# PART A

# IONOSPHERIC DATA

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JULY 1960

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

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PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
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## CONTENTS

# SYMBOLS, TERMINOLOGY, CONVENTIONS

Beginning with data reported for January 1952, and continuing through December 1956, 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 1957, the symbols used are given in NBS Report 5033, "Summary of Changes in Ionospheric Vertical Soundings, Observing and Scaling Procedures - Effective 1 January 1957," which draws upon the First Report of the Special Committee on World-Wide Ionospheric Soundings (URSI/AGI), Brussels, Sept. 2, 1956. A list of these symbols is available upon request.

In the Second Report of the Special Committee on World-Wide Ionospheric Soundings of the URSI/AGI Committee, May 1957, a new descriptive letter was introduced:

M Measurement questionable because the ordinary and extraordinary components are not distinguishable.

There was an expansion in meaning of the following:

Z (1) (qualifying letter) Measurement deduced from the third magnetoionic component.
(2) (descriptive letter) Third magnetoionic component present.

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 above.

a. For all ionospheric characteristics:

Values missing because of A, C, F, H, L, N or R 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'F (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 descriptive 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 are counted as equal to or less than the median foE, or equal to or less than the lower frequency limit of the recorder.

B for fEs is counted on the low side when there is a numerical value of a higher layer characteristic; otherwise it is omitted from the median count.

S for fEs is counted on the low side at night; during the day it is omitted from the median count (beginning with data for November 1957).

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 CRPL-F188, Part A, issued April 1960, the count is given for foF2 in the tables of medians. It is regretted that space limitations prevent including detailed counts for other characteristics.

To indicate further in a general manner the relative reliability of the data, for the F2 layer, h'F or foEs, if the count is from five to nine, or, for all layers, if more than half of the data used to compute the medians are doubtful (either doubtful or interpolated), the median is enclosed in parentheses. Medians are computed for less than five values for foF2 only.

Ordinarily, a blank space in the fEs or foEs 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'F2 or 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.

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

The tables may contain median values of either foEs or fEs. The graph of median Es corresponds to the table. Percentage curves of fEs are estimated from values of foEs when necessary.

The latest available information follows concerning the smoothed observed Zürich numbers beginning with the minimum of April 1954. Final numbers are listed through June 1959.

Smoothed Observed Sunspot Number

| Month | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1954 | | | | 3 | 4 | 4 | 5 | 7 | 8 | 8 | 9 | 12 |
| 1955 | 14 | 16 | 19 | 23 | 29 | 35 | 40 | 46 | 55 | 64 | 73 | 81 |
| 1956 | 89 | 98 | 109 | 119 | 127 | 137 | 146 | 150 | 151 | 156 | 160 | 164 |
| 1957 | 170 | 172 | 174 | 181 | 186 | 188 | 191 | 194 | 197 | 200 | 201 | 200 |
| 1958 | 199 | 201 | 201 | 197 | 191 | 187 | 185 | 185 | 184 | 182 | 181 | 180 |
| 1959 | 179 | 177 | 174 | 169 | 165 | 161 | 156 | 151 | 145 | 140 | 136 | 132 |
| 1960 | | | | | | | | | | | | |

# WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 72 and figures 1 to 144 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
- La Quiaca, Argentina
- Trelew, Argentina
- Ushuaia, Argentina

Commonwealth of Australia, Ionospheric Prediction Service of the Commonwealth Observatory:
- Brisbane, Australia

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

Belgian Royal Meteorological Institute:
- Lwiro (Central African Institute for Scientific Research)

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

Defence Research Board, Canada:
- Alert, Canada
- Resolute Bay, Canada
- Victoria, Canada

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

Danish National Committee of URSI:
- Narsarssuak, Greenland

General Direction of Posts and Telegraphs, Helsinki, Finland:
Nurmijarvi, Finland

The Finnish Academy of Sciences and Letters:
Sodankyla, Finland

The Royal Netherlands Meteorological Institute:
De Bilt, Holland

Central Institute of Meteorology, Budapest, Hungary:
Budapest, Hungary

Indian Council of Scientific and Industrial Research, Radio Research Committee, New Delhi, India:
Ahmedabad (Physical Research Laboratory)
Bombay (All India Radio)
Calcutta (Institute of Radio Physics and Electronics)
Delhi (All India Radio)
Kodaikanal (India Meteorological Department)
Madras (All India Radio)
Tiruchy (All India Radio)
Trivandrum (All India Radio)

General Directorate of Telecommunications, Mexico:
El Cerillo, Mexico

Telecommunication Administration, Oslo, Norway:
Svalbard, Norway

Institute of Terrestrial Magnetism, Ionosphere and Radio Propagation, Moscow, U.S.S.R.:
Moscow
Providenie Bay
Simferopol

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

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

United States Army Signal Corps:
Grand Bahama I.
Okinawa I.
Thule, Greenland
White Sands, New Mexico

National Bureau of Standards (Central Radio Propagation Laboratory):
Byrd Station, Antarctica
Huancayo, Peru (Instituto Geofisico de Huancayo)
Pole Station, Antarctica
Talara, Peru (Instituto Geofisico de Huancayo)
Washington, D. C.

## TABULATIONS OF ELECTRON DENSITY DATA

Reduction of hourly ionospheric vertical soundings to electron density profiles has become a part of the systematic ionospheric data program of the Central Radio Propagation Laboratory, National Bureau of Standards. Scalings of ionograms for this purpose are being provided by ionosphere stations operated by CRPL and the U. S. Army Signal Corps. For the present, the hourly profile data from one CRPL station, Puerto Rico, are appearing in the monthly CRPL-F Reports, Part A. These data are in place of the standard ionogram reductions formerly provided by this Station. The very considerable task of scaling the ionograms for this purpose is being undertaken by T. R. Gilliland, Engineer in Charge, Puerto Rico Ionosphere Sounding Station; the computations are performed at the NBS Boulder Laboratories by a group headed by J. W. Wright. Basic conversion of virtual to true heights uses the well-known matrix method developed by K. G. Budden of the Cavendish Laboratory, Cambridge University, programmed for an IBM 704 computer.

The tabulations provide the following basic electron density profile data for each hour of each day of the month:

| Quantity | Units | Remarks |
|---|---|---|
| Electron Density (N) | $x10^3$ = electrons/$cm^3$ | Body of table; given at each 10 km of height. |
| NMAX | $x10^3$ = electrons/$cm^3$ | Always the highest value of N at each hour. To maintain this rule, the electron density at the next 10 km increment above HMAX is always given as exactly equal to NMAX (unless HMAX coincides with a 10 km level). |
| QUALification | (Alphabetic) | A standard scaling letter qualifying the observation when necessary. |
| HMIN | Kilometers | The height of zero or very low electron density, obtained by linear extrapolation of the electron density vs. height curve. |
| SCAT | Kilometers | One half of the half-thickness of the parabola best fitting the upper portion of the F region profile. Approximates the scale height near the level HMAX. |
| HMAX | Kilometers | The height of maximum electron density, determined by fitting a parabola to the upper portion of the profile. |
| SHMAX | $x10^{10}$ = electrons/$cm^2$ column. | Obtained by integration of the profile between the limits HMIN and HMAX. |

Tabulations of the average electron densities each hour, at each 10 km level, for the quiet ionosphere, are also given. These averages include the profiles obtained when the magnetic character figure Kp is less than 4+. The number of profiles entering the average for each hour is given by CNT. The other parameters of the layer, HMIN, SCAT, HMAX, SHMAX, are averaged in a similar way.

Before the averaging process, the individual profiles are extrapolated above HMAX by a Chapman distribution of 100 km scale height. This assumed model seems to agree well with the few published measurements dealing with the topside profile of the F-region.* Extrapolation is necessary in order to calculate homogeneous averages near HMAX and the average profiles are, in fact, given up to 950 km. Also given are the average estimated integrated electron densities to infinity, SHINF (same units as SHMAX); this is an approximation to the total electron content in a column of the ionosphere.

*See Wright, J.W. "A Model of the F-Region Above HMAX F2" J.Geophys.Res. V.65 pp 185-191.

ELECTRON DENSITY

PUERTO RICO 60 W 1 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | S | |
| HMIN | 249 | 250 | 258 | 205 | 189 | 181 | 214 | 234 | 112 | 110 | | 108 |
| SCAT | 53.9 | 51.2 | 42.8 | 43.9 | 30.2 | 94.5 | 74.7 | 51.4 | 46.8 | 43.9 | | 53.0 |
| HMAXF | 355 | 364 | 354 | 294 | 243 | 394 | 387 | 323 | 294 | 277 | | 310 |
| SHMAX | 571 | 462 | 383 | 495 | 123 | 211 | 220 | 319 | 877 | 1142 | | 1829 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | 156 | | | | | | |
| 390 | | | | | | 156 | 208 | | | | | |
| 380 | | | | | | 155 | 208 | | | | | |
| 370 | | 679 | | | | 154 | 206 | | | | | |
| 360 | 844 | 678 | 670 | | | 151 | 201 | | | | | |
| 350 | 842 | 666 | 668 | | | 148 | 195 | | | | | |
| 340 | 828 | 641 | 651 | | | 143 | 187 | | | | | |
| 330 | 799 | 604 | 615 | | | 138 | 179 | 500 | | | | |
| 320 | 754 | 552 | 561 | | | 132 | 167 | 500 | | | | 2096 |
| 310 | 697 | 485 | 489 | | | 125 | 153 | 492 | | | | 2096 |
| 300 | 614 | 401 | 389 | 917 | | 117 | 137 | 475 | 1143 | | | 2077 |
| 290 | 499 | 301 | 262 | 915 | | 108 | 119 | 448 | 1141 | | | 2021 |
| 280 | 362 | 192 | 143 | 895 | | 99.2 | 101 | 414 | 1117 | 1612 | | 1928 |
| 270 | 209 | 97.2 | 67.4 | 849 | | 89.8 | 83.8 | 367 | 1068 | 1600 | | 1798 |
| 260 | 83.8 | 49.6 | 12.4 | 784 | | 80.8 | 69.1 | 300 | 994 | 1549 | | 1629 |
| 250 | 12.4 | | | 672 | 329 | 72.2 | 57.0 | 219 | 885 | 1455 | | 1422 |
| 240 | | | | 508 | 328 | 64.3 | 46.7 | 83.8 | 754 | 1341 | | 1181 |
| 230 | | | | 286 | 313 | 56.6 | 34.4 | | 628 | 1143 | | 960 |
| 220 | | | | 120 | 282 | 49.6 | 12.4 | | 501 | 932 | | 794 |
| 210 | | | | 44.4 | 225 | 42.9 | | | 396 | 703 | | 643 |
| 200 | | | | | 112 | 30.6 | | | 310 | 525 | | 527 |
| 190 | | | | | 12.4 | 14.1 | | | 243 | 398 | | 442 |
| 180 | | | | | | | | | 192 | 310 | | 376 |
| 170 | | | | | | | | | 151 | 250 | | 322 |
| 160 | | | | | | | | | 124 | 205 | | 275 |
| 150 | | | | | | | | | 107 | 168 | | 229 |
| 140 | | | | | | | | | 95.1 | 145 | | 196 |
| 130 | | | | | | | | | 84.4 | 137 | | 178 |
| 120 | | | | | | | | | 76.1 | 131 | | 168 |
| 110 | | | | | | | | | | 49.6 | | 127 |

ELECTRON DENSITY

PUERTO RICO 60 W 1 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | A | S | A | A | A | A | | | | | |
| HMIN | | | 109 | | 110 | | 230 | 205 | 191 | 208 | 200 | 245 |
| SCAT | | | 63.4 | | 64.9 | | 54.5 | 48.4 | 70.3 | 49.6 | 52.9 | 64.4 |
| HMAXF | | | 338 | | 341 | | 335 | 303 | 343 | 345 | 352 | 401 |
| SHMAX | | | 2219 | | 2212 | | 1504 | 1181 | 1014 | 636 | 538 | 579 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | | 652 |
| 400 | | | | | | | | | | | | 652 |
| 390 | | | | | | | | | | | | 647 |
| 380 | | | | | | | | | | | | 635 |
| 370 | | | | | | | | | | | | 614 |
| 360 | | | | | | | | | | | 679 | 585 |
| 350 | | | | | 2161 | | | | 1050 | 875 | 679 | 550 |
| 340 | | | 2161 | | 2160 | | 2128 | | 1049 | 873 | 670 | 508 |
| 330 | | | 2152 | | 2145 | | 2123 | | 1040 | 855 | 650 | 450 |
| 320 | | | 2117 | | 2104 | | 2087 | | 1021 | 817 | 615 | 389 |
| 310 | | | 2055 | | 2037 | | 2010 | 1861 | 989 | 764 | 573 | 319 |
| 300 | | | 1963 | | 1942 | | 1907 | 1859 | 949 | 695 | 516 | 251 |
| 290 | | | 1854 | | 1827 | | 1758 | 1825 | 899 | 608 | 454 | 183 |
| 280 | | | 1709 | | 1683 | | 1578 | 1752 | 838 | 513 | 382 | 124 |
| 270 | | | 1530 | | 1517 | | 1356 | 1637 | 769 | 417 | 310 | 83.8 |
| 260 | | | 1341 | | 1341 | | 1074 | 1483 | 690 | 310 | 246 | 54.4 |
| 250 | | | 1143 | | 1143 | | 716 | 1294 | 608 | 219 | 179 | 22.3 |
| 240 | | | 940 | | 948 | | 389 | 1067 | 508 | 143 | 127 | |
| 230 | | | 778 | | 763 | | 12.4 | 754 | 411 | 86.2 | 87.5 | |
| 220 | | | 650 | | 621 | | | 362 | 310 | 52.4 | 60.0 | |
| 210 | | | 547 | | 508 | | | 97.2 | 179 | 12.4 | 41.1 | |
| 200 | | | 472 | | 413 | | | | 71.4 | | | |
| 190 | | | 414 | | 349 | | | | | | | |
| 180 | | | 366 | | 302 | | | | | | | |
| 170 | | | 323 | | 260 | | | | | | | |
| 160 | | | 279 | | 219 | | | | | | | |
| 150 | | | 238 | | 186 | | | | | | | |
| 140 | | | 210 | | 164 | | | | | | | |
| 130 | | | 193 | | 152 | | | | | | | |
| 120 | | | 183 | | 141 | | | | | | | |
| 110 | | | 127 | | 83.8 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 2 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | | | | | | | | S | | | |
| HMIN | 287 | 268 | 240 | 208 | 204 | 199 | 201 | 193 | 113 | 107 | 106 | 107 |
| SCAT | 56.1 | 44.5 | 37.8 | 30.6 | 37.2 | 91.6 | 72.4 | 46.6 | 39.5 | 44.3 | 48.9 | 55.0 |
| HMAXF | 422 | 387 | 324 | 266 | 273 | 351 | 359 | 301 | 273 | 272 | 291 | 304 |
| SHMAX | 517 | 424 | 460 | 364 | 166 | 244 | 219 | 327 | 772 | 1149 | 1373 | 1764 |
| KM | | | | | | | | | | | | |
| 430 | 661 | | | | | | | | | | | |
| 420 | 661 | | | | | | | | | | | |
| 410 | 654 | | | | | | | | | | | |
| 400 | 636 | | | | | | | | | | | |
| 390 | 608 | 652 | | | | | | | | | | |
| 380 | 569 | 648 | | | | | | | | | | |
| 370 | 521 | 628 | | | | | | | | | | |
| 360 | 461 | 591 | | | | 214 | 219 | | | | | |
| 350 | 389 | 540 | | | | 214 | 218 | | | | | |
| 340 | 315 | 470 | | | | 213 | 215 | | | | | |
| 330 | 240 | 389 | 939 | | | 211 | 210 | | | | | |
| 320 | 161 | 310 | 935 | | | 208 | 203 | | | | | |
| 310 | 97.2 | 231 | 904 | | | 203 | 193 | 516 | | | | 1937 |
| 300 | 60.0 | 152 | 842 | | | 197 | 182 | 516 | | | 1669 | 1934 |
| 290 | 19.0 | 86.7 | 742 | | | 189 | 169 | 508 | | | 1668 | 1904 |
| 280 | | 53.7 | 608 | | 355 | 181 | 153 | 489 | 1228 | 1612 | 1646 | 1842 |
| 270 | | 12.4 | 362 | 982 | 354 | 172 | 135 | 458 | 1225 | 1611 | 1588 | 1743 |
| 260 | | | 179 | 972 | 343 | 161 | 115 | 417 | 1192 | 1584 | 1493 | 1616 |
| 250 | | | 65.4 | 913 | 321 | 149 | 96.2 | 357 | 1120 | 1516 | 1367 | 1461 |
| 240 | | | | 794 | 288 | 135 | 77.0 | 286 | 1004 | 1406 | 1214 | 1281 |
| 230 | | | | 573 | 224 | 119 | 60.0 | 198 | 834 | 1267 | 1050 | 1096 |
| 220 | | | | 219 | 136 | 97.2 | 46.5 | 124 | 643 | 1068 | 858 | 902 |
| 210 | | | | 40.2 | 60.0 | 69.0 | 26.8 | 74.5 | 477 | 861 | 695 | 734 |
| 200 | | | | | | 12.4 | | 41.8 | 346 | 661 | 558 | 601 |
| 190 | | | | | | | | | 254 | 477 | 456 | 500 |
| 180 | | | | | | | | | 191 | 362 | 378 | 423 |
| 170 | | | | | | | | | 146 | 286 | 310 | 365 |
| 160 | | | | | | | | | 117 | 239 | 251 | 320 |
| 150 | | | | | | | | | 106 | 194 | 198 | 278 |
| 140 | | | | | | | | | 97.7 | 166 | 167 | 240 |
| 130 | | | | | | | | | 81.8 | 146 | 156 | 210 |
| 120 | | | | | | | | | 74.2 | 134 | 150 | 187 |
| 110 | | | | | | | | | | 112 | 143 | 152 |

ELECTRON DENSITY

PUERTO RICO 60 W 2 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 108 | 109 | 107 | 107 | 111 | 111 | 239 | 201 | 183 | 178 | 256 | 245 |
| SCAT | 63.3 | 57.4 | 61.3 | 60.1 | 67.3 | 60.7 | 56.6 | 48.8 | 50.4 | 54.7 | 48.5 | 48.2 |
| HMAXF | 328 | 316 | 330 | 329 | 335 | 330 | 343 | 306 | 309 | 347 | 386 | 381 |
| SHMAX | 2206 | 2223 | 2270 | 2287 | 2175 | 1903 | 1534 | 1170 | 860 | 600 | 461 | 507 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 643 | 716 |
| 380 | | | | | | | | | | | 640 | 716 |
| 370 | | | | | | | | | | | 625 | 707 |
| 360 | | | | | | | | | | | 593 | 682 |
| 350 | | | | | | | 2161 | | | 679 | 550 | 643 |
| 340 | | | 2294 | | 2128 | 2032 | 2159 | | | 676 | 497 | 586 |
| 330 | 2128 | | 2294 | 2361 | 2125 | 2032 | 2133 | | | 662 | 431 | 517 |
| 320 | 2120 | 2430 | 2279 | 2349 | 2102 | 2019 | 2074 | | | 635 | 362 | 436 |
| 310 | 2087 | 2425 | 2233 | 2304 | 2056 | 1978 | 1979 | 1815 | 1191 | 599 | 286 | 351 |
| 300 | 2027 | 2385 | 2161 | 2227 | 1986 | 1907 | 1861 | 1809 | 1182 | 551 | 213 | 262 |
| 290 | 1941 | 2309 | 2049 | 2114 | 1892 | 1807 | 1693 | 1767 | 1149 | 498 | 143 | 179 |
| 280 | 1826 | 2195 | 1914 | 1974 | 1777 | 1684 | 1479 | 1687 | 1096 | 439 | 97.2 | 121 |
| 270 | 1688 | 2053 | 1746 | 1798 | 1634 | 1539 | 1203 | 1570 | 1011 | 381 | 60.0 | 81.3 |
| 260 | 1522 | 1857 | 1555 | 1595 | 1472 | 1368 | 794 | 1411 | 917 | 324 | 24.1 | 53.4 |
| 250 | 1341 | 1628 | 1341 | 1371 | 1288 | 1172 | 417 | 1216 | 794 | 271 | | 22.3 |
| 240 | 1164 | 1367 | 1096 | 1170 | 1076 | 974 | 49.6 | 960 | 659 | 222 | | |
| 230 | 987 | 1120 | 908 | 971 | 875 | 766 | | 661 | 521 | 179 | | |
| 220 | 834 | 899 | 754 | 780 | 701 | 599 | | 335 | 389 | 143 | | |
| 210 | 701 | 716 | 608 | 636 | 556 | 477 | | 97.2 | 248 | 108 | | |
| 200 | 591 | 573 | 518 | 520 | 446 | 378 | | | 133 | 77.8 | | |
| 190 | 502 | 477 | 446 | 431 | 371 | 303 | | | 56.7 | 52.5 | | |
| 180 | 430 | 408 | 389 | 362 | 313 | 245 | | | | 12.4 | | |
| 170 | 373 | 356 | 344 | 310 | 267 | 202 | | | | | | |
| 160 | 328 | 312 | 301 | 266 | 227 | 168 | | | | | | |
| 150 | 289 | 273 | 262 | 224 | 191 | 141 | | | | | | |
| 140 | 253 | 237 | 223 | 187 | 159 | 120 | | | | | | |
| 130 | 219 | 207 | 191 | 160 | 140 | 108 | | | | | | |
| 120 | 193 | 189 | 172 | 151 | 130 | 99.9 | | | | | | |
| 110 | 161 | 143 | 143 | 131 | | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 3 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 269 | 240 | 237 | 228 | 210 | 192 | 207 | 199 | 109 | 109 | 109 | 110 |
| SCAT | 53.6 | 42.7 | 44.2 | 40.0 | 39.9 | 77.7 | 56.7 | 48.2 | 45.1 | 45.2 | 47.1 | 48.5 |
| HMAXF | 383 | 349 | 321 | 316 | 287 | 381 | 343 | 299 | 283 | 290 | 288 | 299 |
| SHMAX | 529 | 478 | 457 | 368 | 297 | 414 | 359 | 359 | 857 | 1294 | 1488 | 1880 |
| KM | | | | | | | | | | | | |
| 390 | 735 | | | | | 375 | | | | | | |
| 380 | 735 | | | | | 375 | | | | | | |
| 370 | 725 | | | | | 373 | | | | | | |
| 360 | 702 | | | | | 368 | | | | | | |
| 350 | 666 | 794 | | | | 360 | 446 | | | | | |
| 340 | 619 | 784 | | | | 348 | 446 | | | | | |
| 330 | 556 | 754 | 834 | | | 335 | 441 | | | | | |
| 320 | 477 | 696 | 834 | 688 | | 318 | 429 | | | | | |
| 310 | 389 | 625 | 821 | 685 | | 297 | 409 | | | | | |
| 300 | 293 | 540 | 788 | 662 | | 274 | 384 | 565 | | 1727 | | 2361 |
| 290 | 188 | 417 | 737 | 617 | 599 | 248 | 350 | 560 | 1191 | 1727 | 1907 | 2341 |
| 280 | 83.8 | 286 | 653 | 552 | 594 | 220 | 310 | 543 | 1189 | 1703 | 1891 | 2270 |
| 270 | 12.4 | 179 | 522 | 460 | 573 | 190 | 265 | 514 | 1165 | 1638 | 1834 | 2148 |
| 260 | | 97.2 | 362 | 346 | 540 | 161 | 216 | 477 | 1110 | 1527 | 1728 | 1975 |
| 250 | | 49.6 | 179 | 198 | 469 | 129 | 169 | 417 | 1028 | 1376 | 1587 | 1755 |
| 240 | | | 49.6 | 92.7 | 362 | 102 | 124 | 342 | 917 | 1175 | 1404 | 1483 |
| 230 | | | | 22.3 | 219 | 78.5 | 83.8 | 257 | 775 | 960 | 1208 | 1190 |
| 220 | | | | | 83.8 | 60.0 | 53.2 | 161 | 619 | 754 | 1004 | 917 |
| 210 | | | | | | 45.6 | 17.7 | 83.8 | 477 | 591 | 794 | 716 |
| 200 | | | | | | 24.1 | | 12.4 | 362 | 464 | 608 | 573 |
| 190 | | | | | | | | | 267 | 373 | 468 | 477 |
| 180 | | | | | | | | | 198 | 310 | 372 | 403 |
| 170 | | | | | | | | | 150 | 255 | 310 | 347 |
| 160 | | | | | | | | | 119 | 212 | 254 | 302 |
| 150 | | | | | | | | | 102 | 177 | 208 | 262 |
| 140 | | | | | | | | | 88.1 | 150 | 173 | 224 |
| 130 | | | | | | | | | 79.7 | 138 | 157 | 189 |
| 120 | | | | | | | | | 73.9 | 130 | 149 | 170 |
| 110 | | | | | | | | | 60.0 | 83.8 | 97.2 | 71.4 |

ELECTRON DENSITY

PUERTO RICO 60 W 3 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | J | J | |
| HMIN | 109 | 108 | 109 | 109 | 108 | 110 | 195 | 219 | 188 | 188 | 223 | 228 |
| SCAT | 54.1 | 53.9 | 62.4 | 52.7 | 62.7 | 67.8 | 62.0 | 52.3 | 58.8 | 70.7 | 43.4 | 44.6 |
| HMAXF | 310 | 321 | 331 | 318 | 318 | 344 | 346 | 329 | 313 | 365 | 347 | 336 |
| SHMAX | 2074 | 2237 | 2444 | 2125 | 1973 | 2059 | 1634 | 1393 | 1106 | 825 | 609 | 483 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | | 834 | | |
| 360 | | | | | | | | | | 833 | | |
| 350 | | | | | | 2000 | 1969 | | | 824 | 917 | |
| 340 | | | 2465 | | | 1998 | 1964 | | | 807 | 912 | 784 |
| 330 | | 2430 | 2465 | | | 1978 | 1935 | 2032 | | 782 | 883 | 780 |
| 320 | 2310 | 2430 | 2447 | 2430 | 2096 | 1936 | 1881 | 2018 | 1420 | 748 | 825 | 758 |
| 310 | 2310 | 2404 | 2397 | 2415 | 2088 | 1873 | 1801 | 1967 | 1419 | 706 | 754 | 716 |
| 300 | 2290 | 2337 | 2315 | 2356 | 2055 | 1786 | 1696 | 1879 | 1402 | 657 | 671 | 654 |
| 290 | 2229 | 2223 | 2203 | 2247 | 1995 | 1676 | 1566 | 1752 | 1365 | 597 | 573 | 573 |
| 280 | 2127 | 2074 | 2060 | 2103 | 1907 | 1555 | 1403 | 1594 | 1308 | 528 | 477 | 468 |
| 270 | 1992 | 1881 | 1878 | 1907 | 1800 | 1401 | 1202 | 1384 | 1230 | 456 | 356 | 362 |
| 260 | 1811 | 1657 | 1669 | 1681 | 1657 | 1231 | 960 | 1123 | 1136 | 380 | 233 | 233 |
| 250 | 1602 | 1427 | 1446 | 1434 | 1486 | 1076 | 701 | 794 | 1004 | 302 | 133 | 127 |
| 240 | 1377 | 1197 | 1205 | 1209 | 1293 | 898 | 457 | 446 | 861 | 225 | 74.8 | 63.3 |
| 230 | 1154 | 991 | 1004 | 1004 | 1050 | 727 | 279 | 179 | 697 | 154 | 41.9 | 12.4 |
| 220 | 933 | 814 | 812 | 794 | 834 | 573 | 152 | 12.4 | 508 | 105 | | |
| 210 | 754 | 679 | 665 | 629 | 643 | 455 | 80.3 | | 286 | 68.8 | | |
| 200 | 608 | 573 | 548 | 508 | 437 | 362 | 36.2 | | 104 | 45.6 | | |
| 190 | 499 | 488 | 460 | 417 | 380 | 286 | | | 24.6 | 7.9 | | |
| 180 | 424 | 417 | 389 | 354 | 314 | 219 | | | | | | |
| 170 | 369 | 365 | 335 | 307 | 272 | 168 | | | | | | |
| 160 | 326 | 319 | 295 | 262 | 235 | 132 | | | | | | |
| 150 | 289 | 281 | 262 | 215 | 194 | 109 | | | | | | |
| 140 | 256 | 247 | 219 | 178 | 159 | 96.4 | | | | | | |
| 130 | 219 | 214 | 187 | 159 | 141 | 91.6 | | | | | | |
| 120 | 190 | 189 | 169 | 150 | 132 | 86.7 | | | | | | |
| 110 | 127 | 143 | 127 | 112 | 97.2 | 12.4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 4 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | J | A | | | A | | | | A | |
| HMIN | 228 | 249 | 219 | 182 | 188 | 176 | 183 | 198 | 114 | 108 | | 109 |
| SCAT | 53.2 | 39.2 | 28.4 | 34.6 | 32.6 | 85.6 | 63.9 | 36.7 | 31.1 | 55.5 | | 54.5 |
| HMAXF | 341 | 339 | 293 | 256 | 261 | 365 | 345 | 278 | 262 | 277 | | 314 |
| SHMAX | 474 | 337 | 303 | 274 | 142 | 213 | 181 | 242 | 626 | 994 | | 1939 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 174 | | | | | | |
| 360 | | | | | | 174 | | | | | | |
| 350 | 670 | | | | | 173 | 189 | | | | | |
| 340 | 670 | 625 | | | | 171 | 188 | | | | | |
| 330 | 663 | 617 | | | | 167 | 186 | | | | | |
| 320 | 644 | 586 | | | | 162 | 181 | | | | | 2144 |
| 310 | 613 | 540 | | | | 155 | 173 | | | | | 2141 |
| 300 | 570 | 466 | 754 | | | 147 | 163 | | | | | 2109 |
| 290 | 516 | 375 | 752 | | | 139 | 151 | | | | | 2041 |
| 280 | 446 | 274 | 712 | | | 129 | 138 | 492 | | 1191 | | 1937 |
| 270 | 357 | 161 | 624 | | 323 | 119 | 123 | 487 | 1131 | 1186 | | 1798 |
| 260 | 269 | 71.4 | 494 | 608 | 323 | 109 | 108 | 463 | 1130 | 1163 | | 1615 |
| 250 | 169 | 12.4 | 335 | 603 | 314 | 98.5 | 92.5 | 425 | 1091 | 1121 | | 1408 |
| 240 | 78.6 | | 161 | 573 | 291 | 88.2 | 78.4 | 362 | 994 | 1060 | | 1191 |
| 230 | 21.7 | | 71.4 | 525 | 253 | 77.9 | 66.0 | 274 | 846 | 978 | | 980 |
| 220 | | | 12.4 | 432 | 191 | 67.6 | 55.3 | 179 | 665 | 875 | | 803 |
| 210 | | | | 310 | 116 | 57.3 | 46.1 | 83.8 | 493 | 754 | | 655 |
| 200 | | | | 161 | 60.0 | 47.1 | 34.5 | 23.7 | 362 | 608 | | 540 |
| 190 | | | | 65.6 | 12.4 | 34.0 | 14.4 | | 262 | 465 | | 451 |
| 180 | | | | | | 10.0 | | | 194 | 349 | | 389 |
| 170 | | | | | | | | | 143 | 275 | | 335 |
| 160 | | | | | | | | | 112 | 222 | | 296 |
| 150 | | | | | | | | | 96.6 | 181 | | 259 |
| 140 | | | | | | | | | 91.8 | 150 | | 229 |
| 130 | | | | | | | | | 87.1 | 127 | | 198 |
| 120 | | | | | | | | | 74.9 | 119 | | 173 |
| 110 | | | | | | | | | | 97.2 | | 112 |

ELECTRON DENSITY

PUERTO RICO 60 W 4 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | | | | | | | | |
| HMIN | 109 | 109 | 108 | 110 | 109 | 110 | 186 | 210 | 189 | 198 | 251 | 214 |
| SCAT | 47.1 | 53.4 | 48.6 | 60.7 | 57.6 | 66.3 | 52.2 | 53.6 | 52.9 | 58.3 | 48.5 | 59.7 |
| HMAXF | 301 | 325 | 315 | 334 | 322 | 331 | 326 | 325 | 308 | 372 | 360 | 346 |
| SHMAX | 1796 | 2151 | 2062 | 2384 | 2093 | 2161 | 1485 | 1329 | 798 | 707 | 581 | 649 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | 784 | | |
| 370 | | | | | | | | | | 784 | 906 | |
| 360 | | | | | | | | | | 776 | 906 | |
| 350 | | | | | | | | | | 756 | 896 | 824 |
| 340 | | | | 2396 | | 2161 | | | | 725 | 865 | 822 |
| 330 | | 2294 | | 2394 | 2294 | 2160 | 2032 | 1907 | | 682 | 817 | 809 |
| 320 | | 2288 | 2430 | 2366 | 2293 | 2145 | 2026 | 1902 | | 628 | 748 | 785 |
| 310 | 2193 | 2248 | 2424 | 2305 | 2268 | 2104 | 1986 | 1868 | 1119 | 566 | 650 | 749 |
| 300 | 2193 | 2168 | 2373 | 2212 | 2209 | 2039 | 1907 | 1801 | 1112 | 501 | 528 | 704 |
| 290 | 2163 | 2043 | 2268 | 2086 | 2109 | 1947 | 1797 | 1700 | 1085 | 432 | 389 | 643 |
| 280 | 2084 | 1885 | 2114 | 1928 | 1979 | 1833 | 1647 | 1574 | 1037 | 362 | 231 | 562 |
| 270 | 1947 | 1690 | 1907 | 1739 | 1822 | 1695 | 1446 | 1392 | 971 | 300 | 118 | 467 |
| 260 | 1768 | 1486 | 1669 | 1537 | 1636 | 1538 | 1221 | 1143 | 884 | 240 | 60.0 | 355 |
| 250 | 1555 | 1272 | 1408 | 1341 | 1446 | 1361 | 960 | 875 | 775 | 189 | | 246 |
| 240 | 1341 | 1082 | 1163 | 1126 | 1223 | 1143 | 679 | 573 | 643 | 140 | | 153 |
| 230 | 1114 | 900 | 947 | 941 | 960 | 960 | 477 | 310 | 497 | 104 | | 79.0 |
| 220 | 898 | 754 | 765 | 774 | 754 | 764 | 310 | 97.2 | 335 | 73.3 | | 40.2 |
| 210 | 716 | 628 | 618 | 633 | 592 | 608 | 179 | | 173 | 49.6 | | |
| 200 | 573 | 535 | 513 | 523 | 467 | 477 | 87.8 | | 71.4 | 12.4 | | |
| 190 | 468 | 464 | 440 | 440 | 378 | 377 | 40.2 | | 12.4 | | | |
| 180 | 395 | 405 | 385 | 373 | 310 | 294 | | | | | | |
| 170 | 345 | 356 | 341 | 321 | 262 | 224 | | | | | | |
| 160 | 304 | 315 | 304 | 279 | 219 | 179 | | | | | | |
| 150 | 267 | 275 | 269 | 243 | 182 | 148 | | | | | | |
| 140 | 230 | 236 | 235 | 210 | 156 | 126 | | | | | | |
| 130 | 198 | 203 | 205 | 184 | 141 | 111 | | | | | | |
| 120 | 186 | 188 | 187 | 167 | 133 | 103 | | | | | | |
| 110 | 112 | 143 | 127 | 49.6 | 83.8 | 49.6 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 5 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | | A | | | | | | A | A | A | A |
| HMIN | 205 | 208 | 220 | 239 | 238 | 206 | 248 | 208 | | | 109 | 112 |
| SCAT | 48₀8 | 53₀6 | 44₀4 | 47₀1 | 48₀3 | 62₀8 | 55₀6 | 34₀8 | | | 47₀8 | 52₀2 |
| HMAXF | 320 | 328 | 325 | 336 | 328 | 367 | 378 | 270 | | | 296 | 298 |
| SHMAX | 459 | 402 | 326 | 299 | 257 | 308 | 298 | 301 | | | 1549 | 1639 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | 389 | | | | | |
| 370 | | | | | | 335 | 387 | | | | | |
| 360 | | | | | | 334 | 378 | | | | | |
| 350 | | | | | | 329 | 364 | | | | | |
| 340 | | | | 477 | | 320 | 344 | | | | | |
| 330 | 679 | 557 | 524 | 475 | 417 | 306 | 318 | | | | | |
| 320 | 679 | 553 | 522 | 463 | 414 | 288 | 282 | | | | | |
| 310 | 671 | 540 | 509 | 440 | 402 | 265 | 240 | | | | | |
| 300 | 649 | 518 | 482 | 406 | 381 | 240 | 190 | | | | 1922 | 1922 |
| 290 | 614 | 488 | 441 | 362 | 353 | 213 | 139 | | | | 1914 | 1910 |
| 280 | 562 | 446 | 389 | 310 | 313 | 181 | 94₀4 | 707 | | | 1867 | 1863 |
| 270 | 497 | 389 | 323 | 240 | 257 | 151 | 64₀2 | 707 | | | 1776 | 1786 |
| 260 | 417 | 322 | 252 | 155 | 187 | 122 | 44₀7 | 693 | | | 1649 | 1669 |
| 250 | 329 | 251 | 179 | 77₀5 | 112 | 95₀6 | 8₀0 | 649 | | | 1473 | 1507 |
| 240 | 234 | 173 | 97₀2 | 12₀4 | 26₀8 | 71₀4 | | 573 | | | 1266 | 1341 |
| 230 | 143 | 103 | 49₀6 | | | 55₀3 | | 446 | | | 1073 | 1121 |
| 220 | 77₀4 | 57₀9 | | | | 41₀7 | | 262 | | | 834 | 917 |
| 210 | 36₀2 | 12₀4 | | | | 12₀4 | | 49₀6 | | | 658 | 716 |
| 200 | | | | | | | | | | | 527 | 573 |
| 190 | | | | | | | | | | | 433 | 477 |
| 180 | | | | | | | | | | | 367 | 401 |
| 170 | | | | | | | | | | | 316 | 344 |
| 160 | | | | | | | | | | | 271 | 297 |
| 150 | | | | | | | | | | | 231 | 256 |
| 140 | | | | | | | | | | | 195 | 217 |
| 130 | | | | | | | | | | | 166 | 185 |
| 120 | | | | | | | | | | | 151 | 167 |
| 110 | | | | | | | | | | | 97₀2 | |

ELECTRON DENSITY

PUERTO RICO 60 W 5 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | S | | | | | | | | | | |
| HMIN | 110 | | 110 | 108 | 109 | 109 | 228 | 211 | 183 | 213 | 238 | 228 |
| SCAT | 52₀6 | | 55₀4 | 54₀5 | 48₀1 | 54₀4 | 58₀0 | 40₀7 | 51₀8 | 50₀7 | 50₀3 | 48₀9 |
| HMAXF | 320 | | 321 | 325 | 315 | 320 | 332 | 295 | 306 | 347 | 373 | 344 |
| SHMAX | 2178 | | 2128 | 2101 | 1870 | 1979 | 1698 | 1107 | 812 | 589 | 525 | 482 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 716 | |
| 370 | | | | | | | | | | | 716 | |
| 360 | | | | | | | | | | | 704 | |
| 350 | | | | | | | | | | 804 | 679 | 726 |
| 340 | | | | | | | 2361 | | | 800 | 643 | 724 |
| 330 | 2465 | | 2294 | 2277 | | 2327 | 2361 | | | 782 | 585 | 710 |
| 320 | 2465 | | 2293 | 2273 | 2210 | 2327 | 2338 | | | 747 | 521 | 679 |
| 310 | 2443 | | 2269 | 2236 | 2203 | 2308 | 2280 | | 1072 | 697 | 446 | 636 |
| 300 | 2376 | | 2207 | 2161 | 2151 | 2250 | 2186 | 2063 | 1069 | 634 | 362 | 573 |
| 290 | 2262 | | 2106 | 2044 | 2041 | 2151 | 2063 | 2054 | 1048 | 559 | 278 | 495 |
| 280 | 2108 | | 1974 | 1896 | 1907 | 2013 | 1907 | 1989 | 1004 | 477 | 192 | 395 |
| 270 | 1907 | | 1798 | 1706 | 1730 | 1836 | 1669 | 1857 | 941 | 379 | 127 | 293 |
| 260 | 1669 | | 1596 | 1496 | 1544 | 1625 | 1404 | 1669 | 864 | 278 | 81₀8 | 179 |
| 250 | 1408 | | 1395 | 1280 | 1341 | 1393 | 1050 | 1416 | 769 | 187 | 49₀6 | 102 |
| 240 | 1156 | | 1173 | 1096 | 1116 | 1122 | 477 | 1096 | 667 | 118 | 12₀4 | 56₀6 |
| 230 | 931 | | 960 | 898 | 917 | 887 | 60₀0 | 679 | 561 | 71₀4 | | 12₀4 |
| 220 | 754 | | 794 | 731 | 728 | 679 | | 240 | 456 | 40₀2 | | |
| 210 | 624 | | 650 | 596 | 589 | 508 | | | 343 | | | |
| 200 | 524 | | 535 | 498 | 477 | 404 | | | 219 | | | |
| 190 | 446 | | 453 | 424 | 389 | 320 | | | 97₀2 | | | |
| 180 | 389 | | 389 | 365 | 322 | 255 | | | | | | |
| 170 | 343 | | 335 | 316 | 271 | 207 | | | | | | |
| 160 | 302 | | 291 | 272 | 231 | 171 | | | | | | |
| 150 | 262 | | 249 | 230 | 198 | 143 | | | | | | |
| 140 | 219 | | 209 | 194 | 168 | 122 | | | | | | |
| 130 | 195 | | 178 | 166 | 143 | 109 | | | | | | |
| 120 | 183 | | 167 | 153 | 133 | 102 | | | | | | |
| 110 | 49₀6 | | 49₀6 | 127 | 97₀2 | 71₀4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 6 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | J | | | | | | | A | A |
| HMIN | 237 | 228 | 238 | 209 | 189 | 188 | 225 | 208 | 110 | 110 | | |
| SCAT | 57₀3 | 51₀4 | 41₀7 | 37₀7 | 31₀0 | 89₀8 | 56₀8 | 40₀2 | 49₀8 | 47₀1 | | |
| HMAXF | 361 | 352 | 334 | 291 | 256 | 352 | 357 | 297 | 277 | 284 | | |
| SHMAX | 479 | 486 | 355 | 333 | 184 | 249 | 132 | 280 | 780 | 1194 | | |
| KM | | | | | | | | | | | | |
| 370 | 634 | | | | | | | | | | | |
| 360 | 634 | 697 | | | | 214 | 161 | | | | | |
| 350 | 628 | 697 | | | | 214 | 160 | | | | | |
| 340 | 612 | 688 | 625 | | | 213 | 157 | | | | | |
| 330 | 586 | 666 | 624 | | | 210 | 151 | | | | | |
| 320 | 552 | 630 | 608 | | | 207 | 143 | | | | | |
| 310 | 508 | 584 | 573 | | | 202 | 132 | | | | | |
| 300 | 446 | 517 | 524 | 697 | | 195 | 118 | 532 | | | | |
| 290 | 370 | 425 | 452 | 697 | | 188 | 104 | 528 | | 1555 | | |
| 280 | 286 | 335 | 362 | 684 | | 181 | 88₀1 | 508 | 1027 | 1552 | | |
| 270 | 204 | 234 | 262 | 647 | | 171 | 73₀4 | 477 | 1022 | 1520 | | |
| 260 | 117 | 143 | 143 | 584 | 446 | 159 | 60₀7 | 417 | 999 | 1453 | | |
| 250 | 63₀3 | 91₀3 | 71₀4 | 477 | 442 | 144 | 49₀6 | 329 | 954 | 1359 | | |
| 240 | 19₀6 | 54₀0 | 12₀4 | 310 | 417 | 127 | 36₀8 | 219 | 891 | 1227 | | |
| 230 | | 12₀4 | | 161 | 370 | 110 | 12₀4 | 127 | 799 | 1050 | | |
| 220 | | | | 71₀4 | 286 | 91₀1 | | 64₀8 | 679 | 858 | | |
| 210 | | | | 12₀4 | 179 | 71₀4 | | 12₀4 | 540 | 679 | | |
| 200 | | | | | 76₀0 | 50₀8 | | | 417 | 520 | | |
| 190 | | | | | 12₀4 | 12₀4 | | | 317 | 405 | | |
| 180 | | | | | | | | | 240 | 322 | | |
| 170 | | | | | | | | | 185 | 262 | | |
| 160 | | | | | | | | | 147 | 219 | | |
| 150 | | | | | | | | | 123 | 179 | | |
| 140 | | | | | | | | | 108 | 153 | | |
| 130 | | | | | | | | | 97₀2 | 139 | | |
| 120 | | | | | | | | | 86₀5 | 130 | | |
| 110 | | | | | | | | | 49₀6 | 60₀0 | | |

ELECTRON DENSITY

PUERTO RICO 60 W 6 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | | | A | A | | | | | | | |
| HMIN | | 108 | 108 | 109 | 107 | 112 | 222 | 206 | 189 | 180 | 231 | 247 |
| SCAT | | 50₀7 | 48₀4 | 60₀0 | 63₀7 | 55₀8 | 37₀8 | 55₀4 | 57₀2 | 53₀6 | 55₀8 | 57₀8 |
| HMAXF | | 315 | 316 | 319 | 322 | 318 | 305 | 317 | 321 | 329 | 365 | 369 |
| SHMAX | | 1817 | 1936 | 2163 | 2097 | 1802 | 1018 | 1275 | 969 | 647 | 521 | 519 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | | | 670 | 697 |
| 360 | | | | | | | | | | | 669 | 693 |
| 350 | | | | | | | | | | | 658 | 678 |
| 340 | | | | | | | | | | | 637 | 653 |
| 330 | | | | | 2161 | | | | 1228 | 784 | 605 | 618 |
| 320 | | 1969 | 2294 | 2310 | 2160 | 2096 | | 1786 | 1228 | 778 | 562 | 573 |
| 310 | | 1964 | 2284 | 2297 | 2142 | 2086 | 2000 | 1779 | 1217 | 759 | 508 | 508 |
| 300 | | 1927 | 2230 | 2251 | 2098 | 2043 | 1992 | 1746 | 1188 | 723 | 440 | 423 |
| 290 | | 1843 | 2122 | 2174 | 2025 | 1967 | 1924 | 1683 | 1143 | 676 | 368 | 326 |
| 280 | | 1732 | 1970 | 2063 | 1922 | 1853 | 1786 | 1594 | 1074 | 620 | 296 | 219 |
| 270 | | 1584 | 1772 | 1925 | 1796 | 1710 | 1578 | 1478 | 988 | 557 | 214 | 127 |
| 260 | | 1414 | 1555 | 1746 | 1653 | 1537 | 1314 | 1317 | 882 | 488 | 137 | 60₀0 |
| 250 | | 1240 | 1306 | 1540 | 1485 | 1341 | 1004 | 1096 | 766 | 417 | 83₀8 | 19₀6 |
| 240 | | 1072 | 1036 | 1324 | 1306 | 1096 | 540 | 875 | 643 | 347 | 45₀6 | |
| 230 | | 901 | 834 | 1063 | 1096 | 875 | 127 | 608 | 495 | 277 | | |
| 220 | | 754 | 679 | 854 | 875 | 679 | | 262 | 344 | 210 | | |
| 210 | | 643 | 562 | 667 | 679 | 508 | | 49₀6 | 179 | 143 | | |
| 200 | | 553 | 477 | 522 | 518 | 389 | | | 80₀2 | 92₀2 | | |
| 190 | | 477 | 417 | 423 | 406 | 306 | | | 12₀4 | 52₀7 | | |
| 180 | | 417 | 366 | 358 | 327 | 244 | | | | | | |
| 170 | | 365 | 325 | 310 | 271 | 198 | | | | | | |
| 160 | | 320 | 286 | 272 | 229 | 161 | | | | | | |
| 150 | | 279 | 248 | 237 | 190 | 135 | | | | | | |
| 140 | | 242 | 208 | 206 | 158 | 116 | | | | | | |
| 130 | | 208 | 179 | 179 | 141 | 107 | | | | | | |
| 120 | | 188 | 169 | 168 | 133 | 99₀5 | | | | | | |
| 110 | | 161 | 143 | 127 | 115 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 7 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | J | | | | | | | | | | | |
| HMIN | 235 | 244 | 228 | 244 | 223 | 228 | 233 | 230 | 108 | 107 | 108 | 109 |
| SCAT | 52.3 | 50.1 | 40.5 | 57.6 | 57.5 | 47.5 | 45.6 | 41.4 | 46.5 | 49.4 | 47.8 | 49.5 |
| HMAXF | 338 | 355 | 324 | 348 | 343 | 330 | 338 | 300 | 269 | 288 | 292 | 296 |
| SHMAX | 377 | 330 | 253 | 307 | 271 | 203 | 199 | 335 | 738 | 1207 | 1576 | 1826 |
| KM | | | | | | | | | | | | |
| 360 | | 477 | | | | | | | | | | |
| 350 | | 475 | | 432 | 355 | | | | | | | |
| 340 | 573 | 466 | | 429 | 355 | 310 | 310 | | | | | |
| 330 | 570 | 446 | 446 | 421 | 351 | 310 | 307 | | | | | |
| 320 | 557 | 417 | 445 | 405 | 341 | 307 | 298 | | | | | |
| 310 | 532 | 380 | 432 | 387 | 326 | 297 | 280 | 661 | | | | |
| 300 | 498 | 331 | 405 | 358 | 310 | 279 | 257 | 661 | | | 2032 | 2227 |
| 290 | 454 | 274 | 366 | 315 | 282 | 255 | 223 | 651 | | 1542 | 2031 | 2217 |
| 280 | 389 | 214 | 310 | 257 | 248 | 225 | 184 | 621 | | 1531 | 1999 | 2165 |
| 270 | 299 | 151 | 244 | 190 | 205 | 187 | 143 | 573 | 1050 | 1489 | 1923 | 2067 |
| 260 | 198 | 89.4 | 173 | 112 | 161 | 147 | 101 | 508 | 1039 | 1410 | 1807 | 1929 |
| 250 | 97.2 | 46.3 | 107 | 49.6 | 112 | 106 | 65.0 | 400 | 1004 | 1301 | 1640 | 1738 |
| 240 | 44.4 | | 56.2 | | 71.4 | 60.0 | 40.2 | 219 | 947 | 1167 | 1423 | 1519 |
| 230 | | | 12.4 | | 40.2 | 12.4 | | 12.4 | 862 | 1004 | 1186 | 1274 |
| 220 | | | | | | | | | 741 | 794 | 944 | 1028 |
| 210 | | | | | | | | | 598 | 633 | 716 | 794 |
| 200 | | | | | | | | | 454 | 493 | 547 | 632 |
| 190 | | | | | | | | | 335 | 384 | 437 | 508 |
| 180 | | | | | | | | | 240 | 303 | 362 | 417 |
| 170 | | | | | | | | | 173 | 240 | 303 | 356 |
| 160 | | | | | | | | | 130 | 194 | 253 | 310 |
| 150 | | | | | | | | | 106 | 157 | 214 | 273 |
| 140 | | | | | | | | | 95.0 | 133 | 182 | 238 |
| 130 | | | | | | | | | 90.3 | 123 | 160 | 208 |
| 120 | | | | | | | | | 85.6 | 116 | 150 | 187 |
| 110 | | | | | | | | | 66.5 | 102 | 127 | 97.2 |

ELECTRON DENSITY

PUERTO RICO 60 W 7 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | | | | | S | | | |
| HMIN | 107 | 107 | 108 | 109 | 108 | 108 | 208 | 200 | 199 | 197 | 213 | 226 |
| SCAT | 44.2 | 54.3 | 54.9 | 60.9 | 50.1 | 56.8 | 57.1 | 42.0 | 53.4 | 51.9 | 57.5 | 50.3 |
| HMAXF | 286 | 309 | 315 | 323 | 314 | 309 | 328 | 307 | 317 | 317 | 344 | 340 |
| SHMAX | 1659 | 1989 | 2059 | 2123 | 1854 | 1725 | 1423 | 985 | 1001 | 736 | 662 | 532 |
| KM | | | | | | | | | | | | |
| 350 | | | | | | | | | | | 865 | 794 |
| 340 | | | | | | | | | | | 864 | 794 |
| 330 | | | | 2128 | | | 1907 | | | | 852 | 786 |
| 320 | | | 2294 | 2127 | 2227 | | 1897 | | 1406 | 1072 | 827 | 763 |
| 310 | | 2193 | 2288 | 2105 | 2223 | 2034 | 1858 | 1669 | 1400 | 1067 | 789 | 724 |
| 300 | | 2180 | 2249 | 2054 | 2182 | 2020 | 1790 | 1656 | 1370 | 1043 | 739 | 670 |
| 290 | 2161 | 2130 | 2172 | 1968 | 2086 | 1977 | 1689 | 1599 | 1315 | 998 | 674 | 596 |
| 280 | 2152 | 2042 | 2053 | 1861 | 1958 | 1907 | 1567 | 1491 | 1235 | 935 | 586 | 499 |
| 270 | 2093 | 1918 | 1907 | 1726 | 1786 | 1796 | 1408 | 1341 | 1132 | 846 | 477 | 389 |
| 260 | 1970 | 1757 | 1710 | 1571 | 1596 | 1660 | 1203 | 1143 | 995 | 716 | 374 | 269 |
| 250 | 1799 | 1555 | 1496 | 1404 | 1364 | 1488 | 945 | 917 | 834 | 573 | 262 | 143 |
| 240 | 1596 | 1341 | 1277 | 1225 | 1096 | 1297 | 679 | 659 | 643 | 417 | 150 | 71.4 |
| 230 | 1368 | 1143 | 1016 | 1050 | 875 | 1050 | 417 | 389 | 434 | 271 | 81.2 | 27.6 |
| 220 | 1143 | 930 | 810 | 883 | 679 | 808 | 143 | 198 | 240 | 155 | 43.5 | |
| 210 | 892 | 754 | 643 | 741 | 540 | 608 | 28.2 | 83.8 | 97.2 | 76.1 | | |
| 200 | 691 | 623 | 528 | 614 | 438 | 446 | | | 18.4 | 29.1 | | |
| 190 | 540 | 518 | 446 | 503 | 369 | 335 | | | | | | |
| 180 | 435 | 437 | 386 | 411 | 315 | 254 | | | | | | |
| 170 | 375 | 379 | 335 | 335 | 269 | 203 | | | | | | |
| 160 | 331 | 335 | 296 | 283 | 231 | 163 | | | | | | |
| 150 | 291 | 296 | 258 | 240 | 198 | 136 | | | | | | |
| 140 | 252 | 256 | 214 | 206 | 169 | 114 | | | | | | |
| 130 | 215 | 219 | 179 | 179 | 143 | 107 | | | | | | |
| 120 | 192 | 193 | 170 | 167 | 133 | 101 | | | | | | |
| 110 | 167 | 161 | 151 | 127 | 112 | 79.4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 8 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | J | | | | | |
| HMIN | 234 | 228 | 218 | 220 | 278 | 267 | 224 | 199 | 114 | 109 | 108 | 107 |
| SCAT | 41.8 | 36.1 | 46.0 | 46.6 | 49.7 | 51.8 | 47.2 | 41.0 | 38.4 | 44.9 | 48.7 | 50.1 |
| HMAXF | 331 | 320 | 322 | 325 | 397 | 384 | 331 | 275 | 263 | 285 | 284 | 301 |
| SHMAX | 389 | 318 | 332 | 267 | 257 | 288 | 305 | 320 | 688 | 1145 | 1301 | 1693 |
| KM | | | | | | | | | | | | |
| 400 | | | | | 362 | | | | | | | |
| 390 | | | | | 360 | 410 | | | | | | |
| 380 | | | | | 351 | 410 | | | | | | |
| 370 | | | | | 335 | 403 | | | | | | |
| 360 | | | | | 312 | 389 | | | | | | |
| 350 | | | | | 281 | 369 | | | | | | |
| 340 | 679 | | | | 245 | 341 | 469 | | | | | |
| 330 | 679 | 616 | 540 | 417 | 204 | 299 | 469 | | | | | |
| 320 | 668 | 616 | 540 | 416 | 161 | 249 | 463 | | | | | |
| 310 | 636 | 605 | 531 | 406 | 117 | 194 | 446 | | | | | 1969 |
| 300 | 588 | 569 | 510 | 387 | 81.8 | 133 | 417 | | | | | 1969 |
| 290 | 516 | 511 | 479 | 358 | 51.6 | 83.8 | 380 | | | 1473 | 1626 | 1946 |
| 280 | 424 | 429 | 430 | 320 | 12.4 | 51.9 | 332 | 634 | | 1469 | 1623 | 1879 |
| 270 | 316 | 335 | 362 | 271 | | 17.5 | 274 | 632 | 1072 | 1432 | 1593 | 1786 |
| 260 | 198 | 231 | 280 | 214 | | | 207 | 614 | 1071 | 1359 | 1524 | 1641 |
| 250 | 105 | 127 | 188 | 153 | | | 138 | 576 | 1038 | 1249 | 1431 | 1467 |
| 240 | 46.2 | 63.5 | 106 | 92.8 | | | 75.3 | 520 | 970 | 1096 | 1298 | 1271 |
| 230 | | 12.4 | 56.2 | 49.6 | | | 40.2 | 432 | 875 | 937 | 1143 | 1050 |
| 220 | | | 12.4 | | | | | 293 | 754 | 775 | 949 | 875 |
| 210 | | | | | | | | 143 | 597 | 629 | 754 | 725 |
| 200 | | | | | | | | 12.4 | 457 | 508 | 595 | 608 |
| 190 | | | | | | | | | 335 | 417 | 470 | 508 |
| 180 | | | | | | | | | 255 | 349 | 389 | 430 |
| 170 | | | | | | | | | 193 | 290 | 324 | 362 |
| 160 | | | | | | | | | 152 | 240 | 275 | 310 |
| 150 | | | | | | | | | 123 | 198 | 234 | 267 |
| 140 | | | | | | | | | 107 | 165 | 198 | 225 |
| 130 | | | | | | | | | 97.2 | 142 | 172 | 189 |
| 120 | | | | | | | | | 71.4 | 131 | 154 | 171 |
| 110 | | | | | | | | | | 97.2 | 120 | 143 |

ELECTRON DENSITY

PUERTO RICO 60 W 8 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | | | | | | | | |
| HMIN | 108 | 106 | 107 | 109 | 109 | 113 | 230 | 208 | 200 | 188 | 225 | 230 |
| SCAT | 54.8 | 52.1 | 50.2 | 57.4 | 54.6 | 55.8 | 51.1 | 43.6 | 44.1 | 64.0 | 54.8 | 48.1 |
| HMAXF | 307 | 307 | 306 | 324 | 318 | 325 | 330 | 315 | 301 | 343 | 359 | 337 |
| SHMAX | 2015 | 1988 | 1707 | 1871 | 1792 | 1819 | 1313 | 1072 | 842 | 777 | 617 | 468 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | 814 | |
| 350 | | | | | | | | | | 854 | 808 | |
| 340 | | | | | | | 2032 | | | 854 | 789 | 726 |
| 330 | | | | 1907 | | 2032 | 2032 | | | 845 | 754 | 722 |
| 320 | | | | 1904 | 1969 | 2028 | 2013 | 1786 | | 826 | 710 | 703 |
| 310 | 2260 | 2294 | 1937 | 1877 | 1968 | 1996 | 1955 | 1781 | 1473 | 797 | 650 | 667 |
| 300 | 2251 | 2282 | 1931 | 1820 | 1915 | 1932 | 1853 | 1735 | 1473 | 758 | 573 | 619 |
| 290 | 2206 | 2230 | 1879 | 1726 | 1828 | 1826 | 1720 | 1639 | 1450 | 706 | 485 | 548 |
| 280 | 2119 | 2132 | 1792 | 1610 | 1719 | 1698 | 1555 | 1502 | 1388 | 648 | 382 | 452 |
| 270 | 2004 | 2000 | 1679 | 1475 | 1585 | 1543 | 1317 | 1316 | 1288 | 580 | 286 | 348 |
| 260 | 1846 | 1818 | 1535 | 1325 | 1428 | 1371 | 960 | 1084 | 1154 | 502 | 179 | 247 |
| 250 | 1641 | 1598 | 1370 | 1180 | 1253 | 1171 | 573 | 817 | 960 | 417 | 119 | 138 |
| 240 | 1418 | 1365 | 1177 | 1028 | 1050 | 960 | 179 | 508 | 660 | 335 | 66.6 | 64.1 |
| 230 | 1189 | 1108 | 995 | 875 | 875 | 776 | | 262 | 389 | 262 | 31.4 | |
| 220 | 960 | 901 | 834 | 740 | 724 | 608 | | 112 | 179 | 190 | | |
| 210 | 771 | 727 | 688 | 624 | 591 | 492 | | 25.6 | 64.7 | 121 | | |
| 200 | 621 | 595 | 573 | 524 | 485 | 396 | | | | 64.7 | | |
| 190 | 508 | 491 | 477 | 436 | 398 | 320 | | | | 12.4 | | |
| 180 | 430 | 417 | 406 | 362 | 326 | 259 | | | | | | |
| 170 | 373 | 362 | 346 | 299 | 269 | 208 | | | | | | |
| 160 | 327 | 316 | 296 | 250 | 227 | 168 | | | | | | |
| 150 | 290 | 277 | 255 | 211 | 192 | 138 | | | | | | |
| 140 | 252 | 233 | 216 | 176 | 164 | 117 | | | | | | |
| 130 | 216 | 193 | 182 | 158 | 142 | 107 | | | | | | |
| 120 | 190 | 173 | 169 | 149 | 133 | 99.6 | | | | | | |
| 110 | 143 | 151 | 143 | 112 | 97.2 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 9 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | | | |
| HMIN | 220 | 226 | 258 | 248 | 228 | 221 | 238 | 206 | 110 | 110 | 108 | 111 |
| SCAT | 51.6 | 50.6 | 55.0 | 48.6 | 56.4 | 61.3 | 57.3 | 48.0 | 49.5 | 61.0 | 49.3 | 51.4 |
| HMAXF | 341 | 345 | 387 | 350 | 357 | 350 | 360 | 294 | 281 | 300 | 300 | 302 |
| SHMAX | 461 | 368 | 372 | 320 | 337 | 362 | 349 | 499 | 850 | 1398 | 1543 | 1983 |
| KM | | | | | | | | | | | | |
| 390 | | | 484 | | | | | | | | | |
| 380 | | | 483 | | | | | | | | | |
| 370 | | | 472 | | | | 454 | | | | | |
| 360 | | | 454 | 492 | 432 | 446 | 454 | | | | | |
| 350 | 661 | 524 | 430 | 492 | 430 | 446 | 451 | | | | | |
| 340 | 661 | 523 | 397 | 487 | 422 | 444 | 440 | | | | | |
| 330 | 654 | 513 | 355 | 470 | 406 | 435 | 423 | | | | | |
| 320 | 634 | 490 | 307 | 446 | 384 | 420 | 399 | | | | | |
| 310 | 602 | 461 | 253 | 409 | 356 | 399 | 369 | | | 1528 | 1786 | 2379 |
| 300 | 560 | 421 | 198 | 359 | 320 | 373 | 330 | 875 | | 1528 | 1786 | 2378 |
| 290 | 501 | 371 | 138 | 299 | 275 | 340 | 282 | 874 | 1131 | 1518 | 1768 | 2347 |
| 280 | 417 | 310 | 90.2 | 232 | 224 | 298 | 228 | 857 | 1131 | 1487 | 1715 | 2271 |
| 270 | 335 | 240 | 54.0 | 153 | 177 | 245 | 167 | 822 | 1117 | 1434 | 1617 | 2149 |
| 260 | 235 | 170 | 12.4 | 75.1 | 132 | 189 | 108 | 771 | 1080 | 1362 | 1487 | 1985 |
| 250 | 153 | 102 | | 21.2 | 83.8 | 133 | 60.0 | 690 | 1023 | 1266 | 1332 | 1773 |
| 240 | 86.8 | 60.0 | | | 52.3 | 83.8 | 12.4 | 558 | 937 | 1158 | 1163 | 1539 |
| 230 | 49.6 | 25.1 | | | 12.4 | 46.5 | | 350 | 817 | 1020 | 992 | 1300 |
| 220 | | | | | | | | 161 | 679 | 865 | 834 | 1036 |
| 210 | | | | | | | | 45.6 | 508 | 703 | 707 | 808 |
| 200 | | | | | | | | | 389 | 557 | 601 | 618 |
| 190 | | | | | | | | | 296 | 433 | 508 | 487 |
| 180 | | | | | | | | | 229 | 335 | 417 | 397 |
| 170 | | | | | | | | | 182 | 268 | 340 | 332 |
| 160 | | | | | | | | | 147 | 219 | 275 | 286 |
| 150 | | | | | | | | | 122 | 177 | 236 | 247 |
| 140 | | | | | | | | | 105 | 146 | 206 | 216 |
| 130 | | | | | | | | | 94.2 | 125 | 173 | 184 |
| 120 | | | | | | | | | 87.5 | 117 | 151 | 166 |
| 110 | | | | | | | | | 49.6 | 49.6 | 112 | |

ELECTRON DENSITY

PUERTO RICO 60 W 9 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | C | S | | | | | | |
| HMIN | 109 | 109 | 109 | 109 | | 110 | 240 | 193 | 192 | 197 | 243 | 232 |
| SCAT | 48.8 | 53.1 | 64.3 | 52.8 | | 54.7 | 49.7 | 52.5 | 45.0 | 62.7 | 56.3 | 54.5 |
| HMAXF | 299 | 312 | 331 | 318 | | 316 | 319 | 313 | 306 | 362 | 382 | 361 |
| SHMAX | 1848 | 1843 | 2118 | 1813 | | 1800 | 1224 | 1146 | 632 | 634 | 526 | 496 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 661 | |
| 380 | | | | | | | | | | | 661 | |
| 370 | | | | | | | | | | 697 | 653 | 679 |
| 360 | | | | | | | | | | 697 | 635 | 679 |
| 350 | | | | | | | | | | 691 | 608 | 673 |
| 340 | | | 2032 | | | | | | | 676 | 569 | 655 |
| 330 | | | 2031 | | | | | | | 652 | 519 | 624 |
| 320 | | 2032 | 2016 | 2032 | | 2161 | 2000 | 1583 | | 617 | 459 | 585 |
| 310 | | 2031 | 1976 | 2020 | | 2155 | 1982 | 1582 | 982 | 576 | 389 | 531 |
| 300 | 2227 | 2006 | 1911 | 1972 | | 2116 | 1925 | 1558 | 978 | 526 | 316 | 455 |
| 290 | 2207 | 1945 | 1820 | 1886 | | 2042 | 1826 | 1505 | 947 | 466 | 247 | 372 |
| 280 | 2135 | 1843 | 1709 | 1769 | | 1929 | 1686 | 1420 | 894 | 401 | 179 | 286 |
| 270 | 2023 | 1712 | 1570 | 1610 | | 1786 | 1508 | 1310 | 824 | 335 | 112 | 189 |
| 260 | 1864 | 1555 | 1408 | 1424 | | 1598 | 1272 | 1172 | 725 | 276 | 71.4 | 108 |
| 250 | 1669 | 1341 | 1240 | 1218 | | 1382 | 917 | 1004 | 608 | 219 | 40.2 | 65.6 |
| 240 | 1446 | 1143 | 1050 | 1026 | | 1109 | 389 | 817 | 483 | 158 | | 42.1 |
| 230 | 1199 | 960 | 903 | 834 | | 875 | | 630 | 348 | 112 | | |
| 220 | 976 | 780 | 762 | 663 | | 643 | | 430 | 229 | 76.4 | | |
| 210 | 784 | 643 | 643 | 540 | | 477 | | 208 | 120 | 49.6 | | |
| 200 | 626 | 540 | 540 | 446 | | 362 | | 71.4 | 55.1 | 12.4 | | |
| 190 | 508 | 466 | 462 | 389 | | 286 | | | | | | |
| 180 | 429 | 413 | 389 | 344 | | 232 | | | | | | |
| 170 | 368 | 366 | 335 | 307 | | 191 | | | | | | |
| 160 | 324 | 322 | 291 | 267 | | 161 | | | | | | |
| 150 | 286 | 280 | 250 | 229 | | 138 | | | | | | |
| 140 | 245 | 243 | 208 | 190 | | 119 | | | | | | |
| 130 | 203 | 214 | 178 | 160 | | 108 | | | | | | |
| 120 | 184 | 186 | 168 | 151 | | 101 | | | | | | |
| 110 | 112 | 112 | 112 | 112 | | 40.2 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 10 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | A | A | A |
| HMIN | 234 | 248 | 239 | 219 | 199 | 208 | 237 | 238 | 109 | | | 108 |
| SCAT | 46.5 | 50.0 | 50.0 | 53.0 | 60.3 | 64.0 | 68.8 | 45.0 | 41.4 | | | 58.7 |
| HMAXF | 340 | 360 | 346 | 323 | 315 | 350 | 392 | 328 | 275 | | | 308 |
| SHMAX | 402 | 383 | 384 | 374 | 287 | 262 | 230 | 376 | 822 | | | 1712 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | 235 | | | | | |
| 390 | | | | | | | 235 | | | | | |
| 380 | | | | | | | 233 | | | | | |
| 370 | | 565 | | | | | 229 | | | | | |
| 360 | | 565 | | | | 292 | 222 | | | | | |
| 350 | 643 | 560 | 582 | | | 292 | 211 | | | | | |
| 340 | 643 | 543 | 580 | | | 290 | 199 | | | | | |
| 330 | 635 | 513 | 567 | 557 | | 283 | 185 | 670 | | | | |
| 320 | 613 | 477 | 542 | 556 | 362 | 272 | 169 | 665 | | | | |
| 310 | 576 | 423 | 505 | 548 | 361 | 260 | 152 | 643 | | | | 1786 |
| 300 | 524 | 356 | 458 | 528 | 356 | 244 | 133 | 608 | | | | 1778 |
| 290 | 452 | 286 | 396 | 503 | 346 | 226 | 115 | 553 | | | | 1744 |
| 280 | 362 | 203 | 315 | 464 | 331 | 204 | 95.9 | 467 | 121 | | | 1685 |
| 270 | 257 | 127 | 219 | 408 | 312 | 179 | 77.1 | 335 | 121 | | | 1600 |
| 260 | 161 | 64.7 | 120 | 335 | 287 | 150 | 60.0 | 198 | 1178 | | | 1494 |
| 250 | 83.8 | 12.4 | 57.2 | 240 | 256 | 123 | 43.6 | 83.8 | 1108 | | | 1351 |
| 240 | 40.2 | | 4.9 | 155 | 219 | 97.2 | 12.4 | 23.7 | 1004 | | | 1191 |
| 230 | | | | 68.3 | 176 | 71.4 | | | 858 | | | 1025 |
| 220 | | | | 12.4 | 127 | 49.6 | | | 690 | | | 859 |
| 210 | | | | | 78.0 | 12.4 | | | 540 | | | 707 |
| 200 | | | | | 12.4 | | | | 403 | | | 584 |
| 190 | | | | | | | | | 298 | | | 489 |
| 180 | | | | | | | | | 222 | | | 417 |
| 170 | | | | | | | | | 176 | | | 358 |
| 160 | | | | | | | | | 143 | | | 310 |
| 150 | | | | | | | | | 120 | | | 272 |
| 140 | | | | | | | | | 106 | | | 236 |
| 130 | | | | | | | | | 96.2 | | | 203 |
| 120 | | | | | | | | | 86.6 | | | 187 |
| 110 | | | | | | | | | 60.0 | | | 161 |

ELECTRON DENSITY

PUERTO RICO 60 W 10 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | A | A | A | A | A | A | B | | | | | |
| HMIN | 109 | | | | | | | 197 | 189 | 189 | 238 | 248 |
| SCAT | 52.7 | | | | | | | 46.3 | 53.8 | 61.9 | 53.4 | 46.8 |
| HMAXF | 307 | | | | | | | 316 | 321 | 342 | 371 | 370 |
| SHMAX | 1634 | | | | | | | 1070 | 914 | 759 | 626 | 541 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 834 | 804 |
| 370 | | | | | | | | | | | 834 | 804 |
| 360 | | | | | | | | | | | 825 | 794 |
| 350 | | | | | | | | | | 917 | 801 | 766 |
| 340 | | | | | | | | | | 917 | 762 | 721 |
| 330 | | | | | | | | | 1215 | 909 | 710 | 655 |
| 320 | | | | | | | | 1669 | 1215 | 889 | 643 | 568 |
| 310 | 1786 | | | | | | | 1662 | 1202 | 856 | 562 | 470 |
| 300 | 1778 | | | | | | | 1620 | 1168 | 813 | 467 | 372 |
| 290 | 1740 | | | | | | | 1537 | 1110 | 754 | 362 | 276 |
| 280 | 1669 | | | | | | | 1422 | 1036 | 679 | 262 | 179 |
| 270 | 1564 | | | | | | | 1259 | 936 | 582 | 171 | 106 |
| 260 | 1430 | | | | | | | 1050 | 815 | 477 | 103 | 60.0 |
| 250 | 1272 | | | | | | | 816 | 679 | 362 | 56.7 | 12.4 |
| 240 | 1117 | | | | | | | 573 | 540 | 256 | 12.4 | |
| 230 | 939 | | | | | | | 335 | 396 | 172 | | |
| 220 | 781 | | | | | | | 170 | 256 | 107 | | |
| 210 | 654 | | | | | | | 83.8 | 143 | 69.0 | | |
| 200 | 552 | | | | | | | 31.0 | 68.8 | 44.7 | | |
| 190 | 470 | | | | | | | | 12.4 | 2.8 | | |
| 180 | 405 | | | | | | | | | | | |
| 170 | 353 | | | | | | | | | | | |
| 160 | 310 | | | | | | | | | | | |
| 150 | 272 | | | | | | | | | | | |
| 140 | 235 | | | | | | | | | | | |
| 130 | 202 | | | | | | | | | | | |
| 120 | 188 | | | | | | | | | | | |
| 110 | 143 | | | | | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 11 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | A | | A |
| HMIN | 239 | 230 | 222 | 210 | 188 | 222 | 230 | 219 | 112 | | 108 | 111 |
| SCAT | 43.6 | 41.9 | 41.7 | 49.3 | 54.5 | 67.1 | 56.9 | 48.2 | 48.1 | | 50.6 | 48.7 |
| HMAXF | 348 | 334 | 303 | 303 | 311 | 375 | 354 | 304 | 272 | | 300 | 303 |
| SHMAX | 461 | 423 | 370 | 318 | 256 | 280 | 260 | 349 | 747 | | 1522 | 1475 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | 298 | | | | | | |
| 370 | | | | | | 297 | | | | | | |
| 360 | | | | | | 294 | 335 | | | | | |
| 350 | 745 | | | | | 287 | 335 | | | | | |
| 340 | 739 | 726 | | | | 277 | 330 | | | | | |
| 330 | 713 | 724 | | | | 264 | 321 | | | | | |
| 320 | 668 | 706 | | | 335 | 247 | 305 | | | | | |
| 310 | 608 | 666 | 716 | 524 | 335 | 227 | 287 | 599 | | | 1786 | 1697 |
| 300 | 524 | 608 | 715 | 523 | 332 | 204 | 262 | 598 | | | 1786 | 1696 |
| 290 | 417 | 525 | 699 | 515 | 322 | 179 | 229 | 586 | | | 1770 | 1669 |
| 280 | 318 | 417 | 661 | 494 | 307 | 149 | 191 | 561 | 1004 | | 1719 | 1585 |
| 270 | 219 | 310 | 608 | 467 | 288 | 121 | 150 | 525 | 1004 | | 1632 | 1486 |
| 260 | 116 | 192 | 508 | 424 | 262 | 95.1 | 108 | 477 | 988 | | 1520 | 1366 |
| 250 | 65.3 | 102 | 374 | 355 | 229 | 71.4 | 71.4 | 389 | 949 | | 1357 | 1226 |
| 240 | 12.4 | 53.4 | 198 | 262 | 192 | 51.9 | 45.3 | 275 | 891 | | 1181 | 1086 |
| 230 | | | 71.4 | 152 | 153 | 30.4 | | 112 | 811 | | 1004 | 926 |
| 220 | | | | 65.6 | 114 | | | 12.4 | 716 | | 815 | 776 |
| 210 | | | | | 80.5 | | | | 593 | | 663 | 643 |
| 200 | | | | | 51.2 | | | | 464 | | 540 | 535 |
| 190 | | | | | 12.4 | | | | 343 | | 446 | 446 |
| 180 | | | | | | | | | 245 | | 370 | 369 |
| 170 | | | | | | | | | 185 | | 310 | 314 |
| 160 | | | | | | | | | 147 | | 262 | 271 |
| 150 | | | | | | | | | 122 | | 225 | 230 |
| 140 | | | | | | | | | 105 | | 193 | 183 |
| 130 | | | | | | | | | 93.1 | | 166 | 159 |
| 120 | | | | | | | | | 85.1 | | 150 | 149 |
| 110 | | | | | | | | | | | 120 | |

ELECTRON DENSITY

PUERTO RICO 60 W 11 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | | S | | | A | A | | | | | |
| HMIN | | 114 | 107 | 110 | 108 | | | 193 | 188 | 227 | 278 | 252 |
| SCAT | | 47.3 | 53.1 | 62.3 | 59.8 | | | 49.7 | 66.8 | 52.8 | 52.8 | 47.9 |
| HMAXF | | 301 | 322 | 334 | 325 | | | 307 | 351 | 370 | 402 | 373 |
| SHMAX | | 1596 | 1838 | 2036 | 2172 | | | 1031 | 838 | 559 | 536 | 530 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | 754 | |
| 400 | | | | | | | | | | | 754 | |
| 390 | | | | | | | | | | | 745 | |
| 380 | | | | | | | | | | 716 | 722 | 794 |
| 370 | | | | | | | | | | 716 | 684 | 793 |
| 360 | | | | | | | | | 854 | 710 | 635 | 780 |
| 350 | | | | | | | | | 854 | 691 | 568 | 748 |
| 340 | | | | 2032 | | | | | 848 | 657 | 477 | 701 |
| 330 | | | 1969 | 2029 | 2361 | | | | 833 | 613 | 377 | 636 |
| 320 | | | 1968 | 2006 | 2358 | | | | 807 | 557 | 277 | 552 |
| 310 | | 1969 | 1945 | 1956 | 2325 | | | 1555 | 772 | 490 | 179 | 446 |
| 300 | | 1969 | 1880 | 1876 | 2260 | | | 1547 | 728 | 417 | 103 | 335 |
| 290 | | 1944 | 1786 | 1775 | 2161 | | | 1508 | 675 | 340 | 56.6 | 227 |
| 280 | | 1867 | 1669 | 1649 | 2032 | | | 1437 | 614 | 267 | 12.4 | 139 |
| 270 | | 1753 | 1505 | 1495 | 1864 | | | 1341 | 548 | 198 | | 80.7 |
| 260 | | 1602 | 1341 | 1320 | 1669 | | | 1205 | 477 | 140 | | 44.3 |
| 250 | | 1419 | 1143 | 1143 | 1430 | | | 1028 | 411 | 90.6 | | |
| 240 | | 1206 | 960 | 960 | 1179 | | | 815 | 345 | 54.9 | | |
| 230 | | 979 | 794 | 782 | 937 | | | 573 | 281 | 18.1 | | |
| 220 | | 783 | 669 | 635 | 716 | | | 310 | 219 | | | |
| 210 | | 633 | 563 | 518 | 560 | | | 143 | 161 | | | |
| 200 | | 522 | 485 | 432 | 446 | | | 54.9 | 97.2 | | | |
| 190 | | 441 | 423 | 366 | 362 | | | | 28.2 | | | |
| 180 | | 380 | 374 | 318 | 303 | | | | | | | |
| 170 | | 330 | 331 | 278 | 257 | | | | | | | |
| 160 | | 286 | 293 | 245 | 219 | | | | | | | |
| 150 | | 242 | 251 | 214 | 183 | | | | | | | |
| 140 | | 196 | 205 | 184 | 158 | | | | | | | |
| 130 | | 173 | 177 | 162 | 142 | | | | | | | |
| 120 | | 143 | 167 | 150 | 133 | | | | | | | |
| 110 | | | 143 | 97.2 | 97.2 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 12 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | J | | | | | | | | | A | A | |
| HMIN | 239 | 219 | 208 | 191 | 208 | 237 | 269 | 228 | 110 | 118 | | 110 |
| SCAT | 36.7 | 38.2 | 36.2 | 30.9 | 72.8 | 104 | 48.7 | 30.3 | 40.5 | 40.8 | | 57.2 |
| HMAXF | 329 | 307 | 286 | 254 | 337 | 433 | 375 | 293 | 264 | 273 | | 308 |
| SHMAX | 412 | 384 | 360 | 187 | 197 | 255 | 119 | 219 | 802 | 978 | | 1686 |
| KM | | | | | | | | | | | | |
| 440 | | | | | | 189 | | | | | | |
| 430 | | | | | | 189 | | | | | | |
| 420 | | | | | | 188 | | | | | | |
| 410 | | | | | | 186 | | | | | | |
| 400 | | | | | | 184 | | | | | | |
| 390 | | | | | | 180 | | | | | | |
| 380 | | | | | | 176 | 174 | | | | | |
| 370 | | | | | | 172 | 174 | | | | | |
| 360 | | | | | | 167 | 170 | | | | | |
| 350 | | | | | | 163 | 163 | | | | | |
| 340 | | | | | 214 | 155 | 152 | | | | | |
| 330 | 794 | | | | 213 | 146 | 137 | | | | | |
| 320 | 783 | | | | 211 | 134 | 119 | | | | | |
| 310 | 741 | 754 | | | 206 | 121 | 98.9 | | | | | 1801 |
| 300 | 673 | 747 | | | 200 | 106 | 77.6 | 524 | | | | 1791 |
| 290 | 573 | 716 | 774 | | 191 | 90.0 | 58.4 | 523 | | | | 1754 |
| 280 | 446 | 659 | 769 | | 182 | 75.0 | 41.7 | 498 | | 1473 | | 1689 |
| 270 | 323 | 573 | 736 | | 170 | 61.3 | 4.5 | 449 | 1316 | 1472 | | 1596 |
| 260 | 179 | 446 | 679 | 477 | 155 | 48.9 | | 370 | 1312 | 1438 | | 1479 |
| 250 | 78.8 | 286 | 573 | 475 | 137 | 34.3 | | 274 | 1275 | 1359 | | 1331 |
| 240 | 12.4 | 143 | 417 | 453 | 113 | 6.9 | | 161 | 1198 | 1240 | | 1160 |
| 230 | | 67.9 | 219 | 410 | 83.8 | | | 40.2 | 1096 | 1069 | | 991 |
| 220 | | 12.4 | 97.2 | 323 | 55.4 | | | | 875 | 875 | | 822 |
| 210 | | | 23.7 | 198 | 12.4 | | | | 643 | 643 | | 679 |
| 200 | | | | 71.4 | | | | | 446 | 477 | | 554 |
| 190 | | | | | | | | | 310 | 368 | | 461 |
| 180 | | | | | | | | | 230 | 293 | | 389 |
| 170 | | | | | | | | | 183 | 236 | | 341 |
| 160 | | | | | | | | | 150 | 189 | | 300 |
| 150 | | | | | | | | | 123 | 159 | | 262 |
| 140 | | | | | | | | | 106 | 132 | | 227 |
| 130 | | | | | | | | | 94.1 | 119 | | 190 |
| 120 | | | | | | | | | 86.5 | 83.8 | | 168 |
| 110 | | | | | | | | | 49.6 | | | 71.4 |

