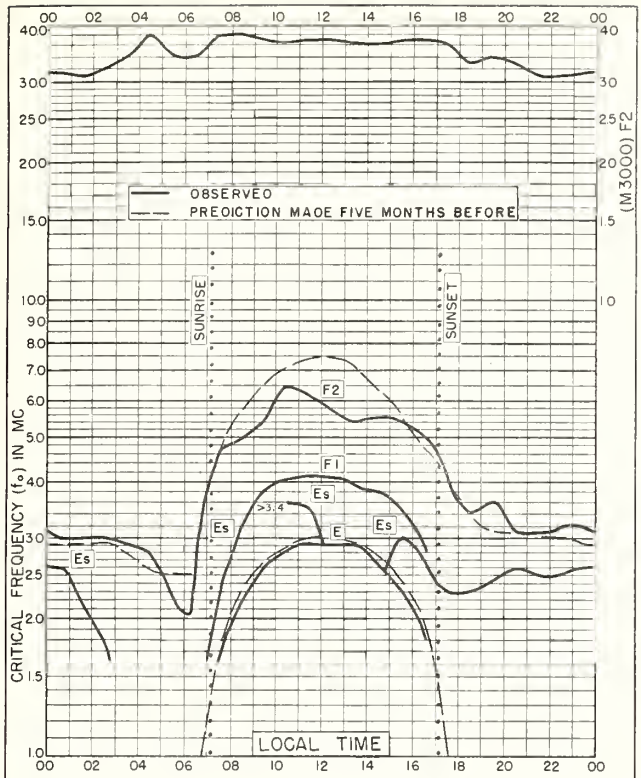


Fig. 105. CASABLANCA, MOROCCO
33.6°N, 7.6°W JANUARY 1954

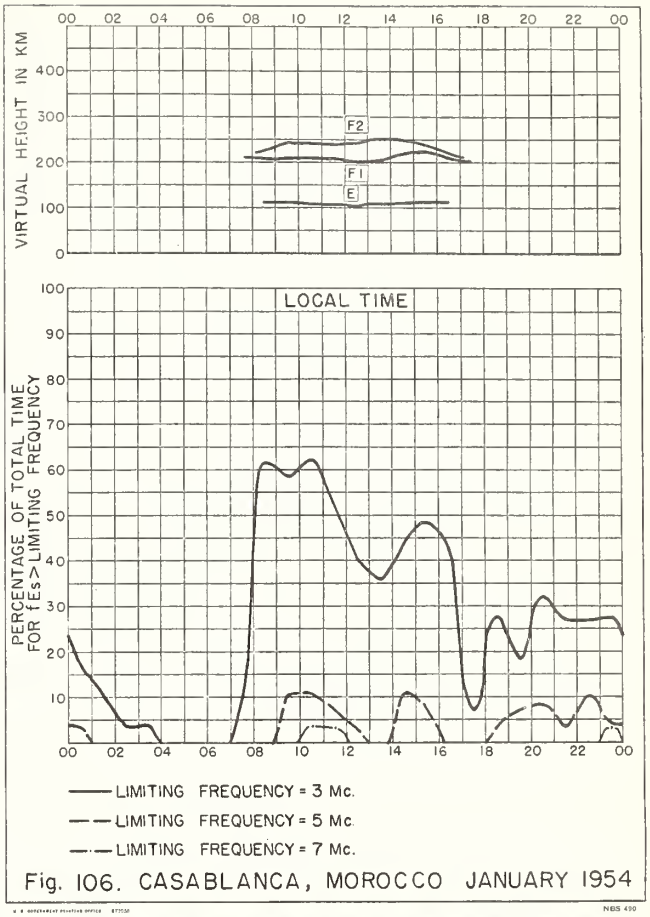


Fig. 106. CASABLANCA, MOROCCO JANUARY 1954

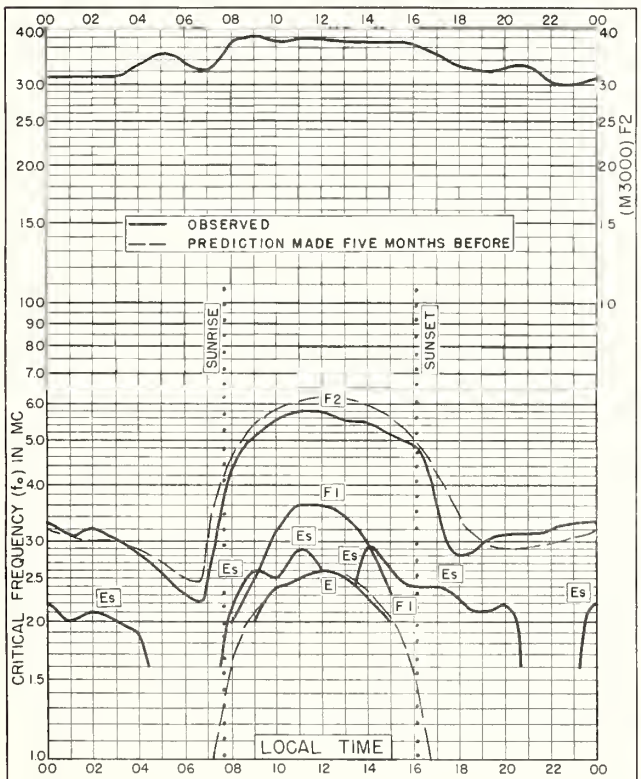


Fig. 107. POITIERS, FRANCE
46.6°N, 0.3°E DECEMBER 1953

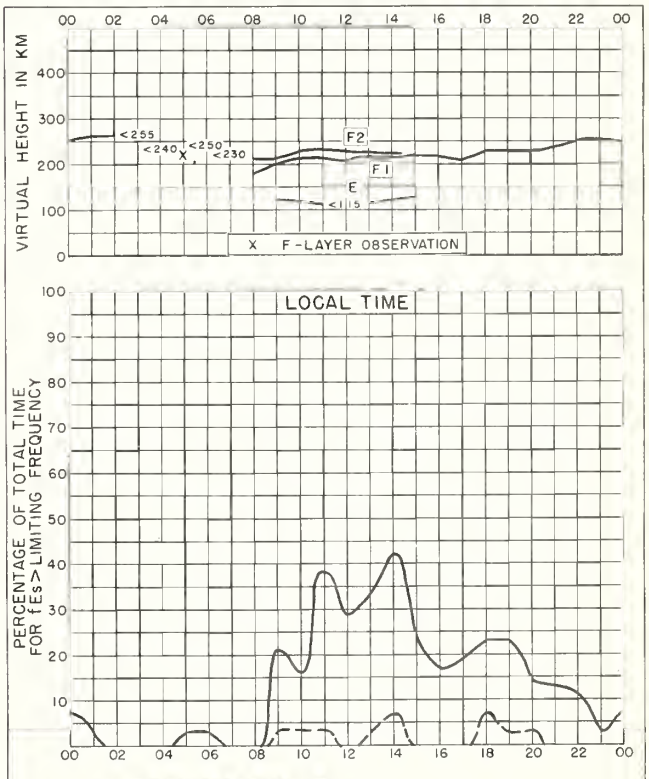


Fig. 108. POITIERS, FRANCE DECEMBER 1953

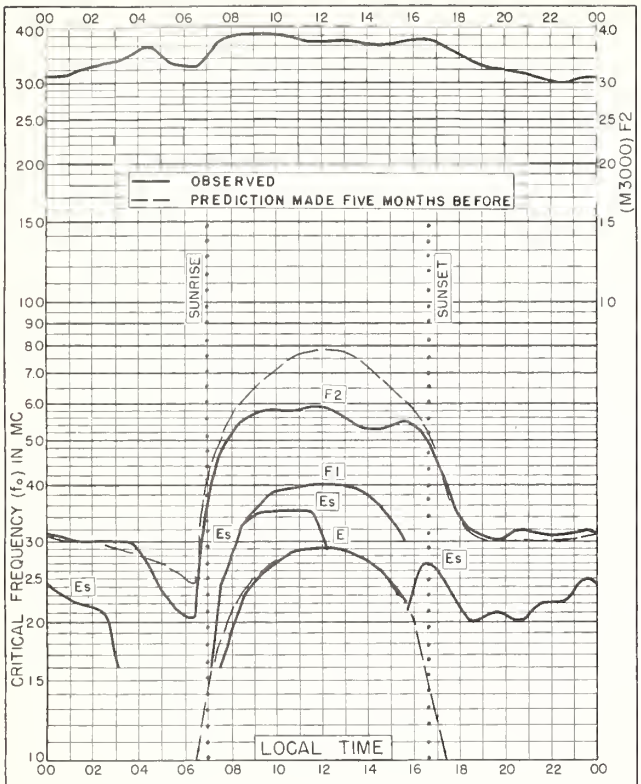


Fig. 109. CASABLANCA, MOROCCO
33.6°N, 7.6°W DECEMBER 1953

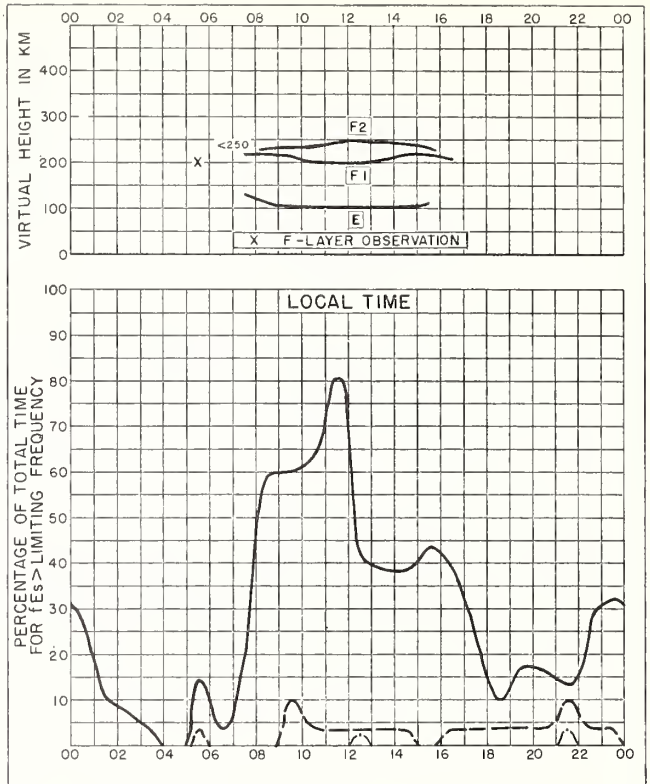


Fig. 110. CASABLANCA, MOROCCO DECEMBER 1953

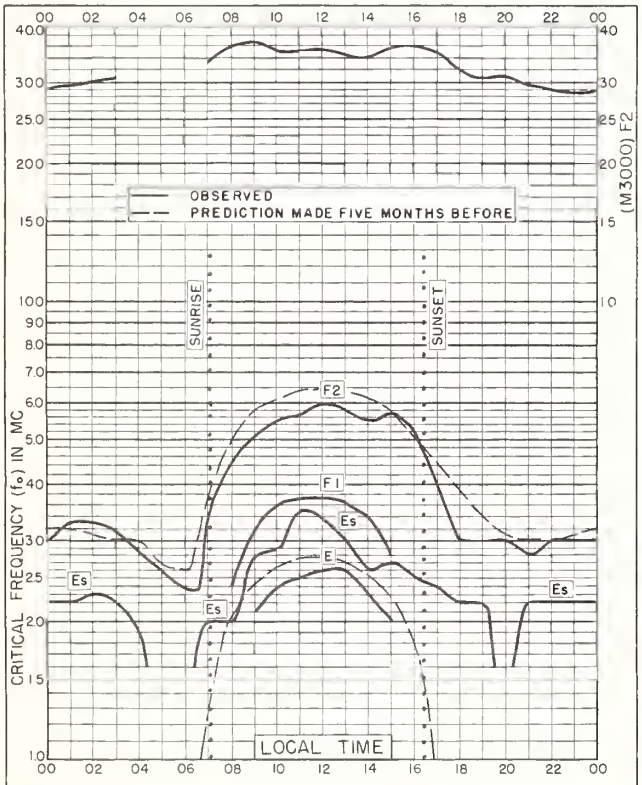


