PART A

# IONOSPHERIC DATA

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NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

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PART A

NATIONAL BUREAU OF STANDARDS
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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 1960.

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 | 146 | 141 | 137 | 132 |
| 1960 | 129 | 125 | 122 | 120 | 117 | 114 | 108 | 102 | | | | |
| 1961 | | | | | | | | | | | | |

## 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

Commonwealth of Australia, Ionospheric Prediction Service of the Commonwealth Observatory:
Brisbane, Australia
Canberra, Australia
Townsville, Australia
Wilkes Station, Antarctica

University of Graz:
Graz, Austria

Belgian Royal Meteorological Institute:
Dourbes, Belgium

Escola Politecnica, University of Sao Paulo:
Sao Paulo, Brazil

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:
Churchill, Canada
Ottawa, Canada
Resolute Bay, Canada
St. John's, Newfoundland
Winnipeg, Canada

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

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

The Finnish Academy of Sciences and Letters:
Sodankyla, Finland

French National Center for Telecommunications Studies:
Bangui, French Equatorial Africa
Dakar, French West Africa
Kerguelen I.
Poitiers, France
Rabat, Morocco
Tahiti, Society Is.
Tamanrasset, French West Africa
Terre Adelie

Heinrich Hertz Institute, German Academy of Sciences, Berlin:
Juliusruh/Rügen, Germany

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

Ionospheric Institute, Breisach, Germany:
Freiburg, Germany

The Royal Netherlands Meteorological Institute:
De Bilt, Holland
Hollandia, Netherlands New Guinea

National Institute of Geophysics, City University, Rome, Italy:
Rome, Italy

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

General Directorate of Telecommunications, Mexico:
El Cerillo, Mexico

Telecommunication Administration, Oslo, Norway:
Svalbard, Norway

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

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

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

Post, Telephone and Telegraph Administration, Berne, Switzerland:
Sottens, Switzerland

National Bureau of Standards (Central Radio Propagation Laboratory):
Byrd Station, Antarctica
Fairbanks (College), Alaska (Geophysical Institute of the University of Alaska)
Huancayo, Peru (Instituto Geofisico de Huancayo)

## 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 several stations associated with CRPL. For the present, the hourly profile data from one CRPL station, Puerto Rico, are appearing in the monthly CRPL-F Reports, Part A. 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 by Dr. H. H. Howe for a CDC-1604 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. |
| KP | | The standard Kp magnetic index, to one digit. |
| 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 4+ or less. The number of profiles entering the average for each hour is given by CNT. The other parameters of the layer, HMIN, SCAT, HMAX, SHMAX, and the mean value of Kp are given for each hour.

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

RAMEY AFB, PUERTO RICO — 60 W — 1 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A1 | 1 |
| HMIN | 266 | 252 | 239 | 221 | 199 | 201 | 199 | 107 | 109 | 109 | | 111 |
| SCAT | 44.9 | 61.6 | 49.5 | 32.1 | 38.1 | 32.4 | 81.1 | 53.8 | 36.8 | 38.3 | | 66.7 |
| HMAXF | 366 | 383 | 349 | 297 | 281 | 264 | 326 | 238 | 247 | 258 | | 310 |
| SHMAX | 231 | 330 | 258 | 174 | 163 | 85 | 209 | 292 | 420 | 552 | | 1021 |
| KM | | | | | | | | | | | | |
| 390 | | 403 | | | | | | | | | | |
| 380 | | 403 | | | | | | | | | | |
| 370 | 375 | 398 | | | | | | | | | | |
| 360 | 374 | 389 | | | | | | | | | | |
| 350 | 364 | 373 | 382 | | | | | | | | | |
| 340 | 345 | 355 | 379 | | | | | | | | | |
| 330 | 318 | 328 | 368 | | | | 214 | | | | | |
| 320 | 276 | 296 | 349 | | | | 213 | | | | | |
| 310 | 227 | 255 | 326 | | | | 211 | | | | | 875 |
| 300 | 173 | 206 | 288 | 382 | | | 208 | | | | | 870 |
| 290 | 112 | 158 | 242 | 379 | 310 | | 203 | | | | | 856 |
| 280 | 65.1 | 112 | 191 | 354 | 310 | | 196 | | | | | 831 |
| 270 | 26.2 | 68.4 | 137 | 315 | 304 | 198 | 189 | | | | | 797 |
| 260 | | 42.6 | 80.4 | 255 | 287 | 198 | 182 | | | 754 | | 754 |
| 250 | | | 49.0 | 181 | 260 | 190 | 172 | | 590 | 746 | | 701 |
| 240 | | | 7.0 | 112 | 221 | 172 | 157 | 396 | 585 | 711 | | 643 |
| 230 | | | | 60.3 | 171 | 146 | 135 | 393 | 556 | 651 | | 581 |
| 220 | | | | | 121 | 107 | 106 | 383 | 508 | 570 | | 523 |
| 210 | | | | | 67.2 | 59.2 | 69.1 | 370 | 447 | 476 | | 472 |
| 200 | | | | | 12.4 | | 12.4 | 350 | 378 | 392 | | 432 |
| 190 | | | | | | | | 317 | 320 | 330 | | 399 |
| 180 | | | | | | | | 268 | 276 | 280 | | 369 |
| 170 | | | | | | | | 203 | 240 | 238 | | 336 |
| 160 | | | | | | | | 143 | 208 | 197 | | 301 |
| 150 | | | | | | | | 106 | 179 | 174 | | 267 |
| 140 | | | | | | | | 85.1 | 145 | 160 | | 228 |
| 130 | | | | | | | | 70.0 | 110 | 153 | | 197 |
| 120 | | | | | | | | 62.7 | 97.8 | 146 | | 185 |
| 110 | | | | | | | | 45.1 | 55.6 | 58.9 | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 1 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 1 | 1 | 50 | 0 | 0 | 1 | A1 | 1 | 1 | 1 | A1 | A2 |
| HMIN | 109 | 109 | 109 | 107 | 109 | 108 | | 180 | 198 | 188 | 197 | 206 |
| SCAT | 58.6 | 53.2 | 56.9 | 53.5 | 46.9 | 49.9 | | 57.4 | 63.5 | 67.8 | 47.0 | 45.2 |
| HMAXF | 329 | 317 | 310 | 312 | 306 | 293 | | 319 | 344 | 331 | 336 | 352 |
| SHMAX | 1310 | 1405 | 1472 | 1409 | 1318 | 1184 | | 721 | 690 | 530 | 344 | 323 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | 446 |
| 350 | | | | | | | | | 824 | | | 446 |
| 340 | | | | | | | | | 823 | 599 | 477 | 438 |
| 330 | 1143 | | | | | | | | 813 | 599 | 475 | 419 |
| 320 | 1136 | 1446 | 1528 | 1528 | | | | 917 | 793 | 595 | 463 | 387 |
| 310 | 1112 | 1439 | 1518 | 1527 | 1669 | | | 911 | 765 | 585 | 439 | 347 |
| 300 | 1067 | 1408 | 1484 | 1507 | 1662 | 1500 | | 892 | 727 | 567 | 407 | 301 |
| 290 | 1010 | 1350 | 1422 | 1460 | 1620 | 1499 | | 857 | 672 | 546 | 362 | 250 |
| 280 | 944 | 1262 | 1340 | 1384 | 1540 | 1474 | | 812 | 599 | 517 | 310 | 200 |
| 270 | 871 | 1154 | 1228 | 1287 | 1430 | 1415 | | 748 | 513 | 479 | 257 | 156 |
| 260 | 791 | 1032 | 1114 | 1160 | 1268 | 1344 | | 666 | 414 | 429 | 204 | 122 |
| 250 | 712 | 894 | 964 | 1021 | 1044 | 1223 | | 571 | 318 | 372 | 157 | 94.5 |
| 240 | 638 | 759 | 807 | 866 | 832 | 1076 | | 468 | 221 | 308 | 116 | 72.0 |
| 230 | 569 | 634 | 661 | 715 | 648 | 907 | | 355 | 140 | 235 | 85.1 | 55.0 |
| 220 | 509 | 523 | 536 | 568 | 496 | 716 | | 248 | 90.6 | 152 | 61.3 | 41.5 |
| 210 | 458 | 447 | 443 | 458 | 405 | 524 | | 152 | 54.7 | 92.7 | 44.2 | 12.4 |
| 200 | 415 | 397 | 384 | 389 | 348 | 384 | | 90.2 | 12.4 | 57.0 | 12.4 | |
| 190 | 381 | 363 | 348 | 347 | 309 | 300 | | 50.8 | | 12.4 | | |
| 180 | 353 | 340 | 323 | 318 | 279 | 250 | | | | | | |
| 170 | 328 | 322 | 301 | 294 | 248 | 217 | | | | | | |
| 160 | 305 | 305 | 276 | 269 | 218 | 188 | | | | | | |
| 150 | 280 | 284 | 246 | 239 | 187 | 160 | | | | | | |
| 140 | 247 | 257 | 216 | 207 | 158 | 133 | | | | | | |
| 130 | 209 | 226 | 196 | 181 | 142 | 114 | | | | | | |
| 120 | 190 | 206 | 185 | 169 | 133 | 104 | | | | | | |
| 110 | 114 | 155 | 74.1 | 142 | 78.9 | 84.1 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 2 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | A3 |
| HMIN | 274 | 248 | 218 | 217 | 207 | 229 | 201 | 199 | 109 | 105 | 109 | |
| SCAT | 39.9 | 38.4 | 47.7 | 49.0 | 46.2 | 33.3 | 36.1 | 35.4 | 44.7 | 45.4 | 77.5 | |
| HMAXF | 370 | 340 | 320 | 342 | 325 | 303 | 277 | 281 | 251 | 272 | 315 | |
| SHMAX | 253 | 258 | 282 | 270 | 243 | 178 | 162 | 300 | 543 | 807 | 1168 | |
| KM | | | | | | | | | | | | |
| 370 | 446 | | | | | | | | | | | |
| 360 | 440 | | | | | | | | | | | |
| 350 | 420 | 477 | | 382 | | | | | | | | |
| 340 | 385 | 477 | | 382 | | | | | | | | |
| 330 | 337 | 468 | | 376 | 362 | | | | | | | |
| 320 | 277 | 442 | 446 | 362 | 361 | | | | | | 1004 | |
| 310 | 213 | 401 | 442 | 339 | 352 | 389 | | | | | 1003 | |
| 300 | 143 | 345 | 427 | 310 | 335 | 388 | | | | | 994 | |
| 290 | 82.2 | 277 | 402 | 273 | 311 | 374 | | 643 | | 1004 | 977 | |
| 280 | 41.8 | 196 | 370 | 228 | 276 | 342 | 342 | 643 | | 1004 | 950 | |
| 270 | | 114 | 324 | 181 | 236 | 293 | 338 | 628 | | 1004 | 918 | |
| 260 | | 60.1 | 263 | 133 | 191 | 225 | 320 | 588 | 814 | 986 | 875 | |
| 250 | | 12.4 | 193 | 93.7 | 145 | 147 | 294 | 522 | 814 | 942 | 825 | |
| 240 | | | 113 | 66.2 | 101 | 74.0 | 247 | 403 | 802 | 877 | 768 | |
| 230 | | | 59.2 | 45.6 | 70.1 | 12.4 | 179 | 255 | 769 | 788 | 703 | |
| 220 | | | 12.4 | 12.4 | 46.5 | | 105 | 142 | 719 | 676 | 630 | |
| 210 | | | | | 12.4 | | 51.1 | 68.9 | 641 | 563 | 546 | |
| 200 | | | | | | | | 12.4 | 513 | 463 | 451 | |
| 190 | | | | | | | | | 372 | 389 | 375 | |
| 180 | | | | | | | | | 270 | 331 | 327 | |
| 170 | | | | | | | | | 211 | 290 | 289 | |
| 160 | | | | | | | | | 169 | 254 | 251 | |
| 150 | | | | | | | | | 137 | 213 | 203 | |
| 140 | | | | | | | | | 117 | 173 | 172 | |
| 130 | | | | | | | | | 107 | 151 | 157 | |
| 120 | | | | | | | | | 102 | 138 | 149 | |
| 110 | | | | | | | | | 62.8 | 128 | 58.9 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 2 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 6 | 5 | 5 | 5 | 5 |
| HMIN | 109 | 109 | 107 | 112 | 108 | 109 | 198 | 215 | 237 | 212 | 239 | 239 |
| SCAT | 69.6 | 53.1 | 58.2 | 66.5 | 54.5 | 51.4 | 60.0 | 49.6 | 44.7 | 48.3 | 63.3 | 45.9 |
| HMAXF | 348 | 334 | 332 | 349 | 324 | 308 | 333 | 332 | 355 | 339 | 387 | 363 |
| SHMAX | 1629 | 1722 | 1772 | 2147 | 1763 | 1497 | 1120 | 926 | 810 | 856 | 858 | 645 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 1004 | |
| 380 | | | | | | | | | | | 1002 | |
| 370 | | | | | | | | | | | 987 | 960 |
| 360 | | | | | | | | | 1240 | | 960 | 959 |
| 350 | 1341 | | | 2032 | | | | | 1236 | | 925 | 942 |
| 340 | 1337 | 1786 | 1741 | 2022 | | | 1446 | 1393 | 1204 | 1265 | 874 | 899 |
| 330 | 1320 | 1783 | 1741 | 1989 | 2000 | | 1446 | 1393 | 1141 | 1255 | 801 | 837 |
| 320 | 1288 | 1756 | 1723 | 1934 | 1997 | | 1431 | 1373 | 1047 | 1210 | 713 | 754 |
| 310 | 1243 | 1696 | 1680 | 1853 | 1967 | 1876 | 1395 | 1320 | 928 | 1152 | 613 | 655 |
| 300 | 1180 | 1599 | 1605 | 1759 | 1903 | 1866 | 1340 | 1246 | 788 | 1062 | 511 | 539 |
| 290 | 1110 | 1476 | 1513 | 1634 | 1814 | 1821 | 1261 | 1143 | 640 | 936 | 407 | 414 |
| 280 | 1024 | 1327 | 1394 | 1475 | 1684 | 1735 | 1168 | 1000 | 480 | 793 | 289 | 292 |
| 270 | 927 | 1140 | 1253 | 1288 | 1504 | 1622 | 1048 | 831 | 315 | 628 | 182 | 192 |
| 260 | 831 | 964 | 1103 | 1069 | 1288 | 1473 | 893 | 626 | 178 | 463 | 99.9 | 112 |
| 250 | 737 | 798 | 942 | 890 | 1061 | 1286 | 712 | 398 | 84.2 | 295 | 54.3 | 58.2 |
| 240 | 648 | 659 | 801 | 736 | 836 | 1100 | 486 | 212 | 30.0 | 163 | 5.6 | 4.9 |
| 230 | 568 | 553 | 667 | 607 | 657 | 831 | 201 | 98.3 | | 86.7 | | |
| 220 | 502 | 478 | 558 | 515 | 509 | 593 | 105 | 43.6 | | 46.5 | | |
| 210 | 452 | 429 | 482 | 449 | 412 | 424 | 58.7 | | | | | |
| 200 | 416 | 394 | 429 | 400 | 353 | 321 | 12.4 | | | | | |
| 190 | 388 | 368 | 388 | 359 | 315 | 262 | | | | | | |
| 180 | 360 | 346 | 355 | 321 | 287 | 224 | | | | | | |
| 170 | 333 | 325 | 324 | 285 | 259 | 195 | | | | | | |
| 160 | 303 | 302 | 296 | 253 | 232 | 169 | | | | | | |
| 150 | 268 | 278 | 268 | 226 | 207 | 145 | | | | | | |
| 140 | 227 | 251 | 237 | 199 | 183 | 128 | | | | | | |
| 130 | 199 | 222 | 208 | 176 | 161 | 121 | | | | | | |
| 120 | 187 | 204 | 189 | 164 | 150 | 116 | | | | | | |
| 110 | 76.8 | 114 | 152 | | 69.4 | 58.9 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 3 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 5 | 5 | 7 | 7 | 7 | 3 | 3 | 3 | F3 | F3 | 3 | 3 |
| HMIN | 239 | 229 | 240 | 220 | 289 | 235 | 279 | 108 | 109 | 108 | 109 | 109 |
| SCAT | 43.8 | 57.1 | 42.2 | 53.7 | 35.9 | 70.8 | 48.8 | 54.8 | 49.3 | 84.5 | 67.7 | 49.6 |
| HMAXF | 341 | 346 | 356 | 346 | 380 | 392 | 375 | 310 | 285 | 335 | 345 | 312 |
| SHMAX | 566 | 657 | 480 | 536 | 345 | 579 | 478 | 994 | 922 | 1371 | 1558 | 1556 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | 599 | | | | | | |
| 390 | | | | | | 599 | | | | | | |
| 380 | | | | | 670 | 595 | 774 | | | | | |
| 370 | | | | | 657 | 584 | 772 | | | | | |
| 360 | | | 764 | | 617 | 568 | 755 | | | | | |
| 350 | 960 | 896 | 760 | 716 | 553 | 547 | 723 | | | | 1341 | |
| 340 | 960 | 893 | 730 | 714 | 460 | 519 | 674 | | | 1050 | 1339 | |
| 330 | 946 | 878 | 685 | 700 | 355 | 484 | 604 | | | 1049 | 1325 | |
| 320 | 906 | 846 | 625 | 672 | 247 | 442 | 509 | | | 1042 | 1296 | 1786 |
| 310 | 846 | 805 | 548 | 634 | 144 | 392 | 373 | 1143 | | 1027 | 1252 | 1785 |
| 300 | 745 | 750 | 453 | 583 | 69.5 | 338 | 228 | 1134 | | 1005 | 1187 | 1758 |
| 290 | 620 | 672 | 349 | 520 | 12.4 | 285 | 98.7 | 1106 | 1191 | 971 | 1117 | 1696 |
| 280 | 480 | 571 | 255 | 446 | | 230 | 12.4 | 1060 | 1188 | 934 | 1034 | 1594 |
| 270 | 316 | 458 | 156 | 358 | | 172 | | 996 | 1165 | 893 | 942 | 1458 |
| 260 | 169 | 327 | 85.3 | 271 | | 118 | | 909 | 1114 | 848 | 843 | 1293 |
| 250 | 73.6 | 182 | 49.6 | 191 | | 70.7 | | 806 | 1042 | 800 | 736 | 1120 |
| 240 | 12.4 | 81.1 | .7 | 115 | | 33.1 | | 696 | 951 | 747 | 638 | 905 |
| 230 | | 12.4 | | 55.7 | | | | 584 | 835 | 691 | 555 | 716 |
| 220 | | | | | | | | 480 | 692 | 632 | 487 | 562 |
| 210 | | | | | | | | 387 | 542 | 566 | 432 | 467 |
| 200 | | | | | | | | 296 | 410 | 494 | 388 | 412 |
| 190 | | | | | | | | 225 | 292 | 417 | 350 | 375 |
| 180 | | | | | | | | 169 | 227 | 349 | 316 | 345 |
| 170 | | | | | | | | 130 | 184 | 292 | 284 | 319 |
| 160 | | | | | | | | 105 | 151 | 245 | 252 | 290 |
| 150 | | | | | | | | 89.3 | 124 | 207 | 220 | 260 |
| 140 | | | | | | | | 80.7 | 110 | 174 | 190 | 228 |
| 130 | | | | | | | | 75.1 | 105 | 156 | 174 | 200 |
| 120 | | | | | | | | 66.3 | 99.3 | 144 | 163 | 187 |
| 110 | | | | | | | | 30.0 | 41.8 | 88.1 | 64.6 | 84.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 3 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 3 | 83 | 3 | 3 | 3 | 2 | A2 | 2 | 4 | 4 | 4 | 5 |
| HMIN | 108 | 108 | 108 | 108 | 108 | 107 | | 188 | 208 | 199 | 226 | 274 |
| SCAT | 52.9 | 60.5 | 43.7 | 43.5 | 60.7 | 43.7 | | 45.3 | 50.3 | 54.5 | 46.9 | 52.0 |
| HMAXF | 320 | 332 | 304 | 292 | 318 | 287 | | 298 | 330 | 349 | 351 | 395 |
| SHMAX | 1738 | 1906 | 1540 | 1216 | 1442 | 1023 | | 469 | 469 | 462 | 347 | 382 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | 524 |
| 390 | | | | | | | | | | | | 523 |
| 380 | | | | | | | | | | | | 513 |
| 370 | | | | | | | | | | | | 490 |
| 360 | | | | | | | | | | | 508 | 462 |
| 350 | | | | | | | | | | 573 | 508 | 424 |
| 340 | | 1907 | | | | | | | | 569 | 501 | 378 |
| 330 | | 1906 | | | | | | | 670 | 556 | 483 | 326 |
| 320 | 1876 | 1887 | | | 1528 | | | | 664 | 531 | 451 | 268 |
| 310 | 1860 | 1842 | 1938 | | 1521 | | | | 645 | 499 | 411 | 200 |
| 300 | 1810 | 1769 | 1933 | 1555 | 1493 | | | 754 | 612 | 457 | 358 | 126 |
| 290 | 1717 | 1675 | 1880 | 1555 | 1445 | 1446 | | 748 | 567 | 405 | 300 | 71.8 |
| 280 | 1600 | 1555 | 1791 | 1526 | 1379 | 1438 | | 724 | 506 | 347 | 238 | 38.8 |
| 270 | 1458 | 1398 | 1643 | 1457 | 1294 | 1394 | | 683 | 432 | 289 | 173 | |
| 260 | 1291 | 1218 | 1448 | 1354 | 1177 | 1311 | | 621 | 348 | 231 | 117 | |
| 250 | 1075 | 1024 | 1235 | 1204 | 1019 | 1196 | | 538 | 261 | 177 | 75.6 | |
| 240 | 886 | 834 | 1038 | 100' | 834 | 1036 | | 443 | 174 | 129 | 49.8 | |
| 230 | 729 | 666 | 819 | 819 | 666 | 839 | | 326 | 101 | 89.8 | 17.2 | |
| 220 | 598 | 543 | 630 | 646 | 529 | 629 | | 193 | 57.1 | 62.4 | | |
| 210 | 500 | 461 | 498 | 522 | 425 | 445 | | 111 | 12.4 | 42.5 | | |
| 200 | 435 | 407 | 419 | 429 | 360 | 330 | | 60.0 | | 4.1 | | |
| 190 | 393 | 372 | 368 | 370 | 316 | 264 | | 12.4 | | | | |
| 180 | 363 | 347 | 333 | 330 | 279 | 224 | | | | | | |
| 170 | 340 | 325 | 307 | 297 | 244 | 192 | | | | | | |
| 160 | 317 | 303 | 283 | 265 | 211 | 162 | | | | | | |
| 150 | 291 | 277 | 258 | 232 | 186 | 138 | | | | | | |
| 140 | 260 | 242 | 228 | 200 | 167 | 121 | | | | | | |
| 130 | 230 | 218 | 199 | 179 | 156 | 110 | | | | | | |
| 120 | 209 | 206 | 185 | 168 | 147 | 103 | | | | | | |
| 110 | 126 | 122 | 96.6 | 129 | 119 | 94.9 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 4 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 5 | 5 | A7 | 7 | 7 | 6 | 6 | H6 | 7 | 7 | 7 | 6 |
| HMIN | 257 | 236 | 248 | 220 | 198 | 257 | 273 | 106 | 109 | 109 | 109 | 106 |
| SCAT | 46.6 | 46.5 | 57.1 | 48.8 | 54.9 | 43.7 | 35.2 | 44.7 | 61.5 | 63.6 | 59.6 | 132 |
| HMAXF | 376 | 358 | 380 | 345 | 315 | 347 | 334 | 290 | 272 | 302 | 313 | 415 |
| SHMAX | 368 | 396 | 421 | 357 | 229 | 167 | 90 | 487 | 523 | 812 | 1002 | 1892 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | 982 |
| 410 | | | | | | | | | | | | 982 |
| 400 | | | | | | | | | | | | 979 |
| 390 | | | | | | | | | | | | 973 |
| 380 | 540 | | 540 | | | | | | | | | 965 |
| 370 | 538 | | 536 | | | | | | | | | 950 |
| 360 | 524 | 599 | 524 | | | | | | | | | 931 |
| 350 | 496 | 595 | 502 | 484 | | 286 | | | | | | 913 |
| 340 | 457 | 578 | 473 | 483 | | 284 | 203 | | | | | 894 |
| 330 | 407 | 547 | 437 | 471 | | 275 | 203 | | | | | 874 |
| 320 | 348 | 502 | 389 | 450 | 310 | 258 | 194 | | | | 917 | 851 |
| 310 | 285 | 439 | 333 | 420 | 309 | 235 | 181 | | | 745 | 917 | 827 |
| 300 | 222 | 368 | 269 | 383 | 305 | 203 | 157 | 608 | | 745 | 906 | 800 |
| 290 | 159 | 291 | 200 | 342 | 294 | 161 | 118 | 608 | | 738 | 883 | 767 |
| 280 | 102 | 207 | 131 | 297 | 278 | 109 | 59.8 | 600 | 540 | 722 | 843 | 726 |
| 270 | 59.6 | 127 | 85.2 | 249 | 259 | 62.8 | | 577 | 540 | 696 | 795 | 678 |
| 260 | 19.0 | 78.7 | 52.5 | 199 | 233 | 19.3 | | 537 | 535 | 663 | 736 | 628 |
| 250 | | 50.6 | 12.4 | 145 | 201 | | | 485 | 523 | 619 | 670 | 575 |
| 240 | | 17.4 | | 89.8 | 161 | | | 423 | 503 | 565 | 598 | 524 |
| 230 | | | | 49.9 | 119 | | | 358 | 476 | 505 | 527 | 477 |
| 220 | | | | | 78.2 | | | 297 | 442 | 450 | 465 | 439 |
| 210 | | | | | 50.0 | | | 244 | 404 | 402 | 416 | 408 |
| 200 | | | | | 12.4 | | | 198 | 363 | 361 | 378 | 384 |
| 190 | | | | | | | | 161 | 321 | 327 | 348 | 364 |
| 180 | | | | | | | | 133 | 281 | 295 | 320 | 345 |
| 170 | | | | | | | | 111 | 241 | 264 | 293 | 323 |
| 160 | | | | | | | | 95.7 | 196 | 235 | 265 | 299 |
| 150 | | | | | | | | 85.3 | 161 | 208 | 237 | 270 |
| 140 | | | | | | | | 79.8 | 143 | 186 | 208 | 239 |
| 130 | | | | | | | | 75.1 | 122 | 160 | 184 | 210 |
| 120 | | | | | | | | 67.3 | 103 | 142 | 162 | 190 |
| 110 | | | | | | | | 43.4 | 49.0 | 41.8 | 49.0 | 163 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 4 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 6 | 6 | H7 | 7 | 7 | 8 | A8 | 8 | 7 | 7 | 7 | 8 |
| HMIN | 106 | 108 | 108 | 109 | 108 | 108 | | 228 | 229 | 245 | 256 | 261 |
| SCAT | 129 | 104 | 97.6 | 76.3 | 93.9 | 59.3 | | 54.6 | 54.7 | 56.1 | 46.2 | 67.1 |
| HMAXF | 476 | 389 | 353 | 318 | 378 | 357 | | 338 | 373 | 385 | 366 | 421 |
| SHMAX | 2313 | 1909 | 1496 | 897 | 1068 | 953 | | 644 | 634 | 593 | 609 | 726 |
| KM | | | | | | | | | | | | |
| 480 | 1050 | | | | | | | | | | | |
| 470 | 1049 | | | | | | | | | | | |
| 460 | 1045 | | | | | | | | | | | |
| 450 | 1038 | | | | | | | | | | | |
| 440 | 1029 | | | | | | | | | | | |
| 430 | 1015 | | | | | | | | | | | 794 |
| 420 | 997 | | | | | | | | | | | 794 |
| 410 | 973 | | | | | | | | | | | 788 |
| 400 | 949 | | | | | | | | | | | 773 |
| 390 | 924 | 1215 | | | | | | | | 754 | | 750 |
| 380 | 898 | 1213 | | | 661 | | | | 754 | 753 | | 721 |
| 370 | 871 | 1205 | | | 660 | | | | 754 | 741 | 960 | 679 |
| 360 | 844 | 1192 | 1038 | | 655 | 834 | | | 744 | 716 | 957 | 624 |
| 350 | 816 | 1172 | 1038 | | 646 | 831 | | | 721 | 682 | 932 | 558 |
| 340 | 787 | 1148 | 1033 | | 631 | 816 | | 906 | 684 | 633 | 887 | 482 |
| 330 | 757 | 1116 | 1023 | | 614 | 789 | | 902 | 636 | 569 | 818 | 405 |
| 320 | 724 | 1081 | 1008 | 707 | 594 | 748 | | 882 | 578 | 498 | 723 | 323 |
| 310 | 689 | 1040 | 980 | 705 | 572 | 700 | | 845 | 517 | 414 | 607 | 244 |
| 300 | 652 | 992 | 950 | 697 | 546 | 643 | | 796 | 451 | 325 | 475 | 174 |
| 290 | 611 | 939 | 921 | 683 | 517 | 577 | | 732 | 384 | 238 | 327 | 112 |
| 280 | 568 | 882 | 889 | 662 | 487 | 504 | | 646 | 319 | 159 | 175 | 70.9 |
| 270 | 526 | 811 | 854 | 638 | 455 | 438 | | 539 | 258 | 101 | 86.8 | 44.4 |
| 260 | 486 | 730 | 813 | 607 | 424 | 382 | | 420 | 200 | 61.4 | 38.8 | |
| 250 | 450 | 642 | 756 | 566 | 395 | 338 | | 266 | 139 | 30.0 | | |
| 240 | 420 | 553 | 684 | 519 | 369 | 304 | | 135 | 79.8 | | | |
| 230 | 395 | 477 | 604 | 470 | 345 | 279 | | 28.3 | 12.4 | | | |
| 220 | 375 | 420 | 522 | 424 | 325 | 260 | | | | | | |
| 210 | 360 | 379 | 451 | 385 | 306 | 244 | | | | | | |
| 200 | 352 | 351 | 393 | 354 | 288 | 229 | | | | | | |
| 190 | 345 | 332 | 352 | 329 | 271 | 213 | | | | | | |
| 180 | 338 | 320 | 322 | 307 | 252 | 196 | | | | | | |
| 170 | 324 | 307 | 298 | 286 | 232 | 177 | | | | | | |
| 160 | 302 | 290 | 276 | 264 | 208 | 156 | | | | | | |
| 150 | 277 | 268 | 253 | 236 | 179 | 135 | | | | | | |
| 140 | 246 | 240 | 225 | 206 | 157 | 120 | | | | | | |
| 130 | 215 | 209 | 201 | 181 | 142 | 109 | | | | | | |
| 120 | 194 | 190 | 188 | 169 | 134 | 103 | | | | | | |
| 110 | 179 | 146 | 148 | 105 | 125 | 89.3 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 8 | 8 | 8 | A8 | 8 | S8 | A8 | A8 | 85 | 85 | G5 | 86 |
| HMIN | 246 | 230 | 220 | | 221 | 218 | | 114 | | | 105 | |
| SCAT | 53.6 | 35.3 | 44.5 | | 77.1 | 71.9 | | 86.9 | | | 43.6 | |
| HMAXF | 406 | 317 | 308 | | 352 | 381 | | 359 | | | 177 | |
| SHMAX | 558 | 535 | 348 | | 295 | 139 | | 344 | | | 133 | |
| KM | | | | | | | | | | | | |
| 410 | 716 | | | | | | | | | | | |
| 400 | 714 | | | | | | | | | | | |
| 390 | 699 | | | | | 135 | | | | | | |
| 380 | 673 | | | | | 135 | | | | | | |
| 370 | 638 | | | | | 134 | | | | | | |
| 360 | 583 | | | | 310 | 132 | | 229 | | | | |
| 350 | 517 | | | | 310 | 129 | | 229 | | | | |
| 340 | 449 | | | | 308 | 123 | | 227 | | | | |
| 330 | 377 | | | | 304 | 116 | | 223 | | | | |
| 320 | 299 | 1143 | | | 297 | 108 | | 217 | | | | |
| 310 | 221 | 1132 | 608 | | 288 | 99.7 | | 208 | | | | |
| 300 | 145 | 1077 | 603 | | 274 | 91.0 | | 199 | | | | |
| 290 | 91.3 | 980 | 584 | | 260 | 82.0 | | 188 | | | | |
| 280 | 56.5 | 817 | 549 | | 243 | 72.8 | | 177 | | | | |
| 270 | 29.3 | 586 | 500 | | 223 | 63.4 | | 167 | | | | |
| 260 | | 327 | 431 | | 197 | 54.6 | | 158 | | | | |
| 250 | | 148 | 344 | | 165 | 46.6 | | 152 | | | | |
| 240 | | 64.8 | 216 | | 122 | 38.2 | | 145 | | | | |
| 230 | | 4.1 | 90.1 | | 63.7 | 21.0 | | 137 | | | | |
| 220 | | | | | | 3.8 | | 129 | | | | |
| 210 | | | | | | | | 118 | | | | |
| 200 | | | | | | | | 104 | | | | |
| 190 | | | | | | | | 90.5 | | | | |
| 180 | | | | | | | | 81.3 | | | 235 | |
| 170 | | | | | | | | 75.5 | | | 233 | |
| 160 | | | | | | | | 70.7 | | | 226 | |
| 150 | | | | | | | | 68.2 | | | 211 | |
| 140 | | | | | | | | 65.8 | | | 190 | |
| 130 | | | | | | | | 63.3 | | | 166 | |
| 120 | | | | | | | | 60.9 | | | 153 | |
| 110 | | | | | | | | | | | 134 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 86 | G6 | G6 | G6 | G6 | 5 | S5 | 5 | 5 | R5 | 5 | F5 |
| HMIN | | 106 | 111 | 108 | 107 | 109 | | 267 | 273 | 277 | 258 | 257 |
| SCAT | | 43.3 | 44.5 | 43.6 | 45.0 | 135 | | 50.9 | 60.4 | 50.3 | 64.7 | 63.0 |
| HMAXF | | 169 | 182 | 175 | 177 | 333 | | 369 | 408 | 380 | 408 | 400 |
| SHMAX | | 141 | 145 | 136 | 128 | 464 | | 165 | 263 | 237 | 259 | 252 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | 310 | | 286 | 286 |
| 400 | | | | | | | | | 309 | | 284 | 286 |
| 390 | | | | | | | | | 303 | | 280 | 284 |
| 380 | | | | | | | | | 294 | 355 | 272 | 278 |
| 370 | | | | | | | | 240 | 279 | 352 | 260 | 269 |
| 360 | | | | | | | | 238 | 261 | 342 | 245 | 256 |
| 350 | | | | | | | | 231 | 239 | 324 | 227 | 242 |
| 340 | | | | | | 274 | | 220 | 213 | 301 | 205 | 221 |
| 330 | | | | | | 274 | | 204 | 185 | 269 | 180 | 197 |
| 320 | | | | | | 273 | | 184 | 152 | 230 | 151 | 171 |
| 310 | | | | | | 272 | | 158 | 120 | 183 | 122 | 141 |
| 300 | | | | | | 270 | | 127 | 89.9 | 122 | 93.8 | 110 |
| 290 | | | | | | 267 | | 97.1 | 63.8 | 65.4 | 70.3 | 83.0 |
| 280 | | | | | | 263 | | 62.6 | 40.8 | 19.9 | 52.5 | 60.0 |
| 270 | | | | | | 256 | | 19.6 | | | 37.7 | 43.5 |
| 260 | | | | | | 247 | | | | | 6.1 | 12.4 |
| 250 | | | | | | 238 | | | | | | |
| 240 | | | | | | 230 | | | | | | |
| 230 | | | | | | 221 | | | | | | |
| 220 | | | | | | 215 | | | | | | |
| 210 | | | | | | 209 | | | | | | |
| 200 | | | | | | 203 | | | | | | |
| 190 | | | 262 | | | 197 | | | | | | |
| 180 | | | 262 | 251 | 229 | 188 | | | | | | |
| 170 | | 272 | 258 | 250 | 228 | 177 | | | | | | |
| 160 | | 268 | 247 | 244 | 221 | 160 | | | | | | |
| 150 | | 257 | 220 | 229 | 206 | 141 | | | | | | |
| 140 | | 241 | 199 | 208 | 186 | 123 | | | | | | |
| 130 | | 214 | 177 | 184 | 165 | 109 | | | | | | |
| 120 | | 191 | 164 | 167 | 150 | 102 | | | | | | |
| 110 | | 150 | | 109 | 80.9 | 46.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 5 | 5 | 5 | 5 | 5 | 2 | F2 | A2 | A2 | R2 | A2 | 2 |
| HMIN | 261 | 253 | 235 | 284 | 287 | 268 | | | 109 | | | 108 |
| SCAT | 53.3 | 58.4 | 57.1 | 53.6 | 52.5 | 52.1 | | | 56.0 | | | 78.6 |
| HMAXF | 369 | 388 | 365 | 409 | 397 | 385 | | | 264 | | | 335 |
| SHMAX | 195 | 202 | 188 | 187 | 203 | 299 | | | 617 | | | 1655 |
| KM | | | | | | | | | | | | |
| 410 | | | | 246 | | | | | | | | |
| 400 | | | | 244 | 286 | | | | | | | |
| 390 | | 246 | | 237 | 284 | 417 | | | | | | |
| 380 | | 244 | | 226 | 278 | 416 | | | | | | |
| 370 | 274 | 240 | 235 | 213 | 266 | 408 | | | | | | |
| 360 | 272 | 230 | 234 | 194 | 249 | 392 | | | | | | |
| 350 | 265 | 220 | 230 | 171 | 228 | 368 | | | | | | |
| 340 | 252 | 205 | 223 | 143 | 200 | 338 | | | | | | 1341 |
| 330 | 238 | 185 | 211 | 115 | 164 | 299 | | | | | | 1340 |
| 320 | 218 | 163 | 198 | 89.5 | 127 | 253 | | | | | | 1329 |
| 310 | 189 | 137 | 180 | 66.6 | 88.0 | 202 | | | | | | 1308 |
| 300 | 157 | 112 | 158 | 48.0 | 54.3 | 143 | | | | | | 1275 |
| 290 | 120 | 87.5 | 134 | 23.4 | 17.7 | 89.6 | | | | | | 1231 |
| 280 | 81.3 | 64.4 | 108 | | | 52.5 | | | | | | 1177 |
| 270 | 47.9 | 46.9 | 82.2 | | | 12.4 | | | 716 | | | 1115 |
| 260 | | 22.7 | 60.5 | | | | | | 716 | | | 1035 |
| 250 | | | 44.4 | | | | | | 706 | | | 940 |
| 240 | | | 15.8 | | | | | | 685 | | | 836 |
| 230 | | | | | | | | | 651 | | | 732 |
| 220 | | | | | | | | | 610 | | | 637 |
| 210 | | | | | | | | | 551 | | | 553 |
| 200 | | | | | | | | | 484 | | | 483 |
| 190 | | | | | | | | | 410 | | | 429 |
| 180 | | | | | | | | | 335 | | | 387 |
| 170 | | | | | | | | | 273 | | | 353 |
| 160 | | | | | | | | | 223 | | | 321 |
| 150 | | | | | | | | | 182 | | | 292 |
| 140 | | | | | | | | | 153 | | | 262 |
| 130 | | | | | | | | | 129 | | | 226 |
| 120 | | | | | | | | | 116 | | | 195 |
| 110 | | | | | | | | | 62.0 | | | 161 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A2 | 2 | R3 | 3 | 3 | 5 | A5 | 5 | 3 | 3 | 3 | 3 |
| HMIN | | 109 | 109 | 108 | 109 | 109 | | 218 | 204 | 236 | 248 | 236 |
| SCAT | | 50.2 | 75.9 | 59.4 | 48.7 | 41.3 | | 44.3 | 75.6 | 50.7 | 43.6 | 43.4 |
| HMAXF | | 289 | 342 | 301 | 297 | 287 | | 318 | 368 | 397 | 358 | 358 |
| SHMAX | | 1292 | 1623 | 1140 | 957 | 853 | | 564 | 782 | 506 | 508 | 471 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | 634 | | |
| 390 | | | | | | | | | | 631 | | |
| 380 | | | | | | | | | | 616 | | |
| 370 | | | | | | | | | 774 | 587 | | |
| 360 | | | | | | | | | 772 | 548 | 824 | 735 |
| 350 | | | 1341 | | | | | | 763 | 497 | 818 | 729 |
| 340 | | | 1341 | | | | | | 746 | 440 | 790 | 701 |
| 330 | | | 1333 | | | | | | 726 | 377 | 740 | 658 |
| 320 | | | 1313 | | | | | 949 | 699 | 317 | 672 | 595 |
| 310 | | | 1282 | 1191 | | | | 942 | 661 | 255 | 585 | 519 |
| 300 | | | 1239 | 1191 | 1038 | | | 909 | 615 | 197 | 480 | 425 |
| 290 | | 1555 | 1181 | 1181 | 1033 | 1119 | | 854 | 562 | 148 | 360 | 327 |
| 280 | | 1542 | 1119 | 1154 | 1007 | 1111 | | 772 | 503 | 111 | 228 | 227 |
| 270 | | 1497 | 1039 | 1109 | 954 | 1066 | | 664 | 436 | 82.0 | 124 | 143 |
| 260 | | 1419 | 941 | 1051 | 888 | 996 | | 529 | 361 | 59.0 | 61.8 | 91.0 |
| 250 | | 1313 | 835 | 963 | 808 | 902 | | 375 | 285 | 42.8 | 12.4 | 56.3 |
| 240 | | 1175 | 727 | 846 | 720 | 780 | | 197 | 216 | 12.4 | | 22.9 |
| 230 | | 997 | 635 | 717 | 627 | 650 | | 92.2 | 139 | | | |
| 220 | | 803 | 552 | 590 | 536 | 523 | | 24.6 | 77.5 | | | |
| 210 | | 613 | 481 | 477 | 461 | 410 | | | 40.0 | | | |
| 200 | | 475 | 426 | 406 | 398 | 332 | | | | | | |
| 190 | | 401 | 383 | 360 | 347 | 282 | | | | | | |
| 180 | | 359 | 350 | 329 | 307 | 248 | | | | | | |
| 170 | | 332 | 321 | 303 | 275 | 217 | | | | | | |
| 160 | | 309 | 292 | 279 | 247 | 189 | | | | | | |
| 150 | | 280 | 249 | 255 | 220 | 164 | | | | | | |
| 140 | | 244 | 198 | 223 | 191 | 143 | | | | | | |
| 130 | | 207 | 177 | 185 | 161 | 126 | | | | | | |
| 120 | | 188 | 166 | 168 | 145 | 115 | | | | | | |
| 110 | | 68.6 | 55.6 | 135 | 73.0 | 76.1 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | A6 | 3 |
| HMIN | 204 | 198 | 235 | 244 | 241 | 228 | 229 | 109 | 108 | 108 | | 107 |
| SCAT | 37.1 | 43.5 | 48.2 | 43.3 | 41.9 | 42.8 | 31.5 | 22.0 | 38.0 | 41.1 | | 66.7 |
| HMAXF | 297 | 305 | 353 | 350 | 342 | 326 | 293 | 230 | 252 | 263 | | 312 |
| SHMAX | 351 | 297 | 279 | 224 | 202 | 195 | 192 | 303 | 465 | 660 | | 1212 |
| KM | | | | | | | | | | | | |
| 360 | | | 403 | 362 | | | | | | | | |
| 350 | | | 402 | 362 | 335 | | | | | | | |
| 340 | | | 396 | 356 | 335 | | | | | | | |
| 330 | | | 378 | 341 | 328 | 329 | | | | | | |
| 320 | | | 356 | 317 | 312 | 327 | | | | | | 1072 |
| 310 | | 477 | 323 | 283 | 285 | 318 | | | | | | 1072 |
| 300 | 679 | 475 | 281 | 239 | 249 | 299 | 469 | | | | | 1064 |
| 290 | 673 | 462 | 234 | 192 | 206 | 273 | 468 | | | | | 1042 |
| 280 | 642 | 435 | 187 | 140 | 162 | 235 | 450 | | | | | 1011 |
| 270 | 587 | 398 | 138 | 92.7 | 113 | 189 | 409 | | | 860 | | 967 |
| 260 | 505 | 348 | 91.0 | 57.3 | 70.8 | 138 | 341 | | 670 | 860 | | 910 |
| 250 | 400 | 291 | 57.9 | 27.3 | 44.2 | 86.1 | 233 | | 669 | 840 | | 841 |
| 240 | 278 | 227 | 28.2 | | | 51.6 | 108 | | 654 | 796 | | 758 |
| 230 | 157 | 162 | | | | 12.4 | 12.4 | 814 | 611 | 724 | | 670 |
| 220 | 79.6 | 94.1 | | | | | | 773 | 551 | 640 | | 589 |
| 210 | 40.0 | 54.6 | | | | | | 644 | 483 | 539 | | 519 |
| 200 | | 12.4 | | | | | | 385 | 419 | 453 | | 466 |
| 190 | | | | | | | | 208 | 361 | 384 | | 426 |
| 180 | | | | | | | | 145 | 289 | 330 | | 393 |
| 170 | | | | | | | | 111 | 212 | 285 | | 363 |
| 160 | | | | | | | | 86.4 | 160 | 247 | | 332 |
| 150 | | | | | | | | 71.9 | 118 | 208 | | 299 |
| 140 | | | | | | | | 68.2 | 102 | 160 | | 259 |
| 130 | | | | | | | | 64.9 | 93.5 | 140 | | 204 |
| 120 | | | | | | | | 61.5 | 87.9 | 131 | | 186 |
| 110 | | | | | | | | 38.9 | 64.5 | 78.2 | | 99.1 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 4 | 4 | 4 | A4 | A4 | 4 | 4 | A4 | 54 | 3 |
| HMIN | 109 | 103 | 106 | 108 | 108 | | | 202 | 204 | 221 | | 268 |
| SCAT | 72.3 | 55.2 | 57.2 | 68.7 | 55.7 | | | 54.3 | 58.6 | 47.7 | | 50.2 |
| HMAXF | 338 | 319 | 322 | 345 | 330 | | | 312 | 354 | 350 | | 395 |
| SHMAX | 1582 | 1532 | 1531 | 1700 | 1556 | | | 884 | 750 | 593 | | 442 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | 625 |
| 390 | | | | | | | | | | | | 624 |
| 380 | | | | | | | | | | | | 611 |
| 370 | | | | | | | | | | | | 586 |
| 360 | | | | | | | | | 875 | | | 551 |
| 350 | | | | 1500 | | | | | 874 | 854 | | 499 |
| 340 | 1290 | | | 1498 | | | | | 862 | 845 | | 433 |
| 330 | 1286 | | 1555 | 1482 | 1626 | | | | 838 | 815 | | 360 |
| 320 | 1270 | 1528 | 1555 | 1451 | 1613 | | | 1290 | 800 | 769 | | 282 |
| 310 | 1241 | 1519 | 1538 | 1402 | 1574 | | | 1290 | 751 | 706 | | 205 |
| 300 | 1194 | 1485 | 1497 | 1352 | 1501 | | | 1274 | 690 | 625 | | 134 |
| 290 | 1146 | 1421 | 1430 | 1278 | 1412 | | | 1236 | 619 | 534 | | 83.6 |
| 280 | 1081 | 1340 | 1336 | 1169 | 1298 | | | 1175 | 540 | 434 | | 50.8 |
| 270 | 1002 | 1234 | 1216 | 1048 | 1167 | | | 1100 | 461 | 326 | | 12.4 |
| 260 | 914 | 1103 | 1098 | 920 | 1011 | | | 985 | 379 | 217 | | |
| 250 | 820 | 965 | 942 | 788 | 843 | | | 828 | 293 | 130 | | |
| 240 | 724 | 831 | 788 | 669 | 686 | | | 644 | 210 | 79.2 | | |
| 230 | 638 | 700 | 652 | 566 | 560 | | | 417 | 136 | 46.1 | | |
| 220 | 564 | 591 | 539 | 484 | 464 | | | 200 | 84.0 | | | |
| 210 | 503 | 511 | 465 | 426 | 400 | | | 69.2 | 46.7 | | | |
| 200 | 457 | 453 | 413 | 382 | 355 | | | | | | | |
| 190 | 419 | 411 | 378 | 348 | 320 | | | | | | | |
| 180 | 387 | 380 | 351 | 320 | 289 | | | | | | | |
| 170 | 358 | 353 | 325 | 294 | 262 | | | | | | | |
| 160 | 329 | 327 | 292 | 265 | 236 | | | | | | | |
| 150 | 300 | 298 | 245 | 230 | 206 | | | | | | | |
| 140 | 268 | 263 | 211 | 198 | 177 | | | | | | | |
| 130 | 234 | 225 | 195 | 178 | 158 | | | | | | | |
| 120 | 205 | 207 | 186 | 167 | 149 | | | | | | | |
| 110 | 58.9 | 176 | 144 | 90.5 | 84.8 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 8 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 5 | 5 | 5 | A3 | 3 | 53 | A3 | A3 | R3 | R4 |
| HMIN | 281 | 239 | 225 | 230 | 207 | 229 | 269 | | | | | |
| SCAT | 46.4 | 46.3 | 43.8 | 38.7 | 59.9 | 37.8 | 37.4 | | | | | |
| HMAXF | 401 | 343 | 330 | 322 | 322 | 308 | 338 | | | | | |
| SHMAX | 451 | 473 | 372 | 318 | 390 | 180 | 186 | | | | | |
| KM | | | | | | | | | | | | |
| 410 | 679 | | | | | | | | | | | |
| 400 | 679 | | | | | | | | | | | |
| 390 | 669 | | | | | | | | | | | |
| 380 | 643 | | | | | | | | | | | |
| 370 | 602 | | | | | | | | | | | |
| 360 | 543 | | | | | | | | | | | |
| 350 | 472 | 784 | | | | | | | | | | |
| 340 | 396 | 783 | | | | | 389 | | | | | |
| 330 | 304 | 769 | 608 | 608 | 500 | | 385 | | | | | |
| 320 | 203 | 737 | 600 | 607 | 500 | | 367 | | | | | |
| 310 | 121 | 691 | 577 | 594 | 495 | 355 | 337 | | | | | |
| 300 | 72.1 | 611 | 538 | 559 | 483 | 351 | 289 | | | | | |
| 290 | 44.7 | 498 | 483 | 507 | 465 | 334 | 223 | | | | | |
| 280 | | 371 | 414 | 424 | 444 | 307 | 133 | | | | | |
| 270 | | 248 | 337 | 328 | 408 | 265 | 12.4 | | | | | |
| 260 | | 124 | 242 | 205 | 362 | 210 | | | | | | |
| 250 | | 59.1 | 144 | 106 | 311 | 139 | | | | | | |
| 240 | | 4.5 | 77.1 | 53.0 | 254 | 68.3 | | | | | | |
| 230 | | | 34.0 | | 189 | 12.4 | | | | | | |
| 220 | | | | | 109 | | | | | | | |
| 210 | | | | | 40.7 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 8 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A4 | A4 | A3 | 3 | 3 | 1 | A1 | 1 | 4 | 4 | 4 | 4 |
| HMIN | | | | 109 | 110 | 109 | | 200 | 217 | 228 | 248 | 228 |
| SCAT | | | | 66.5 | 52.0 | 52.0 | | 48.5 | 51.7 | 51.6 | 50.5 | 40.6 |
| HMAXF | | | | 351 | 324 | 308 | | 312 | 365 | 361 | 370 | 337 |
| SHMAX | | | | 1987 | 1643 | 1463 | | 720 | 662 | 647 | 582 | 477 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | 814 | 875 | 834 | |
| 360 | | | | 1741 | | | | | 812 | 875 | 826 | |
| 350 | | | | 1741 | | | | | 796 | 865 | 802 | |
| 340 | | | | 1729 | | | | | 761 | 839 | 762 | 794 |
| 330 | | | | 1697 | 1815 | | | | 715 | 797 | 706 | 787 |
| 320 | | | | 1643 | 1813 | | | 1050 | 660 | 738 | 628 | 757 |
| 310 | | | | 1577 | 1779 | 1786 | | 1049 | 599 | 663 | 538 | 703 |
| 300 | | | | 1486 | 1699 | 1774 | | 1033 | 529 | 572 | 434 | 626 |
| 290 | | | | 1373 | 1601 | 1731 | | 992 | 457 | 473 | 323 | 535 |
| 280 | | | | 1243 | 1480 | 1652 | | 931 | 384 | 370 | 207 | 436 |
| 270 | | | | 1121 | 1332 | 1551 | | 849 | 309 | 274 | 121 | 330 |
| 260 | | | | 984 | 1173 | 1405 | | 743 | 234 | 185 | 62.3 | 216 |
| 250 | | | | 857 | 1000 | 1225 | | 630 | 160 | 109 | 12.4 | 120 |
| 240 | | | | 740 | 820 | 1038 | | 508 | 105 | 59.2 | | 64.4 |
| 230 | | | | 640 | 654 | 802 | | 376 | 65.5 | 12.4 | | 12.4 |
| 220 | | | | 560 | 528 | 594 | | 236 | 19.9 | | | |
| 210 | | | | 498 | 439 | 443 | | 116 | | | | |
| 200 | | | | 446 | 379 | 349 | | 12.4 | | | | |
| 190 | | | | 400 | 338 | 287 | | | | | | |
| 180 | | | | 355 | 305 | 245 | | | | | | |
| 170 | | | | 312 | 272 | 212 | | | | | | |
| 160 | | | | 270 | 239 | 183 | | | | | | |
| 150 | | | | 234 | 205 | 154 | | | | | | |
| 140 | | | | 206 | 173 | 132 | | | | | | |
| 130 | | | | 191 | 156 | 122 | | | | | | |
| 120 | | | | 179 | 146 | 114 | | | | | | |
| 110 | | | | 52.8 | 12.4 | 46.8 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 9 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 4 | 4 | 3 | 3 | 3 | 3 | 3 | A3 | A3 | A3 | A3 | A2 |
| HMIN | 249 | 256 | 237 | 212 | 236 | 232 | 229 | | | | | |
| SCAT | 48.8 | 48.1 | 49.3 | 51.9 | 42.9 | 44.6 | 53.5 | | | | | |
| HMAXF | 381 | 376 | 350 | 354 | 324 | 320 | 339 | | | | | |
| SHMAX | 516 | 483 | 481 | 513 | 376 | 352 | 353 | | | | | |
| KM | | | | | | | | | | | | |
| 390 | 707 | | | | | | | | | | | |
| 380 | 707 | 716 | | | | | | | | | | |
| 370 | 697 | 713 | | | | | | | | | | |
| 360 | 672 | 695 | 716 | 661 | | | | | | | | |
| 350 | 632 | 661 | 716 | 660 | | | | | | | | |
| 340 | 579 | 615 | 708 | 650 | | | 492 | | | | | |
| 330 | 518 | 549 | 686 | 624 | 679 | | 489 | | | | | |
| 320 | 447 | 467 | 646 | 590 | 677 | 634 | 476 | | | | | |
| 310 | 370 | 377 | 595 | 544 | 660 | 627 | 454 | | | | | |
| 300 | 296 | 280 | 529 | 487 | 625 | 603 | 426 | | | | | |
| 290 | 220 | 183 | 443 | 423 | 575 | 569 | 388 | | | | | |
| 280 | 135 | 109 | 346 | 355 | 491 | 509 | 341 | | | | | |
| 270 | 82.9 | 61.7 | 244 | 289 | 381 | 416 | 284 | | | | | |
| 260 | 49.4 | 24.6 | 140 | 222 | 257 | 285 | 219 | | | | | |
| 250 | 7.0 | | 69.0 | 162 | 115 | 146 | 151 | | | | | |
| 240 | | | 19.9 | 110 | 43.6 | 68.4 | 78.0 | | | | | |
| 230 | | | | 68.3 | | | 12.4 | | | | | |
| 220 | | | | 41.8 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 9 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | A2 | A2 | 3 | 3 | 3 | A3 | A3 | A3 | 2 | 2 | 2 | S2 |
| HMIN | | | 108 | 109 | 109 | 109 | | 199 | 216 | 251 | 254 | 271 |
| SCAT | | | 63.9 | 60.7 | 58.2 | 51.8 | | 50.0 | 63.5 | 56.1 | 43.1 | 47.0 |
| HMAXF | | | 345 | 341 | 337 | 318 | | 309 | 351 | 389 | 375 | 382 |
| SHMAX | | | 2088 | 2066 | 1949 | 1623 | | 848 | 781 | 674 | 491 | 524 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 834 | | 794 |
| 380 | | | | | | | | | | 828 | 754 | 793 |
| 370 | | | | | | | | | | 810 | 752 | 782 |
| 360 | | | | | | | | | 917 | 775 | 733 | 751 |
| 350 | | | 1891 | 2032 | | | | | 917 | 730 | 689 | 703 |
| 340 | | | 1889 | 2031 | 1984 | | | | 910 | 674 | 631 | 639 |
| 330 | | | 1866 | 2014 | 1977 | | | | 892 | 609 | 556 | 560 |
| 320 | | | 1821 | 1970 | 1943 | 1984 | | | 860 | 533 | 476 | 465 |
| 310 | | | 1747 | 1896 | 1874 | 1973 | | 1240 | 819 | 448 | 382 | 364 |
| 300 | | | 1657 | 1796 | 1789 | 1926 | | 1229 | 768 | 356 | 287 | 248 |
| 290 | | | 1542 | 1670 | 1663 | 1831 | | 1194 | 706 | 269 | 198 | 134 |
| 280 | | | 1410 | 1515 | 1512 | 1710 | | 1133 | 628 | 184 | 121 | 61.1 |
| 270 | | | 1275 | 1349 | 1343 | 1562 | | 1047 | 540 | 114 | 70.6 | |
| 260 | | | 1151 | 1141 | 1161 | 1381 | | 942 | 440 | 63.5 | 37.7 | |
| 250 | | | 1005 | 953 | 968 | 1136 | | 812 | 335 | | | |
| 240 | | | 852 | 786 | 800 | 905 | | 663 | 216 | | | |
| 230 | | | 715 | 652 | 645 | 671 | | 489 | 114 | | | |
| 220 | | | 604 | 556 | 535 | 493 | | 296 | 43.9 | | | |
| 210 | | | 520 | 486 | 457 | 382 | | 129 | | | | |
| 200 | | | 461 | 433 | 406 | 313 | | 12.4 | | | | |
| 190 | | | 417 | 390 | 368 | 268 | | | | | | |
| 180 | | | 386 | 350 | 332 | 233 | | | | | | |
| 170 | | | 355 | 314 | 292 | 201 | | | | | | |
| 160 | | | 315 | 279 | 254 | 167 | | | | | | |
| 150 | | | 261 | 232 | 223 | 138 | | | | | | |
| 140 | | | 217 | 193 | 193 | 119 | | | | | | |
| 130 | | | 196 | 175 | 167 | 109 | | | | | | |
| 120 | | | 185 | 167 | 153 | 103 | | | | | | |
| 110 | | | 88.1 | 78.9 | 105 | 89.0 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 10 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 2 | 2 | A2 | A2 | 2 | 3 | A3 | A3 | 2 | 2 | 2 | 4 |
| HMIN | 249 | 236 | 232 | 235 | 216 | 218 | 209 | | 109 | 104 | 108 | 108 |
| SCAT | 47.1 | 39.2 | 35.5 | 53.8 | 52.3 | 39.0 | 50.0 | | 47.2 | 56.9 | 58.1 | 57.0 |
| HMAXF | 363 | 323 | 312 | 344 | 339 | 326 | 306 | | 269 | 280 | 314 | 326 |
| SHMAX | 537 | 425 | 312 | 385 | 332 | 257 | 235 | | 878 | 1046 | 1553 | 1879 |
| KM | | | | | | | | | | | | |
| 370 | 834 | | | | | | | | | | | |
| 360 | 833 | | | | | | | | | | | |
| 350 | 818 | | | 532 | | | | | | | | |
| 340 | 782 | | | 531 | 446 | | | | | | | |
| 330 | 730 | 834 | | 522 | 443 | 446 | | | | | | 1846 |
| 320 | 658 | 833 | 643 | 504 | 432 | 444 | | | | | 1555 | 1840 |
| 310 | 565 | 812 | 642 | 476 | 412 | 428 | 362 | | | | 1554 | 1808 |
| 300 | 454 | 765 | 625 | 441 | 383 | 397 | 360 | | | | 1534 | 1735 |
| 290 | 318 | 689 | 580 | 396 | 349 | 352 | 352 | | | 1143 | 1491 | 1642 |
| 280 | 194 | 574 | 512 | 344 | 311 | 295 | 337 | | | 1143 | 1422 | 1530 |
| 270 | 105 | 414 | 424 | 282 | 264 | 231 | 315 | | 1191 | 1133 | 1336 | 1399 |
| 260 | 55.9 | 226 | 310 | 212 | 215 | 166 | 287 | | 1180 | 1106 | 1224 | 1252 |
| 250 | 4.9 | 101 | 158 | 128 | 164 | 106 | 246 | | 1141 | 1057 | 1095 | 1119 |
| 240 | | 41.8 | 62.5 | 47.7 | 104 | 68.8 | 195 | | 1079 | 996 | 962 | 970 |
| 230 | | | | | 64.0 | 45.5 | 132 | | 985 | 923 | 834 | 830 |
| 220 | | | | | 25.6 | 7.9 | 70.0 | | 861 | 834 | 707 | 712 |
| 210 | | | | | | | 12.4 | | 706 | 726 | 600 | 611 |
| 200 | | | | | | | | | 547 | 604 | 515 | 527 |
| 190 | | | | | | | | | 415 | 492 | 447 | 459 |
| 180 | | | | | | | | | 315 | 404 | 395 | 404 |
| 170 | | | | | | | | | 253 | 342 | 351 | 362 |
| 160 | | | | | | | | | 206 | 298 | 312 | 327 |
| 150 | | | | | | | | | 172 | 258 | 274 | 294 |
| 140 | | | | | | | | | 142 | 214 | 230 | 252 |
| 130 | | | | | | | | | 119 | 181 | 188 | 207 |
| 120 | | | | | | | | | 105 | 159 | 169 | 187 |
| 110 | | | | | | | | | 80.5 | 141 | 138 | 69.4 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 10 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 4 | 4 | 3 | 3 | 3 | 3 | S3 | 3 | 4 | 4 | 4 | 3 |
| HMIN | 109 | 109 | 108 | 109 | 107 | 109 | | 206 | 208 | 258 | 261 | 261 |
| SCAT | 66.7 | 61.7 | 53.1 | 48.7 | 60.4 | 58.1 | | 55.2 | 68.4 | 51.3 | 57.2 | 51.0 |
| HMAXF | 334 | 346 | 348 | 336 | 342 | 327 | | 316 | 374 | 398 | 405 | 388 |
| SHMAX | 2095 | 2185 | 2036 | 1852 | 1979 | 1764 | | 941 | 838 | 573 | 636 | 624 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | 794 | |
| 400 | | | | | | | | | | 754 | 792 | |
| 390 | | | | | | | | | | 749 | 781 | 875 |
| 380 | | | | | | | | | 834 | 730 | 757 | 869 |
| 370 | | | | | | | | | 833 | 695 | 720 | 847 |
| 360 | | | | | | | | | 825 | 647 | 672 | 806 |
| 350 | | 2032 | 1922 | | 1907 | | | | 808 | 588 | 613 | 753 |
| 340 | 1891 | 2027 | 1912 | 1922 | 1906 | | | | 780 | 518 | 536 | 678 |
| 330 | 1890 | 1998 | 1845 | 1916 | 1887 | 1907 | | | 744 | 442 | 449 | 590 |
| 320 | 1871 | 1943 | 1764 | 1849 | 1841 | 1899 | | 1290 | 702 | 361 | 364 | 489 |
| 310 | 1830 | 1853 | 1659 | 1759 | 1765 | 1864 | | 1287 | 652 | 276 | 277 | 371 |
| 300 | 1764 | 1742 | 1537 | 1644 | 1658 | 1800 | | 1264 | 596 | 195 | 192 | 253 |
| 290 | 1675 | 1610 | 1404 | 1510 | 1536 | 1701 | | 1215 | 535 | 126 | 124 | 150 |
| 280 | 1570 | 1462 | 1263 | 1361 | 1403 | 1583 | | 1152 | 470 | 81.6 | 76.0 | 86.5 |
| 270 | 1455 | 1299 | 1127 | 1200 | 1259 | 1441 | | 1068 | 403 | 51.6 | 45.6 | 48.2 |
| 260 | 1320 | 1106 | 983 | 1038 | 1116 | 1283 | | 960 | 341 | 12.4 | | |
| 250 | 1167 | 943 | 854 | 889 | 959 | 1094 | | 833 | 281 | | | |
| 240 | 1018 | 791 | 740 | 758 | 812 | 928 | | 684 | 219 | | | |
| 230 | 869 | 666 | 645 | 645 | 680 | 749 | | 499 | 155 | | | |
| 220 | 740 | 577 | 568 | 560 | 570 | 586 | | 281 | 81.6 | | | |
| 210 | 634 | 516 | 510 | 494 | 479 | 453 | | 82.3 | 21.2 | | | |
| 200 | 553 | 473 | 467 | 440 | 409 | 355 | | | | | | |
| 190 | 489 | 440 | 429 | 398 | 353 | 287 | | | | | | |
| 180 | 438 | 411 | 393 | 362 | 309 | 240 | | | | | | |
| 170 | 391 | 383 | 363 | 331 | 276 | 202 | | | | | | |
| 160 | 349 | 347 | 332 | 301 | 247 | 172 | | | | | | |
| 150 | 311 | 303 | 293 | 270 | 222 | 143 | | | | | | |
| 140 | 275 | 258 | 249 | 239 | 194 | 123 | | | | | | |
| 130 | 235 | 224 | 210 | 206 | 169 | 110 | | | | | | |
| 120 | 209 | 206 | 188 | 180 | 152 | 103 | | | | | | |
| 110 | 92.8 | 92.8 | 102 | 44.7 | 117 | 87.7 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 11 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 3 | 3 | 3 | 1 | 1 | A1 | 2 | 2 | 2 | A3 |
| HMIN | 243 | 248 | 208 | 188 | 208 | 226 | 208 | | 109 | 110 | 109 | |
| SCAT | 53.3 | 47.3 | 46.4 | 43.0 | 51.7 | 59.8 | 51.2 | | 53.5 | 50.8 | 92.3 | |
| HMAXF | 365 | 364 | 317 | 295 | 332 | 374 | 316 | | 275 | 290 | 345 | |
| SHMAX | 501 | 448 | 421 | 318 | 243 | 266 | 263 | | 846 | 1188 | 1923 | |
| KM | | | | | | | | | | | | |
| 380 | | | | | | 310 | | | | | | |
| 370 | 698 | 670 | | | | 310 | | | | | | |
| 360 | 696 | 669 | | | | 306 | | | | | | |
| 350 | 684 | 655 | | | | 298 | | | | | 1446 | |
| 340 | 655 | 624 | | | 329 | 285 | | | | | 1445 | |
| 330 | 618 | 581 | | | 329 | 268 | | | | | 1437 | |
| 320 | 575 | 525 | 661 | | 325 | 247 | 389 | | | | 1420 | |
| 310 | 510 | 454 | 657 | | 314 | 222 | 388 | | | | 1395 | |
| 300 | 429 | 376 | 638 | 524 | 296 | 193 | 380 | | | 1420 | 1361 | |
| 290 | 343 | 295 | 604 | 522 | 274 | 161 | 364 | | | 1420 | 1316 | |
| 280 | 247 | 191 | 557 | 507 | 246 | 129 | 341 | | 1004 | 1406 | 1266 | |
| 270 | 154 | 107 | 493 | 47' | 214 | 97.8 | 312 | | 1002 | 1364 | 1209 | |
| 260 | 83.2 | 57.9 | 413 | 435 | 178 | 74.9 | 272 | | 984 | 1291 | 1145 | |
| 250 | 43.3 | 12.4 | 319 | 377 | 140 | 56.1 | 221 | | 947 | 1199 | 1058 | |
| 240 | | | 214 | 308 | 98.0 | 41.7 | 157 | | 895 | 1069 | 958 | |
| 230 | | | 120 | 229 | 66.5 | 12.4 | 95.8 | | 823 | 899 | 843 | |
| 220 | | | 63.2 | 147 | 44.9 | | 55.1 | | 734 | 732 | 723 | |
| 210 | | | 12.4 | 89.0 | 8.2 | | 12.4 | | 637 | 599 | 606 | |
| 200 | | | | 52.8 | | | | | 533 | 502 | 518 | |
| 190 | | | | 12.4 | | | | | 432 | 425 | 461 | |
| 180 | | | | | | | | | 345 | 358 | 416 | |
| 170 | | | | | | | | | 275 | 302 | 372 | |
| 160 | | | | | | | | | 215 | 254 | 327 | |
| 150 | | | | | | | | | 174 | 212 | 281 | |
| 140 | | | | | | | | | 141 | 177 | 238 | |
| 130 | | | | | | | | | 123 | 157 | 202 | |
| 120 | | | | | | | | | 115 | 147 | 184 | |
| 110 | | | | | | | | | 86.5 | 12.4 | 52.8 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 11 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| HMIN | 107 | 107 | 108 | 107 | 108 | 109 | 221 | 188 | 188 | 226 | 253 | 268 |
| SCAT | 64.2 | 56.0 | 66.4 | 62.6 | 62.8 | 51.6 | 58.7 | 58.6 | 60.1 | 63.4 | 55.3 | 50.0 |
| HMAXF | 333 | 337 | 340 | 337 | 335 | 314 | 333 | 315 | 347 | 395 | 402 | 386 |
| SHMAX | 2175 | 2179 | 2115 | 1901 | 1748 | 1428 | 1102 | 843 | 637 | 603 | 502 | 450 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | 625 | |
| 400 | | | | | | | | | | 643 | 625 | |
| 390 | | | | | | | | | | 642 | 617 | 670 |
| 380 | | | | | | | | | | 634 | 598 | 667 |
| 370 | | | | | | | | | | 619 | 575 | 653 |
| 360 | | | | | | | | | | 593 | 536 | 625 |
| 350 | | | | | | | | | 716 | 560 | 483 | 586 |
| 340 | 2032 | 2096 | 1907 | 1756 | 1669 | | 1528 | | 714 | 522 | 424 | 526 |
| 330 | 2030 | 2088 | 1896 | 1751 | 1666 | | 1527 | | 702 | 478 | 361 | 445 |
| 320 | 2010 | 2049 | 1864 | 1724 | 1645 | 1669 | 1508 | 1096 | 681 | 430 | 294 | 354 |
| 310 | 1964 | 1967 | 1810 | 1675 | 1603 | 1666 | 1468 | 1094 | 648 | 378 | 226 | 250 |
| 300 | 1892 | 1862 | 1729 | 1595 | 1538 | 1637 | 1407 | 1078 | 607 | 322 | 164 | 159 |
| 290 | 1794 | 1726 | 1634 | 1500 | 1455 | 1577 | 1343 | 1047 | 558 | 266 | 118 | 94.5 |
| 280 | 1678 | 1575 | 1516 | 1388 | 1349 | 1479 | 1223 | 1000 | 503 | 210 | 80.2 | 54.8 |
| 270 | 1536 | 1414 | 1377 | 1260 | 1226 | 1358 | 1072 | 935 | 444 | 154 | 55.0 | 12.4 |
| 260 | 1370 | 1249 | 1223 | 1142 | 1104 | 1212 | 855 | 853 | 383 | 107 | 30.5 | |
| 250 | 1197 | 1085 | 1053 | 1001 | 952 | 1043 | 552 | 745 | 319 | 73.1 | | |
| 240 | 1025 | 922 | 911 | 860 | 805 | 843 | 256 | 620 | 253 | 48.5 | | |
| 230 | 857 | 785 | 775 | 731 | 672 | 676 | 81.2 | 482 | 183 | 16.8 | | |
| 220 | 711 | 673 | 662 | 623 | 564 | 542 | | 323 | 119 | | | |
| 210 | 605 | 588 | 578 | 535 | 482 | 434 | | 185 | 78.3 | | | |
| 200 | 529 | 526 | 512 | 473 | 420 | 357 | | 84.4 | 49.5 | | | |
| 190 | 471 | 480 | 459 | 424 | 369 | 304 | | 21.7 | 12.4 | | | |
| 180 | 428 | 442 | 413 | 382 | 327 | 262 | | | | | | |
| 170 | 393 | 407 | 370 | 342 | 288 | 225 | | | | | | |
| 160 | 364 | 369 | 332 | 301 | 251 | 192 | | | | | | |
| 150 | 333 | 326 | 301 | 256 | 216 | 163 | | | | | | |
| 140 | 297 | 285 | 262 | 217 | 185 | 141 | | | | | | |
| 130 | 261 | 253 | 223 | 197 | 163 | 126 | | | | | | |
| 120 | 232 | 229 | 206 | 187 | 152 | 117 | | | | | | |
| 110 | 141 | 176 | 109 | 148 | 109 | 65.5 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 12 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | A3 | 3 | 3 | 3 | 3 | 3 | 3 | A2 | A2 | A2 | 3 |
| HMIN | 221 | 223 | 239 | 201 | 208 | 278 | 232 | 109 | | | 108 | 108 |
| SCAT | 40.4 | 47.2 | 44.8 | 55.2 | 66.0 | 60.0 | 47.8 | 34.3 | | | 54.4 | 70.4 |
| HMAXF | 327 | 342 | 348 | 312 | 363 | 409 | 367 | 262 | | | 297 | 340 |
| SHMAX | 375 | 422 | 347 | 340 | 341 | 272 | 235 | 494 | | | 1403 | 1982 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 329 | | | | | | |
| 400 | | | | | | 327 | | | | | | |
| 390 | | | | | | 320 | | | | | | |
| 380 | | | | | | 309 | | | | | | |
| 370 | | | | | 375 | 293 | 323 | | | | | |
| 360 | | | | | 375 | 273 | 321 | | | | | |
| 350 | | 643 | 540 | | 372 | 249 | 312 | | | | | 1669 |
| 340 | | 643 | 535 | | 364 | 219 | 295 | | | | | 1669 |
| 330 | 643 | 632 | 517 | | 351 | 185 | 273 | | | | | 1660 |
| 320 | 638 | 608 | 485 | 484 | 337 | 148 | 244 | | | | | 1634 |
| 310 | 614 | 573 | 440 | 484 | 316 | 111 | 211 | | | | | 1592 |
| 300 | 570 | 516 | 383 | 478 | 290 | 77.7 | 173 | | | | 1500 | 1531 |
| 290 | 507 | 443 | 322 | 462 | 259 | 50.0 | 136 | | | | 1494 | 1459 |
| 280 | 428 | 358 | 256 | 444 | 223 | 12.4 | 105 | | | | 1463 | 1363 |
| 270 | 340 | 265 | 183 | 413 | 182 | | 80.6 | 928 | | | 1399 | 1254 |
| 260 | 239 | 172 | 97.8 | 374 | 142 | | 61.2 | 927 | | | 1320 | 1155 |
| 250 | 145 | 103 | 53.5 | 322 | 104 | | 46.5 | 899 | | | 1217 | 1035 |
| 240 | 83.1 | 64.1 | 5.8 | 251 | 75.5 | | 24.8 | 840 | | | 1095 | 915 |
| 230 | 46.8 | 37.9 | | 158 | 55.0 | | | 711 | | | 970 | 803 |
| 220 | | | | 90.3 | 38.8 | | | 507 | | | 841 | 704 |
| 210 | | | | 48.2 | 5.8 | | | 335 | | | 721 | 621 |
| 200 | | | | | | | | 232 | | | 612 | 552 |
| 190 | | | | | | | | 171 | | | 515 | 492 |
| 180 | | | | | | | | 132 | | | 435 | 440 |
| 170 | | | | | | | | 103 | | | 371 | 390 |
| 160 | | | | | | | | 83.7 | | | 318 | 343 |
| 150 | | | | | | | | 74.1 | | | 269 | 297 |
| 140 | | | | | | | | 69.0 | | | 224 | 244 |
| 130 | | | | | | | | 65.6 | | | 189 | 197 |
| 120 | | | | | | | | 62.1 | | | 171 | 186 |
| 110 | | | | | | | | 12.4 | | | 139 | 146 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 12 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | A3 | A3 | A1 | A1 | A1 | A1 | S1 | 1 | 4 | 4 | 4 | S5 |
| HMIN | | | | 109 | | | | 200 | 188 | 218 | 240 | 239 |
| SCAT | | | | 57.2 | | | | 60.5 | 56.9 | 54.8 | 42.3 | 43.5 |
| HMAXF | | | | 337 | | | | 340 | 362 | 353 | 349 | 350 |
| SHMAX | | | | 2055 | | | | 1130 | 1024 | 800 | 483 | 458 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | 1131 | | | |
| 360 | | | | | | | | | 1131 | 1050 | | |
| 350 | | | | | | | | | 1119 | 1049 | 794 | 754 |
| 340 | | | | 2032 | | | | 1420 | 1087 | 1035 | 784 | 745 |
| 330 | | | | 2024 | | | | 1411 | 1039 | 1004 | 751 | 715 |
| 320 | | | | 1986 | | | | 1382 | 976 | 953 | 694 | 667 |
| 310 | | | | 1917 | | | | 1334 | 903 | 888 | 621 | 594 |
| 300 | | | | 1808 | | | | 1268 | 818 | 810 | 528 | 502 |
| 290 | | | | 1678 | | | | 1184 | 733 | 715 | 426 | 394 |
| 280 | | | | 1525 | | | | 1073 | 646 | 603 | 312 | 276 |
| 270 | | | | 1354 | | | | 928 | 558 | 472 | 199 | 167 |
| 260 | | | | 1181 | | | | 762 | 465 | 323 | 109 | 90.5 |
| 250 | | | | 1009 | | | | 571 | 371 | 194 | 54.8 | 51.9 |
| 240 | | | | 851 | | | | 367 | 276 | 113 | | 6.6 |
| 230 | | | | 721 | | | | 197 | 197 | 59.6 | | |
| 220 | | | | 618 | | | | 102 | 130 | 12.4 | | |
| 210 | | | | 542 | | | | 52.6 | 81.4 | | | |
| 200 | | | | 484 | | | | | 50.8 | | | |
| 190 | | | | 433 | | | | | 12.4 | | | |
| 180 | | | | 386 | | | | | | | | |
| 170 | | | | 340 | | | | | | | | |
| 160 | | | | 299 | | | | | | | | |
| 150 | | | | 261 | | | | | | | | |
| 140 | | | | 230 | | | | | | | | |
| 130 | | | | 203 | | | | | | | | |
| 120 | | | | 185 | | | | | | | | |
| 110 | | | | 58.9 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 13 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | J5 | 5 | 4 | 4 | 4 | 4 | 4 | A4 | A2 | S2 | 2 | 1 |
| HMIN | 268 | 257 | 233 | 192 | 211 | 190 | 199 | | | | 108 | 108 |
| SCAT | 67.9 | 49.2 | 42.9 | 54.6 | 56.7 | 72.0 | 66.3 | | | | 50.9 | 58.1 |
| HMAXF | 433 | 380 | 331 | 324 | 358 | 336 | 340 | | | | 307 | 326 |
| SHMAX | 791 | 541 | 472 | 494 | 399 | 354 | 364 | | | | 1796 | 2182 |
| KM | | | | | | | | | | | | |
| 440 | 834 | | | | | | | | | | | |
| 430 | 833 | | | | | | | | | | | |
| 420 | 826 | | | | | | | | | | | |
| 410 | 810 | | | | | | | | | | | |
| 400 | 783 | | | | | | | | | | | |
| 390 | 748 | | | | | | | | | | | |
| 380 | 705 | 794 | | | | | | | | | | |
| 370 | 654 | 786 | | | | | | | | | | |
| 360 | 597 | 762 | | | 492 | | | | | | | |
| 350 | 530 | 720 | | | 490 | | 389 | | | | | |
| 340 | 449 | 663 | 834 | | 480 | 375 | 389 | | | | | |
| 330 | 365 | 593 | 834 | 634 | 462 | 374 | 386 | | | | | 2161 |
| 320 | 286 | 502 | 821 | 633 | 439 | 370 | 380 | | | | | 2156 |
| 310 | 205 | 391 | 784 | 624 | 406 | 363 | 368 | | | | 2032 | 2122 |
| 300 | 129 | 275 | 726 | 604 | 364 | 350 | 352 | | | | 2022 | 2056 |
| 290 | 81.8 | 174 | 646 | 576 | 314 | 337 | 335 | | | | 1974 | 1947 |
| 280 | 50.8 | 101 | 535 | 534 | 263 | 319 | 309 | | | | 1884 | 1814 |
| 270 | 12.4 | 59.2 | 372 | 481 | 210 | 296 | 279 | | | | 1755 | 1666 |
| 260 | | 18.7 | 211 | 420 | 155 | 269 | 247 | | | | 1594 | 1498 |
| 250 | | | 102 | 354 | 111 | 235 | 215 | | | | 1405 | 1321 |
| 240 | | | 50.0 | 292 | 80.1 | 198 | 182 | | | | 1212 | 1123 |
| 230 | | | | 227 | 55.5 | 157 | 150 | | | | 1020 | 961 |
| 220 | | | | 155 | 35.6 | 110 | 119 | | | | 824 | 821 |
| 210 | | | | 86.0 | | 70.5 | 84.2 | | | | 668 | 702 |
| 200 | | | | 45.4 | | 45.3 | 12.4 | | | | 547 | 606 |
| 190 | | | | | | 2.2 | | | | | 466 | 527 |
| 180 | | | | | | | | | | | 408 | 461 |
| 170 | | | | | | | | | | | 364 | 408 |
| 160 | | | | | | | | | | | 328 | 361 |
| 150 | | | | | | | | | | | 291 | 315 |
| 140 | | | | | | | | | | | 255 | 272 |
| 130 | | | | | | | | | | | 218 | 236 |
| 120 | | | | | | | | | | | 193 | 212 |
| 110 | | | | | | | | | | | 152 | 109 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 13 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | 1 | 3 | 3 | 3 | 4 | A4 | 4 | 5 | 5 | 5 | 4 |
| HMIN | 105 | 104 | 106 | 108 | 110 | 108 | | 193 | 218 | 219 | 236 | 251 |
| SCAT | 64.6 | 72.6 | 66.2 | 68.8 | 70.7 | 60.2 | | 66.7 | 60.7 | 57.0 | 48.1 | 50.5 |
| HMAXF | 343 | 356 | 351 | 359 | 356 | 326 | | 356 | 382 | 370 | 368 | 374 |
| SHMAX | 2391 | 2591 | 2411 | 2330 | 2255 | 1687 | | 1054 | 914 | 854 | 645 | 666 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | 1038 | | | |
| 380 | | | | | | | | | 1038 | 1050 | | 960 |
| 370 | | | | | | | | | 1028 | 1050 | 917 | 959 |
| 360 | | 2128 | 2112 | 2000 | 2000 | | | 1096 | 1005 | 1041 | 911 | 943 |
| 350 | 2128 | 2124 | 2112 | 1991 | 1997 | | | 1094 | 963 | 1017 | 886 | 906 |
| 340 | 2127 | 2101 | 2097 | 1961 | 1975 | | | 1081 | 912 | 974 | 839 | 854 |
| 330 | 2105 | 2059 | 2059 | 1909 | 1933 | 1786 | | 1055 | 848 | 919 | 775 | 780 |
| 320 | 2058 | 1990 | 1992 | 1835 | 1867 | 1781 | | 1016 | 770 | 846 | 696 | 687 |
| 310 | 1977 | 1912 | 1917 | 1748 | 1793 | 1753 | | 967 | 681 | 760 | 603 | 578 |
| 300 | 1879 | 1806 | 1801 | 1629 | 1691 | 1700 | | 906 | 588 | 661 | 501 | 451 |
| 290 | 1762 | 1684 | 1664 | 1493 | 1566 | 1616 | | 838 | 492 | 554 | 384 | 305 |
| 280 | 1617 | 1549 | 1508 | 1344 | 1414 | 1514 | | 758 | 384 | 439 | 265 | 182 |
| 270 | 1455 | 1405 | 1335 | 1189 | 1241 | 1392 | | 669 | 280 | 323 | 167 | 96.2 |
| 260 | 1283 | 1256 | 1156 | 1043 | 1084 | 1254 | | 581 | 200 | 215 | 101 | 49.0 |
| 250 | 1127 | 1092 | 1001 | 901 | 917 | 1078 | | 491 | 132 | 129 | 61.3 | |
| 240 | 979 | 952 | 865 | 770 | 771 | 910 | | 401 | 83.5 | 79.2 | 24.6 | |
| 230 | 850 | 828 | 751 | 658 | 651 | 748 | | 309 | 51.7 | 50.5 | | |
| 220 | 740 | 717 | 661 | 571 | 551 | 596 | | 216 | 12.4 | 6.8 | | |
| 210 | 649 | 626 | 592 | 505 | 476 | 464 | | 132 | | | | |
| 200 | 578 | 555 | 539 | 455 | 420 | 365 | | 58.6 | | | | |
| 190 | 520 | 500 | 494 | 415 | 371 | 297 | | | | | | |
| 180 | 469 | 455 | 450 | 381 | 328 | 247 | | | | | | |
| 170 | 421 | 415 | 405 | 347 | 289 | 207 | | | | | | |
| 160 | 376 | 376 | 358 | 307 | 253 | 174 | | | | | | |
| 150 | 334 | 336 | 315 | 266 | 220 | 146 | | | | | | |
| 140 | 294 | 291 | 279 | 228 | 189 | 125 | | | | | | |
| 130 | 255 | 242 | 247 | 200 | 163 | 110 | | | | | | |
| 120 | 230 | 214 | 216 | 181 | 151 | 103 | | | | | | |
| 110 | 201 | 194 | 176 | 133 | 40.2 | 85.6 | | | | | | |