ELECTRON DENSITY

PUERTO RICO 60 W 12 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | A | A | A | | | B | | |
| HMIN | 108 | 107 | | 107 | 106 | | | 193 | 188 | | 246 | 249 |
| SCAT | 46.8 | 49.0 | | 61.7 | 53.6 | | | 53.3 | 59.7 | | 54.8 | 41.8 |
| HMAXF | 298 | 300 | | 324 | 314 | | | 319 | 330 | | 388 | 341 |
| SHMAX | 1693 | 1658 | | 1981 | 1737 | | | 1005 | 719 | | 650 | 485 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 854 | |
| 380 | | | | | | | | | | | 850 | |
| 370 | | | | | | | | | | | 831 | |
| 360 | | | | | | | | | | | 798 | |
| 350 | | | | | | | | | | | 754 | 875 |
| 340 | | | | | | | | | 865 | | 690 | 875 |
| 330 | | | | 2000 | | | | | 865 | | 608 | 861 |
| 320 | | | | 1998 | 1969 | | | 1393 | 859 | | 515 | 821 |
| 310 | | 1969 | | 1975 | 1966 | | | 1382 | 841 | | 407 | 760 |
| 300 | 2096 | 1969 | | 1926 | 1936 | | | 1347 | 811 | | 292 | 666 |
| 290 | 2081 | 1950 | | 1844 | 1864 | | | 1287 | 768 | | 198 | 540 |
| 280 | 2016 | 1884 | | 1745 | 1770 | | | 1201 | 716 | | 133 | 389 |
| 270 | 1912 | 1786 | | 1618 | 1639 | | | 1096 | 651 | | 83.8 | 219 |
| 260 | 1751 | 1640 | | 1465 | 1474 | | | 948 | 573 | | 55.1 | 83.8 |
| 250 | 1555 | 1467 | | 1297 | 1291 | | | 768 | 488 | | 22.6 | 12.4 |
| 240 | 1323 | 1278 | | 1109 | 1072 | | | 573 | 389 | | | |
| 230 | 1096 | 1050 | | 917 | 895 | | | 400 | 296 | | | |
| 220 | 861 | 866 | | 767 | 716 | | | 240 | 198 | | | |
| 210 | 679 | 692 | | 625 | 583 | | | 119 | 119 | | | |
| 200 | 548 | 565 | | 508 | 477 | | | 53.5 | 62.8 | | | |
| 190 | 460 | 471 | | 433 | 389 | | | | 12.4 | | | |
| 180 | 398 | 404 | | 370 | 320 | | | | | | | |
| 170 | 353 | 351 | | 317 | 265 | | | | | | | |
| 160 | 313 | 306 | | 273 | 222 | | | | | | | |
| 150 | 276 | 267 | | 235 | 185 | | | | | | | |
| 140 | 242 | 230 | | 198 | 158 | | | | | | | |
| 130 | 208 | 195 | | 175 | 142 | | | | | | | |
| 120 | 184 | 172 | | 161 | 134 | | | | | | | |
| 110 | 127 | 143 | | 127 | 127 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 13 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | A | A | A |
| HMIN | 236 | 208 | 206 | 208 | 198 | 248 | 278 | 211 | 112 | | | |
| SCAT | 41.9 | 35.6 | 36.8 | 31.7 | 56.0 | 77.1 | 63.2 | 49.4 | 38.3 | | | |
| HMAXF | 328 | 294 | 293 | 273 | 310 | 400 | 397 | 295 | 268 | | | |
| SHMAX | 449 | 366 | 312 | 203 | 194 | 237 | 187 | 326 | 739 | | | |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 229 | | | | | | |
| 400 | | | | | | 229 | 229 | | | | | |
| 390 | | | | | | 228 | 229 | | | | | |
| 380 | | | | | | 226 | 225 | | | | | |
| 370 | | | | | | 221 | 219 | | | | | |
| 360 | | | | | | 213 | 210 | | | | | |
| 350 | | | | | | 204 | 201 | | | | | |
| 340 | | | | | | 195 | 186 | | | | | |
| 330 | 814 | | | | | 182 | 166 | | | | | |
| 320 | 806 | | | | 262 | 168 | 141 | | | | | |
| 310 | 776 | | | | 262 | 151 | 112 | | | | | |
| 300 | 726 | 754 | 625 | | 260 | 132 | 78.3 | 557 | | | | |
| 290 | 643 | 752 | 624 | | 254 | 112 | 52.3 | 555 | | | | |
| 280 | 523 | 724 | 604 | 492 | 244 | 92.5 | 12.4 | 543 | | | | |
| 270 | 389 | 665 | 562 | 491 | 229 | 72.8 | | 522 | 1167 | | | |
| 260 | 240 | 573 | 498 | 472 | 212 | 49.6 | | 492 | 1154 | | | |
| 250 | 107 | 446 | 396 | 429 | 188 | 12.4 | | 436 | 1103 | | | |
| 240 | 42.4 | 286 | 273 | 362 | 159 | | | 352 | 1014 | | | |
| 230 | | 161 | 161 | 240 | 123 | | | 240 | 875 | | | |
| 220 | | 71.4 | 75.0 | 112 | 83.8 | | | 91.0 | 699 | | | |
| 210 | | 20.7 | 26.8 | 25.6 | 52.7 | | | | 524 | | | |
| 200 | | | | | 12.4 | | | | 389 | | | |
| 190 | | | | | | | | | 296 | | | |
| 180 | | | | | | | | | 229 | | | |
| 170 | | | | | | | | | 185 | | | |
| 160 | | | | | | | | | 152 | | | |
| 150 | | | | | | | | | 127 | | | |
| 140 | | | | | | | | | 110 | | | |
| 130 | | | | | | | | | 102 | | | |
| 120 | | | | | | | | | 87.8 | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 13 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | A | A | 8 | | | A | | |
| HMIN | 108 | 109 | 109 | 106 | 109 | | | 209 | 201 | 196 | 261 | 253 |
| SCAT | 50.4 | 55.1 | 47.3 | 47.4 | 59.9 | | | 45.8 | 39.0 | 62.0 | 46.8 | 54.3 |
| HMAXF | 292 | 317 | 298 | 297 | 318 | | | 307 | 293 | 351 | 361 | 371 |
| SHMAX | 1744 | 1891 | 1690 | 1578 | 1576 | | | 967 | 610 | 699 | 455 | 495 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | 697 |
| 370 | | | | | | | | | | | 716 | 697 |
| 360 | | | | | | | | | | 794 | 716 | 690 |
| 350 | | | | | | | | | | 794 | 706 | 671 |
| 340 | | | | | | | | | | 788 | 679 | 641 |
| 330 | | | | | | | | | | 772 | 637 | 602 |
| 320 | | 2032 | | | 1669 | | | | | 744 | 578 | 544 |
| 310 | | 2024 | | | 1662 | | | 1612 | | 710 | 501 | 460 |
| 300 | 2177 | 1984 | 2096 | 1969 | 1633 | | | 1602 | 1143 | 662 | 410 | 362 |
| 290 | 2176 | 1907 | 2081 | 1956 | 1580 | | | 1556 | 1141 | 601 | 310 | 262 |
| 280 | 2146 | 1807 | 2018 | 1899 | 1503 | | | 1471 | 1111 | 533 | 198 | 169 |
| 270 | 2072 | 1669 | 1913 | 1786 | 1410 | | | 1354 | 1042 | 457 | 83.8 | 83.8 |
| 260 | 1959 | 1488 | 1757 | 1651 | 1284 | | | 1187 | 935 | 377 | | 44.2 |
| 250 | 1805 | 1288 | 1555 | 1479 | 1119 | | | 960 | 805 | 301 | | |
| 240 | 1586 | 1121 | 1341 | 1274 | 960 | | | 679 | 629 | 229 | | |
| 230 | 1341 | 928 | 1118 | 1028 | 815 | | | 377 | 389 | 166 | | |
| 220 | 1077 | 763 | 904 | 812 | 670 | | | 127 | 179 | 112 | | |
| 210 | 822 | 632 | 697 | 643 | 540 | | | 12.4 | 71.4 | 65.0 | | |
| 200 | 608 | 532 | 540 | 515 | 438 | | | | | 26.8 | | |
| 190 | 477 | 453 | 446 | 424 | 354 | | | | | | | |
| 180 | 389 | 389 | 378 | 358 | 286 | | | | | | | |
| 170 | 335 | 340 | 329 | 310 | 233 | | | | | | | |
| 160 | 302 | 295 | 290 | 270 | 191 | | | | | | | |
| 150 | 267 | 246 | 254 | 234 | 161 | | | | | | | |
| 140 | 227 | 208 | 219 | 198 | 146 | | | | | | | |
| 130 | 198 | 193 | 197 | 178 | 137 | | | | | | | |
| 120 | 188 | 184 | 185 | 169 | 130 | | | | | | | |
| 110 | 161 | 127 | 112 | 148 | 97.2 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 14 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | S | | | | | | | | | | | |
| HMIN | 220 | 219 | 219 | 215 | 228 | 212 | 213 | 218 | 111 | 110 | 109 | 108 |
| SCAT | 33.5 | 40.1 | 52.1 | 39.1 | 56.5 | 57.6 | 67.6 | 41.0 | 46.9 | 47.7 | 45.3 | 48.0 |
| HMAXF | 305 | 310 | 324 | 295 | 352 | 338 | 364 | 292 | 275 | 289 | 286 | 285 |
| SHMAX | 336 | 298 | 338 | 244 | 244 | 209 | 240 | 275 | 742 | 1251 | 1429 | 1516 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | 257 | | | | | |
| 360 | | | | | 310 | | 256 | | | | | |
| 350 | | | | | 310 | | 254 | | | | | |
| 340 | | | | | 306 | 262 | 249 | | | | | |
| 330 | | | 508 | | 298 | 261 | 240 | | | | | |
| 320 | | 540 | 507 | | 284 | 256 | 230 | | | | | |
| 310 | 735 | 540 | 499 | | 265 | 246 | 219 | | | | | |
| 300 | 731 | 532 | 482 | 477 | 242 | 233 | 201 | 557 | | | | |
| 290 | 699 | 508 | 455 | 475 | 216 | 217 | 179 | 556 | | 1583 | 1876 | 1937 |
| 280 | 632 | 466 | 422 | 459 | 186 | 195 | 155 | 545 | 1038 | 1570 | 1867 | 1933 |
| 270 | 533 | 408 | 371 | 429 | 152 | 170 | 129 | 517 | 1035 | 1521 | 1816 | 1891 |
| 260 | 389 | 335 | 299 | 383 | 118 | 141 | 104 | 477 | 1010 | 1437 | 1716 | 1808 |
| 250 | 219 | 245 | 219 | 310 | 83.8 | 112 | 81.0 | 395 | 964 | 1325 | 1576 | 1685 |
| 240 | 103 | 143 | 127 | 225 | 51.8 | 82.2 | 61.5 | 275 | 890 | 1167 | 1386 | 1515 |
| 230 | 49.6 | 68.8 | 60.0 | 112 | 12.4 | 56.7 | 45.7 | 127 | 783 | 1004 | 1177 | 1307 |
| 220 | | 12.4 | 4.5 | 49.6 | | 33.8 | 21.5 | 26.8 | 643 | 834 | 960 | 1050 |
| 210 | | | | | | | | | 497 | 660 | 754 | 834 |
| 200 | | | | | | | | | 362 | 519 | 589 | 643 |
| 190 | | | | | | | | | 271 | 402 | 477 | 508 |
| 180 | | | | | | | | | 207 | 318 | 389 | 422 |
| 170 | | | | | | | | | 164 | 262 | 320 | 356 |
| 160 | | | | | | | | | 133 | 221 | 270 | 305 |
| 150 | | | | | | | | | 110 | 188 | 227 | 262 |
| 140 | | | | | | | | | 96.2 | 161 | 187 | 222 |
| 130 | | | | | | | | | 91.1 | 142 | 161 | 188 |
| 120 | | | | | | | | | 86.0 | 129 | 149 | 171 |
| 110 | | | | | | | | | | 40.2 | 83.8 | 127 |

ELECTRON DENSITY

PUERTO RICO 60 W 14 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | | | |
| HMIN | 105 | 112 | 109 | 110 | 105 | 111 | 118 | 200 | 185 | 190 | 222 | 241 |
| SCAT | 54.5 | 51.9 | 53.9 | 54.6 | 62.7 | 53.7 | 55.2 | 48.4 | 43.3 | 60.4 | 49.2 | 49.3 |
| HMAXF | 297 | 320 | 311 | 320 | 314 | 308 | 317 | 306 | 299 | 343 | 343 | 359 |
| SHMAX | 1701 | 1814 | 1852 | 1921 | 1767 | 1506 | 1465 | 1027 | 723 | 727 | 512 | 500 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | 754 |
| 350 | | | | | | | | | | 854 | 745 | 748 |
| 340 | | | | | | | | | | 854 | 744 | 727 |
| 330 | | 1969 | | 2128 | | | | | | 845 | 731 | 689 |
| 320 | | 1969 | 2096 | 2128 | 1846 | | 1815 | | | 824 | 701 | 643 |
| 310 | | 1950 | 2096 | 2111 | 1843 | 1786 | 1809 | 1569 | | 794 | 657 | 564 |
| 300 | 1907 | 1891 | 2075 | 2058 | 1821 | 1776 | 1774 | 1563 | 1143 | 748 | 600 | 469 |
| 290 | 1898 | 1802 | 2015 | 1962 | 1776 | 1735 | 1709 | 1525 | 1130 | 692 | 525 | 362 |
| 280 | 1859 | 1676 | 1925 | 1842 | 1707 | 1663 | 1609 | 1454 | 1086 | 621 | 434 | 247 |
| 270 | 1786 | 1507 | 1799 | 1683 | 1612 | 1555 | 1487 | 1347 | 1012 | 540 | 335 | 138 |
| 260 | 1687 | 1322 | 1630 | 1499 | 1499 | 1425 | 1341 | 1206 | 911 | 457 | 240 | 80.2 |
| 250 | 1555 | 1152 | 1430 | 1290 | 1359 | 1269 | 1143 | 1040 | 794 | 372 | 149 | 46.8 |
| 240 | 1381 | 974 | 1200 | 1096 | 1173 | 1096 | 934 | 834 | 643 | 286 | 81.2 | |
| 230 | 1197 | 815 | 973 | 895 | 996 | 900 | 716 | 608 | 500 | 198 | 45.8 | |
| 220 | 1004 | 679 | 794 | 716 | 834 | 716 | 508 | 362 | 362 | 122 | | |
| 210 | 807 | 568 | 618 | 563 | 679 | 554 | 362 | 127 | 198 | 76.4 | | |
| 200 | 643 | 483 | 501 | 459 | 525 | 417 | 248 | | 92.8 | 46.1 | | |
| 190 | 519 | 421 | 424 | 385 | 406 | 317 | 173 | | 43.6 | | | |
| 180 | 432 | 374 | 371 | 327 | 324 | 253 | 127 | | | | | |
| 170 | 373 | 335 | 332 | 283 | 267 | 208 | 101 | | | | | |
| 160 | 331 | 302 | 299 | 245 | 225 | 173 | 82.4 | | | | | |
| 150 | 296 | 269 | 262 | 209 | 191 | 143 | 70.7 | | | | | |
| 140 | 262 | 224 | 228 | 177 | 163 | 121 | 64.9 | | | | | |
| 130 | 228 | 195 | 201 | 159 | 142 | 107 | 58.7 | | | | | |
| 120 | 194 | 181 | 174 | 150 | 135 | 98.7 | 50.4 | | | | | |
| 110 | 161 | | 127 | 83.8 | 127 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 15 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 238 | 236 | 207 | 203 | 197 | 194 | 200 | 199 | 105 | 107 | 110 | 107 |
| SCAT | 39•1 | 38•1 | 40•4 | 36•7 | 61•2 | 68•8 | 55•4 | 38•6 | 45•1 | 46•5 | 65•1 | 48•1 |
| HMAXF | 336 | 318 | 298 | 275 | 329 | 352 | 338 | 275 | 257 | 267 | 313 | 298 |
| SHMAX | 414 | 387 | 386 | 247 | 247 | 236 | 195 | 277 | 627 | 890 | 1526 | 1594 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | 246 | | | | | | |
| 350 | | | | | | 246 | | | | | | |
| 340 | 754 | | | | | 244 | 240 | | | | | |
| 330 | 750 | | | | 298 | 239 | 239 | | | | | |
| 320 | 723 | 774 | | | 296 | 230 | 233 | | | | 1500 | |
| 310 | 674 | 766 | | | 291 | 221 | 224 | | | | 1499 | |
| 300 | 594 | 732 | 735 | | 280 | 210 | 210 | | | | 1484 | 1969 |
| 290 | 494 | 674 | 729 | | 268 | 196 | 194 | | | | 1452 | 1954 |
| 280 | 380 | 581 | 700 | 532 | 251 | 179 | 173 | 565 | | | 1402 | 1893 |
| 270 | 240 | 446 | 651 | 529 | 229 | 157 | 149 | 562 | | 1191 | 1333 | 1793 |
| 260 | 127 | 286 | 573 | 509 | 201 | 135 | 124 | 543 | 875 | 1183 | 1240 | 1656 |
| 250 | 60•0 | 127 | 446 | 469 | 168 | 112 | 100 | 508 | 869 | 1149 | 1148 | 1466 |
| 240 | 12•4 | 44•3 | 310 | 411 | 133 | 90•6 | 78•9 | 446 | 843 | 1096 | 1015 | 1252 |
| 230 | | | 161 | 310 | 100 | 70•3 | 60•0 | 354 | 798 | 997 | 865 | 1004 |
| 220 | | | 68•9 | 161 | 71•4 | 53•5 | 46•0 | 229 | 726 | 867 | 716 | 794 |
| 210 | | | 19•9 | 60•0 | 46•7 | 41•1 | 29•1 | 97•2 | 627 | 716 | 608 | 631 |
| 200 | | | | | 12•4 | 15•1 | | 12•4 | 508 | 567 | 508 | 513 |
| 190 | | | | | | | | | 401 | 446 | 431 | 430 |
| 180 | | | | | | | | | 310 | 354 | 371 | 372 |
| 170 | | | | | | | | | 240 | 281 | 320 | 325 |
| 160 | | | | | | | | | 185 | 233 | 277 | 283 |
| 150 | | | | | | | | | 148 | 195 | 237 | 240 |
| 140 | | | | | | | | | 125 | 166 | 201 | 205 |
| 130 | | | | | | | | | 110 | 143 | 174 | 182 |
| 120 | | | | | | | | | 101 | 133 | 153 | 171 |
| 110 | | | | | | | | | 79•9 | 114 | 83•8 | 161 |

ELECTRON DENSITY

PUERTO RICO 60 W 15 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | S | S | S | A | A | | | | F | F | J |
| HMIN | 104 | | | | | 109 | 209 | 208 | 210 | 275 | | 243 |
| SCAT | 52•5 | | | | | 53•2 | 51•0 | 52•1 | 56•0 | 46•6 | | 39•4 |
| HMAXF | 308 | | | | | 328 | 305 | 334 | 337 | 386 | | 341 |
| SHMAX | 1840 | | | | | 1945 | 1522 | 1357 | 1074 | 1229 | | 867 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 1907 | | |
| 380 | | | | | | | | | | 1900 | | |
| 370 | | | | | | | | | | 1853 | | |
| 360 | | | | | | | | | | 1762 | | |
| 350 | | | | | | | | | | 1625 | | 1612 |
| 340 | | | | | | | | 1907 | 1446 | 1446 | | 1611 |
| 330 | | | | | | 2294 | | 1903 | 1441 | 1224 | | 1577 |
| 320 | | | | | | 2279 | | 1870 | 1414 | 960 | | 1481 |
| 310 | 2063 | | | | | 2225 | 2310 | 1802 | 1364 | 696 | | 1351 |
| 300 | 2053 | | | | | 2124 | 2305 | 1699 | 1289 | 417 | | 1159 |
| 290 | 2006 | | | | | 1987 | 2260 | 1565 | 1197 | 219 | | 898 |
| 280 | 1921 | | | | | 1817 | 2171 | 1387 | 1075 | 60•0 | | 608 |
| 270 | 1796 | | | | | 1604 | 2032 | 1163 | 917 | | | 335 |
| 260 | 1639 | | | | | 1375 | 1855 | 917 | 742 | | | 153 |
| 250 | 1446 | | | | | 1096 | 1645 | 643 | 524 | | | 55•7 |
| 240 | 1219 | | | | | 875 | 1376 | 417 | 298 | | | |
| 230 | 1018 | | | | | 666 | 1004 | 219 | 150 | | | |
| 220 | 834 | | | | | 515 | 508 | 97•2 | 63•4 | | | |
| 210 | 679 | | | | | 406 | 60•0 | 25•6 | | | | |
| 200 | 552 | | | | | 328 | | | | | | |
| 190 | 466 | | | | | 272 | | | | | | |
| 180 | 405 | | | | | 228 | | | | | | |
| 170 | 359 | | | | | 192 | | | | | | |
| 160 | 327 | | | | | 161 | | | | | | |
| 150 | 290 | | | | | 138 | | | | | | |
| 140 | 258 | | | | | 120 | | | | | | |
| 130 | 228 | | | | | 109 | | | | | | |
| 120 | 197 | | | | | 102 | | | | | | |
| 110 | 172 | | | | | 71•4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 16 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | J | | | F | F | | | | | | |
| HMIN | 235 | | 244 | 245 | 229 | 290 | 328 | 219 | 110 | 107 | 106 | 108 |
| SCAT | 43•3 | | 43•7 | 55•4 | 71•3 | 50•9 | 49•7 | 42•9 | 46•6 | 43•5 | 45•5 | 58•5 |
| HMAXF | 339 | | 346 | 372 | 414 | 420 | 451 | 310 | 308 | 278 | 277 | 314 |
| SHMAX | 976 | | 685 | 762 | 1032 | 653 | 655 | 894 | 1479 | 1503 | 1436 | 1827 |
| KM | | | | | | | | | | | | |
| 460 | | | | | | | 939 | | | | | |
| 450 | | | | | | | 938 | | | | | |
| 440 | | | | | | | 927 | | | | | |
| 430 | | | | | | 917 | 897 | | | | | |
| 420 | | | | | 1004 | 917 | 845 | | | | | |
| 410 | | | | | 1004 | 908 | 778 | | | | | |
| 400 | | | | | 995 | 881 | 691 | | | | | |
| 390 | | | | | 977 | 836 | 589 | | | | | |
| 380 | | | | 1004 | 949 | 771 | 477 | | | | | |
| 370 | | | | 1004 | 910 | 692 | 362 | | | | | |
| 360 | | | | 992 | 859 | 598 | 219 | | | | | |
| 350 | | | 1143 | 964 | 804 | 488 | 123 | | | | | |
| 340 | 1669 | | 1137 | 917 | 742 | 353 | 60•0 | | | | | |
| 330 | 1652 | | 1104 | 857 | 671 | 231 | 17•4 | | | | | |
| 320 | 1592 | | 1038 | 781 | 597 | 143 | | 1669 | | | | 1876 |
| 310 | 1487 | | 948 | 687 | 518 | 83•8 | | 1669 | 1969 | | | 1874 |
| 300 | 1341 | | 826 | 581 | 429 | 49•6 | | 1646 | 1954 | | | 1849 |
| 290 | 1143 | | 670 | 467 | 335 | | | 1579 | 1895 | | | 1796 |
| 280 | 875 | | 499 | 328 | 251 | | | 1475 | 1786 | 2294 | 1969 | 1713 |
| 270 | 608 | | 310 | 186 | 175 | | | 1318 | 1649 | 2274 | 1958 | 1608 |
| 260 | 310 | | 143 | 93•4 | 116 | | | 1050 | 1446 | 2194 | 1900 | 1473 |
| 250 | 133 | | 53•4 | 42•4 | 74•7 | | | 679 | 1214 | 2054 | 1799 | 1317 |
| 240 | 49•6 | | | | 47•6 | | | 262 | 979 | 1853 | 1649 | 1143 |
| 230 | | | | | 7•1 | | | 97•2 | 754 | 1581 | 1446 | 960 |
| 220 | | | | | | | | 12•4 | 553 | 1231 | 1197 | 804 |
| 210 | | | | | | | | | 417 | 875 | 940 | 668 |
| 200 | | | | | | | | | 328 | 555 | 696 | 568 |
| 190 | | | | | | | | | 262 | 381 | 524 | 502 |
| 180 | | | | | | | | | 213 | 293 | 417 | 446 |
| 170 | | | | | | | | | 170 | 233 | 343 | 395 |
| 160 | | | | | | | | | 138 | 187 | 286 | 338 |
| 150 | | | | | | | | | 116 | 153 | 236 | 281 |
| 140 | | | | | | | | | 102 | 134 | 196 | 231 |
| 130 | | | | | | | | | 92•7 | 124 | 167 | 193 |
| 120 | | | | | | | | | 85•9 | 117 | 152 | 172 |
| 110 | | | | | | | | | 49•6 | 107 | 130 | 143 |

ELECTRON DENSITY

PUERTO RICO 60 W 16 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | | | | | | | | |
| HMIN | 107 | 109 | 108 | 110 | 110 | 109 | 199 | 196 | 184 | 205 | 245 | 238 |
| SCAT | 53•2 | 48•8 | 58•9 | 65•3 | 56•8 | 61•9 | 59•7 | 58•9 | 58•9 | 66•6 | 58•0 | 57•4 |
| HMAXF | 314 | 312 | 315 | 310 | 317 | 340 | 324 | 320 | 313 | 347 | 390 | 374 |
| SHMAX | 1977 | 2006 | 1930 | 2004 | 1986 | 1760 | 1377 | 1194 | 799 | 531 | 465 | 427 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | 573 | |
| 390 | | | | | | | | | | | 573 | |
| 380 | | | | | | | | | | | 569 | 565 |
| 370 | | | | | | | | | | | 556 | 564 |
| 360 | | | | | | | | | | | 534 | 555 |
| 350 | | | | | | 1756 | | | | 573 | 506 | 535 |
| 340 | | | | 1907 | | 1766 | | | | 572 | 466 | 508 |
| 330 | | | | 1907 | | 1746 | 1861 | 1626 | | 564 | 417 | 467 |
| 320 | 2161 | 2260 | 2016 | 1896 | 1771 | 1715 | 1858 | 1626 | 1096 | 550 | 355 | 417 |
| 310 | 2157 | 2259 | 2012 | 1864 | 1764 | 1660 | 1831 | 1613 | 1095 | 527 | 286 | 352 |
| 300 | 2123 | 2226 | 1983 | 1809 | 1728 | 1579 | 1773 | 1574 | 1040 | 500 | 222 | 286 |
| 290 | 2050 | 2141 | 1924 | 1724 | 1659 | 1485 | 1686 | 1508 | 1046 | 467 | 164 | 219 |
| 280 | 1939 | 2008 | 1826 | 1626 | 1555 | 1372 | 1574 | 1415 | 996 | 428 | 114 | 161 |
| 270 | 1786 | 1836 | 1704 | 1504 | 1433 | 1240 | 1426 | 1305 | 926 | 382 | 79•4 | 112 |
| 260 | 1603 | 1639 | 1572 | 1373 | 1281 | 1060 | 1230 | 1143 | 834 | 332 | 53•1 | 74•2 |
| 250 | 1399 | 1427 | 1417 | 1226 | 1096 | 898 | 1004 | 960 | 716 | 280 | 22•3 | 49•6 |
| 240 | 1181 | 1220 | 1250 | 1067 | 917 | 754 | 735 | 741 | 573 | 225 | | 12•4 |
| 230 | 995 | 1031 | 1050 | 917 | 744 | 623 | 477 | 508 | 417 | 172 | | |
| 220 | 834 | 875 | 875 | 773 | 608 | 504 | 240 | 286 | 275 | 120 | | |
| 210 | 707 | 745 | 709 | 635 | 499 | 417 | 97•2 | 120 | 161 | 66•1 | | |
| 200 | 592 | 632 | 582 | 508 | 423 | 343 | 12•4 | 12•4 | 71•4 | | | |
| 190 | 502 | 540 | 477 | 417 | 364 | 286 | | | 12•4 | | | |
| 180 | 436 | 454 | 389 | 356 | 316 | 240 | | | | | | |
| 170 | 362 | 384 | 330 | 315 | 269 | 198 | | | | | | |
| 160 | 310 | 324 | 286 | 281 | 226 | 167 | | | | | | |
| 150 | 276 | 279 | 243 | 249 | 189 | 141 | | | | | | |
| 140 | 240 | 245 | 208 | 216 | 159 | 121 | | | | | | |
| 130 | 194 | 212 | 183 | 186 | 141 | 109 | | | | | | |
| 120 | 173 | 189 | 170 | 168 | 133 | 103 | | | | | | |
| 110 | 161 | 127 | 143 | 49•6 | 60•0 | 71•4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 17 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | J | S | | | S | | |
| HMIN | 246 | 238 | 210 | 189 | 188 | 242 | 257 | 188 | 111 | 109 | 108 | 108 |
| SCAT | 55.1 | 40.3 | 41.2 | 33.3 | 151 | 56.1 | 65.6 | 42.0 | 57.4 | 53.3 | 48.5 | 57.9 |
| HMAXF | 381 | 332 | 294 | 253 | 415 | 364 | 404 | 296 | 289 | 299 | 291 | 297 |
| SHMAX | 436 | 334 | 357 | 138 | 334 | 113 | 162 | 353 | 850 | 1396 | 1436 | 1611 |
| KM | | | | | | | | | | | | |
| 420 | | | | | 189 | | | | | | | |
| 410 | | | | | 189 | | 174 | | | | | |
| 400 | | | | | 188 | | 174 | | | | | |
| 390 | 573 | | | | 187 | | 172 | | | | | |
| 380 | 573 | | | | 186 | | 168 | | | | | |
| 370 | 567 | | | | 184 | 143 | 162 | | | | | |
| 360 | 552 | | | | 182 | 143 | 154 | | | | | |
| 350 | 527 | | | | 180 | 141 | 145 | | | | | |
| 340 | 494 | 608 | | | 176 | 137 | 133 | | | | | |
| 330 | 446 | 607 | | | 172 | 130 | 118 | | | | | |
| 320 | 389 | 595 | | | 167 | 120 | 103 | | | | | |
| 310 | 317 | 562 | | | 163 | 108 | 86.5 | | | | | |
| 300 | 249 | 513 | 697 | | 159 | 95.2 | 71.4 | 608 | | 1626 | 1786 | 1786 |
| 290 | 179 | 439 | 696 | | 154 | 81.1 | 57.5 | 605 | 1004 | 1613 | 1785 | 1779 |
| 280 | 123 | 346 | 676 | | 150 | 67.2 | 46.4 | 587 | 998 | 1573 | 1763 | 1747 |
| 270 | 80.1 | 240 | 636 | | 145 | 54.2 | 31.3 | 553 | 976 | 1503 | 1702 | 1688 |
| 260 | 51.1 | 139 | 578 | 323 | 139 | 43.0 | 7.7 | 503 | 939 | 1406 | 1601 | 1600 |
| 250 | 17.4 | 68.8 | 486 | 322 | 132 | 20.5 | | 417 | 890 | 1288 | 1467 | 1491 |
| 240 | | 20.7 | 322 | 310 | 124 | | | 320 | 817 | 1124 | 1292 | 1352 |
| 230 | | | 143 | 284 | 113 | | | 219 | 716 | 945 | 1110 | 1174 |
| 220 | | | 60.0 | 246 | 97.2 | | | 140 | 601 | 764 | 896 | 960 |
| 210 | | | | 179 | 76.7 | | | 87.9 | 477 | 608 | 701 | 775 |
| 200 | | | | 83.8 | 53.8 | | | 53.3 | 356 | 487 | 540 | 616 |
| 190 | | | | 12.4 | 12.4 | | | 12.4 | 282 | 394 | 434 | 497 |
| 180 | | | | | | | | | 232 | 324 | 362 | 411 |
| 170 | | | | | | | | | 190 | 274 | 310 | 352 |
| 160 | | | | | | | | | 153 | 232 | 267 | 310 |
| 150 | | | | | | | | | 127 | 198 | 232 | 270 |
| 140 | | | | | | | | | 108 | 175 | 201 | 235 |
| 130 | | | | | | | | | 94.4 | 153 | 176 | 203 |
| 120 | | | | | | | | | 87.5 | 136 | 156 | 175 |
| 110 | | | | | | | | | | 97.2 | 127 | 148 |

ELECTRON DENSITY

PUERTO RICO 60 W 17 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | S | | A | | | | | | | |
| HMIN | 107 | 105 | 109 | 107 | 110 | 109 | 198 | 211 | 209 | 199 | 188 | 221 |
| SCAT | 54.1 | 53.1 | 60.6 | 57.3 | 59.4 | 59.0 | 53.9 | 48.5 | 51.9 | 49.9 | 55.3 | 47.6 |
| HMAXF | 322 | 316 | 332 | 331 | 319 | 315 | 337 | 328 | 328 | 319 | 329 | 354 |
| SHMAX | 1870 | 1983 | 2172 | 2298 | 2029 | 1841 | 1359 | 1105 | 980 | 785 | 649 | 489 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | 716 |
| 350 | | | | | | | | | | | | 715 |
| 340 | | | 2161 | 2500 | | | 1815 | | | | | 701 |
| 330 | 2000 | | 2160 | 2500 | | | 1809 | 1654 | 1420 | | 834 | 670 |
| 320 | 2000 | 2193 | 2141 | 2475 | 2243 | 2016 | 1773 | 1643 | 1410 | 1143 | 828 | 625 |
| 310 | 1977 | 2187 | 2092 | 2412 | 2231 | 2012 | 1705 | 1597 | 1375 | 1134 | 809 | 564 |
| 300 | 1921 | 2146 | 2011 | 2312 | 2187 | 1983 | 1603 | 1513 | 1309 | 1101 | 775 | 487 |
| 290 | 1828 | 2066 | 1907 | 2180 | 2111 | 1926 | 1474 | 1401 | 1227 | 1045 | 730 | 396 |
| 280 | 1707 | 1944 | 1770 | 2004 | 2001 | 1832 | 1313 | 1249 | 1110 | 968 | 670 | 300 |
| 270 | 1546 | 1786 | 1599 | 1786 | 1864 | 1719 | 1107 | 1066 | 947 | 864 | 597 | 212 |
| 260 | 1357 | 1595 | 1402 | 1513 | 1692 | 1578 | 875 | 853 | 754 | 737 | 508 | 138 |
| 250 | 1163 | 1368 | 1203 | 1240 | 1488 | 1408 | 666 | 608 | 554 | 608 | 410 | 87.3 |
| 240 | 960 | 1143 | 1004 | 1004 | 1265 | 1222 | 446 | 362 | 362 | 446 | 310 | 53.7 |
| 230 | 794 | 929 | 842 | 794 | 989 | 1036 | 286 | 179 | 179 | 272 | 219 | 17.9 |
| 220 | 658 | 764 | 705 | 643 | 773 | 834 | 153 | 71.4 | 78.3 | 143 | 139 | |
| 210 | 549 | 630 | 595 | 520 | 599 | 643 | 71.4 | | 12.4 | 71.4 | 89.9 | |
| 200 | 474 | 529 | 508 | 435 | 461 | 492 | 20.7 | | | 12.4 | 55.0 | |
| 190 | 423 | 455 | 446 | 376 | 362 | 389 | | | | | 12.4 | |
| 180 | 379 | 399 | 392 | 329 | 299 | 305 | | | | | | |
| 170 | 340 | 356 | 348 | 289 | 250 | 244 | | | | | | |
| 160 | 302 | 319 | 310 | 251 | 210 | 202 | | | | | | |
| 150 | 267 | 286 | 278 | 215 | 174 | 170 | | | | | | |
| 140 | 230 | 251 | 244 | 179 | 149 | 146 | | | | | | |
| 130 | 198 | 219 | 212 | 159 | 138 | 128 | | | | | | |
| 120 | 186 | 195 | 189 | 151 | 131 | 116 | | | | | | |
| 110 | 143 | 166 | 127 | 136 | 49.6 | 60.0 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 18 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 221 | 235 | 219 | 228 | 215 | 197 | 207 | 199 | 109 | 109 | 107 | 108 |
| SCAT | 35.9 | 40.2 | 34.7 | 37.1 | 50.2 | 45.8 | 55.6 | 47.2 | 44.7 | 69.5 | 47.8 | 46.5 |
| HMAXF | 314 | 338 | 297 | 314 | 344 | 317 | 328 | 298 | 267 | 311 | 302 | 297 |
| SHMAX | 321 | 345 | 262 | 241 | 275 | 245 | 245 | 400 | 681 | 1346 | 1605 | 1854 |
| KM | | | | | | | | | | | | |
| 350 | | | | | 375 | | | | | | | |
| 340 | | 599 | | | 375 | | | | | | | |
| 330 | | 593 | | | 368 | | 323 | | | | | |
| 320 | 625 | 569 | | 461 | 352 | 362 | 321 | | | 1303 | | |
| 310 | 623 | 526 | | 460 | 332 | 360 | 314 | | | 1303 | 1937 | |
| 300 | 602 | 467 | 565 | 443 | 303 | 350 | 301 | 643 | | 1295 | 1937 | 2396 |
| 290 | 554 | 389 | 560 | 410 | 266 | 331 | 286 | 638 | | 1274 | 1907 | 2383 |
| 280 | 485 | 301 | 531 | 362 | 224 | 304 | 262 | 619 | | 1240 | 1836 | 2317 |
| 270 | 389 | 210 | 482 | 299 | 182 | 268 | 234 | 586 | 960 | 1187 | 1719 | 2190 |
| 260 | 286 | 127 | 401 | 229 | 141 | 225 | 198 | 540 | 955 | 1132 | 1566 | 2019 |
| 250 | 179 | 71.4 | 286 | 143 | 104 | 179 | 161 | 471 | 927 | 1055 | 1369 | 1786 |
| 240 | 97.2 | 34.0 | 168 | 71.4 | 71.4 | 137 | 119 | 383 | 875 | 954 | 1166 | 1517 |
| 230 | 49.6 | | 71.4 | 21.2 | 48.8 | 101 | 80.4 | 286 | 798 | 834 | 960 | 1240 |
| 220 | | | 12.4 | | 20.7 | 71.4 | 51.4 | 179 | 694 | 716 | 774 | 917 |
| 210 | | | | | | 48.4 | 17.5 | 92.3 | 565 | 589 | 617 | 716 |
| 200 | | | | | | 12.4 | | 12.4 | 438 | 485 | 499 | 560 |
| 190 | | | | | | | | | 335 | 400 | 421 | 456 |
| 180 | | | | | | | | | 249 | 335 | 365 | 385 |
| 170 | | | | | | | | | 190 | 280 | 322 | 335 |
| 160 | | | | | | | | | 153 | 236 | 286 | 296 |
| 150 | | | | | | | | | 130 | 198 | 247 | 266 |
| 140 | | | | | | | | | 109 | 169 | 214 | 238 |
| 130 | | | | | | | | | 95.9 | 150 | 179 | 206 |
| 120 | | | | | | | | | 88.6 | 135 | 156 | 175 |
| 110 | | | | | | | | | 60.0 | 97.2 | 137 | 143 |

ELECTRON DENSITY

PUERTO RICO 60 W 18 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 107 | 108 | 109 | 109 | 109 | 109 | 198 | 199 | 199 | 201 | 239 | 259 |
| SCAT | 49.5 | 47.4 | 60.4 | 56.7 | 51.1 | 55.5 | 50.6 | 47.9 | 61.8 | 60.9 | 56.2 | 45.5 |
| HMAXF | 306 | 305 | 317 | 326 | 317 | 321 | 322 | 311 | 342 | 349 | 378 | 362 |
| SHMAX | 2009 | 1945 | 2177 | 2119 | 1906 | 1942 | 1468 | 1124 | 1098 | 861 | 605 | 582 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 784 | |
| 370 | | | | | | | | | | | 779 | 960 |
| 360 | | | | | | | | | | | 763 | 960 |
| 350 | | | | | | | | | 1328 | 1027 | 733 | 944 |
| 340 | | | | | | | | | 1328 | 1021 | 693 | 905 |
| 330 | | | | 2243 | | 2243 | 2161 | | 1317 | 1002 | 638 | 844 |
| 320 | | | 2294 | 2237 | 2260 | 2243 | 2159 | 1727 | 1288 | 969 | 564 | 754 |
| 310 | 2396 | 2396 | 2285 | 2199 | 2248 | 2222 | 2128 | 1726 | 1240 | 922 | 477 | 634 |
| 300 | 2388 | 2389 | 2247 | 2126 | 2194 | 2165 | 2054 | 1704 | 1176 | 862 | 389 | 491 |
| 290 | 2335 | 2335 | 2177 | 2016 | 2089 | 2067 | 1940 | 1637 | 1096 | 786 | 291 | 335 |
| 280 | 2227 | 2219 | 2075 | 1870 | 1950 | 1940 | 1786 | 1544 | 994 | 692 | 198 | 179 |
| 270 | 2081 | 2064 | 1945 | 1695 | 1772 | 1774 | 1570 | 1409 | 857 | 589 | 127 | 77.9 |
| 260 | 1882 | 1857 | 1786 | 1502 | 1555 | 1567 | 1300 | 1240 | 704 | 477 | 76.3 | 12.4 |
| 250 | 1637 | 1616 | 1579 | 1302 | 1318 | 1341 | 960 | 1017 | 540 | 362 | 47.8 | |
| 240 | 1379 | 1341 | 1363 | 1117 | 1050 | 1096 | 643 | 770 | 389 | 248 | 7.3 | |
| 230 | 1121 | 1072 | 1143 | 917 | 834 | 875 | 373 | 508 | 262 | 153 | | |
| 220 | 895 | 847 | 917 | 754 | 659 | 679 | 179 | 262 | 143 | 83.8 | | |
| 210 | 716 | 668 | 728 | 616 | 526 | 530 | 83.8 | 97.2 | 68.3 | 47.9 | | |
| 200 | 582 | 546 | 573 | 508 | 430 | 410 | 22.3 | 12.4 | 12.4 | | | |
| 190 | 486 | 460 | 464 | 426 | 362 | 319 | | | | | | |
| 180 | 417 | 393 | 389 | 358 | 310 | 253 | | | | | | |
| 170 | 362 | 343 | 335 | 302 | 265 | 205 | | | | | | |
| 160 | 325 | 303 | 294 | 256 | 230 | 170 | | | | | | |
| 150 | 291 | 265 | 257 | 217 | 198 | 142 | | | | | | |
| 140 | 256 | 227 | 226 | 182 | 169 | 121 | | | | | | |
| 130 | 224 | 197 | 201 | 161 | 143 | 108 | | | | | | |
| 120 | 195 | 174 | 186 | 151 | 133 | 101 | | | | | | |
| 110 | 161 | 143 | 127 | 112 | 97.2 | 71.4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 19 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | A | | | | | | | |
| HM1N | 248 | 234 | 226 | 208 | 195 | 196 | 237 | 226 | 108 | 108 | 106 | 108 |
| SCAT | 34.0 | 42.0 | 37.4 | 31.1 | 39.1 | 68.1 | 60.4 | 33.4 | 45.4 | 53.1 | 49.4 | 56.2 |
| HMAXF | 329 | 327 | 308 | 273 | 276 | 338 | 369 | 284 | 281 | 300 | 299 | 311 |
| SHMAX | 422 | 459 | 392 | 232 | 177 | 200 | 164 | 221 | 808 | 1344 | 1698 | 1948 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | 193 | | | | | |
| 360 | | | | | | | 192 | | | | | |
| 350 | | | | | | | 189 | | | | | |
| 340 | | | | | | 214 | 182 | | | | | |
| 330 | 885 | 824 | | | | 213 | 172 | | | | | |
| 320 | 867 | 818 | | | | 210 | 161 | | | | | 2161 |
| 310 | 813 | 788 | 804 | | | 204 | 147 | | | 1528 | | 2160 |
| 300 | 724 | 737 | 795 | | | 196 | 130 | | | 1528 | 2112 | 2141 |
| 290 | 599 | 659 | 758 | | | 186 | 112 | 540 | 1096 | 1513 | 2095 | 2087 |
| 280 | 433 | 547 | 695 | 573 | 335 | 174 | 92.3 | 538 | 1096 | 1471 | 2032 | 1997 |
| 270 | 262 | 417 | 595 | 572 | 333 | 160 | 74.4 | 517 | 1079 | 1401 | 1934 | 1889 |
| 260 | 127 | 270 | 446 | 549 | 321 | 143 | 58.2 | 477 | 1036 | 1317 | 1786 | 1725 |
| 250 | 28.2 | 127 | 262 | 497 | 297 | 124 | 43.6 | 397 | 970 | 1188 | 1592 | 1516 |
| 240 | | 49.6 | 120 | 409 | 262 | 105 | 32.4 | 262 | 875 | 1037 | 1359 | 1289 |
| 230 | | | 43.3 | 262 | 219 | 83.8 | | 83.8 | 743 | 875 | 1096 | 1050 |
| 220 | | | | 127 | 161 | 64.9 | | | 598 | 716 | 834 | 834 |
| 210 | | | | 26.8 | 92.8 | 47.2 | | | 466 | 582 | 657 | 663 |
| 200 | | | | | 43.6 | 16.6 | | | 362 | 477 | 522 | 540 |
| 190 | | | | | | | | | 286 | 405 | 427 | 458 |
| 180 | | | | | | | | | 224 | 335 | 358 | 396 |
| 170 | | | | | | | | | 179 | 286 | 307 | 346 |
| 160 | | | | | | | | | 143 | 240 | 267 | 303 |
| 150 | | | | | | | | | 118 | 206 | 234 | 266 |
| 140 | | | | | | | | | 106 | 178 | 204 | 233 |
| 130 | | | | | | | | | 98.7 | 157 | 178 | 206 |
| 120 | | | | | | | | | 89.9 | 137 | 167 | 187 |
| 110 | | | | | | | | | 60.0 | 112 | 127 | 135 |

ELECTRON DENSITY

PUERTO RICO 60 W 19 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | E | | | | | | | | | |
| HM1N | 109 | 108 | 108 | 106 | 108 | 110 | 227 | 209 | 189 | 197 | 211 | 228 |
| SCAT | 55.0 | 52.6 | 58.7 | 51.8 | 54.1 | 56.0 | 54.4 | 46.0 | 57.1 | 54.3 | 53.8 | 50.3 |
| HMAXF | 309 | 319 | 331 | 324 | 327 | 318 | 333 | 322 | 334 | 330 | 352 | 355 |
| SHMAX | 1941 | 1985 | 2153 | 2061 | 2042 | 1976 | 1537 | 1224 | 1149 | 889 | 671 | 563 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | 875 | 804 |
| 350 | | | | | | | | | | | 875 | 801 |
| 340 | | | 2227 | | | | 2161 | | 1460 | 1219 | 865 | 785 |
| 330 | | | 2226 | 2327 | 2396 | | 2158 | 1907 | 1458 | 1215 | 839 | 754 |
| 320 | | 2161 | 2208 | 2323 | 2386 | 2327 | 2128 | 1906 | 1437 | 1205 | 799 | 706 |
| 310 | 2161 | 2146 | 2156 | 2283 | 2336 | 2315 | 2060 | 1877 | 1393 | 1174 | 743 | 643 |
| 300 | 2145 | 2093 | 2073 | 2199 | 2246 | 2266 | 1956 | 1802 | 1326 | 1122 | 672 | 554 |
| 290 | 2093 | 1996 | 1955 | 2064 | 2113 | 2180 | 1817 | 1685 | 1240 | 1055 | 583 | 455 |
| 280 | 2004 | 1867 | 1809 | 1907 | 1940 | 2056 | 1636 | 1519 | 1131 | 952 | 489 | 344 |
| 270 | 1887 | 1698 | 1627 | 1694 | 1733 | 1907 | 1411 | 1305 | 989 | 827 | 389 | 246 |
| 260 | 1723 | 1488 | 1426 | 1466 | 1507 | 1698 | 1158 | 1050 | 820 | 679 | 286 | 161 |
| 250 | 1531 | 1283 | 1214 | 1227 | 1258 | 1475 | 954 | 794 | 626 | 508 | 198 | 91.5 |
| 240 | 1311 | 1108 | 995 | 1014 | 974 | 1218 | 777 | 508 | 446 | 335 | 127 | 54.4 |
| 230 | 1073 | 917 | 819 | 834 | 754 | 917 | 714 | 310 | 310 | 207 | 77.8 | 12.4 |
| 220 | 864 | 754 | 679 | 667 | 573 | 697 | | 112 | 198 | 121 | 45.8 | |
| 210 | 698 | 634 | 565 | 540 | 440 | 508 | | 12.4 | 123 | 64.7 | | |
| 200 | 573 | 535 | 477 | 453 | 350 | 382 | | | 68.8 | 19.9 | | |
| 190 | 477 | 458 | 413 | 389 | 286 | 302 | | | 12.4 | | | |
| 180 | 410 | 400 | 358 | 338 | 232 | 240 | | | | | | |
| 170 | 356 | 353 | 313 | 295 | 183 | 198 | | | | | | |
| 160 | 313 | 314 | 274 | 255 | 139 | 167 | | | | | | |
| 150 | 276 | 279 | 240 | 219 | 121 | 140 | | | | | | |
| 140 | 240 | 240 | 207 | 185 | 111 | 119 | | | | | | |
| 130 | 209 | 207 | 181 | 160 | 107 | 109 | | | | | | |
| 120 | 188 | 189 | 168 | 150 | 102 | 101 | | | | | | |
| 110 | 127 | 143 | 97.2 | 132 | 97.2 | 12.4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 20 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HM1N | 250 | 248 | 237 | 221 | 205 | 178 | 233 | 219 | 110 | 109 | 109 | 110 |
| SCAT | 47.1 | 51.4 | 38.7 | 51.4 | 43.0 | 77.0 | 53.5 | 45.3 | 38.9 | 58.9 | 51.9 | 60.2 |
| HMAXF | 347 | 356 | 326 | 332 | 281 | 367 | 352 | 296 | 255 | 302 | 294 | 305 |
| SHMAX | 432 | 446 | 335 | 390 | 223 | 286 | 182 | 352 | 594 | 1263 | 1480 | 1851 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 251 | | | | | | |
| 360 | | 670 | | | | 251 | 246 | | | | | |
| 350 | 716 | 668 | | | | 248 | 245 | | | | | |
| 340 | 713 | 654 | | 565 | | 244 | 243 | | | | | |
| 330 | 694 | 628 | 643 | 565 | | 236 | 234 | | | | | |
| 320 | 659 | 589 | 639 | 557 | | 227 | 223 | | | | | |
| 310 | 611 | 540 | 616 | 538 | | 218 | 208 | | | 1354 | | 2032 |
| 300 | 535 | 466 | 573 | 511 | | 204 | 188 | 661 | | 1354 | 1786 | 2028 |
| 290 | 430 | 362 | 508 | 471 | 432 | 189 | 163 | 658 | | 1341 | 1783 | 2000 |
| 280 | 303 | 262 | 406 | 417 | 432 | 172 | 134 | 641 | | 1299 | 1754 | 1943 |
| 270 | 179 | 152 | 293 | 349 | 424 | 154 | 105 | 611 | | 1259 | 1692 | 1856 |
| 260 | 77.8 | 71.4 | 179 | 275 | 405 | 137 | 78.8 | 561 | 939 | 1191 | 1594 | 1749 |
| 250 | | 20.7 | 76.5 | 198 | 379 | 120 | 54.8 | 477 | 935 | 1096 | 1471 | 1607 |
| 240 | | | 20.3 | 120 | 331 | 104 | 30.0 | 348 | 901 | 960 | 1301 | 1417 |
| 230 | | | | 60.0 | 240 | 88.5 | | 179 | 844 | 834 | 1075 | 1175 |
| 220 | | | | | 137 | 74.5 | | 12.4 | 742 | 691 | 875 | 936 |
| 210 | | | | | 49.6 | 61.5 | | | 608 | 573 | 693 | 716 |
| 200 | | | | | | 49.6 | | | 458 | 483 | 540 | 573 |
| 190 | | | | | | 37.3 | | | 335 | 407 | 446 | 469 |
| 180 | | | | | | 6.2 | | | 255 | 344 | 367 | 401 |
| 170 | | | | | | | | | 201 | 286 | 310 | 351 |
| 160 | | | | | | | | | 161 | 237 | 268 | 310 |
| 150 | | | | | | | | | 134 | 195 | 232 | 273 |
| 140 | | | | | | | | | 116 | 163 | 202 | 236 |
| 130 | | | | | | | | | 106 | 143 | 178 | 203 |
| 120 | | | | | | | | | 99.5 | 133 | 166 | 185 |
| 110 | | | | | | | | | 40.2 | 97.2 | 112 | 71.4 |

ELECTRON DENSITY

RUERTO RICO 60 W 20 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | A | | | | | B | | | | | |
| HM1N | 109 | 109 | 107 | 105 | 108 | 116 | 218 | 210 | 209 | 198 | 233 | 249 |
| SCAT | 66.8 | 56.3 | 59.4 | 59.1 | 61.1 | 53.9 | 52.8 | 57.6 | 48.4 | 58.1 | 56.7 | 45.5 |
| HMAXF | 325 | 307 | 325 | 322 | 332 | 321 | 325 | 329 | 326 | 349 | 372 | 360 |
| SHMAX | 2010 | 1790 | 2052 | 1944 | 2095 | 1804 | 1397 | 1306 | 830 | 803 | 652 | 550 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 834 | |
| 370 | | | | | | | | | | | 833 | 875 |
| 360 | | | | | | | | | | | 824 | 875 |
| 350 | | | | | | | | | | 971 | 802 | 865 |
| 340 | | | | | 2161 | | | | | 965 | 764 | 834 |
| 330 | 1907 | | 2063 | 2016 | 2160 | 2193 | 2048 | 1697 | 1240 | 946 | 716 | 780 |
| 320 | 1904 | | 2059 | 2015 | 2139 | 2193 | 2049 | 1687 | 1236 | 910 | 656 | 707 |
| 310 | 1883 | 1922 | 2029 | 1994 | 2090 | 2171 | 2006 | 1652 | 1208 | 862 | 579 | 608 |
| 300 | 1841 | 1914 | 1969 | 1948 | 2009 | 2111 | 1932 | 1590 | 1154 | 799 | 492 | 499 |
| 290 | 1776 | 1876 | 1873 | 1866 | 1907 | 2003 | 1823 | 1503 | 1074 | 721 | 398 | 362 |
| 280 | 1690 | 1806 | 1760 | 1761 | 1770 | 1868 | 1682 | 1395 | 960 | 628 | 296 | 230 |
| 270 | 1586 | 1704 | 1612 | 1628 | 1601 | 1700 | 1483 | 1253 | 834 | 532 | 188 | 118 |
| 260 | 1458 | 1576 | 1446 | 1469 | 1409 | 1490 | 1240 | 1096 | 679 | 430 | 112 | 60.0 |
| 250 | 1309 | 1422 | 1251 | 1286 | 1205 | 1240 | 917 | 898 | 497 | 328 | 67.3 | 4.5 |
| 240 | 1159 | 1251 | 1050 | 1109 | 976 | 1010 | 540 | 676 | 325 | 229 | 41.5 | |
| 230 | 990 | 1083 | 885 | 917 | 794 | 771 | 219 | 417 | 179 | 139 | | |
| 220 | 825 | 894 | 737 | 746 | 655 | 573 | 40.2 | 219 | 79.7 | 90.8 | | |
| 210 | 679 | 725 | 618 | 608 | 540 | 408 | | 12.4 | 12.4 | 53.3 | | |
| 200 | 568 | 590 | 520 | 503 | 442 | 310 | | | | 12.4 | | |
| 190 | 470 | 486 | 460 | 427 | 374 | 240 | | | | | | |
| 180 | 395 | 412 | 404 | 368 | 318 | 190 | | | | | | |
| 170 | 342 | 359 | 359 | 317 | 270 | 149 | | | | | | |
| 160 | 302 | 319 | 319 | 272 | 231 | 114 | | | | | | |
| 150 | 268 | 284 | 286 | 233 | 193 | 97.2 | | | | | | |
| 140 | 235 | 248 | 253 | 198 | 161 | 93.2 | | | | | | |
| 130 | 202 | 212 | 221 | 174 | 141 | 89.1 | | | | | | |
| 120 | 186 | 188 | 194 | 156 | 133 | 84.9 | | | | | | |
| 110 | 71.4 | 71.4 | 161 | 145 | 105 | | | | | | | |

ELECTRON OENSITY

PUERTO RICO 60 W 21 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | | | |
| HMIN | 231 | 242 | 229 | 218 | 211 | 213 | 220 | 210 | 110 | 109 | 106 | 109 |
| SCAT | 49.1 | 41.8 | 44.0 | 45.1 | 49.0 | 42.9 | 51.3 | 35.4 | 43.8 | 55.0 | 51.5 | 47.4 |
| HMAXF | 349 | 338 | 334 | 318 | 331 | 319 | 329 | 271 | 270 | 286 | 306 | 290 |
| SHMAX | 535 | 417 | 412 | 347 | 332 | 25? | 286 | 322 | 751 | 1220 | 1610 | 1530 |
| KM | | | | | | | | | | | | |
| 350 | 804 | | | | | | | | | | | |
| 340 | 796 | 735 | 679 | | 477 | | | | | | | |
| 330 | 772 | 729 | 678 | | 477 | | 417 | | | | | |
| 320 | 730 | 702 | 661 | 573 | 471 | 424 | 414 | | | | | |
| 310 | 674 | 654 | 627 | 569 | 455 | 420 | 403 | | | | 1786 | |
| 300 | 598 | 586 | 577 | 551 | 429 | 400 | 384 | | | | 1779 | 1922 |
| 290 | 498 | 487 | 508 | 518 | 395 | 374 | 359 | | | 1433 | 1742 | 1922 |
| 280 | 381 | 369 | 417 | 473 | 349 | 335 | 324 | 754 | 1084 | 1429 | 1669 | 1902 |
| 270 | 262 | 240 | 318 | 409 | 293 | 286 | 276 | 754 | 1084 | 1404 | 1565 | 1839 |
| 260 | 149 | 136 | 209 | 327 | 240 | 226 | 219 | 737 | 1069 | 1355 | 1427 | 1729 |
| 250 | 83.8 | 60.0 | 116 | 234 | 179 | 167 | 161 | 688 | 1026 | 1281 | 1260 | 1590 |
| 240 | 47.5 | | 57.? | 137 | 120 | 112 | 101 | 608 | 954 | 1187 | 1096 | 1396 |
| 230 | | | 4.5 | 67.0 | 75.0 | 68.2 | 52.3 | 477 | 853 | 1064 | 940 | 1186 |
| 220 | | | | 12.4 | 44.0 | 40.2 | | 240 | 707 | 908 | 794 | 960 |
| 210 | | | | | | | | 12.4 | 540 | 737 | 667 | 744 |
| 200 | | | | | | | | | 411 | 586 | 563 | 587 |
| 190 | | | | | | | | | 316 | 469 | 477 | 477 |
| 180 | | | | | | | | | 248 | 377 | 405 | 404 |
| 170 | | | | | | | | | 198 | 307 | 341 | 350 |
| 160 | | | | | | | | | 158 | 254 | 286 | 305 |
| 150 | | | | | | | | | 127 | 212 | 243 | 262 |
| 140 | | | | | | | | | 106 | 179 | 203 | 225 |
| 130 | | | | | | | | | 94.3 | 153 | 172 | 192 |
| 120 | | | | | | | | | 88.3 | 135 | 154 | 172 |
| 110 | | | | | | | | | 49.6 | 112 | 138 | 97.2 |

ELECTRON DENSITY

PUERTO RICO 60 W 21 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | | | | |
| HMIN | 108 | 109 | 108 | 105 | 109 | 108 | 229 | 216 | 197 | 189 | 207 | 247 |
| SCAT | 57.1 | 55.4 | 61.1 | 49.3 | 57.0 | 58.9 | 48.2 | 41.2 | 49.6 | 60.9 | 42.4 | 44.9 |
| HMAXF | 316 | 317 | 327 | 314 | 320 | 335 | 323 | 298 | 303 | 315 | 330 | 357 |
| SHMAX | 1895 | 2037 | 2313 | 1946 | 2034 | 2105 | 1476 | 1165 | 1009 | 798 | 489 | 454 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | 726 |
| 350 | | | | | | | | | | | | 722 |
| 340 | | | | | | 2294 | | | | | 764 | 701 |
| 330 | | | 2294 | | 2227 | 2290 | 2430 | | | | 764 | 661 |
| 320 | 1907 | 2177 | 2286 | 2260 | 2227 | 2258 | 2427 | | | 1016 | 754 | 608 |
| 310 | 1901 | 2168 | 2249 | 2256 | 2208 | 2193 | 2384 | | 1528 | 1014 | 723 | 529 |
| 300 | 1868 | 2125 | 2181 | 2214 | 2155 | 2039 | 2294 | 2193 | 1527 | 1000 | 667 | 437 |
| 290 | 1805 | 2047 | 2075 | 2117 | 2068 | 1961 | 2137 | 2172 | 1503 | 973 | 598 | 328 |
| 280 | 1706 | 1926 | 1948 | 1978 | 1945 | 1799 | 1937 | 2086 | 1449 | 930 | 514 | 219 |
| 270 | 1583 | 1786 | 1786 | 1807 | 1786 | 1600 | 1669 | 1935 | 1363 | 875 | 417 | 127 |
| 260 | 1446 | 1602 | 1612 | 1606 | 1604 | 1383 | 1240 | 1722 | 1248 | 807 | 323 | 71.4 |
| 250 | 1289 | 1407 | 1418 | 1376 | 1391 | 1127 | 754 | 1418 | 1096 | 716 | 228 | 20.3 |
| 240 | 1134 | 1192 | 1213 | 1127 | 1173 | 901 | 286 | 1004 | 917 | 608 | 149 | |
| 230 | 974 | 984 | 1023 | 929 | 960 | 702 | 40.2 | 508 | 716 | 477 | 90.3 | |
| 220 | 834 | 802 | 848 | 754 | 754 | 553 | | 143 | 431 | 335 | 56.1 | |
| 210 | 716 | 659 | 709 | 608 | 592 | 446 | | | 179 | 179 | 18.5 | |
| 200 | 617 | 552 | 596 | 508 | 477 | 362 | | | 44.2 | 71.4 | | |
| 190 | 535 | 477 | 508 | 434 | 393 | 301 | | | | 12.4 | | |
| 180 | 462 | 417 | 434 | 377 | 330 | 252 | | | | | | |
| 170 | 398 | 373 | 376 | 329 | 281 | 210 | | | | | | |
| 160 | 346 | 333 | 328 | 286 | 243 | 174 | | | | | | |
| 150 | 305 | 299 | 291 | 249 | 212 | 143 | | | | | | |
| 140 | 265 | 266 | 253 | 214 | 186 | 122 | | | | | | |
| 130 | 223 | 225 | 223 | 186 | 164 | 109 | | | | | | |
| 120 | 193 | 192 | 193 | 172 | 149 | 103 | | | | | | |
| 110 | 143 | 97.2 | 143 | 162 | 83.8 | 83.8 | | | | | | |

ELECTRON OENSITY

PUERTO RICO 60 W 22 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | | | | | | | A | A | A | |
| HMIN | 248 | 251 | 234 | 222 | 216 | 218 | 218 | 219 | 108 | 109 | 109 | 106 |
| SCAT | 38.2 | 49.9 | 50.4 | 51.1 | 47.6 | 51.2 | 49.4 | 48.6 | 44.8 | 57.1 | 46.2 | 50.5 |
| HMAXF | 350 | 353 | 338 | 333 | 322 | 331 | 331 | 292 | 266 | 288 | 292 | 29? |
| SHMAX | 376 | 436 | 394 | 370 | 291 | 273 | 257 | 413 | 796 | 1166 | 1306 | 1533 |
| KM | | | | | | | | | | | | |
| 360 | 670 | 670 | | | | | | | | | | |
| 350 | 670 | 669 | | | | | | | | | | |
| 340 | 659 | 658 | 599 | 548 | | 389 | 375 | | | | | |
| 330 | 624 | 633 | 595 | 548 | 446 | 389 | 375 | | | | | |
| 320 | 568 | 598 | 579 | 539 | 446 | 385 | 370 | | | | | |
| 310 | 494 | 544 | 552 | 517 | 439 | 373 | 358 | | | | | |
| 300 | 401 | 471 | 516 | 490 | 422 | 353 | 339 | 774 | | | 1555 | 1786 |
| 290 | 301 | 379 | 459 | 451 | 396 | 328 | 313 | 774 | | 1316 | 1555 | 1783 |
| 280 | 204 | 286 | 389 | 393 | 358 | 293 | 275 | 762 | | 1309 | 1530 | 1754 |
| 270 | 120 | 171 | 302 | 322 | 310 | 251 | 231 | 736 | 1143 | 1282 | 1469 | 1689 |
| 260 | 63.3 | 71.4 | 198 | 246 | 254 | 205 | 179 | 699 | 1137 | 1233 | 1365 | 1588 |
| 250 | 12.4 | | 97.2 | 169 | 191 | 153 | 131 | 623 | 1105 | 1166 | 1240 | 1454 |
| 240 | | | 46.3 | 90.9 | 119 | 97.2 | 81.8 | 488 | 1045 | 1081 | 1080 | 1286 |
| 230 | | | | 45.2 | 65.4 | 56.4 | 49.6 | 262 | 960 | 960 | 928 | 1108 |
| 220 | | | | | 26.8 | 12.4 | 12.4 | 40.2 | 818 | 834 | 781 | 917 |
| 210 | | | | | | | | | 643 | 692 | 643 | 733 |
| 200 | | | | | | | | | 490 | 563 | 533 | 594 |
| 190 | | | | | | | | | 368 | 454 | 446 | 494 |
| 180 | | | | | | | | | 280 | 366 | 389 | 422 |
| 170 | | | | | | | | | 223 | 298 | 342 | 368 |
| 160 | | | | | | | | | 182 | 247 | 303 | 324 |
| 150 | | | | | | | | | 153 | 207 | 268 | 286 |
| 140 | | | | | | | | | 131 | 175 | 233 | 252 |
| 130 | | | | | | | | | 115 | 152 | 201 | 224 |
| 120 | | | | | | | | | 104 | 136 | 175 | 198 |
| 110 | | | | | | | | | 76.9 | 112 | 127 | 161 |

ELECTRON DENSITY

PUERTO RICO 60 W 22 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OUAL | | | S | | | | | | | | | |
| HMIN | 109 | 109 | 108 | 106 | 108 | 109 | 223 | 209 | 189 | 189 | 228 | 250 |
| SCAT | 64.0 | 60.8 | 57.7 | 57.6 | 56.7 | 59.7 | 46.0 | 46.9 | 46.3 | 66.7 | 52.5 | 53.9 |
| HMAXF | 316 | 315 | 330 | 320 | 329 | 323 | 324 | 315 | 316 | 363 | 366 | 374 |
| SHMAX | 1755 | 1813 | 1959 | 1884 | 1907 | 1810 | 1136 | 1111 | 795 | 875 | 607 | 609 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | 854 |
| 370 | | | | | | | | | | 917 | 804 | 853 |
| 360 | | | | | | | | | | 917 | 801 | 840 |
| 350 | | | | | | | | | | 908 | 786 | 813 |
| 340 | | | 1922 | | | | | | | 889 | 754 | 770 |
| 330 | | | 1922 | 1984 | 2000 | 1969 | 1846 | | | 859 | 707 | 716 |
| 320 | 1697 | 1801 | 1907 | 1984 | 1986 | 1967 | 1843 | 1771 | 1203 | 820 | 651 | 638 |
| 310 | 1693 | 1797 | 1848 | 1969 | 1942 | 1946 | 1804 | 1767 | 1198 | 770 | 581 | 540 |
| 300 | 1669 | 1772 | 1786 | 1924 | 1860 | 1896 | 1717 | 1728 | 1168 | 710 | 499 | 417 |
| 290 | 1618 | 1723 | 1683 | 1841 | 1757 | 1819 | 1598 | 1646 | 1108 | 643 | 405 | 286 |
| 280 | 1565 | 1646 | 1555 | 1737 | 1619 | 1711 | 1425 | 1528 | 1024 | 563 | 310 | 168 |
| 270 | 1481 | 1549 | 1412 | 1605 | 1457 | 1580 | 1197 | 1371 | 908 | 477 | 223 | 94.4 |
| 260 | 1370 | 1426 | 1251 | 1446 | 1275 | 1420 | 943 | 1165 | 767 | 389 | 143 | 51.9 |
| 250 | 1240 | 1286 | 1096 | 1278 | 1096 | 1240 | 643 | 917 | 608 | 310 | 88.6 | |
| 240 | 1096 | 1143 | 948 | 1070 | 917 | 1050 | 335 | 608 | 446 | 240 | 52.5 | |
| 230 | 944 | 994 | 811 | 875 | 754 | 834 | 83.8 | 310 | 293 | 172 | 12.4 | |
| 220 | 794 | 834 | 696 | 716 | 616 | 643 | | 112 | 179 | 112 | | |
| 210 | 679 | 687 | 600 | 585 | 508 | 494 | | 12.4 | 97.2 | 71.4 | | |
| 200 | 565 | 573 | 523 | 485 | 434 | 389 | | | 53.7 | 47.6 | | |
| 190 | 477 | 481 | 457 | 417 | 373 | 310 | | | 5.5 | 7.1 | | |
| 180 | 414 | 417 | 399 | 362 | 322 | 253 | | | | | | |
| 170 | 362 | 369 | 349 | 318 | 278 | 214 | | | | | | |
| 160 | 324 | 329 | 308 | 278 | 240 | 182 | | | | | | |
| 150 | 288 | 293 | 272 | 240 | 205 | 157 | | | | | | |
| 140 | 251 | 258 | 234 | 206 | 177 | 137 | | | | | | |
| 130 | 219 | 223 | 200 | 179 | 157 | 123 | | | | | | |
| 120 | 194 | 194 | 185 | 169 | 145 | 113 | | | | | | |
| 110 | 143 | 143 | 143 | 143 | 112 | 60.0 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 23 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | J | | | | | | | B | | | | |
| HMIN | 231 | 233 | 230 | 220 | 212 | 215 | 210 | 209 | 107 | 106 | 108 | 108 |
| SCAT | 49.1 | 49.1 | 40.1 | 49.2 | 54.8 | 52.5 | 47.4 | 44.6 | 45.4 | 53.3 | 59.0 | 56.0 |
| HMAXF | 343 | 353 | 331 | 319 | 334 | 323 | 301 | 276 | 260 | 281 | 304 | 303 |
| SHMAX | 479 | 438 | 347 | 318 | 317 | 265 | 205 | 338 | 671 | 1054 | 1497 | 1573 |
| KM | | | | | | | | | | | | |
| 360 | | 643 | | | | | | | | | | |
| 350 | 745 | 642 | | | | | | | | | | |
| 340 | 744 | 632 | 608 | | 417 | | | | | | | |
| 330 | 732 | 608 | 608 | | 417 | 389 | | | | | | |
| 320 | 702 | 571 | 596 | 540 | 410 | 388 | | | | | | |
| 310 | 658 | 523 | 566 | 534 | 397 | 383 | 335 | | | | 1583 | 1697 |
| 300 | 602 | 455 | 519 | 513 | 376 | 370 | 335 | | | | 1582 | 1696 |
| 290 | 516 | 372 | 446 | 477 | 350 | 350 | 331 | | | 1215 | 1562 | 1674 |
| 280 | 400 | 286 | 367 | 427 | 316 | 326 | 319 | 670 | | 1215 | 1519 | 1625 |
| 270 | 286 | 205 | 279 | 362 | 275 | 289 | 301 | 667 | 896 | 1201 | 1454 | 1548 |
| 260 | 161 | 127 | 179 | 277 | 228 | 234 | 277 | 648 | 896 | 1166 | 1363 | 1446 |
| 250 | 91.8 | 71.4 | 97.2 | 189 | 182 | 173 | 240 | 614 | 886 | 1110 | 1247 | 1310 |
| 240 | 49.6 | 40.2 | 52.8 | 105 | 134 | 112 | 191 | 562 | 851 | 1032 | 1119 | 1143 |
| 230 | | | | 53.4 | 86.9 | 62.7 | 131 | 468 | 799 | 929 | 960 | 984 |
| 220 | | | | | 46.9 | 32.9 | 65.6 | 286 | 725 | 810 | 794 | 819 |
| 210 | | | | | | | | 49.6 | 637 | 679 | 658 | 687 |
| 200 | | | | | | | | | 540 | 566 | 546 | 573 |
| 190 | | | | | | | | | 440 | 471 | 462 | 485 |
| 180 | | | | | | | | | 347 | 389 | 393 | 412 |
| 170 | | | | | | | | | 262 | 325 | 335 | 356 |
| 160 | | | | | | | | | 203 | 267 | 289 | 310 |
| 150 | | | | | | | | | 166 | 222 | 254 | 272 |
| 140 | | | | | | | | | 139 | 188 | 215 | 242 |
| 130 | | | | | | | | | 117 | 158 | 173 | 198 |
| 120 | | | | | | | | | 105 | 137 | 153 | 172 |
| 110 | | | | | | | | | 83.8 | 117 | 127 | 143 |

ELECTRON DENSITY

PUERTO RICO 60 W 23 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | A | | | | | | |
| HMIN | 106 | 109 | 113 | 112 | 107 | 109 | 229 | 199 | 198 | 204 | 218 | 265 |
| SCAT | 60.3 | 58.0 | 62.1 | 62.7 | 60.5 | 60.6 | 56.6 | 56.0 | 54.0 | 56.2 | 55.0 | 39.6 |
| HMAXF | 323 | 328 | 338 | 341 | 332 | 325 | 337 | 324 | 335 | 345 | 370 | 378 |
| SHMAX | 1979 | 2043 | 2086 | 2189 | 2093 | 1861 | 1329 | 1163 | 916 | 770 | 704 | 485 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 865 | 804 |
| 370 | | | | | | | | | | | 865 | 796 |
| 360 | | | | | | | | | | | 857 | 759 |
| 350 | | | | 2177 | | | | | | 960 | 835 | 703 |
| 340 | | | 2032 | 2177 | 2161 | | 1846 | | 1215 | 958 | 798 | 629 |
| 330 | 192 | 2043 | 2093 | 2161 | 2160 | 2000 | 1839 | 1583 | 1213 | 942 | 747 | 540 |
| 320 | 1920 | 2054 | 2089 | 2104 | 2138 | 1997 | 1805 | 1581 | 1192 | 910 | 685 | 432 |
| 310 | 1898 | 2007 | 1928 | 2050 | 2046 | 1870 | 1735 | 1565 | 1151 | 862 | 608 | 322 |
| 300 | 1849 | 1935 | 1834 | 1952 | 2002 | 1916 | 1649 | 1504 | 1090 | 802 | 529 | 219 |
| 290 | 1772 | 1838 | 1723 | 1816 | 1898 | 1832 | 1530 | 1446 | 1004 | 731 | 439 | 131 |
| 280 | 1669 | 1714 | 1586 | 1649 | 1761 | 1727 | 1369 | 1341 | 899 | 651 | 349 | 75.9 |
| 270 | 1547 | 1565 | 1436 | 1446 | 1597 | 1584 | 1168 | 1206 | 770 | 554 | 267 | 35.0 |
| 260 | 1394 | 1390 | 1267 | 1255 | 1370 | 1406 | 917 | 1035 | 626 | 445 | 194 | |
| 250 | 1240 | 1211 | 1071 | 1057 | 1177 | 1240 | 608 | 894 | 477 | 330 | 127 | |
| 240 | 1082 | 1029 | 903 | 849 | 986 | 1110 | 286 | 608 | 335 | 226 | 81.9 | |
| 230 | 930 | 859 | 766 | 701 | 794 | 834 | 40.2 | 361 | 198 | 133 | 49.6 | |
| 220 | 794 | 716 | 653 | 588 | 631 | 643 | | 161 | 112 | 71.4 | 12.4 | |
| 210 | 673 | 594 | 557 | 508 | 506 | 509 | | 71.4 | 57.6 | 40.2 | | |
| 200 | 573 | 502 | 477 | 442 | 426 | 394 | | 12.4 | 12.4 | | | |
| 190 | 496 | 434 | 407 | 389 | 365 | 315 | | | | | | |
| 180 | 434 | 381 | 349 | 334 | 315 | 254 | | | | | | |
| 170 | 383 | 335 | 303 | 293 | 273 | 208 | | | | | | |
| 160 | 341 | 298 | 259 | 251 | 237 | 174 | | | | | | |
| 150 | 303 | 256 | 217 | 212 | 205 | 147 | | | | | | |
| 140 | 262 | 214 | 188 | 185 | 177 | 131 | | | | | | |
| 130 | 225 | 195 | 173 | 172 | 158 | 122 | | | | | | |
| 120 | 191 | 182 | 162 | 162 | 148 | 114 | | | | | | |
| 110 | 149 | 112 | | | 112 | 49.6 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 24 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | | | | | |
| HMIN | 268 | 256 | 219 | 196 | 188 | 211 | 273 | 129 | 108 | 109 | 108 | 105 |
| SCAT | 60.1 | 48.1 | 46.8 | 51.7 | 52.8 | 57.6 | 55.5 | 49.6 | 36.6 | 59.9 | 58.5 | 63.6 |
| HMAXF | 407 | 369 | 334 | 305 | 308 | 336 | 397 | 280 | 268 | 295 | 301 | 312 |
| SHMAX | 693 | 578 | 558 | 484 | 284 | 204 | 219 | 540 | 904 | 1381 | 1483 | 1730 |
| KM | | | | | | | | | | | | |
| 410 | 875 | | | | | | | | | | | |
| 400 | 872 | | | | | | 286 | | | | | |
| 390 | 857 | | | | | | 285 | | | | | |
| 380 | 830 | | | | | | 279 | | | | | |
| 370 | 794 | 875 | | | | | 269 | | | | | |
| 360 | 742 | 868 | | | | | 254 | | | | | |
| 350 | 671 | 842 | | | | | 237 | | | | | |
| 340 | 573 | 797 | 875 | | | 257 | 212 | | | | | |
| 330 | 477 | 733 | 874 | | | 256 | 181 | | | | | |
| 320 | 362 | 649 | 856 | | | 252 | 146 | | | | | 1669 |
| 310 | 250 | 550 | 819 | 716 | 389 | 243 | 112 | | | | 1583 | 1668 |
| 300 | 157 | 428 | 764 | 714 | 386 | 231 | 83.8 | | | 1528 | 1583 | 1654 |
| 290 | 97.2 | 286 | 679 | 700 | 377 | 217 | 59.9 | 784 | | 1525 | 1569 | 1619 |
| 280 | 55.6 | 179 | 573 | 672 | 362 | 196 | 31.6 | 784 | | 1504 | 1522 | 1564 |
| 270 | 12.4 | 88.7 | 446 | 631 | 339 | 171 | | 776 | 1473 | 1462 | 1463 | 1487 |
| 260 | | 40.2 | 310 | 578 | 308 | 143 | | 751 | 1454 | 1399 | 1383 | 1393 |
| 250 | | | 198 | 498 | 270 | 115 | | 716 | 1381 | 1331 | 1279 | 1273 |
| 240 | | | 105 | 402 | 225 | 83.8 | | 656 | 1261 | 1224 | 1167 | 1143 |
| 230 | | | 56.3 | 299 | 174 | 60.0 | | 573 | 1073 | 1082 | 1023 | 996 |
| 220 | | | 4.5 | 179 | 127 | 40.2 | | 454 | 875 | 917 | 856 | 853 |
| 210 | | | | 97.2 | 83.8 | | | 322 | 643 | 746 | 709 | 725 |
| 200 | | | | 40.2 | 52.9 | | | 214 | 467 | 589 | 581 | 618 |
| 190 | | | | | 12.4 | | | 143 | 327 | 453 | 482 | 527 |
| 180 | | | | | | | | 105 | 245 | 362 | 402 | 451 |
| 170 | | | | | | | | 83.8 | 192 | 291 | 331 | 389 |
| 160 | | | | | | | | 70.9 | 154 | 240 | 275 | 342 |
| 150 | | | | | | | | 64.1 | 126 | 198 | 231 | 298 |
| 140 | | | | | | | | 54.7 | 110 | 161 | 186 | 258 |
| 130 | | | | | | | | 12.4 | 104 | 141 | 159 | 219 |
| 120 | | | | | | | | | 98.2 | 132 | 150 | 189 |
| 110 | | | | | | | | | 71.4 | 97.2 | 127 | 158 |