Fig. 111. POITIERS, FRANCE
46.6°N, 0.3°E NOVEMBER 1953

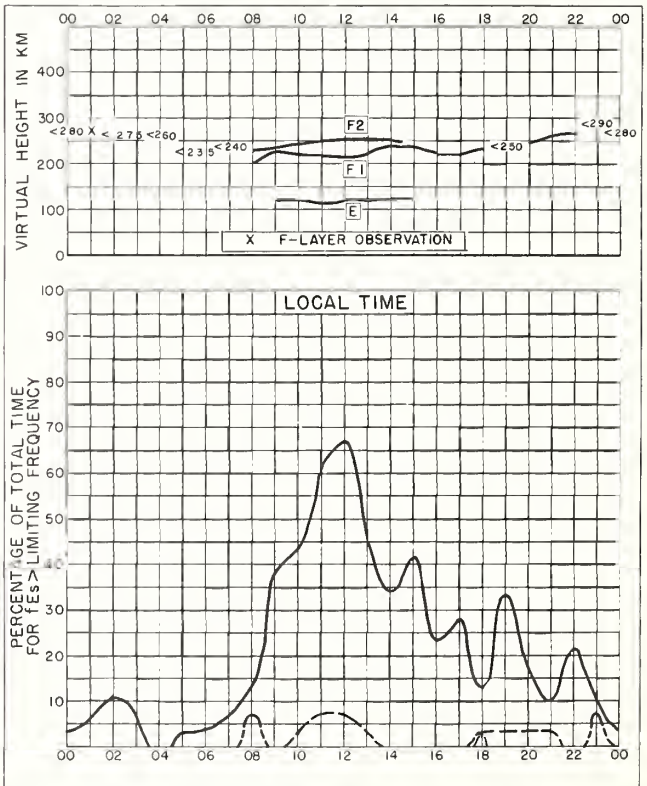


Fig. 112. POITIERS, FRANCE NOVEMBER 1953

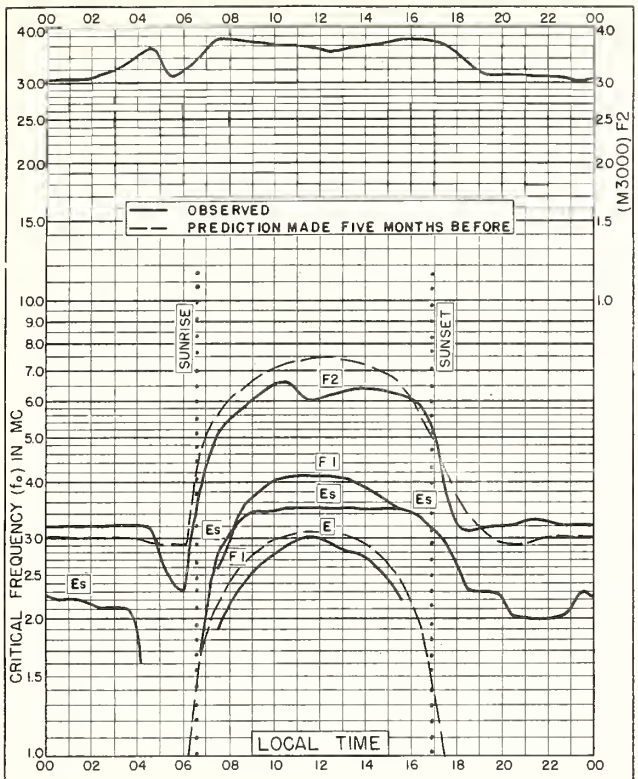


Fig. 113. CASABLANCA, MOROCCO
33.6°N, 7.6°W NOVEMBER 1953

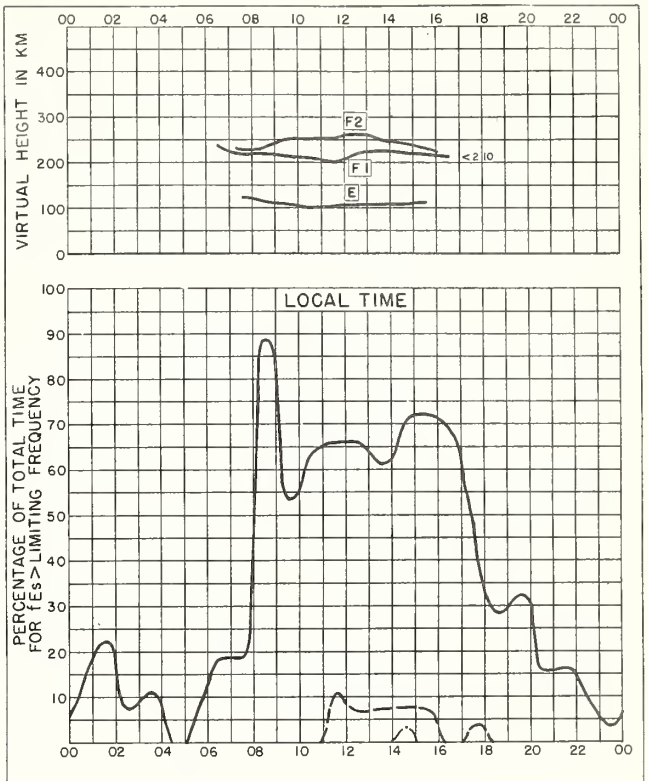


Fig. 114. CASABLANCA, MOROCCO NOVEMBER 1953

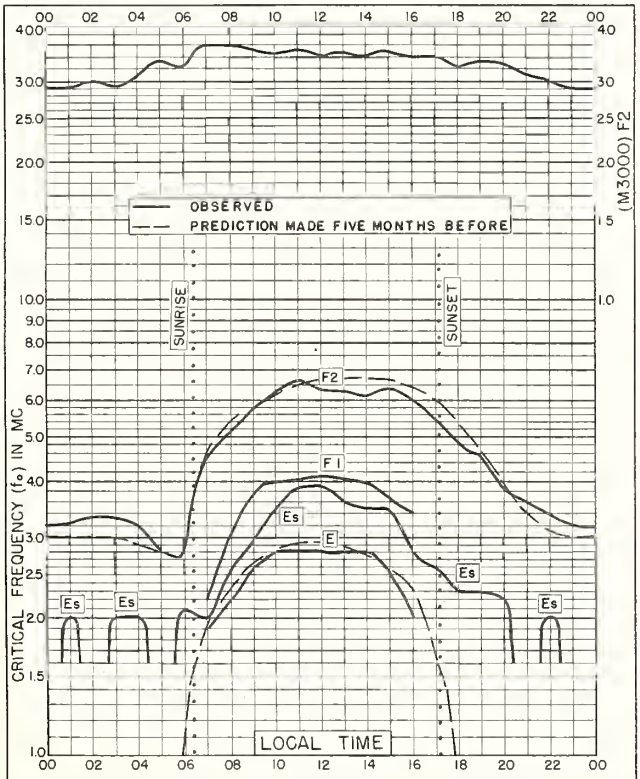


Fig. 115. POITIERS, FRANCE
46.6°N, 0.3°E OCTOBER 1953

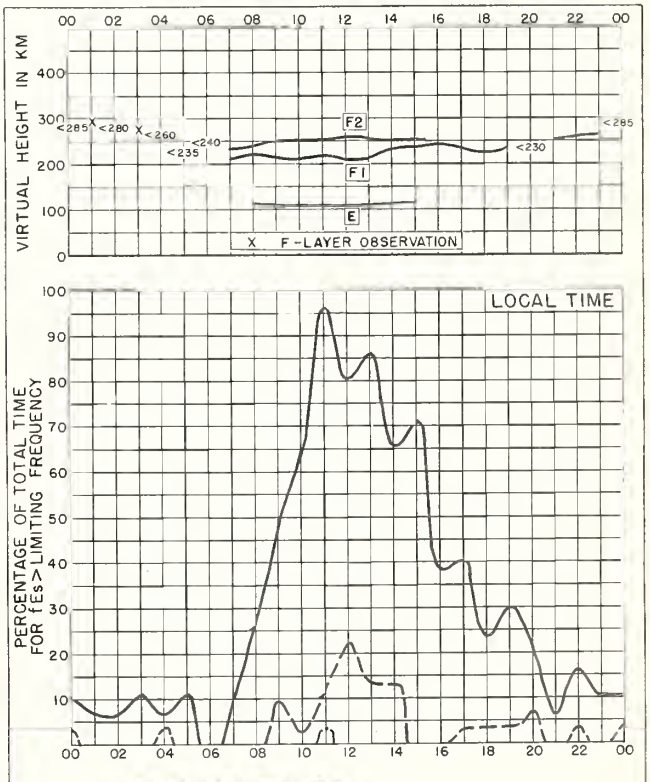


Fig. 116. POITIERS, FRANCE OCTOBER 1953

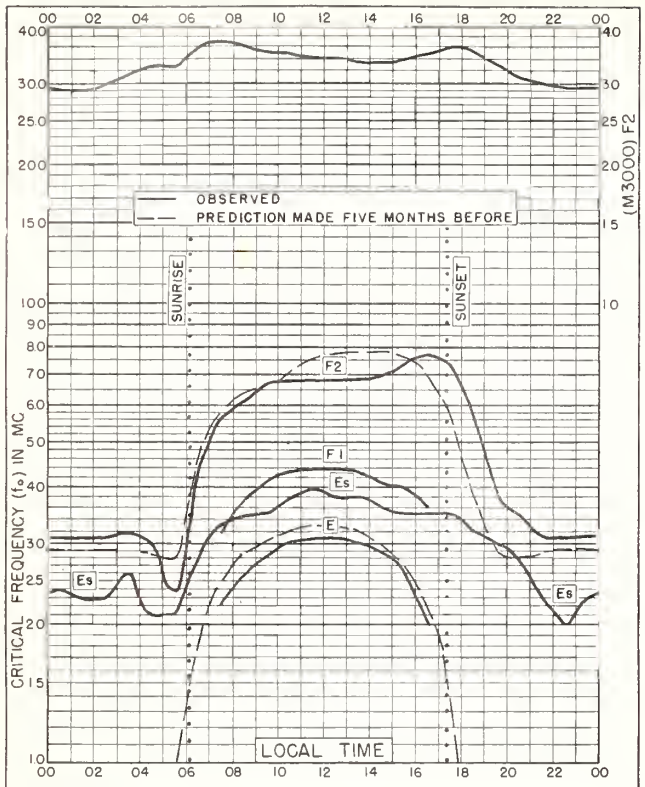


Fig. 117. CASABLANCA, MOROCCO
33.6°N, 7.6°W OCTOBER 1953