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ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 14 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 4 | 4 | 2 | 2 | 2 | 2 | 2 | S2 | A1 | A1 | A1 | 1 |
| HMIN | 228 | 219 | 228 | 238 | 261 | 219 | 198 | | | | | 109 |
| SCAT | 55.6 | 41.6 | 54.3 | 55.6 | 47.9 | 45.1 | 43.4 | | | | | 77.5 |
| HMAXF | 352 | 312 | 351 | 363 | 374 | 308 | 315 | | | | | 343 |
| SHMAX | 716 | 500 | 495 | 420 | 379 | 312 | 330 | | | | | 2555 |
| KM | | | | | | | | | | | | |
| 380 | | | | | 565 | | | | | | | |
| 370 | | | | 540 | 564 | | | | | | | |
| 360 | 1004 | | 670 | 540 | 553 | | | | | | | |
| 350 | 1004 | | 670 | 532 | 528 | | | | | | | 2144 |
| 340 | 993 | | 663 | 516 | 494 | | | | | | | 2143 |
| 330 | 965 | | 645 | 490 | 446 | | | | | | | 2129 |
| 320 | 927 | 906 | 616 | 456 | 384 | | 508 | | | | | 2097 |
| 310 | 866 | 906 | 576 | 417 | 316 | 540 | 506 | | | | | 2047 |
| 300 | 772 | 888 | 520 | 370 | 247 | 536 | 492 | | | | | 1978 |
| 290 | 654 | 844 | 454 | 317 | 166 | 519 | 463 | | | | | 1904 |
| 280 | 516 | 773 | 376 | 259 | 98.5 | 488 | 422 | | | | | 1796 |
| 270 | 360 | 670 | 292 | 193 | 49.0 | 446 | 370 | | | | | 1669 |
| 260 | 225 | 536 | 199 | 125 | | 388 | 314 | | | | | 1528 |
| 250 | 119 | 374 | 119 | 65.3 | | 307 | 253 | | | | | 1372 |
| 240 | 60.5 | 202 | 62.7 | 12.4 | | 189 | 188 | | | | | 1211 |
| 230 | 12.4 | 90.2 | 12.4 | | | 82.9 | 128 | | | | | 1045 |
| 220 | | 12.4 | | | | 12.4 | 79.9 | | | | | 897 |
| 210 | | | | | | | 50.4 | | | | | 760 |
| 200 | | | | | | | 12.4 | | | | | 635 |
| 190 | | | | | | | | | | | | 531 |
| 180 | | | | | | | | | | | | 447 |
| 170 | | | | | | | | | | | | 382 |
| 160 | | | | | | | | | | | | 334 |
| 150 | | | | | | | | | | | | 299 |
| 140 | | | | | | | | | | | | 267 |
| 130 | | | | | | | | | | | | 228 |
| 120 | | | | | | | | | | | | 207 |
| 110 | | | | | | | | | | | | 78.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 14 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | B1 | B0 | 0 | A0 | 0 | A0 | 0 | A0 | 0 | 0 | 2 |
| HMIN | 108 | | | 107 | | 106 | | 198 | 230 | 203 | 241 | 247 |
| SCAT | 70.3 | | | 69.3 | | 75.9 | | 57.0 | 65.3 | 59.2 | 55.7 | 44.7 |
| HMAXF | 353 | | | 354 | | 348 | | 346 | 362 | 368 | 376 | 354 |
| SHMAX | 2527 | | | 2237 | | 1946 | | 1010 | 913 | 830 | 722 | 565 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 949 | |
| 370 | | | | | | | | | 1084 | 960 | 947 | |
| 360 | 2161 | | | 1891 | | | | | 1084 | 956 | 930 | 917 |
| 350 | 2160 | | | 1889 | | 1669 | | 1240 | 1074 | 937 | 898 | 916 |
| 340 | 2142 | | | 1871 | | 1664 | | 1236 | 1052 | 903 | 853 | 896 |
| 330 | 2103 | | | 1833 | | 1644 | | 1214 | 1016 | 856 | 787 | 853 |
| 320 | 2042 | | | 1772 | | 1611 | | 1173 | 972 | 800 | 698 | 789 |
| 310 | 1953 | | | 1688 | | 1563 | | 1115 | 909 | 729 | 596 | 696 |
| 300 | 1850 | | | 1590 | | 1497 | | 1036 | 830 | 648 | 490 | 587 |
| 290 | 1725 | | | 1479 | | 1425 | | 936 | 731 | 559 | 372 | 458 |
| 280 | 1580 | | | 1352 | | 1334 | | 823 | 622 | 466 | 257 | 315 |
| 270 | 1425 | | | 1217 | | 1226 | | 704 | 498 | 373 | 158 | 168 |
| 260 | 1264 | | | 1086 | | 1114 | | 576 | 353 | 275 | 86.8 | 78.9 |
| 250 | 1090 | | | 945 | | 983 | | 434 | 186 | 187 | 47.1 | 30.0 |
| 240 | 944 | | | 825 | | 849 | | 300 | 74.3 | 124 | | |
| 230 | 815 | | | 722 | | 719 | | 186 | 2.6 | 83.7 | | |
| 220 | 711 | | | 632 | | 601 | | 112 | | 56.0 | | |
| 210 | 622 | | | 558 | | 498 | | 60.2 | | 31.0 | | |
| 200 | 546 | | | 495 | | 413 | | 12.4 | | | | |
| 190 | 480 | | | 441 | | 346 | | | | | | |
| 180 | 429 | | | 393 | | 292 | | | | | | |
| 170 | 387 | | | 352 | | 247 | | | | | | |
| 160 | 348 | | | 315 | | 209 | | | | | | |
| 150 | 306 | | | 277 | | 177 | | | | | | |
| 140 | 264 | | | 238 | | 153 | | | | | | |
| 130 | 229 | | | 206 | | 133 | | | | | | |
| 120 | 208 | | | 189 | | 121 | | | | | | |
| 110 | 109 | | | 158 | | 112 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 2 | 2 | 1 | 1 | 1 | 1 | 1 | S1 | 1 | 1 | 1 | 1 |
| HMIN | 231 | 254 | 228 | 191 | 196 | 235 | 219 | | 105 | 105 | 107 | 106 |
| SCAT | 52.0 | 46.0 | 38.7 | 54.5 | 65.9 | 50.2 | 37.1 | | 41.1 | 82.0 | 65.4 | 64.6 |
| HMAXF | 349 | 369 | 331 | 335 | 361 | 359 | 308 | | 249 | 314 | 319 | 333 |
| SHMAX | 575 | 482 | 419 | 464 | 504 | 359 | 339 | | 701 | 1485 | 1704 | 2058 |
| KM | | | | | | | | | | | | |
| 370 | | 754 | | | 540 | | | | | | | |
| 360 | | 748 | | | 540 | 500 | | | | | | |
| 350 | 834 | 723 | | | 537 | 496 | | | | | | |
| 340 | 827 | 682 | 754 | 573 | 527 | 481 | | | | | | 1907 |
| 330 | 805 | 621 | 754 | 572 | 511 | 456 | | | | | | 1905 |
| 320 | 767 | 538 | 740 | 563 | 489 | 422 | | | | 1316 | 1626 | 1886 |
| 310 | 716 | 437 | 698 | 544 | 462 | 378 | 661 | | | 1315 | 1618 | 1844 |
| 300 | 645 | 329 | 636 | 513 | 426 | 328 | 653 | | | 1305 | 1590 | 1779 |
| 290 | 547 | 218 | 547 | 475 | 384 | 272 | 621 | | | 1286 | 1542 | 1690 |
| 280 | 438 | 134 | 444 | 428 | 337 | 213 | 567 | | | 1257 | 1477 | 1579 |
| 270 | 313 | 74.1 | 324 | 371 | 287 | 146 | 482 | | | 1219 | 1395 | 1448 |
| 260 | 186 | 38.8 | 197 | 325 | 234 | 94.4 | 379 | | | 1178 | 1291 | 1301 |
| 250 | 96.3 | | 102 | 269 | 184 | 58.9 | 251 | | 1050 | 1131 | 1152 | 1122 |
| 240 | 50.3 | | 56.3 | 211 | 133 | 27.7 | 141 | | 1037 | 1042 | 1003 | 973 |
| 230 | | | 12.4 | 156 | 94.0 | | 68.4 | | 991 | 927 | 858 | 842 |
| 220 | | | | 105 | 66.6 | | 12.4 | | 918 | 790 | 726 | 729 |
| 210 | | | | 65.5 | 46.1 | | | | 813 | 651 | 621 | 634 |
| 200 | | | | 43.1 | 16.3 | | | | 688 | 536 | 536 | 550 |
| 190 | | | | | | | | | 551 | 447 | 470 | 479 |
| 180 | | | | | | | | | 411 | 381 | 416 | 418 |
| 170 | | | | | | | | | 294 | 329 | 370 | 365 |
| 160 | | | | | | | | | 222 | 280 | 324 | 313 |
| 150 | | | | | | | | | 177 | 230 | 276 | 261 |
| 140 | | | | | | | | | 145 | 183 | 225 | 231 |
| 130 | | | | | | | | | 126 | 159 | 185 | 214 |
| 120 | | | | | | | | | 118 | 152 | 169 | 203 |
| 110 | | | | | | | | | 103 | 144 | 131 | 166 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | B1 | S1 | S1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| HMIN | | | 109 | 105 | 108 | 108 | 199 | 188 | 199 | 228 | 247 | 271 |
| SCAT | | | 63.0 | 64.7 | 70.7 | 73.9 | 71.2 | 50.8 | 68.0 | 56.1 | 48.6 | 46.2 |
| HMAXF | | | 335 | 346 | 342 | 349 | 349 | 327 | 373 | 370 | 373 | 373 |
| SHMAX | | | 1950 | 1992 | 1917 | 1874 | 1300 | 880 | 1002 | 798 | 642 | 618 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 1038 | | 917 | 1004 |
| 370 | | | | | | | | | 1037 | 1004 | 916 | 1004 |
| 360 | | | | | | | | | 1028 | 997 | 900 | 986 |
| 350 | | | | 1786 | 1669 | 1640 | 1406 | | 1007 | 973 | 862 | 943 |
| 340 | | | 1786 | 1782 | 1668 | 1633 | 1401 | | 972 | 931 | 808 | 879 |
| 330 | | | 1783 | 1759 | 1657 | 1612 | 1382 | 1143 | 928 | 876 | 734 | 788 |
| 320 | | | 1760 | 1714 | 1629 | 1576 | 1348 | 1137 | 877 | 806 | 645 | 664 |
| 310 | | | 1714 | 1645 | 1585 | 1520 | 1297 | 1109 | 816 | 724 | 545 | 520 |
| 300 | | | 1641 | 1560 | 1518 | 1459 | 1243 | 1056 | 748 | 629 | 432 | 356 |
| 290 | | | 1546 | 1450 | 1441 | 1375 | 1168 | 985 | 664 | 523 | 313 | 194 |
| 280 | | | 1437 | 1321 | 1348 | 1277 | 1074 | 901 | 573 | 400 | 204 | 74.2 |
| 270 | | | 1310 | 1185 | 1240 | 1179 | 952 | 803 | 483 | 284 | 124 | |
| 260 | | | 1160 | 1039 | 1118 | 1066 | 811 | 695 | 378 | 175 | 63.9 | |
| 250 | | | 1011 | 892 | 984 | 929 | 660 | 585 | 265 | 101 | 19.6 | |
| 240 | | | 869 | 766 | 850 | 794 | 506 | 470 | 172 | 57.4 | | |
| 230 | | | 750 | 654 | 732 | 665 | 329 | 346 | 111 | 12.4 | | |
| 220 | | | 652 | 567 | 629 | 558 | 181 | 229 | 70.3 | | | |
| 210 | | | 576 | 501 | 542 | 463 | 81.0 | 125 | 45.0 | | | |
| 200 | | | 520 | 451 | 475 | 380 | 12.4 | 61.6 | 2.5 | | | |
| 190 | | | 475 | 414 | 421 | 309 | | 12.4 | | | | |
| 180 | | | 436 | 383 | 373 | 254 | | | | | | |
| 170 | | | 394 | 347 | 329 | 214 | | | | | | |
| 160 | | | 349 | 305 | 285 | 182 | | | | | | |
| 150 | | | 307 | 260 | 244 | 155 | | | | | | |
| 140 | | | 267 | 225 | 211 | 136 | | | | | | |
| 130 | | | 228 | 202 | 187 | 124 | | | | | | |
| 120 | | | 207 | 189 | 170 | 116 | | | | | | |
| 110 | | | 65.5 | 172 | 130 | 69.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 0 | 0 | 0 | 0 | 0 | 1 | 1 | S1 | S1 | S1 | S1 | S1 |
| HMIN | 239 | 223 | 205 | 189 | 207 | 225 | 255 | 108 | 103 | 105 | | 103 |
| SCAT | 40.6 | 39.3 | 39.7 | 72.1 | 68.0 | 57.5 | 53.5 | 30.8 | 51.2 | 61.4 | | 71.1 |
| HMAXF | 333 | 319 | 297 | 326 | 351 | 364 | 361 | 242 | 274 | 288 | | 331 |
| SHMAX | 526 | 435 | 387 | 450 | 362 | 290 | 269 | 483 | 1013 | 1279 | | 2008 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 355 | 382 | | | | | |
| 360 | | | | | 403 | 355 | 382 | | | | | |
| 350 | | | | | 403 | 350 | 378 | | | | | |
| 340 | 960 | | | | 400 | 340 | 367 | | | | | 1786 |
| 330 | 959 | | | 500 | 393 | 323 | 348 | | | | | 1786 |
| 320 | 937 | 794 | | 499 | 382 | 303 | 325 | | | | | 1775 |
| 310 | 885 | 782 | | 494 | 369 | 277 | 294 | | | | | 1747 |
| 300 | 804 | 744 | 745 | 484 | 351 | 245 | 252 | | | | | 1702 |
| 290 | 687 | 682 | 739 | 468 | 324 | 208 | 202 | | | 1341 | | 1636 |
| 280 | 533 | 596 | 711 | 450 | 289 | 171 | 150 | | 1328 | 1335 | | 1562 |
| 270 | 371 | 481 | 663 | 426 | 249 | 134 | 91.1 | | 1326 | 1311 | | 1459 |
| 260 | 207 | 352 | 581 | 396 | 206 | 101 | 42.4 | | 1302 | 1269 | | 1342 |
| 250 | 84.3 | 221 | 455 | 357 | 163 | 71.6 | | 917 | 1253 | 1208 | | 1202 |
| 240 | 12.4 | 101 | 318 | 303 | 114 | 49.6 | | 916 | 1179 | 1141 | | 1053 |
| 230 | | 48.5 | 164 | 243 | 75.5 | 20.7 | | 880 | 1081 | 1036 | | 907 |
| 220 | | | 79.5 | 177 | 48.2 | | | 796 | 935 | 917 | | 773 |
| 210 | | | 34.0 | 105 | 12.4 | | | 665 | 747 | 789 | | 656 |
| 200 | | | | 53.9 | | | | 492 | 549 | 655 | | 561 |
| 190 | | | | 5.8 | | | | 337 | 405 | 540 | | 487 |
| 180 | | | | | | | | 232 | 313 | 450 | | 428 |
| 170 | | | | | | | | 173 | 251 | 376 | | 377 |
| 160 | | | | | | | | 138 | 207 | 314 | | 329 |
| 150 | | | | | | | | 116 | 166 | 267 | | 282 |
| 140 | | | | | | | | 101 | 136 | 224 | | 228 |
| 130 | | | | | | | | 91.1 | 124 | 193 | | 189 |
| 120 | | | | | | | | 82.3 | 117 | 161 | | 173 |
| 110 | | | | | | | | 64.4 | 105 | 146 | | 163 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | S1 | 1 | B1 | 1 | A1 | A1 | A1 | A1 | 1 | 1 | 1 | 2 |
| HMIN | | 109 | | 107 | | 105 | 217 | 188 | 218 | 219 | 238 | 240 |
| SCAT | | 58.1 | | 68.2 | | 55.8 | 60.4 | 45.9 | 58.2 | 49.5 | 48.9 | 42.9 |
| HMAXF | | 333 | | 364 | | 323 | 339 | 331 | 376 | 378 | 378 | 353 |
| SHMAX | | 1864 | | 2273 | | 1618 | 1232 | 861 | 878 | 766 | 725 | 658 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 1050 | 1004 | 1027 | |
| 370 | | | | 1907 | | | | | 1047 | 998 | 1020 | |
| 360 | | | | 1905 | | | | | 1030 | 972 | 989 | 1096 |
| 350 | | | | 1881 | | | | | 996 | 923 | 938 | 1094 |
| 340 | | 1741 | | 1850 | | | 1555 | 1143 | 948 | 856 | 873 | 1069 |
| 330 | | 1740 | | 1792 | | 1801 | 1547 | 1143 | 886 | 775 | 780 | 1012 |
| 320 | | 1718 | | 1706 | | 1799 | 1518 | 1126 | 808 | 681 | 668 | 929 |
| 310 | | 1670 | | 1608 | | 1765 | 1468 | 1079 | 717 | 582 | 542 | 815 |
| 300 | | 1586 | | 1491 | | 1701 | 1390 | 1007 | 620 | 472 | 413 | 674 |
| 290 | | 1486 | | 1359 | | 1622 | 1297 | 922 | 512 | 359 | 286 | 513 |
| 280 | | 1369 | | 1218 | | 1520 | 1184 | 825 | 394 | 257 | 188 | 327 |
| 270 | | 1242 | | 1084 | | 1396 | 1053 | 722 | 279 | 179 | 122 | 178 |
| 260 | | 1090 | | 946 | | 1256 | 896 | 618 | 187 | 126 | 79.0 | 94.6 |
| 250 | | 949 | | 819 | | 1053 | 697 | 513 | 125 | 89.2 | 49.6 | 51.5 |
| 240 | | 825 | | 711 | | 856 | 455 | 407 | 79.0 | 62.4 | 12.4 | |
| 230 | | 715 | | 626 | | 682 | 194 | 295 | 50.0 | 42.5 | | |
| 220 | | 631 | | 561 | | 538 | 43.1 | 197 | 12.4 | 4.1 | | |
| 210 | | 568 | | 510 | | 433 | | 117 | | | | |
| 200 | | 521 | | 465 | | 356 | | 61.8 | | | | |
| 190 | | 484 | | 424 | | 298 | | 12.4 | | | | |
| 180 | | 448 | | 383 | | 248 | | | | | | |
| 170 | | 403 | | 344 | | 206 | | | | | | |
| 160 | | 355 | | 309 | | 172 | | | | | | |
| 150 | | 310 | | 274 | | 142 | | | | | | |
| 140 | | 268 | | 236 | | 124 | | | | | | |
| 130 | | 230 | | 203 | | 111 | | | | | | |
| 120 | | 208 | | 181 | | 105 | | | | | | |
| 110 | | 116 | | 147 | | 98.1 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | A2 | 2 |
| HMIN | 231 | 240 | 219 | 202 | 181 | 225 | 261 | 109 | 108 | 109 | | 106 |
| SCAT | 43.7 | 57.6 | 44.0 | 48.0 | 49.4 | 54.8 | 54.2 | 47.2 | 45.9 | 58.7 | | 72.2 |
| HMAXF | 334 | 360 | 317 | 309 | 292 | 359 | 371 | 272 | 271 | 289 | | 335 |
| SHMAX | 636 | 646 | 485 | 395 | 262 | 238 | 250 | 667 | 988 | 1261 | | 1998 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | 351 | | | | | |
| 370 | | 875 | | | | | 351 | | | | | |
| 360 | | 875 | | | | 298 | 348 | | | | | |
| 350 | | 868 | | | | 296 | 338 | | | | | |
| 340 | 1096 | 848 | | | | 289 | 322 | | | | | 1669 |
| 330 | 1094 | 815 | | | | 275 | 303 | | | | | 1667 |
| 320 | 1069 | 772 | 824 | | | 260 | 275 | | | | | 1651 |
| 310 | 1015 | 708 | 818 | 599 | | 238 | 238 | | | | | 1619 |
| 300 | 933 | 622 | 791 | 594 | 389 | 212 | 189 | | | | | 1571 |
| 290 | 813 | 513 | 744 | 575 | 389 | 184 | 140 | | | 1367 | | 1502 |
| 280 | 660 | 388 | 675 | 542 | 383 | 155 | 97.7 | 993 | 1367 | 1359 | | 1423 |
| 270 | 466 | 264 | 579 | 498 | 370 | 124 | 51.1 | 993 | 1367 | 1327 | | 1328 |
| 260 | 257 | 140 | 465 | 443 | 348 | 94.3 | | 978 | 1348 | 1273 | | 1222 |
| 250 | 119 | 63.4 | 320 | 374 | 320 | 69.0 | | 943 | 1289 | 1210 | | 1117 |
| 240 | 58.1 | 3.7 | 174 | 294 | 282 | 48.1 | | 891 | 1214 | 1130 | | 1007 |
| 230 | | | 73.5 | 207 | 235 | 20.1 | | 789 | 1097 | 1024 | | 896 |
| 220 | | | 12.4 | 117 | 180 | | | 645 | 942 | 905 | | 793 |
| 210 | | | | 55.9 | 122 | | | 474 | 755 | 784 | | 700 |
| 200 | | | | | 73.6 | | | 324 | 576 | 663 | | 617 |
| 190 | | | | | 45.0 | | | 225 | 431 | 542 | | 533 |
| 180 | | | | | | | | 165 | 324 | 438 | | 458 |
| 170 | | | | | | | | 128 | 257 | 351 | | 398 |
| 160 | | | | | | | | 104 | 212 | 278 | | 351 |
| 150 | | | | | | | | 88.2 | 177 | 231 | | 312 |
| 140 | | | | | | | | 80.0 | 150 | 196 | | 269 |
| 130 | | | | | | | | 74.6 | 136 | 170 | | 222 |
| 120 | | | | | | | | 64.0 | 121 | 150 | | 194 |
| 110 | | | | | | | | 41.2 | 85.8 | 58.9 | | 179 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A2 | 2 | 3 | 3 | A3 | A3 | A3 | A3 | A5 | 5 | 5 | 4 |
| HMIN | 107 | 108 | 109 | 107 | | | | 187 | 239 | 240 | 258 | 268 |
| SCAT | 70.5 | 57.6 | 71.0 | 59.7 | | | | 58.8 | 45.6 | 58.6 | 64.3 | 55.0 |
| HMAXF | 345 | 340 | 356 | 337 | | | | 347 | 359 | 395 | 409 | 399 |
| SHMAX | 2104 | 2085 | 2403 | 1948 | | | | 1123 | 782 | 849 | 870 | 723 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | | | | | 1004 | |
| 400 | | | | | | | | | | 1004 | 1000 | 960 |
| 390 | | | | | | | | | | 1002 | 984 | 953 |
| 380 | | | | | | | | | | 988 | 954 | 931 |
| 370 | | | | | | | | | | 958 | 914 | 894 |
| 360 | | | 2032 | | | | | | 1143 | 911 | 861 | 841 |
| 350 | 1771 | 1938 | 2028 | | | | | 1316 | 1132 | 855 | 795 | 765 |
| 340 | 1768 | 1937 | 2005 | 1846 | | | | 1311 | 1094 | 782 | 711 | 676 |
| 330 | 1750 | 1922 | 1962 | 1839 | | | | 1287 | 1024 | 695 | 612 | 573 |
| 320 | 1715 | 1861 | 1897 | 1807 | | | | 1245 | 937 | 603 | 507 | 457 |
| 310 | 1660 | 1782 | 1812 | 1739 | | | | 1177 | 832 | 505 | 395 | 331 |
| 300 | 1587 | 1683 | 1707 | 1655 | | | | 1100 | 719 | 403 | 276 | 201 |
| 290 | 1501 | 1566 | 1585 | 1549 | | | | 1007 | 598 | 302 | 172 | 116 |
| 280 | 1393 | 1434 | 1449 | 1422 | | | | 899 | 467 | 209 | 102 | 60.7 |
| 270 | 1268 | 1289 | 1302 | 1281 | | | | 774 | 318 | 129 | 56.7 | 12.4 |
| 260 | 1123 | 1118 | 1133 | 1130 | | | | 643 | 170 | 79.8 | 12.4 | |
| 250 | 986 | 975 | 980 | 983 | | | | 510 | 77.0 | 48.3 | | |
| 240 | 859 | 847 | 846 | 833 | | | | 373 | 12.4 | .7 | | |
| 230 | 750 | 742 | 728 | 707 | | | | 262 | | | | |
| 220 | 661 | 657 | 634 | 602 | | | | 172 | | | | |
| 210 | 590 | 589 | 563 | 524 | | | | 104 | | | | |
| 200 | 534 | 533 | 504 | 469 | | | | 59.6 | | | | |
| 190 | 487 | 486 | 455 | 426 | | | | 19.0 | | | | |
| 180 | 444 | 442 | 410 | 389 | | | | | | | | |
| 170 | 401 | 397 | 367 | 350 | | | | | | | | |
| 160 | 359 | 355 | 326 | 311 | | | | | | | | |
| 150 | 319 | 317 | 289 | 276 | | | | | | | | |
| 140 | 282 | 279 | 254 | 236 | | | | | | | | |
| 130 | 243 | 240 | 221 | 206 | | | | | | | | |
| 120 | 213 | 209 | 206 | 190 | | | | | | | | |
| 110 | 180 | 139 | 74.1 | 163 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 2 | 2 | 2 | 4 | 4 | 4 | 2 | A2 | 2 | S1 |
| HMIN | 256 | 228 | 230 | 222 | 188 | 247 | 239 | 108 | 113 | 109 | 109 | |
| SCAT | 47.0 | 42.3 | 43.6 | 58.4 | 73.6 | 69.1 | 58.6 | 54.1 | 63.7 | 55.5 | 65.4 | |
| HMAXF | 372 | 337 | 332 | 342 | 346 | 404 | 365 | 298 | 313 | 309 | 325 | |
| SHMAX | 636 | 560 | 542 | 544 | 505 | 429 | 413 | 758 | 1470 | 1628 | 2045 | |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 439 | | | | | | |
| 400 | | | | | | 439 | | | | | | |
| 390 | | | | | | 435 | | | | | | |
| 380 | 982 | | | | | 426 | | | | | | |
| 370 | 982 | | | | | 412 | 532 | | | | | |
| 360 | 967 | | | | | 395 | 531 | | | | | |
| 350 | 928 | | | 716 | 508 | 373 | 523 | | | | | |
| 340 | 872 | 949 | 939 | 716 | 507 | 345 | 508 | | | | | |
| 330 | 788 | 943 | 938 | 708 | 502 | 312 | 484 | | | | 1876 | |
| 320 | 680 | 910 | 922 | 690 | 493 | 278 | 454 | | 1555 | | 1874 | |
| 310 | 556 | 852 | 882 | 660 | 478 | 243 | 415 | | 1555 | 1861 | 1852 | |
| 300 | 414 | 768 | 815 | 623 | 459 | 206 | 365 | 917 | 1539 | 1850 | 1809 | |
| 290 | 267 | 658 | 718 | 572 | 437 | 168 | 302 | 912 | 1505 | 1809 | 1737 | |
| 280 | 145 | 525 | 587 | 504 | 408 | 130 | 231 | 893 | 1451 | 1729 | 1652 | |
| 270 | 74.0 | 370 | 425 | 420 | 372 | 93.1 | 156 | 855 | 1371 | 1629 | 1542 | |
| 260 | 27.5 | 215 | 265 | 325 | 331 | 61.0 | 96.6 | 806 | 1275 | 1501 | 1418 | |
| 250 | | 111 | 125 | 227 | 285 | 19.9 | 53.1 | 738 | 1170 | 1350 | 1286 | |
| 240 | | 59.7 | 55.2 | 124 | 239 | | 6.1 | 654 | 1045 | 1150 | 1158 | |
| 230 | | 12.4 | | 56.5 | 194 | | | 559 | 889 | 947 | 1019 | |
| 220 | | | | | 146 | | | 458 | 718 | 752 | 882 | |
| 210 | | | | | 98.7 | | | 351 | 566 | 597 | 766 | |
| 200 | | | | | 58.7 | | | 258 | 437 | 480 | 665 | |
| 190 | | | | | 12.4 | | | 189 | 342 | 394 | 571 | |
| 180 | | | | | | | | 141 | 271 | 325 | 479 | |
| 170 | | | | | | | | 110 | 215 | 268 | 397 | |
| 160 | | | | | | | | 90.3 | 172 | 210 | 338 | |
| 150 | | | | | | | | 81.6 | 142 | 166 | 296 | |
| 140 | | | | | | | | 77.7 | 126 | 147 | 259 | |
| 130 | | | | | | | | 73.7 | 119 | 138 | 220 | |
| 120 | | | | | | | | 63.8 | 111 | 130 | 192 | |
| 110 | | | | | | | | 34.9 | | 43.8 | 134 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | S1 | 1 | S1 | S1 | S1 | A1 | A1 | A1 | 1 | 1 | 1 | 1 |
| HMIN | 109 | 109 | 110 | 109 | 109 | | | | 210 | 239 | 251 | 255 |
| SCAT | 66.3 | 60.3 | 55.4 | 70.1 | 62.1 | | | | 44.2 | 47.7 | 55.7 | 49.2 |
| HMAXF | 346 | 343 | 339 | 352 | 339 | | | | 364 | 371 | 389 | 365 |
| SHMAX | 2310 | 2192 | 2132 | 2368 | 1960 | | | | 783 | 778 | 809 | 677 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 1050 | |
| 380 | | | | | | | | | | 1096 | 1042 | |
| 370 | | | | | | | | | 1084 | 1096 | 1018 | 1038 |
| 360 | | | | 2112 | | | | | 1081 | 1081 | 974 | 1035 |
| 350 | 2016 | 2032 | | 2112 | | | | | 1055 | 1040 | 917 | 1014 |
| 340 | 2011 | 2031 | 2096 | 2098 | 1907 | | | | 998 | 975 | 845 | 970 |
| 330 | 1985 | 2009 | 2080 | 2062 | 1897 | | | | 919 | 893 | 746 | 905 |
| 320 | 1935 | 1960 | 2031 | 2000 | 1863 | | | | 827 | 796 | 636 | 815 |
| 310 | 1859 | 1878 | 1935 | 1926 | 1804 | | | | 726 | 683 | 516 | 702 |
| 300 | 1768 | 1771 | 1817 | 1825 | 1710 | | | | 613 | 557 | 383 | 561 |
| 290 | 1641 | 1641 | 1677 | 1704 | 1601 | | | | 493 | 434 | 259 | 386 |
| 280 | 1512 | 1486 | 1525 | 1571 | 1475 | | | | 381 | 301 | 156 | 222 |
| 270 | 1364 | 1324 | 1353 | 1400 | 1336 | | | | 278 | 182 | 87.9 | 105 |
| 260 | 1210 | 1148 | 1182 | 1224 | 1191 | | | | 194 | 101 | 47.5 | 45.6 |
| 250 | 1057 | 994 | 1016 | 1029 | 1045 | | | | 131 | 54.4 | | |
| 240 | 926 | 860 | 861 | 870 | 883 | | | | 89.8 | 5.8 | | |
| 230 | 814 | 748 | 735 | 733 | 735 | | | | 61.2 | | | |
| 220 | 722 | 662 | 636 | 623 | 607 | | | | 41.1 | | | |
| 210 | 643 | 594 | 557 | 534 | 505 | | | | | | | |
| 200 | 573 | 540 | 496 | 464 | 423 | | | | | | | |
| 190 | 506 | 492 | 447 | 409 | 355 | | | | | | | |
| 180 | 446 | 443 | 401 | 365 | 296 | | | | | | | |
| 170 | 392 | 393 | 358 | 325 | 244 | | | | | | | |
| 160 | 346 | 348 | 317 | 285 | 200 | | | | | | | |
| 150 | 306 | 307 | 275 | 240 | 177 | | | | | | | |
| 140 | 269 | 262 | 230 | 205 | 162 | | | | | | | |
| 130 | 238 | 220 | 198 | 180 | 154 | | | | | | | |
| 120 | 207 | 206 | 186 | 168 | 147 | | | | | | | |
| 110 | 55.6 | 92.8 | 12.4 | 64.6 | 58.9 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 19 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 2 | 2 | 2 | 1 | 1 | S1 | 1 | 1 | 1 | A1 |
| HMIN | 231 | 229 | 216 | 203 | 205 | 217 | 235 | 108 | 108 | 108 | 109 | |
| SCAT | 48.5 | 51.2 | 49.9 | 50.3 | 68.2 | 70.3 | 50.6 | 40.1 | 48.0 | 77.3 | 68.2 | |
| HMAXF | 347 | 338 | 323 | 306 | 352 | 363 | 347 | 259 | 265 | 321 | 326 | |
| SHMAX | 594 | 585 | 536 | 371 | 411 | 368 | 325 | 632 | 823 | 1622 | 2045 | |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 403 | | | | | | |
| 360 | | | | | 446 | 403 | | | | | | |
| 350 | 917 | | | | 446 | 400 | 477 | | | | | |
| 340 | 913 | 917 | | | 443 | 393 | 474 | | | | | |
| 330 | 890 | 912 | 834 | | 434 | 381 | 463 | | | 1446 | 1907 | |
| 320 | 847 | 890 | 833 | | 421 | 367 | 442 | | | 1446 | 1903 | |
| 310 | 787 | 851 | 819 | 573 | 402 | 349 | 417 | | | 1439 | 1882 | |
| 300 | 704 | 799 | 787 | 572 | 380 | 324 | 374 | | | 1420 | 1840 | |
| 290 | 584 | 704 | 742 | 560 | 353 | 292 | 321 | | | 1388 | 1776 | |
| 280 | 445 | 575 | 675 | 536 | 320 | 251 | 254 | | | 1345 | 1697 | |
| 270 | 305 | 420 | 579 | 502 | 280 | 207 | 184 | | 1131 | 1286 | 1594 | |
| 260 | 177 | 255 | 455 | 456 | 236 | 162 | 120 | 1050 | 1128 | 1222 | 1466 | |
| 250 | 90.8 | 122 | 306 | 392 | 192 | 112 | 68.3 | 1035 | 1103 | 1145 | 1316 | |
| 240 | 48.6 | 57.7 | 179 | 306 | 143 | 74.7 | 32.2 | 987 | 1054 | 1040 | 1153 | |
| 230 | | 4.5 | 86.1 | 200 | 96.3 | 48.5 | | 909 | 980 | 916 | 978 | |
| 220 | | | 38.8 | 103 | 60.2 | 12.4 | | 792 | 876 | 787 | 823 | |
| 210 | | | | 48.1 | 28.8 | | | 622 | 732 | 652 | 692 | |
| 200 | | | | | | | | 430 | 566 | 541 | 585 | |
| 190 | | | | | | | | 282 | 425 | 450 | 497 | |
| 180 | | | | | | | | 197 | 319 | 374 | 431 | |
| 170 | | | | | | | | 149 | 246 | 311 | 377 | |
| 160 | | | | | | | | 120 | 198 | 257 | 331 | |
| 150 | | | | | | | | 99.4 | 165 | 211 | 286 | |
| 140 | | | | | | | | 85.3 | 140 | 176 | 244 | |
| 130 | | | | | | | | 70.0 | 123 | 158 | 208 | |
| 120 | | | | | | | | 62.8 | 115 | 149 | 189 | |
| 110 | | | | | | | | 32.2 | 65.9 | 118 | 64.6 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 19 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| HMIN | 108 | 109 | 108 | 109 | 108 | 109 | 199 | 199 | 219 | 220 | 277 | 258 |
| SCAT | 61.9 | 61.7 | 62.1 | 59.7 | 54.8 | 69.8 | 67.3 | 49.7 | 58.9 | 52.6 | 42.6 | 50.3 |
| HMAXF | 339 | 342 | 351 | 349 | 328 | 328 | 345 | 338 | 376 | 354 | 377 | 378 |
| SHMAX | 2292 | 2256 | 2320 | 2271 | 1984 | 1785 | 1250 | 855 | 802 | 662 | 467 | 540 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 960 | | 754 | 794 |
| 370 | | | | | | | | | 958 | | 749 | 789 |
| 360 | | | 2080 | | | | | | 942 | 875 | 723 | 769 |
| 350 | | 2032 | 2079 | 2161 | | | 1406 | | 913 | 874 | 674 | 734 |
| 340 | 2144 | 2031 | 2063 | 2149 | | | 1404 | 1143 | 869 | 859 | 609 | 687 |
| 330 | 2134 | 2012 | 2013 | 2108 | 2144 | 1756 | 1388 | 1135 | 813 | 828 | 530 | 613 |
| 320 | 2096 | 1966 | 1931 | 2037 | 2133 | 1750 | 1357 | 1106 | 740 | 781 | 441 | 520 |
| 310 | 2030 | 1892 | 1836 | 1932 | 2087 | 1725 | 1306 | 1048 | 655 | 720 | 352 | 409 |
| 300 | 1939 | 1791 | 1721 | 1802 | 2001 | 1683 | 1251 | 974 | 563 | 646 | 243 | 299 |
| 290 | 1819 | 1667 | 1584 | 1640 | 1883 | 1619 | 1171 | 890 | 462 | 560 | 136 | 192 |
| 280 | 1664 | 1517 | 1435 | 1457 | 1728 | 1548 | 1075 | 792 | 359 | 465 | 41.8 | 111 |
| 270 | 1488 | 1358 | 1269 | 1262 | 1556 | 1448 | 956 | 677 | 249 | 368 | | 59.6 |
| 260 | 1309 | 1206 | 1094 | 1095 | 1350 | 1333 | 809 | 558 | 167 | 265 | | 12.4 |
| 250 | 1119 | 1066 | 947 | 931 | 1151 | 1193 | 647 | 422 | 111 | 169 | | |
| 240 | 965 | 928 | 816 | 790 | 947 | 1035 | 481 | 277 | 70.2 | 94.4 | | |
| 230 | 827 | 807 | 705 | 671 | 765 | 877 | 332 | 173 | 44.5 | 50.9 | | |
| 220 | 710 | 710 | 620 | 581 | 615 | 700 | 187 | 96.2 | 2.8 | | | |
| 210 | 622 | 638 | 555 | 515 | 498 | 532 | 81.0 | 53.0 | | | | |
| 200 | 554 | 579 | 505 | 466 | 425 | 400 | 12.4 | 6.1 | | | | |
| 190 | 497 | 526 | 467 | 427 | 374 | 302 | | | | | | |
| 180 | 448 | 473 | 433 | 391 | 332 | 239 | | | | | | |
| 170 | 403 | 418 | 398 | 354 | 293 | 195 | | | | | | |
| 160 | 361 | 368 | 358 | 315 | 256 | 161 | | | | | | |
| 150 | 321 | 326 | 318 | 276 | 221 | 132 | | | | | | |
| 140 | 282 | 288 | 280 | 241 | 192 | 115 | | | | | | |
| 130 | 239 | 253 | 245 | 214 | 171 | 107 | | | | | | |
| 120 | 212 | 227 | 215 | 192 | 155 | 102 | | | | | | |
| 110 | 171 | 106 | 173 | 105 | 132 | 78.9 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 20 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A1 | 1 | 1 | 1 |
| HMIN | 235 | 214 | 203 | 194 | 198 | 195 | 265 | 108 | 109 | 108 | 109 | 108 |
| SCAT | 44.7 | 39.4 | 44.6 | 46.0 | 54.0 | 61.9 | 45.9 | 45.7 | 44.7 | 71.0 | 67.6 | 73.3 |
| HMAXF | 343 | 306 | 296 | 293 | 313 | 342 | 355 | 266 | 278 | 304 | 312 | 331 |
| SHMAX | 517 | 418 | 407 | 270 | 202 | 195 | 161 | 568 | 943 | 1467 | 1632 | 1939 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | 262 | | | | | |
| 350 | 854 | | | | | 219 | 262 | | | | | |
| 340 | 854 | | | | | 219 | 255 | | | | | 1654 |
| 330 | 837 | | | | | 217 | 243 | | | | | 1654 |
| 320 | 799 | | | | 274 | 212 | 224 | | | | 1555 | 1645 |
| 310 | 740 | 784 | | | 274 | 204 | 199 | | | 1446 | 1555 | 1620 |
| 300 | 657 | 779 | 716 | 446 | 270 | 193 | 167 | | | 1445 | 1543 | 1579 |
| 290 | 545 | 751 | 713 | 446 | 261 | 181 | 129 | | | 1432 | 1514 | 1520 |
| 280 | 410 | 699 | 694 | 437 | 248 | 164 | 87.9 | | 1240 | 1404 | 1468 | 1455 |
| 270 | 273 | 618 | 655 | 418 | 231 | 145 | 43.6 | 824 | 1231 | 1362 | 1397 | 1368 |
| 260 | 153 | 511 | 602 | 391 | 208 | 124 | | 820 | 1191 | 1299 | 1314 | 1264 |
| 250 | 78.1 | 378 | 519 | 349 | 179 | 103 | | 798 | 1119 | 1228 | 1219 | 1141 |
| 240 | 35.0 | 215 | 400 | 284 | 147 | 83.6 | | 758 | 1018 | 1151 | 1116 | 1015 |
| 230 | | 102 | 251 | 211 | 113 | 65.7 | | 695 | 891 | 1043 | 994 | 890 |
| 220 | | 48.4 | 125 | 130 | 80.6 | 51.2 | | 603 | 739 | 907 | 860 | 777 |
| 210 | | | 53.5 | 74.2 | 52.7 | 39.3 | | 488 | 597 | 746 | 722 | 676 |
| 200 | | | | 38.8 | 12.4 | 12.4 | | 367 | 481 | 601 | 602 | 591 |
| 190 | | | | | | | | 268 | 392 | 475 | 502 | 517 |
| 180 | | | | | | | | 190 | 321 | 381 | 421 | 454 |
| 170 | | | | | | | | 141 | 263 | 311 | 358 | 400 |
| 160 | | | | | | | | 110 | 215 | 253 | 309 | 353 |
| 150 | | | | | | | | 90.6 | 177 | 204 | 266 | 308 |
| 140 | | | | | | | | 80.4 | 148 | 167 | 224 | 257 |
| 130 | | | | | | | | 74.1 | 127 | 155 | 195 | 218 |
| 120 | | | | | | | | 64.1 | 116 | 148 | 180 | 204 |
| 110 | | | | | | | | 34.9 | 80.1 | 67.3 | 41.8 | 156 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 20 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | A1 | A3 | A3 | A3 | 2 | 2 | 2 | 1 |
| HMIN | 109 | 108 | 106 | 106 | 108 | 106 | | 187 | 221 | 249 | 266 | 249 |
| SCAT | 66.9 | 69.4 | 67.7 | 70.3 | 62.1 | 62.9 | | 56.7 | 56.2 | 62.1 | 54.2 | 37.3 |
| HMAXF | 335 | 346 | 347 | 354 | 340 | 324 | | 343 | 393 | 393 | 389 | 340 |
| SHMAX | 1908 | 2047 | 2094 | 2202 | 1931 | 1691 | | 926 | 837 | 871 | 733 | 540 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | 960 | 1050 | | |
| 390 | | | | | | | | | 960 | 1049 | 1004 | |
| 380 | | | | | | | | | 948 | 1038 | 997 | |
| 370 | | | | | | | | | 921 | 1013 | 973 | |
| 360 | | | | 1861 | | | | | 875 | 974 | 932 | |
| 350 | | 1727 | 1786 | 1859 | | | | 1096 | 818 | 924 | 875 | |
| 340 | 1669 | 1723 | 1781 | 1843 | 1846 | | | 1095 | 751 | 855 | 796 | 1050 |
| 330 | 1666 | 1703 | 1757 | 1808 | 1834 | 1756 | | 1082 | 675 | 763 | 695 | 1032 |
| 320 | 1648 | 1664 | 1714 | 1749 | 1799 | 1755 | | 1051 | 591 | 659 | 576 | 974 |
| 310 | 1611 | 1600 | 1647 | 1682 | 1733 | 1735 | | 1004 | 500 | 545 | 451 | 883 |
| 300 | 1555 | 1530 | 1560 | 1589 | 1656 | 1694 | | 938 | 410 | 424 | 317 | 758 |
| 290 | 1471 | 1439 | 1459 | 1477 | 1550 | 1627 | | 859 | 323 | 300 | 176 | 593 |
| 280 | 1376 | 1333 | 1346 | 1353 | 1421 | 1549 | | 770 | 250 | 184 | 88.1 | 387 |
| 270 | 1271 | 1200 | 1215 | 1218 | 1278 | 1442 | | 673 | 190 | 101 | 38.8 | 202 |
| 260 | 1142 | 1065 | 1074 | 1082 | 1108 | 1306 | | 573 | 140 | 55.0 | | 79.3 |
| 250 | 1017 | 938 | 934 | 941 | 955 | 1169 | | 464 | 101 | 5.8 | | 12.4 |
| 240 | 891 | 821 | 811 | 807 | 809 | 1013 | | 359 | 70.4 | | | |
| 230 | 779 | 721 | 709 | 693 | 683 | 831 | | 261 | 45.5 | | | |
| 220 | 685 | 637 | 624 | 602 | 576 | 636 | | 172 | | | | |
| 210 | 610 | 571 | 560 | 534 | 493 | 485 | | 110 | | | | |
| 200 | 551 | 520 | 512 | 480 | 429 | 377 | | 63.0 | | | | |
| 190 | 501 | 476 | 473 | 434 | 379 | 303 | | 19.6 | | | | |
| 180 | 454 | 437 | 437 | 392 | 336 | 248 | | | | | | |
| 170 | 406 | 396 | 398 | 352 | 297 | 206 | | | | | | |
| 160 | 359 | 353 | 356 | 315 | 262 | 174 | | | | | | |
| 150 | 315 | 312 | 316 | 278 | 227 | 151 | | | | | | |
| 140 | 265 | 272 | 280 | 243 | 195 | 135 | | | | | | |
| 130 | 218 | 229 | 247 | 212 | 176 | 124 | | | | | | |
| 120 | 205 | 209 | 223 | 189 | 167 | 117 | | | | | | |
| 110 | 84.9 | 171 | 162 | 151 | 134 | 97.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | A2 | 2 | A2 | A2 |
| HMIN | 219 | 203 | 209 | 189 | 197 | 228 | 235 | 112 | 108 | 108 | | |
| SCAT | 56.0 | 51.4 | 32.4 | 49.7 | 57.0 | 58.9 | 46.4 | 51.5 | 46.9 | 74.0 | | |
| HMAXF | 330 | 321 | 286 | 282 | 335 | 346 | 330 | 259 | 268 | 322 | | |
| SHMAX | 696 | 564 | 322 | 301 | 246 | 208 | 192 | 547 | 862 | 1606 | | |
| KM | | | | | | | | | | | | |
| 350 | | | | | | 268 | | | | | | |
| 340 | 1004 | | | | 298 | 268 | 310 | | | | | |
| 330 | 1004 | 824 | | | 297 | 263 | 310 | | | 1446 | | |
| 320 | 996 | 824 | | | 292 | 254 | 306 | | | 1446 | | |
| 310 | 972 | 814 | | | 282 | 244 | 295 | | | 1436 | | |
| 300 | 930 | 788 | | | 268 | 230 | 277 | | | 1413 | | |
| 290 | 876 | 750 | 735 | 492 | 249 | 210 | 252 | | | 1377 | | |
| 280 | 799 | 692 | 729 | 492 | 227 | 182 | 219 | | | 1325 | | |
| 270 | 685 | 617 | 691 | 485 | 200 | 149 | 177 | | 1096 | 1260 | | |
| 260 | 545 | 519 | 619 | 468 | 172 | 116 | 129 | 784 | 1089 | 1188 | | |
| 250 | 362 | 400 | 505 | 447 | 142 | 83.5 | 76.5 | 777 | 1057 | 1101 | | |
| 240 | 190 | 275 | 355 | 408 | 114 | 52.6 | 36.2 | 756 | 999 | 990 | | |
| 230 | 80.3 | 162 | 172 | 350 | 87.7 | 12.4 | | 725 | 920 | 868 | | |
| 220 | 12.4 | 83.5 | 75.8 | 269 | 64.1 | | | 675 | 823 | 738 | | |
| 210 | | 44.7 | 12.4 | 161 | 44.8 | | | 587 | 715 | 617 | | |
| 200 | | | | 72.9 | 12.4 | | | 466 | 596 | 516 | | |
| 190 | | | | 12.4 | | | | 328 | 480 | 436 | | |
| 180 | | | | | | | | 220 | 386 | 368 | | |
| 170 | | | | | | | | 152 | 310 | 311 | | |
| 160 | | | | | | | | 113 | 249 | 261 | | |
| 150 | | | | | | | | 92.9 | 201 | 218 | | |
| 140 | | | | | | | | 81.9 | 167 | 180 | | |
| 130 | | | | | | | | 76.7 | 143 | 158 | | |
| 120 | | | | | | | | 71.3 | 133 | 149 | | |
| 110 | | | | | | | | | 102 | 114 | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 2 | 2 | 2 | 2 | 2 | A3 | 3 | 3 | 3 | 3 | 3 | 2 |
| HMIN | 109 | 107 | 109 | 109 | 109 | | 198 | 199 | 212 | 240 | 254 | 246 |
| SCAT | 68.5 | 68.7 | 53.2 | 50.5 | 65.4 | | 57.7 | 60.5 | 54.5 | 45.2 | 47.1 | 50.1 |
| HMAXF | 341 | 356 | 351 | 333 | 344 | | 340 | 356 | 371 | 371 | 373 | 366 |
| SHMAX | 2316 | 2433 | 2199 | 2112 | 2275 | | 1344 | 1228 | 956 | 821 | 802 | 831 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 1143 | 1240 | 1215 | |
| 370 | | | | | | | | | 1143 | 1240 | 1214 | 1215 |
| 360 | | 2032 | 2161 | | | | | 1433 | 1132 | 1221 | 1194 | 1211 |
| 350 | 2032 | 2028 | 2161 | | 2144 | | | 1429 | 1102 | 1172 | 1146 | 1183 |
| 340 | 2032 | 2004 | 2139 | 2294 | 2142 | | 1669 | 1408 | 1049 | 1094 | 1073 | 1131 |
| 330 | 2020 | 1958 | 2079 | 2292 | 2120 | | 1657 | 1367 | 982 | 981 | 965 | 1057 |
| 320 | 1986 | 1888 | 1972 | 2257 | 2073 | | 1620 | 1302 | 902 | 847 | 834 | 951 |
| 310 | 1931 | 1793 | 1831 | 2177 | 1997 | | 1558 | 1224 | 810 | 698 | 680 | 821 |
| 300 | 1848 | 1680 | 1671 | 2043 | 1908 | | 1474 | 1127 | 705 | 536 | 514 | 663 |
| 290 | 1752 | 1560 | 1490 | 1876 | 1781 | | 1365 | 1006 | 600 | 380 | 355 | 503 |
| 280 | 1632 | 1424 | 1298 | 1684 | 1635 | | 1222 | 870 | 491 | 243 | 199 | 331 |
| 270 | 1496 | 1285 | 1134 | 1478 | 1476 | | 1067 | 726 | 384 | 138 | 94.7 | 180 |
| 260 | 1349 | 1142 | 972 | 1255 | 1308 | | 896 | 570 | 286 | 76.9 | 46.5 | 85.5 |
| 250 | 1197 | 1008 | 831 | 1064 | 1147 | | 702 | 422 | 205 | 46.3 | | 38.8 |
| 240 | 1041 | 886 | 719 | 874 | 967 | | 504 | 294 | 140 | 1.5 | | |
| 230 | 903 | 781 | 633 | 713 | 795 | | 322 | 192 | 79.9 | | | |
| 220 | 782 | 688 | 566 | 597 | 649 | | 173 | 117 | 44.1 | | | |
| 210 | 676 | 608 | 515 | 518 | 531 | | 79.8 | 67.8 | | | | |
| 200 | 586 | 541 | 471 | 459 | 443 | | 21.2 | 12.4 | | | | |
| 190 | 511 | 483 | 431 | 411 | 378 | | | | | | | |
| 180 | 446 | 435 | 390 | 369 | 329 | | | | | | | |
| 170 | 392 | 393 | 346 | 329 | 285 | | | | | | | |
| 160 | 348 | 355 | 306 | 291 | 247 | | | | | | | |
| 150 | 311 | 315 | 272 | 250 | 217 | | | | | | | |
| 140 | 276 | 278 | 242 | 215 | 190 | | | | | | | |
| 130 | 238 | 244 | 204 | 196 | 165 | | | | | | | |
| 120 | 210 | 213 | 187 | 186 | 152 | | | | | | | |
| 110 | 147 | 164 | 54.8 | 110 | 110 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 2 | 2 | 2 | 2 | 2 | 1 | 1 | S1 | 2 | 2 | R2 | 2 |
| HMIN | 219 | 210 | 201 | 193 | 209 | 226 | 218 | 209 | 107 | 109 | | 108 |
| SCAT | 39.8 | 39.5 | 37.2 | 47.2 | 79.0 | 46.5 | 47.9 | 44.3 | 55.3 | 52.2 | | 68.7 |
| HMAXF | 317 | 301 | 283 | 303 | 384 | 327 | 317 | 276 | 268 | 296 | | 340 |
| SHMAX | 615 | 567 | 395 | 308 | 391 | 212 | 249 | 411 | 803 | 1071 | | 2300 |
| KM | | | | | | | | | | | | |
| 390 | | | | | 362 | | | | | | | |
| 380 | | | | | 361 | | | | | | | |
| 370 | | | | | 359 | | | | | | | |
| 360 | | | | | 353 | | | | | | | |
| 350 | | | | | 345 | | | | | | | |
| 340 | | | | | 333 | | | | | | | 2032 |
| 330 | | | | | 318 | 335 | | | | | | 2022 |
| 320 | 1131 | | | | 302 | 334 | 389 | | | | | 1990 |
| 310 | 1123 | 1084 | | 477 | 283 | 325 | 387 | | | | | 1937 |
| 300 | 1081 | 1084 | | 476 | 259 | 308 | 376 | | | 1143 | | 1859 |
| 290 | 1007 | 1063 | 794 | 468 | 231 | 285 | 357 | | | 1139 | | 1767 |
| 280 | 889 | 1009 | 792 | 449 | 200 | 252 | 331 | 834 | | 1115 | | 1646 |
| 270 | 734 | 918 | 768 | 420 | 169 | 210 | 294 | 830 | 1004 | 1068 | | 1511 |
| 260 | 538 | 781 | 714 | 379 | 138 | 161 | 247 | 806 | 1000 | 1003 | | 1366 |
| 250 | 334 | 602 | 633 | 326 | 109 | 105 | 193 | 764 | 979 | 921 | | 1212 |
| 240 | 171 | 378 | 513 | 262 | 80.8 | 65.2 | 131 | 697 | 939 | 834 | | 1064 |
| 230 | 75.7 | 190 | 368 | 188 | 57.8 | 26.8 | 72.5 | 576 | 886 | 744 | | 922 |
| 220 | 12.4 | 77.3 | 212 | 117 | 40.9 | | 21.2 | 311 | 818 | 656 | | 792 |
| 210 | | 2.0 | 74.1 | 71.1 | 5.1 | | | 38.9 | 731 | 575 | | 676 |
| 200 | | | | 41.3 | | | | | 626 | 503 | | 573 |
| 190 | | | | | | | | | 489 | 439 | | 492 |
| 180 | | | | | | | | | 345 | 372 | | 426 |
| 170 | | | | | | | | | 237 | 299 | | 377 |
| 160 | | | | | | | | | 182 | 231 | | 337 |
| 150 | | | | | | | | | 139 | 174 | | 302 |
| 140 | | | | | | | | | 117 | 146 | | 265 |
| 130 | | | | | | | | | 108 | 138 | | 224 |
| 120 | | | | | | | | | 103 | 132 | | 193 |
| 110 | | | | | | | | | 97.4 | 105 | | 164 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 2 | 2 | 3 | 3 | A3 | A3 | A3 | A3 | A3 | 3 | 3 | 3 |
| HMIN | 109 | 109 | 108 | 107 | 108 | | | | 210 | 218 | 255 | 264 |
| SCAT | 63.1 | 63.4 | 65.2 | 60.1 | 59.4 | | | | 57.7 | 57.8 | 52.6 | 44.7 |
| HMAXF | 342 | 342 | 346 | 341 | 336 | | | | 373 | 375 | 390 | 374 |
| SHMAX | 2392 | 2349 | 2463 | 2318 | 2116 | | | | 915 | 961 | 790 | 710 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | 1050 | |
| 390 | | | | | | | | | | | 1050 | |
| 380 | | | | | | | | | 1050 | 1143 | 1040 | 1143 |
| 370 | | | | | | | | | 1049 | 1140 | 1011 | 1141 |
| 360 | | | | | | | | | 1037 | 1123 | 962 | 1115 |
| 350 | 2227 | 2161 | 2277 | 2260 | | | | | 1009 | 1086 | 896 | 1057 |
| 340 | 2226 | 2160 | 2272 | 2260 | 2112 | | | | 958 | 1032 | 815 | 977 |
| 330 | 2208 | 2142 | 2243 | 2242 | 2107 | | | | 900 | 966 | 717 | 867 |
| 320 | 2161 | 2097 | 2187 | 2193 | 2075 | | | | 836 | 886 | 605 | 729 |
| 310 | 2072 | 2024 | 2097 | 2106 | 2009 | | | | 760 | 788 | 485 | 572 |
| 300 | 1971 | 1921 | 1991 | 1998 | 1917 | | | | 675 | 675 | 364 | 394 |
| 290 | 1849 | 1797 | 1859 | 1856 | 1796 | | | | 579 | 561 | 235 | 219 |
| 280 | 1700 | 1650 | 1693 | 1687 | 1649 | | | | 478 | 448 | 136 | 106 |
| 270 | 1530 | 1482 | 1508 | 1495 | 1486 | | | | 378 | 332 | 72.6 | 47.0 |
| 260 | 1346 | 1300 | 1310 | 1297 | 1305 | | | | 281 | 228 | 33.1 | |
| 250 | 1144 | 1113 | 1108 | 1105 | 1137 | | | | 190 | 149 | | |
| 240 | 980 | 968 | 941 | 927 | 960 | | | | 123 | 93.2 | | |
| 230 | 836 | 838 | 796 | 778 | 802 | | | | 77.4 | 54.7 | | |
| 220 | 713 | 725 | 674 | 654 | 665 | | | | 47.1 | 12.4 | | |
| 210 | 609 | 633 | 577 | 560 | 556 | | | | 1.1 | | | |
| 200 | 530 | 557 | 506 | 489 | 469 | | | | | | | |
| 190 | 471 | 491 | 451 | 433 | 399 | | | | | | | |
| 180 | 428 | 433 | 408 | 386 | 344 | | | | | | | |
| 170 | 390 | 384 | 369 | 346 | 297 | | | | | | | |
| 160 | 354 | 343 | 333 | 308 | 255 | | | | | | | |
| 150 | 317 | 308 | 298 | 274 | 218 | | | | | | | |
| 140 | 278 | 274 | 263 | 243 | 185 | | | | | | | |
| 130 | 241 | 240 | 233 | 215 | 162 | | | | | | | |
| 120 | 211 | 211 | 210 | 193 | 151 | | | | | | | |
| 110 | 74.1 | 162 | 168 | 162 | 128 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 23 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 54 | A1 | A1 | A1 | 1 |
| HMIN | 228 | 229 | 186 | 180 | 196 | 299 | 280 | 189 | | | 109 | 108 |
| SCAT | 40.0 | 41.7 | 34.1 | 48.0 | 69.9 | 68.7 | 72.3 | 44.4 | | | 61.3 | 77.8 |
| HMAXF | 339 | 328 | 262 | 276 | 336 | 447 | 416 | 284 | | | 322 | 344 |
| SHMAX | 640 | 617 | 412 | 227 | 140 | 141 | 202 | 458 | | | 1505 | 2030 |
| KM | | | | | | | | | | | | |
| 450 | | | | | | 148 | | | | | | |
| 440 | | | | | | 147 | | | | | | |
| 430 | | | | | | 145 | | | | | | |
| 420 | | | | | | 141 | 214 | | | | | |
| 410 | | | | | | 136 | 213 | | | | | |
| 400 | | | | | | 130 | 211 | | | | | |
| 390 | | | | | | 123 | 207 | | | | | |
| 380 | | | | | | 114 | 201 | | | | | |
| 370 | | | | | | 102 | 192 | | | | | |
| 360 | | | | | | 88.4 | 182 | | | | | |
| 350 | | | | | | 74.5 | 170 | | | | | 1654 |
| 340 | 1084 | | | | 148 | 61.5 | 155 | | | | | 1653 |
| 330 | 1070 | 1096 | | | 147 | 50.7 | 139 | | | | 1446 | 1641 |
| 320 | 1020 | 1086 | | | 146 | 41.8 | 119 | | | | 1446 | 1614 |
| 310 | 939 | 1046 | | | 142 | 23.0 | 95.9 | | | | 1433 | 1575 |
| 300 | 828 | 974 | | | 136 | 1.8 | 70.2 | | | | 1401 | 1519 |
| 290 | 700 | 869 | | | 130 | | 45.3 | 794 | | | 1350 | 1461 |
| 280 | 554 | 723 | | 362 | 123 | | 2.2 | 792 | | | 1278 | 1379 |
| 270 | 403 | 553 | 917 | 360 | 114 | | | 774 | | | 1190 | 1280 |
| 260 | 236 | 363 | 916 | 351 | 104 | | | 735 | | | 1080 | 1173 |
| 250 | 118 | 182 | 888 | 335 | 92.5 | | | 681 | | | 957 | 1058 |
| 240 | 60.5 | 76.6 | 824 | 313 | 80.2 | | | 593 | | | 828 | 933 |
| 230 | 12.4 | 12.4 | 709 | 280 | 67.1 | | | 469 | | | 706 | 810 |
| 220 | | | 540 | 235 | 54.7 | | | 331 | | | 599 | 695 |
| 210 | | | 329 | 181 | 42.5 | | | 189 | | | 514 | 594 |
| 200 | | | 139 | 110 | 12.4 | | | 81.8 | | | 452 | 508 |
| 190 | | | 45.7 | 55.3 | | | | 12.4 | | | 404 | 439 |
| 180 | | | | | | | | | | | 365 | 386 |
| 170 | | | | | | | | | | | 329 | 347 |
| 160 | | | | | | | | | | | 291 | 317 |
| 150 | | | | | | | | | | | 251 | 289 |
| 140 | | | | | | | | | | | 218 | 256 |
| 130 | | | | | | | | | | | 189 | 221 |
| 120 | | | | | | | | | | | 169 | 193 |
| 110 | | | | | | | | | | | 58.9 | 139 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 23 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | 1 | A3 | A3 | A3 | A5 | A5 | A5 | 5 |
| HMIN | 109 | 109 | 106 | 109 | 109 | | | 193 | 222 | | | 283 |
| SCAT | 54.9 | 56.0 | 59.3 | 58.1 | 62.3 | | | 50.7 | 51.1 | | | 42.2 |
| HMAXF | 319 | 328 | 330 | 325 | 320 | | | 333 | 367 | | | 400 |
| SHMAX | 1697 | 1766 | 1744 | 1570 | 1481 | | | 661 | 580 | | | 498 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | 794 |
| 390 | | | | | | | | | | | | 784 |
| 380 | | | | | | | | | | | | 750 |
| 370 | | | | | | | | | 754 | | | 693 |
| 360 | | | | | | | | | 751 | | | 621 |
| 350 | | | | | | | | | 734 | | | 535 |
| 340 | | | 1669 | | | | | 875 | 699 | | | 435 |
| 330 | | 1786 | 1669 | 1555 | 1487 | | | 874 | 652 | | | 328 |
| 320 | 1786 | 1776 | 1656 | 1553 | 1487 | | | 862 | 596 | | | 222 |
| 310 | 1775 | 1737 | 1620 | 1530 | 1476 | | | 831 | 529 | | | 137 |
| 300 | 1735 | 1671 | 1560 | 1485 | 1447 | | | 782 | 452 | | | 76.9 |
| 290 | 1664 | 1570 | 1473 | 1410 | 1392 | | | 720 | 374 | | | 41.9 |
| 280 | 1562 | 1451 | 1365 | 1316 | 1335 | | | 647 | 295 | | | |
| 270 | 1432 | 1300 | 1238 | 1207 | 1251 | | | 563 | 219 | | | |
| 260 | 1281 | 1157 | 1113 | 1082 | 1137 | | | 473 | 152 | | | |
| 250 | 1120 | 998 | 968 | 947 | 1007 | | | 383 | 98.4 | | | |
| 240 | 934 | 833 | 825 | 813 | 866 | | | 286 | 62.1 | | | |
| 230 | 757 | 688 | 694 | 691 | 736 | | | 183 | 37.2 | | | |
| 220 | 614 | 572 | 587 | 584 | 613 | | | 113 | | | | |
| 210 | 514 | 496 | 508 | 495 | 502 | | | 68.5 | | | | |
| 200 | 452 | 442 | 451 | 426 | 411 | | | 40.8 | | | | |
| 190 | 411 | 401 | 411 | 377 | 342 | | | | | | | |
| 180 | 381 | 367 | 377 | 339 | 295 | | | | | | | |
| 170 | 353 | 335 | 345 | 301 | 257 | | | | | | | |
| 160 | 322 | 302 | 313 | 279 | 225 | | | | | | | |
| 150 | 287 | 266 | 279 | 248 | 196 | | | | | | | |
| 140 | 250 | 230 | 245 | 218 | 168 | | | | | | | |
| 130 | 214 | 199 | 213 | 189 | 147 | | | | | | | |
| 120 | 190 | 186 | 192 | 170 | 135 | | | | | | | |
| 110 | 106 | 74.1 | 168 | 80.9 | 97.2 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 24 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 5 | 5 | 5 | 5 | 5 | 85 | 5 | 5 | 2 | 2 | 2 | A4 |
| HMIN | 243 | 216 | 193 | 185 | 334 | 341 | 287 | 222 | 106 | 108 | 106 | |
| SCAT | 42.3 | 34.4 | 35.4 | 44.7 | 71.4 | 88.9 | 79.4 | 27.1 | 47.3 | 46.9 | 71.4 | |
| HMAXF | 350 | 301 | 264 | 262 | 464 | 516 | 425 | 281 | 278 | 289 | 322 | |
| SHMAX | 567 | 443 | 275 | 117 | 93 | 133 | 199 | 243 | 818 | 1105 | 1666 | |
| KM | | | | | | | | | | | | |
| 520 | | | | | | 112 | | | | | | |
| 510 | | | | | | 111 | | | | | | |
| 500 | | | | | | 111 | | | | | | |
| 490 | | | | | | 109 | | | | | | |
| 480 | | | | | | 107 | | | | | | |
| 470 | | | | | 101 | 104 | | | | | | |
| 460 | | | | | 101 | 101 | | | | | | |
| 450 | | | | | 99.8 | 96.1 | | | | | | |
| 440 | | | | | 98.0 | 90.3 | | | | | | |
| 430 | | | | | 94.1 | 84.5 | 198 | | | | | |
| 420 | | | | | 89.7 | 77.9 | 198 | | | | | |
| 410 | | | | | 85.3 | 71.2 | 197 | | | | | |
| 400 | | | | | 79.5 | 63.8 | 194 | | | | | |
| 390 | | | | | 72.9 | 56.5 | 189 | | | | | |
| 380 | | | | | 65.5 | 49.3 | 183 | | | | | |
| 370 | | | | | 57.6 | 42.7 | 174 | | | | | |
| 360 | | | | | 49.3 | 30.2 | 165 | | | | | |
| 350 | 960 | | | | 40.6 | 14.0 | 155 | | | | | |
| 340 | 947 | | | | 15.0 | | 143 | | | | | |
| 330 | 906 | | | | | | 128 | | | | 1528 | |
| 320 | 840 | | | | | | 108 | | | | 1528 | |
| 310 | 747 | 928 | | | | | 85.9 | | | | 1518 | |
| 300 | 629 | 928 | | | | | 59.4 | | | | 1492 | |
| 290 | 493 | 900 | | | | | 18.7 | 679 | | 1341 | 1452 | |
| 280 | 330 | 841 | | | | | | 679 | 1050 | 1329 | 1394 | |
| 270 | 174 | 736 | 608 | 208 | | | | 651 | 1042 | 1286 | 1331 | |
| 260 | 89.7 | 593 | 605 | 208 | | | | 577 | 1011 | 1208 | 1242 | |
| 250 | 44.7 | 420 | 583 | 205 | | | | 454 | 954 | 1106 | 1142 | |
| 240 | | 240 | 540 | 195 | | | | 265 | 878 | 982 | 1015 | |
| 230 | | 113 | 465 | 183 | | | | 79.5 | 778 | 842 | 879 | |
| 220 | | 43.9 | 356 | 164 | | | | | 659 | 701 | 747 | |
| 210 | | | 192 | 136 | | | | | 537 | 579 | 629 | |
| 200 | | | 61.7 | 93.4 | | | | | 421 | 479 | 528 | |
| 190 | | | | 49.0 | | | | | 333 | 401 | 444 | |
| 180 | | | | | | | | | 270 | 338 | 377 | |
| 170 | | | | | | | | | 221 | 287 | 323 | |
| 160 | | | | | | | | | 180 | 243 | 275 | |
| 150 | | | | | | | | | 148 | 205 | 231 | |
| 140 | | | | | | | | | 124 | 171 | 192 | |
| 130 | | | | | | | | | 110 | 147 | 165 | |
| 120 | | | | | | | | | 102 | 134 | 153 | |
| 110 | | | | | | | | | 86.3 | 101 | 136 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 24 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A4 | 4 | A3 | A3 | A3 | A1 | A1 | A1 | A1 | 1 | 1 | 1 |
| HMIN | | 108 | | | | | | | | 238 | 256 | 233 |
| SCAT | | 67.5 | | | | | | | | 46.8 | 56.0 | 43.6 |
| HMAXF | | 336 | | | | | | | | 364 | 376 | 346 |
| SHMAX | | 2206 | | | | | | | | 564 | 583 | 504 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 784 | |
| 370 | | | | | | | | | | 834 | 782 | |
| 360 | | | | | | | | | | 833 | 768 | |
| 350 | | | | | | | | | | 816 | 741 | 824 |
| 340 | | 2032 | | | | | | | | 779 | 704 | 820 |
| 330 | | 2028 | | | | | | | | 724 | 652 | 797 |
| 320 | | 2003 | | | | | | | | 653 | 588 | 749 |
| 310 | | 1956 | | | | | | | | 567 | 507 | 685 |
| 300 | | 1885 | | | | | | | | 470 | 413 | 601 |
| 290 | | 1797 | | | | | | | | 357 | 304 | 493 |
| 280 | | 1681 | | | | | | | | 251 | 193 | 364 |
| 270 | | 1545 | | | | | | | | 152 | 92.6 | 234 |
| 260 | | 1389 | | | | | | | | 87.3 | 40.9 | 135 |
| 250 | | 1226 | | | | | | | | 53.1 | | 73.9 |
| 240 | | 1071 | | | | | | | | 12.4 | | 41.7 |
| 230 | | 917 | | | | | | | | | | |
| 220 | | 782 | | | | | | | | | | |
| 210 | | 656 | | | | | | | | | | |
| 200 | | 544 | | | | | | | | | | |
| 190 | | 445 | | | | | | | | | | |
| 180 | | 373 | | | | | | | | | | |
| 170 | | 323 | | | | | | | | | | |
| 160 | | 285 | | | | | | | | | | |
| 150 | | 258 | | | | | | | | | | |
| 140 | | 222 | | | | | | | | | | |
| 130 | | 196 | | | | | | | | | | |
| 120 | | 185 | | | | | | | | | | |
| 110 | | 112 | | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 25 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | R0 | R0 | 1 |
| HMIN | 222 | 209 | 209 | 209 | 198 | 229 | 219 | 109 | 108 | | 113 | 111 |
| SCAT | 46.6 | 38.0 | 49.6 | 52.6 | 63.4 | 48.6 | 55.3 | 35.0 | 45.7 | | 51.6 | 50.5 |
| HMAXF | 319 | 299 | 307 | 314 | 328 | 334 | 323 | 250 | 269 | | 295 | 308 |
| SHMAX | 451 | 346 | 336 | 237 | 198 | 122 | 160 | 368 | 749 | | 1315 | 1663 |
| KM | | | | | | | | | | | | |
| 340 | | | | | | 179 | | | | | | |
| 330 | | | | | 229 | 179 | 219 | | | | | |
| 320 | 754 | | | 335 | 228 | 175 | 219 | | | | | |
| 310 | 747 | | 532 | 335 | 225 | 168 | 216 | | | | | 1891 |
| 300 | 723 | 679 | 529 | 329 | 218 | 156 | 209 | | | | 1555 | 1879 |
| 290 | 685 | 670 | 516 | 318 | 208 | 141 | 199 | | | | 1552 | 1830 |
| 280 | 624 | 637 | 492 | 299 | 197 | 122 | 186 | | | | 1524 | 1738 |
| 270 | 538 | 583 | 459 | 275 | 182 | 102 | 169 | | 1004 | | 1466 | 1616 |
| 260 | 419 | 496 | 409 | 246 | 164 | 80.5 | 148 | 643 | 995 | | 1372 | 1459 |
| 250 | 275 | 380 | 338 | 209 | 143 | 60.0 | 123 | 643 | 961 | | 1253 | 1268 |
| 240 | 137 | 247 | 249 | 166 | 120 | 42.3 | 93.4 | 629 | 905 | | 1116 | 1066 |
| 230 | 57.4 | 114 | 149 | 119 | 96.7 | 4.1 | 64.4 | 588 | 821 | | 940 | 884 |
| 220 | | 58.2 | 75.9 | 74.9 | 73.2 | | 12.4 | 522 | 723 | | 770 | 730 |
| 210 | | 4.5 | 12.4 | 12.4 | 49.0 | | | 430 | 623 | | 617 | 604 |
| 200 | | | | | 12.4 | | | 320 | 510 | | 496 | 509 |
| 190 | | | | | | | | 223 | 398 | | 416 | 442 |
| 180 | | | | | | | | 151 | 294 | | 363 | 392 |
| 170 | | | | | | | | 102 | 212 | | 318 | 353 |
| 160 | | | | | | | | 80.7 | 158 | | 270 | 316 |
| 150 | | | | | | | | 70.5 | 121 | | 226 | 277 |
| 140 | | | | | | | | 67.3 | 109 | | 184 | 239 |
| 130 | | | | | | | | 64.1 | 104 | | 158 | 208 |
| 120 | | | | | | | | 60.9 | 99.7 | | 146 | 178 |
| 110 | | | | | | | | 38.9 | 67.3 | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 25 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | A1 | A3 | A3 | A3 | A1 | A1 | A1 | A3 | A3 | 3 | 1 |
| HMIN | 108 | | | | | | | 192 | 238 | 215 | 221 | 258 |
| SCAT | 53.8 | | | | | | | 50.7 | 43.0 | 51.9 | 53.8 | 49.2 |
| HMAXF | 307 | | | | | | | 327 | 350 | 347 | 356 | 373 |
| SHMAX | 1754 | | | | | | | 845 | 618 | 668 | 559 | 489 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | 735 |
| 370 | | | | | | | | | | | | 734 |
| 360 | | | | | | | | | 960 | | 735 | 722 |
| 350 | | | | | | | | | 960 | 917 | 733 | 692 |
| 340 | | | | | | | | | 946 | 913 | 719 | 652 |
| 330 | | | | | | | | 1143 | 904 | 894 | 690 | 592 |
| 320 | | | | | | | | 1137 | 837 | 855 | 652 | 513 |
| 310 | 1969 | | | | | | | 1110 | 749 | 803 | 601 | 418 |
| 300 | 1961 | | | | | | | 1059 | 644 | 732 | 533 | 308 |
| 290 | 1920 | | | | | | | 988 | 534 | 643 | 457 | 197 |
| 280 | 1834 | | | | | | | 901 | 421 | 540 | 374 | 118 |
| 270 | 1727 | | | | | | | 806 | 305 | 428 | 294 | 59.6 |
| 260 | 1591 | | | | | | | 691 | 189 | 314 | 212 | 12.4 |
| 250 | 1427 | | | | | | | 566 | 98.5 | 194 | 132 | |
| 240 | 1230 | | | | | | | 413 | 25.6 | 114 | 79.1 | |
| 230 | 1027 | | | | | | | 264 | | 66.6 | 46.1 | |
| 220 | 831 | | | | | | | 151 | | 32.2 | | |
| 210 | 657 | | | | | | | 84.7 | | | | |
| 200 | 531 | | | | | | | 45.4 | | | | |
| 190 | 444 | | | | | | | | | | | |
| 180 | 383 | | | | | | | | | | | |
| 170 | 337 | | | | | | | | | | | |
| 160 | 298 | | | | | | | | | | | |
| 150 | 259 | | | | | | | | | | | |
| 140 | 225 | | | | | | | | | | | |
| 130 | 199 | | | | | | | | | | | |
| 120 | 185 | | | | | | | | | | | |
| 110 | 131 | | | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 26 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | 1 | 3 | 3 | 83 | 2 | 2 | S2 | 1 | 1 | 81 | 1 |
| HMIN | 237 | 211 | 195 | 202 | 214 | 274 | 247 | | 110 | 107 | | 109 |
| SCAT | 39.8 | 41.2 | 33.5 | 43.6 | 83.9 | 84.0 | 58.2 | | 37.6 | 40.4 | | 62.5 |
| HMAXF | 344 | 300 | 271 | 281 | 362 | 419 | 372 | | 263 | 265 | | 314 |
| SHMAX | 459 | 397 | 289 | 205 | 193 | 162 | 137 | | 704 | 833 | | 1643 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | 152 | | | | | | |
| 410 | | | | | | 151 | | | | | | |
| 400 | | | | | | 150 | | | | | | |
| 390 | | | | | | 147 | | | | | | |
| 380 | | | | | | 144 | 170 | | | | | |
| 370 | | | | | 179 | 139 | 170 | | | | | |
| 360 | | | | | 179 | 134 | 168 | | | | | |
| 350 | 794 | | | | 178 | 129 | 164 | | | | | |
| 340 | 791 | | | | 176 | 122 | 156 | | | | | |
| 330 | 768 | | | | 172 | 112 | 146 | | | | | |
| 320 | 718 | | | | 168 | 99.4 | 135 | | | | | 1612 |
| 310 | 646 | | | | 162 | 84.9 | 121 | | | | | 1610 |
| 300 | 559 | 754 | | | 154 | 69.4 | 104 | | | | | 1590 |
| 290 | 449 | 744 | | 375 | 146 | 52.6 | 87.2 | | | | | 1549 |
| 280 | 320 | 710 | 643 | 375 | 137 | 26.8 | 69.5 | | | | | 1482 |
| 270 | 205 | 658 | 643 | 369 | 126 | | 53.2 | | 1096 | 1143 | | 1403 |
| 260 | 111 | 570 | 627 | 353 | 113 | | 39.8 | | 1094 | 1139 | | 1305 |
| 250 | 62.2 | 451 | 583 | 331 | 97.1 | | 9.4 | | 1064 | 1104 | | 1190 |
| 240 | 19.9 | 272 | 509 | 294 | 79.6 | | | | 997 | 1030 | | 1063 |
| 230 | | 136 | 393 | 238 | 61.2 | | | | 886 | 932 | | 923 |
| 220 | | 61.1 | 249 | 165 | 40.5 | | | | 736 | 819 | | 782 |
| 210 | | | 132 | 80.7 | | | | | 577 | 687 | | 650 |
| 200 | | | 47.1 | | | | | | 439 | 558 | | 531 |
| 190 | | | | | | | | | 345 | 447 | | 444 |
| 180 | | | | | | | | | 271 | 363 | | 384 |
| 170 | | | | | | | | | 214 | 293 | | 340 |
| 160 | | | | | | | | | 171 | 242 | | 305 |
| 150 | | | | | | | | | 142 | 201 | | 273 |
| 140 | | | | | | | | | 122 | 166 | | 239 |
| 130 | | | | | | | | | 108 | 142 | | 207 |
| 120 | | | | | | | | | 99.4 | 133 | | 185 |
| 110 | | | | | | | | | 12.4 | 110 | | 92.8 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 26 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 1 | 1 | 3 | 3 | 3 | A4 | A4 | 4 | 5 | 5 | 5 | 4 |
| HMIN | 109 | 109 | 109 | 109 | 109 | | 218 | 206 | 239 | 253 | 269 | 250 |
| SCAT | 52.6 | 56.2 | 49.2 | 55.8 | 54.4 | | 53.9 | 44.7 | 55.4 | 51.6 | 46.9 | 52.6 |
| HMAXF | 304 | 324 | 321 | 317 | 309 | | 328 | 332 | 375 | 390 | 379 | 390 |
| SHMAX | 1605 | 1888 | 1831 | 1864 | 1569 | | 1007 | 779 | 957 | 848 | 755 | 885 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 1131 | | 1203 |
| 380 | | | | | | | | | 1215 | 1121 | 1143 | 1193 |
| 370 | | | | | | | | | 1213 | 1088 | 1131 | 1161 |
| 360 | | | | | | | | | 1193 | 1034 | 1093 | 1106 |
| 350 | | | | | | | | | 1153 | 963 | 1028 | 1031 |
| 340 | | | | | | | | 1131 | 1092 | 876 | 940 | 932 |
| 330 | | 1907 | 2032 | | | | 1433 | 1130 | 1013 | 771 | 830 | 808 |
| 320 | | 1904 | 2031 | 2032 | | | 1425 | 1110 | 919 | 650 | 699 | 663 |
| 310 | 1786 | 1878 | 2006 | 2023 | 1786 | | 1393 | 1058 | 812 | 517 | 563 | 509 |
| 300 | 1783 | 1820 | 1939 | 1982 | 1774 | | 1335 | 982 | 691 | 393 | 407 | 363 |
| 290 | 1754 | 1727 | 1818 | 1909 | 1732 | | 1251 | 895 | 555 | 262 | 240 | 236 |
| 280 | 1692 | 1611 | 1669 | 1799 | 1658 | | 1148 | 794 | 416 | 148 | 92.1 | 142 |
| 270 | 1588 | 1467 | 1493 | 1660 | 1557 | | 1013 | 671 | 266 | 79.1 | 12.4 | 81.9 |
| 260 | 1460 | 1304 | 1302 | 1499 | 1421 | | 844 | 541 | 148 | 42.5 | | 48.0 |
| 250 | 1316 | 1152 | 1109 | 1322 | 1270 | | 650 | 399 | 69.5 | | | .7 |
| 240 | 1159 | 998 | 926 | 1106 | 1087 | | 410 | 270 | 12.4 | | | |
| 230 | 977 | 847 | 773 | 898 | 905 | | 149 | 159 | | | | |
| 220 | 802 | 719 | 638 | 727 | 734 | | 28.3 | 83.9 | | | | |
| 210 | 647 | 613 | 533 | 589 | 587 | | | 37.4 | | | | |
| 200 | 527 | 527 | 464 | 480 | 467 | | | | | | | |
| 190 | 447 | 456 | 414 | 405 | 371 | | | | | | | |
| 180 | 390 | 401 | 375 | 351 | 307 | | | | | | | |
| 170 | 348 | 356 | 338 | 306 | 257 | | | | | | | |
| 160 | 313 | 317 | 304 | 268 | 217 | | | | | | | |
| 150 | 281 | 279 | 272 | 235 | 183 | | | | | | | |
| 140 | 246 | 239 | 234 | 204 | 157 | | | | | | | |
| 130 | 212 | 207 | 198 | 177 | 140 | | | | | | | |
| 120 | 190 | 188 | 182 | 163 | 131 | | | | | | | |
| 110 | 100 | 84.9 | 131 | 55.6 | 41.8 | | | | | | | |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 27 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | S1 | 1 | 1 | 1 |
| HMIN | 221 | 215 | 199 | 229 | 238 | 287 | 225 | 98 | | 109 | 106 | 108 |
| SCAT | 46.8 | 43.6 | 36.1 | 36.0 | 61.4 | 57.6 | 44.1 | 38.7 | | 54.5 | 47.4 | 60.3 |
| HMAXF | 328 | 319 | 288 | 290 | 370 | 413 | 319 | 253 | | 287 | 288 | 308 |
| SHMAX | 747 | 716 | 570 | 207 | 221 | 209 | 186 | 412 | | 1226 | 1411 | 1662 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | 262 | | | | | | |
| 410 | | | | | | 262 | | | | | | |
| 400 | | | | | | 259 | | | | | | |
| 390 | | | | | | 252 | | | | | | |
| 380 | | | | | | 241 | | | | | | |
| 370 | | | | | 262 | 225 | | | | | | |
| 360 | | | | | 261 | 206 | | | | | | |
| 350 | | | | | 256 | 183 | | | | | | |
| 340 | | | | | 247 | 157 | | | | | | |
| 330 | 1228 | | | | 234 | 128 | | | | | | |
| 320 | 1218 | 1240 | | | 220 | 98.0 | 310 | | | | | |
| 310 | 1181 | 1227 | | | 200 | 71.2 | 307 | | | | | 1712 |
| 300 | 1116 | 1182 | | | 177 | 47.2 | 296 | | | | | 1705 |
| 290 | 1023 | 1107 | 1191 | 500 | 152 | 12.4 | 276 | | | 1446 | 1786 | 1674 |
| 280 | 885 | 993 | 1178 | 491 | 124 | | 249 | | | 1440 | 1772 | 1613 |
| 270 | 709 | 837 | 1118 | 464 | 95.5 | | 215 | | | 1409 | 1718 | 1545 |
| 260 | 496 | 652 | 1017 | 421 | 68.1 | | 172 | 643 | | 1355 | 1622 | 1444 |
| 250 | 256 | 398 | 842 | 320 | 45.1 | | 123 | 642 | | 1273 | 1493 | 1316 |
| 240 | 120 | 177 | 616 | 113 | 8.0 | | 72.3 | 624 | | 1173 | 1319 | 1177 |
| 230 | 57.5 | 85.3 | 357 | 12.4 | | | 34.0 | 582 | | 1041 | 1094 | 1015 |
| 220 | | 36.2 | 169 | | | | | 523 | | 883 | 879 | 847 |
| 210 | | | 74.5 | | | | | 447 | | 708 | 699 | 695 |
| 200 | | | 12.4 | | | | | 358 | | 561 | 551 | 575 |
| 190 | | | | | | | | 270 | | 438 | 451 | 475 |
| 180 | | | | | | | | 190 | | 351 | 380 | 402 |
| 170 | | | | | | | | 136 | | 290 | 326 | 350 |
| 160 | | | | | | | | 101 | | 243 | 282 | 307 |
| 150 | | | | | | | | 83.0 | | 205 | 242 | 268 |
| 140 | | | | | | | | 73.4 | | 176 | 209 | 232 |
| 130 | | | | | | | | 67.8 | | 158 | 184 | 200 |
| 120 | | | | | | | | 63.3 | | 147 | 170 | 187 |
| 110 | | | | | | | | 54.4 | | 64.6 | 136 | 130 |
| 100 | | | | | | | | 12.4 | | | | |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 27 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 2 | 2 | 2 | A1 | A1 | 1 | 1 | 1 | 1 | 2 |
| HMIN | 109 | 108 | 107 | 109 | 107 | | 207 | 207 | 211 | 211 | 234 | 249 |
| SCAT | 47.4 | 51.1 | 54.6 | 55.6 | 50.9 | | 120 | 51.7 | 53.1 | 59.0 | 52.5 | 45.7 |
| HMAXF | 297 | 309 | 316 | 312 | 303 | | 408 | 334 | 334 | 355 | 375 | 366 |
| SHMAX | 1579 | 1723 | 1962 | 1898 | 1556 | | 2347 | 748 | 652 | 626 | 513 | 437 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | | 1597 | | | | | |
| 400 | | | | | | | 1595 | | | | | |
| 390 | | | | | | | 1588 | | | | | |
| 380 | | | | | | | 1575 | | | | 679 | |
| 370 | | | | | | | 1557 | | | | 678 | 679 |
| 360 | | | | | | | 1532 | | | 754 | 665 | 676 |
| 350 | | | | | | | 1503 | | | 753 | 641 | 659 |
| 340 | | | | | | | 1467 | 1004 | 917 | 742 | 606 | 625 |
| 330 | | | | | | | 1427 | 1003 | 916 | 720 | 555 | 576 |
| 320 | | | 2144 | 2144 | | | 1380 | 986 | 901 | 685 | 493 | 506 |
| 310 | | 1907 | 2137 | 2144 | 1907 | | 1328 | 949 | 869 | 644 | 421 | 424 |
| 300 | 1907 | 1890 | 2096 | 2121 | 1905 | | 1270 | 894 | 824 | 589 | 342 | 331 |
| 290 | 1896 | 1838 | 2017 | 2063 | 1878 | | 1210 | 822 | 759 | 524 | 265 | 231 |
| 280 | 1844 | 1745 | 1909 | 1969 | 1813 | | 1151 | 735 | 672 | 453 | 188 | 142 |
| 270 | 1744 | 1622 | 1758 | 1850 | 1704 | | 1067 | 635 | 566 | 371 | 127 | 87.4 |
| 260 | 1608 | 1460 | 1573 | 1683 | 1566 | | 956 | 528 | 450 | 292 | 83.1 | 50.2 |
| 250 | 1433 | 1277 | 1362 | 1474 | 1400 | | 824 | 412 | 310 | 206 | 54.1 | 6.8 |
| 240 | 1213 | 1103 | 1150 | 1248 | 1196 | | 677 | 296 | 183 | 129 | 26.8 | |
| 230 | 1007 | 919 | 941 | 999 | 972 | | 497 | 192 | 95.3 | 78.1 | | |
| 220 | 820 | 755 | 757 | 785 | 767 | | 298 | 104 | 49.6 | 45.6 | | |
| 210 | 666 | 617 | 612 | 621 | 587 | | 61.8 | 41.6 | | | | |
| 200 | 548 | 519 | 509 | 503 | 445 | | | | | | | |
| 190 | 462 | 451 | 439 | 415 | 355 | | | | | | | |
| 180 | 404 | 403 | 388 | 354 | 296 | | | | | | | |
| 170 | 359 | 368 | 348 | 308 | 250 | | | | | | | |
| 160 | 324 | 336 | 310 | 275 | 208 | | | | | | | |
| 150 | 291 | 301 | 274 | 245 | 172 | | | | | | | |
| 140 | 251 | 260 | 244 | 213 | 152 | | | | | | | |
| 130 | 210 | 218 | 217 | 185 | 140 | | | | | | | |
| 120 | 189 | 192 | 192 | 169 | 133 | | | | | | | |
| 110 | 84.9 | 160 | 142 | 120 | 118 | | | | | | | |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 28 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | 2 | 2 | 2 | 3 | 3 | A3 | A1 | 1 | 1 | 2 |
| HMIN | 248 | 232 | 230 | 198 | 191 | 247 | 228 | 209 | 109 | 107 | 109 | 109 |
| SCAT | 35.3 | 43.3 | 43.9 | 32.1 | 68.2 | 55.3 | 66.4 | 32.2 | 44.0 | 45.1 | 44.1 | 63.2 |
| HMAXF | 345 | 337 | 326 | 267 | 312 | 363 | 358 | 276 | 280 | 273 | 289 | 306 |
| SHMAX | 321 | 347 | 325 | 227 | 218 | 151 | 203 | 277 | 802 | 1140 | 1308 | 1649 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 198 | | | | | | |
| 360 | | | | | | 198 | 235 | | | | | |
| 350 | 608 | | | | | 196 | 234 | | | | | |
| 340 | 604 | 573 | | | | 190 | 230 | | | | | |
| 330 | 579 | 570 | 557 | | | 180 | 224 | | | | | |
| 320 | 528 | 552 | 554 | | 251 | 168 | 215 | | | | | |
| 310 | 457 | 518 | 539 | | 251 | 153 | 205 | | | | | 1727 |
| 300 | 375 | 470 | 512 | | 249 | 133 | 192 | | | | | 1723 |
| 290 | 283 | 404 | 465 | | 244 | 111 | 175 | | | | 1669 | 1700 |
| 280 | 187 | 324 | 403 | | 236 | 87.7 | 151 | 608 | 1096 | 1555 | 1653 | 1653 |
| 270 | 106 | 242 | 323 | 540 | 225 | 65.7 | 124 | 602 | 1082 | 1554 | 1594 | 1588 |
| 260 | 59.6 | 150 | 222 | 534 | 213 | 46.4 | 94.1 | 568 | 1039 | 1524 | 1485 | 1505 |
| 250 | 12.4 | 82.2 | 121 | 503 | 199 | 12.4 | 65.5 | 506 | 971 | 1457 | 1344 | 1392 |
| 240 | | 45.1 | 59.0 | 448 | 180 | | 44.3 | 420 | 872 | 1356 | 1162 | 1246 |
| 230 | | | 4.1 | 351 | 158 | | 8.2 | 328 | 750 | 1212 | 982 | 1057 |
| 220 | | | | 212 | 130 | | | 221 | 606 | 1022 | 810 | 865 |
| 210 | | | | 91.9 | 96.3 | | | 41.8 | 473 | 815 | 652 | 699 |
| 200 | | | | 24.6 | 56.6 | | | | 371 | 629 | 531 | 564 |
| 190 | | | | | | | | | 293 | 470 | 442 | 460 |
| 180 | | | | | | | | | 234 | 367 | 378 | 388 |
| 170 | | | | | | | | | 189 | 301 | 325 | 339 |
| 160 | | | | | | | | | 154 | 258 | 280 | 300 |
| 150 | | | | | | | | | 128 | 223 | 239 | 265 |
| 140 | | | | | | | | | 109 | 191 | 209 | 226 |
| 130 | | | | | | | | | 96.0 | 158 | 179 | 188 |
| 120 | | | | | | | | | 89.0 | 136 | 157 | 167 |
| 110 | | | | | | | | | 49.0 | 105 | 55.6 | 49.0 |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 28 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | A1 | 1 | 1 | A1 | A1 | 1 | A1 | 1 | 1 | 0 |
| HMIN | 109 | 108 | | 109 | 109 | | | 228 | 207 | 198 | 250 | 246 |
| SCAT | 61.2 | 57.4 | | 58.0 | 46.8 | | | 48.7 | 68.9 | 50.0 | 53.2 | 44.0 |
| HMAXF | 324 | 327 | | 320 | 297 | | | 326 | 336 | 331 | 375 | 360 |
| SHMAX | 1922 | 1964 | | 2025 | 1554 | | | 697 | 605 | 478 | 428 | 362 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 573 | |
| 370 | | | | | | | | | | | 572 | |
| 360 | | | | | | | | | | | 563 | 573 |
| 350 | | | | | | | | | | | 543 | 567 |
| 340 | | | | | | | | | 875 | 643 | 513 | 545 |
| 330 | 1907 | 2000 | | | | | | 1050 | 871 | 643 | 474 | 510 |
| 320 | 1905 | 1993 | | 2144 | | | | 1046 | 851 | 635 | 422 | 457 |
| 310 | 1882 | 1956 | | 2130 | | | | 1023 | 810 | 614 | 364 | 387 |
| 300 | 1833 | 1887 | | 2083 | 2032 | | | 974 | 755 | 578 | 299 | 312 |
| 290 | 1757 | 1799 | | 2000 | 2019 | | | 907 | 677 | 532 | 234 | 235 |
| 280 | 1670 | 1668 | | 1893 | 1962 | | | 823 | 584 | 477 | 164 | 158 |
| 270 | 1540 | 1508 | | 1748 | 1854 | | | 725 | 479 | 412 | 99.2 | 101 |
| 260 | 1379 | 1330 | | 1583 | 1705 | | | 607 | 359 | 343 | 52.6 | 60.7 |
| 250 | 1204 | 1164 | | 1393 | 1514 | | | 470 | 238 | 280 | | 25.1 |
| 240 | 1027 | 993 | | 1183 | 1286 | | | 288 | 148 | 210 | | |
| 230 | 866 | 828 | | 975 | 1008 | | | 53.9 | 91.7 | 137 | | |
| 220 | 727 | 680 | | 798 | 788 | | | | 56.4 | 83.8 | | |
| 210 | 613 | 569 | | 652 | 597 | | | | 18.3 | 53.9 | | |
| 200 | 523 | 485 | | 536 | 463 | | | | | 12.4 | | |
| 190 | 454 | 418 | | 442 | 373 | | | | | | | |
| 180 | 396 | 369 | | 373 | 307 | | | | | | | |
| 170 | 348 | 331 | | 318 | 262 | | | | | | | |
| 160 | 310 | 301 | | 274 | 228 | | | | | | | |
| 150 | 276 | 267 | | 243 | 198 | | | | | | | |
| 140 | 239 | 229 | | 215 | 170 | | | | | | | |
| 130 | 205 | 198 | | 188 | 145 | | | | | | | |
| 120 | 185 | 185 | | 169 | 133 | | | | | | | |
| 110 | 58.9 | 77.9 | | 68.6 | 78.9 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 29 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 0 | 0 | 3 | 3 | 3 | 2 | 2 | A2 | A5 | A5 | A5 | 3 |
| HMIN | 228 | 227 | 204 | 198 | 187 | 214 | 237 | | | | | 109 |
| SCAT | 39.8 | 43.4 | 34.5 | 31.5 | 52.3 | 62.7 | 44.3 | | | | | 51.9 |
| HMAXF | 328 | 318 | 293 | 269 | 295 | 330 | 331 | | | | | 290 |
| SHMAX | 320 | 316 | 244 | 189 | 157 | 147 | 134 | | | | | 1323 |
| KM | | | | | | | | | | | | |
| 340 | | | | | | | 219 | | | | | |
| 330 | 573 | | | | | 179 | 219 | | | | | |
| 320 | 568 | 557 | | | | 178 | 215 | | | | | |
| 310 | 545 | 551 | | | | 175 | 206 | | | | | |
| 300 | 506 | 530 | 508 | | 219 | 169 | 191 | | | | | |
| 290 | 445 | 499 | 507 | | 218 | 161 | 171 | | | | | 1555 |
| 280 | 365 | 448 | 491 | | 214 | 150 | 145 | | | | | 1542 |
| 270 | 274 | 367 | 454 | 446 | 206 | 138 | 116 | | | | | 1499 |
| 260 | 174 | 281 | 395 | 438 | 194 | 124 | 85.0 | | | | | 1425 |
| 250 | 100 | 180 | 308 | 407 | 178 | 107 | 56.1 | | | | | 1328 |
| 240 | 57.2 | 87.3 | 196 | 355 | 158 | 86.3 | 19.0 | | | | | 1196 |
| 230 | 12.4 | 31.0 | 114 | 270 | 134 | 62.9 | | | | | | 1038 |
| 220 | | | 66.7 | 157 | 109 | 36.8 | | | | | | 852 |
| 210 | | | 36.8 | 75.2 | 83.6 | | | | | | | 690 |
| 200 | | | | 21.2 | 58.9 | | | | | | | 551 |
| 190 | | | | | 19.6 | | | | | | | 451 |
| 180 | | | | | | | | | | | | 384 |
| 170 | | | | | | | | | | | | 335 |
| 160 | | | | | | | | | | | | 296 |
| 150 | | | | | | | | | | | | 261 |
| 140 | | | | | | | | | | | | 227 |
| 130 | | | | | | | | | | | | 196 |
| 120 | | | | | | | | | | | | 175 |
| 110 | | | | | | | | | | | | 44.7 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 29 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 2 | 2 | A2 | A4 | A4 | 4 | A5 | A5 | A5 | 4 |
| HMIN | 108 | 109 | 108 | 108 | | | 208 | 189 | 200 | 218 | 240 | 258 |
| SCAT | 54.4 | 57.6 | 56.8 | 48.7 | | | 54.9 | 60.8 | 60.8 | 64.3 | 57.0 | 48.6 |
| HMAXF | 303 | 323 | 322 | 316 | | | 314 | 343 | 351 | 370 | 375 | 361 |
| SHMAX | 1434 | 1768 | 1913 | 1755 | | | 1089 | 1141 | 910 | 864 | 732 | 609 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | 1004 | 949 | |
| 370 | | | | | | | | | | 1004 | 947 | 960 |
| 360 | | | | | | | | | 1050 | 998 | 932 | 960 |
| 350 | | | | | | | | 1341 | 1049 | 979 | 902 | 947 |
| 340 | | | | | | | | 1340 | 1041 | 948 | 861 | 914 |
| 330 | | 1786 | 2032 | | | | | 1325 | 1019 | 910 | 800 | 861 |
| 320 | | 1784 | 2031 | 2063 | | | 1555 | 1291 | 980 | 852 | 719 | 786 |
| 310 | 1555 | 1763 | 2009 | 2056 | | | 1553 | 1240 | 929 | 780 | 622 | 676 |
| 300 | 1554 | 1714 | 1956 | 1998 | | | 1529 | 1170 | 867 | 689 | 512 | 548 |
| 290 | 1532 | 1634 | 1870 | 1909 | | | 1478 | 1085 | 796 | 587 | 398 | 388 |
| 280 | 1483 | 1534 | 1765 | 1780 | | | 1397 | 970 | 710 | 478 | 284 | 231 |
| 270 | 1401 | 1402 | 1610 | 1608 | | | 1296 | 843 | 613 | 356 | 170 | 104 |
| 260 | 1295 | 1259 | 1434 | 1404 | | | 1171 | 714 | 509 | 233 | 93.5 | 25.6 |
| 250 | 1174 | 1102 | 1245 | 1191 | | | 1008 | 575 | 403 | 146 | 50.4 | |
| 240 | 1032 | 936 | 1027 | 987 | | | 788 | 435 | 294 | 88.4 | | |
| 230 | 881 | 788 | 850 | 797 | | | 523 | 288 | 181 | 53.0 | | |
| 220 | 733 | 662 | 696 | 641 | | | 202 | 175 | 99.6 | 12.4 | | |
| 210 | 607 | 560 | 570 | 521 | | | 32.2 | 99.7 | 52.1 | | | |
| 200 | 506 | 482 | 477 | 438 | | | | 54.4 | | | | |
| 190 | 432 | 424 | 409 | 379 | | | | 5.8 | | | | |
| 180 | 376 | 377 | 356 | 332 | | | | | | | | |
| 170 | 333 | 336 | 314 | 291 | | | | | | | | |
| 160 | 299 | 299 | 277 | 254 | | | | | | | | |
| 150 | 265 | 265 | 242 | 219 | | | | | | | | |
| 140 | 227 | 234 | 208 | 187 | | | | | | | | |
| 130 | 195 | 205 | 181 | 162 | | | | | | | | |
| 120 | 181 | 184 | 168 | 150 | | | | | | | | |
| 110 | 84.8 | 119 | 86.7 | 78.2 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 30 SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 4 | 4 | 4 | 4 | 4 | 3 | 3 | A3 | A4 | A4 | A4 | A4 |
| HMIN | 214 | 227 | 237 | 219 | 178 | 187 | 188 | | | | | |
| SCAT | 47.9 | 50.3 | 40.5 | 43.0 | 42.5 | 61.4 | 39.2 | | | | | |
| HMAXF | 318 | 355 | 337 | 330 | 293 | 313 | 262 | | | | | |
| SHMAX | 567 | 462 | 403 | 445 | 388 | 368 | 134 | | | | | |
| KM | | | | | | | | | | | | |
| 360 | | 643 | | | | | | | | | | |
| 350 | | 641 | | | | | | | | | | |
| 340 | | 628 | 716 | 716 | | | | | | | | |
| 330 | | 602 | 711 | 716 | | | | | | | | |
| 320 | 917 | 564 | 686 | 706 | | 446 | | | | | | |
| 310 | 910 | 513 | 640 | 676 | | 446 | | | | | | |
| 300 | 884 | 451 | 570 | 626 | 608 | 441 | | | | | | |
| 290 | 839 | 380 | 476 | 559 | 607 | 430 | | | | | | |
| 280 | 773 | 302 | 362 | 480 | 594 | 413 | | | | | | |
| 270 | 678 | 223 | 241 | 393 | 562 | 390 | 262 | | | | | |
| 260 | 555 | 148 | 134 | 286 | 514 | 362 | 262 | | | | | |
| 250 | 381 | 90.8 | 69.1 | 182 | 455 | 327 | 256 | | | | | |
| 240 | 214 | 54.8 | 19.9 | 100 | 385 | 286 | 241 | | | | | |
| 230 | 105 | 17.9 | | 55.0 | 311 | 242 | 220 | | | | | |
| 220 | 46.2 | | | 5.6 | 240 | 192 | 187 | | | | | |
| 210 | | | | | 168 | 130 | 141 | | | | | |
| 200 | | | | | 97.8 | 68.4 | 81.0 | | | | | |
| 190 | | | | | 56.1 | 19.9 | 23.0 | | | | | |
| 180 | | | | | 12.4 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 30 SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | A4 | 4 | A4 | A4 | A4 | A5 | A5 | 5 | A4 | 4 | 4 | 6 |
| HMIN | | 109 | 108 | | | | | 201 | | 179 | 217 | 227 |
| SCAT | | 64.5 | 49.8 | | | | | 49.7 | | 60.8 | 44.1 | 49.1 |
| HMAXF | | 324 | 313 | | | | | 335 | | 325 | 326 | 335 |
| SHMAX | | 2174 | 1879 | | | | | 784 | | 692 | 442 | 378 |
| KM | | | | | | | | | | | | |
| 340 | | | | | | | | 1096 | | | | 573 |
| 330 | | 2243 | | | | | | 1093 | | 794 | 716 | 572 |
| 320 | | 2241 | 2294 | | | | | 1072 | | 792 | 713 | 561 |
| 310 | | 2216 | 2292 | | | | | 1026 | | 781 | 694 | 537 |
| 300 | | 2164 | 2255 | | | | | 962 | | 759 | 654 | 501 |
| 290 | | 2052 | 2172 | | | | | 876 | | 726 | 599 | 454 |
| 280 | | 1984 | 2039 | | | | | 776 | | 684 | 523 | 394 |
| 270 | | 1849 | 1867 | | | | | 657 | | 628 | 431 | 318 |
| 260 | | 1665 | 1639 | | | | | 520 | | 563 | 327 | 234 |
| 250 | | 1433 | 1379 | | | | | 373 | | 492 | 219 | 140 |
| 240 | | 1198 | 1085 | | | | | 246 | | 419 | 127 | 71.2 |
| 230 | | 974 | 867 | | | | | 145 | | 350 | 68.0 | 20.3 |
| 220 | | 758 | 688 | | | | | 83.9 | | 280 | 19.9 | |
| 210 | | 594 | 539 | | | | | 46.8 | | 209 | | |
| 200 | | 485 | 439 | | | | | | | 127 | | |
| 190 | | 412 | 370 | | | | | | | 67.3 | | |
| 180 | | 359 | 319 | | | | | | | 12.4 | | |
| 170 | | 316 | 273 | | | | | | | | | |
| 160 | | 277 | 230 | | | | | | | | | |
| 150 | | 243 | 201 | | | | | | | | | |
| 140 | | 214 | 185 | | | | | | | | | |
| 130 | | 194 | 174 | | | | | | | | | |
| 120 | | 182 | 166 | | | | | | | | | |
| 110 | | 52.8 | 119 | | | | | | | | | |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — SEP 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 24 | 24 | 24 | 24 | 24 | 27 | 26 | 16 | 18 | 17 | 15 | 19 |
| KP | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 1.6 | 1.6 | 1.6 | 1.8 |
| HMIN | 236 | 228 | 218 | 207 | 207 | 233 | 231 | 131 | 108 | 108 | 109 | 108 |
| RATIO | 5.6 | 5.7 | 6.0 | 5.6 | 4.6 | 4.9 | 5.4 | 5.9 | 4.7 | 4.1 | 3.8 | 3.7 |
| SCAT | 45.1 | 45.0 | 42.5 | 48.0 | 58.3 | 55.4 | 50.8 | 41.5 | 47.7 | 58.5 | 62.9 | 65.3 |
| NMAX | 825 | 768 | 696 | 506 | 375 | 345 | 371 | 808 | 1085 | 1307 | 1588 | 1689 |
| HMAXF | 344 | 333 | 316 | 313 | 336 | 353 | 336 | 266 | 270 | 294 | 315 | 323 |
| SHMAX | 510 | 462 | 392 | 332 | 295 | 257 | 245 | 498 | 828 | 1217 | 1602 | 1806 |
| SHINF | 2837 | 2629 | 2355 | 1761 | 1354 | 1229 | 1291 | 2777 | 3888 | 4905 | 6083 | 6571 |
| KM | | | | | | | | | | | | |
| 950 | 65.6 | 57.7 | 47.9 | 35.2 | 29.1 | 28.8 | 28.6 | 44.3 | 60.6 | 81.9 | 109 | 122 |
| 900 | 84.1 | 74.0 | 61.4 | 45.1 | 37.4 | 36.9 | 36.7 | 56.8 | 77.7 | 105 | 140 | 157 |
| 850 | 108 | 95.0 | 78.8 | 57.9 | 47.9 | 47.4 | 47.0 | 72.9 | 99.8 | 135 | 180 | 201 |
| 800 | 138 | 122 | 101 | 74.2 | 61.4 | 60.7 | 60.3 | 93.5 | 128 | 173 | 230 | 258 |
| 750 | 177 | 156 | 129 | 95.0 | 78.6 | 77.6 | 77.1 | 120 | 164 | 222 | 295 | 330 |
| 700 | 226 | 199 | 165 | 121 | 100 | 98.9 | 98.5 | 153 | 210 | 284 | 377 | 422 |
| 650 | 287 | 253 | 211 | 155 | 128 | 126 | 125 | 196 | 268 | 362 | 481 | 537 |
| 600 | 363 | 321 | 267 | 196 | 161 | 158 | 158 | 250 | 342 | 460 | 611 | 681 |
| 550 | 454 | 402 | 337 | 247 | 202 | 197 | 198 | 317 | 434 | 582 | 769 | 856 |
| 500 | 559 | 497 | 419 | 307 | 249 | 241 | 244 | 399 | 546 | 727 | 957 | 1062 |
| 490 | 581 | 517 | 436 | 320 | 259 | 250 | 254 | 417 | 570 | 759 | 998 | 1106 |
| 480 | 603 | 538 | 454 | 333 | 269 | 258 | 264 | 436 | 596 | 792 | 1039 | 1151 |
| 470 | 625 | 558 | 473 | 346 | 279 | 267 | 274 | 455 | 622 | 826 | 1082 | 1197 |
| 460 | 647 | 579 | 491 | 360 | 289 | 276 | 283 | 475 | 649 | 860 | 1124 | 1243 |
| 450 | 669 | 599 | 510 | 373 | 299 | 285 | 293 | 496 | 677 | 894 | 1167 | 1288 |
| 440 | 690 | 620 | 528 | 387 | 309 | 293 | 303 | 516 | 705 | 930 | 1210 | 1334 |
| 430 | 711 | 640 | 547 | 400 | 318 | 300 | 312 | 538 | 734 | 965 | 1253 | 1379 |
| 420 | 730 | 659 | 565 | 413 | 327 | 307 | 321 | 559 | 763 | 1000 | 1295 | 1423 |
| 410 | 749 | 677 | 583 | 426 | 336 | 314 | 329 | 581 | 792 | 1035 | 1336 | 1465 |
| 400 | 765 | 694 | 600 | 438 | 344 | 319 | 337 | 602 | 822 | 1069 | 1376 | 1506 |
| 390 | 780 | 710 | 616 | 450 | 351 | 324 | 344 | 624 | 851 | 1103 | 1414 | 1544 |
| 380 | 792 | 724 | 631 | 461 | 357 | 327 | 350 | 646 | 880 | 1136 | 1450 | 1579 |
| 370 | 801 | 736 | 645 | 471 | 362 | 327 | 355 | 667 | 908 | 1166 | 1482 | 1610 |
| 360 | 804 | 745 | 658 | 479 | 365 | 327 | 358 | 687 | 936 | 1195 | 1511 | 1636 |
| 350 | 802 | 749 | 668 | 486 | 366 | 323 | 358 | 707 | 962 | 1221 | 1536 | 1657 |
| 340 | 791 | 748 | 675 | 491 | 365 | 317 | 355 | 726 | 987 | 1245 | 1556 | 1671 |
| 330 | 770 | 739 | 678 | 492 | 360 | 307 | 349 | 743 | 1009 | 1264 | 1569 | 1678 |
| 320 | 734 | 720 | 674 | 488 | 351 | 295 | 337 | 759 | 1030 | 1279 | 1575 | 1673 |
| 310 | 683 | 689 | 660 | 480 | 338 | 278 | 320 | 772 | 1047 | 1289 | 1570 | 1654 |
| 300 | 614 | 642 | 635 | 466 | 319 | 257 | 296 | 783 | 1061 | 1292 | 1551 | 1617 |
| 290 | 529 | 578 | 598 | 445 | 296 | 231 | 266 | 790 | 1070 | 1286 | 1516 | 1561 |
| 280 | 429 | 495 | 546 | 416 | 267 | 201 | 230 | 792 | 1074 | 1268 | 1462 | 1484 |
| 270 | 325 | 399 | 477 | 380 | 234 | 167 | 193 | 788 | 1069 | 1235 | 1386 | 1388 |
| 260 | 221 | 294 | 393 | 335 | 197 | 133 | 156 | 772 | 1051 | 1185 | 1286 | 1275 |
| 250 | 129 | 192 | 302 | 281 | 161 | 96.7 | 119 | 742 | 1012 | 1116 | 1167 | 1147 |
| 240 | 66.4 | 108 | 212 | 216 | 124 | 66.0 | 82.8 | 692 | 952 | 1025 | 1033 | 1008 |
| 230 | 25.7 | 50.2 | 127 | 155 | 94.3 | 36.5 | 50.4 | 616 | 866 | 911 | 892 | 870 |
| 220 | 6.3 | 19.6 | 71.6 | 96.4 | 68.6 | 19.6 | 29.5 | 510 | 757 | 784 | 754 | 741 |
| 210 | 1.7 | 4.4 | 32.2 | 51.9 | 39.3 | 11.1 | 16.2 | 384 | 633 | 655 | 632 | 630 |
| 200 | | .5 | 8.3 | 21.0 | 17.7 | 4.7 | 4.5 | 273 | 507 | 540 | 532 | 539 |
| 190 | | | 1.9 | 3.6 | 5.5 | .8 | .9 | 191 | 396 | 443 | 454 | 466 |
| 180 | | | | | .5 | | | 138 | 307 | 367 | 394 | 409 |
| 170 | | | | | | | | 102 | 241 | 305 | 344 | 363 |
| 160 | | | | | | | | 79.7 | 194 | 254 | 299 | 323 |
| 150 | | | | | | | | 66.5 | 158 | 212 | 257 | 285 |
| 140 | | | | | | | | 59.4 | 133 | 178 | 218 | 246 |
| 130 | | | | | | | | 54.2 | 118 | 157 | 188 | 210 |
| 120 | | | | | | | | 49.1 | 109 | 144 | 170 | 189 |
| 110 | | | | | | | | 26.7 | 69.0 | 94.5 | 90.9 | 107 |
| 100 | | | | | | | | .8 | | | | |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — SEP 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 20 | 22 | 21 | 25 | 20 | 12 | 8 | 22 | 20 | 22 | 21 | 23 |
| KP | 1.9 | 2.1 | 2.4 | 2.1 | 2.3 | 1.8 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.2 |
| HMIN | 108 | 108 | 108 | 108 | 109 | 108 | 208 | 196 | 210 | 222 | 244 | 251 |
| RATIO | 3.7 | 3.7 | 3.8 | 3.8 | 4.0 | 4.1 | 4.4 | 4.7 | 4.4 | 4.6 | 5.0 | 5.3 |
| SCAT | 62.0 | 59.6 | 59.5 | 60.2 | 58.0 | 58.8 | 68.0 | 53.8 | 57.8 | 54.4 | 50.0 | 47.0 |
| NMAX | 1821 | 1900 | 1920 | 1894 | 1913 | 1725 | 1519 | 1146 | 934 | 870 | 813 | 873 |
| HMAXF | 330 | 332 | 335 | 335 | 326 | 321 | 345 | 330 | 360 | 365 | 371 | 368 |
| SHMAX | 1938 | 1979 | 1975 | 1945 | 1748 | 1591 | 1334 | 881 | 780 | 677 | 577 | 571 |
| SHINF | 7104 | 7338 | 7391 | 7288 | 6863 | 6456 | 5619 | 4113 | 3414 | 3130 | 2869 | 3035 |
| KM | | | | | | | | | | | | |
| 950 | 137 | 143 | 146 | 145 | 133 | 123 | 123 | 85.7 | 81.2 | 77.5 | 75.0 | 78.8 |
| 900 | 175 | 184 | 188 | 186 | 171 | 158 | 157 | 110 | 104 | 99.4 | 96.3 | 101 |
| 850 | 225 | 236 | 241 | 239 | 219 | 202 | 202 | 141 | 134 | 127 | 123 | 130 |
| 800 | 288 | 303 | 309 | 306 | 281 | 259 | 258 | 181 | 171 | 163 | 158 | 166 |
| 750 | 369 | 387 | 395 | 392 | 360 | 332 | 330 | 231 | 219 | 209 | 202 | 212 |
| 700 | 471 | 495 | 505 | 501 | 460 | 424 | 421 | 296 | 279 | 266 | 257 | 270 |
| 650 | 600 | 630 | 643 | 638 | 585 | 541 | 536 | 376 | 354 | 337 | 326 | 343 |
| 600 | 760 | 798 | 814 | 807 | 742 | 686 | 677 | 477 | 447 | 425 | 410 | 432 |
| 550 | 954 | 1001 | 1021 | 1012 | 932 | 863 | 845 | 599 | 556 | 528 | 509 | 536 |
| 500 | 1181 | 1238 | 1261 | 1249 | 1155 | 1071 | 1038 | 741 | 679 | 643 | 617 | 652 |
| 490 | 1229 | 1288 | 1312 | 1300 | 1202 | 1116 | 1078 | 771 | 705 | 667 | 639 | 676 |
| 480 | 1278 | 1339 | 1364 | 1351 | 1251 | 1162 | 1118 | 802 | 730 | 690 | 661 | 699 |
| 470 | 1328 | 1391 | 1416 | 1402 | 1300 | 1208 | 1158 | 833 | 755 | 713 | 682 | 722 |
| 460 | 1377 | 1442 | 1468 | 1453 | 1349 | 1254 | 1198 | 864 | 779 | 735 | 702 | 745 |
| 450 | 1427 | 1494 | 1520 | 1504 | 1398 | 1301 | 1238 | 895 | 803 | 757 | 722 | 766 |
| 440 | 1476 | 1544 | 1571 | 1554 | 1446 | 1347 | 1276 | 925 | 826 | 777 | 740 | 787 |
| 430 | 1524 | 1594 | 1621 | 1603 | 1494 | 1394 | 1313 | 955 | 847 | 796 | 757 | 805 |
| 420 | 1571 | 1642 | 1669 | 1650 | 1541 | 1439 | 1347 | 985 | 867 | 813 | 772 | 823 |
| 410 | 1615 | 1688 | 1715 | 1695 | 1586 | 1482 | 1380 | 1013 | 885 | 829 | 784 | 838 |
| 400 | 1658 | 1731 | 1758 | 1737 | 1629 | 1524 | 1409 | 1039 | 900 | 842 | 795 | 850 |
| 390 | 1697 | 1771 | 1797 | 1775 | 1668 | 1564 | 1436 | 1063 | 913 | 851 | 801 | 859 |
| 380 | 1732 | 1807 | 1832 | 1808 | 1704 | 1600 | 1458 | 1085 | 921 | 856 | 803 | 863 |
| 370 | 1762 | 1837 | 1862 | 1836 | 1736 | 1633 | 1476 | 1104 | 925 | 855 | 798 | 861 |
| 360 | 1787 | 1861 | 1885 | 1858 | 1763 | 1661 | 1489 | 1120 | 923 | 845 | 781 | 848 |
| 350 | 1806 | 1879 | 1901 | 1872 | 1783 | 1684 | 1497 | 1131 | 910 | 825 | 750 | 821 |
| 340 | 1816 | 1887 | 1906 | 1876 | 1796 | 1700 | 1498 | 1136 | 884 | 791 | 706 | 778 |
| 330 | 1814 | 1883 | 1894 | 1864 | 1798 | 1709 | 1488 | 1133 | 847 | 745 | 646 | 715 |
| 320 | 1797 | 1858 | 1863 | 1832 | 1784 | 1707 | 1464 | 1118 | 799 | 686 | 572 | 631 |
| 310 | 1760 | 1810 | 1811 | 1779 | 1749 | 1689 | 1421 | 1086 | 738 | 617 | 487 | 530 |
| 300 | 1704 | 1737 | 1733 | 1702 | 1692 | 1651 | 1362 | 1036 | 667 | 537 | 393 | 415 |
| 290 | 1625 | 1641 | 1630 | 1601 | 1611 | 1589 | 1285 | 970 | 587 | 452 | 295 | 297 |
| 280 | 1523 | 1523 | 1505 | 1476 | 1505 | 1507 | 1184 | 887 | 500 | 365 | 204 | 191 |
| 270 | 1399 | 1383 | 1360 | 1334 | 1374 | 1400 | 1059 | 789 | 409 | 281 | 133 | 105 |
| 260 | 1258 | 1226 | 1200 | 1180 | 1224 | 1272 | 905 | 677 | 317 | 206 | 80.7 | 52.4 |
| 250 | 1106 | 1069 | 1034 | 1020 | 1059 | 1110 | 718 | 553 | 229 | 142 | 39.7 | 22.2 |
| 240 | 956 | 918 | 876 | 865 | 888 | 940 | 510 | 421 | 153 | 94.2 | 19.6 | 8.7 |
| 230 | 816 | 779 | 738 | 725 | 729 | 764 | 303 | 287 | 94.4 | 60.7 | 10.3 | 2.9 |
| 220 | 694 | 661 | 623 | 610 | 596 | 599 | 139 | 174 | 51.4 | 33.7 | 3.9 | 1.8 |
| 210 | 594 | 568 | 535 | 521 | 492 | 463 | 42.0 | 90.8 | 20.0 | 19.5 | 2.1 | .5 |
| 200 | 517 | 498 | 472 | 454 | 415 | 365 | 5.8 | 33.4 | 5.8 | 9.1 | .6 | |
| 190 | 458 | 445 | 424 | 403 | 358 | 297 | | 7.0 | 1.2 | 3.6 | | |
| 180 | 411 | 402 | 385 | 361 | 313 | 248 | | | | .6 | | |
| 170 | 371 | 364 | 349 | 324 | 274 | 210 | | | | | | |
| 160 | 334 | 329 | 312 | 288 | 239 | 178 | | | | | | |
| 150 | 299 | 293 | 275 | 252 | 207 | 150 | | | | | | |
| 140 | 261 | 256 | 239 | 218 | 180 | 130 | | | | | | |
| 130 | 225 | 222 | 210 | 192 | 159 | 117 | | | | | | |
| 120 | 202 | 202 | 192 | 177 | 148 | 109 | | | | | | |
| 110 | 110 | 124 | 112 | 106 | 91.9 | 84.1 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, RUERTO RICO 60 W 1 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 6 | 6 | 5 | 5 | 5 | 5 | 5 | S5 | A5 | A5 | 5 | 4 |
| HMIN | 262 | 275 | 219 | 227 | 201 | 205 | 234 | | 108 | | 107 | 107 |
| SCAT | 49.4 | 49.0 | 47.4 | 41.8 | 71.7 | 62.5 | 49.6 | | 46.3 | | 59.4 | 58.1 |
| HMAXF | 393 | 398 | 329 | 324 | 353 | 362 | 323 | | 313 | | 301 | 337 |
| SHMAX | 380 | 380 | 406 | 339 | 378 | 298 | 225 | | 982 | | 1491 | 1896 |
| KM | | | | | | | | | | | | |
| 400 | 524 | 540 | | | | | | | | | | |
| 390 | 523 | 537 | | | | | | | | | | |
| 380 | 514 | 522 | | | | | | | | | | |
| 370 | 493 | 496 | | | | 323 | | | | | | |
| 360 | 465 | 462 | | | 389 | 322 | | | | | | |
| 350 | 423 | 410 | | | 389 | 319 | | | | | | |
| 340 | 372 | 352 | | | 386 | 312 | | | | | | 1907 |
| 330 | 315 | 289 | 643 | 608 | 379 | 300 | 362 | | | | | 1899 |
| 320 | 255 | 225 | 637 | 606 | 368 | 287 | 361 | | 1096 | | | 1865 |
| 310 | 197 | 161 | 617 | 591 | 353 | 267 | 356 | | 1095 | | 1669 | 1802 |
| 300 | 140 | 101 | 585 | 557 | 337 | 242 | 343 | | 1075 | | 1668 | 1708 |
| 290 | 93.8 | 61.0 | 538 | 509 | 314 | 216 | 322 | | 1026 | | 1655 | 1592 |
| 280 | 61.0 | 29.4 | 465 | 434 | 288 | 187 | 295 | | 955 | | 1618 | 1444 |
| 270 | 37.2 | | 372 | 334 | 258 | 159 | 259 | | 872 | | 1557 | 1271 |
| 260 | | | 270 | 216 | 225 | 133 | 207 | | 780 | | 1470 | 1076 |
| 250 | | | 168 | 120 | 189 | 108 | 135 | | 687 | | 1365 | 903 |
| 240 | | | 94.6 | 63.7 | 150 | 85.6 | 58.4 | | 592 | | 1234 | 751 |
| 230 | | | 53.3 | 19.6 | 108 | 64.6 | | | 504 | | 1092 | 624 |
| 220 | | | 6.1 | | 69.6 | 47.7 | | | 432 | | 900 | 529 |
| 210 | | | | | 43.7 | 20.5 | | | 373 | | 697 | 459 |
| 200 | | | | | | | | | 320 | | 514 | 409 |
| 190 | | | | | | | | | 274 | | 385 | 375 |
| 180 | | | | | | | | | 233 | | 306 | 347 |
| 170 | | | | | | | | | 195 | | 250 | 318 |
| 160 | | | | | | | | | 159 | | 198 | 283 |
| 150 | | | | | | | | | 130 | | 174 | 238 |
| 140 | | | | | | | | | 116 | | 160 | 198 |
| 130 | | | | | | | | | 107 | | 154 | 177 |
| 120 | | | | | | | | | 100 | | 147 | 167 |
| 110 | | | | | | | | | 70.2 | | 104 | 125 |