ELECTRON DENSITY

PUERTO RICO 60 W 24 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | A | A | | | | A | | | | | |
| HMIN | 108 | 109 | 111 | 111 | 109 | 110 | 240 | 200 | 199 | 187 | 248 | 270 |
| SCAT | 63.4 | 59.5 | 68.8 | 59.5 | 65.0 | 72.7 | 47.4 | 58.5 | 61.1 | 64.5 | 61.1 | 61.4 |
| HMAXF | 324 | 335 | 354 | 340 | 340 | 348 | 328 | 326 | 339 | 371 | 405 | 414 |
| SHMAX | 1966 | 2033 | 2449 | 2156 | 21 | 22 7 | 1149 | 1051 | 975 | 901 | 748 | 794 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | 982 |
| 410 | | | | | | | | | | | 854 | 981 |
| 400 | | | | | | | | | | | 853 | 970 |
| 390 | | | | | | | | | | | 841 | 945 |
| 380 | | | | | | | | | | 917 | 816 | 912 |
| 370 | | | | | | | | | | 917 | 784 | 860 |
| 360 | | | 2227 | | | | | | | 911 | 738 | 794 |
| 350 | | | 2225 | 2161 | 2032 | 2096 | | | | 894 | 683 | 697 |
| 340 | | 2032 | 2205 | 2161 | 2032 | 2089 | | | 1191 | 863 | 618 | 592 |
| 330 | 1907 | 2028 | 2161 | 2146 | 2018 | 2064 | 1907 | 1640 | 1185 | 823 | 540 | 477 |
| 320 | 1905 | 1999 | 2070 | 2101 | 1981 | 2014 | 1893 | 1636 | 1163 | 774 | 459 | 362 |
| 310 | 1883 | 1942 | 2017 | 2074 | 1920 | 1946 | 1838 | 1611 | 1125 | 716 | 371 | 233 |
| 300 | 1837 | 1849 | 1899 | 1917 | 1850 | 1865 | 1736 | 1562 | 1074 | 654 | 286 | 139 |
| 290 | 1765 | 1772 | 1743 | 1786 | 1724 | 1762 | 1600 | 1487 | 1004 | 584 | 203 | 83.8 |
| 280 | 1674 | 1593 | 1555 | 1613 | 1592 | 1637 | 1412 | 1394 | 907 | 512 | 134 | 49.6 |
| 270 | 1555 | 1435 | 1368 | 1430 | 1446 | 1488 | 1159 | 1270 | 794 | 437 | 83.8 | |
| 260 | 1419 | 1261 | 1179 | 1240 | 1276 | 1315 | 834 | 1109 | 668 | 366 | 52.6 | |
| 250 | 1271 | 1072 | 1004 | 1031 | 1118 | 1143 | 446 | 917 | 540 | 301 | 12.4 | |
| 240 | 1096 | 917 | 847 | 856 | 934 | 942 | 12.4 | 679 | 389 | 233 | | |
| 230 | 917 | 778 | 708 | 716 | 763 | 754 | | 446 | 249 | 168 | | |
| 220 | 772 | 664 | 608 | 608 | 624 | 592 | | 219 | 143 | 115 | | |
| 210 | 652 | 573 | 527 | 520 | 521 | 466 | | 83.8 | 71.4 | 75.4 | | |
| 200 | 552 | 508 | 462 | 454 | 438 | 372 | | | 12.4 | 48.5 | | |
| 190 | 477 | 458 | 409 | 395 | 372 | 304 | | | | 12.4 | | |
| 180 | 417 | 410 | 364 | 345 | 318 | 254 | | | | | | |
| 170 | 362 | 365 | 325 | 301 | 273 | 214 | | | | | | |
| 160 | 318 | 323 | 286 | 260 | 234 | 182 | | | | | | |
| 150 | 275 | 281 | 245 | 223 | 202 | 157 | | | | | | |
| 140 | 226 | 240 | 210 | 193 | 175 | 137 | | | | | | |
| 130 | 182 | 215 | 192 | 175 | 156 | 123 | | | | | | |
| 120 | 169 | 201 | 180 | 164 | 145 | 114 | | | | | | |
| 110 | 143 | 127 | | | 83.8 | 12.4 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 25 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | B | | | | |
| HMIN | 249 | 219 | 200 | 198 | 187 | 247 | 215 | 118 | 110 | 106 | 109 | 108 |
| SCAT | 53.1 | 33.0 | 48.4 | 51.0 | 60.0 | 83.5 | 58.0 | 54.6 | 46.7 | 58.9 | 46.7 | 58.5 |
| HMAXF | 354 | 298 | 297 | 301 | 327 | 402 | 367 | 306 | 285 | 308 | 298 | 310 |
| SHMAX | 713 | 449 | 481 | 258 | 242 | 282 | 208 | 562 | 1003 | 1630 | 1688 | 2031 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 268 | | | | | | |
| 400 | | | | | | 268 | | | | | | |
| 390 | | | | | | 267 | | | | | | |
| 380 | | | | | | 264 | | | | | | |
| 370 | | | | | | 258 | 240 | | | | | |
| 360 | 1107 | | | | | 251 | 239 | | | | | |
| 350 | 1106 | | | | | 245 | 235 | | | | | |
| 340 | 1088 | | | | | 237 | 227 | | | | | |
| 330 | 1058 | | | | 286 | 223 | 215 | | | | | |
| 320 | 1004 | | | | 285 | 205 | 200 | | | | | 2227 |
| 310 | 908 | | | 389 | 280 | 183 | 181 | 688 | | 1815 | | 2227 |
| 300 | 770 | 1004 | 844 | 389 | 272 | 156 | 159 | 686 | | 1808 | 2161 | 2212 |
| 290 | 608 | 990 | 839 | 384 | 259 | 127 | 135 | 671 | 1354 | 1772 | 2144 | 2164 |
| 280 | 417 | 931 | 816 | 372 | 242 | 97.2 | 112 | 649 | 1350 | 1719 | 2078 | 2080 |
| 270 | 219 | 825 | 784 | 352 | 222 | 71.4 | 92.4 | 615 | 1317 | 1662 | 1958 | 1976 |
| 260 | 92.1 | 661 | 716 | 328 | 198 | 47.9 | 74.6 | 564 | 1254 | 1532 | 1796 | 1828 |
| 250 | 12.4 | 446 | 608 | 292 | 170 | 12.4 | 60.0 | 497 | 1161 | 1365 | 1587 | 1641 |
| 240 | | 240 | 446 | 240 | 140 | | 48.6 | 417 | 1033 | 1143 | 1341 | 1425 |
| 230 | | 83.8 | 240 | 179 | 112 | | 36.8 | 344 | 875 | 960 | 1096 | 1166 |
| 220 | | 12.4 | 106 | 118 | 83.8 | | 12.4 | 270 | 679 | 754 | 854 | 938 |
| 210 | | | 49.6 | 65.1 | 60.0 | | | 204 | 508 | 608 | 643 | 754 |
| 200 | | | | 12.4 | 44.1 | | | 148 | 389 | 492 | 508 | 608 |
| 190 | | | | | 12.4 | | | 109 | 310 | 408 | 417 | 492 |
| 180 | | | | | | | | 83.8 | 247 | 343 | 362 | 409 |
| 170 | | | | | | | | 68.3 | 201 | 286 | 310 | 349 |
| 160 | | | | | | | | 58.5 | 164 | 237 | 270 | 300 |
| 150 | | | | | | | | 52.9 | 134 | 194 | 234 | 259 |
| 140 | | | | | | | | 47.6 | 118 | 166 | 194 | 219 |
| 130 | | | | | | | | 42.7 | 107 | 142 | 160 | 185 |
| 120 | | | | | | | | 12.4 | 95.2 | 131 | 150 | 170 |
| 110 | | | | | | | | | 49.6 | 114 | 112 | 143 |

ELECTRON DENSITY

PUERTO RICO 60 W 25 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | A | | | | A | A | | | | | |
| HMIN | 109 | 110 | 110 | 109 | 108 | | 217 | 225 | 199 | 188 | 242 | 263 |
| SCAT | 52.0 | 54.0 | 60.6 | 60.3 | 69.7 | | 63.0 | 50.8 | 53.5 | 70.8 | 51.7 | 56.1 |
| HMAXF | 321 | 325 | 329 | 333 | 334 | | 350 | 332 | 339 | 371 | 386 | 394 |
| SHMAX | 2121 | 2201 | 2272 | 2082 | 1949 | | 1469 | 1111 | 1004 | 1087 | 727 | 730 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | 982 |
| 390 | | | | | | | | | | | 949 | 981 |
| 380 | | | | | | | | | | 1072 | 946 | 968 |
| 370 | | | | | | | | | | 1072 | 927 | 937 |
| 360 | | | | | | | 1815 | | | 1066 | 887 | 896 |
| 350 | | | | | | | 1815 | | | 1048 | 834 | 834 |
| 340 | | | | 2032 | 1815 | | 1804 | 1697 | 1354 | 1019 | 763 | 744 |
| 330 | 2294 | 2379 | 2294 | 2031 | 1814 | | 1761 | 1697 | 1345 | 982 | 679 | 631 |
| 320 | 2293 | 2373 | 2281 | 2009 | 1798 | | 1701 | 1675 | 1299 | 931 | 587 | 508 |
| 310 | 2266 | 2333 | 2237 | 1959 | 1757 | | 1623 | 1614 | 1250 | 869 | 484 | 382 |
| 300 | 2196 | 2243 | 2161 | 1877 | 1707 | | 1519 | 1545 | 1170 | 794 | 380 | 262 |
| 290 | 2078 | 2122 | 2054 | 1769 | 1646 | | 1391 | 1416 | 1069 | 716 | 286 | 161 |
| 280 | 1923 | 1961 | 1918 | 1637 | 1555 | | 1215 | 1240 | 935 | 631 | 184 | 87.1 |
| 270 | 1735 | 1769 | 1748 | 1483 | 1436 | | 1004 | 1022 | 780 | 540 | 119 | 44.4 |
| 260 | 1530 | 1555 | 1555 | 1310 | 1290 | | 766 | 754 | 616 | 451 | 71.4 | |
| 250 | 1314 | 1341 | 1341 | 1143 | 1151 | | 528 | 446 | 446 | 366 | 42.6 | |
| 240 | 1116 | 1096 | 1115 | 977 | 1004 | | 286 | 198 | 275 | 280 | | |
| 230 | 933 | 917 | 929 | 823 | 834 | | 112 | 49.6 | 161 | 202 | | |
| 220 | 773 | 740 | 770 | 693 | 687 | | 40.2 | | 91.4 | 136 | | |
| 210 | 649 | 608 | 643 | 593 | 562 | | | | 53.0 | 83.8 | | |
| 200 | 555 | 508 | 540 | 515 | 466 | | | | 6.1 | 52.3 | | |
| 190 | 481 | 440 | 466 | 454 | 389 | | | | | 12.4 | | |
| 180 | 417 | 389 | 405 | 402 | 332 | | | | | | | |
| 170 | 369 | 345 | 354 | 352 | 286 | | | | | | | |
| 160 | 328 | 307 | 310 | 304 | 247 | | | | | | | |
| 150 | 294 | 265 | 273 | 262 | 213 | | | | | | | |
| 140 | 258 | 230 | 238 | 227 | 184 | | | | | | | |
| 130 | 219 | 212 | 214 | 198 | 161 | | | | | | | |
| 120 | 192 | 200 | 201 | 185 | 152 | | | | | | | |
| 110 | 143 | 49.6 | 40.2 | 97.2 | 127 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 26 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | B | | | | A |
| HMIN | 238 | 216 | 197 | 202 | 213 | 248 | 268 | 189 | 107 | 109 | 109 | 110 |
| SCAT | 46.2 | 45.8 | 44.9 | 50.2 | 61.0 | 57.9 | 60.6 | 44.5 | 52.1 | 45.9 | 70.9 | 49.9 |
| HMAXF | 347 | 309 | 288 | 304 | 363 | 386 | 414 | 306 | 282 | 283 | 305 | 299 |
| SHMAX | 682 | 577 | 370 | 234 | 229 | 212 | 209 | 466 | 1160 | 1371 | 1778 | 1589 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | | 240 | | | | | |
| 410 | | | | | | | 240 | | | | | |
| 400 | | | | | | | 237 | | | | | |
| 390 | | | | | | 257 | 231 | | | | | |
| 380 | | | | | | 256 | 221 | | | | | |
| 370 | | | | | 257 | 252 | 208 | | | | | |
| 360 | | | | | 257 | 244 | 193 | | | | | |
| 350 | 1096 | | | | 254 | 231 | 174 | | | | | |
| 340 | 1090 | | | | 248 | 216 | 151 | | | | | |
| 330 | 1060 | | | | 238 | 196 | 127 | | | | | |
| 320 | 1004 | | | | 224 | 173 | 103 | | | | | |
| 310 | 917 | 1038 | | 355 | 208 | 146 | 81.0 | 754 | | | 1771 | |
| 300 | 813 | 1029 | | 354 | 188 | 118 | 63.6 | 751 | | | 1768 | 1801 |
| 290 | 670 | 995 | 643 | 348 | 166 | 92.2 | 49.6 | 731 | 1569 | 1891 | 1750 | 1786 |
| 280 | 508 | 944 | 637 | 334 | 143 | 71.4 | 34.6 | 693 | 1568 | 1889 | 1714 | 1736 |
| 270 | 335 | 848 | 616 | 316 | 119 | 53.7 | 6.8 | 637 | 1541 | 1852 | 1659 | 1646 |
| 260 | 161 | 703 | 580 | 289 | 97.2 | 40.2 | | 549 | 1487 | 1768 | 1588 | 1515 |
| 250 | 66.9 | 508 | 527 | 249 | 78.2 | 5.8 | | 440 | 1421 | 1647 | 1503 | 1366 |
| 240 | 12.4 | 253 | 446 | 198 | 60.0 | | | 323 | 1311 | 1472 | 1396 | 1209 |
| 230 | | 112 | 342 | 140 | 45.3 | | | 219 | 1143 | 1252 | 1261 | 1050 |
| 220 | | 40.2 | 219 | 83.8 | 21.5 | | | 136 | 917 | 979 | 1096 | 883 |
| 210 | | | 97.2 | 45.6 | | | | 83.8 | 679 | 754 | 917 | 736 |
| 200 | | | 33.5 | | | | | 49.6 | 477 | 551 | 716 | 617 |
| 190 | | | | | | | | 6.7 | 330 | 417 | 548 | 519 |
| 180 | | | | | | | | | 250 | 335 | 412 | 439 |
| 170 | | | | | | | | | 198 | 270 | 329 | 376 |
| 160 | | | | | | | | | 161 | 219 | 277 | 328 |
| 150 | | | | | | | | | 133 | 179 | 236 | 288 |
| 140 | | | | | | | | | 112 | 148 | 196 | 248 |
| 130 | | | | | | | | | 105 | 138 | 173 | 206 |
| 120 | | | | | | | | | 99.1 | 131 | 154 | 184 |
| 110 | | | | | | | | | 83.8 | 83.8 | 12.4 | 60.0 |

ELECTRON DENSITY

PUERTO RICO 60 W 26 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | A | | | | | B | | | | | |
| HMIN | 108 | 108 | 108 | 108 | 109 | 107 | 236 | 199 | 194 | 211 | 253 | 232 |
| SCAT | 64.9 | 54.5 | 62.8 | 53.2 | 62.1 | 61.2 | 53.2 | 55.2 | 60.3 | 62.3 | 57.3 | 52.1 |
| HMAXF | 330 | 325 | 338 | 331 | 338 | 324 | 335 | 331 | 349 | 348 | 386 | 359 |
| SHMAX | 2156 | 2188 | 2451 | 2149 | 2302 | 1904 | 1263 | 1129 | 1073 | 798 | 713 | 630 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 917 | |
| 380 | | | | | | | | | | | 915 | |
| 370 | | | | | | | | | | | 900 | |
| 360 | | | | | | | | | | | 871 | 896 |
| 350 | | | | | | | | | 1303 | 949 | 834 | 890 |
| 340 | 2032 | | 2379 | 2294 | 2294 | | 1907 | 1514 | 1296 | 946 | 773 | 865 |
| 330 | 2032 | 2294 | 2369 | 2293 | 2285 | 2000 | 1902 | 1514 | 1271 | 930 | 697 | 826 |
| 320 | 2020 | 2289 | 2330 | 2267 | 2248 | 1998 | 1869 | 1500 | 1227 | 901 | 608 | 771 |
| 310 | 1984 | 2252 | 2260 | 2200 | 2181 | 1973 | 1801 | 1461 | 1169 | 863 | 498 | 696 |
| 300 | 1925 | 2176 | 2161 | 2088 | 2081 | 1921 | 1701 | 1396 | 1096 | 810 | 389 | 594 |
| 290 | 1836 | 2054 | 2032 | 1942 | 1958 | 1839 | 1571 | 1316 | 986 | 741 | 276 | 477 |
| 280 | 1731 | 1907 | 1869 | 1758 | 1800 | 1738 | 1389 | 1197 | 853 | 659 | 173 | 350 |
| 270 | 1599 | 1720 | 1685 | 1555 | 1609 | 1604 | 1143 | 1050 | 705 | 565 | 97.2 | 233 |
| 260 | 1446 | 1516 | 1485 | 1341 | 1401 | 1446 | 834 | 875 | 551 | 464 | 49.6 | 139 |
| 250 | 1279 | 1299 | 1278 | 1121 | 1195 | 1273 | 389 | 660 | 403 | 362 | | 80.8 |
| 240 | 1114 | 1096 | 1070 | 936 | 1004 | 1096 | 60.0 | 463 | 286 | 255 | | 44.5 |
| 230 | 942 | 928 | 897 | 771 | 834 | 897 | | 277 | 186 | 151 | | |
| 220 | 794 | 783 | 742 | 643 | 679 | 716 | | 161 | 117 | 67.1 | | |
| 210 | 663 | 668 | 622 | 554 | 564 | 562 | | 71.4 | 71.4 | | | |
| 200 | 565 | 573 | 528 | 482 | 477 | 440 | | 12.4 | 40.2 | | | |
| 190 | 491 | 499 | 455 | 422 | 412 | 348 | | | | | | |
| 180 | 431 | 434 | 398 | 371 | 356 | 281 | | | | | | |
| 170 | 380 | 379 | 349 | 329 | 303 | 232 | | | | | | |
| 160 | 335 | 335 | 310 | 291 | 257 | 194 | | | | | | |
| 150 | 296 | 297 | 272 | 256 | 219 | 165 | | | | | | |
| 140 | 256 | 253 | 234 | 219 | 187 | 143 | | | | | | |
| 130 | 212 | 206 | 195 | 192 | 162 | 126 | | | | | | |
| 120 | 188 | 184 | 171 | 171 | 152 | 117 | | | | | | |
| 110 | 143 | 143 | 127 | 112 | 127 | 97.2 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 27 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | A | | | | |
| HMIN | 230 | 226 | 213 | 223 | 217 | 207 | 238 | 198 | 107 | 108 | 109 | 108 |
| SCAT | 42.2 | 50.5 | 59.5 | 58.9 | 65.1 | 54.0 | 52.7 | 40.8 | 54.1 | 63.9 | 64.4 | 63.9 |
| HMAXF | 341 | 322 | 351 | 349 | 374 | 338 | 356 | 289 | 278 | 308 | 314 | 321 |
| SHMAX | 518 | 484 | 411 | 371 | 358 | 293 | 262 | 442 | 937 | 1583 | 1992 | 2251 |
| KM | | | | | | | | | | | | |
| 380 | | | | | 389 | | | | | | | |
| 370 | | | | | 388 | | | | | | | |
| 360 | | | 508 | | 384 | | 362 | | | | | |
| 350 | 875 | | 508 | 477 | 375 | | 360 | | | | | |
| 340 | 875 | | 504 | 474 | 362 | 389 | 353 | | | | | |
| 330 | 861 | 784 | 492 | 464 | 344 | 387 | 340 | | | | | 2243 |
| 320 | 822 | 783 | 473 | 448 | 322 | 378 | 320 | | | | 2048 | 2243 |
| 310 | 761 | 773 | 449 | 425 | 294 | 363 | 295 | | | 1626 | 2045 | 2225 |
| 300 | 669 | 747 | 417 | 395 | 260 | 342 | 259 | | | 1619 | 2017 | 2180 |
| 290 | 554 | 712 | 374 | 357 | 223 | 314 | 216 | 854 | | 1594 | 1967 | 2103 |
| 280 | 417 | 651 | 320 | 306 | 185 | 277 | 172 | 844 | 1155 | 1547 | 1918 | 2015 |
| 270 | 286 | 556 | 262 | 247 | 150 | 231 | 124 | 811 | 1148 | 1482 | 1821 | 1883 |
| 260 | 168 | 430 | 198 | 182 | 117 | 182 | 81.3 | 754 | 1121 | 1402 | 1685 | 1715 |
| 250 | 92.7 | 286 | 143 | 121 | 85.7 | 136 | 49.6 | 643 | 1086 | 1294 | 1512 | 1520 |
| 240 | 52.0 | 143 | 88.9 | 71.6 | 60.0 | 94.9 | 12.4 | 490 | 1011 | 1163 | 1323 | 1310 |
| 230 | | 44.7 | 57.4 | 40.2 | 44.0 | 66.6 | | 299 | 917 | 1004 | 1096 | 1108 |
| 220 | | | 31.0 | | 12.4 | 46.0 | | 155 | 783 | 834 | 893 | 905 |
| 210 | | | | | | 12.4 | | 76.9 | 643 | 679 | 716 | 740 |
| 200 | | | | | | | | 71.9 | 516 | 553 | 586 | 608 |
| 190 | | | | | | | | | 401 | 446 | 485 | 508 |
| 180 | | | | | | | | | 310 | 367 | 412 | 438 |
| 170 | | | | | | | | | 240 | 306 | 355 | 382 |
| 160 | | | | | | | | | 198 | 260 | 306 | 339 |
| 150 | | | | | | | | | 168 | 222 | 262 | 299 |
| 140 | | | | | | | | | 143 | 190 | 219 | 260 |
| 130 | | | | | | | | | 127 | 166 | 183 | 219 |
| 120 | | | | | | | | | 116 | 150 | 170 | 193 |
| 110 | | | | | | | | | 90.3 | 119 | 143 | 161 |

ELECTRON DENSITY

PUERTO RICO 60 W 27 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | B | | | | | |
| HMIN | 108 | 109 | 110 | 107 | 108 | 107 | | 209 | 219 | 209 | 227 | 258 |
| SCAT | 57.1 | 59.9 | 60.9 | 59.3 | 59.9 | 66.8 | | 67.8 | 64.0 | 58.5 | 73.3 | 56.0 |
| HMAXF | 330 | 326 | 349 | 344 | 341 | 338 | | 355 | 363 | 349 | 389 | 404 |
| SHMAX | 2256 | 2287 | 2573 | 2503 | 2408 | 2335 | | 1463 | 1170 | 986 | 1045 | 859 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | | 1061 |
| 400 | | | | | | | | | | | | 1059 |
| 390 | | | | | | | | | | | 1084 | 1040 |
| 380 | | | | | | | | | | | 1080 | 1004 |
| 370 | | | | | | | | | 1393 | | 1067 | 955 |
| 360 | | | | | | | | 1669 | 1392 | | 1041 | 897 |
| 350 | | | 2430 | 2448 | 2448 | | | 1667 | 1379 | 1240 | 1004 | 827 |
| 340 | 2294 | | 2417 | 2445 | 2447 | 2161 | | 1649 | 1348 | 1232 | 964 | 736 |
| 330 | 2294 | 2294 | 2371 | 2399 | 2422 | 2354 | | 1613 | 1294 | 1206 | 911 | 627 |
| 320 | 2277 | 2287 | 2294 | 2325 | 2355 | 2320 | | 1560 | 1240 | 1162 | 845 | 508 |
| 310 | 2225 | 2250 | 2175 | 2227 | 2283 | 2254 | | 1485 | 1154 | 1100 | 763 | 389 |
| 300 | 2134 | 2181 | 2032 | 2099 | 2161 | 2175 | | 1398 | 1050 | 1019 | 667 | 271 |
| 290 | 2010 | 2069 | 1857 | 1940 | 1996 | 2063 | | 1290 | 905 | 917 | 557 | 167 |
| 280 | 1855 | 1935 | 1669 | 1752 | 1811 | 1911 | | 1156 | 741 | 794 | 439 | 97.2 |
| 270 | 1669 | 1786 | 1460 | 1555 | 1609 | 1746 | | 992 | 573 | 643 | 310 | 55.8 |
| 260 | 1457 | 1605 | 1264 | 1341 | 1364 | 1532 | | 794 | 407 | 499 | 198 | 12.4 |
| 250 | 1240 | 1411 | 1071 | 1143 | 1154 | 1296 | | 540 | 248 | 350 | 123 | |
| 240 | 1075 | 1205 | 909 | 960 | 941 | 1107 | | 297 | 143 | 12 | 66.7 | |
| 230 | 902 | 1004 | 778 | 794 | 772 | 852 | | 150 | 71.4 | 112 | 19.9 | |
| 220 | 754 | 834 | 670 | 679 | 629 | 652 | | 71.4 | 12.4 | 60.0 | | |
| 210 | 643 | 679 | 583 | 582 | 524 | 498 | | 12.4 | | 4.5 | | |
| 200 | 550 | 573 | 518 | 508 | 446 | 389 | | | | | | |
| 190 | 477 | 485 | 470 | 446 | 389 | 314 | | | | | | |
| 180 | 417 | 423 | 428 | 389 | 335 | 262 | | | | | | |
| 170 | 372 | 379 | 382 | 341 | 288 | 223 | | | | | | |
| 160 | 335 | 339 | 335 | 300 | 250 | 190 | | | | | | |
| 150 | 305 | 300 | 296 | 265 | 216 | 163 | | | | | | |
| 140 | 262 | 265 | 258 | 234 | 188 | 141 | | | | | | |
| 130 | 207 | 231 | 226 | 207 | 166 | 125 | | | | | | |
| 120 | 188 | 205 | 205 | 188 | 152 | 116 | | | | | | |
| 110 | 143 | 112 | 89.8 | 143 | 112 | 92.9 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 28 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | B | A | A | | A |
| HMIN | 256 | 243 | 229 | 201 | 208 | 221 | 274 | 230 | 109 | 105 | 110 | |
| SCAT | 60.3 | 51.6 | 42.7 | 53.8 | 63.1 | 57.1 | 45.6 | 31.5 | 60.6 | 54.2 | 64.5 | |
| HMAXF | 381 | 343 | 315 | 311 | 332 | 335 | 373 | 286 | 293 | 298 | 320 | |
| SHMAX | 832 | 637 | 487 | 480 | 329 | 283 | 226 | 292 | 870 | 1277 | 1735 | |
| KM | | | | | | | | | | | | |
| 390 | 1096 | | | | | | | | | | | |
| 380 | 1096 | | | | | | 355 | | | | | |
| 370 | 1086 | | | | | | 354 | | | | | |
| 360 | 1061 | | | | | | 347 | | | | | |
| 350 | 1020 | 1016 | | | | | 331 | | | | | |
| 340 | 968 | 1015 | | | | 403 | 382 | 307 | | | | |
| 330 | 893 | 998 | | | | 403 | 381 | 274 | | | | 1669 |
| 320 | 794 | 968 | 928 | 679 | 399 | 376 | 237 | | | | | 1669 |
| 310 | 664 | 917 | 925 | 679 | 391 | 364 | 191 | | | | | 1658 |
| 300 | 508 | 834 | 899 | 672 | 375 | 346 | 143 | | 1004 | 1446 | 1628 | |
| 290 | 335 | 716 | 856 | 653 | 357 | 324 | 94.7 | 754 | 1004 | 1438 | 1577 | |
| 280 | 179 | 552 | 769 | 622 | 335 | 294 | 49.6 | 748 | 992 | 1405 | 1499 | |
| 270 | 83.8 | 362 | 643 | 582 | 305 | 255 | | 705 | 967 | 1347 | 1408 | |
| 260 | 40.2 | 179 | 446 | 525 | 268 | 206 | | 627 | 929 | 1262 | 1301 | |
| 250 | | 60.0 | 219 | 456 | 223 | 151 | | 490 | 879 | 1153 | 1178 | |
| 240 | | | 83.8 | 371 | 168 | 92.1 | | 262 | 807 | 1034 | 1050 | |
| 230 | | | 12.4 | 269 | 112 | 49.6 | | 12.4 | 710 | 892 | 917 | |
| 220 | | | | 161 | 60.0 | | | | 592 | 736 | 794 | |
| 210 | | | | 65.8 | 12.4 | | | | 459 | 590 | 663 | |
| 200 | | | | | | | | | 341 | 477 | 548 | |
| 190 | | | | | | | | | 257 | 389 | 455 | |
| 180 | | | | | | | | | 203 | 327 | 384 | |
| 170 | | | | | | | | | 164 | 277 | 330 | |
| 160 | | | | | | | | | 132 | 233 | 283 | |
| 150 | | | | | | | | | 110 | 192 | 240 | |
| 140 | | | | | | | | | 96.4 | 159 | 205 | |
| 130 | | | | | | | | | 91.8 | 141 | 176 | |
| 120 | | | | | | | | | 87.1 | 133 | 155 | |
| 110 | | | | | | | | | 71.4 | 114 | 40.2 | |

ELECTRON DENSITY

PUERTO RICO 60 W 28 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | A | | | A | B | B | | | | | |
| HMIN | 110 | 109 | 109 | 108 | 107 | | 199 | 199 | 200 | 218 | 274 | 283 |
| SCAT | 63.3 | 60.0 | 63.0 | 57.5 | 55.3 | | 59.3 | 67.5 | 51.7 | 64.9 | 61.6 | 53.3 |
| HMAXF | 340 | 345 | 356 | 343 | 331 | | 333 | 342 | 350 | 374 | 439 | 410 |
| SHMAX | 2286 | 2354 | 2498 | 2306 | 2109 | | 1309 | 1239 | 865 | 853 | 821 | 737 |
| KM | | | | | | | | | | | | |
| 440 | | | | | | | | | | | 917 | |
| 430 | | | | | | | | | | | 913 | |
| 420 | | | | | | | | | | | 896 | 1004 |
| 410 | | | | | | | | | | | 866 | 1004 |
| 400 | | | | | | | | | | | 824 | 995 |
| 390 | | | | | | | | | | | 773 | 968 |
| 380 | | | | | | | | | | 949 | 712 | 921 |
| 370 | | | | | | | | | | 949 | 643 | 860 |
| 360 | | | 2294 | | | | | | 1084 | 939 | 563 | 784 |
| 350 | 2144 | 2260 | 2288 | 2294 | | | | 1420 | 1084 | 917 | 477 | 690 |
| 340 | 2144 | 2256 | 2257 | 2292 | 2277 | | 1683 | 1419 | 1073 | 885 | 384 | 573 |
| 330 | 2131 | 2225 | 2196 | 2265 | 2277 | | 1682 | 1408 | 1039 | 844 | 291 | 446 |
| 320 | 2091 | 2161 | 2105 | 2203 | 2256 | | 1660 | 1381 | 984 | 787 | 209 | 295 |
| 310 | 2022 | 2063 | 1993 | 2100 | 2198 | | 1610 | 1341 | 917 | 716 | 143 | 172 |
| 300 | 1928 | 1939 | 1842 | 1969 | 2094 | | 1560 | 1278 | 840 | 643 | 97.2 | 97.2 |
| 290 | 1809 | 1786 | 1669 | 1807 | 1961 | | 1469 | 1209 | 754 | 552 | 60.0 | 48.1 |
| 280 | 1669 | 1612 | 1480 | 1623 | 1800 | | 1350 | 1120 | 655 | 460 | 33.5 | |
| 270 | 1489 | 1420 | 1293 | 1425 | 1611 | | 1198 | 1004 | 550 | 362 | | |
| 260 | 1314 | 1215 | 1125 | 1227 | 1408 | | 1019 | 859 | 440 | 262 | | |
| 250 | 1143 | 1050 | 950 | 1050 | 1210 | | 814 | 694 | 325 | 173 | | |
| 240 | 977 | 884 | 794 | 875 | 1004 | | 573 | 508 | 219 | 103 | | |
| 230 | 825 | 747 | 687 | 723 | 806 | | 299 | 310 | 138 | 57.5 | | |
| 220 | 699 | 643 | 602 | 617 | 634 | | 153 | 169 | 83.8 | 12.4 | | |
| 210 | 598 | 561 | 540 | 536 | 508 | | 71.4 | 80.0 | 49.6 | | | |
| 200 | 520 | 501 | 489 | 472 | 421 | | 12.4 | 12.4 | | | | |
| 190 | 458 | 446 | 440 | 417 | 357 | | | | | | | |
| 180 | 408 | 401 | 389 | 367 | 303 | | | | | | | |
| 170 | 365 | 358 | 344 | 325 | 262 | | | | | | | |
| 160 | 326 | 314 | 303 | 290 | 224 | | | | | | | |
| 150 | 290 | 270 | 266 | 260 | 193 | | | | | | | |
| 140 | 254 | 226 | 231 | 230 | 172 | | | | | | | |
| 130 | 209 | 198 | 202 | 204 | 158 | | | | | | | |
| 120 | 188 | 187 | 188 | 187 | 150 | | | | | | | |
| 110 | 112 | 143 | 143 | 127 | 112 | | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 29 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | | B | | | A | A |
| HMIN | 261 | 239 | 229 | 199 | 198 | 205 | 317 | 225 | 111 | 110 | 110 | 108 |
| SCAT | 48.6 | 47.5 | 43.9 | 39.2 | 66.3 | 81.2 | 60.2 | 41.7 | 52.0 | 59.8 | 74.4 | 72.4 |
| HMAXF | 387 | 341 | 316 | 290 | 333 | 386 | 444 | 292 | 277 | 290 | 327 | 335 |
| SHMAX | 744 | 654 | 545 | 322 | 374 | 306 | 197 | 447 | 1002 | 1313 | 1752 | 1936 |
| KM | | | | | | | | | | | | |
| 450 | | | | | | | 240 | | | | | |
| 440 | | | | | | | 240 | | | | | |
| 430 | | | | | | | 237 | | | | | |
| 420 | | | | | | | 231 | | | | | |
| 410 | | | | | | | 221 | | | | | |
| 400 | | | | | | | 209 | | | | | |
| 390 | 1084 | | | | | 274 | 194 | | | | | |
| 380 | 1079 | | | | | 274 | 174 | | | | | |
| 370 | 1050 | | | | | 271 | 150 | | | | | |
| 360 | 1004 | | | | | 267 | 124 | | | | | |
| 350 | 928 | 1072 | | | | 260 | 97.2 | | | | | |
| 340 | 834 | 1072 | | | 439 | 252 | 69.7 | | | | | 1669 |
| 330 | 723 | 1058 | | | 439 | 243 | 46.7 | | | | 1514 | 1667 |
| 320 | 589 | 1020 | 993 | | 435 | 231 | 12.4 | | | | 1511 | 1651 |
| 310 | 446 | 960 | 988 | | 426 | 216 | | | | | 1495 | 1620 |
| 300 | 286 | 868 | 960 | 608 | 412 | 196 | | 917 | | 1473 | 1466 | 1573 |
| 290 | 161 | 736 | 910 | 608 | 397 | 175 | | 916 | | 1473 | 1418 | 1505 |
| 280 | 83.8 | 573 | 822 | 599 | 375 | 152 | | 897 | 1290 | 1463 | 1361 | 1428 |
| 270 | 49.6 | 389 | 690 | 569 | 342 | 129 | | 854 | 1284 | 1428 | 1291 | 1331 |
| 260 | | 198 | 508 | 522 | 298 | 106 | | 783 | 1255 | 1379 | 1209 | 1224 |
| 250 | | 83.8 | 286 | 451 | 244 | 85.6 | | 663 | 1198 | 1318 | 1116 | 1104 |
| 240 | | 12.4 | 127 | 350 | 186 | 67.5 | | 477 | 1133 | 1224 | 1019 | 988 |
| 230 | | | 12.4 | 240 | 127 | 51.8 | | 112 | 1020 | 1096 | 917 | 875 |
| 220 | | | | 133 | 83.8 | 40.2 | | | 875 | 937 | 810 | 764 |
| 210 | | | | 67.9 | 52.5 | 12.4 | | | 716 | 767 | 697 | 655 |
| 200 | | | | 12.4 | 12.4 | | | | 573 | 617 | 588 | 555 |
| 190 | | | | | | | | | 430 | 499 | 491 | 470 |
| 180 | | | | | | | | | 317 | 396 | 407 | 403 |
| 170 | | | | | | | | | 240 | 316 | 341 | 350 |
| 160 | | | | | | | | | 184 | 257 | 286 | 305 |
| 150 | | | | | | | | | 149 | 213 | 245 | 266 |
| 140 | | | | | | | | | 127 | 177 | 208 | 225 |
| 130 | | | | | | | | | 116 | 154 | 178 | 187 |
| 120 | | | | | | | | | 99.3 | 138 | 164 | 170 |
| 110 | | | | | | | | | | 49.6 | 83.8 | 127 |

ELECTRON DENSITY

PUERTO RICO 60 W 29 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | A | S | | | A | B | | | S | | |
| HMIN | 109 | 109 | | 109 | 108 | 110 | 220 | 218 | 219 | 229 | 278 | 283 |
| SCAT | 59.0 | 64.3 | | 64.6 | 58.8 | 67.7 | 60.6 | 70.1 | 57.8 | 48.6 | 55.7 | 66.0 |
| HMAXF | 337 | 343 | | 340 | 328 | 332 | 343 | 356 | 362 | 352 | 425 | 421 |
| SHMAX | 2183 | 2479 | | 2350 | 1985 | 1956 | 1386 | 1346 | 1023 | 852 | 981 | 1276 |
| KM | | | | | | | | | | | | |
| 430 | | | | | | | | | | | 1240 | 1514 |
| 420 | | | | | | | | | | | 1238 | 1514 |
| 410 | | | | | | | | | | | 1218 | 1503 |
| 400 | | | | | | | | | | | 1179 | 1474 |
| 390 | | | | | | | | | | | 1119 | 1424 |
| 380 | | | | | | | | | | | 1041 | 1363 |
| 370 | | | | | | | | | 1265 | | 942 | 1282 |
| 360 | | | | | | | | 1514 | 1265 | 1215 | 826 | 1184 |
| 350 | | 2396 | | 2227 | | | 1727 | 1512 | 1252 | 1215 | 691 | 1050 |
| 340 | 2128 | 2394 | | 2227 | | 1907 | 1726 | 1495 | 1213 | 1196 | 555 | 887 |
| 330 | 2121 | 2371 | | 2213 | 2032 | 1906 | 1707 | 1463 | 1163 | 1151 | 417 | 679 |
| 320 | 2086 | 2318 | | 2172 | 2023 | 1892 | 1664 | 1415 | 1100 | 1081 | 277 | 461 |
| 310 | 2017 | 2228 | | 2098 | 1986 | 1857 | 1598 | 1363 | 1014 | 985 | 175 | 272 |
| 300 | 1919 | 2121 | | 2012 | 1919 | 1801 | 1506 | 1289 | 906 | 875 | 101 | 127 |
| 290 | 1798 | 1986 | | 1886 | 1816 | 1721 | 1393 | 1187 | 776 | 747 | 57.4 | 53.6 |
| 280 | 1640 | 1803 | | 1741 | 1692 | 1628 | 1259 | 1050 | 643 | 608 | 12.4 | |
| 270 | 1470 | 1590 | | 1571 | 1542 | 1510 | 1106 | 894 | 499 | 446 | | |
| 260 | 1292 | 1368 | | 1383 | 1373 | 1367 | 917 | 699 | 362 | 298 | | |
| 250 | 1127 | 1166 | | 1192 | 1204 | 1198 | 716 | 508 | 240 | 161 | | |
| 240 | 960 | 980 | | 1004 | 1050 | 1019 | 446 | 300 | 143 | 71.4 | | |
| 230 | 811 | 819 | | 850 | 875 | 847 | 161 | 143 | 71.4 | 12.4 | | |
| 220 | 686 | 679 | | 716 | 716 | 679 | | 26.8 | 12.4 | | | |
| 210 | 588 | 567 | | 601 | 580 | 549 | | | | | | |
| 200 | 508 | 487 | | 508 | 477 | 436 | | | | | | |
| 190 | 446 | 425 | | 438 | 396 | 352 | | | | | | |
| 180 | 396 | 376 | | 379 | 335 | 289 | | | | | | |
| 170 | 354 | 333 | | 333 | 289 | 245 | | | | | | |
| 160 | 316 | 293 | | 295 | 249 | 209 | | | | | | |
| 150 | 276 | 253 | | 260 | 215 | 179 | | | | | | |
| 140 | 235 | 213 | | 227 | 186 | 157 | | | | | | |
| 130 | 197 | 193 | | 198 | 163 | 141 | | | | | | |
| 120 | 184 | 182 | | 182 | 151 | 131 | | | | | | |
| 110 | 97.2 | 97.2 | | 83.8 | 112 | 40.2 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 30 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | | | | | | | S | B | | | | B |
| HMIN | 228 | 206 | 196 | 205 | 278 | 237 | 227 | 114 | 109 | 111 | 111 | 109 |
| SCAT | 47.8 | 36.0 | 56.4 | 54.5 | 58.3 | 63.1 | 58.7 | 61.4 | 63.5 | 66.2 | 58.0 | 64.5 |
| HMAXF | 345 | 282 | 295 | 318 | 403 | 378 | 339 | 302 | 296 | 315 | 302 | 333 |
| SHMAX | 1046 | 767 | 604 | 243 | 255 | 290 | 274 | 627 | 1097 | 1590 | 1725 | 2125 |
| KM | | | | | | | | | | | | |
| 410 | | | | | 316 | | | | | | | |
| 400 | | | | | 316 | | | | | | | |
| 390 | | | | | 312 | | | | | | | |
| 380 | | | | | 302 | 335 | | | | | | |
| 370 | | | | | 290 | 334 | | | | | | |
| 360 | | | | | 273 | 328 | | | | | | |
| 350 | 1669 | | | | 251 | 319 | | | | | | |
| 340 | 1664 | | | | 224 | 304 | 355 | | | | | 2016 |
| 330 | 1629 | | | | 194 | 287 | 353 | | | | | 2015 |
| 320 | 1555 | | | 335 | 161 | 265 | 345 | | | 1569 | | 1997 |
| 310 | 1456 | | | 333 | 127 | 237 | 333 | 754 | | 1567 | 1969 | 1954 |
| 300 | 1312 | | 917 | 326 | 90.1 | 203 | 315 | 754 | 1167 | 1544 | 1968 | 1885 |
| 290 | 1096 | 1669 | 915 | 313 | 58.2 | 166 | 293 | 748 | 1164 | 1503 | 1948 | 1796 |
| 280 | 834 | 1667 | 901 | 295 | 12.4 | 129 | 265 | 731 | 1149 | 1461 | 1896 | 1684 |
| 270 | 508 | 1620 | 872 | 272 | | 97.2 | 230 | 704 | 1119 | 1393 | 1815 | 1542 |
| 260 | 262 | 1510 | 836 | 240 | | 66.5 | 190 | 671 | 1081 | 1300 | 1714 | 1377 |
| 250 | 127 | 1341 | 775 | 198 | | 45.6 | 143 | 622 | 1017 | 1191 | 1574 | 1208 |
| 240 | 64.8 | 1050 | 669 | 151 | | 12.4 | 97.2 | 550 | 932 | 1074 | 1385 | 1050 |
| 230 | 12.4 | 679 | 525 | 105 | | | 40.2 | 458 | 834 | 943 | 1143 | 893 |
| 220 | | 240 | 335 | 62.7 | | | | 347 | 727 | 804 | 889 | 762 |
| 210 | | 49.6 | 161 | 29.4 | | | | 240 | 618 | 657 | 694 | 643 |
| 200 | | | 45.6 | | | | | 161 | 508 | 517 | 560 | 551 |
| 190 | | | | | | | | 109 | 401 | 406 | 467 | 468 |
| 180 | | | | | | | | 81.7 | 310 | 329 | 395 | 398 |
| 170 | | | | | | | | 69.0 | 248 | 275 | 332 | 341 |
| 160 | | | | | | | | 61.4 | 198 | 235 | 279 | 290 |
| 150 | | | | | | | | 57.7 | 165 | 202 | 240 | 243 |
| 140 | | | | | | | | 54.9 | 140 | 172 | 198 | 211 |
| 130 | | | | | | | | 52.0 | 123 | 153 | 175 | 192 |
| 120 | | | | | | | | 46.4 | 112 | 133 | 163 | 180 |
| 110 | | | | | | | | | 60.0 | | | 83.8 |

ELECTRON DENSITY

PUERTO RICO 60 W 30 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | B | B | S | | | B | | | | | S | A |
| HMIN | | | | 110 | 109 | 108 | 235 | 195 | 223 | 237 | 231 | 239 |
| SCAT | | | | 59.0 | 61.6 | 56.0 | 61.9 | 71.2 | 69.9 | 67.3 | 58.4 | 49.8 |
| HMAXF | | | | 342 | 352 | 329 | 351 | 375 | 388 | 401 | 378 | 351 |
| SHMAX | | | | 2298 | 2307 | 1954 | 1532 | 1549 | 1276 | 1345 | 1143 | 876 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | 1473 | | |
| 400 | | | | | | | | | | 1473 | | |
| 390 | | | | | | | | | 1341 | 1463 | | |
| 380 | | | | | | | | 1555 | 1337 | 1436 | 1420 | |
| 370 | | | | | | | | 1554 | 1319 | 1393 | 1413 | |
| 360 | | | | | 2161 | | 1937 | 1539 | 1288 | 1332 | 1386 | 1341 |
| 350 | | | | 2227 | 2160 | | 1937 | 1508 | 1240 | 1255 | 1338 | 1341 |
| 340 | | | | 2226 | 2141 | | 1922 | 1463 | 1180 | 1164 | 1268 | 1325 |
| 330 | | | | 2203 | 2093 | 2112 | 1870 | 1400 | 1112 | 1050 | 1180 | 1281 |
| 320 | | | | 2143 | 2014 | 2098 | 1800 | 1330 | 1022 | 910 | 1067 | 1207 |
| 310 | | | | 2049 | 1907 | 2050 | 1713 | 1240 | 908 | 754 | 917 | 1114 |
| 300 | | | | 1930 | 1775 | 1953 | 1605 | 1126 | 787 | 608 | 754 | 980 |
| 290 | | | | 1786 | 1621 | 1837 | 1460 | 1004 | 662 | 461 | 599 | 794 |
| 280 | | | | 1626 | 1458 | 1700 | 1285 | 875 | 530 | 310 | 446 | 586 |
| 270 | | | | 1446 | 1296 | 1544 | 1078 | 724 | 403 | 172 | 302 | 362 |
| 260 | | | | 1278 | 1116 | 1367 | 834 | 573 | 270 | 101 | 179 | 198 |
| 250 | | | | 1085 | 960 | 1189 | 508 | 446 | 171 | 58.0 | 97.2 | 78.9 |
| 240 | | | | 917 | 811 | 1004 | 97.2 | 322 | 91.1 | 18.5 | 49.6 | 12.4 |
| 230 | | | | 764 | 697 | 809 | | 219 | 44.7 | | | |
| 220 | | | | 649 | 608 | 633 | | 127 | | | | |
| 210 | | | | 558 | 526 | 492 | | 71.4 | | | | |
| 200 | | | | 490 | 453 | 389 | | 34.0 | | | | |
| 190 | | | | 435 | 392 | 316 | | | | | | |
| 180 | | | | 389 | 339 | 262 | | | | | | |
| 170 | | | | 345 | 294 | 219 | | | | | | |
| 160 | | | | 306 | 258 | 185 | | | | | | |
| 150 | | | | 270 | 229 | 158 | | | | | | |
| 140 | | | | 238 | 203 | 138 | | | | | | |
| 130 | | | | 216 | 181 | 124 | | | | | | |
| 120 | | | | 202 | 168 | 118 | | | | | | |
| 110 | | | | 49.6 | 97.2 | 97.2 | | | | | | |

ELECTRON DENSITY

PUERTO RICO 60 W 31 MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | F | | | | | | | | | | | |
| HMIN | 261 | 251 | 230 | 209 | 214 | 227 | 245 | 209 | 107 | 108 | 110 | 110 |
| SCAT | 50.8 | 42.2 | 51.5 | 52.1 | 71.9 | 59.6 | 56.3 | 44.5 | 48.4 | 54.1 | 69.5 | 101 |
| HMAXF | 377 | 355 | 334 | 316 | 395 | 383 | 394 | 298 | 281 | 302 | 321 | 397 |
| SHMAX | 828 | 714 | 729 | 543 | 610 | 494 | 524 | 588 | 1024 | 1222 | 1216 | 2433 |
| KM | | | | | | | | | | | | |
| 400 | | | | | 599 | | 643 | | | | | 1514 |
| 390 | | | | | 598 | 573 | 642 | | | | | 1512 |
| 380 | 1215 | | | | 593 | 573 | 632 | | | | | 1503 |
| 370 | 1209 | | | | 581 | 566 | 613 | | | | | 1486 |
| 360 | 1181 | 1215 | | | 563 | 551 | 583 | | | | | 1462 |
| 350 | 1128 | 1211 | | | 541 | 526 | 544 | | | | | 1425 |
| 340 | 1055 | 1178 | 1143 | | 511 | 495 | 493 | | | | | 1380 |
| 330 | 951 | 1109 | 1141 | | 477 | 458 | 435 | | | | 1050 | 1334 |
| 320 | 823 | 1004 | 1121 | 814 | 436 | 410 | 369 | | | | 1049 | 1278 |
| 310 | 679 | 875 | 1078 | 810 | 389 | 357 | 299 | | | 1341 | 1043 | 1219 |
| 300 | 477 | 704 | 1019 | 793 | 338 | 301 | 227 | 1016 | | 1340 | 1026 | 1159 |
| 290 | 296 | 517 | 924 | 761 | 286 | 240 | 169 | 1008 | 1354 | 1323 | 996 | 1092 |
| 280 | 153 | 321 | 794 | 716 | 234 | 184 | 120 | 969 | 1354 | 1283 | 955 | 1018 |
| 270 | 64.0 | 170 | 608 | 653 | 184 | 139 | 80.0 | 917 | 1332 | 1217 | 905 | 944 |
| 260 | | 68.1 | 403 | 561 | 140 | 100 | 53.1 | 834 | 1281 | 1132 | 849 | 869 |
| 250 | | | 198 | 446 | 101 | 68.6 | 22.3 | 722 | 1220 | 1027 | 786 | 800 |
| 240 | | | 78.7 | 310 | 71.4 | 46.7 | | 573 | 1107 | 911 | 716 | 734 |
| 230 | | | | 161 | 49.6 | 12.4 | | 389 | 960 | 787 | 651 | 672 |
| 220 | | | | 71.4 | 24.0 | | | 161 | 794 | 663 | 583 | 615 |
| 210 | | | | 12.4 | | | | 12.4 | 643 | 550 | 519 | 558 |
| 200 | | | | | | | | | 508 | 458 | 459 | 501 |
| 190 | | | | | | | | | 376 | 384 | 401 | 446 |
| 180 | | | | | | | | | 278 | 319 | 346 | 389 |
| 170 | | | | | | | | | 211 | 268 | 296 | 343 |
| 160 | | | | | | | | | 167 | 226 | 254 | 303 |
| 150 | | | | | | | | | 135 | 188 | 219 | 267 |
| 140 | | | | | | | | | 111 | 153 | 181 | 231 |
| 130 | | | | | | | | | 105 | 138 | 158 | 198 |
| 120 | | | | | | | | | 99.1 | 129 | 147 | 179 |
| 110 | | | | | | | | | 71.4 | 71.4 | 40.2 | 40.2 |

ELECTRON DENSITY

PUERTO RICO 60 W 31 MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUAL | A | B | A | | | | B | | F | F | F | F |
| HMIN | 109 | 110 | 108 | 110 | 108 | 109 | 233 | 269 | 348 | | | 231 |
| SCAT | 70.3 | 76.4 | 96.9 | 99.1 | 112 | 85.8 | 63.2 | 70.8 | 66.3 | | | 61.9 |
| HMAXF | 338 | 355 | 392 | 414 | 436 | 372 | 386 | 414 | 529 | | | 381 |
| SHMAX | 2283 | 2365 | 1879 | 2498 | 2316 | 1747 | 1050 | 1440 | 2882 | | | 1287 |
| KM | | | | | | | | | | | | |
| 530 | | | | | | | | | 2903 | | | |
| 520 | | | | | | | | | 2888 | | | |
| 510 | | | | | | | | | 2825 | | | |
| 500 | | | | | | | | | 2732 | | | |
| 490 | | | | | | | | | 2617 | | | |
| 480 | | | | | | | | | 2487 | | | |
| 470 | | | | | | | | | 2336 | | | |
| 460 | | | | | | | | | 2172 | | | |
| 450 | | | | | | | | | 1977 | | | |
| 440 | | | | | 1328 | | | | 1786 | | | |
| 430 | | | | | 1327 | | | | 1555 | | | |
| 420 | | | | 1555 | 1322 | | | 1528 | 1304 | | | |
| 410 | | | | 1555 | 1311 | | | 1527 | 1050 | | | |
| 400 | | | 1131 | 1548 | 1294 | | | 1514 | 794 | | | |
| 390 | | | 1131 | 1533 | 1273 | | 1240 | 1485 | 508 | | | 1528 |
| 380 | | | 1126 | 1510 | 1246 | 1341 | 1237 | 1440 | 310 | | | 1528 |
| 370 | | | 1116 | 1480 | 1210 | 1341 | 1220 | 1377 | 151 | | | 1516 |
| 360 | | 2000 | 1100 | 1440 | 1174 | 1334 | 1187 | 1303 | 71.4 | | | 1483 |
| 350 | | 1998 | 1074 | 1390 | 1135 | 1319 | 1138 | 1215 | 20.7 | | | 1429 |
| 340 | 2096 | 1982 | 1045 | 1341 | 1087 | 1294 | 1072 | 1114 | | | | 1358 |
| 330 | 2089 | 1948 | 1011 | 1277 | 1031 | 1260 | 995 | 995 | | | | 1266 |
| 320 | 2061 | 1897 | 973 | 1208 | 967 | 1215 | 899 | 859 | | | | 1155 |
| 310 | 2012 | 1833 | 930 | 1130 | 898 | 1165 | 779 | 704 | | | | 1004 |
| 300 | 1942 | 1758 | 886 | 1050 | 827 | 1106 | 643 | 540 | | | | 834 |
| 290 | 1851 | 1653 | 839 | 970 | 754 | 1032 | 477 | 335 | | | | 679 |
| 280 | 1746 | 1520 | 794 | 887 | 683 | 948 | 310 | 179 | | | | 508 |
| 270 | 1607 | 1369 | 744 | 807 | 617 | 854 | 184 | 12.4 | | | | 335 |
| 260 | 1446 | 1207 | 697 | 732 | 557 | 754 | 117 | | | | | 198 |
| 250 | 1260 | 1041 | 652 | 664 | 503 | 655 | 71.4 | | | | | 105 |
| 240 | 1096 | 875 | 608 | 604 | 457 | 563 | 40.2 | | | | | 56.7 |
| 230 | 917 | 723 | 568 | 551 | 417 | 481 | | | | | | |
| 220 | 754 | 608 | 529 | 503 | 384 | 409 | | | | | | |
| 210 | 608 | 527 | 491 | 458 | 355 | 350 | | | | | | |
| 200 | 501 | 463 | 452 | 415 | 330 | 302 | | | | | | |
| 190 | 429 | 411 | 411 | 374 | 306 | 262 | | | | | | |
| 180 | 378 | 368 | 369 | 335 | 283 | 228 | | | | | | |
| 170 | 333 | 331 | 328 | 299 | 259 | 201 | | | | | | |
| 160 | 290 | 297 | 290 | 267 | 231 | 178 | | | | | | |
| 150 | 248 | 262 | 256 | 238 | 207 | 157 | | | | | | |
| 140 | 213 | 223 | 223 | 210 | 184 | 140 | | | | | | |
| 130 | 194 | 198 | 197 | 183 | 163 | 126 | | | | | | |
| 120 | 182 | 185 | 184 | 167 | 151 | 118 | | | | | | |
| 110 | 60.0 | 60.0 | 127 | 49.6 | 112 | 83.8 | | | | | | |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

PUERTO RICO — 60 W — MAR 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 29 | 29 | 27 | 27 | 27 | 28 | 28 | 28 | 28 | 26 | 23 | 26 |
| HMIN | 241 | 234 | 222 | 212 | 211 | 217 | 238 | 201 | 110 | 109 | 108 | 108 |
| RATIO | 5.5 | 5.8 | 6.0 | 6.1 | 5.1 | 4.3 | 4.6 | 6.3 | 5.0 | 4.4 | 4.3 | 4.1 |
| SCAT | 47.5 | 44.5 | 43.7 | 44.3 | 55.8 | 66.8 | 56.8 | 43.3 | 46.1 | 53.0 | 53.8 | 55.1 |
| NMAX | 808 | 757 | 687 | 532 | 364 | 315 | 315 | 697 | 1167 | 1535 | 1806 | 1993 |
| HMAXF | 350 | 335 | 318 | 305 | 328 | 362 | 365 | 292 | 276 | 290 | 299 | 306 |
| SHMAX | 516 | 444 | 389 | 307 | 260 | 271 | 241 | 384 | 840 | 1272 | 1565 | 1787 |
| SHINF | 2796 | 2578 | 2326 | 1809 | 1287 | 1159 | 1130 | 2349 | 4133 | 5602 | 6661 | 7408 |
| KM | | | | | | | | | | | | |
| 950 | 67.2 | 57.2 | 47.9 | 35.1 | 26.9 | 27.9 | 28.8 | 43.0 | 66.6 | 93.7 | 115 | 131 |
| 900 | 86.1 | 73.3 | 61.4 | 45.0 | 34.5 | 35.8 | 37.0 | 55.2 | 85.5 | 120 | 148 | 168 |
| 850 | 110 | 94.0 | 78.7 | 57.8 | 44.2 | 45.9 | 47.4 | 70.8 | 110 | 154 | 189 | 216 |
| 800 | 141 | 120 | 101 | 74.1 | 56.6 | 58.7 | 60.6 | 90.8 | 141 | 198 | 243 | 277 |
| 750 | 181 | 154 | 129 | 94.9 | 72.5 | 75.0 | 77.5 | 116 | 180 | 253 | 311 | 354 |
| 700 | 231 | 197 | 165 | 121 | 92.6 | 95.6 | 98.6 | 149 | 231 | 324 | 398 | 453 |
| 650 | 293 | 251 | 211 | 155 | 118 | 121 | 125 | 190 | 295 | 414 | 508 | 578 |
| 600 | 370 | 317 | 267 | 197 | 149 | 153 | 157 | 242 | 376 | 527 | 646 | 735 |
| 550 | 462 | 398 | 336 | 248 | 187 | 189 | 194 | 306 | 476 | 666 | 816 | 927 |
| 500 | 565 | 491 | 418 | 309 | 231 | 230 | 234 | 383 | 598 | 835 | 1020 | 1157 |
| 490 | 587 | 511 | 435 | 322 | 240 | 238 | 242 | 400 | 625 | 872 | 1064 | 1207 |
| 480 | 609 | 531 | 453 | 336 | 249 | 247 | 250 | 417 | 653 | 910 | 1110 | 1258 |
| 470 | 630 | 552 | 471 | 350 | 259 | 255 | 258 | 435 | 682 | 949 | 1157 | 1311 |
| 460 | 651 | 572 | 490 | 364 | 268 | 262 | 265 | 453 | 711 | 989 | 1205 | 1364 |
| 450 | 672 | 592 | 508 | 378 | 278 | 270 | 272 | 472 | 741 | 1029 | 1253 | 1417 |
| 440 | 692 | 612 | 527 | 392 | 287 | 277 | 278 | 490 | 772 | 1070 | 1302 | 1472 |
| 430 | 711 | 631 | 545 | 406 | 296 | 284 | 283 | 509 | 803 | 1112 | 1351 | 1526 |
| 420 | 729 | 650 | 563 | 420 | 305 | 290 | 287 | 528 | 835 | 1154 | 1400 | 1580 |
| 410 | 745 | 668 | 580 | 434 | 313 | 295 | 290 | 547 | 866 | 1195 | 1449 | 1633 |
| 400 | 759 | 685 | 597 | 448 | 321 | 298 | 291 | 566 | 898 | 1236 | 1497 | 1685 |
| 390 | 771 | 700 | 613 | 461 | 328 | 301 | 290 | 584 | 930 | 1277 | 1543 | 1735 |
| 380 | 780 | 713 | 628 | 473 | 334 | 301 | 288 | 602 | 961 | 1316 | 1588 | 1783 |
| 370 | 784 | 724 | 641 | 484 | 339 | 300 | 284 | 619 | 991 | 1354 | 1631 | 1828 |
| 360 | 783 | 732 | 652 | 495 | 342 | 296 | 277 | 635 | 1020 | 1390 | 1670 | 1868 |
| 350 | 776 | 736 | 662 | 504 | 344 | 291 | 270 | 649 | 1048 | 1423 | 1706 | 1905 |
| 340 | 761 | 734 | 668 | 511 | 344 | 282 | 261 | 663 | 1074 | 1453 | 1737 | 1936 |
| 330 | 736 | 723 | 670 | 516 | 342 | 271 | 249 | 674 | 1097 | 1479 | 1763 | 1960 |
| 320 | 694 | 702 | 667 | 518 | 336 | 258 | 235 | 683 | 1118 | 1500 | 1783 | 1976 |
| 310 | 636 | 668 | 655 | 515 | 327 | 242 | 218 | 689 | 1135 | 1516 | 1795 | 1983 |
| 300 | 561 | 617 | 632 | 506 | 314 | 223 | 197 | 692 | 1148 | 1525 | 1797 | 1975 |
| 290 | 467 | 548 | 595 | 489 | 298 | 201 | 174 | 687 | 1156 | 1523 | 1783 | 1943 |
| 280 | 360 | 465 | 539 | 461 | 276 | 178 | 147 | 672 | 1155 | 1508 | 1742 | 1879 |
| 270 | 250 | 367 | 467 | 423 | 252 | 153 | 118 | 640 | 1143 | 1470 | 1669 | 1782 |
| 260 | 151 | 267 | 373 | 372 | 225 | 125 | 93.6 | 588 | 1112 | 1404 | 1562 | 1649 |
| 250 | 77.7 | 174 | 268 | 308 | 193 | 95.9 | 70.0 | 504 | 1056 | 1308 | 1424 | 1483 |
| 240 | 36.4 | 98.7 | 169 | 234 | 155 | 68.9 | 47.3 | 386 | 970 | 1181 | 1257 | 1292 |
| 230 | 11.2 | 47.2 | 87.8 | 160 | 116 | 49.0 | 28.3 | 248 | 853 | 1026 | 1072 | 1087 |
| 220 | 2.7 | 15.4 | 38.5 | 91.0 | 77.4 | 32.7 | 13.5 | 138 | 707 | 851 | 880 | 887 |
| 210 | 1.2 | 2.9 | 14.0 | 45.5 | 42.2 | 18.6 | 4.9 | 62.8 | 555 | 681 | 709 | 715 |
| 200 | | | 2.9 | 14.1 | 19.7 | 9.2 | 1.2 | 27.2 | 424 | 535 | 568 | 582 |
| 190 | | | | 2.9 | 3.2 | 3.5 | .5 | 13.6 | 320 | 422 | 464 | 483 |
| 180 | | | | | | .6 | | 9.7 | 245 | 340 | 386 | 410 |
| 170 | | | | | | | | 7.9 | 192 | 278 | 325 | 353 |
| 160 | | | | | | | | 6.8 | 153 | 230 | 276 | 307 |
| 150 | | | | | | | | 6.2 | 127 | 191 | 236 | 267 |
| 140 | | | | | | | | 5.6 | 111 | 162 | 199 | 230 |
| 130 | | | | | | | | 3.8 | 99.8 | 143 | 172 | 198 |
| 120 | | | | | | | | 2.1 | 90.5 | 130 | 156 | 177 |
| 110 | | | | | | | | | 45.1 | 86.0 | 105 | 115 |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

PUERTO RICO — 60 W — MAR 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 26 | 24 | 23 | 26 | 25 | 22 | 24 | 29 | 29 | 28 | 29 | 28 |
| HMIN | 108 | 109 | 109 | 108 | 108 | 110 | 215 | 205 | 196 | 200 | 236 | 246 |
| RATIO | 4.1 | 4.0 | 3.9 | 4.0 | 4.0 | 4.1 | 5.1 | 5.1 | 4.8 | 4.4 | 4.7 | 5.1 |
| SCAT | 55.4 | 54.8 | 58.1 | 57.4 | 58.9 | 59.9 | 54.1 | 52.4 | 54.8 | 59.4 | 54.3 | 51.5 |
| NMAX | 2105 | 2177 | 2209 | 2198 | 2137 | 2086 | 1981 | 1706 | 1227 | 939 | 844 | 831 |
| HMAXF | 314 | 319 | 327 | 328 | 326 | 326 | 331 | 322 | 328 | 351 | 373 | 369 |
| SHMAX | 1954 | 2034 | 2142 | 2103 | 2016 | 1921 | 1395 | 1181 | 924 | 787 | 650 | 588 |
| SHINF | 7891 | 8174 | 8374 | 8304 | 8045 | 7807 | 6984 | 5993 | 4385 | 3437 | 3032 | 2931 |
| KM | | | | | | | | | | | | |
| 950 | 145 | 154 | 162 | 162 | 156 | 152 | 148 | 122 | 90.8 | 77.8 | 79.0 | 76.7 |
| 900 | 185 | 197 | 208 | 207 | 200 | 195 | 190 | 156 | 116 | 99.7 | 101 | 98.4 |
| 850 | 238 | 253 | 267 | 266 | 257 | 250 | 243 | 200 | 149 | 128 | 130 | 126 |
| 800 | 305 | 324 | 342 | 341 | 329 | 321 | 312 | 256 | 191 | 164 | 166 | 161 |
| 750 | 391 | 415 | 438 | 436 | 421 | 410 | 399 | 328 | 245 | 209 | 212 | 206 |
| 700 | 499 | 530 | 560 | 558 | 538 | 524 | 510 | 419 | 313 | 267 | 270 | 263 |
| 650 | 637 | 676 | 713 | 710 | 686 | 668 | 650 | 534 | 398 | 340 | 343 | 333 |
| 600 | 808 | 857 | 903 | 900 | 869 | 847 | 823 | 677 | 504 | 429 | 430 | 419 |
| 550 | 1019 | 1079 | 1135 | 1131 | 1093 | 1065 | 1034 | 852 | 633 | 535 | 533 | 519 |
| 500 | 1268 | 1341 | 1407 | 1402 | 1355 | 1320 | 1280 | 1058 | 784 | 657 | 644 | 629 |
| 490 | 1322 | 1397 | 1465 | 1460 | 1411 | 1375 | 1332 | 1102 | 816 | 682 | 667 | 651 |
| 480 | 1377 | 1455 | 1524 | 1519 | 1468 | 1431 | 1385 | 1147 | 848 | 707 | 689 | 672 |
| 470 | 1433 | 1513 | 1583 | 1578 | 1526 | 1487 | 1439 | 1193 | 881 | 732 | 710 | 694 |
| 460 | 1489 | 1572 | 1643 | 1638 | 1584 | 1544 | 1493 | 1239 | 914 | 757 | 731 | 714 |
| 450 | 1546 | 1631 | 1703 | 1698 | 1642 | 1601 | 1547 | 1285 | 947 | 782 | 750 | 734 |
| 440 | 1603 | 1690 | 1763 | 1757 | 1700 | 1657 | 1600 | 1331 | 979 | 805 | 768 | 752 |
| 430 | 1660 | 1749 | 1821 | 1816 | 1757 | 1713 | 1652 | 1376 | 1011 | 828 | 785 | 769 |
| 420 | 1716 | 1806 | 1878 | 1873 | 1813 | 1767 | 1703 | 1421 | 1042 | 849 | 799 | 784 |
| 410 | 1771 | 1863 | 1933 | 1928 | 1867 | 1820 | 1752 | 1464 | 1072 | 869 | 810 | 796 |
| 400 | 1825 | 1917 | 1985 | 1980 | 1918 | 1870 | 1798 | 1505 | 1100 | 887 | 818 | 805 |
| 390 | 1875 | 1968 | 2034 | 2028 | 1966 | 1916 | 1840 | 1544 | 1127 | 902 | 821 | 809 |
| 380 | 1923 | 2015 | 2078 | 2072 | 2009 | 1959 | 1879 | 1580 | 1150 | 913 | 820 | 808 |
| 370 | 1966 | 2058 | 2117 | 2111 | 2048 | 1997 | 1912 | 1613 | 1170 | 922 | 811 | 802 |
| 360 | 2005 | 2095 | 2150 | 2144 | 2080 | 2029 | 1939 | 1640 | 1187 | 925 | 794 | 787 |
| 350 | 2038 | 2126 | 2174 | 2169 | 2106 | 2054 | 1960 | 1662 | 1198 | 922 | 766 | 760 |
| 340 | 2065 | 2150 | 2190 | 2185 | 2123 | 2071 | 1971 | 1678 | 1203 | 912 | 726 | 720 |
| 330 | 2083 | 2163 | 2192 | 2188 | 2128 | 2078 | 1969 | 1685 | 1200 | 890 | 674 | 663 |
| 320 | 2090 | 2164 | 2178 | 2172 | 2118 | 2071 | 1948 | 1683 | 1187 | 855 | 610 | 593 |
| 310 | 2081 | 2144 | 2139 | 2130 | 2084 | 2040 | 1896 | 1663 | 1161 | 809 | 535 | 508 |
| 300 | 2049 | 2093 | 2070 | 2056 | 2019 | 1981 | 1812 | 1620 | 1120 | 751 | 453 | 418 |
| 290 | 1986 | 2006 | 1968 | 1946 | 1921 | 1892 | 1693 | 1546 | 1058 | 681 | 369 | 324 |
| 280 | 1891 | 1884 | 1834 | 1808 | 1795 | 1776 | 1535 | 1438 | 975 | 600 | 284 | 232 |
| 270 | 1761 | 1729 | 1671 | 1638 | 1640 | 1630 | 1329 | 1293 | 870 | 510 | 205 | 154 |
| 260 | 1600 | 1545 | 1488 | 1450 | 1462 | 1454 | 1069 | 1107 | 748 | 418 | 140 | 92.6 |
| 250 | 1417 | 1347 | 1287 | 1249 | 1271 | 1260 | 760 | 886 | 613 | 326 | 88.2 | 46.1 |
| 240 | 1222 | 1148 | 1082 | 1056 | 1065 | 1052 | 416 | 639 | 471 | 238 | 50.2 | 22.0 |
| 230 | 1026 | 957 | 902 | 872 | 870 | 844 | 177 | 395 | 334 | 161 | 26.1 | 5.8 |
| 220 | 847 | 790 | 748 | 716 | 699 | 658 | 79.9 | 186 | 212 | 102 | 12.3 | 1.4 |
| 210 | 696 | 653 | 619 | 590 | 562 | 509 | 40.6 | 58.3 | 115 | 57.0 | 5.2 | |
| 200 | 574 | 549 | 521 | 494 | 456 | 397 | 18.3 | 10.6 | 47.9 | 25.6 | 1.9 | |
| 190 | 483 | 470 | 447 | 421 | 377 | 316 | 8.9 | | 11.4 | 6.2 | .4 | |
| 180 | 415 | 408 | 388 | 362 | 316 | 254 | 5.3 | | | .4 | | |
| 170 | 363 | 359 | 340 | 314 | 268 | 208 | 4.2 | | | | | |
| 160 | 321 | 316 | 299 | 272 | 228 | 172 | 3.4 | | | | | |
| 150 | 284 | 277 | 261 | 235 | 194 | 145 | 2.9 | | | | | |
| 140 | 246 | 239 | 224 | 201 | 167 | 125 | 2.7 | | | | | |
| 130 | 210 | 208 | 195 | 177 | 148 | 113 | 2.4 | | | | | |
| 120 | 188 | 188 | 179 | 164 | 139 | 106 | 2.1 | | | | | |
| 110 | 135 | 123 | 112 | 108 | 99.1 | 45.5 | | | | | | |

## Corrigendum

In the tabulations of average electron density profiles for Puerto Rico, February 1960 in the previous issue (CRPL-F 190 Part A), the average profiles for hours 1900-2300 were inadvertently omitted. The complete table of average profiles is given in this issue, following the average profiles for March 1960.