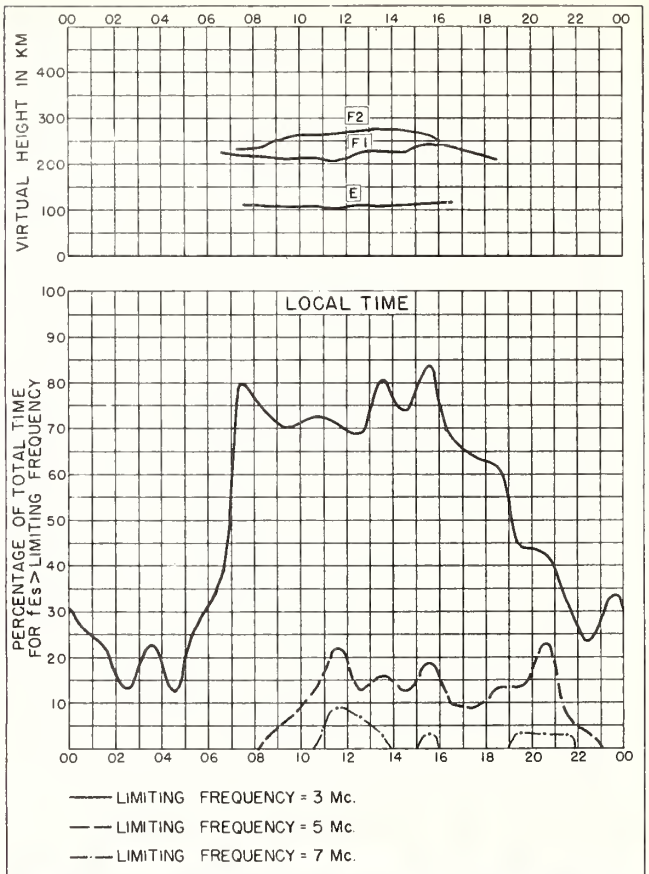


Fig. 118. CASABLANCA, MOROCCO OCTOBER 1953

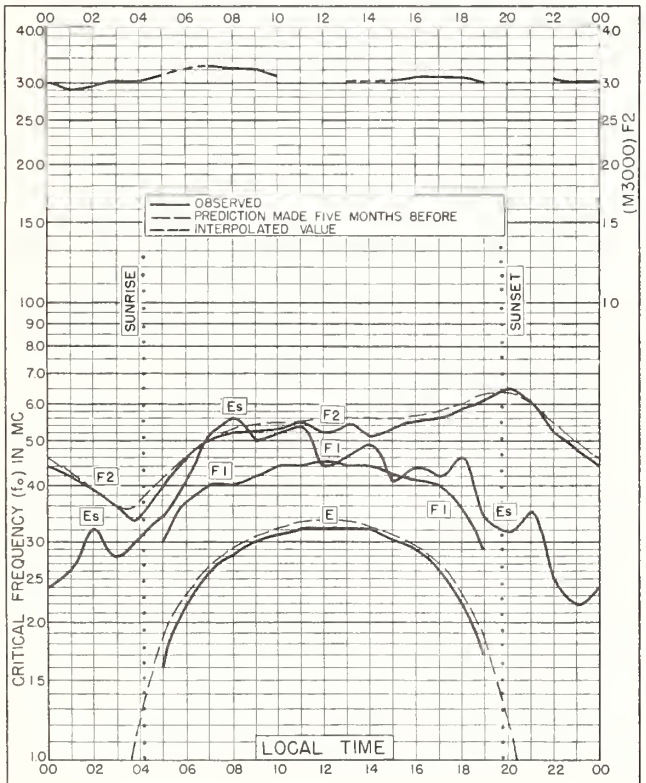


Fig. 119. POITIERS, FRANCE
46.6°N, 0.3°E JUNE 1953

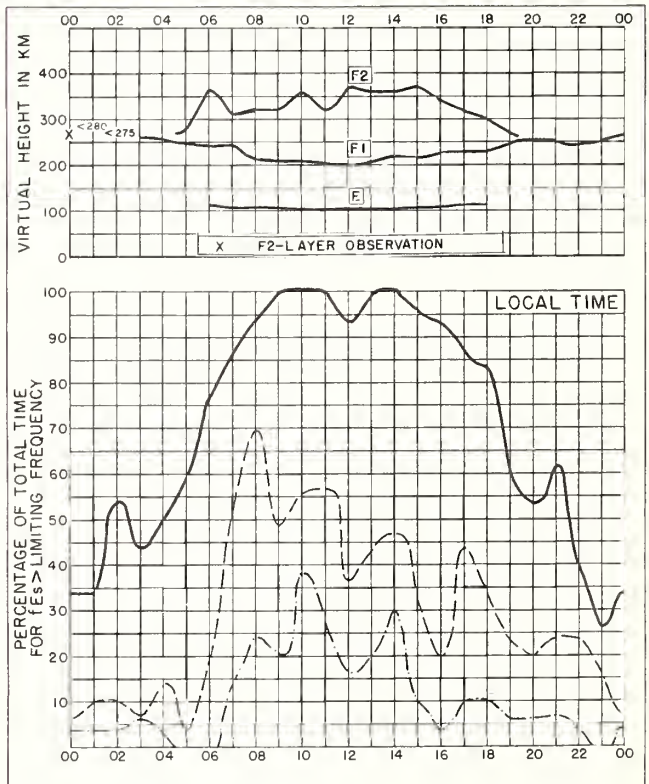


Fig. 120. POITIERS, FRANCE JUNE 1953

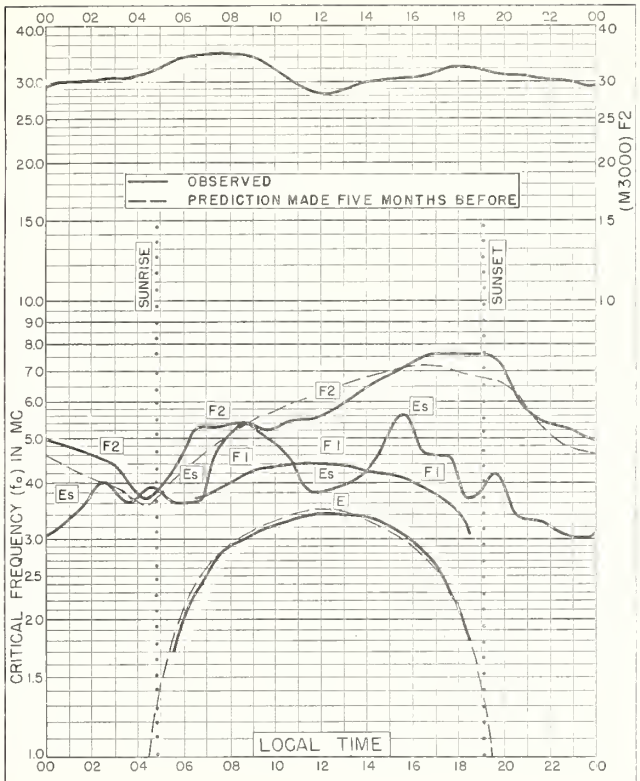


Fig. 121. CASABLANCA, MOROCCO
33.6°N, 7.6°W JUNE 1953

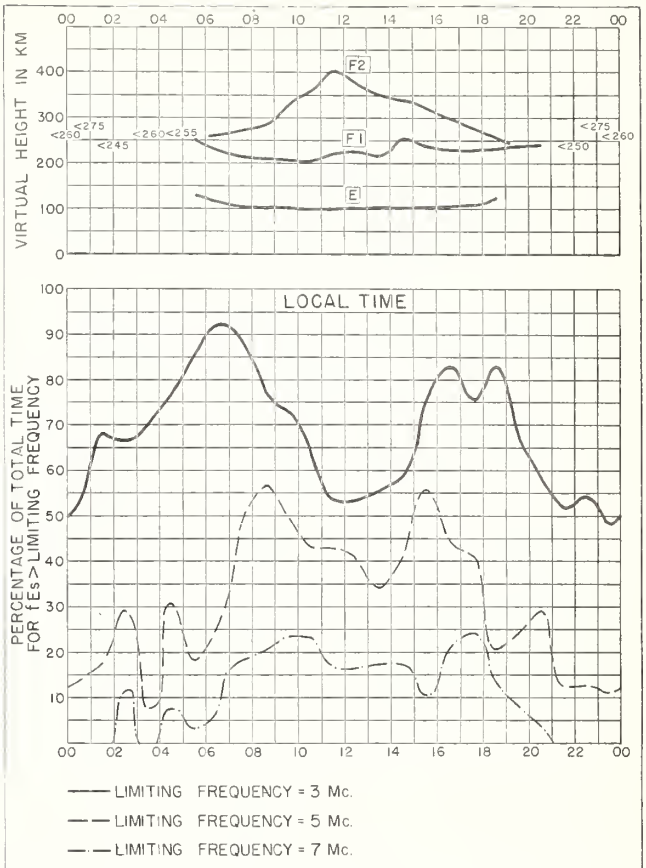


Fig. 122. CASABLANCA, MOROCCO JUNE 1953

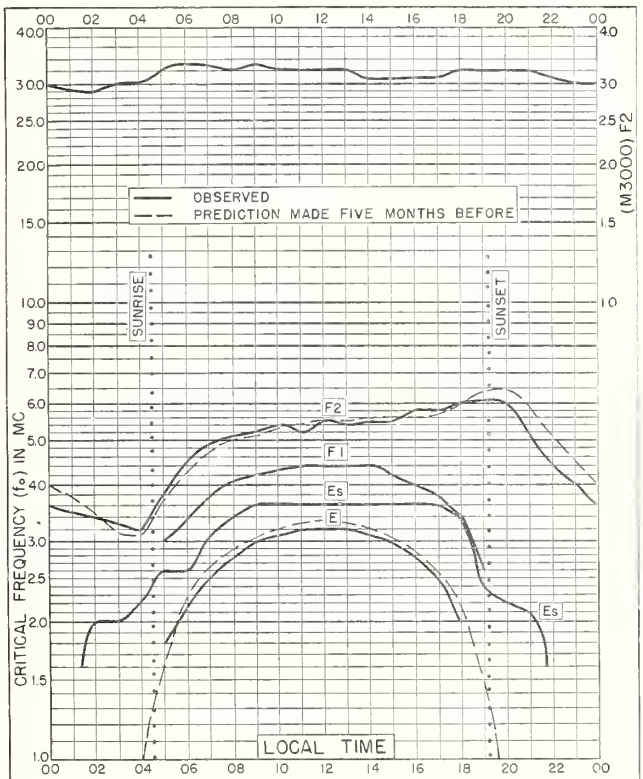


Fig. 123. POITIERS, FRANCE
46.6°N, 0.3°E MAY 1953

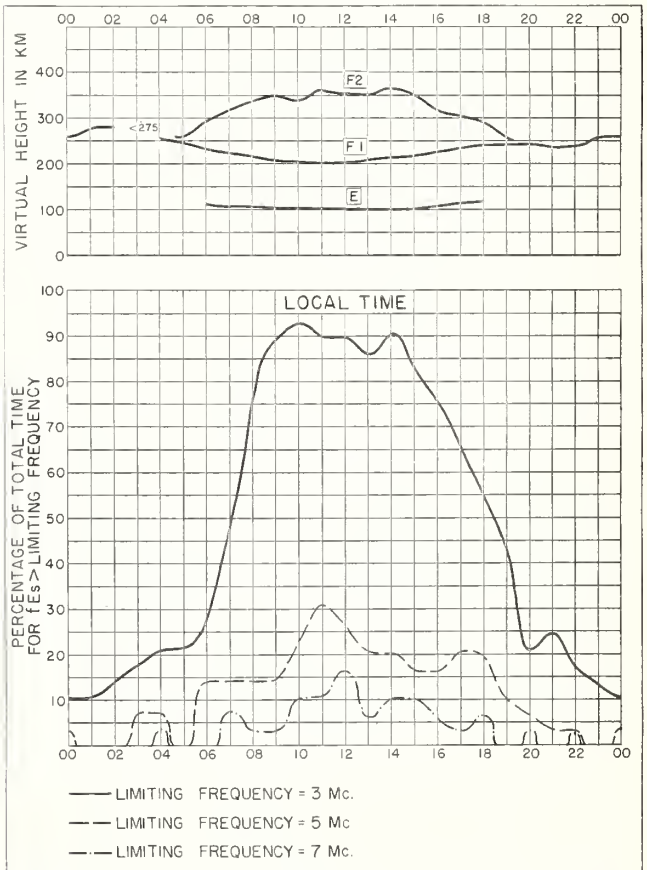


Fig. 124. POITIERS, FRANCE MAY 1953