ELECTRON DENSITY

RAMEY AFB, RUERTO RICO 60 W 1 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KR | A4 | 4 | 4 | 4 | A4 | A5 | A5 | 5 | 5 | 5 | 5 | 5 |
| HMIN | | 109 | 109 | 109 | | | 199 | 212 | 199 | 208 | 237 | 218 |
| SCAT | | 52.1 | 49.7 | 42.8 | | | 51.8 | 44.9 | 42.5 | 48.5 | 37.7 | 46.3 |
| HMAXF | | 316 | 317 | 292 | | | 313 | 331 | 317 | 329 | 331 | 336 |
| SHMAX | | 2088 | 1946 | 1778 | | | 807 | 673 | 487 | 445 | 371 | 358 |
| KM | | | | | | | | | | | | |
| 340 | | | | | | | | 1050 | | | 679 | 540 |
| 330 | | | | | | | | 1049 | | 643 | 679 | 538 |
| 320 | | 2430 | 2294 | | | | 1143 | 1033 | 754 | 638 | 663 | 524 |
| 310 | | 2424 | 2281 | | | | 1142 | 988 | 750 | 619 | 622 | 495 |
| 300 | | 2376 | 2224 | 2571 | | | 1124 | 920 | 725 | 584 | 560 | 457 |
| 290 | | 2283 | 2116 | 2570 | | | 1082 | 829 | 678 | 538 | 481 | 406 |
| 280 | | 2151 | 1968 | 2523 | | | 1022 | 716 | 613 | 482 | 392 | 343 |
| 270 | | 1964 | 1774 | 2403 | | | 941 | 583 | 542 | 409 | 284 | 270 |
| 260 | | 1741 | 1545 | 2219 | | | 835 | 430 | 458 | 331 | 161 | 199 |
| 250 | | 1476 | 1303 | 1964 | | | 703 | 278 | 366 | 255 | 75.9 | 130 |
| 240 | | 1212 | 1044 | 1640 | | | 558 | 158 | 270 | 177 | 31.0 | 83.0 |
| 230 | | 983 | 843 | 1260 | | | 407 | 85.6 | 177 | 105 | | 52.0 |
| 220 | | 776 | 670 | 957 | | | 278 | 46.1 | 100 | 58.3 | | 12.4 |
| 210 | | 610 | 539 | 672 | | | 142 | | 53.7 | 12.4 | | |
| 200 | | 488 | 451 | 482 | | | 12.4 | | 5.8 | | | |
| 190 | | 408 | 389 | 372 | | | | | | | | |
| 180 | | 353 | 344 | 308 | | | | | | | | |
| 170 | | 312 | 305 | 268 | | | | | | | | |
| 160 | | 277 | 269 | 232 | | | | | | | | |
| 150 | | 243 | 235 | 197 | | | | | | | | |
| 140 | | 214 | 203 | 172 | | | | | | | | |
| 130 | | 195 | 178 | 157 | | | | | | | | |
| 120 | | 183 | 167 | 148 | | | | | | | | |
| 110 | | 127 | 128 | 97.2 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, RUERTO RICO 60 W 2 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | A6 | A6 | A6 | A6 |
| HMIN | 257 | 259 | 221 | 197 | 190 | 229 | 196 | 199 | | | | |
| SCAT | 47.0 | 54.3 | 42.3 | 35.7 | 35.2 | 67.2 | 89.7 | 43.1 | | | | |
| HMAXF | 378 | 395 | 330 | 276 | 277 | 369 | 368 | 299 | | | | |
| SHMAX | 329 | 386 | 343 | 229 | 172 | 181 | 240 | 304 | | | | |
| KM | | | | | | | | | | | | |
| 400 | | 500 | | | | | | | | | | |
| 390 | | 499 | | | | | | | | | | |
| 380 | 477 | 491 | | | | | | | | | | |
| 370 | 473 | 474 | | | | 193 | 198 | | | | | |
| 360 | 459 | 450 | | | | 193 | 198 | | | | | |
| 350 | 433 | 417 | | | | 189 | 196 | | | | | |
| 340 | 397 | 373 | | | | 184 | 194 | | | | | |
| 330 | 352 | 325 | 573 | | | 176 | 190 | | | | | |
| 320 | 300 | 267 | 566 | | | 166 | 184 | | | | | |
| 310 | 244 | 210 | 542 | | | 155 | 178 | | | | | |
| 300 | 188 | 155 | 501 | | | 141 | 170 | 508 | | | | |
| 290 | 135 | 106 | 447 | | | 126 | 163 | 502 | | | | |
| 280 | 88.7 | 69.6 | 375 | 477 | 335 | 110 | 153 | 483 | | | | |
| 270 | 55.2 | 45.0 | 287 | 473 | 332 | 94.5 | 140 | 449 | | | | |
| 260 | 18.1 | 2.5 | 194 | 452 | 315 | 78.0 | 127 | 403 | | | | |
| 250 | | | 123 | 412 | 283 | 60.8 | 113 | 344 | | | | |
| 240 | | | 74.2 | 352 | 241 | 43.4 | 99.2 | 270 | | | | |
| 230 | | | 45.2 | 272 | 188 | 3.6 | 86.3 | 186 | | | | |
| 220 | | | | 165 | 137 | | 73.1 | 112 | | | | |
| 210 | | | | 78.9 | 89.7 | | 57.9 | 74.3 | | | | |
| 200 | | | | 33.6 | 50.8 | | 26.8 | 12.4 | | | | |

ELECTRON DENSITY

RAMEY AFB, RUERTO RICO 60 W 2 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KR | A6 | 6 | 5 | 5 | 5 | A3 | 3 | 3 | 3 | 3 | 3 | 2 |
| HMIN | 109 | 107 | 110 | 106 | 109 | 109 | 199 | 200 | 204 | 246 | 239 | 201 |
| SCAT | 55.9 | 52.5 | 47.9 | 48.3 | 42.8 | 44.9 | 45.8 | 46.8 | 63.1 | 40.3 | 41.0 | 38.1 |
| HMAXF | 312 | 325 | 310 | 302 | 296 | 274 | 294 | 306 | 367 | 354 | 328 | 280 |
| SHMAX | 2063 | 2038 | 2010 | 1919 | 1578 | 1174 | 637 | 487 | 524 | 341 | 345 | 289 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | 573 | | | |
| 360 | | | | | | | | | 572 | 573 | | |
| 350 | | | | | | | | | 563 | 572 | | |
| 340 | | | | | | | | | 547 | 556 | | |
| 330 | | 2227 | | | | | | | 523 | 521 | 643 | |
| 320 | 2294 | 2222 | | | | | | | 493 | 471 | 637 | |
| 310 | 2293 | 2181 | 2536 | 2430 | | | | 754 | 456 | 407 | 613 | |
| 300 | 2268 | 2094 | 2510 | 2429 | 2161 | | 1050 | 751 | 410 | 333 | 570 | |
| 290 | 2206 | 1979 | 2428 | 2393 | 2148 | | 1048 | 732 | 359 | 250 | 507 | 608 |
| 280 | 2102 | 1817 | 2291 | 2305 | 2081 | 1786 | 1026 | 693 | 307 | 168 | 414 | 608 |
| 270 | 1969 | 1616 | 2096 | 2157 | 1945 | 1783 | 977 | 641 | 255 | 106 | 290 | 596 |
| 260 | 1800 | 1396 | 1851 | 1967 | 1763 | 1744 | 906 | 572 | 204 | 61.5 | 162 | 564 |
| 250 | 1593 | 1159 | 1553 | 1730 | 1540 | 1660 | 812 | 487 | 159 | 25.6 | 72.7 | 514 |
| 240 | 1369 | 961 | 1250 | 1450 | 1294 | 1525 | 692 | 387 | 120 | | 12.4 | 424 |
| 230 | 1118 | 798 | 956 | 1157 | 1072 | 1361 | 536 | 276 | 82.3 | | | 261 |
| 220 | 893 | 666 | 743 | 902 | 817 | 1123 | 352 | 154 | 54.6 | | | 126 |
| 210 | 710 | 565 | 581 | 693 | 619 | 853 | 150 | 71.7 | 26.8 | | | 58.5 |
| 200 | 573 | 488 | 470 | 532 | 473 | 594 | 12.4 | 2.0 | | | | |
| 190 | 469 | 431 | 400 | 428 | 364 | 391 | | | | | | |
| 180 | 394 | 383 | 351 | 359 | 291 | 236 | | | | | | |
| 170 | 341 | 341 | 312 | 308 | 240 | 167 | | | | | | |
| 160 | 303 | 304 | 278 | 265 | 205 | 134 | | | | | | |
| 150 | 271 | 271 | 247 | 227 | 172 | 110 | | | | | | |
| 140 | 234 | 234 | 217 | 196 | 144 | 92.4 | | | | | | |
| 130 | 196 | 195 | 187 | 173 | 127 | 81.8 | | | | | | |
| 120 | 172 | 172 | 167 | 155 | 119 | 76.3 | | | | | | |
| 110 | 119 | 135 | 12.4 | 134 | 100 | 64.2 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 3 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 2 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 3 | 3 | 3 | B3 |
| HMIN | 191 | 196 | 200 | 204 | 270 | 258 | 204 | 199 | 109 | 108 | 107 | |
| SCAT | 40.5 | 68.0 | 58.3 | 62.3 | 60.7 | 56.4 | 52.2 | 31.5 | 34.0 | 55.6 | 57.3 | |
| HMAXF | 277 | 313 | 319 | 347 | 394 | 376 | 311 | 259 | 255 | 282 | 294 | |
| SHMAX | 240 | 215 | 170 | 171 | 163 | 161 | 198 | 252 | 542 | 957 | 1497 | |
| KM | | | | | | | | | | | | |
| 400 | | | | | 198 | | | | | | | |
| 390 | | | | | 198 | | | | | | | |
| 380 | | | | | 196 | 208 | | | | | | |
| 370 | | | | | 191 | 208 | | | | | | |
| 360 | | | | | 183 | 204 | | | | | | |
| 350 | | | | 193 | 172 | 197 | | | | | | |
| 340 | | | | 193 | 161 | 187 | | | | | | |
| 330 | | | | 190 | 145 | 175 | | | | | | |
| 320 | | 257 | 219 | 185 | 125 | 158 | 286 | | | | | |
| 310 | | 257 | 217 | 176 | 102 | 137 | 286 | | | | | |
| 300 | | 255 | 213 | 166 | 79.6 | 114 | 282 | | | | 1669 | |
| 290 | | 250 | 205 | 154 | 59.1 | 90.8 | 274 | | | 1119 | 1666 | |
| 280 | 446 | 242 | 194 | 138 | 41.0 | 67.6 | 260 | | | 1119 | 1643 | |
| 270 | 443 | 231 | 181 | 120 | | 46.3 | 244 | | | 1105 | 1594 | |
| 260 | 427 | 220 | 164 | 100 | | 7.6 | 220 | 643 | 875 | 1073 | 1515 | |
| 250 | 398 | 204 | 142 | 82.1 | | | 185 | 630 | 870 | 1027 | 1416 | |
| 240 | 357 | 184 | 113 | 65.7 | | | 144 | 585 | 832 | 956 | 1292 | |
| 230 | 291 | 155 | 81.7 | 51.6 | | | 101 | 507 | 754 | 863 | 1153 | |
| 220 | 212 | 117 | 57.7 | 40.5 | | | 63.6 | 375 | 651 | 749 | 987 | |
| 210 | 123 | 71.2 | 40.4 | 15.0 | | | 35.0 | 143 | 535 | 622 | 799 | |
| 200 | 57.1 | 28.3 | 8.3 | | | | | 12.4 | 422 | 503 | 625 | |
| 190 | | | | | | | | | 327 | 402 | 495 | |
| 180 | | | | | | | | | 250 | 321 | 400 | |
| 170 | | | | | | | | | 195 | 267 | 336 | |
| 160 | | | | | | | | | 151 | 224 | 290 | |
| 150 | | | | | | | | | 114 | 178 | 251 | |
| 140 | | | | | | | | | 99.2 | 142 | 212 | |
| 130 | | | | | | | | | 92.6 | 125 | 177 | |
| 120 | | | | | | | | | 87.2 | 118 | 154 | |
| 110 | | | | | | | | | 41.8 | 101 | 128 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 3 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 3 | B3 | 2 | A2 | 2 | A2 | 2 | 2 | 2 | 2 | 2 | 1 |
| HMIN | 109 | 109 | 109 | 109 | 109 | | 199 | 178 | 187 | 177 | 257 | 240 |
| SCAT | 46.7 | 50.3 | 52.5 | 57.8 | 51.0 | | 44.0 | 44.4 | 45.2 | 50.4 | 42.2 | 41.0 |
| HMAXF | 294 | 314 | 311 | 318 | 298 | | 283 | 284 | 317 | 329 | 365 | 333 |
| SHMAX | 1677 | 1878 | 2024 | 2126 | 1847 | | 677 | 417 | 368 | 346 | 276 | 267 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | | | 446 | |
| 360 | | | | | | | | | | | 445 | |
| 350 | | | | | | | | | | | 433 | |
| 340 | | | | | | | | | | | 407 | 477 |
| 330 | | | | | | | | | | 432 | 369 | 476 |
| 320 | | 2144 | 2413 | 2413 | | | | | 540 | 428 | 322 | 465 |
| 310 | | 2141 | 2413 | 2401 | | | | | 537 | 415 | 266 | 439 |
| 300 | 2161 | 2104 | 2386 | 2354 | 2413 | | | | 522 | 393 | 208 | 401 |
| 290 | 2157 | 2023 | 2316 | 2268 | 2400 | | 1240 | 679 | 491 | 364 | 151 | 346 |
| 280 | 2114 | 1906 | 2202 | 2162 | 2341 | | 1239 | 678 | 450 | 329 | 96.8 | 272 |
| 270 | 2019 | 1735 | 2051 | 2003 | 2232 | | 1213 | 662 | 396 | 291 | 58.8 | 193 |
| 260 | 1879 | 1534 | 1835 | 1784 | 2087 | | 1155 | 627 | 334 | 250 | 18.7 | 121 |
| 250 | 1686 | 1320 | 1580 | 1524 | 1887 | | 1071 | 577 | 267 | 210 | | 59.9 |
| 240 | 1449 | 1089 | 1307 | 1232 | 1634 | | 931 | 513 | 205 | 172 | | 4.1 |
| 230 | 1177 | 900 | 1002 | 992 | 1330 | | 742 | 433 | 149 | 136 | | |
| 220 | 907 | 739 | 766 | 757 | 963 | | 480 | 341 | 103 | 104 | | |
| 210 | 702 | 620 | 595 | 590 | 678 | | 165 | 220 | 69.6 | 78.0 | | |
| 200 | 555 | 526 | 482 | 465 | 481 | | 12.4 | 113 | 47.2 | 57.6 | | |
| 190 | 458 | 452 | 406 | 381 | 365 | | | 61.5 | 12.4 | 41.8 | | |
| 180 | 389 | 392 | 353 | 323 | 297 | | | 12.4 | | 8.9 | | |
| 170 | 339 | 342 | 313 | 279 | 252 | | | | | | | |
| 160 | 297 | 301 | 280 | 242 | 217 | | | | | | | |
| 150 | 259 | 262 | 252 | 208 | 189 | | | | | | | |
| 140 | 221 | 224 | 223 | 179 | 164 | | | | | | | |
| 130 | 186 | 190 | 191 | 158 | 144 | | | | | | | |
| 120 | 168 | 169 | 169 | 147 | 132 | | | | | | | |
| 110 | 68.6 | 78.9 | 76.1 | 64.6 | 55.6 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 4 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | S3 | 3 | 3 | A6 |
| HMIN | 218 | 208 | 211 | 197 | 196 | 275 | 226 | 198 | | 109 | 109 | 110 |
| SCAT | 31.4 | 27.7 | 33.9 | 45.8 | 59.4 | 52.1 | 60.1 | 30.2 | | 45.3 | 44.5 | 51.1 |
| HMAXF | 286 | 267 | 287 | 298 | 306 | 385 | 348 | 256 | | 267 | 285 | 291 |
| SHMAX | 198 | 115 | 124 | 139 | 134 | 116 | 153 | 281 | | 1006 | 1244 | 1536 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | 161 | | | | | | |
| 380 | | | | | | 160 | | | | | | |
| 370 | | | | | | 157 | | | | | | |
| 360 | | | | | | 152 | | | | | | |
| 350 | | | | | | 143 | 189 | | | | | |
| 340 | | | | | | 131 | 188 | | | | | |
| 330 | | | | | | 116 | 184 | | | | | |
| 320 | | | | | | 98.5 | 178 | | | | | |
| 310 | | | | | 174 | 79.8 | 169 | | | | | |
| 300 | | | | 219 | 174 | 61.1 | 159 | | | | | 1876 |
| 290 | 477 | | 262 | 217 | 171 | 44.7 | 145 | | | | 1626 | 1876 |
| 280 | 473 | | 259 | 210 | 166 | 15.8 | 128 | | | | 1621 | 1853 |
| 270 | 446 | 310 | 245 | 199 | 158 | | 108 | | | 1406 | 1580 | 1794 |
| 260 | 397 | 305 | 221 | 182 | 150 | | 86.6 | 754 | | 1397 | 1498 | 1702 |
| 250 | 319 | 281 | 183 | 160 | 141 | | 64.5 | 748 | | 1355 | 1382 | 1578 |
| 240 | 200 | 237 | 136 | 131 | 124 | | 46.0 | 704 | | 1281 | 1218 | 1397 |
| 230 | 87.3 | 171 | 86.1 | 100 | 98.5 | | 16.3 | 619 | | 1175 | 1042 | 1183 |
| 220 | 23.0 | 83.8 | 47.1 | 71.2 | 70.5 | | | 460 | | 1014 | 838 | 952 |
| 210 | | 23.7 | | 48.2 | 48.3 | | | 202 | | 810 | 661 | 738 |
| 200 | | | | 12.4 | 16.7 | | | 34.9 | | 615 | 528 | 570 |
| 190 | | | | | | | | | | 465 | 430 | 466 |
| 180 | | | | | | | | | | 365 | 357 | 395 |
| 170 | | | | | | | | | | 298 | 301 | 344 |
| 160 | | | | | | | | | | 248 | 254 | 301 |
| 150 | | | | | | | | | | 207 | 214 | 260 |
| 140 | | | | | | | | | | 175 | 175 | 218 |
| 130 | | | | | | | | | | 151 | 157 | 193 |
| 120 | | | | | | | | | | 133 | 148 | 174 |
| 110 | | | | | | | | | | 54.0 | 62.8 | 12.4 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 4 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q-KP | A6 | 56 | S7 | 7 | 57 | S6 | 6 | 6 | 4 | 4 | 4 | 5 |
| HMIN | 109 | | 109 | 109 | 109 | | 204 | 180 | 196 | 257 | 270 | 201 |
| SCAT | 53.7 | | 49.5 | 51.9 | 51.0 | | 51.1 | 46.1 | 58.8 | 45.6 | 47.7 | 39.0 |
| HMAXF | 305 | | 336 | 330 | 318 | | 307 | 314 | 370 | 375 | 378 | 292 |
| SHMAX | 1730 | | 2155 | 2287 | 2328 | | 1369 | 874 | 714 | 468 | 546 | 375 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 794 | 716 | 834 | |
| 370 | | | | | | | | | 794 | 714 | 828 | |
| 360 | | | | | | | | | 788 | 698 | 804 | |
| 350 | | | | | | | | | 770 | 662 | 762 | |
| 340 | | | 2430 | | | | | | 739 | 612 | 700 | |
| 330 | | | 2421 | 2571 | | | | | 698 | 545 | 620 | |
| 320 | | | 2367 | 2546 | 2865 | | | 1143 | 649 | 466 | 521 | |
| 310 | 1907 | | 2255 | 2478 | 2849 | | 2032 | 1141 | 591 | 370 | 408 | |
| 300 | 1903 | | 2094 | 2348 | 2780 | | 2021 | 1116 | 528 | 268 | 287 | 716 |
| 290 | 1872 | | 1905 | 2182 | 2651 | | 1973 | 1063 | 459 | 177 | 176 | 716 |
| 280 | 1807 | | 1692 | 1981 | 2475 | | 1884 | 985 | 386 | 109 | 78.2 | 700 |
| 270 | 1700 | | 1436 | 1749 | 2238 | | 1761 | 897 | 312 | 61.6 | | 661 |
| 260 | 1568 | | 1159 | 1496 | 1944 | | 1595 | 798 | 244 | 19.6 | | 601 |
| 250 | 1417 | | 939 | 1248 | 1603 | | 1389 | 693 | 188 | | | 505 |
| 240 | 1250 | | 765 | 1002 | 1271 | | 1135 | 589 | 138 | | | 381 |
| 230 | 1089 | | 636 | 811 | 1012 | | 840 | 492 | 101 | | | 237 |
| 220 | 918 | | 542 | 652 | 760 | | 475 | 405 | 73.0 | | | 121 |
| 210 | 755 | | 472 | 530 | 584 | | 150 | 314 | 49.5 | | | 57.1 |
| 200 | 612 | | 419 | 443 | 462 | | | 217 | 17.1 | | | |
| 190 | 495 | | 377 | 381 | 377 | | | 120 | | | | |
| 180 | 406 | | 341 | 336 | 314 | | | 12.4 | | | | |
| 170 | 348 | | 310 | 299 | 266 | | | | | | | |
| 160 | 306 | | 280 | 268 | 227 | | | | | | | |
| 150 | 265 | | 248 | 242 | 195 | | | | | | | |
| 140 | 222 | | 208 | 216 | 171 | | | | | | | |
| 130 | 195 | | 177 | 184 | 156 | | | | | | | |
| 120 | 184 | | 167 | 168 | 146 | | | | | | | |
| 110 | 84.9 | | 76.1 | 97.2 | 44.7 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| HMIN | 200 | 217 | 218 | 208 | 240 | 266 | 201 | 209 | 109 | 111 | 107 | 109 |
| SCAT | 59.5 | 43.8 | 37.1 | 62.8 | 49.2 | 59.6 | 45.3 | 32.7 | 38.4 | 57.3 | 56.2 | 48.9 |
| HMAXF | 321 | 324 | 300 | 351 | 346 | 395 | 292 | 264 | 257 | 284 | 306 | 293 |
| SHMAX | 424 | 297 | 225 | 299 | 221 | 232 | 243 | 284 | 624 | 1227 | 1646 | 1566 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | 286 | | | | | | |
| 390 | | | | | | 285 | | | | | | |
| 380 | | | | | | 281 | | | | | | |
| 370 | | | | | | 274 | | | | | | |
| 360 | | | | 335 | | 262 | | | | | | |
| 350 | | | | 335 | 329 | 247 | | | | | | |
| 340 | | | | 332 | 328 | 228 | | | | | | |
| 330 | 540 | 477 | | 325 | 320 | 202 | | | | | | |
| 320 | 540 | 476 | | 314 | 305 | 171 | | | | | | |
| 310 | 535 | 464 | 446 | 298 | 286 | 137 | | | | | 1771 | |
| 300 | 523 | 440 | 446 | 279 | 258 | 103 | 417 | | | | 1765 | 1907 |
| 290 | 502 | 405 | 438 | 255 | 221 | 73.4 | 417 | | | 1433 | 1733 | 1905 |
| 280 | 476 | 354 | 413 | 227 | 179 | 49.8 | 410 | | | 1431 | 1673 | 1875 |
| 270 | 439 | 291 | 373 | 196 | 135 | 17.2 | 392 | 716 | | 1411 | 1586 | 1805 |
| 260 | 394 | 227 | 313 | 164 | 89.4 | | 366 | 713 | 1004 | 1369 | 1471 | 1690 |
| 250 | 338 | 165 | 236 | 134 | 49.1 | | 329 | 682 | 997 | 1303 | 1323 | 1540 |
| 240 | 273 | 102 | 146 | 105 | .7 | | 270 | 620 | 956 | 1224 | 1174 | 1360 |
| 230 | 203 | 60.4 | 73.0 | 77.2 | | | 191 | 509 | 881 | 1112 | 1006 | 1133 |
| 220 | 131 | 19.3 | 22.3 | 50.8 | | | 114 | 330 | 777 | 980 | 842 | 929 |
| 210 | 66.3 | | | 12.4 | | | 57.5 | 55.6 | 643 | 832 | 702 | 764 |
| 200 | 3.7 | | | | | | | | 509 | 659 | 583 | 618 |
| 190 | | | | | | | | | 368 | 496 | 485 | 505 |
| 180 | | | | | | | | | 229 | 378 | 404 | 419 |
| 170 | | | | | | | | | 165 | 305 | 338 | 353 |
| 160 | | | | | | | | | 121 | 248 | 285 | 303 |
| 150 | | | | | | | | | 99.6 | 198 | 242 | 262 |
| 140 | | | | | | | | | 93.9 | 158 | 184 | 223 |
| 130 | | | | | | | | | 90.1 | 138 | 157 | 184 |
| 120 | | | | | | | | | 86.2 | 127 | 149 | 168 |
| 110 | | | | | | | | | 55.6 | | 129 | 78.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 4 | 4 | 3 | 3 | 3 | A6 | A6 | 6 | 6 | 6 | S6 | 8 |
| HMIN | 109 | 109 | 109 | 108 | 107 | 109 | 197 | 189 | 198 | 238 | 253 | 187 |
| SCAT | 57.4 | 55.9 | 50.4 | 49.2 | 43.5 | 44.2 | 58.9 | 45.2 | 56.5 | 47.1 | 51.4 | 41.1 |
| HMAXF | 308 | 318 | 317 | 309 | 301 | 291 | 313 | 304 | 346 | 363 | 384 | 275 |
| SHMAX | 1828 | 1967 | 2004 | 1970 | 1750 | 1502 | 1228 | 844 | 733 | 586 | 621 | 594 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 875 | |
| 380 | | | | | | | | | | | 874 | |
| 370 | | | | | | | | | | 875 | 860 | |
| 360 | | | | | | | | | | 874 | 828 | |
| 350 | | | | | | | | | 875 | 858 | 782 | |
| 340 | | | | | | | | | 872 | 821 | 718 | |
| 330 | | | | | | | | | 857 | 768 | 632 | |
| 320 | | 2096 | 2294 | | | | 1555 | | 827 | 690 | 527 | |
| 310 | 1907 | 2084 | 2282 | 2430 | 2430 | | 1555 | 1341 | 783 | 595 | 405 | |
| 300 | 1898 | 2040 | 2227 | 2410 | 2430 | 2161 | 1538 | 1338 | 729 | 492 | 292 | |
| 290 | 1861 | 1956 | 2122 | 2340 | 2389 | 2160 | 1498 | 1307 | 659 | 370 | 191 | |
| 280 | 1795 | 1850 | 1977 | 2217 | 2280 | 2126 | 1434 | 1244 | 583 | 244 | 120 | 1143 |
| 270 | 1698 | 1704 | 1791 | 2047 | 2103 | 2037 | 1348 | 1150 | 505 | 149 | 72.2 | 1139 |
| 260 | 1574 | 1528 | 1575 | 1827 | 1879 | 1884 | 1242 | 1018 | 426 | 86.9 | 41.3 | 1106 |
| 250 | 1425 | 1329 | 1348 | 1571 | 1605 | 1690 | 1118 | 857 | 346 | 51.7 | | 1039 |
| 240 | 1266 | 1118 | 1102 | 1285 | 1309 | 1471 | 981 | 676 | 264 | 12.4 | | 935 |
| 230 | 1110 | 922 | 904 | 1046 | 1048 | 1247 | 829 | 466 | 188 | | | 782 |
| 220 | 941 | 748 | 740 | 803 | 765 | 950 | 647 | 260 | 117 | | | 556 |
| 210 | 786 | 618 | 608 | 614 | 554 | 694 | 390 | 131 | 64.4 | | | 292 |
| 200 | 654 | 528 | 509 | 482 | 410 | 465 | 90.5 | 66.8 | 12.4 | | | 96.1 |
| 190 | 544 | 461 | 436 | 395 | 323 | 290 | | 12.4 | | | | 35.0 |
| 180 | 458 | 408 | 378 | 334 | 267 | 200 | | | | | | |
| 170 | 387 | 361 | 332 | 290 | 221 | 151 | | | | | | |
| 160 | 332 | 320 | 291 | 252 | 183 | 119 | | | | | | |
| 150 | 289 | 282 | 255 | 218 | 151 | 98.0 | | | | | | |
| 140 | 250 | 248 | 221 | 184 | 133 | 86.2 | | | | | | |
| 130 | 215 | 214 | 187 | 160 | 123 | 80.1 | | | | | | |
| 120 | 189 | 188 | 169 | 151 | 117 | 75.3 | | | | | | |
| 110 | 124 | 84.9 | 110 | 123 | 111 | 61.1 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 8 | 8 | 7 | 7 | 7 | 8 | 8 | A8 | 8 | 8 | 8 | 8 |
| HMIN | 178 | 285 | 259 | 355 | 327 | 373 | 338 | 198 | 110 | 109 | 109 | 107 |
| SCAT | 60.1 | 72.9 | 38.7 | 60.2 | 55.2 | 88.3 | 66.9 | 43.1 | 36.3 | 73.8 | 81.3 | 57.0 |
| HMAXF | 305 | 445 | 329 | 482 | 435 | 562 | 488 | 321 | 267 | 333 | 384 | 323 |
| SHMAX | 257 | 184 | 109 | 177 | 161 | 277 | 221 | 532 | 856 | 1160 | 2420 | 2446 |
| KM | | | | | | | | | | | | |
| 550 | | | | | | 240 | | | | | | |
| 540 | | | | | | 240 | | | | | | |
| 530 | | | | | | 239 | | | | | | |
| 520 | | | | | | 236 | | | | | | |
| 510 | | | | | | 232 | | | | | | |
| 500 | | | | | | 226 | | | | | | |
| 490 | | | | 214 | | 219 | 235 | | | | | |
| 480 | | | | 213 | | 209 | 234 | | | | | |
| 470 | | | | 211 | | 199 | 230 | | | | | |
| 460 | | | | 206 | | 188 | 224 | | | | | |
| 450 | | 179 | | 198 | | 175 | 215 | | | | | |
| 440 | | 179 | | 186 | 219 | 160 | 204 | | | | | |
| 430 | | 177 | | 172 | 218 | 141 | 190 | | | | | |
| 420 | | 174 | | 156 | 215 | 119 | 173 | | | | | |
| 410 | | 169 | | 136 | 208 | 95.7 | 155 | | | | | |
| 400 | | 162 | | 114 | 197 | 73.8 | 136 | | | | | |
| 390 | | 153 | | 91.9 | 183 | 53.2 | 115 | | | | 1786 | |
| 380 | | 143 | | 69.9 | 166 | 28.6 | 94.3 | | | | 1784 | |
| 370 | | 131 | | 50.2 | 143 | | 74.3 | | | | 1772 | |
| 360 | | 118 | | 20.7 | 115 | | 55.3 | | | | 1746 | |
| 350 | | 105 | | | 85.8 | | 39.4 | | | | 1707 | |
| 340 | | 91.2 | | | 58.6 | | 5.7 | | | 1004 | 1651 | |
| 330 | | 77.1 | 219 | | 19.0 | | | 834 | | 1004 | 1580 | 2571 |
| 320 | | 63.6 | 216 | | | | | 834 | | 997 | 1498 | 2570 |
| 310 | 310 | 51.4 | 205 | | | | | 820 | | 981 | 1408 | 2540 |
| 300 | 309 | 39.7 | 189 | | | | | 783 | | 954 | 1312 | 2470 |
| 290 | 305 | 12.4 | 166 | | | | | 729 | | 918 | 1210 | 2349 |
| 280 | 296 | | 127 | | | | | 640 | | 875 | 1099 | 2197 |
| 270 | 283 | | 76.6 | | | | | 533 | 1406 | 823 | 986 | 2023 |
| 260 | 266 | | 12.4 | | | | | 417 | 1393 | 762 | 874 | 1821 |
| 250 | 244 | | | | | | | 310 | 1325 | 692 | 771 | 1605 |
| 240 | 218 | | | | | | | 225 | 1207 | 616 | 675 | 1381 |
| 230 | 189 | | | | | | | 163 | 1040 | 531 | 590 | 1156 |
| 220 | 159 | | | | | | | 104 | 819 | 454 | 522 | 947 |
| 210 | 126 | | | | | | | 58.7 | 582 | 393 | 469 | 774 |
| 200 | 89.8 | | | | | | | 12.4 | 427 | 350 | 429 | 632 |
| 190 | 56.3 | | | | | | | | 323 | 311 | 394 | 515 |
| 180 | 12.4 | | | | | | | | 256 | 273 | 359 | 422 |
| 170 | | | | | | | | | 206 | 230 | 325 | 358 |
| 160 | | | | | | | | | 170 | 172 | 290 | 312 |
| 150 | | | | | | | | | 142 | 127 | 256 | 274 |
| 140 | | | | | | | | | 119 | 112 | 222 | 238 |
| 130 | | | | | | | | | 107 | 107 | 192 | 206 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | F9 | F9 |
| HMIN | 108 | 107 | 109 | 109 | 109 | 108 | 225 | 246 | 264 | 258 | 288 | |
| SCAT | 57.1 | 56.9 | 72.8 | 67.7 | 55.6 | 75.0 | 54.1 | 54.1 | 48.3 | 64.1 | 51.7 | |
| HMAXF | 336 | 320 | 350 | 376 | 302 | 333 | 332 | 365 | 404 | 401 | 440 | |
| SHMAX | 2307 | 1986 | 2086 | 2236 | 1950 | 1583 | 1269 | 860 | 880 | 1356 | 1046 | |
| KM | | | | | | | | | | | | |
| 440 | | | | | | | | | | | 1303 | |
| 430 | | | | | | | | | | | 1291 | |
| 420 | | | | | | | | | | | 1255 | |
| 410 | | | | | | | | | 1240 | 1555 | 1186 | |
| 400 | | | | | | | | | 1238 | 1555 | 1104 | |
| 390 | | | | | | | | | 1213 | 1543 | 1006 | |
| 380 | | | | 1907 | | | | | 1162 | 1512 | 901 | |
| 370 | | | | 1903 | | | | 1215 | 1082 | 1462 | 787 | |
| 360 | | | 1741 | 1881 | | | | 1213 | 982 | 1388 | 668 | |
| 350 | | | 1741 | 1838 | | | | 1192 | 866 | 1300 | 546 | |
| 340 | 2294 | | 1733 | 1773 | | 1446 | 1786 | 1151 | 732 | 1194 | 417 | |
| 330 | 2288 | | 1708 | 1688 | | 1446 | 1785 | 1094 | 573 | 1076 | 299 | |
| 320 | 2249 | 2032 | 1665 | 1583 | | 1435 | 1763 | 1006 | 407 | 939 | 188 | |
| 310 | 2176 | 2017 | 1598 | 1458 | 2294 | 1412 | 1711 | 889 | 270 | 776 | 109 | |
| 300 | 2061 | 1970 | 1522 | 1316 | 2292 | 1376 | 1625 | 746 | 171 | 599 | 58.7 | |
| 290 | 1919 | 1890 | 1434 | 1177 | 2265 | 1323 | 1517 | 575 | 106 | 412 | 12.4 | |
| 280 | 1747 | 1784 | 1337 | 1037 | 2200 | 1257 | 1371 | 379 | 65.7 | 236 | | |
| 270 | 1557 | 1638 | 1230 | 898 | 2086 | 1184 | 1187 | 222 | 36.8 | 96.1 | | |
| 260 | 1352 | 1476 | 1109 | 776 | 1946 | 1102 | 973 | 114 | | 25.6 | | |
| 250 | 1166 | 1305 | 991 | 671 | 1782 | 998 | 719 | 42.5 | | | | |
| 240 | 994 | 1138 | 870 | 582 | 1593 | 883 | 417 | | | | | |
| 230 | 846 | 969 | 758 | 513 | 1382 | 762 | 117 | | | | | |
| 220 | 729 | 810 | 657 | 456 | 1133 | 638 | | | | | | |
| 210 | 633 | 680 | 568 | 410 | 868 | 520 | | | | | | |
| 200 | 553 | 579 | 490 | 371 | 621 | 411 | | | | | | |
| 190 | 483 | 493 | 424 | 337 | 436 | 320 | | | | | | |
| 180 | 420 | 421 | 367 | 303 | 322 | 246 | | | | | | |
| 170 | 365 | 363 | 318 | 270 | 255 | 186 | | | | | | |
| 160 | 317 | 316 | 278 | 236 | 215 | 145 | | | | | | |
| 150 | 279 | 277 | 245 | 201 | 184 | 119 | | | | | | |
| 140 | 245 | 242 | 215 | 174 | 159 | 103 | | | | | | |
| 130 | 212 | 213 | 188 | 158 | 142 | 93.9 | | | | | | |
| 120 | 188 | 191 | 171 | 150 | 132 | 88.3 | | | | | | |
| 110 | 138 | 159 | 68.6 | 97.2 | 78.9 | 74.5 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 9 | 9 | 8 | 8 | 8 | 8 | 8 | A8 | 7 | 7 | B7 | A7 |
| HMIN | 260 | 240 | 214 | 277 | 248 | 215 | 189 | | 107 | 109 | | |
| SCAT | 77.4 | 70.2 | 109 | 74.3 | 65.0 | 61.5 | 74.9 | | 44.5 | 50.3 | | |
| HMAXF | 445 | 362 | 459 | 465 | 423 | 333 | 316 | | 290 | 274 | | |
| SHMAX | 989 | 961 | 1441 | 1009 | 986 | 1129 | 938 | | 1081 | 1141 | | |
| KM | | | | | | | | | | | | |
| 470 | | | | 960 | | | | | | | | |
| 460 | | | 917 | 959 | | | | | | | | |
| 450 | 917 | | 915 | 950 | | | | | | | | |
| 440 | 916 | | 910 | 932 | | | | | | | | |
| 430 | 909 | | 900 | 904 | 1050 | | | | | | | |
| 420 | 894 | | 887 | 869 | 1049 | | | | | | | |
| 410 | 871 | | 868 | 825 | 1039 | | | | | | | |
| 400 | 840 | | 844 | 774 | 1017 | | | | | | | |
| 390 | 802 | | 818 | 714 | 981 | | | | | | | |
| 380 | 757 | | 791 | 646 | 934 | | | | | | | |
| 370 | 706 | 1143 | 761 | 569 | 876 | | | | | | | |
| 360 | 648 | 1142 | 732 | 487 | 799 | | | | | | | |
| 350 | 583 | 1134 | 701 | 406 | 713 | | | | | | | |
| 340 | 510 | 1114 | 670 | 328 | 625 | 1446 | | | | | | |
| 330 | 430 | 1081 | 636 | 247 | 537 | 1445 | | | | | | |
| 320 | 346 | 1040 | 598 | 172 | 444 | 1430 | 1050 | | | | | |
| 310 | 269 | 984 | 557 | 116 | 349 | 1395 | 1048 | | | | | |
| 300 | 188 | 913 | 512 | 78.4 | 262 | 1341 | 1037 | | 1555 | | | |
| 290 | 124 | 818 | 463 | 51.1 | 188 | 1270 | 1017 | | 1555 | | | |
| 280 | 77.7 | 688 | 406 | 17.5 | 126 | 1181 | 983 | | 1534 | 1555 | | |
| 270 | 47.4 | 522 | 343 | | 81.8 | 1058 | 942 | | 1473 | 1553 | | |
| 260 | 1.1 | 327 | 270 | | 50.8 | 897 | 896 | | 1363 | 1527 | | |
| 250 | | 113 | 189 | | 12.4 | 711 | 844 | | 1219 | 1470 | | |
| 240 | | | 117 | | | 486 | 772 | | 1043 | 1382 | | |
| 230 | | | 70.8 | | | 241 | 672 | | 818 | 1271 | | |
| 220 | | | 38.8 | | | 87.1 | 529 | | 605 | 1113 | | |
| 210 | | | | | | | 335 | | 444 | 926 | | |
| 200 | | | | | | | 125 | | 325 | 714 | | |
| 190 | | | | | | | 12.4 | | 244 | 467 | | |
| 180 | | | | | | | | | 190 | 299 | | |
| 170 | | | | | | | | | 148 | 215 | | |
| 160 | | | | | | | | | 117 | 172 | | |
| 150 | | | | | | | | | 104 | 136 | | |
| 140 | | | | | | | | | 95.8 | 119 | | |
| 130 | | | | | | | | | 91.6 | 109 | | |
| 120 | | | | | | | | | 87.5 | 102 | | |
| 110 | | | | | | | | | 78.5 | 86.3 | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A7 | A7 | A6 | B6 | 6 | A6 | A6 | A6 | A5 | 5 | 5 | 4 |
| HMIN | | | 108 | 109 | 111 | | 189 | 196 | 231 | 223 | 248 | 238 |
| SCAT | | | 45.6 | 51.1 | 52.8 | | 48.9 | 53.5 | 57.2 | 43.3 | 64.9 | 45.4 |
| HMAXF | | | 318 | 299 | 294 | | 303 | 350 | 348 | 345 | 398 | 354 |
| SHMAX | | | 2208 | 2076 | 1671 | | 673 | 721 | 644 | 485 | 695 | 508 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | | 794 | |
| 390 | | | | | | | | | | | 790 | |
| 380 | | | | | | | | | | | 778 | |
| 370 | | | | | | | | | | | 756 | |
| 360 | | | | | | | | 917 | | | 724 | 794 |
| 350 | | | | | | | | 917 | 875 | 754 | 683 | 792 |
| 340 | | | | | | | | 909 | 870 | 752 | 634 | 776 |
| 330 | | | | | | | | 884 | 853 | 731 | 572 | 739 |
| 320 | | | 2865 | | | | | 843 | 821 | 688 | 494 | 686 |
| 310 | | | 2844 | | | | 1004 | 787 | 779 | 628 | 406 | 613 |
| 300 | | | 2755 | 2716 | 2144 | | 1003 | 715 | 720 | 553 | 315 | 521 |
| 290 | | | 2598 | 2694 | 2141 | | 985 | 629 | 636 | 468 | 228 | 411 |
| 280 | | | 2375 | 2621 | 2106 | | 945 | 538 | 533 | 366 | 152 | 296 |
| 270 | | | 2072 | 2487 | 2033 | | 886 | 434 | 418 | 262 | 95.4 | 190 |
| 260 | | | 1721 | 2315 | 1919 | | 803 | 332 | 285 | 173 | 55.3 | 106 |
| 250 | | | 1376 | 2080 | 1772 | | 703 | 238 | 164 | 110 | 12.4 | 57.8 |
| 240 | | | 1091 | 1770 | 1580 | | 589 | 163 | 70.2 | 67.8 | | 12.4 |
| 230 | | | 825 | 1393 | 1347 | | 447 | 114 | | 40.4 | | |
| 220 | | | 631 | 1040 | 1091 | | 278 | 76.9 | | | | |
| 210 | | | 507 | 742 | 781 | | 151 | 50.5 | | | | |
| 200 | | | 428 | 502 | 520 | | 77.1 | 17.4 | | | | |
| 190 | | | 374 | 385 | 354 | | 12.4 | | | | | |
| 180 | | | 334 | 324 | 278 | | | | | | | |
| 170 | | | 300 | 284 | 232 | | | | | | | |
| 160 | | | 262 | 251 | 197 | | | | | | | |
| 150 | | | 219 | 216 | 164 | | | | | | | |
| 140 | | | 183 | 181 | 137 | | | | | | | |
| 130 | | | 160 | 156 | 123 | | | | | | | |
| 120 | | | 149 | 144 | 114 | | | | | | | |
| 110 | | | 75.6 | 51.4 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 8 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 |
| HMIN | 213 | 202 | 198 | 207 | 217 | 254 | 188 | 105 | 107 | 111 | 109 | 109 |
| SCAT | 44.6 | 39.8 | 42.9 | 55.6 | 46.8 | 49.6 | 39.4 | 30.2 | 38.7 | 41.5 | 55.2 | 51.0 |
| HMAXF | 322 | 304 | 297 | 329 | 323 | 361 | 289 | 248 | 259 | 279 | 297 | 301 |
| SHMAX | 456 | 405 | 310 | 332 | 200 | 227 | 208 | 425 | 755 | 1105 | 1569 | 1641 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 335 | | | | | | |
| 360 | | | | | | 335 | | | | | | |
| 350 | | | | | | 331 | | | | | | |
| 340 | | | | | | 320 | | | | | | |
| 330 | 754 | | | 446 | 310 | 302 | | | | | | |
| 320 | 754 | | | 444 | 310 | 279 | | | | | | |
| 310 | 741 | 716 | | 434 | 304 | 246 | | | | | | 1907 |
| 300 | 709 | 715 | 540 | 417 | 291 | 206 | | | | | 1786 | 1906 |
| 290 | 660 | 695 | 537 | 394 | 269 | 162 | 362 | | | | 1778 | 1885 |
| 280 | 587 | 653 | 520 | 363 | 241 | 111 | 357 | | | 1555 | 1742 | 1827 |
| 270 | 491 | 587 | 487 | 321 | 207 | 69.3 | 341 | | | 1536 | 1677 | 1724 |
| 260 | 372 | 503 | 442 | 266 | 167 | 37.7 | 314 | | 1191 | 1471 | 1584 | 1593 |
| 250 | 246 | 402 | 375 | 207 | 124 | | 275 | 834 | 1175 | 1363 | 1464 | 1433 |
| 240 | 140 | 278 | 286 | 146 | 83.6 | | 224 | 818 | 1119 | 1211 | 1305 | 1250 |
| 230 | 75.2 | 171 | 187 | 90.7 | 51.3 | | 171 | 755 | 1024 | 1007 | 1145 | 1046 |
| 220 | 42.0 | 93.4 | 103 | 56.3 | 17.7 | | 120 | 654 | 874 | 784 | 952 | 851 |
| 210 | | 47.7 | 55.6 | 18.5 | | | 79.2 | 522 | 679 | 589 | 757 | 679 |
| 200 | | | 12.4 | | | | 50.8 | 363 | 509 | 463 | 596 | 552 |
| 190 | | | | | | | 12.4 | 227 | 381 | 382 | 471 | 463 |
| 180 | | | | | | | | 144 | 295 | 333 | 386 | 394 |
| 170 | | | | | | | | 106 | 238 | 296 | 329 | 344 |
| 160 | | | | | | | | 86.3 | 204 | 256 | 284 | 306 |
| 150 | | | | | | | | 76.9 | 166 | 214 | 244 | 272 |
| 140 | | | | | | | | 70.0 | 133 | 179 | 207 | 237 |
| 130 | | | | | | | | 65.7 | 110 | 147 | 164 | 200 |
| 120 | | | | | | | | 61.3 | 101 | 129 | 150 | 170 |
| 110 | | | | | | | | 44.6 | 78.1 | | 58.9 | 65.5 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 8 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 4 | A4 | A4 | 54 | 4 | 4 | 4 | 4 | 4 | 6 |
| HMIN | 109 | 109 | 109 | | | | 178 | 198 | 211 | 230 | 257 | 232 |
| SCAT | 44.0 | 53.2 | 47.2 | | | | 58.9 | 43.4 | 46.9 | 57.1 | 48.3 | 57.0 |
| HMAXF | 296 | 322 | 314 | | | | 331 | 318 | 319 | 345 | 375 | 380 |
| SHMAX | 1521 | 1974 | 1919 | | | | 843 | 581 | 478 | 436 | 393 | 480 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | | 599 |
| 380 | | | | | | | | | | | 573 | 599 |
| 370 | | | | | | | | | | | 572 | 594 |
| 360 | | | | | | | | | | | 559 | 580 |
| 350 | | | | | | | | | | 573 | 533 | 556 |
| 340 | | | | | | | 1004 | | | 572 | 496 | 525 |
| 330 | | 2161 | | | | | 1004 | | | 563 | 447 | 482 |
| 320 | | 2160 | 2361 | | | | 996 | 939 | 754 | 546 | 387 | 427 |
| 310 | | 2133 | 2358 | | | | 973 | 930 | 747 | 518 | 320 | 363 |
| 300 | 1938 | 2068 | 2312 | | | | 934 | 893 | 723 | 483 | 246 | 291 |
| 290 | 1929 | 1963 | 2207 | | | | 885 | 838 | 681 | 439 | 165 | 222 |
| 280 | 1865 | 1826 | 2062 | | | | 815 | 756 | 622 | 383 | 104 | 160 |
| 270 | 1768 | 1644 | 1856 | | | | 734 | 648 | 542 | 320 | 59.6 | 115 |
| 260 | 1613 | 1434 | 1614 | | | | 642 | 514 | 445 | 255 | 19.0 | 79.8 |
| 250 | 1421 | 1217 | 1352 | | | | 540 | 368 | 330 | 176 | | 55.6 |
| 240 | 1193 | 991 | 1103 | | | | 433 | 242 | 203 | 84.8 | | 33.8 |
| 230 | 958 | 814 | 854 | | | | 328 | 152 | 107 | | | |
| 220 | 750 | 679 | 656 | | | | 233 | 94.0 | 56.6 | | | |
| 210 | 597 | 572 | 525 | | | | 160 | 56.0 | | | | |
| 200 | 494 | 488 | 444 | | | | 98.7 | 12.4 | | | | |
| 190 | 430 | 424 | 395 | | | | 57.4 | | | | | |
| 180 | 386 | 384 | 354 | | | | 12.4 | | | | | |
| 170 | 354 | 350 | 311 | | | | | | | | | |
| 160 | 324 | 314 | 281 | | | | | | | | | |
| 150 | 289 | 271 | 236 | | | | | | | | | |
| 140 | 242 | 221 | 194 | | | | | | | | | |
| 130 | 200 | 183 | 163 | | | | | | | | | |
| 120 | 174 | 169 | 152 | | | | | | | | | |
| 110 | 127 | 127 | 119 | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 9 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 6 | 6 | 5 | 5 | 5 | 4 | 4 | A4 | A5 | A5 | A5 | 4 |
| HMIN | 261 | 228 | 209 | 229 | 208 | 267 | 201 | | | | 109 | 109 |
| SCAT | 44.9 | 38.4 | 56.1 | 40.9 | 58.3 | 43.9 | 60.6 | | | | 57.5 | 45.3 |
| HMAXF | 377 | 334 | 333 | 31' | 343 | 367 | 314 | | | | 293 | 300 |
| SHMAX | 373 | 347 | 432 | 284 | 279 | 223 | 171 | | | | 1362 | 1537 |
| KM | | | | | | | | | | | | |
| 380 | 573 | | | | | | | | | | | |
| 370 | 570 | | | | | 362 | | | | | | |
| 360 | 552 | | | | | 360 | | | | | | |
| 350 | 519 | | | | 335 | 349 | | | | | | |
| 340 | 474 | 608 | 573 | | 335 | 328 | | | | | | |
| 330 | 414 | 606 | 573 | | 331 | 298 | | | | | | |
| 320 | 346 | 586 | 566 | 508 | 322 | 260 | 219 | | | | | |
| 310 | 270 | 544 | 550 | 503 | 308 | 217 | 218 | | | | | 1907 |
| 300 | 195 | 485 | 525 | 482 | 289 | 166 | 216 | | | | 1542 | 1907 |
| 290 | 130 | 411 | 493 | 447 | 266 | 114 | 210 | | | | 1540 | 1883 |
| 280 | 81.7 | 327 | 447 | 396 | 238 | 65.9 | 201 | | | | 1521 | 1813 |
| 270 | 48.2 | 234 | 387 | 329 | 208 | 19.9 | 189 | | | | 1478 | 1690 |
| 260 | | 153 | 322 | 251 | 175 | | 176 | | | | 1409 | 1533 |
| 250 | | 92.4 | 253 | 166 | 142 | | 158 | | | | 1326 | 1332 |
| 240 | | 54.0 | 177 | 82.1 | 108 | | 136 | | | | 1208 | 1097 |
| 230 | | 12.4 | 98.4 | 12.4 | 75.6 | | 106 | | | | 1066 | 887 |
| 220 | | | 54.4 | | 49.0 | | 69.9 | | | | 891 | 713 |
| 210 | | | 5.8 | | 12.4 | | 44.2 | | | | 704 | 577 |
| 200 | | | | | | | | | | | 535 | 483 |
| 190 | | | | | | | | | | | 418 | 422 |
| 180 | | | | | | | | | | | 350 | 378 |
| 170 | | | | | | | | | | | 304 | 342 |
| 160 | | | | | | | | | | | 269 | 306 |
| 150 | | | | | | | | | | | 237 | 266 |
| 140 | | | | | | | | | | | 207 | 226 |
| 130 | | | | | | | | | | | 171 | 187 |
| 120 | | | | | | | | | | | 152 | 170 |
| 110 | | | | | | | | | | | 118 | 128 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 9 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 4 | 4 | 4 | 4 | B4 | 5 | A5 | 5 | 4 | 4 | 4 | 4 |
| HMIN | 108 | 109 | 109 | 108 | | 110 | 202 | 211 | 240 | 259 | 267 | 247 |
| SCAT | 63.4 | 52.4 | 50.8 | 54.5 | | 58.9 | 52.8 | 45.1 | 76.6 | 48.4 | 49.9 | 60.1 |
| HMAXF | 312 | 323 | 312 | 313 | | 312 | 328 | 330 | 374 | 363 | 376 | 375 |
| SHMAX | 1752 | 1789 | 1705 | 1706 | | 1239 | 890 | 704 | 818 | 520 | 509 | 581 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | 875 | | 754 | 754 |
| 370 | | | | | | | | | 874 | 794 | 752 | 753 |
| 360 | | | | | | | | | 868 | 793 | 735 | 743 |
| 350 | | | | | | | | | 854 | 779 | 701 | 723 |
| 340 | | | | | | | | | 833 | 748 | 655 | 693 |
| 330 | | 1846 | | | | | 1228 | 1072 | 806 | 699 | 594 | 654 |
| 320 | 1727 | 1844 | 1984 | 1907 | | 1341 | 1220 | 1060 | 773 | 637 | 516 | 596 |
| 310 | 1726 | 1816 | 1983 | 1905 | | 1341 | 1192 | 1016 | 725 | 556 | 425 | 517 |
| 300 | 1710 | 1744 | 1955 | 1879 | | 1328 | 1141 | 951 | 662 | 459 | 314 | 425 |
| 290 | 1673 | 1646 | 1884 | 1821 | | 1295 | 1070 | 873 | 586 | 340 | 196 | 313 |
| 280 | 1610 | 1522 | 1778 | 1722 | | 1244 | 969 | 768 | 490 | 213 | 105 | 209 |
| 270 | 1539 | 1374 | 1640 | 1597 | | 1168 | 841 | 635 | 384 | 112 | 38.7 | 123 |
| 260 | 1434 | 1217 | 1457 | 1452 | | 1080 | 698 | 498 | 267 | 12.4 | | 65.9 |
| 250 | 1309 | 1067 | 1241 | 1282 | | 974 | 553 | 347 | 142 | | | 19.9 |
| 240 | 1172 | 913 | 1048 | 1099 | | 853 | 405 | 212 | 12.4 | | | |
| 230 | 1014 | 771 | 839 | 894 | | 726 | 249 | 113 | | | | |
| 220 | 852 | 658 | 655 | 704 | | 601 | 125 | 56.6 | | | | |
| 210 | 712 | 567 | 531 | 556 | | 493 | 57.5 | | | | | |
| 200 | 587 | 496 | 445 | 450 | | 396 | | | | | | |
| 190 | 489 | 443 | 392 | 379 | | 313 | | | | | | |
| 180 | 417 | 400 | 348 | 328 | | 244 | | | | | | |
| 170 | 365 | 361 | 307 | 288 | | 187 | | | | | | |
| 160 | 325 | 327 | 273 | 253 | | 149 | | | | | | |
| 150 | 291 | 292 | 241 | 220 | | 124 | | | | | | |
| 140 | 258 | 253 | 190 | 189 | | 105 | | | | | | |
| 130 | 221 | 216 | 160 | 162 | | 92.7 | | | | | | |
| 120 | 191 | 191 | 151 | 149 | | 84.9 | | | | | | |
| 110 | 150 | 103 | 74.1 | 113 | | 12.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 10 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | A0 | A1 |
| HMIN | 210 | 220 | 208 | 210 | 199 | 218 | 269 | 208 | 109 | 107 | 109 | |
| SCAT | 45.2 | 36.6 | 49.1 | 47.6 | 38.0 | 70.8 | 44.2 | 31.0 | 33.9 | 47.7 | 58.0 | |
| HMAXF | 322 | 325 | 322 | 314 | 280 | 345 | 350 | 281 | 270 | 281 | 292 | |
| SHMAX | 459 | 374 | 404 | 346 | 175 | 163 | 115 | 319 | 859 | 1267 | 1462 | |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | 198 | | | | | |
| 350 | | | | | | 179 | 198 | | | | | |
| 340 | | | | | | 179 | 196 | | | | | |
| 330 | 754 | 679 | 608 | | | 177 | 188 | | | | | |
| 320 | 754 | 676 | 607 | 540 | | 173 | 174 | | | | | |
| 310 | 742 | 652 | 598 | 539 | | 168 | 156 | | | | | |
| 300 | 711 | 599 | 577 | 528 | | 161 | 133 | | | | 1640 | |
| 290 | 664 | 526 | 544 | 504 | 335 | 151 | 107 | 754 | | 1669 | 1639 | |
| 280 | 592 | 437 | 496 | 469 | 335 | 141 | 73.5 | 754 | 1500 | 1668 | 1623 | |
| 270 | 495 | 336 | 432 | 422 | 329 | 129 | 12.4 | 730 | 1500 | 1647 | 1582 | |
| 260 | 378 | 240 | 356 | 364 | 312 | 114 | | 665 | 1467 | 1589 | 1515 | |
| 250 | 238 | 151 | 265 | 290 | 282 | 95.9 | | 565 | 1377 | 1493 | 1441 | |
| 240 | 139 | 86.7 | 166 | 196 | 242 | 74.5 | | 410 | 1241 | 1368 | 1319 | |
| 230 | 80.9 | 49.8 | 98.8 | 109 | 190 | 50.0 | | 223 | 971 | 1186 | 1156 | |
| 220 | 48.7 | | 57.4 | 59.0 | 132 | 12.4 | | 98.0 | 699 | 971 | 970 | |
| 210 | .7 | | 12.4 | 4.1 | 72.3 | | | 24.6 | 494 | 765 | 778 | |
| 200 | | | | | 12.4 | | | | 359 | 588 | 628 | |
| 190 | | | | | | | | | 271 | 452 | 504 | |
| 180 | | | | | | | | | 206 | 360 | 415 | |
| 170 | | | | | | | | | 157 | 298 | 352 | |
| 160 | | | | | | | | | 127 | 249 | 302 | |
| 150 | | | | | | | | | 116 | 205 | 261 | |
| 140 | | | | | | | | | 109 | 167 | 226 | |
| 130 | | | | | | | | | 104 | 143 | 188 | |
| 120 | | | | | | | | | 99.9 | 133 | 165 | |
| 110 | | | | | | | | | 55.6 | 114 | 84.9 | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 10 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q.KP | A1 | A1 | A1 | A1 | A1 | A3 | A3 | A3 | A4 | 4 | 4 | 4 |
| HMIN | | | | | | | | | 204 | 228 | 288 | 258 |
| SCAT | | | | | | | | | 60.8 | 60.7 | 71.4 | 50.0 |
| HMAXF | | | | | | | | | 336 | 378 | 412 | 375 |
| SHMAX | | | | | | | | | 688 | 527 | 522 | 352 |
| KM | | | | | | | | | | | | |
| 420 | | | | | | | | | | | 608 | |
| 410 | | | | | | | | | | | 607 | |
| 400 | | | | | | | | | | | 603 | |
| 390 | | | | | | | | | | | 593 | |
| 380 | | | | | | | | | | 608 | 576 | 508 |
| 370 | | | | | | | | | | 605 | 557 | 507 |
| 360 | | | | | | | | | | 595 | 534 | 497 |
| 350 | | | | | | | | | | 576 | 496 | 477 |
| 340 | | | | | | | | | 875 | 548 | 439 | 448 |
| 330 | | | | | | | | | 873 | 514 | 368 | 406 |
| 320 | | | | | | | | | 860 | 471 | 290 | 352 |
| 310 | | | | | | | | | 835 | 420 | 201 | 289 |
| 300 | | | | | | | | | 799 | 363 | 95.4 | 223 |
| 290 | | | | | | | | | 752 | 305 | 24.6 | 158 |
| 280 | | | | | | | | | 685 | 246 | | 98.9 |
| 270 | | | | | | | | | 600 | 190 | | 56.3 |
| 260 | | | | | | | | | 498 | 131 | | 12.4 |
| 250 | | | | | | | | | 374 | 82.3 | | |
| 240 | | | | | | | | | 248 | 51.8 | | |
| 230 | | | | | | | | | 145 | 12.4 | | |
| 220 | | | | | | | | | 79.0 | | | |
| 210 | | | | | | | | | 40.0 | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 11 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 5 | A5 | A5 | A3 | A3 | A3 | 3 | 53 | 3 | 2 |
| HMIN | 249 | 224 | 201 | 209 | 288 | 357 | | | 109 | 109 | 105 | 105 |
| SCAT | 53.4 | 38.9 | 37.2 | 114 | 79.8 | 78.8 | | | 40.4 | 45.1 | 52.6 | 56.7 |
| HMAXF | 361 | 317 | 273 | 379 | 425 | 487 | | | 271 | 283 | 298 | 308 |
| SHMAX | 362 | 278 | 231 | 314 | 171 | 149 | | | 760 | 1155 | 1548 | 1676 |
| KM | | | | | | | | | | | | |
| 490 | | | | | | 152 | | | | | | |
| 480 | | | | | | 152 | | | | | | |
| 470 | | | | | | 150 | | | | | | |
| 460 | | | | | | 148 | | | | | | |
| 450 | | | | | | 144 | | | | | | |
| 440 | | | | | | 139 | | | | | | |
| 430 | | | | | 170 | 134 | | | | | | |
| 420 | | | | | 170 | 129 | | | | | | |
| 410 | | | | | 168 | 120 | | | | | | |
| 400 | | | | | 166 | 109 | | | | | | |
| 390 | | | | | 162 | 93.1 | | | | | | |
| 380 | | | | 235 | 156 | 74.2 | | | | | | |
| 370 | 524 | | | 234 | 151 | 53.9 | | | | | | |
| 360 | 524 | | | 233 | 145 | 18.5 | | | | | | |
| 350 | 519 | | | 231 | 136 | | | | | | | |
| 340 | 504 | | | 228 | 125 | | | | | | | |
| 330 | 483 | | | 224 | 109 | | | | | | | |
| 320 | 452 | 508 | | 219 | 90.3 | | | | | | | |
| 310 | 404 | 503 | | 212 | 72.6 | | | | | | | 1786 |
| 300 | 341 | 482 | | 205 | 52.0 | | | | | | 1786 | 1776 |
| 290 | 269 | 445 | | 199 | 12.4 | | | | 1528 | 1774 | 1739 | |
| 280 | 187 | 390 | 500 | 190 | | | | | 1096 | 1526 | 1731 | 1674 |
| 270 | 101 | 320 | 499 | 182 | | | | | 1096 | 1494 | 1654 | 1577 |
| 260 | 55.2 | 239 | 484 | 171 | | | | | 1076 | 1424 | 1551 | 1458 |
| 250 | 5.3 | 157 | 453 | 158 | | | | | 1019 | 1331 | 1408 | 1313 |
| 240 | | 84.3 | 402 | 142 | | | | | 934 | 1180 | 1238 | 1121 |
| 230 | | 41.2 | 312 | 118 | | | | | 823 | 1008 | 1070 | 942 |
| 220 | | | 174 | 82.1 | | | | | 682 | 812 | 878 | 795 |
| 210 | | | 71.0 | 12.4 | | | | | 526 | 637 | 707 | 674 |
| 200 | | | | | | | | | 415 | 501 | 566 | 568 |
| 190 | | | | | | | | | 328 | 400 | 460 | 480 |
| 180 | | | | | | | | | 262 | 325 | 382 | 409 |
| 170 | | | | | | | | | 209 | 267 | 324 | 352 |
| 160 | | | | | | | | | 170 | 221 | 274 | 303 |
| 150 | | | | | | | | | 142 | 182 | 232 | 261 |
| 140 | | | | | | | | | 122 | 155 | 196 | 223 |
| 130 | | | | | | | | | 108 | 140 | 169 | 188 |
| 120 | | | | | | | | | 98.6 | 132 | 154 | 171 |
| 110 | | | | | | | | | 41.3 | 100 | 144 | 153 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 11 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | 2 | 2 | 2 | A2 | 2 | 2 | 1 | 1 | 1 | F1 |
| HMIN | 105 | 108 | 108 | 108 | 109 | 109 | 219 | 201 | 212 | 218 | 269 | 243 |
| SCAT | 65.6 | 55.1 | 54.2 | 61.3 | 56.6 | 63.8 | 57.2 | 48.9 | 50.6 | 57.5 | 54.3 | 52.6 |
| HMAXF | 325 | 325 | 316 | 322 | 329 | 313 | 325 | 318 | 323 | 358 | 386 | 357 |
| SHMAX | 2018 | 2035 | 2050 | 1986 | 1897 | 1592 | 968 | 649 | 552 | 463 | 432 | 398 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | 608 | |
| 380 | | | | | | | | | | | 606 | |
| 370 | | | | | | | | | | | 595 | |
| 360 | | | | | | | | | | 540 | 573 | 565 |
| 350 | | | | | | | | | | 538 | 542 | 562 |
| 340 | | | | | | | | | | 528 | 501 | 550 |
| 330 | 1984 | 2161 | | 1984 | 2032 | | 1341 | | 824 | 509 | 441 | 527 |
| 320 | 1981 | 2155 | 2294 | 1984 | 2020 | 1786 | 1339 | 960 | 823 | 481 | 368 | 496 |
| 310 | 1958 | 2118 | 2286 | 1965 | 1976 | 1784 | 1320 | 954 | 810 | 446 | 284 | 452 |
| 300 | 1911 | 2045 | 2242 | 1920 | 1899 | 1766 | 1280 | 928 | 778 | 406 | 184 | 399 |
| 290 | 1837 | 1932 | 2159 | 1842 | 1787 | 1725 | 1218 | 881 | 733 | 362 | 105 | 336 |
| 280 | 1750 | 1790 | 2037 | 1747 | 1651 | 1662 | 1145 | 816 | 674 | 315 | 57.3 | 259 |
| 270 | 1635 | 1612 | 1875 | 1623 | 1485 | 1579 | 1035 | 727 | 591 | 268 | 4.9 | 161 |
| 260 | 1488 | 1395 | 1678 | 1482 | 1291 | 1476 | 895 | 621 | 483 | 220 | | 84.0 |
| 250 | 1315 | 1188 | 1440 | 1325 | 1114 | 1343 | 714 | 505 | 370 | 175 | | 44.9 |
| 240 | 1094 | 988 | 1190 | 1147 | 933 | 1166 | 493 | 365 | 231 | 133 | | |
| 230 | 914 | 812 | 980 | 981 | 777 | 956 | 262 | 231 | 118 | 87.2 | | |
| 220 | 749 | 672 | 785 | 828 | 642 | 724 | 49.0 | 122 | 55.1 | 25.6 | | |
| 210 | 613 | 566 | 634 | 694 | 531 | 517 | | 59.7 | | | | |
| 200 | 512 | 491 | 519 | 579 | 437 | 366 | | | | | | |
| 190 | 438 | 436 | 437 | 480 | 357 | 263 | | | | | | |
| 180 | 380 | 392 | 379 | 399 | 292 | 197 | | | | | | |
| 170 | 332 | 352 | 334 | 332 | 238 | 152 | | | | | | |
| 160 | 290 | 312 | 297 | 278 | 196 | 122 | | | | | | |
| 150 | 251 | 272 | 261 | 233 | 160 | 104 | | | | | | |
| 140 | 207 | 229 | 218 | 198 | 137 | 93.8 | | | | | | |
| 130 | 17= | 198 | 196 | 176 | 124 | 87.3 | | | | | | |
| 120 | 170 | 186 | 185 | 164 | 117 | 79.0 | | | | | | |
| 110 | 161 | 146 | 122 | 105 | 84.0 | 46.8 | | | | | | |