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

PUERTO RICO — 60 W — FEB 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 25 | 24 | 26 | 26 | 26 | 25 | 24 | 25 | 26 | 27 | 25 | 26 |
| HMIN | 235 | 228 | 226 | 213 | 201 | 216 | 213 | 219 | 110 | 110 | 109 | 109 |
| PATIO | 5.5 | 5.8 | 6.1 | 7.0 | 5.6 | 4.3 | 4.2 | 5.9 | 5.1 | 4.7 | 4.5 | 4.4 |
| SCAT | 46.6 | 43.9 | 43.5 | 38.0 | 55.4 | 66.0 | 63.7 | 45.5 | 44.4 | 47.7 | 49.9 | 51.9 |
| NMAX | 636 | 592 | 574 | 491 | 308 | 261 | 240 | 470 | 1110 | 1610 | 1979 | 2099 |
| HMAXF | 344 | 327 | 320 | 296 | 312 | 357 | 352 | 312 | 277 | 286 | 297 | 299 |
| SHMAX | 401 | 350 | 324 | 248 | 210 | 231 | 207 | 279 | 776 | 1236 | 1608 | 1777 |
| SHINF | 2195 | 2020 | 1942 | 1633 | 1078 | 968 | 884 | 1605 | 3908 | 5778 | 7190 | 7697 |
| KM | | | | | | | | | | | | |
| 950 | 50.0 | 43.4 | 40.5 | 31.5 | 21.0 | 22.3 | 19.6 | 32.3 | 64.1 | 97.2 | 125 | 134 |
| 900 | 64.1 | 55.7 | 51.9 | 40.5 | 26.9 | 28.6 | 25.1 | 41.4 | 82.2 | 125 | 160 | 172 |
| 850 | 82.2 | 71.4 | 66.6 | 51.9 | 34.5 | 36.7 | 32.2 | 53.0 | 105 | 160 | 205 | 220 |
| 800 | 105 | 91.5 | 85.3 | 66.5 | 44.3 | 47.0 | 41.2 | 68.0 | 135 | 205 | 263 | 283 |
| 750 | 135 | 117 | 109 | 85.2 | 56.7 | 60.1 | 52.7 | 87.1 | 173 | 263 | 337 | 362 |
| 700 | 172 | 150 | 140 | 109 | 72.4 | 76.6 | 67.3 | 111 | 222 | 336 | 431 | 463 |
| 650 | 219 | 191 | 178 | 139 | 92.2 | 97.2 | 85.6 | 142 | 283 | 429 | 550 | 591 |
| 600 | 276 | 242 | 226 | 176 | 117 | 122 | 108 | 180 | 361 | 546 | 700 | 752 |
| 550 | 346 | 303 | 284 | 222 | 147 | 152 | 135 | 227 | 457 | 691 | 884 | 950 |
| 500 | 425 | 376 | 352 | 277 | 182 | 186 | 166 | 282 | 574 | 867 | 1106 | 1187 |
| 490 | 442 | 391 | 367 | 289 | 190 | 193 | 172 | 294 | 600 | 905 | 1155 | 1239 |
| 480 | 459 | 407 | 382 | 302 | 197 | 199 | 179 | 306 | 627 | 945 | 1205 | 1292 |
| 470 | 476 | 423 | 397 | 314 | 205 | 206 | 185 | 319 | 654 | 986 | 1256 | 1347 |
| 460 | 492 | 439 | 413 | 327 | 213 | 213 | 191 | 331 | 683 | 1027 | 1308 | 1402 |
| 450 | 509 | 454 | 428 | 339 | 221 | 219 | 198 | 344 | 711 | 1070 | 1361 | 1459 |
| 440 | 525 | 470 | 443 | 352 | 229 | 225 | 204 | 356 | 741 | 1113 | 1415 | 1515 |
| 430 | 541 | 486 | 458 | 365 | 237 | 231 | 210 | 369 | 770 | 1156 | 1468 | 1572 |
| 420 | 556 | 501 | 473 | 378 | 244 | 236 | 215 | 381 | 800 | 1200 | 1522 | 1629 |
| 410 | 570 | 515 | 488 | 390 | 252 | 241 | 220 | 393 | 830 | 1244 | 1576 | 1686 |
| 400 | 583 | 529 | 502 | 403 | 259 | 245 | 225 | 405 | 861 | 1287 | 1629 | 1741 |
| 390 | 594 | 542 | 515 | 414 | 266 | 248 | 229 | 416 | 890 | 1329 | 1680 | 1796 |
| 380 | 602 | 554 | 527 | 426 | 272 | 250 | 232 | 426 | 920 | 1371 | 1730 | 1848 |
| 370 | 608 | 564 | 537 | 436 | 278 | 250 | 235 | 436 | 948 | 1411 | 1777 | 1897 |
| 360 | 610 | 572 | 546 | 445 | 283 | 249 | 236 | 444 | 976 | 1449 | 1822 | 1943 |
| 350 | 608 | 577 | 553 | 453 | 287 | 247 | 236 | 452 | 1002 | 1484 | 1862 | 1984 |
| 340 | 601 | 580 | 558 | 458 | 290 | 242 | 234 | 457 | 1026 | 1516 | 1898 | 2020 |
| 330 | 587 | 577 | 559 | 461 | 292 | 235 | 230 | 459 | 1048 | 1545 | 1928 | 2050 |
| 320 | 564 | 567 | 555 | 461 | 292 | 227 | 223 | 458 | 1067 | 1568 | 1951 | 2073 |
| 310 | 532 | 547 | 543 | 458 | 291 | 215 | 213 | 454 | 1083 | 1586 | 1967 | 2086 |
| 300 | 490 | 514 | 522 | 449 | 287 | 200 | 200 | 442 | 1094 | 1597 | 1973 | 2086 |
| 290 | 437 | 468 | 488 | 436 | 280 | 185 | 183 | 422 | 1100 | 1597 | 1960 | 2063 |
| 280 | 374 | 406 | 438 | 416 | 269 | 168 | 164 | 391 | 1098 | 1577 | 1915 | 2008 |
| 270 | 301 | 327 | 372 | 389 | 254 | 148 | 142 | 348 | 1081 | 1532 | 1829 | 1913 |
| 260 | 226 | 249 | 290 | 350 | 234 | 128 | 120 | 291 | 1042 | 1458 | 1703 | 1782 |
| 250 | 151 | 174 | 203 | 297 | 207 | 106 | 97.5 | 231 | 977 | 1347 | 1538 | 1610 |
| 240 | 84.3 | 104 | 124 | 234 | 174 | 85.8 | 77.2 | 159 | 882 | 1196 | 1338 | 1409 |
| 230 | 42.2 | 55.0 | 65.2 | 162 | 136 | 64.3 | 57.6 | 96.3 | 760 | 1018 | 1122 | 1190 |
| 220 | 16.5 | 22.0 | 25.4 | 91.5 | 94.7 | 42.3 | 37.3 | 51.8 | 623 | 827 | 898 | 970 |
| 210 | 3.5 | 7.2 | 7.3 | 42.7 | 57.2 | 22.5 | 24.4 | 18.1 | 485 | 649 | 705 | 780 |
| 200 | 1.7 | .8 | .2 | 12.9 | 21.1 | 8.4 | 10.3 | 5.4 | 365 | 506 | 557 | 625 |
| 190 | | | | 2.1 | 3.5 | 1.8 | 1.4 | .6 | 271 | 397 | 449 | 504 |
| 180 | | | | | .6 | | | | 201 | 317 | 370 | 417 |
| 170 | | | | | | | | | 153 | 256 | 311 | 352 |
| 160 | | | | | | | | | 123 | 210 | 263 | 302 |
| 150 | | | | | | | | | 104 | 175 | 223 | 260 |
| 140 | | | | | | | | | 93.9 | 150 | 191 | 224 |
| 130 | | | | | | | | | 86.6 | 134 | 168 | 195 |
| 120 | | | | | | | | | 77.8 | 124 | 155 | 177 |
| 110 | | | | | | | | | 17.7 | 62.7 | 82.2 | 108 |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

PUERTO RICO — 60 W — FEB 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 24 | 25 | 21 | 21 | 23 | 19 | 24 | 24 | 22 | 24 | 24 | 25 |
| HMIN | 109 | 109 | 109 | 109 | 109 | 110 | 211 | 201 | 196 | 210 | 224 | 222 |
| RATIO | 4.1 | 3.9 | 3.8 | 3.7 | 3.8 | 4.1 | 5.1 | 5.0 | 5.1 | 4.7 | 5.0 | 5.2 |
| SCAT | 55.3 | 58.6 | 60.8 | 63.6 | 61.2 | 58.0 | 52.7 | 52.4 | 50.6 | 55.2 | 50.9 | 49.4 |
| NMAX | 2066 | 2071 | 1983 | 1914 | 1903 | 1850 | 1857 | 1507 | 1069 | 856 | 792 | 704 |
| HMAXF | 309 | 320 | 325 | 331 | 333 | 324 | 325 | 323 | 323 | 346 | 351 | 339 |
| SHMAX | 1884 | 2017 | 2003 | 1985 | 1922 | 1676 | 1309 | 1030 | 759 | 666 | 565 | 478 |
| SHINF | 7711 | 7857 | 7611 | 7386 | 7291 | 6895 | 6547 | 5332 | 3774 | 3080 | 2800 | 2464 |
| KM | | | | | | | | | | | | |
| 950 | 139 | 148 | 145 | 143 | 144 | 134 | 136 | 103 | 77.2 | 70.6 | 66.4 | 54.9 |
| 900 | 178 | 189 | 186 | 184 | 185 | 172 | 174 | 139 | 98.9 | 90.6 | 85.1 | 70.4 |
| 850 | 228 | 243 | 239 | 236 | 237 | 221 | 223 | 178 | 127 | 116 | 109 | 90.2 |
| 800 | 293 | 311 | 306 | 302 | 304 | 283 | 286 | 228 | 163 | 149 | 140 | 116 |
| 750 | 375 | 398 | 392 | 387 | 389 | 362 | 366 | 292 | 208 | 190 | 179 | 148 |
| 700 | 479 | 509 | 500 | 495 | 496 | 463 | 468 | 374 | 266 | 243 | 228 | 189 |
| 650 | 611 | 649 | 637 | 630 | 632 | 590 | 596 | 476 | 339 | 308 | 290 | 240 |
| 600 | 777 | 823 | 808 | 798 | 800 | 747 | 755 | 604 | 430 | 389 | 366 | 304 |
| 550 | 979 | 1035 | 1015 | 1001 | 1004 | 940 | 949 | 760 | 540 | 485 | 456 | 381 |
| 500 | 1221 | 1285 | 1258 | 1239 | 1241 | 1165 | 1176 | 943 | 669 | 594 | 559 | 470 |
| 490 | 1273 | 1338 | 1310 | 1290 | 1292 | 1214 | 1225 | 982 | 696 | 617 | 580 | 489 |
| 480 | 1327 | 1393 | 1363 | 1341 | 1343 | 1263 | 1274 | 1022 | 724 | 639 | 601 | 507 |
| 470 | 1381 | 1448 | 1416 | 1393 | 1395 | 1312 | 1324 | 1062 | 753 | 662 | 623 | 526 |
| 460 | 1437 | 1504 | 1470 | 1445 | 1446 | 1363 | 1375 | 1103 | 781 | 684 | 643 | 545 |
| 450 | 1492 | 1560 | 1524 | 1497 | 1497 | 1413 | 1425 | 1144 | 810 | 705 | 664 | 564 |
| 440 | 1548 | 1616 | 1577 | 1548 | 1548 | 1463 | 1475 | 1185 | 838 | 726 | 684 | 583 |
| 430 | 1604 | 1671 | 1630 | 1599 | 1598 | 1512 | 1524 | 1225 | 866 | 746 | 702 | 601 |
| 420 | 1660 | 1726 | 1681 | 1647 | 1646 | 1561 | 1572 | 1265 | 893 | 765 | 720 | 618 |
| 410 | 1715 | 1778 | 1731 | 1694 | 1692 | 1607 | 1618 | 1303 | 920 | 782 | 736 | 634 |
| 400 | 1768 | 1829 | 1778 | 1738 | 1735 | 1652 | 1662 | 1339 | 945 | 797 | 750 | 649 |
| 390 | 1819 | 1876 | 1822 | 1779 | 1775 | 1693 | 1703 | 1374 | 968 | 810 | 762 | 663 |
| 380 | 1867 | 1920 | 1862 | 1816 | 1810 | 1731 | 1741 | 1405 | 989 | 819 | 771 | 675 |
| 370 | 1912 | 1959 | 1897 | 1847 | 1840 | 1765 | 1774 | 1433 | 1008 | 824 | 776 | 684 |
| 360 | 1952 | 1993 | 1927 | 1873 | 1864 | 1794 | 1802 | 1457 | 1024 | 825 | 774 | 691 |
| 350 | 1987 | 2021 | 1950 | 1892 | 1881 | 1816 | 1823 | 1477 | 1036 | 821 | 764 | 693 |
| 340 | 2017 | 2040 | 1964 | 1902 | 1887 | 1831 | 1836 | 1490 | 1042 | 809 | 746 | 691 |
| 330 | 2038 | 2049 | 1968 | 1900 | 1881 | 1837 | 1838 | 1496 | 1040 | 786 | 716 | 681 |
| 320 | 2051 | 2046 | 1957 | 1884 | 1857 | 1828 | 1825 | 1489 | 1029 | 755 | 673 | 660 |
| 310 | 2051 | 2025 | 1927 | 1845 | 1813 | 1801 | 1790 | 1466 | 1007 | 713 | 618 | 627 |
| 300 | 2031 | 1981 | 1874 | 1783 | 1744 | 1750 | 1728 | 1420 | 971 | 659 | 550 | 579 |
| 290 | 1985 | 1910 | 1796 | 1697 | 1653 | 1671 | 1631 | 1347 | 918 | 596 | 472 | 517 |
| 280 | 1905 | 1809 | 1692 | 1589 | 1537 | 1564 | 1500 | 1246 | 850 | 524 | 390 | 441 |
| 270 | 1793 | 1679 | 1562 | 1460 | 1406 | 1434 | 1334 | 1118 | 764 | 446 | 305 | 357 |
| 260 | 1647 | 1524 | 1413 | 1315 | 1260 | 1279 | 1134 | 962 | 666 | 365 | 220 | 268 |
| 250 | 1470 | 1346 | 1254 | 1159 | 1103 | 1103 | 887 | 781 | 558 | 283 | 152 | 182 |
| 240 | 1272 | 1161 | 1085 | 1001 | 944 | 920 | 601 | 576 | 441 | 204 | 99.4 | 108 |
| 230 | 1071 | 984 | 924 | 852 | 793 | 745 | 314 | 373 | 321 | 135 | 58.2 | 56.0 |
| 220 | 884 | 817 | 778 | 717 | 662 | 585 | 120 | 196 | 201 | 72.9 | 31.7 | 26.3 |
| 210 | 722 | 675 | 653 | 604 | 549 | 458 | 40.5 | 87.4 | 100 | 35.0 | 12.9 | 7.7 |
| 200 | 592 | 562 | 549 | 510 | 457 | 360 | 6.8 | 28.9 | 35.7 | 10.7 | 4.9 | 2.2 |
| 190 | 494 | 475 | 465 | 433 | 380 | 286 | .5 | 4.3 | 4.8 | 2.5 | .8 | 1.5 |
| 180 | 421 | 408 | 397 | 369 | 318 | 228 | | | | | | |
| 170 | 362 | 353 | 342 | 315 | 267 | 185 | | | | | | |
| 160 | 314 | 308 | 295 | 269 | 225 | 152 | | | | | | |
| 150 | 271 | 267 | 254 | 231 | 191 | 129 | | | | | | |
| 140 | 233 | 229 | 219 | 198 | 165 | 113 | | | | | | |
| 130 | 203 | 202 | 194 | 173 | 146 | 104 | | | | | | |
| 120 | 187 | 186 | 180 | 160 | 136 | 97.1 | | | | | | |
| 110 | 105 | 111 | 105 | 94.0 | 79.7 | 25.3 | | | | | | |

# TABLES OF IONOSPHERIC DATA



APRIL 1960 - AUGUST 1957

Table 1

Washington, D. C. (38.7° N, 77.1° W) — April 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.25 | 26 | 290 | | | | | 2.65 |
| 01 | | 5.7 | 27 | 300 | | | | | 2.65 |
| 02 | | 5.6 | 25 | 300 | | | | | 2.65 |
| 03 | | 4.9 | 27 | 300 | | | | | 2.62 |
| 04 | | >4.5 | 27 | 300 | | | | | 2.65 |
| 05 | | 4.0 | 28 | 305 | | --- | ---- | | 2.70 |
| 06 | G | 4.85 | 30 | 270 | (3.2) | 121 | 2.02 | | 2.95 |
| 07 | 410 | 5.95 | 30 | 250 | 4.0 | 114 | 2.65 | >2.7 | 2.95 |
| 08 | 460 | 6.0 | 29 | 235 | 4.2 | 109 | 3.05 | | 2.90 |
| 09 | 385 | 7.5 | 30 | 220 | 4.4 | 109 | 3.30 | 3.4 | 2.95 |
| 10 | 470 | 7.8 | 30 | 210 | 4.7 | 109 | 3.50 | 3.5 | 2.75 |
| 11 | 350 | 8.6 | 30 | 210 | 4.8 | 109 | 3.60 | | 2.75 |
| 12 | 375 | 8.4 | 30 | 220 | 4.8 | 107 | 3.70 | | 2.72 |
| 13 | 360 | 8.85 | 30 | 225 | 4.0 | 109 | 3.70 | | 2.70 |
| 14 | 345 | 0.95 | 30 | 230 | 4.7 | 109 | 3.62 | | 2.75 |
| 15 | 420 | 8.8 | 30 | 230 | 4.7 | 109 | 3.50 | | 2.75 |
| 16 | 350 | 8.5 | 30 | 230 | 4.6 | 109 | 3.20 | | 2.80 |
| 17 | (370) | 8.5 | 30 | 240 | --- | 113 | 2.02 | 2.9 | 2.80 |
| 18 | (305) | 8.95 | 30 | 260 | --- | 121 | 2.22 | 2.3 | 2.85 |
| 19 | | 9.1 | 29 | 250 | | --- | ---- | | 2.05 |
| 20 | | 8.3 | 28 | 250 | | | | | 2.78 |
| 21 | | 7.2 | 27 | 255 | | | | | 2.75 |
| 22 | | 6.9 | 28 | 275 | | | | | 2.65 |
| 23 | | 6.5 | 27 | 290 | | | | | 2.65 |

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

Table 2

Washington, D. C. (30.7° N, 77.1° W) — March 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.6 | 31 | 280 | | | | | 2.80 |
| 01 | | 5.4 | 31 | 280 | | | | | 2.75 |
| 02 | | 5.2 | 31 | 285 | | | | | 2.75 |
| 03 | | 5.0 | 31 | 280 | | | | | 2.80 |
| 04 | | 4.7 | 31 | 275 | | | | | 2.00 |
| 05 | | 4.3 | 31 | 280 | | | | | 2.80 |
| 06 | | (4.6) | 31 | 265 | | --- | ---- | | (2.90) |
| 07 | | 6.5 | 31 | 245 | | 119 | 2.15 | | 3.20 |
| 08 | (255) | 8.0 | 31 | 235 | --- | 111 | 2.70 | | 3.20 |
| 09 | 270 | 8.6 | 31 | 220 | --- | 109 | 3.10 | | 3.20 |
| 10 | 270 | 9.3 | 31 | 210 | --- | 109 | 3.32 | | 3.05 |
| 11 | 290 | 9.9 | 31 | 205 | --- | 109 | 3.45 | | 2.98 |
| 12 | 280 | 10.6 | 31 | 205 | --- | 109 | 3.55 | | 2.95 |
| 13 | 270 | 10.6 | 31 | 215 | --- | 109 | 3.55 | | 2.90 |
| 14 | (275) | 10.8 | 31 | 220 | --- | 109 | 3.50 | | 2.90 |
| 15 | (270) | 10.7 | 31 | 230 | --- | 109 | 3.30 | | 2.90 |
| 16 | --- | 10.4 | 31 | 235 | --- | 111 | 3.00 | | 2.90 |
| 17 | --- | 10.1 | 31 | 240 | --- | 115 | 2.50 | | 2.95 |
| 10 | | 9.7 | 31 | 240 | | 131 | 1.85 | | 3.00 |
| 19 | | 8.75 | 30 | 230 | | | | | 2.98 |
| 20 | | 7.75 | 30 | 240 | | | | | 2.95 |
| 21 | | 7.0 | 30 | 240 | | | | | 2.90 |
| 22 | | 6.4 | 30 | 250 | | | | | 2.85 |
| 23 | | 5.85 | 30 | 270 | | | | | 2.80 |

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

Table 3

Huancayo, Peru (12.0° S, 75.3° W) — March 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 9.1 | 12 | 220 | | | | | 3.08 |
| 01 | | 8.8 | 18 | 210 | | | | | 3.05 |
| 02 | | 7.55 | 22 | 225 | | | | | 3.15 |
| 03 | | 6.45 | 24 | 235 | | | | 3.2 | 3.20 |
| 04 | | 5.35 | 24 | 230 | | | | | 3.22 |
| 05 | | 3.9 | 19 | 235 | | | | | 3.25 |
| 06 | | 5.0 | 23 | 265 | | --- | 1.40 | 3.4 | 3.00 |
| 07 | | 9.25 | 30 | 245 | | 119 | 2.50 | 2.5 | 3.20 |
| 08 | | 11.5 | 31 | 230 | | 113 | (3.10) | 7.0 | 3.00 |
| 09 | | 12.8 | 30 | 220 | | 111 | (3.55) | 8.0 | 2.65 |
| 10 | --- | 13.2 | 28 | 215 | | --- | (3.85) | 9.0 | 2.45 |
| 11 | | 13.0 | 29 | 210 | | --- | (4.00) | 9.0 | 2.40 |
| 12 | | 12.1 | 30 | 205 | | --- | (4.00) | 9.0 | 2.35 |
| 13 | | 12.1 | 30 | 200 | | --- | (4.00) | 9.0 | 2.35 |
| 14 | | 12.25 | 28 | 200 | | --- | (3.95) | 9.0 | 2.32 |
| 15 | | 12.6 | 27 | 200 | | --- | (3.65) | 8.0 | 2.40 |
| 16 | | 12.3 | 27 | 210 | | --- | (3.25) | 7.6 | 2.35 |
| 17 | | 12.75 | 26 | 250 | | --- | (2.70) | 7.0 | 2.35 |
| 18 | | 11.7 | 27 | 275 | | <153 | (1.90) | 4.7 | 2.35 |
| 19 | | 10.55 | 30 | 360 | | | | | 2.25 |
| 20 | | 9.5 | 14 | 380 | | | | | 2.25 |
| 21 | | 8.7 | 11 | 325 | | | | | (2.40) |
| 22 | | (9.1) | 12 | 265 | | | | | (2.70) |
| 23 | | 9.3 | 11 | 240 | | | | | 2.90 |

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

Table 4

Thule, Greenland (76.6° N, 68.7° W) — February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (4.7) | 18 | 260 | | | | | (2.82) |
| 01 | | (5.8) | 13 | 255 | | | | | (2.92) |
| 02 | | (5.0) | 13 | <265 | | | | | (2.90) |
| 03 | | (4.6) | 13 | 260 | | | | | (2.82) |
| 04 | | (5.5) | 8 | 250 | | | | | (2.95) |
| 05 | | (4.6) | 16 | 260 | | | | | (2.80) |
| 06 | | (5.15) | 12 | 250 | | | | | (2.80) |
| 07 | | (4.3) | 14 | 250 | | | | | (2.95) |
| 08 | | (5.0) | 19 | 250 | | 110 | 1.55 | 1.9 | (3.00) |
| 09 | | (5.0) | 21 | 240 | | (114) | 1.70 | | (2.98) |
| 10 | | (5.85) | 22 | 250 | | (119) | 1.85 | | (3.02) |
| 11 | | (6.0) | 21 | 250 | | <135 | 1.90 | 2.2 | (3.05) |
| 12 | | (6.35) | 22 | 250 | | <130 | 2.00 | | (3.00) |
| 13 | | (6.1) | 22 | 250 | | 120 | 1.95 | 2.2 | (3.05) |
| 14 | | (7.0) | 23 | 240 | | 127 | ---- | 2.2 | (2.95) |
| 15 | | (6.65) | 20 | 240 | | --- | ---- | 2.2 | (2.85) |
| 16 | | (7.0) | 16 | 250 | | | | 2.8 | (2.90) |
| 17 | | (6.2) | 17 | 240 | | | | 3.9 | (2.95) |
| 18 | | (7.0) | 12 | 250 | | | | 3.6 | (2.85) |
| 19 | | (5.5) | 14 | 250 | | | | 3.6 | (2.85) |
| 20 | | (5.6) | 17 | 250 | | | | | (2.80) |
| 21 | | (5.0) | 17 | 250 | | | | 1.7 | (2.80) |
| 22 | | (5.8) | 9 | 250 | | | | | (2.95) |
| 23 | | (4.9) | 15 | 260 | | | | | (2.90) |

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

Table 5

Narsarssuak, Greenland (61.2° N, 45.4° W) — February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (4.7) | 13 | | | | | 3.8 | (2.70) |
| 01 | | (4.8) | 14 | | | | | 3.6 | (2.65) |
| 02 | | (4.5) | 13 | | | | | 3.0 | (2.70) |
| 03 | | (4.4) | 11 | | | | | 4.3 | (2.75) |
| 04 | | (4.4) | 13 | | | | | 4.0 | (2.60) |
| 05 | | (4.3) | 19 | | | | | 4.1 | (2.65) |
| 06 | | (4.2) | 22 | | | | | 3.6 | (2.70) |
| 07 | | (4.5) | 23 | | | --- | ---- | | (2.88) |
| 08 | | 5.75 | 26 | | | (122) | 2.05 | | 3.05 |
| 09 | | 7.05 | 26 | | | (125) | 2.30 | | 3.02 |
| 10 | | 0.2 | 27 | | | 121 | 2.60 | | 3.05 |
| 11 | | 9.6 | 27 | | | 120 | 2.70 | | 3.00 |
| 12 | | 10.3 | 27 | | | 120 | 2.80 | | 2.95 |
| 13 | | 10.2 | 20 | | | 119 | 2.75 | | 3.00 |
| 14 | | (10.0) | 29 | | | 118 | 2.75 | | (2.98) |
| 15 | | (0.0) | 25 | | | 119 | 2.70 | | (3.10) |
| 16 | | (7.5) | 25 | | | (125) | 2.25 | | 3.10 |
| 17 | | (6.0) | 23 | | | --- | ---- | 3.1 | (3.10) |
| 18 | | (6.6) | 16 | | | | | 3.2 | (3.05) |
| 19 | | (4.55) | 14 | | | | | 3.3 | (2.68) |
| 20 | | (5.4) | 11 | | | | | 3.4 | (2.80) |
| 21 | | (5.8) | 12 | | | | | 3.2 | (2.75) |
| 22 | | (5.8) | 16 | | | | | 3.0 | (2.75) |
| 23 | | (5.15) | 8 | | | | | 3.6 | ---- |

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

Table 6

White Sands, New Mexico (32.3° N, 106.5° W) — February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.5 | 29 | 270 | | | | | 2.80 |
| 01 | | 4.3 | 29 | 275 | | | | | 2.75 |
| 02 | | 4.2 | 29 | 280 | | | | | 2.80 |
| 03 | | 4.2 | 29 | 260 | | | | | 2.85 |
| 04 | | 4.0 | 29 | 260 | | | | | 2.85 |
| 05 | | 3.8 | 28 | 200 | | | | | 2.70 |
| 06 | | 3.7 | 27 | 295 | | | | | 2.70 |
| 07 | | 6.0 | 27 | 240 | | <155 | 1.88 | | 3.10 |
| 08 | | 9.2 | 25 | 230 | | 109 | 2.60 | | 3.30 |
| 09 | | 10.85 | 26 | 225 | | 105 | 3.10 | 3.1 | 3.20 |
| 10 | --- | 11.8 | 25 | 220 | | 102 | 3.40 | | 3.15 |
| 11 | --- | 12.4 | 27 | 210 | | 105 | 3.60 | 3.8 | 3.10 |
| 12 | (270) | 12.6 | 27 | 205 | | 105 | 3.70 | | 3.00 |
| 13 | (270) | 12.9 | 27 | 215 | | 105 | 3.70 | 3.8 | 2.95 |
| 14 | --- | 12.05 | 28 | 220 | | 105 | 3.60 | 3.8 | 2.95 |
| 15 | --- | 12.2 | 28 | 220 | | 105 | 3.40 | 3.4 | 2.92 |
| 16 | | 12.0 | 28 | 230 | | 105 | 3.00 | 3.2 | 2.95 |
| 17 | | 11.5 | 29 | 225 | | 111 | 2.40 | 2.6 | 3.10 |
| 18 | | 10.5 | 29 | 215 | | | | 1.7 | 3.15 |
| 19 | | 8.5 | 27 | 215 | | | | 2.3 | 3.05 |
| 20 | | 6.7 | 29 | 220 | | | | 2.2 | 3.05 |
| 21 | | 5.7 | 29 | 230 | | | | | 3.00 |
| 22 | | 4.9 | 29 | 245 | | | | | 3.00 |
| 23 | | 4.55 | 28 | 255 | | | | | 2.92 |

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

Table 7

Grand Bahama I. (26.6° N, 78.2° W) February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.85 | 28 | 250 | | | | | 2.90 |
| 01 | | 5.8 | 27 | 260 | | | | | 3.00 |
| 02 | | 5.55 | 28 | 255 | | | | | 2.98 |
| 03 | | 5.15 | 28 | 250 | | | | | 3.05 |
| 04 | | 4.7 | 28 | 230 | | | | | 2.95 |
| 05 | | 4.25 | 28 | 260 | | | | | --72 |
| 06 | | 4.15 | 28 | 265 | | | | | 2.82 |
| 07 | | 6.45 | 28 | 240 | | <165 | 2.00 | | 3.15 |
| 08 | | 9.2 | 28 | 225 | | 110 | 2.60 | | 3.20 |
| 09 | | 10.5 | 27 | 220 | | 110 | 3.12 | | 3.20 |
| 10 | | 11.9 | 27 | 220 | | 107 | 3.48 | | 3.15 |
| 11 | --- | 12.2 | 28 | 215 | | 105 | 3.70 | | 3.02 |
| 12 | --- | >12.0 | 27 | 215 | | 110 | 3.80 | | 2.90 |
| 13 | --- | 12.3 | 28 | 215 | | 109 | 3.80 | | 2.90 |
| 14 | --- | (12.3) | 28 | 220 | | 110 | 3.60 | | 2.90 |
| 15 | --- | (12.0) | 27 | 220 | | 110 | 3.40 | | 2.90 |
| 16 | | (11.4) | 27 | 230 | | 110 | 3.10 | | (3.05) |
| 17 | | (11.2) | 27 | 230 | | 110 | 2.60 | 2.8 | ---- |
| 18 | | >10.0 | 28 | 225 | | <150 | 1.90 | | |
| 19 | | >9.0 | 28 | 210 | | | | | (3.15) |
| 20 | | (8.0) | 28 | 215 | | | | | (3.02) |
| 21 | | 6.8 | 28 | 230 | | | | | 3.00 |
| 22 | | 6.2 | 27 | 240 | | | | | 2.85 |
| 23 | | 5.95 | 24 | 265 | | | | | 2.85 |

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

Table 8

Okinawa I. (26.3° N, 127.8° E) February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.5 | 28 | 240 | | | | | (2.95) |
| 01 | | 9.3 | 27 | 235 | | | | | (3.02) |
| 02 | | 7.3 | 27 | 235 | | | | | (3.00) |
| 03 | | 6.8 | 27 | 240 | | | | | (3.00) |
| 04 | | >5.8 | 27 | 230 | | | | | (3.10) |
| 05 | | >4.4 | 28 | 245 | | | | | (2.95) |
| 06 | | (4.05) | 26 | (330) | | | | | (2.65) |
| 07 | | 5.7 | 28 | 270 | | | | | 2.90 |
| 08 | | 9.5 | 28 | 235 | | --- | ---- | | 3.20 |
| 09 | | 12.0 | 27 | 235 | | 110 | ---- | >3.0 | 3.12 |
| 10 | | 13.5 | 28 | 230 | | 109 | ---- | >3.5 | 3.12 |
| 11 | --- | 14.4 | 28 | 220 | | 108 | ---- | 3.7 | 3.08 |
| 12 | --- | 14.8 | 28 | 215 | | (109) | 3.88 | | 2.90 |
| 13 | --- | >15.4 | 28 | 210 | | (111) | 3.85 | 4.2 | 2.85 |
| 14 | --- | (16.0) | 27 | 220 | | 110 | 3.78 | | 2.85 |
| 15 | (280) | >15.9 | 26 | 230 | | (110) | (3.60) | 3.8 | 2.80 |
| 16 | --- | >15.2 | 25 | 230 | | 110 | 3.35 | 3.4 | 2.90 |
| 17 | | >14.5 | 26 | 235 | | 116 | (2.80) | 3.2 | 2.95 |
| 18 | | >14.3 | 28 | 235 | | | | | 3.00 |
| 19 | | >13.4 | 28 | 225 | | | | | (2.95) |
| 20 | | >13.4 | 28 | 235 | | | | | (2.95) |
| 21 | | >14.4 | 27 | 230 | | | | | ---- |
| 22 | | >12.6 | 28 | 225 | | | | | ---- |
| 23 | | >11.3 | 28 | 235 | | | | | (2.95) |

Time: 135.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 9

Talara, Peru (4.6° S, 81.3° W) February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 12.2 | 14 | 230 | | | | 3.0 | 2.92 |
| 01 | | >11.05 | 20 | 230 | | | | 3.8 | 3.12 |
| 02 | | 9.35 | 22 | 225 | | | | | 3.12 |
| 03 | | 7.65 | 22 | 230 | | | | | 3.18 |
| 04 | | 6.45 | 22 | <235 | | | | 1.7 | 3.10 |
| 05 | | 5.9 | 22 | 230 | | | | | 3.18 |
| 06 | | 6.1 | 21 | 245 | | | | 1.9 | 3.02 |
| 07 | | 7.6 | 25 | <260 | | 129 | 2.20 | 2.4 | 3.00 |
| 08 | | 10.9 | 27 | 240 | | 119 | 3.00 | 3.2 | 2.85 |
| 09 | | 13.0 | 26 | 220 | | 115 | 3.50 | | 2.80 |
| 10 | --- | 13.6 | 26 | 215 | | 112 | 3.80 | | 2.58 |
| 11 | --- | 14.0 | 27 | 210 | | 111 | 4.00 | | 2.45 |
| 12 | --- | 14.0 | 28 | <205 | | 111 | 4.10 | | 2.30 |
| 13 | --- | 14.0 | 28 | 200 | | 111 | 4.05 | | 2.25 |
| 14 | --- | >14.05 | 28 | 200 | --- | 111 | 4.00 | | 2.30 |
| 15 | | >14.0 | 27 | 210 | | 111 | 3.90 | 4.2 | 2.35 |
| 16 | | 13.9 | 28 | 215 | | 111 | 3.55 | 3.7 | 2.35 |
| 17 | | 13.55 | 28 | 230 | | 115 | 3.15 | 4.1 | 2.30 |
| 18 | | 13.45 | 28 | 260 | | (125) | 2.50 | 3.5 | 2.40 |
| 19 | | 13.3 | 29 | 280 | | | | 3.2 | (2.42) |
| 20 | | >13.2 | 28 | 350 | | | | 2.0 | 2.30 |
| 21 | | 13.15 | 18 | 330 | | | | | 2.45 |
| 22 | | >13.05 | 14 | 280 | | | | 1.8 | (2.75) |
| 23 | | (12.8) | 16 | 240 | | | | 2.1 | (2.82) |

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

Table 10

Grand Bahama I. (26.6° N, 78.2° W) January 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.3 | 29 | 260 | | | | | 2.98 |
| 01 | | 5.2 | 31 | 255 | | | | | 3.00 |
| 02 | | 4.95 | 30 | 250 | | | | | 3.00 |
| 03 | | 4.7 | 27 | 260 | | | | | 3.00 |
| 04 | | 4.45 | 30 | 255 | | | | | 2.85 |
| 05 | | 4.35 | 30 | 275 | | | | | 2.78 |
| 06 | | 4.5 | 31 | 270 | | | | | 2.85 |
| 07 | | 6.4 | 31 | 250 | | <170 | 1.85 | | 3.10 |
| 08 | | 9.8 | 31 | 230 | | <115 | 2.65 | | 3.20 |
| 09 | | 11.2 | 31 | 230 | | 110 | 3.05 | 3.2 | 3.20 |
| 10 | | 11.9 | 29 | 220 | | 108 | 3.40 | 3.7 | 3.10 |
| 11 | | 12.2 | 28 | 210 | | 108 | 3.65 | 4.0 | 3.00 |
| 12 | --- | 12.0 | 31 | 210 | | 110 | 3.80 | | 2.95 |
| 13 | --- | 11.8 | 31 | 220 | | 109 | 3.80 | | 2.90 |
| 14 | --- | 11.7 | 31 | 230 | | 109 | 3.70 | | 2.90 |
| 15 | | (11.7) | 31 | 230 | | 109 | 3.38 | | (2.85) |
| 16 | | (11.7) | 30 | 235 | | 110 | 3.00 | | 2.95 |
| 17 | | (11.15) | 30 | 230 | | <120 | 2.40 | 2.4 | (2.92) |
| 18 | | >9.1 | 30 | 220 | | | | 2.8 | (3.00) |
| 19 | | 8.2 | 31 | 220 | | | | 2.1 | 3.00 |
| 20 | | 7.6 | 29 | 240 | | | | 2.6 | 3.05 |
| 21 | | 6.25 | 30 | 240 | | | | | 3.05 |
| 22 | | 5.9 | 29 | 250 | | | | | 2.90 |
| 23 | | 5.4 | 29 | 265 | | | | | 2.90 |

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

Table 11

Talara, Peru (4.6° S, 81.3° W) January 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >12.0 | 13 | 245 | | | | 3.9 | 2.95 |
| 01 | | 9.6 | 15 | 245 | | | | 4.0 | 2.95 |
| 02 | | 8.4 | 19 | 240 | | | | 3.2 | 2.92 |
| 03 | | 7.6 | 23 | 240 | | | | 3.8 | 3.05 |
| 04 | | 6.4 | 25 | 240 | | | | 4.0 | 3.20 |
| 05 | | 5.3 | 29 | 240 | | | | 4.0 | 3.10 |
| 06 | | 4.9 | 27 | 265 | | | | 3.2 | 2.75 |
| 07 | | 8.9 | 29 | 260 | | <129 | 2.35 | 3.5 | 2.90 |
| 08 | | 11.9 | 31 | 240 | | 115 | 3.12 | 3.6 | 2.90 |
| 09 | | 13.3 | 30 | 225 | | 111 | 3.60 | 3.8 | 2.80 |
| 10 | | 13.6 | 30 | 215 | | 111 | 3.90 | 4.3 | 2.55 |
| 11 | | 14.0 | 30 | 210 | | 111 | 4.10 | | 2.30 |
| 12 | | 13.6 | 30 | 210 | | 111 | 4.15 | | 2.18 |
| 13 | | 13.5 | 30 | 210 | --- | 111 | 4.12 | | 2.15 |
| 14 | --- | >13.5 | 30 | 205 | (6.5) | 111 | 4.02 | | 2.20 |
| 15 | --- | 13.6 | 31 | 210 | --- | 111 | 3.80 | 4.5 | 2.25 |
| 16 | --- | 13.8 | 31 | 225 | --- | 111 | 3.50 | 4.0 | 2.32 |
| 17 | | 13.3 | 31 | <250 | | <119 | 3.18 | 3.9 | 2.38 |
| 18 | | >13.2 | 31 | 270 | | 129 | 2.50 | 3.5 | 2.40 |
| 19 | | >13.3 | 31 | 280 | | | | 3.3 | (2.50) |
| 20 | | 13.2 | 31 | 320 | | | | 2.0 | 2.55 |
| 21 | | >13.0 | 23 | 310 | | | | | (2.55) |
| 22 | | >13.0 | 19 | (280) | | | | 2.7 | 2.60 |
| 23 | | 12.7 | 18 | 265 | | | | 3.5 | 2.70 |

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

Table 12

Pole Station (90.0° S) January 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 430 | (6.0) | 29 | 240 | 4.5 | 101 | 2.95 | 4.8 | (2.50) |
| 01 | 440 | (5.7) | 25 | 235 | (4.4) | 101 | 2.95 | 3.5 | (2.50) |
| 02 | 445 | (5.9) | 27 | 240 | (4.4) | 101 | 2.95 | 4.0 | (2.50) |
| 03 | 445 | (5.85) | 28 | 245 | 4.3 | 101 | 2.95 | 3.0 | (2.40) |
| 04 | 435 | (5.9) | 26 | 240 | 4.3 | 101 | 2.90 | 3.1 | (2.40) |
| 05 | 460 | (5.9) | 25 | 230 | 4.2 | 101 | 2.90 | 3.0 | (2.40) |
| 06 | 460 | (5.65) | 28 | 230 | 4.2 | 103 | 2.90 | | (2.30) |
| 07 | (470) | (5.85) | 24 | 230 | (4.2) | 103 | 2.95 | | (2.30) |
| 08 | 505 | (5.2) | 24 | 240 | (4.2) | 103 | 2.92 | 3.2 | (2.25) |
| 09 | 520 | (5.4) | 21 | 230 | 4.1 | 103 | 2.95 | | (2.28) |
| 10 | (540) | (5.05) | 10 | 245 | (4.2) | 103 | 3.00 | | (2.20) |
| 11 | 630 | (5.1) | 17 | 260 | 4.2 | 101 | 3.05 | 3.8 | (2.30) |
| 12 | (550) | 5.2 | 20 | 265 | (4.3) | 103 | 3.20 | | 2.30 |
| 13 | (615) | 5.4 | 23 | <260 | 4.4 | 101 | 3.05 | | (2.45) |
| 14 | (480) | 5.5 | 26 | 260 | (4.6) | 103 | 3.05 | 4.1 | 2.60 |
| 15 | 520 | 6.0 | 27 | 250 | 4.3 | 103 | 3.00 | | 2.50 |
| 16 | 430 | (6.4) | 27 | 250 | 4.3 | 103 | 2.95 | 3.2 | (2.50) |
| 17 | 470 | (6.25) | 26 | 250 | 4.4 | 103 | 2.90 | | (2.40) |
| 18 | 545 | (5.9) | 21 | 240 | 4.3 | 103 | 2.95 | | (2.50) |
| 19 | 510 | (5.7) | 28 | 250 | 4.2 | 103 | 2.95 | 3.5 | (2.60) |
| 20 | (470) | (5.7) | 26 | 250 | 4.5 | 103 | 3.05 | 3.4 | (2.50) |
| 21 | (480) | (5.8) | 24 | 245 | 4.7 | 104 | 2.98 | 5.0 | (2.60) |
| 22 | (400) | (6.15) | 24 | 240 | (4.5) | 101 | 2.95 | 4.4 | (2.70) |
| 23 | 450 | (6.0) | 27 | <245 | (4.5) | 101 | 2.92 | 3.6 | (2.60) |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 13

Resolute Bay, Canada (74.7° N, 94.9° W) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.0 | 31 | 270 | | --- | ---- | | 2.60 |
| 01 | | 3.9 | 31 | 290 | | --- | ---- | | 2.55 |
| 02 | | 3.9 | 31 | 290 | | --- | ---- | | 2.55 |
| 03 | | 4.0 | 31 | 290 | | --- | ---- | | 2.55 |
| 04 | | 4.0 | 31 | 300 | | --- | ---- | | 2.55 |
| 05 | | 3.0 | 30 | 300 | | --- | ---- | | 2.55 |
| 06 | | 3.3 | 30 | 310 | | --- | ---- | | 2.50 |
| 07 | | 4.0 | 30 | 300 | | --- | ---- | | 2.60 |
| 08 | | 3.6 | 30 | 295 | | --- | ---- | | 2.60 |
| 09 | | 4.2 | 31 | 300 | | --- | ---- | | 2.55 |
| 10 | | 5.0 | 31 | 290 | | --- | ---- | | 2.55 |
| 11 | | 6.0 | 31 | 275 | | --- | ---- | | 2.60 |
| 12 | | 6.4 | 31 | 260 | | --- | 1.25 | | 2.70 |
| 13 | | 5.8 | 31 | 255 | | --- | 1.30 | | 2.75 |
| 14 | | 5.9 | 31 | 250 | | --- | ---- | | 2.75 |
| 15 | | 6.0 | 31 | 260 | | --- | ---- | | 2.55 |
| 16 | | 6.0 | 31 | 260 | | --- | ---- | | 2.60 |
| 17 | | 5.2 | 31 | 270 | | --- | ---- | | 2.50 |
| 18 | | 5.1 | 31 | 285 | | --- | ---- | | 2.50 |
| 19 | | 4.7 | 31 | 270 | | --- | ---- | | 2.50 |
| 20 | | 4.8 | 31 | 280 | | --- | ---- | | 2.55 |
| 21 | | 4.8 | 31 | 200 | | --- | ---- | | 2.50 |
| 22 | | 4.4 | 31 | 270 | | --- | ---- | | 2.60 |
| 23 | | 4.2 | 31 | 280 | | --- | ---- | | 2.60 |

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 14

Inverness, Scotland (57.4° N, 4.2° W) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >2.5 | 31 | 330 | | | | <1.1 | 2.40 |
| 01 | | 2.4 | 30 | 350 | | | | <1.2 | 2.45 |
| 02 | | 2.4 | 31 | 330 | | | | (1.1) | 2.50 |
| 03 | | 2.5 | 31 | 320 | | | | (1.2) | 2.50 |
| 04 | | 2.6 | 30 | 300 | | | | <1.1 | 2.55 |
| 05 | | 2.7 | 31 | 300 | | | | (1.1) | 2.60 |
| 06 | | 2.8 | 31 | 300 | | | | <1.6 | 2.65 |
| 07 | | >2.5 | 31 | 270 | | | | <1.6 | 2.70 |
| 08 | | 3.7 | 31 | 250 | | --- | ---- | <1.5 | 2.70 |
| 09 | | 6.2 | 31 | 240 | | 115 | 1.90 | | 3.00 |
| 10 | | 8.6 | 31 | 230 | | 110 | 2.25 | | 3.10 |
| 11 | | 10.2 | 31 | 240 | | 120 | 2.40 | | 3.10 |
| 12 | | 11.0 | 30 | 240 | | 120 | 2.50 | | 3.10 |
| 13 | | 11.3 | 31 | 230 | | 120 | 2.50 | | 3.10 |
| 14 | | 11.6 | 31 | 230 | | 120 | 2.30 | | 3.10 |
| 15 | | 10.5 | 31 | 220 | | 120 | 2.00 | | 3.10 |
| 16 | | >8.3 | 31 | 210 | | 120 | ---- | <1.6 | (3.10) |
| 17 | | >6.5 | 31 | 220 | | | | <1.6 | 3.00 |
| 18 | | 5.0 | 29 | 240 | | | | <1.6 | 2.90 |
| 19 | | 3.6 | 30 | 250 | | | | <1.6 | 2.80 |
| 20 | | 3.0 | 30 | 270 | | | | <1.6 | 2.80 |
| 21 | | >2.8 | 28 | 300 | | | | <1.6 | 2.70 |
| 22 | | 2.7 | 29 | 310 | | | | <1.6 | 2.60 |
| 23 | | >2.6 | 30 | <300 | | | | <1.6 | 2.50 |

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 15

De Bilt, Holland (52.1° N, 5.2° E) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.0 | 30 | <350 | | | | | 2.70 |
| 01 | | 3.2 | 30 | <345 | | | | | 2.75 |
| 02 | | 2.7 | 30 | <340 | | | | | 2.70 |
| 03 | | 2.6 | 29 | <320 | | | | | 2.85 |
| 04 | | 2.8 | 30 | (300) | | | | | 2.90 |
| 05 | | 2.6 | 29 | <290 | | | | | 3.00 |
| 06 | | 2.4 | 27 | <300 | | | | | 3.00 |
| 07 | | 3.4 | 30 | 255 | | | | | 3.05 |
| 08 | | 6.5 | 31 | 215 | | --- | 2.0 | | 3.35 |
| 09 | --- | 9.0 | 31 | 215 | --- | 125 | 2.4 | | 3.30 |
| 10 | 230 | 10.5 | 31 | 220 | --- | 125 | 2.8 | | 3.30 |
| 11 | 240 | 11.2 | 31 | 220 | --- | 120 | 2.9 | 3.0 | 3.30 |
| 12 | 230 | 11.2 | 31 | 220 | --- | 120 | 3.0 | | 3.30 |
| 13 | --- | >11.2 | 31 | 220 | --- | 125 | 2.8 | | 3.20 |
| 14 | 230 | 11.0 | 31 | 220 | --- | 135 | 2.6 | | 3.30 |
| 15 | --- | 10.3 | 31 | 205 | --- | --- | 2.2 | | 3.30 |
| 16 | --- | 9.0 | 31 | 205 | | | | | 3.30 |
| 17 | | >6.8 | 30 | 215 | | | | | 3.30 |
| 18 | | 4.9 | 30 | 235 | | | | | 3.15 |
| 19 | | 4.2 | 29 | 250 | | | | | 3.10 |
| 20 | | 3.4 | 30 | (260) | | | | | 3.05 |
| 21 | | 3.1 | 27 | (300) | | | | | 3.00 |
| 22 | | 3.2 | 28 | (310) | | | | | 2.05 |
| 23 | | 3.0 | 28 | (325) | | | | | 2.70 |

Time: 0.0°.
Sweep: 1.4 Mc to 16.0 Mc in 40 seconds.

Table 16

Slough, England (51.5° N, 0.6° W) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.2 | 27 | <300 | | | | <1.3 | 2.50 |
| 01 | | 3.3 | 26 | 300 | | | | (0.9) | 2.50 |
| 02 | | 3.1 | 26 | <315 | | | | <1.0 | 2.50 |
| 03 | | 2.8 | 26 | <300 | | | | 1.0 | 2.60 |
| 04 | | 2.7 | 25 | 200 | | | | <1.2 | 2.70 |
| 05 | | 2.6 | 26 | <260 | | | | <1.6 | 2.80 |
| 06 | | 2.5 | 23 | <235 | | | | <1.6 | 2.70 |
| 07 | | 2.9 | 26 | <250 | | | ---- | <1.6 | 2.75 |
| 08 | | 5.8 | 26 | 230 | | 115 | 1.75 | 1.9 | 3.10 |
| 09 | | 8.5 | 24 | 225 | | 120 | 2.30 | 2.4 | 3.30 |
| 10 | | (10.3) | 25 | 230 | | 120 | 2.60 | 2.8 | (3.25) |
| 11 | | >11.3 | 27 | 225 | | 120 | 2.80 | 2.9 | (3.20) |
| 12 | | 11.7 | 26 | 225 | | 120 | 2.85 | 3.0 | 3.20 |
| 13 | | (11.2) | 27 | 220 | | 120 | 2.75 | | (3.10) |
| 14 | | 11.1 | 29 | 230 | | 125 | 2.60 | | 3.10 |
| 15 | | 10.6 | 26 | 230 | | 130 | 2.20 | 2.4 | 3.20 |
| 16 | | 9.4 | 25 | 215 | | --- | 1.75 | 1.7 | 3.20 |
| 17 | | 7.5 | 28 | 220 | | | | <1.6 | 3.15 |
| 18 | | 5.8 | 28 | 220 | | | | <1.6 | 3.05 |
| 19 | | 5.0 | 27 | <240 | | | | <1.6 | 3.00 |
| 20 | | 3.8 | 28 | <240 | | | | <1.6 | 2.90 |
| 21 | | 3.4 | 28 | <245 | | | | <1.6 | 2.65 |
| 22 | | 3.2 | 28 | <270 | | | | <1.6 | 2.60 |
| 23 | | 3.1 | 28 | <270 | | | | <1.6 | 2.60 |

Time: 0.0°.
Sweep: 0.65 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 17

Brisbane, Australia (27.5° S, 152.9° E) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 9.0 | 24 | 280 | | | | 3.4 | 2.75 |
| 01 | | 8.5 | 25 | 280 | | | | 3.4 | 2.70 |
| 02 | | 8.0 | 25 | 285 | | | | 2.6 | 2.70 |
| 03 | | 7.6 | 24 | 270 | | | | 2.9 | 2.70 |
| 04 | | 6.9 | 23 | 260 | | | | 1.3 | 2.70 |
| 05 | | 6.9 | 23 | 250 | | | 1.00 | 1.8 | 2.70 |
| 06 | | 7.2 | 24 | 240 | --- | | 2.60 | 3.2 | 2.85 |
| 07 | | 7.0 | 22 | 240 | --- | | 3.15 | 4.0 | 2.70 |
| 08 | | 8.4 | 20 | <230 | 5.2 | | 3.55 | 4.4 | 2.70 |
| 09 | | 9.0 | 20 | 220 | 5.4 | | 3.80 | 4.5 | 2.65 |
| 10 | | 9.9 | 23 | 215 | 5.5 | | 3.90 | 4.4 | 2.60 |
| 11 | | 10.2 | 24 | (225) | 5.8 | | >4.00 | 4.7 | 2.60 |
| 12 | | 10.8 | 24 | <250 | 5.7 | | 4.00 | 4.5 | 2.60 |
| 13 | | 10.7 | 25 | (240) | 5.6 | | 4.00 | 4.5 | 2.60 |
| 14 | | 11.0 | 26 | 230 | 5.6 | | 3.95 | 4.4 | 2.60 |
| 15 | | 10.0 | 26 | 230 | 5.4 | | 3.75 | 4.2 | 2.65 |
| 16 | | 10.0 | 24 | 240 | 4.9 | | 3.40 | 4.2 | 2.70 |
| 17 | | 9.2 | 24 | 250 | --- | | 2.90 | 4 0 | 2.75 |
| 18 | | 8.5 | 23 | 265 | | | 2.15 | 4.4 | 2.65 |
| 19 | | >0.8 | 22 | 300 | | | | 4.4 | 2.55 |
| 20 | | 9.0 | 23 | 320 | | | | 4.1 | 2.55 |
| 21 | | 9.2 | 23 | 320 | | | | 3.7 | 2.55 |
| 22 | | 9.8 | 23 | 300 | | | | 3.5 | 2.60 |
| 23 | | 10.0 | 23 | 290 | | | | 3.5 | 2.75 |

Time: 150.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 1 minute 55 seconds.

Table 18

Pole Station (90.0° S) December 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 460 | (5.7) | 23 | 245 | (4.3) | 103 | 2.92 | 4.2 | (2.50) |
| 01 | 510 | (5.5) | 24 | 250 | (4.3) | 103 | 2.95 | 4.2 | (2.40) |
| 02 | 400 | (5.4) | 25 | 250 | 4.2 | 103 | 2.95 | 4.2 | (2.35) |
| 03 | 480 | (5.3) | 23 | 245 | 4.2 | 103 | 2.90 | 3.3 | (2.30) |
| 04 | 470 | (5.5) | 25 | 250 | 4.2 | 101 | 2.90 | 3.2 | (2.40) |
| 05 | 500 | (5.4) | 22 | 250 | 4.2 | 103 | 2.95 | | (2.30) |
| 06 | 510 | (5.45) | 24 | 240 | (4.0) | 103 | 2.92 | | (2.30) |
| 07 | 510 | (5.4) | 21 | 240 | (4.1) | 103 | 2.95 | | (2.25) |
| 08 | 525 | (5.0) | 18 | 240 | (4.1) | 103 | 3.00 | 3.3 | (2.30) |
| 09 | 520 | (4.6) | 17 | 230 | (4.1) | 103 | (2.95) | 3.4 | (2.25) |
| 10 | 575 | (4.9) | 17 | 240 | (4.0) | 104 | 3.00 | 4.7 | (2.15) |
| 11 | G | <4.2 | 20 | 255 | 4.2 | 103 | 3.00 | 3.2 | G |
| 12 | 725 | 4.6 | 10 | 280 | 4.1 | 102 | 3.10 | 3.8 | G |
| 13 | 540 | 5.05 | 18 | 265 | (4.3) | 103 | >3.00 | | (2.40) |
| 14 | 530 | 5.2 | 23 | 260 | 4.3 | 103 | 3.05 | | 2.40 |
| 15 | 445 | (5.95) | 24 | 255 | 4.3 | 103 | 2.95 | | (2.50) |
| 16 | 460 | (6.2) | 23 | 250 | (4.3) | 103 | 2.95 | | (2.50) |
| 17 | 505 | (5.85) | 20 | 245 | (4.2) | 105 | 2.98 | | (2.40) |
| 18 | 525 | (5.45) | 20 | 240 | 4.4 | 103 | (2.95) | 3.2 | (2.30) |
| 19 | 460 | (5.5) | 23 | 250 | (4.2) | 103 | 2.95 | 3.4 | (2.60) |
| 20 | 450 | (5.55) | 22 | 240 | (4.3) | 103 | 2.95 | 3.7 | (2.50) |
| 21 | 440 | (5.7) | 27 | 240 | (4.3) | 103 | 2.95 | 5.0 | (2.65) |
| 22 | 440 | (5.65) | 26 | 250 | (4.5) | 103 | 3.00 | 4.4 | (2.60) |
| 23 | 460 | (5.8) | 24 | 240 | (4.3) | 103 | 2.90 | 3.8 | (2.58) |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 19

Pole Station (90.0° S) November 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 410 | (5.75) | 20 | 250 | (4.4) | 103 | 2.90 | 3.2 | 2.65 |
| 01 | 425 | (5.9) | 26 | 255 | 4.1 | 103 | 2.80 | 3.1 | (2.60) |
| 02 | 430 | (5.65) | 24 | 250 | (4.1) | 103 | 2.80 | 2.9 | (2.50) |
| 03 | 420 | (6.0) | 21 | 250 | (4.1) | 103 | 2.80 | | (2.50) |
| 04 | 440 | (5.5) | 22 | 255 | 4.0 | 103 | 2.80 | 2.8 | (2.42) |
| 05 | 410 | (5.6) | 20 | 255 | 4.0 | 105 | 2.78 | | (2.55) |
| 06 | 470 | (5.4) | 23 | 245 | 3.9 | 103 | 2.80 | 2.8 | (2.45) |
| 07 | 530 | 4.5 | 11 | 245 | 4.0 | 103 | 2.80 | | 2.25 |
| 08 | 455 | (5.6) | 13 | 230 | 3.9 | 104 | (2.80) | 3.2 | (2.50) |
| 09 | 520 | (5.2) | 17 | 240 | 4.0 | 103 | 2.95 | 3.2 | (2.45) |
| 10 | G | 4.85 | 16 | 240 | 4.0 | 103 | 3.00 | 4.2 | 2.50 |
| 11 | (570) | 4.6 | 17 | (270) | 4.0 | 101 | 3.02 | 3.6 | 2.30 |
| 12 | G | 4.6 | 18 | 265 | (4.0) | 103 | 2.95 | 4.3 | 2.50 |
| 13 | (540) | 5.2 | 18 | 270 | (4.4) | 101 | (3.00) | 3.4 | 2.70 |
| 14 | (500) | 5.5 | 18 | 265 | (4.2) | 103 | 2.98 | | 2.75 |
| 15 | 420 | 5.55 | 22 | 260 | (4.1) | 103 | 2.90 | | 2.55 |
| 16 | (430) | 6.2 | 20 | 260 | (4.0) | 105 | (2.90) | 3.0 | 2.60 |
| 17 | (430) | (5.7) | 15 | 265 | 4.1 | 103 | 2.95 | | 2.62 |
| 18 | 440 | (5.5) | 17 | 255 | (4.0) | 103 | (2.78) | | (2.65) |
| 19 | 460 | (5.5) | 17 | 250 | 4.2 | 103 | (2.90) | | (2.72) |
| 20 | (430) | (5.7) | 22 | 250 | 4.2 | 103 | 2.85 | 3.0 | (2.80) |
| 21 | (420) | (5.8) | 21 | 245 | 4.2 | 103 | 2.85 | 3.5 | (2.70) |
| 22 | (375) | 5.9 | 20 | 260 | --- | 101 | (2.88) | 3.6 | 2.72 |
| 23 | (395) | (6.0) | 25 | 260 | (4.5) | 103 | 2.88 | 3.3 | (2.70) |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 20

Lulea, Sweden (65.6° N, 22.1° E) October 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (5.0) | 19 | 325 | | | | 2.9 | (2.7) |
| 01 | | (4.4) | 23 | 335 | | | | 2.0 | 2.7 |
| 02 | | (4.3) | 21 | 320 | | --- | --- | | 2.6 |
| 03 | | (4.5) | 19 | 310 | | | | | (2.75) |
| 04 | | (3.5) | 21 | 300 | | | | | 2.8 |
| 05 | | 3.5 | 21 | 275 | | | | | 2.8 |
| 06 | | 4.8 | 21 | 260 | | --- | 1.5 | | 3.0 |
| 07 | | 6.1 | 23 | 250 | | --- | 1.9 | | 3.1 |
| 08 | | 7.2 | 27 | 250 | | 125 | 2.3 | | 3.1 |
| 09 | | 8.5 | 26 | 240 | | 120 | 2.5 | | 3.2 |
| 10 | | 9.6 | 27 | 240 | | 115 | 2.7 | | 3.1 |
| 11 | | 10.1 | 28 | 235 | | 115 | 2.8 | | 3.1 |
| 12 | | 10.4 | 30 | 240 | | 120 | 2.8 | | 3.1 |
| 13 | | 10.4 | 30 | 235 | | 120 | 2.7 | | 3.1 |
| 14 | | 9.8 | 29 | 240 | | 120 | 2.4 | | 3.2 |
| 15 | | 9.5 | 29 | 235 | | 130 | 2.2 | | 3.2 |
| 16 | | 8.7 | 25 | 230 | | --- | 1.8 | | 3.2 |
| 17 | | 8.4 | 20 | 235 | | --- | E | | 3.2 |
| 18 | | 7.0 | 21 | 240 | | --- | --- | | 3.05 |
| 19 | | 5.6 | 22 | 250 | | --- | --- | | 3.0 |
| 20 | | (5.1) | 15 | 260 | | --- | --- | 2.0 | (2.9) |
| 21 | | (5.0) | 17 | 280 | | --- | --- | >3.0 | (2.8) |
| 22 | | (5.0) | 16 | 310 | | --- | --- | >2.4 | (2.7) |
| 23 | | (5.2) | 18 | 310 | | --- | --- | <1.4 | (2.8) |

Time: 15.0°E.
Sweep: 0.65 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 21

Lycksele, Sweden (64.6° N, 18.8° E) October 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.5 | 25 | 340 | | --- | ---- | 3.0 | 2.4 |
| 01 | | 4.3 | 25 | 310 | | --- | ---- | 2.9 | 2.4 |
| 02 | | 4.2 | 24 | 320 | | --- | ---- | 2.9 | 2.4 |
| 03 | | 4.1 | 22 | 295 | | --- | 0.80 | 2.6 | 2.5 |
| 04 | | 3.3 | 27 | 295 | | --- | ---- | 2.4 | 2.4 |
| 05 | | 3.3 | 26 | 285 | | --- | (0.75) | 2.5 | 2.4 |
| 06 | --- | 4.2 | 25 | 265 | | --- | 0.90 | 2.8 | 2.6 |
| 07 | --- | 5.6 | 27 | 250 | | 115 | 1.70 | 3.9 | 2.8 |
| 08 | --- | 7.1 | 28 | 240 | --- | 120 | 2.05 | 4.5 | 2.8 |
| 09 | --- | 8.1 | 30 | 240 | 4.0 | <120 | 2.40 | 4.7 | 2.9 |
| 10 | (265) | 8.9 | 31 | 240 | 4.2 | <120 | 2.55 | 4.8 | 2.9 |
| 11 | (260) | 9.9 | 30 | 230 | 4.2 | <115 | 2.70 | 4.4 | 2.8 |
| 12 | (270) | 10.1 | 30 | 235 | 4.6 | 110 | 2.70 | 4.5 | 2.9 |
| 13 | (340) | 10.5 | 29 | 230 | (4.2) | 115 | 2.60 | 4.3 | 2.9 |
| 14 | --- | 10.0 | 31 | 235 | --- | 115 | 2.40 | 4.5 | 2.9 |
| 15 | --- | 9.6 | 31 | 235 | --- | 125 | 2.15 | 3.5 | 2.9 |
| 16 | --- | 8.8 | 30 | 235 | | --- | 1.80 | 3.5 | 2.8 |
| 17 | | 8.3 | 27 | 230 | | --- | 1.20 | 4.0 | 2.8 |
| 18 | | 7.7 | 27 | 235 | | --- | 1.00 | 4.0 | 2.8 |
| 19 | | 6.2 | 26 | 245 | | --- | 0.65 | 3.4 | 2.8 |
| 20 | | 5.4 | 24 | 255 | | --- | ---- | 3.2 | 2.7 |
| 21 | | 4.6 | 22 | 290 | | --- | ---- | 3.2 | 2.6 |
| 22 | | 4.6 | 23 | 300 | | --- | ---- | 3.4 | 2.5 |
| 23 | | 4.5 | 23 | 310 | | --- | ---- | 3.3 | 2.5 |

Time: 15.0°E.
Sweep: 0.33 Mc to 20.0 Mc in 3 minutes, automatic operation.
Occasionally, 1.4 Mc to 16.0 Mc in 6 minutes, automatic operation.

Table 22

El Cerillo, Mexico (19.3° N, 99.5° W) October 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.8 | 28 | | | | | | 3.00 |
| 01 | | 5.3 | 27 | | | | | | 2.95 |
| 02 | | 5.2 | 28 | | | | | 2.4 | 3.10 |
| 03 | | 4.9 | 27 | | | | | | 3.10 |
| 04 | | 4.2 | 27 | | | | | 1.7 | 2.80 |
| 05 | | 4.2 | 26 | | | | | | 2.70 |
| 06 | | 4.2 | 25 | | | | | 2.6 | 2.75 |
| 07 | | 7.6 | 24 | | | | 2.00 | 2.3 | 3.30 |
| 08 | | 10.2 | 24 | | | | 2.70 | 3.0 | 3.35 |
| 09 | | 11.4 | 27 | | | | 3.20 | 3.6 | 3.20 |
| 10 | | 12.0 | 27 | | | | 3.60 | 3.9 | 3.10 |
| 11 | | 13.0 | 26 | | | | 3.80 | 4.2 | 3.00 |
| 12 | | 12.8 | 27 | | | | 3.90 | 4.0 | 2.90 |
| 13 | | 13.0 | 27 | | | | 3.80 | | 2.80 |
| 14 | | 13.6 | 28 | | | | 3.70 | 4.0 | 2.85 |
| 15 | | 13.9 | 30 | | | | 3.50 | 4.0 | 2.90 |
| 16 | | 13.4 | 27 | | | | 3.20 | 4.0 | 2.90 |
| 17 | | 13.0 | 27 | | | | 2.60 | 3.7 | 3.00 |
| 18 | | 12.0 | 26 | | | | ---- | 3.8 | 3.00 |
| 19 | | 10.6 | 28 | | | | | 3.0 | 3.00 |
| 20 | | 8.6 | 28 | | | | | 2.5 | 3.00 |
| 21 | | 7.2 | 29 | | | | | 2.5 | 2.90 |
| 22 | | 6.6 | 27 | | | | | | 2.90 |
| 23 | | 6.2 | 29 | | | | | 3.0 | 2.95 |

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 18 seconds.

Table 23

Nurmijarvi, Finland (60.5° N, 24.6° E) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (5.8) | 3 | | | | | | ---- |
| 01 | | (4.3) | 3 | | | | | | ---- |
| 02 | | (5.0) | 3 | | | | | | ---- |
| 03 | | (3.7) | 1 | | | | | | ---- |
| 04 | | (3.7) | 1 | | | | | | ---- |
| 05 | | (4.3) | 3 | | | | | | ---- |
| 06 | | (5.1) | 9 | | --- | | --- | | (2.85) |
| 07 | | 5.2 | 16 | | --- | | --- | | 2.95 |
| 08 | | 5.9 | 23 | | --- | | --- | | 2.90 |
| 09 | | 6.3 | 23 | | 4.3 | | --- | | 2.85 |
| 10 | | 6.8 | 27 | | 4.8 | | --- | | 2.80 |
| 11 | | 6.7 | 24 | | --- | | --- | | 2.70 |
| 12 | | 7.2 | 25 | | 4.9 | | --- | | 2.80 |
| 13 | | 7.8 | 25 | | --- | | --- | | 2.80 |
| 14 | | 7.9 | 26 | | --- | | --- | | 2.85 |
| 15 | | 7.7 | 27 | | --- | | --- | | 2.90 |
| 16 | | 7.8 | 26 | | | | --- | | 2.85 |
| 17 | | 8.0 | 21 | | | | --- | | 2.90 |
| 18 | | 8.0 | 17 | | | | --- | | 2.90 |
| 19 | | (7.7) | 7 | | | | --- | | (2.85) |
| 20 | | (7.5) | 8 | | | | | | 2.80 |
| 21 | | (8.0) | 6 | | | | | | 2.90 |
| 22 | | (6.6) | 4 | | | | | | ---- |
| 23 | | (6.0) | 4 | | | | | | ---- |

Time: 30.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 1 minute.

Table 24

Moscow, U.S.S.R. (55.5° N, 37.3° E) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.9 | 30 | 320 | | | | <1.3 | 2.45 |
| 01 | | 4.6 | 29 | 320 | | | | <1.2 | 2.40 |
| 02 | | 4.2 | 29 | 325 | | | | <1.1 | 2.40 |
| 03 | | 4.1 | 28 | 310 | | | ---- | | 2.50 |
| 04 | | 3.8 | 30 | 300 | | | E | | 2.50 |
| 05 | | 4.4 | 30 | 290 | | | 1.60 | 1.6 | 2.80 |
| 06 | --- | 5.3 | 30 | 255 | --- | | 2.20 | | 2.95 |
| 07 | 300 | 6.2 | 30 | 245 | (4.2) | | 2.60 | 2.6 | 2.90 |
| 08 | 355 | 6.8 | 30 | 230 | 4.6 | | 3.00 | 3.0 | 2.80 |
| 09 | 325 | 7.2 | 30 | 225 | 4.8 | | 3.20 | 3.4 | 2.80 |
| 10 | 340 | 8.0 | 30 | 220 | 5.0 | | 3.40 | 3.4 | 2.80 |
| 11 | 320 | 8.4 | 30 | 220 | (5.4) | | 3.45 | | 2.80 |
| 12 | 335 | 9.0 | 30 | 220 | (5.3) | | 3.45 | | 2.75 |
| 13 | 310 | 9.1 | 30 | 230 | (5.3) | | 3.40 | | 2.80 |
| 14 | (300) | 9.0 | 30 | 235 | --- | | 3.20 | 3.2 | 2.85 |
| 15 | (300) | 8.9 | 30 | 240 | --- | | 3.00 | | 2.85 |
| 16 | --- | 8.4 | 30 | 245 | --- | | 2.60 | | 2.90 |
| 17 | | 8.6 | 30 | 250 | | | 2.15 | 2.2 | 2.90 |
| 18 | | 8.2 | 30 | 250 | | | 1.40 | 2.0 | 2.90 |
| 19 | | 7.8 | 30 | 250 | | | ---- | 1.8 | 2.80 |
| 20 | | 7.0 | 30 | 250 | | | ---- | <1.4 | 2.80 |
| 21 | | 6.0 | 30 | 265 | | | ---- | <1.3 | 2.70 |
| 22 | | 5.4 | 30 | 290 | | | | <1.4 | 2.60 |
| 23 | | 5.0 | 30 | 300 | | | | <1.4 | 2.55 |

Time: 30.0°.
Sweep: 1.0 Mc to 25.0 Mc in 15 seconds.

Table 25

El Cerillo, Mexico (19.3° N, 99.5° W) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.2 | 29 | | | | | | 2.80 |
| 01 | | 6.7 | 29 | | | | | 2.0 | 2.85 |
| 02 | | 6.4 | 29 | | | | | 1.3 | 2.80 |
| 03 | | 5.8 | 29 | | | | | 2.0 | 2.70 |
| 04 | | 5.5 | 29 | | | | | 1.9 | 2.65 |
| 05 | | 5.3 | 29 | | | | | 2.1 | 2.60 |
| 06 | | 5.5 | 29 | | | | | 2.6 | 2.70 |
| 07 | | 7.9 | 29 | | | | | 3.5 | 3.20 |
| 08 | | 9.8 | 30 | | | | | 3.8 | 3.20 |
| 09 | | 10.8 | 29 | | | | | 4.0 | 3.00 |
| 10 | | 11.4 | 30 | | | | | 4.4 | 2.85 |
| 11 | | 12.0 | 29 | | | | | 4.4 | 2.75 |
| 12 | | 13.2 | 29 | | | | | 4.5 | 2.70 |
| 13 | | 13.4 | 29 | | | | | 4.4 | 2.70 |
| 14 | | 13.6 | 30 | | | | | 4.3 | 2.75 |
| 15 | | 13.4 | 27 | | | | | 4.4 | 2.75 |
| 16 | | 13.4 | 27 | | | | | 4.2 | 2.80 |
| 17 | | 12.8 | 27 | | | | | 3.9 | 2.85 |
| 18 | | 11.6 | 26 | | | | | 3.7 | 2.90 |
| 19 | | 11.0 | 27 | | | | | 3.2 | 2.90 |
| 20 | | 9.2 | 28 | | | | | 2.2 | 2.00 |
| 21 | | 8.3 | 29 | | | | | 1.9 | 2.75 |
| 22 | | 7.9 | 29 | | | | | | 2.70 |
| 23 | | 7.4 | 29 | | | | | 2.6 | 2.70 |

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 10 seconds.

Table 26

Singapore, British Malaya (1.3° N, 103.8° E) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 11.5 | 25 | 220 | | | | <1.5 | 2.80 |
| 01 | | 10.5 | 28 | 245 | | | | <1.3 | 2.85 |
| 02 | | 9.4 | 29 | 245 | | | | <1.3 | 3.00 |
| 03 | | 8.2 | 28 | 235 | | | | <1.2 | 3.00 |
| 04 | | 7.0 | 28 | 235 | | | | 1.3 | 3.05 |
| 05 | | 6.0 | 26 | 230 | | | | <1.3 | 3.05 |
| 06 | | 6.8 | 29 | 265 | --- | 110 | ---- | 1.4 | 2.90 |
| 07 | | 10.7 | 29 | 250 | --- | 120 | (2.00) | | 2.95 |
| 08 | | 13.1 | 28 | 235 | --- | 115 | 3.45 | 3.6 | 2.75 |
| 09 | | 13.6 | 28 | 228 | --- | 110 | 3.00 | 4.2 | 2.45 |
| 10 | | 13.0 | 27 | 210 | --- | 110 | 4.10 | 4.2 | 2.15 |
| 11 | --- | 13.2 | 27 | 205 | --- | 110 | 4.20 | | 2.05 |
| 12 | --- | 13.0 | 27 | 200 | --- | 110 | 4.25 | | 2.05 |
| 13 | --- | 12.0 | 27 | 210 | --- | 110 | 4.20 | | 2.10 |
| 14 | --- | 13.1 | 28 | 210 | --- | 110 | 4.05 | | 2.10 |
| 15 | --- | 13.0 | 26 | 215 | --- | 110 | 3.75 | | 2.15 |
| 16 | --- | 13.0 | 24 | 240 | --- | 110 | 3.35 | | 2.15 |
| 17 | --- | 13.4 | 29 | 255 | --- | 115 | 2.70 | | 2.20 |
| 18 | --- | 13.5 | 29 | 290 | --- | 100 | ---- | 1.5 | 2.20 |
| 19 | | >13.0 | 27 | 375 | | | | 2.4 | 2.15 |
| 20 | | >13.0 | 17 | 360 | | | | <1.7 | (2.25) |
| 21 | | (14.0) | 9 | 275 | | | | <1.7 | ---- |
| 22 | | >13.6 | 16 | 235 | | | | <1.7 | 2.70 |
| 23 | | 12.7 | 14 | 215 | | | | <1.6 | 2.90 |

Time: 105.0°E.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 27

Lwiro, Belgian Congo (2.3° S, 28.8° E) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >12.9 | 26 | 218 | | | | | 2.04 |
| 01 | | 11.2 | 23 | 220 | | | | (1.6) | 2.82 |
| 02 | | 10.3 | 22 | 235 | | | | (1.6) | 2.90 |
| 03 | | 10.4 | 22 | 235 | | | | (1.6) | 2.95 |
| 04 | | 9.9 | 22 | 235 | | | | (1.6) | 3.06 |
| 05 | | 8.4 | 23 | 230 | | | | (1.7) | 3.23 |
| 06 | | 7.8 | 30 | 250 | | --- | E | (2.0) | 3.17 |
| 07 | 250 | 10.5 | 29 | 245 | | 121 | 2.75 | 3.2 | 3.19 |
| 08 | 250 | 12.0 | 26 | 230 | | 113 | 3.35 | 4.0 | 3.07 |
| 09 | (270) | 12.8 | 28 | 220 | | 111 | 3.75 | 4.4 | 2.89 |
| 10 | (275) | 13.4 | 38 | 215 | --- | 109 | 4.00 | 4.4 | 2.74 |
| 11 | --- | 14.0 | 30 | 210 | (5.4) | 109 | 4.15 | 4.4 | 2.62 |
| 12 | 360 | 14.0 | 30 | 210 | (5.5) | 109 | 4.20 | | 2.58 |
| 13 | 390 | 14.2 | 30 | 210 | (5.4) | 109 | 4.10 | | 2.58 |
| 14 | 430 | 14.2 | 30 | 210 | (5.0) | 111 | 4.00 | | 2.46 |
| 15 | 430 | 14.1 | 29 | 220 | --- | 111 | 3.80 | | 2.43 |
| 16 | 425 | 14.2 | 29 | 240 | | 113 | 3.30 | 3.7 | 2.42 |
| 17 | --- | 14.6 | 29 | 255 | | 119 | 2.70 | (3.2) | 2.50 |
| 18 | | (14.8) | 29 | 290 | | --- | ---- | (3.0) | (2.47) |
| 19 | | >13.4 | 29 | 340 | | | | (1.9) | <2.76 |
| 20 | | >13.2 | 30 | 290 | | | | (2.4) | (2.61) |
| 21 | | >13.6 | 29 | 230 | | | | (1.8) | (3.30) |
| 22 | | >13.4 | 30 | 210 | | | | (1.6) | <3.23 |
| 23 | | >13.4 | 30 | 210 | | | | (1.6) | (3.02) |

Time: 30.0°E.
Sweep: 1.25 Mc to 20.0 Mc in 3 minutes.

Table 28

Falkland Is. (51.7° S, 57.8° W) September 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.7 | 30 | 340 | | | | | 2.30 |
| 01 | | 5.7 | 29 | 325 | | | | | 2.40 |
| 02 | | 5.6 | 28 | 305 | | | | | 2.45 |
| 03 | | 5.4 | 28 | 305 | | | | | 2.45 |
| 04 | | 5.1 | 29 | 300 | | | | | 2.35 |
| 05 | | 5.1 | 28 | 325 | | | ---- | | 2.35 |
| 06 | | 6.5 | 29 | 255 | | 135 | E | | (3.10) |
| 07 | | 8.8 | 29 | 235 | | 120 | 2.00 | | 3.15 |
| 08 | | 10.2 | 29 | 235 | | 115 | 2.60 | 3.3 | 3.05 |
| 09 | | 11.3 | 29 | 230 | | 110 | 3.10 | 3.6 | 2.95 |
| 10 | | 12.7 | 28 | 235 | | 105 | 3.40 | 3.9 | 2.95 |
| 11 | | 13.0 | 29 | 235 | | 105 | 3.50 | 4.1 | 2.95 |
| 12 | | 13.0 | 29 | 240 | | 105 | 3.50 | 4.0 | 2.90 |
| 13 | | 12.6 | 29 | 235 | | 105 | 3.50 | 4.0 | 2.90 |
| 14 | | 11.6 | 29 | 240 | | 105 | 3.30 | 3.5 | 2.95 |
| 15 | | 10.9 | 29 | 245 | | 110 | 3.10 | | 2.95 |
| 16 | | 10.4 | 29 | 245 | | 115 | 2.60 | 3.1 | 2.95 |
| 17 | | 9.4 | 29 | 245 | | 130 | 2.05 | 2.8 | 3.05 |
| 18 | | 8.4 | 29 | 235 | | | ---- | 2.4 | 3.00 |
| 19 | | 6.8 | 29 | 240 | | | | 2.3 | 2.75 |
| 20 | | 6.2 | 29 | 250 | | | | <1.7 | 2.50 |
| 21 | | 6.3 | 29 | 275 | | | | <1.6 | 2.50 |
| 22 | | 6.2 | 29 | <305 | | | | <1.4 | 2.40 |
| 23 | | 6.0 | 29 | <350 | | | | <1.4 | 2.35 |

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 29

Lycksele, Sweden (64.6° N, 18.8° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.2 | 30 | 350 | | --- | ---- | 4.0 | 2.4 |
| 01 | | 5.2 | 27 | 340 | | --- | ---- | 3.4 | 2.4 |
| 02 | | 5.0 | 28 | 350 | | --- | ---- | 3.2 | 2.4 |
| 03 | 455 | 4.7 | 29 | 335 | 2.8 | --- | 1.45 | 3.4 | 2.4 |
| 04 | 450 | 5.0 | 28 | 290 | 3.3 | 130 | 1.80 | 3.7 | 2.4 |
| 05 | 400 | 5.6 | 29 | 260 | 3.7 | 120 | 2.30 | 4.3 | 2.6 |
| 06 | 400 | 5.8 | 29 | 250 | 4.2 | 110 | 2.55 | 5.0 | 2.5 |
| 07 | 450 | 6.0 | 29 | 240 | 4.6 | 105 | 2.90 | 5.0 | 2.6 |
| 08 | 390 | 7.0 | 20 | 235 | 5.0 | 105 | 3.15 | 5.6 | 2.6 |
| 09 | 420 | 7.3 | 29 | 235 | 5.0 | 105 | 3.25 | 5.2 | 2.6 |
| 10 | 400 | 7.0 | 30 | 230 | 5.2 | 105 | 3.40 | 5.1 | 2.55 |
| 11 | 400 | 7.2 | 28 | 220 | 5.4 | 100 | 3.50 | 6.0 | 2.5 |
| 12 | 390 | 7.2 | 29 | 220 | 5.4 | 100 | 3.50 | 5.5 | 2.6 |
| 13 | 400 | 7.2 | 30 | 220 | 5.3 | 100 | 3.50 | 5.0 | 2.6 |
| 14 | 375 | 7.3 | 30 | 230 | 5.3 | 100 | 3.40 | 5.5 | 2.6 |
| 15 | 360 | 7.1 | 29 | 230 | 5.0 | 105 | 3.25 | 5.7 | 2.6 |
| 16 | 350 | 6.9 | 29 | 235 | 4.9 | 105 | 3.05 | 5.0 | 2.6 |
| 17 | 335 | 6.9 | 29 | 245 | 4.5 | 110 | 2.70 | 4.8 | 2.7 |
| 18 | 320 | 6.6 | 30 | 255 | 4.2 | 110 | 2.40 | 4.5 | 2.7 |
| 19 | --- | 6.6 | 29 | 265 | --- | 130 | 1.90 | 4.0 | 2.7 |
| 20 | --- | 5.8 | 30 | 285 | --- | --- | 1.55 | 3.2 | 2.6 |
| 21 | | 5.2 | 30 | 290 | | --- | 1.35 | 3.1 | 2.6 |
| 22 | | 5.2 | 29 | 300 | | --- | ---- | 3.0 | 2.4 |
| 23 | | 5.3 | 28 | 330 | | --- | ---- | 3.1 | 2.4 |

Time: 15.0°E.
Sweep: 0.33 Mc to 20.0 Mc in 3 minutes, automatic operation.
Occasionally, 1.4 Mc to 16.0 Mc in 6 minutes, automatic operation.

Table 30

Upsala, Sweden (59.8° N, 17.6° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.4 | 28 | 310 | | | | 3.2 | 2.50 |
| 01 | | 5.0 | 29 | 310 | | | | 3.6 | 2.40 |
| 02 | | 4.0 | 29 | 315 | | --- | ---- | 3.5 | 2.50 |
| 03 | --- | 4.6 | 27 | 310 | --- | 110 | 0.80 | 3.4 | 2.40 |
| 04 | 380 | 4.6 | 30 | 300 | 2.9 | 110 | 1.50 | 3.4 | 2.60 |
| 05 | 425 | 5.4 | 30 | 260 | 3.8 | 105 | 2.00 | 4.0 | 2.70 |
| 06 | 405 | 6.0 | 31 | 250 | 4.2 | 105 | 2.45 | 4.0 | 2.60 |
| 07 | 400 | 6.6 | 30 | 240 | 4.7 | 105 | 2.90 | 4.3 | 2.65 |
| 08 | 410 | 6.9 | 30 | 240 | 4.9 | 105 | 3.20 | 4.0 | 2.70 |
| 09 | 390 | 7.3 | 31 | 235 | 5.1 | 105 | 3.35 | 4.4 | 2.70 |
| 10 | 390 | 7.5 | 31 | 225 | 5.3 | 105 | 3.50 | 4.5 | 2.70 |
| 11 | 395 | 7.7 | 31 | 225 | 5.5 | 105 | 3.60 | 4.4 | 2.70 |
| 12 | 395 | 7.3 | 31 | 220 | 5.5 | 105 | 3.60 | 4.4 | 2.70 |
| 13 | 405 | 7.4 | 31 | 220 | 5.5 | 105 | 3.60 | 4.0 | 2.60 |
| 14 | 390 | 7.7 | 30 | 230 | 5.4 | 105 | 3.55 | 3.9 | 2.65 |
| 15 | 390 | 7.6 | 29 | 230 | 5.3 | 105 | 3.40 | 3.5 | 2.70 |
| 16 | 365 | 7.4 | 31 | 240 | 5.0 | 105 | 3.25 | 4.0 | 2.70 |
| 17 | 345 | 7.4 | 30 | 250 | 4.7 | 110 | 2.85 | 4.0 | 2.70 |
| 18 | (315) | 7.5 | 31 | 260 | 4.0 | 110 | 2.50 | 4.0 | 2.00 |
| 19 | --- | 7.3 | 31 | 265 | --- | 110 | 1.80 | 4.0 | 2.80 |
| 20 | | 7.3 | 31 | 265 | | 110 | 1.40 | 2.7 | 2.80 |
| 21 | | 7.0 | 30 | 270 | | 125 | 0.70 | 2.5 | 2.70 |
| 22 | | 6.7 | 27 | 280 | | --- | ---- | 2.6 | 2.60 |
| 23 | | 5.9 | 28 | 295 | | | | 3.2 | 2.50 |

Time: 15.0°E.
Sweep: 0.3 Mc to 20.0 Mc in 3 minutes, automatic operation.
Occasionally, 1.4 Mc to 17.0 Mc in 6 minutes, automatic operation.

Table 31

Moscow, U.S.S.R. (55.5° N, 37.3° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.7 | 31 | 300 | | | E | <1.3 | 2.50 |
| 01 | | 5.0 | 31 | 310 | | | E | <1.2 | 2.50 |
| 02 | | 4.9 | 31 | 305 | | | E | <1.1 | 2.45 |
| 03 | | 4.6 | 31 | 310 | | | E | 1.3 | 2.45 |
| 04 | (350) | 4.9 | 31 | 300 | --- | | 1.50 | | 2.65 |
| 05 | (325) | 5.6 | 31 | 265 | 3.8 | | 2.20 | 2.2 | 2.80 |
| 06 | 360 | 6.6 | 31 | 250 | 4.4 | | 2.70 | 3.0 | 2.75 |
| 07 | 375 | 7.0 | 31 | 240 | 4.9 | | 3.10 | 3.5 | 2.75 |
| 08 | 370 | 7.6 | 31 | 235 | 5.2 | | 3.35 | 3.8 | 2.65 |
| 09 | 360 | 8.0 | 31 | 230 | 5.3 | | 3.60 | 4.0 | 2.65 |
| 10 | 370 | 8.1 | 31 | 225 | 5.3 | | 3.70 | 4.0 | 2.65 |
| 11 | 370 | 8.2 | 31 | 225 | 5.6 | | 3.80 | 4.1 | 2.65 |
| 12 | 370 | 8.2 | 31 | 225 | 5.6 | | 3.80 | 4.0 | 2.70 |
| 13 | 390 | 7.9 | 31 | 220 | 5.5 | | 3.70 | 3.8 | 2.65 |
| 14 | 380 | 7.7 | 31 | 225 | 5.5 | | 3.60 | 3.6 | 2.70 |
| 15 | 375 | 7.8 | 21 | 230 | 5.3 | | 3.40 | 3.4 | 2.70 |
| 16 | 330 | 7.8 | 31 | 240 | 5.0 | | 3.10 | 3.2 | 2.75 |
| 17 | (310) | 7.4 | 31 | 250 | 4.5 | | 2.80 | 3.0 | 2.80 |
| 18 | (290) | 7.5 | 31 | 265 | --- | | 2.30 | 3.2 | 2.80 |
| 19 | | 7.6 | 31 | 260 | | | 1.80 | 3.0 | 2.80 |
| 20 | | 7.6 | 31 | 270 | | | E | 3.0 | 2.75 |
| 21 | | 7.4 | 31 | 265 | | | E | (2.7) | 2.65 |
| 22 | | 6.6 | 29 | 280 | | | E | 1.6 | 2.60 |
| 23 | | 6.2 | 31 | 280 | | | E | 1.8 | 2.55 |

Time: 30.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 15 seconds.