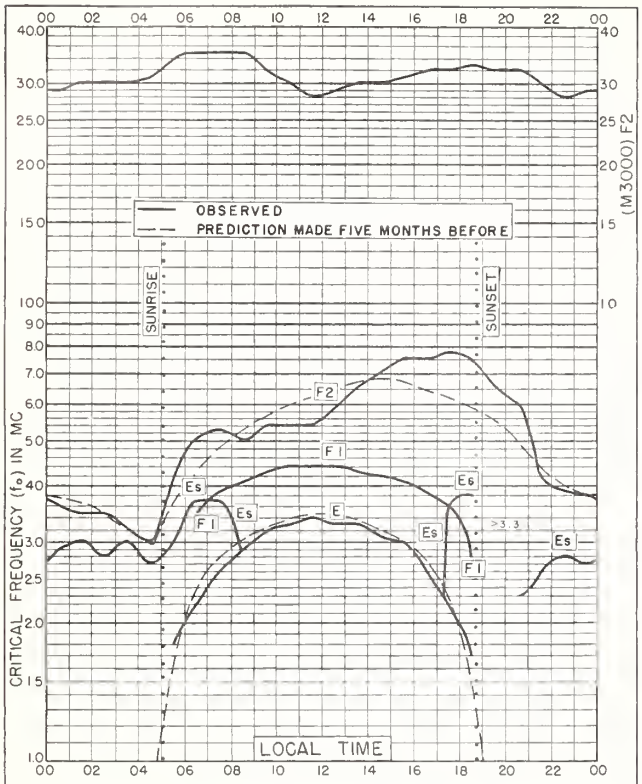


Fig. 125. CASABLANCA, MOROCCO
33.6°N, 7.6°W MAY 1953

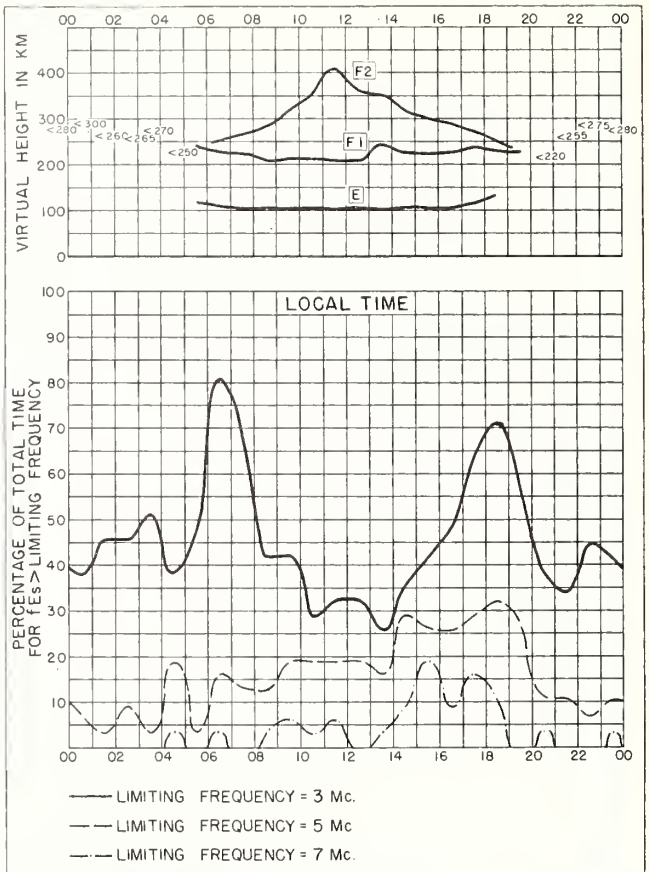


Fig 126. CASABLANCA, MOROCCO MAY 1953

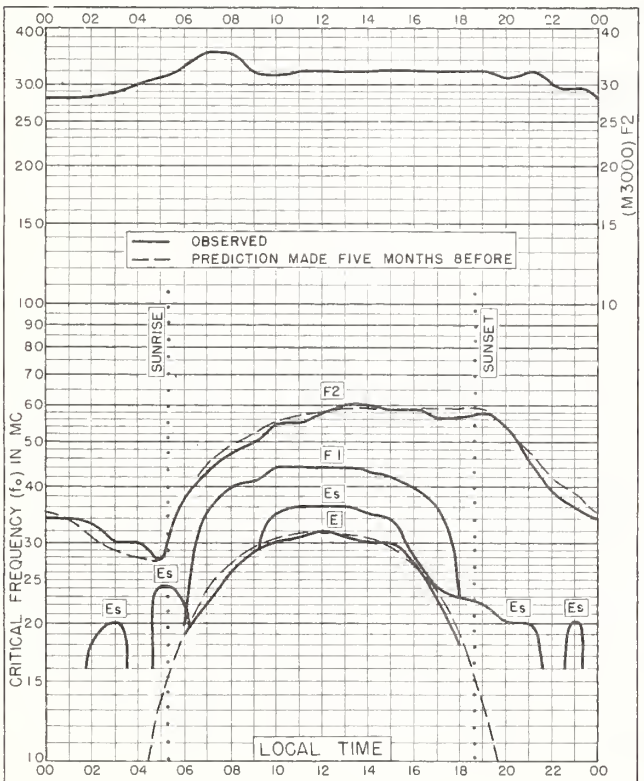


Fig. 127. POITIERS, FRANCE
46.6°N, 0.3°E APRIL 1953

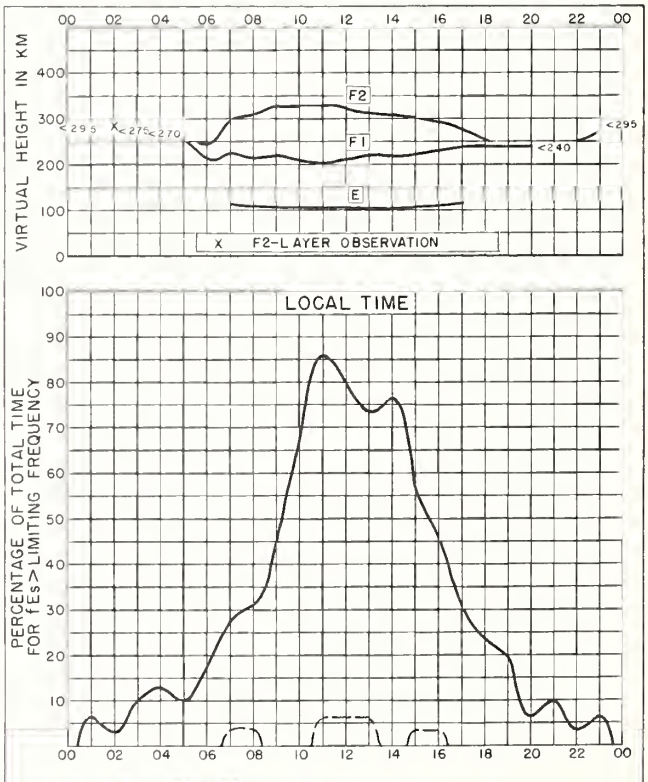


Fig 128. POITIERS, FRANCE APRIL 1953

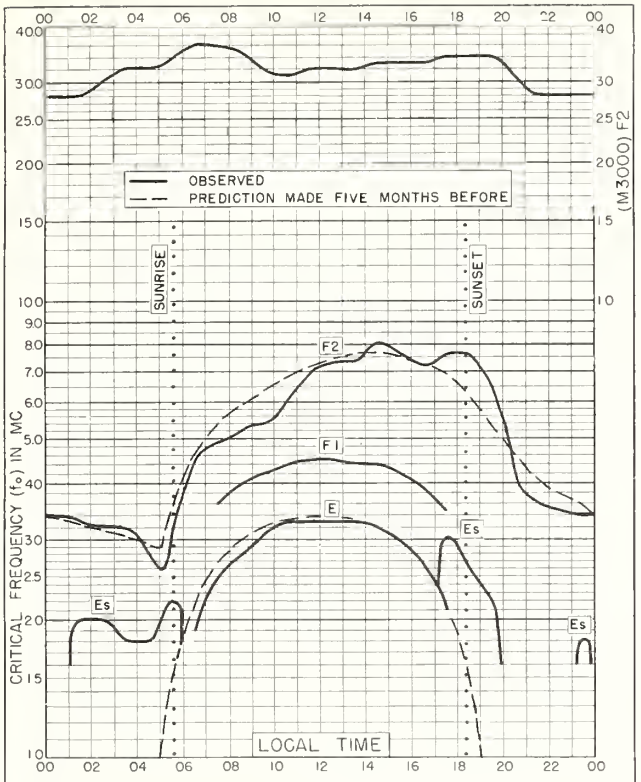


Fig 129. CASABLANCA, MOROCCO
33.6°N, 7.6°W APRIL 1953

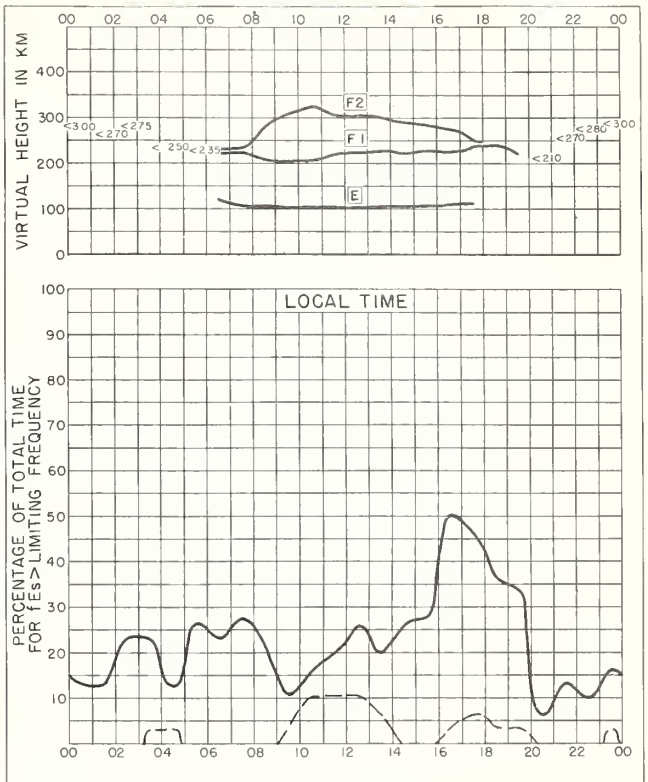


Fig. 130. CASABLANCA, MOROCCO APRIL 1953

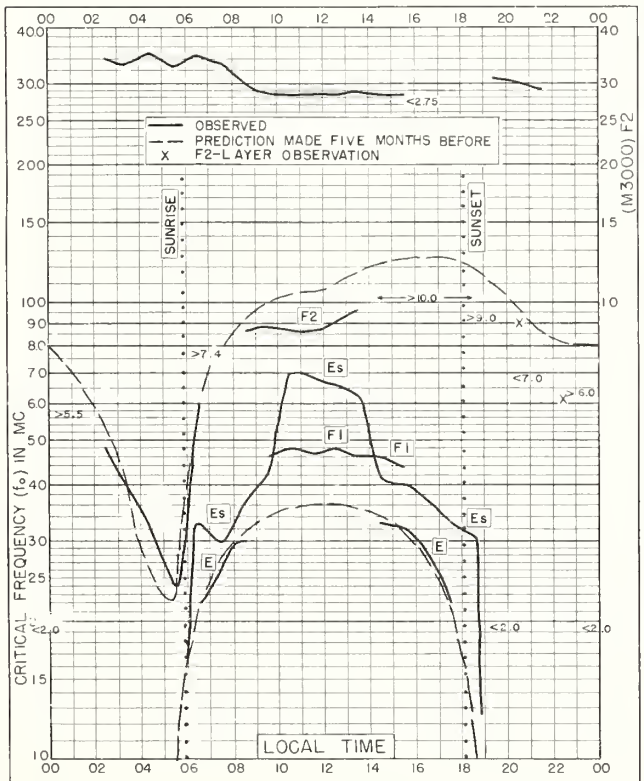


Fig. 131. DJIBOUTI, FRENCH SOMALILAND