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ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 12 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | F1 | F1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | A1 |
| HMIN | 251 | 230 | 215 | 204 | 229 | 257 | 218 | 199 | 109 | 109 | 107 | 108 |
| SCAT | 42.1 | 48.3 | 44.1 | 41.4 | 63.8 | 44.9 | 51.4 | 43.4 | 45.3 | 40.3 | 50.5 | 52.8 |
| HMAXF | 339 | 328 | 301 | 285 | 342 | 343 | 319 | 274 | 264 | 271 | 292 | 308 |
| SHMAX | 338 | 368 | 299 | 192 | 213 | 128 | 178 | 390 | 777 | 1019 | 1394 | 1685 |
| KM | | | | | | | | | | | | |
| 350 | | | | | 262 | 214 | | | | | | |
| 340 | 608 | | | | 262 | 213 | | | | | | |
| 330 | 600 | 608 | | | 260 | 209 | | | | | | |
| 320 | 575 | 604 | | | 255 | 200 | 262 | | | | | |
| 310 | 533 | 587 | 540 | | 246 | 184 | 261 | | | | | 1891 |
| 300 | 474 | 557 | 540 | | 234 | 164 | 254 | | | | 1640 | 1880 |
| 290 | 394 | 517 | 532 | 362 | 222 | 140 | 242 | | | | 1640 | 1836 |
| 280 | 291 | 455 | 510 | 360 | 203 | 111 | 226 | 754 | | 1446 | 1619 | 1752 |
| 270 | 171 | 362 | 478 | 350 | 180 | 78.3 | 205 | 753 | 1084 | 1446 | 1565 | 1640 |
| 260 | 70.6 | 232 | 426 | 329 | 148 | 35.0 | 177 | 736 | 1082 | 1421 | 1474 | 1495 |
| 250 | | 125 | 340 | 299 | 111 | | 140 | 699 | 1058 | 1352 | 1360 | 1324 |
| 240 | | 59.5 | 233 | 254 | 75.1 | | 98.6 | 646 | 1008 | 1246 | 1211 | 1138 |
| 230 | | 4.1 | 123 | 187 | 12.4 | | 61.8 | 549 | 932 | 1081 | 1041 | 926 |
| 220 | | | 49.0 | 101 | | | 12.4 | 401 | 829 | 903 | 870 | 748 |
| 210 | | | | 46.2 | | | | 203 | 702 | 723 | 710 | 606 |
| 200 | | | | | | | | 38.9 | 560 | 567 | 585 | 509 |
| 190 | | | | | | | | | 426 | 451 | 486 | 441 |
| 180 | | | | | | | | | 323 | 367 | 409 | 387 |
| 170 | | | | | | | | | 241 | 305 | 345 | 342 |
| 160 | | | | | | | | | 185 | 253 | 294 | 301 |
| 150 | | | | | | | | | 152 | 206 | 253 | 256 |
| 140 | | | | | | | | | 125 | 172 | 203 | 216 |
| 130 | | | | | | | | | 109 | 144 | 184 | 195 |
| 120 | | | | | | | | | 102 | 133 | 168 | 185 |
| 110 | | | | | | | | | 58.9 | 62.0 | 132 | 99.6 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 12 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | R2 | 2 | 2 | A3 | 3 | 3 | 1 | 1 | 1 | 1 |
| HMIN | 107 | 109 | | 109 | 109 | | 199 | 178 | 213 | 218 | 228 | 220 |
| SCAT | 50.1 | 59.0 | | 57.1 | 60.9 | | 60.4 | 51.6 | 48.6 | 51.8 | 47.3 | 38.8 |
| HMAXF | 304 | 326 | | 314 | 322 | | 331 | 313 | 334 | 341 | 344 | 319 |
| SHMAX | 1682 | 1935 | | 1563 | 1593 | | 1074 | 710 | 555 | 504 | 454 | 336 |
| KM | | | | | | | | | | | | |
| 350 | | | | | | | | | | 716 | 679 | |
| 340 | | | | | | | 1341 | | 834 | 716 | 678 | |
| 330 | | 1969 | | | 1626 | | 1341 | | 833 | 708 | 664 | |
| 320 | | 1963 | | 1669 | 1625 | | 1329 | 960 | 817 | 687 | 634 | 608 |
| 310 | 1907 | 1930 | | 1667 | 1611 | | 1299 | 959 | 782 | 653 | 591 | 599 |
| 300 | 1904 | 1857 | | 1644 | 1574 | | 1251 | 944 | 731 | 608 | 532 | 569 |
| 290 | 1870 | 1764 | | 1596 | 1507 | | 1184 | 909 | 665 | 542 | 459 | 520 |
| 280 | 1798 | 1651 | | 1516 | 1429 | | 1103 | 857 | 572 | 462 | 380 | 452 |
| 270 | 1680 | 1519 | | 1415 | 1330 | | 986 | 790 | 459 | 370 | 292 | 366 |
| 260 | 1533 | 1356 | | 1294 | 1206 | | 851 | 704 | 336 | 267 | 194 | 269 |
| 250 | 1364 | 1185 | | 1167 | 1063 | | 706 | 608 | 215 | 165 | 110 | 174 |
| 240 | 1187 | 1012 | | 1019 | 918 | | 532 | 501 | 129 | 95.4 | 59.6 | 97.1 |
| 230 | 1005 | 841 | | 855 | 778 | | 347 | 385 | 74.9 | 55.0 | 12.4 | 52.0 |
| 220 | 832 | 702 | | 702 | 649 | | 198 | 264 | 41.9 | 12.4 | | |
| 210 | 683 | 585 | | 566 | 537 | | 86.0 | 160 | | | | |
| 200 | 562 | 490 | | 462 | 445 | | 12.4 | 93.8 | | | | |
| 190 | 474 | 415 | | 381 | 367 | | | 55.3 | | | | |
| 180 | 409 | 359 | | 316 | 304 | | | 12.4 | | | | |
| 170 | 360 | 313 | | 264 | 252 | | | | | | | |
| 160 | 319 | 261 | | 222 | 209 | | | | | | | |
| 150 | 280 | 218 | | 189 | 175 | | | | | | | |
| 140 | 244 | 199 | | 161 | 152 | | | | | | | |
| 130 | 225 | 190 | | 156 | 139 | | | | | | | |
| 120 | 194 | 181 | | 148 | 129 | | | | | | | |
| 110 | 156 | 65.5 | | 68.6 | 78.9 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 13 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | B1 | B1 |
| HMIN | 220 | 209 | 209 | 202 | 254 | 280 | 208 | 107 | 110 | 106 | | |
| SCAT | 36.3 | 37.1 | 47.1 | 48.1 | 59.3 | 48.2 | 41.6 | 27.6 | 56.6 | 43.3 | | |
| HMAXF | 309 | 294 | 297 | 300 | 380 | 381 | 298 | 246 | 281 | 280 | | |
| SHMAX | 306 | 286 | 276 | 168 | 183 | 152 | 177 | 400 | 891 | 1088 | | |
| KM | | | | | | | | | | | | |
| 390 | | | | | 219 | 229 | | | | | | |
| 380 | | | | | 219 | 229 | | | | | | |
| 370 | | | | | 217 | 226 | | | | | | |
| 360 | | | | | 212 | 218 | | | | | | |
| 350 | | | | | 204 | 204 | | | | | | |
| 340 | | | | | 193 | 186 | | | | | | |
| 330 | | | | | 179 | 164 | | | | | | |
| 320 | | | | | 161 | 136 | | | | | | |
| 310 | 608 | | | 262 | 142 | 108 | | | | | | |
| 300 | 597 | 573 | 477 | 262 | 122 | 78.7 | 310 | | | | | |
| 290 | 562 | 572 | 474 | 259 | 103 | 49.4 | 307 | | 1084 | 1446 | | |
| 280 | 506 | 554 | 461 | 251 | 82.4 | | 295 | | 1084 | 1446 | | |
| 270 | 431 | 517 | 437 | 236 | 61.1 | | 274 | | 1075 | 1426 | | |
| 260 | 327 | 457 | 407 | 218 | 40.0 | | 245 | | 1048 | 1368 | | |
| 250 | 198 | 368 | 355 | 191 | | | 204 | 834 | 1008 | 1269 | | |
| 240 | 105 | 251 | 275 | 156 | | | 155 | 823 | 948 | 1131 | | |
| 230 | 53.3 | 136 | 157 | 115 | | | 103 | 760 | 859 | 979 | | |
| 220 | | 68.3 | 71.4 | 73.5 | | | 59.0 | 647 | 748 | 812 | | |
| 210 | | 12.4 | 12.4 | 43.3 | | | 12.4 | 485 | 618 | 646 | | |
| 200 | | | | | | | | 334 | 489 | 508 | | |
| 190 | | | | | | | | 223 | 371 | 413 | | |
| 180 | | | | | | | | 145 | 275 | 344 | | |
| 170 | | | | | | | | 100 | 208 | 284 | | |
| 160 | | | | | | | | 80.1 | 160 | 233 | | |
| 150 | | | | | | | | 70.8 | 131 | 189 | | |
| 140 | | | | | | | | 67.6 | 118 | 158 | | |
| 130 | | | | | | | | 64.4 | 109 | 142 | | |
| 120 | | | | | | | | 61.2 | 102 | 134 | | |
| 110 | | | | | | | | 43.9 | 12.4 | 122 | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 13 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | A1 | A1 | A1 | A1 | A2 | A2 | A2 | 2 | 2 | 2 | 1 |
| HMIN | 108 | 109 | | | | | | 206 | 197 | 231 | 258 | 239 |
| SCAT | 50.0 | 60.6 | | | | | | 54.7 | 43.4 | 82.9 | 50.1 | 49.4 |
| HMAXF | 303 | 318 | | | | | | 338 | 315 | 399 | 381 | 350 |
| SHMAX | 1708 | 2014 | | | | | | 928 | 624 | 817 | 589 | 545 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | 754 | | |
| 390 | | | | | | | | | | 752 | 834 | |
| 380 | | | | | | | | | | 744 | 834 | |
| 370 | | | | | | | | | | 731 | 823 | |
| 360 | | | | | | | | | | 711 | 796 | |
| 350 | | | | | | | | | | 685 | 749 | 834 |
| 340 | | | | | | | | 1240 | | 655 | 690 | 826 |
| 330 | | | | | | | | 1233 | | 621 | 620 | 800 |
| 320 | | 2032 | | | | | | 1206 | 1004 | 580 | 533 | 757 |
| 310 | 1907 | 2024 | | | | | | 1157 | 1001 | 531 | 430 | 698 |
| 300 | 1905 | 1989 | | | | | | 1089 | 973 | 474 | 317 | 619 |
| 290 | 1874 | 1927 | | | | | | 999 | 918 | 409 | 204 | 511 |
| 280 | 1805 | 1836 | | | | | | 888 | 837 | 338 | 115 | 382 |
| 270 | 1691 | 1723 | | | | | | 753 | 736 | 256 | 63.1 | 240 |
| 260 | 1548 | 1574 | | | | | | 599 | 609 | 175 | 12.4 | 133 |
| 250 | 1376 | 1410 | | | | | | 439 | 457 | 106 | | 67.8 |
| 240 | 1185 | 1217 | | | | | | 275 | 302 | 59.3 | | 12.4 |
| 230 | 1004 | 1013 | | | | | | 145 | 182 | | | |
| 220 | 858 | 846 | | | | | | 74.0 | 107 | | | |
| 210 | 738 | 701 | | | | | | 27.5 | 60.4 | | | |
| 200 | 638 | 588 | | | | | | | 19.3 | | | |
| 190 | 551 | 503 | | | | | | | | | | |
| 180 | 471 | 440 | | | | | | | | | | |
| 170 | 401 | 389 | | | | | | | | | | |
| 160 | 342 | 339 | | | | | | | | | | |
| 150 | 286 | 301 | | | | | | | | | | |
| 140 | 247 | 273 | | | | | | | | | | |
| 130 | 220 | 238 | | | | | | | | | | |
| 120 | 204 | 208 | | | | | | | | | | |
| 110 | 143 | 84.9 | | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 14 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| HMIN | 218 | 206 | 201 | 199 | 289 | 277 | 250 | 198 | 110 | 111 | 109 | 108 |
| SCAT | 41.1 | 34.9 | 41.2 | 55.9 | 52.2 | 60.1 | 57.6 | 36.8 | 47.2 | 53.2 | 51.2 | 58.7 |
| HMAXF | 317 | 286 | 288 | 299 | 392 | 397 | 345 | 270 | 271 | 288 | 300 | 311 |
| SHMAX | 420 | 317 | 289 | 203 | 184 | 200 | 205 | 349 | 834 | 1298 | 1668 | 2094 |
| KM | | | | | | | | | | | | |
| 400 | | | | | 262 | 251 | | | | | | |
| 390 | | | | | 262 | 250 | | | | | | |
| 380 | | | | | 259 | 246 | | | | | | |
| 370 | | | | | 250 | 238 | | | | | | |
| 360 | | | | | 237 | 227 | | | | | | |
| 350 | | | | | 221 | 216 | 286 | | | | | |
| 340 | | | | | 198 | 196 | 285 | | | | | |
| 330 | | | | | 168 | 172 | 281 | | | | | |
| 320 | 754 | | | | 134 | 143 | 273 | | | | | 2260 |
| 310 | 749 | | | | 100 | 110 | 260 | | | | | 2260 |
| 300 | 723 | | | 286 | 64.5 | 80.6 | 245 | | | | 1969 | 2239 |
| 290 | 674 | 679 | 540 | 284 | 12.4 | 53.1 | 225 | | | 1555 | 1951 | 2186 |
| 280 | 603 | 674 | 535 | 277 | | 17.5 | 195 | 754 | 1050 | 1546 | 1893 | 2099 |
| 270 | 505 | 645 | 513 | 266 | | | 158 | 754 | 1049 | 1509 | 1799 | 1989 |
| 260 | 381 | 589 | 481 | 250 | | | 112 | 740 | 1035 | 1444 | 1673 | 1831 |
| 250 | 237 | 499 | 423 | 230 | | | 12.4 | 698 | 994 | 1350 | 1505 | 1627 |
| 240 | 128 | 373 | 338 | 205 | | | | 631 | 929 | 1228 | 1310 | 1390 |
| 230 | 60.0 | 210 | 231 | 172 | | | | 510 | 851 | 1087 | 1082 | 1167 |
| 220 | 12.4 | 96.3 | 120 | 131 | | | | 336 | 759 | 915 | 867 | 940 |
| 210 | | 42.3 | 57.1 | 74.2 | | | | 162 | 650 | 731 | 695 | 763 |
| 200 | | | | 12.4 | | | | 32.2 | 540 | 571 | 564 | 618 |
| 190 | | | | | | | | | 442 | 450 | 468 | 506 |
| 180 | | | | | | | | | 357 | 361 | 398 | 427 |
| 170 | | | | | | | | | 282 | 296 | 342 | 371 |
| 160 | | | | | | | | | 224 | 250 | 297 | 328 |
| 150 | | | | | | | | | 183 | 214 | 257 | 290 |
| 140 | | | | | | | | | 154 | 186 | 223 | 252 |
| 130 | | | | | | | | | 129 | 161 | 195 | 215 |
| 120 | | | | | | | | | 114 | 140 | 172 | 192 |
| 110 | | | | | | | | | 12.4 | | 84.9 | 151 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 14 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 0 | 0 | 0 | 0 | 0 | A1 | A1 | 1 | 1 | 1 | 1 | 2 |
| HMIN | 106 | 108 | 108 | 107 | 109 | | 208 | 209 | 199 | 237 | 246 | 229 |
| SCAT | 50.7 | 60.5 | 54.4 | 57.9 | 63.6 | | 53.3 | 49.1 | 55.5 | 51.6 | 57.2 | 54.6 |
| HMAXF | 306 | 317 | 314 | 324 | 327 | | 331 | 325 | 319 | 359 | 364 | 340 |
| SHMAX | 1898 | 1977 | 1817 | 1910 | 1805 | | 1165 | 966 | 714 | 604 | 608 | 480 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | | | 834 | |
| 360 | | | | | | | | | | 834 | 833 | |
| 350 | | | | | | | | | | 828 | 821 | 679 |
| 340 | | | | | | | 1612 | | | 806 | 797 | 679 |
| 330 | | | | 1984 | 1786 | | 1611 | 1446 | | 766 | 761 | 673 |
| 320 | | 2000 | 1907 | 1982 | 1780 | | 1595 | 1442 | 960 | 715 | 712 | 655 |
| 310 | 2161 | 1993 | 1904 | 1955 | 1752 | | 1550 | 1410 | 954 | 649 | 643 | 627 |
| 300 | 2153 | 1960 | 1877 | 1896 | 1703 | | 1478 | 1349 | 932 | 570 | 547 | 590 |
| 290 | 2108 | 1897 | 1817 | 1806 | 1627 | | 1381 | 1255 | 892 | 478 | 431 | 533 |
| 280 | 2019 | 1808 | 1714 | 1692 | 1537 | | 1248 | 1139 | 839 | 371 | 311 | 457 |
| 270 | 1893 | 1692 | 1591 | 1551 | 1420 | | 1090 | 975 | 772 | 265 | 175 | 367 |
| 260 | 1718 | 1553 | 1444 | 1387 | 1289 | | 894 | 793 | 685 | 164 | 93.4 | 269 |
| 250 | 1509 | 1399 | 1285 | 1213 | 1162 | | 677 | 592 | 583 | 92.2 | 42.5 | 164 |
| 240 | 1287 | 1232 | 1129 | 1039 | 1016 | | 445 | 367 | 467 | 36.8 | | 82.9 |
| 230 | 1067 | 1063 | 958 | 862 | 857 | | 254 | 179 | 332 | | | 12.4 |
| 220 | 889 | 881 | 807 | 710 | 710 | | 104 | 81.6 | 192 | | | |
| 210 | 733 | 725 | 681 | 578 | 582 | | 26.9 | 12.4 | 82.2 | | | |
| 200 | 608 | 588 | 577 | 479 | 471 | | | | 12.4 | | | |
| 190 | 513 | 478 | 493 | 408 | 374 | | | | | | | |
| 180 | 443 | 403 | 424 | 351 | 298 | | | | | | | |
| 170 | 386 | 351 | 368 | 302 | 238 | | | | | | | |
| 160 | 339 | 311 | 321 | 261 | 197 | | | | | | | |
| 150 | 298 | 277 | 282 | 224 | 167 | | | | | | | |
| 140 | 262 | 240 | 247 | 187 | 143 | | | | | | | |
| 130 | 233 | 207 | 215 | 160 | 126 | | | | | | | |
| 120 | 211 | 189 | 191 | 151 | 118 | | | | | | | |
| 110 | 162 | 109 | 150 | 122 | 90.8 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| HMIN | 238 | 220 | 206 | 247 | 240 | 249 | 206 | 120 | 105 | 105 | 106 | 108 |
| SCAT | 41.5 | 39.3 | 40.3 | 48.6 | 44.3 | 51.5 | 43.8 | 35.7 | 40.2 | 58.0 | 42.0 | 50.2 |
| HMAXF | 335 | 322 | 296 | 348 | 341 | 360 | 294 | 255 | 274 | 289 | 289 | 300 |
| SHMAX | 351 | 326 | 281 | 225 | 210 | 214 | 179 | 395 | 912 | 1381 | 1436 | 1802 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 298 | | | | | | |
| 360 | | | | | | 298 | | | | | | |
| 350 | | | | 335 | 335 | 295 | | | | | | |
| 340 | 608 | | | 333 | 335 | 286 | | | | | | |
| 330 | 606 | 573 | | 323 | 330 | 270 | | | | | | |
| 320 | 589 | 573 | | 307 | 317 | 251 | | | | | | |
| 310 | 553 | 560 | | 284 | 293 | 226 | | | | | | 2128 |
| 300 | 502 | 527 | 524 | 253 | 263 | 197 | 310 | | | | | 2128 |
| 290 | 430 | 477 | 521 | 215 | 225 | 164 | 309 | | | 1612 | 1907 | 2106 |
| 280 | 343 | 408 | 504 | 174 | 182 | 129 | 302 | | 1328 | 1602 | 1887 | 2042 |
| 270 | 254 | 329 | 476 | 133 | 138 | 92.7 | 286 | | 1325 | 1568 | 1813 | 1932 |
| 260 | 164 | 247 | 422 | 87.9 | 93.1 | 57.8 | 264 | 679 | 1288 | 1507 | 1677 | 1789 |
| 250 | 79.5 | 163 | 348 | 35.0 | 51.2 | 4.9 | 232 | 676 | 1205 | 1441 | 1497 | 1598 |
| 240 | 22.3 | 89.4 | 257 | | | | 187 | 649 | 1092 | 1333 | 1294 | 1380 |
| 230 | | 50.8 | 150 | | | | 136 | 595 | 931 | 1172 | 1061 | 1157 |
| 220 | | | 73.9 | | | | 77.5 | 516 | 752 | 991 | 854 | 936 |
| 210 | | | 28.3 | | | | 28.3 | 419 | 579 | 788 | 679 | 757 |
| 200 | | | | | | | | 314 | 442 | 607 | 539 | 611 |
| 190 | | | | | | | | 219 | 347 | 471 | 448 | 500 |
| 180 | | | | | | | | 151 | 279 | 366 | 384 | 425 |
| 170 | | | | | | | | 109 | 227 | 293 | 330 | 365 |
| 160 | | | | | | | | 86.3 | 187 | 241 | 285 | 318 |
| 150 | | | | | | | | 73.2 | 155 | 198 | 246 | 279 |
| 140 | | | | | | | | 66.0 | 133 | 165 | 212 | 242 |
| 130 | | | | | | | | 59.4 | 116 | 143 | 185 | 210 |
| 120 | | | | | | | | 40.2 | 106 | 136 | 168 | 186 |
| 110 | | | | | | | | | 97.8 | 128 | 142 | 133 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | A4 | 4 | 4 | 54 | S3 | 3 | 3 | 2 | 2 | 2 | 2 |
| HMIN | 107 | 111 | 110 | 108 | 108 | | 219 | 184 | 197 | 260 | 270 | 231 |
| SCAT | 56.8 | 51.8 | 58.1 | 66.5 | 63.0 | | 55.9 | 53.6 | 57.8 | 54.8 | 49.4 | 47.3 |
| HMAXF | 312 | 317 | 333 | 354 | 339 | | 338 | 327 | 321 | 388 | 382 | 336 |
| SHMAX | 1839 | 1796 | 1954 | 2228 | 1948 | | 1676 | 1325 | 864 | 608 | 628 | 599 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 794 | 960 | |
| 380 | | | | | | | | | | 789 | 960 | |
| 370 | | | | | | | | | | 772 | 947 | |
| 360 | | | | 1984 | | | | | | 741 | 913 | |
| 350 | | | | 1989 | | | | | | 699 | 861 | |
| 340 | | | 1907 | 1963 | 1907 | | 2277 | | | 641 | 788 | 949 |
| 330 | | | 1905 | 1921 | 1897 | | 2265 | 1727 | 1050 | 568 | 687 | 945 |
| 320 | 1907 | 1907 | 1882 | 1850 | 1863 | | 2217 | 1719 | 1049 | 486 | 563 | 921 |
| 310 | 1906 | 1898 | 1831 | 1769 | 1805 | | 2130 | 1684 | 1040 | 397 | 413 | 880 |
| 300 | 1887 | 1855 | 1745 | 1658 | 1713 | | 2017 | 1612 | 1015 | 303 | 253 | 812 |
| 290 | 1838 | 1775 | 1633 | 1530 | 1604 | | 1857 | 1524 | 971 | 216 | 128 | 714 |
| 280 | 1753 | 1656 | 1500 | 1391 | 1482 | | 1661 | 1396 | 916 | 137 | 60.7 | 603 |
| 270 | 1640 | 1510 | 1355 | 1242 | 1349 | | 1407 | 1240 | 847 | 73.0 | 4.1 | 465 |
| 260 | 1506 | 1345 | 1193 | 1102 | 1210 | | 1119 | 1058 | 768 | 2.6 | | 300 |
| 250 | 1350 | 1185 | 1033 | 955 | 1072 | | 781 | 870 | 684 | | | 149 |
| 240 | 1186 | 1032 | 882 | 827 | 913 | | 422 | 677 | 593 | | | 65.4 |
| 230 | 1029 | 884 | 755 | 711 | 752 | | 159 | 490 | 498 | | | |
| 220 | 873 | 747 | 650 | 613 | 603 | | 12.4 | 327 | 385 | | | |
| 210 | 738 | 634 | 565 | 526 | 483 | | | 191 | 248 | | | |
| 200 | 618 | 549 | 497 | 452 | 388 | | | 95.7 | 66.3 | | | |
| 190 | 521 | 479 | 443 | 386 | 317 | | | 45.1 | | | | |
| 180 | 441 | 419 | 396 | 331 | 261 | | | | | | | |
| 170 | 377 | 365 | 352 | 285 | 217 | | | | | | | |
| 160 | 327 | 319 | 311 | 247 | 181 | | | | | | | |
| 150 | 284 | 277 | 275 | 213 | 153 | | | | | | | |
| 140 | 244 | 232 | 243 | 185 | 133 | | | | | | | |
| 130 | 209 | 197 | 208 | 164 | 123 | | | | | | | |
| 120 | 191 | 184 | 184 | 151 | 116 | | | | | | | |
| 110 | 172 | | 12.4 | 98.4 | 78.1 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 2 | 2 | 2 | 2 | 2 | 1 | 1 | R1 | 3 | 3 | 3 | 1 |
| HMIN | 218 | 228 | 213 | 190 | 219 | 235 | 241 | 111 | 109 | 108 | 107 | 106 |
| SCAT | 38.8 | 36.0 | 39.4 | 45.3 | 52.5 | 51.8 | 49.2 | 34.9 | 41.2 | 43.3 | 51.2 | 58.0 |
| HMAXF | 317 | 316 | 293 | 284 | 317 | 339 | 332 | 265 | 267 | 280 | 290 | 314 |
| SHMAX | 464 | 379 | 336 | 235 | 186 | 143 | 162 | 509 | 922 | 1335 | 1730 | 2026 |
| KM | | | | | | | | | | | | |
| 340 | | | | | | 203 | 251 | | | | | |
| 330 | | | | | | 202 | 251 | | | | | |
| 320 | 854 | 754 | | | 274 | 196 | 247 | | | | | 2144 |
| 310 | 848 | 748 | | | 273 | 186 | 238 | | | | | 2142 |
| 300 | 814 | 715 | 679 | | 267 | 174 | 224 | | | | | 2112 |
| 290 | 757 | 654 | 678 | 389 | 255 | 158 | 206 | | | | 2096 | 2051 |
| 280 | 663 | 558 | 661 | 388 | 241 | 138 | 180 | | | 1907 | 2076 | 1949 |
| 270 | 549 | 444 | 623 | 380 | 220 | 115 | 147 | 854 | 1393 | 1882 | 2011 | 1828 |
| 260 | 409 | 306 | 563 | 362 | 194 | 90.9 | 111 | 850 | 1382 | 1807 | 1913 | 1676 |
| 250 | 255 | 157 | 462 | 336 | 162 | 66.0 | 68.6 | 814 | 1330 | 1676 | 1775 | 1486 |
| 240 | 135 | 72.7 | 307 | 297 | 121 | 35.0 | | 747 | 1244 | 1499 | 1597 | 1288 |
| 230 | 66.7 | 21.2 | 155 | 248 | 71.9 | | | 643 | 1108 | 1278 | 1397 | 1076 |
| 220 | 12.4 | | 55.8 | 188 | 12.4 | | | 526 | 927 | 973 | 1195 | 906 |
| 210 | | | | 122 | | | | 406 | 724 | 744 | 980 | 752 |
| 200 | | | | 60.5 | | | | 296 | 546 | 565 | 757 | 624 |
| 190 | | | | 4.1 | | | | 210 | 406 | 436 | 590 | 515 |
| 180 | | | | | | | | 145 | 302 | 347 | 448 | 427 |
| 170 | | | | | | | | 106 | 230 | 287 | 354 | 359 |
| 160 | | | | | | | | 83.3 | 180 | 239 | 287 | 308 |
| 150 | | | | | | | | 70.9 | 147 | 202 | 243 | 264 |
| 140 | | | | | | | | 67.4 | 121 | 169 | 209 | 224 |
| 130 | | | | | | | | 63.9 | 108 | 141 | 170 | 184 |
| 120 | | | | | | | | 60.3 | 101 | 133 | 153 | 169 |
| 110 | | | | | | | | | 65.5 | 97.2 | 137 | 128 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 0 | 0 | 0 | S2 | 2 | 2 | 3 | 3 | 3 | 1 |
| HMIN | 108 | 106 | 107 | 109 | 109 | | 208 | 188 | 213 | 261 | 267 | 257 |
| SCAT | 56.4 | 52.6 | 50.4 | 56.4 | 47.4 | | 52.4 | 55.9 | 54.4 | 45.5 | 40.2 | 45.5 |
| HMAXF | 313 | 320 | 314 | 322 | 310 | | 308 | 320 | 345 | 378 | 357 | 349 |
| SHMAX | 1998 | 2103 | 1949 | 2000 | 1572 | | 1065 | 869 | 591 | 507 | 478 | 490 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | 754 | | |
| 370 | | | | | | | | | | 749 | | |
| 360 | | | | | | | | | | 725 | 875 | |
| 350 | | | | | | | | | 754 | 683 | 869 | 834 |
| 340 | | | | | | | | | 753 | 623 | 838 | 826 |
| 330 | | 2243 | | 2161 | | | | 1096 | 741 | 552 | 782 | 797 |
| 320 | 2161 | 2243 | 2294 | 2160 | 1907 | | | 1096 | 716 | 474 | 693 | 749 |
| 310 | 2159 | 2222 | 2290 | 2137 | 1907 | | 1555 | 1086 | 677 | 383 | 579 | 681 |
| 300 | 2133 | 2159 | 2251 | 2081 | 1885 | | 1547 | 1059 | 626 | 284 | 440 | 580 |
| 290 | 2073 | 2056 | 2167 | 1986 | 1822 | | 1511 | 1013 | 568 | 196 | 273 | 455 |
| 280 | 1975 | 1912 | 2036 | 1866 | 1705 | | 1447 | 952 | 501 | 120 | 136 | 297 |
| 270 | 1851 | 1733 | 1860 | 1706 | 1558 | | 1349 | 874 | 427 | 63.2 | 44.6 | 144 |
| 260 | 1688 | 1538 | 1651 | 1519 | 1387 | | 1231 | 782 | 347 | | | 43.5 |
| 250 | 1492 | 1334 | 1399 | 1311 | 1213 | | 1086 | 675 | 260 | | | |
| 240 | 1281 | 1162 | 1115 | 1115 | 1046 | | 914 | 559 | 172 | | | |
| 230 | 1093 | 988 | 902 | 911 | 859 | | 697 | 438 | 101 | | | |
| 220 | 893 | 830 | 724 | 726 | 696 | | 392 | 321 | 54.0 | | | |
| 210 | 723 | 701 | 589 | 589 | 556 | | 78.1 | 213 | | | | |
| 200 | 592 | 594 | 488 | 488 | 438 | | | 111 | | | | |
| 190 | 487 | 502 | 416 | 414 | 344 | | | 26.9 | | | | |
| 180 | 411 | 428 | 365 | 355 | 277 | | | | | | | |
| 170 | 352 | 366 | 324 | 306 | 224 | | | | | | | |
| 160 | 303 | 311 | 287 | 260 | 181 | | | | | | | |
| 150 | 257 | 264 | 248 | 220 | 148 | | | | | | | |
| 140 | 216 | 228 | 211 | 185 | 131 | | | | | | | |
| 130 | 194 | 200 | 184 | 160 | 122 | | | | | | | |
| 120 | 185 | 188 | 170 | 148 | 116 | | | | | | | |
| 110 | 147 | 161 | 149 | 74.1 | 73.0 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| HMIN | 220 | 207 | 200 | 198 | 197 | 277 | 248 | | 108 | 108 | 107 | 109 |
| SCAT | 37.7 | 36.6 | 27.9 | 35.2 | 75.7 | 62.7 | 50.6 | | 43.9 | 47.7 | 44.3 | 47.5 |
| HMAXF | 307 | 285 | 262 | 267 | 337 | 401 | 350 | | 265 | 277 | 281 | 302 |
| SHMAX | 454 | 357 | 214 | 138 | 163 | 129 | 146 | | 943 | 1150 | 1359 | 1682 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 152 | | | | | | |
| 400 | | | | | | 152 | | | | | | |
| 390 | | | | | | 151 | | | | | | |
| 380 | | | | | | 148 | | | | | | |
| 370 | | | | | | 143 | | | | | | |
| 360 | | | | | | 135 | | | | | | |
| 350 | | | | | | 128 | 214 | | | | | |
| 340 | | | | | 165 | 117 | 212 | | | | | |
| 330 | | | | | 165 | 104 | 205 | | | | | |
| 320 | | | | | 163 | 89.0 | 195 | | | | | |
| 310 | 917 | | | | 160 | 73.6 | 182 | | | | | 2032 |
| 300 | 909 | | | | 155 | 58.3 | 163 | | | | | 2031 |
| 290 | 868 | 754 | | | 150 | 44.1 | 138 | | | | 1786 | 2001 |
| 280 | 800 | 751 | | | 146 | 12.4 | 110 | | | 1446 | 1785 | 1926 |
| 270 | 686 | 724 | 573 | 304 | 137 | | 79.6 | | 1420 | 1438 | 1756 | 1806 |
| 260 | 527 | 676 | 573 | 301 | 126 | | 54.2 | | 1416 | 1398 | 1682 | 1641 |
| 250 | 320 | 578 | 548 | 287 | 111 | | 12.4 | | 1380 | 1323 | 1563 | 1433 |
| 240 | 143 | 449 | 488 | 262 | 95.1 | | | | 1307 | 1213 | 1395 | 1216 |
| 230 | 63.6 | 266 | 386 | 221 | 78.6 | | | | 1207 | 1089 | 1184 | 1023 |
| 220 | 3.7 | 118 | 239 | 159 | 62.0 | | | | 1051 | 938 | 967 | 827 |
| 210 | | 40.6 | 83.3 | 80.6 | 45.6 | | | | 851 | 785 | 780 | 673 |
| 200 | | | | 21.7 | 12.4 | | | | 634 | 649 | 631 | 555 |
| 190 | | | | | | | | | 432 | 526 | 519 | 461 |
| 180 | | | | | | | | | 299 | 421 | 428 | 387 |
| 170 | | | | | | | | | 219 | 331 | 356 | 329 |
| 160 | | | | | | | | | 170 | 264 | 296 | 275 |
| 150 | | | | | | | | | 135 | 219 | 246 | 230 |
| 140 | | | | | | | | | 112 | 184 | 204 | 206 |
| 130 | | | | | | | | | 106 | 159 | 178 | 193 |
| 120 | | | | | | | | | 100 | 146 | 167 | 184 |
| 110 | | | | | | | | | 76.5 | 89.4 | 133 | 145 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | A1 | A1 | A2 | A2 | A2 | A2 | 2 | 2 | 4 | 4 | 4 | 4 |
| HMIN | 108 | | | | | 110 | 188 | 209 | 225 | 267 | 269 | 249 |
| SCAT | 53.3 | | | | | 60.3 | 55.6 | 50.9 | 50.8 | 54.4 | 37.2 | 44.6 |
| HMAXF | 306 | | | | | 309 | 323 | 328 | 331 | 380 | 358 | 341 |
| SHMAX | 1657 | | | | | 1437 | 1165 | 863 | 657 | 635 | 510 | 530 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 875 | | |
| 380 | | | | | | | | | | 875 | | |
| 370 | | | | | | | | | | 867 | | |
| 360 | | | | | | | | | | 845 | 960 | |
| 350 | | | | | | | | | | 807 | 949 | 906 |
| 340 | | | | | | | | | 960 | 757 | 901 | 906 |
| 330 | | | | | | | 1514 | 1215 | 960 | 687 | 821 | 892 |
| 320 | | | | | | | 1513 | 1208 | 949 | 601 | 716 | 855 |
| 310 | 1786 | | | | | 1654 | 1494 | 1177 | 919 | 505 | 587 | 798 |
| 300 | 1780 | | | | | 1644 | 1451 | 1122 | 869 | 388 | 434 | 710 |
| 290 | 1744 | | | | | 1611 | 1379 | 1045 | 802 | 263 | 257 | 598 |
| 280 | 1678 | | | | | 1556 | 1291 | 943 | 716 | 139 | 113 | 467 |
| 270 | 1571 | | | | | 1474 | 1173 | 818 | 607 | 42.0 | 12.4 | 276 |
| 260 | 1440 | | | | | 1376 | 1033 | 686 | 488 | | | 131 |
| 250 | 1298 | | | | | 1252 | 880 | 536 | 344 | | | 12.4 |
| 240 | 1135 | | | | | 1080 | 706 | 377 | 203 | | | |
| 230 | 983 | | | | | 907 | 500 | 222 | 89.0 | | | |
| 220 | 840 | | | | | 711 | 309 | 104 | | | | |
| 210 | 711 | | | | | 539 | 165 | 12.4 | | | | |
| 200 | 599 | | | | | 392 | 81.0 | | | | | |
| 190 | 500 | | | | | 279 | 22.3 | | | | | |
| 180 | 419 | | | | | 198 | | | | | | |
| 170 | 356 | | | | | 147 | | | | | | |
| 160 | 303 | | | | | 116 | | | | | | |
| 150 | 258 | | | | | 95.6 | | | | | | |
| 140 | 231 | | | | | 83.5 | | | | | | |
| 130 | 213 | | | | | 79.1 | | | | | | |
| 120 | 201 | | | | | 74.6 | | | | | | |
| 110 | 137 | | | | | 12.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 54 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| HMIN | 257 | 265 | 210 | 198 | 207 | 268 | 226 | 108 | 106 | 109 | 107 | 104 |
| SCAT | 41.6 | 46.7 | 42.7 | 40.8 | 44.3 | 63.6 | 49.9 | 41.6 | 51.9 | 38.8 | 46.8 | 45.0 |
| HMAXF | 363 | 374 | 320 | 301 | 284 | 404 | 345 | 275 | 308 | 281 | 291 | 297 |
| SHMAX | 497 | 558 | 503 | 412 | 261 | 274 | 237 | 525 | 1289 | 1486 | 1725 | 1765 |
| KM | | | | | | | | | | | | |
| 410 | | | | | | 310 | | | | | | |
| 400 | | | | | | 310 | | | | | | |
| 390 | | | | | | 306 | | | | | | |
| 380 | | 854 | | | | 299 | | | | | | |
| 370 | 824 | 853 | | | | 288 | | | | | | |
| 360 | 823 | 835 | | | | 273 | | | | | | |
| 350 | 803 | 796 | | | | 256 | 329 | | | | | |
| 340 | 757 | 739 | | | | 233 | 328 | | | | | |
| 330 | 692 | 666 | 824 | | | 206 | 321 | | | | | |
| 320 | 608 | 575 | 824 | | | 176 | 307 | | | | | |
| 310 | 505 | 468 | 812 | 716 | | 147 | 289 | | 1555 | | | |
| 300 | 391 | 348 | 775 | 716 | | 119 | 262 | | 1547 | | 2294 | 2210 |
| 290 | 271 | 223 | 720 | 704 | 477 | 88.9 | 228 | | 1510 | 2396 | 2293 | 2196 |
| 280 | 166 | 119 | 644 | 670 | 476 | 59.5 | 190 | 754 | 1444 | 2395 | 2261 | 2119 |
| 270 | 81.6 | 50.8 | 549 | 616 | 465 | 12.4 | 152 | 751 | 1362 | 2344 | 2176 | 1996 |
| 260 | 30.0 | | 437 | 538 | 442 | | 115 | 729 | 1253 | 2208 | 2046 | 1828 |
| 250 | | | 309 | 442 | 410 | | 83.9 | 683 | 1070 | 2000 | 1849 | 1619 |
| 240 | | | 187 | 335 | 361 | | 58.2 | 618 | 884 | 1696 | 1593 | 1390 |
| 230 | | | 99.8 | 217 | 287 | | 25.6 | 532 | 703 | 1292 | 1283 | 1132 |
| 220 | | | 54.0 | 122 | 174 | | | 440 | 552 | 881 | 1027 | 934 |
| 210 | | | | 63.3 | 64.8 | | | 348 | 437 | 625 | 782 | 760 |
| 200 | | | | 12.4 | | | | 271 | 347 | 459 | 588 | 620 |
| 190 | | | | | | | | 208 | 281 | 366 | 467 | 509 |
| 180 | | | | | | | | 160 | 229 | 305 | 381 | 423 |
| 170 | | | | | | | | 121 | 184 | 258 | 315 | 360 |
| 160 | | | | | | | | 95.8 | 149 | 218 | 261 | 307 |
| 150 | | | | | | | | 81.9 | 121 | 186 | 217 | 262 |
| 140 | | | | | | | | 75.1 | 109 | 158 | 180 | 219 |
| 130 | | | | | | | | 59.0 | 104 | 140 | 159 | 184 |
| 120 | | | | | | | | 50.1 | 99.1 | 131 | 150 | 170 |
| 110 | | | | | | | | 12.4 | 77.5 | 74.1 | 124 | 149 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 5 | 5 | A5 | A4 | A4 | A4 | A2 | 2 | 2 | 4 |
| HMIN | 109 | 110 | 109 | 110 | | | | 204 | 192 | 248 | 247 | 223 |
| SCAT | 55.9 | 62.9 | 59.2 | 51.4 | | | | 60.6 | 56.3 | 46.5 | 51.1 | 45.9 |
| HMAXF | 308 | 328 | 325 | 328 | | | | 343 | 332 | 361 | 358 | 330 |
| SHMAX | 1977 | 2246 | 2120 | 1939 | | | | 1184 | 752 | 532 | 567 | 450 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | | 794 | | |
| 360 | | | | | | | | | | 794 | 834 | |
| 350 | | | | | | | | 1446 | | 783 | 828 | |
| 340 | | | | | | | | 1446 | 949 | 755 | 807 | 716 |
| 330 | | 2227 | 2144 | 2080 | | | | 1430 | 949 | 706 | 768 | 716 |
| 320 | | 2218 | 2141 | 2067 | | | | 1395 | 938 | 643 | 716 | 707 |
| 310 | 2227 | 2182 | 2111 | 2007 | | | | 1340 | 911 | 565 | 645 | 682 |
| 300 | 2214 | 2110 | 2050 | 1911 | | | | 1264 | 870 | 475 | 552 | 640 |
| 290 | 2167 | 2026 | 1952 | 1786 | | | | 1173 | 814 | 382 | 445 | 579 |
| 280 | 2080 | 1906 | 1833 | 1629 | | | | 1049 | 742 | 282 | 316 | 503 |
| 270 | 1969 | 1755 | 1684 | 1465 | | | | 902 | 658 | 178 | 185 | 406 |
| 260 | 1811 | 1570 | 1505 | 1299 | | | | 744 | 565 | 90.3 | 98.0 | 298 |
| 250 | 1593 | 1367 | 1316 | 1090 | | | | 581 | 467 | 23.7 | 36.8 | 177 |
| 240 | 1337 | 1181 | 1125 | 915 | | | | 408 | 356 | | | 91.6 |
| 230 | 1110 | 1003 | 958 | 774 | | | | 249 | 237 | | | 44.9 |
| 220 | 896 | 831 | 812 | 659 | | | | 122 | 141 | | | |
| 210 | 715 | 685 | 688 | 559 | | | | 51.1 | 80.7 | | | |
| 200 | 586 | 566 | 582 | 477 | | | | | 44.7 | | | |
| 190 | 495 | 474 | 492 | 411 | | | | | | | | |
| 180 | 423 | 402 | 415 | 352 | | | | | | | | |
| 170 | 364 | 345 | 351 | 299 | | | | | | | | |
| 160 | 313 | 300 | 298 | 253 | | | | | | | | |
| 150 | 268 | 261 | 256 | 215 | | | | | | | | |
| 140 | 227 | 220 | 222 | 189 | | | | | | | | |
| 130 | 197 | 196 | 189 | 174 | | | | | | | | |
| 120 | 184 | 185 | 170 | 165 | | | | | | | | |
| 110 | 97.2 | 49.6 | 124 | 12.4 | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 19 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | A4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A2 |
| HMIN | | 237 | 200 | 205 | 203 | 200 | 187 | 199 | 109 | 107 | 107 | 108 |
| SCAT | | 35.6 | 28.8 | 47.1 | 56.1 | 62.6 | 48.2 | 39.9 | 44.0 | 46.5 | 46.5 | 61.5 |
| HMAXF | | 321 | 279 | 314 | 322 | 319 | 298 | 269 | 268 | 285 | 294 | 320 |
| SHMAX KM | | 334 | 253 | 308 | 312 | 250 | 208 | 386 | 806 | 1272 | 1614 | 2512 |
| 330 | | 679 | | | 417 | | | | | | | 2680 |
| 320 | | 679 | | 469 | 417 | 310 | | | | | | 2680 |
| 310 | | 664 | | 468 | 412 | 309 | | | | | | 2661 |
| 300 | | 621 | | 459 | 401 | 303 | 310 | | | | 2032 | 2606 |
| 290 | | 553 | | 438 | 383 | 294 | 308 | | | 1669 | 2027 | 2509 |
| 280 | | 458 | 608 | 407 | 362 | 281 | 299 | | | 1664 | 1983 | 2385 |
| 270 | | 341 | 597 | 367 | 328 | 267 | 284 | 794 | 1096 | 1626 | 1890 | 2226 |
| 260 | | 197 | 550 | 316 | 286 | 245 | 263 | 783 | 1087 | 1549 | 1750 | 2027 |
| 250 | | 90.5 | 468 | 260 | 238 | 216 | 234 | 748 | 1051 | 1437 | 1569 | 1777 |
| 240 | | 35.0 | 352 | 196 | 184 | 180 | 198 | 693 | 984 | 1280 | 1351 | 1493 |
| 230 | | | 221 | 130 | 119 | 139 | 156 | 593 | 895 | 1067 | 1161 | 1207 |
| 220 | | | 117 | 70.6 | 69.3 | 94.4 | 115 | 442 | 790 | 850 | 952 | 957 |
| 210 | | | 61.2 | 33.1 | 40.8 | 54.3 | 76.3 | 242 | 668 | 674 | 763 | 749 |
| 200 | | | 4.1 | | | | 48.5 | 43.8 | 540 | 531 | 604 | 588 |
| 190 | | | | | | | 12.4 | | 425 | 420 | 477 | 478 |
| 180 | | | | | | | | | 333 | 346 | 378 | 406 |
| 170 | | | | | | | | | 256 | 293 | 312 | 349 |
| 160 | | | | | | | | | 196 | 250 | 261 | 306 |
| 150 | | | | | | | | | 158 | 214 | 219 | 268 |
| 140 | | | | | | | | | 132 | 183 | 189 | 230 |
| 130 | | | | | | | | | 111 | 157 | 158 | 199 |
| 120 | | | | | | | | | 99.4 | 135 | 149 | 183 |
| 110 | | | | | | | | | 49.0 | 95.2 | 121 | 98.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 19 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 2 | 2 | A2 | 2 | 2 | B3 | 3 | 3 | 1 | 1 | 1 | 3 |
| HMIN | 110 | 108 | | 107 | 108 | | 210 | 189 | 203 | 209 | 211 | 206 |
| SCAT | 52.0 | 49.3 | | 49.8 | 56.6 | | 43.1 | 44.1 | 44.6 | 44.6 | 45.4 | 44.9 |
| HMAXF | 303 | 304 | | 304 | 312 | | 312 | 312 | 309 | 319 | 315 | 302 |
| SHMAX KM | 2001 | 1900 | | 1811 | 1738 | | 996 | 855 | 690 | 598 | 522 | 441 |
| 320 | | | | | 1907 | | 1654 | 1341 | | 960 | 865 | |
| 310 | 2379 | 2294 | | 2294 | 1906 | | 1653 | 1340 | 1143 | 950 | 862 | 745 |
| 300 | 2376 | 2291 | | 2289 | 1886 | | 1623 | 1316 | 1132 | 916 | 842 | 744 |
| 290 | 2341 | 2251 | | 2247 | 1837 | | 1546 | 1257 | 1091 | 859 | 798 | 731 |
| 280 | 2256 | 2163 | | 2157 | 1752 | | 1423 | 1162 | 1024 | 776 | 737 | 698 |
| 270 | 2139 | 2028 | | 2013 | 1638 | | 1261 | 1036 | 927 | 670 | 652 | 649 |
| 260 | 1968 | 1845 | | 1834 | 1502 | | 1077 | 880 | 794 | 551 | 543 | 578 |
| 250 | 1756 | 1621 | | 1633 | 1353 | | 847 | 707 | 637 | 406 | 403 | 483 |
| 240 | 1497 | 1377 | | 1375 | 1194 | | 588 | 526 | 441 | 253 | 228 | 367 |
| 230 | 1235 | 1153 | | 1024 | 1026 | | 319 | 350 | 244 | 134 | 115 | 228 |
| 220 | 1011 | 918 | | 775 | 850 | | 111 | 197 | 118 | 66.8 | 56.3 | 101 |
| 210 | 799 | 729 | | 591 | 680 | | | 108 | 53.2 | 12.4 | | 43.3 |
| 200 | 631 | 571 | | 465 | 542 | | | 58.6 | | | | |
| 190 | 500 | 461 | | 373 | 415 | | | 4.5 | | | | |
| 180 | 411 | 389 | | 307 | 322 | | | | | | | |
| 170 | 349 | 336 | | 261 | 257 | | | | | | | |
| 160 | 300 | 293 | | 226 | 211 | | | | | | | |
| 150 | 258 | 251 | | 194 | 176 | | | | | | | |
| 140 | 218 | 214 | | 157 | 150 | | | | | | | |
| 130 | 194 | 194 | | 141 | 129 | | | | | | | |
| 120 | 182 | 183 | | 134 | 118 | | | | | | | |
| 110 | 12.4 | 127 | | 124 | 97.2 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 20 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 2 | 2 | 2 | 3 | 3 | S3 | 2 | 2 | 2 | 3 |
| HMIN | 226 | 230 | 209 | 204 | 236 | 262 | 259 | | 109 | 109 | 109 | 108 |
| SCAT | 42.8 | 41.2 | 43.9 | 43.5 | 48.9 | 59.0 | 52.2 | | 40.1 | 49.3 | 42.9 | 57.0 |
| HMAXF | 317 | 311 | 299 | 291 | 334 | 379 | 360 | | 264 | 289 | 282 | 308 |
| SHMAX KM | 334 | 286 | 270 | 186 | 146 | 144 | 151 | | 901 | 1317 | 1376 | 1821 |
| 380 | | | | | | 179 | | | | | | |
| 370 | | | | | | 178 | | | | | | |
| 360 | | | | | | 174 | 219 | | | | | |
| 350 | | | | | | 168 | 217 | | | | | |
| 340 | | | | | 219 | 159 | 211 | | | | | |
| 330 | | | | | 218 | 148 | 201 | | | | | |
| 320 | 573 | 532 | | | 214 | 134 | 187 | | | | | |
| 310 | 569 | 532 | | | 205 | 118 | 171 | | | | | 2016 |
| 300 | 551 | 523 | 477 | 323 | 192 | 99.7 | 147 | | | | | 2006 |
| 290 | 516 | 497 | 472 | 323 | 175 | 81.7 | 117 | | | 1640 | 1846 | 1966 |
| 280 | 467 | 458 | 455 | 318 | 152 | 63.4 | 87.0 | | | 1626 | 1845 | 1893 |
| 270 | 397 | 398 | 426 | 304 | 126 | 42.8 | 55.7 | | 1393 | 1578 | 1809 | 1793 |
| 260 | 318 | 317 | 385 | 286 | 98.9 | | 4.5 | | 1390 | 1493 | 1718 | 1661 |
| 250 | 228 | 223 | 323 | 254 | 70.7 | | | | 1350 | 1382 | 1585 | 1489 |
| 240 | 123 | 104 | 234 | 209 | 38.8 | | | | 1263 | 1231 | 1401 | 1282 |
| 230 | 56.9 | 12.4 | 138 | 156 | | | | | 1140 | 1042 | 1189 | 1041 |
| 220 | | | 68.3 | 98.2 | | | | | 976 | 844 | 972 | 845 |
| 210 | | | 12.4 | 54.1 | | | | | 776 | 680 | 787 | 676 |
| 200 | | | | | | | | | 571 | 549 | 631 | 552 |
| 190 | | | | | | | | | 404 | 441 | 501 | 464 |
| 180 | | | | | | | | | 293 | 360 | 404 | 396 |
| 170 | | | | | | | | | 233 | 297 | 334 | 342 |
| 160 | | | | | | | | | 190 | 244 | 279 | 297 |
| 150 | | | | | | | | | 155 | 204 | 236 | 257 |
| 140 | | | | | | | | | 132 | 175 | 204 | 220 |
| 130 | | | | | | | | | 116 | 152 | 173 | 187 |
| 120 | | | | | | | | | 104 | 135 | 153 | 170 |
| 110 | | | | | | | | | 68.6 | 68.6 | 110 | 133 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 20 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 1 |
| HMIN | 109 | 105 | 106 | 109 | 108 | 110 | 199 | 189 | 209 | 248 | 260 | 224 |
| SCAT | 46.7 | 49.3 | 54.0 | 54.2 | 56.5 | 51.7 | 51.1 | 41.8 | 56.8 | 47.4 | 36.8 | 52.4 |
| HMAXF | 307 | 305 | 310 | 309 | 311 | 308 | 319 | 305 | 323 | 352 | 343 | 327 |
| SHMAX KM | 1851 | 1863 | 2001 | 1854 | 1641 | 1354 | 1085 | 713 | 562 | 422 | 302 | 337 |
| 360 | | | | | | | | | | 643 | | |
| 350 | | | | | | | | | | 642 | 573 | |
| 340 | | | | | | | | | | 632 | 572 | |
| 330 | | | | | | | | | 754 | 608 | 555 | 492 |
| 320 | | | | | 1786 | | 1626 | | 754 | 569 | 513 | 490 |
| 310 | 2294 | 2277 | 2277 | 2144 | 1785 | 1669 | 1612 | 1143 | 744 | 516 | 455 | 480 |
| 300 | 2280 | 2272 | 2258 | 2129 | 1767 | 1657 | 1567 | 1138 | 722 | 447 | 382 | 458 |
| 290 | 2216 | 2227 | 2201 | 2077 | 1722 | 1615 | 1491 | 1104 | 689 | 370 | 299 | 431 |
| 280 | 2095 | 2130 | 2098 | 1984 | 1644 | 1538 | 1394 | 1035 | 647 | 282 | 211 | 394 |
| 270 | 1929 | 1987 | 1961 | 1862 | 1540 | 1428 | 1245 | 939 | 585 | 193 | 111 | 344 |
| 260 | 1708 | 1809 | 1794 | 1701 | 1412 | 1298 | 1032 | 821 | 510 | 112 | 12.4 | 282 |
| 250 | 1463 | 1587 | 1533 | 1513 | 1270 | 1121 | 771 | 690 | 421 | 28.3 | | 215 |
| 240 | 1204 | 1326 | 1369 | 1310 | 1130 | 953 | 493 | 541 | 322 | | | 132 |
| 230 | 959 | 1049 | 1116 | 1072 | 967 | 790 | 277 | 387 | 218 | | | 58.2 |
| 220 | 761 | 825 | 895 | 861 | 806 | 627 | 147 | 233 | 106 | | | |
| 210 | 609 | 641 | 714 | 672 | 655 | 479 | 71.9 | 121 | 12.4 | | | |
| 200 | 499 | 510 | 571 | 529 | 529 | 360 | 12.4 | 65.1 | | | | |
| 190 | 424 | 426 | 464 | 422 | 414 | 267 | | 12.4 | | | | |
| 180 | 368 | 367 | 384 | 336 | 321 | 198 | | | | | | |
| 170 | 323 | 321 | 325 | 275 | 254 | 149 | | | | | | |
| 160 | 285 | 284 | 278 | 227 | 210 | 118 | | | | | | |
| 150 | 250 | 252 | 240 | 189 | 177 | 96.9 | | | | | | |
| 140 | 213 | 221 | 207 | 156 | 152 | 83.5 | | | | | | |
| 130 | 182 | 192 | 181 | 140 | 130 | 78.7 | | | | | | |
| 120 | 169 | 173 | 168 | 132 | 118 | 74.0 | | | | | | |
| 110 | 92.8 | 149 | 144 | 63.9 | 71.6 | 12.4 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 0 |
| HMIN | 238 | 209 | 212 | 190 | 216 | 266 | 256 | 211 | 108 | 107 | 108 | 109 |
| SCAT | 47.4 | 43.6 | 25.5 | 44.0 | 176 | 59.8 | 50.8 | 33.7 | 51.8 | 41.4 | 45.4 | 42.1 |
| HMAXE | 339 | 298 | 269 | 271 | 476 | 376 | 352 | 281 | 290 | 273 | 301 | 293 |
| SHMAX | 290 | 279 | 136 | 120 | 408 | 113 | 123 | 295 | 1163 | 1245 | 1706 | 1709 |
| KM | | | | | | | | | | | | |
| 480 | | | | | 198 | | | | | | | |
| 470 | | | | | 198 | | | | | | | |
| 460 | | | | | 198 | | | | | | | |
| 450 | | | | | 197 | | | | | | | |
| 440 | | | | | 196 | | | | | | | |
| 430 | | | | | 195 | | | | | | | |
| 420 | | | | | 193 | | | | | | | |
| 410 | | | | | 191 | | | | | | | |
| 400 | | | | | 189 | | | | | | | |
| 390 | | | | | 187 | | | | | | | |
| 380 | | | | | 184 | 143 | | | | | | |
| 370 | | | | | 181 | 143 | | | | | | |
| 360 | | | | | 176 | 141 | 184 | | | | | |
| 350 | | | | | 172 | 137 | 184 | | | | | |
| 340 | 446 | | | | 167 | 131 | 181 | | | | | |
| 330 | 443 | | | | 163 | 122 | 174 | | | | | |
| 320 | 429 | | | | 158 | 113 | 166 | | | | | |
| 310 | 404 | | | | 154 | 100 | 154 | | | | 2227 | |
| 300 | 372 | 508 | | | 150 | 86.0 | 137 | | | | 2226 | 2294 |
| 290 | 328 | 504 | | | 145 | 70.8 | 115 | 679 | 1500 | | 2193 | 2291 |
| 280 | 275 | 486 | | 214 | 139 | 54.5 | 89.9 | 679 | 1487 | 1907 | 2103 | 2239 |
| 270 | 217 | 456 | 389 | 213 | 131 | 25.6 | 63.6 | 660 | 1447 | 1904 | 1979 | 2116 |
| 260 | 152 | 414 | 378 | 210 | 121 | | 28.3 | 613 | 1379 | 1857 | 1765 | 1935 |
| 250 | 85.2 | 344 | 338 | 201 | 104 | | | 532 | 1291 | 1753 | 1500 | 1706 |
| 240 | 23.7 | 233 | 266 | 187 | 84.4 | | | 407 | 1157 | 1603 | 1222 | 1469 |
| 230 | | 122 | 168 | 169 | 61.7 | | | 228 | 984 | 1383 | 998 | 1213 |
| 220 | | 63.7 | 68.5 | 139 | 26.8 | | | 79.1 | 764 | 1056 | 781 | 952 |
| 210 | | 12.4 | | 96.8 | | | | | 569 | 776 | 615 | 757 |
| 200 | | | | 52.7 | | | | | 424 | 546 | 495 | 599 |
| 190 | | | | | | | | | 321 | 405 | 409 | 474 |
| 180 | | | | | | | | | 249 | 322 | 343 | 381 |
| 170 | | | | | | | | | 197 | 262 | 287 | 317 |
| 160 | | | | | | | | | 160 | 214 | 240 | 267 |
| 150 | | | | | | | | | 134 | 173 | 192 | 225 |
| 140 | | | | | | | | | 116 | 148 | 166 | 196 |
| 130 | | | | | | | | | 106 | 138 | 155 | 176 |
| 120 | | | | | | | | | 98.4 | 131 | 147 | 166 |
| 110 | | | | | | | | | 55.7 | 106 | 98.9 | 105 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 0 | A0 | S2 | 2 | 2 | S3 | 3 | 3 | 0 | 0 | 0 | 1 |
| HMIN | 109 | 107 | | 106 | 107 | | 197 | 199 | 208 | 258 | 249 | 240 |
| SCAT | 46.7 | 55.4 | | 52.1 | 49.9 | | 35.6 | 44.2 | 62.3 | 44.4 | 43.1 | 41.6 |
| HMAXE | 294 | 310 | | 309 | 306 | | 286 | 297 | 341 | 353 | 332 | 325 |
| SHMAX | 1895 | 2030 | | 1902 | 1749 | | 803 | 569 | 443 | 336 | 303 | 300 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | 540 | | |
| 350 | | | | | | | | | 508 | 540 | | |
| 340 | | | | | | | | | 508 | 529 | 540 | |
| 330 | | | | | | | | | 504 | 503 | 540 | 532 |
| 320 | | | | | | | | | 493 | 464 | 529 | 530 |
| 310 | | 2277 | | 2294 | 2161 | | | | 476 | 413 | 504 | 514 |
| 300 | 2536 | 2259 | | 2277 | 2153 | | | 917 | 450 | 352 | 466 | 484 |
| 290 | 2531 | 2204 | | 2220 | 2105 | | 1626 | 911 | 420 | 284 | 410 | 438 |
| 280 | 2477 | 2109 | | 2113 | 2011 | | 1616 | 882 | 385 | 208 | 334 | 373 |
| 270 | 2361 | 1987 | | 1971 | 1880 | | 1545 | 829 | 345 | 130 | 248 | 299 |
| 260 | 2196 | 1817 | | 1792 | 1700 | | 1412 | 753 | 303 | 54.6 | 133 | 215 |
| 250 | 1958 | 1613 | | 1578 | 1478 | | 1210 | 657 | 258 | | 12.4 | 117 |
| 240 | 1671 | 1392 | | 1326 | 1239 | | 972 | 543 | 208 | | | 12.4 |
| 230 | 1342 | 1131 | | 1018 | 1038 | | 661 | 416 | 155 | | | |
| 220 | 993 | 914 | | 791 | 867 | | 336 | 258 | 92.7 | | | |
| 210 | 737 | 745 | | 613 | 613 | | 138 | 108 | 26.9 | | | |
| 200 | 566 | 599 | | 484 | 474 | | 40.7 | 12.4 | | | | |
| 190 | 456 | 486 | | 391 | 374 | | | | | | | |
| 180 | 384 | 403 | | 322 | 300 | | | | | | | |
| 170 | 332 | 338 | | 271 | 247 | | | | | | | |
| 160 | 289 | 290 | | 232 | 204 | | | | | | | |
| 150 | 248 | 251 | | 204 | 174 | | | | | | | |
| 140 | 210 | 216 | | 176 | 148 | | | | | | | |
| 130 | 179 | 183 | | 153 | 127 | | | | | | | |
| 120 | 168 | 169 | | 137 | 118 | | | | | | | |
| 110 | 84.4 | 117 | | 127 | 92.5 | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HMIN | 218 | 221 | 230 | 217 | 197 | 227 | 229 | 198 | 110 | 109 | 108 | 109 |
| SCAT | 27.5 | 31.0 | 44.0 | 54.0 | 57.2 | 48.8 | 52.3 | 36.5 | 32.7 | 54.3 | 50.0 | 49.8 |
| HMAXE | 282 | 288 | 301 | 311 | 323 | 329 | 327 | 271 | 250 | 280 | 292 | 292 |
| SHMAX | 177 | 181 | 175 | 143 | 140 | 114 | 134 | 316 | 563 | 1093 | 1490 | 1665 |
| KM | | | | | | | | | | | | |
| 330 | | | | | 170 | 170 | 193 | | | | | |
| 320 | | | | 208 | 170 | 168 | 193 | | | | | |
| 310 | | | 329 | 208 | 167 | 163 | 188 | | | | | |
| 300 | | | 329 | 206 | 163 | 154 | 181 | | | | 1891 | 2128 |
| 290 | 461 | 439 | 323 | 200 | 154 | 144 | 170 | | | 1316 | 1891 | 2127 |
| 280 | 461 | 432 | 309 | 190 | 145 | 127 | 156 | 679 | | 1316 | 1864 | 2097 |
| 270 | 440 | 401 | 291 | 180 | 132 | 108 | 136 | 679 | | 1303 | 1800 | 2023 |
| 260 | 390 | 349 | 261 | 163 | 117 | 86.7 | 113 | 663 | 1004 | 1269 | 1701 | 1912 |
| 250 | 308 | 271 | 207 | 141 | 102 | 66.5 | 86.3 | 623 | 1004 | 1209 | 1564 | 1750 |
| 240 | 209 | 157 | 130 | 113 | 87.5 | 47.0 | 59.4 | 557 | 980 | 1138 | 1370 | 1544 |
| 230 | 98.5 | 67.6 | 12.4 | 79.9 | 72.5 | 12.4 | 12.4 | 447 | 910 | 1030 | 1128 | 1282 |
| 220 | 25.6 | | | 36.8 | 58.1 | | | 296 | 788 | 898 | 869 | 990 |
| 210 | | | | | 44.2 | | | 130 | 633 | 746 | 666 | 765 |
| 200 | | | | | 12.4 | | | 28.3 | 472 | 589 | 522 | 576 |
| 190 | | | | | | | | | 331 | 448 | 425 | 452 |
| 180 | | | | | | | | | 240 | 355 | 356 | 370 |
| 170 | | | | | | | | | 182 | 289 | 301 | 312 |
| 160 | | | | | | | | | 144 | 240 | 256 | 269 |
| 150 | | | | | | | | | 118 | 198 | 216 | 232 |
| 140 | | | | | | | | | 105 | 166 | 181 | 198 |
| 130 | | | | | | | | | 95.9 | 143 | 158 | 177 |
| 120 | | | | | | | | | 88.1 | 133 | 148 | 165 |
| 110 | | | | | | | | | 12.4 | 90.5 | 67.3 | 62.8 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 0 | 0 | A0 | A0 | A0 | A0 | 0 | 0 | 0 | 0 | A0 | 0 |
| HMIN | 110 | 108 | 106 | | | | 220 | 198 | 200 | 241 | 259 | 218 |
| SCAT | 65.1 | 48.7 | 55.2 | | | | 53.8 | 57.0 | 49.9 | 48.7 | 44.6 | 48.2 |
| HMAXE | 307 | 300 | 308 | | | | 309 | 314 | 309 | 351 | 344 | 328 |
| SHMAX | 1828 | 1609 | 1720 | | | | 1029 | 650 | 374 | 347 | 338 | 299 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | 508 | | |
| 350 | | | | | | | | | | 508 | 599 | |
| 340 | | | | | | | | | | 502 | 598 | |
| 330 | | | | | | | | | | 485 | 584 | 446 |
| 320 | | | | | | | | 906 | | 456 | 554 | 443 |
| 310 | 1891 | 1907 | 1907 | | | | 1555 | 905 | 557 | 419 | 513 | 430 |
| 300 | 1886 | 1907 | 1896 | | | | 1544 | 892 | 552 | 369 | 451 | 407 |
| 290 | 1859 | 1885 | 1855 | | | | 1505 | 864 | 536 | 313 | 363 | 375 |
| 280 | 1810 | 1823 | 1783 | | | | 1439 | 826 | 509 | 254 | 245 | 334 |
| 270 | 1737 | 1719 | 1678 | | | | 1350 | 770 | 472 | 193 | 110 | 285 |
| 260 | 1653 | 1580 | 1540 | | | | 1234 | 686 | 421 | 124 | 12.4 | 229 |
| 250 | 1535 | 1396 | 1382 | | | | 1066 | 574 | 359 | 64.3 | | 168 |
| 240 | 1381 | 1192 | 1195 | | | | 832 | 447 | 287 | | | 103 |
| 230 | 1200 | 994 | 988 | | | | 535 | 300 | 201 | | | 58.7 |
| 220 | 995 | 811 | 808 | | | | 127 | 176 | 116 | | | 12.4 |
| 210 | 784 | 667 | 649 | | | | | 89.6 | 59.9 | | | |
| 200 | 622 | 548 | 531 | | | | | 24.6 | 4.1 | | | |
| 190 | 491 | 450 | 439 | | | | | | | | | |
| 180 | 402 | 384 | 370 | | | | | | | | | |
| 170 | 341 | 337 | 316 | | | | | | | | | |
| 160 | 295 | 299 | 273 | | | | | | | | | |
| 150 | 255 | 265 | 236 | | | | | | | | | |
| 140 | 218 | 231 | 203 | | | | | | | | | |
| 130 | 195 | 202 | 180 | | | | | | | | | |
| 120 | 181 | 186 | 169 | | | | | | | | | |
| 110 | 49.6 | 144 | 143 | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 23 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 50 | 0 | 0 | 0 | 1 |
| HMIN | 230 | 219 | 210 | 193 | 204 | 252 | 246 | 199 | 109 | 109 | 108 | 109 |
| SCAT | 32.3 | 27.8 | 27.3 | 23.6 | 36.6 | 62.1 | 46.5 | 33.6 | 34.0 | 47.3 | 41.4 | 46.6 |
| HMAXF | 312 | 284 | 269 | 241 | 270 | 364 | 334 | 275 | 251 | 279 | 275 | 294 |
| SHMAX | 219 | 183 | 163 | 82 | 69 | 78 | 78 | 297 | 605 | 1071 | 1202 | 1502 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 97.2 | | | | | | |
| 360 | | | | | | 97.1 | | | | | | |
| 350 | | | | | | 96.0 | | | | | | |
| 340 | | | | | | 93.6 | 127 | | | | | |
| 330 | | | | | | 89.9 | 127 | | | | | |
| 320 | 477 | | | | | 85.0 | 124 | | | | | |
| 310 | 476 | | | | | 78.3 | 119 | | | | | |
| 300 | 460 | | | | | 71.2 | 110 | | | | | 1907 |
| 290 | 421 | 477 | | | | 62.1 | 98.8 | | | | | 1903 |
| 280 | 360 | 474 | | | 143 | 52.4 | 84.2 | 643 | | 1433 | 1786 | 1863 |
| 270 | 280 | 446 | 446 | | 143 | 42.8 | 67.9 | 640 | | 1421 | 1779 | 1778 |
| 260 | 184 | 388 | 434 | | 141 | 20.6 | 50.3 | 613 | 1096 | 1377 | 1727 | 1655 |
| 250 | 98.7 | 296 | 392 | 262 | 133 | | 17.4 | 558 | 1095 | 1303 | 1621 | 1479 |
| 240 | 53.0 | 175 | 319 | 262 | 119 | | | 473 | 1064 | 1206 | 1470 | 1272 |
| 230 | | 80.4 | 212 | 248 | 102 | | | 361 | 990 | 1048 | 1241 | 1023 |
| 220 | | 12.4 | 88.1 | 211 | 75.7 | | | 234 | 855 | 835 | 953 | 818 |
| 210 | | | | 146 | 45.6 | | | 106 | 664 | 632 | 693 | 646 |
| 200 | | | | 59.5 | | | | 12.4 | 458 | 491 | 507 | 525 |
| 190 | | | | | | | | | 312 | 387 | 394 | 442 |
| 180 | | | | | | | | | 227 | 320 | 329 | 378 |
| 170 | | | | | | | | | 172 | 270 | 288 | 323 |
| 160 | | | | | | | | | 133 | 227 | 252 | 275 |
| 150 | | | | | | | | | 115 | 190 | 211 | 232 |
| 140 | | | | | | | | | 108 | 159 | 173 | 196 |
| 130 | | | | | | | | | 103 | 140 | 156 | 175 |
| 120 | | | | | | | | | 98.2 | 131 | 147 | 163 |
| 110 | | | | | | | | | 62.0 | 65.5 | 67.3 | 58.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 23 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 1 | 1 | 2 | 2 | A2 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| HMIN | 109 | 110 | 109 | 109 | 109 | 109 | 209 | 200 | 199 | 283 | 283 | 280 |
| SCAT | 38.6 | 43.3 | 54.7 | 55.2 | 56.8 | 42.5 | 39.4 | 38.2 | 50.2 | 45.2 | 50.7 | 52.6 |
| HMAXF | 280 | 283 | 298 | 292 | 305 | 290 | 280 | 284 | 312 | 381 | 383 | 376 |
| SHMAX | 1281 | 1368 | 1616 | 1348 | 1374 | 1075 | 656 | 419 | 315 | 248 | 256 | 256 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | 389 | 382 | |
| 380 | | | | | | | | | | 389 | 382 | 382 |
| 370 | | | | | | | | | | 383 | 375 | 381 |
| 360 | | | | | | | | | | 368 | 362 | 373 |
| 350 | | | | | | | | | | 343 | 341 | 359 |
| 340 | | | | | | | | | | 309 | 314 | 340 |
| 330 | | | | | | | | | | 269 | 275 | 313 |
| 320 | | | | | | | | | 446 | 224 | 230 | 271 |
| 310 | | | | | 1542 | | | | 446 | 175 | 177 | 220 |
| 300 | | | 1891 | 1626 | 1539 | 1542 | | | 440 | 121 | 115 | 164 |
| 290 | | 1907 | 1882 | 1625 | 1516 | 1542 | 1341 | 794 | 426 | 69.2 | 58.5 | 92.2 |
| 280 | 1891 | 1904 | 1842 | 1606 | 1468 | 1520 | 1341 | 792 | 401 | | | |
| 270 | 1863 | 1862 | 1767 | 1560 | 1389 | 1455 | 1319 | 769 | 369 | | | |
| 260 | 1767 | 1766 | 1668 | 1484 | 1290 | 1348 | 1254 | 719 | 329 | | | |
| 250 | 1607 | 1625 | 1532 | 1388 | 1178 | 1197 | 1150 | 641 | 284 | | | |
| 240 | 1398 | 1429 | 1363 | 1261 | 1048 | 1017 | 986 | 540 | 231 | | | |
| 230 | 1112 | 1163 | 1163 | 1095 | 889 | 827 | 741 | 421 | 176 | | | |
| 220 | 854 | 885 | 945 | 907 | 725 | 643 | 377 | 277 | 120 | | | |
| 210 | 650 | 664 | 729 | 705 | 583 | 470 | 55.6 | 131 | 69.1 | | | |
| 200 | 506 | 509 | 552 | 530 | 463 | 349 | | 12.4 | 12.4 | | | |
| 190 | 414 | 414 | 429 | 386 | 363 | 257 | | | | | | |
| 180 | 353 | 354 | 352 | 293 | 291 | 197 | | | | | | |
| 170 | 308 | 312 | 301 | 233 | 236 | 156 | | | | | | |
| 160 | 268 | 277 | 263 | 192 | 196 | 127 | | | | | | |
| 150 | 231 | 238 | 231 | 167 | 165 | 107 | | | | | | |
| 140 | 197 | 200 | 202 | 154 | 141 | 91.7 | | | | | | |
| 130 | 176 | 177 | 179 | 144 | 125 | 81.7 | | | | | | |
| 120 | 167 | 166 | 166 | 134 | 117 | 75.8 | | | | | | |
| 110 | 74.1 | 12.4 | 92.8 | 73.0 | 82.9 | 44.7 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 24 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 6 |
| HMIN | 239 | 209 | 201 | 199 | 198 | 253 | 270 | 199 | 111 | 110 | 109 | 108 |
| SCAT | 42.1 | 24.6 | 23.8 | 31.1 | 56.5 | 69.5 | 53.8 | 31.1 | 36.4 | 48.4 | 53.7 | 47.9 |
| HMAXF | 334 | 270 | 255 | 250 | 288 | 373 | 365 | 269 | 260 | 278 | 296 | 298 |
| SHMAX | 229 | 171 | 123 | 81 | 68 | 80 | 83 | 246 | 604 | 900 | 1363 | 1490 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | 90.4 | | | | | | |
| 370 | | | | | | 90.4 | 119 | | | | | |
| 360 | | | | | | 89.6 | 119 | | | | | |
| 350 | | | | | | 88.0 | 117 | | | | | |
| 340 | 403 | | | | | 85.4 | 113 | | | | | |
| 330 | 402 | | | | | 81.5 | 106 | | | | | |
| 320 | 392 | | | | | 77.1 | 99.5 | | | | | |
| 310 | 371 | | | | | 72.6 | 89.4 | | | | | |
| 300 | 340 | | | | | 66.1 | 76.3 | | | | 1542 | 1861 |
| 290 | 294 | | | | 97.2 | 58.7 | 61.1 | | | | 1536 | 1847 |
| 280 | 234 | | | | 96.8 | 50.1 | 44.5 | | | 1143 | 1506 | 1793 |
| 270 | 155 | 508 | | | 94.8 | 41.5 | 2.2 | 573 | 1004 | 1135 | 1449 | 1697 |
| 260 | 92.2 | 487 | 382 | 214 | 91.3 | 17.7 | | 561 | 1004 | 1103 | 1373 | 1569 |
| 250 | 52.9 | 426 | 278 | 214 | 86.3 | | | 519 | 985 | 1050 | 1270 | 1387 |
| 240 | 6.1 | 313 | 347 | 207 | 80.2 | | | 449 | 928 | 967 | 1117 | 1151 |
| 230 | | 157 | 279 | 191 | 74.1 | | | 350 | 832 | 856 | 957 | 917 |
| 220 | | 68.9 | 170 | 166 | 65.3 | | | 227 | 697 | 726 | 795 | 716 |
| 210 | | 12.4 | 67.0 | 112 | 51.7 | | | 105 | 530 | 592 | 651 | 569 |
| 200 | | | | 12.4 | 12.4 | | | 12.4 | 379 | 477 | 534 | 465 |
| 190 | | | | | | | | | 279 | 381 | 442 | 393 |
| 180 | | | | | | | | | 207 | 307 | 370 | 342 |
| 170 | | | | | | | | | 156 | 250 | 315 | 303 |
| 160 | | | | | | | | | 120 | 202 | 269 | 268 |
| 150 | | | | | | | | | 108 | 163 | 231 | 232 |
| 140 | | | | | | | | | 104 | 143 | 196 | 198 |
| 130 | | | | | | | | | 98.9 | 136 | 174 | 176 |
| 120 | | | | | | | | | 86.6 | 129 | 164 | 166 |
| 110 | | | | | | | | | | 12.4 | 78.9 | 127 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 24 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 6 | 6 | 4 | A4 | A4 | A2 | 2 | 2 | 2 | 2 | 2 | 3 |
| HMIN | 109 | 107 | 109 | | | | 201 | 199 | 250 | 299 | 318 | 269 |
| SCAT | 42.9 | 42.4 | 57.3 | | | | 51.3 | 48.8 | 50.9 | 60.9 | 52.6 | 47.4 |
| HMAXF | 294 | 290 | 326 | | | | 310 | 307 | 361 | 434 | 419 | 369 |
| SHMAX | 1652 | 1729 | 1885 | | | | 984 | 508 | 412 | 432 | 385 | 399 |
| KM | | | | | | | | | | | | |
| 440 | | | | | | | | | | 508 | | |
| 430 | | | | | | | | | | 507 | | |
| 420 | | | | | | | | | | 501 | 565 | |
| 410 | | | | | | | | | | 488 | 561 | |
| 400 | | | | | | | | | | 467 | 546 | |
| 390 | | | | | | | | | | 441 | 521 | |
| 380 | | | | | | | | | | 407 | 488 | |
| 370 | | | | | | | | | 573 | 367 | 440 | 643 |
| 360 | | | | | | | | | 573 | 321 | 376 | 637 |
| 350 | | | | | | | | | 566 | 273 | 302 | 617 |
| 340 | | | | | | | | | 548 | 223 | 215 | 585 |
| 330 | | | 2000 | | | | | | 518 | 171 | 130 | 538 |
| 320 | | | 1995 | | | | | | 479 | 117 | 34.9 | 464 |
| 310 | | | 1963 | | | | 1446 | 754 | 428 | 70.9 | | 370 |
| 300 | 2294 | | 1899 | | | | 1433 | 751 | 369 | 12.4 | | 264 |
| 290 | 2288 | 2430 | 1806 | | | | 1393 | 732 | 306 | | | 169 |
| 280 | 2231 | 2399 | 1684 | | | | 1323 | 696 | 241 | | | 84.9 |
| 270 | 2110 | 2300 | 1529 | | | | 1236 | 646 | 173 | | | 12.4 |
| 260 | 1935 | 2139 | 1349 | | | | 1107 | 581 | 102 | | | |
| 250 | 1684 | 1899 | 1166 | | | | 944 | 505 | 12.4 | | | |
| 240 | 1377 | 1611 | 959 | | | | 746 | 414 | | | | |
| 230 | 1050 | 1297 | 779 | | | | 523 | 315 | | | | |
| 220 | 787 | 967 | 630 | | | | 318 | 195 | | | | |
| 210 | 594 | 726 | 511 | | | | 128 | 96.6 | | | | |
| 200 | 472 | 548 | 431 | | | | | 12.4 | | | | |
| 190 | 396 | 432 | 372 | | | | | | | | | |
| 180 | 344 | 363 | 327 | | | | | | | | | |
| 170 | 304 | 316 | 290 | | | | | | | | | |
| 160 | 269 | 278 | 256 | | | | | | | | | |
| 150 | 237 | 240 | 228 | | | | | | | | | |
| 140 | 206 | 205 | 198 | | | | | | | | | |
| 130 | 182 | 179 | 174 | | | | | | | | | |
| 120 | 168 | 169 | 151 | | | | | | | | | |
| 110 | 74.1 | 140 | 78.9 | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 25 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 6 | N6 | S6 | S6 | 6 | 6 | 6 | 6 | 6 | B8 |
| HMIN | 229 | 212 | 209 | 189 | 354 | 327 | 269 | 209 | 113 | 113 | 109 | 107 |
| SCAT | 35.7 | 41.0 | 25.9 | 35.1 | 81.4 | 59.0 | 45.8 | 26.1 | 63.3 | 48.2 | 61.9 | 69.2 |
| HMAXF | 304 | 296 | 262 | 245 | 495 | 440 | 366 | 261 | 292 | 293 | 341 | 333 |
| SHMAX | 329 | 351 | 188 | 73 | 112 | 101 | 152 | 377 | 765 | 1335 | 1762 | 2242 |
| KM | | | | | | | | | | | | |
| 500 | | | | | 108 | | | | | | | |
| 490 | | | | | 108 | | | | | | | |
| 480 | | | | | 107 | | | | | | | |
| 470 | | | | | 105 | | | | | | | |
| 460 | | | | | 103 | | | | | | | |
| 450 | | | | | 99.6 | 127 | | | | | | |
| 440 | | | | | 95.3 | 127 | | | | | | |
| 430 | | | | | 90.5 | 126 | | | | | | |
| 420 | | | | | 85.6 | 123 | | | | | | |
| 410 | | | | | 79.3 | 118 | | | | | | |
| 400 | | | | | 71.9 | 112 | | | | | | |
| 390 | | | | | 63.0 | 103 | | | | | | |
| 380 | | | | | 53.1 | 92.4 | | | | | | |
| 370 | | | | | 42.7 | 80.8 | 240 | | | | | |
| 360 | | | | | 18.2 | 68.5 | 239 | | | | | |
| 350 | | | | | | 56.5 | 233 | | | | 1669 | |
| 340 | | | | | | 44.0 | 221 | | | | 1668 | 2161 |
| 330 | | | | | | 12.4 | 203 | | | | 1656 | 2159 |
| 320 | | | | | | | 181 | | | | 1621 | 2141 |
| 310 | 716 | | | | | | 150 | | | | 1565 | 2100 |
| 300 | 714 | 688 | | | | | 117 | | 865 | 1786 | 1479 | 2036 |
| 290 | 690 | 685 | | | | | 85.3 | | 864 | 1783 | 1379 | 1949 |
| 280 | 641 | 659 | | | | | 54.6 | | 857 | 1751 | 1263 | 1845 |
| 270 | 555 | 619 | 573 | | | | 5.3 | 1096 | 839 | 1680 | 1121 | 1711 |
| 260 | 427 | 552 | 573 | | | | | 1095 | 811 | 1578 | 986 | 1547 |
| 250 | 258 | 436 | 545 | 170 | | | | 1043 | 774 | 1431 | 861 | 1344 |
| 240 | 95.4 | 287 | 478 | 169 | | | | 913 | 720 | 1221 | 747 | 1148 |
| 230 | 12.4 | 152 | 322 | 162 | | | | 704 | 644 | 1000 | 647 | 940 |
| 220 | | 59.5 | 139 | 150 | | | | 392 | 551 | 773 | 560 | 752 |
| 210 | | | 12.4 | 132 | | | | 49.0 | 453 | 558 | 485 | 600 |
| 200 | | | | 94.3 | | | | | 352 | 409 | 421 | 485 |
| 190 | | | | 12.4 | | | | | 262 | 317 | 364 | 400 |
| 180 | | | | | | | | | 192 | 256 | 311 | 339 |
| 170 | | | | | | | | | 142 | 208 | 265 | 289 |
| 160 | | | | | | | | | 111 | 170 | 225 | 246 |
| 150 | | | | | | | | | 96.3 | 141 | 192 | 209 |
| 140 | | | | | | | | | 91.9 | 124 | 161 | 178 |
| 130 | | | | | | | | | 87.5 | 117 | 141 | 158 |
| 120 | | | | | | | | | 78.2 | 107 | 132 | 149 |
| 110 | | | | | | | | | | | 62.8 | 120 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 25 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 8 | 8 | 7 | 7 | S7 | 5 | N5 | N5 | 7 | 7 | 7 | 6 |
| HMIN | 108 | 108 | 110 | 107 | 107 | 109 | 189 | 190 | 219 | 283 | 280 | 270 |
| SCAT | 41.3 | 51.3 | 53.2 | 56.4 | 51.2 | 52.8 | 46.3 | 54.5 | 50.7 | 54.0 | 37.6 | 43.4 |
| HMAXF | 328 | 318 | 346 | 337 | 318 | 308 | 315 | 315 | 345 | 400 | 354 | 352 |
| SHMAX | 2138 | 2417 | 2584 | 2810 | 2760 | 2502 | 1223 | 785 | 458 | 509 | 352 | 377 |
| KM | | | | | | | | | | | | |
| 400 | | | | | | | | | | 679 | | |
| 390 | | | | | | | | | | 674 | | |
| 380 | | | | | | | | | | 657 | | |
| 370 | | | | | | | | | | 626 | | |
| 360 | | | | | | | | | | 587 | 716 | 679 |
| 350 | | | 2716 | | | | | | 608 | 535 | 714 | 679 |
| 340 | | | 2707 | 2998 | | | | | 606 | 473 | 690 | 665 |
| 330 | 2716 | | 2654 | 2988 | | | | | 594 | 434 | 639 | 633 |
| 320 | 2690 | 2865 | 2548 | 2932 | 3335 | | 1786 | 1050 | 570 | 323 | 565 | 584 |
| 310 | 2586 | 2846 | 2387 | 2821 | 3313 | 3174 | 1781 | 1048 | 532 | 241 | 458 | 515 |
| 300 | 2396 | 2774 | 2200 | 2666 | 3227 | 3155 | 1740 | 1031 | 487 | 163 | 307 | 410 |
| 290 | 2140 | 2639 | 1986 | 2478 | 3063 | 3080 | 1655 | 995 | 433 | 88.4 | 162 | 287 |
| 280 | 1834 | 2457 | 1745 | 2260 | 2850 | 2938 | 1529 | 944 | 371 | 12.4 | 148 | |
| 270 | 1534 | 2234 | 1499 | 2012 | 2605 | 2749 | 1365 | 874 | 311 | | 12.4 | |
| 260 | 1260 | 1977 | 1276 | 1738 | 2326 | 2515 | 1180 | 778 | 252 | | | |
| 250 | 1044 | 1669 | 1089 | 1477 | 1999 | 2227 | 975 | 668 | 194 | | | |
| 240 | 851 | 1351 | 920 | 1247 | 1659 | 1910 | 749 | 543 | 131 | | | |
| 230 | 700 | 1056 | 776 | 1011 | 1348 | 1544 | 540 | 410 | 78.4 | | | |
| 220 | 586 | 824 | 661 | 812 | 1029 | 1204 | 367 | 285 | 12.4 | | | |
| 210 | 495 | 648 | 560 | 648 | 780 | 886 | 231 | 189 | | | | |
| 200 | 426 | 520 | 474 | 509 | 567 | 619 | 130 | 101 | | | | |
| 190 | 369 | 424 | 402 | 404 | 418 | 386 | 12.4 | 12.4 | | | | |
| 180 | 322 | 359 | 342 | 326 | 305 | 230 | | | | | | |
| 170 | 281 | 312 | 293 | 271 | 230 | 143 | | | | | | |
| 160 | 247 | 272 | 252 | 231 | 184 | 101 | | | | | | |
| 150 | 214 | 237 | 218 | 198 | 152 | 80.9 | | | | | | |
| 140 | 180 | 203 | 190 | 171 | 127 | 70.8 | | | | | | |
| 130 | 159 | 179 | 164 | 151 | 111 | 66.9 | | | | | | |
| 120 | 149 | 165 | 150 | 136 | 103 | 67.9 | | | | | | |
| 110 | 82.3 | 113 | 12.4 | 112 | 69.7 | 50.5 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 26 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 6 | 6 | A6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| HMIN | 249 | 199 | 198 | 219 | 269 | 329 | 297 | 198 | 108 | 106 | 108 | 109 |
| SCAT | 42.6 | 33.1 | 47.9 | 66.4 | 47.4 | 58.7 | 42.9 | 45.5 | 42.2 | 39.2 | 46.2 | 56.5 |
| HMAXF | 341 | 275 | 303 | 357 | 360 | 437 | 378 | 308 | 268 | 280 | 286 | 296 |
| SHMAX | 426 | 274 | 406 | 300 | 224 | 236 | 184 | 470 | 1021 | 1314 | 1809 | 1910 |
| KM | | | | | | | | | | | | |
| 440 | | | | | | 310 | | | | | | |
| 430 | | | | | | 309 | | | | | | |
| 420 | | | | | | 303 | | | | | | |
| 410 | | | | | | 293 | | | | | | |
| 400 | | | | | | 279 | | | | | | |
| 390 | | | | | | 262 | | | | | | |
| 380 | | | | | | 238 | 329 | | | | | |
| 370 | | | | | 362 | 206 | 326 | | | | | |
| 360 | | | | 329 | 362 | 168 | 314 | | | | | |
| 350 | 754 | | | 328 | 357 | 128 | 295 | | | | | |
| 340 | 754 | | | 324 | 345 | 87.9 | 266 | | | | | |
| 330 | 741 | | | 315 | 324 | 12.4 | 224 | | | | | |
| 320 | 705 | | | 303 | 298 | | 168 | | | | | |
| 310 | 650 | | 643 | 288 | 259 | | 107 | 754 | | | | |
| 300 | 576 | | 642 | 268 | 207 | | 45.7 | 749 | | | | 2277 |
| 290 | 479 | | 631 | 245 | 149 | | | 726 | | 1907 | 2571 | 2269 |
| 280 | 343 | 608 | 605 | 220 | 84.9 | | | 686 | | 1907 | 2561 | 2229 |
| 270 | 174 | 605 | 567 | 190 | 12.4 | | | 626 | 1597 | 1873 | 2495 | 2152 |
| 260 | 83.6 | 578 | 512 | 159 | | | | 543 | 1584 | 1774 | 2368 | 2044 |
| 250 | 12.4 | 523 | 434 | 127 | | | | 440 | 1521 | 1609 | 2193 | 1902 |
| 240 | | 440 | 343 | 94.2 | | | | 322 | 1430 | 1400 | 1923 | 1702 |
| 230 | | 324 | 228 | 64.1 | | | | 210 | 1277 | 1143 | 1533 | 1448 |
| 220 | | 189 | 131 | 12.4 | | | | 123 | 1060 | 903 | 1155 | 1121 |
| 210 | | 81.2 | 66.3 | | | | | 64.2 | 817 | 701 | 840 | 846 |
| 200 | | 12.4 | 12.4 | | | | | 12.4 | 577 | 554 | 614 | 641 |
| 190 | | | | | | | | | 392 | 453 | 461 | 506 |
| 180 | | | | | | | | | 270 | 373 | 365 | 404 |
| 170 | | | | | | | | | 202 | 304 | 304 | 334 |
| 160 | | | | | | | | | 163 | 249 | 258 | 286 |
| 150 | | | | | | | | | 137 | 205 | 219 | 250 |
| 140 | | | | | | | | | 118 | 173 | 188 | 218 |
| 130 | | | | | | | | | 105 | 150 | 164 | 189 |
| 120 | | | | | | | | | 93.0 | 136 | 149 | 169 |
| 110 | | | | | | | | | 34.9 | 112 | 79.9 | 105 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 26 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 6 | 6 | A4 | 4 | 4 | 4 | A4 | 4 | 5 | 5 | 5 | 5 |
| HMIN | 105 | 107 | | 107 | 111 | 199 | 199 | 199 | 210 | 238 | 208 | 230 |
| SCAT | 55.1 | 47.3 | | 44.7 | 56.3 | 55.4 | 38.5 | 53.1 | 39.0 | 36.4 | 43.9 | 46.9 |
| HMAXF | 304 | 299 | | 285 | 289 | 299 | 299 | 317 | 302 | 320 | 301 | 350 |
| SHMAX | 1928 | 1887 | | 1726 | 1622 | 1035 | 628 | 645 | 366 | 311 | 288 | 265 |
| KM | | | | | | | | | | | | |
| 350 | | | | | | | | | | | | 389 |
| 340 | | | | | | | | | | | | 384 |
| 330 | | | | | | | | | | | | 371 |
| 320 | | | | | | | | 917 | | 599 | | 348 |
| 310 | 2161 | | | | | | | 913 | 679 | 589 | 508 | 318 |
| 300 | 2158 | 2413 | | | | 1542 | 1143 | 893 | 679 | 553 | 508 | 278 |
| 290 | 2127 | 2393 | | 2430 | 2000 | 1532 | 1127 | 856 | 663 | 500 | 500 | 232 |
| 280 | 2060 | 2319 | | 2422 | 1986 | 1497 | 1070 | 806 | 623 | 424 | 478 | 185 |
| 270 | 1949 | 2188 | | 2361 | 1941 | 1436 | 978 | 732 | 564 | 338 | 447 | 138 |
| 260 | 1811 | 2008 | | 2232 | 1860 | 1361 | 850 | 635 | 480 | 246 | 397 | 96.5 |
| 250 | 1646 | 1774 | | 2055 | 1759 | 1254 | 697 | 517 | 380 | 143 | 323 | 63.8 |
| 240 | 1458 | 1510 | | 1811 | 1615 | 1098 | 512 | 390 | 258 | 57.2 | 224 | 42.2 |
| 230 | 1245 | 1228 | | 1523 | 1435 | 865 | 316 | 259 | 143 | | 119 | |
| 220 | 1016 | 988 | | 1218 | 1216 | 528 | 166 | 149 | 67.2 | | 61.9 | |
| 210 | 820 | 760 | | 957 | 961 | 173 | 80.2 | 73.2 | 3.7 | | 12.4 | |
| 200 | 656 | 586 | | 700 | 717 | 12.4 | 12.4 | 12.4 | | | | |
| 190 | 522 | 461 | | 494 | 522 | | | | | | | |
| 180 | 428 | 367 | | 348 | 368 | | | | | | | |
| 170 | 357 | 303 | | 262 | 262 | | | | | | | |
| 160 | 305 | 259 | | 213 | 195 | | | | | | | |
| 150 | 264 | 222 | | 171 | 152 | | | | | | | |
| 140 | 228 | 189 | | 136 | 122 | | | | | | | |
| 130 | 194 | 164 | | 124 | 108 | | | | | | | |
| 120 | 172 | 153 | | 117 | 100 | | | | | | | |
| 110 | 148 | 143 | | 105 | | | | | | | | |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 27 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 5 | 5 | 3 | 3 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 5 |
| HMIN | 271 | 242 | 222 | 200 | 200 | 198 | 248 | 199 | 110 | 108 | 111 | 109 |
| SCAT | 42.9 | 42.7 | 31.3 | 38.6 | 46.6 | 55.0 | 47.7 | 39.2 | 36.7 | 45.3 | 41.1 | 45.3 |
| HMAXF | 367 | 331 | 294 | 271 | 275 | 285 | 340 | 266 | 268 | 275 | 273 | 276 |
| SHMAX | 250 | 270 | 221 | 194 | 138 | 66 | 92 | 239 | 747 | 1122 | 1195 | 1533 |
| KM | | | | | | | | | | | | |
| 370 | 417 | | | | | | | | | | | |
| 360 | 414 | | | | | | | | | | | |
| 350 | 400 | | | | | | 143 | | | | | |
| 340 | 375 | 477 | | | | | 143 | | | | | |
| 330 | 340 | 477 | | | | | 142 | | | | | |
| 320 | 291 | 469 | | | | | 137 | | | | | |
| 310 | 233 | 449 | | | | | 129 | | | | | |
| 300 | 172 | 420 | 508 | | | | 117 | | | | | |
| 290 | 112 | 370 | 506 | | | 97.2 | 103 | | | | | |
| 280 | 63.9 | 306 | 482 | 389 | 240 | 97.0 | 85.6 | | | 1528 | 1741 | 2128 |
| 270 | | 224 | 432 | 389 | 239 | 95.3 | 67.1 | 508 | 1143 | 1523 | 1739 | 2118 |
| 260 | | 133 | 357 | 381 | 234 | 92.0 | 48.9 | 505 | 1129 | 1487 | 1700 | 2060 |
| 250 | | 58.0 | 261 | 359 | 222 | 87.1 | 12.4 | 486 | 1070 | 1412 | 1602 | 1945 |
| 240 | | | 154 | 330 | 207 | 80.7 | | 455 | 973 | 1316 | 1465 | 1789 |
| 230 | | | 60.8 | 276 | 186 | 73.9 | | 402 | 837 | 1155 | 1267 | 1573 |
| 220 | | | | 205 | 154 | 64.9 | | 303 | 680 | 958 | 1015 | 1310 |
| 210 | | | | 119 | 109 | 52.0 | | 158 | 528 | 755 | 780 | 1010 |
| 200 | | | | 12.4 | 12.4 | 12.4 | | 12.4 | 408 | 580 | 599 | 771 |
| 190 | | | | | | | | | 323 | 441 | 462 | 575 |
| 180 | | | | | | | | | 258 | 351 | 368 | 431 |
| 170 | | | | | | | | | 210 | 288 | 306 | 342 |
| 160 | | | | | | | | | 173 | 239 | 264 | 285 |
| 150 | | | | | | | | | 143 | 209 | 228 | 243 |
| 140 | | | | | | | | | 123 | 174 | 198 | 208 |
| 130 | | | | | | | | | 109 | 152 | 176 | 181 |
| 120 | | | | | | | | | 101 | 136 | 156 | 168 |
| 110 | | | | | | | | | 12.4 | 89.1 | | 68.6 |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 27 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 5 | 5 | A4 | 4 | B4 | A5 | 5 | 5 | 5 | 5 | 5 | 6 |
| HMIN | 108 | 107 | | 107 | 107 | | 200 | 200 | 242 | 229 | 243 | 239 |
| SCAT | 44.8 | 58.8 | | 63.0 | 53.6 | | 37.2 | 43.8 | 54.7 | 42.1 | 44.5 | 55.9 |
| HMAXF | 279 | 292 | | 312 | 304 | | 282 | 283 | 354 | 326 | 342 | 353 |
| SHMAX | 1395 | 1602 | | 1797 | 1697 | | 874 | 493 | 381 | 268 | 259 | 328 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | 524 | | | 446 |
| 350 | | | | | | | | | 523 | | 417 | 446 |
| 340 | | | | | | | | | 515 | | 417 | 441 |
| 330 | | | | | | | | | 498 | 446 | 410 | 428 |
| 320 | | | | 1876 | | | | | 477 | 444 | 393 | 408 |
| 310 | | | | 1876 | 2032 | | | | 441 | 430 | 365 | 384 |
| 300 | | 1786 | | 1860 | 2028 | | | | 394 | 402 | 326 | 349 |
| 290 | | 1785 | | 1820 | 1995 | | 1669 | 875 | 337 | 363 | 278 | 301 |
| 280 | 1846 | 1766 | | 1752 | 1927 | | 1668 | 874 | 273 | 313 | 223 | 243 |
| 270 | 1829 | 1720 | | 1668 | 1821 | | 1627 | 855 | 202 | 256 | 163 | 183 |
| 260 | 1762 | 1647 | | 1562 | 1681 | | 1522 | 812 | 130 | 195 | 103 | 118 |
| 250 | 1658 | 1556 | | 1425 | 1513 | | 1362 | 749 | 65.8 | 135 | 53.6 | 66.6 |
| 240 | 1502 | 1429 | | 1271 | 1330 | | 1150 | 661 | | 79.7 | | 12.4 |
| 230 | 1306 | 1279 | | 1082 | 1101 | | 907 | 542 | | 12.4 | | |
| 220 | 1073 | 1090 | | 898 | 881 | | 655 | 388 | | | | |
| 210 | 869 | 880 | | 713 | 679 | | 352 | 187 | | | | |
| 200 | 693 | 685 | | 561 | 514 | | 12.4 | 12.4 | | | | |
| 190 | 546 | 545 | | 442 | 390 | | | | | | | |
| 180 | 436 | 435 | | 353 | 297 | | | | | | | |
| 170 | 360 | 358 | | 292 | 226 | | | | | | | |
| 160 | 306 | 306 | | 248 | 178 | | | | | | | |
| 150 | 264 | 268 | | 211 | 150 | | | | | | | |
| 140 | 229 | 236 | | 178 | 126 | | | | | | | |
| 130 | 197 | 202 | | 153 | 109 | | | | | | | |
| 120 | 174 | 176 | | 137 | 102 | | | | | | | |
| 110 | 98.9 | 156 | | 124 | 80.3 | | | | | | | |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 28 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| HMIN | 270 | 271 | 239 | 199 | 220 | 199 | 277 | 199 | 110 | 105 | 105 | 106 |
| SCAT | 44.6 | 40.4 | 35.1 | 35.2 | 31.2 | 35.5 | 64.8 | 40.4 | 45.6 | 37.0 | 37.1 | 44.1 |
| HMAXF | 359 | 365 | 318 | 269 | 288 | 261 | 383 | 280 | 262 | 253 | 274 | 285 |
| SHMAX | 245 | 246 | 234 | 180 | 160 | 73 | 123 | 288 | 761 | 767 | 1128 | 1371 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | 152 | | | | | |
| 380 | | | | | | | 152 | | | | | |
| 370 | | 432 | | | | | 150 | | | | | |
| 360 | 403 | 430 | | | | | 147 | | | | | |
| 350 | 399 | 417 | | | | | 141 | | | | | |
| 340 | 383 | 390 | | | | | 134 | | | | | |
| 330 | 359 | 351 | | | | | 127 | | | | | |
| 320 | 325 | 300 | 477 | | | | 117 | | | | | |
| 310 | 282 | 240 | 471 | | | | 104 | | | | | |
| 300 | 231 | 178 | 445 | | | | 87.2 | | | | | |
| 290 | 172 | 110 | 400 | | 382 | | 65.5 | 540 | | | | 1786 |
| 280 | 104 | 55.2 | 338 | | 375 | | 31.0 | 540 | | | 1669 | 1780 |
| 270 | 12.4 | | 262 | 389 | 348 | 161 | | 531 | 1131 | | 1664 | 1736 |
| 260 | | | 177 | 383 | 304 | 161 | | 505 | 1130 | 1240 | 1609 | 1643 |
| 250 | | | 90.6 | 361 | 232 | 157 | | 463 | 1111 | 1238 | 1487 | 1512 |
| 240 | | | 12.4 | 324 | 139 | 147 | | 403 | 1065 | 1202 | 1308 | 1326 |
| 230 | | | | 269 | 66.7 | 132 | | 324 | 994 | 1120 | 1127 | 1101 |
| 220 | | | | 192 | 4.1 | 109 | | 231 | 885 | 993 | 883 | 900 |
| 210 | | | | 94.5 | | 77.1 | | 110 | 742 | 815 | 675 | 724 |
| 200 | | | | 12.4 | | 12.4 | | 12.4 | 562 | 624 | 525 | 584 |
| 190 | | | | | | | | | 403 | 471 | 421 | 478 |
| 180 | | | | | | | | | 279 | 342 | 351 | 397 |
| 170 | | | | | | | | | 197 | 258 | 300 | 334 |
| 160 | | | | | | | | | 150 | 205 | 257 | 286 |
| 150 | | | | | | | | | 122 | 170 | 220 | 249 |
| 140 | | | | | | | | | 104 | 144 | 188 | 216 |
| 130 | | | | | | | | | 93.9 | 126 | 161 | 190 |
| 120 | | | | | | | | | 87.6 | 119 | 152 | 172 |
| 110 | | | | | | | | | 12.4 | 107 | 138 | 151 |

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 28 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q,KP | 5 | 5 | 54 | A4 | A4 | 53 | 3 | 3 | 5 | 5 | 5 | 4 |
| HMIN | 106 | 106 | 109 | | | 109 | 200 | 219 | 199 | 240 | 270 | 288 |
| SCAT | 47.1 | 49.0 | 66.3 | | | 45.9 | 49.8 | 43.3 | 40.8 | 56.8 | 54.2 | 45.2 |
| HMAXF | 278 | 288 | 306 | | | 274 | 293 | 310 | 290 | 365 | 376 | 387 |
| SHMAX | 1368 | 1492 | 1579 | | | 1162 | 874 | 517 | 324 | 314 | 336 | 278 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | | | | | | | 446 |
| 380 | | | | | | | | | | | 477 | 444 |
| 370 | | | | | | | | | | 389 | 475 | 431 |
| 360 | | | | | | | | | | 388 | 466 | 406 |
| 350 | | | | | | | | | | 382 | 449 | 373 |
| 340 | | | | | | | | | | 371 | 424 | 326 |
| 330 | | | | | | | | | | 351 | 392 | 264 |
| 320 | | | | | | | | | | 328 | 346 | 202 |
| 310 | | | 1555 | | | | | 917 | | 298 | 288 | 140 |
| 300 | | | 1552 | | | | 1341 | 905 | 573 | 264 | 225 | 87.3 |
| 290 | | 1876 | 1532 | | | | 1340 | 869 | 573 | 228 | 149 | 26.9 |
| 280 | 1786 | 1865 | 1495 | | | 1786 | 1319 | 812 | 564 | 190 | 78.2 | |
| 270 | 1773 | 1816 | 1438 | | | 1782 | 1271 | 718 | 538 | 152 | 2.0 | |
| 260 | 1720 | 1722 | 1368 | | | 1744 | 1193 | 591 | 495 | 115 | | |
| 250 | 1624 | 1599 | 1281 | | | 1663 | 1096 | 441 | 434 | 75.0 | | |
| 240 | 1497 | 1434 | 1168 | | | 1537 | 957 | 265 | 358 | | | |
| 230 | 1319 | 1242 | 1042 | | | 1374 | 799 | 113 | 272 | | | |
| 220 | 1081 | 992 | 905 | | | 1127 | 614 | 12.4 | 175 | | | |
| 210 | 864 | 778 | 758 | | | 840 | 369 | | 88.2 | | | |
| 200 | 681 | 601 | 622 | | | 545 | 71.4 | | 12.4 | | | |
| 190 | 537 | 470 | 510 | | | 333 | | | | | | |
| 180 | 425 | 384 | 419 | | | 210 | | | | | | |
| 170 | 349 | 327 | 345 | | | 152 | | | | | | |
| 160 | 299 | 285 | 283 | | | 120 | | | | | | |
| 150 | 258 | 250 | 243 | | | 98.1 | | | | | | |
| 140 | 221 | 214 | 209 | | | 83.5 | | | | | | |
| 130 | 189 | 183 | 179 | | | 78.8 | | | | | | |
| 120 | 172 | 169 | 167 | | | 74.1 | | | | | | |
| 110 | 161 | 146 | 92.8 | | | 51.7 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 29 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | F4 | F4 | F4 | F4 | F4 | N6 | A6 | 6 | 5 | 5 | 5 | 5 |
| HMIN | | | 210 | | 207 | | 237 | 108 | 108 | 107 | 108 | 109 |
| SCAT | | | 41.5 | | 43.3 | | 64.9 | 34.8 | 41.2 | 48.4 | 49.5 | 43.2 |
| HMAXF | | | 291 | | 268 | | 360 | 241 | 263 | 290 | 283 | 280 |
| SHMAX | | | 622 | | 128 | | 124 | 324 | 733 | 1160 | 1386 | 1440 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | 143 | | | | | |
| 360 | | | | | | | 143 | | | | | |
| 350 | | | | | | | 142 | | | | | |
| 340 | | | | | | | 140 | | | | | |
| 330 | | | | | | | 136 | | | | | |
| 320 | | | | | | | 130 | | | | | |
| 310 | | | | | | | 122 | | | | | |
| 300 | | | 1240 | | | | 112 | | | 1446 | | |
| 290 | | | 1240 | | | | 102 | | | 1446 | 1786 | 1907 |
| 280 | | | 1220 | | | | 89.1 | | | 1430 | 1784 | 1907 |
| 270 | | | 1164 | | 262 | | 74.0 | | 1050 | 1382 | 1753 | 1880 |
| 260 | | | 1072 | | 260 | | 58.2 | | 1048 | 1303 | 1687 | 1803 |
| 250 | | | 936 | | 251 | | 43.7 | 540 | 1021 | 1200 | 1584 | 1670 |
| 240 | | | 691 | | 235 | | 12.4 | 540 | 964 | 1054 | 1448 | 1491 |
| 230 | | | 328 | | 220 | | | 527 | 876 | 887 | 1263 | 1288 |
| 220 | | | 103 | | 182 | | | 490 | 761 | 720 | 1038 | 1078 |
| 210 | | | | | 56.4 | | | 433 | 635 | 574 | 804 | 872 |
| 200 | | | | | | | | 356 | 512 | 459 | 610 | 700 |
| 190 | | | | | | | | 280 | 391 | 372 | 465 | 562 |
| 180 | | | | | | | | 206 | 297 | 307 | 367 | 454 |
| 170 | | | | | | | | 153 | 233 | 254 | 304 | 371 |
| 160 | | | | | | | | 119 | 186 | 210 | 256 | 310 |
| 150 | | | | | | | | 97.5 | 153 | 174 | 216 | 264 |
| 140 | | | | | | | | 89.8 | 132 | 148 | 185 | 226 |
| 130 | | | | | | | | 78.7 | 121 | 138 | 169 | 197 |
| 120 | | | | | | | | 63.9 | 112 | 131 | 155 | 183 |
| 110 | | | | | | | | 32.2 | 75.9 | 97.2 | 104 | 78.9 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 29 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 5 | 5 | A4 | A4 | A4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| HMIN | 105 | 106 | | | | 108 | 200 | 199 | 230 | 268 | 239 | 270 |
| SCAT | 41.6 | 49.4 | | | | 64.7 | 50.0 | 50.5 | 58.9 | 41.5 | 45.2 | 43.1 |
| HMAXF | 282 | 296 | | | | 308 | 298 | 299 | 362 | 350 | 330 | 351 |
| SHMAX | 1583 | 1728 | | | | 1775 | 975 | 584 | 386 | 293 | 321 | 294 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | | | | 469 | | | |
| 360 | | | | | | | | | 469 | | | 524 |
| 350 | | | | | | | | | 464 | 540 | | 524 |
| 340 | | | | | | | | | 452 | 532 | 540 | 515 |
| 330 | | | | | | | | | 432 | 509 | 540 | 491 |
| 320 | | | | | | | | | 407 | 471 | 533 | 457 |
| 310 | | | | | | 2032 | | | 376 | 415 | 513 | 405 |
| 300 | | 2144 | | | | 2024 | 1500 | 906 | 338 | 337 | 479 | 334 |
| 290 | 2294 | 2136 | | | | 1992 | 1491 | 900 | 293 | 243 | 432 | 248 |
| 280 | 2292 | 2087 | | | | 1936 | 1453 | 876 | 245 | 137 | 366 | 147 |
| 270 | 2242 | 1990 | | | | 1851 | 1378 | 837 | 198 | 28.3 | 285 | 40.2 |
| 260 | 2124 | 1859 | | | | 1751 | 1283 | 775 | 152 | | 197 | |
| 250 | 1946 | 1676 | | | | 1621 | 1158 | 688 | 104 | | 98.4 | |
| 240 | 1691 | 1444 | | | | 1454 | 983 | 579 | 54.8 | | 12.4 | |
| 230 | 1390 | 1180 | | | | 1237 | 778 | 440 | | | | |
| 220 | 1038 | 934 | | | | 959 | 522 | 278 | | | | |
| 210 | 782 | 733 | | | | 671 | 262 | 123 | | | | |
| 200 | 582 | 576 | | | | 440 | 12.4 | 12.4 | | | | |
| 190 | 456 | 469 | | | | 299 | | | | | | |
| 180 | 373 | 391 | | | | 213 | | | | | | |
| 170 | 318 | 332 | | | | 161 | | | | | | |
| 160 | 277 | 286 | | | | 127 | | | | | | |
| 150 | 239 | 247 | | | | 106 | | | | | | |
| 140 | 202 | 208 | | | | 90.8 | | | | | | |
| 130 | 178 | 181 | | | | 80.9 | | | | | | |
| 120 | 168 | 170 | | | | 74.3 | | | | | | |
| 110 | 148 | 154 | | | | 49.9 | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 30 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | 5 | S5 | 5 | 5 | 5 | A5 | 5 | B5 | 5 | 4 |
| HMIN | 221 | 208 | 202 | | 199 | 270 | 249 | | 111 | 109 | 109 | 109 |
| SCAT | 34.1 | 31.3 | 24.5 | | 77.4 | 55.1 | 49.9 | | 28.4 | 36.1 | 58.1 | 40.7 |
| HMAXF | 309 | 277 | 256 | | 326 | 386 | 346 | | 254 | 264 | 304 | 276 |
| SHMAX | 262 | 209 | 157 | | 124 | 123 | 146 | | 668 | 854 | 1384 | 1393 |
| KM | | | | | | | | | | | | |
| 390 | | | | | | 161 | | | | | | |
| 380 | | | | | | 160 | | | | | | |
| 370 | | | | | | 157 | | | | | | |
| 360 | | | | | | 152 | | | | | | |
| 350 | | | | | | 144 | 219 | | | | | |
| 340 | | | | | | 132 | 218 | | | | | |
| 330 | | | | | 127 | 119 | 213 | | | | | |
| 320 | | | | | 127 | 103 | 204 | | | | | |
| 310 | 540 | | | | 126 | 86.3 | 190 | | | | 1514 | |
| 300 | 531 | | | | 123 | 70.2 | 174 | | | | 1513 | |
| 290 | 497 | | | | 120 | 54.9 | 151 | | | | 1493 | |
| 280 | 443 | 508 | | | 116 | 38.8 | 122 | | | | 1451 | 2032 |
| 270 | 364 | 502 | | | 110 | 1.1 | 91.8 | | | 1341 | 1384 | 2019 |
| 260 | 267 | 472 | 477 | | 104 | | 61.6 | | 1367 | 1337 | 1297 | 1949 |
| 250 | 167 | 419 | 470 | | 97.3 | | 12.4 | | 1360 | 1291 | 1185 | 1815 |
| 240 | 88.8 | 323 | 426 | | 88.0 | | | | 1281 | 1188 | 1057 | 1623 |
| 230 | 49.0 | 187 | 343 | | 78.1 | | | | 1117 | 1045 | 891 | 1382 |
| 220 | | 82.3 | 215 | | 67.0 | | | | 851 | 856 | 730 | 1070 |
| 210 | | 23.7 | 74.2 | | 53.3 | | | | 587 | 663 | 601 | 822 |
| 200 | | | | | 12.4 | | | | 407 | 519 | 493 | 619 |
| 190 | | | | | | | | | 275 | 399 | 406 | 481 |
| 180 | | | | | | | | | 203 | 313 | 334 | 388 |
| 170 | | | | | | | | | 158 | 252 | 277 | 326 |
| 160 | | | | | | | | | 127 | 203 | 231 | 282 |
| 150 | | | | | | | | | 110 | 166 | 191 | 244 |
| 140 | | | | | | | | | 105 | 143 | 162 | 208 |
| 130 | | | | | | | | | 100 | 135 | 153 | 180 |
| 120 | | | | | | | | | 88.8 | 127 | 145 | 167 |
| 110 | | | | | | | | | | 55.6 | 49.0 | 76.1 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 30 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 4 | 4 | A4 | A4 | R4 | S5 | 5 | 5 | 5 | 5 | 5 | 3 |
| HMIN | 107 | 108 | | | | | 200 | 199 | 198 | 220 | 278 | 230 |
| SCAT | 58.3 | 44.7 | | | | | 43.2 | 41.6 | 43.7 | 53.1 | 43.5 | 53.0 |
| HMAXF | 294 | 294 | | | | | 298 | 293 | 314 | 348 | 358 | 331 |
| SHMAX | 1789 | 1472 | | | | | 852 | 558 | 451 | 466 | 360 | 461 |
| KM | | | | | | | | | | | | |
| 360 | | | | | | | | | | | 643 | |
| 350 | | | | | | | | | | 599 | 638 | |
| 340 | | | | | | | | | | 596 | 616 | 707 |
| 330 | | | | | | | | | | 582 | 578 | 707 |
| 320 | | | | | | | | | 716 | 555 | 521 | 700 |
| 310 | | | | | | | | | 714 | 520 | 444 | 680 |
| 300 | 2112 | 1907 | | | | | 1446 | 1004 | 697 | 476 | 341 | 645 |
| 290 | 2109 | 1903 | | | | | 1433 | 1003 | 659 | 424 | 215 | 602 |
| 280 | 2080 | 1862 | | | | | 1382 | 979 | 605 | 368 | 77.5 | 541 |
| 270 | 2017 | 1769 | | | | | 1283 | 926 | 531 | 310 | | 454 |
| 260 | 1931 | 1628 | | | | | 1157 | 843 | 443 | 252 | | 332 |
| 250 | 1814 | 1450 | | | | | 990 | 727 | 346 | 191 | | 179 |
| 240 | 1647 | 1232 | | | | | 780 | 575 | 243 | 125 | | 73.1 |
| 230 | 1414 | 981 | | | | | 528 | 384 | 153 | 62.1 | | 1.2 |
| 220 | 1117 | 790 | | | | | 304 | 201 | 95.1 | 4.1 | | |
| 210 | 859 | 635 | | | | | 163 | 100 | 55.6 | | | |
| 200 | 649 | 518 | | | | | 12.4 | 12.4 | 12.4 | | | |
| 190 | 489 | 428 | | | | | | | | | | |
| 180 | 390 | 359 | | | | | | | | | | |
| 170 | 325 | 305 | | | | | | | | | | |
| 160 | 278 | 260 | | | | | | | | | | |
| 150 | 240 | 222 | | | | | | | | | | |
| 140 | 204 | 195 | | | | | | | | | | |
| 130 | 179 | 177 | | | | | | | | | | |
| 120 | 169 | 168 | | | | | | | | | | |
| 110 | 146 | 109 | | | | | | | | | | |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 31 OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| HMIN | 200 | 218 | 208 | 198 | 198 | 276 | 242 | 199 | 109 | 106 | 108 | 108 |
| SCAT | 38.1 | 40.5 | 35.3 | 41.6 | 68.2 | 41.4 | 41.5 | 35.5 | 40.5 | 39.7 | 37.9 | 40.6 |
| HMAXF | 287 | 313 | 293 | 285 | 324 | 369 | 326 | 273 | 261 | 267 | 268 | 278 |
| SHMAX | 246 | 248 | 219 | 180 | 176 | 129 | 147 | 341 | 779 | 1014 | 1048 | 1278 |
| KM | | | | | | | | | | | | |
| 370 | | | | | | 219 | | | | | | |
| 360 | | | | | | 216 | | | | | | |
| 350 | | | | | | 207 | | | | | | |
| 340 | | | | | | 191 | | | | | | |
| 330 | | | | | 198 | 169 | 262 | | | | | |
| 320 | | 439 | | | 198 | 142 | 261 | | | | | |
| 310 | | 438 | | | 196 | 112 | 253 | | | | | |
| 300 | | 428 | 446 | | 192 | 82.8 | 237 | | | | | |
| 290 | 477 | 402 | 446 | 329 | 186 | 57.7 | 215 | | | | | |
| 280 | 473 | 366 | 432 | 328 | 178 | 24.1 | 184 | 754 | | | | 1727 |
| 270 | 453 | 316 | 400 | 318 | 167 | | 144 | 753 | 1240 | 1555 | 1555 | 1708 |
| 260 | 418 | 253 | 351 | 300 | 155 | | 99.2 | 728 | 1240 | 1545 | 1539 | 1630 |
| 250 | 364 | 184 | 279 | 274 | 140 | | 56.4 | 677 | 1216 | 1487 | 1471 | 1506 |
| 240 | 290 | 108 | 190 | 231 | 122 | | | 582 | 1155 | 1377 | 1351 | 1340 |
| 230 | 197 | 60.4 | 108 | 173 | 101 | | | 430 | 1057 | 1218 | 1173 | 1144 |
| 220 | 112 | 12.4 | 59.6 | 108 | 76.0 | | | 248 | 918 | 996 | 950 | 943 |
| 210 | 55.2 | | 12.4 | 59.9 | 51.0 | | | 104 | 740 | 746 | 747 | 755 |
| 200 | | | | 12.4 | 12.4 | | | 12.4 | 555 | 554 | 584 | 620 |
| 190 | | | | | | | | | 377 | 418 | 467 | 515 |
| 180 | | | | | | | | | 258 | 332 | 380 | 431 |
| 170 | | | | | | | | | 184 | 275 | 312 | 365 |
| 160 | | | | | | | | | 141 | 229 | 262 | 307 |
| 150 | | | | | | | | | 115 | 192 | 224 | 260 |
| 140 | | | | | | | | | 96.8 | 165 | 194 | 218 |
| 130 | | | | | | | | | 91.4 | 138 | 174 | 187 |
| 120 | | | | | | | | | 86.0 | 121 | 162 | 170 |
| 110 | | | | | | | | | 43.8 | 101 | 98.4 | 125 |

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 31 OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q*KP | 5 | 5 | A5 | A5 | A5 | A3 | 3 | 53 | 0 | 0 | 0 | 0 |
| HMIN | 107 | 105 | | | | | 210 | 188 | 199 | 267 | 269 | 267 |
| SCAT | 47.0 | 50.4 | | | | | 35.6 | 42.3 | 40.3 | 36.9 | 56.2 | 46.1 |
| HMAXF | 276 | 289 | | | | | 283 | 284 | 288 | 338 | 377 | 353 |
| SHMAX | 1307 | 1458 | | | | | 800 | 520 | 252 | 175 | 259 | 230 |
| KM | | | | | | | | | | | | |
| 380 | | | | | | | | | | | 355 | |
| 370 | | | | | | | | | | | 354 | |
| 360 | | | | | | | | | | | 347 | 389 |
| 350 | | | | | | | | | | | 335 | 388 |
| 340 | | | | | | | | | | 362 | 318 | 381 |
| 330 | | | | | | | | | | 357 | 296 | 364 |
| 320 | | | | | | | | | | 340 | 264 | 342 |
| 310 | | | | | | | | | | 310 | 222 | 308 |
| 300 | | | | | | | | | | 266 | 176 | 253 |
| 290 | | 1771 | | | | | 1786 | 834 | 446 | 208 | 124 | 191 |
| 280 | 1654 | 1757 | | | | | 1783 | 832 | 442 | 131 | 77.3 | 117 |
| 270 | 1647 | 1709 | | | | | 1730 | 811 | 424 | 40.7 | 12.4 | 38.7 |
| 260 | 1606 | 1620 | | | | | 1606 | 765 | 392 | | | |
| 250 | 1522 | 1503 | | | | | 1421 | 698 | 347 | | | |
| 240 | 1405 | 1354 | | | | | 1093 | 615 | 290 | | | |
| 230 | 1255 | 1139 | | | | | 605 | 521 | 226 | | | |
| 220 | 1101 | 936 | | | | | 191 | 425 | 156 | | | |
| 210 | 906 | 751 | | | | | 12.4 | 332 | 92.1 | | | |
| 200 | 715 | 601 | | | | | | 225 | 12.4 | | | |
| 190 | 569 | 485 | | | | | | 77.6 | | | | |
| 180 | 454 | 402 | | | | | | | | | | |
| 170 | 376 | 343 | | | | | | | | | | |
| 160 | 317 | 298 | | | | | | | | | | |
| 150 | 269 | 261 | | | | | | | | | | |
| 140 | 231 | 222 | | | | | | | | | | |
| 130 | 203 | 184 | | | | | | | | | | |
| 120 | 188 | 171 | | | | | | | | | | |
| 110 | 156 | 162 | | | | | | | | | | |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — OCT 1960

| TIME | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 20 | 21 | 20 | 19 | 20 | 19 | 18 | 15 | 20 | 21 | 20 | 17 |
| KP | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.1 | 2.1 | 1.9 | 2.2 | 2.2 | 2.3 | 2.2 |
| HMIN | 225 | 218 | 210 | 203 | 220 | 261 | 232 | 178 | 109 | 108 | 108 | 108 |
| RATIO | 6.3 | 6.7 | 6.9 | 6.0 | 5.1 | 4.7 | 5.3 | 7.0 | 5.2 | 4.8 | 4.6 | 4.3 |
| SCAT | 39.7 | 38.4 | 38.1 | 45.1 | 59.5 | 57.4 | 50.0 | 34.9 | 41.4 | 47.1 | 48.4 | 51.2 |
| NMAX | 611 | 574 | 526 | 334 | 249 | 211 | 244 | 732 | 1203 | 1558 | 1829 | 2067 |
| HMAXF | 317 | 304 | 292 | 296 | 330 | 374 | 330 | 268 | 268 | 280 | 290 | 303 |
| SHMAX | 332 | 296 | 265 | 201 | 184 | 160 | 161 | 356 | 814 | 1167 | 1464 | 1763 |
| SHINF | 2055 | 1914 | 1749 | 1144 | 886 | 754 | 850 | 2420 | 4207 | 5561 | 6624 | 7593 |
| KM | | | | | | | | | | | | |
| 950 | 43.0 | 38.2 | 32.5 | 21.3 | 18.8 | 19.6 | 17.9 | 39.9 | 66.0 | 89.9 | 111 | 135 |
| 900 | 55.2 | 49.1 | 41.7 | 27.3 | 24.1 | 25.2 | 22.9 | 51.2 | 84.7 | 115 | 143 | 173 |
| 850 | 70.8 | 63.0 | 53.4 | 35.1 | 31.0 | 32.3 | 29.4 | 65.7 | 109 | 148 | 183 | 222 |
| 800 | 90.8 | 80.7 | 68.5 | 45.0 | 39.7 | 41.3 | 37.7 | 84.3 | 139 | 190 | 235 | 284 |
| 750 | 116 | 103 | 87.8 | 57.6 | 50.7 | 52.7 | 48.3 | 108 | 179 | 243 | 301 | 364 |
| 700 | 149 | 132 | 112 | 73.7 | 64.7 | 67.1 | 61.7 | 138 | 229 | 312 | 386 | 466 |
| 650 | 189 | 169 | 143 | 94.1 | 82.2 | 85.0 | 78.6 | 177 | 293 | 398 | 493 | 594 |
| 600 | 240 | 214 | 183 | 120 | 104 | 107 | 99.6 | 226 | 373 | 507 | 627 | 755 |
| 550 | 302 | 270 | 231 | 151 | 130 | 132 | 125 | 286 | 473 | 643 | 793 | 953 |
| 500 | 375 | 336 | 289 | 188 | 159 | 159 | 155 | 360 | 595 | 808 | 994 | 1190 |
| 490 | 391 | 350 | 302 | 197 | 165 | 165 | 161 | 377 | 623 | 844 | 1038 | 1242 |
| 480 | 407 | 365 | 315 | 205 | 171 | 170 | 168 | 394 | 651 | 882 | 1084 | 1295 |
| 470 | 423 | 380 | 328 | 214 | 178 | 175 | 174 | 412 | 680 | 920 | 1130 | 1349 |
| 460 | 439 | 395 | 342 | 222 | 184 | 180 | 181 | 430 | 709 | 960 | 1178 | 1403 |
| 450 | 456 | 410 | 356 | 231 | 190 | 185 | 187 | 448 | 740 | 1000 | 1226 | 1459 |
| 440 | 472 | 426 | 370 | 240 | 196 | 189 | 194 | 467 | 771 | 1042 | 1275 | 1515 |
| 430 | 48= | 441 | 384 | 249 | 202 | 193 | 200 | 486 | 803 | 1083 | 1325 | 1571 |
| 420 | 504 | 456 | 398 | 258 | 208 | 197 | 206 | 506 | 835 | 1126 | 1375 | 1627 |
| 410 | 520 | 471 | 412 | 266 | 213 | 200 | 212 | 526 | 867 | 1168 | 1424 | 1682 |
| 400 | 535 | 485 | 426 | 275 | 219 | 202 | 218 | 546 | 900 | 1211 | 1474 | 1736 |
| 390 | 549 | 499 | 440 | 283 | 223 | 203 | 223 | 566 | 933 | 1253 | 1522 | 1789 |
| 380 | 562 | 512 | 453 | 291 | 228 | 202 | 228 | 585 | 965 | 1294 | 1569 | 1839 |
| 370 | 573 | 524 | 466 | 299 | 231 | 200 | 232 | 605 | 997 | 1334 | 1615 | 1886 |
| 360 | 584 | 535 | 478 | 306 | 233 | 196 | 236 | 624 | 1028 | 1373 | 1657 | 1929 |
| 350 | 591 | 543 | 489 | 312 | 234 | 189 | 238 | 642 | 1057 | 1410 | 1697 | 1967 |
| 340 | 595 | 549 | 499 | 317 | 234 | 181 | 239 | 660 | 1085 | 1444 | 1733 | 2000 |
| 330 | 595 | 552 | 507 | 321 | 232 | 169 | 238 | 676 | 1111 | 1475 | 1764 | 2026 |
| 320 | 589 | 552 | 514 | 323 | 228 | 154 | 234 | 690 | 1135 | 1502 | 1790 | 2044 |
| 310 | 575 | 547 | 518 | 324 | 222 | 136 | 227 | 703 | 1156 | 1524 | 1809 | 2051 |
| 300 | 549 | 532 | 518 | 321 | 213 | 117 | 216 | 714 | 1172 | 1541 | 1821 | 2044 |
| 290 | 508 | 508 | 513 | 315 | 201 | 97.4 | 201 | 722 | 1184 | 1552 | 1821 | 2012 |
| 280 | 451 | 471 | 498 | 304 | 188 | 73.3 | 181 | 728 | 1190 | 1555 | 1796 | 1943 |
| 270 | 376 | 421 | 470 | 287 | 173 | 52.2 | 153 | 727 | 1188 | 1536 | 1740 | 1836 |
| 260 | 289 | 354 | 427 | 264 | 155 | 35.2 | 126 | 710 | 1172 | 1484 | 1644 | 1691 |
| 250 | 193 | 275 | 360 | 234 | 133 | 23.7 | 94.4 | 670 | 1127 | 1396 | 1508 | 1507 |
| 240 | 113 | 186 | 266 | 197 | 109 | 17.7 | 67.1 | 601 | 1050 | 1271 | 1335 | 1298 |
| 230 | 59.6 | 101 | 158 | 154 | 83.7 | 10.6 | 44.9 | 490 | 934 | 1101 | 1137 | 1074 |
| 220 | 24.6 | 41.7 | 76.1 | 107 | 57.9 | 5.6 | 24.9 | 352 | 788 | 899 | 927 | 867 |
| 210 | 8.9 | 13.6 | 19.3 | 59.5 | 31.4 | 2.9 | 12.2 | 199 | 627 | 709 | 737 | 699 |
| 200 | 2.9 | 1.3 | .2 | 14.1 | 4.6 | | 2.7 | 95.3 | 479 | 551 | 583 | 566 |
| 190 | | | | .2 | | | .7 | 57.3 | 358 | 431 | 470 | 469 |
| 180 | | | | | | | | 40.1 | 269 | 347 | 386 | 397 |
| 170 | | | | | | | | 29.1 | 207 | 286 | 324 | 341 |
| 160 | | | | | | | | 23.0 | 164 | 238 | 275 | 296 |
| 150 | | | | | | | | 19.8 | 135 | 197 | 233 | 255 |
| 140 | | | | | | | | 18.4 | 117 | 166 | 197 | 218 |
| 130 | | | | | | | | 16.4 | 106 | 144 | 170 | 189 |
| 120 | | | | | | | | 14.1 | 97.9 | 132 | 156 | 173 |
| 110 | | | | | | | | 3.8 | 48.9 | 74.8 | 100 | 111 |