Table 32

Bunia, Belgian Congo (1.5° N, 30.2° E) August 1959

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 235 | (9.6) | 5 | | | | | 3.0 | (2.80) |
| 01 | 235 | (10.1) | 7 | | | | | 3.0 | (2.84) |
| 02 | 230 | 8.7 | 11 | | | | | 3.0 | <2.95 |
| 03 | 230 | 6.6 | 11 | | | | | 3.0 | 3.10 |
| 04 | 260 | 6.5 | 15 | | | --- | --- | 3.4 | 2.89 |
| 05 | 250 | 10.2 | 18 | 245 | --- | 120 | 2.8 | 4.0 | 2.97 |
| 06 | 280 | 12.6 | 19 | 240 | --- | 110 | 3.4 | 5.0 | 2.80 |
| 07 | 290 | 13.8 | 24 | 230 | --- | 110 | 3.7 | 5.0 | 2.65 |
| 08 | (330) | 14.0 | 24 | 230 | --- | 110 | 4.0 | 5.0 | 2.54 |
| 09 | 390 | 14.0 | 24 | 235 | --- | 110 | 4.1 | 5.0 | 2.35 |
| 10 | 430 | 13.5 | 23 | 250 | --- | 110 | --- | | 2.22 |
| 11 | 470 | 13.4 | 17 | 250 | --- | 110 | 4.0 | | 2.13 |
| 12 | (525) | 13.2 | 14 | 250 | --- | 110 | 4.0 | | 2.10 |
| 13 | (535) | 13.1 | 15 | 240 | --- | 110 | 4.0 | | 2.07 |
| 14 | (520) | 13.0 | 15 | 240 | --- | 110 | 3.6 | | <2.09 |
| 15 | --- | (13.0) | 9 | 255 | --- | 115 | 3.0 | 3.0 | (2.21) |
| 16 | (290) | (13.5) | 9 | 280 | --- | --- | --- | 3.0 | (2.25) |
| 17 | 340 | (13.4) | 9 | | | | | 2.8 | (2.18) |
| 18 | 345 | (12.0) | 1 | | | | | 2.2 | ---- |
| 19 | 260 | ---- | 0 | | | | | 2.0 | |
| 20 | 240 | >15.0 | 1 | | | | | 2.0 | ---- |
| 21 | 240 | ---- | 0 | | | | | 2.8 | |
| 22 | 240 | >12.0 | 2 | | | | | 3.0 | ---- |
| 23 | 240 | (12.9) | 2 | | | | | 3.0 | ---- |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 33

Singapore, British Malaya (1.3° N, 103.8° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 11.8 | 26 | 230 | | | | >3.1 | 2.95 |
| 01 | | 10.5 | 26 | 230 | | | | 3.1 | 3.00 |
| 02 | | 9.3 | 29 | 230 | | | | 3.0 | 3.00 |
| 03 | | 7.6 | 25 | 230 | | | | <1.6 | 3.00 |
| 04 | | 5.9 | 27 | 230 | | | | <2.0 | 3.05 |
| 05 | | 4.7 | 25 | 240 | | | | <1.6 | 3.20 |
| 06 | --- | 5.9 | 26 | 290 | --- | 120 | 1.35 | 1.7 | 2.85 |
| 07 | --- | 10.4 | 28 | 255 | --- | 120 | 2.70 | 3.1 | 2.90 |
| 08 | --- | 12.8 | 30 | 245 | --- | 110 | 3.45 | | 2.75 |
| 09 | --- | 13.8 | 28 | 230 | --- | 105 | 3.85 | 4.1 | 2.60 |
| 10 | --- | 14.3 | 26 | 220 | --- | 105 | 4.10 | | 2.35 |
| 11 | 350 | 13.9 | 25 | 215 | 6.1 | 105 | 4.25 | | 2.20 |
| 12 | --- | 13.2 | 28 | 210 | --- | 105 | 4.35 | | 2.05 |
| 13 | 275 | 13.0 | 29 | 210 | --- | 105 | 4.30 | | 2.00 |
| 14 | (510) | 12.7 | 29 | 210 | --- | 105 | 4.15 | | 2.05 |
| 15 | --- | 12.6 | 26 | 220 | --- | 105 | 3.90 | | 2.10 |
| 16 | --- | 12.3 | 29 | 240 | --- | 110 | 3.55 | | 2.20 |
| 17 | --- | 12.8 | 29 | 250 | --- | 115 | 2.80 | | 2.30 |
| 18 | --- | 13.1 | 28 | 280 | --- | 100 | ---- | 3.1 | 2.35 |
| 19 | | 13.0 | 30 | 330 | | | | 3.2 | 2.35 |
| 20 | | 13.3 | 27 | 335 | | | | 2.8 | 2.40 |
| 21 | | 13.2 | 22 | 270 | | | | 3.0 | 2.65 |
| 22 | | 12.8 | 25 | 240 | | | | 3.0 | 2.80 |
| 23 | | 12.5 | 25 | 230 | | | | 3.5 | (2.90) |

Time: 105.0°E.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 34

Lwiro, Belgian Congo (2.3° S, 28.8° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >13.1 | 28 | 220 | | | | (1.9) | 2.98 |
| 01 | | 11.6 | 28 | 210 | | | | (1.7) | 2.90 |
| 02 | | 10.0 | 19 | 220 | | | | (1.7) | 2.85 |
| 03 | | 8.7 | 18 | 235 | | | | (1.8) | 2.89 |
| 04 | | 8.5 | 25 | 240 | | | | (1.7) | 3.02 |
| 05 | | 7.6 | 28 | 235 | | | | (2.1) | 3.12 |
| 06 | | 7.0 | 28 | 260 | | --- | E | (2.1) | 3.02 |
| 07 | 260 | 10.6 | 30 | 255 | | 121 | 2.70 | (3.1) | 3.17 |
| 08 | 260 | 12.7 | 31 | 240 | | 113 | 3.30 | (4.0) | 3.10 |
| 09 | 285 | 13.2 | 30 | 235 | | 111 | 3.80 | (4.6) | 3.02 |
| 10 | 300 | 13.6 | 30 | 220 | --- | 109 | 4.00 | 4.8 | 2.88 |
| 11 | 325 | 13.8 | 30 | 220 | --- | 109 | 4.15 | 4.6 | 2.74 |
| 12 | 380 | 13.2 | 30 | 210 | (5.4) | 109 | 4.25 | 4.2 | 2.58 |
| 13 | 425 | 13.6 | 30 | 210 | (5.4) | 109 | 4.20 | 4.5 | 2.49 |
| 14 | 435 | 13.7 | 30 | 215 | (5.0) | 111 | 4.05 | | 2.44 |
| 15 | 430 | 13.7 | 30 | 220 | --- | 111 | 3.85 | | 2.41 |
| 16 | 420 | 14.0 | 31 | 230 | --- | 111 | 3.45 | | 2.40 |
| 17 | --- | 14.0 | 31 | 255 | | 117 | 2.90 | (3.5) | 2.44 |
| 18 | | >14.0 | 31 | 280 | | --- | 1.65 | (3.1) | 2.52 |
| 19 | | (14.0) | 31 | 305 | | | | (2.6) | <2.61 |
| 20 | | >13.0 | 31 | 300 | | | | (2.6) | <2.82 |
| 21 | | >13.4 | 29 | 240 | | | | (2.2) | <2.99 |
| 22 | | (13.3) | 31 | 220 | | | | (2.0) | (3.02) |
| 23 | | >13.0 | 30 | 215 | | | | (1.9) | (3.00) |

Time: 30.0°E.
Sweep: 1.25 Mc to 20.0 Mc in 3 minutes.

Table 35

Leopoldville, Belgian Congo (4.4° S, 15.2° E) August 1959

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 215 | >8.7 | 15 | | | | | 1.9 | 2.78 |
| 01 | 235 | 8.0 | 17 | | | | | 2.6 | 2.63 |
| 02 | 245 | 6.8 | 21 | | | | | 2.2 | 2.65 |
| 03 | 240 | 5.6 | 22 | | | | | 2.4 | 2.81 |
| 04 | 240 | 5.0 | 26 | | | | | 2.5 | 2.82 |
| 05 | 270 | 6.4 | 29 | | | --- | --- | 2.7 | 2.76 |
| 06 | 250 | 10.0 | 26 | 250 | --- | 120 | 2.7 | 3.4 | 2.85 |
| 07 | 270 | 12.3 | 24 | 240 | --- | 115 | 3.4 | 3.5 | 2.78 |
| 08 | 280 | 12.6 | 31 | 235 | --- | 110 | 3.8 | 4.3 | 2.70 |
| 09 | (300) | 12.6 | 29 | 235 | --- | 110 | 4.0 | 4.0 | 2.54 |
| 10 | 315 | 12.8 | 26 | 230 | --- | 110 | --- | | 2.50 |
| 11 | (380) | 13.1 | 25 | 235 | --- | 110 | --- | | 2.29 |
| 12 | 400 | 13.5 | 27 | 250 | --- | 110 | --- | | 2.25 |
| 13 | 400 | 13.9 | 27 | 250 | 6.0 | 110 | 4.0 | | 2.22 |
| 14 | 400 | 14.1 | 25 | 245 | 6.0 | 110 | 3.6 | | 2.21 |
| 15 | >400 | 14.0 | 26 | 250 | --- | 115 | 3.4 | 3.5 | 2.22 |
| 16 | --- | 14.0 | 22 | 260 | --- | 120 | 2.6 | 3.5 | 2.30 |
| 17 | 285 | >14.0 | 21 | | | | | 3.0 | 2.41 |
| 18 | 285 | 14.6 | 15 | | | | | 3.0 | 2.52 |
| 19 | 275 | ---- | 2 | | | | | 2.8 | ---- |
| 20 | 230 | ---- | 4 | | | | | 1.9 | ---- |
| 21 | 220 | (13.5) | 7 | | | | | 1.7 | (2.71) |
| 22 | 225 | 14.1 | 13 | | | | | 1.9 | 2.70 |
| 23 | 220 | 13.0 | 15 | | | | | | 2.72 |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 36

Elisabethville, Belgian Congo (11.6° S, 27.5° E) August 1959

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 250 | 4.3 | 23 | | | | | 1.6 | 2.62 |
| 01 | 270 | 3.2 | 22 | | | | | 1.8 | 2.56 |
| 02 | 280 | 3.2 | 25 | | | | | 1.4 | 2.63 |
| 03 | 270 | 3.1 | 27 | | | | | 1.6 | 2.79 |
| 04 | 270 | 4.0 | 28 | | | | | | 2.70 |
| 05 | 250 | 8.5 | 29 | 250 | --- | 130 | 2.4 | 2.9 | 3.00 |
| 06 | 255 | 10.6 | 29 | 245 | --- | 120 | 3.1 | | 2.94 |
| 07 | 270 | 11.6 | 28 | 240 | --- | 110 | 3.6 | | 2.86 |
| 08 | 270 | 11.7 | 28 | 235 | --- | 110 | 3.9 | | 2.72 |
| 09 | 300 | 11.6 | 29 | 250 | --- | 110 | 4.0 | 4.0 | 2.60 |
| 10 | 330 | 11.6 | 29 | 250 | --- | 110 | 4.0 | 4.3 | 2.54 |
| 11 | 350 | 11.2 | 28 | 255 | --- | 110 | 4.0 | 4.8 | 2.40 |
| 12 | 365 | 11.2 | 29 | 250 | 5.8 | 110 | 4.0 | 4.7 | 2.35 |
| 13 | 370 | 11.1 | 27 | 250 | --- | 110 | 3.7 | 3.8 | 2.34 |
| 14 | 345 | 11.5 | 30 | 250 | --- | 115 | 3.4 | 4.0 | 2.36 |
| 15 | (300) | 11.7 | 29 | 265 | --- | 120 | 2.7 | 3.8 | 2.48 |
| 16 | 265 | 11.8 | 28 | --- | --- | --- | --- | 3.6 | <2.59 |
| 17 | 260 | 11.4 | 19 | | | | | 3.2 | <2.70 |
| 18 | 250 | 11.0 | 16 | | | | | 3.0 | 2.72 |
| 19 | 235 | >9.4 | 9 | | | | | 2.9 | <2.87 |
| 20 | 235 | 9.4 | 13 | | | | | 2.5 | (2.72) |
| 21 | 235 | 8.5 | 13 | | | | | 1.6 | 2.79 |
| 22 | 235 | 6.2 | 16 | | | | | 1.5 | 2.68 |
| 23 | 240 | 5.0 | 19 | | | | | 1.6 | 2.64 |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 37

Providenie Bay, U.S.S.R. (64.4° N, 106.6° E) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.2 | 18 | 340 | | | (1.50) | 2.6 | 2.50 |
| 01 | (410) | (5.3) | 17 | 350 | (2.7) | | (1.60) | 2.5 | (2.50) |
| 02 | (440) | 5.2 | 20 | 340 | 2.9 | | (1.80) | 3.0 | 2.50 |
| 03 | 450 | 5.6 | 23 | 310 | 3.5 | | 2.00 | (3.2) | 2.45 |
| 04 | 440 | 5.6 | 26 | 280 | 3.8 | | 2.50 | (3.7) | 2.45 |
| 05 | 450 | 6.0 | 27 | 250 | 4.0 | | 2.70 | (4.7) | 2.45 |
| 06 | 500 | 6.0 | 26 | 250 | 4.3 | | 3.00 | 3.4 | 2.35 |
| 07 | 490 | 6.2 | 24 | 240 | 4.6 | | 3.20 | | 2.40 |
| 08 | 500 | 6.0 | 24 | 230 | 4.0 | | 3.40 | 3.9 | 2.45 |
| 09 | 520 | 6.0 | 24 | 230 | 4.9 | | 3.40 | 3.9 | 2.50 |
| 10 | 560 | 5.9 | 23 | 230 | 5.0 | | 3.50 | 4.0 | 2.40 |
| 11 | 550 | 5.8 | 24 | 230 | 5.1 | | 3.60 | 3.9 | 2.40 |
| 12 | 560 | 6.0 | 24 | 230 | 5.1 | | 3.60 | 4.0 | 2.40 |
| 13 | 550 | 5.9 | 25 | 230 | 5.1 | | 3.60 | 3.9 | 2.35 |
| 14 | 520 | 6.0 | 23 | 230 | 5.0 | | 3.50 | | 2.50 |
| 15 | 510 | 6.0 | 23 | 240 | 5.0 | | 3.40 | | 2.50 |
| 16 | 510 | 6.0 | 23 | 240 | 4.8 | | 3.20 | | 2.50 |
| 17 | 440 | 6.2 | 24 | 250 | 4.6 | | 3.00 | | 2.60 |
| 18 | (460) | 6.0 | 25 | 260 | 4.5 | | 2.80 | 3.4 | 2.65 |
| 19 | (440) | 6.2 | 26 | 280 | --- | | 2.50 | 3.7 | 2.70 |
| 20 | | 6.2 | 26 | 290 | | | 2.20 | 2.7 | 2.75 |
| 21 | | 6.0 | 26 | 300 | | | 2.00 | 2.4 | 2.65 |
| 22 | | 5.5 | 23 | 300 | | | (1.80) | 2.1 | 2.60 |
| 23 | | 5.2 | 22 | 320 | | | 1.40 | 2.3 | 2.60 |

Time: 180.0°E.
Sweep: 1.0 Mc to 10.0 Mc in 5 minutes, station automatic with manual recording.

Table 38

Simferopol, U.S.S.R. (44.8° N, 34.1° E) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (7.5) | 17 | 300 | | | | 2.9 | (2.55) |
| 01 | | 7.1 | 22 | 290 | | | | 2.4 | 2.60 |
| 02 | | 7.0 | 21 | 275 | | | | 2.5 | 2.60 |
| 03 | | 6.4 | 22 | 275 | | | | 2.6 | 2.60 |
| 04 | | 6.3 | 23 | 205 | | | <1.50 | 2.4 | 2.70 |
| 05 | (365) | 6.9 | 22 | 245 | --- | | 2.30 | 2.7 | 2.85 |
| 06 | (325) | 7.8 | 22 | 240 | 4.6 | | 2.90 | 3.5 | 2.75 |
| 07 | 350 | 8.3 | 25 | 225 | 5.1 | | 3.25 | 4.3 | 2.70 |
| 08 | 350 | 8.2 | 26 | 225 | 5.4 | | 3.60 | 4.7 | 2.60 |
| 09 | 360 | 8.7 | 25 | 220 | 5.4 | | 3.80 | 4.8 | 2.65 |
| 10 | 350 | 9.0 | 25 | 220 | 5.7 | | 3.95 | 5.0 | 2.65 |
| 11 | 360 | 9.2 | 23 | 200 | 5.8 | | 4.00 | 5.1 | 2.65 |
| 12 | 375 | 9.2 | 22 | 205 | 5.8 | | 4.00 | 5.0 | 2.60 |
| 13 | 360 | 8.9 | 24 | 210 | 5.9 | | 4.00 | 4.7 | 2.65 |
| 14 | 370 | 8.6 | 24 | 215 | 5.7 | | 3.95 | 4.5 | 2.65 |
| 15 | 350 | 8.3 | 27 | 220 | 5.6 | | 3.80 | 4.4 | 2.70 |
| 16 | 350 | 8.2 | 26 | 220 | 5.3 | | 3.55 | 4.8 | 2.70 |
| 17 | (325) | 8.1 | 25 | 230 | 5.0 | | 3.15 | 4.0 | 2.80 |
| 18 | | 8.1 | 26 | 240 | | | 2.65 | 3.6 | 2.80 |
| 19 | | 8.4 | 23 | 260 | | | 1.50 | 3.2 | 2.85 |
| 20 | | 8.6 | 19 | 260 | | | <1.50 | 3.3 | 2.85 |
| 21 | | (8.3) | 16 | 250 | | | | 3.4 | 2.75 |
| 22 | | 7.9 | 16 | 270 | | | | 2.9 | 2.70 |
| 23 | | 7.5 | 17 | 275 | | | | 3.1 | 2.60 |

Time: 30.0°E.
Sweep: 0.5 Mc to 25.0 Mc in 12 seconds.

Table 39

El Cerillo, Mexico (19.3° N, 99.5° W) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 8.3 | 30 | | | | | 2.6 | 2.70 |
| 01 | | 8.0 | 31 | | | | | 3.2 | 2.80 |
| 02 | | 7.6 | 30 | | | | | 3.0 | 2.80 |
| 03 | | 7.4 | 30 | | | | | 3.0 | 2.70 |
| 04 | | 7.0 | 31 | | | | | 2.6 | 2.75 |
| 05 | | 6.5 | 30 | | | | | 2.6 | 2.70 |
| 06 | | 6.4 | 29 | | | | | 3.4 | 2.80 |
| 07 | | 7.6 | 30 | | | | 2.40 | 4.4 | 3.10 |
| 08 | | 8.7 | 29 | | | | 3.10 | 4.2 | 2.95 |
| 09 | | 9.2 | 28 | | | | 3.50 | 4.4 | 2.70 |
| 10 | | 9.8 | 27 | | | | 3.75 | 4.8 | 2.50 |
| 11 | | 10.4 | 27 | | | | 3.85 | 4.8 | 2.50 |
| 12 | | 10.8 | 30 | | | | 4.00 | 4.6 | 2.50 |
| 13 | | 11.4 | 30 | | | | 4.00 | 4.6 | 2.60 |
| 14 | | 11.9 | 30 | | | | 4.00 | 4.6 | 2.60 |
| 15 | | 11.7 | 30 | | | | 3.95 | 4.4 | 2.60 |
| 16 | | 11.5 | 28 | | | | 3.70 | 4.5 | 2.60 |
| 17 | | 11.2 | 21 | | | | 3.30 | 3.7 | 2.70 |
| 18 | | 10.6 | 30 | | | | 2.70 | 3.4 | 2.75 |
| 19 | | 10.0 | 30 | | | | | 3.2 | 2.75 |
| 20 | | 9.8 | 29 | | | | | 3.0 | 2.70 |
| 21 | | 9.4 | 28 | | | | | 3.0 | 2.70 |
| 22 | | 9.0 | 30 | | | | | 2.6 | 2.70 |
| 23 | | 8.4 | 30 | | | | | 2.6 | 2.70 |

Time: 90.0°W.
Sweep: 1.0 Mc to 25.0 Mc in 18 seconds.

Table 40

Leopoldville, Belgian Congo (4.4° S, 15.2° E) July 1959

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 220 | 10.8 | 20 | | | | | 2.0 | 2.79 |
| 01 | 230 | 8.2 | 20 | | | | | 3.0 | <2.79 |
| 02 | 235 | 6.5 | 22 | | | | | 2.3 | 2.74 |
| 03 | 250 | 5.4 | 23 | | | | | 2.6 | 2.65 |
| 04 | 260 | 4.5 | 25 | | | | | 2.8 | 2.68 |
| 05 | 280 | 6.4 | 28 | --- | --- | --- | --- | 2.4 | 2.70 |
| 06 | 250 | 10.2 | 24 | 250 | --- | 125 | 2.6 | 3.5 | 2.84 |
| 07 | 280 | 12.4 | 25 | 245 | --- | 115 | 3.2 | 4.0 | 2.85 |
| 08 | 265 | 12.9 | 26 | 240 | --- | 110 | 3.6 | 4.4 | 2.74 |
| 09 | 290 | 13.2 | 29 | 230 | --- | 110 | 3.9 | 4.6 | 2.65 |
| 10 | 310 | 13.0 | 28 | 240 | --- | 110 | --- | 3.4 | 2.50 |
| 11 | 350 | 12.7 | 27 | (230) | --- | 110 | --- | | 2.40 |
| 12 | 370 | 13.2 | 23 | 250 | --- | 110 | --- | | 2.33 |
| 13 | 400 | 13.9 | 28 | 250 | --- | 110 | 4.0 | 4.1 | 2.28 |
| 14 | 390 | 13.8 | 24 | 255 | (5.8) | 110 | 3.6 | 4.1 | 2.25 |
| 15 | (365) | >14.2 | 26 | 250 | --- | 115 | 3.1 | 4.0 | 2.29 |
| 16 | --- | 14.0 | 26 | 255 | --- | 125 | 2.5 | 4.0 | 2.38 |
| 17 | 270 | 14.9 | 21 | | | | | 3.9 | 2.50 |
| 18 | 270 | 14.5 | 13 | | | | | 3.7 | 2.56 |
| 19 | 255 | ---- | 0 | | | | | 3.1 | |
| 20 | 220 | (15.0) | 4 | | | | | 2.7 | ---- |
| 21 | 230 | (15.0) | 3 | | | | | 2.1 | ---- |
| 22 | 235 | 15.0 | 15 | | | | | 2.2 | 2.77 |
| 23 | 225 | 13.3 | 22 | | | | | 2.7 | 2.87 |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 41

Elisabethville, Belgian Congo (11.6° S, 27.5° E) July 1959

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 250 | 4.0 | 20 | | | | | 2.1 | 2.66 |
| 01 | 275 | 3.0 | 20 | | | | | 2.0 | 2.62 |
| 02 | 275 | 2.9 | 25 | | | | | 2.4 | 2.66 |
| 03 | 275 | 2.8 | 24 | | | | | 2.6 | 2.78 |
| 04 | 265 | 3.4 | 26 | | | | | 2.0 | 2.57 |
| 05 | 250 | 8.1 | 29 | 255 | --- | 135 | 2.1 | 3.0 | 3.01 |
| 06 | 250 | 10.8 | 30 | 250 | --- | 115 | 3.0 | 3.5 | 2.98 |
| 07 | 260 | 12.0 | 30 | 240 | --- | 110 | 3.5 | 3.9 | 2.94 |
| 08 | 270 | 11.1 | 31 | 240 | --- | 110 | 3.7 | 4.0 | 2.74 |
| 09 | 295 | 11.8 | 30 | 240 | --- | 110 | 4.0 | 4.1 | 2.68 |
| 10 | 310 | 11.6 | 31 | 250 | --- | 110 | 4.0 | 4.5 | 2.58 |
| 11 | 325 | 11.4 | 30 | 250 | 5.8 | 110 | 4.0 | 4.4 | 2.54 |
| 12 | 330 | 11.5 | 31 | 255 | --- | 110 | 3.8 | 4.4 | 2.50 |
| 13 | 335 | 11.1 | 31 | 250 | --- | 110 | 3.6 | 4.0 | 2.47 |
| 14 | 325 | 11.0 | 31 | 250 | --- | 110 | 3.2 | 3.8 | 2.50 |
| 15 | 300 | 11.4 | 31 | 255 | --- | 120 | 2.6 | 3.7 | 2.54 |
| 16 | 260 | 11.8 | 29 | --- | --- | | | 3.6 | 2.68 |
| 17 | 235 | 11.4 | 27 | | | | | 3.4 | 2.91 |
| 18 | 235 | 9.8 | 15 | | | | | 3.0 | 2.91 |
| 19 | 230 | 8.8 | 14 | | | | | 3.0 | 2.86 |
| 20 | 240 | 8.4 | 11 | | | | | 2.6 | 2.93 |
| 21 | 240 | 6.0 | 13 | | | | | 2.7 | 2.80 |
| 22 | 240 | 5.6 | 18 | | | | | 2.6 | 2.82 |
| 23 | 240 | 4.4 | 20 | | | | | 2.5 | 2.64 |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 7 seconds.

Table 42

Falkland Is. (51.7° S, 57.8° W) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.0 | 30 | <350 | | | | 2.6 | 2.35 |
| 01 | | 3.0 | 29 | 350 | | | | 2.6 | 2.35 |
| 02 | | 3.0 | 29 | 350 | | | | | 2.40 |
| 03 | | 3.0 | 29 | 345 | | | | | 2.50 |
| 04 | | 2.9 | 29 | 345 | | | | | 2.35 |
| 05 | | 2.8 | 29 | 300 | | | | | 2.50 |
| 06 | | 2.6 | 29 | 300 | | | --- | | 2.60 |
| 07 | | 3.7 | 27 | 290 | | 160 | 1.6 | | ---- |
| 08 | | 6.5 | 29 | 235 | | | 1.9 | 2.2 | 3.40 |
| 09 | | 8.4 | 29 | 220 | | | 2.3 | 2.8 | 3.40 |
| 10 | | 9.6 | 28 | 230 | | 115 | 2.6 | 3.1 | 3.40 |
| 11 | | 10.2 | 28 | 235 | | 115 | 2.9 | 3.4 | 3.25 |
| 12 | | 10.2 | 30 | 240 | | 115 | 2.9 | 3.8 | 3.30 |
| 13 | | 9.4 | 31 | 225 | | | 2.9 | 3.2 | 3.35 |
| 14 | | 8.3 | 31 | 230 | | | 2.7 | 3.6 | 3.35 |
| 15 | | 8.4 | 31 | 235 | | | 2.3 | 2.9 | 3.40 |
| 16 | | 7.1 | 31 | 225 | | | 2.0 | 3.2 | 3.40 |
| 17 | | 5.7 | 29 | 225 | | | --- | 2.3 | (3.25) |
| 18 | | 4.9 | 31 | 235 | | | --- | 2.5 | 3.15 |
| 19 | | 4.1 | 27 | 245 | | | --- | 2.6 | (3.40) |
| 20 | | 3.2 | 30 | 250 | | | --- | 2.5 | (3.00) |
| 21 | | 3.0 | 30 | >285 | | | --- | 2.6 | (2.70) |
| 22 | | 2.9 | 31 | >340 | | | --- | 2.3 | 2.50 |
| 23 | | 3.0 | 30 | >350 | | | | 2.5 | 2.40 |

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 43

Sodankyla, Finland (67.4° N, 26.6° E) June 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.9 | 14 | 350 | | --- | ---- | 4.2 | 2.50 |
| 01 | | 6.0 | 14 | 360 | | --- | ---- | 4.2 | 2.45 |
| 02 | | 6.0 | 15 | 330 | --- | --- | ---- | 4.4 | 2.50 |
| 03 | | 6.0 | 17 | 290 | --- | 115 | 2.30 | 4.3 | 2.45 |
| 04 | | 6.3 | 17 | 260 | --- | 115 | 2.40 | 4.4 | 2.50 |
| 05 | | 6.4 | 20 | 250 | --- | 110 | 2.80 | 4.6 | 2.50 |
| 06 | | 6.4 | 22 | 240 | 4.4 | 110 | 2.90 | 5.0 | 2.50 |
| 07 | | 6.5 | 21 | 240 | 4.6 | 110 | 3.10 | 5.2 | 2.45 |
| 08 | | 6.8 | 26 | 230 | 4.8 | 110 | 3.30 | 6.0 | 2.45 |
| 09 | | 7.0 | 30 | 230 | 5.0 | 105 | 3.40 | 5.9 | 2.50 |
| 10 | | 7.0 | 29 | 230 | 5.2 | 105 | 3.50 | 6.2 | 2.45 |
| 11 | | 7.2 | 28 | 225 | 5.2 | 105 | 3.60 | 6.2 | 2.45 |
| 12 | | 7.3 | 28 | 230 | 5.4 | 110 | 3.70 | 6.9 | 2.50 |
| 13 | | 7.0 | 27 | 225 | 5.4 | 110 | 3.80 | 6.4 | 2.45 |
| 14 | | 6.0 | 27 | 225 | 5.2 | 105 | 3.60 | 6.0 | 2.50 |
| 15 | | 6.7 | 27 | 220 | 5.2 | 110 | 3.50 | 5.3 | 2.50 |
| 16 | | 6.8 | 27 | 230 | --- | 110 | 3.40 | 6.0 | 2.55 |
| 17 | | 6.8 | 26 | 240 | --- | 110 | 3.25 | 5.2 | 2.60 |
| 18 | | 6.6 | 26 | 240 | --- | 110 | 3.05 | 5.0 | 2.65 |
| 19 | | 6.6 | 26 | 250 | --- | 110 | 2.90 | 4.6 | 2.70 |
| 20 | | 6.6 | 25 | 270 | | 115 | 2.60 | 4.4 | 2.70 |
| 21 | | 6.4 | 24 | 315 | | 120 | 2.45 | 4.0 | 2.65 |
| 22 | | 6.4 | 19 | 320 | | --- | ---- | 4.0 | 2.65 |
| 23 | | 6.5 | 16 | 340 | | --- | ---- | 4.0 | 2.60 |

Time: 30.0°E.
Sweep: 1.4 Mc to 22.0 Mc in 8 minutes, automatic operation.

Table 44

Simferopol, U.S.S.R. (44.8° N, 34.1° E) June 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (8.0) | 16 | 295 | | | | 3.6 | (2.60) |
| 01 | | (7.6) | 18 | 290 | | | | 3.5 | (2.60) |
| 02 | | 7.4 | 19 | 255 | | | | 3.1 | 2.65 |
| 03 | | (7.1) | 19 | 275 | | | ---- | 3.0 | 2.60 |
| 04 | | 7.2 | 18 | 280 | | | 1.50 | 2.4 | 2.65 |
| 05 | (315) | 8.0 | 19 | 250 | | | 2.40 | 3.2 | 2.70 |
| 06 | (330) | 8.2 | 16 | 235 | 4.6 | | 3.00 | 4.0 | 2.65 |
| 07 | 380 | 8.2 | 20 | 225 | 5.1 | | 3.30 | 4.4 | 2.75 |
| 08 | 350 | 8.6 | 22 | 225 | 5.5 | | 3.70 | 5.1 | 2.70 |
| 09 | 370 | 9.0 | 24 | 220 | 5.4 | | 3.85 | 5.0 | 2.60 |
| 10 | 365 | 9.8 | 24 | 215 | 5.7 | | 4.00 | 5.0 | 2.60 |
| 11 | 375 | 9.8 | 23 | 210 | 6.0 | | 4.05 | 4.7 | 2.60 |
| 12 | 400 | 9.6 | 24 | 200 | 5.8 | | 4.00 | 4.5 | 2.60 |
| 13 | 390 | 8.9 | 24 | 205 | 5.9 | | 4.00 | 4.5 | 2.60 |
| 14 | 385 | 0.6 | 24 | 205 | 5.8 | | 3.95 | 4.3 | 2.60 |
| 15 | 375 | 8.5 | 23 | 220 | 5.6 | | 3.75 | 4.5 | 2.70 |
| 16 | <375 | 0.3 | 22 | 225 | 5.6 | | 3.50 | 4.6 | 2.70 |
| 17 | 355 | 8.1 | 22 | 225 | 5.0 | | 3.15 | 4.2 | 2.75 |
| 18 | | 0.3 | 21 | 250 | | | 2.65 | 3.6 | 2.80 |
| 19 | | 8.3 | 21 | 270 | | | 1.70 | 3.4 | 2.05 |
| 20 | | 8.1 | 15 | 265 | | | <1.30 | 3.9 | 2.75 |
| 21 | | (8.4) | 16 | 275 | | | | 3.9 | 2.60 |
| 22 | | (8.4) | 14 | 300 | | | | 3.8 | (2.60) |
| 23 | | 8.3 | 11 | 290 | | | | 5.0 | 2.60 |

Time: 30.0°E.
Sweep: 0.5 Mc to 25.0 Mc in 12 seconds.

Table 45

Formosa, China (25.0° N, 121.5° E) June 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >11.2 | 29 | 300 | | | | >3.2 | 2.70 |
| 01 | | 10.0 | 26 | 260 | | | | 3.0 | 2.75 |
| 02 | | 9.2 | 28 | 260 | | | | 1.9 | 2.80 |
| 03 | | 8.2 | 20 | 250 | | | | 2.0 | 2.75 |
| 04 | | 7.5 | 28 | 260 | | | | | 2.65 |
| 05 | | 7.6 | 28 | 280 | | | | 2.4 | 2.70 |
| 06 | | 8.6 | 27 | 250 | | | | 3.0 | 2.95 |
| 07 | | 8.9 | 26 | 240 | | | | 4.6 | 3.00 |
| 08 | --- | 8.7 | 25 | (240) | ---- | | (2.5) | 6.2 | 2.90 |
| 09 | --- | 9.0 | 26 | <280 | ---- | | (3.3) | 6.4 | 2.60 |
| 10 | --- | 10.0 | 23 | <260 | ---- | | --- | 7.0 | 2.40 |
| 11 | 420 | 10.9 | 20 | <300 | 6.50 | | --- | 6.6 | 2.45 |
| 12 | 380 | 12.0 | 22 | <290 | ---- | | --- | 6.2 | 2.50 |
| 13 | 410 | >12.4 | 27 | <300 | ---- | | --- | 6.7 | 2.55 |
| 14 | (410) | 13.1 | 24 | <330 | ---- | | --- | 6.5 | 2.55 |
| 15 | 380 | 13.4 | 27 | <300 | ---- | | --- | 6.2 | 2.65 |
| 16 | (360) | 14.0 | 25 | <300 | ---- | | | 5.7 | 2.65 |
| 17 | --- | 13.3 | 29 | <260 | ---- | | | 5.4 | 2.05 |
| 18 | | 13.5 | 28 | <300 | | | | 6.2 | 2.65 |
| 19 | | (13.0) | 29 | <310 | | | | 5.2 | 2.60 |
| 20 | | 11.5 | 30 | <340 | | | | >4.4 | 2.45 |
| 21 | | >11.1 | 28 | 340 | | | | 3.3 | 2.45 |
| 22 | | >11.4 | 20 | 330 | | | | 2.8 | 2.50 |
| 23 | | >11.2 | 28 | 310 | | | | 2.9 | 2.60 |

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

Table 46

Simferopol, U.S.S.R. (44.8° N, 34.1° E) May 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (7.8) | 11 | 285 | | | ---- | 2.7 | (2.60) |
| 01 | | (7.7) | 13 | 300 | | | | 2.6 | (2.55) |
| 02 | | (7.5) | 11 | 300 | | | | 2.6 | (2.50) |
| 03 | | 7.0 | 13 | 285 | | | | 2.4 | (2.60) |
| 04 | | (7.2) | 8 | 285 | | | <1.10 | 2.6 | (2.65) |
| 05 | (425) | 0.4 | 16 | 255 | --- | | 2.30 | 2.8 | 2.80 |
| 06 | (395) | (9.1) | 15 | 235 | --- | | 2.90 | 3.4 | (2.80) |
| 07 | <375 | 9.9 | 19 | 225 | --- | | 3.25 | 4.0 | 2.80 |
| 08 | (365) | 9.8 | 21 | 225 | 5.4 | | 3.60 | 4.4 | 2.80 |
| 09 | (375) | 9.9 | 21 | 220 | 6.1 | | 3.80 | 4.6 | 2.65 |
| 10 | 365 | 10.6 | 21 | 210 | 5.8 | | 3.95 | 4.4 | 2.65 |
| 11 | <350 | 10.7 | 21 | 205 | 6.1 | | 4.00 | 4.6 | 2.65 |
| 12 | 360 | 10.6 | 22 | 210 | 6.2 | | 4.00 | 4.4 | 2.65 |
| 13 | 355 | 10.4 | 22 | 215 | 6.0 | | 4.00 | 4.2 | 2.65 |
| 14 | 355 | 10.4 | 20 | 225 | 6.0 | | 3.95 | 4.3 | 2.65 |
| 15 | (340) | 10.1 | 22 | 225 | 5.6 | | 3.75 | 4.0 | 2.70 |
| 16 | (330) | 9.6 | 23 | 230 | --- | | 3.50 | 4.2 | 2.75 |
| 17 | (280) | (9.6) | 21 | 250 | | | 3.05 | 4.3 | 2.80 |
| 18 | | (9.6) | 17 | 250 | | | 2.40 | 4.3 | (2.85) |
| 19 | | (9.2) | 9 | 255 | | | <1.40 | 3.3 | (2.85) |
| 20 | | (8.9) | 13 | 250 | | | ---- | 3.4 | (2.75) |
| 21 | | (8.8) | 14 | 260 | | | | 3.0 | 2.65 |
| 22 | | (8.6) | 12 | 275 | | | | 3.1 | 2.55 |
| 23 | | 8.1 | 13 | 295 | | | | 3.0 | (2.60) |

Time: 30.0°E.
Sweep: 0.5 Mc to 25.0 Mc in 12 seconds.

Table 47

Lwiro, Belgian Congo (2.3° S, 28.8° E) May 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >13.6 | 31 | 220 | | | | (1.9) | <3.60 |
| 01 | | >13.2 | 31 | 220 | | | | (1.8) | <3.32 |
| 02 | | (10.0) | 29 | 215 | | | | (1.7) | (2.97) |
| 03 | | >10.4 | 27 | 220 | | | | (1.8) | 2.95 |
| 04 | | 9.6 | 27 | 225 | | | | (1.8) | 3.14 |
| 05 | | >7.0 | 27 | 225 | | | | (2.0) | 3.21 |
| 06 | | 7.4 | 28 | 250 | | --- | E | (2.3) | 3.06 |
| 07 | 250 | 10.7 | 30 | 245 | | 121 | 2.75 | 3.0 | 3.13 |
| 08 | 250 | 13.1 | 29 | 235 | | 113 | 3.35 | 3.7 | 3.08 |
| 09 | (270) | 13.6 | 30 | 225 | --- | 111 | 3.75 | 4.2 | 2.98 |
| 10 | (310) | 14.0 | 30 | 220 | --- | 111 | 4.00 | | 2.85 |
| 11 | 350 | 14.2 | 30 | 215 | (5.1) | 109 | 4.20 | | 2.76 |
| 12 | 385 | 14.9 | 31 | 210 | (5.3) | 109 | 4.25 | 4.5 | 2.66 |
| 13 | 400 | (14.7) | 31 | 210 | (5.1) | 109 | 4.15 | 4.6 | 2.61 |
| 14 | 410 | (14.6) | 31 | 215 | (5.0) | 111 | 4.00 | (4.9) | (2.62) |
| 15 | 410 | 15.0 | 31 | 230 | --- | 111 | 3.70 | 4.3 | 2.55 |
| 16 | 390 | (14.8) | 31 | 235 | | 113 | 3.25 | (4.2) | 2.58 |
| 17 | --- | (14.9) | 31 | 250 | | 115 | 2.70 | (3.8) | (2.66) |
| 18 | | (15.0) | 31 | 275 | | --- | ---- | (3.3) | (2.78) |
| 19 | | >14.0 | 31 | 305 | | | | (2.7) | <3.11 |
| 20 | | >11.6 | 31 | 300 | | | | (2.4) | ---- |
| 21 | | >11.2 | 31 | 240 | | | | (1.8) | <3.29 |
| 22 | | >12.3 | 31 | 225 | | | | (1.8) | <3.37 |
| 23 | | >13.2 | 31 | 225 | | | | (1.7) | <3.55 |

Time: 30.0°E.
Sweep: 1.25 Mc to 20.0 Mc in 3 minutes.

Table 48

Byrd Station (80.0° S, 120.0° W) February 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | (480) | 5.95 | 14 | 335 | | 111 | ---- | | (2.40) |
| 01 | 480 | (5.3) | 21 | 345 | --- | 114 | ---- | | (2.40) |
| 02 | <535 | 5.05 | 18 | (315) | --- | --- | ---- | >2.5 | 2.40 |
| 03 | (545) | 5.2 | 13 | (280) | --- | --- | ---- | >2.2 | 2.45 |
| 04 | --- | 5.9 | 11 | 305 | --- | --- | ---- | | 2.50 |
| 05 | --- | (5.8) | 9 | (255) | --- | --- | ---- | | (2.62) |
| 06 | --- | 5.6 | 13 | 265 | --- | --- | ---- | | 2.80 |
| 07 | --- | 5.6 | 13 | (280) | --- | --- | ---- | | 2.80 |
| 08 | (630) | 5.45 | 22 | <280 | 4.5 | --- | ---- | | 2.60 |
| 09 | (540) | 5.95 | 22 | <265 | 4.6 | 111 | ---- | | 2.60 |
| 10 | (465) | 6.7 | 26 | 245 | 4.6 | 106 | ---- | | 2.58 |
| 11 | (460) | 7.0 | 23 | 250 | 4.6 | 105 | ---- | | 2.60 |
| 12 | 480 | 7.0 | 24 | (245) | 4.3 | 107 | ---- | | 2.50 |
| 13 | 480 | 6.9 | 24 | 260 | 4.3 | 109 | ---- | | 2.58 |
| 14 | 455 | 6.75 | 22 | 260 | 4.5 | 110 | ---- | | 2.60 |
| 15 | 470 | 6.6 | 27 | 260 | 4.2 | 110 | 2.95 | | 2.52 |
| 16 | --- | 6.8 | 23 | 275 | --- | 107 | 2.70 | | 2.65 |
| 17 | 460 | 6.7 | 23 | (275) | 4.4 | 110 | 2.78 | | 2.55 |
| 18 | 440 | 6.6 | 23 | 285 | --- | 111 | 2.78 | | 2.50 |
| 19 | (425) | 7.0 | 17 | 295 | | 113 | 2.82 | | 2.45 |
| 20 | --- | >6.45 | 16 | 300 | | 119 | (2.58) | >2.8 | ---- |
| 21 | (420) | >6.1 | 20 | <315 | | 125 | 2.35 | 4.4 | (2.40) |
| 22 | (540) | (5.6) | 21 | 320 | | (125) | ---- | >2.5 | (2.42) |
| 23 | <440 | (6.55) | 18 | 335 | | (118) | (2.65) | | (2.52) |

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

Table 49

Victoria, Canada (48.4° N, 123.4° W) December 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.7 | 29 | 300 | | | | | |
| 01 | | 3.7 | 30 | 300 | | | | | |
| 02 | | 3.6 | 30 | 300 | | | | | |
| 03 | | 3.6 | 30 | 320 | | | | | |
| 04 | | 3.5 | 29 | 300 | | | | | |
| 05 | | 3.5 | 29 | 300 | | | | | |
| 06 | | 3.5 | 29 | 290 | | | | | |
| 07 | | 3.7 | 27 | 280 | | --- | E | | |
| 08 | | 6.2 | 20 | 240 | | --- | --- | | |
| 09 | | 9.5 | 28 | 230 | | 120 | 2.5 | | |
| 10 | | 12.2 | 26 | 230 | | 120 | 2.9 | | |
| 11 | | 13.2 | 26 | 220 | | 120 | 3.0 | | |
| 12 | --- | 13.6 | 26 | 220 | --- | 115 | 3.1 | | |
| 13 | | 13.5 | 23 | 220 | | 110 | 3.1 | | |
| 14 | | 13.5 | 23 | 220 | | 110 | 2.9 | | |
| 15 | | 13.0 | 19 | 220 | | --- | 2.6 | | |
| 16 | | 11.9 | 20 | 220 | | --- | 2.2 | | |
| 17 | | 11.0 | 20 | 220 | | --- | E | | |
| 18 | | 9.6 | 24 | 220 | | | | | |
| 19 | | 7.7 | 30 | 220 | | | | | |
| 20 | | 6.1 | 30 | 230 | | | | | |
| 21 | | 4.7 | 30 | 250 | | | | | |
| 22 | | 4.2 | 30 | 270 | | | | | |
| 23 | | 3.6 | 30 | 280 | | | | | |

Time: 120.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 50

Ibadan, Nigeria (7.4° N, 3.9° E) December 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 9.5 | 30 | 270 | | | | | (2.45) |
| 01 | | 10.0 | 30 | 270 | | | | | (2.65) |
| 02 | | 9.4 | 30 | 260 | | | | | 2.75 |
| 03 | | 9.1 | 30 | 240 | | | | | (2.85) |
| 04 | | 8.6 | 30 | 220 | | | | | 3.10 |
| 05 | | >6.8 | 28 | 215 | | | | | <3.20 |
| 06 | | 7.5 | 30 | 260 | | 140 | 1.90 | | 2.90 |
| 07 | | >10.1 | 30 | 245 | | 110 | 2.90 | 6.6 | <2.95 |
| 08 | | 11.8 | 30 | 235 | | 105 | 3.50 | 8.2 | 2.60 |
| 09 | | 12.1 | 31 | 220 | | 105 | 3.00 | 9.0 | 2.30 |
| 10 | | 12.1 | 31 | 215 | | 105 | 4.00 | 11.0 | 2.20 |
| 11 | | 12.0 | 30 | 210 | | 105 | (4.20) | 10.0 | 2.15 |
| 12 | | 12.3 | 31 | 215 | | 105 | (4.25) | 11.0 | 2.10 |
| 13 | | 12.3 | 30 | 215 | | 105 | (4.20) | 7.0 | 2.10 |
| 14 | | 12.2 | 30 | 220 | | 105 | (4.00) | 7.7 | 2.05 |
| 15 | | 12.7 | 31 | 240 | | 105 | 3.65 | 7.0 | 2.05 |
| 16 | | (12.2) | 31 | 245 | | 110 | 3.15 | 6.8 | 2.10 |
| 17 | | >11.4 | 31 | 280 | | 120 | 2.30 | 3.6 | (2.05) |
| 18 | | (10.5) | 31 | 355 | | --- | (1.20) | | (1.95) |
| 19 | | 8.9 | 31 | 430 | | | | | 1.90 |
| 20 | | 8.5 | 30 | 415 | | | | | (2.00) |
| 21 | | 8.5 | 31 | 390 | | | | | (2.25) |
| 22 | | 8.5 | 30 | 320 | | | | | (2.30) |
| 23 | | 9.0 | 30 | 300 | | | | | (2.40) |

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 51

Buenos Aires, Argentina (34.5° S, 58.5° W) December 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.2 | 22 | 355 | | | | 3.4 | 2.40 |
| 01 | | 10.0 | 23 | 330 | | | | 3.4 | 2.50 |
| 02 | | 9.2 | 25 | 320 | | | | 2.8 | 2.45 |
| 03 | | 8.0 | 25 | 325 | | | | 2.4 | 2.35 |
| 04 | | 8.6 | 24 | 355 | | | | | 2.30 |
| 05 | --- | 9.1 | 21 | 275 | | 135 | 2.25 | 2.6 | 2.15 |
| 06 | --- | 9.6 | 23 | 255 | | 119 | 3.10 | 3.7 | 2.30 |
| 07 | --- | 10.1 | 25 | 245 | | 115 | ---- | 3.8 | 2.30 |
| 08 | --- | 10.9 | 23 | 240 | 6.4 | 115 | ---- | | 2.30 |
| 09 | (470) | 11.3 | 24 | 230 | --- | 113 | ---- | | 2.30 |
| 10 | 450 | >11.8 | 24 | 245 | 6.5 | --- | ---- | 4.9 | 2.40 |
| 11 | 455 | 12.0 | 25 | --- | 6.6 | --- | ---- | | 2.45 |
| 12 | 430 | 12.1 | 25 | --- | 6.7 | --- | ---- | | 2.40 |
| 13 | 430 | 12.0 | 26 | --- | 6.4 | --- | ---- | | 2.40 |
| 14 | 440 | 12.0 | 26 | 245 | 6.4 | --- | ---- | | 2.45 |
| 15 | 410 | 11.5 | 25 | 245 | --- | --- | ---- | | 2.50 |
| 16 | 410 | >10.9 | 24 | 245 | 5.8 | --- | ---- | | 2.50 |
| 17 | 400 | 10.7 | 24 | 255 | --- | --- | ---- | 4.4 | 2.50 |
| 18 | --- | 10.3 | 23 | 280 | | --- | ---- | 3.6 | 2.45 |
| 19 | | 10.2 | 25 | 320 | | | | 2.8 | 2.35 |
| 20 | | 10.4 | 24 | 385 | | | | 3.0 | 2.30 |
| 21 | | 10.4 | 23 | 410 | | | | | 2.25 |
| 22 | | 10.3 | 21 | 390 | | | | 2.4 | 2.35 |
| 23 | | 10.0 | 23 | 370 | | | | 2.6 | 2.40 |

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

Table 52

Port Lockroy (64.8° S, 63.5° W) December 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.6 | 30 | 335 | | | --- | 1.8 | 2.35 |
| 01 | | 11.1 | 30 | 330 | | | --- | 1.8 | 2.35 |
| 02 | | 11.2 | 30 | 325 | | | 1.8 | 2.0 | 2.35 |
| 03 | | 11.0 | 30 | 310 | | | 2.1 | 2.3 | 2.30 |
| 04 | | 11.2 | 30 | 290 | | | 2.4 | 2.8 | 2.30 |
| 05 | | 10.9 | 30 | 265 | | | (2.8) | 3.2 | 2.30 |
| 06 | | 10.7 | 29 | (260) | | | (3.1) | 3.8 | 2.35 |
| 07 | | 10.0 | 30 | 250 | | | (3.3) | 4.0 | 2.30 |
| 08 | | 9.3 | 29 | <250 | | | (3.6) | 4.4 | 2.35 |
| 09 | | 8.7 | 29 | <250 | | | (3.8) | 5.0 | 2.40 |
| 10 | | 8.4 | 29 | 240 | | | (3.8) | 5.2 | 2.40 |
| 11 | | 7.9 | 30 | (235) | | | (3.8) | 4.8 | 2.40 |
| 12 | | 8.0 | 27 | 245 | | | (3.9) | 5.0 | 2.45 |
| 13 | | 7.5 | 30 | <240 | | | (3.0) | 4.4 | 2.45 |
| 14 | | 7.5 | 31 | 240 | | | (3.8) | 4.5 | 2.45 |
| 15 | | 7.3 | 31 | <250 | | | (3.8) | 4.3 | 2.50 |
| 16 | | 7.5 | 28 | (255) | | | (3.6) | 4.8 | 2.50 |
| 17 | | 7.6 | 31 | 255 | | | (3.4) | 4.2 | 2.55 |
| 18 | | 7.6 | 31 | 255 | | | (3.2) | 4.1 | 2.55 |
| 19 | | 7.8 | 30 | (270) | | | (2.8) | 3.8 | 2.50 |
| 20 | | 8.0 | 31 | 270 | | | (2.5) | 3.0 | 2.50 |
| 21 | | 8.3 | 31 | 290 | | | 2.2 | 2.2 | 2.40 |
| 22 | | 9.3 | 29 | 320 | | | 1.6 | 2.0 | 2.30 |
| 23 | | 10.2 | 28 | 335 | | | --- | 1.8 | 2.35 |

Time: 60.0°W.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 53

Pole Station (90.0° S) December 1950

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 570 | (5.9) | 23 | 250 | 4.7 | 99 | 3.00 | | (2.30) |
| 01 | (500) | (6.1) | 24 | <260 | (4.6) | 99 | 3.00 | | (2.35) |
| 02 | 520 | 6.15 | 26 | 240 | 4.6 | 97 | (3.00) | | (2.35) |
| 03 | 535 | 6.0 | 26 | 255 | 4.6 | 99 | 3.00 | | 2.30 |
| 04 | (530) | (5.9) | 25 | 240 | 4.5 | 99 | 3.00 | | (2.25) |
| 05 | 505 | (6.0) | 23 | 250 | 4.5 | 97 | 3.00 | | (2.20) |
| 06 | 540 | (6.6) | 25 | 240 | 4.4 | 99 | 3.00 | | (2.30) |
| 07 | 530 | (6.2) | 25 | 240 | 4.3 | 99 | 3.00 | | (2.28) |
| 08 | 570 | (5.8) | 22 | 240 | 4.4 | 100 | 3.00 | | (2.22) |
| 09 | 565 | 5.6 | 22 | 240 | 4.4 | 101 | (3.00) | | 2.25 |
| 10 | 750 | <5.1 | 19 | 240 | 4.3 | 99 | 3.00 | | 2.10 |
| 11 | 590 | 5.3 | 16 | 250 | 4.5 | 97 | (3.00) | | (2.20) |
| 12 | 675 | 5.3 | 19 | 255 | 4.5 | 100 | 3.00 | | 2.10 |
| 13 | 660 | 5.5 | 21 | 260 | 4.6 | 97 | 3.00 | | 2.20 |
| 14 | (590) | 5.6 | 24 | 260 | 4.7 | 99 | 3.00 | | 2.32 |
| 15 | 540 | 6.2 | 25 | 255 | 4.7 | 99 | 3.00 | | 2.30 |
| 16 | 490 | 6.35 | 24 | 255 | 4.6 | 101 | 3.00 | | 2.40 |
| 17 | 510 | 6.05 | 24 | 260 | 4.5 | 97 | 3.00 | | 2.35 |
| 18 | 485 | 6.0 | 20 | 250 | (4.5) | 97 | 3.00 | | 2.40 |
| 19 | 555 | 5.7 | 20 | 245 | 4.6 | 101 | 3.00 | | 2.38 |
| 20 | 490 | 6.0 | 20 | 250 | 4.7 | 100 | 3.00 | | 2.40 |
| 21 | 520 | 6.0 | 19 | 250 | (4.6) | 101 | (3.00) | | 2.45 |
| 22 | 500 | 6.0 | 24 | 245 | (4.6) | 101 | (3.00) | 4.0 | 2.45 |
| 23 | 530 | (6.15) | 24 | 240 | (4.6) | 99 | 3.00 | | (2.40) |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 seconds.

Table 54

Ibadan, Nigeria (7.4° N, 3.9° E) September 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.1 | 21 | 295 | | | | | (2.50) |
| 01 | | 10.0 | 21 | 285 | | | | | (2.80) |
| 02 | | 8.8 | 22 | 250 | | | | | ---- |
| 03 | | 8.4 | 21 | 240 | | | | | (3.10) |
| 04 | | 7.6 | 22 | 230 | | | | | (3.30) |
| 05 | | 6.2 | 21 | 215 | | | | | 3.30 |
| 06 | | 8.5 | 18 | 255 | | (140) | 2.25 | | 3.10 |
| 07 | | 12.0 | 20 | 240 | | 110 | 3.15 | | 3.05 |
| 08 | | 13.6 | 20 | 230 | | 105 | 3.70 | 7.0 | 2.75 |
| 09 | | 14.5 | 21 | 215 | | 105 | (4.05) | 7.0 | 2.40 |
| 10 | | >14.0 | 22 | 210 | | 105 | (4.30) | 7.0 | 2.15 |
| 11 | | 13.5 | 22 | 210 | | 105 | (4.40) | 7.0 | 2.10 |
| 12 | | 13.1 | 27 | 205 | | 105 | (4.40) | 7.0 | 2.10 |
| 13 | | 12.3 | 27 | 205 | | 105 | (4.30) | 7.0 | 2.05 |
| 14 | | 12.4 | 26 | 205 | | 105 | (4.15) | 7.0 | 2.05 |
| 15 | | 12.4 | 25 | 210 | | 105 | 3.85 | 7.0 | 2.10 |
| 16 | | 11.0 | 24 | 240 | | 105 | 3.40 | 7.0 | (2.10) |
| 17 | | >11.6 | 13 | 265 | | 115 | 2.80 | | (2.10) |
| 18 | | >11.2 | 12 | 340 | | --- | 1.60 | | (1.95) |
| 19 | | 8.5 | 19 | 455 | | | ---- | | (1.90) |
| 20 | | 8.4 | 20 | 460 | | | | | ---- |
| 21 | | 8.3 | 19 | 390 | | | | | ---- |
| 22 | | 8.6 | 19 | 330 | | | | | ---- |
| 23 | | 9.0 | 19 | 300 | | | | | (2.45) |

Time: 0.0°.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 55

Trelew, Argentina (43.0° S, 65.0° W) September 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (8.2) | 15 | 300 | | | | | (2.55) |
| 01 | | 8.3 | 16 | 290 | | | | | 2.60 |
| 02 | | 8.2 | 14 | 275 | | --- | ---- | | 2.70 |
| 03 | | 8.3 | 13 | 240 | | --- | ---- | | 2.90 |
| 04 | | 7.2 | 13 | 205 | | --- | ---- | | 2.90 |
| 05 | | 6.2 | 14 | 230 | | --- | E | | 2.50 |
| 06 | | (6.9) | 13 | 260 | | 155 | 1.55 | | (2.60) |
| 07 | | >8.4 | 13 | 205 | | 99 | 2.60 | | ---- |
| 08 | | >9.0 | 10 | 205 | | 97 | 3.10 | | ---- |
| 09 | | >9.0 | 10 | (205) | | 97 | 3.50 | | |
| 10 | | >9.0 | 6 | (205) | | 93 | ---- | | |
| 11 | --- | >9.2 | 10 | (210) | | 94 | ---- | | ---- |
| 12 | --- | >9.2 | 10 | (200) | | 95 | ---- | | ---- |
| 13 | --- | >9.4 | 11 | (220) | --- | 95 | ---- | | ---- |
| 14 | --- | >9.4 | 10 | (220) | --- | 95 | ---- | | |
| 15 | | >9.0 | 9 | (220) | | 99 | ---- | (2.6) | |
| 16 | | >9.1 | 14 | 215 | | 97 | 3.25 | | |
| 17 | | >9.0 | 12 | 230 | | 99 | 2.90 | 3.0 | |
| 18 | | >9.0 | 15 | 230 | | --- | 2.00 | 3.0 | |
| 19 | | >8.0 | 14 | 230 | | | | | ---- |
| 20 | | >0.0 | 12 | 260 | | | | | |
| 21 | | >8.0 | 13 | 265 | | | | | |
| 22 | | >8.0 | 14 | 290 | | | | | ---- |
| 23 | | (8.2) | 15 | 300 | | | | | (2.60) |

Time: 60.0°W.
Sweep: 1.3 Mc to 18.0 Mc in 30 seconds.

Table 56

Budapest, Hungary (47.4° N, 19.2° E) August 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.8 | 28 | 330 | | | | | |
| 01 | | 6.5 | 27 | 335 | | | | | |
| 02 | | 6.2 | 29 | 325 | | | | | |
| 03 | | 5.8 | 28 | 330 | | | | | |
| 04 | | >6.2 | 30 | 300 | | 135 | 2.0 | | |
| 05 | | 7.3 | 29 | 260 | | 125 | 2.6 | 3.9 | |
| 06 | (350) | 8.2 | 30 | 245 | 5.3 | 120 | 3.1 | 4.5 | |
| 07 | (415) | 8.8 | 30 | 240 | 5.6 | 120 | 3.5 | 4.8 | |
| 08 | 405 | 9.1 | 31 | 230 | 5.9 | 120 | 3.7 | 5.4 | |
| 09 | 410 | 9.3 | 27 | 230 | 6.1 | 120 | 3.7 | 5.3 | |
| 10 | 400 | 9.6 | 30 | 230 | 6.2 | 120 | 3.8 | 5.2 | |
| 11 | 420 | 9.5 | 28 | 230 | 6.3 | 120 | 3.8 | 5.6 | |
| 12 | 420 | 9.1 | 27 | 230 | 6.2 | 120 | 3.8 | 5.0 | |
| 13 | 400 | 8.9 | 30 | 235 | 6.0 | 120 | 4.0 | 4.6 | |
| 14 | 400 | 8.8 | 31 | 240 | 5.8 | 120 | 3.7 | 4.1 | |
| 15 | 370 | 8.6 | 30 | 245 | 5.4 | 120 | 3.4 | 4.0 | |
| 16 | --- | 8.4 | 31 | 260 | --- | 125 | 3.0 | 3.5 | |
| 17 | | 8.4 | 30 | 275 | | 130 | 2.4 | 3.7 | |
| 18 | | 8.4 | 26 | 280 | | --- | --- | 3.7 | |
| 19 | | (7.9) | 28 | 300 | | | | 3.7 | |
| 20 | | >6.6 | 24 | 300 | | | | 4.0 | |
| 21 | | (6.4) | 27 | 320 | | | | 3.2 | |
| 22 | | (6.4) | 26 | 320 | | | | 3.0 | |
| 23 | | (6.4) | 28 | 330 | | | | 3.0 | |

Time: 0.0°.
Sweep: 1.0 Mc to 20.0 Mc in 35 seconds.

Table 57

La Quiaca, Argentina (22.1° S, 65.6° W) August 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >11.0 | 21 | 200 | | | | | ---- |
| 01 | | >9.5 | 20 | 200 | | | | | (3.15) |
| 02 | | >9.4 | 17 | 200 | | | | | (3.05) |
| 03 | | >8.8 | 16 | 200 | | | | | (3.10) |
| 04 | | 6.6 | 16 | 210 | | | | | 2.90 |
| 05 | | 5.8 | 16 | 225 | | | | | 2.95 |
| 06 | | 4.9 | 17 | 220 | | | | | 2.80 |
| 07 | | 7.0 | 15 | 250 | | 149 | (1.80) | | 2.90 |
| 08 | | >9.6 | 13 | 220 | | 103 | (2.85) | | ---- |
| 09 | | >11.4 | 14 | 205 | | 103 | (3.30) | | ---- |
| 10 | | >12.0 | 13 | 200 | | 103 | ---- | | |
| 11 | --- | >12.0 | 13 | 195 | --- | 103 | ---- | | |
| 12 | --- | >11.8 | 13 | (190) | --- | 103 | ---- | | |
| 13 | (405) | >11.9 | 15 | 190 | --- | 103 | ---- | | |
| 14 | (410) | >11.8 | 16 | (190) | 6.4 | 103 | ---- | | |
| 15 | --- | >11.8 | 14 | 200 | --- | 103 | ---- | | |
| 16 | --- | >11.6 | 17 | 200 | --- | 103 | (3.25) | | |
| 17 | | >11.0 | 21 | 225 | | 103 | (2.90) | | |
| 18 | | >9.0 | 18 | 260 | | --- | 1.80 | | ---- |
| 19 | | >8.8 | 14 | 295 | | | | | ---- |
| 20 | | >9.0 | 14 | 270 | | | | | |
| 21 | | >9.0 | 14 | 240 | | | | | ---- |
| 22 | | >9.0 | 16 | 220 | | | | | ---- |
| 23 | | 11.1 | 16 | 200 | | | | | ---- |

Time: 60.0°W.
Sweep: 1.3 Mc to 18.0 Mc in 30 seconds.

Table 58

Trelew, Argentina (43.0° S, 65.0° W) August 1958*

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >5.9 | 12 | 330 | | | | | ---- |
| 01 | | >6.0 | 12 | 325 | | | | | (2.50) |
| 02 | | >6.0 | 13 | <315 | | | | | (2.40) |
| 03 | | 6.0 | 13 | 320 | | | | | 2.50 |
| 04 | | (5.7) | 13 | 305 | | | | | (2.45) |
| 05 | | 5.3 | 13 | 255 | | | | | (2.60) |
| 06 | | (5.1) | 15 | 280 | | | | | (2.60) |
| 07 | | >6.2 | 14 | 260 | | | | | ---- |
| 08 | | >7.7 | 11 | 210 | | | | | ---- |
| 09 | | >9.4 | 2 | --- | | | | | |
| 10 | | --- | 0 | --- | | | | | |
| 11 | | --- | 0 | --- | | | | | |
| 12 | | --- | 0 | --- | | | | | |
| 13 | | --- | 0 | --- | | | | | |
| 14 | | --- | 0 | --- | | | | | |
| 15 | | --- | 0 | --- | | | | | |
| 16 | | >10.0 | 1 | --- | | | | | |
| 17 | | >9.6 | 5 | (210) | | | | | |
| 18 | | >6.2 | 7 | (225) | | | | | |
| 19 | | >6.1 | 7 | (210) | | | | | |
| 20 | | >6.2 | 4 | --- | | | | | |
| 21 | | >6.2 | 7 | (235) | | | | | |
| 22 | | (5.9) | 8 | --- | | | | | ---- |
| 23 | | >6.0 | 11 | 290 | | | | | ---- |

Time: 60.0°W.
Sweep: 1.3 Mc to 18.0 Mc in 30 seconds.
*Bulk of data obtained first half of month.

Table 59

Svalbard, Norway (78.2° N, 15.7° E) May 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | 5.7 | 21 | 260 | ---- | 115 | 2.30 | 3.2 | 2.40 |
| 01 | 450 | 5.4 | 20 | 275 | 3.60 | 115 | 2.35 | 3.2 | 2.30 |
| 02 | 445 | 5.7 | 21 | 270 | 3.70 | 115 | 2.40 | 3.2 | 2.30 |
| 03 | 475 | (5.5) | 21 | 250 | 3.80 | 110 | 2.60 | 3.2 | 2.30 |
| 04 | 540 | 5.2 | 24 | 240 | 4.00 | 110 | 2.65 | 3.0 | 2.20 |
| 05 | 560 | 5.5 | 25 | 250 | 4.25 | 110 | 2.80 | 3.2 | 2.15 |
| 06 | 515 | 5.0 | 22 | 255 | 4.30 | 110 | 3.00 | 3.2 | 2.25 |
| 07 | 550 | 6.2 | 22 | 255 | 4.65 | 105 | 3.25 | 3.3 | 2.25 |
| 08 | 500 | 6.5 | 25 | 250 | 4.00 | 105 | 3.25 | 3.2 | 2.30 |
| 09 | 470 | 7.0 | 26 | 245 | 4.85 | 105 | 3.35 | 3.4 | 2.35 |
| 10 | 480 | 7.3 | 27 | 240 | 5.00 | 105 | 3.35 | | 2.30 |
| 11 | 400 | 7.0 | 29 | 240 | 4.80 | 105 | 3.35 | | 2.35 |
| 12 | 510 | 6.9 | 27 | 235 | 4.00 | 100 | 3.35 | | 2.35 |
| 13 | 505 | 6.8 | 26 | 235 | 4.05 | 105 | 3.30 | | 2.35 |
| 14 | 450 | 7.1 | 27 | 235 | 4.70 | 100 | 3.30 | | 2.45 |
| 15 | 500 | 7.0 | 20 | 240 | 4.60 | 105 | 3.25 | | 2.40 |
| 16 | 450 | 6.0 | 26 | 250 | 4.70 | 105 | 3.15 | 3.2 | 2.45 |
| 17 | 470 | 7.0 | 27 | 250 | 4.60 | 110 | 3.00 | 3.4 | 2.45 |
| 18 | --- | 7.1 | 25 | 250 | ---- | 110 | 2.90 | 3.4 | 2.50 |
| 19 | (510) | 6.0 | 22 | 260 | ---- | 110 | 2.75 | 3.0 | 2.45 |
| 20 | (505) | 6.5 | 23 | 260 | ---- | 110 | 2.60 | 3.4 | 2.40 |
| 21 | (440) | 6.8 | 22 | 270 | ---- | 115 | 2.55 | 3.7 | 2.50 |
| 22 | (415) | 6.4 | 25 | 265 | ---- | 115 | 2.40 | 3.0 | 2.45 |
| 23 | (535) | 6.5 | 21 | 260 | 3.60 | 115 | 2.30 | 2.6 | 2.50 |

Time: 15.0°E.
Sweep: 0.68 Mc to 24.6 Mc in 5 minutes, automatic operation.

Table 60

Alert, Canada (82.5° N, 62.7° W) April 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.6 | 26 | 350 | | 140 | 2.0 | | |
| 01 | --- | 6.0 | 27 | 350 | --- | 140 | 2.2 | | |
| 02 | --- | 6.0 | 27 | 350 | --- | 140 | 2.2 | | |
| 03 | --- | 6.2 | 27 | 330 | 3.0 | 130 | 2.2 | | |
| 04 | --- | 6.5 | 27 | 320 | --- | 130 | 2.4 | | |
| 05 | (540) | 6.2 | 27 | 320 | 4.0 | 130 | 2.5 | | |
| 06 | (580) | 6.2 | 27 | 310 | 4.3 | 130 | 2.6 | | |
| 07 | (560) | 6.1 | 27 | 300 | 4.2 | 130 | 2.7 | | |
| 08 | (520) | 6.2 | 27 | 310 | 4.5 | 130 | 2.0 | | |
| 09 | 600 | 6.6 | 26 | 300 | 4.6 | 120 | 2.8 | | |
| 10 | 540 | 6.6 | 26 | 300 | 4.6 | 120 | 2.9 | | |
| 11 | 500 | 6.0 | 27 | 300 | 4.7 | 120 | 2.9 | | |
| 12 | 540 | 7.0 | 28 | 300 | 4.7 | 120 | 2.9 | | |
| 13 | 530 | 6.8 | 28 | 300 | 4.4 | 120 | 2.9 | | |
| 14 | 540 | 6.3 | 28 | 300 | 4.3 | 130 | 2.9 | | |
| 15 | 600 | 6.3 | 26 | 300 | 4.2 | 120 | 2.8 | | |
| 16 | 560 | 6.2 | 26 | 310 | 4.1 | 120 | 2.8 | | |
| 17 | (500) | 6.5 | 27 | 330 | 4.1 | 130 | 2.6 | | |
| 18 | --- | 6.0 | 27 | 340 | 4.0 | 130 | 2.5 | | |
| 19 | --- | 5.4 | 28 | 340 | 3.7 | 130 | 2.4 | | |
| 20 | --- | 5.8 | 28 | 340 | --- | 120 | 2.2 | | |
| 21 | | 5.4 | 28 | 350 | --- | 140 | 2.2 | | |
| 22 | | 5.0 | 20 | 360 | --- | 140 | 2.0 | | |
| 23 | | 5.8 | 20 | 360 | --- | 120 | 2.0 | | |

Time: 75.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 61

Ushuaia, Argentina (54.8° S, 68.3° W) March 1950

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.6 | 26 | 340 | | | | | 2.40 |
| 01 | | 7.6 | 28 | 325 | | | | | 2.40 |
| 02 | | 7.0 | 26 | 315 | | | | | 2.35 |
| 03 | | 6.5 | 27 | 330 | | | | | 2.30 |
| 04 | | 6.0 | 28 | 360 | | | | | 2.30 |
| 05 | | 6.0 | 28 | 340 | | --- | E | | 2.30 |
| 06 | --- | 6.1 | 28 | 330 | --- | --- | E | | 2.40 |
| 07 | --- | 7.5 | 27 | 250 | --- | 148 | 2.15 | | (2.80) |
| 08 | --- | >8.4 | 24 | 225 | --- | 105 | ---- | 3.1 | (2.70) |
| 09 | --- | >8.7 | 22 | 225 | --- | 101 | ---- | 3.1 | ---- |
| 10 | --- | >9.2 | 20 | 225 | --- | 101 | ---- | 3.8 | ---- |
| 11 | --- | >9.1 | 18 | --- | --- | --- | ---- | 4.1 | |
| 12 | --- | >9.3 | 15 | --- | --- | --- | ---- | 4.4 | ---- |
| 13 | --- | >9.3 | 18 | --- | --- | --- | ---- | 4.0 | ---- |
| 14 | --- | >9.4 | 17 | --- | --- | --- | ---- | 3.7 | ---- |
| 15 | --- | >8.7 | 28 | 230 | --- | 101 | ---- | | ---- |
| 16 | | >9.0 | 21 | 230 | | 101 | ---- | | ---- |
| 17 | | >8.9 | 20 | 245 | | 101 | ---- | | (2.00) |
| 10 | | >8.8 | 10 | 250 | | 103 | 2.70 | | ---- |
| 19 | | >8.6 | 20 | 255 | | 155 | 1.00 | | ---- |
| 20 | | >8.5 | 23 | 260 | | | | 2.4 | (2.65) |
| 21 | | >8.0 | 23 | 270 | | | | 2.6 | (2.60) |
| 22 | | 7.0 | 24 | 380 | | | | 1.8 | 2.40 |
| 23 | | 7.5 | 22 | 330 | | | | 1.6 | 2.40 |

Time: 60.0°W.
Sweep: 1.3 Mc to 10.0 Mc in 30 seconds.

Table 62

Delhi, India (28.6° N, 77.2° E) February 1958

| Time | * | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 340 | >7.0 | 26 | | | | | | 2.85 |
| 01 | 330 | (6.7) | 26 | | | | | | 2.80 |
| 02 | (340) | >6.0 | 11 | | | | | | (2.85) |
| 03 | 379 | >5.0 | 25 | | | | | | <2.85 |
| 04 | 360 | (4.7) | 28 | | | | | | 2.50 |
| 05 | 380 | 4.8 | 27 | | | | | | 2.70 |
| 06 | 340 | 5.5 | 28 | | | | | | 2.80 |
| 07 | 280 | >9.1 | 26 | | | --- | --- | | 3.10 |
| 08 | 300 | 12.1 | 25 | | | 100 | 3.0 | 3.8 | 3.15 |
| 09 | 300 | >14.0 | 26 | | | 100 | 3.4 | 4.0 | 3.00 |
| 10 | 340 | 15.0 | 23 | | | 100 | 3.6 | 4.5 | <2.90 |
| 11 | 350 | >15.1 | 25 | | | 110 | 3.0 | 4.2 | (2.80) |
| 12 | 360 | 16.0 | 27 | | | 100 | 3.9 | | 2.80 |
| 13 | (360) | 15.5 | 24 | | | 110 | 3.9 | | ---- |
| 14 | 360 | 15.3 | 25 | | | 120 | 3.7 | 4.4 | (2.00) |
| 15 | 360 | 15.0 | 25 | | | --- | --- | 4.2 | 2.80 |
| 16 | 360 | 14.7 | 27 | | | --- | --- | 4.4 | 2.80 |
| 17 | 340 | 14.2 | 26 | | | | | 3.7 | 2.85 |
| 18 | 330 | 14.0 | 27 | | | | | 3.1 | 2.90 |
| 19 | 350 | >13.3 | 27 | | | | | | 2.75 |
| 20 | (340) | >12.4 | 25 | | | | | | (2.80) |
| 21 | 360 | >10.0 | 27 | | | | | | (2.70) |
| 22 | 360 | 9.1 | 28 | | | | | | 2.80 |
| 23 | 340 | 8.2 | 28 | | | | | | (2.90) |

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.

Table 63

Ahmedabad, India (23.0° N, 72.6 E) February 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 12.2 | 17 | 250 | | | | 1.7 | 2.75 |
| 01 | | 10.7 | 16 | 245 | | | | | 2.85 |
| 02 | | 0.4 | 19 | 240 | | | | | 3.05 |
| 03 | | 7.4 | 15 | 225 | | | | | 3.00 |
| 04 | | 6.4 | 12 | 250 | | | | | 2.60 |
| 05 | | (4.6) | 8 | 270 | | | | | (2.55) |
| 06 | | 4.4 | 11 | 270 | | | | | (2.65) |
| 07 | | 0.2 | 15 | 260 | | 150 | 1.00 | 2.3 | 2.95 |
| 08 | 250 | 11.8 | 12 | 250 | | 115 | 2.80 | | 3.05 |
| 09 | 250 | 13.9 | 13 | (240) | --- | 110 | 3.35 | | 2.00 |
| 10 | 300 | 15.5 | 15 | (230) | 5.6 | 110 | 3.75 | | 2.75 |
| 11 | 350 | 16.0 | 13 | (240) | 5.6 | 110 | 4.00 | | 2.60 |
| 12 | 350 | 16.3 | 18 | (235) | --- | 110 | 4.10 | | 2.50 |
| 13 | 360 | 15.6 | 20 | (240) | --- | 110 | 4.10 | | 2.50 |
| 14 | 370 | (15.7) | 20 | 240 | 5.3 | 110 | 4.00 | | 2.40 |
| 15 | 350 | 16.1 | 20 | 230 | --- | 110 | 3.80 | | 2.45 |
| 16 | 335 | >15.3 | 17 | (250) | --- | 110 | 3.60 | | 2.55 |
| 17 | 250 | >15.1 | 18 | 250 | 6.0 | 110 | 2.90 | >3.2 | 2.55 |
| 18 | | 15.2 | 19 | 260 | | --- | 1.75 | 2.5 | 2.55 |
| 19 | | 15.3 | 19 | 280 | | | | 2.5 | 2.55 |
| 20 | | >15.3 | 16 | 260 | | | | 2.4 | 2.65 |
| 21 | | >15.3 | 17 | 235 | | | | 1.8 | <2.65 |
| 22 | | 15.2 | 19 | 230 | | | | 2.2 | 2.75 |
| 23 | | 13.8 | 15 | 240 | | | | | (2.65) |

Time: 75.0°E.
Sweep: 0.6 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 64

Calcutta, India (23.0° N, 88.6° E) February 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >11.0 | 17 | 240 | | | | | ---- |
| 01 | | >10.0 | 17 | 235 | | | | | (4.0) |
| 02 | | >7.2 | 18 | 245 | | | | | ---- |
| 03 | | (6.8) | 18 | 240 | | | | | (4.0) |
| 04 | | >4.4 | 10 | 235 | | | | | (3.8) |
| 05 | | (4.3) | 18 | 250 | | | | | (3.6) |
| 06 | | >4.4 | 18 | 255 | | --- | --- | | (3.4) |
| 07 | | (9.2) | 18 | 255 | | 100 | (2.4) | | 3.65 |
| 08 | | (12.0) | 17 | 250 | | 100 | >3.0 | | <4.25 |
| 09 | | D | 14 | 250 | | 100 | (3.6) | | ---- |
| 10 | --- | D | 11 | (250) | | 105 | <3.7 | | |
| 11 | --- | D | 9 | (255) | --- | --- | <6.0 | | |
| 12 | --- | D | 11 | (250) | --- | --- | <6.0 | | |
| 13 | (400) | 0 | 13 | (250) | (8.0) | --- | <5.0 | | |
| 14 | (400) | 0 | 12 | (250) | (8.0) | --- | <5.0 | | |
| 15 | (360) | 0 | 12 | (245) | (7.0) | 100 | (3.7) | | |
| 16 | (360) | 0 | 14 | (250) | --- | 105 | (3.4) | | |
| 17 | | D | 16 | 250 | | 110 | (2.9) | | |
| 18 | | D | 10 | 265 | | <150 | (1.9) | | |
| 19 | | D | 17 | <300 | | | | | ---- |
| 20 | | 0 | 17 | 270 | | | | | ---- |
| 21 | | 0 | 16 | 245 | | | | | ---- |
| 22 | | D | 17 | 245 | | | | | ---- |
| 23 | | >12.0 | 17 | 245 | | | | | |

Time: 90.0°E.
Sweep: 1.0 Mc to 13.0 Mc in 1 minute 55 seconds.

Table 65

Bombay, India (19.0° N, 73.0° E) February 1950

| Time | * | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | >11.0 | 17 | | | | | | ---- |
| 01 | --- | >10.5 | 23 | | | | | | ---- |
| 02 | --- | >9.8 | 24 | | | | | | ---- |
| 03 | (320) | >8.7 | 23 | | | | | | ---- |
| 04 | (320) | >0.0 | 23 | | | | | | (3.10) |
| 05 | (300) | >6.7 | 24 | | | --- | --- | | (3.20) |
| 06 | 300 | >6.1 | 22 | | | 80 | 3.0 | | (3.30) |
| 07 | 280 | 9.0 | 26 | | | | | | ---- |
| 08 | 320 | >13.2 | 25 | | | | | | |
| 09 | 330 | >13.1 | 23 | | | | | | ---- |
| 10 | (360) | (14.8) | 25 | | | | | | |
| 11 | (380) | (14.6) | 27 | | | | | | |
| 12 | (400) | >14.7 | 28 | | | | | | ---- |
| 13 | (430) | >14.7 | 20 | | | | | | ---- |
| 14 | (440) | >15.1 | 28 | | | 100 | 4.4 | | |
| 15 | (420) | >14.9 | 27 | | | 100 | 4.2 | | |
| 16 | --- | >14.2 | 25 | | | 100 | 4.2 | | ---- |
| 17 | --- | (14.4) | 23 | | | 100 | 3.9 | | |
| 18 | --- | >14.2 | 21 | | | 100 | 3.0 | | ---- |
| 19 | --- | >13.8 | 27 | | | --- | --- | | ---- |
| 20 | --- | >14.0 | 5 | | | --- | --- | | |
| 21 | --- | >12.8 | 14 | | | --- | --- | | ---- |
| 22 | --- | >12.5 | 16 | | | | | | ---- |
| 23 | --- | >12.0 | 17 | | | | | | ---- |

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.

Table 66

Madras, India (13.1° N, 80.3° E) February 1950

| Time | * | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | 12.4 | 28 | | | | | | ---- |
| 01 | --- | 11.5 | 23 | | | | | | |
| 02 | --- | 9.0 | 22 | | | | | | |
| 03 | --- | 7.8 | 18 | | | | | | |
| 04 | --- | 7.0 | 26 | | | | | | |
| 05 | (340) | 6.9 | 24 | | | | | | ---- |
| 06 | 340 | 7.0 | 25 | | | | | | (2.80) |
| 07 | 360 | 11.5 | 25 | | | | | 3.8 | ---- |
| 08 | 420 | 13.3 | 23 | | | | | 4.2 | 2.55 |
| 09 | 440 | 13.5 | 25 | | | | | 4.5 | 2.30 |
| 10 | 460 | 13.4 | 26 | | | | | 4.9 | 2.35 |
| 11 | 480 | 13.1 | 25 | | | | | 4.4 | 2.30 |
| 12 | 500 | 13.8 | 25 | | | | | 4.6 | 2.25 |
| 13 | 510 | 13.9 | 15 | | | | | 3.6 | (2.25) |
| 14 | 510 | 14.0 | 25 | | | | | 4.7 | (2.25) |
| 15 | 520 | 14.2 | 25 | | | | | 4.5 | (2.30) |
| 16 | (520) | 14.0 | 24 | | | | | 5.0 | (2.30) |
| 17 | (530) | 13.6 | 24 | | | | | 4.8 | ---- |
| 18 | (540) | 12.1 | 26 | | | | | 3.6 | ---- |
| 19 | --- | 11.5 | 21 | | | | | | ---- |
| 20 | --- | 12.5 | 19 | | | | | | |
| 21 | --- | 12.5 | 24 | | | | | | |
| 22 | --- | 13.4 | 23 | | | | | | |
| 23 | --- | 13.4 | 26 | | | | | | |

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.

Table 67

Tiruchy, India (10.8° N, 78.7° E) February 1958

| Time | * | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | (320) | (11.6) | 14 | | | | | | ---- |
| 01 | --- | 11.5 | 11 | | | | | | ---- |
| 02 | (320) | >9.8 | 10 | | | | | | ---- |
| 03 | 320 | >8.9 | 17 | | | | | | 3.15 |
| 04 | 200 | 8.0 | 18 | | | | | | 3.20 |
| 05 | 280 | 6.7 | 22 | | | | | | 3.35 |
| 06 | 300 | 7.2 | 21 | | | | | | 3.20 |
| 07 | 320 | 10.5 | 25 | | | | | 7.2 | 2.90 |
| 08 | 360 | >11.7 | 27 | | | | | 10.0 | 2.60 |
| 09 | 400 | 12.1 | 17 | | | | | 11.4 | (2.60) |
| 10 | 440 | 12.3 | 28 | | | | | >11.5 | 2.40 |
| 11 | 460 | 12.3 | 27 | | | | | 11.6 | 2.35 |
| 12 | 490 | >12.4 | 25 | | | | | 11.4 | 2.30 |
| 13 | 520 | >13.0 | 27 | | | | | 11.4 | 2.20 |
| 14 | 500 | 13.1 | 27 | | | | | 11.2 | (2.30) |
| 15 | 520 | >13.4 | 27 | | | | | (11.3) | ---- |
| 16 | (520) | >12.0 | 20 | | | | | >11.3 | ---- |
| 17 | (520) | >12.0 | 23 | | | | | >10.2 | ---- |
| 18 | (560) | >11.5 | 27 | | | | | | ---- |
| 19 | (560) | 11.5 | 17 | | | | | | ---- |
| 20 | --- | (10.5) | 4 | | | | | | |
| 21 | (360) | >11.4 | 13 | | | | | | ---- |
| 22 | (400) | >11.7 | 13 | | | | | | |
| 23 | --- | >11.7 | 13 | | | | | | ---- |

Time: 75.0°E.
Sweep: 2.5 Mc to 20.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.