11.5°N, 43.1°E APRIL 1953

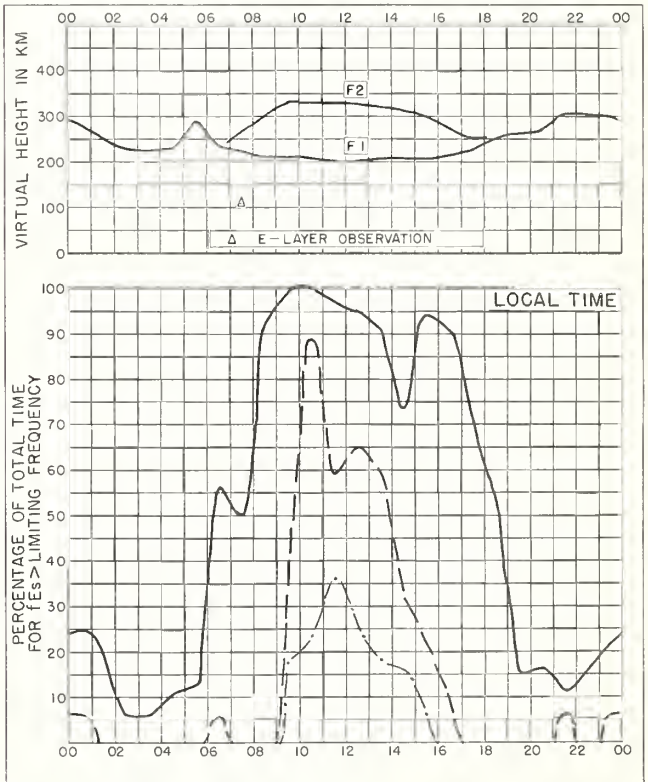


Fig. 132. DJIBOUTI, FRENCH SOMALILAND APRIL 1953

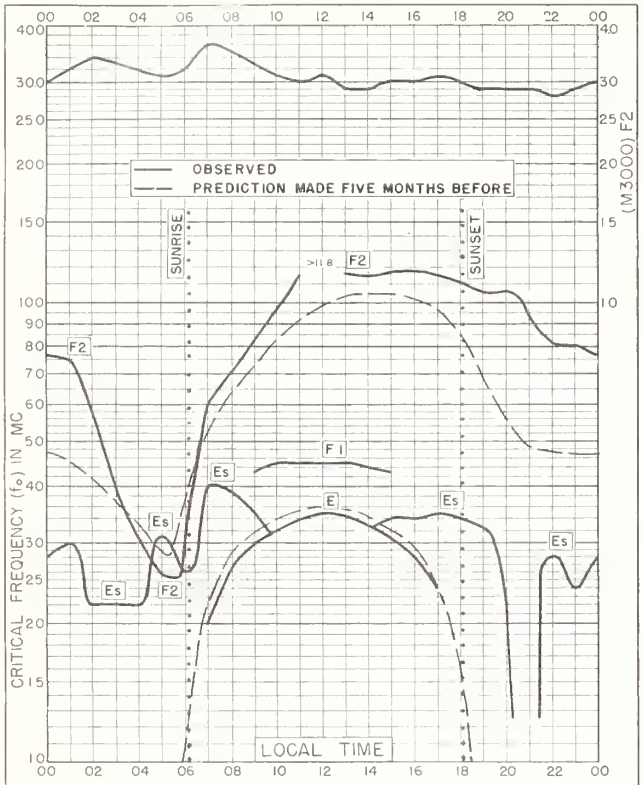


Fig. 133. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W MARCH 1953

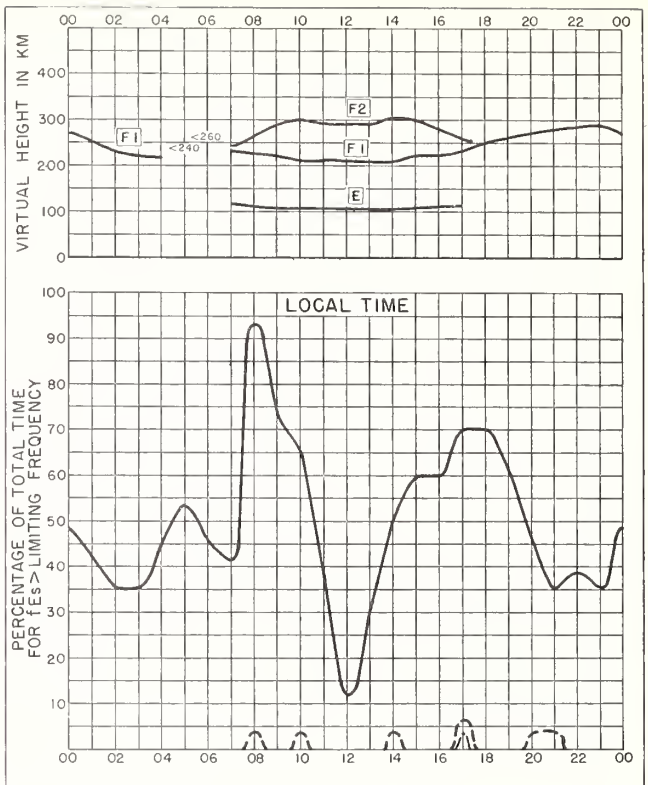


Fig. 134. DAKAR, FRENCH W. AFRICA MARCH 1953

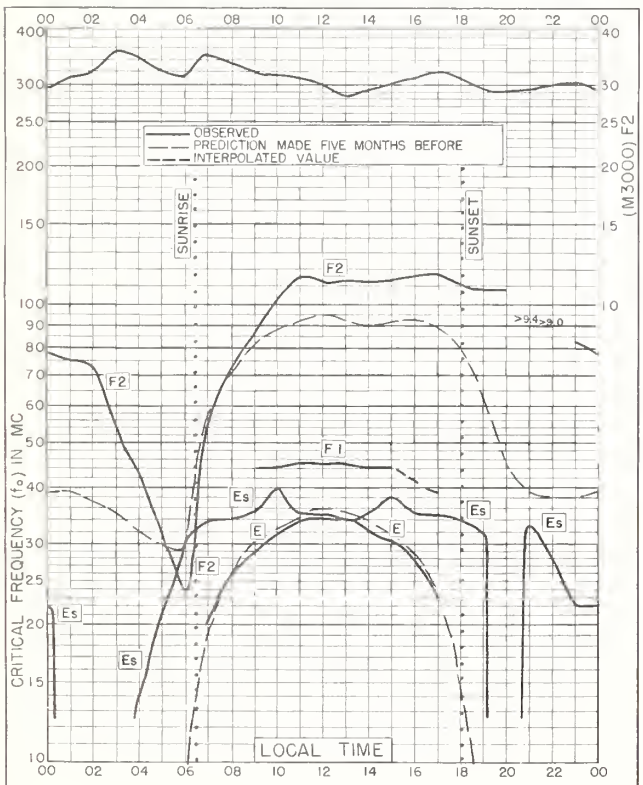


Fig. 135. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W FEBRUARY 1953

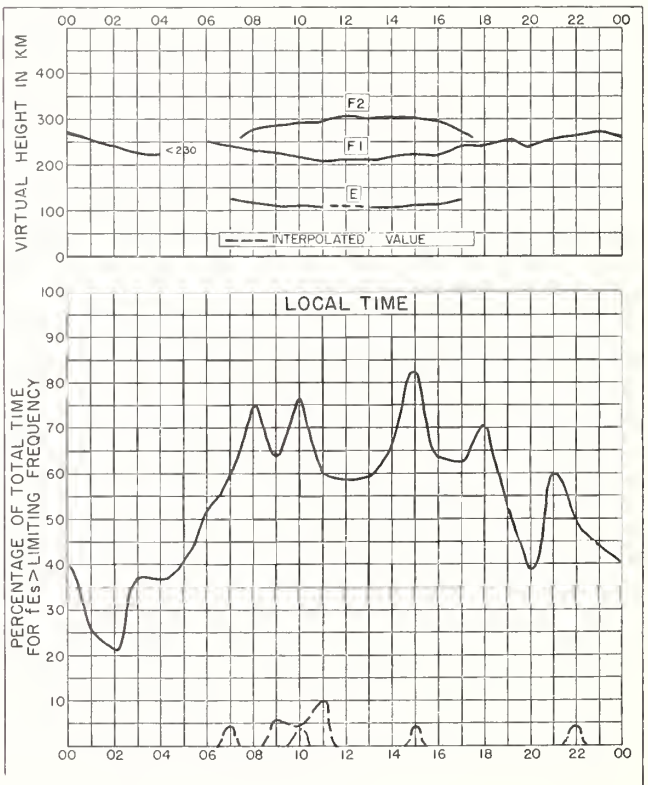


Fig. 136. DAKAR, FRENCH W. AFRICA FEBRUARY 1953

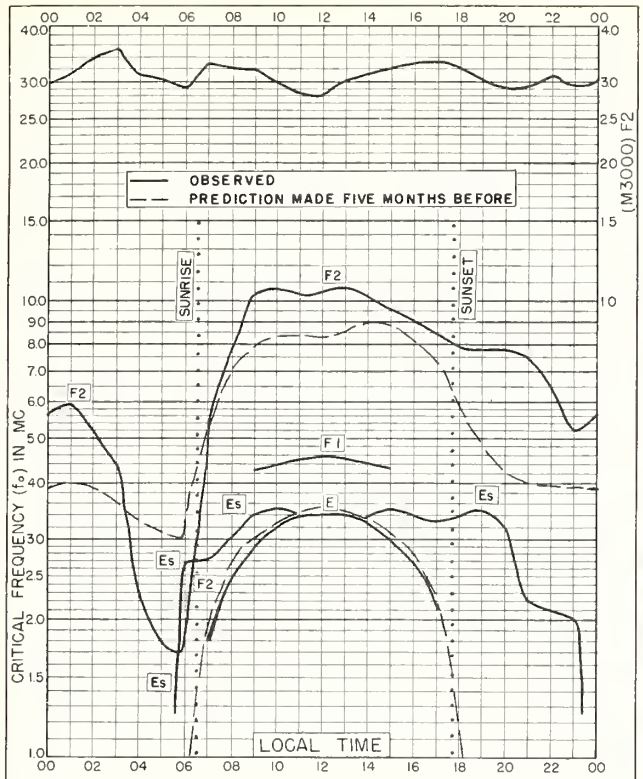