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — OCT 1960

| TIME | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COUNT | 18 | 18 | 14 | 15 | 13 | 8 | 19 | 21 | 22 | 22 | 22 | 23 |
| KP | 2.1 | 2.3 | 2.5 | 2.5 | 2.2 | 2.8 | 2.5 | 2.6 | 2.1 | 2.1 | 2.1 | 2.2 |
| HMIN | 108 | 108 | 108 | 108 | 108 | 120 | 203 | 197 | 209 | 246 | 260 | 242 |
| RATIO | 4.3 | 4.2 | 4.2 | 4.3 | 4.3 | 4.7 | 5.5 | 5.2 | 4.9 | 5.1 | 5.4 | 5.5 |
| SCAT | 53.2 | 53.2 | 54.0 | 54.8 | 55.1 | 53.6 | 49.0 | 48.7 | 53.8 | 50.8 | 48.3 | 47.3 |
| NMAX | 2048 | 2099 | 2098 | 2118 | 1964 | 1724 | 1471 | 1043 | 757 | 646 | 675 | 632 |
| HMAXF | 304 | 313 | 314 | 312 | 312 | 297 | 308 | 312 | 332 | 363 | 364 | 343 |
| SHMAX | 1789 | 1891 | 1869 | 1847 | 1710 | 1326 | 953 | 712 | 561 | 462 | 434 | 397 |
| SHINF | 7567 | 7812 | 7789 | 7821 | 7249 | 6190 | 5103 | 3653 | 2695 | 2284 | 2339 | 2180 |
| KM | | | | | | | | | | | | |
| 950 | 134 | 144 | 144 | 144 | 133 | 109 | 98.6 | 71.9 | 56.9 | 57.0 | 59.6 | 50.1 |
| 900 | 171 | 184 | 185 | 184 | 171 | 140 | 127 | 92.3 | 73.1 | 73.1 | 76.5 | 64.3 |
| 850 | 220 | 236 | 237 | 236 | 219 | 179 | 162 | 118 | 93.7 | 93.7 | 98.1 | 82.4 |
| 800 | 282 | 303 | 304 | 303 | 280 | 230 | 208 | 152 | 120 | 120 | 126 | 106 |
| 750 | 361 | 388 | 389 | 388 | 359 | 295 | 267 | 194 | 154 | 153 | 161 | 135 |
| 700 | 462 | 497 | 497 | 496 | 459 | 377 | 341 | 249 | 196 | 195 | 205 | 173 |
| 650 | 589 | 633 | 634 | 633 | 586 | 481 | 435 | 317 | 250 | 248 | 260 | 219 |
| 600 | 749 | 804 | 805 | 804 | 744 | 612 | 552 | 402 | 317 | 312 | 327 | 277 |
| 550 | 946 | 1013 | 1015 | 1013 | 938 | 773 | 696 | 507 | 397 | 388 | 407 | 347 |
| 500 | 1181 | 1261 | 1264 | 1262 | 1168 | 967 | 868 | 630 | 491 | 473 | 495 | 427 |
| 490 | 1232 | 1315 | 1318 | 1316 | 1218 | 1009 | 905 | 657 | 511 | 490 | 513 | 444 |
| 480 | 1285 | 1370 | 1372 | 1371 | 1270 | 1052 | 943 | 684 | 531 | 507 | 531 | 461 |
| 470 | 1338 | 1426 | 1428 | 1427 | 1321 | 1097 | 981 | 712 | 551 | 524 | 549 | 478 |
| 460 | 1393 | 1482 | 1485 | 1483 | 1374 | 1142 | 1021 | 740 | 572 | 541 | 566 | 495 |
| 450 | 1448 | 1539 | 1542 | 1541 | 1427 | 1188 | 1060 | 768 | 592 | 557 | 583 | 512 |
| 440 | 1504 | 1597 | 1599 | 1598 | 1481 | 1235 | 1100 | 797 | 612 | 572 | 598 | 528 |
| 430 | 1560 | 1653 | 1656 | 1655 | 1534 | 1281 | 1140 | 825 | 631 | 586 | 613 | 544 |
| 420 | 1615 | 1710 | 1713 | 1712 | 1586 | 1328 | 1179 | 852 | 650 | 599 | 627 | 559 |
| 410 | 1670 | 1765 | 1768 | 1767 | 1638 | 1375 | 1218 | 880 | 668 | 610 | 638 | 573 |
| 400 | 1724 | 1818 | 1821 | 1821 | 1688 | 1420 | 1255 | 906 | 685 | 619 | 648 | 586 |
| 390 | 1776 | 1869 | 1872 | 1872 | 1736 | 1465 | 1291 | 931 | 701 | 626 | 655 | 597 |
| 380 | 1826 | 1917 | 1920 | 1921 | 1782 | 1508 | 1325 | 954 | 715 | 630 | 659 | 607 |
| 370 | 1873 | 1961 | 1964 | 1966 | 1823 | 1548 | 1357 | 975 | 727 | 631 | 658 | 614 |
| 360 | 1915 | 2000 | 2003 | 2006 | 1861 | 1586 | 1385 | 994 | 736 | 625 | 650 | 618 |
| 350 | 1954 | 2034 | 2037 | 2041 | 1894 | 1621 | 1410 | 1010 | 742 | 612 | 633 | 617 |
| 340 | 1987 | 2061 | 2064 | 2068 | 1920 | 1651 | 1430 | 1023 | 743 | 590 | 604 | 611 |
| 330 | 2013 | 2080 | 2083 | 2087 | 1939 | 1677 | 1445 | 1031 | 739 | 557 | 562 | 595 |
| 320 | 2032 | 2090 | 2092 | 2097 | 1949 | 1696 | 1452 | 1032 | 729 | 513 | 506 | 568 |
| 310 | 2041 | 2082 | 2087 | 2093 | 1945 | 1709 | 1447 | 1024 | 709 | 458 | 439 | 529 |
| 300 | 2036 | 2046 | 2051 | 2067 | 1922 | 1711 | 1427 | 1001 | 677 | 392 | 359 | 475 |
| 290 | 2004 | 1979 | 1978 | 2012 | 1870 | 1696 | 1386 | 960 | 632 | 321 | 273 | 408 |
| 280 | 1936 | 1878 | 1870 | 1925 | 1786 | 1659 | 1323 | 899 | 574 | 245 | 194 | 330 |
| 270 | 1833 | 1740 | 1726 | 1802 | 1668 | 1598 | 1225 | 815 | 504 | 175 | 120 | 248 |
| 260 | 1692 | 1568 | 1551 | 1645 | 1523 | 1512 | 1093 | 710 | 422 | 113 | 68.0 | 175 |
| 250 | 1515 | 1376 | 1353 | 1460 | 1359 | 1389 | 928 | 588 | 330 | 70.7 | 35.3 | 113 |
| 240 | 1309 | 1172 | 1141 | 1250 | 1179 | 1229 | 723 | 454 | 237 | 40.2 | 14.2 | 64.2 |
| 230 | 1096 | 970 | 937 | 1022 | 989 | 1040 | 494 | 320 | 156 | 19.3 | 5.8 | 31.1 |
| 220 | 890 | 792 | 760 | 817 | 793 | 805 | 265 | 200 | 93.1 | 9.5 | 2.6 | 10.4 |
| 210 | 716 | 648 | 616 | 642 | 622 | 568 | 103 | 107 | 44.1 | 4.1 | | 4.4 |
| 200 | 582 | 536 | 508 | 507 | 485 | 382 | 19.3 | 41.1 | 10.7 | 2.6 | | |
| 190 | 482 | 452 | 430 | 407 | 379 | 261 | 4.2 | 13.5 | .6 | 1.9 | | |
| 180 | 409 | 391 | 371 | 334 | 299 | 181 | .7 | 1.2 | | .4 | | |
| 170 | 353 | 342 | 323 | 281 | 240 | 136 | | | | | | |
| 160 | 307 | 300 | 283 | 239 | 197 | 108 | | | | | | |
| 150 | 266 | 261 | 247 | 204 | 164 | 89.5 | | | | | | |
| 140 | 228 | 225 | 211 | 174 | 141 | 77.4 | | | | | | |
| 130 | 200 | 197 | 183 | 154 | 125 | 71.0 | | | | | | |
| 120 | 183 | 181 | 168 | 143 | 117 | 66.0 | | | | | | |
| 110 | 117 | 99.8 | 107 | 98.8 | 76.6 | 35.3 | | | | | | |

# TABLES OF IONOSPHERIC DATA

Table 1

AUGUST 1960 - DECEMBER 1952

Resolute Bay, Canada (74.7° N, 94.9° W) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.6 | 30 | 280 | | 100 | 1.80 | | 2.90 |
| 01 | | 5.6 | 29 | 260 | | 100 | 1.80 | | 2.90 |
| 02 | | 5.6 | 29 | 260 | | 105 | 1.80 | | 2.90 |
| 03 | --- | 5.2 | 30 | 270 | --- | 100 | 2.00 | | 2.80 |
| 04 | (320) | 5.3 | 29 | 250 | 3.5 | 110 | 2.10 | | 2.90 |
| 05 | (400) | 5.5 | 28 | 250 | 3.6 | 110 | 2.30 | | 2.95 |
| 06 | 400 | 5.3 | 30 | 245 | 3.7 | 110 | 2.50 | | 2.75 |
| 07 | 350 | 5.6 | 30 | 240 | 3.9 | 100 | 2.70 | | 2.80 |
| 08 | 415 | 5.4 | 28 | 220 | 4.0 | 100 | 2.80 | | 2.75 |
| 09 | 400 | 5.6 | 27 | 220 | 4.3 | 100 | 3.00 | | 2.75 |
| 10 | 400 | 5.6 | 25 | 210 | 4.4 | 100 | 3.00 | | 2.75 |
| 11 | 400 | 5.4 | 26 | 210 | 4.5 | 100 | 3.10 | | 2.70 |
| 12 | 410 | 5.6 | 26 | 210 | 4.5 | 100 | 3.10 | | 2.70 |
| 13 | 460 | 5.5 | 29 | 210 | 4.4 | 100 | 3.10 | | 2.60 |
| 14 | 420 | 5.6 | 29 | 200 | 4.5 | 100 | 3.10 | | 2.60 |
| 15 | 405 | 6.0 | 28 | 210 | 4.4 | 100 | 3.00 | | 2.70 |
| 16 | 400 | 5.8 | 27 | 220 | 4.4 | 100 | 3.00 | | 2.70 |
| 17 | 450 | 5.7 | 29 | 220 | 4.0 | 100 | 2.85 | | 2.70 |
| 18 | 400 | 5.6 | 29 | 235 | 4.0 | 110 | 2.70 | | 2.80 |
| 19 | 400 | 5.6 | 28 | 240 | 3.9 | 110 | 2.50 | | 2.70 |
| 20 | --- | 5.8 | 29 | 270 | --- | 100 | 2.30 | | 2.80 |
| 21 | --- | 5.6 | 28 | 270 | --- | 115 | 2.10 | | 2.80 |
| 22 | --- | 5.6 | 29 | 280 | --- | 105 | 2.00 | | 2.90 |
| 23 | | 5.4 | 29 | 280 | | 130 | 1.90 | | 2.90 |

Time: 90.0°W.
Sweep: 1.5 Mc to 20.0 Mc in 15 seconds.

Table 2

Kiruna, Sweden (67.8° N, 20.3° E) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (5.4) | 9 | 340 | | | | 4.6 | (2.6) |
| 01 | | (4.6) | 9 | 340 | | | | 4.2 | (2.6) |
| 02 | | 4.4 | 13 | 325 | | | | 4.0 | 2.6 |
| 03 | | 4.3 | 21 | 325 | --- | --- | --- | 3.0 | 2.6 |
| 04 | (440) | 4.6 | 24 | 280 | 3.1 | --- | 2.0 | 2.3 | 2.7 |
| 05 | 450 | 5.0 | 23 | 250 | 3.6 | 120 | 2.4 | 1.8 | 2.6 |
| 06 | 390 | 5.6 | 23 | 250 | 3.9 | 110 | 2.6 | | 2.7 |
| 07 | 410 | 5.8 | 24 | 240 | 4.3 | 110 | 2.8 | | 2.75 |
| 08 | 390 | 5.9 | 26 | 235 | 4.6 | 110 | 2.9 | | 2.75 |
| 09 | 365 | 6.0 | 30 | 225 | 4.6 | 110 | 3.0 | | 2.8 |
| 10 | 360 | 6.2 | 28 | 225 | 4.8 | 105 | 3.0 | | 2.8 |
| 11 | 365 | 6.5 | 29 | 215 | 4.8 | 105 | 3.1 | | 2.8 |
| 12 | 360 | 6.4 | 30 | 215 | 4.8 | 105 | 3.1 | | 2.8 |
| 13 | 370 | 6.4 | 30 | 220 | 4.7 | 105 | 3.1 | | 2.8 |
| 14 | 345 | 6.3 | 28 | 225 | 4.7 | 110 | 3.1 | | 2.9 |
| 15 | 370 | 6.2 | 27 | 225 | 4.6 | 110 | 3.0 | | 2.8 |
| 16 | 330 | 6.2 | 29 | 240 | 4.4 | 110 | 2.8 | | 2.9 |
| 17 | --- | 6.0 | 27 | 250 | 4.2 | 115 | 2.7 | | 2.9 |
| 18 | --- | 6.0 | 27 | 260 | --- | 115 | 2.4 | 3.8 | 3.0 |
| 19 | --- | 5.8 | 22 | 280 | --- | --- | 2.2 | 3.4 | 2.8 |
| 20 | | 5.5 | 18 | 285 | | --- | --- | 3.5 | 2.9 |
| 21 | | 5.0 | 14 | 300 | | --- | --- | 3.8 | 2.65 |
| 22 | | 5.1 | 14 | 335 | | | | 4.1 | 2.7 |
| 23 | | (5.2) | 7 | 320 | | | | 4.0 | (2.7) |

Time: 15.0°E.
Sweep: 0.8 Mc to 15.0 Mc in 30 seconds.

Table 3

Sodankyla, Finland (67.4° N, 26.6° E) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (5.0) | 9 | 310 | | | | (4.1) | (2.70) |
| 01 | | (4.8) | 8 | 325 | | | | (3.8) | (2.65) |
| 02 | | (4.4) | 6 | 360 | | --- | ---- | (3.4) | (2.50) |
| 03 | | (4.9) | 7 | 325 | | --- | ---- | (3.3) | (2.80) |
| 04 | | 4.7 | 11 | 300 | --- | --- | E | (3.0) | 2.65 |
| 05 | | 5.0 | 16 | 265 | 3.3 | --- | 1.80 | (3.2) | 2.80 |
| 06 | | 5.3 | 17 | 250 | --- | 120 | 2.40 | (3.7) | 2.70 |
| 07 | | 5.6 | 18 | 240 | 4.1 | 120 | 2.70 | (4.1) | 2.65 |
| 08 | | 6.1 | 20 | 235 | 4.2 | 115 | 2.90 | (4.4) | 2.00 |
| 09 | | 6.2 | 21 | 225 | 4.6 | 110 | 3.05 | (4.3) | 2.75 |
| 10 | | 6.3 | 23 | 225 | 4.7 | 110 | 3.25 | (5.0) | 2.75 |
| 11 | | 6.7 | 25 | 220 | 4.8 | 110 | 3.30 | (4.9) | 2.80 |
| 12 | | 6.8 | 26 | 220 | 4.8 | 115 | 3.30 | (4.8) | 2.80 |
| 13 | | 6.7 | 27 | 220 | 4.8 | 110 | 3.30 | (4.8) | 2.80 |
| 14 | | 6.7 | 27 | 220 | 4.8 | 110 | 3.30 | (4.8) | 2.85 |
| 15 | | 6.6 | 24 | 220 | --- | 110 | 3.20 | (4.6) | 2.85 |
| 16 | | 6.6 | 20 | 230 | --- | 115 | 3.10 | (4.6) | 2.85 |
| 17 | | 6.4 | 27 | 240 | | 115 | 2.90 | (4.8) | 2.90 |
| 18 | | 6.1 | 26 | 245 | | 120 | 2.70 | (3.9) | 2.95 |
| 19 | | 5.9 | 29 | 260 | | 125 | 2.30 | (3.6) | 2.90 |
| 20 | | 5.8 | 21 | 275 | | --- | E | 3.6 | 2.85 |
| 21 | | 5.4 | 16 | 290 | | --- | E | 3.1 | 2.80 |
| 22 | | (5.3) | 9 | 295 | | --- | ---- | 3.3 | (2.75) |
| 23 | | (5.0) | 8 | 305 | | --- | ---- | 3.6 | (2.65) |

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

Table 4

Fairbanks, Alaska (64.9° N, 147.8° W) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (4.7) | 10 | | | | | 5.3 | (2.75) |
| 01 | | (4.5) | 9 | | | | | 4.7 | (2.65) |
| 02 | | (4.7) | 13 | | | | | 4.4 | (2.70) |
| 03 | | (4.6) | 12 | | | | | 5.0 | (2.70) |
| 04 | | (4.85) | 12 | | | | | 3.5 | 2.72 |
| 05 | | (5.0) | 12 | | | | | 4.3 | (2.75) |
| 06 | | 5.55 | 14 | | | | | >2.6 | 2.60 |
| 07 | | (5.2) | 18 | | | | | | (2.60) |
| 08 | | (5.8) | 17 | | | | | | 2.65 |
| 09 | | 5.5 | 23 | | | | | | 2.55 |
| 10 | | 5.5 | 25 | | | | | | 2.60 |
| 11 | | 5.5 | 25 | | | | | | 2.55 |
| 12 | | 5.35 | 28 | | | | | | 2.55 |
| 13 | | 5.5 | 29 | | | | | | 2.60 |
| 14 | | 5.5 | 30 | | | | | | 2.65 |
| 15 | | 5.6 | 28 | | | | | | 2.70 |
| 16 | | 5.75 | 26 | | | | | | 2.80 |
| 17 | | 5.75 | 28 | | | | | | 2.85 |
| 18 | | 5.65 | 26 | | | | | 2.8 | 2.95 |
| 19 | | 5.3 | 25 | | | | | | 2.95 |
| 20 | | 5.4 | 21 | | | | | 2.6 | 3.00 |
| 21 | | 5.1 | 17 | | | | | 2.9 | 2.92 |
| 22 | | (4.65) | 14 | | | | | 3.8 | (2.92) |
| 23 | | (4.5) | 16 | | | | | 4.0 | (2.75) |

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

Table 5

Lycksele, Sweden (64.6° N, 18.8° E) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.7 | 26 | 290 | | --- | ---- | 2.8 | 2.5 |
| 01 | | 4.4 | 26 | 310 | | --- | ---- | 3.2 | 2.5 |
| 02 | | 4.2 | 26 | 300 | | --- | ---- | 3.0 | 2.45 |
| 03 | --- | 4.3 | 26 | 305 | --- | 105 | 1.50 | 2.8 | 2.45 |
| 04 | (425) | 4.5 | 25 | 270 | 3.1 | --- | 1.80 | 3.0 | 2.5 |
| 05 | (410) | 5.0 | 24 | 250 | 3.6 | 100 | 2.20 | 4.0 | 2.6 |
| 06 | 435 | 5.3 | 26 | 240 | 4.0 | 100 | 2.50 | 4.8 | 2.65 |
| 07 | 440 | 5.7 | 25 | 235 | 4.4 | 100 | 2.70 | 4.8 | 2.7 |
| 08 | 375 | 6.0 | 27 | 220 | 4.6 | 100 | 3.00 | 4.5 | 2.7 |
| 09 | 345 | 6.4 | 27 | 225 | 4.8 | 100 | 3.20 | 5.0 | 2.7 |
| 10 | 380 | 6.6 | 28 | 210 | 4.9 | 100 | 3.30 | 4.8 | 2.7 |
| 11 | 340 | 6.8 | 28 | 215 | 4.9 | 100 | 3.40 | 4.6 | 2.7 |
| 12 | 335 | 6.8 | 28 | 210 | 5.0 | 100 | 3.40 | 5.0 | 2.7 |
| 13 | 335 | 6.8 | 30 | 210 | 4.9 | 100 | 3.40 | 5.0 | 2.7 |
| 14 | 360 | 6.8 | 29 | 215 | 4.8 | 100 | 3.25 | 4.6 | 2.7 |
| 15 | 335 | 6.7 | 30 | 220 | 4.8 | 100 | 3.20 | 4.8 | 2.7 |
| 16 | (315) | 6.7 | 30 | 230 | 4.6 | 100 | 3.00 | 4.8 | 2.8 |
| 17 | --- | 6.5 | 31 | 240 | 4.4 | 105 | 2.70 | 4.0 | 2.8 |
| 18 | --- | 6.5 | 31 | 250 | | 105 | 2.40 | 3.8 | 2.8 |
| 19 | | 6.3 | 29 | 260 | | 100 | 2.10 | 3.6 | 2.8 |
| 20 | | 5.6 | 29 | 265 | | 105 | 1.60 | 3.5 | 2.75 |
| 21 | | 5.4 | 28 | 270 | | 110 | 1.40 | 3.2 | 2.6 |
| 22 | | 4.8 | 27 | 280 | | --- | ---- | 2.8 | 2.6 |
| 23 | | 4.8 | 26 | 290 | | | | 3.2 | 2.55 |

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

Table 6

Nurmijarvi, Finland (60.5° N, 24.6° E) — August 1960

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (5.8) | 4 | | | | | | ---- |
| 01 | | (5.6) | 4 | | | | | | ---- |
| 02 | | (4.6) | 4 | | | | | | ---- |
| 03 | | (4.5) | 4 | | | | | | ---- |
| 04 | | (4.3) | 7 | | | | | | (2.85) |
| 05 | | 4.8 | 13 | | --- | | | | 2.85 |
| 06 | | 5.5 | 16 | | 3.7 | | 2.15 | | 2.85 |
| 07 | | 6.2 | 20 | | 4.1 | | 2.60 | | 2.90 |
| 08 | | 6.4 | 22 | | 4.4 | | 2.90 | | 2.90 |
| 09 | | 7.0 | 24 | | 4.6 | | 3.10 | | 2.80 |
| 10 | | 7.0 | 28 | | 4.8 | | ---- | | 2.90 |
| 11 | | 7.2 | 27 | | 5.0 | | ---- | | 2.90 |
| 12 | | 7.5 | 25 | | 5.0 | | ---- | | 2.85 |
| 13 | | 7.4 | 28 | | 5.0 | | ---- | | 2.90 |
| 14 | | 7.4 | 30 | | 4.9 | | ---- | | 2.90 |
| 15 | | 7.0 | 28 | | --- | | ---- | | 3.00 |
| 16 | | 6.8 | 31 | | --- | | ---- | | 2.95 |
| 17 | | 6.8 | 30 | | --- | | ---- | | 3.00 |
| 18 | | 7.0 | 27 | | --- | | 2.60 | 2.7 | 3.00 |
| 19 | | 6.9 | 26 | | --- | | ---- | | 2.95 |
| 20 | | 7.1 | 14 | | | | | | 3.00 |
| 21 | | (6.9) | 8 | | | | | | (2.80) |
| 22 | | (5.3) | 2 | | | | | | ---- |
| 23 | | (5.9) | 2 | | | | | | ---- |

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

Table 7

Upsala, Sweden (59.8° N, 17.6° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.0 | 26 | 280 | | 110 | (0.85) | 2.2 | 2.5 |
| 01 | | 4.8 | 23 | 285 | | 110 | (0.80) | 2.5 | 2.5 |
| 02 | | 4.4 | 23 | 300 | | 105 | (0.70) | 2.9 | 2.5 |
| 03 | | 4.0 | 28 | 295 | | 105 | ---- | 3.1 | 2.5 |
| 04 | --- | 4.4 | 31 | 280 | --- | 105 | 1.50 | 3.1 | 2.6 |
| 05 | (410) | 5.0 | 30 | 255 | 3.5 | 100 | 1.90 | 4.0 | 2.8 |
| 06 | (355) | 5.6 | 30 | 245 | 4.0 | 100 | 2.45 | 4.4 | 2.75 |
| 07 | 365 | 6.0 | 30 | 230 | 4.3 | 100 | 2.80 | 4.0 | 2.75 |
| 08 | 380 | 6.4 | 30 | 230 | 4.6 | 100 | 3.10 | 5.1 | 2.7 |
| 09 | 350 | 7.0 | 30 | 225 | 4.8 | 100 | 3.20 | 5.7 | 2.8 |
| 10 | 330 | 7.3 | 30 | 220 | 4.9 | 100 | 3.30 | 4.9 | 2.8 |
| 11 | 340 | 7.2 | 30 | 215 | 4.9 | 105 | 3.40 | 5.4 | 2.7 |
| 12 | 330 | 7.4 | 31 | 215 | 5.0 | 100 | 3.40 | 4.9 | 2.8 |
| 13 | 335 | 7.4 | 31 | 220 | 5.0 | 105 | 3.40 | 5.3 | 2.8 |
| 14 | 330 | 7.2 | 30 | 225 | 5.0 | 105 | 3.40 | 5.0 | 2.8 |
| 15 | 330 | 7.0 | 31 | 225 | 4.8 | 100 | 3.20 | 5.0 | 2.8 |
| 16 | 335 | 7.1 | 31 | 235 | 4.6 | 105 | 3.10 | 4.2 | 2.8 |
| 17 | (325) | 7.1 | 30 | 245 | 4.4 | 105 | 2.70 | 3.4 | 2.8 |
| 18 | --- | 7.1 | 31 | 250 | --- | 105 | 2.40 | 3.7 | 2.8 |
| 19 | | 7.2 | 31 | 260 | | 100 | 1.80 | 3.3 | 2.8 |
| 20 | | 7.0 | 30 | 255 | | 105 | 1.30 | 2.8 | 2.8 |
| 21 | | 6.6 | 28 | 265 | | 110 | (1.15) | | 2.65 |
| 22 | | 6.1 | 28 | 265 | | 105 | (0.90) | | 2.6 |
| 23 | | 5.8 | 28 | 275 | | 110 | ---- | | 2.6 |

Time: 15.0°E.
Sweep: 0.33 Mc to 20.0 Mc in 3 minutes.
Occasionaly, 1.4 Mc to 17.0 Mc in 6 minutes, automatic operation.

Table 8

Churchill, Canada (58.8° N, 94.2° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.6 | 26 | 300 | | | | 5.0 | ---- |
| 01 | | 5.1 | 27 | 300 | | | | 5.0 | ---- |
| 02 | | 4.3 | 27 | 300 | | | | 4.3 | |
| 03 | | 4.0 | 27 | 300 | | --- | ---- | 3.8 | ---- |
| 04 | | 4.0 | 25 | 330 | | --- | ---- | 2.6 | |
| 05 | --- | 4.1 | 27 | 300 | 3.0 | 110 | 2.10 | 2.8 | ---- |
| 06 | G | <4.5 | 28 | 280 | 3.9 | 110 | 2.80 | 3.3 | G |
| 07 | 580 | 4.8 | 24 | 280 | 4.1 | 105 | 2.80 | 3.6 | (2.85) |
| 08 | 520 | 5.0 | 24 | 250 | 4.4 | 105 | 3.20 | 3.7 | (2.60) |
| 09 | 550 | 5.2 | 25 | 240 | 4.6 | 105 | 3.40 | 3.8 | G |
| 10 | 440 | 5.8 | 25 | 220 | 4.7 | 100 | 3.40 | | 2.70 |
| 11 | 505 | 5.8 | 26 | 220 | 4.8 | 100 | 3.50 | | 2.55 |
| 12 | 505 | 5.8 | 28 | 220 | 4.9 | 100 | 3.60 | | 2.55 |
| 13 | 490 | 6.0 | 28 | 220 | 4.9 | 100 | 3.60 | | 2.60 |
| 14 | 430 | 6.0 | 28 | 220 | 4.8 | 100 | 3.50 | | 2.60 |
| 15 | 395 | 6.4 | 27 | 220 | 4.8 | 105 | 3.30 | | 2.75 |
| 16 | 400 | 6.3 | 27 | 230 | 4.7 | 105 | 3.20 | | 2.70 |
| 17 | 390 | 6.2 | 28 | 250 | 4.4 | 105 | 3.00 | | 2.70 |
| 18 | 380 | 6.3 | 28 | 260 | 4.2 | 110 | 2.80 | >3.1 | 2.85 |
| 19 | --- | 5.7 | 28 | 310 | --- | --- | ---- | 3.5 | (2.90) |
| 20 | | 5.2 | 30 | 320 | | --- | ---- | 3.8 | ---- |
| 21 | | 5.2 | 29 | 300 | | --- | ---- | 4.8 | ---- |
| 22 | | 5.0 | 26 | 300 | | | | 7.3 | ---- |
| 23 | | 4.8 | 29 | 310 | | | | 5.4 | ---- |

Time: 90.0°W.
Sweep: 1.0 Mc to 17.0 Mc in 16 seconds.

Table 9

Inverness, Scotland (57.4° N, 4.2° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (4.8) | 29 | 300 | | | | <1.3 | 2.60 |
| 01 | | >4.4 | 28 | 300 | | | | <1.0 | 2.60 |
| 02 | | >3.9 | 28 | 300 | | | | 1.3 | 2.55 |
| 03 | | 4.0 | 27 | 300 | | | | <1.1 | 2.60 |
| 04 | | 3.8 | 25 | 300 | | --- | ---- | 1.3 | 2.65 |
| 05 | --- | 4.3 | 28 | 270 | --- | 120 | 1.85 | | 2.80 |
| 06 | (460) | 5.1 | 29 | 250 | 3.7 | 120 | 2.40 | | 2.90 |
| 07 | (550) | 5.6 | 29 | 240 | 4.0 | 120 | 2.70 | | 2.85 |
| 08 | (400) | 6.4 | 27 | 230 | 4.2 | 110 | 3.05 | 3.1 | 2.90 |
| 09 | (410) | 6.6 | 27 | 220 | >4.6 | 110 | 3.30 | | 2.85 |
| 10 | 410 | >6.8 | 28 | 225 | 4.8 | 110 | 3.50 | 3.6 | 2.90 |
| 11 | 390 | 7.0 | 30 | 220 | >4.8 | 110 | 3.60 | | 2.80 |
| 12 | (400) | 6.9 | 27 | 220 | 5.0 | 110 | 3.70 | | 2.80 |
| 13 | 400 | 6.8 | 28 | 220 | (5.1) | 110 | 3.70 | | 2.80 |
| 14 | (450) | 6.8 | 28 | 220 | (4.9) | 110 | 3.60 | | 2.80 |
| 15 | (450) | 7.0 | 29 | 230 | --- | 110 | 3.50 | | 2.80 |
| 16 | (380) | 6.9 | 29 | 240 | --- | 110 | 3.30 | | 2.85 |
| 17 | --- | 7.2 | 28 | 250 | | 120 | 3.00 | 3.1 | 2.90 |
| 18 | | 7.2 | 28 | 250 | | 120 | 2.65 | 3.2 | 2.90 |
| 19 | | 7.3 | 27 | 260 | | 120 | 2.20 | 2.8 | 2.90 |
| 20 | | 7.3 | 29 | 250 | | | ---- | <2.3 | 2.90 |
| 21 | | >6.7 | 30 | 260 | | | | <1.6 | 2.80 |
| 22 | | >6.4 | 28 | 270 | | | | <1.6 | 2.80 |
| 23 | | 5.6 | 29 | 280 | | | | <1.6 | 2.70 |

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

Table 10

De Bilt, Holland (52.1° N, 5.2° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.7 | 31 | 290 | | | | 2.3 | 2.65 |
| 01 | | 5.1 | 31 | 295 | | | | 2.3 | 2.60 |
| 02 | | 4.8 | 31 | 300 | | | | 3.1 | 2.60 |
| 03 | | 4.6 | 31 | 290 | | | | 2.9 | 2.65 |
| 04 | --- | 4.4 | 30 | 280 | | --- | E | 2.2 | 2.75 |
| 05 | (425) | 5.2 | 29 | 250 | 3.4 | 115 | 2.0 | 2.3 | 2.90 |
| 06 | 370 | 5.9 | 30 | 240 | 3.9 | 105 | 2.6 | 3.3 | 3.10 |
| 07 | 295 | 6.3 | 29 | 220 | 4.5 | 100 | 3.0 | 3.6 | 3.05 |
| 08 | 320 | 7.2 | 28 | 215 | 4.8 | 100 | 3.3 | 4.0 | 3.00 |
| 09 | 315 | 7.4 | 29 | 210 | 5.1 | 100 | 3.5 | 4.2 | 3.00 |
| 10 | 330 | 7.6 | 29 | 210 | 5.2 | 100 | 3.6 | 4.3 | 2.95 |
| 11 | 300 | 7.9 | 29 | 200 | 5.2 | 100 | 3.7 | 4.0 | 3.05 |
| 12 | 330 | 7.7 | 28 | 200 | 5.4 | 100 | 3.8 | 4.2 | 2.90 |
| 13 | 315 | 7.6 | 30 | 210 | 5.4 | 100 | 3.8 | 4.0 | 2.95 |
| 14 | 320 | 7.3 | 31 | 210 | 5.2 | 100 | 3.7 | 3.8 | 2.95 |
| 15 | 305 | 7.3 | 31 | 220 | 5.1 | 100 | 3.5 | 4.1 | 2.95 |
| 16 | 300 | 7.3 | 30 | 225 | 4.7 | 100 | 3.2 | 3.8 | 3.00 |
| 17 | (295) | 7.8 | 31 | 235 | --- | 100 | 2.9 | 3.7 | 2.95 |
| 18 | (270) | 8.0 | 30 | 250 | --- | 110 | 2.3 | 3.7 | 3.05 |
| 19 | (270) | 8.0 | 30 | 250 | | --- | 1.8 | 3.7 | 3.00 |
| 20 | | 7.8 | 30 | 250 | | --- | --- | 3.1 | 2.90 |
| 21 | | 7.1 | 30 | 245 | | | | 2.3 | 2.90 |
| 22 | | 6.5 | 31 | 260 | | | | 3.2 | 2.80 |
| 23 | | 6.0 | 30 | 270 | | | | 2.3 | 2.70 |

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

Table 11

Slough, England (51.5° N, 0.6° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | 5.8 | 30 | <285 | | | | <1.4 | 2.65 |
| 01 | --- | 5.2 | 29 | 290 | | | | 1.6 | 2.50 |
| 02 | --- | 4.9 | 29 | 300 | | | | 1.7 | 2.55 |
| 03 | --- | 4.8 | 29 | 300 | | | | 1.6 | 2.55 |
| 04 | --- | 4.4 | 30 | 295 | | | ---- | 1.4 | 2.65 |
| 05 | --- | 4.8 | 29 | 275 | --- | 120 | 1.85 | 2.2 | 2.80 |
| 06 | --- | 5.7 | 30 | 245 | 3.8 | 110 | 2.35 | 2.8 | 3.00 |
| 07 | 400 | 6.1 | 29 | 230 | 4.2 | 105 | 2.85 | 3.4 | 2.85 |
| 08 | 405 | 6.6 | 30 | <220 | 4.6 | 105 | 3.15 | 3.8 | 2.90 |
| 09 | 310 | 7.2 | 30 | <220 | 4.8 | 100 | 3.40 | 3.9 | 2.90 |
| 10 | 315 | 7.5 | 31 | 205 | 5.0 | 100 | 3.55 | 4.0 | 2.90 |
| 11 | 320 | 7.8 | 30 | 205 | 5.0 | 100 | 3.70 | 4.1 | 2.90 |
| 12 | 365 | 7.5 | 31 | 205 | 5.2 | 100 | 3.70 | 3.9 | 2.85 |
| 13 | 345 | 7.6 | 31 | 205 | 5.2 | 100 | 3.70 | 3.9 | 2.90 |
| 14 | 340 | 7.4 | 30 | 210 | 5.0 | 100 | 3.70 | 3.0 | 2.90 |
| 15 | 330 | 7.3 | 29 | 220 | 5.0 | 100 | 3.55 | 3.7 | 2.90 |
| 16 | 325 | 7.4 | 31 | 235 | 4.0 | 105 | 3.35 | 3.4 | 2.90 |
| 17 | --- | 7.7 | 31 | 240 | --- | 105 | 3.00 | 3.4 | 2.90 |
| 18 | --- | 8.0 | 30 | 250 | --- | 105 | 2.60 | 3.1 | 2.95 |
| 19 | --- | 8.0 | 30 | 255 | | --- | 1.95 | 3.0 | 2.95 |
| 20 | --- | 8.1 | 30 | <250 | | | ---- | (2.6) | 2.90 |
| 21 | --- | 7.3 | 29 | 235 | | | | (1.8) | 2.80 |
| 22 | --- | 6.6 | 30 | <245 | | | | 1.7 | 2.75 |
| 23 | --- | 6.2 | 30 | <255 | | | | 1.6 | 2.60 |

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

Table 12

Winnipeg, Canada (49.9° N, 97.4° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.2 | 24 | 300 | | | | | 2.80 |
| 01 | | 3.8 | 24 | 315 | | | | | 2.60 |
| 02 | | 3.7 | 23 | 320 | | | | 2.6 | 2.70 |
| 03 | | 3.6 | 21 | 315 | | | | 2.3 | 2.70 |
| 04 | | 3.8 | 24 | 325 | | | | | 2.70 |
| 05 | | 3.8 | 26 | 300 | | | | | 2.70 |
| 06 | --- | 4.2 | 24 | 270 | --- | 120 | 2.00 | | 2.90 |
| 07 | 460 | 4.8 | 26 | 240 | 3.9 | 110 | 2.60 | | 2.85 |
| 08 | 520 | 5.1 | 27 | 220 | 4.3 | 110 | 3.00 | | 2.75 |
| 09 | 480 | 5.3 | 30 | 220 | 4.6 | 105 | 3.30 | | 2.50 |
| 10 | 455 | 5.6 | 29 | 210 | 4.7 | 100 | 3.50 | | 2.55 |
| 11 | 450 | 5.9 | 29 | 210 | 4.9 | 100 | 3.60 | | 2.60 |
| 12 | 420 | 5.8 | 29 | 220 | 4.9 | 100 | 3.75 | | 2.60 |
| 13 | 460 | 6.2 | 26 | 220 | 5.0 | 100 | 3.75 | | 2.70 |
| 14 | 450 | 6.3 | 27 | 225 | 5.0 | 100 | 3.70 | | 2.60 |
| 15 | 450 | 6.1 | 31 | 220 | 4.8 | 100 | 3.50 | | 2.60 |
| 16 | 400 | 6.2 | 31 | 225 | 4.8 | 105 | 3.30 | | 2.60 |
| 17 | 400 | 6.4 | 31 | 230 | 4.6 | 110 | 3.10 | | 2.70 |
| 18 | 365 | 6.4 | 30 | 245 | 4.0 | 110 | 2.80 | | 2.80 |
| 19 | --- | 6.3 | 29 | 270 | | 120 | 2.30 | | 2.80 |
| 20 | | 6.4 | 29 | 270 | | --- | 1.80 | | 2.80 |
| 21 | | 5.9 | 29 | 280 | | | | | 2.80 |
| 22 | | 5.2 | 29 | 285 | | | | | 2.70 |
| 23 | | 4.6 | 26 | 295 | | | | | 2.70 |

Time: 90.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 13

St. John's, Newfoundland (47.6° N, 52.7° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.0 | 23 | 280 | | | | | 2.60 |
| 01 | | 4.4 | 26 | 290 | | | | | 2.60 |
| 02 | | 4.0 | 24 | 285 | | | | | 2.60 |
| 03 | | 3.5 | 24 | 300 | | | | | 2.60 |
| 04 | | 3.2 | 26 | 280 | | | | | 2.70 |
| 05 | --- | 4.2 | 28 | 250 | --- | --- | ---- | | 3.00 |
| 06 | G | 5.0 | 29 | 220 | 4.0 | 100 | 2.70 | | 3.00 |
| 07 | 400 | 5.3 | 26 | 205 | 4.2 | 100 | 3.00 | | 2.90 |
| 08 | 400 | 5.8 | 27 | 200 | 4.6 | 100 | 3.50 | | 2.90 |
| 09 | 425 | 5.9 | 28 | 200 | 4.7 | 100 | 3.60 | | 2.75 |
| 10 | 460 | 6.0 | 29 | 200 | 5.0 | 100 | 3.70 | | 2.70 |
| 11 | 405 | 6.2 | 29 | 200 | 5.0 | 100 | 3.85 | | 2.70 |
| 12 | 430 | 6.5 | 30 | 200 | 5.1 | 100 | 3.90 | | 2.65 |
| 13 | 430 | 6.3 | 30 | 200 | 5.0 | 100 | 3.85 | | 2.70 |
| 14 | 405 | 6.4 | 30 | 200 | 5.0 | 100 | 3.70 | | 2.70 |
| 15 | 375 | 6.9 | 30 | 210 | 4.8 | 100 | 3.50 | | 2.70 |
| 16 | 330 | 7.1 | 31 | 210 | 4.6 | 100 | 3.10 | | 2.70 |
| 17 | (340) | 7.0 | 30 | 225 | --- | 100 | 2.80 | | 2.80 |
| 18 | | 7.2 | 31 | 250 | | 100 | ---- | | 2.80 |
| 19 | | 7.2 | 30 | 250 | | | | | 2.00 |
| 20 | | 7.1 | 26 | 250 | | | | | 2.75 |
| 21 | | 6.3 | 28 | 250 | | | | | 2.60 |
| 22 | | 5.6 | 27 | 275 | | | | | 2.65 |
| 23 | | 5.2 | 27 | 275 | | | | | 2.60 |

Time: 60.0°W.
Sweep: 1.6 Mc to 20.0 Mc in 15 seconds.

Table 14

Graz, Austria (47.1° N, 15.5° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >5.7 | 27 | 305 | | | | | (2.6) |
| 01 | | 6.0 | 25 | 300 | | | | | 2.7 |
| 02 | | >5.6 | 25 | 300 | | | | | 2.6 |
| 03 | | 5.4 | 24 | 310 | | | | | 2.6 |
| 04 | | 5.1 | 24 | 300 | | | | | 2.7 |
| 05 | | 5.3 | 25 | 285 | | | | | 2.9 |
| 06 | 390 | >5.9 | 24 | 240 | (3.8) | | | | 2.8 |
| 07 | (200) | >6.9 | 28 | 240 | (4.3) | (100) | (2.9) | 3.4 | 3.0 |
| 08 | 290 | (7.7) | 26 | <250 | 4.7 | 100 | 3.1 | 3.8 | 3.1 |
| 09 | 300 | 8.2 | 27 | <250 | 5.1 | 110 | 3.3 | 4.0 | 2.9 |
| 10 | 300 | 7.9 | 26 | <245 | 5.2 | | | 3.5 | 2.9 |
| 11 | 330 | 8.0 | 28 | <250 | 5.2 | | | | 2.8 |
| 12 | 340 | 8.4 | 27 | <260 | 5.4 | | | | 2.8 |
| 13 | 330 | 8.5 | 26 | <250 | 5.2 | | | | 2.8 |
| 14 | 300 | 8.3 | 27 | <260 | 5.2 | | | 3.3 | 2.9 |
| 15 | 310 | 8.0 | 28 | <260 | 5.1 | | | | 2.9 |
| 16 | 300 | 7.7 | 29 | <240 | (4.7) | 110 | 3.3 | 3.3 | 2.8 |
| 17 | | 7.9 | 28 | 240 | | 110 | 2.9 | 3.2 | 2.8 |
| 18 | | 8.3 | 27 | 250 | | | | 3.0 | 2.9 |
| 19 | | 8.4 | 28 | 250 | | | | | 3.0 |
| 20 | | (8.0) | 26 | 250 | | | | | (2.9) |
| 21 | | >6.7 | 29 | 260 | | | | | (2.8) |
| 22 | | >5.9 | 24 | 280 | | | | | (2.6) |
| 23 | | >5.6 | 27 | 295 | | | | | (2.6) |

Time: 15.0°E.
Sweep: 2.0 Mc to 18.0 Mc in 50 seconds.

Table 15

Sottens, Switzerland (46.6° N, 6.7° E) August 1960

| Time | h'F2 | foF2—Count | | h'F1 | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 300 | 6.2 | 29 | | | | | | 2.8 |
| 01 | 300 | 6.0 | 28 | | | | | | 2.8 |
| 02 | 310 | 5.8 | 27 | | | | | | 2.8 |
| 03 | 300 | 5.4 | 28 | | | | | | 2.8 |
| 04 | 300 | 5.2 | 27 | | | | | | 2.8 |
| 05 | 300 | 4.9 | 30 | | | | | | 2.8 |
| 06 | 280 | 5.6 | 28 | 270 | 3.4 | 120 | 2.0 | 2.8 | 3.0 |
| 07 | 280 | 6.4 | 24 | 250 | 4.2 | 110 | 2.5 | 3.8 | 3.15 |
| 08 | 290 | 6.7 | 27 | 230 | 4.6 | 110 | 3.0 | 4.3 | 3.1 |
| 09 | 300 | 7.4 | 27 | 230 | 5.0 | 100 | 3.2 | 4.7 | 3.1 |
| 10 | 300 | 7.4 | 25 | 220 | 5.1 | 100 | 3.4 | 5.2 | 3.2 |
| 11 | 320 | 7.6 | 27 | 210 | 5.3 | 100 | 3.5 | 5.1 | 3.0 |
| 12 | 330 | 8.0 | 28 | 210 | 5.3 | 100 | 3.6 | 4.8 | 3.0 |
| 13 | 340 | 8.0 | 28 | 230 | 5.5 | 100 | 3.7 | 4.2 | 3.0 |
| 14 | 340 | 8.0 | 30 | 220 | 5.4 | 100 | 3.6 | 4.0 | 3.0 |
| 15 | 320 | 7.8 | 29 | 230 | 5.2 | 100 | 3.5 | 3.8 | 3.0 |
| 16 | 320 | 7.7 | 30 | 235 | 5.0 | 100 | 3.4 | 3.7 | 3.0 |
| 17 | 300 | 7.8 | 28 | 250 | 4.6 | 110 | 3.1 | 4.0 | 3.1 |
| 18 | 280 | 7.8 | 27 | 250 | 4.1 | 110 | 2.7 | 4.3 | 3.1 |
| 19 | 270 | 8.1 | 27 | --- | --- | 120 | 2.1 | 3.9 | 3.15 |
| 20 | 260 | 7.8 | 26 | | | | | 3.8 | 3.2 |
| 21 | 250 | 7.7 | 27 | | | | | 3.6 | 3.1 |
| 22 | 260 | 6.8 | 26 | | | | | 3.4 | 3.0 |
| 23 | 280 | 6.5 | 29 | | | | | 2.8 | 2.9 |

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

Table 16

Ottawa, Canada (45.4° N, 75.9° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.7 | 28 | 295 | | | | | (2.80) |
| 01 | | 4.3 | 29 | 300 | | | | | ---- |
| 02 | | 4.0 | 27 | 300 | | | | | ---- |
| 03 | | 3.8 | 29 | 300 | | | | | ---- |
| 04 | | 3.2 | 29 | 300 | | | | | ---- |
| 05 | | 3.5 | 29 | 300 | | 125 | 1.7 | | ---- |
| 06 | (400) | 4.5 | 30 | 260 | 3.8 | 115 | 2.4 | | 2.95 |
| 07 | 475 | 5.0 | 30 | 240 | 4.1 | 110 | 3.0 | 3.0 | (2.85) |
| 08 | 460 | 5.4 | 30 | 230 | 4.5 | 110 | 3.3 | | 2.90 |
| 09 | 400 | 5.8 | 30 | 210 | 4.8 | 105 | 3.5 | 3.6 | 2.90 |
| 10 | 470 | 6.0 | 30 | 200 | 5.0 | 105 | 3.6 | 3.7 | 2.70 |
| 11 | 440 | 6.1 | 31 | 200 | 5.0 | 105 | 3.8 | 3.8 | 2.65 |
| 12 | 410 | 6.1 | 31 | 205 | 5.0 | 105 | 3.9 | | 2.80 |
| 13 | 470 | 6.0 | 31 | 210 | 5.0 | 105 | 3.9 | | 2.80 |
| 14 | 450 | 6.1 | 31 | 220 | 5.0 | 105 | 3.8 | | 2.75 |
| 15 | 400 | 6.4 | 30 | 220 | 4.9 | 105 | 3.6 | | 2.75 |
| 16 | 400 | 6.6 | 30 | 230 | 4.6 | 105 | 3.3 | | 2.80 |
| 17 | 370 | 6.6 | 30 | 240 | (4.3) | 110 | 3.0 | | 2.85 |
| 18 | (335) | 6.8 | 31 | 260 | --- | 110 | 2.6 | | 2.85 |
| 19 | | 6.8 | 29 | 285 | | 145 | 2.0 | | 2.90 |
| 20 | | 6.5 | 30 | 260 | | | | | 2.90 |
| 21 | | 6.2 | 30 | 280 | | | | | 2.80 |
| 22 | | 5.5 | 29 | 290 | | | | | (2.90) |
| 23 | | 5.0 | 27 | 290 | | | | | 2.75 |

Time: 75.0°W.
Sweep: 1.0 Mc to 20.0 Mc in 16 seconds.

Table 17

Wakkanai, Japan (45.4° N, 141.7° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.2 | 27 | 300 | | | | 2.7 | 2.65 |
| 01 | | 5.8 | 27 | 295 | | | | (2.5) | 2.65 |
| 02 | | 5.7 | 27 | 295 | | | | 2.4 | 2.65 |
| 03 | | 5.3 | 27 | 300 | | | | 2.3 | 2.65 |
| 04 | | 5.3 | 30 | 300 | | | ---- | 1.5 | 2.65 |
| 05 | --- | 5.6 | 30 | 275 | --- | | 1.90 | 2.4 | 2.75 |
| 06 | 405 | 6.4 | 30 | 250 | 4.0 | | 2.60 | 3.2 | 2.80 |
| 07 | 370 | 6.6 | 30 | 250 | 4.4 | | 3.00 | 4.2 | 2.80 |
| 08 | 410 | 7.2 | 28 | 240 | 4.6 | | 3.30 | 4.9 | 2.85 |
| 09 | 365 | 7.1 | 26 | 235 | (4.8) | | 3.45 | 5.2 | 2.90 |
| 10 | 415 | 7.0 | 25 | 230 | 5.0 | | 3.50 | 5.5 | 2.85 |
| 11 | 435 | 7.6 | 25 | 220 | 5.1 | | 3.50 | 5.6 | 2.80 |
| 12 | 395 | 7.2 | 26 | 220 | 5.1 | | 3.55 | 4.8 | 2.80 |
| 13 | 400 | 7.0 | 29 | 230 | 5.0 | | 3.50 | 4.8 | 2.75 |
| 14 | 375 | 7.3 | 29 | 240 | 5.0 | | 3.50 | 4.3 | 2.80 |
| 15 | 365 | 6.8 | 30 | 245 | 4.8 | | 3.40 | 4.0 | 2.80 |
| 16 | 340 | 6.8 | 30 | 245 | 4.6 | | 3.10 | 4.0 | 2.85 |
| 17 | (315) | 7.0 | 30 | 260 | --- | | 2.70 | 4.0 | 2.90 |
| 18 | | 7.0 | 31 | 270 | | | 2.10 | (4.0) | 2.90 |
| 19 | | 7.4 | 30 | 270 | | | | (4.0) | 2.80 |
| 20 | | (7.2) | 27 | 285 | | | | (3.7) | (2.70) |
| 21 | | 7.0 | 26 | 285 | | | | (3.3) | 2.70 |
| 22 | | 7.0 | 27 | 285 | | | | (2.8) | 2.70 |
| 23 | | 6.6 | 29 | 295 | | | | 2.6 | 2.65 |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.7 Mc in 1 minute.

Table 18

Rome, Italy (41.8° N, 12.5° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (6.7) | 23 | 310 | | | | 2.9 | 2.65 |
| 01 | | (6.5) | 24 | 310 | | | | 3.1 | 2.60 |
| 02 | | (6.2) | 21 | 310 | | | | 2.4 | (2.60) |
| 03 | | (6.1) | 22 | 300 | | | | 2.2 | (2.60) |
| 04 | | (6.0) | 21 | 300 | | | | 2.2 | (2.65) |
| 05 | --- | 5.6 | 28 | 300 | --- | --- | 1.6 | | 2.65 |
| 06 | --- | (6.2) | 22 | 250 | --- | 130 | 2.2 | 3.2 | (2.90) |
| 07 | --- | 8.0 | 22 | 250 | --- | 110 | 2.7 | 4.1 | 3.00 |
| 08 | --- | 7.9 | 29 | 240 | --- | 110 | 3.2 | 4.5 | 3.10 |
| 09 | --- | 8.1 | 24 | 240 | --- | 110 | 3.4 | 5.1 | 3.00 |
| 10 | --- | 8.2 | 26 | 210 | --- | 110 | 3.6 | 5.2 | 2.95 |
| 11 | (340) | 8.3 | 30 | 220 | (5.2) | 110 | 3.7 | 5.4 | 2.05 |
| 12 | --- | 8.8 | 29 | 220 | --- | 110 | 3.7 | 4.8 | 2.80 |
| 13 | (350) | 8.9 | 27 | 220 | (5.4) | 110 | 3.8 | 4.8 | 2.85 |
| 14 | (340) | 9.0 | 27 | 240 | (5.4) | 110 | 3.8 | | 2.85 |
| 15 | --- | 8.8 | 25 | 240 | --- | 110 | 3.6 | | 2.85 |
| 16 | --- | 8.7 | 29 | 240 | --- | 110 | 3.4 | | 2.90 |
| 17 | | 8.8 | 25 | 250 | | 110 | 3.0 | 4.5 | 2.95 |
| 18 | | (8.8) | 24 | 260 | | 120 | 2.5 | 4.5 | (3.00) |
| 19 | | 8.7 | 19 | 260 | | --- | 1.8 | 3.7 | 3.00 |
| 20 | | 8.6 | 20 | 260 | | | | 3.8 | 3.00 |
| 21 | | (8.0) | 18 | 260 | | | | 4.3 | (2.85) |
| 22 | | (7.6) | 21 | 280 | | | | 3.8 | (2.70) |
| 23 | | (6.8) | 14 | 290 | | | | 3.5 | (2.70) |

Time: 15.0°E.
Sweep: 1.4 Mc to 15.0 Mc in 5 minutes, automatic operation.

Table 19

Akita, Japan (39.7° N, 140.1° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.8 | 25 | 300 | | | | (3.8) | 2.70 |
| 01 | | 6.6 | 25 | 295 | | | | (2.4) | 2.75 |
| 02 | | 6.3 | 26 | 295 | | | | (2.3) | 2.70 |
| 03 | | 5.9 | 28 | 290 | | | | (2.2) | 2.70 |
| 04 | | 5.6 | 28 | 300 | | | | (2.3) | 2.70 |
| 05 | (405) | 5.7 | 29 | 290 | --- | | ---- | 2.2 | 2.80 |
| 06 | 355 | 6.8 | 29 | 245 | 4.0 | | 2.50 | 3.0 | 3.00 |
| 07 | 345 | 7.3 | 29 | 245 | 4.4 | | 2.95 | 3.8 | 3.00 |
| 08 | 310 | 7.6 | 28 | 240 | 4.7 | | 3.30 | 4.8 | 3.10 |
| 09 | 340 | 8.1 | 27 | 210 | 4.8 | | 3.55 | (4.5) | 3.00 |
| 10 | 350 | 7.9 | 27 | 225 | 5.0 | | 3.70 | 5.1 | 2.90 |
| 11 | 355 | 7.8 | 27 | 210 | 5.2 | | 3.90 | (5.2) | 2.85 |
| 12 | 360 | 7.8 | 26 | 215 | 5.2 | | (3.70) | (5.5) | 2.80 |
| 13 | 355 | 7.8 | 26 | 230 | 5.4 | | 3.75 | (4.8) | 2.85 |
| 14 | 340 | 8.0 | 27 | 240 | 5.1 | | 3.90 | (4.5) | 2.90 |
| 15 | 335 | 8.0 | 28 | 245 | 5.0 | | 3.55 | (4.4) | 2.95 |
| 16 | 305 | 8.0 | 28 | 245 | 4.6 | | 3.20 | 4.0 | 3.00 |
| 17 | 300 | 7.8 | 29 | 250 | --- | | 2.70 | (4.0) | 3.00 |
| 18 | 295 | 7.8 | 29 | 260 | | | ---- | (3.6) | 2.95 |
| 19 | | 8.0 | 29 | 260 | | | | (3.8) | 2.90 |
| 20 | | 7.6 | 28 | 275 | | | | (3.7) | 2.80 |
| 21 | | 7.6 | 28 | 285 | | | | (3.1) | 2.70 |
| 22 | | 7.2 | 28 | 295 | | | | (3.5) | 2.70 |
| 23 | | 7.3 | 25 | 300 | | | | (3.9) | 2.65 |

Time: 135.0°E.
Sweep: 1.6 Mc to 20.0 Mc in 20 seconds.

Table 20

Tokyo, Japan (35.7° N, 139.5° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.8 | 30 | (335) | | | | (3.2) | 2.55 |
| 01 | | 6.6 | 29 | 320 | | | | (3.3) | 2.60 |
| 02 | | 6.4 | 29 | 305 | | | | (2.5) | 2.60 |
| 03 | | 6.0 | 29 | 300 | | | | 2.2 | 2.60 |
| 04 | | 5.8 | 29 | 305 | | | | 2.2 | 2.55 |
| 05 | --- | 5.6 | 29 | 300 | --- | | ---- | | 2.60 |
| 06 | (350) | 7.0 | 28 | 255 | 4.0 | | 2.40 | 2.8 | 2.90 |
| 07 | 360 | 8.2 | 28 | 250 | 4.6 | | 2.95 | 3.5 | 2.90 |
| 08 | 300 | 7.9 | 28 | 245 | 4.9 | | 3.30 | 4.5 | 2.95 |
| 09 | 330 | 7.8 | 29 | 250 | 5.2 | | 3.55 | 4.9 | 2.85 |
| 10 | 375 | 7.7 | 30 | 230 | 5.4 | | 3.75 | 4.6 | 2.70 |
| 11 | 360 | 8.3 | 30 | 240 | 5.6 | | (3.85) | 4.9 | 2.75 |
| 12 | 370 | 8.1 | 30 | 245 | 5.7 | | (3.90) | 4.8 | 2.65 |
| 13 | 355 | 8.7 | 30 | (250) | 5.5 | | (3.85) | 4.6 | 2.70 |
| 14 | <350 | 9.0 | 30 | 250 | 5.4 | | 3.80 | 4.2 | 2.70 |
| 15 | 330 | 8.8 | 30 | 250 | 5.3 | | 3.70 | 4.2 | 2.75 |
| 16 | 320 | 8.5 | 30 | 250 | 4.9 | | 3.30 | 4.6 | 2.80 |
| 17 | 300 | 8.4 | 31 | 255 | | | 2.70 | 3.8 | 2.85 |
| 18 | 300 | 8.4 | 31 | 280 | | | ---- | 3.5 | 2.90 |
| 19 | | 8.2 | 30 | (280) | | | | 3.4 | 2.85 |
| 20 | | 7.4 | 30 | 300 | | | | 4.5 | 2.65 |
| 21 | | 7.2 | 30 | (310) | | | | (4.5) | 2.55 |
| 22 | | 7.2 | 30 | 330 | | | | (3.9) | 2.55 |
| 23 | | 7.0 | 30 | <330 | | | | (3.8) | 2.60 |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 20 seconds.

Table 21

Yamagawa, Japan (31.2° N, 130.6° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (7.4) | 29 | 310 | | | | 3.7 | (2.65) |
| 01 | | 7.2 | 27 | 310 | | | | 3.6 | 2.70 |
| 02 | | 6.6 | 30 | 300 | | | | 3.0 | 2.75 |
| 03 | | 6.3 | 29 | 290 | | | | 2.4 | 2.75 |
| 04 | | 5.9 | 30 | 305 | | | | (2.4) | 2.65 |
| 05 | | 5.5 | 27 | 310 | | | | 2.3 | 2.70 |
| 06 | --- | 6.3 | 31 | 275 | --- | | 2.00 | 2.4 | 3.00 |
| 07 | --- | 8.1 | 31 | 250 | --- | | 2.70 | 3.1 | 3.20 |
| 08 | (370) | 7.7 | 31 | 240 | --- | | 3.15 | 3.8 | 3.15 |
| 09 | 330 | 7.9 | 31 | 240 | 5.2 | | 3.45 | 4.6 | 2.90 |
| 10 | 360 | 8.1 | 31 | 245 | 5.2 | | 3.65 | 5.1 | 2.80 |
| 11 | 350 | 8.8 | 30 | 230 | 5.6 | | 3.75 | 5.2 | 2.75 |
| 12 | 350 | 9.6 | 30 | 230 | 5.5 | | 3.85 | 5.0 | 2.75 |
| 13 | 350 | 9.8 | 30 | 245 | 5.6 | | 3.95 | 4.9 | 2.70 |
| 14 | 350 | 10.2 | 31 | 245 | 5.6 | | 3.85 | 5.0 | 2.75 |
| 15 | 335 | 10.0 | 31 | 245 | 5.4 | | 3.70 | 4.6 | 2.80 |
| 16 | 320 | 10.1 | 31 | 250 | 5.2 | | 3.50 | 4.4 | 2.85 |
| 17 | 300 | 9.8 | 30 | 250 | 4.7 | | 3.10 | 4.4 | 2.85 |
| 18 | 290 | 10.0 | 30 | 265 | | | 2.50 | 3.8 | 2.95 |
| 19 | | (10.0) | 30 | 255 | | | ---- | 3.8 | (3.00) |
| 20 | | 8.2 | 30 | 255 | | | | 3.5 | 2.80 |
| 21 | | (7.6) | 31 | 300 | | | | 3.1 | (2.60) |
| 22 | | (7.5) | 30 | 310 | | | | 2.8 | (2.55) |
| 23 | | (7.4) | 30 | 310 | | | | 3.2 | (2.60) |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 30 seconds.

Table 22

Formosa, China (25.0° N, 121.5° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (9.7) | 27 | 270 | | | | (2.0) | (2.80) |
| 01 | | 9.0 | 26 | 260 | | | | | 2.90 |
| 02 | | 8.0 | 26 | 250 | | | | (2.3) | 2.85 |
| 03 | | 7.5 | 20 | 260 | | | | (1.7) | 2.90 |
| 04 | | 6.6 | 20 | 265 | | | | | 2.85 |
| 05 | | 5.8 | 23 | 260 | | | | | 2.90 |
| 06 | | 7.0 | 26 | 235 | | | | | 3.20 |
| 07 | --- | 7.9 | 27 | 220 | --- | <111 | ---- | 3.3 | 3.30 |
| 08 | (260) | 8.4 | 26 | 210 | --- | 101 | ---- | 3.9 | 3.20 |
| 09 | (305) | 8.5 | 26 | 205 | (5.2) | 101 | ---- | 4.3 | 3.00 |
| 10 | 355 | (9.3) | 27 | (200) | (5.5) | 101 | ---- | 4.5 | (2.85) |
| 11 | 345 | >10.0 | 28 | (200) | (5.5) | 101 | ---- | 4.5 | 2.80 |
| 12 | 350 | 12.2 | 28 | (205) | (5.6) | 101 | ---- | 4.6 | 2.80 |
| 13 | 350 | 12.9 | 29 | (210) | (5.6) | 101 | ---- | 4.5 | 2.80 |
| 14 | 340 | 13.3 | 29 | 205 | (5.9) | 101 | ---- | 4.4 | 2.85 |
| 15 | 325 | 13.4 | 29 | 220 | (5.6) | 101 | (3.75) | 4.2 | 2.90 |
| 16 | 300 | 14.2 | 28 | (220) | (5.2) | (103) | (3.40) | 3.8 | 2.95 |
| 17 | 270 | 14.4 | 28 | 230 | | <111 | ---- | 3.7 | (3.00) |
| 18 | --- | (13.8) | 28 | 245 | | | | (3.7) | 3.15 |
| 19 | | >10.8 | 27 | 240 | | | | (3.0) | 3.00 |
| 20 | | (10.8) | 29 | 250 | | | | (1.8) | (2.80) |
| 21 | | >10.0 | 27 | 260 | | | | | 2.75 |
| 22 | | >9.9 | 28 | 270 | | | | | 2.70 |
| 23 | | >9.3 | 26 | 280 | | | | | 2.75 |

Time: 120.0°E.
Sweep: 1.0 Mc to 25.0 Mc in 27 seconds.

Table 23

El Cerillo, Mexico (19.3° N, 99.5° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.8 | 29 | 280 | | | | | 2.80 |
| 01 | | 6.8 | 29 | 285 | | | | | 2.80 |
| 02 | | 6.6 | 29 | 260 | | | | | 3.00 |
| 03 | | 6.0 | 29 | 255 | | | | 1.7 | 2.80 |
| 04 | | 5.6 | 29 | 270 | | | | | 2.80 |
| 05 | | 5.2 | 29 | 270 | | | | 2.3 | 2.90 |
| 06 | | 5.4 | 29 | 270 | | | | 1.7 | 2.90 |
| 07 | | 6.6 | 30 | 240 | | 111 | 2.10 | 2.8 | 3.10 |
| 08 | --- | 7.6 | 30 | 220 | --- | 103 | 2.90 | 3.4 | 3.00 |
| 09 | (325) | 8.2 | 28 | 205 | 4.9 | 103 | 3.30 | 3.9 | 2.90 |
| 10 | 350 | 9.2 | 30 | 200 | 5.5 | 103 | 3.70 | 4.2 | 2.70 |
| 11 | 360 | 10.0 | 28 | 215 | 5.6 | 103 | 3.80 | 4.1 | 2.65 |
| 12 | 360 | 11.0 | 28 | 210 | 5.7 | 103 | 4.00 | 4.4 | 2.70 |
| 13 | 350 | 11.2 | 27 | 210 | 5.6 | 103 | 4.00 | 4.4 | 2.70 |
| 14 | 340 | 11.6 | 24 | 220 | 5.6 | 103 | 3.95 | 4.4 | 2.80 |
| 15 | 330 | 12.0 | 27 | 220 | 5.5 | 103 | 3.80 | 4.4 | 2.80 |
| 16 | 300 | 11.4 | 27 | 225 | 5.1 | 103 | 3.60 | 4.0 | 3.00 |
| 17 | | 10.9 | 28 | 235 | --- | 105 | 3.20 | 4.0 | 3.00 |
| 18 | | 10.2 | 29 | 240 | | 109 | 2.60 | 3.6 | 3.10 |
| 19 | | 9.2 | 28 | 245 | | | | 3.9 | 3.00 |
| 20 | | 8.0 | 28 | 240 | | | | 3.3 | 2.90 |
| 21 | | 8.0 | 26 | 260 | | | | 2.4 | 2.80 |
| 22 | | 7.2 | 29 | 275 | | | | 2.4 | 2.00 |
| 23 | | 7.0 | 30 | 280 | | | | | 2.80 |

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

Table 24

Singapore, British Malaya (1.3° N, 103.8° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.2 | 24 | 230 | | --- | | | 3.15 |
| 01 | | 8.7 | 27 | 215 | | --- | | 1.4 | 3.15 |
| 02 | | 7.8 | 29 | 220 | | --- | | | 3.10 |
| 03 | | 6.0 | 25 | 230 | | --- | | 1.6 | 3.10 |
| 04 | | >5.0 | 27 | 230 | | --- | | 2.2 | 3.10 |
| 05 | | 4.4 | 28 | 245 | | --- | | 2.4 | 3.15 |
| 06 | --- | 5.4 | 28 | 270 | --- | 115 | ---- | 1.7 | 2.95 |
| 07 | --- | 9.3 | 29 | 250 | --- | 120 | 2.65 | 2.9 | 3.05 |
| 08 | --- | 11.7 | 30 | 240 | --- | 110 | 3.30 | | 2.95 |
| 09 | --- | 13.1 | 29 | 220 | --- | 110 | 3.70 | | 2.85 |
| 10 | --- | 13.6 | 29 | 210 | --- | 110 | 3.85 | | 2.55 |
| 11 | 320 | 13.5 | 28 | 210 | (5.1) | 105 | 4.00 | | 2.35 |
| 12 | 540 | 12.8 | 28 | 205 | 5.4 | 105 | 4.10 | | 2.20 |
| 13 | --- | 12.0 | 29 | 205 | --- | 105 | 4.00 | | 2.20 |
| 14 | --- | 11.5 | 27 | 205 | --- | 110 | 3.90 | | 2.15 |
| 15 | --- | 11.7 | 29 | 205 | --- | 110 | 3.70 | | 2.15 |
| 16 | --- | 11.6 | 26 | 230 | --- | 110 | 3.30 | | 2.25 |
| 17 | --- | 11.8 | 30 | 250 | --- | 110 | 2.70 | | 2.35 |
| 18 | --- | 12.1 | 27 | 260 | --- | --- | ---- | 1.4 | 2.50 |
| 19 | | 12.1 | 25 | 295 | | --- | ---- | | 2.55 |
| 20 | | 12.0 | 22 | 295 | | --- | | | 2.70 |
| 21 | | >12.1 | 22 | 255 | | --- | | | 2.80 |
| 22 | | 11.8 | 22 | 220 | | --- | | 2.2 | 3.00 |
| 23 | | 11.5 | 25 | 215 | | --- | | | 3.00 |

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

Table 25

Huancayo, Peru (12.0° S, 75.3° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.5 | 28 | 225 | | | | | 3.10 |
| 01 | | 7.1 | 27 | 225 | | | | | 3.15 |
| 02 | | 6.5 | 28 | 230 | | | | | 3.15 |
| 03 | | 5.7 | 28 | 235 | | | | | 3.20 |
| 04 | | 5.0 | 27 | 240 | | | | | 3.25 |
| 05 | | 4.1 | 25 | 245 | | | | | 3.18 |
| 06 | | 4.1 | 27 | 285 | | --- | (1.35) | | 2.82 |
| 07 | | 7.6 | 31 | 245 | | 119 | 2.45 | 5.7 | 3.05 |
| 08 | | 9.4 | 31 | 235 | | 112 | (3.10) | 7.3 | 2.80 |
| 09 | | 10.25 | 30 | 220 | | --- | (3.50) | 7.6 | 2.60 |
| 10 | --- | 10.0 | 30 | 210 | --- | --- | (3.85) | 8.0 | 2.45 |
| 11 | --- | 9.9 | 31 | 200 | --- | --- | (3.95) | 8.3 | 2.40 |
| 12 | --- | 9.8 | 31 | 200 | --- | --- | (4.05) | 9.0 | 2.30 |
| 13 | --- | 9.35 | 30 | 200 | --- | --- | (4.00) | 8.2 | 2.30 |
| 14 | --- | 9.3 | 30 | 200 | --- | --- | (3.85) | 8.1 | 2.30 |
| 15 | --- | 9.5 | 31 | 210 | --- | --- | (3.60) | 8.0 | 2.30 |
| 16 | | 9.3 | 31 | 225 | | --- | (3.20) | 7.4 | 2.35 |
| 17 | | 9.1 | 31 | 250 | | 112 | (2.60) | 5.8 | 2.38 |
| 18 | | 8.9 | 31 | 285 | | <166 | 1.55 | 4.2 | 2.40 |
| 19 | | 8.35 | 30 | 360 | | | | | 2.30 |
| 20 | | 7.8 | 23 | 330 | | | | | 2.45 |
| 21 | | 8.1 | 22 | 280 | | | | | 2.60 |
| 22 | | 8.3 | 25 | 235 | | | | | 2.90 |
| 23 | | 8.4 | 24 | 225 | | | | | 3.00 |

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

Table 26

Townsville, Australia (19.3° S, 146.7° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >6.0 | 10 | 250 | | | | | ---- |
| 01 | | >4.3 | 15 | 250 | | | | | (2.90) |
| 02 | | >4.3 | 12 | 240 | | | | | (3.20) |
| 03 | | 3.9 | 17 | 240 | | | | 1.9 | 3.30 |
| 04 | | >3.2 | 18 | 280 | | | | 2.4 | 2.90 |
| 05 | | 3.5 | 19 | 300 | | | | 1.8 | 2.80 |
| 06 | | >3.7 | 22 | 200 | | | | 2.4 | 2.90 |
| 07 | | >7.0 | 4 | 240 | | | 2.25 | | ---- |
| 08 | | >9.5 | 9 | 240 | | | 3.00 | | ---- |
| 09 | | (10.5) | 16 | 230 | | | 3.30 | | 3.10 |
| 10 | | 11.7 | 18 | 220 | | | 3.65 | | 3.05 |
| 11 | | 11.5 | 19 | 210 | | | 3.75 | | 3.00 |
| 12 | | 11.0 | 19 | --- | | | 3.80 | | 2.95 |
| 13 | | 11.2 | 17 | --- | | | 3.75 | (3.9) | 2.85 |
| 14 | | 10.8 | 18 | <210 | | | 3.55 | 3.9 | 2.80 |
| 15 | | >10.4 | 20 | 215 | | | 3.45 | 3.8 | 2.80 |
| 16 | | >10.0 | 19 | 230 | | | 3.20 | 3.4 | (2.80) |
| 17 | | >10.0 | 8 | 250 | | | 2.70 | 3.6 | ---- |
| 18 | | (8.6) | 2 | 250 | | | 1.80 | 3.4 | |
| 19 | | >6.8 | 6 | 240 | | | | 3.1 | |
| 20 | | >6.9 | 10 | <250 | | | | 2.4 | |
| 21 | | >6.2 | 12 | 260 | | | | 1.8 | ---- |
| 22 | | >6.5 | 8 | 260 | | | | | ---- |
| 23 | | >6.0 | 10 | 270 | | | | | ---- |

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

Table 27

Brisbane, Australia (27.5° S, 152.9° E) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.4 | 25 | 260 | | | | 2.4 | 2.75 |
| 01 | | 5.3 | 26 | 260 | | | | 2.5 | 2.80 |
| 02 | | 5.0 | 28 | 250 | | | | 2.0 | 2.80 |
| 03 | | 4.6 | 29 | 250 | | | | 2.1 | 2.80 |
| 04 | | 4.1 | 28 | 250 | | | | | 2.60 |
| 05 | | 4.0 | 28 | 270 | | | | | 2.70 |
| 06 | | 4.6 | 28 | 250 | | | <1.60 | | 2.85 |
| 07 | | 7.6 | 30 | 230 | | | 2.20 | | 3.20 |
| 08 | | 9.0 | 30 | 230 | | | 2.95 | | 3.20 |
| 09 | | 10.0 | 30 | 230 | | | 3.40 | | 3.20 |
| 10 | | 10.6 | 30 | 220 | | | 3.55 | 3.8 | 3.10 |
| 11 | | 10.4 | 30 | 220 | 4.9 | | 3.70 | 4.0 | 3.05 |
| 12 | | 10.0 | 28 | 220 | 4.9 | | 3.80 | 4.3 | 2.95 |
| 13 | | 10.0 | 29 | 220 | 5.0 | | 3.70 | 4.2 | 2.90 |
| 14 | | 9.7 | 29 | 220 | | | 3.50 | 4.3 | 2.90 |
| 15 | | 9.4 | 30 | 225 | | | 3.20 | 3.8 | 2.90 |
| 16 | | 9.0 | 30 | 240 | | | 2.80 | 3.0 | 2.90 |
| 17 | | 8.8 | 30 | 240 | | | 2.20 | 2.5 | 2.95 |
| 18 | | 8.5 | 30 | 235 | | | | 3.0 | 2.90 |
| 19 | | 7.4 | 30 | 230 | | | | 2.2 | 2.85 |
| 20 | | 6.6 | 30 | 250 | | | | 2.1 | 2.75 |
| 21 | | 6.0 | 29 | 250 | | | | | 2.70 |
| 22 | | 5.8 | 27 | 255 | | | | | 2.75 |
| 23 | | 5.5 | 28 | 250 | | | | | 2.75 |

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

Table 28

Falkland Is. (51.7° S, 57.8° W) August 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.4 | 19 | 335 | | | | (2.5) | ---- |
| 01 | | 3.6 | 24 | 350 | | | | | ---- |
| 02 | | 3.4 | 22 | 325 | | | | | (2.45) |
| 03 | | 3.4 | 28 | 315 | | --- | ---- | | (2.50) |
| 04 | | 3.2 | 25 | 295 | | | | | (2.65) |
| 05 | | 3.1 | 27 | 260 | | | | | (3.05) |
| 06 | | 2.9 | 26 | 260 | | 180 | ---- | | (2.70) |
| 07 | | 5.2 | 24 | 240 | | 155 | 1.80 | | ---- |
| 08 | | 6.8 | 26 | 215 | | 130 | 2.30 | | 3.40 |
| 09 | | 7.9 | 27 | 225 | | 115 | ---- | 3.1 | 3.35 |
| 10 | | 9.1 | 22 | 225 | | 110 | 3.05 | (4.2) | 3.35 |
| 11 | | 9.6 | 22 | 220 | | 110 | (3.10) | (4.6) | 3.35 |
| 12 | | 9.6 | 23 | 225 | | 110 | 3.20 | (4.6) | (3.40) |
| 13 | | 8.6 | 18 | 230 | | 110 | ---- | (4.6) | (3.50) |
| 14 | | 8.4 | 20 | 230 | | 115 | ---- | (3.5) | (3.25) |
| 15 | | 8.4 | 23 | 230 | | 115 | ---- | 3.1 | (3.40) |
| 16 | | 8.3 | 25 | 230 | | 130 | 2.20 | 2.4 | 3.40 |
| 17 | | 6.8 | 22 | 220 | | --- | E | (2.3) | (3.20) |
| 18 | | 5.3 | 25 | 230 | | --- | ---- | (2.2) | ---- |
| 19 | | 4.4 | 22 | 240 | | | | (1.8) | ---- |
| 20 | | 3.4 | 24 | 240 | | | | (1.7) | ---- |
| 21 | | 3.1 | 27 | 270 | | | | (1.6) | (2.75) |
| 22 | | 3.2 | 22 | 280 | | | | (2.4) | ---- |
| 23 | | 3.6 | 17 | 345 | | | | 1.9 | (2.45) |

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

Table 29

Wakkanai, Japan (45.4° N, 141.7° E) July 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.1 | 29 | 300 | | | | (3.5) | 2.60 |
| 01 | | 6.7 | 29 | 290 | | | | (2.8) | 2.65 |
| 02 | | 6.5 | 28 | 290 | | | | (2.6) | 2.70 |
| 03 | | 6.0 | 28 | 295 | | | | (2.8) | 2.70 |
| 04 | --- | 5.9 | 29 | 300 | --- | | 1.55 | 2.4 | 2.65 |
| 05 | 380 | 6.5 | 31 | 265 | 3.4 | | 2.15 | 3.0 | 2.65 |
| 06 | 350 | 7.2 | 31 | 250 | 4.2 | | 2.70 | 4.5 | 2.65 |
| 07 | 350 | 7.3 | 29 | (245) | 4.6 | | 3.10 | 5.0 | 2.75 |
| 08 | 355 | 7.2 | 29 | 220 | (4.8) | | 3.35 | (5.7) | 2.70 |
| 09 | 385 | 6.7 | 27 | 230 | 5.2 | | 3.50 | 5.8 | 2.70 |
| 10 | 415 | 6.8 | 25 | 230 | 5.2 | | 3.60 | (6.3) | 2.65 |
| 11 | 410 | 7.0 | 22 | 230 | 5.2 | | 3.65 | 6.3 | 2.70 |
| 12 | 430 | 6.6 | 24 | 225 | 5.2 | | 3.60 | 5.8 | 2.70 |
| 13 | 420 | 6.8 | 27 | 225 | 5.3 | | 3.55 | (5.0) | 2.65 |
| 14 | 400 | 7.0 | 28 | 240 | 5.2 | | 3.50 | 5.0 | 2.70 |
| 15 | 390 | 6.8 | 29 | 235 | 5.2 | | 3.50 | 4.5 | 2.70 |
| 16 | 365 | 6.8 | 29 | 240 | 5.1 | | 3.25 | 5.0 | 2.80 |
| 17 | 370 | 6.8 | 29 | 250 | 4.7 | | 2.90 | (5.2) | 2.75 |
| 18 | --- | 6.8 | 31 | 265 | 4.5 | | 2.35 | 5.7 | 2.80 |
| 19 | | 7.0 | 31 | 285 | | | | (5.0) | 2.80 |
| 20 | | 7.0 | 21 | 280 | | | | (4.3) | 2.70 |
| 21 | | (7.2) | 18 | 290 | | | | (5.0) | (2.65) |
| 22 | | (7.2) | 17 | 290 | | | | (4.9) | (2.60) |
| 23 | | 7.2 | 23 | 295 | | | | (2.8) | 2.60 |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.7 Mc in 1 minute.

Table 30

Akita, Japan (39.7° N, 140.1° E) July 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.3 | 19 | 300 | | | | (3.9) | 2.70 |
| 01 | | 7.3 | 19 | 300 | | | | (4.0) | 2.70 |
| 02 | | 6.8 | 21 | 295 | | | | (3.6) | 2.70 |
| 03 | | 6.5 | 24 | 295 | | | | (3.3) | 2.70 |
| 04 | | 6.3 | 30 | 295 | | | | (2.5) | 2.75 |
| 05 | 400 | 7.0 | 31 | 255 | 3.3 | | 2.05 | 2.8 | 2.75 |
| 06 | 320 | 7.7 | 31 | 250 | 4.0 | | 2.60 | 4.0 | 2.80 |
| 07 | 310 | 8.1 | 30 | 245 | 4.5 | | 3.05 | (5.2) | 2.85 |
| 08 | 310 | 7.9 | 28 | (240) | (4.7) | | 3.40 | (6.2) | 2.90 |
| 09 | 360 | 7.2 | 28 | 220 | 4.8 | | 3.60 | (6.2) | 2.80 |
| 10 | 415 | 7.6 | 24 | 220 | 5.0 | | 3.80 | (6.9) | 2.80 |
| 11 | 420 | 7.0 | 24 | 210 | 5.2 | | 3.90 | (6.8) | 2.75 |
| 12 | 435 | 7.0 | 26 | 210 | 5.4 | | 3.90 | (6.8) | 2.70 |
| 13 | 410 | 7.1 | 25 | 230 | 5.2 | | 3.80 | (5.3) | 2.70 |
| 14 | 395 | 7.4 | 28 | 240 | 5.2 | | 3.70 | (5.5) | 2.75 |
| 15 | 350 | 7.6 | 30 | 240 | 5.0 | | 3.55 | (4.8) | 2.80 |
| 16 | 345 | 7.5 | 30 | 245 | 4.8 | | 3.30 | (6.4) | 2.80 |
| 17 | 320 | 7.5 | 30 | 245 | 4.5 | | 2.85 | (5.9) | 2.90 |
| 18 | 300 | 7.4 | 30 | 260 | --- | | 2.30 | (5.9) | 2.90 |
| 19 | | 7.4 | 31 | 280 | | | | (4.2) | 2.85 |
| 20 | | 7.6 | 29 | 280 | | | | (5.0) | 2.75 |
| 21 | | 7.4 | 26 | 300 | | | | (4.9) | 2.70 |
| 22 | | 7.4 | 25 | 300 | | | | (3.8) | 2.60 |
| 23 | | 7.5 | 21 | 305 | | | | (5.0) | 2.65 |

Time: 135.0°E.
Sweep: 1.6 Mc to 20.0 Mc in 20 seconds.

Table 31

Tokyo, Japan (35.7° N, 139.5° E) July 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.9 | 29 | <350 | | | | (4.6) | 2.55 |
| 01 | | 7.6 | 29 | 320 | | | | (3.8) | 2.65 |
| 02 | | 7.4 | 29 | 300 | | | | (3.0) | 2.70 |
| 03 | | 6.8 | 29 | 300 | | | | (2.8) | 2.60 |
| 04 | | 6.6 | 29 | 300 | | | ---- | 2.3 | 2.65 |
| 05 | (380) | 6.6 | 29 | 270 | --- | | 2.10 | 2.2 | 2.70 |
| 06 | 390 | 7.6 | 28 | 250 | 3.8 | | 2.60 | 3.3 | 2.70 |
| 07 | 305 | 8.3 | 27 | 250 | 4.5 | | 3.10 | 4.4 | 2.85 |
| 08 | 305 | 8.2 | 24 | 245 | 5.0 | | 3.40 | 5.4 | 2.80 |
| 09 | 360 | 7.6 | 24 | 245 | 5.2 | | 3.60 | 6.3 | 2.70 |
| 10 | 400 | 7.7 | 25 | 230 | 5.4 | | 3.80 | 5.6 | 2.60 |
| 11 | 420 | 7.6 | 26 | 250 | 5.6 | | (3.90) | 5.8 | 2.60 |
| 12 | 395 | 7.8 | 29 | (250) | 5.4 | | (3.95) | 5.8 | 2.65 |
| 13 | 400 | 8.0 | 28 | (250) | 5.5 | | 3.90 | 5.6 | 2.65 |
| 14 | 390 | 7.9 | 29 | (250) | 5.3 | | 3.80 | 5.3 | 2.70 |
| 15 | 370 | 8.4 | 31 | 250 | 5.2 | | 3.65 | 5.3 | 2.70 |
| 16 | 355 | 8.0 | 31 | 250 | 4.9 | | 3.30 | 5.3 | 2.75 |
| 17 | <340 | 8.1 | 31 | (255) | (4.4) | | 2.90 | (5.4) | 2.75 |
| 18 | <325 | 8.2 | 31 | 270 | --- | | 2.15 | 4.8 | 2.80 |
| 19 | | 7.7 | 31 | (290) | | | | 4.4 | 2.75 |
| 20 | | 7.8 | 31 | 300 | | | | (4.2) | 2.60 |
| 21 | | 7.6 | 31 | <325 | | | | (3.7) | 2.50 |
| 22 | | 7.6 | 31 | 350 | | | | (3.8) | 2.50 |
| 23 | | 7.6 | 30 | <350 | | | | (4.6) | 2.55 |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 20 seconds.

Table 32

Yamagawa, Japan (31.2° N, 130.6° E) July 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 8.2 | 25 | 325 | | | | 3.4 | 2.60 |
| 01 | | 8.6 | 20 | 305 | | | | 4.0 | 2.70 |
| 02 | | 7.8 | 23 | 290 | | | | 3.2 | 2.80 |
| 03 | | 7.4 | 18 | 280 | | | | 3.1 | 2.80 |
| 04 | | 6.8 | 20 | 300 | | | | (2.6) | 2.75 |
| 05 | | 6.7 | 22 | 290 | | | | 2.2 | 2.75 |
| 06 | --- | 7.0 | 28 | 260 | --- | | 2.00 | 2.7 | 2.90 |
| 07 | --- | 7.7 | 28 | 250 | --- | | 2.75 | 3.6 | 3.00 |
| 08 | (490) | 7.8 | 30 | 250 | 4.5 | | 3.20 | 4.2 | 2.90 |
| 09 | (470) | 8.0 | 29 | 250 | 4.8 | | 3.55 | 5.0 | 2.65 |
| 10 | 410 | 8.0 | 30 | 245 | 5.6 | | 3.75 | 5.2 | 2.65 |
| 11 | 400 | 8.3 | 29 | 235 | 5.5 | | 3.90 | 5.6 | 2.60 |
| 12 | 390 | 8.7 | 31 | 245 | 5.6 | | 3.90 | 5.4 | 2.55 |
| 13 | 385 | 9.3 | 30 | 240 | 5.6 | | 4.00 | 5.5 | 2.60 |
| 14 | 370 | 9.8 | 30 | 250 | 5.4 | | 3.90 | 5.5 | 2.65 |
| 15 | 370 | 9.6 | 31 | 245 | 5.4 | | 3.80 | 5.2 | 2.75 |
| 16 | 350 | 9.7 | 31 | 250 | 5.2 | | 3.50 | 5.1 | 2.70 |
| 17 | 340 | 9.7 | 29 | 245 | 4.8 | | 3.20 | 4.6 | 2.75 |
| 18 | 305 | 9.4 | 28 | 260 | 4.3 | | 2.60 | 4.0 | 2.85 |
| 19 | --- | 9.0 | 29 | 275 | | | ---- | 3.7 | 2.85 |
| 20 | | 8.2 | 30 | 275 | | | | 3.1 | 2.80 |
| 21 | | 8.1 | 31 | 300 | | | | (3.1) | 2.55 |
| 22 | | 8.2 | 28 | 335 | | | | (3.1) | 2.55 |
| 23 | | 8.2 | 26 | 315 | | | | 3.2 | 2.60 |

Time: 135.0°E.
Sweep: 1.0 Mc to 20.0 Mc in 30 seconds.

Table 33

El Cerillo, Mexico (19.3° N, 99.5° W) February 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.5 | 14 | 240 | | | | 2.2 | 3.10 |
| 01 | | 5.0 | 14 | 250 | | | | | 3.00 |
| 02 | | 4.6 | 14 | 250 | | | | | 3.00 |
| 03 | | 4.3 | 14 | 235 | | | | | 3.10 |
| 04 | | 3.4 | 14 | 235 | | | | | 2.90 |
| 05 | | 3.2 | 14 | 300 | | | | 2.0 | 2.65 |
| 06 | | 3.2 | 14 | 305 | | | | 2.2 | 2.70 |
| 07 | | 4.8 | 14 | 275 | | | | 2.4 | 2.90 |
| 08 | | 8.8 | 14 | 230 | | 117 | 2.40 | 3.0 | 3.30 |
| 09 | | 11.4 | 15 | 225 | | 111 | 3.00 | 3.8 | 3.15 |
| 10 | | 12.4 | 16 | 220 | | 109 | 3.40 | | 3.10 |
| 11 | | 13.0 | 15 | 220 | | 105 | 3.70 | | 3.05 |
| 12 | | 12.6 | 15 | 210 | | 107 | 3.80 | 4.0 | 2.90 |
| 13 | | 13.0 | 14 | 210 | | 109 | 3.80 | 4.0 | 2.90 |
| 14 | | 12.9 | 14 | 220 | | 109 | 3.70 | 3.8 | 2.80 |
| 15 | | 12.8 | 17 | 220 | | 105 | 3.60 | 3.9 | 2.80 |
| 16 | | 12.4 | 17 | 225 | | 106 | 3.40 | 3.9 | 2.85 |
| 17 | | 12.0 | 15 | 230 | | 108 | 3.00 | 2.6 | 2.85 |
| 18 | | 11.6 | 16 | 230 | | --- | ---- | 3.4 | 3.00 |
| 19 | | 10.8 | 19 | 215 | | | | 3.0 | 3.10 |
| 20 | | 8.2 | 16 | 210 | | | | 2.7 | 3.00 |
| 21 | | 6.8 | 16 | 230 | | | | 1.9 | 3.00 |
| 22 | | 6.4 | 15 | 245 | | | | 2.4 | 2.95 |
| 23 | | 5.8 | 15 | 240 | | | | 2.7 | 3.00 |

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

Table 34

El Cerillo, Mexico (19.3° N, 99.5° W) January 1960

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.8 | 28 | | | | | 3.4 | 3.00 |
| 01 | | 5.0 | 28 | | | | | 3.4 | 3.00 |
| 02 | | 4.3 | 27 | | | | | 3.9 | 3.20 |
| 03 | | 3.6 | 28 | | | | | 4.0 | 3.10 |
| 04 | | 3.0 | 28 | | | | | 4.0 | 2.70 |
| 05 | | 3.1 | 28 | | | | | 3.6 | 2.60 |
| 06 | | 3.0 | 28 | | | | | 3.7 | 2.60 |
| 07 | | 4.8 | 27 | | | | ---- | 3.1 | 2.90 |
| 08 | | 9.2 | 28 | | | | 2.30 | 3.4 | 3.30 |
| 09 | | 11.4 | 31 | | | | 3.05 | 3.6 | 3.25 |
| 10 | | 12.8 | 28 | | | | 3.40 | 3.9 | 3.20 |
| 11 | | 12.2 | 28 | | | | 3.70 | 4.2 | 3.10 |
| 12 | | 12.0 | 29 | | | | 3.80 | 4.4 | 2.85 |
| 13 | | 12.7 | 26 | | | | 3.80 | 4.4 | 2.80 |
| 14 | | 12.8 | 27 | | | | 3.80 | 4.4 | 2.85 |
| 15 | | 12.2 | 27 | | | | 3.60 | 4.4 | 2.90 |
| 16 | | 11.7 | 26 | | | | 3.40 | 4.2 | 2.85 |
| 17 | | 11.4 | 26 | | | | 2.90 | 5.3 | 2.95 |
| 18 | | 10.5 | 26 | | | | 2.00 | 3.8 | 3.05 |
| 19 | | 9.1 | 26 | | | | | 4.9 | 3.00 |
| 20 | | 7.8 | 29 | | | | | 4.0 | 3.00 |
| 21 | | 7.0 | 28 | | | | | 4.1 | 3.10 |
| 22 | | 6.3 | 30 | | | | | 4.0 | 3.10 |
| 23 | | 5.1 | 30 | | | | | 3.4 | 3.00 |

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

Table 35

Svalbard, Norway (78.2° N, 15.7° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | (4.8) | 9 | 255 | | --- | 2.15 | 3.2 | (2.55) |
| 01 | --- | (5.1) | 6 | 265 | ---- | --- | ---- | 3.2 | ---- |
| 02 | --- | (4.5) | 5 | 260 | ---- | --- | 2.35 | 3.1 | ---- |
| 03 | --- | (4.6) | 6 | 250 | ---- | --- | 2.35 | 3.2 | ---- |
| 04 | G | <4.2 | 8 | 260 | 3.80 | 110 | ---- | 2.9 | G |
| 05 | (540) | 4.8 | 10 | 250 | 3.85 | 110 | 2.75 | 3.0 | (2.30) |
| 06 | (640) | (4.8) | 9 | 260 | 4.20 | 110 | 2.95 | 3.1 | G |
| 07 | (640) | <4.6 | 6 | 245 | 4.00 | 110 | ---- | 3.2 | G |
| 08 | (590) | 5.8 | 12 | 250 | 4.35 | 110 | 3.20 | | 2.45 |
| 09 | (420) | (6.6) | 9 | 250 | 4.40 | 110 | 3.20 | | (2.55) |
| 10 | (480) | 6.3 | 11 | 230 | 4.60 | 100 | 3.20 | 3.2 | (2.55) |
| 11 | --- | 6.2 | 11 | 240 | 4.75 | 110 | 3.20 | | (2.55) |
| 12 | (495) | (6.3) | 9 | 240 | 4.55 | 110 | 3.20 | | (2.55) |
| 13 | (470) | 5.8 | 11 | 250 | 4.35 | 110 | 3.20 | | (2.55) |
| 14 | --- | (5.6) | 9 | 245 | 4.40 | 110 | 3.10 | | (2.55) |
| 15 | --- | (6.0) | 6 | 240 | ---- | 110 | 3.05 | 3.2 | (2.55) |
| 16 | --- | (5.9) | 9 | 240 | ---- | 110 | 2.90 | 5.8 | (2.60) |
| 17 | --- | 6.0 | 11 | 245 | ---- | 110 | 2.85 | 6.8 | (2.60) |
| 18 | --- | (5.6) | 9 | 250 | ---- | --- | ---- | 7.6 | (2.60) |
| 19 | --- | (5.4) | 7 | (260) | ---- | --- | ---- | 6.6 | (2.55) |
| 20 | --- | 5.8 | 11 | 260 | ---- | --- | 2.45 | 5.0 | 2.50 |
| 21 | | (5.5) | 9 | 250 | | --- | ---- | 4.2 | (2.60) |
| 22 | | (5.1) | 9 | 260 | | --- | 2.25 | 4.0 | (2.55) |
| 23 | --- | (5.4) | 5 | 260 | ---- | --- | 2.00 | 3.2 | ---- |

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

Table 36

Juliusruh/Rügen, Germany (54.6° N, 13.4° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | --- | 6.1 | 29 | 315 | | | ---- | | 2.45 |
| 01 | --- | 5.8 | 29 | <310 | --- | | E | 1.2 | 2.45 |
| 02 | --- | 5.4 | 29 | 310 | --- | | E | 1.2 | 2.40 |
| 03 | --- | 5.1 | 29 | 305 | --- | | E | 1.3 | 2.45 |
| 04 | --- | 4.8 | 30 | 310 | --- | | 1.35 | 1.4 | 2.55 |
| 05 | --- | 5.4 | 30 | 290 | --- | | 1.80 | 2.1 | 2.70 |
| 06 | --- | 6.1 | 30 | 265 | --- | | 2.60 | 2.8 | 2.80 |
| 07 | (400) | 6.8 | 30 | 245 | --- | | 3.00 | 3.4 | 2.85 |
| 08 | (400) | 7.0 | 30 | 245 | --- | | 3.35 | 3.9 | 2.75 |
| 09 | 390 | 7.5 | 31 | 230 | 5.2 | | 3.60 | 4.0 | 2.75 |
| 10 | 400 | 7.8 | 30 | 230 | 5.4 | | 3.70 | 4.2 | 2.70 |
| 11 | 410 | 8.2 | 29 | 230 | 5.5 | | 3.80 | 4.3 | 2.70 |
| 12 | 400 | 7.8 | 29 | 225 | 5.4 | | 3.80 | 4.2 | 2.70 |
| 13 | 420 | 7.6 | 30 | 230 | 5.5 | | 3.80 | 4.2 | 2.65 |
| 14 | 410 | 7.7 | 30 | 230 | 5.5 | | 3.80 | 3.9 | 2.65 |
| 15 | (450) | 7.8 | 30 | 230 | 5.2 | | 3.70 | 3.9 | 2.70 |
| 16 | --- | 7.9 | 29 | 235 | --- | | 3.50 | 3.7 | 2.75 |
| 17 | --- | 7.8 | 28 | 250 | --- | | 3.25 | 3.4 | 2.75 |
| 18 | --- | 8.0 | 29 | 270 | --- | | 2.75 | 3.6 | 2.80 |
| 19 | --- | 8.3 | 29 | 290 | --- | | 2.20 | 3.4 | 2.80 |
| 20 | --- | 8.2 | 29 | 280 | | | ---- | (3.0) | 2.75 |
| 21 | --- | 7.9 | 29 | 275 | | | | 2.1 | 2.70 |
| 22 | --- | 7.4 | 30 | <290 | | | | | 2.60 |
| 23 | --- | 6.8 | 29 | 290 | | | | | 2.55 |

Time: 15.0°E.
Sweep: 0.5 Mc to 20.0 Mc in 20 seconds.