Table 68

Kodaikanal, India (10.2° N, 77.5° E) February 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 11.4 | 19 | 240 | | | | | 2.95 |
| 01 | | 10.9 | 23 | 240 | | | | | 3.00 |
| 02 | | 9.3 | 22 | 230 | | | | | 3.05 |
| 03 | | 8.3 | 25 | 240 | | | | | 2.95 |
| 04 | | 7.5 | 26 | 240 | | | | | 3.00 |
| 05 | | 6.9 | 26 | 240 | | | | | 3.10 |
| 06 | | 6.4 | 26 | 250 | | | | | 3.00 |
| 07 | | 9.8 | 25 | 260 | | 120 | 2.6 | 6.8 | 2.70 |
| 08 | | 11.8 | 27 | 240 | | 110 | --- | 9.8 | 2.60 |
| 09 | | 12.3 | 25 | 225 | | 110 | --- | 10.6 | 2.35 |
| 10 | | 11.9 | 25 | 220 | | 110 | --- | 12.0 | 2.30 |
| 11 | | 12.0 | 24 | 210 | | 105 | --- | 11.8 | 2.30 |
| 12 | --- | 12.4 | 25 | 210 | | 110 | --- | 11.6 | 2.20 |
| 13 | --- | 12.9 | 25 | 215 | | 110 | 4.2 | 10.8 | 2.20 |
| 14 | --- | 13.6 | 26 | 220 | --- | 110 | 4.0 | 9.5 | 2.20 |
| 15 | --- | 13.5 | 27 | 220 | | 110 | 3.7 | 10.0 | 2.20 |
| 16 | --- | 13.1 | 25 | 240 | | 110 | --- | 8.2 | 2.25 |
| 17 | | 12.8 | 27 | 260 | | 115 | --- | 7.6 | 2.15 |
| 18 | | 11.8 | 27 | 300 | | | | | 2.10 |
| 19 | | 10.7 | 25 | 405 | | | | | 2.00 |
| 20 | | 10.5 | 17 | 360 | | | | | 2.15 |
| 21 | | 10.6 | 18 | 290 | | | | | 2.40 |
| 22 | | 11.6 | 16 | 265 | | | | | 2.70 |
| 23 | | 12.1 | 18 | 255 | | | | | 2.80 |

Time: 75.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 69

Trivandrum, India (0.5° N, 77.0° E) February 1958

| Time | * | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | (330) | >11.4 | 14 | | | | | | ---- |
| 01 | (360) | >11.1 | 15 | | | | | | ---- |
| 02 | 330 | >10.2 | 16 | | | | | | (3.00) |
| 03 | 320 | 9.0 | 18 | | | | | | 3.10 |
| 04 | 320 | 8.2 | 18 | | | | | | 3.10 |
| 05 | 280 | 6.9 | 17 | | | | | | 3.20 |
| 06 | 320 | 6.8 | 18 | | | | | | 3.10 |
| 07 | 350 | 9.6 | 25 | | | | | | 2.80 |
| 08 | 400 | 11.5 | 27 | | | | | >9.0 | 2.60 |
| 09 | 440 | 12.2 | 28 | | | | | 13.0 | 2.40 |
| 10 | 440 | 12.0 | 27 | | | | | 13.0 | 2.40 |
| 11 | 460 | 12.4 | 26 | | | | | 13.2 | 2.35 |
| 12 | 480 | 12.6 | 25 | | | | | 13.0 | 2.30 |
| 13 | 500 | 12.8 | 27 | | | | | 13.0 | 2.25 |
| 14 | 520 | 13.5 | 27 | | | | | 12.6 | 2.25 |
| 15 | 520 | 13.0 | 28 | | | | | >12.0 | 2.25 |
| 16 | 520 | 13.2 | 28 | | | | | >10.7 | 2.20 |
| 17 | 540 | >13.0 | 27 | | | | | >7.5 | (2.20) |
| 18 | 560 | (12.1) | 27 | | | | | | (2.10) |
| 19 | --- | >10.8 | 10 | | | | | | ---- |
| 20 | --- | >10.5 | 8 | | | | | | ---- |
| 21 | (480) | >11.4 | 14 | | | | | | ---- |
| 22 | (400) | >11.4 | 16 | | | | | | ---- |
| 23 | 350 | >11.6 | 17 | | | | | | ---- |

Time: 75.0°E.
Sweep: 1.5 Mc to 18.0 Mc in 5 minutes, manual operation.
*Height at 0.83 foF2.

Table 70

Singapore, British Malaya (1.3° N, 103.8° E) February 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.3 | 27 | 240 | | 120 | 1.00 | | 2.55 |
| 01 | | 10.0 | 26 | 255 | | 105 | 1.00 | <1.2 | 2.60 |
| 02 | | 9.9 | 24 | 260 | | 105 | 1.00 | | 2.65 |
| 03 | | 9.4 | 27 | 250 | | 135 | ---- | <1.0 | 2.80 |
| 04 | | 8.1 | 27 | 250 | | 135 | 1.15 | | 2.90 |
| 05 | | 6.6 | 25 | 245 | | 120 | 1.10 | | 2.95 |
| 06 | --- | 6.2 | 27 | 255 | | 130 | 1.20 | | 2.80 |
| 07 | --- | 9.1 | 25 | 260 | | 130 | 2.60 | | 2.90 |
| 08 | --- | 11.0 | 20 | 245 | --- | 115 | 3.30 | | 2.70 |
| 09 | 470 | 11.2 | 28 | 230 | --- | 110 | 3.75 | 3.9 | 2.35 |
| 10 | --- | (12.2) | 28 | 215 | --- | 110 | 4.05 | 4.2 | 2.05 |
| 11 | 1040 | >12.4 | 26 | 210 | --- | 110 | 4.25 | | 2.05 |
| 12 | 345 | 12.6 | 27 | 205 | --- | 105 | 4.30 | | 2.00 |
| 13 | 440 | 12.6 | 28 | 205 | --- | 105 | 4.25 | | 2.05 |
| 14 | 500 | 12.8 | 28 | 210 | --- | 105 | 4.05 | | 2.05 |
| 15 | 505 | 13.3 | 25 | 230 | --- | 105 | 3.90 | | 2.05 |
| 16 | --- | 13.8 | 26 | 245 | --- | 110 | 3.50 | 4.0 | 2.10 |
| 17 | --- | 13.8 | 26 | 255 | --- | 110 | 3.00 | 3.4 | 2.15 |
| 18 | --- | (13.4) | 24 | 295 | | 130 | 2.00 | 3.4 | 2.10 |
| 19 | | 12.9 | 17 | 360 | | --- | ---- | 3.2 | 2.00 |
| 20 | | >12.5 | 14 | 365 | | 135 | ---- | 2.9 | (2.05) |
| 21 | | >12.4 | 12 | 310 | | 130 | ---- | 2.2 | ---- |
| 22 | | (11.5) | 16 | 260 | | --- | ---- | 3.0 | (2.40) |
| 23 | | 11.7 | 20 | 240 | | 120 | ---- | 2.0 | 2.45 |

Time: 105.0°E.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 71

Singapore, British Malaya (1.3° N, 103.8° E) January 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.4 | 30 | 305 | | --- | ---- | <1.1 | 2.40 |
| 01 | | 9.9 | 31 | 300 | | --- | ---- | <1.1 | 2.40 |
| 02 | | 9.0 | 31 | 300 | | --- | ---- | <1.1 | 2.45 |
| 03 | | 8.6 | 30 | 295 | | --- | ---- | <1.1 | 2.45 |
| 04 | | 8.2 | 30 | 265 | | 140 | ---- | <1.0 | 2.50 |
| 05 | | 7.0 | 30 | 250 | | 140 | ---- | <1.1 | 2.60 |
| 06 | | 6.9 | 30 | 290 | | 140 | 1.50 | | 2.50 |
| 07 | | 9.1 | 31 | 265 | | 120 | 2.70 | | 2.65 |
| 08 | | 10.2 | 31 | 250 | | 110 | 3.45 | | 2.50 |
| 09 | | 11.0 | 31 | 245 | | 110 | 3.90 | 4.2 | 2.00 |
| 10 | | 11.6 | 31 | 235 | --- | 110 | 4.15 | | 1.80 |
| 11 | 455 | 12.3 | 29 | 225 | --- | 110 | <4.40 | | 1.80 |
| 12 | 590 | 12.2 | 31 | 210 | 6.8 | 105 | 4.45 | | 1.75 |
| 13 | 600 | (11.6) | 29 | 215 | 6.7 | 110 | <4.45 | | 1.65 |
| 14 | 575 | 11.6 | 29 | 215 | 6.5 | 110 | 4.25 | | 1.70 |
| 15 | 580 | 11.8 | 29 | 240 | 6.3 | 110 | 4.00 | | 1.80 |
| 16 | 510 | >12.0 | 30 | 250 | 6.1 | 110 | 3.65 | | 1.90 |
| 17 | 640 | 12.2 | 31 | 270 | --- | 115 | 3.10 | | 1.90 |
| 18 | | 12.0 | 30 | 310 | | 140 | 2.20 | 3.1 | 1.90 |
| 19 | | 11.8 | 30 | 400 | | --- | ---- | 3.1 | 1.90 |
| 20 | | >11.6 | 28 | 395 | | --- | ---- | 2.8 | 1.95 |
| 21 | | 11.5 | 29 | 335 | | --- | ---- | 2.8 | 2.15 |
| 22 | | 11.1 | 31 | 295 | | --- | ---- | 2.8 | 2.20 |
| 23 | | 10.7 | 31 | 300 | | 100 | ---- | <1.3 | 2.30 |

Time: 105.0°E.
Sweep: 0.67 Mc to 25.0 Mc in 5 minutes, automatic operation.

Table 7-

Alert, Canada (82.5° N, 62.7° W) August 1957

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | 5.5 | 22 | 260 | --- | 120 | 2.2 | | |
| 01 | --- | 5.6 | 23 | 260 | --- | 110 | 2.2 | | |
| 02 | (530) | 5.3 | 24 | 240 | 3.6 | 105 | 2.3 | | |
| 03 | (400) | 5.2 | 23 | 250 | 3.7 | 105 | 2.4 | | |
| 04 | (420) | 5.5 | 23 | 240 | 3.9 | 105 | 2.5 | | |
| 05 | (400) | 5.4 | 25 | 240 | 4.0 | 100 | 2.6 | | |
| 06 | 400 | 5.5 | 25 | 240 | 4.2 | 100 | 2.7 | | |
| 07 | 400 | 5.7 | 25 | 240 | 4.3 | 100 | 2.8 | | |
| 08 | 440 | 5.6 | 25 | 230 | 4.4 | 100 | 2.8 | | |
| 09 | 420 | 5.7 | 25 | 230 | 4.5 | 100 | 2.9 | | |
| 10 | 470 | 5.6 | 22 | 230 | 4.3 | 100 | 3.0 | 3.5 | |
| 11 | 470 | 5.6 | 21 | 220 | 4.3 | 100 | 3.0 | | |
| 12 | 400 | 5.6 | 20 | 210 | 4.4 | 100 | 3.0 | | |
| 13 | 480 | 5.6 | 23 | 220 | 4.3 | 100 | 3.0 | | |
| 14 | 410 | 5.8 | 22 | 240 | 4.3 | 100 | 2.9 | 4.0 | |
| 15 | 420 | 5.5 | 22 | 240 | 4.2 | 100 | 2.8 | | |
| 16 | 400 | 5.7 | 23 | 240 | 4.2 | 105 | 2.8 | | |
| 17 | 400 | 5.8 | 24 | 240 | 4.0 | 105 | 2.7 | | |
| 18 | 380 | 5.5 | 23 | 250 | 3.9 | 100 | 2.6 | | |
| 19 | 400 | 5.4 | 23 | 250 | 3.8 | 110 | 2.5 | | |
| 20 | (400) | 5.4 | 22 | 270 | 3.7 | 110 | 2.4 | | |
| 21 | (430) | 5.4 | 24 | 260 | 3.6 | 110 | 2.2 | | |
| 22 | --- | 5.6 | 24 | 250 | (3.5) | 110 | 2.2 | | |
| 23 | (440) | 5.4 | 22 | 260 | 3.6 | 110 | 2.1 | | |

Time: 75.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

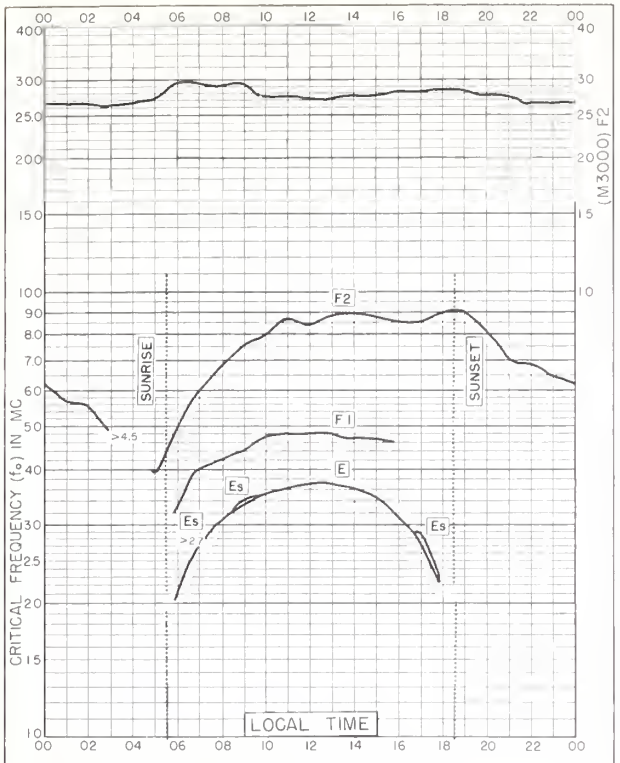



Fig. 1. WASHINGTON, D. C.
38.7°N, 77.1°W APRIL 1960

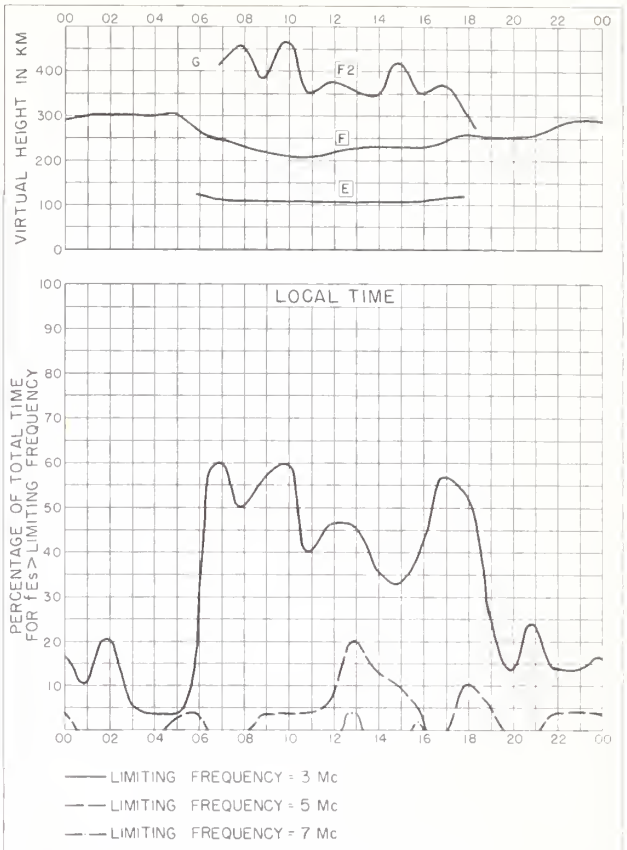



Fig. 2. WASHINGTON, D. C. APRIL 1960

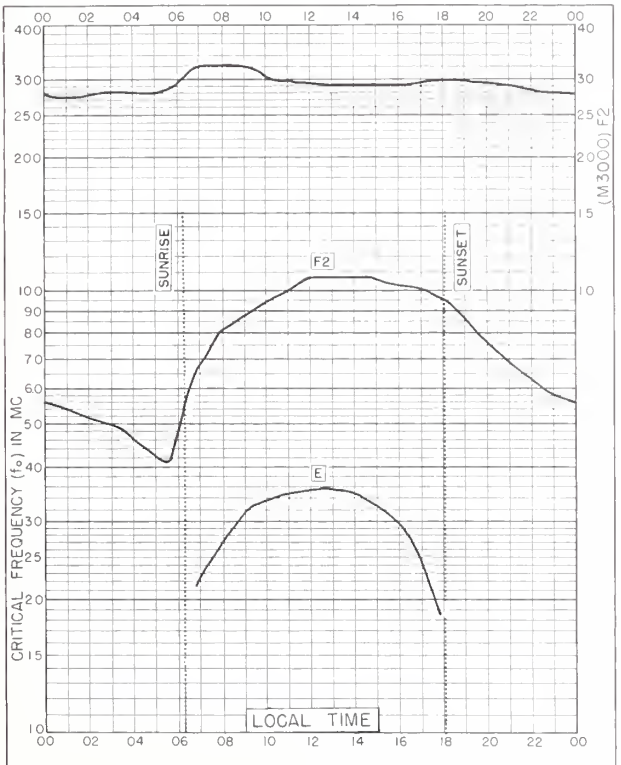



Fig. 3. WASHINGTON, D. C.
38.7°N, 77.1°W MARCH 1960

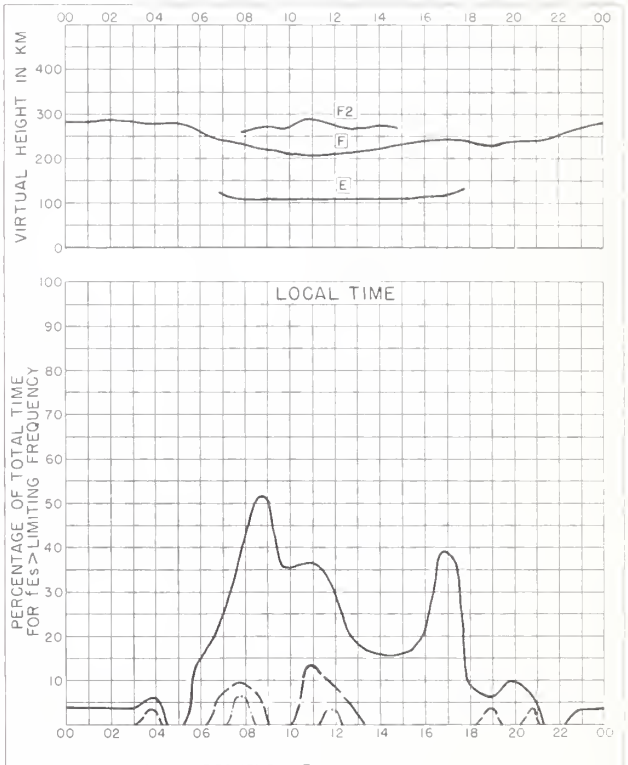



Fig. 4. WASHINGTON, D. C. MARCH 1960

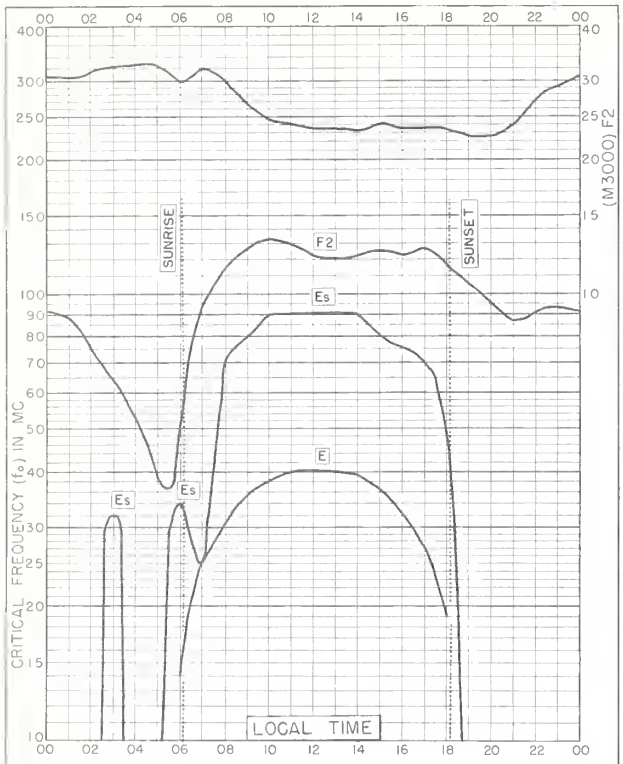



Fig. 5. HUANCAYO, PERU
12.0°S, 75.3°W MARCH 1960

NBS 503

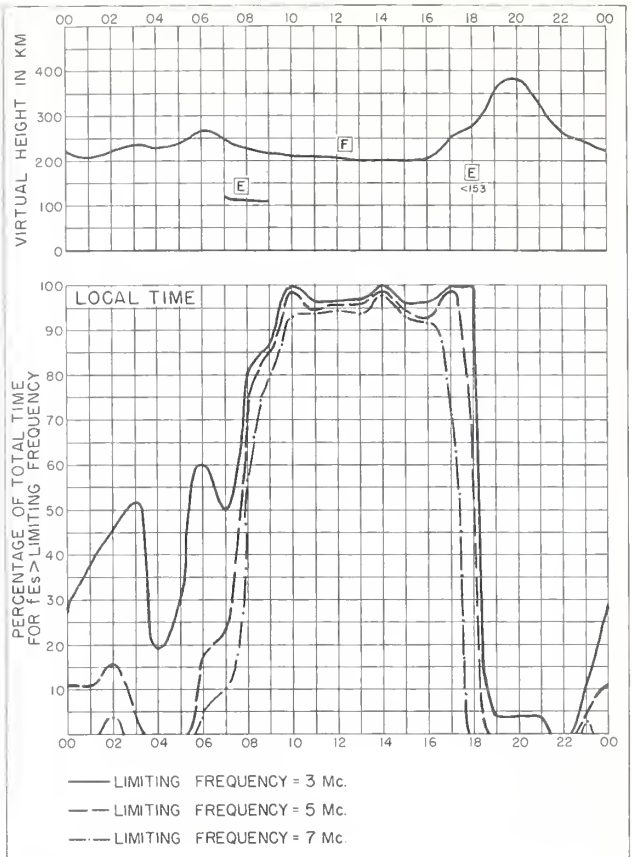



Fig. 6. HUANCAYO, PERU MARCH 1960

NBS 490

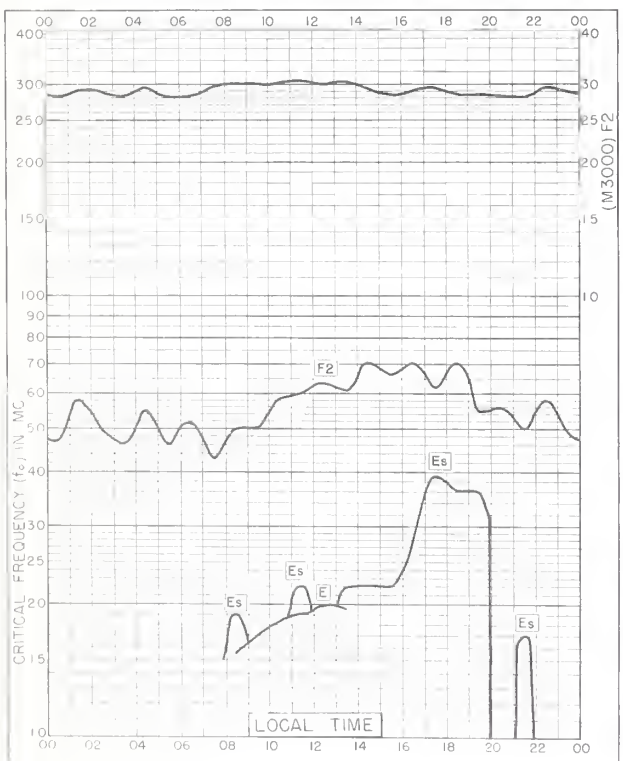



Fig. 7 THULE, GREENLAND
76.6°N, 68.7°W FEBRUARY 1960

NBS 503

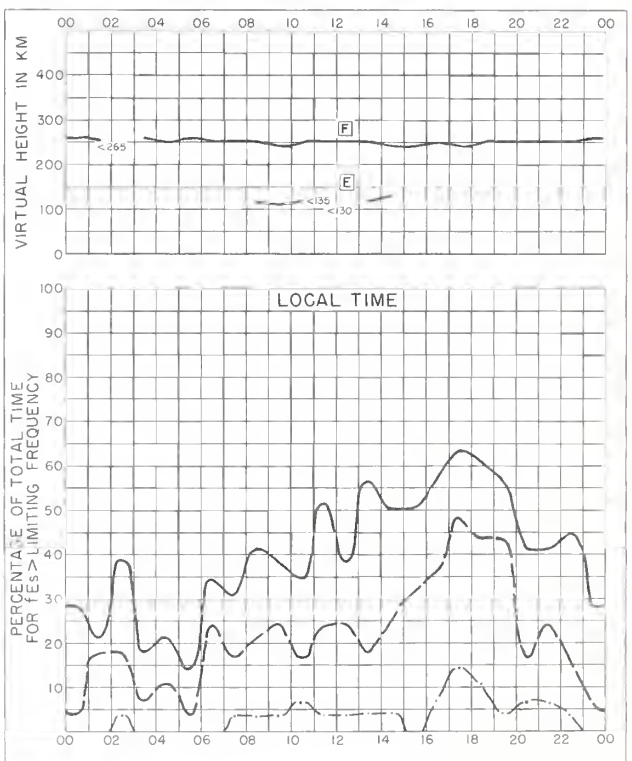



Fig. 8. THULE, GREENLAND FEBRUARY 1960

NBS 490

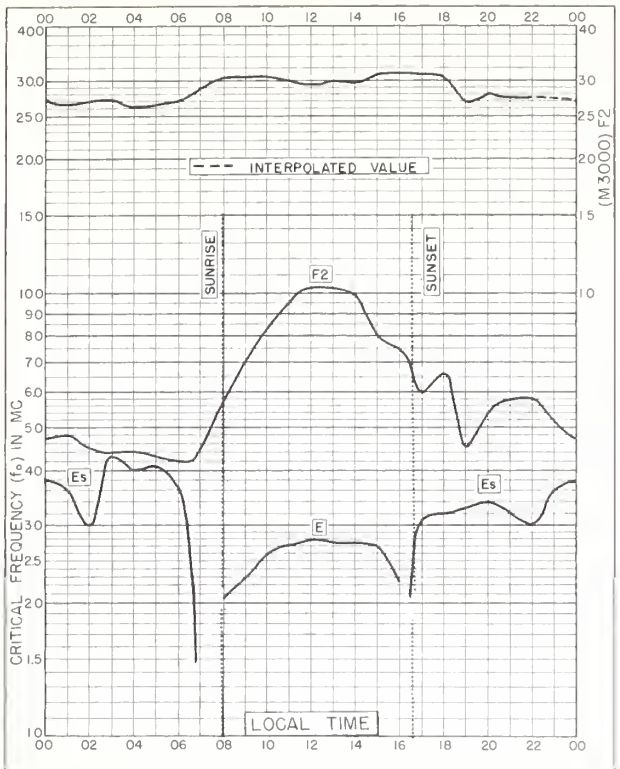
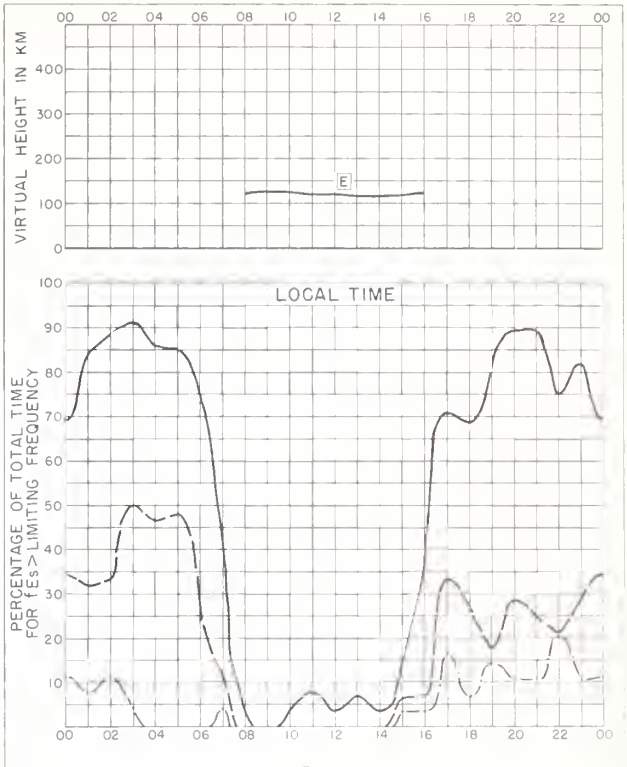



Fig. 9. NARSARSSUAK, GREENLAND
61.2°N, 45.4°W FEBRUARY 1960

NBS 503




FEBRUARY 1960

Fig. 10. NARSARSSUAK, GREENLAND

NBS 491

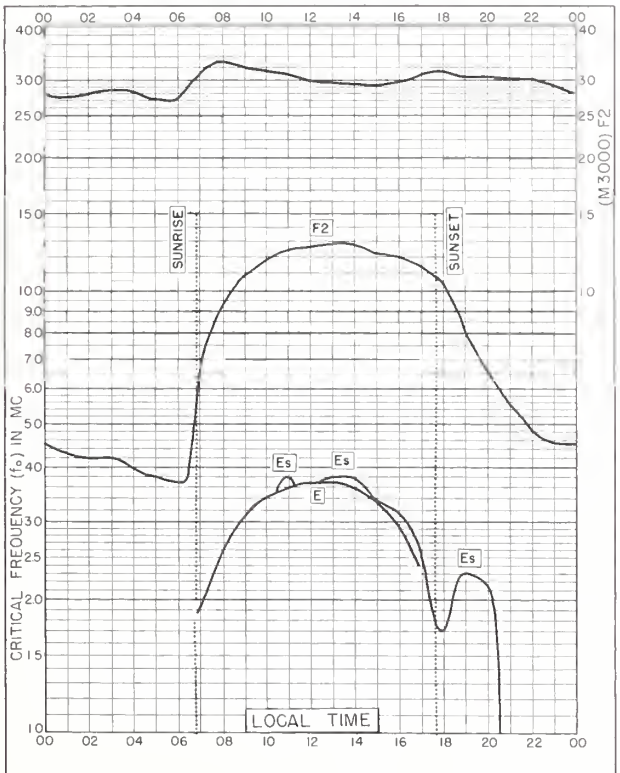
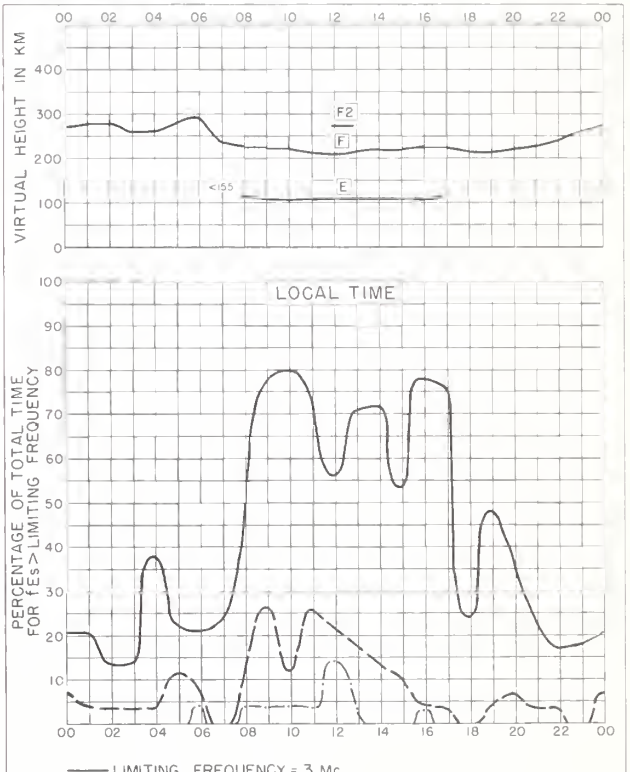



Fig. 11. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W FEBRUARY 1960

NBS 503




FEBRUARY 1960

Fig. 12. WHITE SANDS, NEW MEXICO

NBS 490

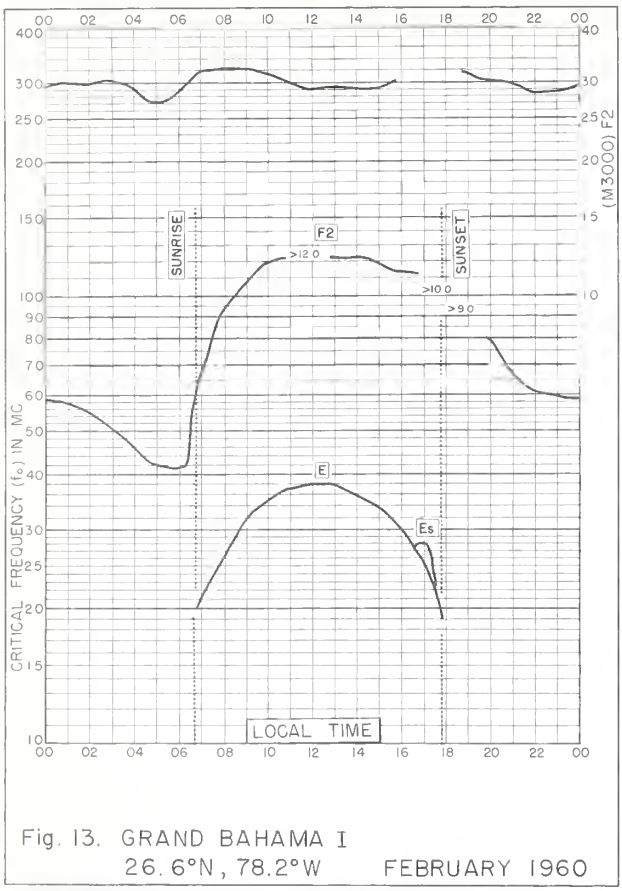



Fig. 13. GRAND BAHAMA I
26.6°N, 78.2°W FEBRUARY 1960

NBS 503

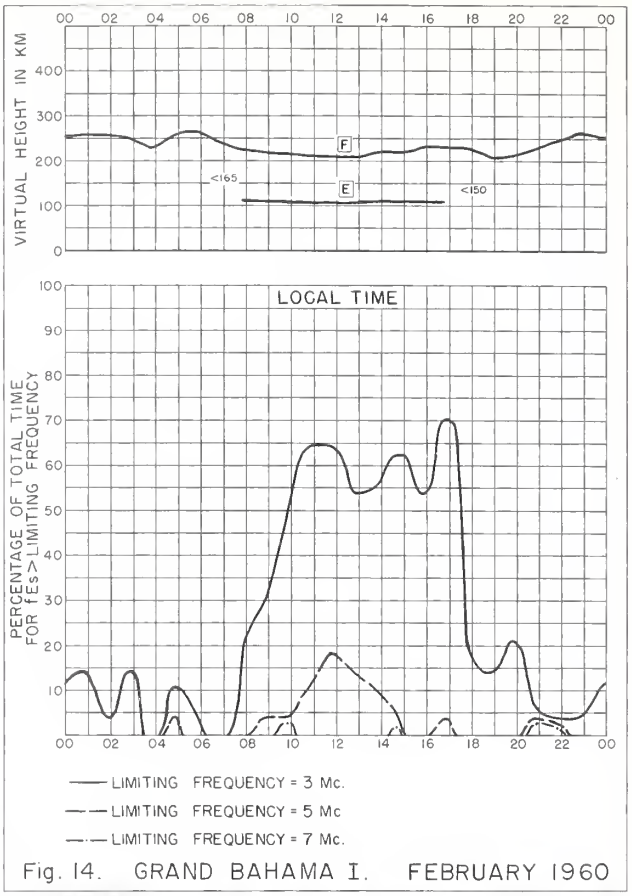



Fig. 14. GRAND BAHAMA I. FEBRUARY 1960

NBS 490

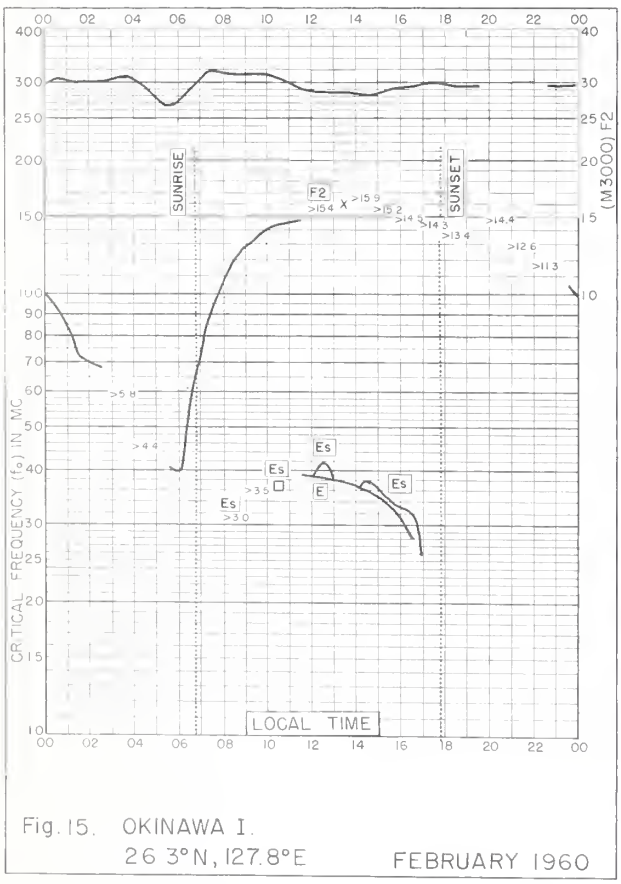



Fig. 15. OKINAWA I.
26.3°N, 127.8°E FEBRUARY 1960

NBS 503

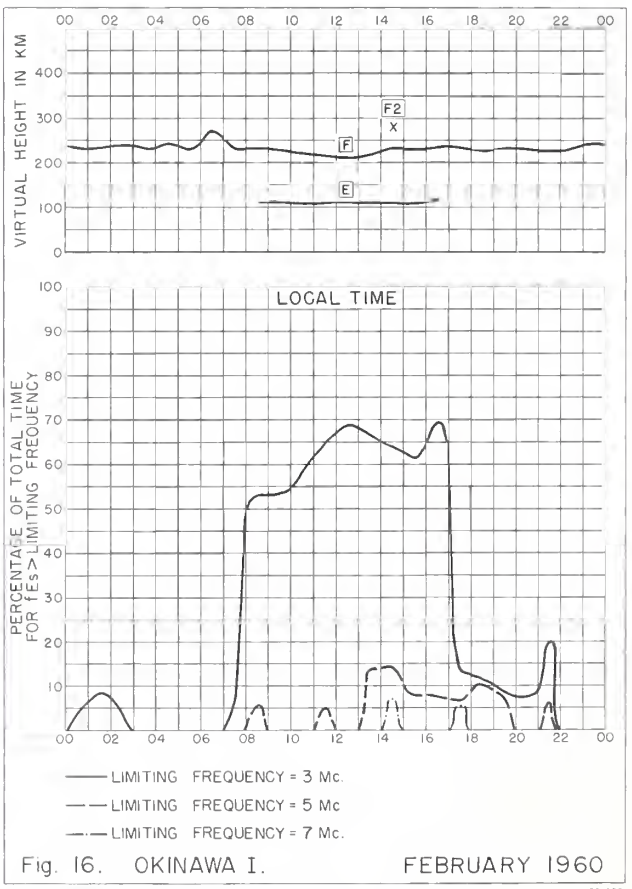



Fig. 16. OKINAWA I. FEBRUARY 1960

NBS 490

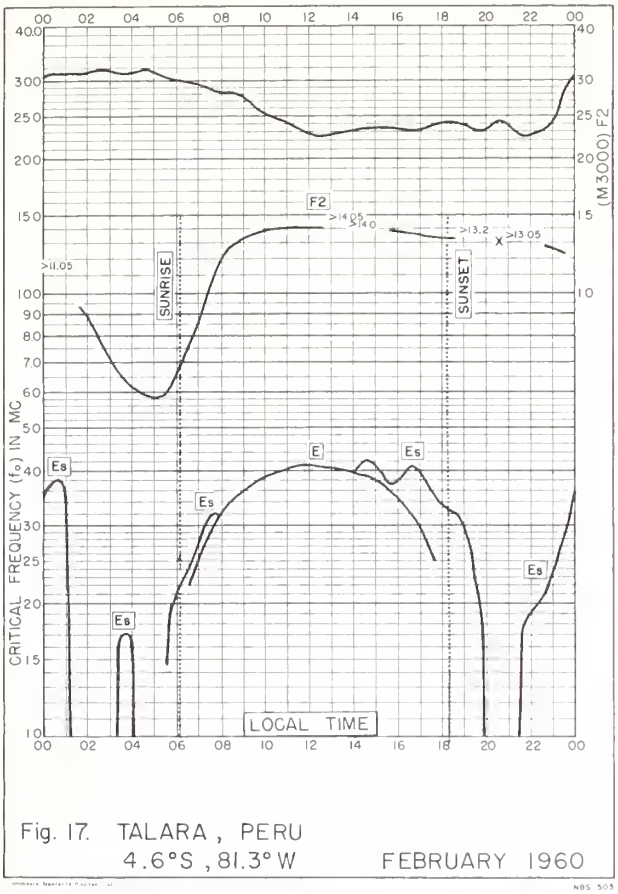



Fig. 17. TALARA, PERU
4.6°S, 81.3° W FEBRUARY 1960

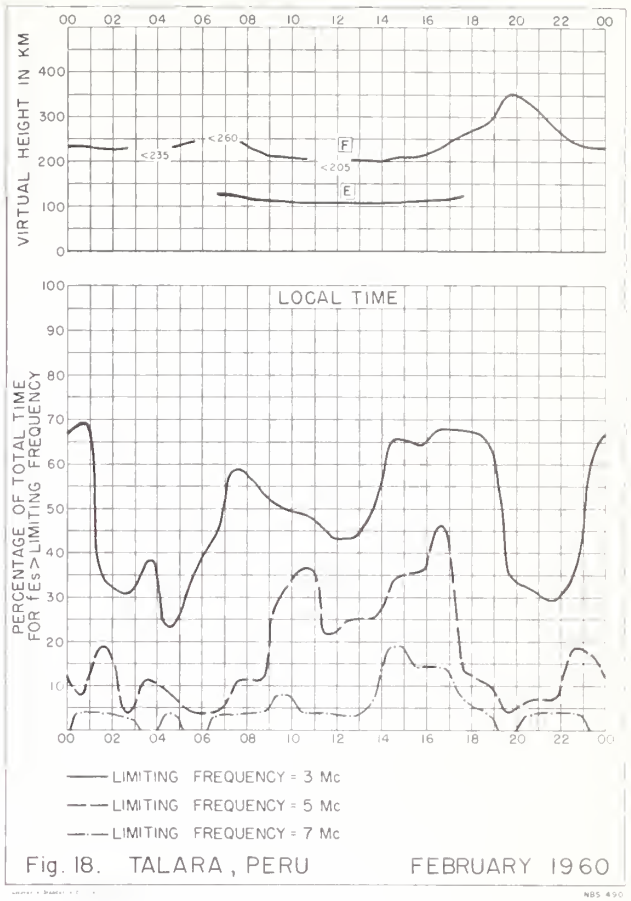



Fig. 18. TALARA, PERU FEBRUARY 1960

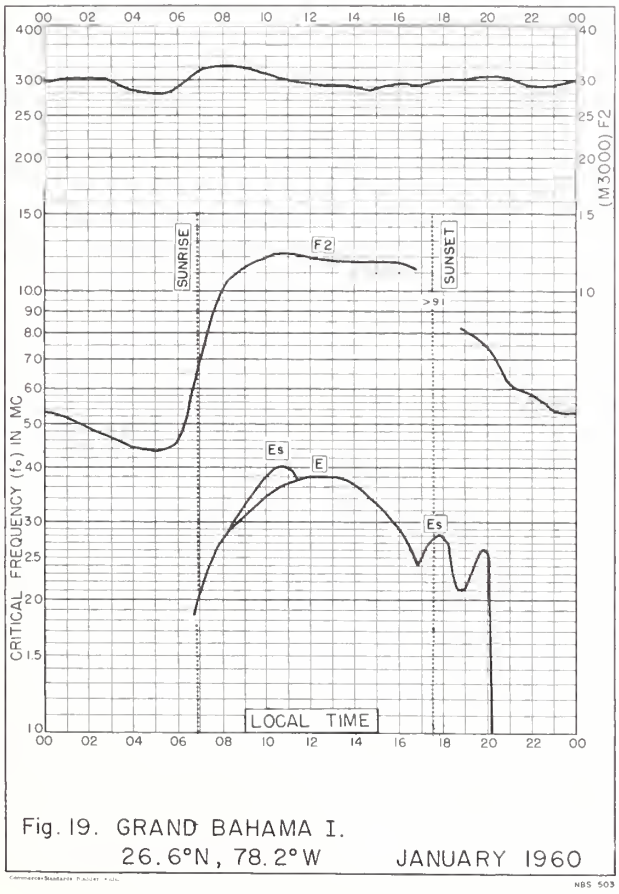



Fig. 19. GRAND BAHAMA I.
26.6°N, 78.2° W JANUARY 1960

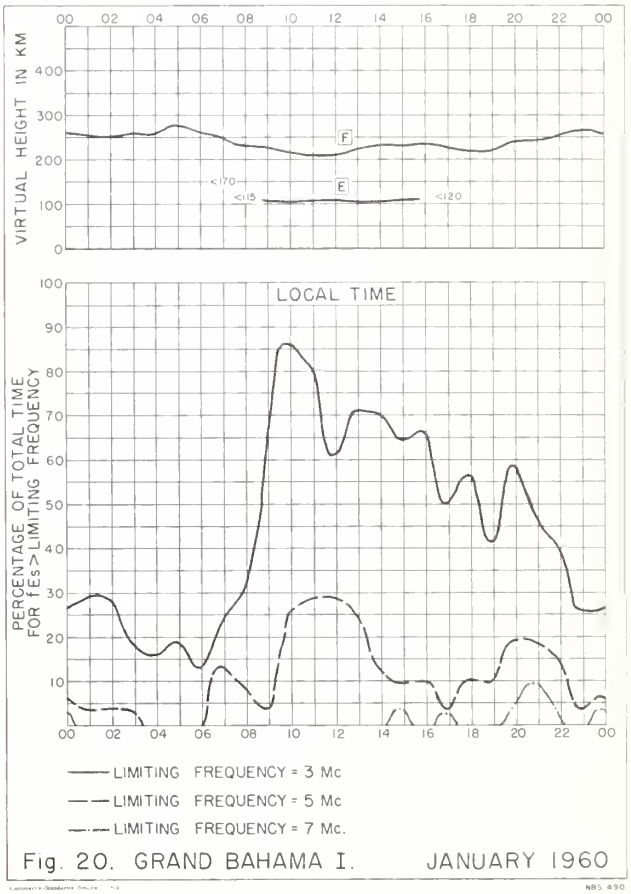



Fig. 20. GRAND BAHAMA I. JANUARY 1960

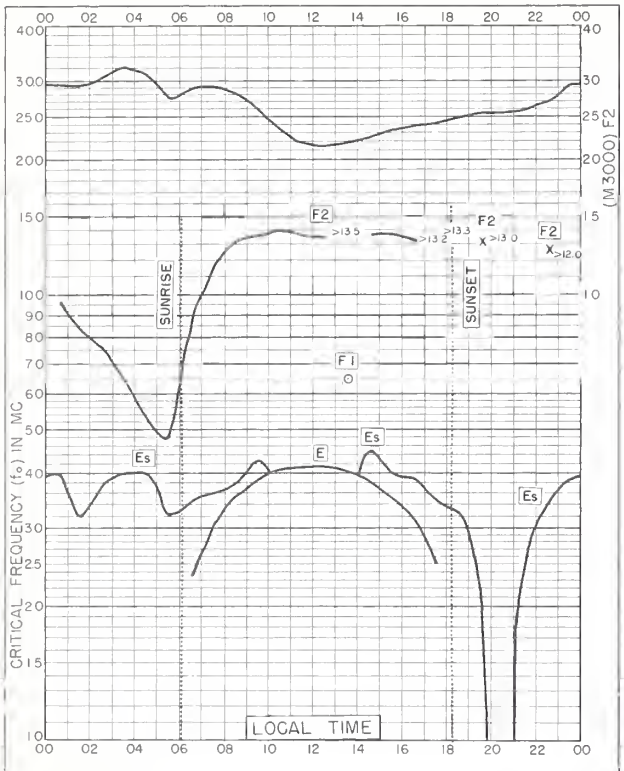



Fig. 21. TALARA, PERU
4.6°S, 81.3°W
JANUARY 1960

NBS 503

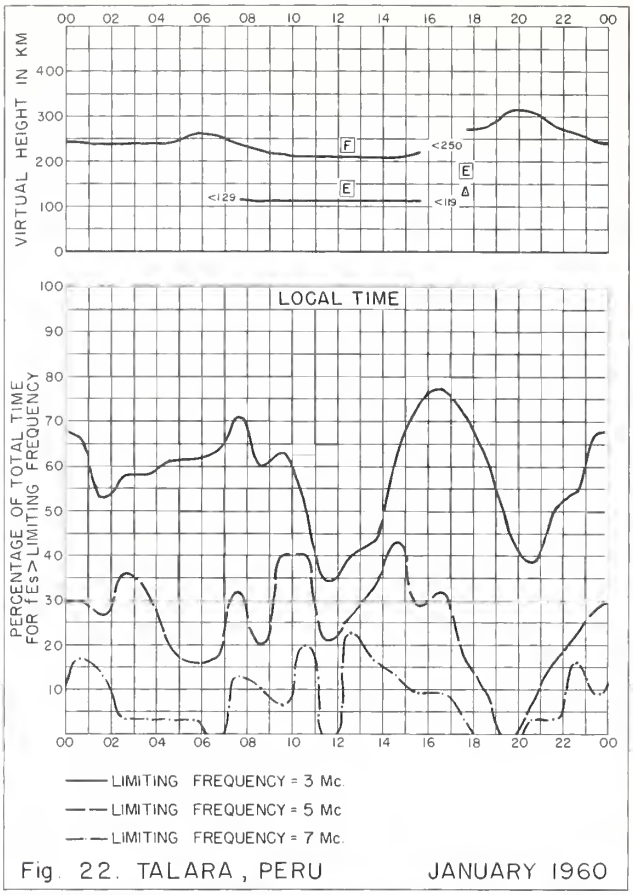



Fig. 22. TALARA, PERU
JANUARY 1960

NBS 490

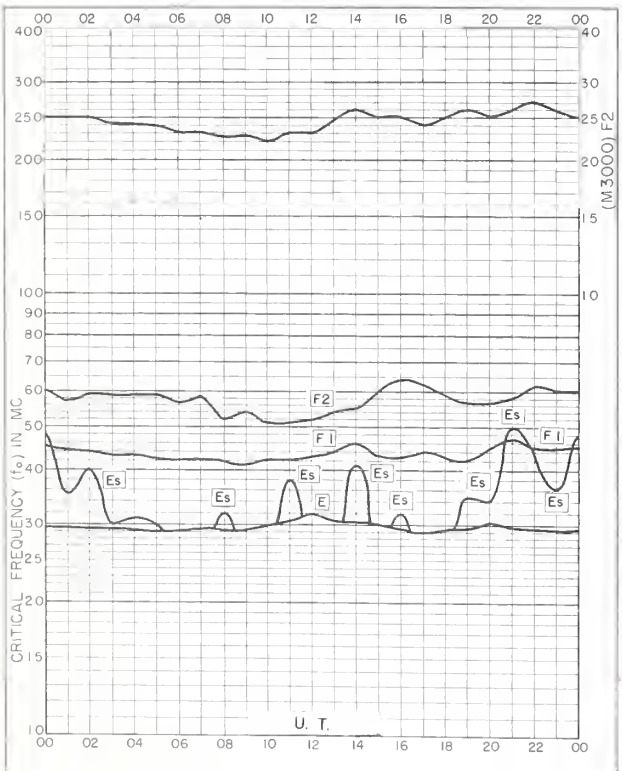



Fig 23. POLE STATION
90.0°S
JANUARY 1960

NBS 503

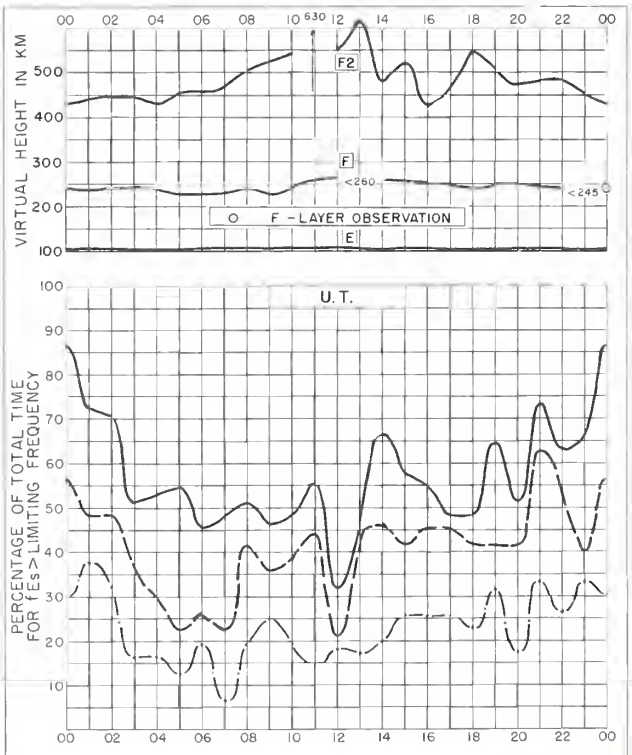



Fig 24. POLE STATION
JANUARY 1960

NBS 490

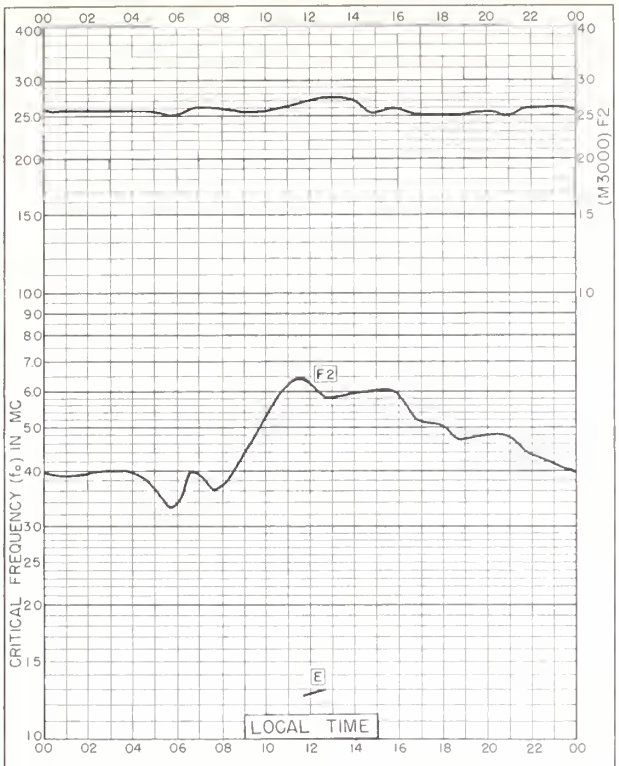
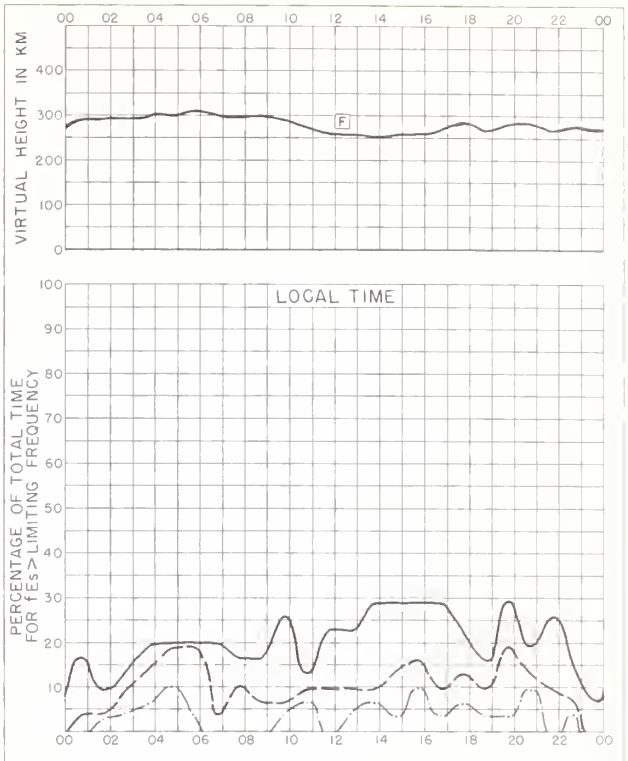



Fig. 25. RESOLUTE BAY, CANADA
74.7°N, 94.9°W DECEMBER 1959

NBS 503




DECEMBER 1959

Fig. 26. RESOLUTE BAY, CANADA

NBS 490

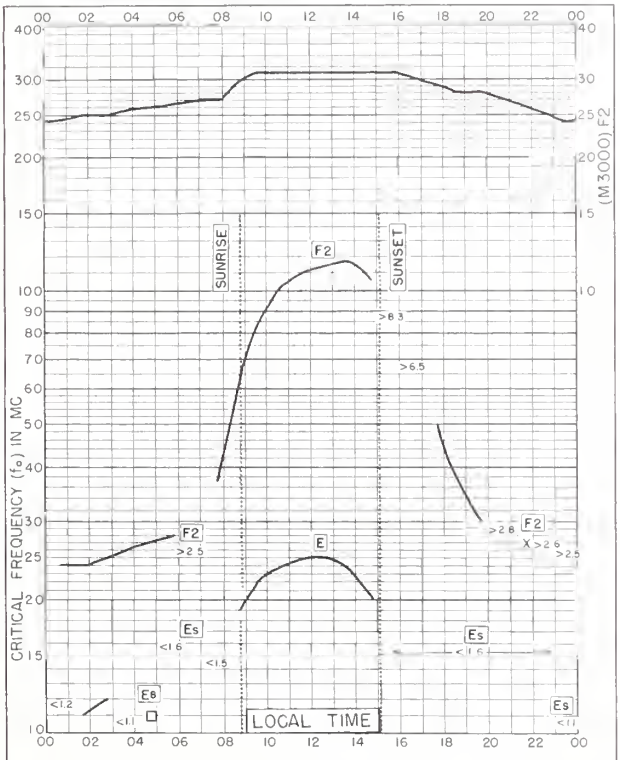
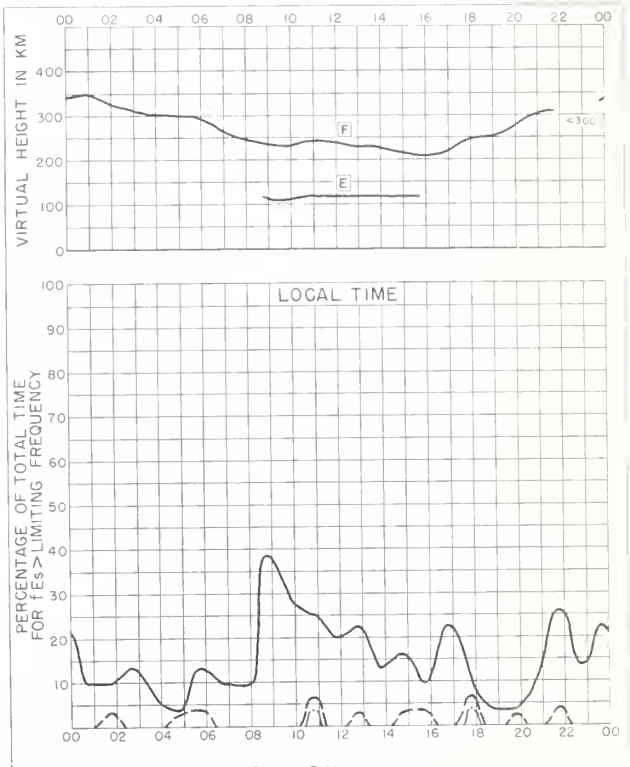