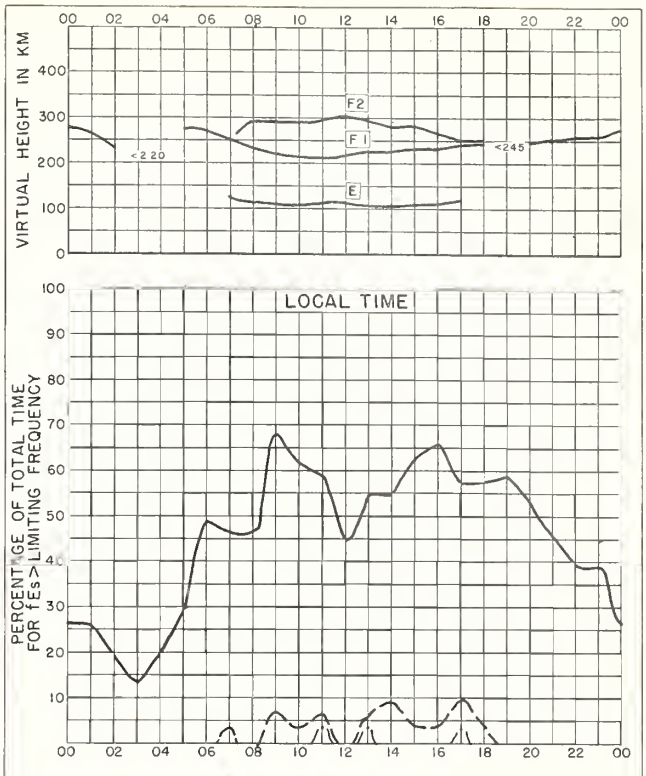


Fig. 137. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W JANUARY 1953



JANUARY 1953

Fig. 138. DAKAR, FRENCH W. AFRICA

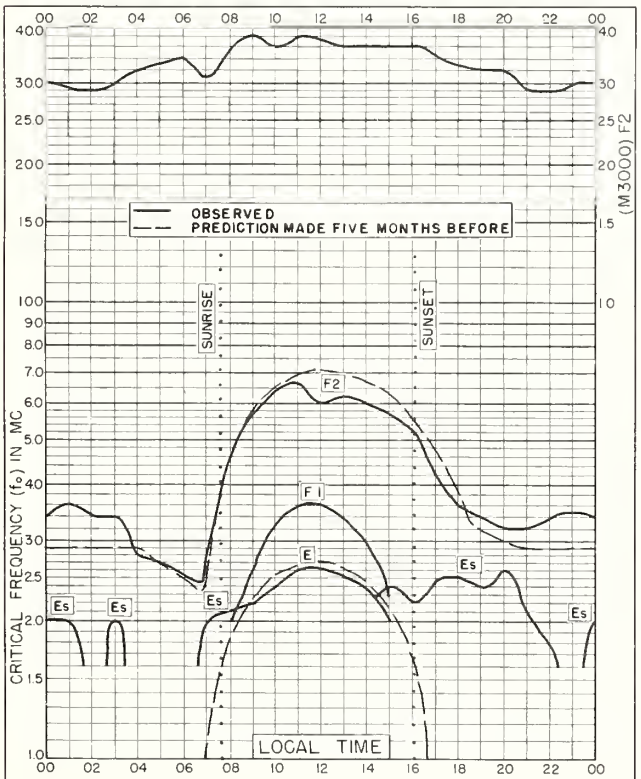


Fig. 139. POITIERS, FRANCE
46.6°N, 0.3°E DECEMBER 1952

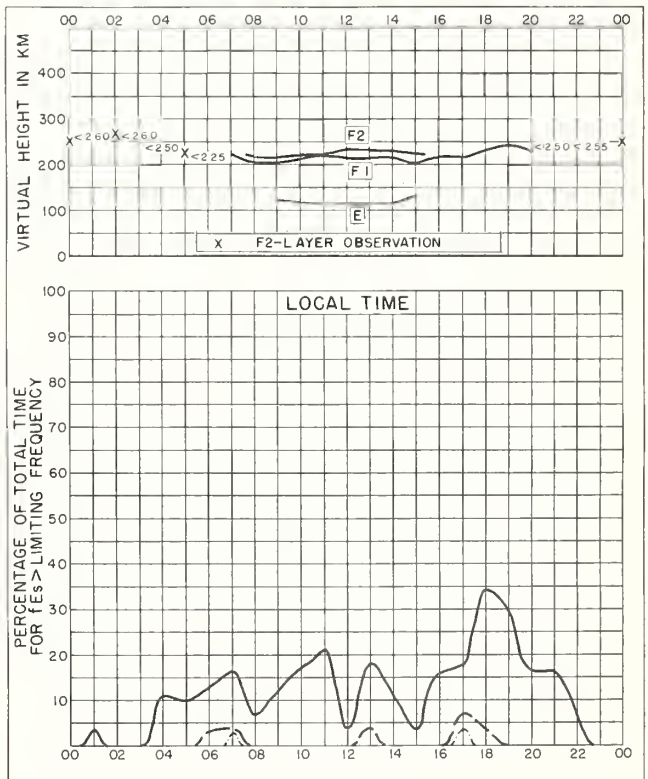


Fig. 140. POITIERS, FRANCE DECEMBER 1952

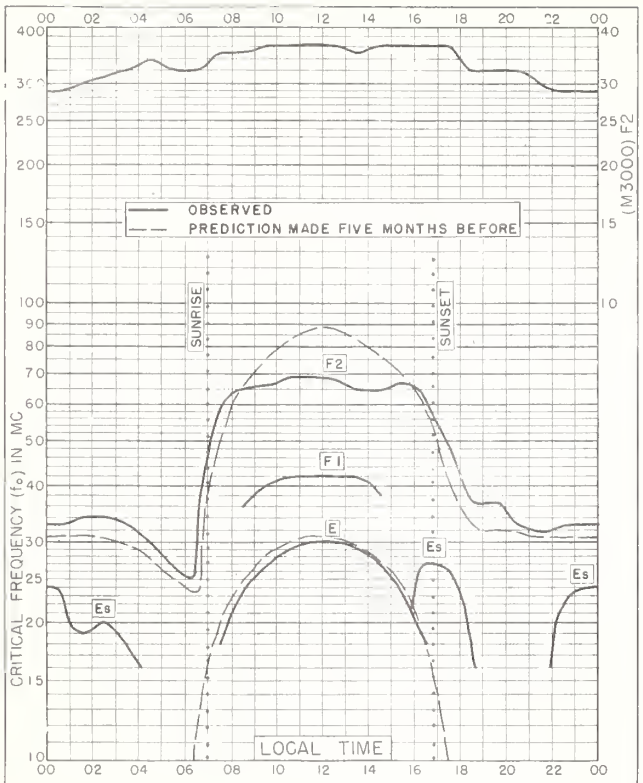
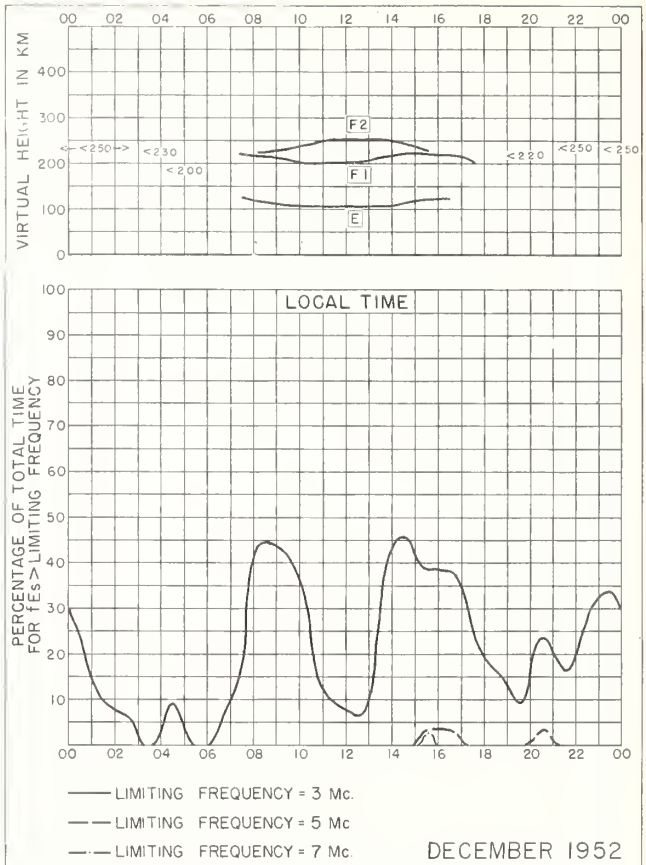


Fig. 141. CASABLANCA, MOROCCO
33.6°N, 7.6°W DECEMBER 1952



DECEMBER 1952
Fig. 142. CASABLANCA, MOROCCO

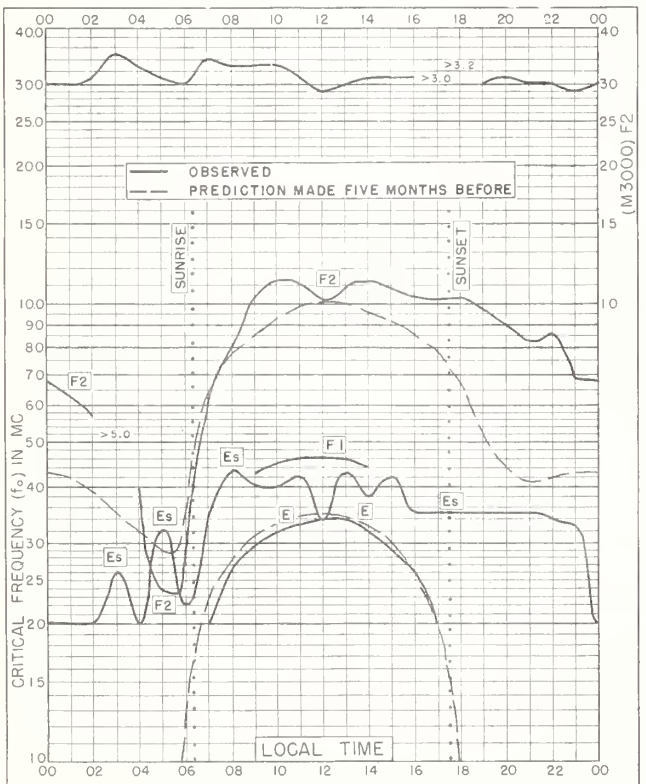
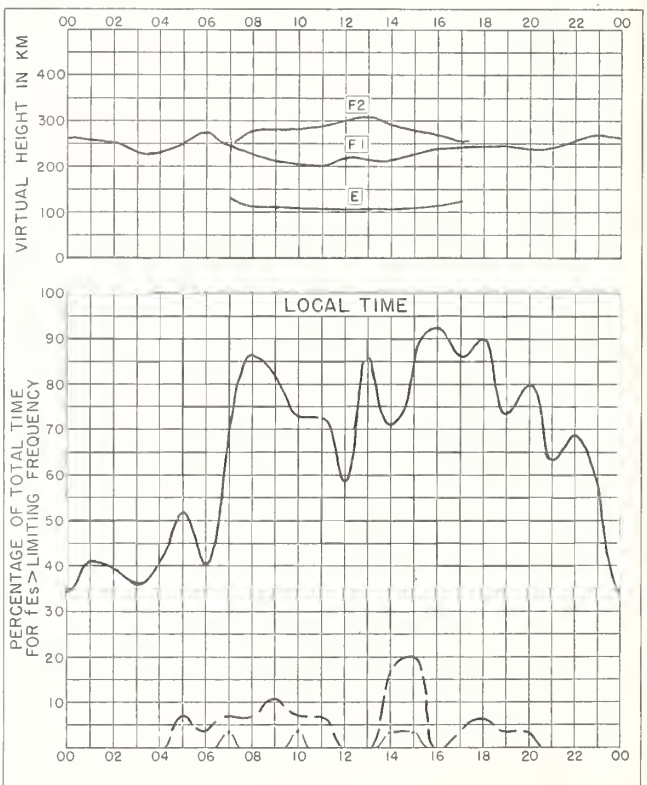