Table 37

Winnipeg, Canada (49.9° N, 97.4° W) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.8 | 21 | 300 | | | | 2.0 | --- |
| 01 | | 4.6 | 21 | 310 | | --- | --- | 2.1 | |
| 02 | | 4.4 | 22 | 320 | | | | | --- |
| 03 | | 4.5 | 25 | 320 | | | | 3.0 | |
| 04 | | 4.2 | 28 | 320 | | | | 3.0 | --- |
| 05 | | 4.1 | 29 | 320 | | --- | --- | 2.4 | --- |
| 06 | --- | 4.9 | 28 | 270 | --- | 110 | 2.2 | | (2.8) |
| 07 | --- | 5.3 | 27 | 240 | 4.2 | 100 | 2.8 | | 2.9 |
| 08 | 500 | 5.8 | 27 | 230 | 4.6 | 100 | 3.2 | | 2.7 |
| 09 | 480 | 6.2 | 27 | 220 | 5.0 | 100 | 3.5 | | 2.4 |
| 10 | 510 | 6.4 | 25 | 230 | 5.2 | 100 | 3.8 | | 2.6 |
| 11 | 490 | 6.8 | 23 | 220 | 5.4 | 100 | 4.0 | | 2.6 |
| 12 | 500 | 7.0 | 23 | 220 | 5.5 | 100 | 4.0 | | 2.5 |
| 13 | 500 | 6.9 | 25 | 220 | 5.5 | 100 | 4.0 | | 2.5 |
| 14 | 490 | 7.0 | 25 | 220 | 5.4 | 100 | 4.0 | | 2.6 |
| 15 | 480 | 7.0 | 25 | 220 | 5.3 | 100 | 3.8 | | 2.6 |
| 16 | 450 | 7.0 | 26 | 230 | 5.2 | 100 | 3.6 | | 2.6 |
| 17 | 420 | 7.0 | 28 | 230 | 4.8 | 100 | 3.2 | | (2.6) |
| 18 | (380) | 7.0 | 30 | 250 | 4.3 | 100 | 2.9 | | 2.6 |
| 19 | --- | 7.0 | 30 | 280 | | 115 | 2.4 | | (2.7) |
| 20 | | (7.0) | 30 | 260 | | --- | 1.8 | | --- |
| 21 | | (6.8) | 29 | 270 | | | | | |
| 22 | | 6.0 | 27 | 270 | | | | | |
| 23 | | 5.5 | 23 | 270 | | | | | |

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

Table 38

St. John's, Newfoundland (47.6° N, 52.7° W) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.4 | 24 | 300 | | | | | 2.60 |
| 01 | | 5.0 | 27 | 300 | | | | | 2.60 |
| 02 | | 4.6 | 28 | 300 | | | | | 2.60 |
| 03 | | 4.0 | 27 | 300 | | | | | 2.60 |
| 04 | | 3.8 | 27 | 300 | | 135 | 1.5 | | 2.70 |
| 05 | | 4.8 | 28 | 267 | --- | 112 | 2.2 | | 3.00 |
| 06 | (350) | 5.5 | 29 | 250 | 4.2 | 110 | 2.9 | | 3.00 |
| 07 | 445 | 5.9 | 29 | 232 | 4.6 | 105 | 3.2 | | 2.85 |
| 08 | 468 | 6.0 | 29 | 220 | 5.0 | 102 | 3.6 | | 2.80 |
| 09 | 475 | 6.3 | 29 | 221 | 5.1 | 101 | 3.9 | | 2.75 |
| 10 | 425 | 6.6 | 30 | 220 | 5.4 | 101 | 3.9 | | 2.80 |
| 11 | 475 | 7.0 | 30 | <218 | 5.5 | 101 | 4.0 | | 2.65 |
| 12 | 492 | 7.2 | 31 | 220 | 5.4 | 101 | 4.0 | | 2.65 |
| 13 | 470 | 7.3 | 31 | 220 | 5.4 | 101 | 4.0 | | 2.65 |
| 14 | 458 | 7.6 | 30 | 220 | 5.2 | 101 | 3.9 | | 2.65 |
| 15 | 435 | 7.7 | 30 | 230 | 5.1 | 102 | 3.7 | | 2.65 |
| 16 | (408) | 7.8 | 30 | 235 | 4.9 | 105 | 3.4 | | 2.65 |
| 17 | --- | 7.9 | 31 | 250 | --- | 110 | 2.9 | | 2.70 |
| 18 | --- | 8.1 | 31 | 280 | | 116 | 2.3 | 2.8 | 2.75 |
| 19 | | 8.0 | 29 | 272 | | --- | 1.9 | 2.1 | 2.75 |
| 20 | | 7.5 | 28 | 265 | | | | | 2.70 |
| 21 | | 7.0 | 29 | 280 | | | | | 2.60 |
| 22 | | 6.4 | 26 | 295 | | | | | 2.65 |
| 23 | | 6.0 | 24 | 300 | | | | | 2.60 |

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

Table 39

Ibadan, Nigeria (7.4° N, 3.9° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.0 | 31 | 350 | | | | | ---- |
| 01 | | 7.0 | 31 | 325 | | | | | ---- |
| 02 | | 7.0 | 31 | 300 | | | | | ---- |
| 03 | | (6.6) | 31 | 250 | | | | | (3.15) |
| 04 | | (5.8) | 31 | 250 | | | | | 3.20 |
| 05 | | 5.2 | 30 | 245 | | | | | 3.15 |
| 06 | | 8.0 | 31 | 260 | | | 2.15 | | 3.10 |
| 07 | | 11.2 | 29 | 250 | | | 3.10 | | 3.05 |
| 08 | | 12.7 | 31 | 235 | | | 3.60 | | 2.95 |
| 09 | | 13.4 | 29 | 225 | | | 3.95 | 8.2 | 2.65 |
| 10 | | 13.8 | 29 | 220 | | | 4.15 | 7.7 | 2.45 |
| 11 | | 12.9 | 28 | 210 | | | (4.30) | 9.5 | 2.30 |
| 12 | | 12.4 | 29 | 205 | | | (4.30) | 9.5 | 2.15 |
| 13 | | 11.6 | 25 | 200 | | | (4.20) | 8.2 | 2.15 |
| 14 | | 11.2 | 28 | 205 | | | (4.05) | 7.0 | 2.20 |
| 15 | | 11.3 | 29 | 210 | | | 3.80 | 7.0 | 2.15 |
| 16 | | 11.7 | 29 | 230 | | | 3.35 | 7.0 | 2.20 |
| 17 | | >11.7 | 30 | 250 | | | 2.80 | 6.7 | (2.25) |
| 18 | | >11.3 | 30 | 295 | | | 1.70 | | (2.30) |
| 19 | | (9.5) | 29 | 390 | | | | | 2.10 |
| 20 | | 9.3 | 30 | 380 | | | | | (2.05) |
| 21 | | 9.0 | 30 | 410 | | | | | ---- |
| 22 | | 8.8 | 30 | 375 | | | | | ---- |
| 23 | | 8.2 | 31 | 370 | | | | | ---- |

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

Table 40

Sao Paulo, Brazil (23.5° S, 46.5° W) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 10.6 | 27 | 220 | | | | | 3.10 |
| 01 | | 9.9 | 28 | 215 | | | | | 3.05 |
| 02 | | 8.4 | 28 | 215 | | | | | 3.00 |
| 03 | | 6.8 | 27 | 220 | | | | | 3.00 |
| 04 | | 5.7 | 28 | 250 | | | | | 2.75 |
| 05 | | 4.6 | 28 | <275 | | | | | 2.80 |
| 06 | | 4.5 | 25 | 270 | | | | | 2.75 |
| 07 | | 8.0 | 27 | 245 | | | ---- | | 3.00 |
| 08 | | 10.5 | 25 | 240 | | | 3.20 | | 3.10 |
| 09 | | 11.8 | 24 | 225 | | | (3.50) | | 3.00 |
| 10 | --- | 13.2 | 19 | 220 | | | (3.75) | | 2.90 |
| 11 | (325) | 13.7 | 21 | 215 | | | ---- | | 2.80 |
| 12 | --- | 13.4 | 18 | 225 | | | ---- | | 2.65 |
| 13 | (355) | 13.0 | 21 | <225 | --- | | ---- | | 2.70 |
| 14 | 370 | 13.1 | 22 | 225 | --- | | ---- | | 2.60 |
| 15 | (355) | 13.7 | 19 | 225 | --- | | ---- | | 2.65 |
| 16 | --- | 14.0 | 22 | 240 | | | ---- | | 2.80 |
| 17 | | (14.0) | 25 | 250 | | | ---- | | (2.90) |
| 18 | | 13.6 | 21 | 235 | | | | | (3.00) |
| 19 | | 13.4 | 20 | 240 | | | | | 2.95 |
| 20 | | (12.0) | 22 | 240 | | | | | (2.70) |
| 21 | | >12.0 | 23 | 240 | | | | | 2.90 |
| 22 | | (12.3) | 21 | 230 | | | | | (3.00) |
| 23 | | 12.5 | 25 | 220 | | | | | 3.00 |

Time: 45.0°W.
Sweep: 1.75 Mc to 20.0 Mc in 2 minutes 30 seconds.

Table 41

Capetown, Union of S. Africa (34.1° S, 18.3° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.8 | 26 | --- | | | | <1.6 | 2.65 |
| 01 | | 2.9 | 26 | --- | | | | <1.6 | 2.65 |
| 02 | | 3.0 | 26 | --- | | | | <1.5 | 2.70 |
| 03 | | 3.0 | 26 | --- | | | | <1.5 | 2.75 |
| 04 | | 3.0 | 26 | --- | | | | <1.5 | 2.75 |
| 05 | | 2.9 | 26 | --- | | | | <1.4 | 2.70 |
| 06 | | 2.8 | 25 | --- | | | | <1.4 | 2.80 |
| 07 | | 3.6 | 24 | 260 | | | <1.3 | <1.4 | 2.80 |
| 08 | | 7.4 | 26 | 235 | | | 2.2 | | 3.20 |
| 09 | --- | 9.2 | 27 | 235 | | | 3.0 | | 3.15 |
| 10 | (245) | 10.4 | 27 | 235 | | | 3.3 | | 3.00 |
| 11 | --- | (11.7) | 29 | 235 | | | 3.6 | | (2.90) |
| 12 | (265) | (11.9) | 29 | 230 | --- | | 3.8 | 3.9 | 2.75 |
| 13 | --- | (12.1) | 30 | 230 | --- | | 3.8 | 4.0 | 2.75 |
| 14 | (260) | (12.2) | 30 | 240 | --- | | 3.8 | 4.1 | 2.65 |
| 15 | (290) | (11.8) | 30 | 240 | --- | | 3.6 | 4.0 | 2.70 |
| 16 | --- | 11.6 | 30 | 240 | --- | | 3.3 | 3.7 | 2.75 |
| 17 | --- | 11.4 | 30 | 240 | | | 2.8 | 3.4 | 2.80 |
| 18 | | 11.0 | 30 | 240 | | | 2.0 | 2.4 | 2.90 |
| 19 | | 10.0 | 28 | 225 | | | <1.4 | 1.6 | 3.00 |
| 20 | | 7.2 | 28 | 220 | | | | 1.8 | 3.05 |
| 21 | | 5.5 | 28 | 230 | | | | 2.0 | 3.10 |
| 22 | | 3.6 | 28 | 230 | | | | <1.5 | 3.10 |
| 23 | | 2.9 | 27 | --- | | | | 1.6 | 2.85 |

Time: 30.0°E.
Sweep: 1.0 Mc to 17.0 Mc in 7 seconds.

Table 42

Buenos Aires, Argentina (34.5° S, 58.5° W) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.6 | 29 | 280 | | | | | 2.70 |
| 01 | | 6.4 | 29 | 280 | | | | | 2.70 |
| 02 | | 6.4 | 29 | 270 | | | | | 2.80 |
| 03 | | 5.9 | 27 | 260 | | | | | 2.80 |
| 04 | | 5.0 | 28 | 230 | | | | | 2.80 |
| 05 | | 4.3 | 27 | 260 | | --- | --- | | 2.50 |
| 06 | | 4.4 | 24 | 300 | | --- | --- | | 2.75 |
| 07 | | 7.9 | 27 | 240 | | --- | --- | | 3.10 |
| 08 | | 10.0 | 29 | 240 | | --- | --- | | 3.10 |
| 09 | --- | >11.0 | 27 | 240 | | --- | --- | | 3.10 |
| 10 | 270 | 12.0 | 28 | 240 | | --- | --- | | 3.05 |
| 11 | 270 | >12.0 | 28 | 240 | | --- | --- | | 3.00 |
| 12 | 275 | 12.0 | 27 | 250 | | --- | --- | | 2.90 |
| 13 | 300 | >11.9 | 26 | 250 | --- | --- | --- | | 2.90 |
| 14 | 295 | >12.0 | 30 | 250 | --- | --- | --- | | 2.90 |
| 15 | (315) | >12.0 | 30 | 245 | | --- | --- | | 3.00 |
| 16 | --- | 11.5 | 31 | 240 | | | | | 2.95 |
| 17 | | 11.0 | 30 | 235 | | | | | 3.00 |
| 18 | | 11.0 | 31 | 230 | | | | | 3.05 |
| 19 | | >10.1 | 30 | 235 | | | | | 2.95 |
| 20 | | 10.9 | 31 | 240 | | | | | 2.95 |
| 21 | | 9.5 | 29 | 240 | | | | | 2.95 |
| 22 | | 8.1 | 29 | 240 | | | | | 2.85 |
| 23 | | 6.8 | 28 | 270 | | | | | 2.70 |

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

Table 43

Canberra, Australia (35.3° S, 149.0° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.8 | 27 | 260 | | | | | 2.65 |
| 01 | | >5.5 | 26 | 250 | | | | | (2.75) |
| 02 | | 5.6 | 22 | 260 | | | | | 2.70 |
| 03 | | (5.3) | 27 | 260 | | | | | 2.70 |
| 04 | | >5.0 | 28 | 240 | | | | | 2.75 |
| 05 | | >4.8 | 28 | 240 | | | | | 2.80 |
| 06 | | 4.6 | 27 | 230 | | | | | 2.85 |
| 07 | | >7.0 | 25 | 230 | | | 2.10 | | (3.10) |
| 08 | | >9.5 | 25 | 220 | | | 2.75 | | (3.20) |
| 09 | | >10.0 | 23 | 220 | | | 3.30 | | |
| 10 | | >10.0 | 14 | 210 | | | 3.50 | | |
| 11 | | >11.0 | 9 | (220) | | | 3.70 | 3.8 | ---- |
| 12 | | (11.2) | 7 | (220) | | | 3.70 | | ---- |
| 13 | | >10.0 | 5 | (210) | | | 3.65 | | |
| 14 | | >11.0 | 8 | (210) | | | 3.50 | 3.7 | |
| 15 | | >10.0 | 12 | 220 | | | 3.35 | 3.5 | |
| 16 | | >10.0 | 21 | 220 | | | 3.00 | 3.2 | |
| 17 | | >9.0 | 27 | 220 | | | 2.15 | 2.2 | ---- |
| 18 | | >9.0 | 28 | 220 | | | ---- | | (2.90) |
| 19 | | >8.5 | 27 | 220 | | | | | 2.90 |
| 20 | | (7.6) | 26 | 220 | | | | | 2.90 |
| 21 | | >7.0 | 23 | 230 | | | | | 2.80 |
| 22 | | >7.0 | 27 | 240 | | | | | (2.80) |
| 23 | | >6.0 | 27 | 250 | | | | | (2.80) |

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

Table 44

Wilkes Station (66.9° S, 110.5° E) August 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (4.6) | 12 | 240 | | 135 | (1.30) | | (2.80) |
| 01 | | (5.2) | 11 | 250 | | 125 | >1.85 | | (2.90) |
| 02 | | (6.5) | 15 | 240 | | 120 | >2.00 | | (2.85) |
| 03 | | >7.4 | 12 | 250 | | 125 | >2.10 | | (2.70) |
| 04 | | (7.6) | 12 | <250 | | 125 | >2.60 | | (2.80) |
| 05 | | (8.6) | 10 | 250 | | 125 | >2.20 | | (2.65) |
| 06 | | (9.4) | 9 | 255 | >3.7 | 125 | >2.20 | | (2.65) |
| 07 | | >7.3 | 16 | 250 | | 125 | (2.05) | | (2.70) |
| 08 | | >7.4 | 10 | 250 | | 125 | (1.85) | 1.8 | (2.70) |
| 09 | | >6.7 | 9 | 265 | | 125 | >1.60 | | (2.65) |
| 10 | | (5.2) | 11 | 275 | | --- | E | | (2.60) |
| 11 | | (5.0) | 5 | 275 | | --- | E | 2.4 | (2.45) |
| 12 | | >4.6 | 6 | <275 | | --- | E | 2.9 | (2.60) |
| 13 | | >4.9 | 7 | (250) | | --- | E | 1.6 | (2.70) |
| 14 | | (4.2) | 7 | <260 | | --- | E | 3.9 | (2.85) |
| 15 | | (3.8) | 9 | <240 | | --- | E | 1.8 | (2.85) |
| 16 | | (4.2) | 11 | <245 | | --- | E | 2.2 | (2.80) |
| 17 | | (3.3) | 9 | <250 | | --- | E | | (2.85) |
| 18 | | >3.6 | 9 | <240 | | --- | E | | (2.80) |
| 19 | | >3.5 | 8 | <240 | | --- | E | | (2.75) |
| 20 | | >3.3 | 11 | <250 | | --- | E | 2.1 | (2.95) |
| 21 | | (3.7) | 15 | <250 | | --- | E | 1.5 | (2.80) |
| 22 | | (4.2) | 6 | 250 | | --- | E | 2.2 | ---- |
| 23 | | (4.6) | 9 | <245 | | --- | E | 2.8 | (2.80) |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 13.5 or 27 seconds.

Table 45

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

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >5.0 | 13 | 345 | | | | >1.9 | ---- |
| 01 | | >5.0 | 17 | <365 | | | | >3.0 | (2.55) |
| 02 | | (5.4) | 14 | (360) | | | | 3.8 | ---- |
| 03 | | >5.0 | 17 | (355) | | | | >2.4 | (2.70) |
| 04 | | (4.9) | 12 | <315 | | | | 3.0 | (2.70) |
| 05 | | (4.7) | 9 | (285) | | | | >2.0 | ---- |
| 06 | | (4.5) | 7 | (260) | | --- | ---- | | (2.90) |
| 07 | | (4.7) | 13 | <285 | | | | | (2.85) |
| 08 | | (5.7) | 11 | (265) | | | | | (3.05) |
| 09 | | (5.45) | 14 | <300 | | | | | (2.95) |
| 10 | | (6.0) | 23 | (275) | | | | | (2.95) |
| 11 | | (6.0) | 21 | 260 | | --- | ---- | | (3.00) |
| 12 | | 5.7 | 21 | <280 | | --- | ---- | | (2.90) |
| 13 | | 5.5 | 17 | <270 | | --- | ---- | | (2.85) |
| 14 | | >5.0 | 15 | <310 | | --- | ---- | | (3.00) |
| 15 | | >5.0 | 13 | <325 | | --- | ---- | 2.6 | (2.95) |
| 16 | | 4.7 | 11 | 330 | | --- | ---- | 2.9 | (2.82) |
| 17 | | (5.0) | 10 | 350 | | --- | ---- | 4.0 | ---- |
| 18 | | >5.0 | 13 | <355 | | | | >2.8 | ---- |
| 19 | | >5.0 | 13 | <355 | | | | 4.4 | ---- |
| 20 | | (5.2) | 19 | 330 | | | | 3.8 | |
| 21 | | >5.0 | 19 | <345 | | | | >2.0 | ---- |
| 22 | | >5.25 | 18 | 320 | | | | >2.9 | |
| 23 | | >5.0 | 18 | <330 | | | | | (2.65) |

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

Table 46

Juliusruh/Rügen, Germany (54.6° N, 13.4° E) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.8 | 23 | 300 | | | | | 2.50 |
| 01 | | 6.4 | 25 | 300 | | | E | 1.0 | 2.50 |
| 02 | | 6.2 | 23 | 300 | | | E | 1.3 | 2.55 |
| 03 | | 5.5 | 19 | 300 | --- | | E | 1.4 | 2.50 |
| 04 | --- | 5.6 | 22 | 300 | --- | | 1.55 | 1.8 | 2.60 |
| 05 | --- | 5.9 | 22 | 280 | --- | | 2.15 | 2.4 | 2.70 |
| 06 | (475) | 6.1 | 22 | 260 | 4.2 | | 2.70 | 3.1 | 2.65 |
| 07 | (455) | 6.7 | 19 | 240 | 4.6 | | 3.05 | 3.6 | 2.70 |
| 08 | 450 | 6.6 | 19 | 235 | 4.8 | | 3.30 | 3.7 | 2.65 |
| 09 | 420 | 7.0 | 21 | 230 | 5.2 | | 3.55 | 4.0 | 2.60 |
| 10 | 415 | 7.2 | 21 | 220 | 5.2 | | 3.60 | 4.2 | 2.65 |
| 11 | 475 | 7.1 | 21 | 220 | 5.3 | | 3.70 | 4.4 | 2.60 |
| 12 | 455 | 7.0 | 23 | 220 | 5.4 | | 3.80 | 4.4 | 2.50 |
| 13 | 460 | 7.0 | 25 | 215 | 5.4 | | 3.70 | 4.1 | 2.55 |
| 14 | 460 | 6.8 | 19 | 225 | 5.4 | | 3.55 | 3.7 | 2.50 |
| 15 | 490 | 6.9 | 21 | 220 | 5.3 | | 3.55 | | 2.55 |
| 16 | 430 | 7.0 | 24 | 230 | 5.1 | | 3.40 | | 2.60 |
| 17 | (410) | 7.1 | 25 | 240 | --- | | 3.25 | 3.8 | 2.70 |
| 18 | --- | 7.2 | 24 | 250 | | | 2.75 | 4.3 | 2.75 |
| 19 | | 7.2 | 24 | (290) | | | 2.30 | 3.5 | 2.80 |
| 20 | | 7.1 | 24 | <300 | | | 1.80 | 2.3 | 2.75 |
| 21 | | 7.5 | 25 | 290 | | | | | 2.70 |
| 22 | | 7.4 | 24 | 290 | | | | | 2.65 |
| 23 | | 7.1 | 25 | 300 | | | | | 2.55 |

Time: 15.0°E.
Sweep: 0.5 Mc to 20.0 Mc in 20 seconds.

Table 47

Lindau/Harz, Germany (51.6° N, 10.1° E) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 7.18 | 29 | 294 | | | | | 2.52 |
| 01 | | 6.70 | 31 | 304 | | | | | 2.50 |
| 02 | | 6.39 | 30 | 301 | | | | | 2.50 |
| 03 | | 5.90 | 29 | 298 | | --- | E | | 2.52 |
| 04 | --- | 5.87 | 30 | 304 | ---- | --- | E | 2.2 | 2.59 |
| 05 | --- | 6.18 | 30 | 275 | ---- | 108 | 2.10 | 2.8 | 2.64 |
| 06 | --- | 6.50 | 29 | 250 | 3.79 | 102 | 2.55 | 3.7 | 2.71 |
| 07 | (473) | 7.15 | 30 | 240 | 4.68 | 102 | 3.03 | 4.2 | 2.71 |
| 08 | 443 | 7.10 | 30 | 231 | 5.05 | 102 | 3.34 | 4.5 | 2.58 |
| 09 | 402 | 7.12 | 30 | 228 | 5.20 | 101 | 3.56 | 4.7 | 2.60 |
| 10 | 415 | 7.30 | 28 | 226 | 5.30 | 100 | 3.72 | 5.0 | 2.62 |
| 11 | 456 | 7.20 | 29 | 232 | 5.48 | 100 | 3.72 | 5.1 | 2.55 |
| 12 | 421 | 7.25 | 29 | 231 | 5.60 | 100 | 3.89 | 5.0 | 2.56 |
| 13 | 461 | 7.44 | 29 | 222 | 5.75 | 101 | 3.86 | 5.1 | 2.54 |
| 14 | 457 | 7.26 | 28 | 225 | 5.64 | 101 | 3.88 | 4.6 | 2.54 |
| 15 | 412 | 7.42 | 30 | 223 | 5.54 | 102 | 3.77 | 4.7 | 2.64 |
| 16 | 434 | 7.46 | 29 | 230 | 5.40 | 102 | 3.58 | 3.8 | 2.64 |
| 17 | (400) | 7.38 | 27 | 237 | 5.00 | 104 | 3.33 | 3.9 | 2.70 |
| 18 | --- | 7.44 | 31 | 245 | ---- | 105 | 2.96 | 4.3 | 2.73 |
| 19 | --- | 7.55 | 31 | 258 | ---- | 108 | 2.48 | 4.4 | 2.80 |
| 20 | | 7.44 | 30 | 276 | | --- | 1.75 | 4.0 | 2.78 |
| 21 | | 7.80 | 30 | 274 | | --- | E | 3.5 | 2.69 |
| 22 | | 7.80 | 30 | 274 | | | | 2.6 | 2.62 |
| 23 | | 7.40 | 30 | 284 | | | | 2.3 | 2.55 |

Time: 15.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 4 minutes.

Table 48

Johannesburg, Union of S. Africa (26.1° S, 28.1° E) July 1959

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.9 | 31 | --- | | | | <1.6 | 2.70 |
| 01 | | 2.9 | 31 | (315) | | | | 1.5 | 2.75 |
| 02 | | 3.0 | 31 | --- | | | | <1.6 | 2.80 |
| 03 | | 3.0 | 31 | --- | | | | 1.8 | 2.85 |
| 04 | | 2.8 | 31 | --- | | | | 1.4 | 2.80 |
| 05 | | 2.8 | 31 | --- | | | | <1.4 | 2.80 |
| 06 | | 2.8 | 31 | (250) | | | | <1.4 | 2.80 |
| 07 | | 6.1 | 31 | 235 | | | 2.0 | | 3.15 |
| 08 | | 8.9 | 31 | 220 | | | 2.7 | 3.0 | 3.30 |
| 09 | --- | 10.2 | 31 | 220 | | | 3.3 | 4.0 | 3.20 |
| 10 | (240) | 11.2 | 30 | 220 | | | 3.6 | 4.0 | 3.10 |
| 11 | (240) | 11.6 | 30 | 215 | | | 3.0 | 4.0 | 3.00 |
| 12 | (250) | 11.4 | 30 | 210 | --- | | 3.9 | 4.1 | 2.95 |
| 13 | (250) | 11.3 | 30 | 210 | --- | | 3.8 | 4.2 | 2.90 |
| 14 | --- | 11.0 | 31 | 215 | --- | | 3.7 | 4.2 | 2.80 |
| 15 | (275) | 11.0 | 31 | 225 | --- | | 3.4 | 4.0 | 2.80 |
| 16 | (250) | 10.8 | 31 | 230 | | | 3.0 | 4.0 | 2.90 |
| 17 | --- | 10.8 | 31 | 230 | | | 2.3 | 2.5 | 3.00 |
| 18 | | 9.4 | 31 | 215 | | | --- | 2.2 | 3.05 |
| 19 | | 6.8 | 31 | 210 | | | | 2.0 | 3.05 |
| 20 | | 5.2 | 31 | 225 | | | | 2.1 | 3.15 |
| 21 | | 4.0 | 31 | (230) | | | | 1.8 | 3.10 |
| 22 | | 3.2 | 31 | --- | | | | 1.7 | 3.10 |
| 23 | | 3.0 | 31 | --- | | | | <1.7 | 2.80 |

Time: 30.0°E.
Sweep: 1.0 Mc to 16.0 Mc in 7 seconds.

Table 49

Capetown, Union of S. Africa (34.1° S, 18.3° E) July 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.5 | 31 | --- | | | | 2.8 | 2.60 |
| 01 | | 2.6 | 31 | --- | | | | 3.1 | 2.70 |
| 02 | | 2.8 | 30 | --- | | | | 2.7 | 2.65 |
| 03 | | 2.8 | 31 | --- | | | | 2.4 | 2.70 |
| 04 | | 2.8 | 31 | --- | | | | 2.1 | 2.80 |
| 05 | | 2.8 | 30 | --- | | | | 2.6 | 2.85 |
| 06 | | 2.7 | 29 | --- | | | | 2.8 | 2.70 |
| 07 | | 2.7 | 30 | --- | | | | 2.1 | 2.75 |
| 08 | | 6.1 | 31 | 235 | | | 2.0 | 2.5 | 3.10 |
| 09 | | 8.6 | 31 | 235 | | | 2.7 | 2.8 | 3.20 |
| 10 | (250) | 10.1 | 31 | 235 | --- | | 3.1 | 3.2 | 3.10 |
| 11 | 250 | 11.0 | 31 | 230 | --- | | 3.4 | | 3.05 |
| 12 | 250 | 11.4 | 31 | 230 | --- | | 3.6 | 3.7 | 2.95 |
| 13 | (250) | 11.4 | 31 | 235 | --- | | 3.6 | 3.9 | 2.85 |
| 14 | (250) | 11.4 | 31 | 230 | --- | | 3.6 | 4.0 | (2.80) |
| 15 | (260) | 11.7 | 31 | 235 | | | 3.3 | 3.8 | (2.80) |
| 16 | --- | 11.6 | 31 | 240 | | | 3.0 | 3.6 | 2.90 |
| 17 | | 10.9 | 31 | 240 | | | 2.5 | 3.1 | 2.95 |
| 18 | | 9.7 | 31 | 220 | | | <1.8 | 2.6 | 3.05 |
| 19 | | 7.5 | 31 | 210 | | | | 2.2 | 3.05 |
| 20 | | 5.3 | 31 | 225 | | | | 2.2 | 3.15 |
| 21 | | 3.7 | 31 | --- | | | | 2.0 | 3.20 |
| 22 | | 2.7 | 31 | --- | | | | 2.1 | 3.10 |
| 23 | | 2.4 | 31 | --- | | | | 2.6 | 2.85 |

Time: 30.0°E.
Sweep: 1.0 Mc to 17.0 Mc in 7 seconds.

Table 50

Port Lockroy (64.8° S, 63.5° W) July 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.4 | 26 | 365 | | | | | 2.40 |
| 01 | | 2.4 | 25 | 380 | | | | | 2.40 |
| 02 | | 2.4 | 27 | 370 | | | | | 2.50 |
| 03 | | 2.3 | 25 | 375 | | | ---- | | 2.45 |
| 04 | | 2.4 | 24 | 360 | | | ---- | | 2.45 |
| 05 | | 2.4 | 23 | 335 | | | | | 2.50 |
| 06 | | 2.1 | 23 | 290 | | | | | 2.70 |
| 07 | | 2.1 | 21 | <295 | | | | | 2.75 |
| 08 | | >3.0 | 19 | 265 | | | ---- | 1.4 | <2.65 |
| 09 | | >5.1 | 25 | <235 | | | <1.45 | 2.0 | <3.20 |
| 10 | | 7.7 | 22 | 215 | | | (1.65) | 2.4 | 3.30 |
| 11 | | 8.4 | 28 | 215 | | | <2.15 | 2.3 | 3.35 |
| 12 | | 8.7 | 27 | 215 | | | (2.15) | | 3.45 |
| 13 | | 8.5 | 21 | 220 | | | 2.10 | | 3.45 |
| 14 | | 7.8 | 28 | 215 | | | 2.00 | | 3.45 |
| 15 | | 7.4 | 26 | 225 | | | 1.70 | 1.4 | 3.35 |
| 16 | | 6.2 | 28 | 220 | | | 1.35 | | 3.35 |
| 17 | | 5.1 | 24 | 220 | | | ---- | | 3.35 |
| 18 | | 3.5 | 23 | 240 | | | ---- | 1.0 | 3.10 |
| 19 | | 2.7 | 19 | 260 | | | ---- | | 3.05 |
| 20 | | 2.2 | 26 | 310 | | | ---- | | 2.60 |
| 21 | | 2.2 | 28 | 350 | | | ---- | | 2.50 |
| 22 | | 2.2 | 27 | 360 | | | | | 2.45 |
| 23 | | 2.3 | 25 | 370 | | | | | 2.40 |

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

Table 51

Svalbard, Norway (78.2° N, 15.7° E) February 1959

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.4 | 10 | 270 | | --- | E | 1.4 | 2.50 |
| 01 | | 4.4 | 10 | 275 | | --- | E | | (2.35) |
| 02 | | 4.3 | 13 | 295 | | --- | (1.40) | 2.6 | (2.40) |
| 03 | | (4.0) | 8 | 325 | | --- | 1.90 | 3.0 | (2.30) |
| 04 | | 4.2 | 10 | 315 | | --- | 1.50 | 2.5 | (2.40) |
| 05 | | 3.5 | 11 | 310 | | --- | 1.40 | 1.9 | (2.40) |
| 06 | | 3.9 | 14 | 315 | | --- | 1.40 | 3.0 | 2.40 |
| 07 | | 3.6 | 12 | 270 | | --- | 1.35 | 2.5 | (2.40) |
| 08 | | 4.2 | 11 | 300 | | 140 | 1.45 | 1.7 | (2.55) |
| 09 | | (6.1) | 9 | 300 | | --- | 1.60 | 2.6 | ---- |
| 10 | | (8.8) | 8 | 270 | | --- | 2.10 | 2.3 | (2.70) |
| 11 | | (10.5) | 7 | 290 | | --- | 1.95 | 2.8 | (2.80) |
| 12 | | (10.0) | 5 | 285 | | --- | 1.95 | 2.2 | ---- |
| 13 | | (5.5) | 5 | 260 | | --- | 1.95 | 2.5 | (2.85) |
| 14 | | (6.8) | 9 | 270 | | 135 | 1.90 | | (2.70) |
| 15 | | (6.4) | 8 | 265 | | --- | 1.85 | | (2.60) |
| 16 | | (6.0) | 5 | 250 | | --- | 1.50 | 3.2 | ---- |
| 17 | | (5.2) | 7 | 265 | | --- | 1.35 | 2.8 | (2.55) |
| 18 | | (4.7) | 5 | 260 | | --- | ---- | 3.2 | ---- |
| 19 | | (5.8) | 7 | 270 | | --- | E | 3.1 | (2.55) |
| 20 | | (6.4) | 3 | 260 | | --- | E | 1.8 | |
| 21 | | (6.2) | 8 | 250 | | --- | E | 1.4 | (2.55) |
| 22 | | (4.9) | 7 | 250 | | --- | E | 1.4 | (2.55) |
| 23 | | (3.6) | 8 | 275 | | --- | E | 1.4 | (2.50) |

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

Table 52

Hollandia, Netherlands New Guinea (2.5° S, 140.8° E) August 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | (350) | (14.0) | 8 | <250 | --- | 100 | 4.0 | | (3.20) |
| 01 | (395) | (14.0) | 7 | <250 | (7.0) | 100 | --- | <6.0 | (2.85) |
| 02 | 400 | (13.5) | 3 | <260 | (7.6) | --- | --- | <6.2 | ---- |
| 03 | 440 | (14.0) | 5 | --- | (7.4) | --- | --- | <6.5 | (2.80) |
| 04 | 445 | (13.4) | 1 | <260 | 7.1 | --- | --- | <6.5 | ---- |
| 05 | 430 | (13.0) | 6 | --- | 6.8 | 100 | --- | (4.7) | (2.50) |
| 06 | 435 | (13.2) | 6 | (220) | (6.7) | 100 | 3.8 | | (2.50) |
| 07 | --- | (13.0) | 7 | 230 | --- | 105 | 3.5 | 3.8 | (2.65) |
| 08 | | (12.4) | 7 | 250 | | 120 | 2.6 | 3.5 | (2.50) |
| 09 | | (13.0) | 9 | 295 | | --- | --- | 3.6 | (2.55) |
| 10 | | (13.5) | 3 | 330 | | | | 3.1 | ---- |
| 11 | | (13.2) | 4 | 260 | | | | 3.8 | ---- |
| 12 | | (14.8) | 2 | 220 | | | | 3.4 | ---- |
| 13 | | (13.5) | 9 | 200 | | | | | (2.95) |
| 14 | | (12.8) | 13 | 200 | | | | | (3.00) |
| 15 | | 10.8 | 23 | 200 | | | | | 3.10 |
| 16 | | 9.6 | 24 | 200 | | | | | 3.00 |
| 17 | | 8.4 | 28 | 200 | | | | | 3.00 |
| 18 | | 7.8 | 29 | 210 | | | | 3.2 | 3.05 |
| 19 | | 7.5 | 30 | 210 | | | | | 3.15 |
| 20 | | 6.9 | 29 | 210 | | | | 2.3 | 3.30 |
| 21 | | 9.8 | 29 | 240 | | 140 | 2.4 | 3.0 | 3.20 |
| 22 | | 12.8 | 21 | 225 | | 100 | 3.2 | 3.6 | 3.15 |
| 23 | --- | 14.3 | 13 | 225 | --- | 100 | 3.7 | | 3.20 |

Time: 0.0°.
Sweep: 1.4 Mc to 20.0 Mc in 40 seconds.

Table 53

Dourbes, Belgium (50.1° N, 4.6° E) July 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 6.9 | 28 | 305 | | | | <1.6 | 2.55 |
| 01 | | 6.4 | 28 | 310 | | | | <1.3 | 2.55 |
| 02 | | 6.2 | 28 | 300 | | | | <1.2 | 2.55 |
| 03 | | 5.8 | 28 | 310 | | | | <1.4 | 2.60 |
| 04 | --- | 5.8 | 28 | 290 | --- | <114 | 1.75 | 1.9 | 2.65 |
| 05 | (440) | 6.4 | 28 | 255 | 4.3 | 111 | (2.50) | 2.8 | 2.70 |
| 06 | 370 | 6.7 | 28 | <240 | 4.5 | 103 | 2.80 | 3.3 | 2.80 |
| 07 | 370 | 7.1 | 27 | 225 | 5.0 | 101 | 3.30 | 3.7 | 2.75 |
| 08 | 370 | 7.3 | 27 | 220 | 5.3 | 101 | 3.55 | 4.0 | 2.80 |
| 09 | 420 | 7.4 | 28 | (210) | 5.5 | 101 | 3.70 | 4.1 | 2.70 |
| 10 | 415 | 7.4 | 28 | <210 | 5.5 | 101 | (3.80) | 4.1 | 2.65 |
| 11 | 430 | 7.5 | 27 | 200 | 5.9 | 101 | (4.00) | 4.1 | 2.60 |
| 12 | 415 | 7.6 | 27 | 210 | 5.7 | 101 | (3.95) | 4.2 | 2.60 |
| 13 | 435 | 7.5 | 28 | 210 | 5.8 | 101 | (3.90) | 4.2 | 2.60 |
| 14 | 440 | 7.4 | 29 | 220 | 5.7 | 101 | 3.75 | 4.0 | 2.60 |
| 15 | 430 | 7.4 | 28 | 220 | 5.5 | 101 | 3.70 | 3.7 | 2.60 |
| 16 | 395 | 7.5 | 28 | 230 | 5.3 | 103 | 3.50 | 3.8 | 2.75 |
| 17 | 395 | 7.3 | 27 | (230) | 5.0 | 103 | 3.15 | 3.5 | 2.75 |
| 18 | --- | 7.7 | 25 | <250 | --- | 105 | 2.60 | 3.1 | 2.85 |
| 19 | | (7.6) | 27 | 270 | --- | <119 | <2.15 | 2.8 | (2.85) |
| 20 | | (7.6) | 27 | 270 | | --- | <1.60 | 2.4 | (2.75) |
| 21 | | (7.7) | 28 | 270 | | | | <1.6 | (2.65) |
| 22 | | (7.4) | 28 | 280 | | | | <1.6 | (2.55) |
| 23 | | 7.4 | 28 | 300 | | | | <1.6 | 2.55 |

Time: 0.0°.
Sweep: 1.0 Mc to 25.0 Mc in 30 seconds.

Table 54

Poitiers, France (46.6° N, 0.3° E) July 1958

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (7.9) | 31 | <310 | | | | 2.3 | (2.40) |
| 01 | | (7.4) | 31 | <315 | | | | 2.3 | (2.40) |
| 02 | | 6.9 | 31 | <315 | | | | 2.1 | 2.40 |
| 03 | | (6.6) | 31 | <310 | | --- | ---- | 2.2 | (2.45) |
| 04 | --- | 6.3 | 31 | 320 | --- | --- | E | 2.5 | 2.50 |
| 05 | (400) | 6.8 | 31 | 270 | (4.0) | 125 | 1.95 | 3.0 | 2.55 |
| 06 | 360 | 7.3 | 30 | <250 | (4.5) | 110 | 2.70 | 3.6 | 2.65 |
| 07 | 340 | 7.6 | 30 | (240) | (5.0) | 105 | 3.20 | 4.0 | 2.70 |
| 08 | 365 | 8.0 | 30 | (230) | (5.4) | 100 | 3.60 | 4.4 | 2.70 |
| 09 | 410 | 8.0 | 31 | (230) | 5.8 | 100 | 3.80 | 4.4 | 2.55 |
| 10 | 410 | 8.4 | 30 | 220 | (5.8) | 100 | 3.95 | 4.6 | 2.55 |
| 11 | 425 | 8.3 | 29 | 235 | (5.9) | 105 | 4.00 | 4.7 | 2.50 |
| 12 | 410 | 8.4 | 29 | 235 | 6.0 | 105 | 4.00 | 4.4 | 2.55 |
| 13 | 440 | 8.2 | 30 | 230 | 5.9 | 105 | 4.05 | 4.5 | 2.50 |
| 14 | 430 | 8.2 | 31 | <240 | 5.9 | 105 | 4.00 | 4.4 | 2.55 |
| 15 | 420 | 8.2 | 31 | <250 | 5.7 | 105 | 3.85 | 4.5 | 2.60 |
| 16 | 380 | 8.3 | 31 | <240 | (5.4) | 105 | 3.65 | 4.0 | 2.60 |
| 17 | 360 | (8.2) | 31 | 250 | (5.2) | 110 | 3.30 | 3.7 | 2.60 |
| 18 | 320 | (8.6) | 31 | 250 | (4.5) | 110 | 2.80 | 3.4 | (2.65) |
| 19 | --- | (8.6) | 30 | 275 | --- | 125 | 2.00 | 3.0 | (2.65) |
| 20 | | >8.1 | 30 | 270 | | --- | E | 2.5 | (2.60) |
| 21 | | 8.0 | 30 | <280 | | --- | ---- | 3.2 | ---- |
| 22 | | >8.0 | 30 | <285 | | | | 2.5 | ---- |
| 23 | | >8.0 | 30 | (305) | | | | 2.1 | (2.30) |

Time: 0.0°.
Sweep: 1.6 Mc to 17.0 Mc in 1 minute.

Table 55

Rabat, Morocco (30.9° N, 6.8° W) July 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >9.1 | 30 | <320 | | | | 3.1 | (2.45) |
| 01 | | (9.2) | 30 | <315 | | | | 2.7 | (2.50) |
| 02 | | >9.0 | 31 | <300 | | | | 2.4 | 2.60 |
| 03 | | (8.5) | 31 | <300 | | | | 3.1 | 2.50 |
| 04 | | 7.9 | 31 | <310 | | | | 2.8 | 2.50 |
| 05 | | 7.6 | 30 | 300 | | | | 2.2 | 2.60 |
| 06 | --- | 7.6 | 30 | 255 | --- | 120 | 2.10 | 3.2 | 2.70 |
| 07 | (350) | 8.2 | 30 | 245 | --- | 110 | 2.85 | 3.3 | 2.95 |
| 08 | 275 | 8.3 | 29 | (235) | 5.1 | 100 | 3.35 | 4.4 | 2.80 |
| 09 | 350 | 8.4 | 24 | <230 | 5.7 | 100 | 3.65 | 4.1 | 2.80 |
| 10 | 430 | 8.6 | 27 | 210 | 5.7 | 105 | 3.90 | 4.1 | 2.60 |
| 11 | 400 | 9.2 | 28 | (210) | 6.0 | 105 | 4.00 | 4.0 | 2.55 |
| 12 | 390 | 9.9 | 27 | 230 | 6.1 | 105 | ---- | | 2.60 |
| 13 | 390 | 10.0 | 31 | <230 | 6.1 | 105 | ---- | | 2.60 |
| 14 | 385 | 10.1 | 30 | 230 | 6.0 | 105 | ---- | | 2.60 |
| 15 | 375 | 10.2 | 30 | 230 | 5.8 | 105 | 3.85 | | 2.60 |
| 16 | 365 | 10.2 | 31 | <240 | 5.8 | 100 | 3.70 | 4.2 | 2.70 |
| 17 | 345 | 10.1 | 31 | <245 | 5.2 | 100 | 3.40 | 3.8 | 2.70 |
| 18 | 310 | 9.6 | 30 | 250 | --- | 105 | 2.90 | 3.6 | 2.80 |
| 19 | (280) | (9.4) | 30 | (270) | | 120 | 2.10 | 2.8 | 2.80 |
| 20 | | 9.0 | 29 | <280 | | --- | ---- | 3.2 | 2.70 |
| 21 | | 9.0 | 31 | <300 | | | | 2.8 | 2.50 |
| 22 | | >9.0 | 31 | <315 | | | | 2.8 | 2.45 |
| 23 | | (9.1) | 30 | <325 | | | | 3.1 | 2.45 |

Time: 0.0°.
Sweep: 1.6 Mc to 17.0 Mc in 1 minute.

Table 56

Tamanrasset, French W. Africa (22.8° N, 5.5° E) July 1958*

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | >12.8 | 8 | 300 | | --- | ---- | 2.5 | ---- |
| 01 | | >11.4 | 10 | 290 | | --- | ---- | 2.4 | ---- |
| 02 | | >10.4 | 8 | 270 | | --- | E | 2.2 | ---- |
| 03 | | >8.8 | 10 | 260 | | --- | ---- | 2.2 | ---- |
| 04 | | (8.6) | 8 | 250 | | --- | E | 2.4 | (2.45) |
| 05 | | >7.5 | 9 | 255 | | --- | E | (2.8) | (2.65) |
| 06 | | (8.8) | 8 | (240) | | 110 | 2.75 | 3.4 | (3.00) |
| 07 | | 8.8 | 10 | 230 | | 100 | 3.40 | 5.3 | (2.80) |
| 08 | | 9.5 | 11 | 225 | --- | 100 | 3.80 | 5.6 | 2.45 |
| 09 | | 10.2 | 12 | 210 | --- | 100 | 4.00 | 5.0 | 2.30 |
| 10 | --- | 11.7 | 12 | (210) | --- | 100 | 4.30 | 4.7 | 2.30 |
| 11 | --- | 13.0 | 12 | (210) | --- | 100 | 4.40 | 5.6 | 2.30 |
| 12 | (420) | 13.6 | 12 | 205 | --- | 100 | 4.30 | 5.3 | 2.30 |
| 13 | (420) | 13.8 | 12 | (210) | --- | 100 | 4.25 | 5.3 | 2.30 |
| 14 | (405) | 15.0 | 12 | (220) | --- | 100 | 4.10 | 5.1 | (2.40) |
| 15 | (370) | >15.0 | 12 | (220) | --- | 100 | 3.85 | 4.9 | (2.40) |
| 16 | --- | >14.9 | 12 | 240 | | 100 | 3.50 | 5.1 | (2.40) |
| 17 | --- | >13.6 | 12 | 245 | | 100 | 2.90 | 3.8 | (2.35) |
| 18 | | >13.2 | 12 | 270 | | --- | ---- | 3.2 | ---- |
| 19 | | >12.9 | 12 | 310 | | --- | E | 2.1 | ---- |
| 20 | | (12.7) | 9 | (370) | | --- | E | 2.8 | |
| 21 | | >12.8 | 10 | (370) | | --- | ---- | 2.1 | |
| 22 | | >12.8 | 9 | (350) | | --- | ---- | 2.4 | ---- |
| 23 | | >13.0 | 9 | 330 | | --- | ---- | 2.7 | ---- |

Time: 0.0°.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.
* Observations taken 1 through 13 only.

Table 57

Oakar, French W. Africa (14.7° N, 17.4° W) July 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 5.4 | 10 | <370 | | | | 2.3 | (2.40) |
| 01 | | (5.8) | 9 | 350 | | | | 2.3 | (2.50) |
| 02 | | (5.4) | 8 | 320 | | | | | (2.50) |
| 03 | | 5.0 | 10 | 320 | | | | 2.4 | (2.65) |
| 04 | | 5.5 | 10 | 310 | | | | | 2.55 |
| 05 | | 5.3 | 14 | <295 | | | | 2.0 | 2.65 |
| 06 | | 5.1 | 17 | 250 | | --- | ---- | 2.4 | 2.80 |
| 07 | | 6.6 | 26 | 235 | | 135 | 1.90 | 3.2 | 3.10 |
| 08 | | 8.5 | 22 | 215 | | 105 | 2.75 | >4.5 | 3.25 |
| 09 | | 9.3 | 23 | 205 | | 100 | 3.30 | 4.7 | 3.00 |
| 10 | | 10.5 | 25 | 200 | | 95 | (3.70) | 4.9 | 2.75 |
| 11 | --- | 11.1 | 23 | 190 | --- | 95 | 3.90 | 5.0 | 2.60 |
| 12 | --- | 11.9 | 19 | <190 | --- | 95 | (4.15) | 4.8 | 2.60 |
| 13 | (450) | 12.2 | 18 | 185 | --- | 95 | 4.25 | | 2.55 |
| 14 | (420) | >12.9 | 8 | 190 | (6.1) | 95 | 4.10 | 4.6 | (2.45) |
| 15 | (385) | >13.3 | 6 | 195 | --- | 95 | 4.00 | 4.2 | ---- |
| 16 | (430) | (12.2) | 6 | 200 | --- | 100 | 3.80 | | (2.35) |
| 17 | --- | (12.5) | 8 | 205 | --- | 100 | 3.50 | 3.8 | ---- |
| 18 | --- | 12.3 | 10 | 220 | --- | 100 | 3.00 | 3.6 | (2.50) |
| 19 | --- | 12.2 | 13 | 240 | | 110 | 2.30 | 4.5 | (2.45) |
| 20 | | 11.2 | 18 | 300 | | --- | 1.30 | 2.4 | 2.30 |
| 21 | | >8.9 | 10 | 390 | | --- | ---- | 2.2 | (2.30) |
| 22 | | 7.6 | 12 | 410 | | --- | ---- | 2.0 | 2.30 |
| 23 | | 6.2 | 10 | 390 | | | | 2.2 | (2.35) |

Time: 0.0°.
Sweep: 1.25 Mc to 20.0 Mc in 10 minutes.

Table 58

Bangui, French Equatorial Africa (4.6° N, 18.6° E) July 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (8.6) | 1 | 280 | | | | 2.5 | ---- |
| 01 | | (8.4) | 2 | 280 | | | | 2.5 | ---- |
| 02 | | (7.7) | 5 | (250) | | | | 3.2 | (2.90) |
| 03 | | (6.5) | 9 | 240 | | | | 3.1 | (2.95) |
| 04 | | 6.2 | 18 | 230 | | --- | ---- | 2.9 | 2.95 |
| 05 | | 5.8 | 22 | 240 | | --- | ---- | 3.0 | 2.90 |
| 06 | --- | 8.4 | 24 | 275 | | --- | (1.75) | 4.3 | 2.80 |
| 07 | --- | 12.1 | 29 | 250 | | 110 | 3.00 | 5.5 | 2.85 |
| 08 | --- | 13.5 | 28 | 240 | | 105 | 3.50 | 5.3 | 2.80 |
| 09 | --- | 14.2 | 28 | 225 | | 105 | 3.95 | 4.7 | 2.65 |
| 10 | --- | 14.2 | 26 | 220 | --- | 105 | 4.10 | 4.8 | 2.50 |
| 11 | --- | (13.8) | 28 | 215 | --- | 105 | 4.20 | 4.8 | 2.25 |
| 12 | --- | >12.5 | 24 | 210 | --- | 105 | 4.25 | 4.5 | ---- |
| 13 | --- | >11.3 | 17 | 210 | --- | 105 | 4.20 | 4.6 | ---- |
| 14 | --- | >11.1 | 18 | 210 | --- | 105 | 4.00 | | ---- |
| 15 | --- | >11.0 | 20 | 220 | --- | 105 | 3.80 | 3.9 | ---- |
| 16 | --- | >11.2 | 24 | 240 | --- | 110 | 3.40 | 3.7 | ---- |
| 17 | | >11.2 | 27 | 255 | | <115 | 2.80 | 3.2 | ---- |
| 18 | | (11.5) | 25 | 295 | | --- | (1.40) | 3.1 | ---- |
| 19 | | >11.0 | 23 | 360 | | --- | ---- | 2.2 | ---- |
| 20 | | >10.6 | 6 | (360) | | --- | ---- | | |
| 21 | | (11.5) | 3 | --- | | --- | ---- | | ---- |
| 22 | | ---- | 0 | --- | | --- | ---- | 2.3 | |
| 23 | | >9.0 | 1 | (305) | | --- | ---- | 2.4 | |

Time: 15.0°E.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.

Table 59

Hollandia, Netherlands New Guinea (2.5° S, 140.8° E) July 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | fEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | 275 | 13.9 | 21 | 220 | 7.2 | 100 | 3.8 | 3.9 | 3.10 |
| 01 | 310 | (13.4) | 16 | 230 | 7.8 | 100 | 3.9 | 4.2 | (3.00) |
| 02 | 360 | 13.7 | 17 | (250) | 7.4 | 100 | 3.6 | 4.0 | 2.75 |
| 03 | 400 | (13.4) | 20 | (250) | 7.4 | 100 | 3.7 | 4.4 | (2.65) |
| 04 | 445 | 13.2 | 14 | (250) | 6.8 | 100 | 3.8 | 4.4 | 2.70 |
| 05 | 420 | (13.4) | 15 | (220) | 6.8 | 100 | 3.8 | 4.1 | 2.55 |
| 06 | 400 | 13.7 | 14 | 220 | 6.8 | 100 | 3.7 | 4.2 | 2.50 |
| 07 | 405 | (13.3) | 14 | 220 | 7.0 | 100 | 3.3 | 4.0 | (2.60) |
| 08 | (400) | 13.7 | 14 | 240 | | 110 | 2.5 | 3.8 | 2.60 |
| 09 | | (14.0) | 10 | 260 | | --- | --- | 3.9 | (2.70) |
| 10 | | (14.3) | 7 | 295 | | | | 3.7 | (2.70) |
| 11 | | (13.8) | 5 | 250 | | | | 3.5 | (2.80) |
| 12 | | (14.0) | 10 | 210 | | | | 3.4 | (2.95) |
| 13 | | (13.6) | 16 | 210 | | | | 3.5 | (2.95) |
| 14 | | (12.2) | 15 | 200 | | | | 3.7 | 3.00 |
| 15 | | 11.0 | 21 | 200 | | | | 3.5 | 3.10 |
| 16 | | 9.9 | 24 | 200 | | | | 3.6 | 3.10 |
| 17 | | 7.9 | 27 | 200 | | | | 3.7 | 3.10 |
| 18 | | 7.2 | 26 | 200 | | | | 3.7 | 3.15 |
| 19 | | 6.5 | 27 | 210 | | | | 3.3 | 3.15 |
| 20 | | 5.9 | 28 | 210 | | | | 3.2 | 3.30 |
| 21 | | 8.7 | 31 | 240 | | 130 | 2.2 | 3.5 | 3.30 |
| 22 | (250) | 12.1 | 21 | 220 | | 100 | 3.0 | 3.8 | 3.30 |
| 23 | 250 | 14.0 | 20 | 215 | | 100 | 3.5 | 4.0 | 3.25 |

Time: 0.0°.
Sweep: 1.4 Mc to 20.0 Mc in 40 seconds.

Table 60

Tahiti, Society Is. (17.7° S, 149.3° W) July 1958

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 12.0 | 13 | 230 | | --- | ---- | 2.6 | 3.05 |
| 01 | | 10.4 | 10 | 225 | | --- | ---- | 2.2 | 2.95 |
| 02 | | (9.9) | 6 | 240 | | --- | E | 2.3 | (2.90) |
| 03 | | 7.1 | 11 | 220 | | --- | ---- | 2.6 | 3.10 |
| 04 | | (6.5) | 8 | 235 | | --- | ---- | 2.6 | (3.00) |
| 05 | | (5.0) | 9 | 255 | | --- | ---- | 2.8 | (2.95) |
| 06 | | 6.0 | 12 | 275 | | --- | (0.90) | 3.1 | 2.90 |
| 07 | | 10.4 | 18 | 250 | | 125 | 2.20 | 3.1 | 3.10 |
| 08 | --- | 12.5 | 15 | 245 | | 110 | 3.10 | 3.1 | 3.15 |
| 09 | (260) | 14.5 | 22 | 235 | | 105 | 3.50 | | 3.15 |
| 10 | (260) | 13.7 | 22 | 230 | --- | 105 | 3.75 | | 3.10 |
| 11 | --- | 12.6 | 23 | 220 | --- | 105 | 3.85 | | 2.95 |
| 12 | (295) | 11.9 | 25 | 220 | --- | 100 | 3.90 | | 2.80 |
| 13 | 350 | 12.3 | 22 | 225 | 6.0 | 105 | 3.80 | 3.9 | 2.80 |
| 14 | 375 | 12.4 | 18 | 230 | --- | 105 | 3.75 | 3.8 | 2.65 |
| 15 | (355) | 13.1 | 17 | 240 | --- | 110 | 3.50 | | 2.65 |
| 16 | --- | 13.6 | 19 | 250 | --- | 115 | 3.10 | 4.0 | 2.70 |
| 17 | | 14.0 | 21 | 255 | | 125 | 2.35 | 3.1 | 2.70 |
| 18 | | 14.5 | 20 | 260 | | --- | ---- | 3.1 | 2.80 |
| 19 | | 15.0 | 18 | 255 | | --- | ---- | 3.1 | 2.80 |
| 20 | | 16.1 | 17 | 250 | | --- | ---- | 3.1 | (2.80) |
| 21 | | 15.9 | 18 | 230 | | --- | ---- | 3.1 | 2.95 |
| 22 | | 14.5 | 17 | 220 | | --- | ---- | 2.8 | 3.00 |
| 23 | | (12.5) | 9 | 215 | | --- | E | 2.6 | (3.00) |

Time: 150.0°W.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.

Table 61

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

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.6 | 30 | 375 | | | | | 2.40 |
| 01 | | 2.6 | 29 | 370 | | | | | 2.40 |
| 02 | | 2.7 | 29 | 360 | | | | | 2.45 |
| 03 | | 2.6 | 30 | 360 | | | | | 2.40 |
| 04 | | 2.6 | 29 | 350 | | | | | 2.40 |
| 05 | | 2.4 | 28 | 330 | | | | | 2.50 |
| 06 | | 2.4 | 27 | 310 | | | | 1.1 | 2.60 |
| 07 | | 2.4 | 28 | 290 | | | --- | 1.4 | 2.70 |
| 08 | | 3.0 | 20 | 260 | | | --- | 1.6 | 2.95 |
| 09 | | 5.8 | 25 | 220 | | | --- | 2.0 | 3.10 |
| 10 | | 7.6 | 30 | 215 | | | (2.0) | 2.8 | 3.35 |
| 11 | | 8.9 | 28 | <215 | | | (2.1) | 2.6 | 3.35 |
| 12 | | 9.2 | 24 | 220 | | | --- | 2.5 | 3.35 |
| 13 | | 9.0 | 27 | 215 | | | 2.1 | 2.1 | 3.35 |
| 14 | | 8.0 | 29 | 215 | | | 2.0 | 2.0 | 3.35 |
| 15 | | 7.3 | 29 | 220 | | | (1.8) | 2.0 | 3.35 |
| 16 | | 6.7 | 29 | 210 | | | 1.4 | 1.6 | 3.25 |
| 17 | | 5.6 | 30 | 215 | | | --- | 1.4 | 3.20 |
| 18 | | 4.0 | 29 | 220 | | | | >1.0 | 3.20 |
| 19 | | 2.9 | 27 | 260 | | | | 1.5 | 2.80 |
| 20 | | 2.5 | 27 | 300 | | | | 1.2 | 2.65 |
| 21 | | 2.4 | 28 | <340 | | | | | 2.55 |
| 22 | | 2.5 | 29 | 350 | | | | | 2.40 |
| 23 | | 2.6 | 28 | 370 | | | | | 2.40 |

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

Table 62

Kerguelen I. (49.4° S, 70.3° E) May 1957

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 2.3 | 17 | 270 | | --- | ---- | 1.1 | 2.95 |
| 01 | | 2.3 | 22 | 290 | | | | 1.2 | 3.00 |
| 02 | | 2.2 | 20 | 275 | | | | 1.5 | 2.90 |
| 03 | | 2.2 | 20 | 300 | | | | 1.5 | 2.75 |
| 04 | | 2.2 | 21 | 305 | | --- | ---- | 1.5 | 2.70 |
| 05 | | 2.2 | 13 | 330 | | --- | ---- | 2.0 | 2.60 |
| 06 | | 2.5 | 17 | 320 | | --- | ---- | 1.5 | 2.65 |
| 07 | | >3.6 | 12 | 300 | | --- | ---- | | 2.80 |
| 08 | | 6.8 | 29 | 245 | | 110 | 2.15 | | 3.25 |
| 09 | | 9.5 | 29 | 240 | | 105 | 2.70 | | 3.25 |
| 10 | --- | 10.8 | 30 | 230 | | 105 | 3.00 | | 3.20 |
| 11 | --- | 11.4 | 15 | 240 | | 105 | 3.15 | | (3.10) |
| 12 | --- | >11.5 | 3 | 240 | | 105 | 3.25 | | ---- |
| 13 | --- | (11.8) | 2 | 230 | | 105 | 3.20 | | ---- |
| 14 | --- | (11.7) | 2 | 230 | | 105 | 3.05 | | ---- |
| 15 | --- | >11.4 | 3 | 225 | | 105 | 2.75 | | ---- |
| 16 | | ---- | 0 | 220 | | --- | 2.25 | | |
| 17 | | >10.5 | 9 | 215 | | --- | ---- | 1.5 | ---- |
| 18 | | >10.0 | 19 | 220 | | | | 1.5 | 3.20 |
| 19 | | >7.5 | 24 | 220 | | | | | 3.25 |
| 20 | | 4.5 | 25 | 220 | | --- | ---- | | 3.30 |
| 21 | | 3.1 | 22 | 240 | | --- | (0.95) | | 3.20 |
| 22 | | 2.7 | 21 | 250 | | --- | ---- | 1.1 | 3.10 |
| 23 | --- | 2.4 | 20 | 255 | | --- | ---- | 1.4 | 3.00 |

Time: Local.
Sweep: 0.88 Mc to 14.14 Mc in 10 minutes, automatic operation.

Table 63

Kerguelen I. (49.4° S, 70.3° E) April 1957

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.2 | 19 | 290 | | --- | ---- | 1.4 | 2.90 |
| 01 | | 3.0 | 16 | 300 | | --- | ---- | 1.4 | 2.70 |
| 02 | | 2.9 | 15 | 330 | | --- | ---- | 1.4 | 2.50 |
| 03 | | 2.8 | 14 | 325 | | | | 1.4 | 2.65 |
| 04 | --- | 2.6 | 10 | 350 | | | | 1.5 | 2.50 |
| 05 | | 2.6 | 13 | 350 | | --- | ---- | | 2.50 |
| 06 | | 2.8 | 14 | 320 | | --- | ---- | 1.2 | 2.50 |
| 07 | | 5.2 | 26 | 260 | | 105 | 1.80 | | 3.00 |
| 08 | --- | 7.0 | 28 | 245 | --- | 105 | 2.50 | | 3.25 |
| 09 | (250) | 8.2 | 29 | 240 | --- | 105 | 2.95 | | 3.20 |
| 10 | --- | 9.2 | 28 | 235 | --- | 100 | 3.20 | | 2.90 |
| 11 | (265) | 10.5 | 25 | 235 | --- | 100 | 3.30 | | 2.75 |
| 12 | --- | 11.0 | 23 | 235 | --- | 105 | 3.45 | | 2.80 |
| 13 | (250) | 11.2 | 19 | 230 | --- | 105 | 3.40 | | 2.75 |
| 14 | --- | >11.4 | 18 | 240 | --- | 105 | 3.25 | | 2.75 |
| 15 | --- | 11.0 | 17 | 235 | | 105 | 3.10 | | 2.80 |
| 16 | | 11.0 | 16 | 235 | | 105 | 2.75 | | (2.95) |
| 17 | | 11.0 | 17 | 230 | | --- | 2.00 | | 3.05 |
| 18 | | 10.5 | 22 | 230 | | --- | ---- | 1.2 | 3.00 |
| 19 | | 8.0 | 29 | 235 | | --- | ---- | | 3.10 |
| 20 | | 6.6 | 25 | 230 | | --- | ---- | 1.5 | 3.10 |
| 21 | | 4.4 | 26 | 240 | | --- | ---- | 1.5 | 3.10 |
| 22 | --- | 3.8 | 22 | 250 | | 150 | 1.15 | 1.2 | 3.00 |
| 23 | | 3.8 | 20 | 255 | | 150 | ---- | 1.3 | 3.00 |

Time: Local.
Sweep: 0.88 Mc to 14.14 Mc in 10 minutes, automatic operation.

Table 64

Terre Adelie (66.7° S, 140.0° E) April 1957

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (3.8) | 8 | 270 | | | | | ---- |
| 01 | | (3.1) | 5 | 280 | | | | 1.8 | |
| 02 | | (3.8) | 7 | 300 | | --- | ---- | 2.7 | ---- |
| 03 | | (3.0) | 7 | 295 | | --- | ---- | | (2.40) |
| 04 | | (2.5) | 3 | 290 | | --- | ---- | | ---- |
| 05 | | (3.0) | 6 | 300 | | --- | ---- | 1.6 | ---- |
| 06 | | (3.3) | 5 | 300 | | --- | (1.55) | 1.8 | (2.45) |
| 07 | | (6.4) | 8 | 290 | | --- | 1.65 | | (2.70) |
| 08 | | (6.0) | 7 | 260 | | 115 | 1.95 | | (2.70) |
| 09 | --- | (8.1) | 6 | 265 | --- | 110 | 2.30 | | (2.80) |
| 10 | --- | (9.0) | 7 | 255 | --- | 110 | 2.50 | | (2.70) |
| 11 | --- | (0.0) | 0 | 255 | --- | 110 | 2.80 | | (2.70) |
| 12 | --- | (8.2) | 6 | (250) | --- | 110 | ---- | | (2.50) |
| 13 | --- | (8.0) | 4 | 250 | --- | 110 | 2.65 | | ---- |
| 14 | --- | (7.8) | 8 | 255 | --- | --- | 2.70 | | (2.60) |
| 15 | --- | (8.7) | 0 | 260 | --- | --- | 2.50 | | (2.50) |
| 16 | --- | (8.5) | 11 | 260 | --- | --- | (2.10) | | (2.65) |
| 17 | | 8.0 | 12 | 260 | | --- | 1.60 | | 2.65 |
| 18 | | 8.0 | 14 | 250 | | --- | ---- | | 2.60 |
| 19 | | (7.7) | 11 | 255 | | --- | ---- | 1.9 | (2.60) |
| 20 | | (7.0) | 9 | 255 | | --- | ---- | | ---- |
| 21 | | (7.1) | 6 | 250 | | | | | (2.70) |
| 22 | | (4.9) | 7 | 260 | | | | | (2.50) |
| 23 | | (6.2) | 4 | 260 | | | | | ---- |

Time: 135.0°E.
Sweep: 1.2 Mc to 17.0 Mc in 1 minute.

Table 65

Freiburg, Germany (48.1° N, 7.8° E) July 1955

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.6 | 29 | 270 | | | | 2.4 | 2.93 |
| 01 | | 4.5 | 29 | 270 | | | | 1.6 | 2.93 |
| 02 | | 4.1 | 30 | 270 | | | | 1.6 | 2.92 |
| 03 | | 3.8 | 30 | 270 | | | | 1.7 | 2.95 |
| 04 | --- | 3.6 | 31 | 265 | | | | 1.5 | 2.97 |
| 05 | 320 | 4.3 | 31 | 245 | 3.10 | 127 | 1.85 | 2.2 | 3.02 |
| 06 | 310 | 4.9 | 31 | 235 | 3.60 | 111 | 2.35 | 2.7 | 3.13 |
| 07 | 310 | 5.1 | 26 | (220) | 4.00 | 111 | 2.65 | 3.4 | 3.16 |
| 08 | 330 | 5.4 | 29 | 225 | 4.20 | 107 | 2.95 | 3.5 | 3.11 |
| 09 | 325 | 5.5 | 27 | 220 | 4.40 | 105 | 3.15 | 4.0 | 3.09 |
| 10 | 350 | 5.7 | 29 | 210 | 4.50 | 103 | 3.25 | 3.6 | 2.96 |
| 11 | 340 | 6.0 | 25 | 200 | 4.55 | 103 | 3.40 | 3.8 | 3.07 |
| 12 | 350 | 5.7 | 27 | 205 | 4.55 | 103 | 3.35 | 3.9 | 3.00 |
| 13 | 365 | 5.7 | 25 | (205) | 4.55 | 105 | 3.35 | 3.9 | 2.98 |
| 14 | 350 | 5.5 | 29 | (215) | 4.50 | 107 | 3.30 | 4.0 | 3.02 |
| 15 | 350 | 5.5 | 29 | 210 | 4.40 | 105 | 3.20 | 3.4 | 3.00 |
| 16 | 350 | 5.5 | 28 | 215 | 4.25 | 107 | 3.05 | 3.2 | 2.96 |
| 17 | 325 | 5.5 | 26 | (220) | 4.00 | 109 | 2.75 | 3.2 | 3.00 |
| 18 | 310 | 5.7 | 27 | (240) | 3.70 | 111 | 2.40 | 3.4 | 3.00 |
| 19 | 280 | 6.4 | 27 | (260) | ---- | 123 | (1.75) | 4.1 | 3.03 |
| 20 | | 7.0 | 31 | 250 | | | | 3.4 | 3.09 |
| 21 | | 6.6 | 29 | 240 | | | | 2.9 | 3.10 |
| 22 | | 5.8 | 30 | 240 | | | | 2.6 | 3.07 |
| 23 | | 5.0 | 31 | 260 | | | | 2.4 | 3.00 |

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

Table 66

Freiburg, Germany (48.1° N, 7.8° E) June 1955

| Time | h'F2 | foF2 | Count | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 4.8 | 30 | 255 | | | | 2.2 | 2.93 |
| 01 | | 4.6 | 29 | 270 | | | | 2.0 | 2.94 |
| 02 | | 4.2 | 27 | 270 | | | | 1.8 | 2.90 |
| 03 | | 4.0 | 30 | 260 | | | | 2.0 | 2.93 |
| 04 | (320) | 3.9 | 30 | 270 | ---- | --- | ---- | 1.7 | 2.98 |
| 05 | 305 | 4.5 | 28 | 240 | 3.20 | 121 | 1.80 | 2.3 | 3.08 |
| 06 | 320 | 4.9 | 28 | 230 | 3.75 | 109 | 2.30 | 2.8 | 3.02 |
| 07 | 335 | 5.2 | 27 | 220 | 3.95 | 105 | 2.70 | 3.4 | 3.04 |
| 08 | 325 | 5.5 | 27 | (220) | 4.20 | 103 | 2.95 | 4.2 | 3.08 |
| 09 | 340 | 5.6 | 24 | 215 | 4.40 | 101 | 3.10 | 4.2 | 3.04 |
| 10 | 330 | 5.8 | 28 | 210 | 4.40 | 101 | 3.20 | 4.3 | 3.06 |
| 11 | 340 | 5.9 | 23 | 205 | 4.50 | 101 | 3.35 | 4.6 | 3.11 |
| 12 | 360 | 5.7 | 26 | (210) | 4.55 | 101 | 3.30 | 4.4 | 3.02 |
| 13 | 360 | 5.5 | 25 | (210) | 4.50 | 103 | 3.40 | 4.1 | 3.02 |
| 14 | 365 | 5.5 | 29 | 210 | 4.45 | 101 | 3.25 | 3.8 | 3.01 |
| 15 | 355 | 5.4 | 28 | 220 | 4.30 | 103 | 3.20 | 3.8 | 3.02 |
| 16 | 340 | 5.6 | 26 | 220 | 4.20 | 103 | 3.00 | 3.2 | 3.02 |
| 17 | 325 | 5.8 | 26 | (220) | 4.00 | 105 | 2.75 | 4.0 | 3.03 |
| 18 | 300 | 5.8 | 25 | (230) | (3.60) | 109 | 2.35 | 4.0 | 3.04 |
| 19 | 280 | 6.2 | 26 | (255) | ---- | 119 | 1.80 | 3.9 | 3.08 |
| 20 | | 6.6 | 29 | 255 | | | | 3.2 | 3.09 |
| 21 | | 6.6 | 28 | 240 | | | | 2.6 | 3.08 |
| 22 | | 5.9 | 29 | 240 | | | | 2.6 | 3.00 |
| 23 | | 5.4 | 27 | 250 | | | | 1.9 | 2.98 |

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

Table 67

Freiburg, Germany (48.1° N, 7.8° E) April 1955

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.1 | 30 | 290 | | | | | 2.82 |
| 01 | | 3.1 | 30 | 290 | | | | | 2.85 |
| 02 | | 3.0 | 29 | 280 | | | | | 2.88 |
| 03 | | 2.9 | 30 | 280 | | | | | 2.90 |
| 04 | | 2.8 | 30 | 270 | | | | | 2.96 |
| 05 | --- | 3.0 | 30 | 255 | | --- | --- | | 3.17 |
| 06 | 250 | 3.8 | 30 | 240 | --- | 125 | 1.80 | | 3.32 |
| 07 | 290 | 4.2 | 30 | 230 | 3.70 | 115 | 2.30 | | 3.32 |
| 08 | 300 | 4.9 | 29 | 225 | 3.85 | 111 | 2.70 | | 3.19 |
| 09 | 310 | 5.1 | 30 | 215 | 4.05 | 109 | 2.90 | | 3.24 |
| 10 | 320 | 5.5 | 30 | 210 | 4.20 | 109 | 3.10 | | 3.22 |
| 11 | 300 | 5.5 | 29 | 210 | 4.30 | 107 | 3.15 | 3.3 | 3.24 |
| 12 | 310 | 5.4 | 29 | 210 | 4.30 | 107 | 3.20 | 3.3 | 3.24 |
| 13 | 315 | 5.5 | 30 | 210 | 4.30 | 107 | 3.15 | | 3.20 |
| 14 | 320 | 5.6 | 30 | 215 | 4.20 | 105 | 3.05 | | 3.15 |
| 15 | 300 | 5.6 | 30 | 230 | 4.10 | 109 | 2.95 | | 3.24 |
| 16 | 290 | 5.7 | 30 | 230 | 3.90 | 111 | 2.70 | | 3.22 |
| 17 | 280 | 5.8 | 30 | 240 | 3.60 | 113 | 2.35 | | 3.22 |
| 18 | 265 | 6.0 | 30 | 250 | --- | 122 | 1.85 | 2.2 | 3.23 |
| 19 | --- | 6.2 | 30 | 240 | | | | 1.8 | 3.21 |
| 20 | | 5.6 | 30 | 240 | | | | 1.5 | 3.17 |
| 21 | | 4.6 | 30 | 240 | | | | | 3.16 |
| 22 | | 3.6 | 30 | 235 | | | | | 3.03 |
| 23 | | 3.4 | 30 | 270 | | | | | 2.90 |

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

Table 68

Freiburg, Germany (48.1° N, 7.8° E) March 1955

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.1 | 31 | 275 | | | | | 2.89 |
| 01 | | 3.0 | 31 | 280 | | | | | 2.89 |
| 02 | | 2.9 | 31 | 270 | | | | | 2.90 |
| 03 | | 2.9 | 31 | 275 | | | | | 2.91 |
| 04 | | 2.9 | 31 | 270 | | | | | 2.96 |
| 05 | | 2.5 | 31 | 255 | | | | | 3.13 |
| 06 | --- | 2.9 | 31 | 240 | | --- | ---- | | 3.19 |
| 07 | 250 | 4.1 | 30 | 230 | ---- | 121 | 1.75 | 1.8 | 3.44 |
| 08 | 245 | 4.6 | 31 | 220 | 3.40 | 117 | 2.20 | 2.2 | 3.48 |
| 09 | 265 | 5.1 | 30 | 210 | 3.80 | 111 | 2.55 | 2.6 | 3.50 |
| 10 | 270 | 5.5 | 31 | 205 | 4.00 | 109 | 2.80 | 2.9 | 3.43 |
| 11 | 280 | 5.8 | 30 | 205 | 4.10 | 109 | 2.90 | | 3.36 |
| 12 | 295 | 5.7 | 31 | 205 | 4.15 | 107 | 3.00 | | 3.32 |
| 13 | 275 | 5.8 | 30 | 210 | 4.10 | 107 | 3.00 | | 3.34 |
| 14 | 275 | 5.9 | 31 | 220 | 4.00 | 111 | 2.90 | | 3.36 |
| 15 | 270 | 5.7 | 29 | 220 | 3.90 | 113 | 2.70 | | 3.38 |
| 16 | 260 | 5.5 | 31 | 235 | 3.60 | 113 | 2.35 | | 3.39 |
| 17 | 255 | 5.5 | 31 | 240 | ---- | 121 | 2.00 | 2.0 | 3.37 |
| 18 | --- | 5.4 | 30 | 235 | | --- | ---- | 1.6 | 3.33 |
| 19 | | 5.2 | 31 | 230 | | | | | 3.13 |
| 20 | | 4.7 | 31 | 235 | | | | | 3.14 |
| 21 | | 4.0 | 31 | 245 | | | | | 3.12 |
| 22 | | 3.4 | 31 | 255 | | | | | 3.01 |
| 23 | | 3.2 | 31 | 280 | | | | | 2.89 |

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

Table 69

Freiburg, Germany (48.1° N, 7.8° E) February 1955

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.2 | 28 | 265 | | | | | 2.96 |
| 01 | | 3.2 | 25 | 260 | | | | | 3.03 |
| 02 | | 3.3 | 27 | 255 | | | | | 2.97 |
| 03 | | 3.2 | 24 | 265 | | | | | 2.96 |
| 04 | | 3.1 | 25 | 265 | | | | | 3.02 |
| 05 | | 2.7 | 23 | 260 | | | | | 3.07 |
| 06 | | 2.2 | 25 | 260 | | | | | 3.08 |
| 07 | | 3.4 | 22 | 240 | | | | | 3.32 |
| 08 | 230 | 4.9 | 26 | 225 | | 121 | 1.80 | | 3.54 |
| 09 | 240 | 5.4 | 24 | 220 | ---- | 116 | 2.30 | | 3.56 |
| 10 | 245 | 5.8 | 27 | 220 | (3.85) | 111 | 2.60 | | 3.55 |
| 11 | 250 | 6.0 | 26 | 205 | (3.85) | 111 | 2.75 | | 3.51 |
| 12 | 250 | 6.0 | 27 | 215 | (3.95) | 111 | 2.80 | | 3.50 |
| 13 | 245 | 6.0 | 25 | 215 | 3.90 | 111 | 2.80 | | 3.52 |
| 14 | 250 | 5.8 | 28 | 220 | ---- | 111 | 2.70 | | 3.47 |
| 15 | 245 | 6.0 | 23 | 230 | ---- | 115 | 2.45 | | 3.43 |
| 16 | 240 | 5.8 | 27 | 230 | | 121 | 2.05 | | 3.48 |
| 17 | --- | 5.4 | 26 | 225 | | --- | 1.60 | 1.8 | 3.51 |
| 18 | | 4.6 | 28 | 225 | | | | | 3.28 |
| 19 | | 4.5 | 25 | 230 | | | | | 3.26 |
| 20 | | 3.9 | 27 | 235 | | | | | 3.20 |
| 21 | | 3.4 | 24 | 240 | | | | | 3.15 |
| 22 | | 3.3 | 25 | 255 | | | | | 3.03 |
| 23 | | 3.2 | 24 | 265 | | | | | 2.94 |

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

Table 70

Freiburg, Germany (48.1° N, 7.8° E) January 1955

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.2 | 30 | 250 | | | | | 3.03 |
| 01 | | 3.2 | 30 | 255 | | | | | 2.98 |
| 02 | | 3.2 | 31 | 260 | | | | | 3.00 |
| 03 | | 3.1 | 31 | 270 | | | | | 3.00 |
| 04 | | 2.7 | 29 | 255 | | | | | 3.10 |
| 05 | | 2.4 | 29 | 240 | | | | | 3.24 |
| 06 | | 2.4 | 30 | 235 | | | | | 3.26 |
| 07 | | 2.5 | 31 | 240 | | | | | 3.22 |
| 08 | | 4.8 | 29 | 220 | | --- | 1.55 | 1.7 | 3.60 |
| 09 | --- | 5.8 | 29 | 220 | | 120 | 2.00 | | 3.69 |
| 10 | 225 | 5.9 | 31 | 225 | --- | 113 | 2.40 | | 3.66 |
| 11 | 230 | 6.2 | 28 | 230 | --- | 115 | 2.60 | | 3.65 |
| 12 | 235 | 6.1 | 31 | 220 | --- | 117 | 2.60 | | 3.61 |
| 13 | 235 | 5.9 | 30 | 225 | --- | 122 | 2.60 | | 3.58 |
| 14 | 235 | 5.6 | 28 | 230 | | 118 | 2.40 | | 3.63 |
| 15 | 235 | 5.4 | 29 | 230 | | 121 | 2.15 | | 3.58 |
| 16 | | 5.1 | 31 | 220 | | 121 | 1.70 | 1.9 | 3.55 |
| 17 | | 4.5 | 28 | 220 | | | | 1.6 | 3.43 |
| 18 | | 3.8 | 30 | 230 | | | | 1.6 | 3.30 |
| 19 | | 3.1 | 31 | 230 | | | | 1.7 | 3.32 |
| 20 | | 3.0 | 29 | 245 | | | | 1.7 | 3.14 |
| 21 | | 3.2 | 30 | 250 | | | | | 3.09 |
| 22 | | 3.2 | 29 | 260 | | | | | 3.09 |
| 23 | | 3.3 | 31 | 250 | | | | | 3.09 |

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

Table 71

Lulea, Sweden (65.6° N, 22.1° E) May 1953

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | 3.7 | 20 | 260 | | | | 2.5 | |
| 01 | | | | | | | | | |
| 02 | | 3.5 | 16 | 255 | | --- | --- | 3.0 | |
| 03 | | | | | | | | | |
| 04 | (340) | 4.0 | 24 | 240 | 3.5 | 130 | 2.0 | 2.6 | |
| 05 | | | | | | | | | |
| 06 | 375 | 4.1 | 20 | 235 | 3.7 | 110 | 2.5 | | |
| 07 | | | | | | | | | |
| 08 | 350 | 4.2 | 18 | 210 | 4.0 | 110 | 2.8 | 3.0 | |
| 09 | | | | | | | | | |
| 10 | 350 | 5.0 | 18 | 210 | 4.1 | 110 | 3.0 | 3.1 | |
| 11 | | | | | | | | | |
| 12 | 340 | 4.7 | 19 | 200 | 4.0 | 110 | 3.0 | 3.5 | |
| 13 | | | | | | | | | |
| 14 | 325 | 4.5 | 16 | 210 | 4.0 | 110 | 3.0 | | |
| 15 | | | | | | | | | |
| 16 | 350 | 4.5 | 22 | 225 | 3.7 | 110 | 2.6 | | |
| 17 | | | | | | | | | |
| 18 | (315) | 5.0 | 24 | 240 | 3.5 | 115 | 2.3 | 2.6 | |
| 19 | | | | | | | | | |
| 20 | | 4.5 | 24 | 240 | | --- | E | 2.2 | |
| 21 | | | | | | | | | |
| 22 | | 4.0 | 21 | 250 | | --- | --- | 3.0 | |
| 23 | | | | | | | | | |

Time: 15.0°E.
Sweep: 1.5 Mc to 10.0 Mc in 9 minutes, automatic operation.

Table 72

Lulea, Sweden (65.6° N, 22.1° E) December 1952

| Time | h'F2 | foF2—Count | | h'F | foF1 | h'E | foE | foEs | (M3000)F2 |
|---|---|---|---|---|---|---|---|---|---|
| 00 | | (2.4) | 4 | (370) | | | | 3.0 | |
| 01 | | | | | | | | | |
| 02 | | (2.2) | 6 | --- | | | | 2.0 | |
| 03 | | | | | | | | | |
| 04 | | (2.0) | 5 | --- | | | | 2.4 | |
| 05 | | | | | | | | | |
| 06 | | (2.0) | 3 | --- | | | | | |
| 07 | | | | | | | | | |
| 08 | | 2.3 | 15 | --- | | | | | |
| 09 | | | | | | | | | |
| 10 | | 4.3 | 18 | 205 | | --- | 1.7 | 2.6 | |
| 11 | | | | | | | | | |
| 12 | --- | 5.1 | 22 | 205 | --- | --- | --- | 2.2 | |
| 13 | | | | | | | | | |
| 14 | | 4.0 | 18 | 200 | | | | | |
| 15 | | | | | | | | | |
| 16 | | (2.5) | 11 | 230 | | | | | |
| 17 | | | | | | | | | |
| 18 | | (2.0) | 5 | --- | | | | 2.8 | |
| 19 | | | | | | | | | |
| 20 | | (2.5) | 1 | (325) | | | | 2.5 | |
| 21 | | | | | | | | | |
| 22 | | (3.0) | 5 | (295) | | | | 3.0 | |
| 23 | | | | | | | | | |

Time: 15.0°E.
Sweep: 1.5 Mc to 10.0 Mc in 9 minutes, automatic operation.