Fig. 27. INVERNESS, SCOTLAND
57.4°N, 4.2°W DECEMBER 1959

NBS 503




DECEMBER 1959

Fig. 28. INVERNESS, SCOTLAND

NBS 490


Fig. 29. De BILT, HOLLAND
52.1°N, 5.2°E DECEMBER 1959

NBS 503

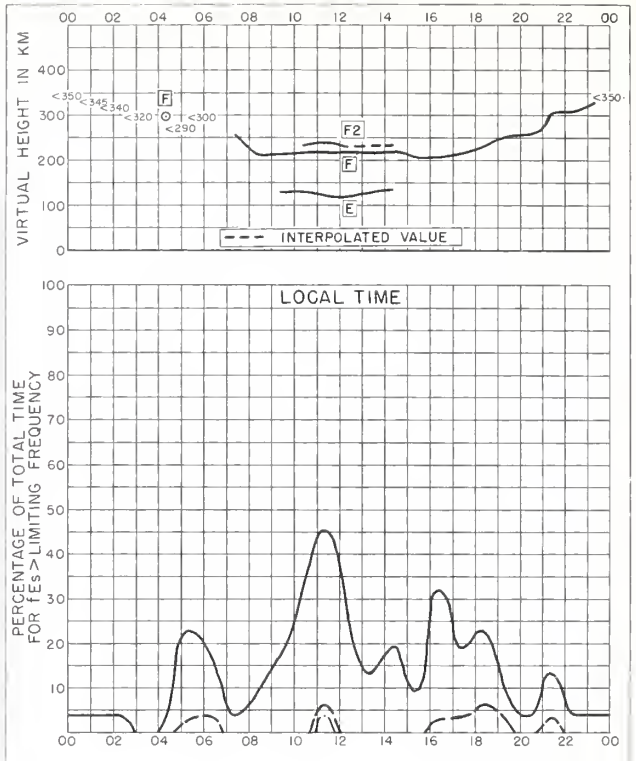



Fig. 30. De BILT, HOLLAND DECEMBER 1959

NBS 490

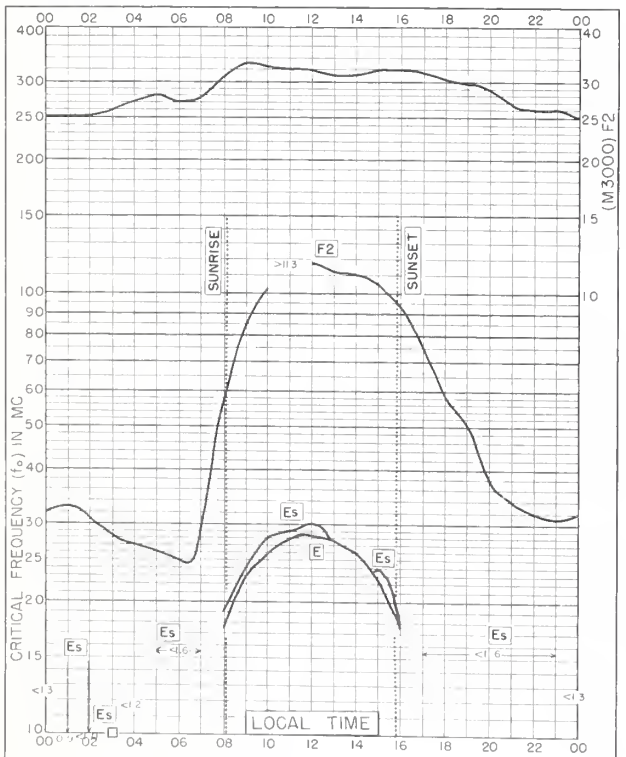



Fig. 31. SLOUGH, ENGLAND
51.5°N, 0.6°W DECEMBER 1959

NBS 503

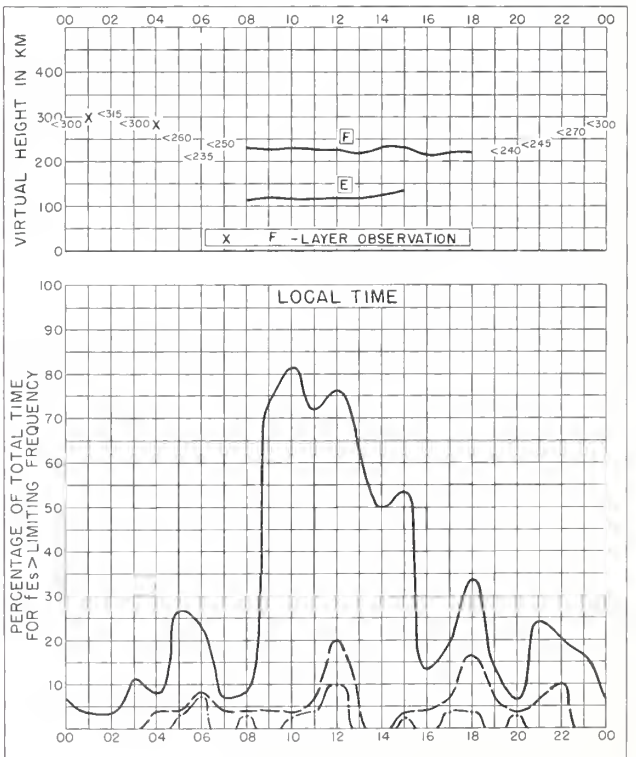



Fig. 32. SLOUGH, ENGLAND DECEMBER 1959

NBS 490

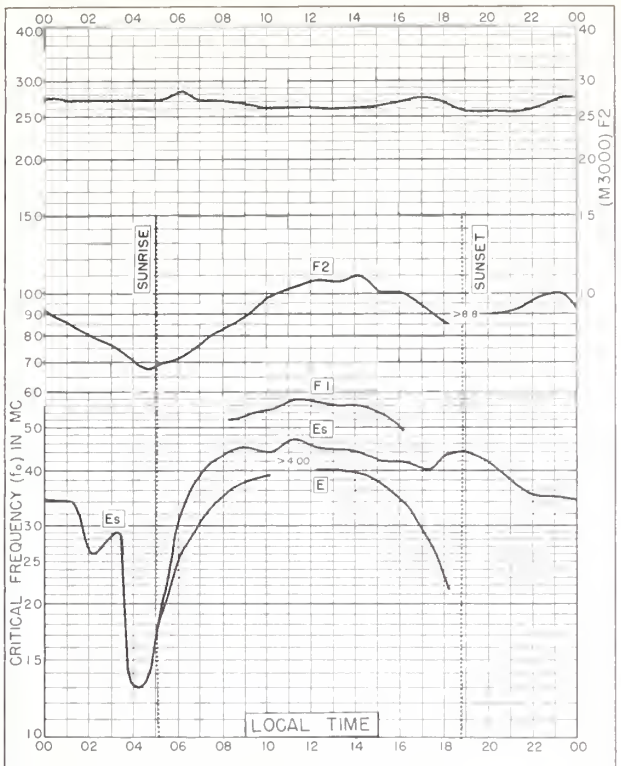



Fig. 33. BRISBANE, AUSTRALIA
27.5°S, 152.9°E DECEMBER 1959

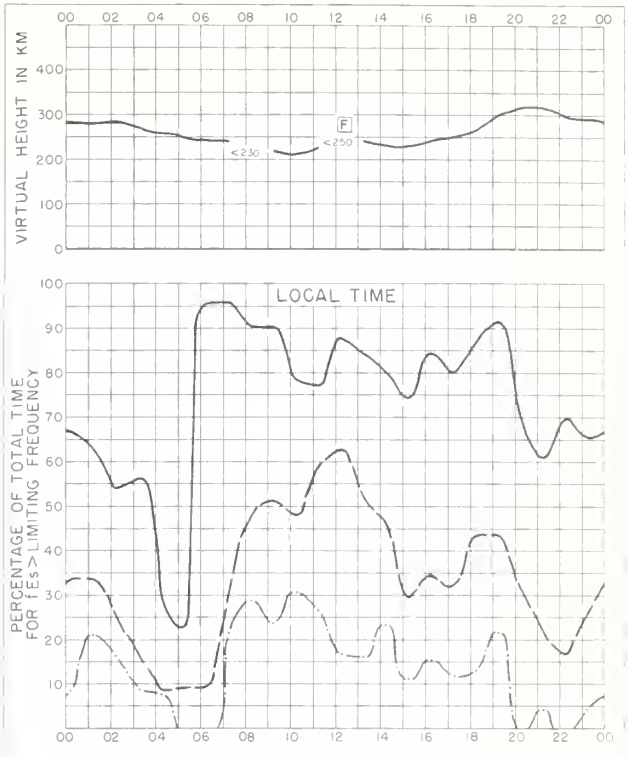



Fig. 34. BRISBANE, AUSTRALIA DECEMBER 1959

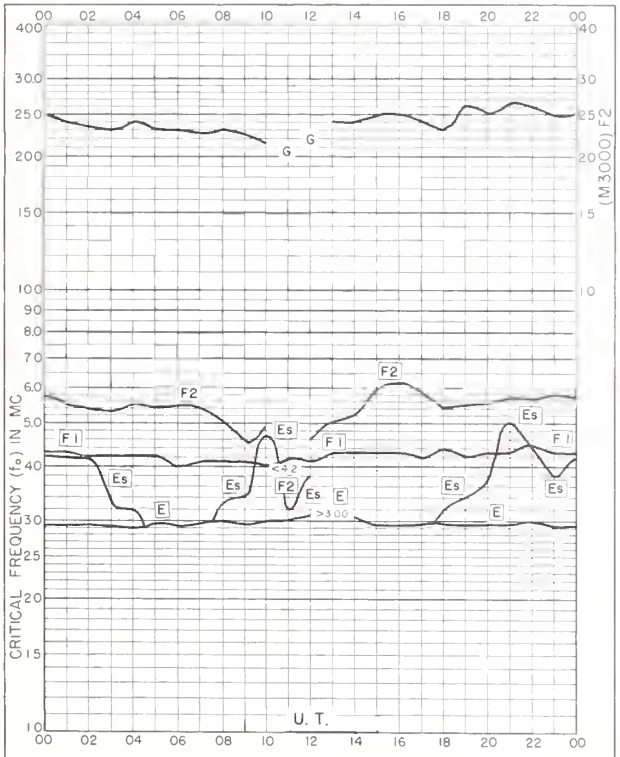



Fig. 35. POLE STATION
90.0°S DECEMBER 1959

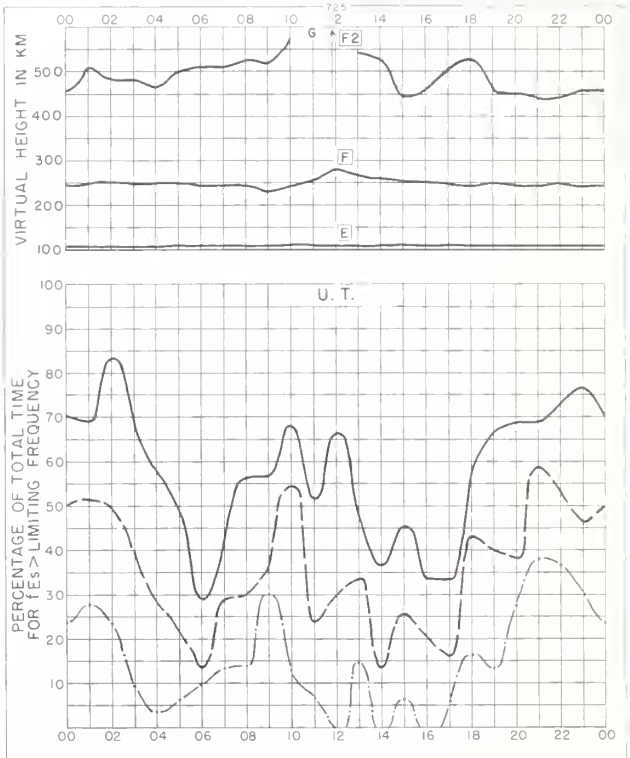



Fig. 36. POLE STATION DECEMBER 1959

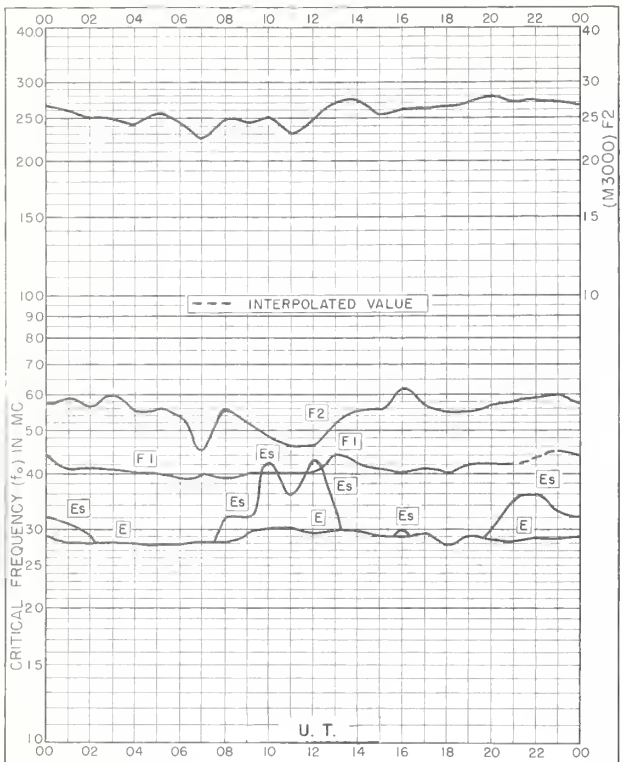



Fig. 37. POLE STATION
90.0° S NOVEMBER 1959

NBS 503

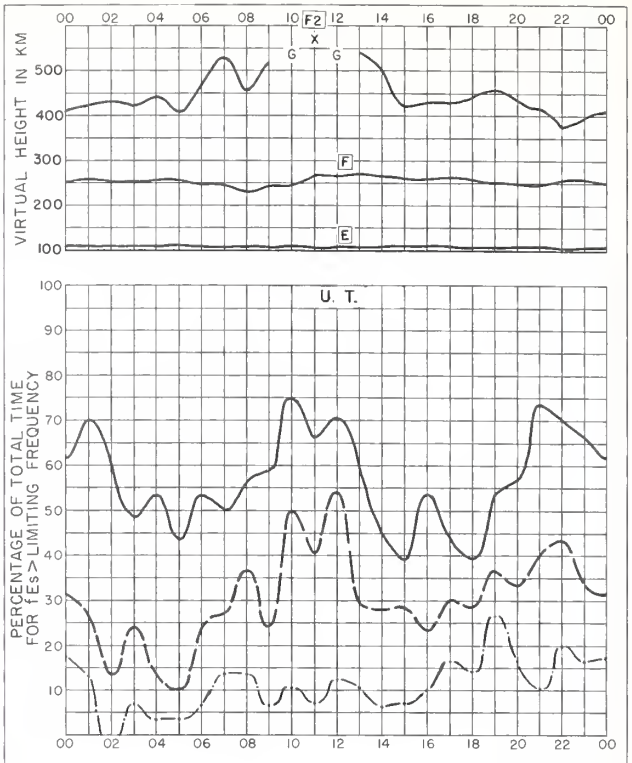



Fig. 38. POLE STATION NOVEMBER 1959

NBS 490

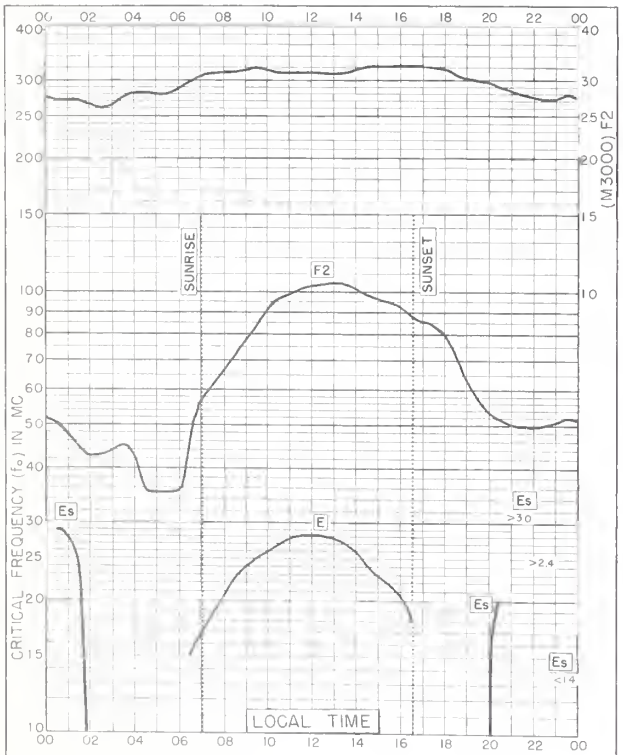



Fig. 39. LULEA, SWEDEN
65.6°N, 22.1°E OCTOBER 1959

NBS 503

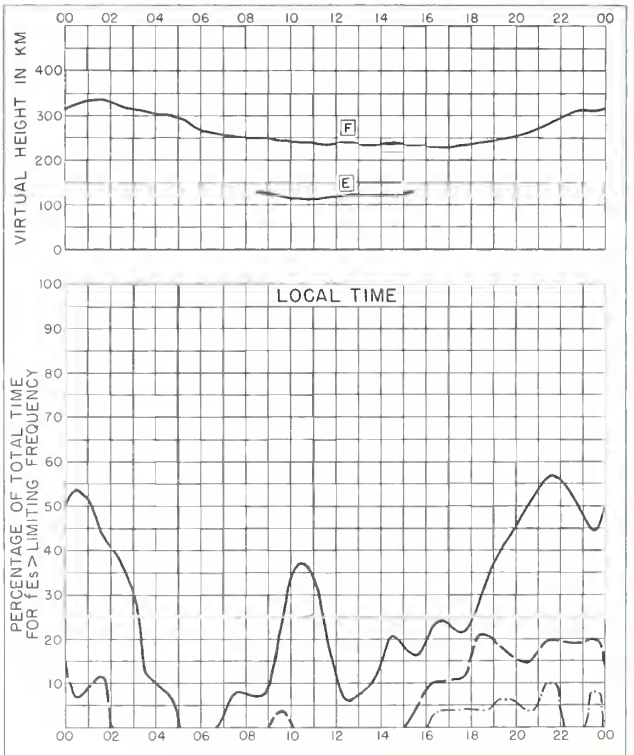



Fig. 40. LULEA, SWEDEN OCTOBER 1959

NBS 490

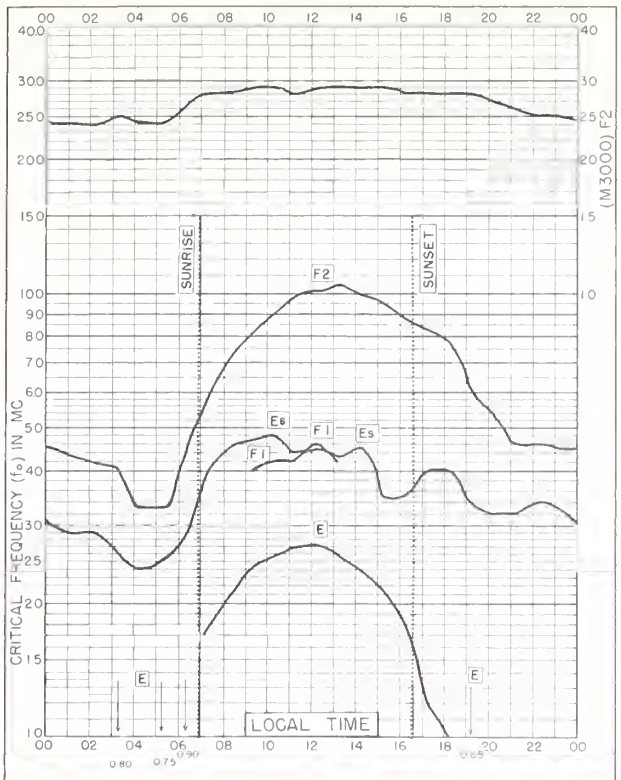



Fig. 41. LYCKSELE, SWEDEN
64.6°N, 18.8°E OCTOBER 1959

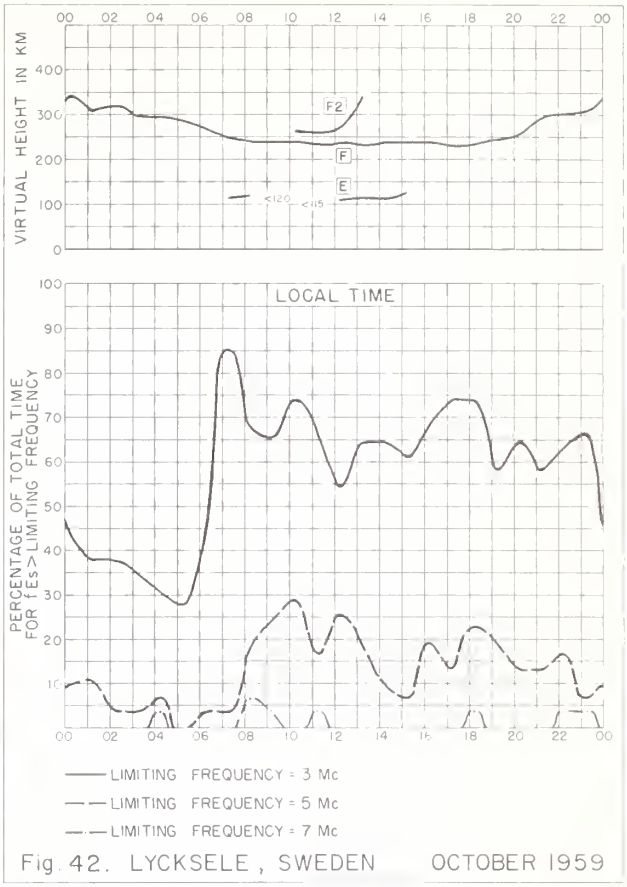



Fig. 42. LYCKSELE, SWEDEN OCTOBER 1959

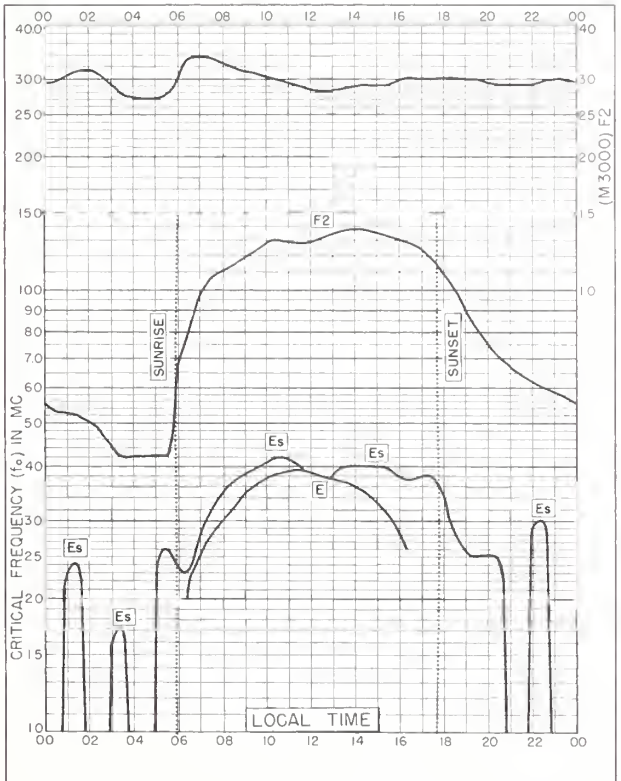



Fig. 43. EL CERILLO, MEXICO
19.3°N, 99.5° W OCTOBER 1959

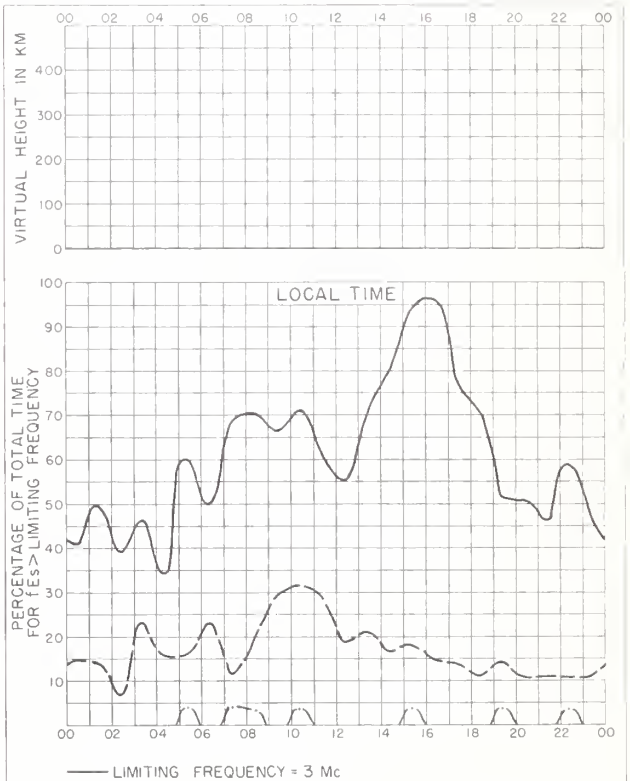



Fig. 44. EL CERILLO, MEXICO OCTOBER 1959

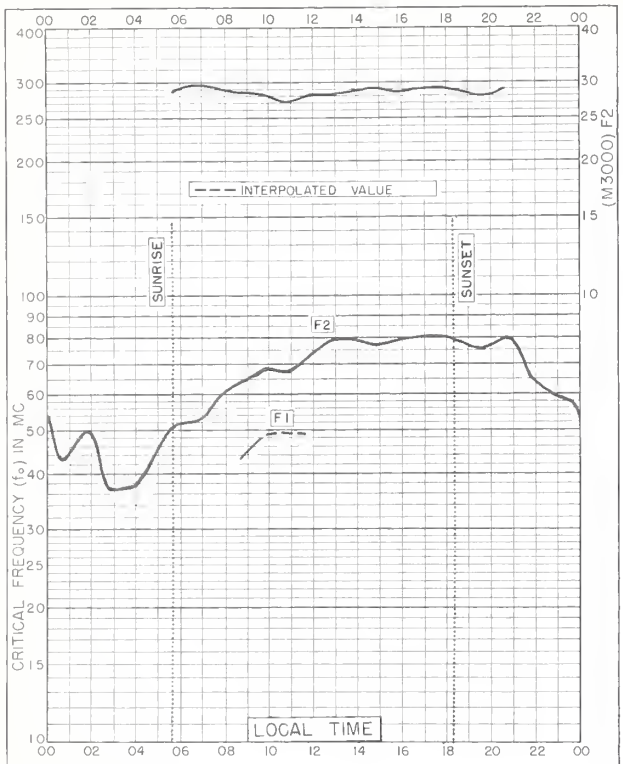



Fig. 45. NURMIJARVI, FINLAND
60.5°N, 24.6°E SEPTEMBER 1959

NBS 503

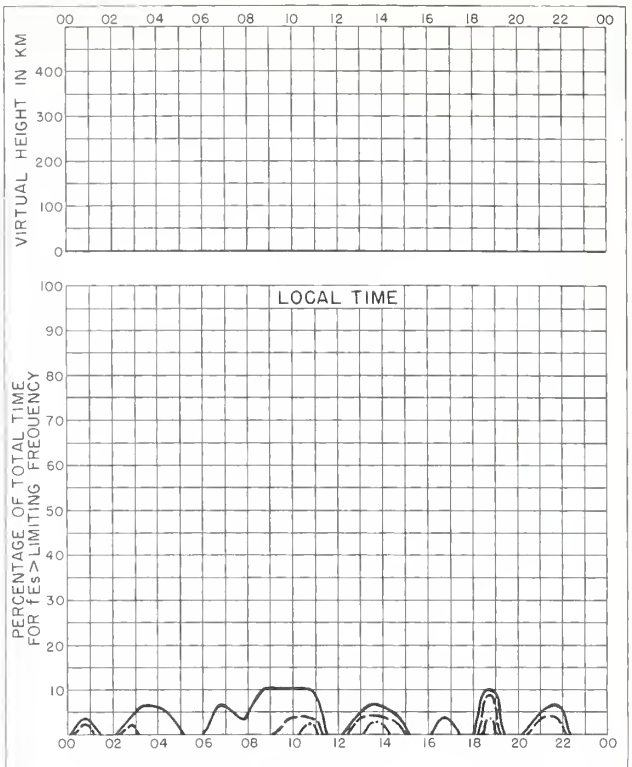



Fig. 46. NURMIJARVI, FINLAND SEPTEMBER 1959

NBS 490

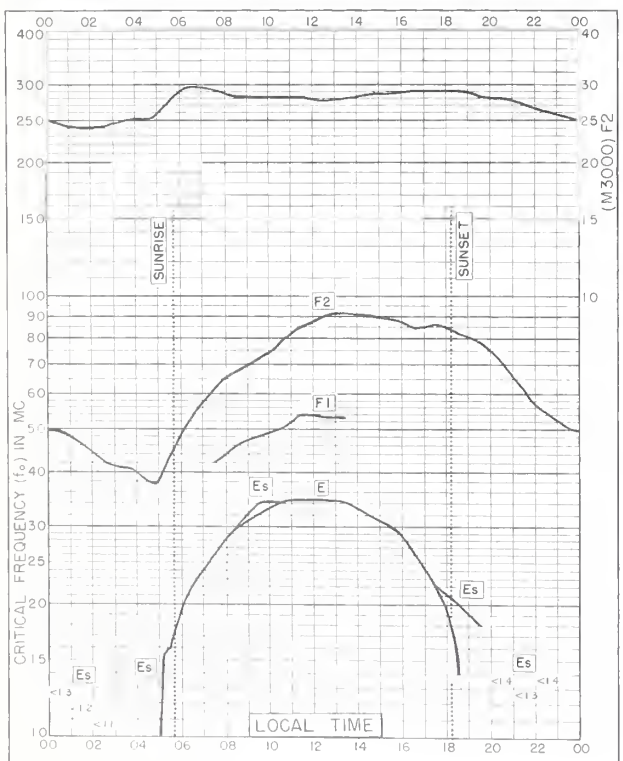



Fig. 47. MOSCOW, U.S.S.R.
55.5°N, 37.3°E SEPTEMBER 1959

NBS 503

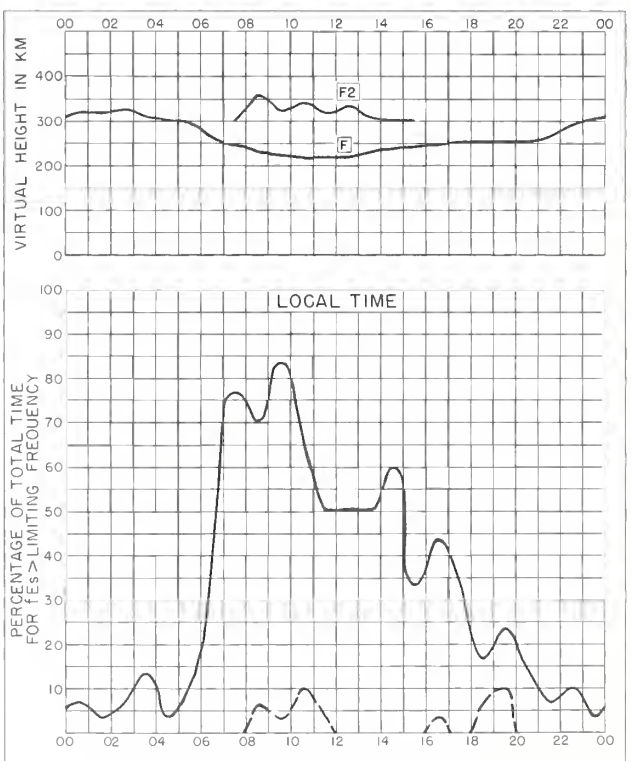



Fig. 48. MOSCOW, U.S.S.R. SEPTEMBER 1959

NBS 490

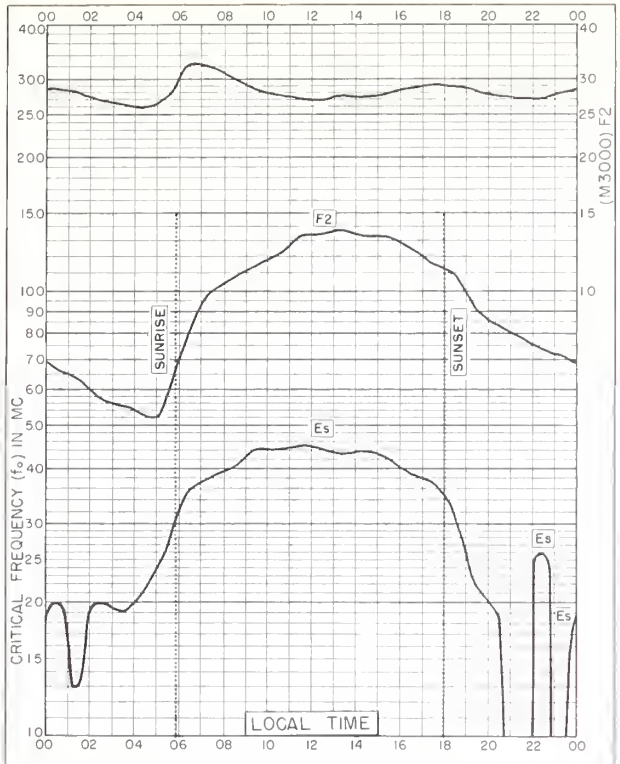
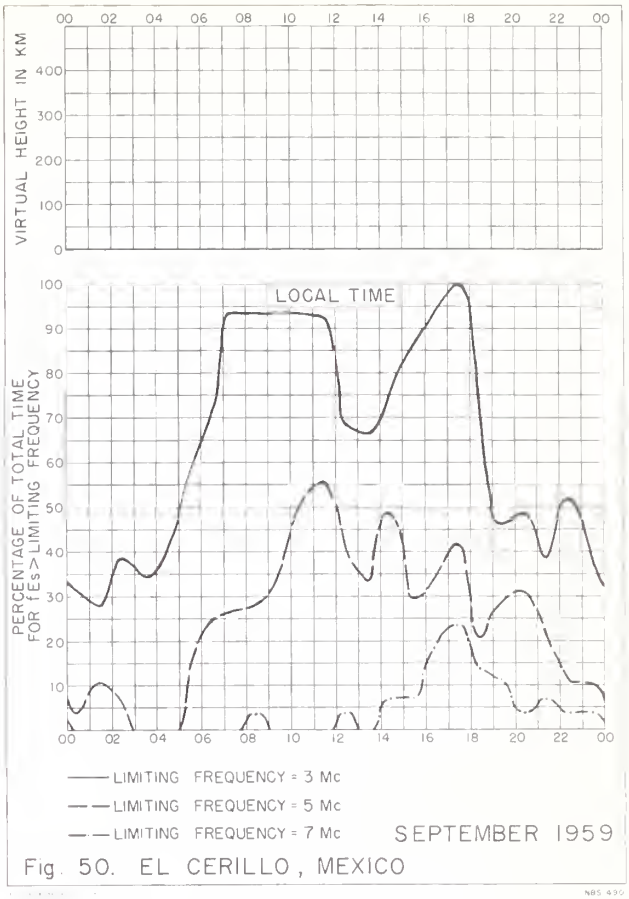



Fig. 49. EL CERILLO, MEXICO
19.3°N, 99.5°W SEPTEMBER 1959




SEPTEMBER 1959

Fig. 50. EL CERILLO, MEXICO

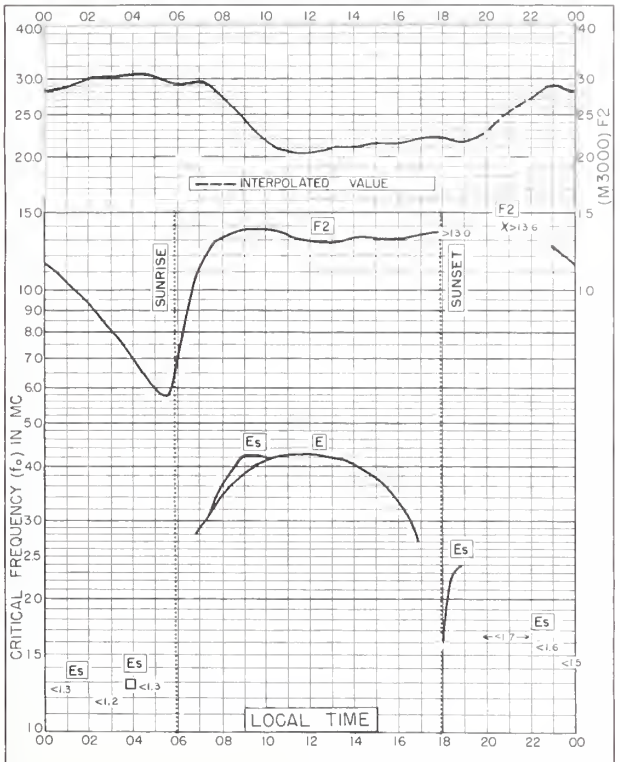
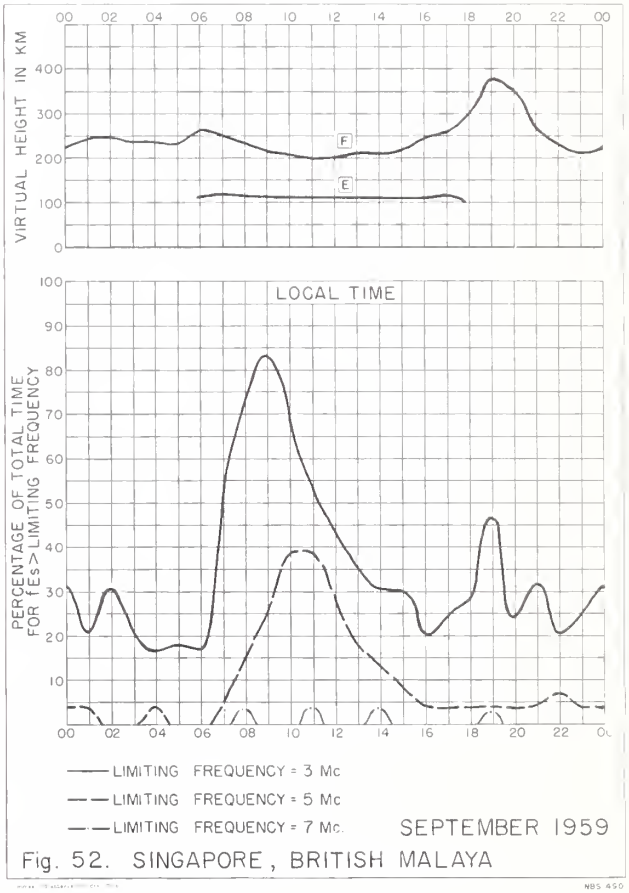



Fig. 51. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E SEPTEMBER 1959




SEPTEMBER 1959

Fig. 52. SINGAPORE, BRITISH MALAYA


Fig. 53. LWIRO, BELGIAN CONGO
2.3°S, 28.8°E SEPTEMBER 1959

NBS 503

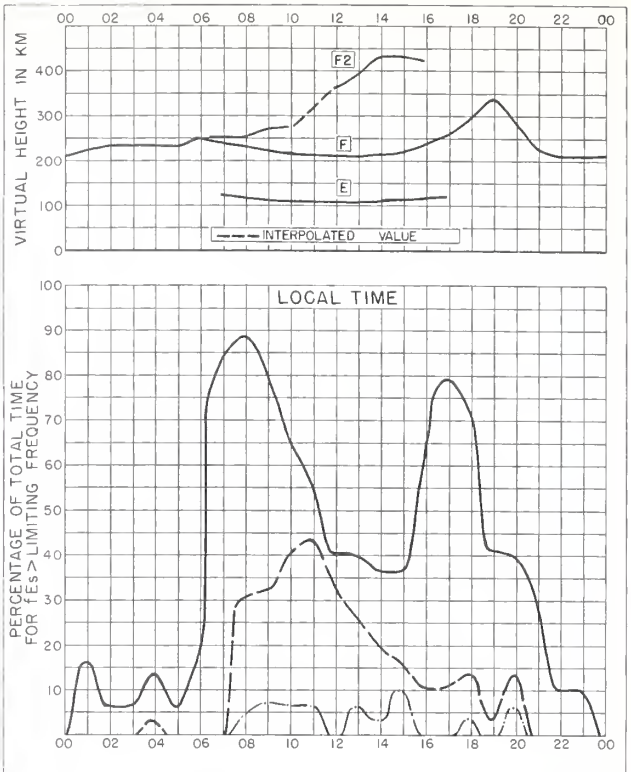



Fig. 54. LWIRO, BELGIAN CONGO SEPTEMBER 1959

NBS 490

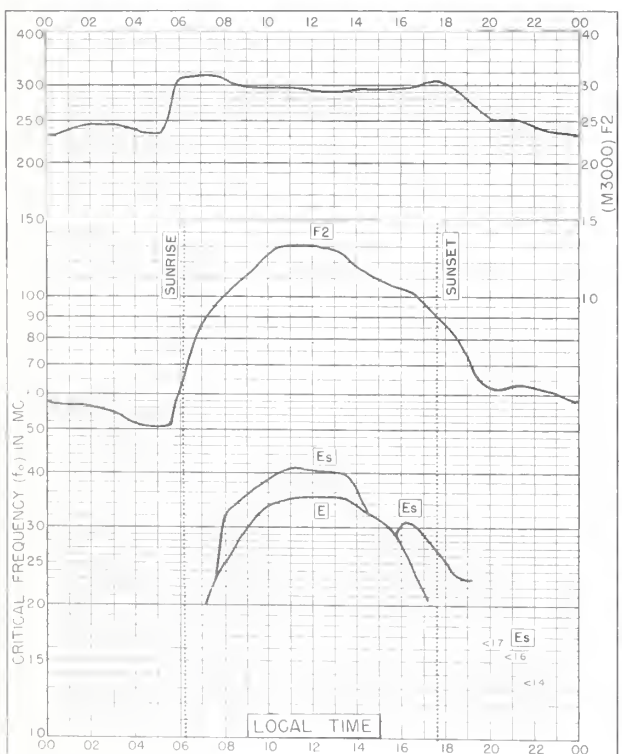



Fig. 55. FALKLAND IS.
51.7°S, 57.8°W SEPTEMBER 1959

NBS 503

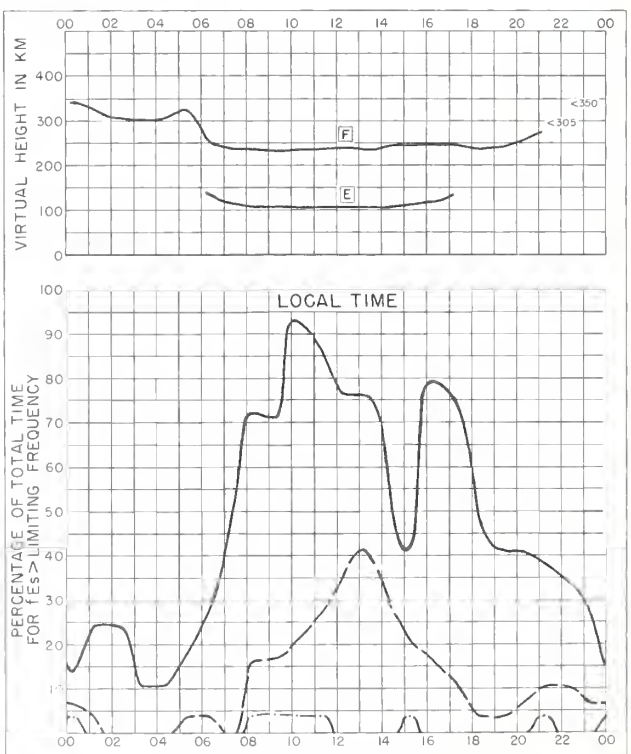



Fig. 56. FALKLAND IS. SEPTEMBER 1959

NBS 490

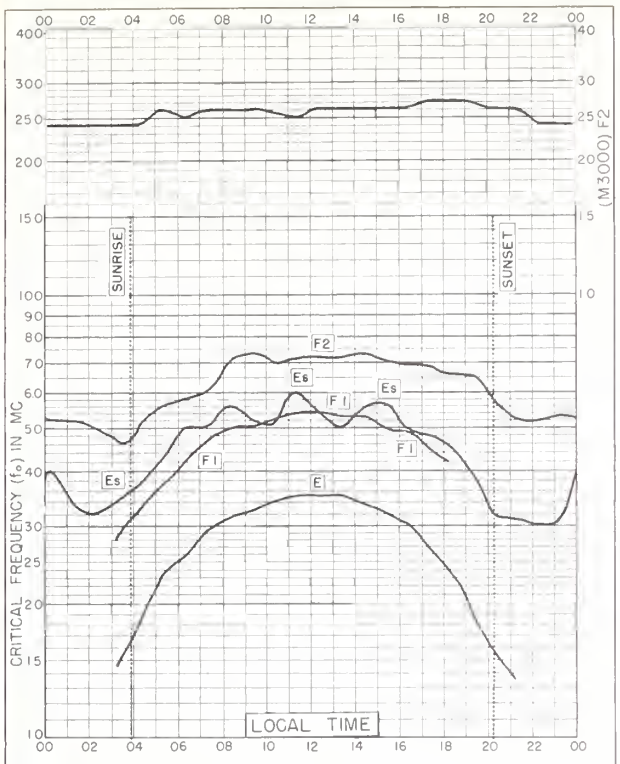



Fig. 57. LYCKSELE, SWEDEN
64.6°N, 18.8°E AUGUST 1959

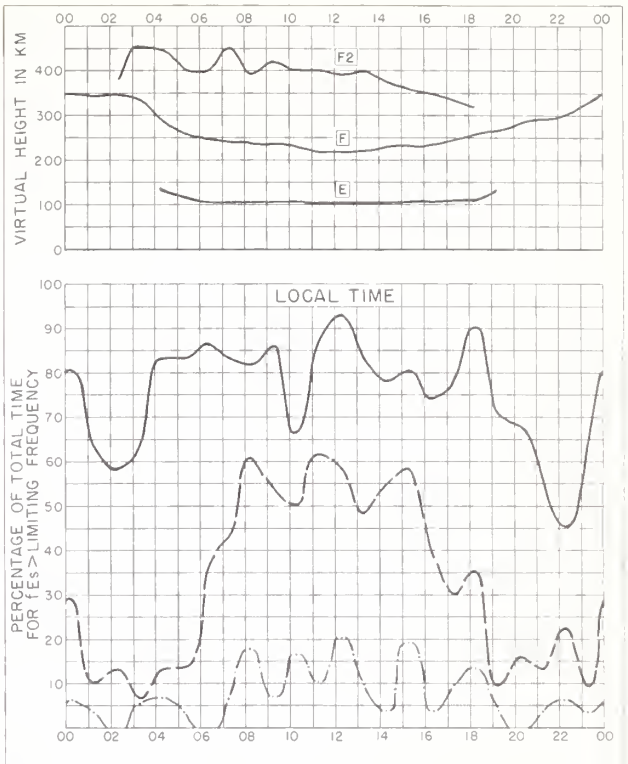



Fig. 58. LYCKSELE, SWEDEN AUGUST 1959

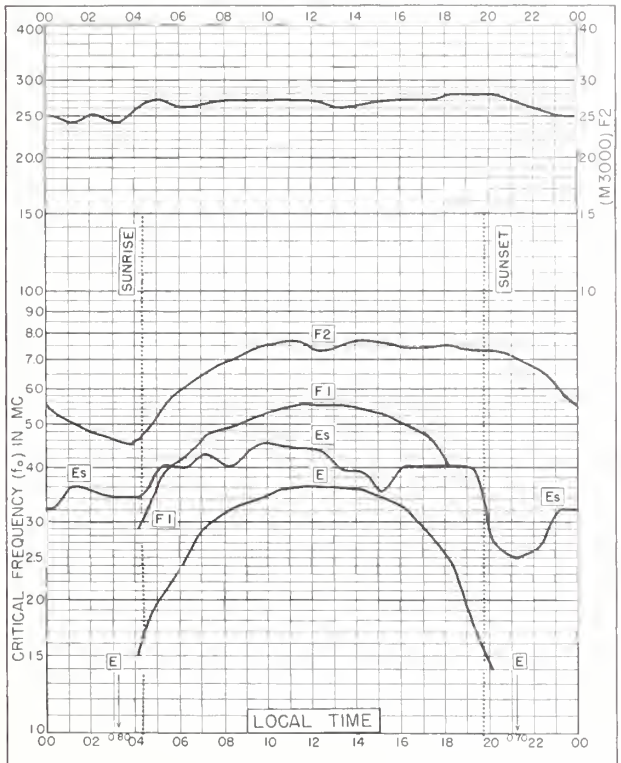



Fig. 59. UPSALA, SWEDEN
59.8°N, 17.6°E AUGUST 1959

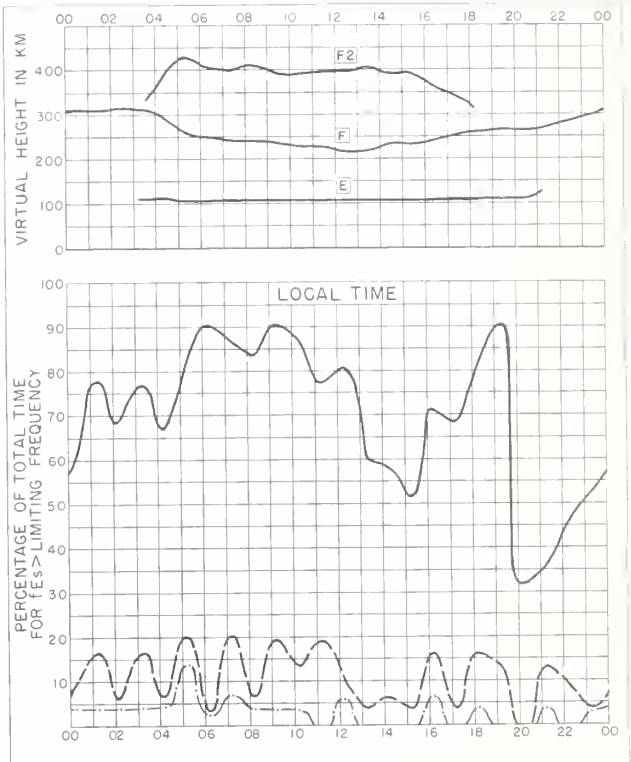



Fig. 60. UPSALA, SWEDEN AUGUST 1959

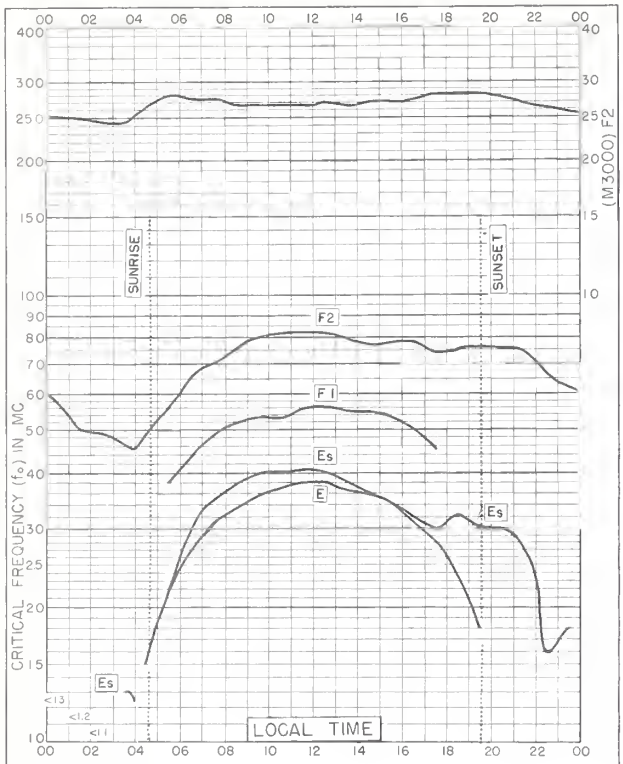



Fig. 61. MOSCOW, U. S. S. R.
55.5°N, 37.3°E AUGUST 1959

NBS 503

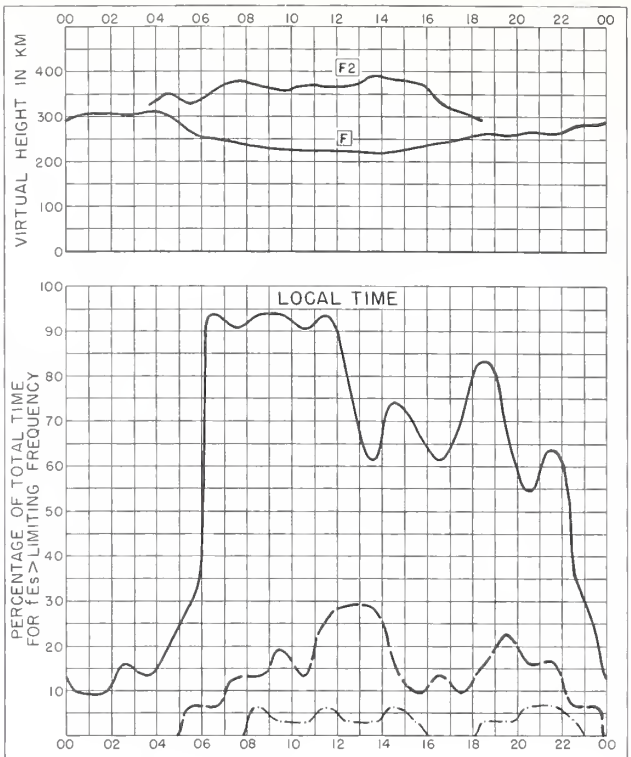



Fig. 62. MOSCOW, U. S. S. R. AUGUST 1959

NBS 490

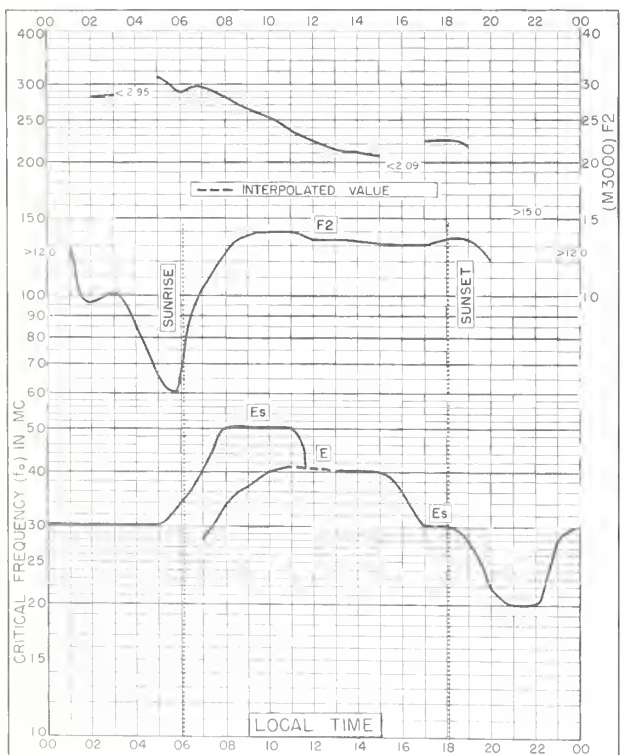



Fig. 63. BUNIA, BELGIAN CONGO
1.5°N, 30.2°E AUGUST 1959

NBS 503

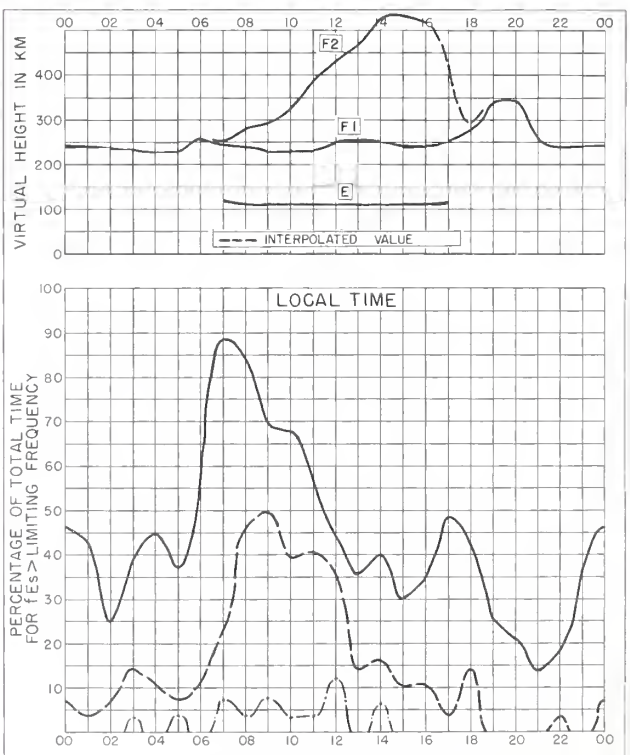



Fig. 64. BUNIA, BELGIAN CONGO AUGUST 1959

NBS 490

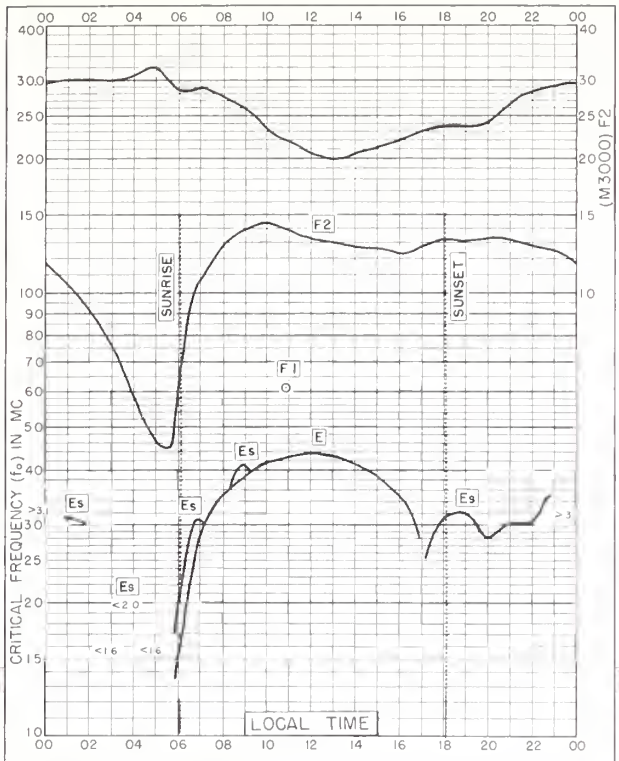



Fig. 65. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E AUGUST 1959

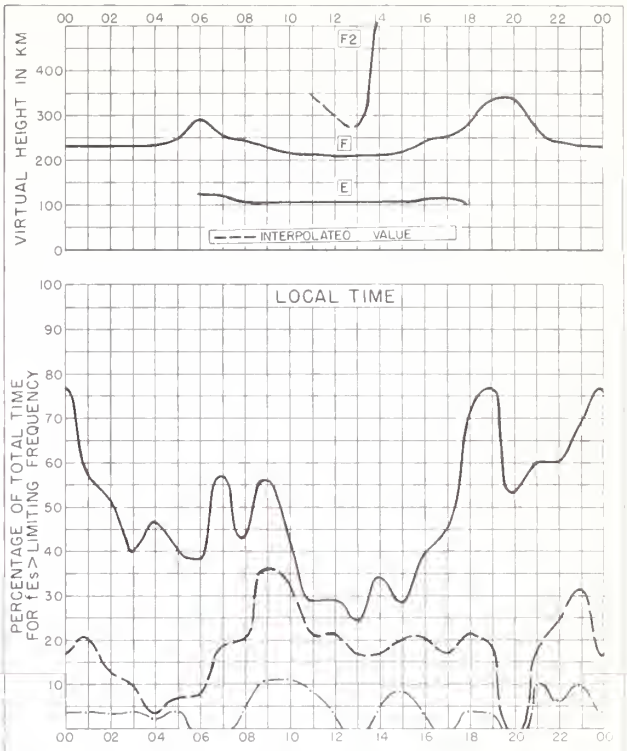



Fig. 66. SINGAPORE, BRITISH MALAYA AUGUST 1959

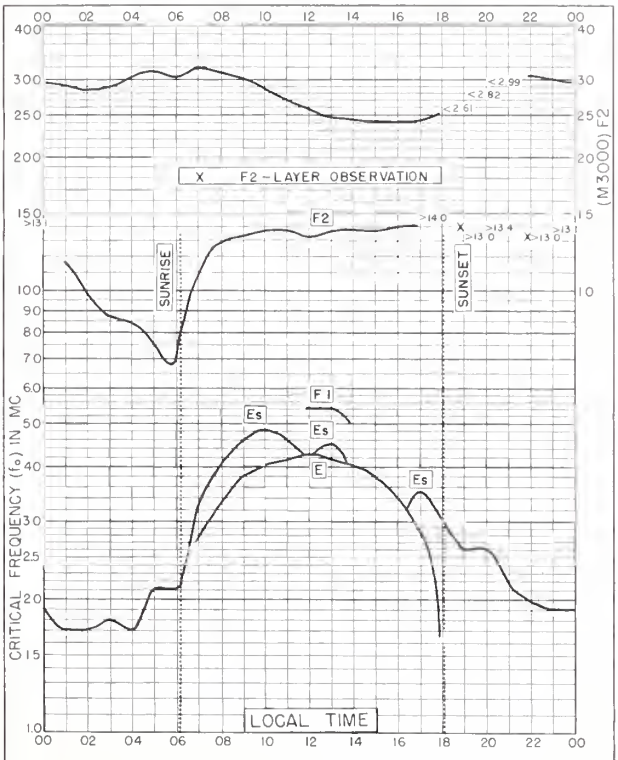



Fig. 67. LWIRO, BELGIAN CONGO
2.3°S, 28.8°E AUGUST 1959

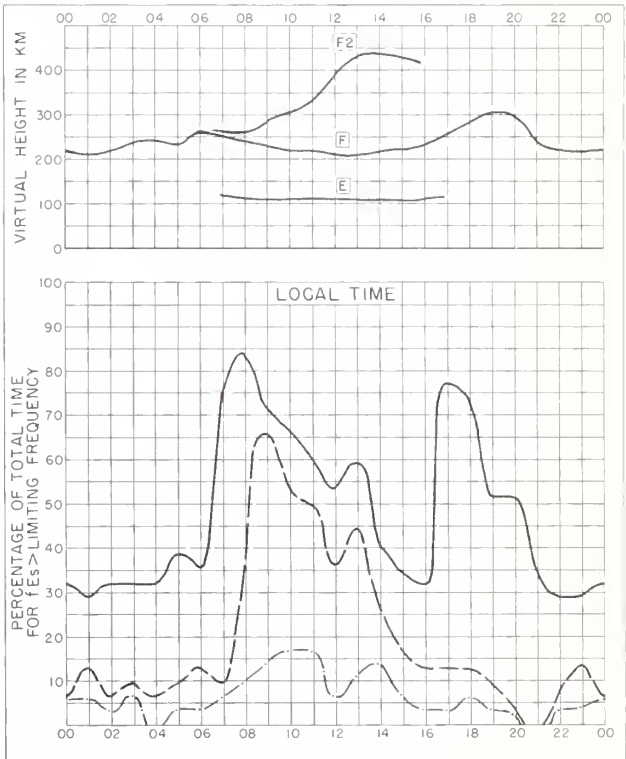



Fig. 68. LWIRO, BELGIAN CONGO AUGUST 1959

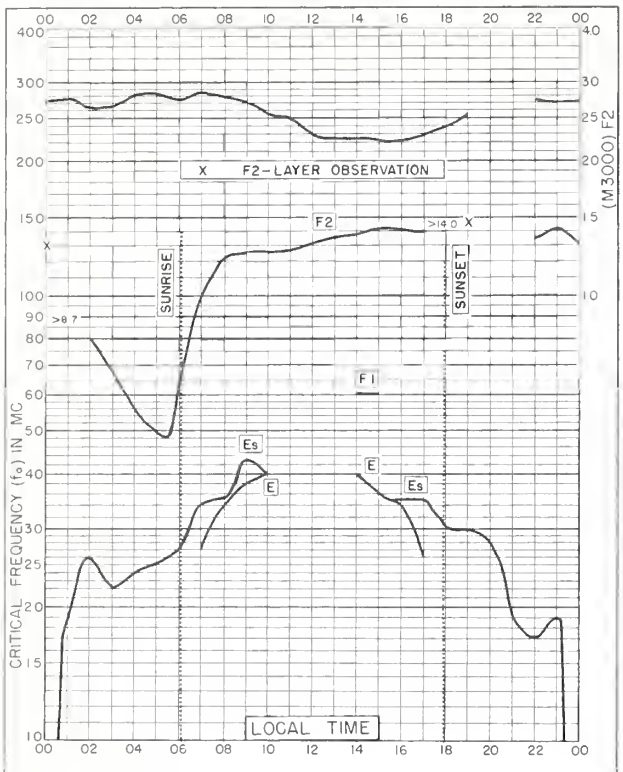
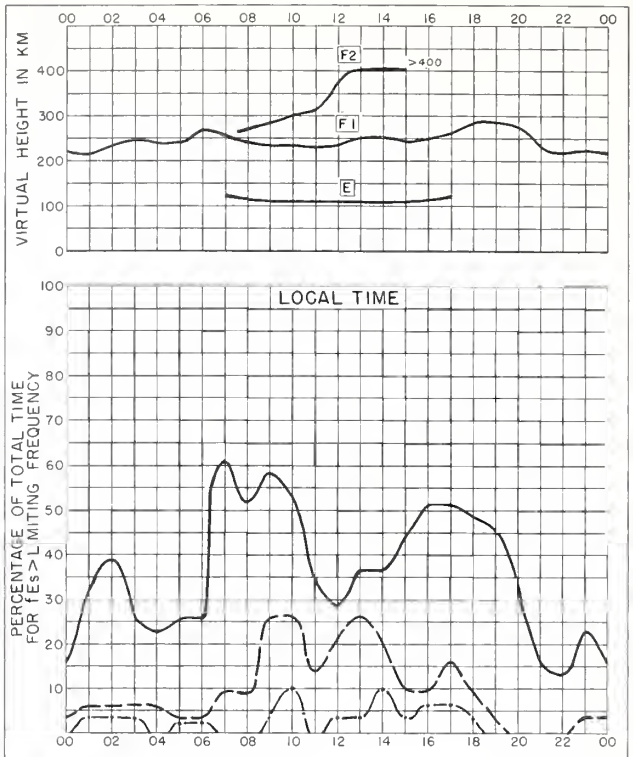



Fig. 69. LEOPOLDVILLE, BELGIAN CONGO
4.4°S, 15.2°E AUGUST 1959

NBS 503




AUGUST 1959

Fig. 70. LEOPOLDVILLE, BELGIAN CONGO

NBS 490

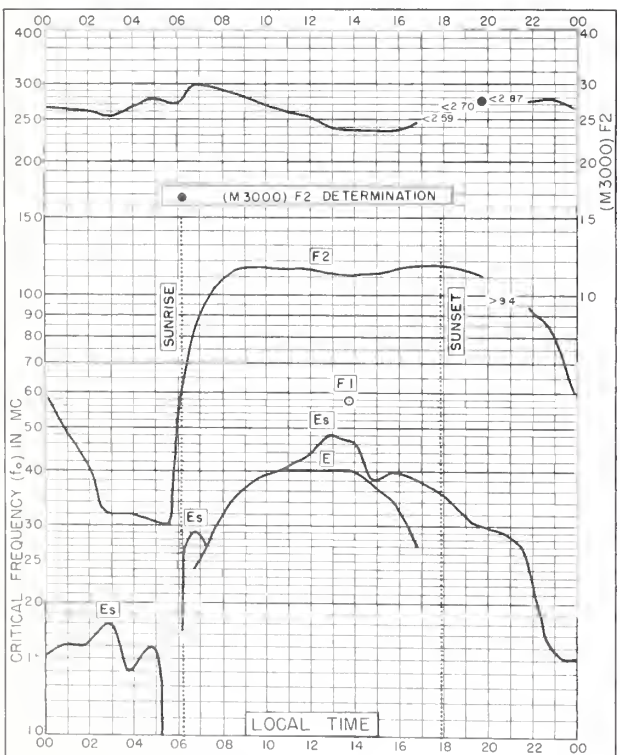
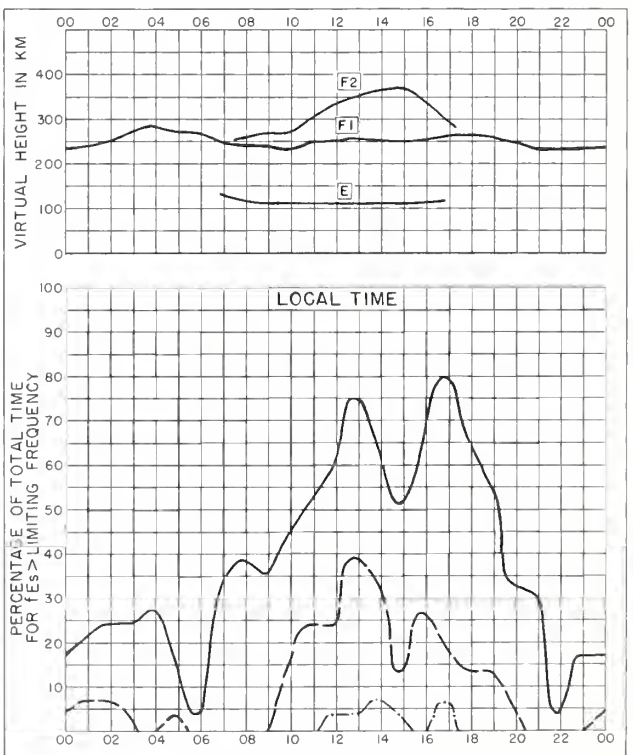