Fig. 143. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W DECEMBER 1952



DECEMBER 1952
Fig. 144. DAKAR, FRENCH W. AFRICA

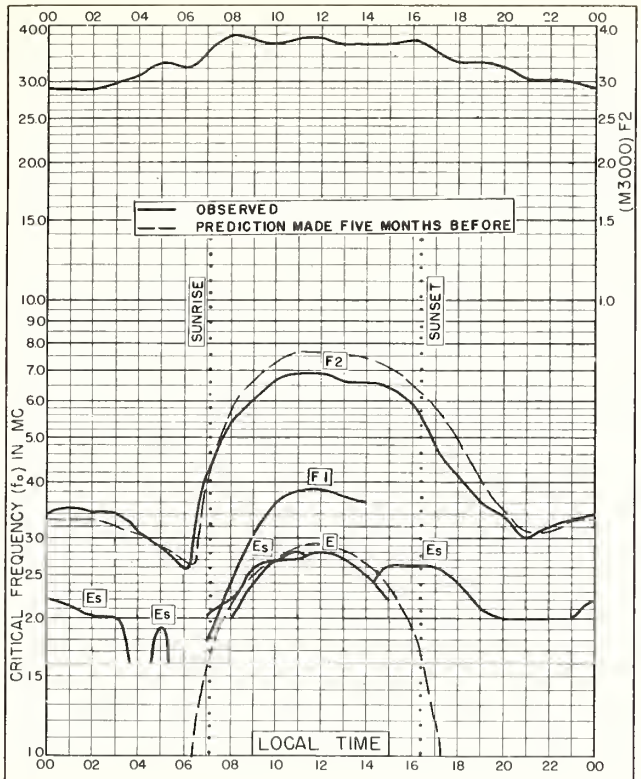


Fig. 145. POITIERS, FRANCE
46.6° N, 0.3°E NOVEMBER 1952

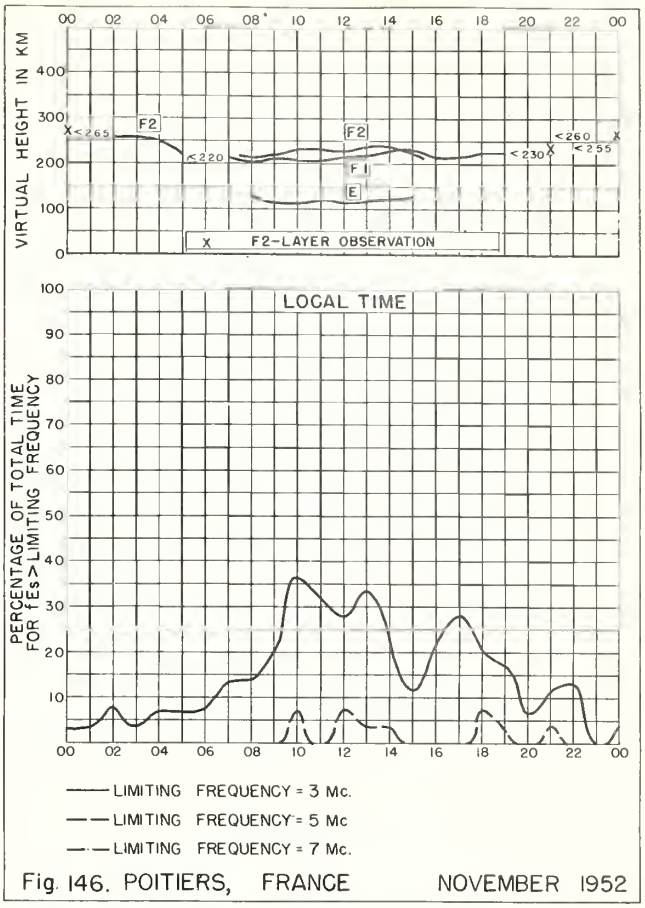


Fig. 146. POITIERS, FRANCE NOVEMBER 1952

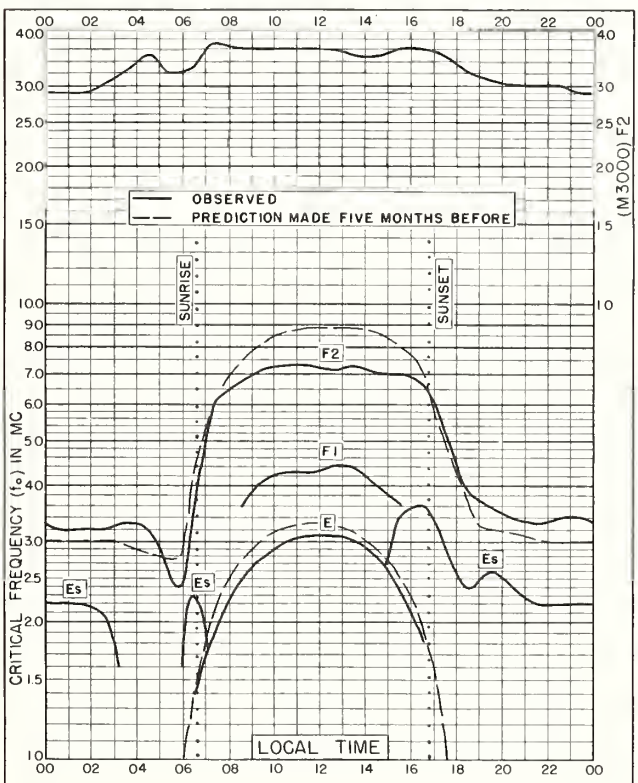


Fig. 147. CASABLANCA, MOROCCO
33.6°N, 7.6° W NOVEMBER 1952

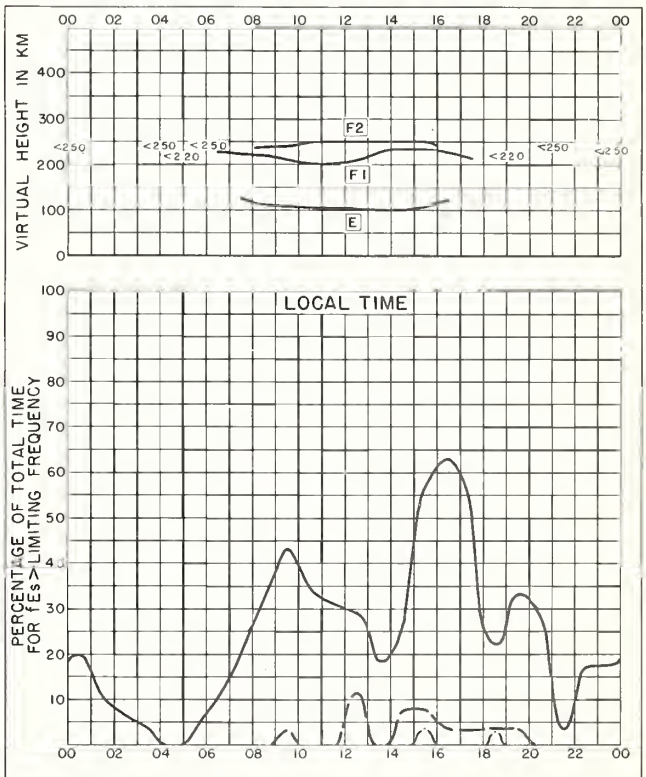


Fig. 148. CASABLANCA, MOROCCO NOVEMBER 1952

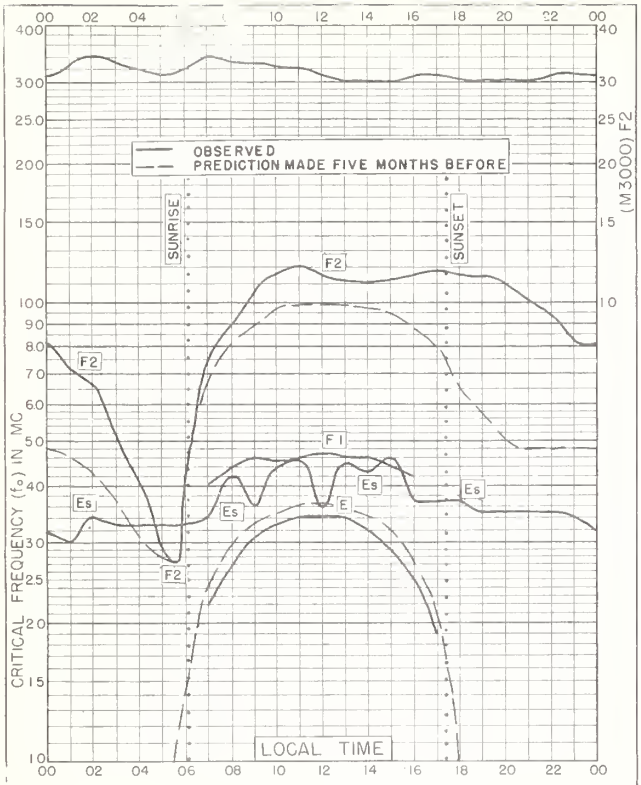
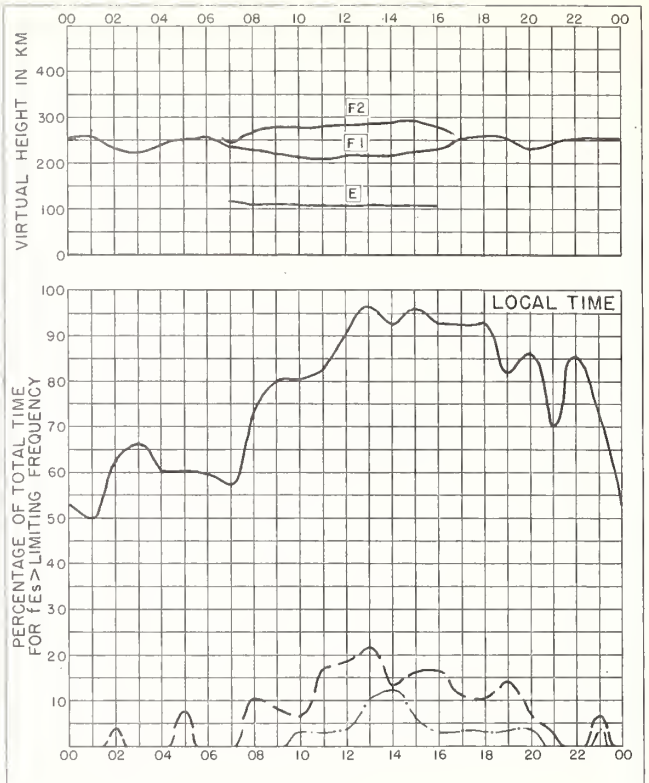