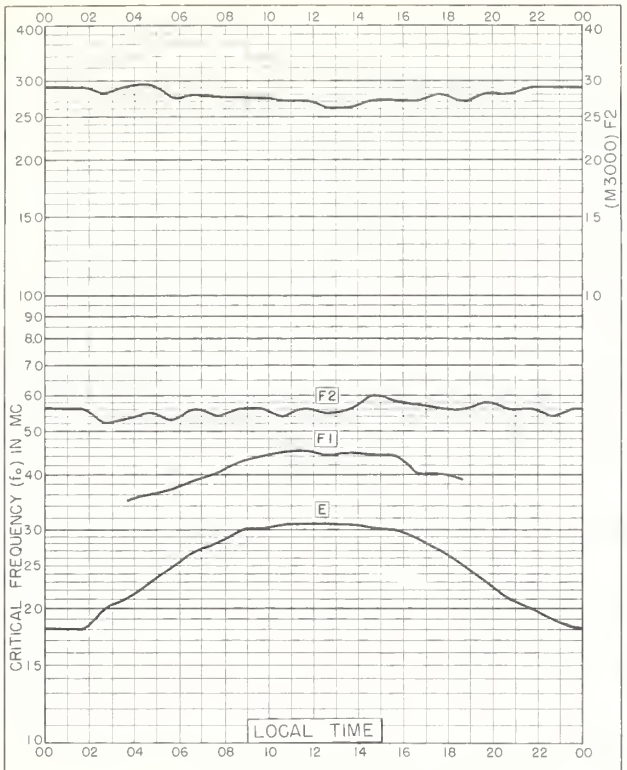



Fig. 1. RESOLUTE BAY, CANADA
74.7°N, 94.9°W AUGUST 1960

NBS 503

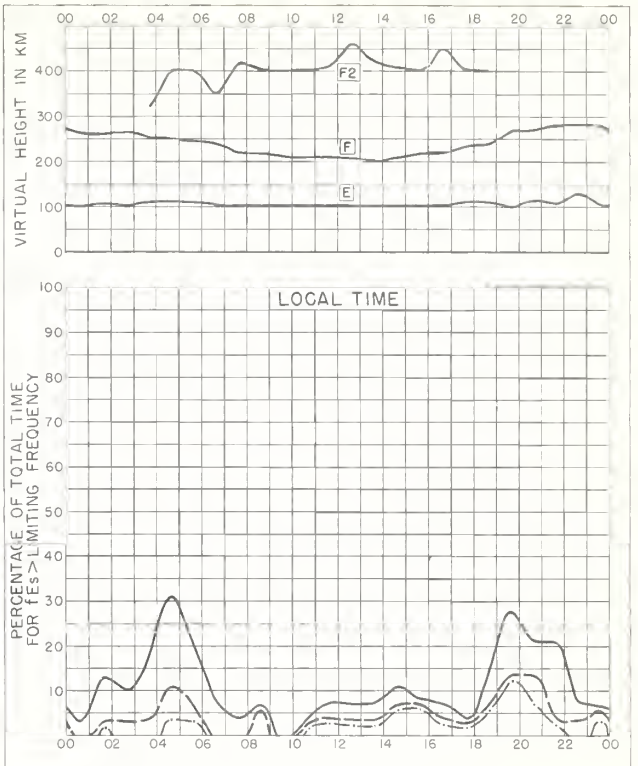



Fig. 2. RESOLUTE BAY, CANADA AUGUST 1960

NBS 490

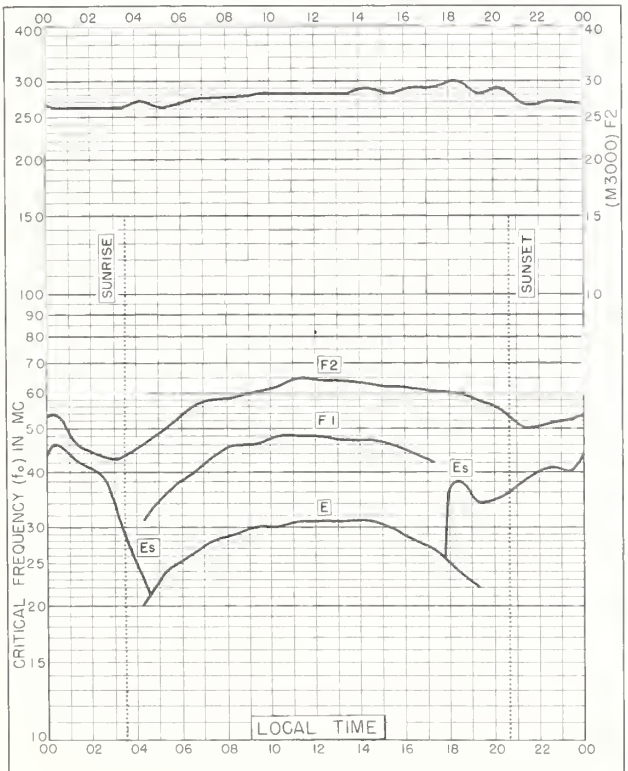



Fig. 3. KIRUNA, SWEDEN
67.8°N, 20.3°E AUGUST 1960

NBS 503

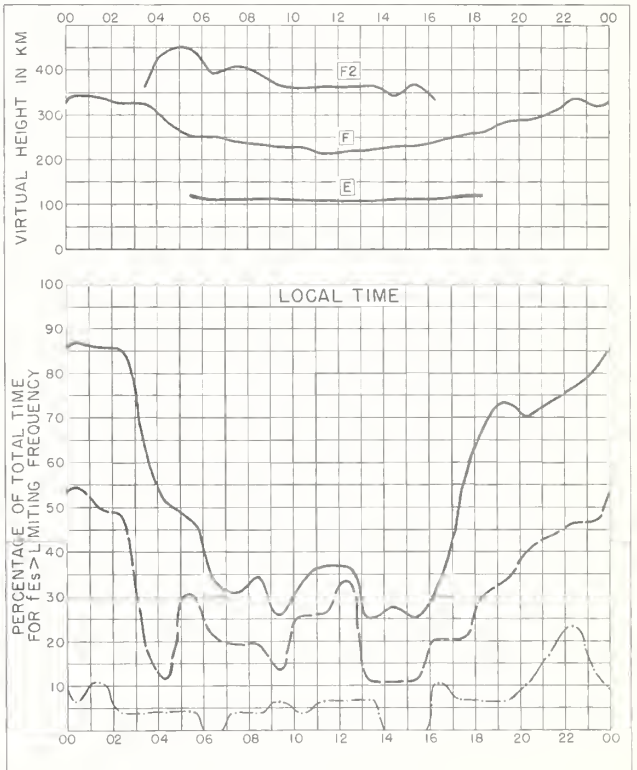



Fig. 4. KIRUNA, SWEDEN AUGUST 1960

NBS 490

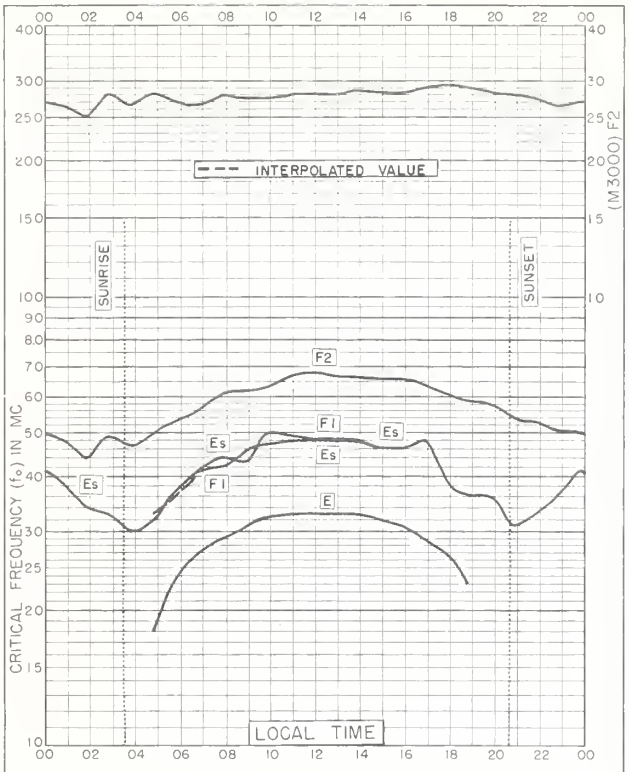



Fig. 5. SODANKYLA, FINLAND
67.4°N, 26.6°E AUGUST 1960

NBS 503

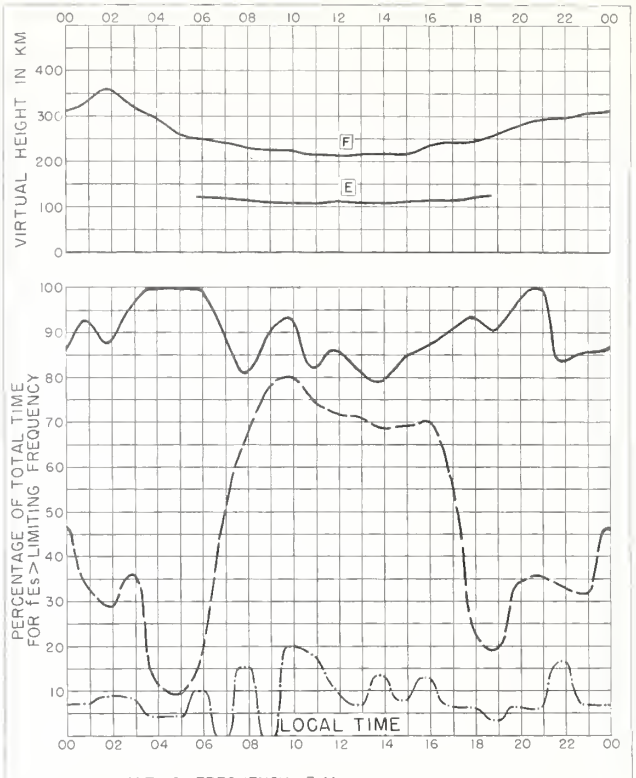



Fig. 6. SODANKYLA, FINLAND AUGUST 1960

NBS 490

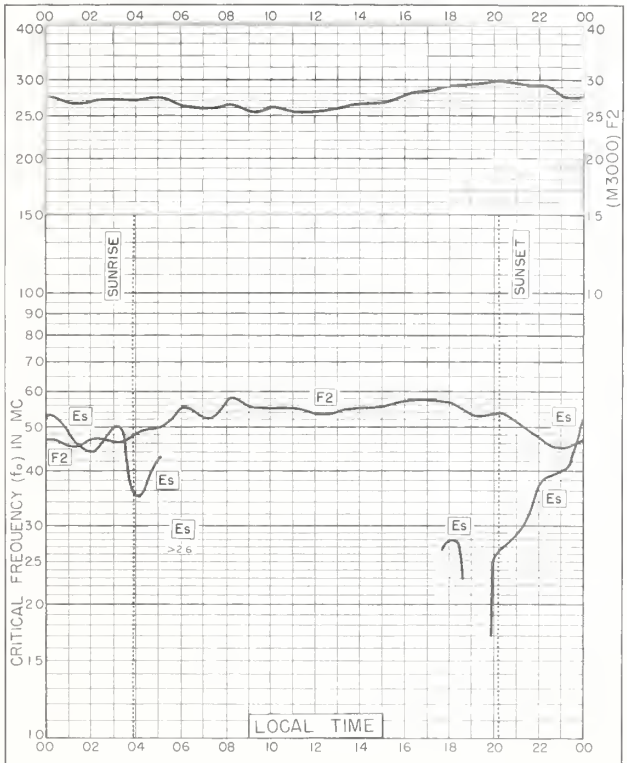



Fig. 7. FAIRBANKS, ALASKA
64.9°N, 147.8°W AUGUST 1960

NBS 503

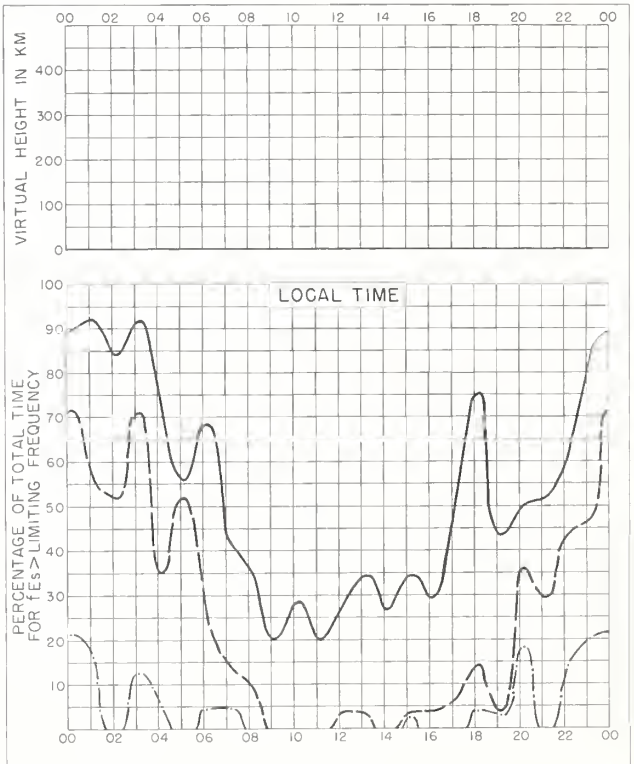



Fig. 8. FAIRBANKS, ALASKA AUGUST 1960

NBS 490

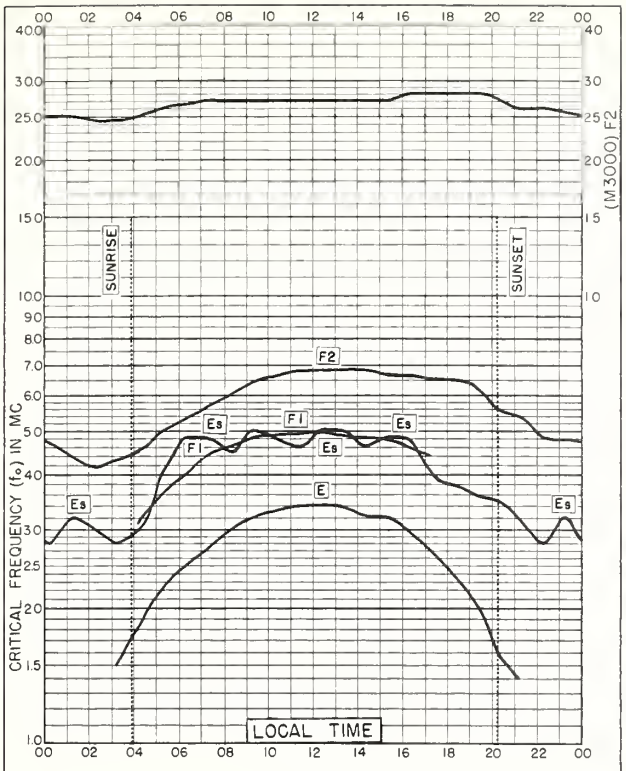



Fig. 9. LYCKSELE, SWEDEN
64.6°N, 18.8°E AUGUST 1960

NBS 503

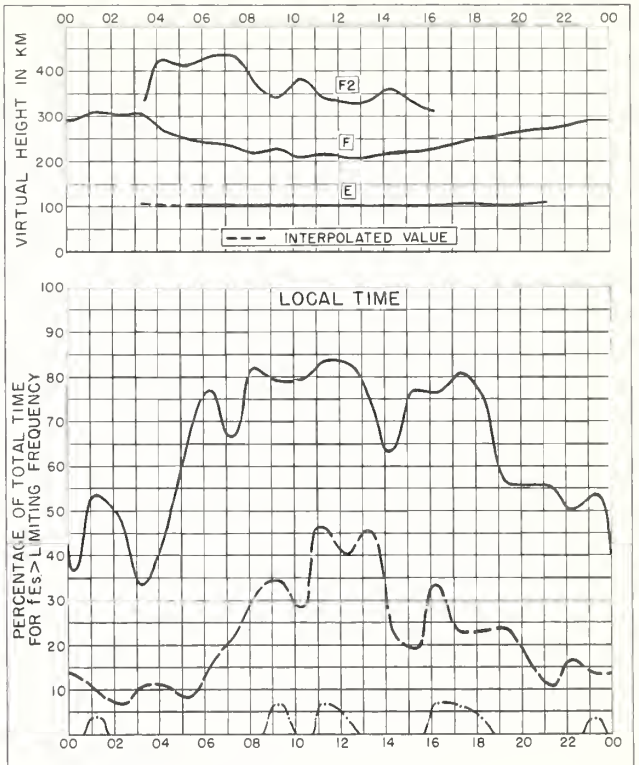



Fig. 10. LYCKSELE, SWEDEN AUGUST 1960

NBS 490

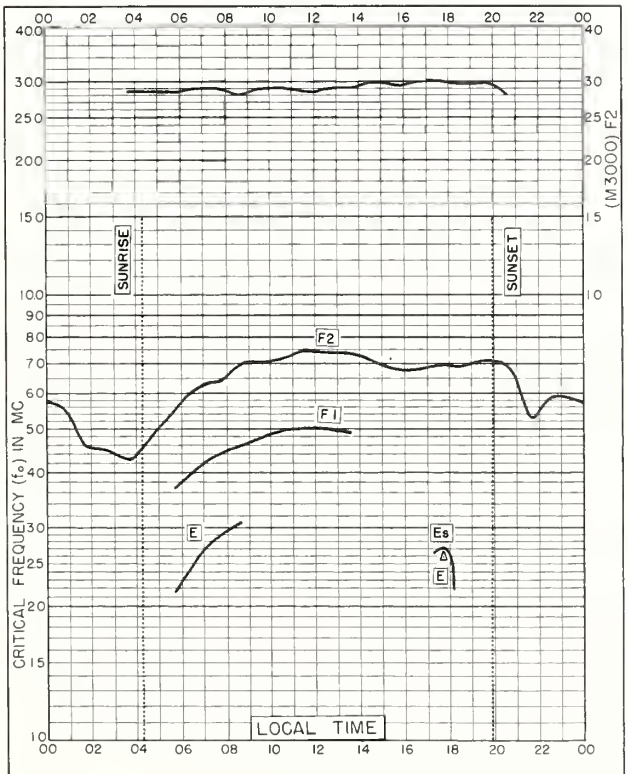



Fig. 11. NURMIJARVI, FINLAND
60.5°N, 24.6°E AUGUST 1960

NBS 503

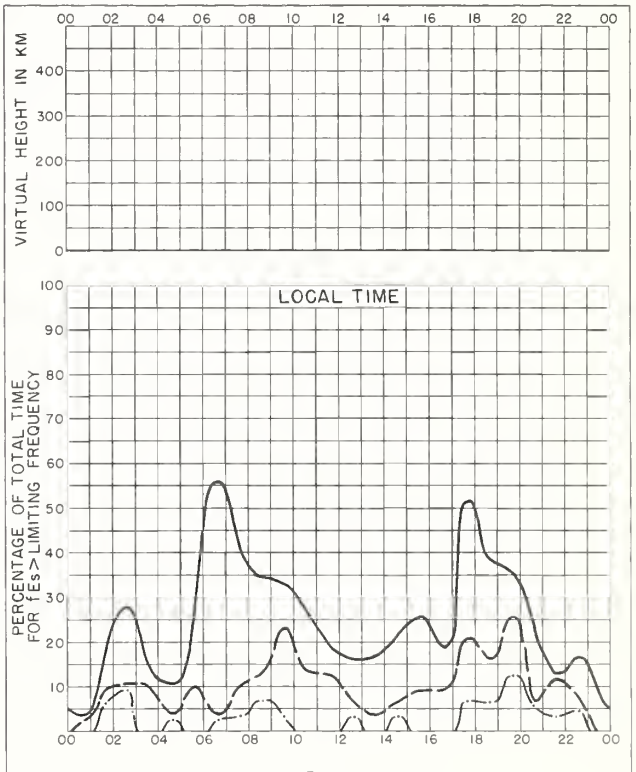



Fig. 12. NURMIJARVI, FINLAND AUGUST 1960

NBS 490

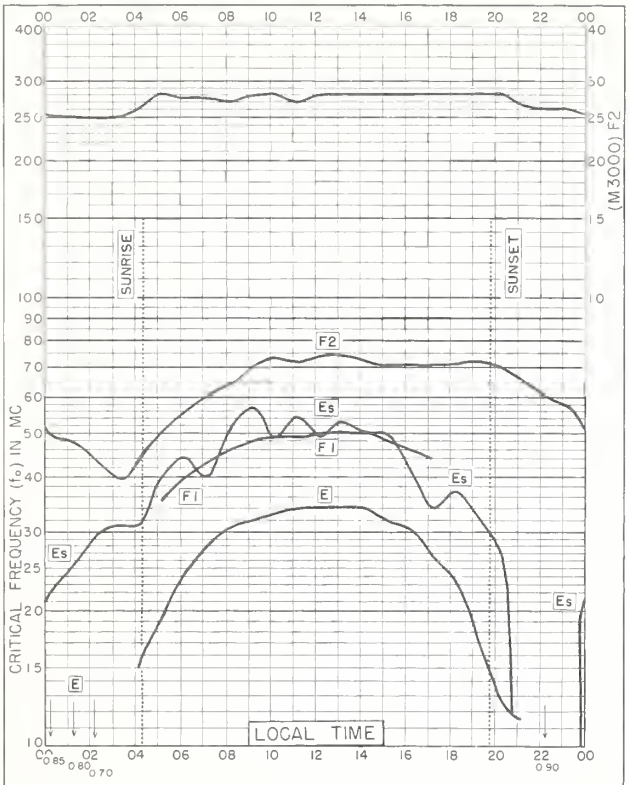



Fig. 13. UPSALA, SWEDEN
59.8°N, 17.6°E AUGUST 1960

NBS 503

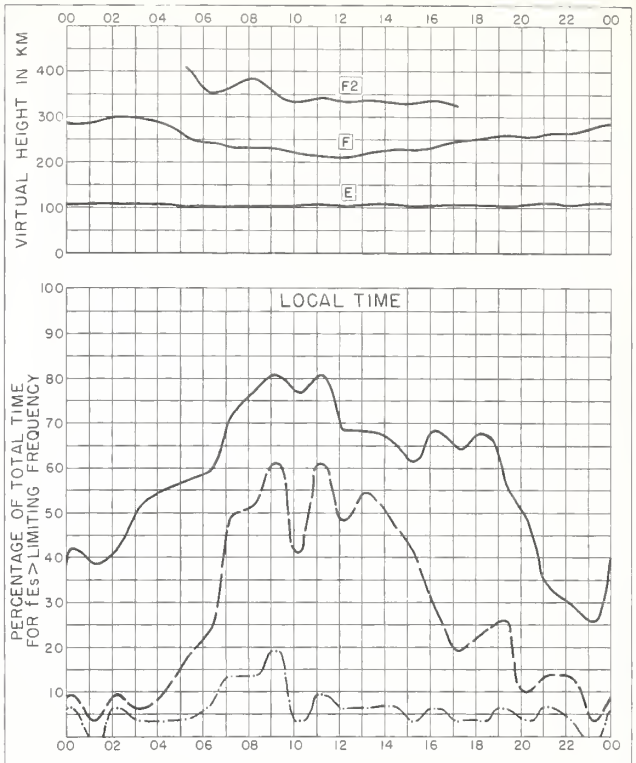



Fig. 14. UPSALA, SWEDEN AUGUST 1960

NBS 490

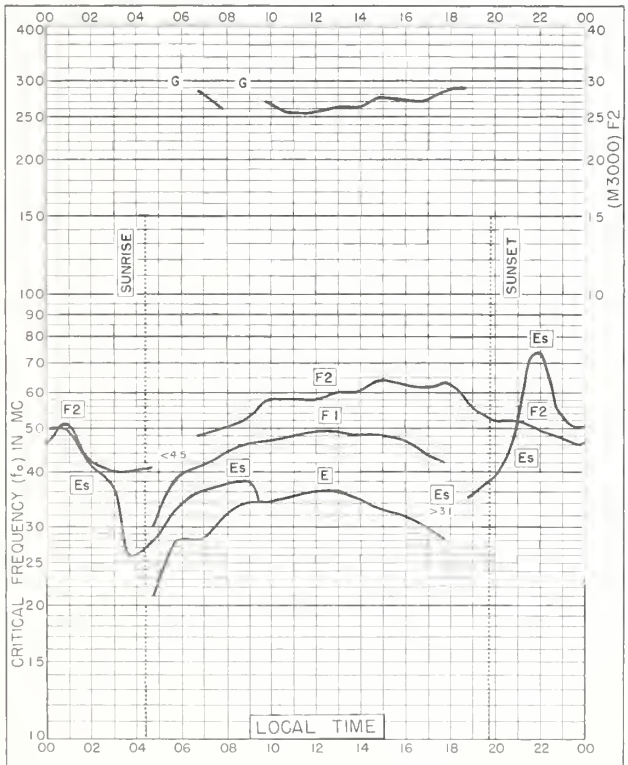



Fig. 15. CHURCHILL, CANADA
58.8°N, 94.2°W AUGUST 1960

NBS 503

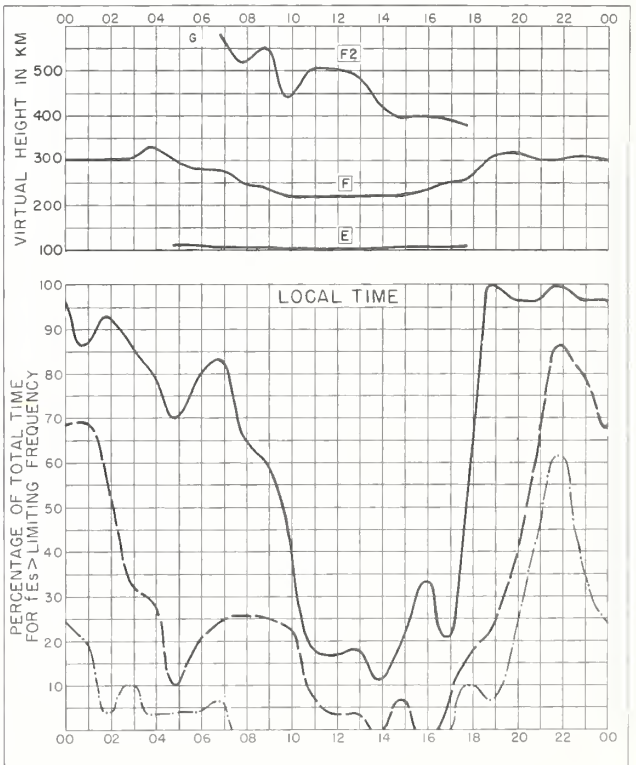



Fig. 16. CHURCHILL, CANADA AUGUST 1960

NBS 490

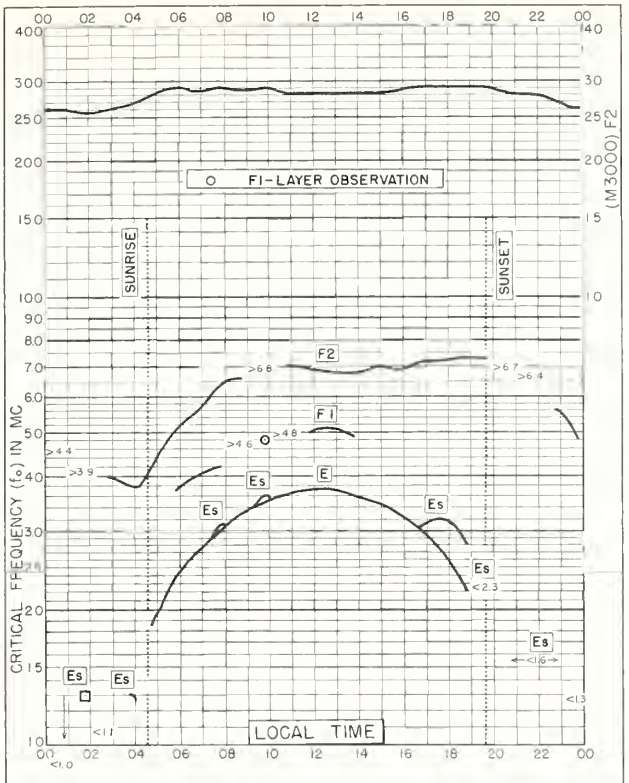



Fig. 17. INVERNESS, SCOTLAND
57.4°N, 4.2°W AUGUST 1960

NBS 503

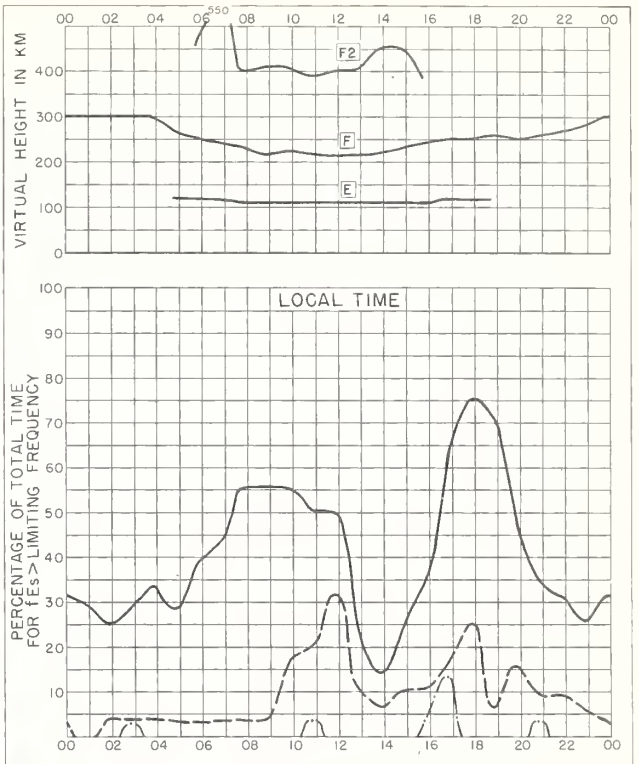



Fig. 18. INVERNESS, SCOTLAND AUGUST 1960

NBS 490

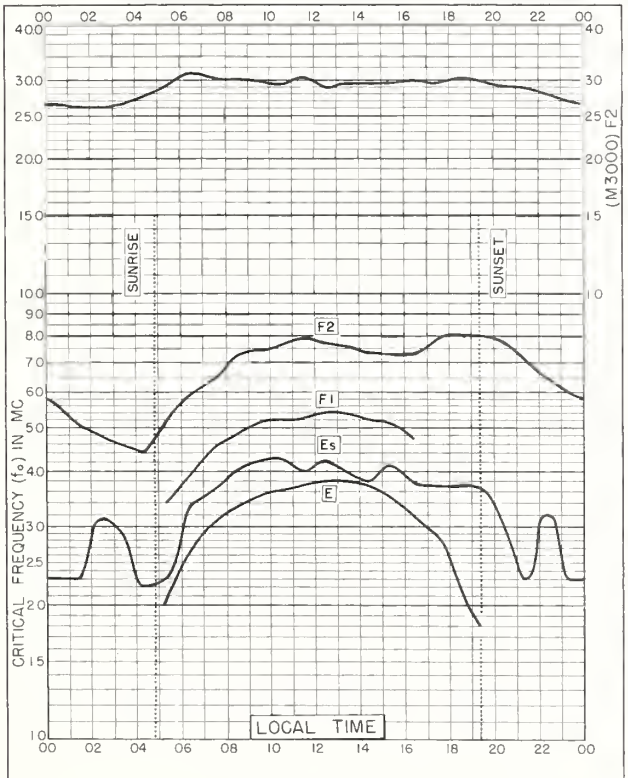



Fig. 19. De BILT, HOLLAND
52.1°N, 5.2°E AUGUST 1960

NBS 503

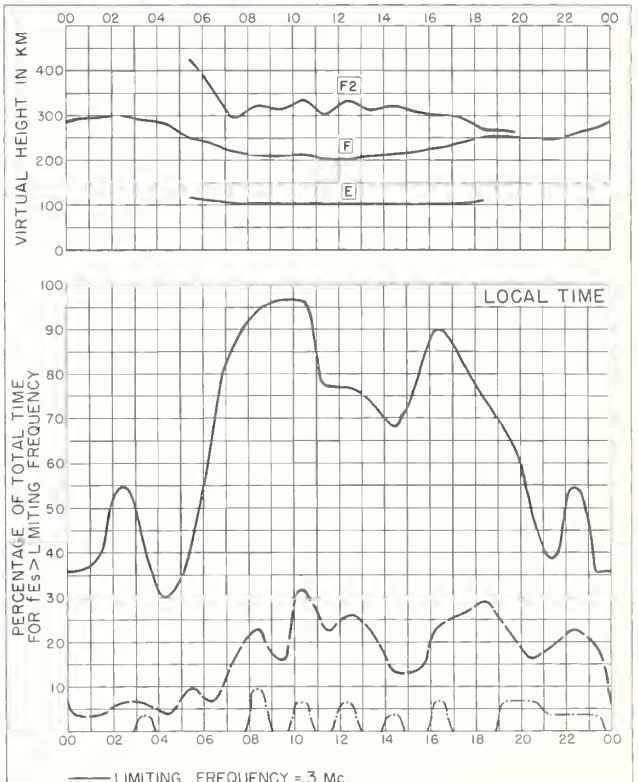



Fig 20. De BILT, HOLLAND AUGUST 1960

NBS 490

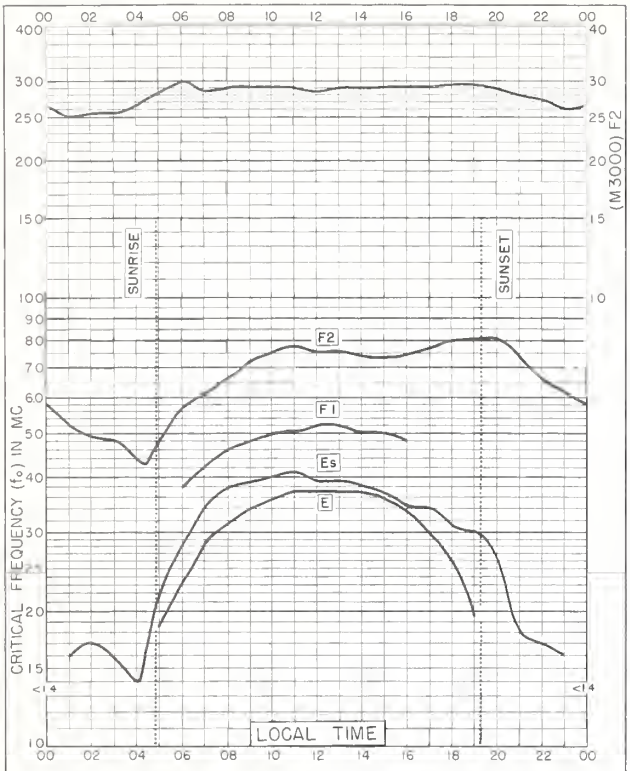



Fig. 21. SLOUGH, ENGLAND
51.5°N, 0.6°W AUGUST 1960

NBS 503

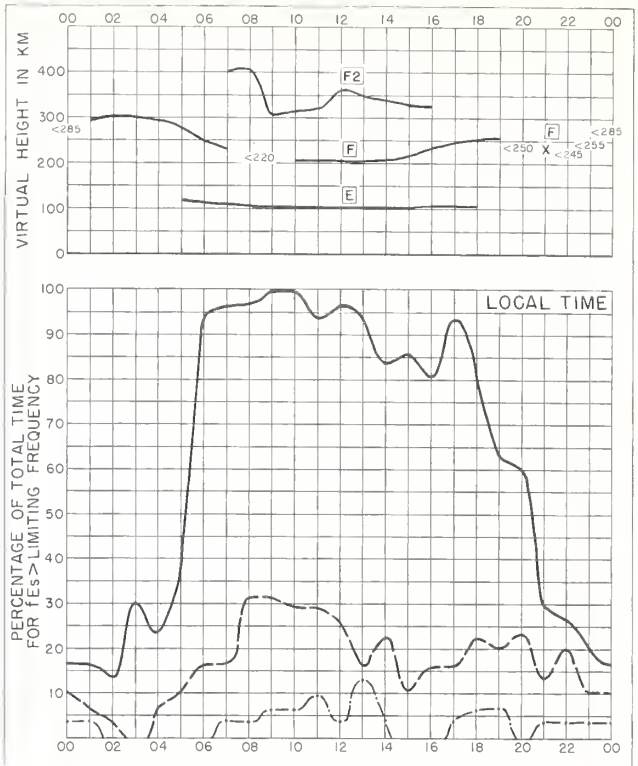



Fig. 22. SLOUGH, ENGLAND AUGUST 1960

NBS 490

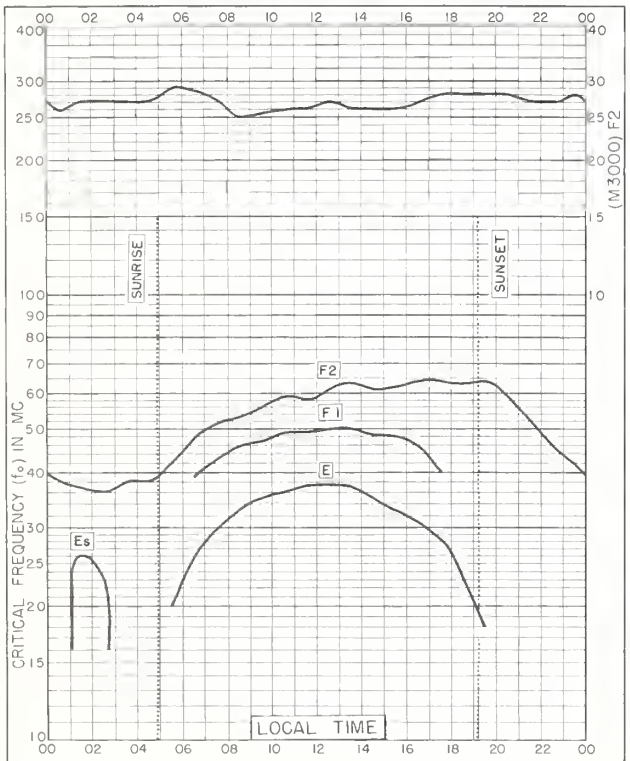



Fig. 23. WINNIPEG, CANADA
49.9°N, 97.4°W AUGUST 1960

NBS 503

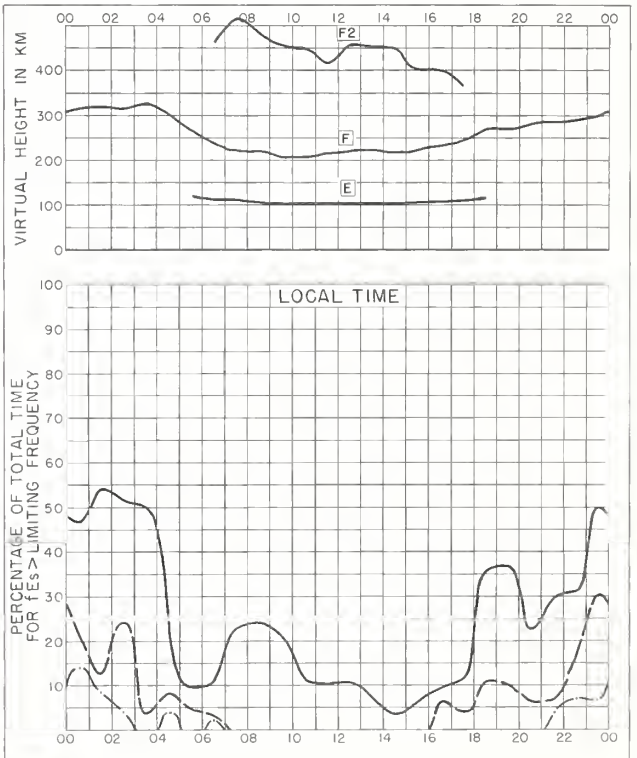



Fig 24. WINNIPEG, CANADA AUGUST 1960

NBS 490

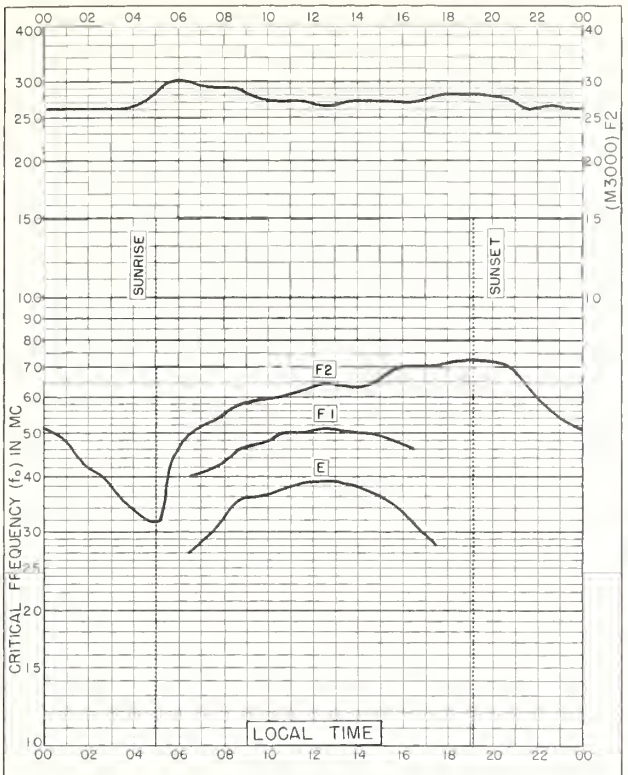



Fig. 25. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W AUGUST 1960

NBS 503

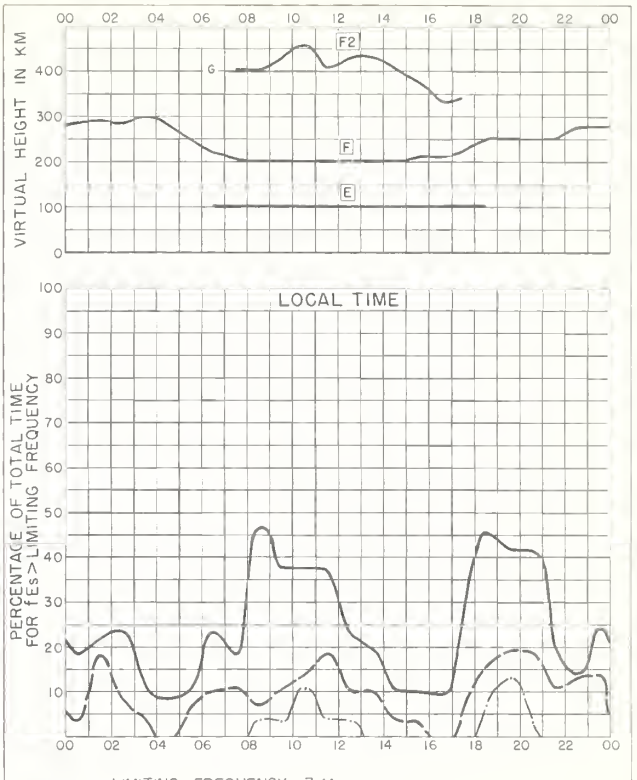



Fig. 26. ST. JOHN'S, NEWFOUNDLAND AUGUST 1960

NBS 490

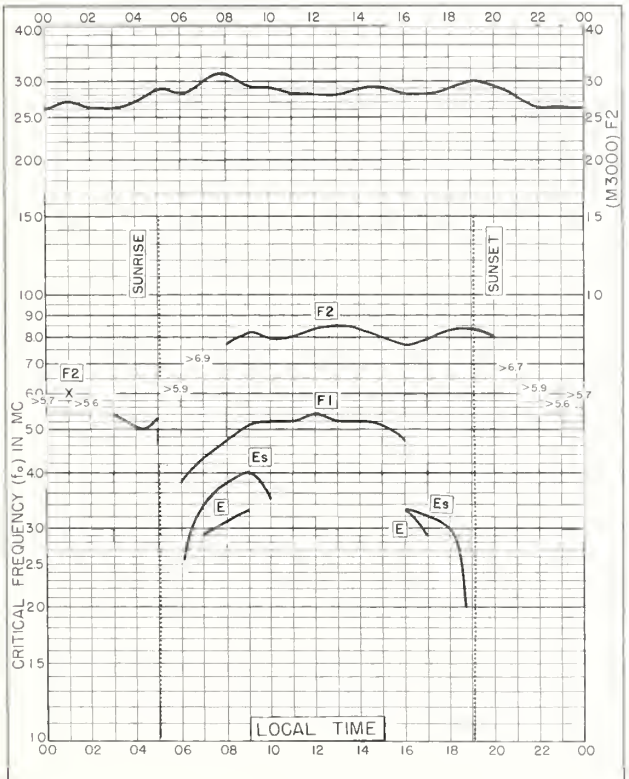



Fig. 27. GRAZ, AUSTRIA
47.1°N, 15.5°E AUGUST 1960

NBS 503

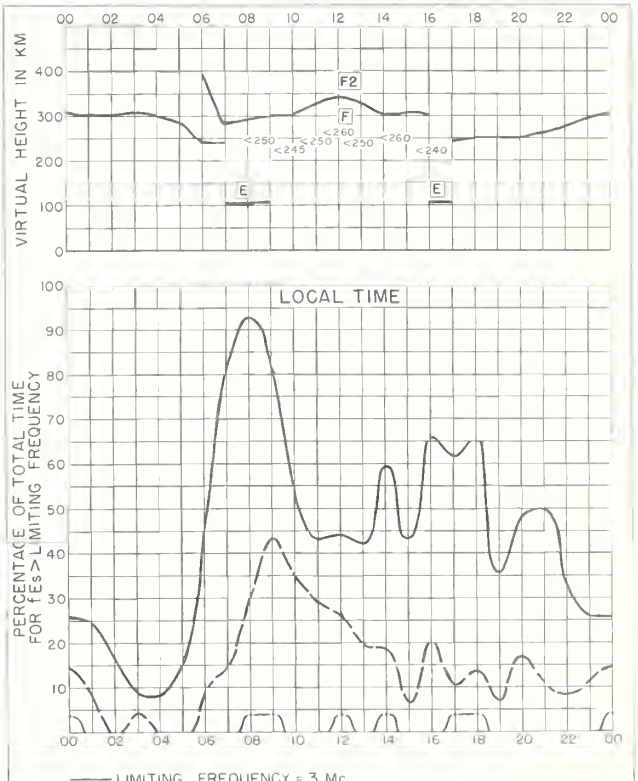



Fig. 28. GRAZ, AUSTRIA AUGUST 1960

NBS 490

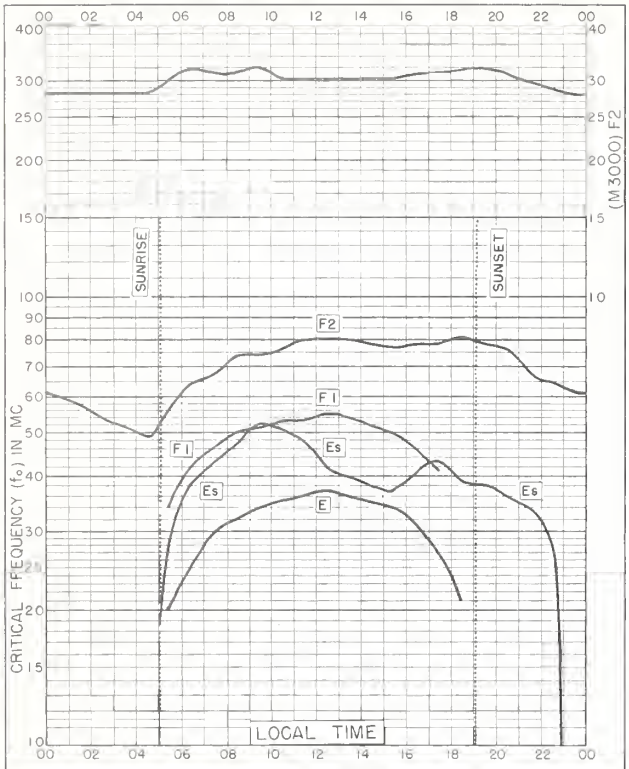



Fig. 29. SOTTENS, SWITZERLAND
46.6°N, 6.7°E AUGUST 1960

NBS 503

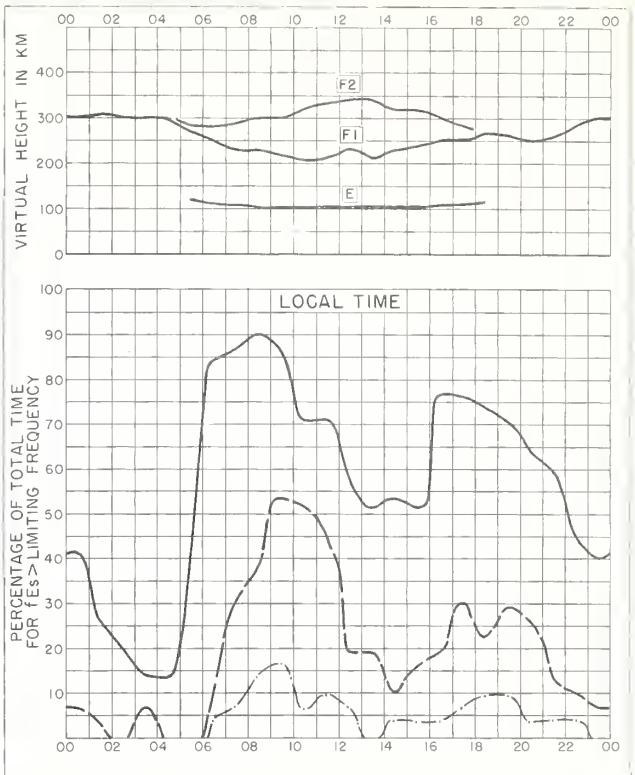



Fig. 30. SOTTENS, SWITZERLAND AUGUST 1960

NBS 490

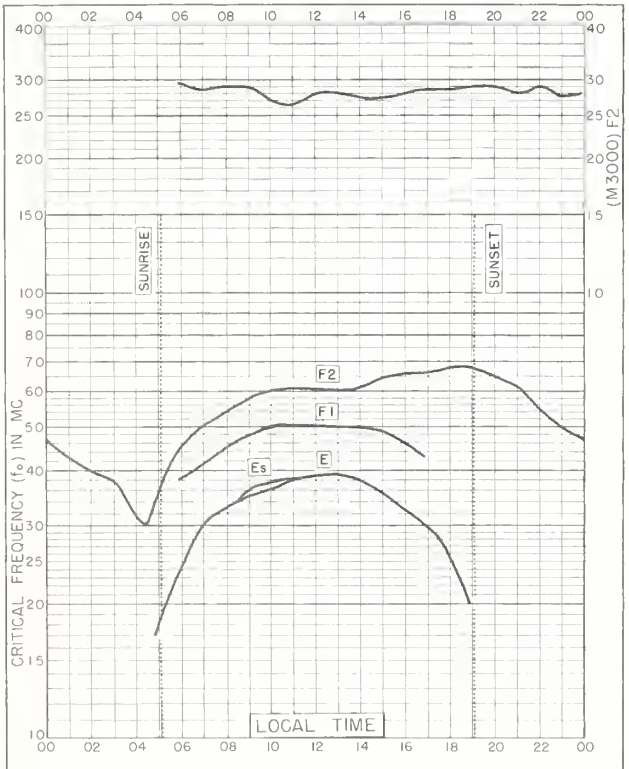



Fig. 31. OTTAWA, CANADA
45.4°N, 75.9°W AUGUST 1960

NBS 503

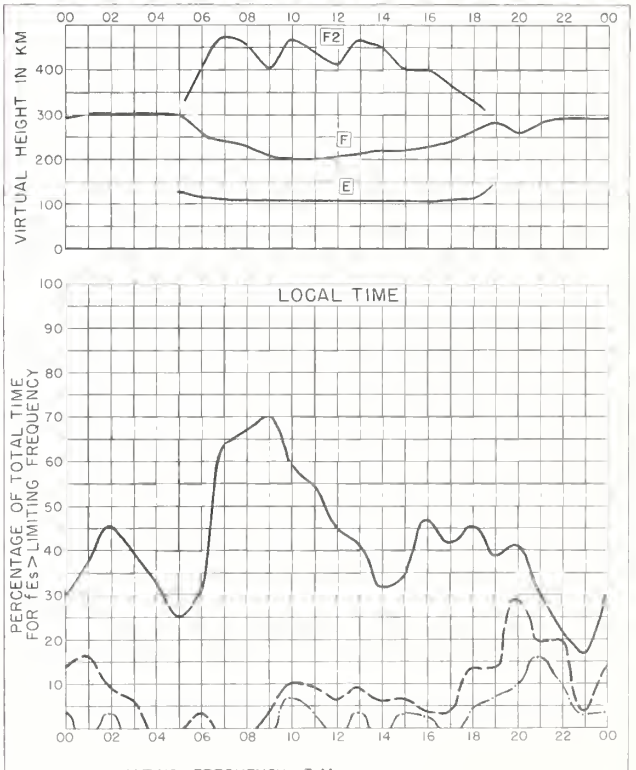



Fig. 32. OTTAWA, CANADA AUGUST 1960

NBS 490

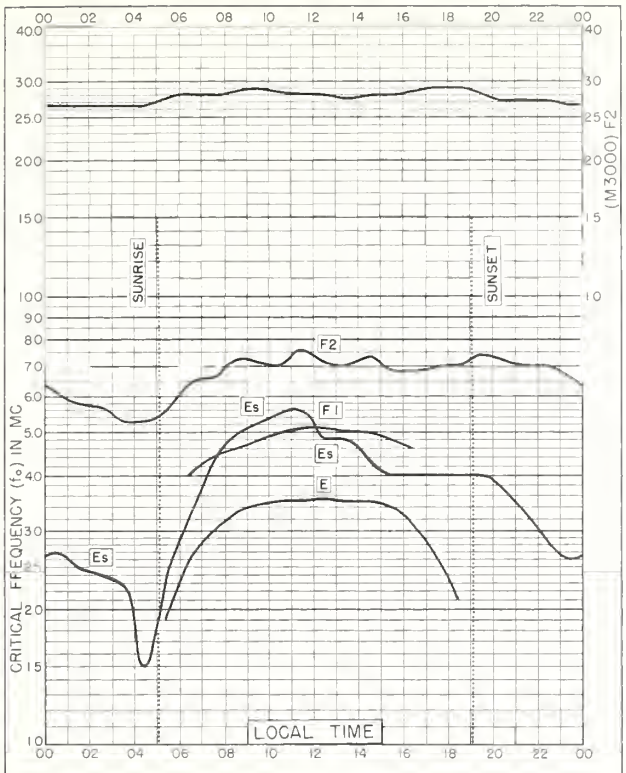



Fig. 33. WAKKANAI, JAPAN
45.4°N, 141.7°E AUGUST 1960

NBS 503

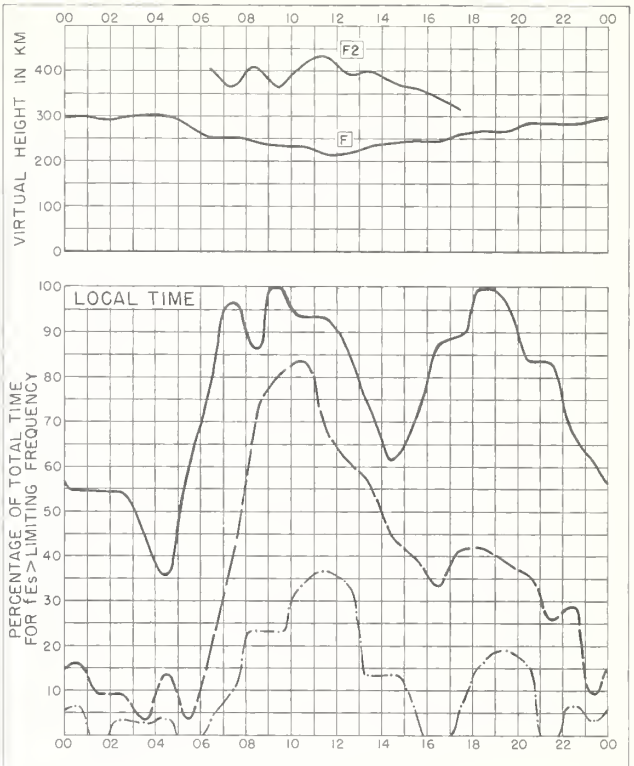



Fig. 34. WAKKANAI, JAPAN AUGUST 1960

NBS 490

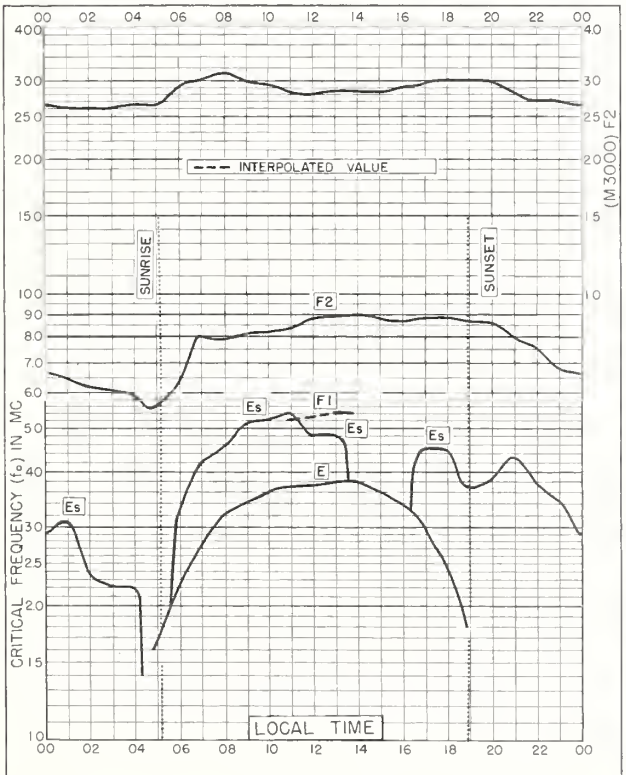



Fig. 35. ROME, ITALY
41.8°N, 12.5°E AUGUST 1960

NBS 503

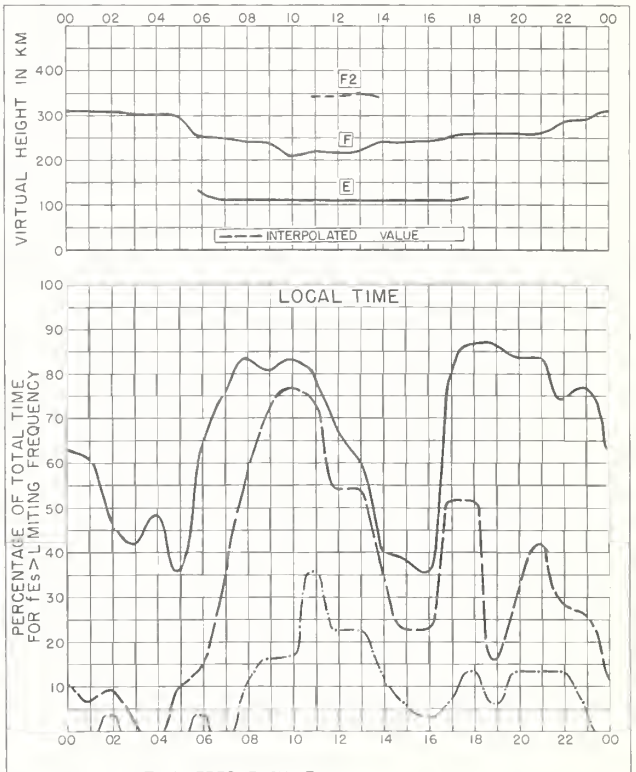



Fig. 36. ROME, ITALY AUGUST 1960

NBS 490

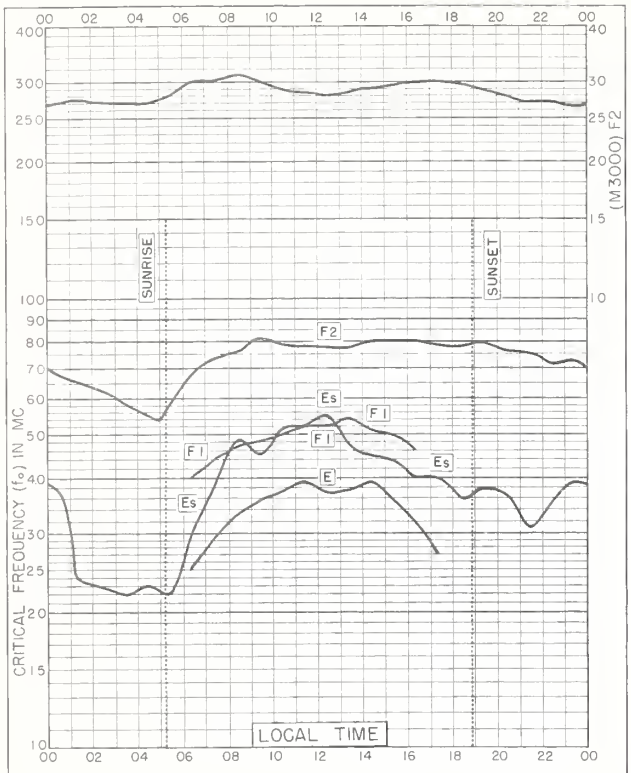



Fig. 37. AKITA, JAPAN
39.7°N, 140.1°E AUGUST 1960

NBS 503

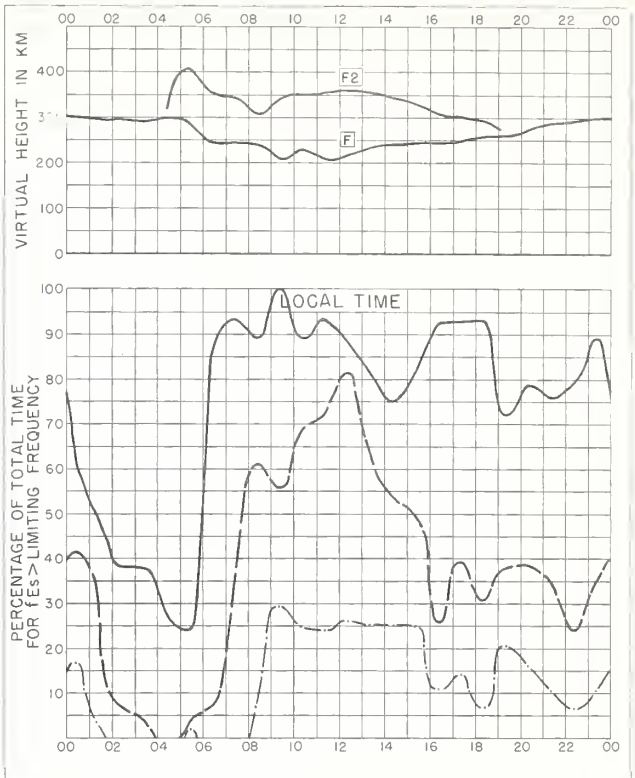



Fig. 38. AKITA, JAPAN AUGUST 1960

NBS 490

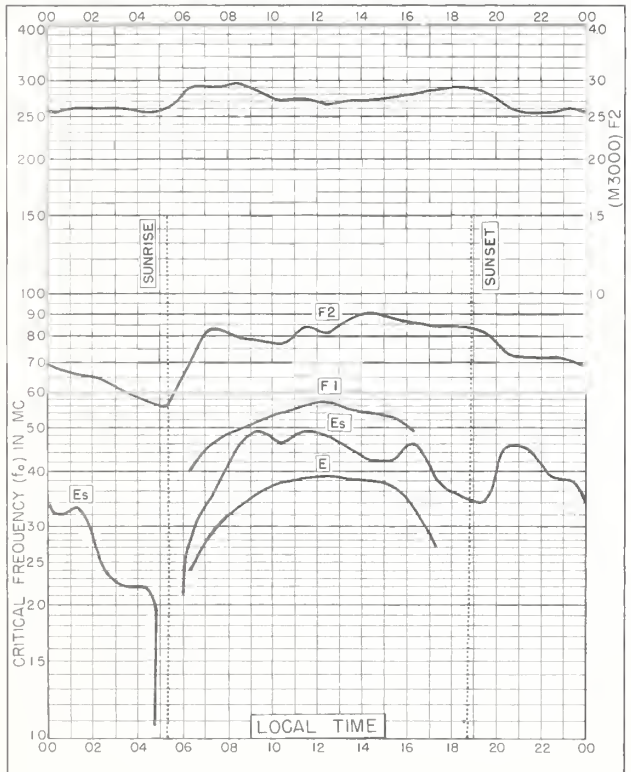



Fig. 39. TOKYO, JAPAN
35.7°N, 139.5°E AUGUST 1960

NBS 503

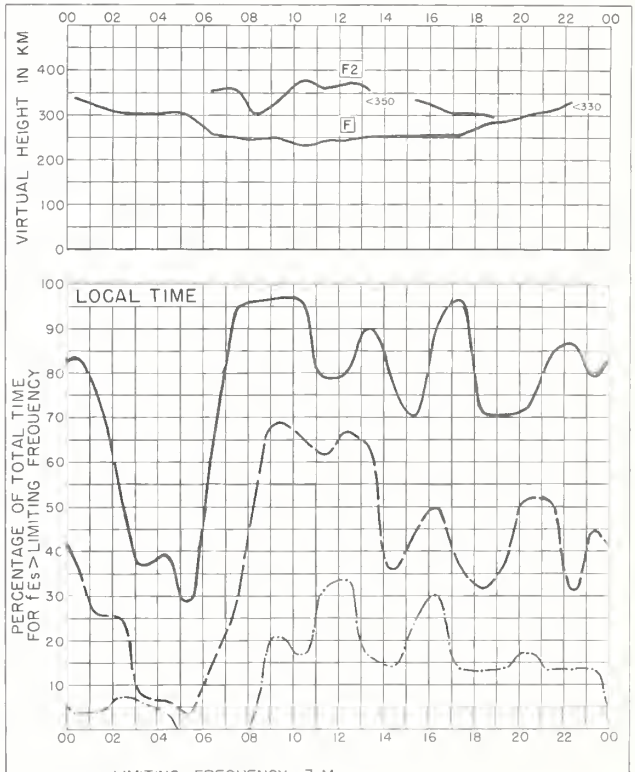



Fig. 40. TOKYO, JAPAN AUGUST 1960

NBS 490

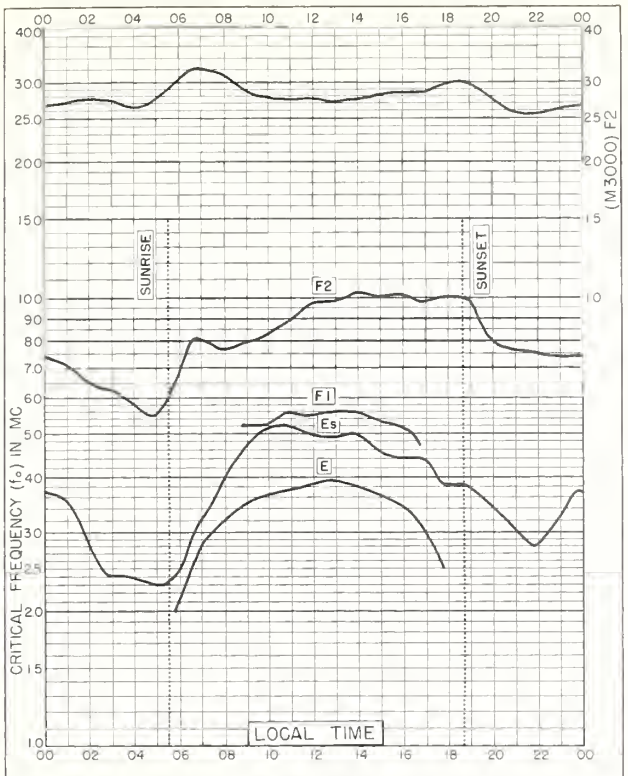



Fig. 41. YAMAGAWA, JAPAN
31.2°N, 130.6°E AUGUST 1960

NBS 503

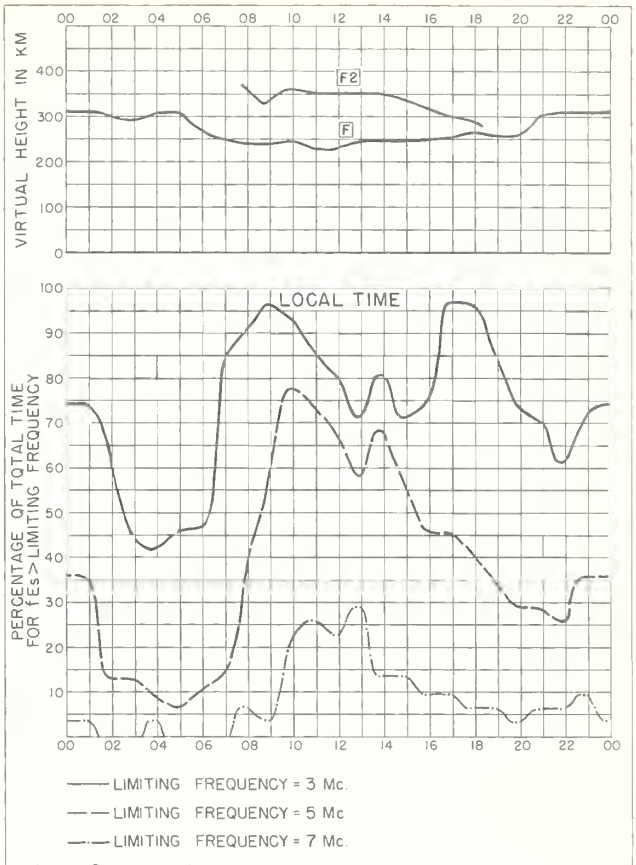



Fig. 42. YAMAGAWA, JAPAN AUGUST 1960

NBS 490

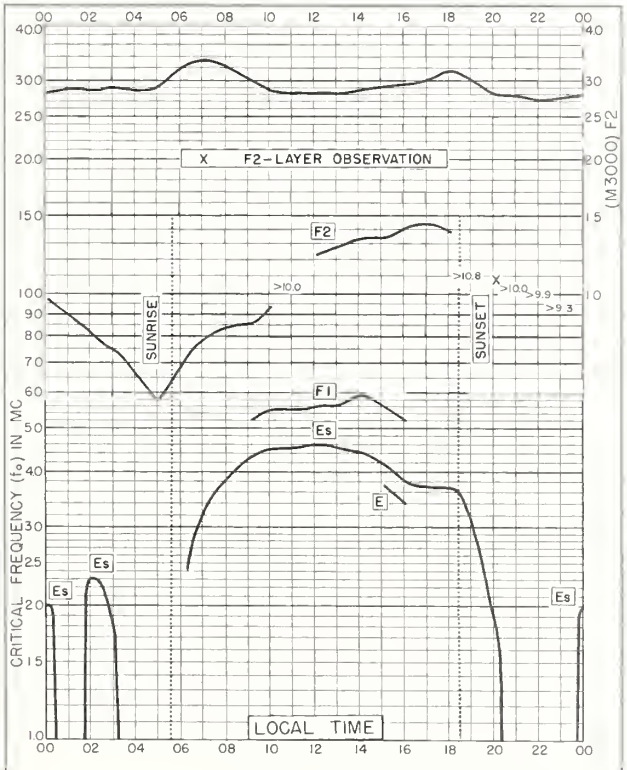



Fig. 43. FORMOSA, CHINA
25.0°N, 121.5°E AUGUST 1960

NBS 503

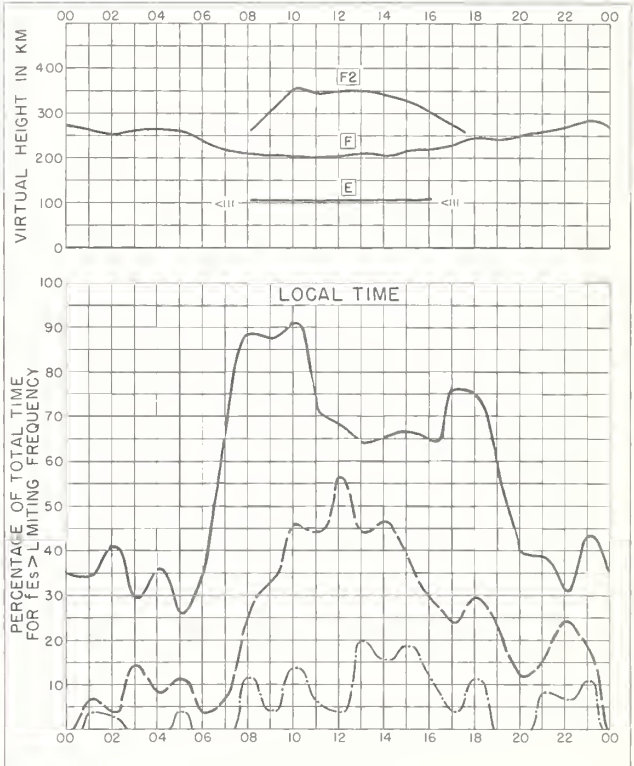



Fig. 44. FORMOSA, CHINA AUGUST 1960

NBS 490

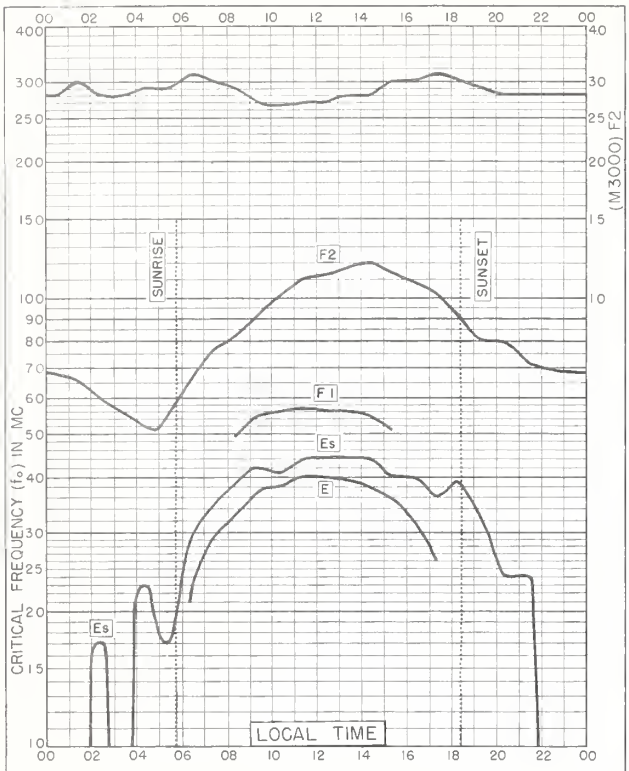



Fig. 45. EL CERILLO, MEXICO
19.3°N, 99.5°W AUGUST 1960

NBS 503

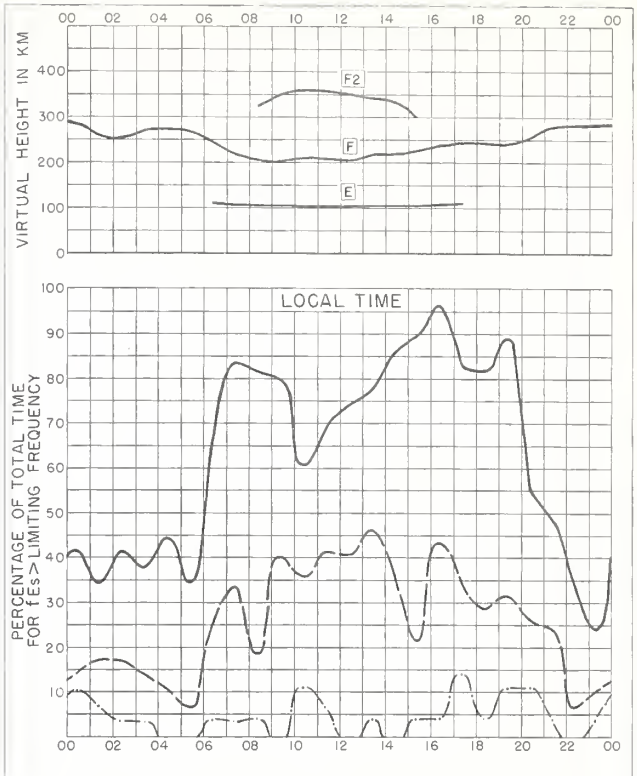



Fig. 46. EL CERILLO, MEXICO AUGUST 1960

NBS 490

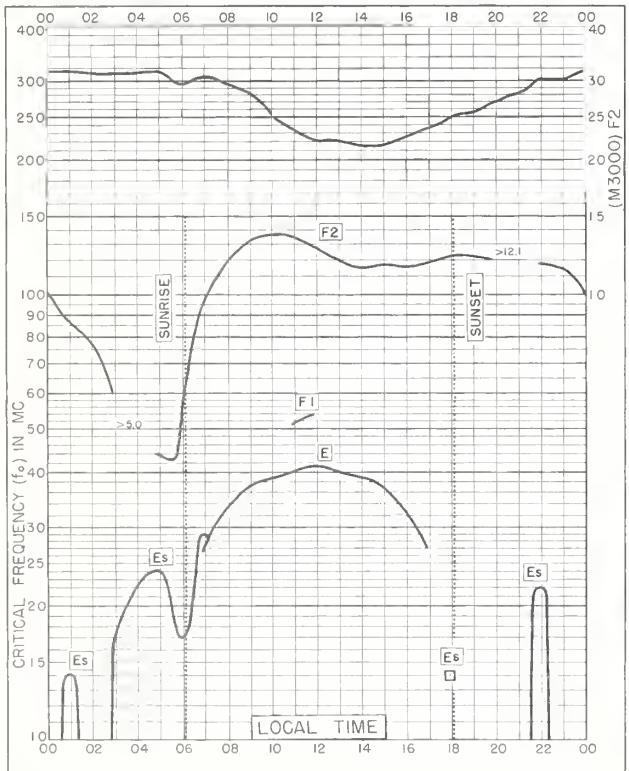



Fig. 47. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E AUGUST 1960

NBS 503

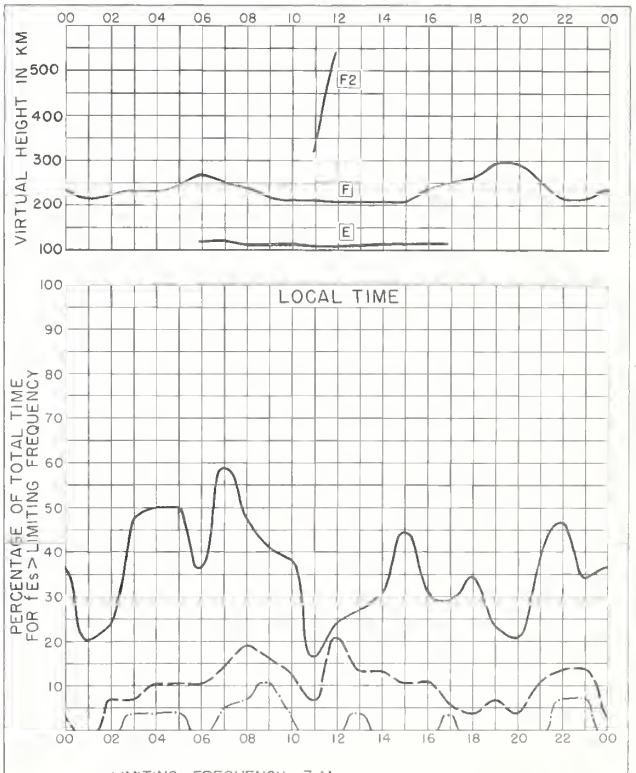



Fig. 48. SINGAPORE, BRITISH MALAYA AUGUST 1960

NBS 490

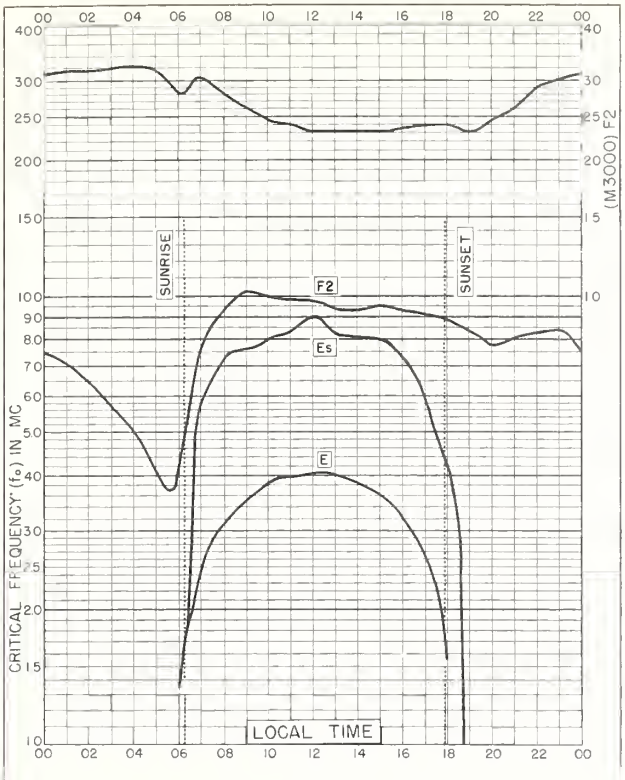



Fig. 49. HUANCAYO, PERU
12.0°S, 75.3°W AUGUST 1960

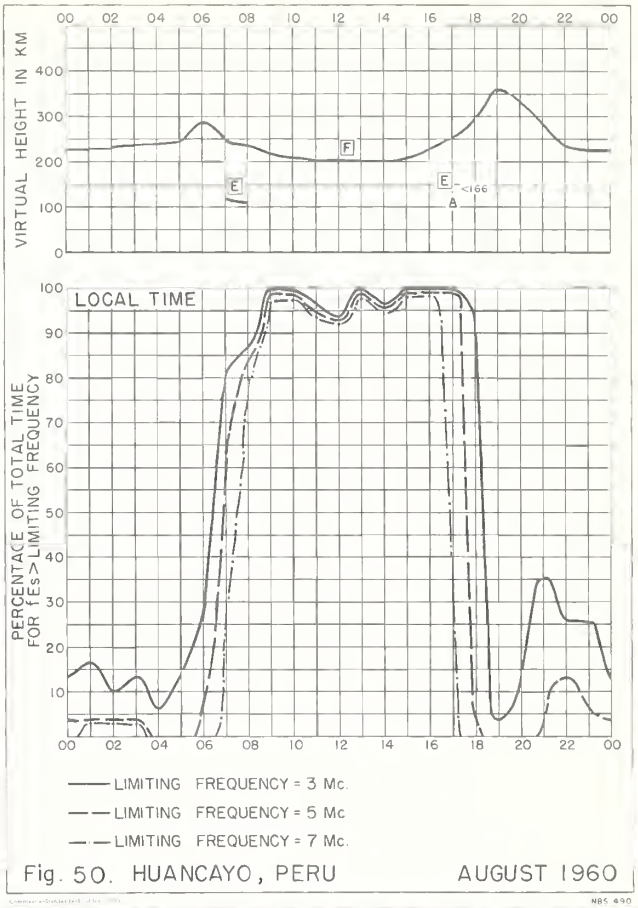



Fig. 50. HUANCAYO, PERU AUGUST 1960

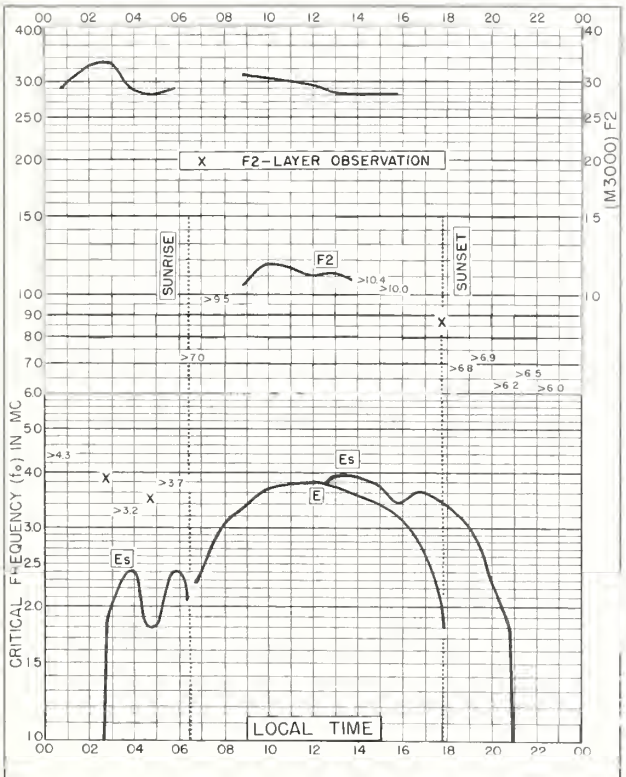



Fig. 51. TOWNSVILLE, AUSTRALIA
19.3°S, 146.7°E AUGUST 1960

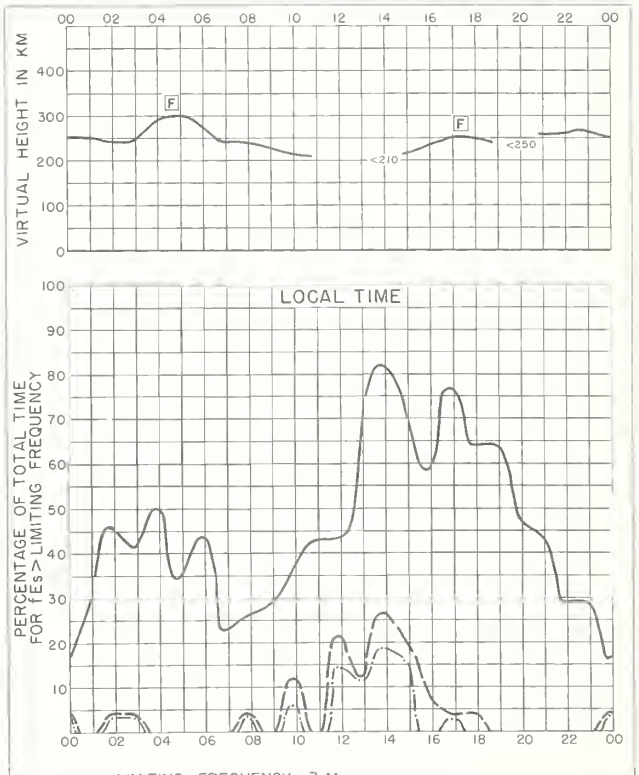



Fig. 52. TOWNSVILLE, AUSTRALIA AUGUST 1960

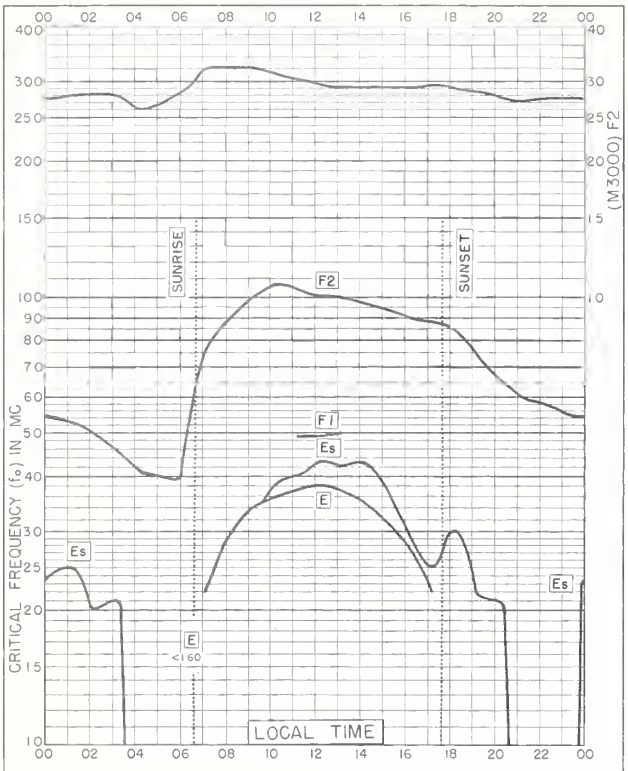



Fig. 53. BRISBANE, AUSTRALIA
27.5°S, 152.9°E AUGUST 1960

NBS 503

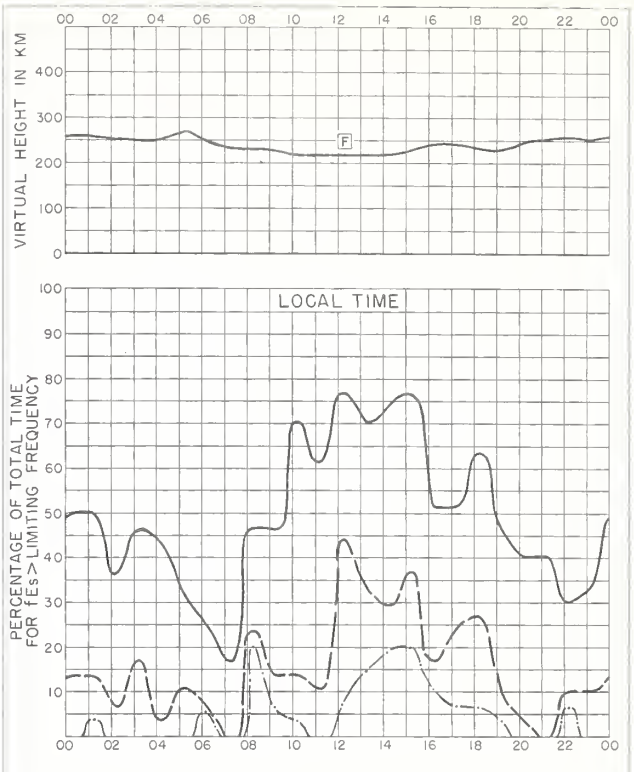



Fig. 54. BRISBANE, AUSTRALIA AUGUST 1960

NBS 490

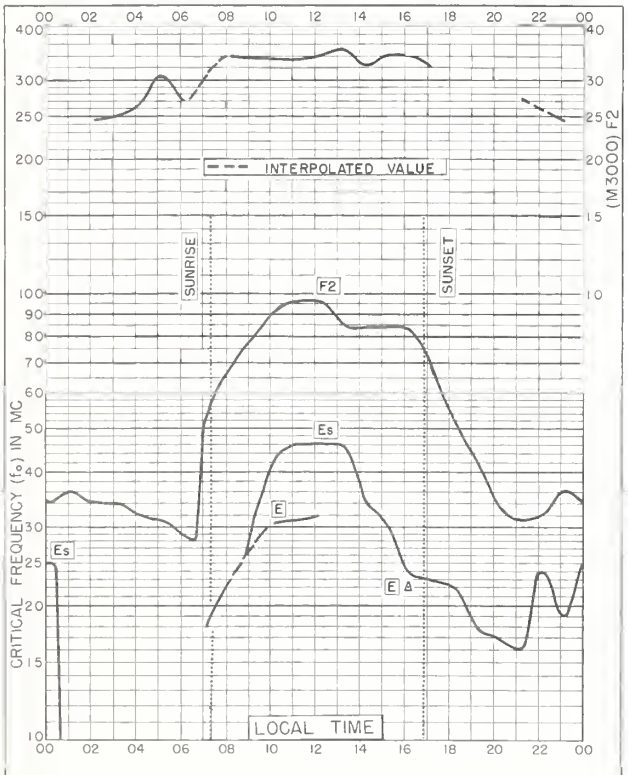



Fig. 55. FALKLAND IS.
51.7°S, 57.8°W AUGUST 1960

NBS 503

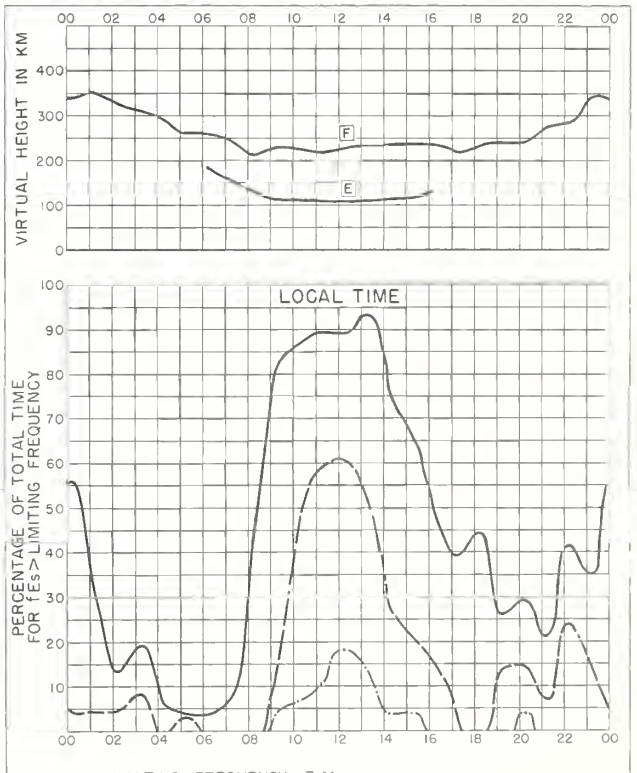



Fig. 56. FALKLAND IS. AUGUST 1960

NBS 490

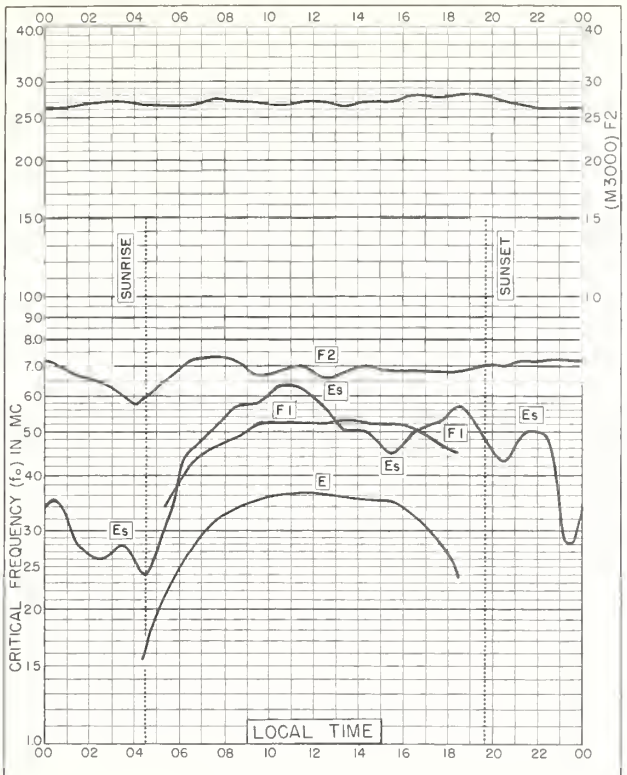



Fig. 57. WAKKANAI, JAPAN
45.4°N, 141.7°E JULY 1960

NBS 503

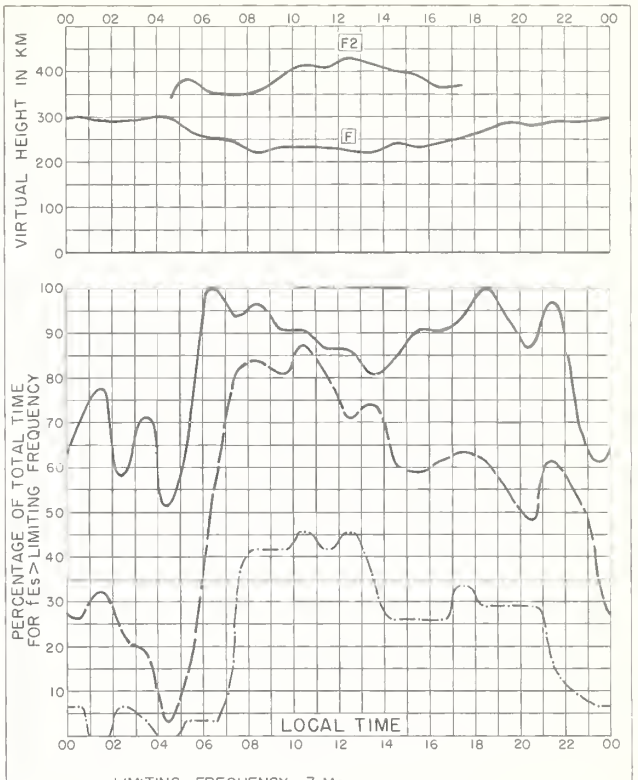



Fig. 58. WAKKANAI, JAPAN JULY 1960

NBS 490

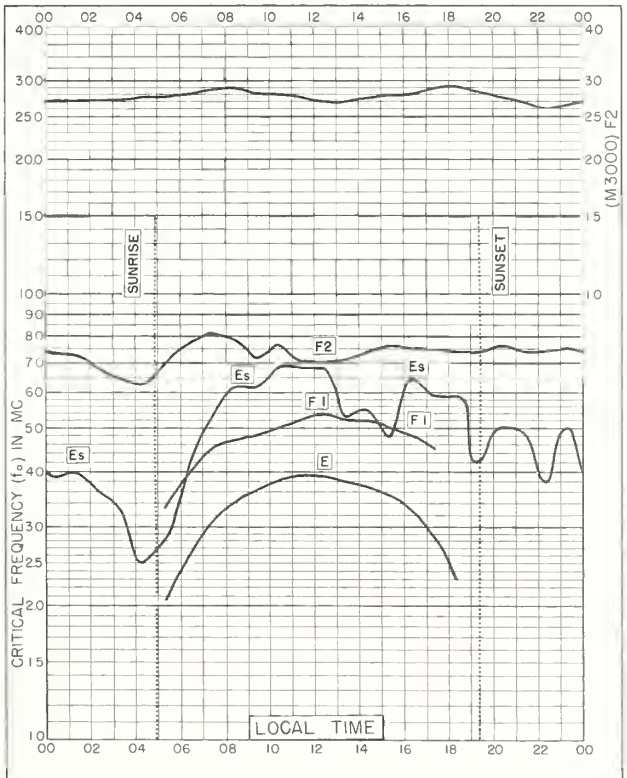



Fig. 59. AKITA, JAPAN
39.7°N, 140.1°E JULY 1960

NBS 503

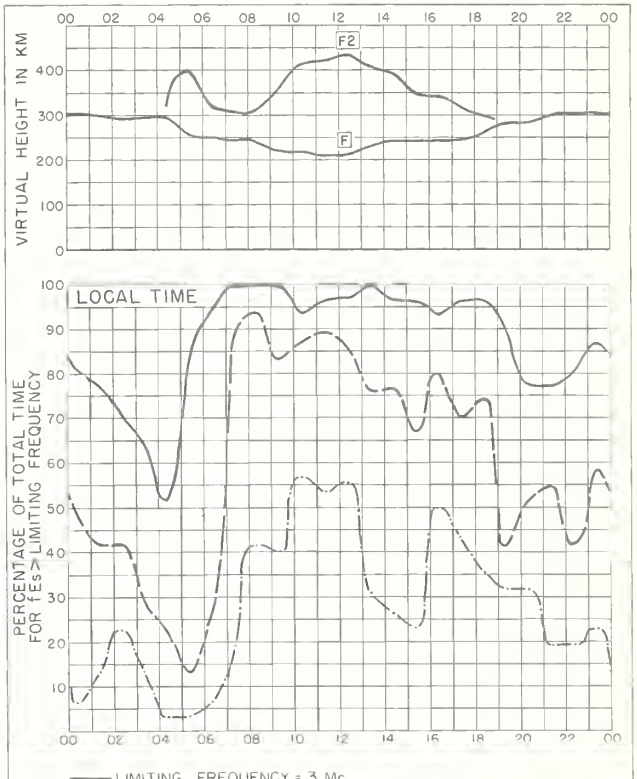



Fig. 60. AKITA, JAPAN JULY 1960

NBS 490

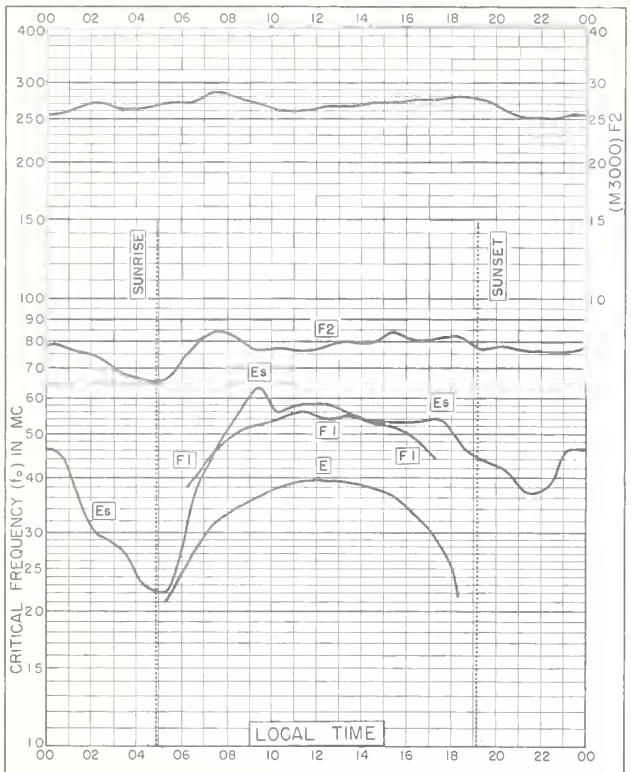



Fig. 61. TOKYO, JAPAN
35.7°N, 139.5°E JULY 1960

NBS 503

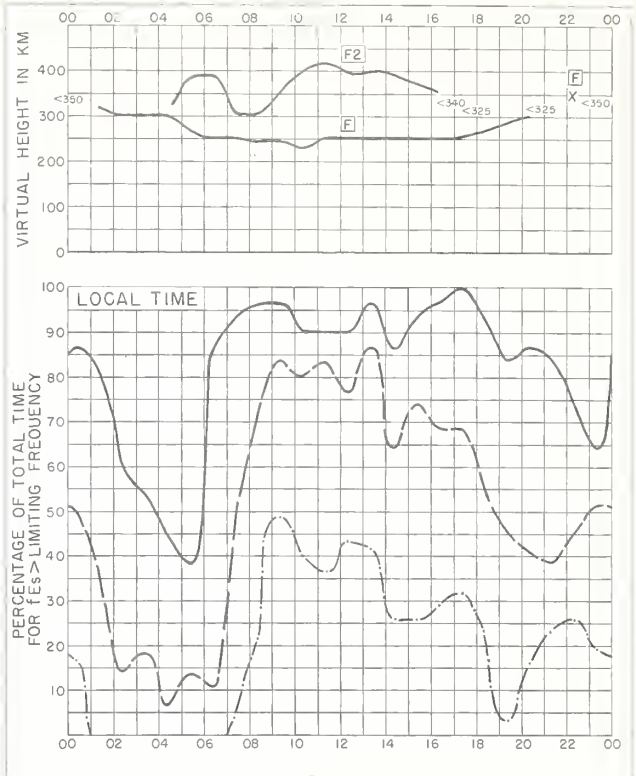



Fig. 62. TOKYO, JAPAN JULY 1960

NBS 490

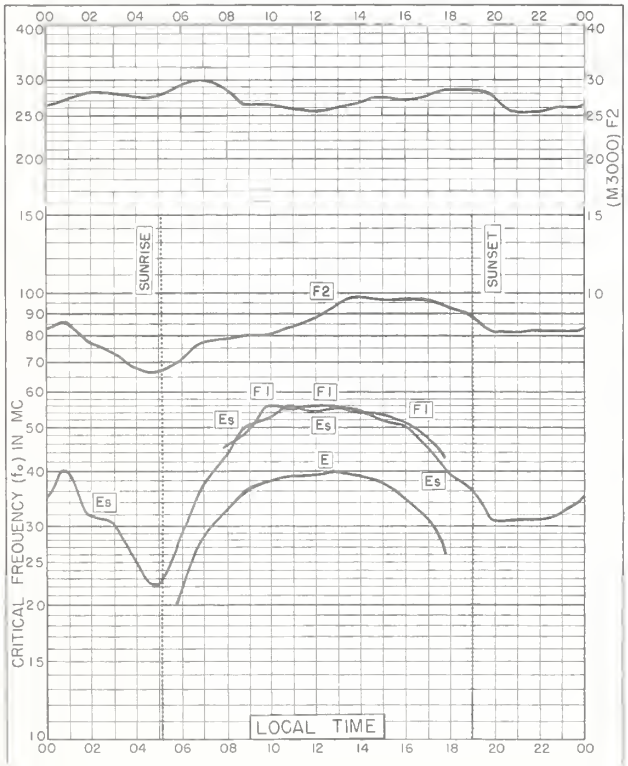



Fig. 63. YAMAGAWA, JAPAN
31.2°N, 130.6°E JULY 1960

NBS 503

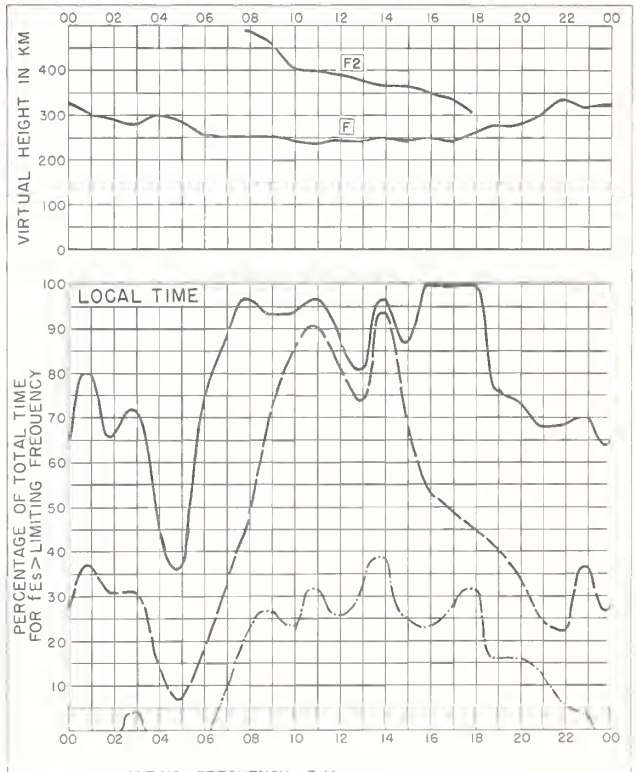



Fig. 64. YAMAGAWA, JAPAN JULY 1960

NBS 490

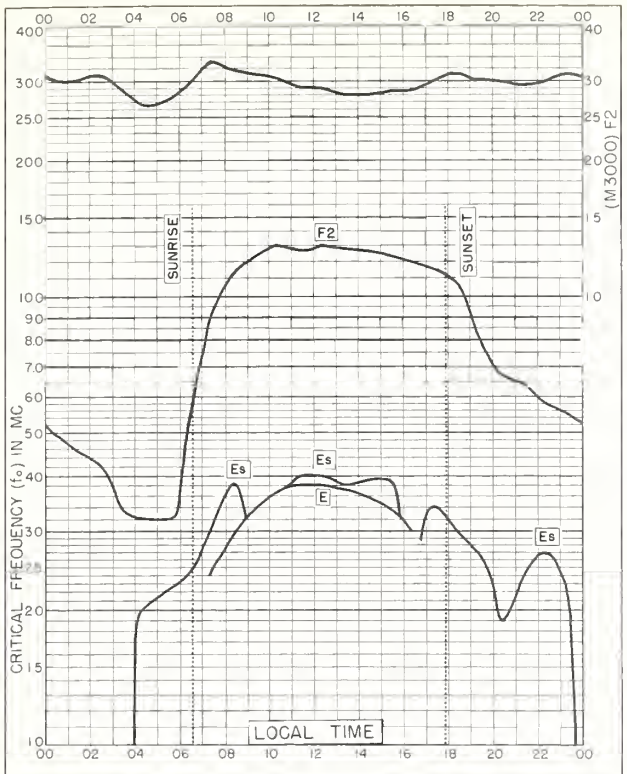



Fig. 65. EL CERILLO, MEXICO
19.3°N, 99.5°W FEBRUARY 1960

NBS 503

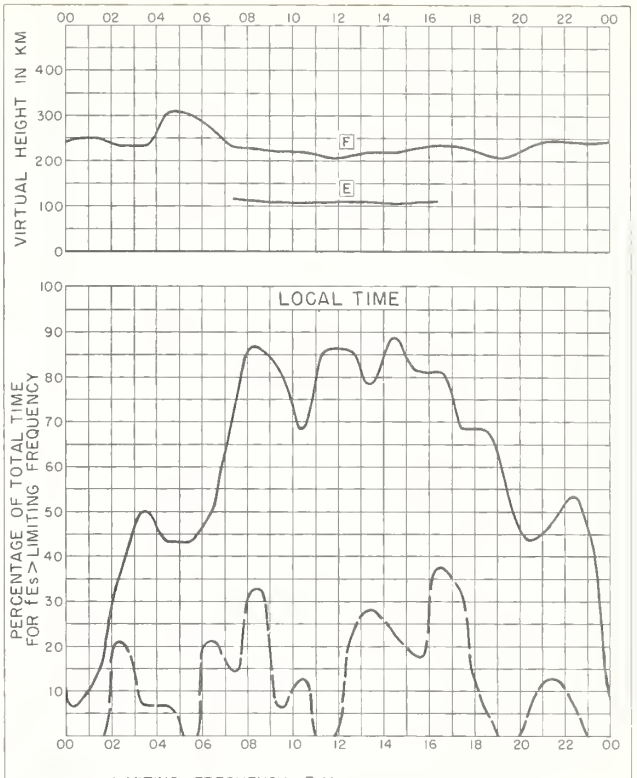



Fig. 66. EL CERILLO, MEXICO FEBRUARY 1960

NBS 490


Fig. 67. EL CERILLO, MEXICO
19.3°N, 99.5°W JANUARY 1960

NBS 503

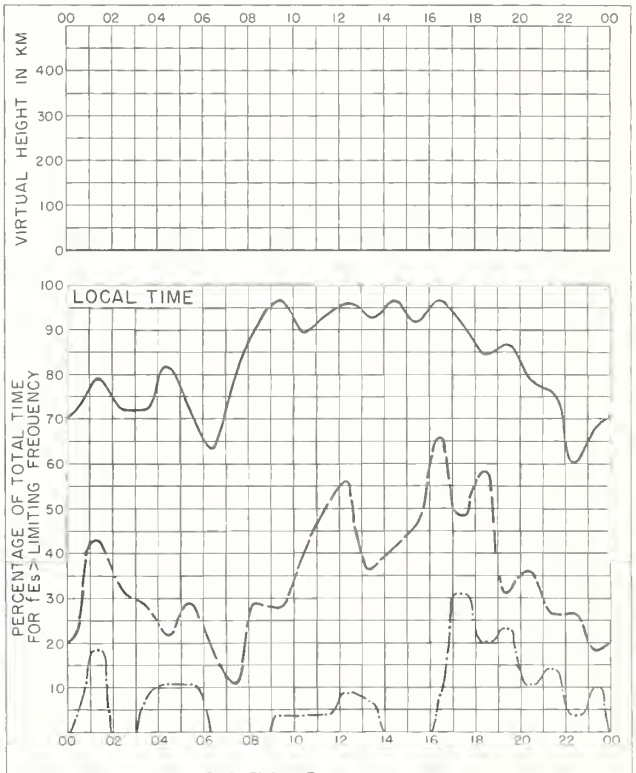



Fig. 68. EL CERILLO, MEXICO JANUARY 1960

NBS 490

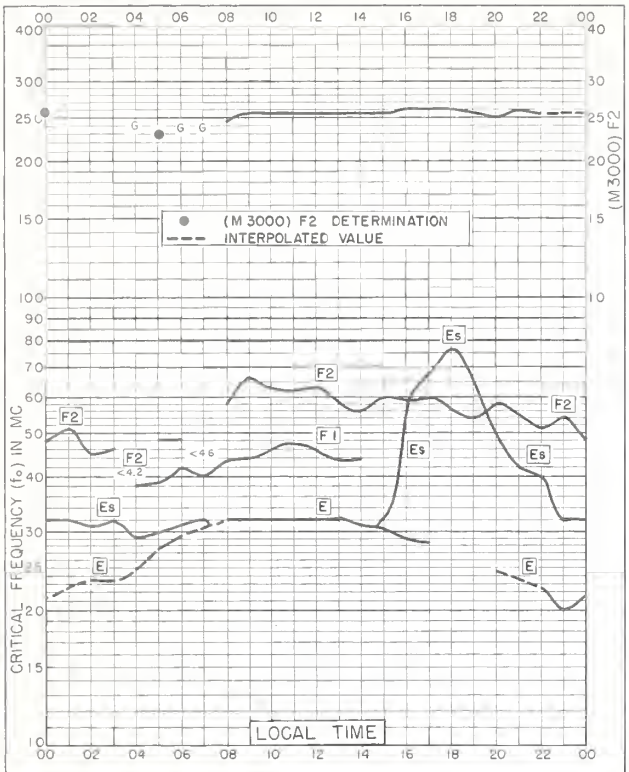



Fig. 69. SVALBARD, NORWAY
78.2°N, 15.7°E AUGUST 1959

NBS 503

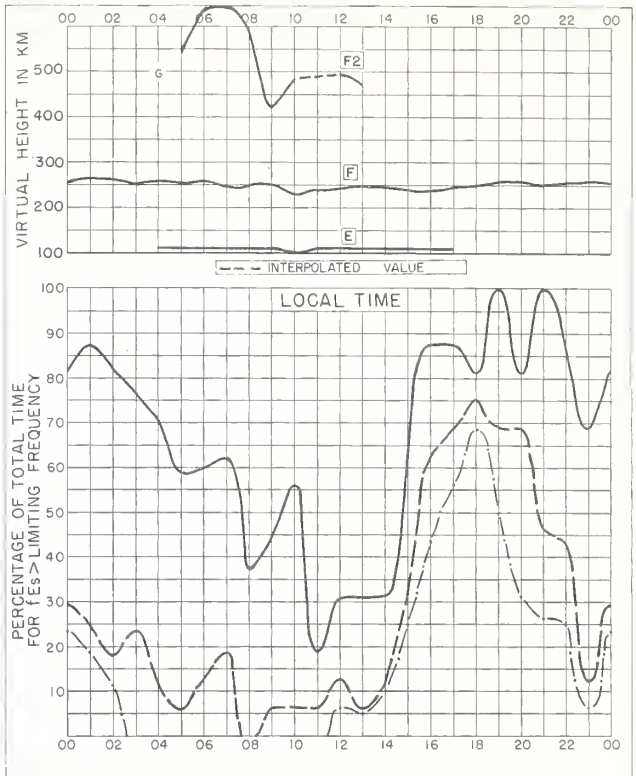



Fig. 70. SVALBARD, NORWAY AUGUST 1959

NBS 490

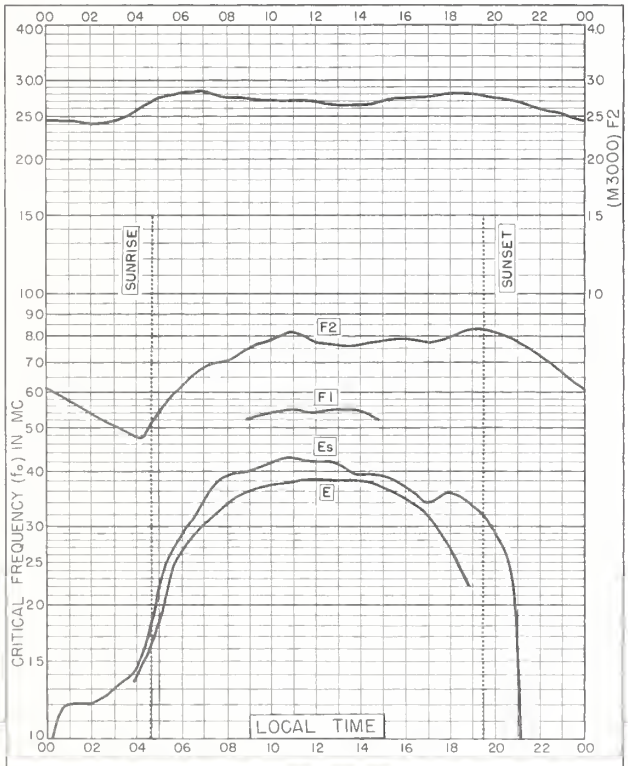



Fig. 71. JULIUSRUH/RÜGEN, GERMANY
54.6°N, 13.4°E AUGUST 1959

NBS 503

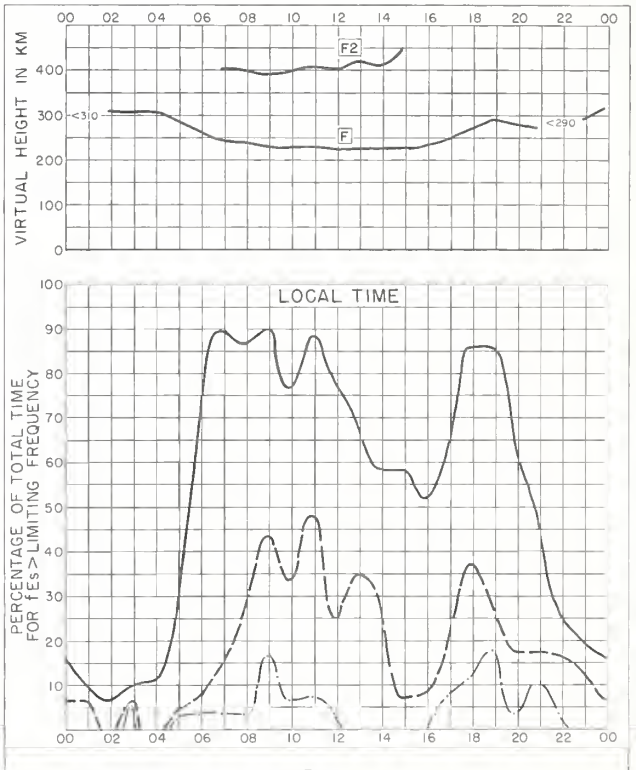



Fig. 72. JULIUSRUH/RÜGEN, GERMANY AUGUST 1959

NBS 490

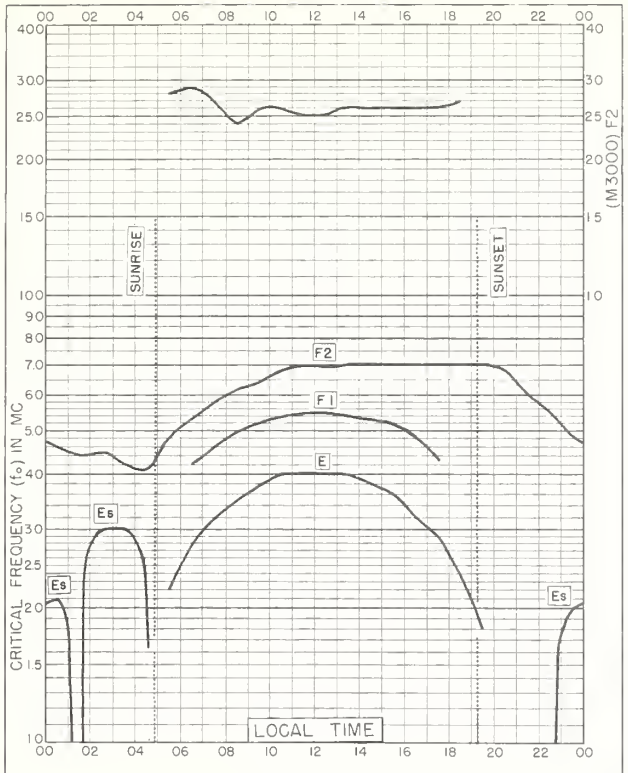



Fig. 73. WINNIPEG, CANADA
49.9°N, 97.4°W AUGUST 1959

NBS 503

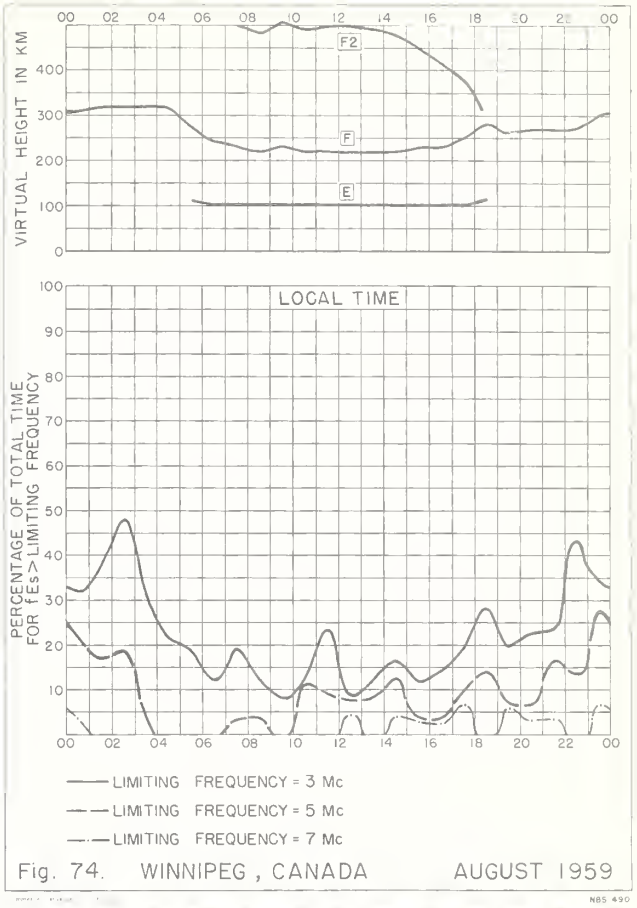



Fig. 74. WINNIPEG, CANADA AUGUST 1959

NBS 490

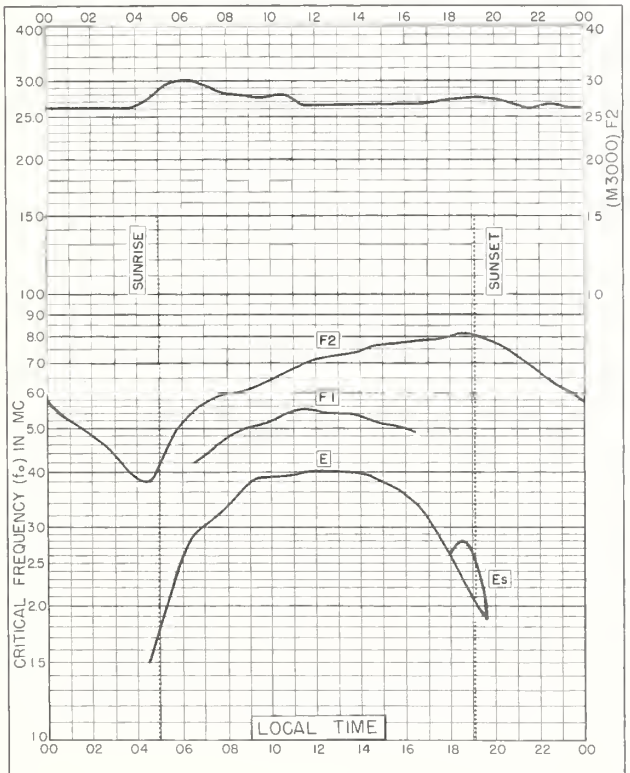



Fig. 75. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W AUGUST 1959

NBS 503

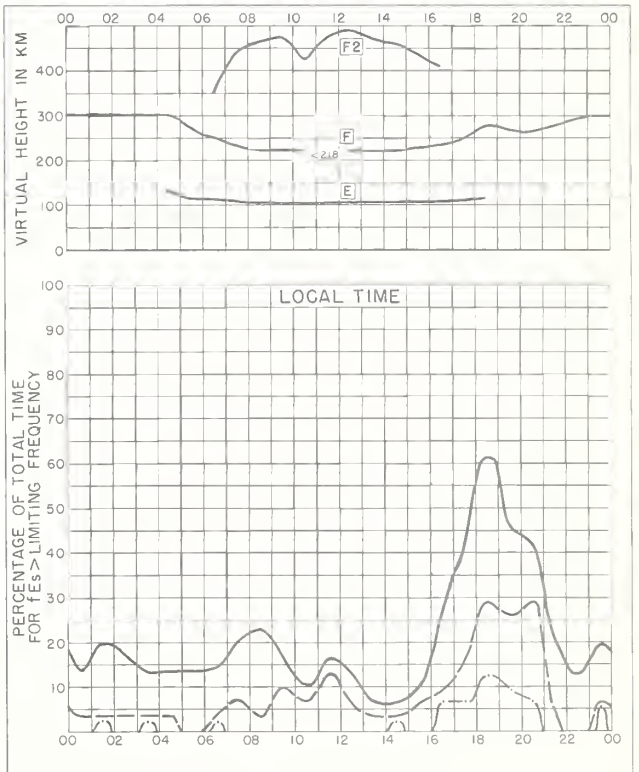



Fig. 76. ST. JOHN'S, NEWFOUNDLAND AUGUST 1959

NBS 490


Fig. 77. IBADAN, NIGERIA
7.4°N, 3.9°E AUGUST 1959

NBS 503

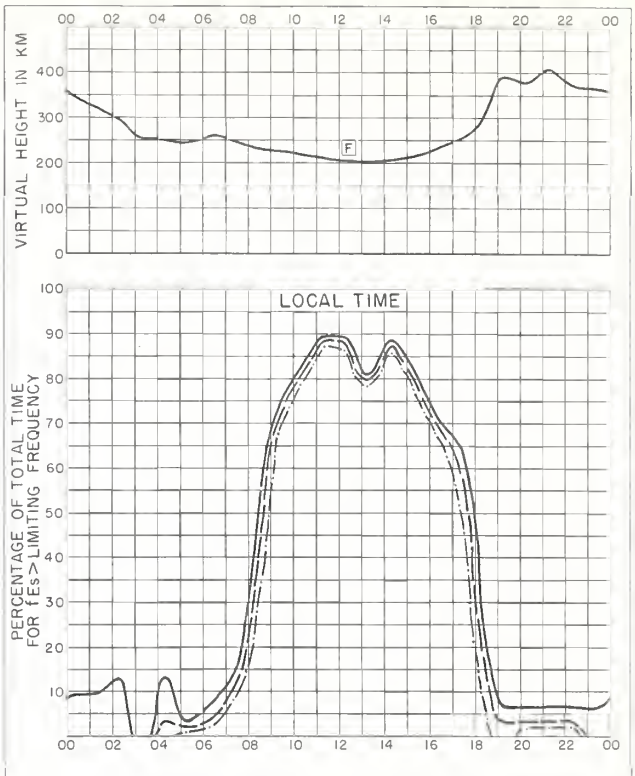



Fig. 78. IBADAN, NIGERIA AUGUST 1959

NBS 490

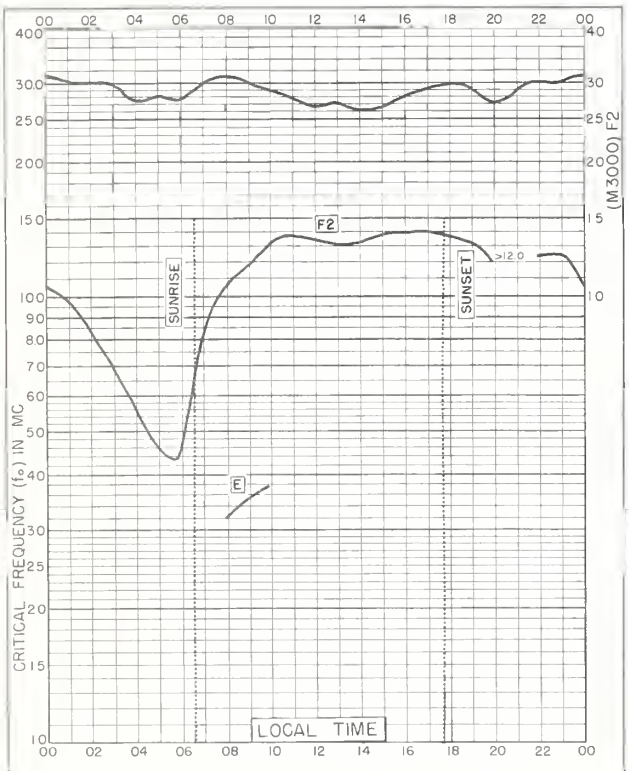



Fig. 79. SAO PAULO, BRAZIL
23.5°S, 46.5°W AUGUST 1959

NBS 503

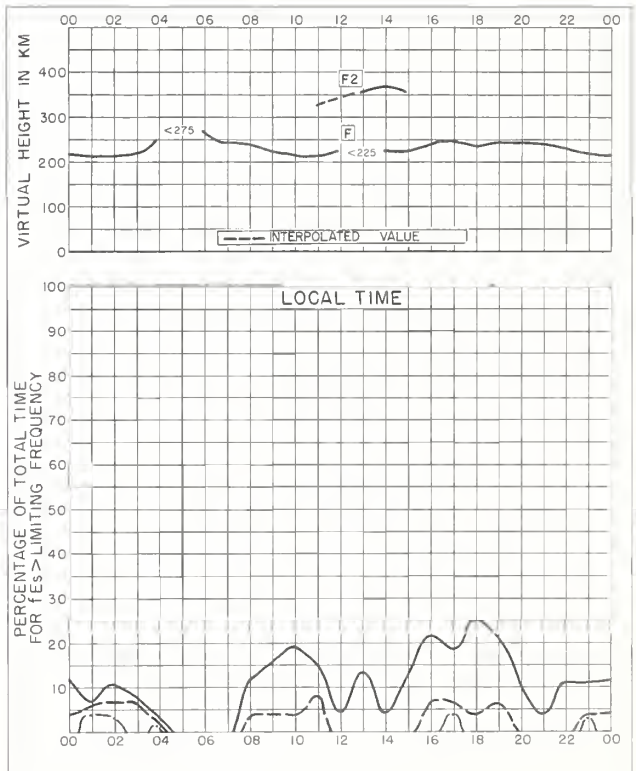



Fig. 80. SAO PAULO, BRAZIL AUGUST 1959

NBS 490

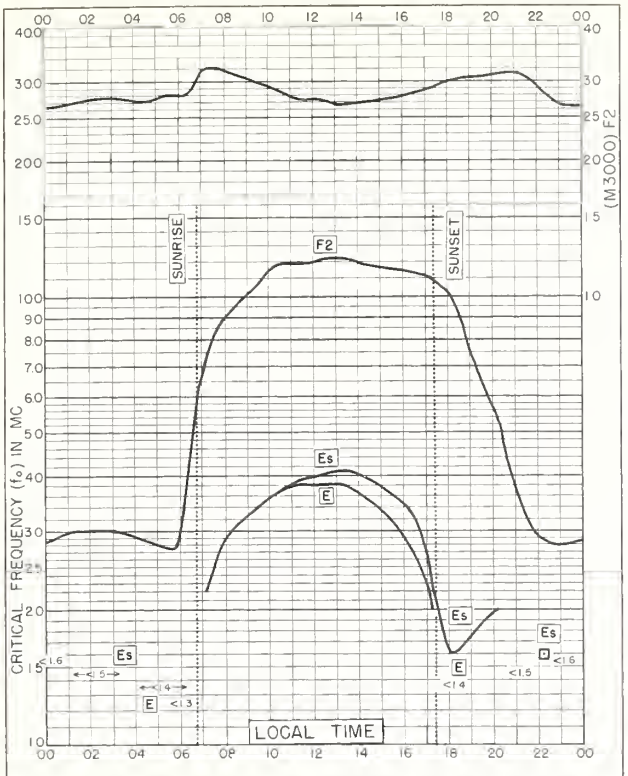
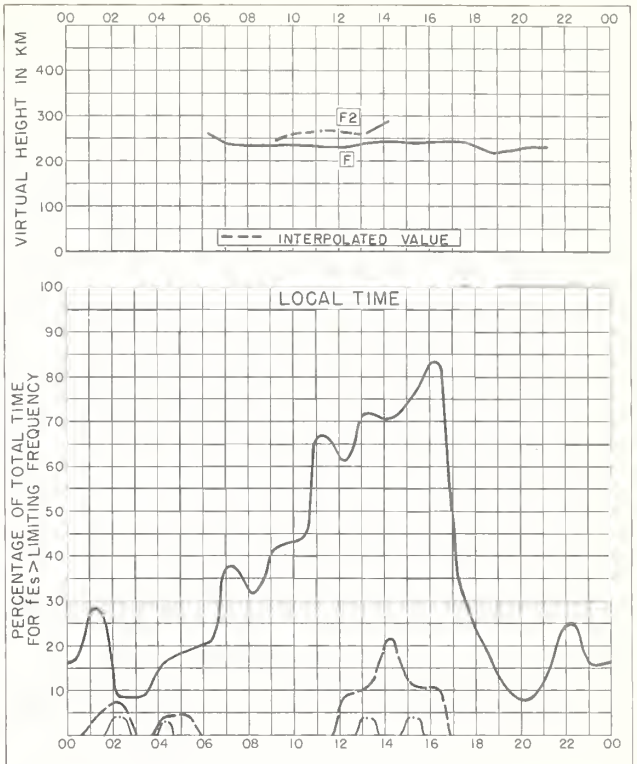