Fig. 71. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E AUGUST 1959

NBS 503




AUGUST 1959

Fig. 72. ELISABETHVILLE, BELGIAN CONGO

NBS 490

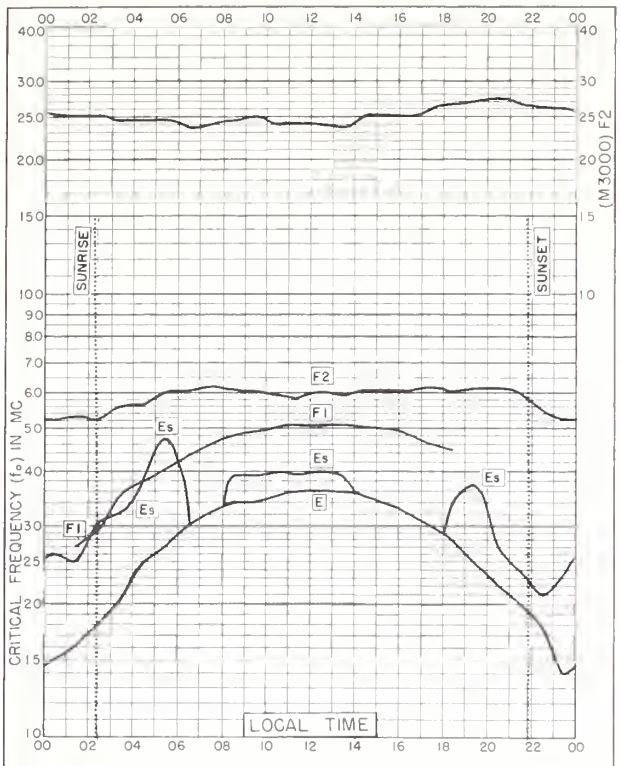



Fig. 73. PROVIDENIE BAY, U.S.S.R.
64.4°N, 186.6°E JULY 1959

NBS 503

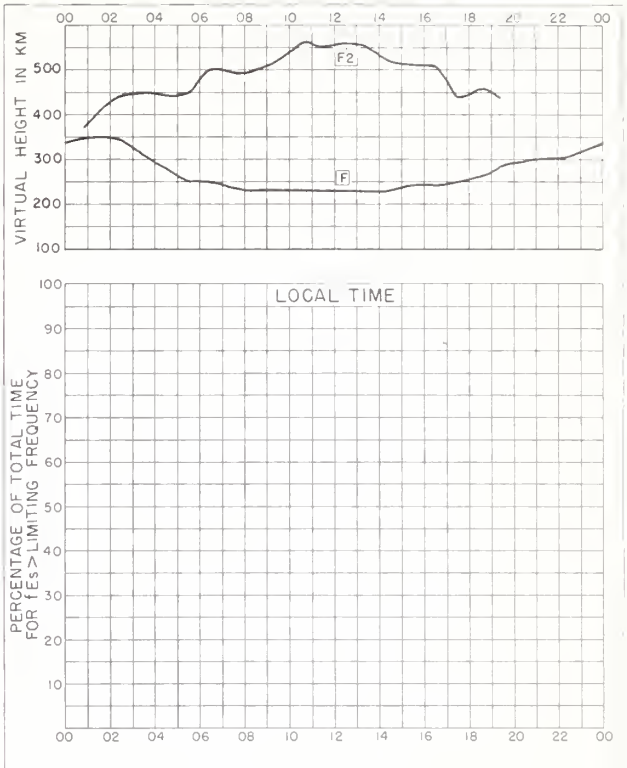



Fig. 74. PROVIDENIE BAY, U.S.S.R. JULY 1959

NBS 490

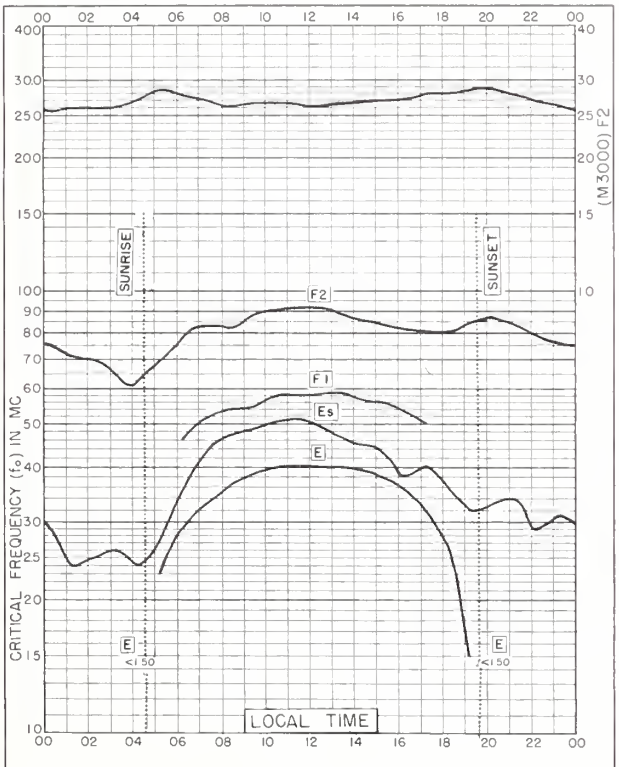



Fig. 75. SIMFEROPOL, U.S.S.R.
44.8°N, 34.1°E JULY 1959

NBS 503

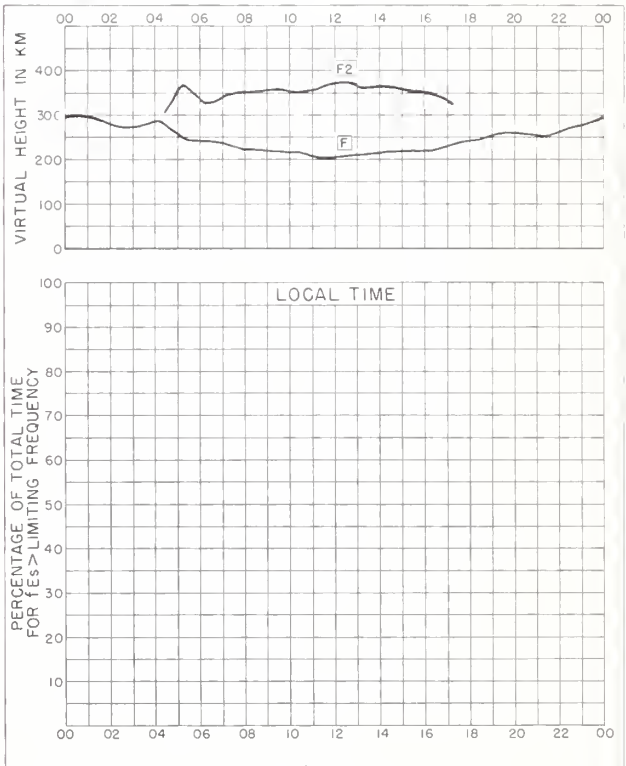



Fig. 76. SIMFEROPOL, U.S.S.R. JULY 1959

NBS 490

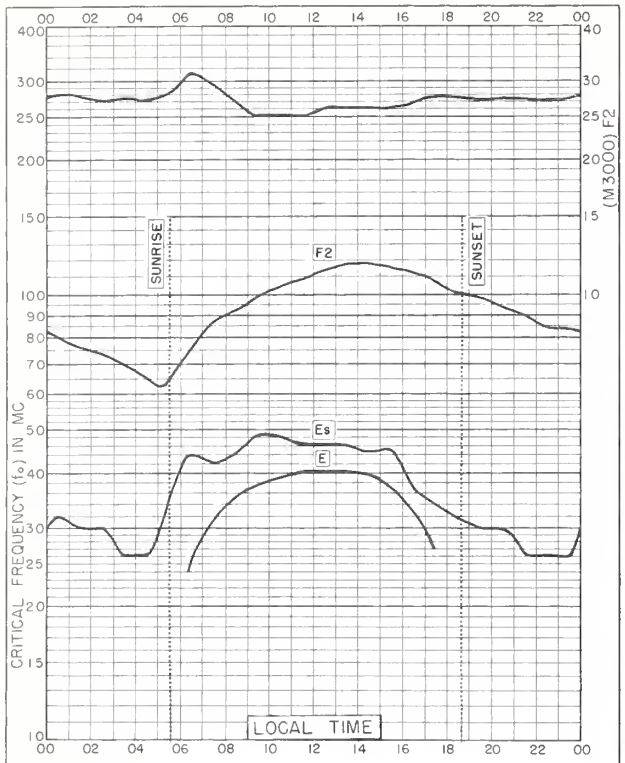



Fig. 77. EL CERILLO, MEXICO
19.3°N, 99.5° W JULY 1959

NBS 503

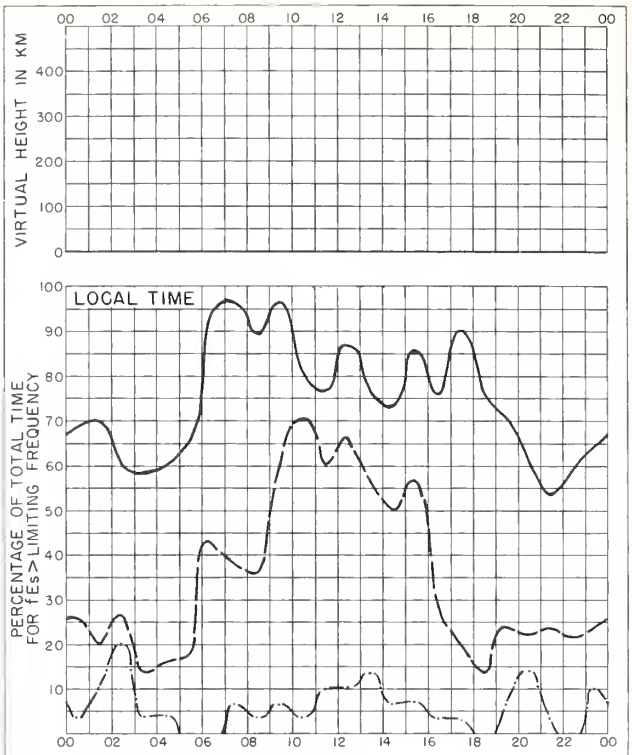



Fig. 78. EL CERILLO, MEXICO JULY 1959

NBS 490

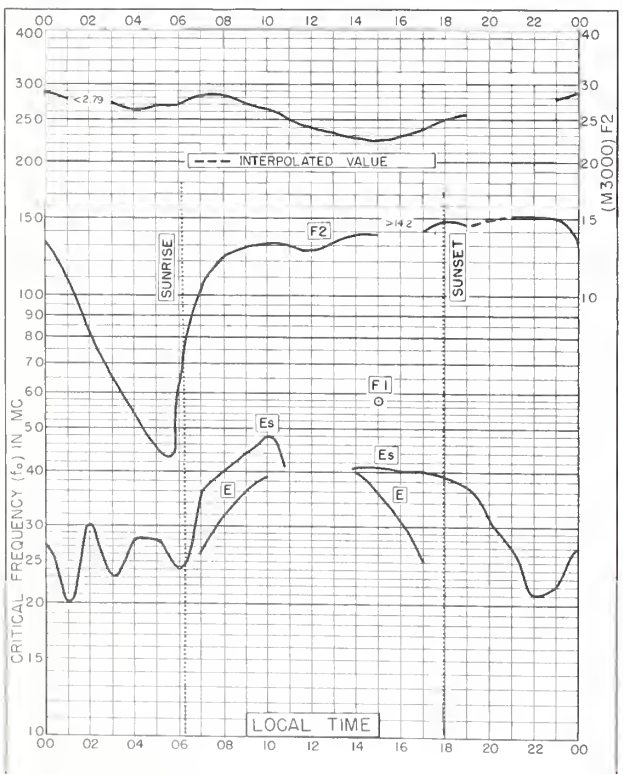



Fig. 79. LEOPOLDVILLE, BELGIAN CONGO
4.4°S, 15.2°E JULY 1959

NBS 503

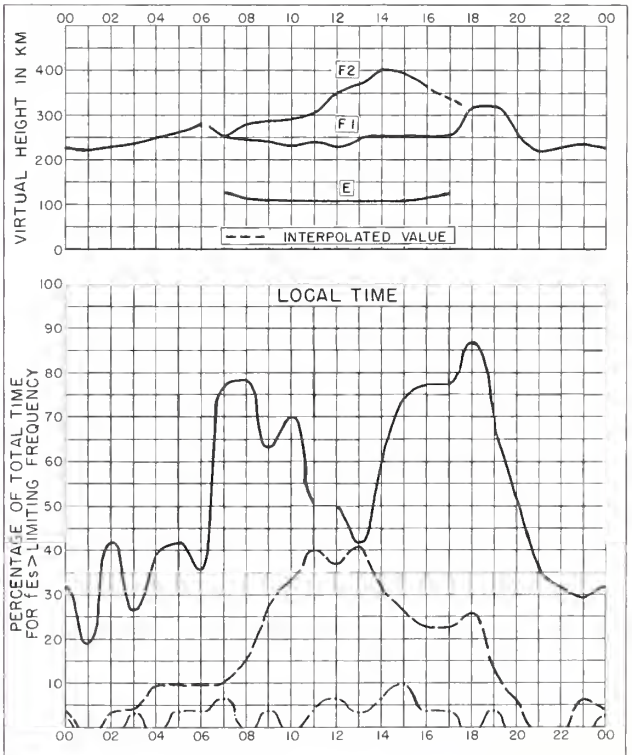



Fig. 80. LEOPOLDVILLE, BELGIAN CONGO JULY 1959

NBS 490

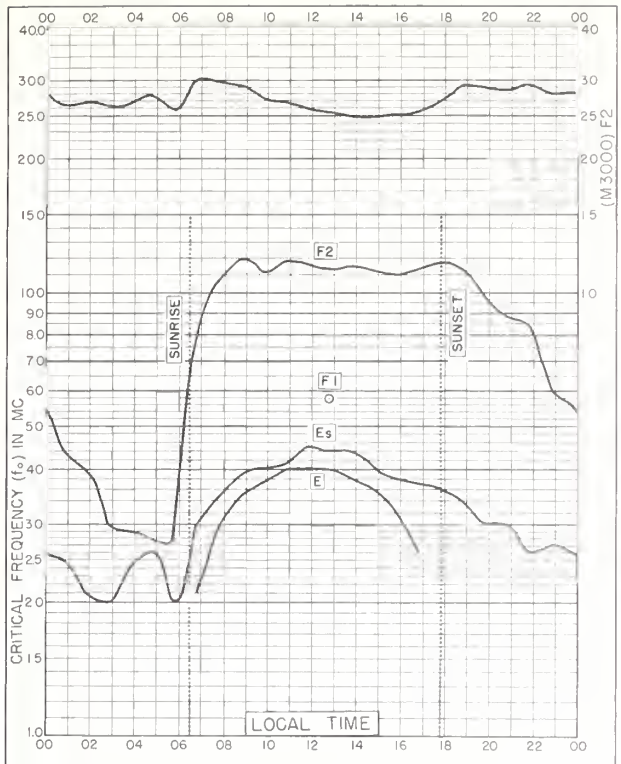



Fig. 81. ELISABETHVILLE, BELGIAN CONGO
11.6°S, 27.5°E JULY 1959

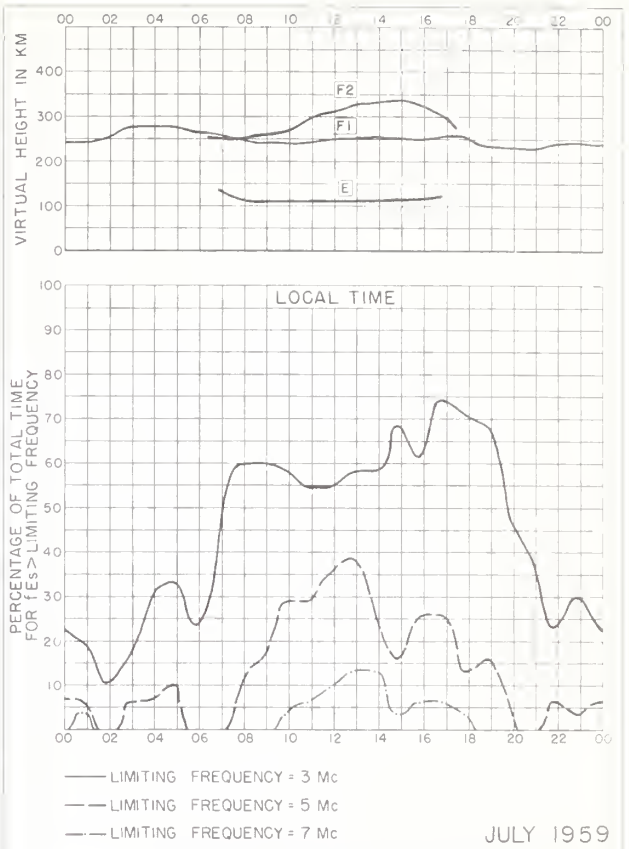



Fig. 82. ELISABETHVILLE, BELGIAN CONGO JULY 1959

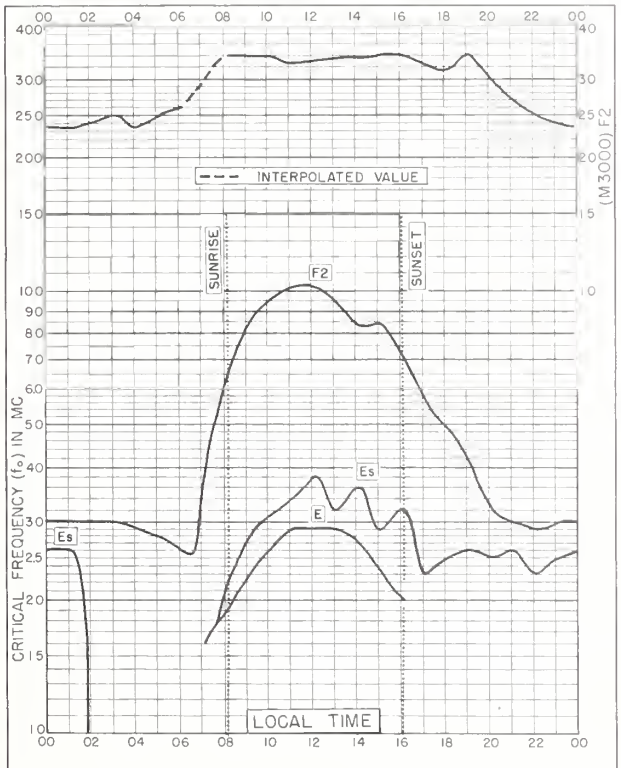



Fig. 83. FALKLAND IS.
51.7°S, 57.8° W JULY 1959

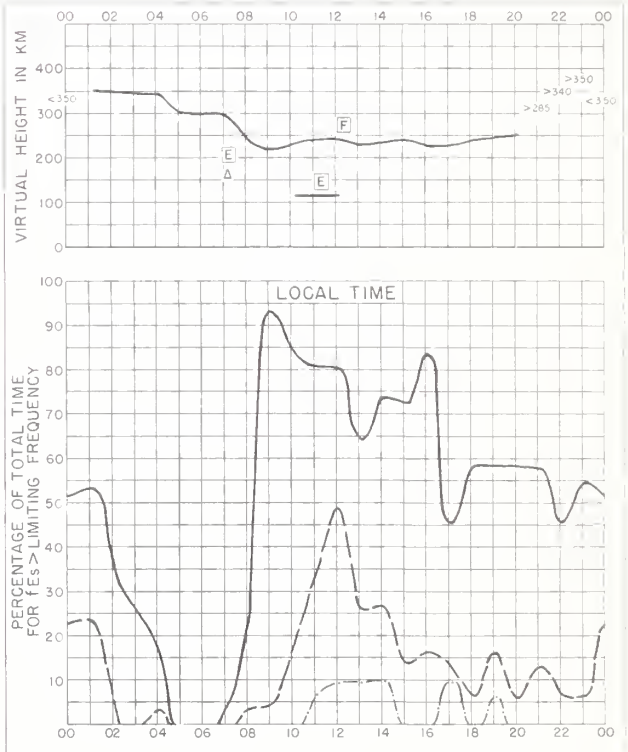



Fig. 84. FALKLAND IS. JULY 1959

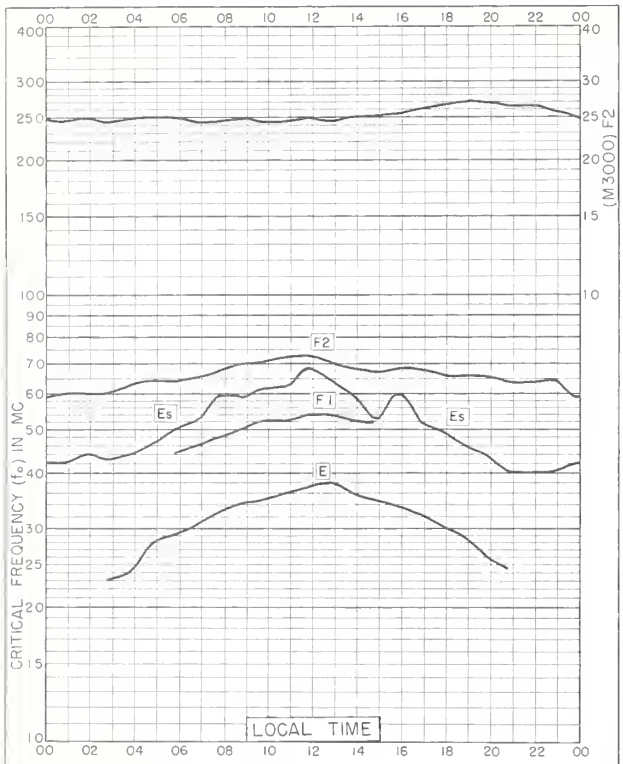



Fig. 85. SODANKYLA, FINLAND
67.4°N, 26.6°E JUNE 1959

NBS 503

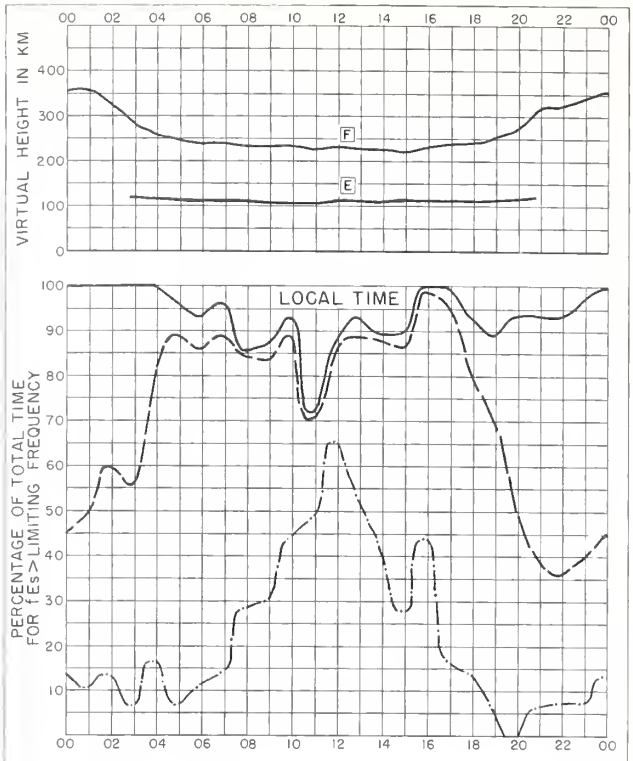



Fig. 86. SODANKYLA, FINLAND JUNE 1959

NBS 690

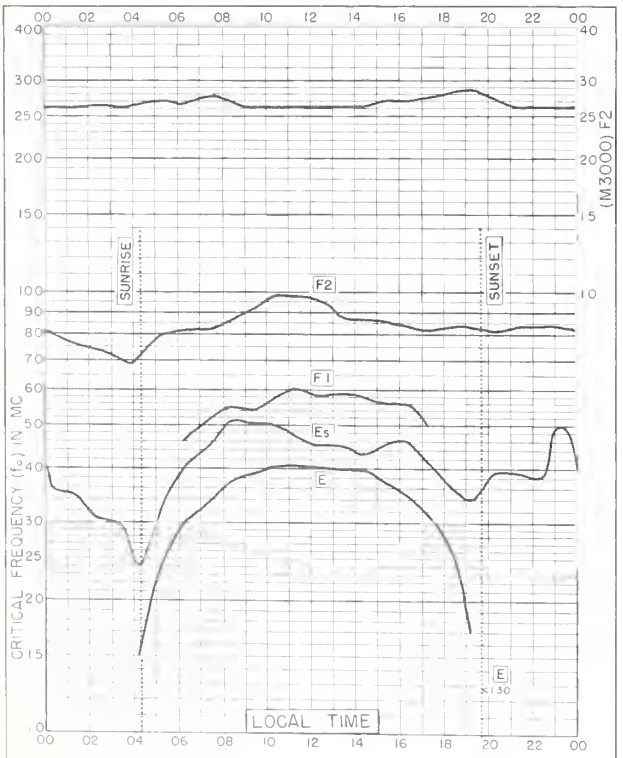



Fig 87. SIMFEROPOL, U.S.S.R.
44.8°N, 34.1°E JUNE 1959

NBS 503

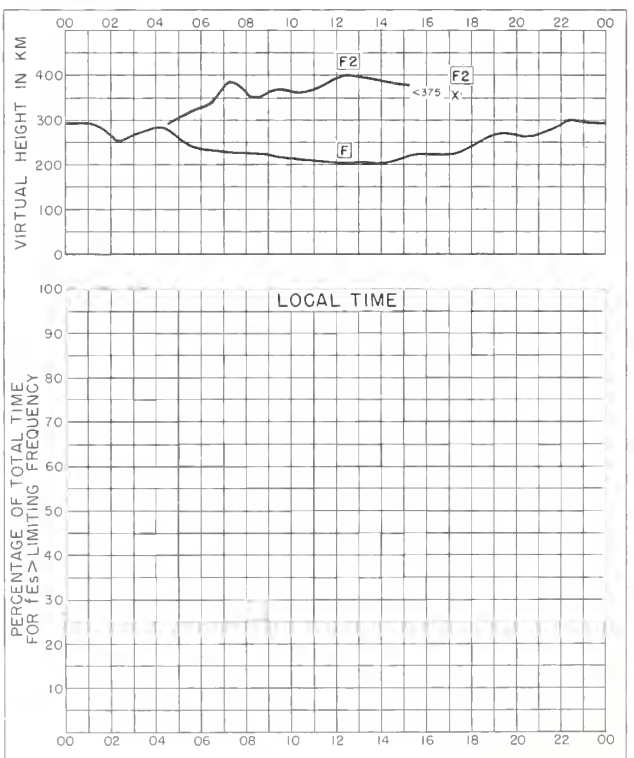



Fig. 88. SIMFEROPOL, U.S.S.R. JUNE 1959

NBS 690

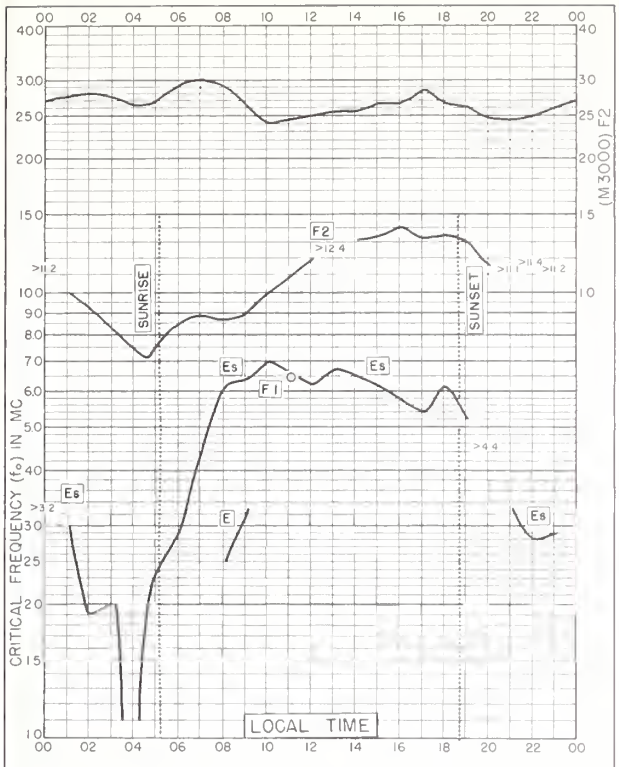



Fig. 89. FORMOSA, CHINA
25.0°N, 121.5°E JUNE 1959

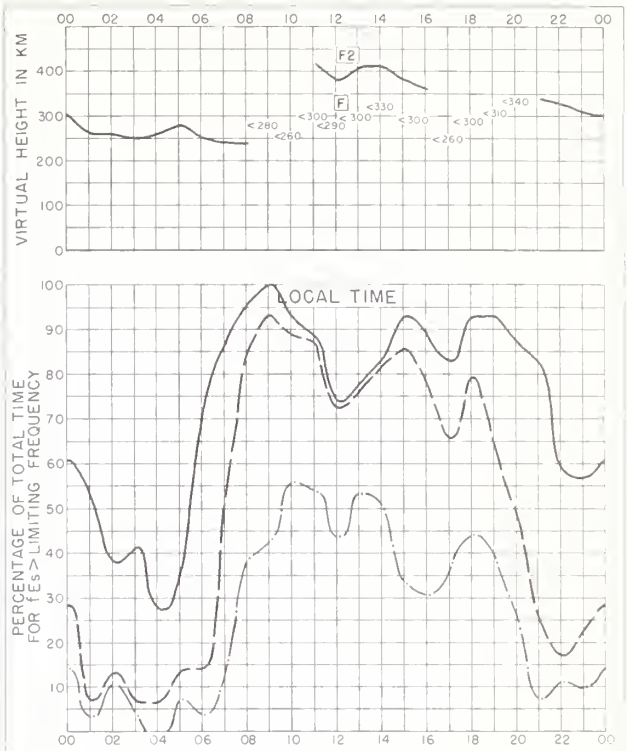



Fig. 90. FORMOSA, CHINA JUNE 1959

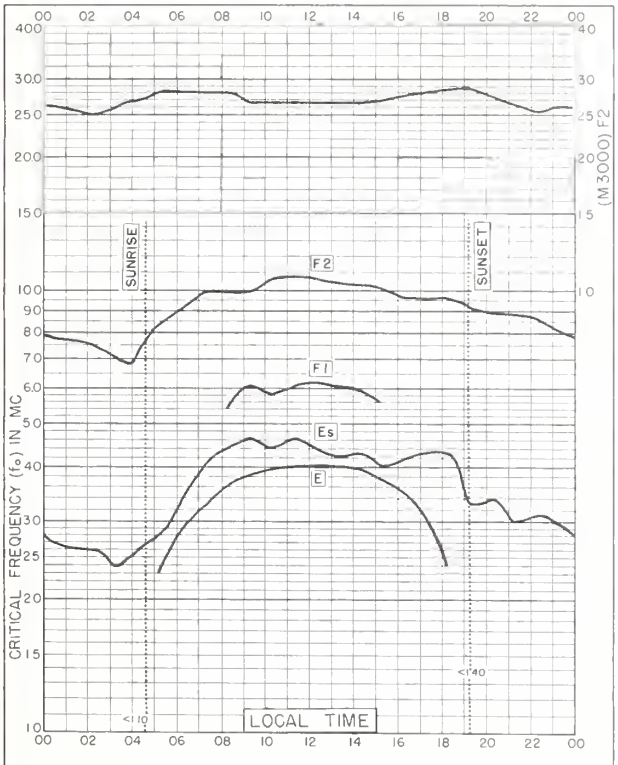



Fig. 91. SIMFEROPOL, U.S.S.R.
44.8°N, 34.1°E MAY 1959

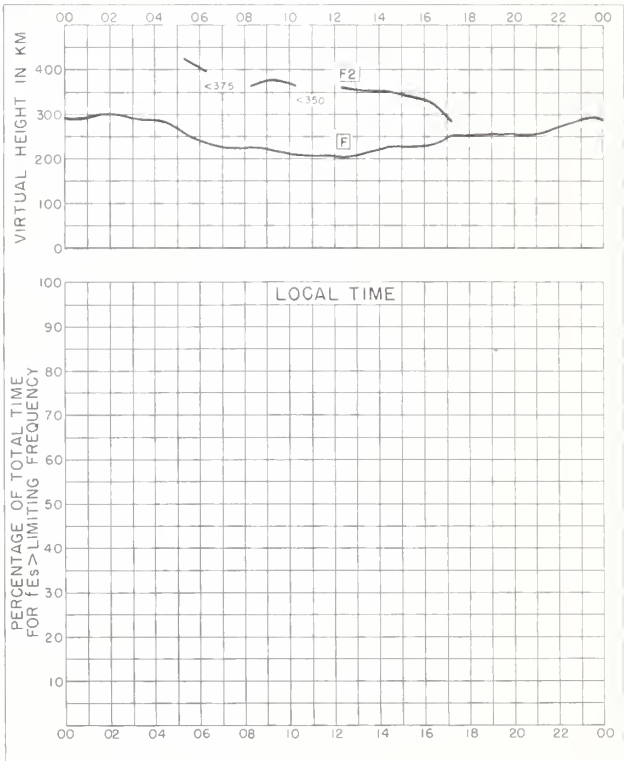



Fig. 92. SIMFEROPOL, U.S.S.R. MAY 1959

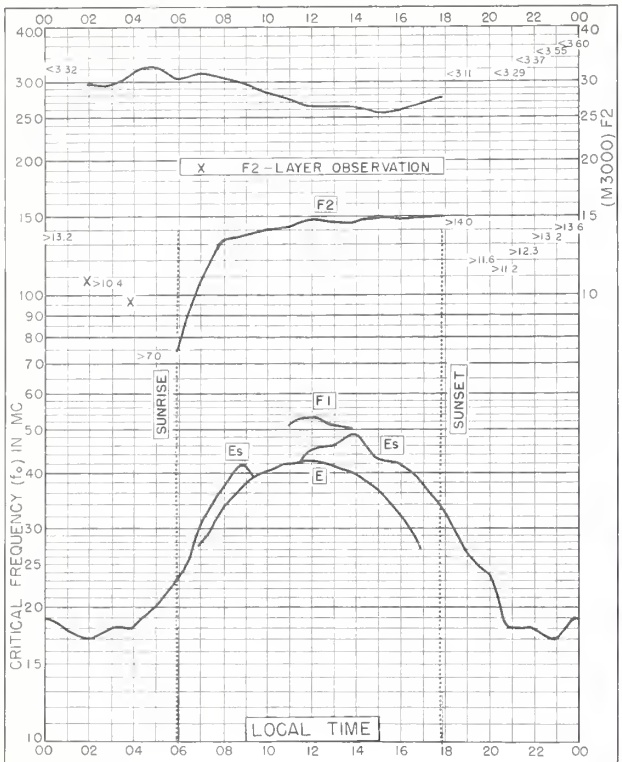



Fig. 93. LWIRO, BELGIAN CONGO
2.3°S, 28.8°E MAY 1959

NBS 503

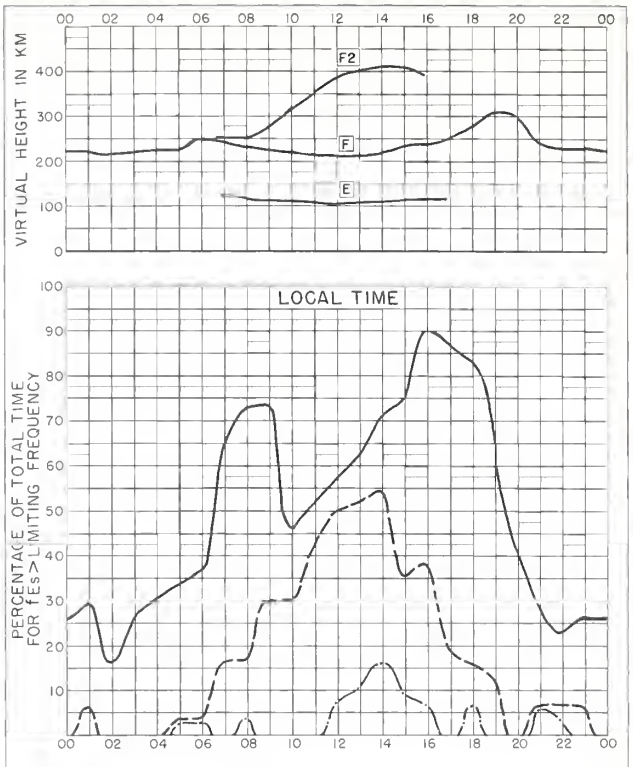



Fig. 94. LWIRO, BELGIAN CONGO MAY 1959

NBS 490

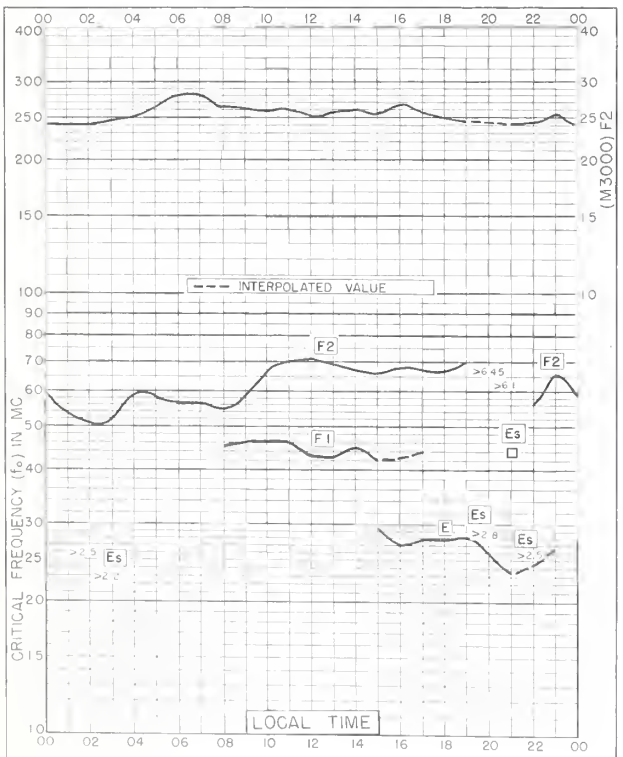



Fig. 95. BYRD STATION
80.0°S, 120.0°W FEBRUARY 1959

NBS 501

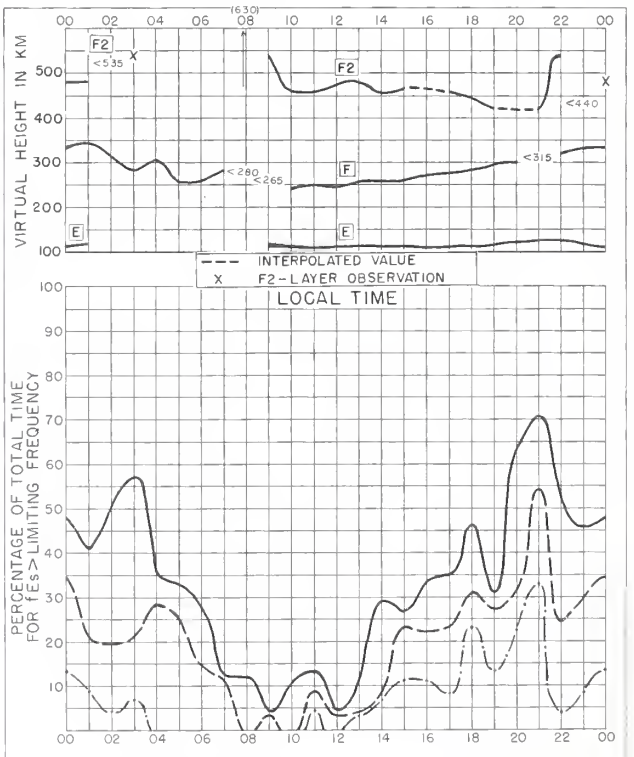



Fig. 96. BYRD STATION FEBRUARY 1959

NBS 490


Fig. 97. VICTORIA, CANADA
48.4°N, 123.4°W DECEMBER 1958

NBS 503

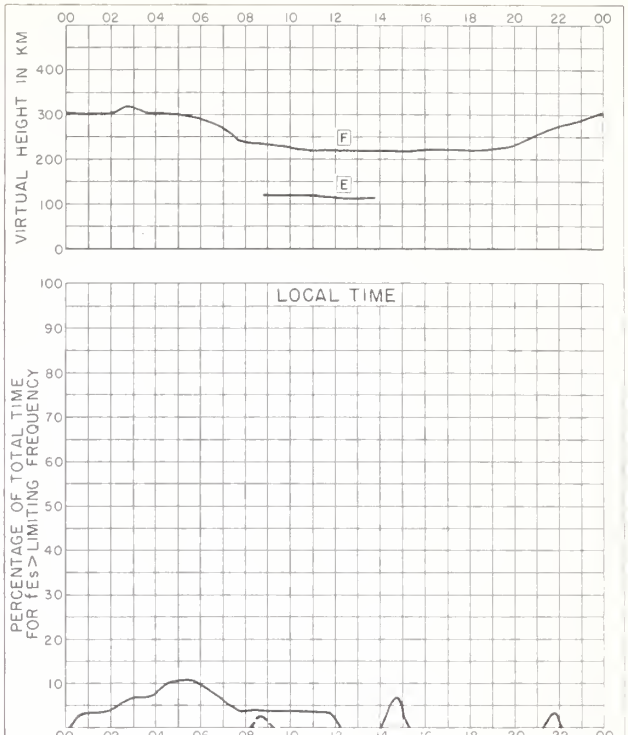



Fig. 98. VICTORIA, CANADA DECEMBER 1958

NBS 490

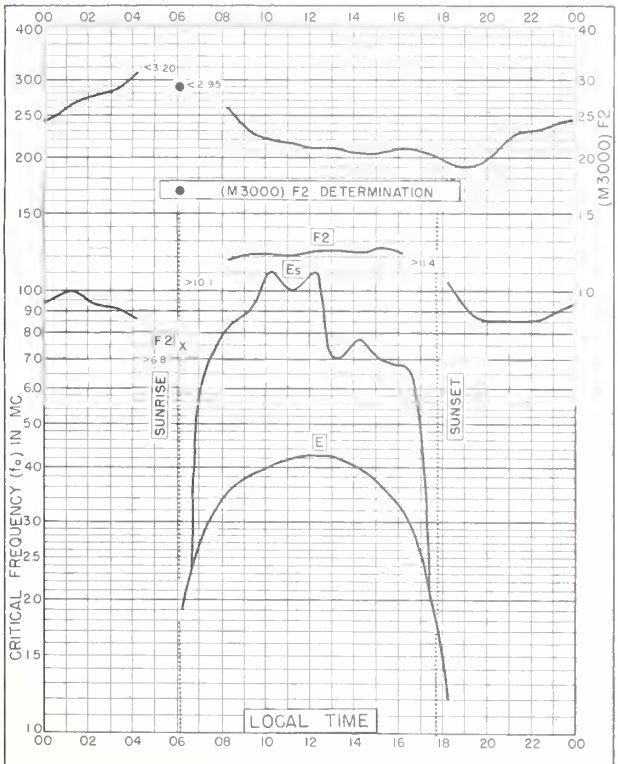



Fig. 99. IBADAN, NIGERIA
7.4°N, 3.9°E DECEMBER 1958

NBS 503

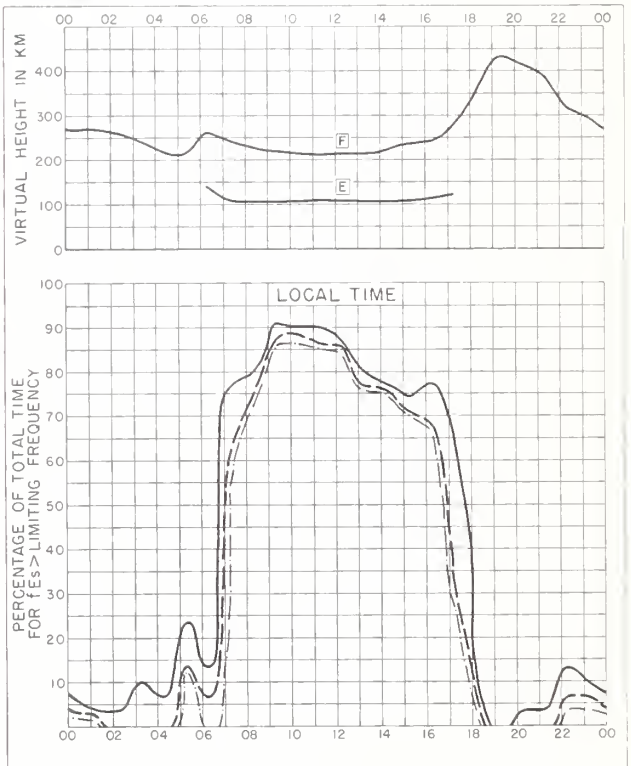



Fig. 100. IBADAN, NIGERIA DECEMBER 1958

NBS 490

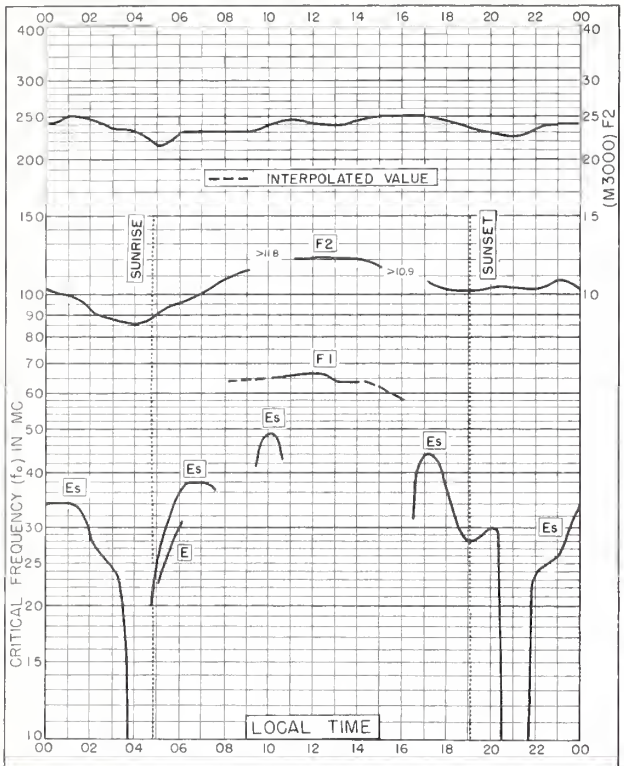



Fig. 101. BUENOS AIRES, ARGENTINA
34.5°S, 58.5°W DECEMBER 1958

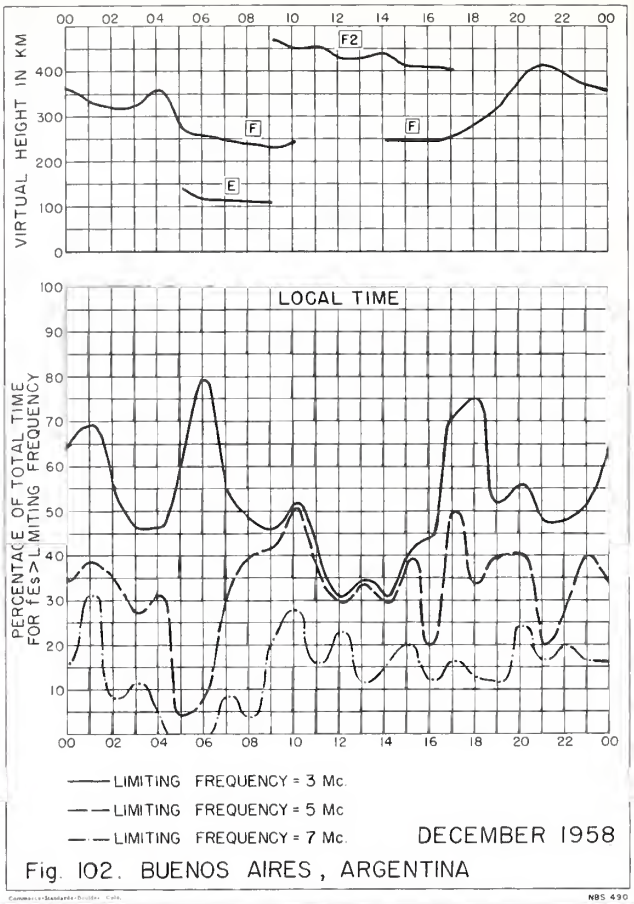



Fig. 102. BUENOS AIRES, ARGENTINA DECEMBER 1958

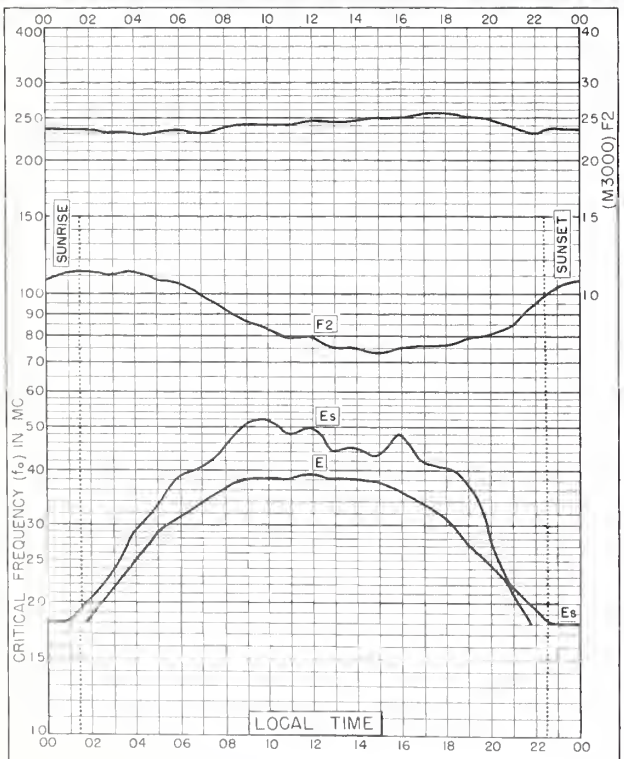



Fig. 103. PORT LOCKROY
64.8°S, 63.5°W DECEMBER 1958

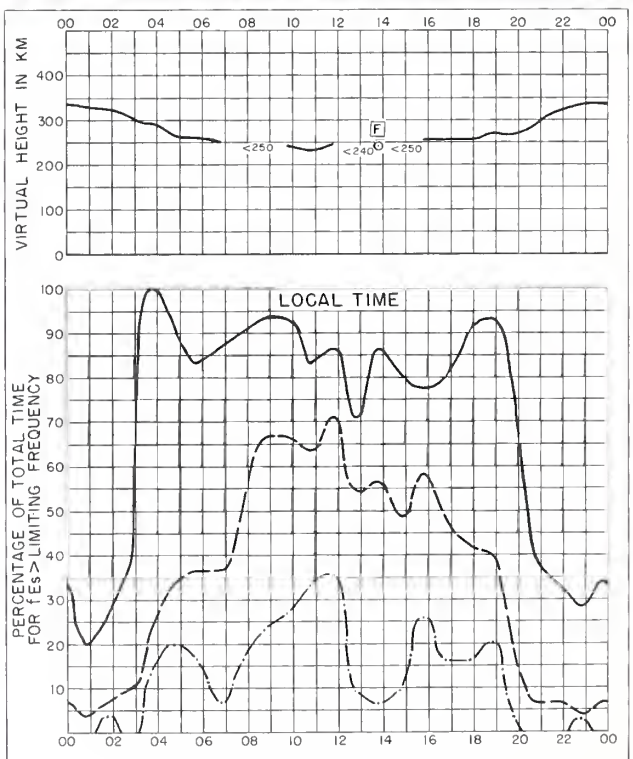



Fig. 104. PORT LOCKROY DECEMBER 1958

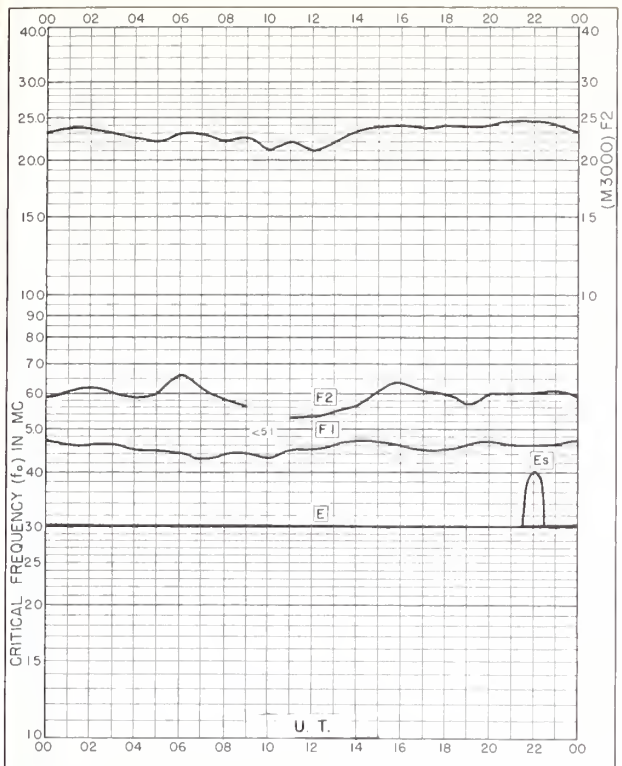



Fig. 105. POLE STATION
90.0°S DECEMBER 1958

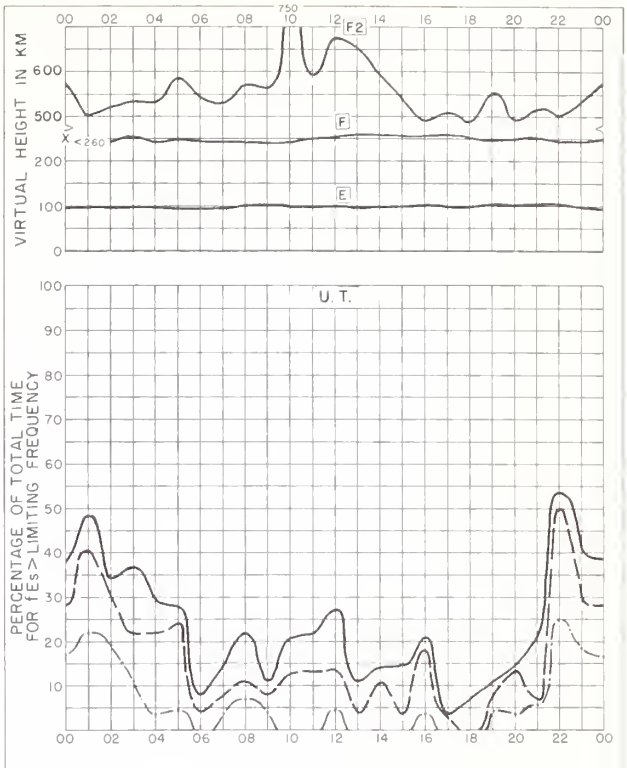



Fig 106. POLE STATION DECEMBER 1958

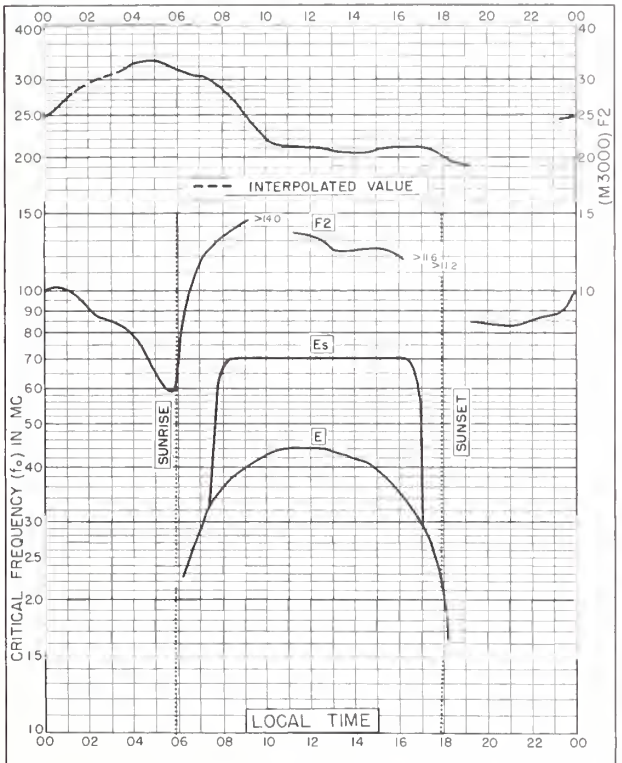



Fig. 107. IBADAN, NIGERIA
7.4°N, 3.9°E SEPTEMBER 1958

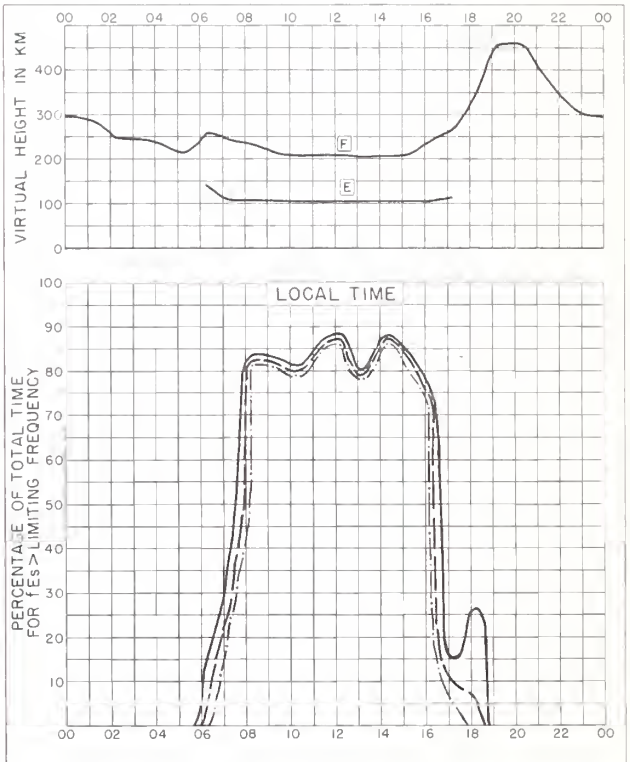



Fig. 108. IBADAN, NIGERIA SEPTEMBER 1958

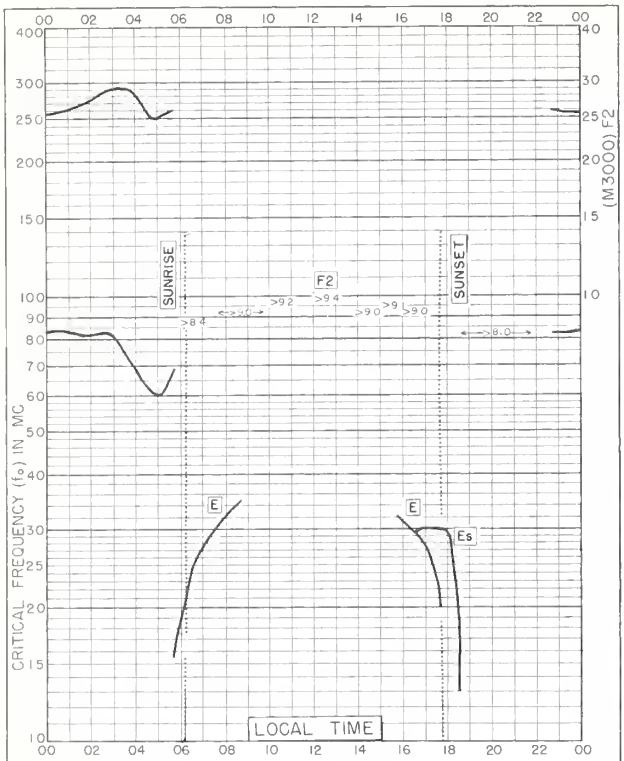
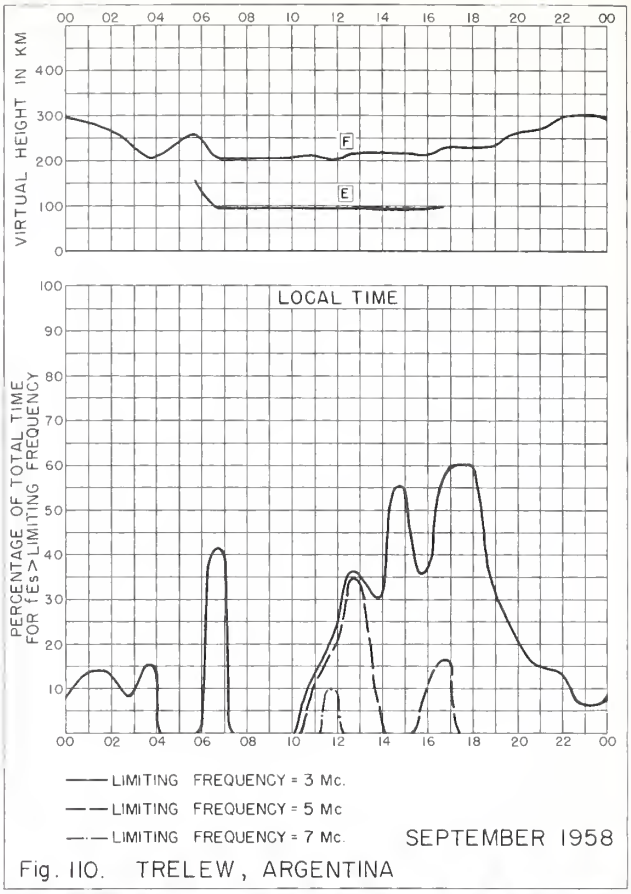



Fig. 109. TRELEW, ARGENTINA
43.0°S, 65.0°W SEPTEMBER 1958

NBS 503




SEPTEMBER 1958

Fig. 110. TRELEW, ARGENTINA

NBS 490

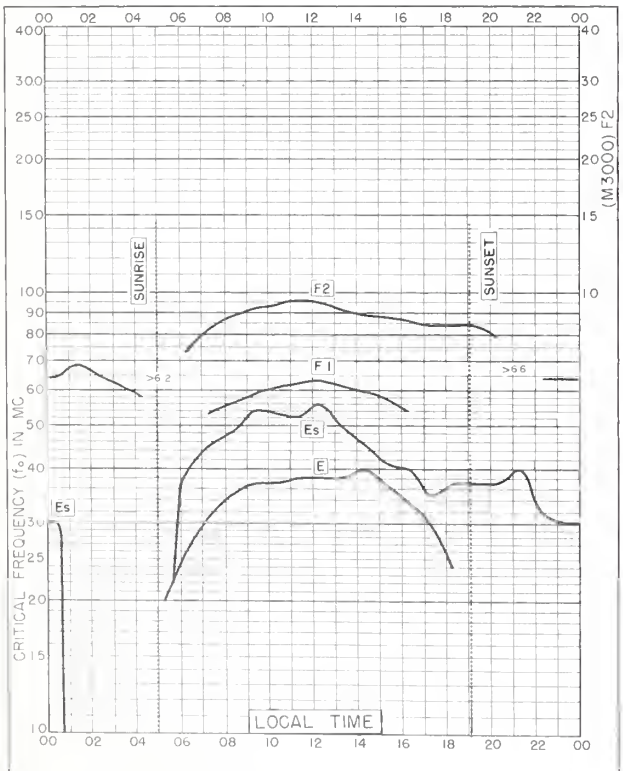



Fig. 111. BUDAPEST, HUNGARY
47.4°N, 19.2°E AUGUST 1958

NBS 503

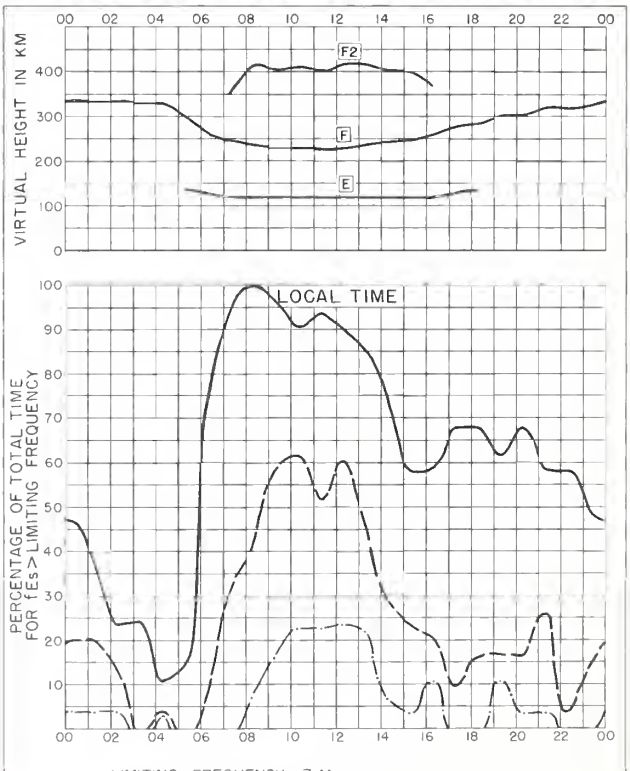



Fig. 112. BUDAPEST, HUNGARY AUGUST 1958

NBS 490

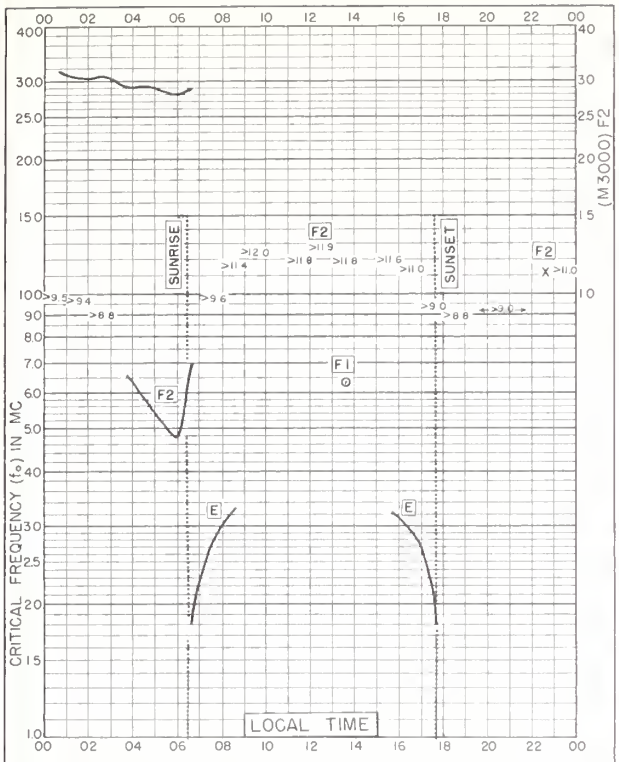



Fig. 113. La QUIACA, ARGENTINA
22.1°S, 65.6°W AUGUST 1958

NBS 503

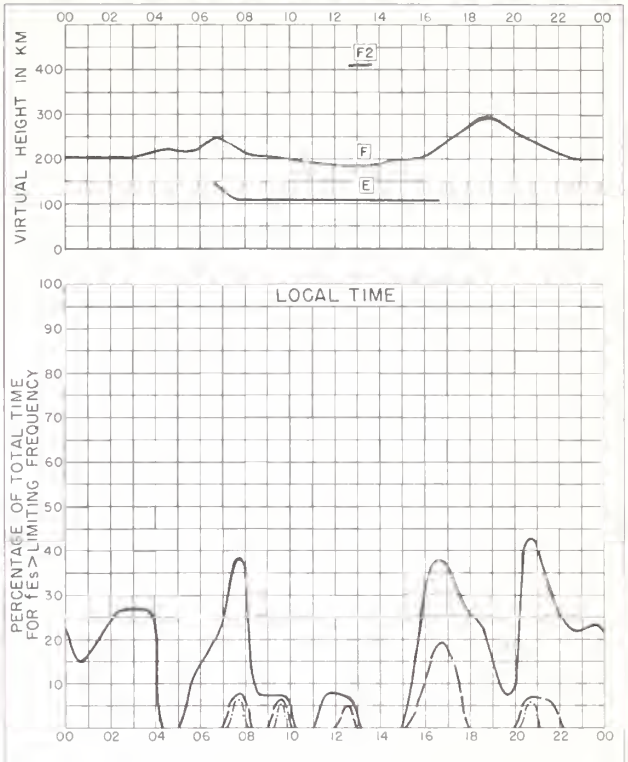



Fig. 114. La QUIACA, ARGENTINA AUGUST 1958

NBS 490

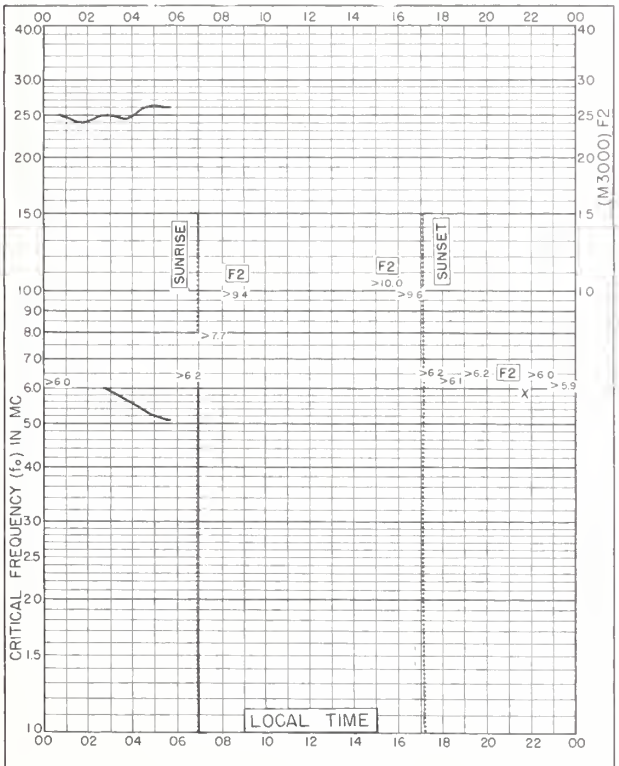



Fig. 115. TRELEW, ARGENTINA
43.0°S, 65.0°W AUGUST 1958

NBS 503

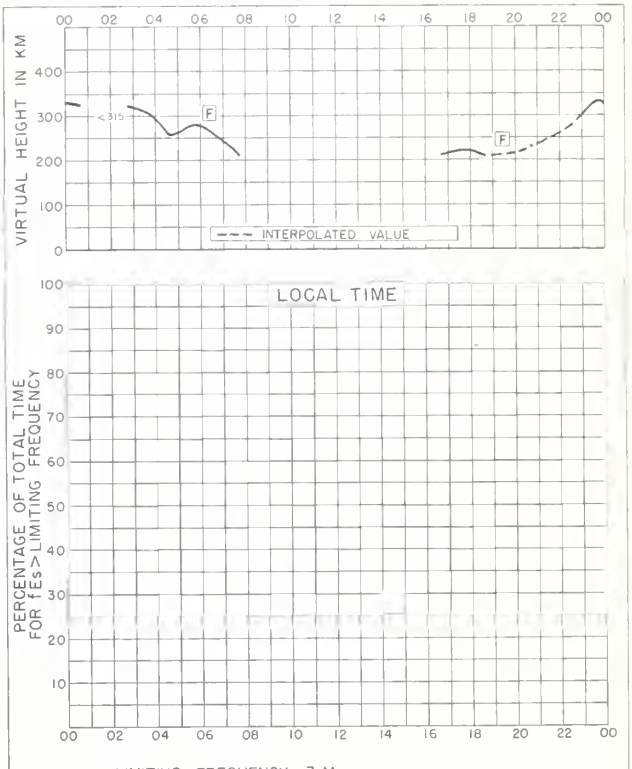



Fig. 116. TRELEW, ARGENTINA AUGUST 1958

NBS 490

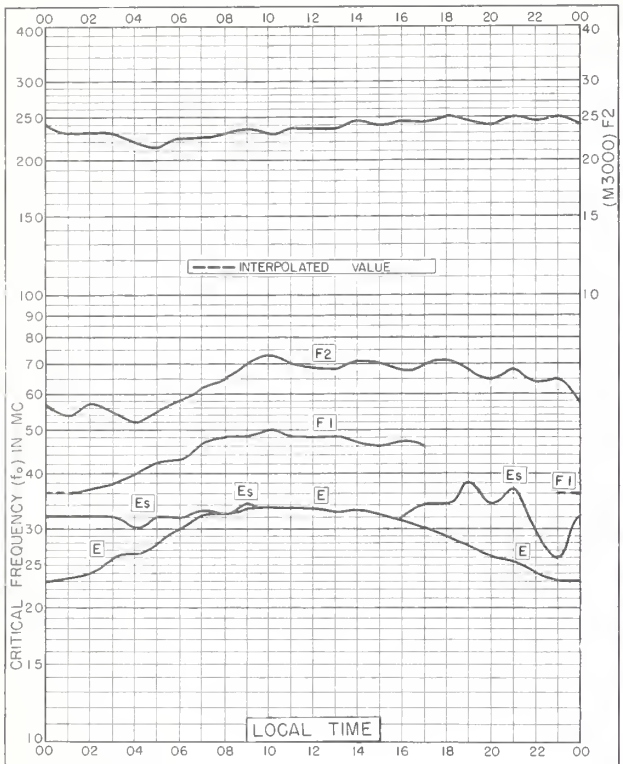



Fig. 117. SVALBARD, NORWAY
78.2°N, 15.7°E MAY 1958

NBS 503

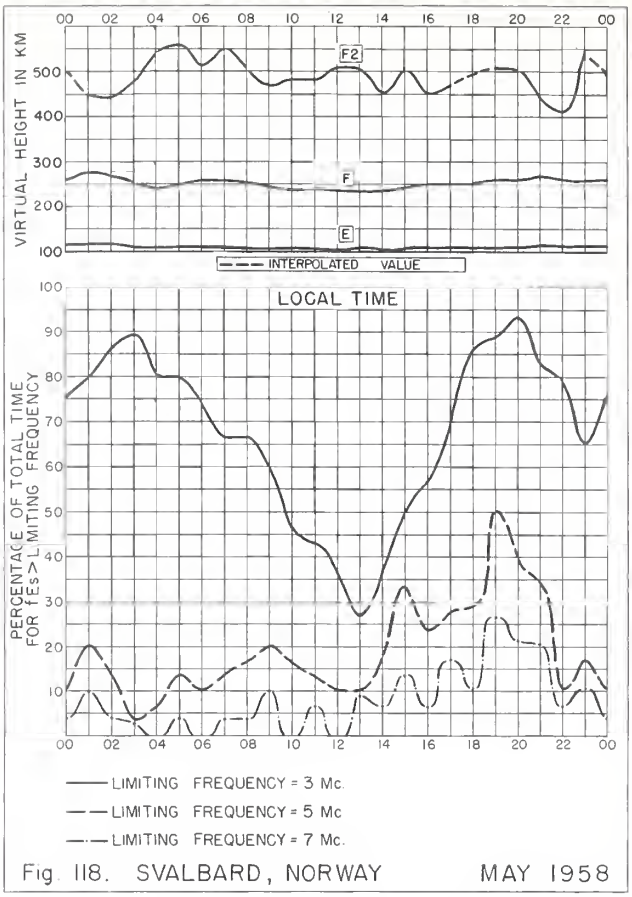



Fig. 118. SVALBARD, NORWAY MAY 1958

NBS 490

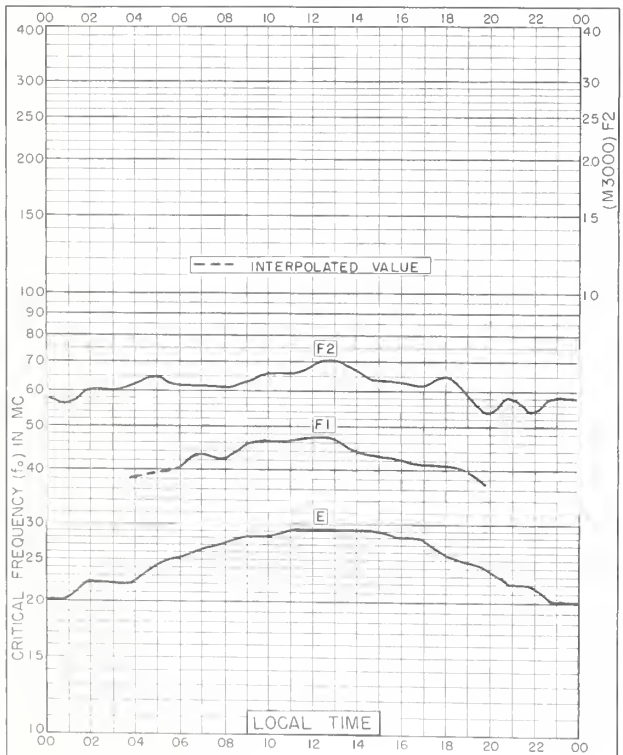



Fig. 119. ALERT, CANADA
82.5°N, 62.7°W APRIL 1958

NBS 503

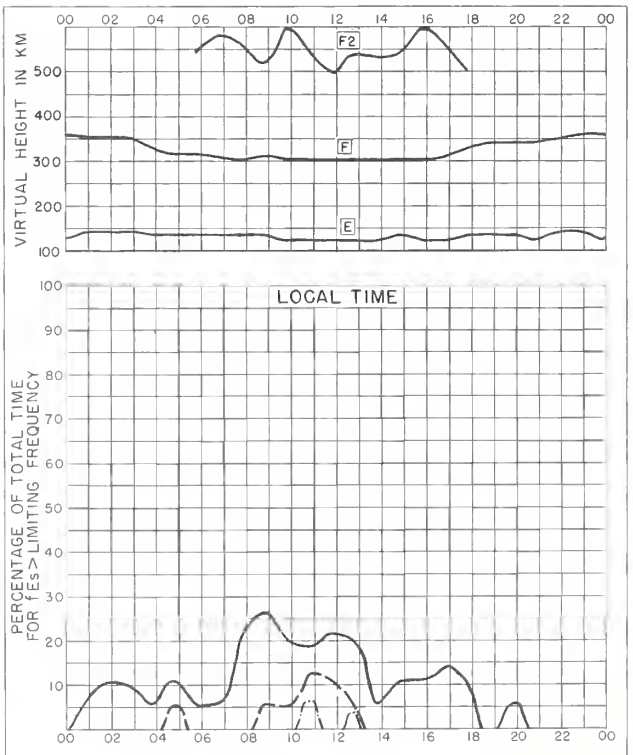



Fig. 120. ALERT, CANADA APRIL 1958

NBS 490

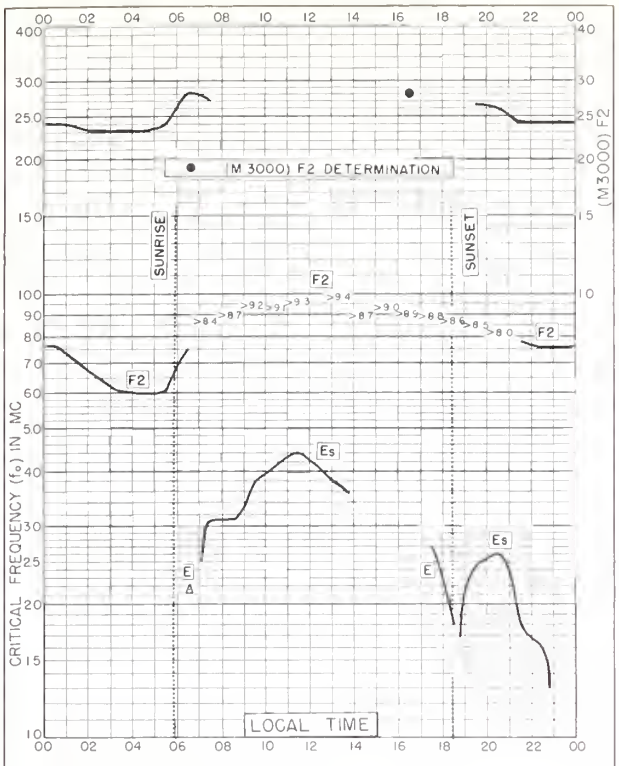



Fig. 121. USHUAIA, ARGENTINA
54.8°S, 68.3°W MARCH 1958

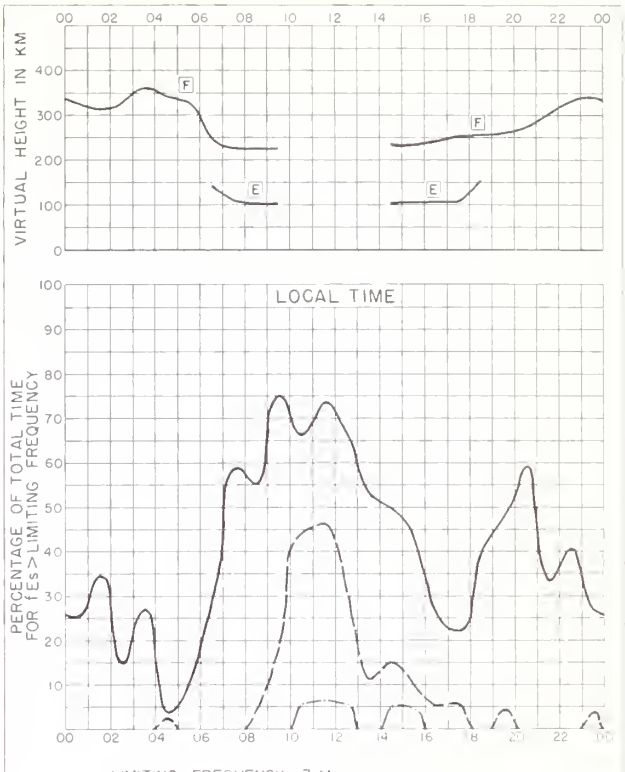



Fig. 122. USHUAIA, ARGENTINA MARCH 1958

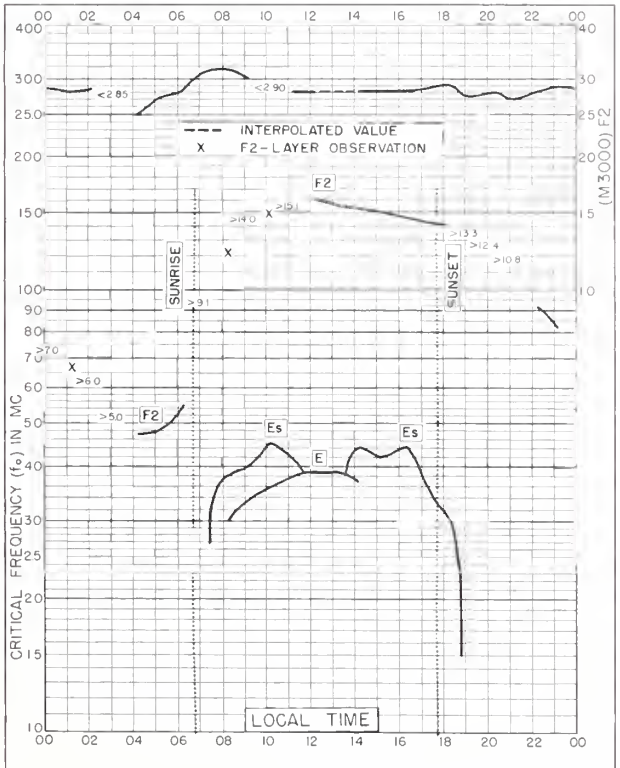



Fig. 123. DELHI, INDIA
28.6°N, 77.2°E FEBRUARY 1958

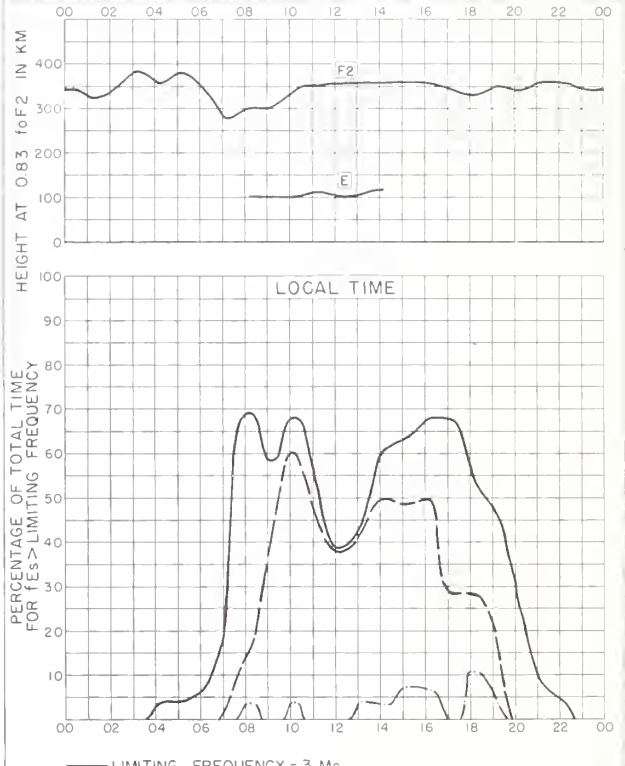



Fig. 124. DELHI, INDIA FEBRUARY 1958

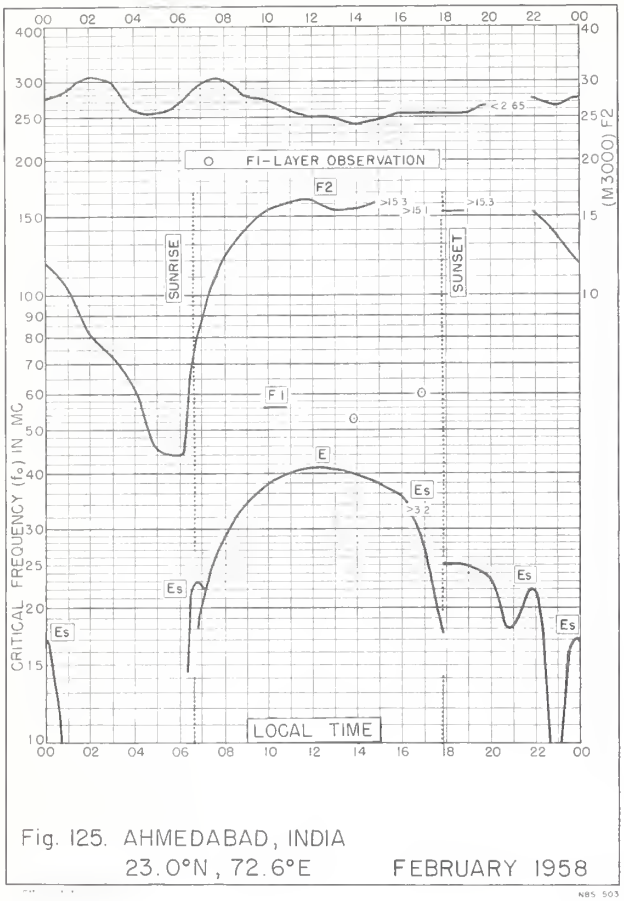



Fig. 125. AHMEDABAD, INDIA
23.0°N, 72.6°E FEBRUARY 1958

NBS 503

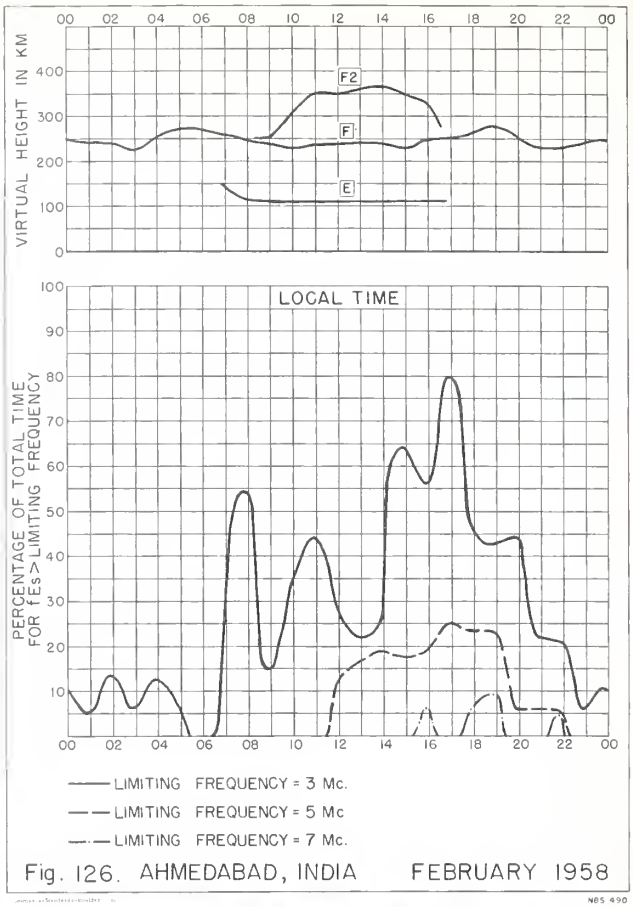



Fig. 126. AHMEDABAD, INDIA FEBRUARY 1958

NBS 490

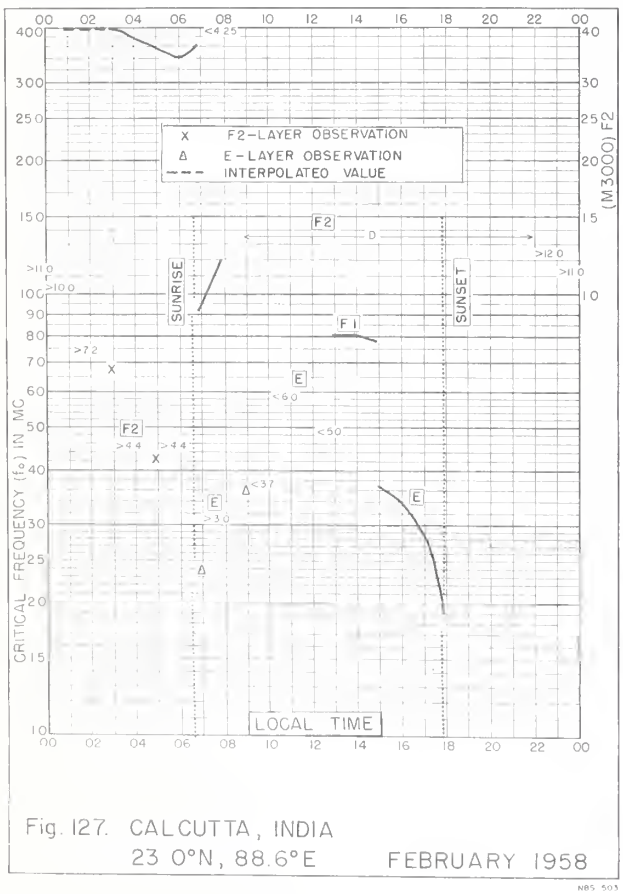



Fig. 127. CALCUTTA, INDIA
23.0°N, 88.6°E FEBRUARY 1958

NBS 503

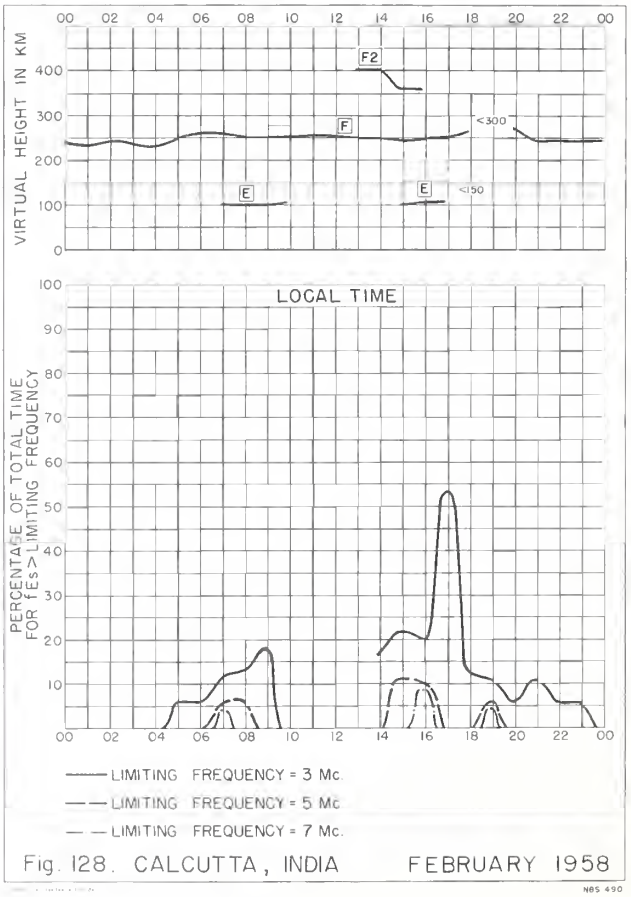



Fig. 128. CALCUTTA, INDIA FEBRUARY 1958

NBS 490

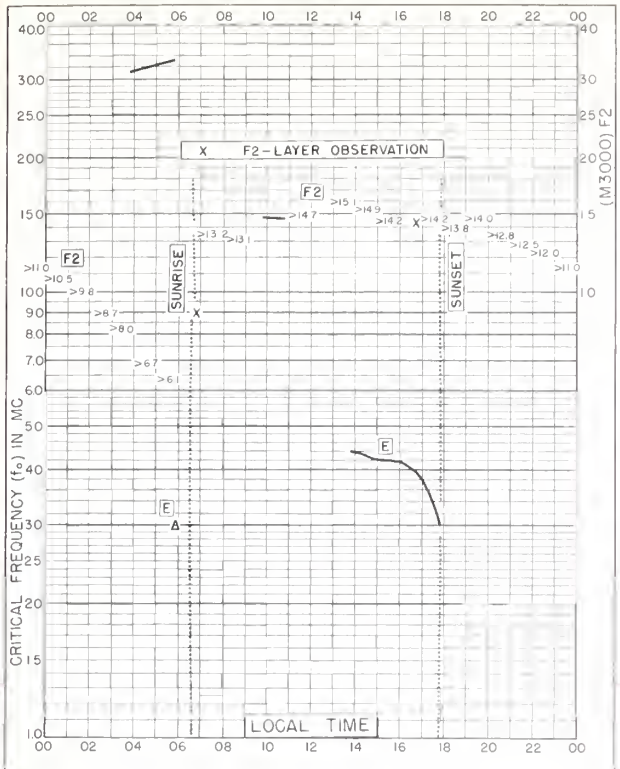



Fig. 129. BOMBAY, INDIA
19.0°N, 73.0°E FEBRUARY 1958

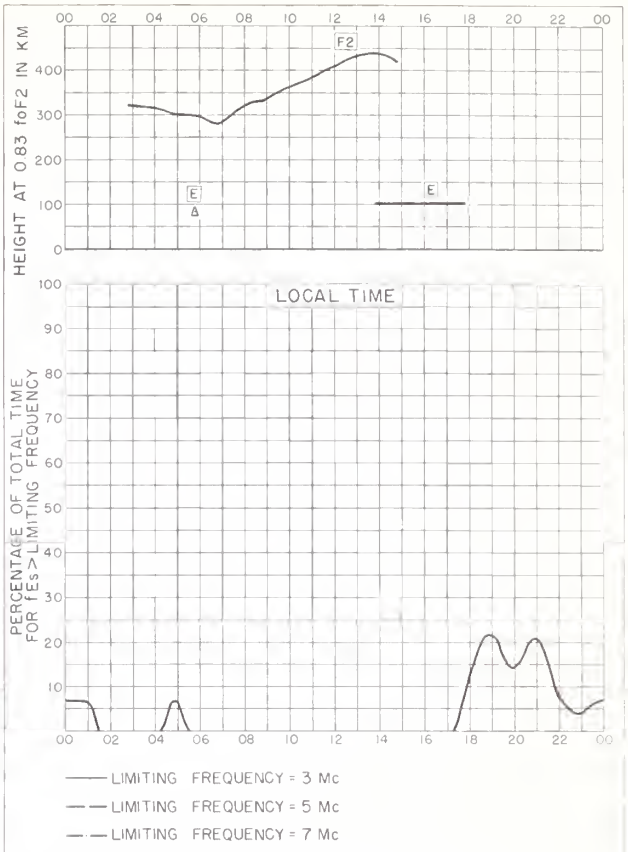



Fig. 130. BOMBAY, INDIA FEBRUARY 1958

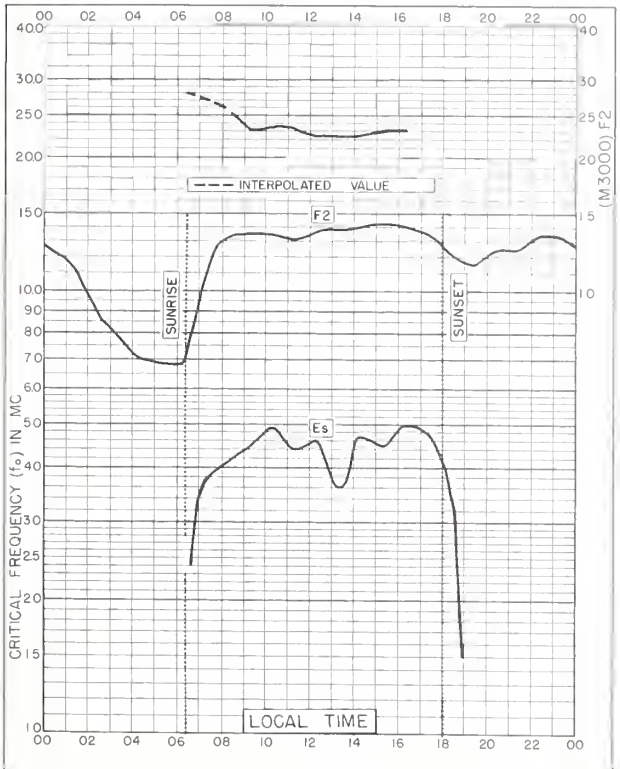



Fig. 131. MADRAS, INDIA
13.1°N, 80.3°E FEBRUARY 1958

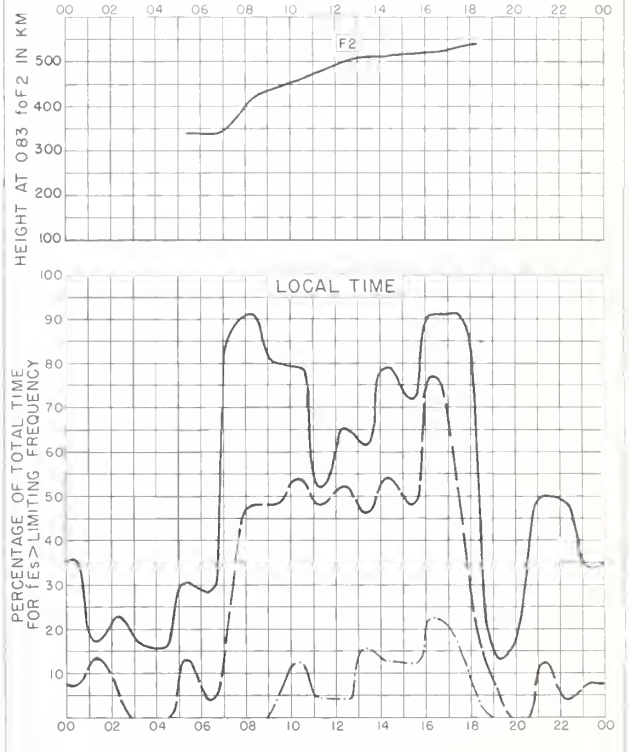



Fig. 132. MADRAS, INDIA FEBRUARY 1958

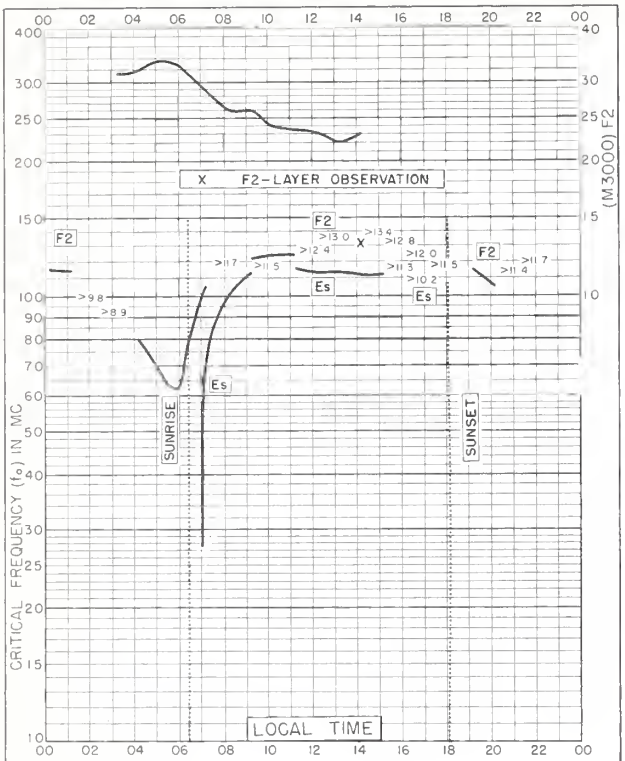



Fig. 133. TIRUCHY, INDIA
10.8°N, 78.7°E FEBRUARY 1958

NBS 503

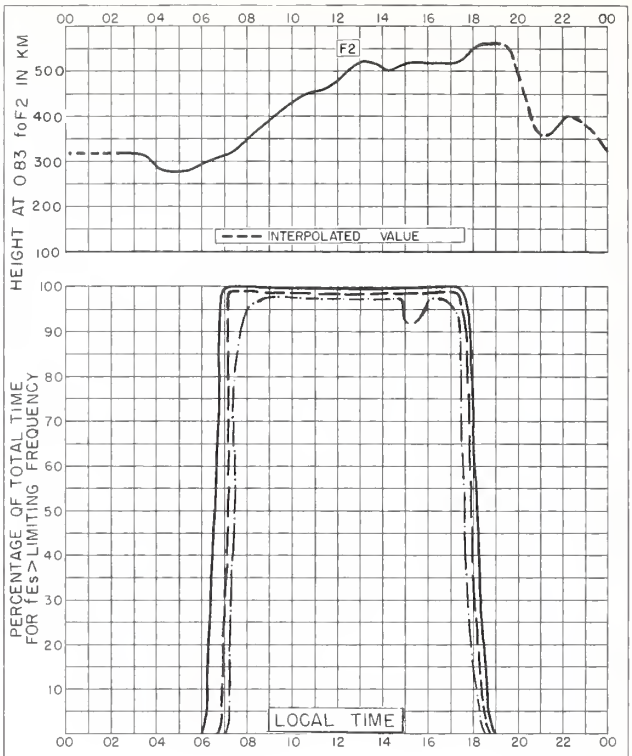



Fig. 134. TIRUCHY, INDIA FEBRUARY 1958

NBS 490

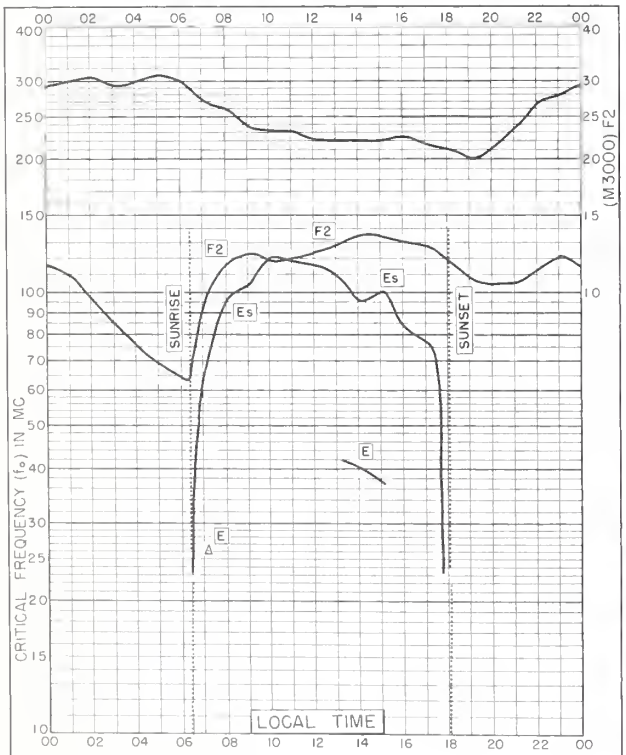



Fig. 135. KODAIKANAL, INDIA
10.2°N, 77.5°E FEBRUARY 1958

NBS 503

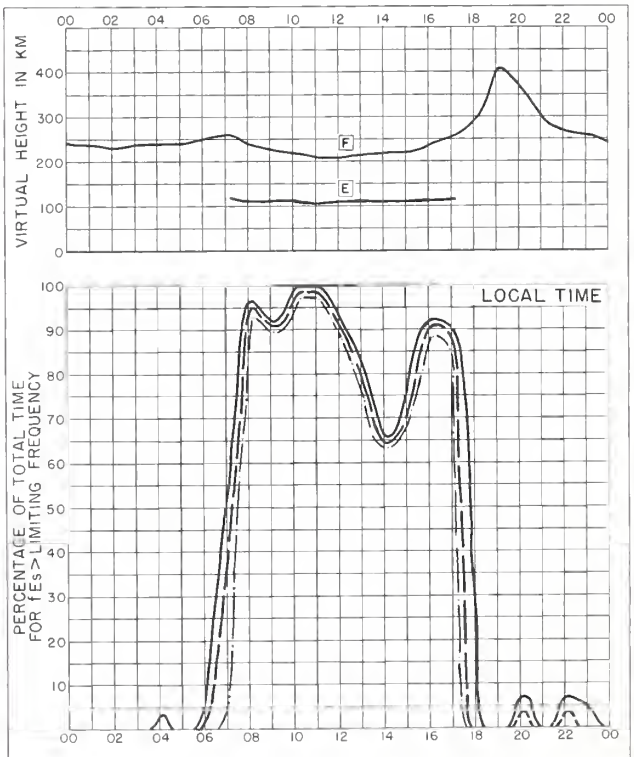



Fig. 136. KODAIKANAL, INDIA FEBRUARY 1958

NBS 490

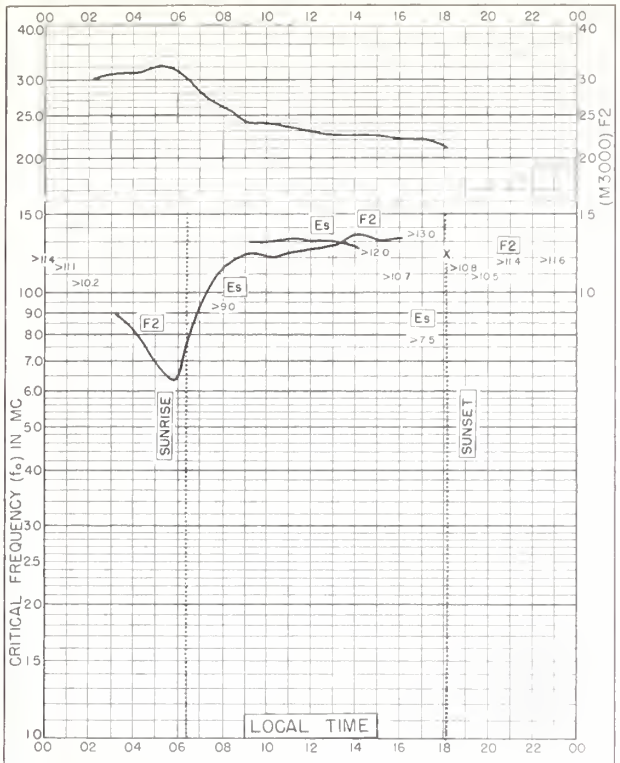



Fig. 137. TRIVANDRUM, INDIA
8.5°N, 77.0°E FEBRUARY 1958

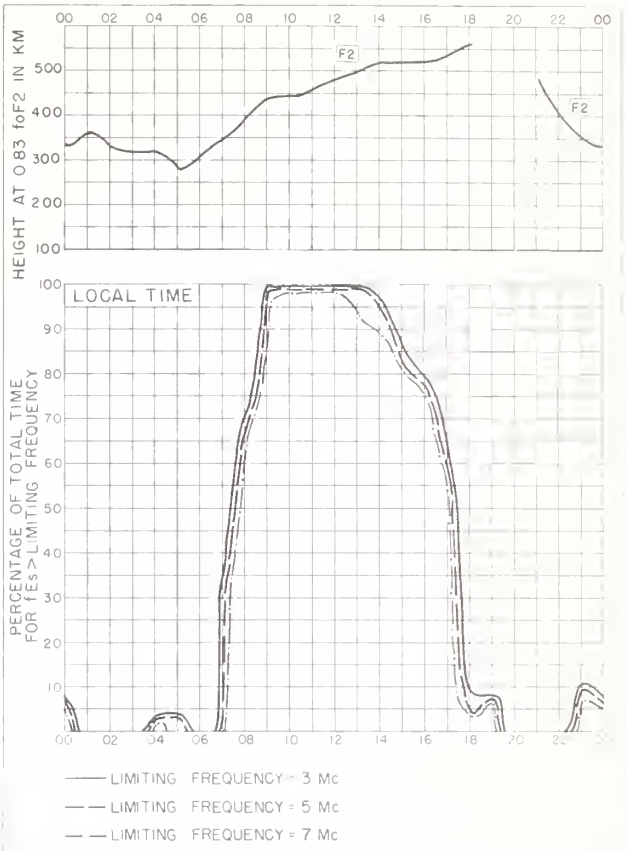



Fig. 138. TRIVANDRUM, INDIA FEBRUARY 1958

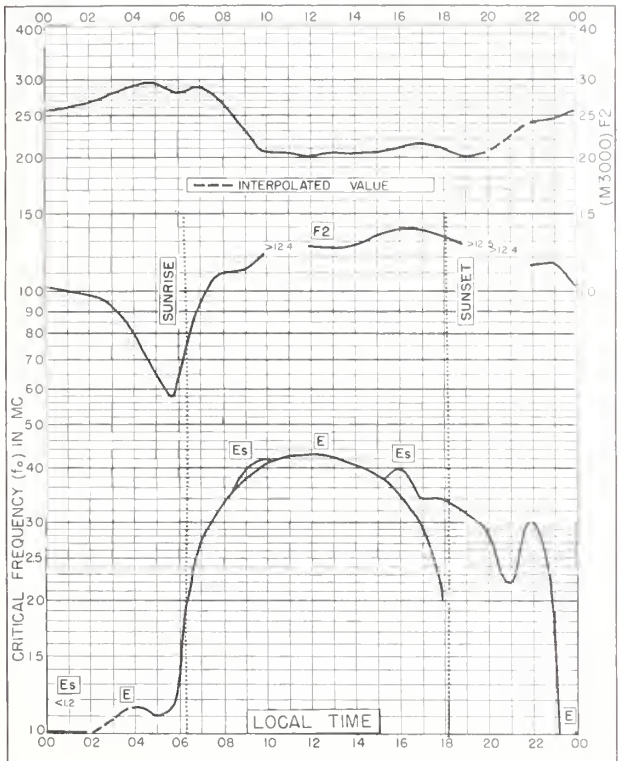
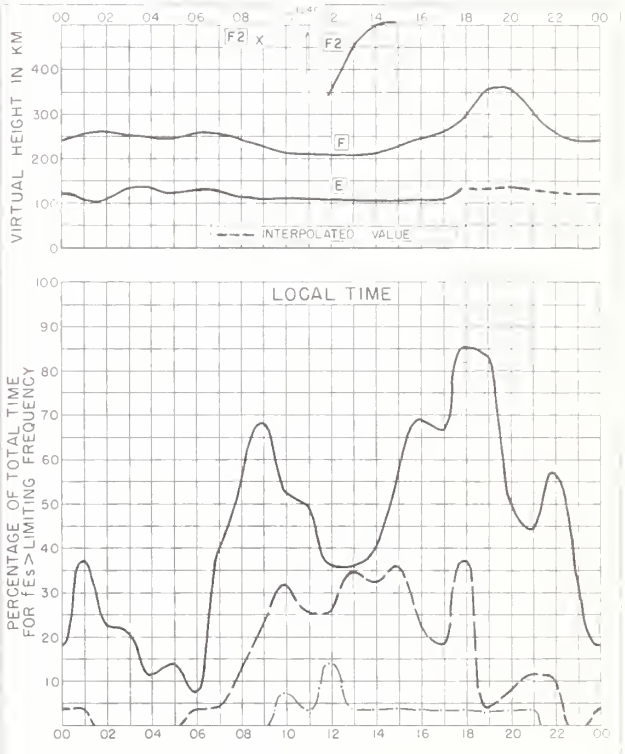



Fig. 139. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E FEBRUARY 1958




FEBRUARY 1958

Fig. 140. SINGAPORE, BRITISH MALAYA

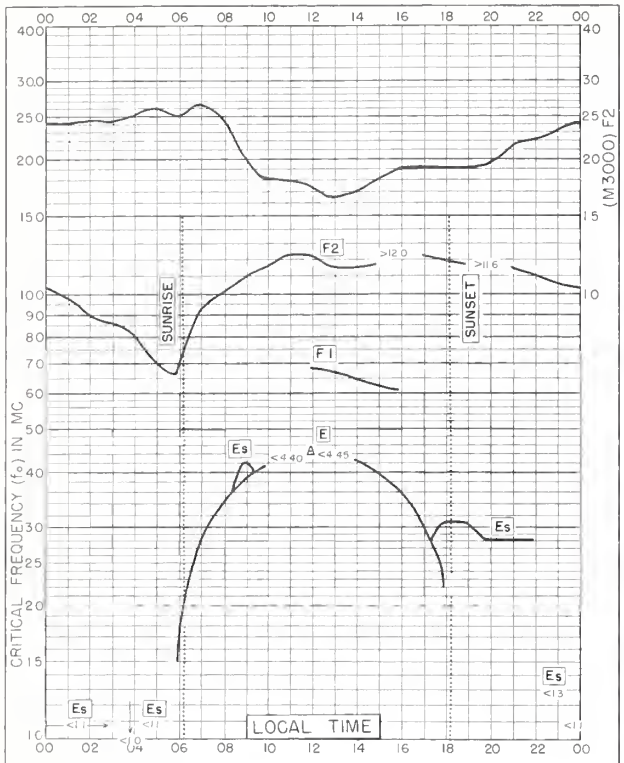



Fig. 141. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E JANUARY 1958

NBS 503

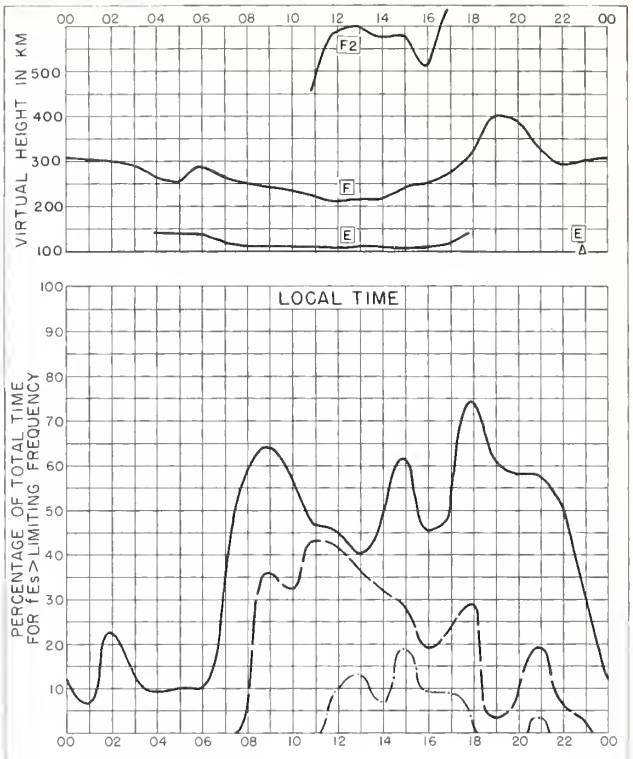



Fig. 142. SINGAPORE, BRITISH MALAYA JANUARY 1958

NBS 490


Fig. 143. ALERT, CANADA
82.5°N, 62.7°W AUGUST 1957

NBS 503

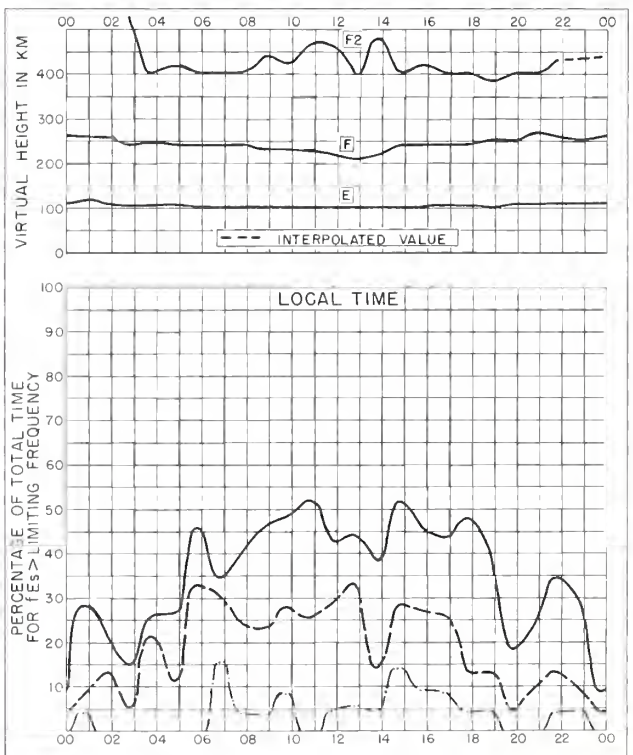



Fig. 144. ALERT, CANADA AUGUST 1957

NBS 490

## Index of Tables and Graphs of Ionospheric Data

## in CRPL-F191 (Part A)

Index (CRPL-F191 (Part A), continued)

Index (CRPL-F191 (Part A), concluded)

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