Fig. 149. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W NOVEMBER 1952



NOVEMBER 1952

Fig. 150. DAKAR, FRENCH W. AFRICA

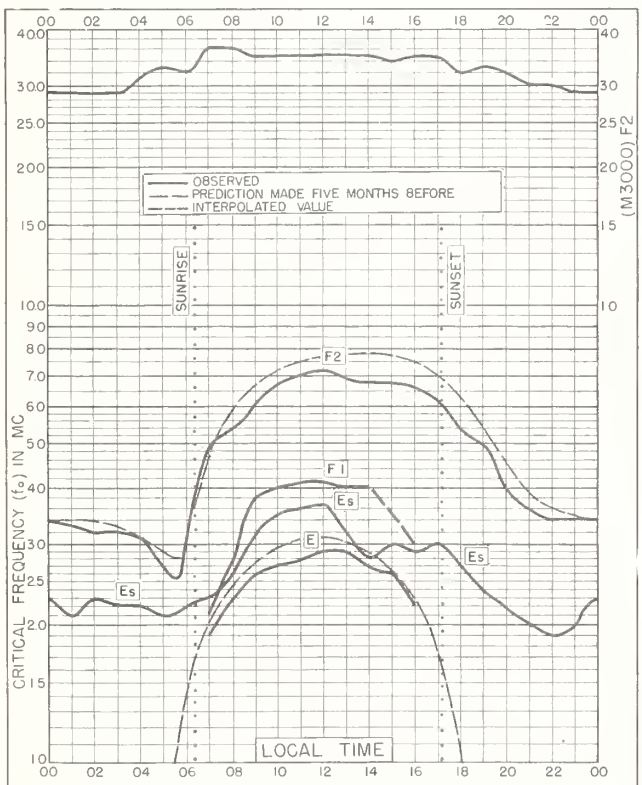


Fig. 151. POITIERS, FRANCE
46.6°N, 0.3° E OCTOBER 1952

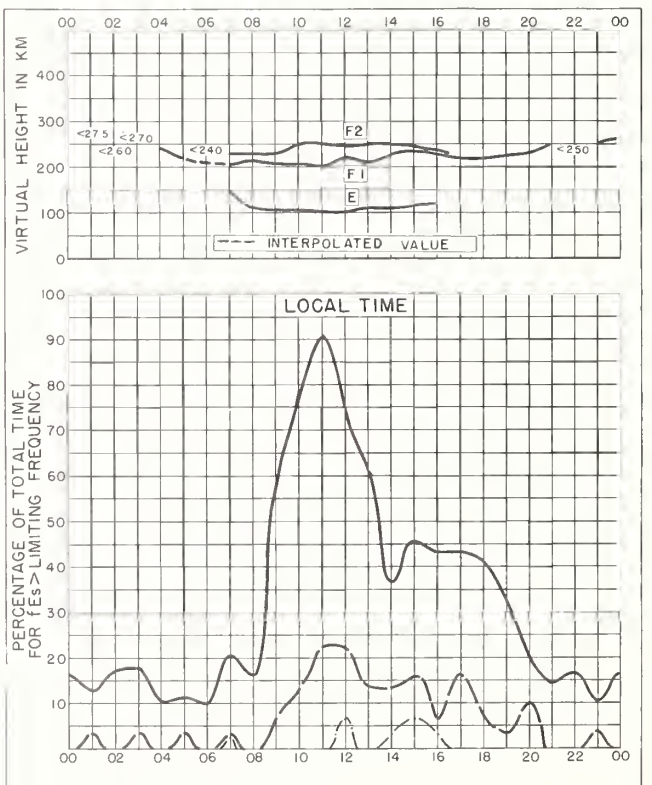


Fig. 152. POITIERS, FRANCE OCTOBER 1952

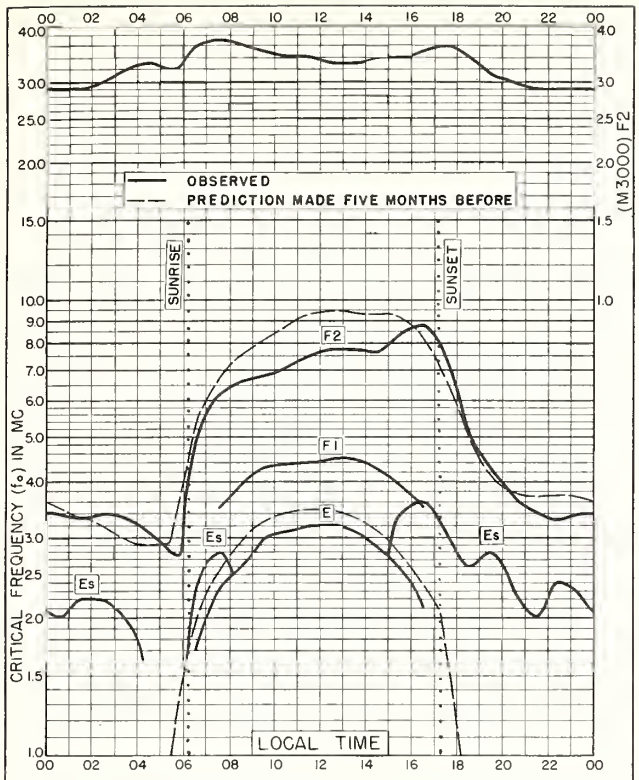


Fig. 153. CASABLANCA, MOROCCO
33.6°N, 7.6°W OCTOBER 1952

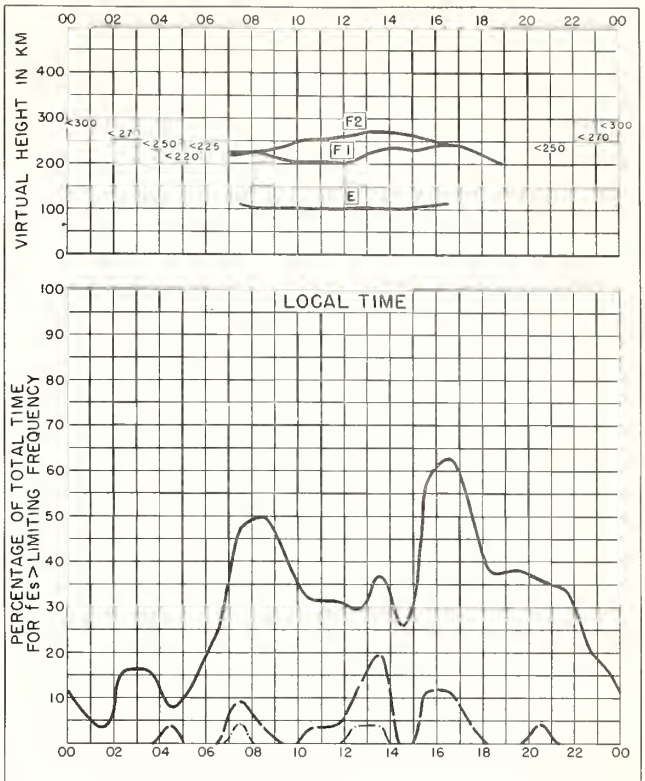


Fig. 154. CASABLANCA, MOROCCO OCTOBER 1952

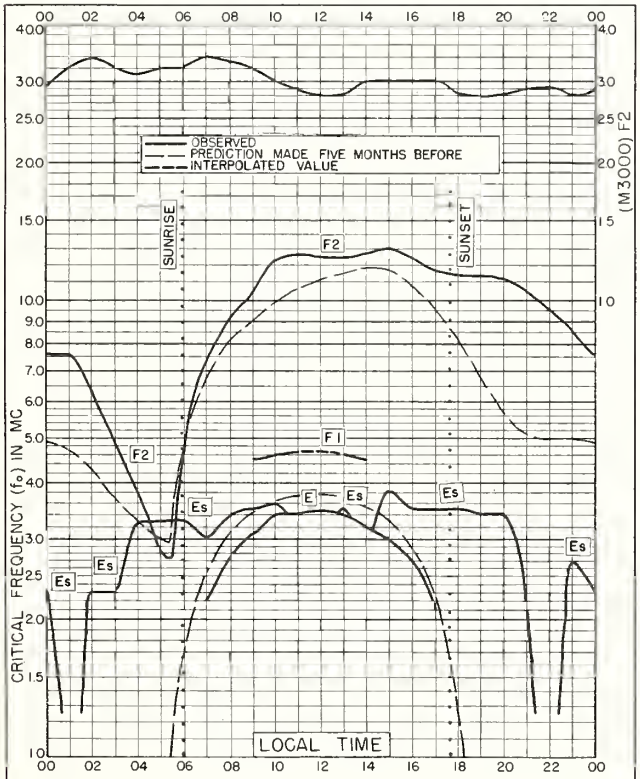


Fig. 155. DAKAR, FRENCH W. AFRICA
14.6°N, 17.4°W OCTOBER 1952

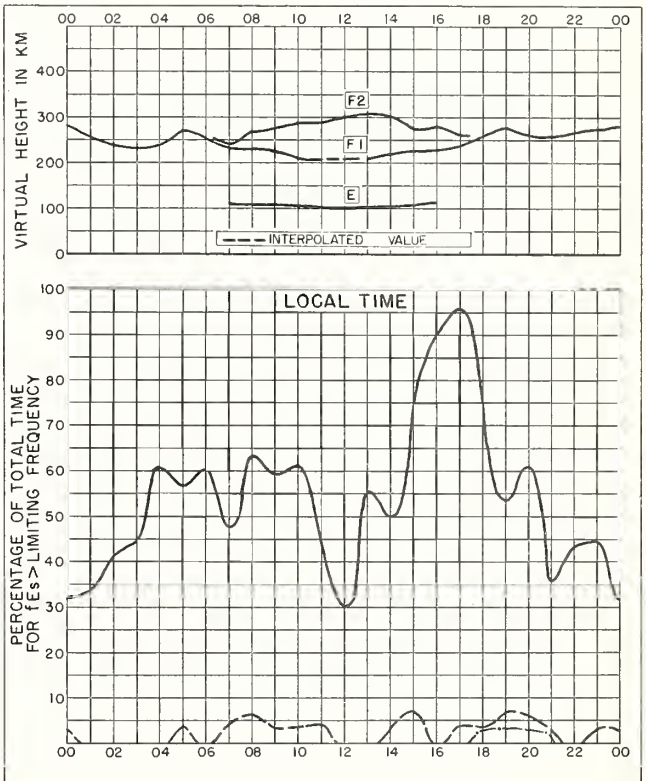


Fig. 156. DAKAR, FRENCH W. AFRICA OCTOBER 1952

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