Fig. 81. CAPETOWN, UNION OF S. AFRICA
34.1°S, 18.3°E AUGUST 1959

NBS 503




AUGUST 1959

Fig. 82. CAPETOWN, UNION OF S. AFRICA

NBS 490

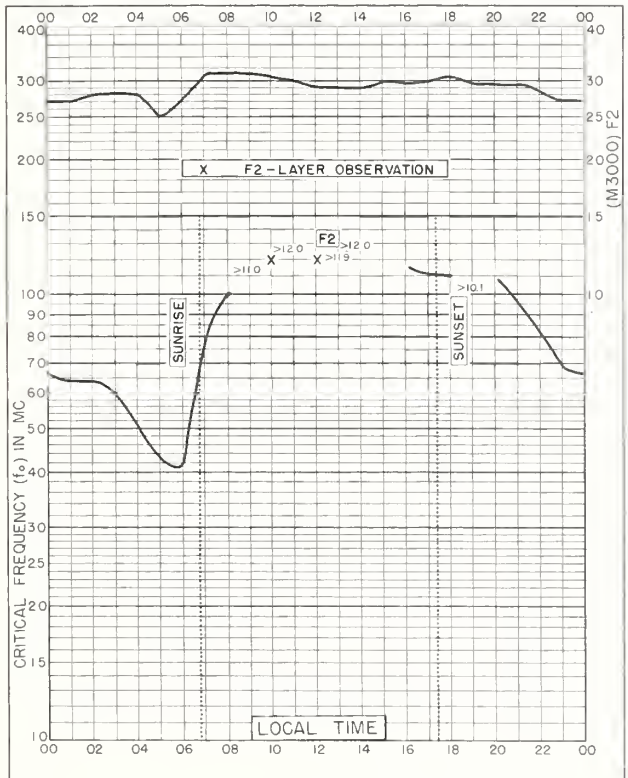
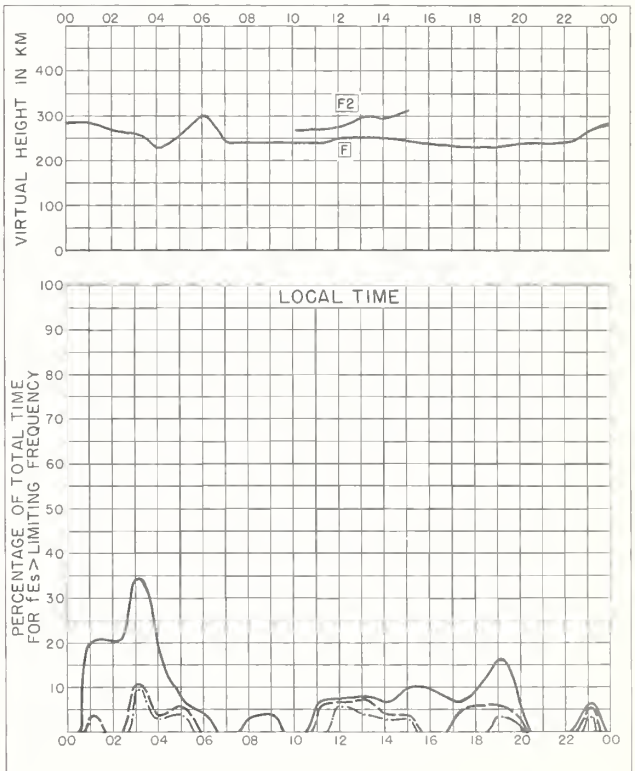



Fig. 83. BUENOS AIRES, ARGENTINA
34.5°S, 58.5°W AUGUST 1959

NBS 503




AUGUST 1959

Fig. 84. BUENOS AIRES, ARGENTINA

NBS 490

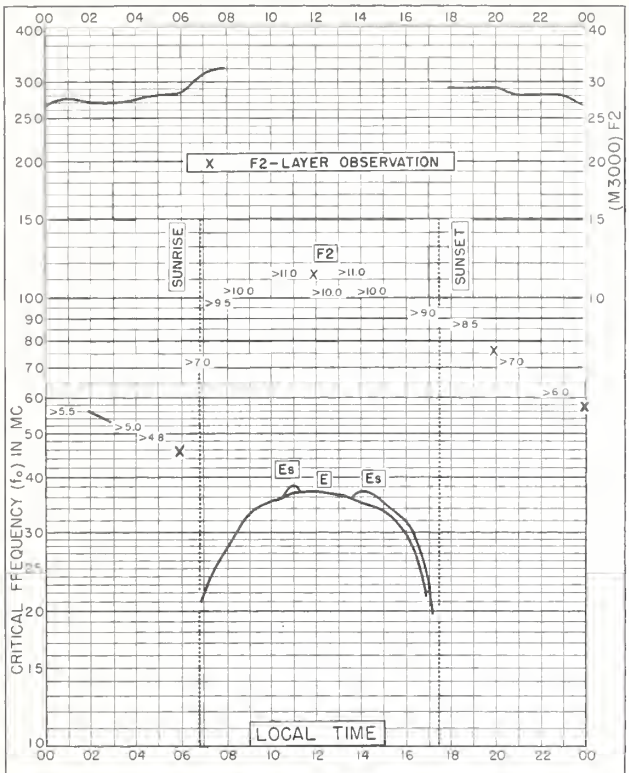



Fig. 85. CANBERRA, AUSTRALIA
35.3°S, 149.0°E AUGUST 1959

NBS 503

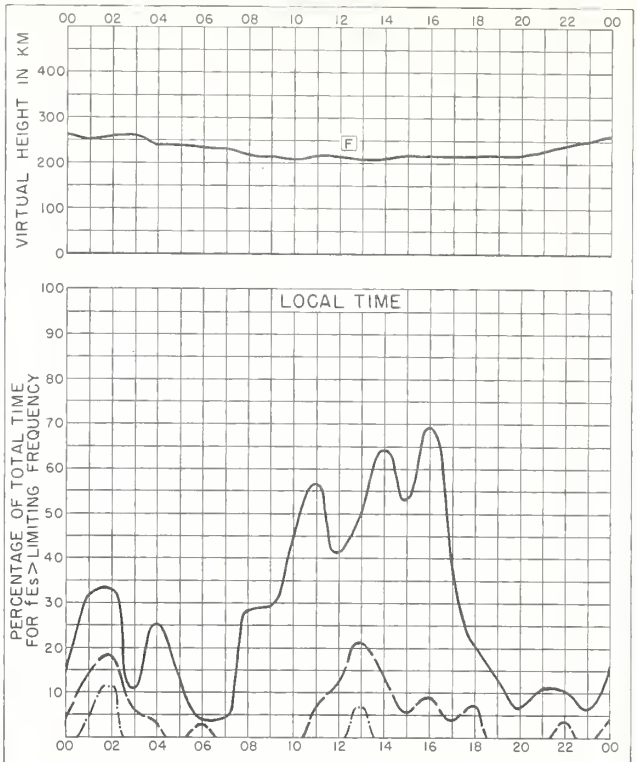



Fig. 86. CANBERRA, AUSTRALIA AUGUST 1959

NBS 490

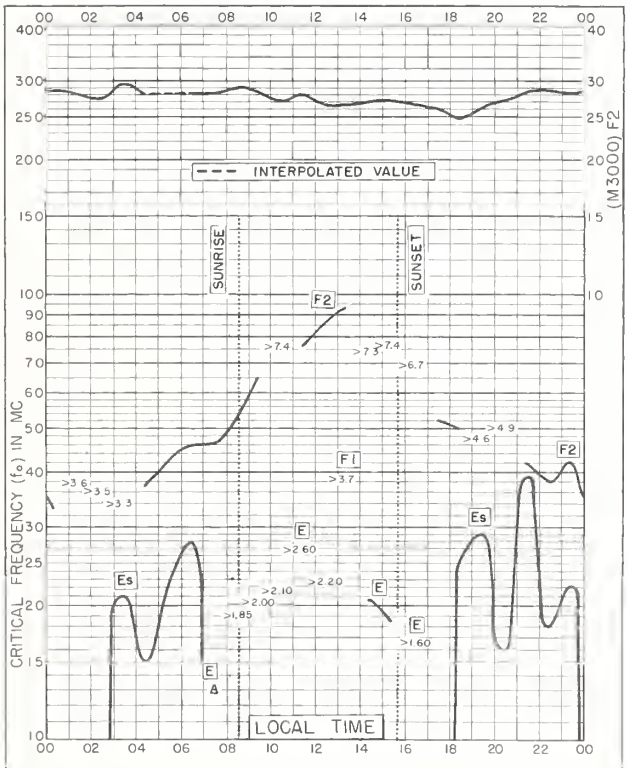



Fig. 87. WILKES STATION
66.9°S, 110.5°E AUGUST 1959

NBS 503

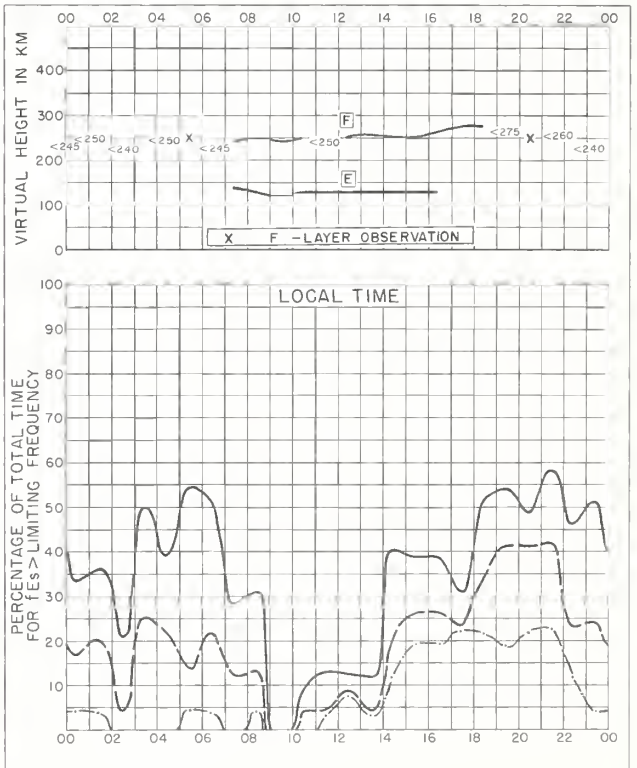



Fig. 88. WILKES STATION AUGUST 1959

NBS 490

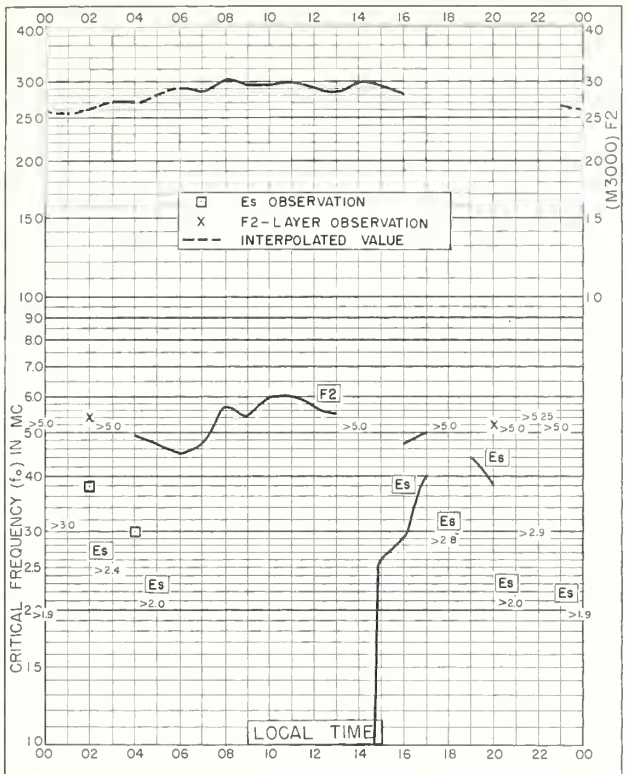



Fig. 89. BYRD STATION
80.0°S, 120.0°W AUGUST 1959

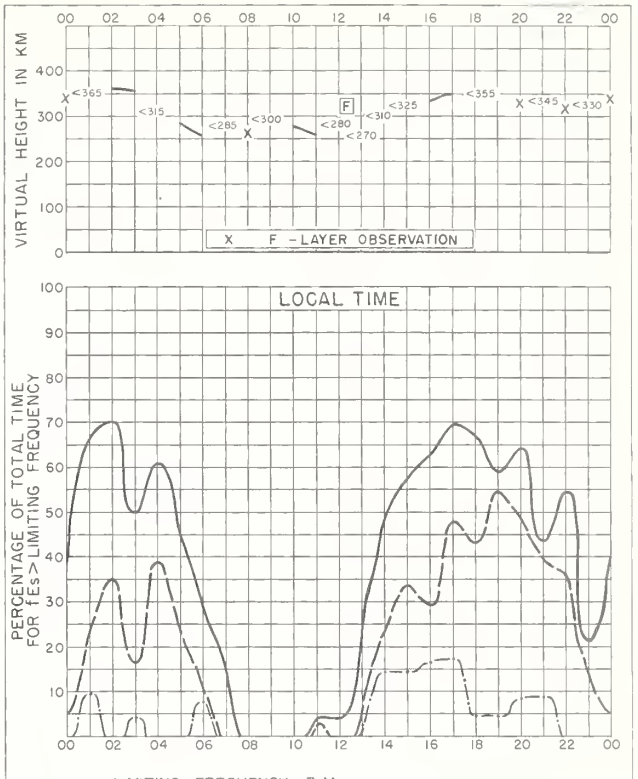



Fig. 90. BYRD STATION AUGUST 1959

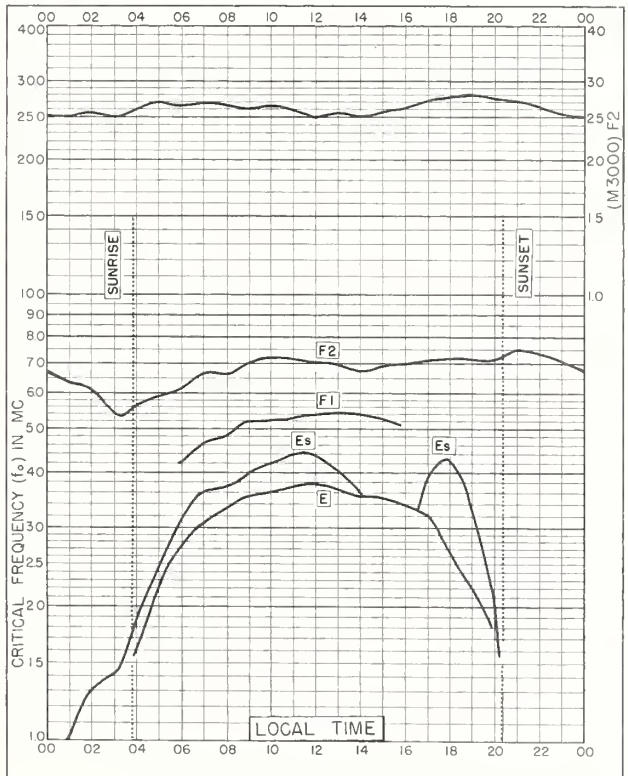



Fig. 91. JULIUSRUH/RÜGEN, GERMANY
54.6°N, 13.4°E JULY 1959

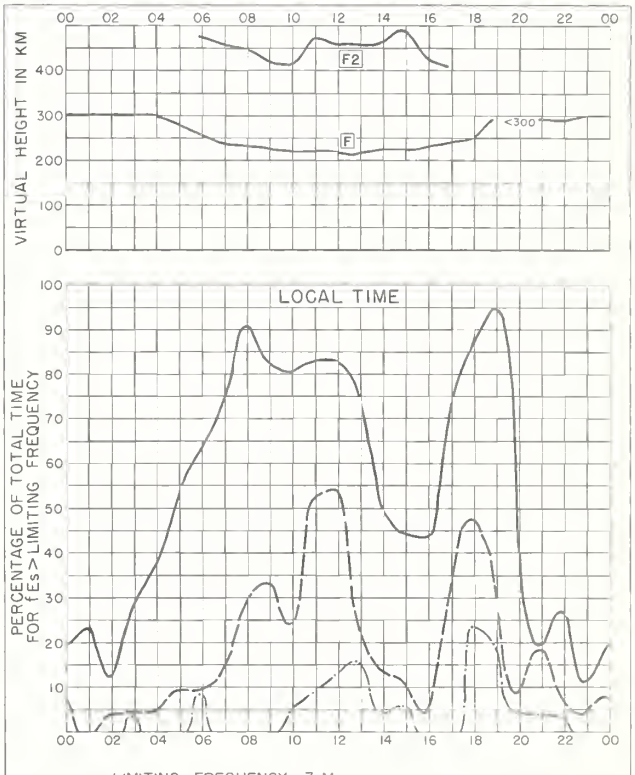



Fig. 92. JULIUSRUH/RÜGEN, GERMANY JULY 1959

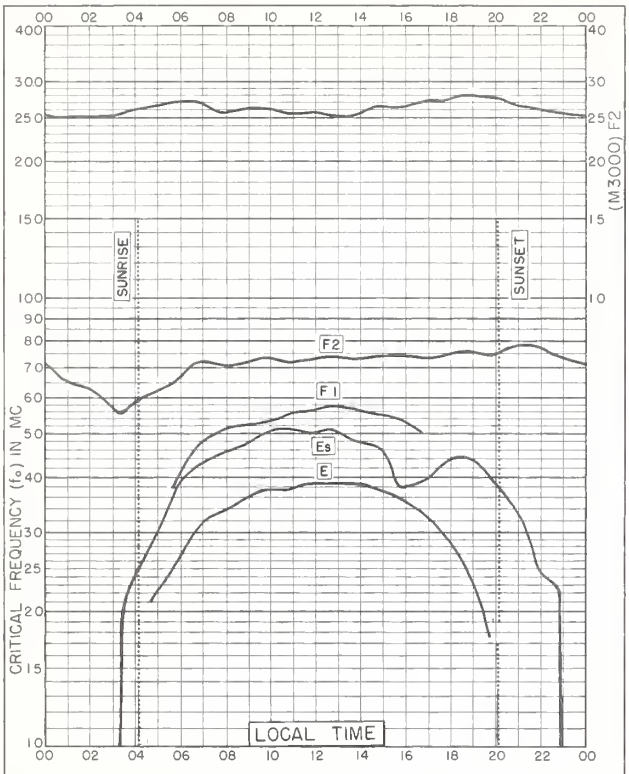



Fig. 93. LINDAU/HARZ, GERMANY
51.6°N, 10.1°E JULY 1959

NBS 503

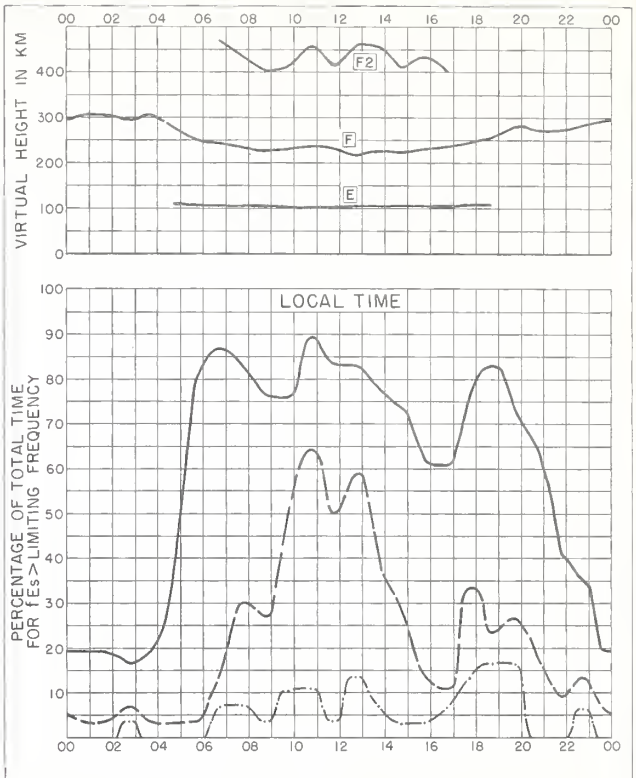



Fig. 94. LINDAU/HARZ, GERMANY JULY 1959

NBS 490

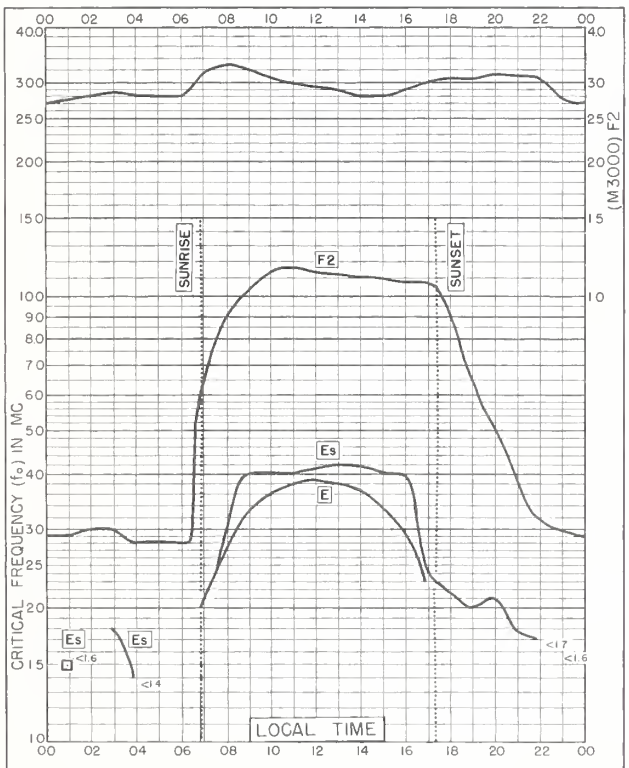
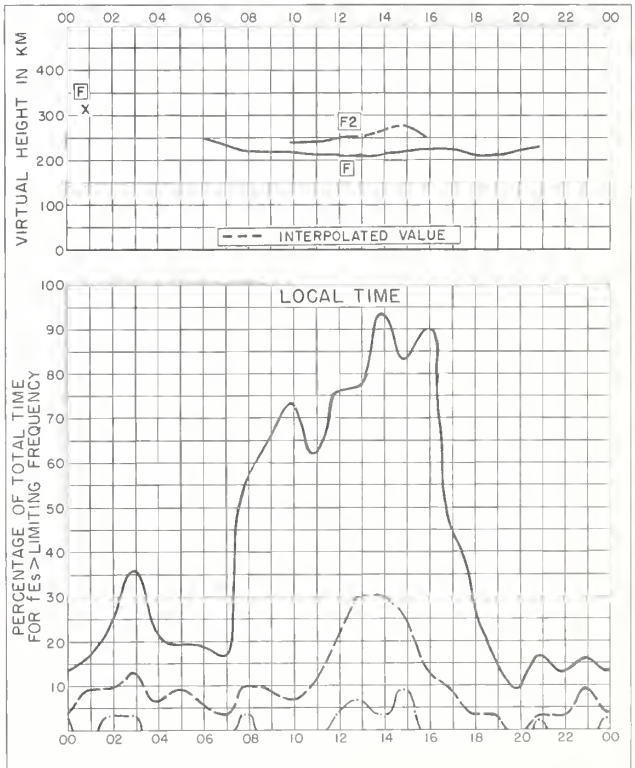



Fig. 95. JOHANNESBURG, UNION OF S. AFRICA
26.1°S, 28.1°E JULY 1959

NBS 503




JULY 1959

Fig. 96. JOHANNESBURG, UNION OF S. AFRICA

NBS 490

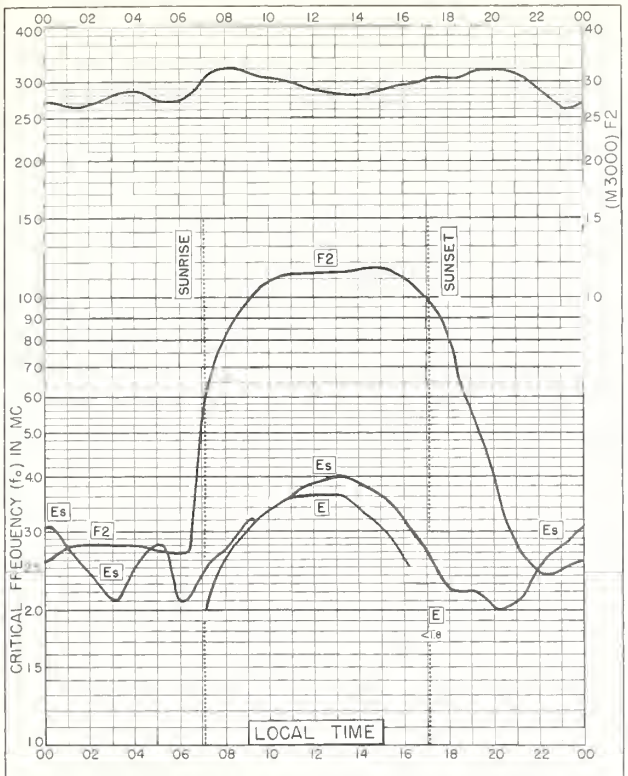
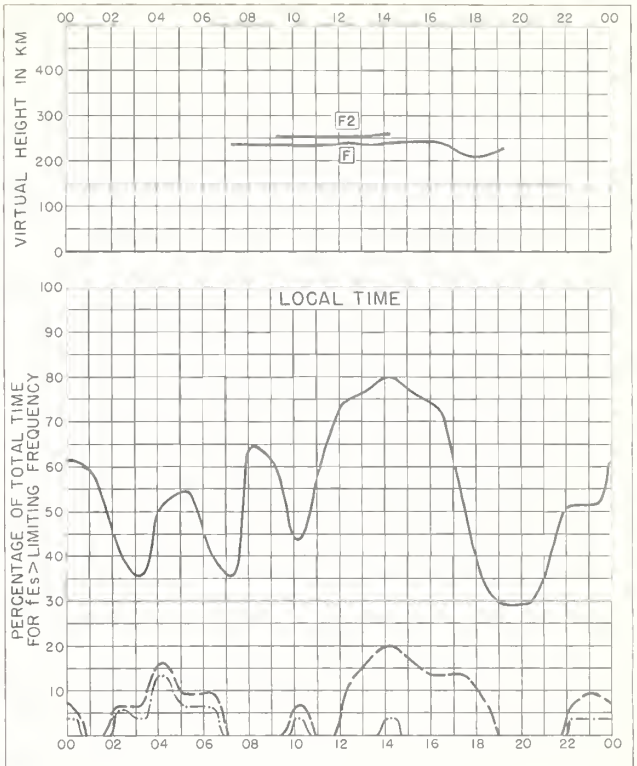



Fig. 97. CAPETOWN, UNION OF S. AFRICA
34.1°S, 18.3°E JULY 1959

NBS 503




JULY 1959

Fig. 98. CAPETOWN, UNION OF S. AFRICA

NBS 490

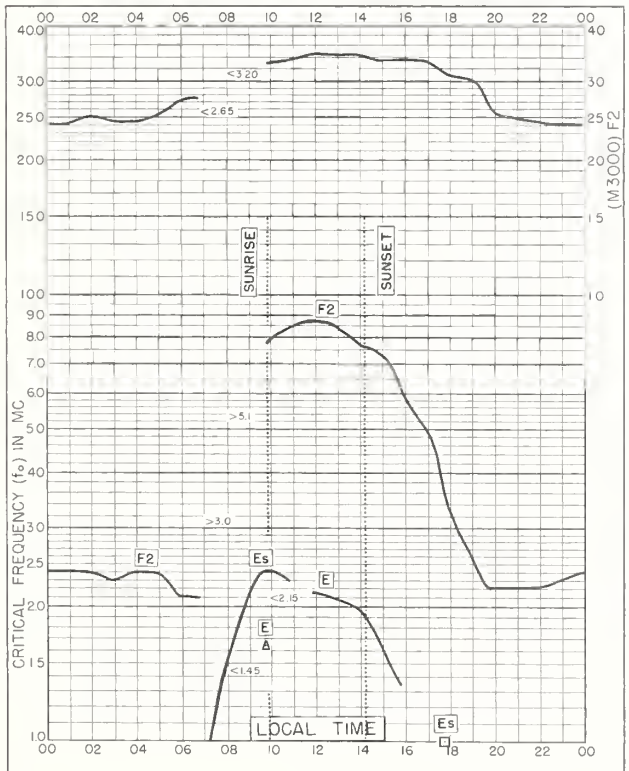



Fig. 99. PORT LOCKROY
64.8°S, 63.5°W JULY 1959

NBS 503

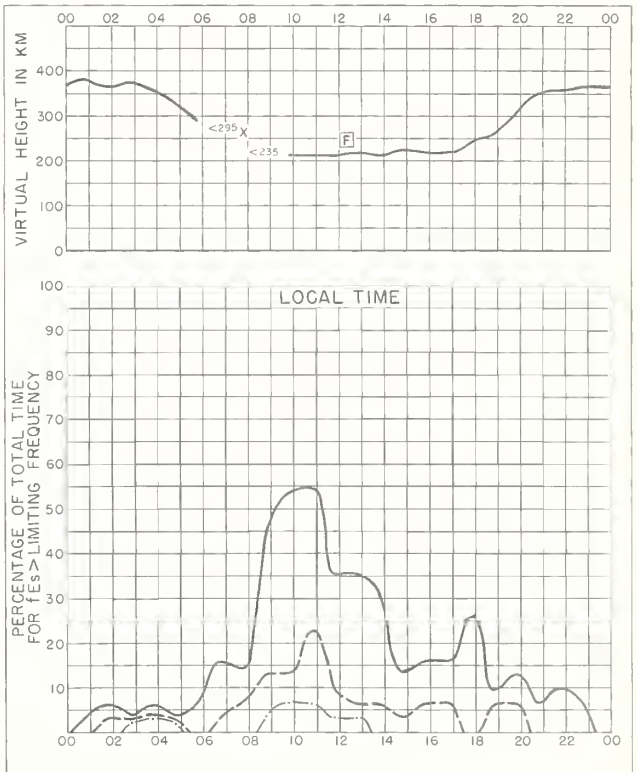



Fig. 100. PORT LOCKROY JULY 1959

NBS 490

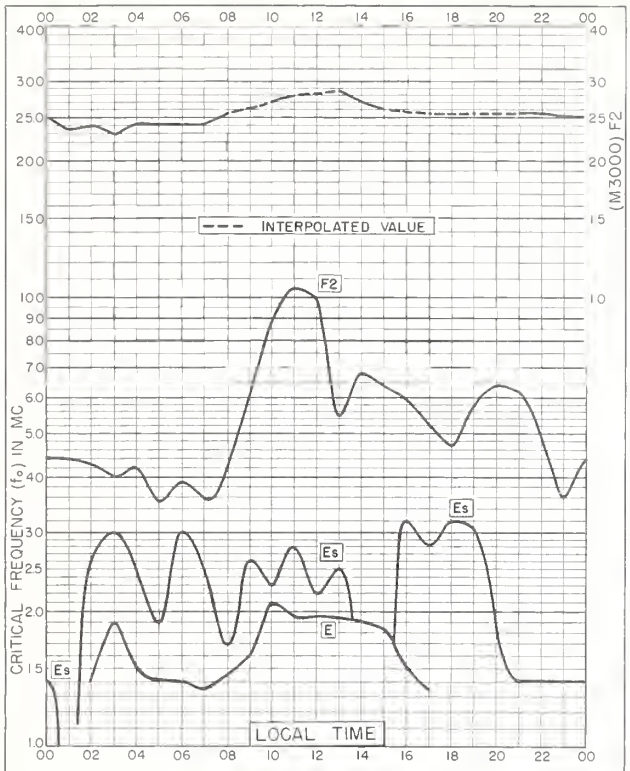



Fig. 101. SVALBARD, NORWAY
78.2°N, 15.7°E FEBRUARY 1959

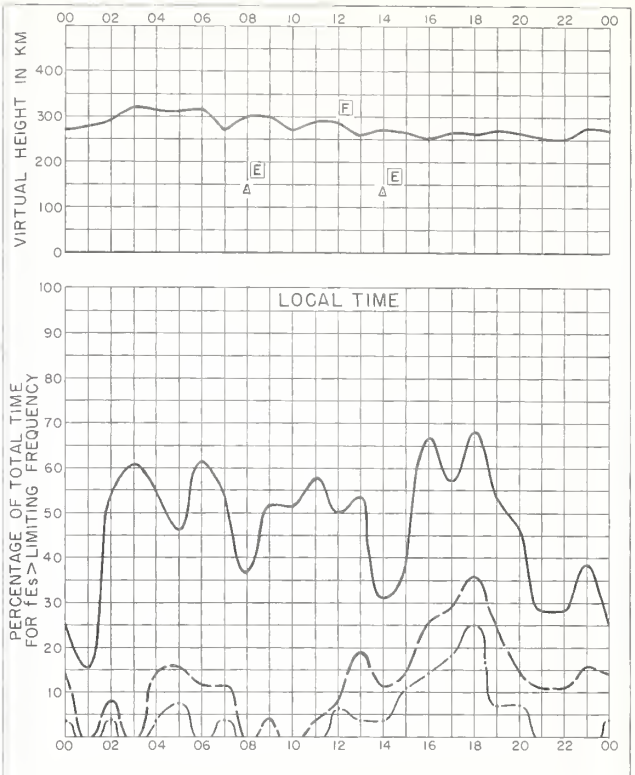



Fig. 102. SVALBARD, NORWAY FEBRUARY 1959

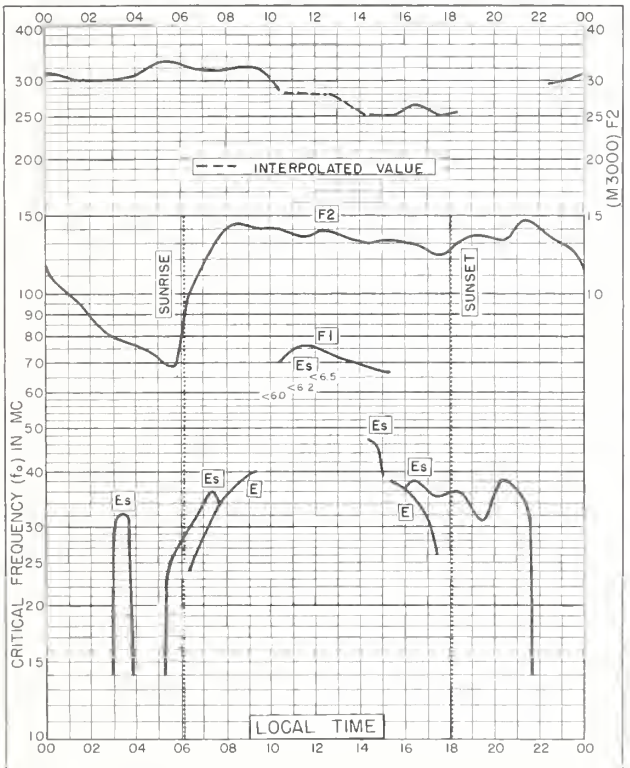
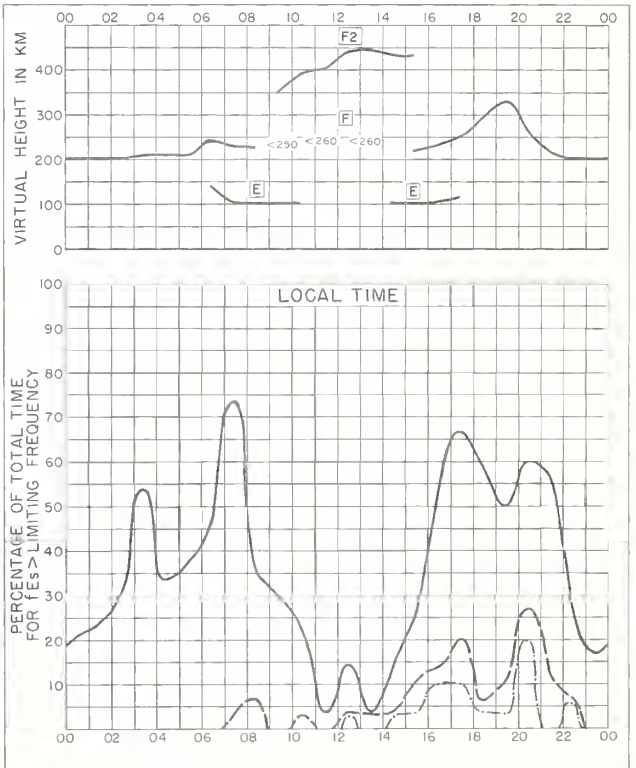



Fig. 103. HOLLANDIA, NETHERLANDS NEW GUINEA
2.5°S, 140.8°E AUGUST 1958




AUGUST 1958

Fig. 104. HOLLANDIA, NETHERLANDS NEW GUINEA

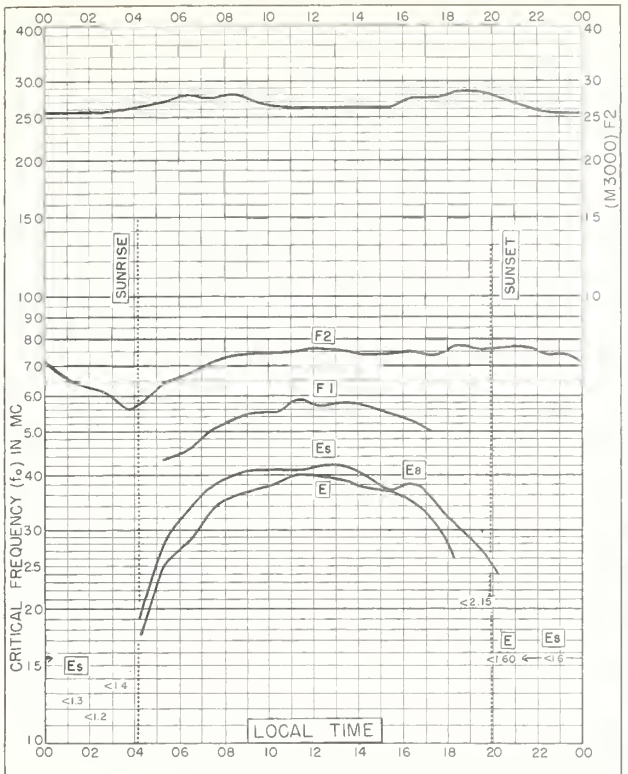



Fig. 105. DOURBES, BELGIUM
50.1°N, 4.6°E JULY 1958

NBS 503

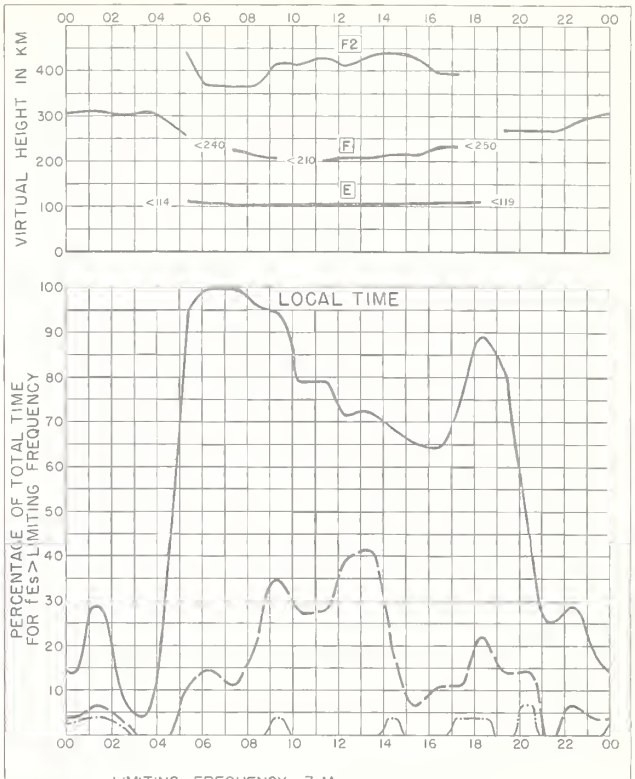



Fig. 106. DOURBES, BELGIUM JULY 1958

NBS 490

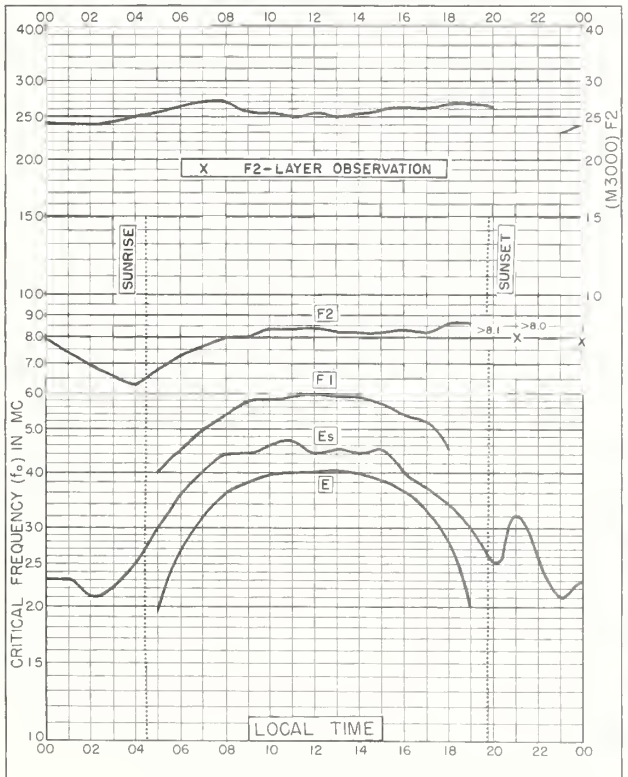



Fig. 107. POITIERS, FRANCE
46.6°N, 0.3°E JULY 1958

NBS 503

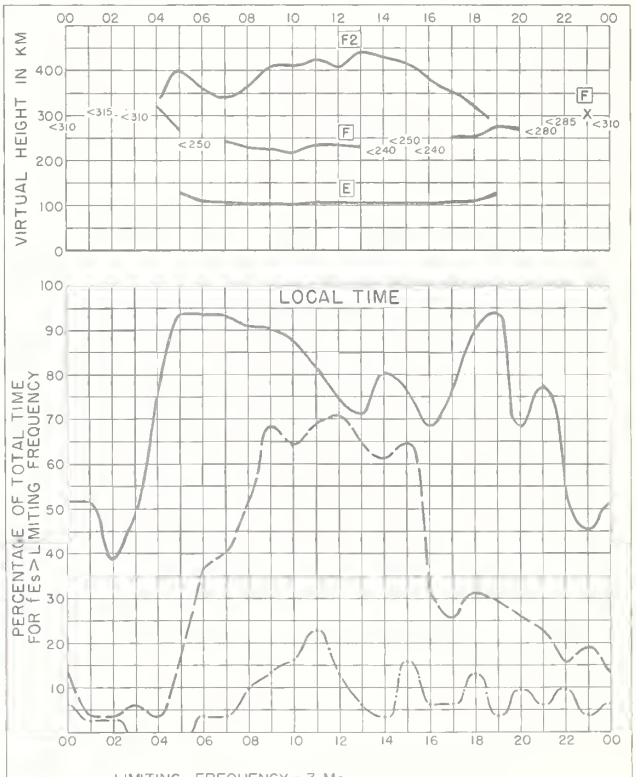



Fig. 108. POITIERS, FRANCE JULY 1958

NBS 490

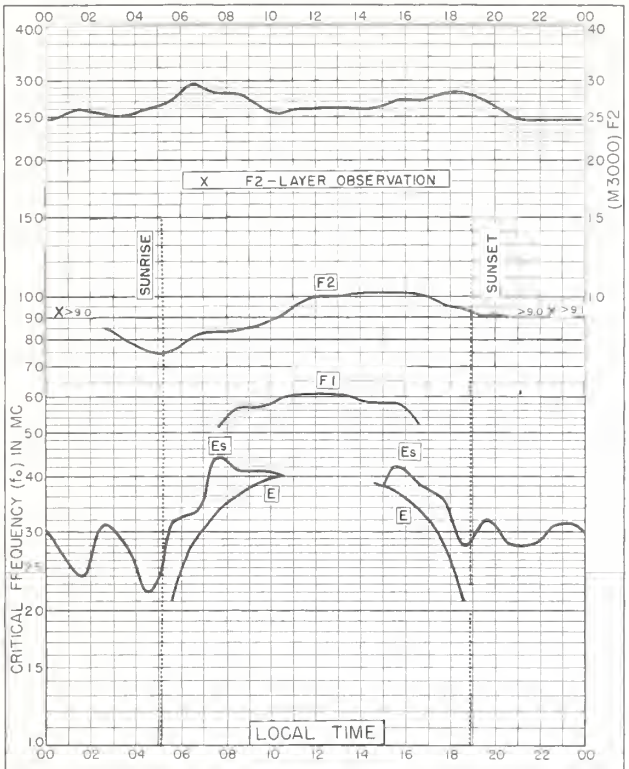



Fig. 109. RABAT, MOROCCO
30.9°N, 6.8°W JULY 1958

NBS 503

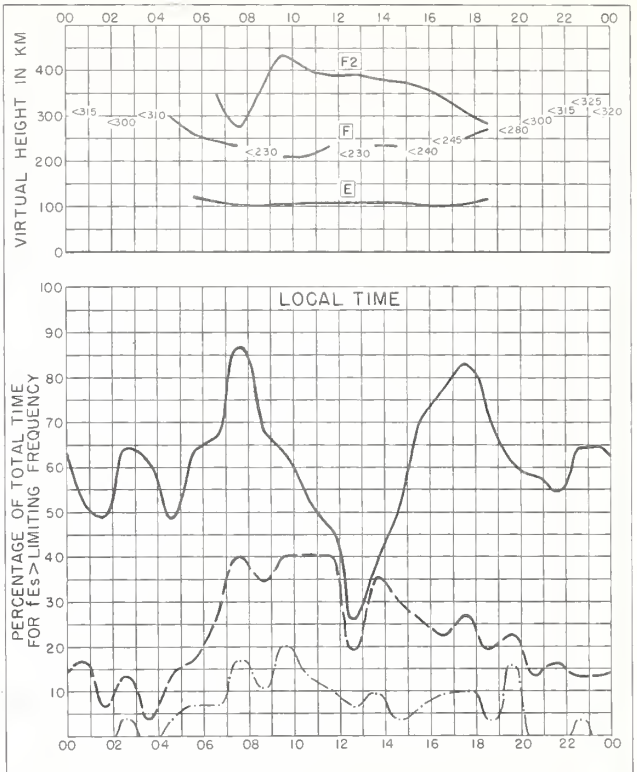



Fig. 110. RABAT, MOROCCO JULY 1958

NBS 490

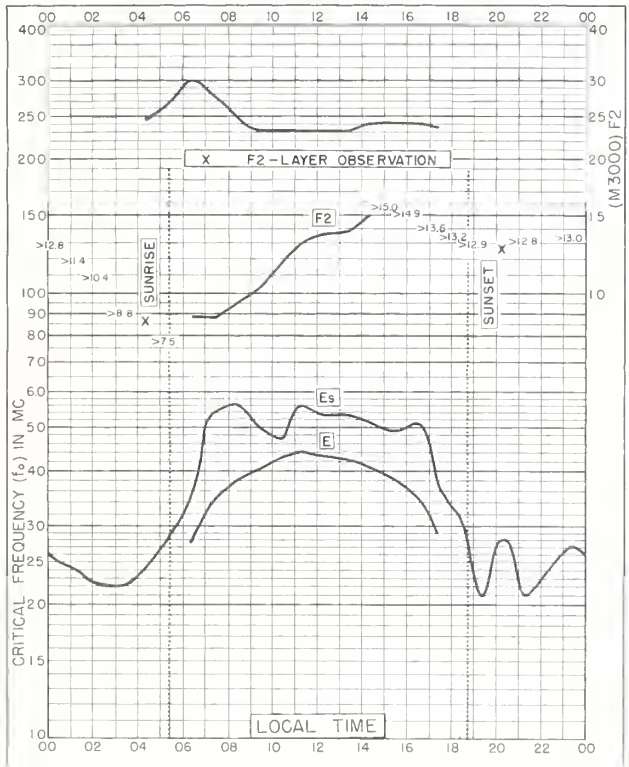



Fig. 111. TAMANRASSET, FRENCH W. AFRICA
22.8°N, 5.5°E JULY 1958

NBS 503

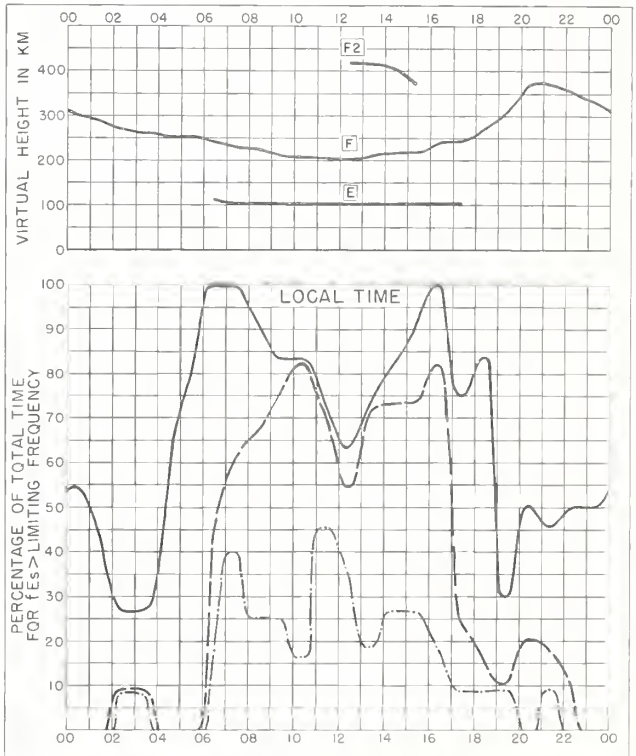



Fig. 112. TAMANRASSET, FRENCH W. AFRICA JULY 1958

NBS 490

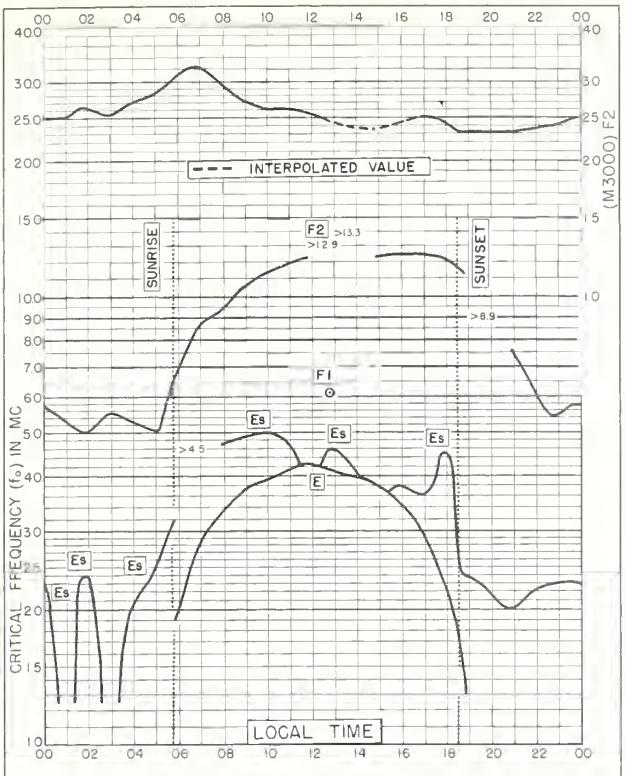
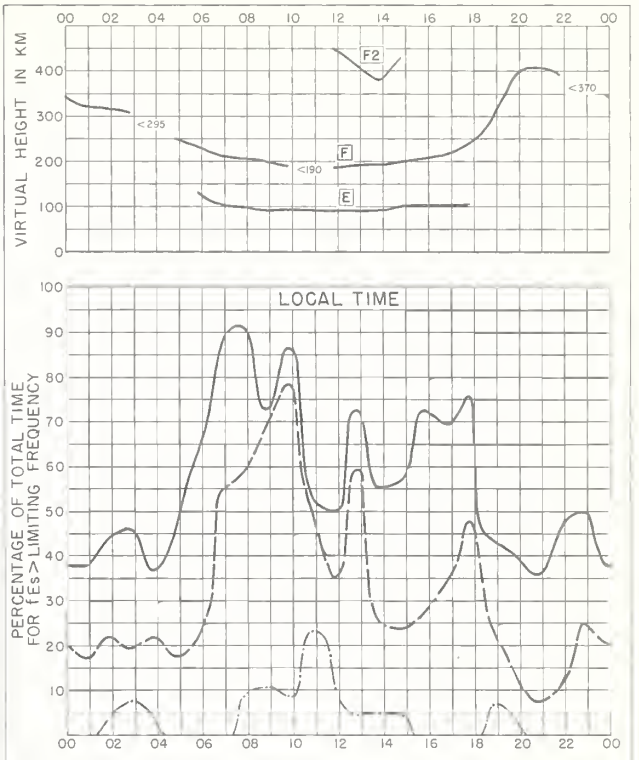



Fig. 113. DAKAR, FRENCH W. AFRICA
14.7°N, 17.4°W JULY 1958

NBS 503




JULY 1958

Fig. 114. DAKAR, FRENCH W. AFRICA

NBS 490

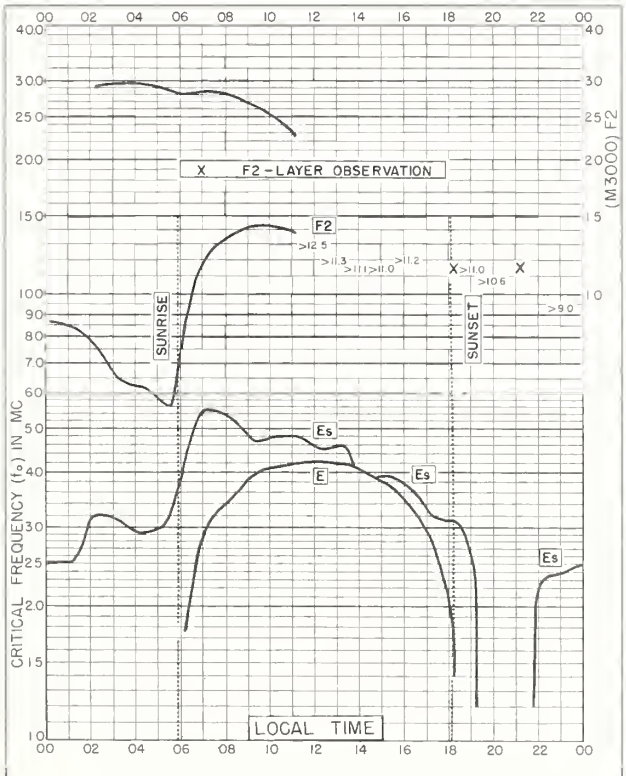
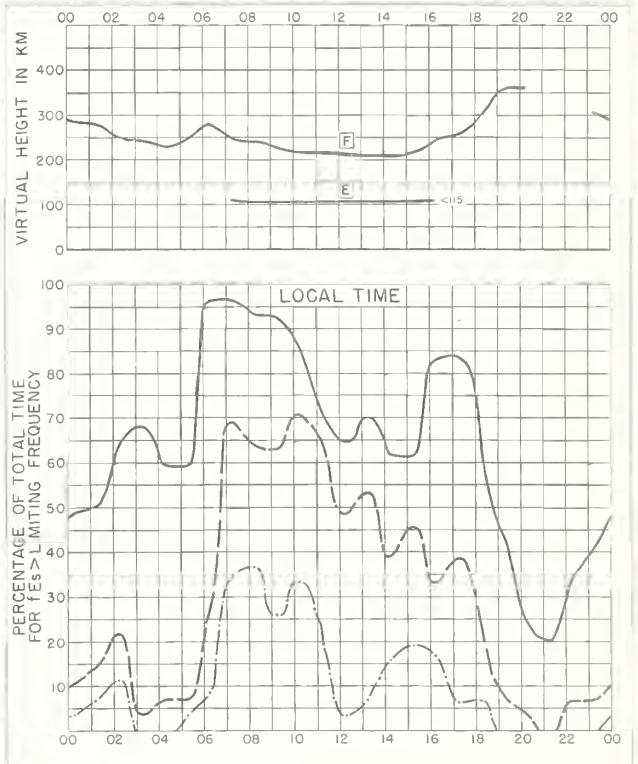



Fig. 115. BANGUI, FRENCH EQUATORIAL AFRICA
4.6°N, 18.6°E JULY 1958

NBS 503




JULY 1958

Fig. 116. BANGUI, FRENCH EQUATORIAL AFRICA

NBS 490

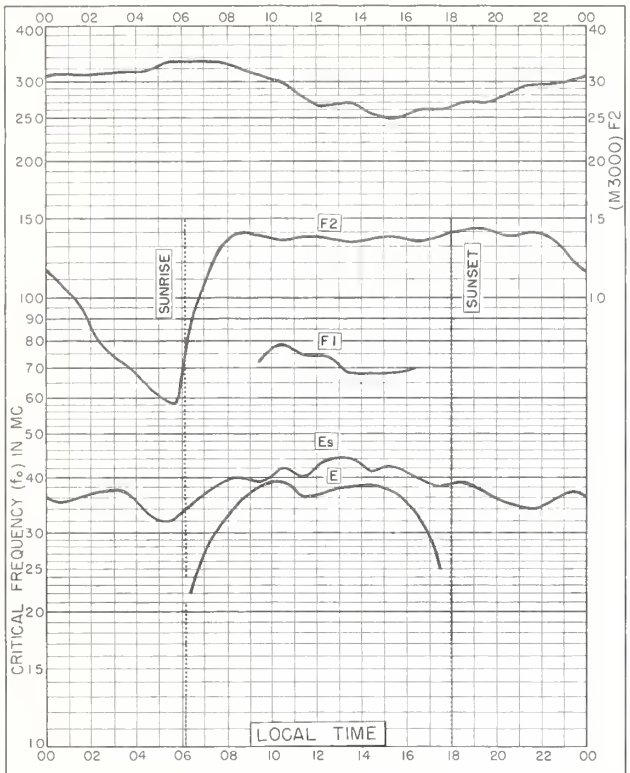
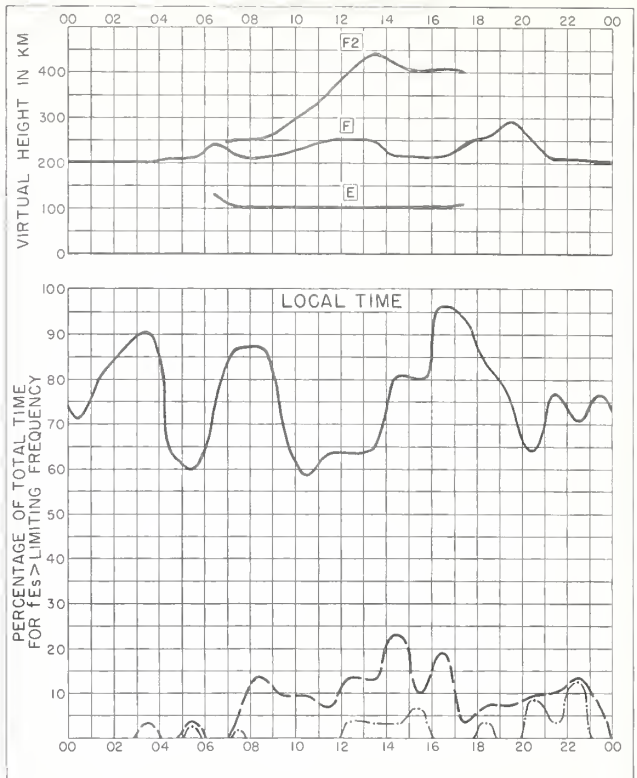



Fig. 117. HOLLANDIA, NETHERLANDS NEW GUINEA
2.5°S, 140.8°E JULY 1958

NBS 503




JULY 1958

Fig. 118. HOLLANDIA, NETHERLANDS NEW GUINEA

NBS 490

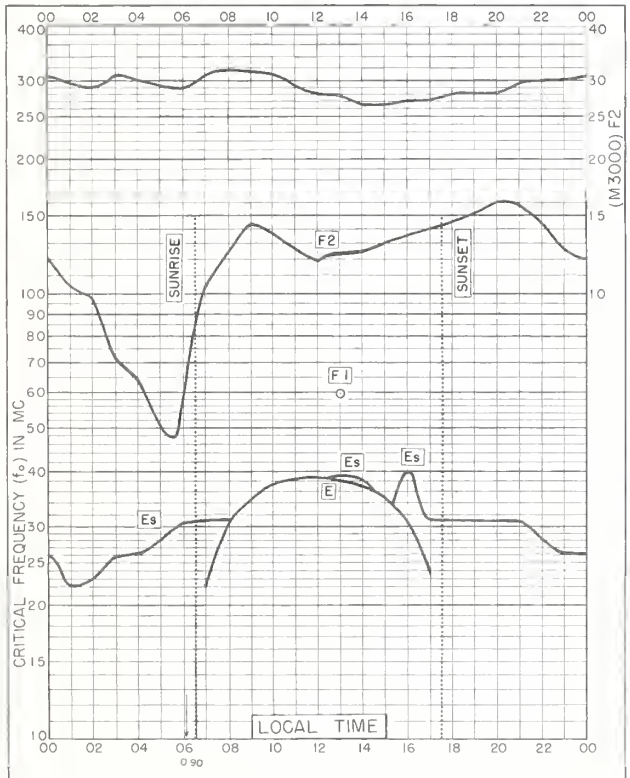



Fig. 119. TAHITI, SOCIETY IS.
17.7°S, 149.3°W JULY 1958

NBS 503

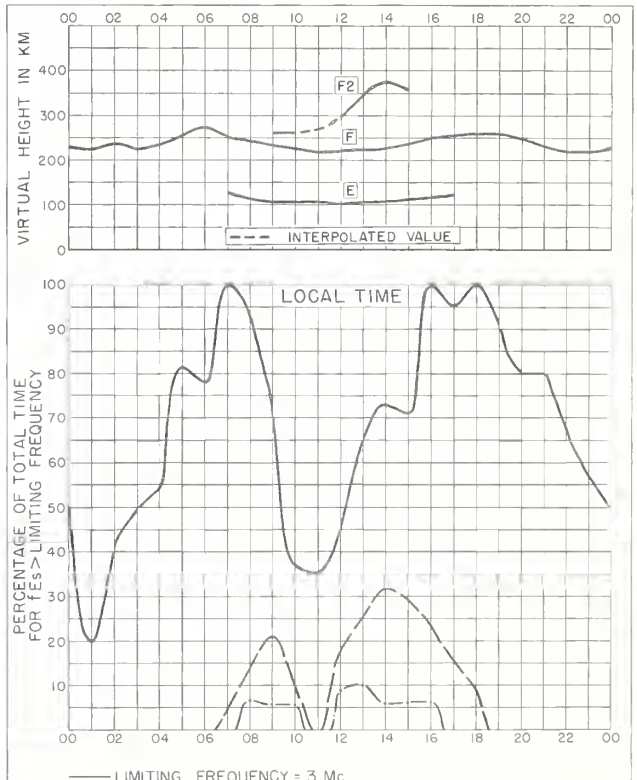



Fig. 120. TAHITI, SOCIETY IS. JULY 1958

NBS 490

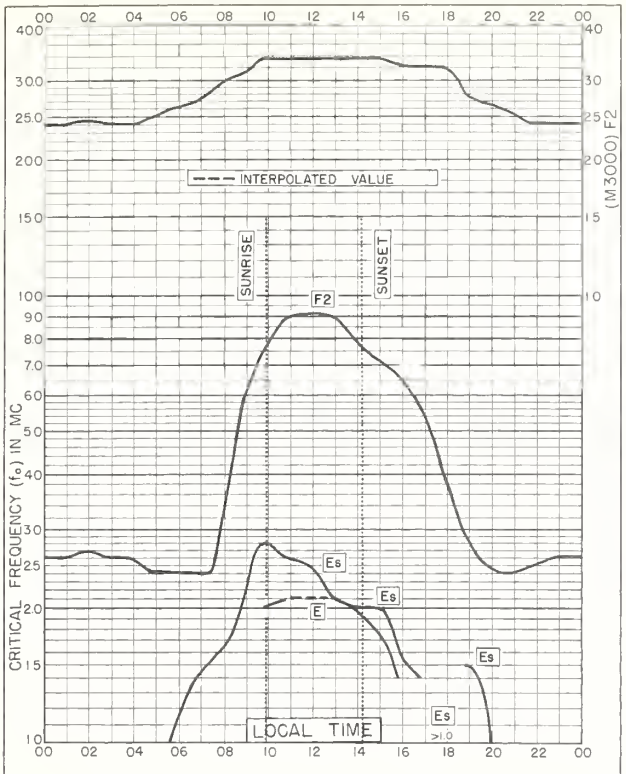



Fig. 121. PORT LOCKROY
64.8°S, 63.5°W JULY 1958

NBS 503

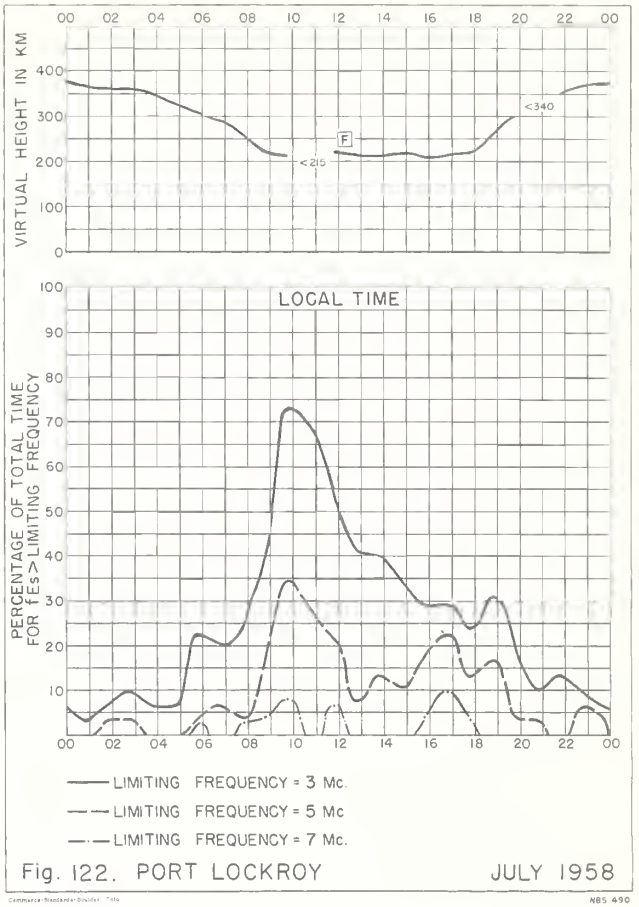



Fig. 122. PORT LOCKROY JULY 1958

NBS 490

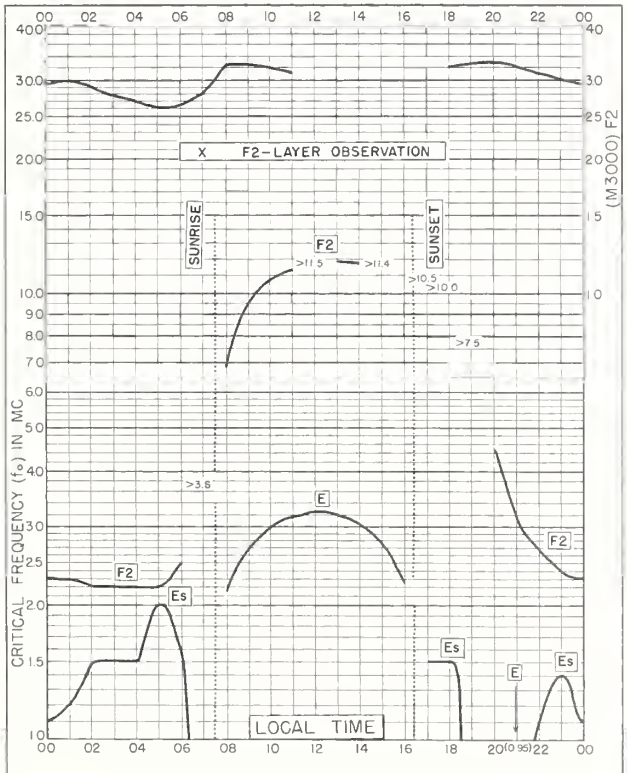



Fig. 123. KERGUELEN I.
49.4°S, 70.3°E MAY 1957

NBS 503

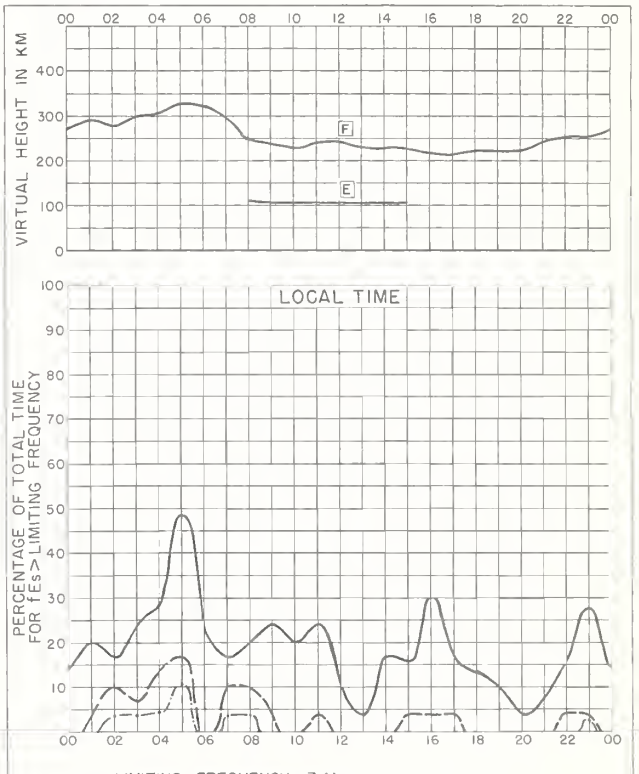



Fig. 124. KERGUELEN I. MAY 1957

NBS 490

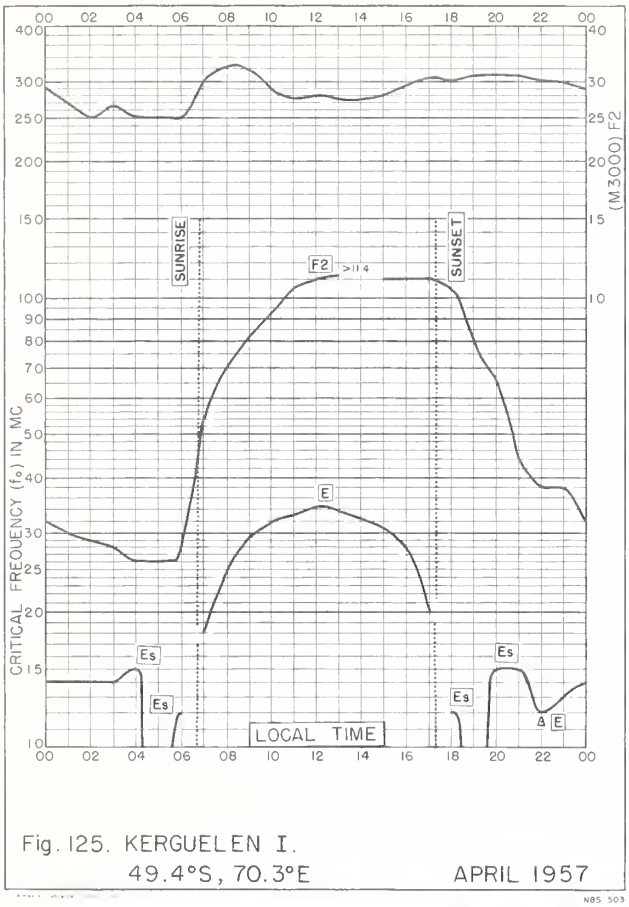



Fig. 125. KERGUELEN I.
49.4°S, 70.3°E APRIL 1957

NBS 503

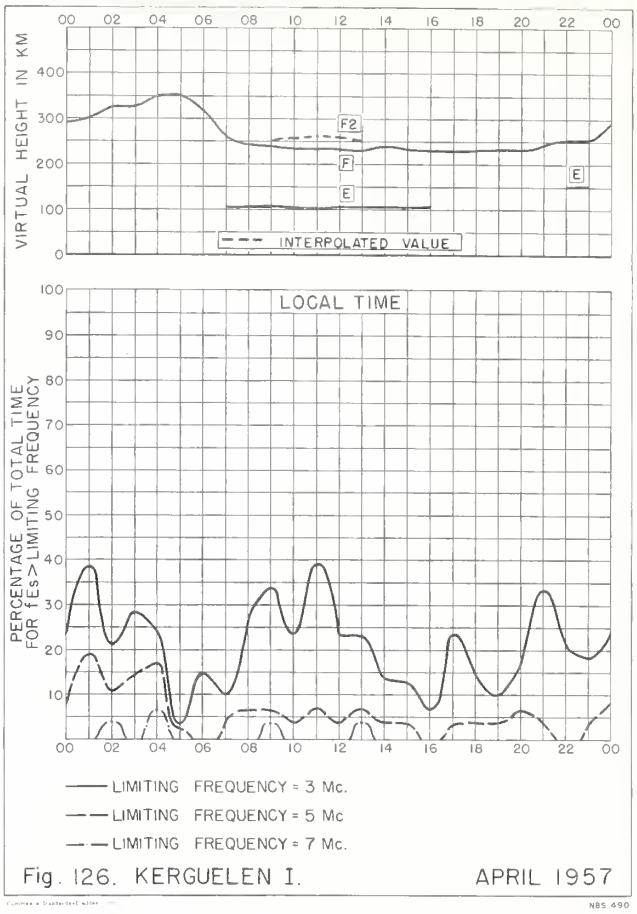



Fig. 126. KERGUELEN I. APRIL 1957

NBS 490

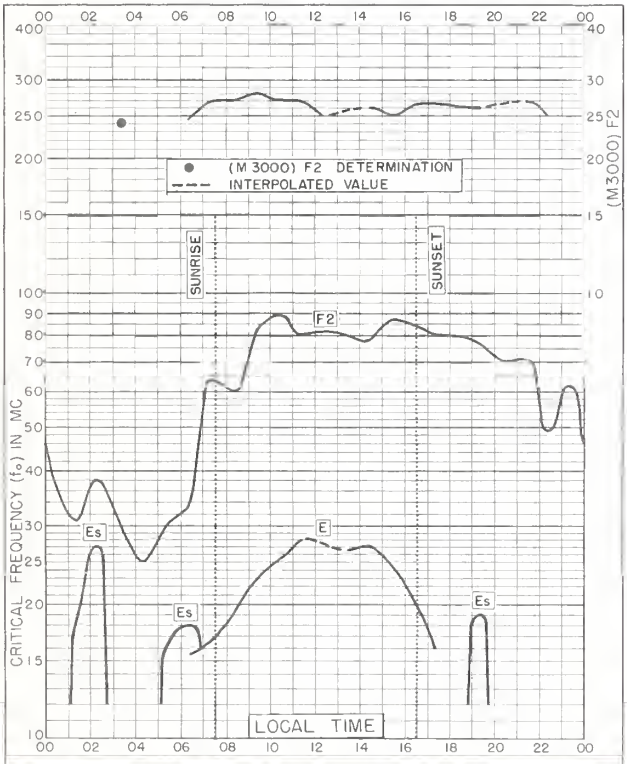



Fig. 127. TERRE ADELIE
66.7°S, 140.0°E APRIL 1957

NBS 503

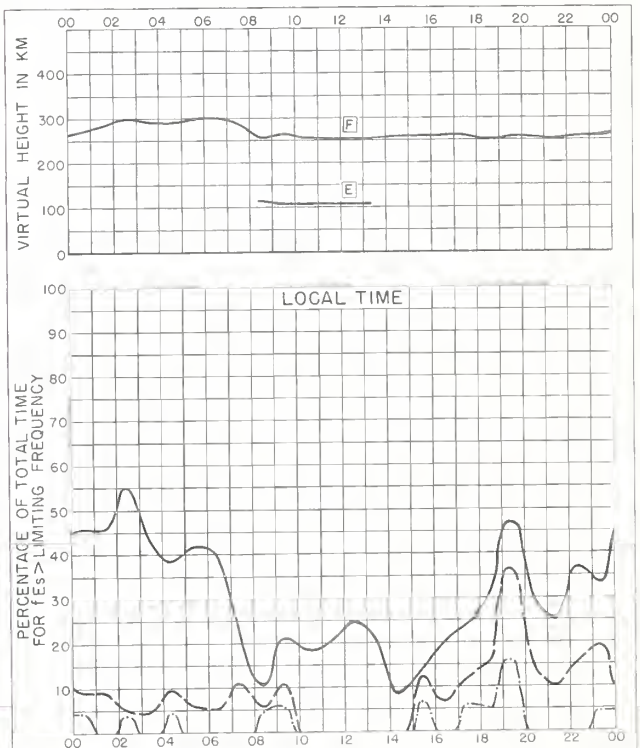



Fig. 128. TERRE ADELIE APRIL 1957

NBS 490

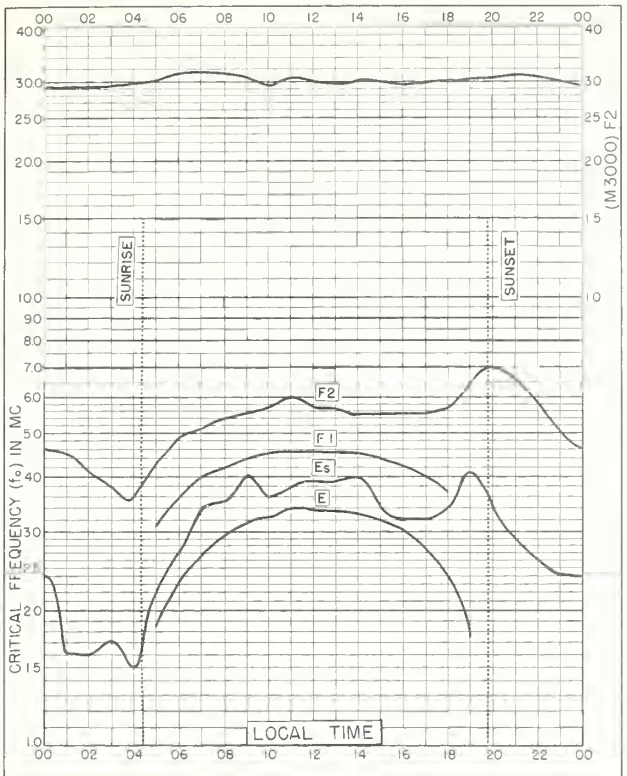



Fig. 129. FREIBURG, GERMANY
48.1°N, 7.8°E JULY 1955

NBS 503

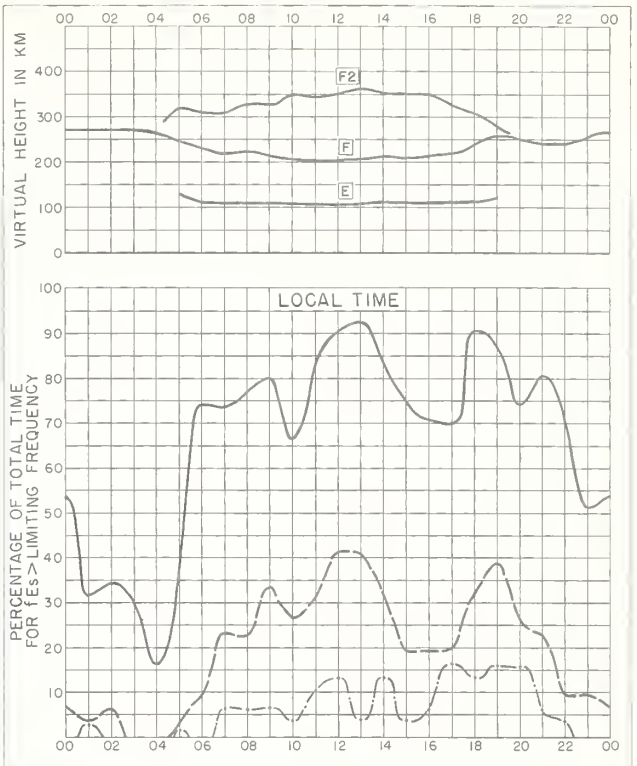



Fig. 130. FREIBURG, GERMANY JULY 1955

NBS 490

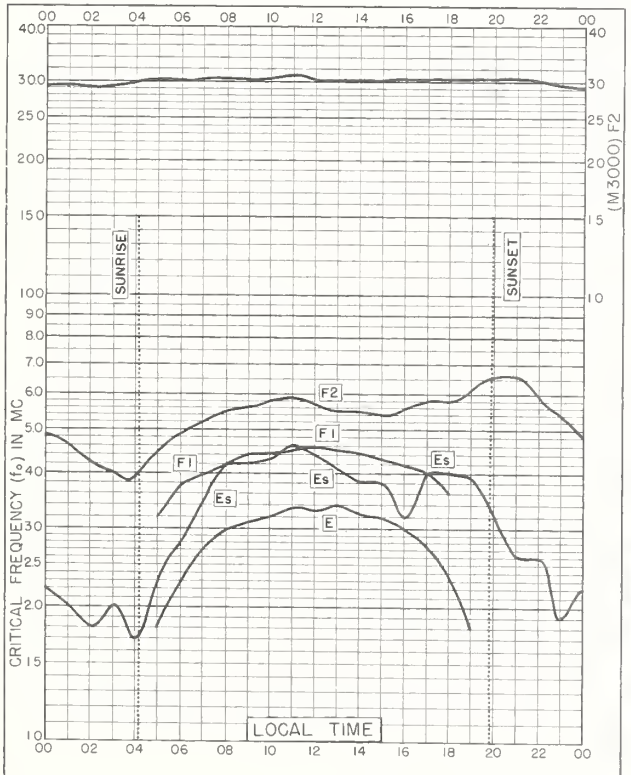



Fig. 131. FREIBURG, GERMANY
48.1°N, 7.8°E JUNE 1955

NBS 503

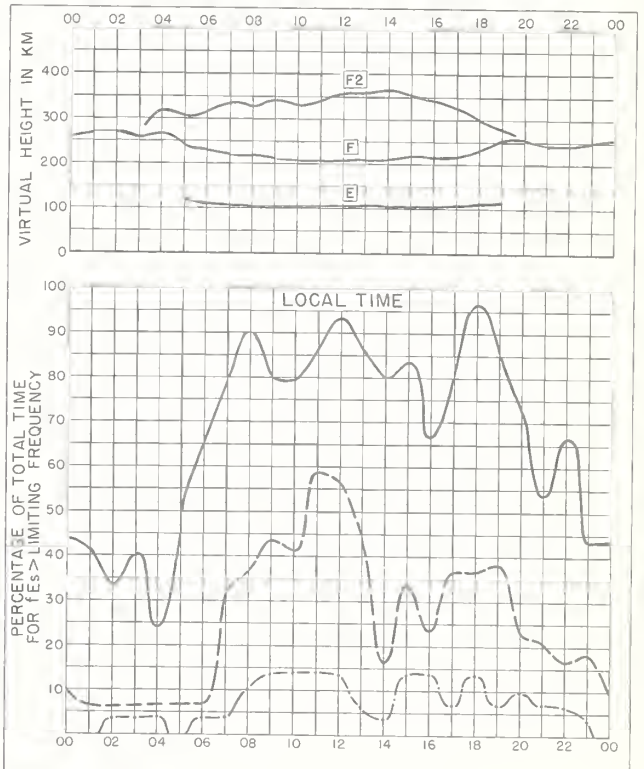



Fig. 132. FREIBURG, GERMANY JUNE 1955

NBS 490

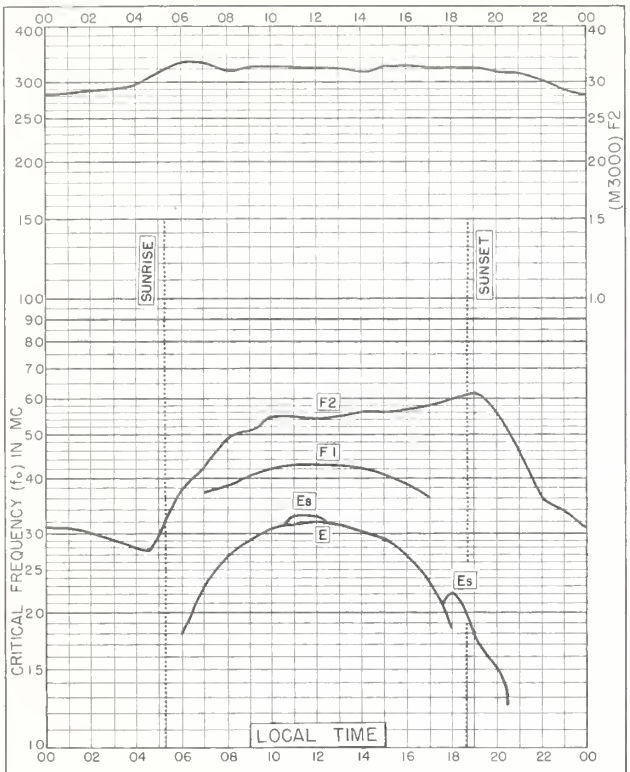



Fig. 133. FREIBURG, GERMANY
48.1°N, 7.8°E APRIL 1955

NBS 503

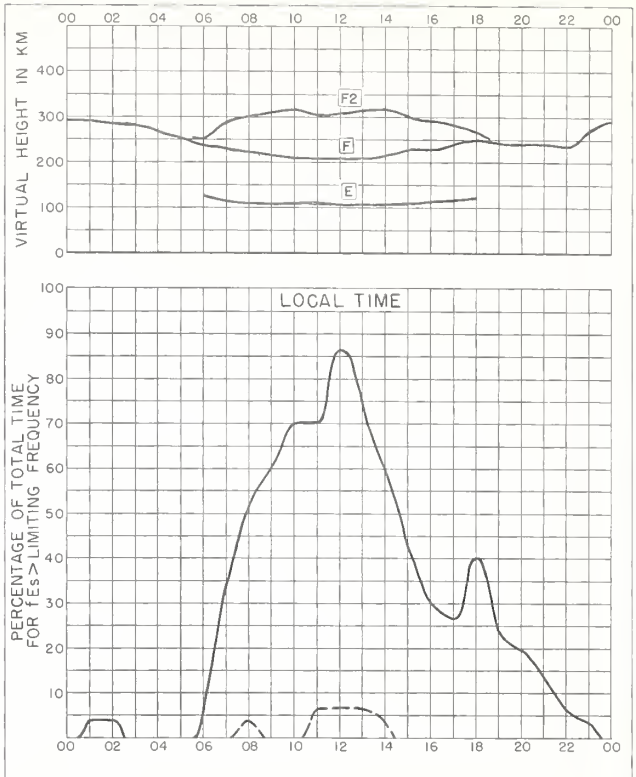



Fig. 134. FREIBURG, GERMANY APRIL 1955

NBS 490

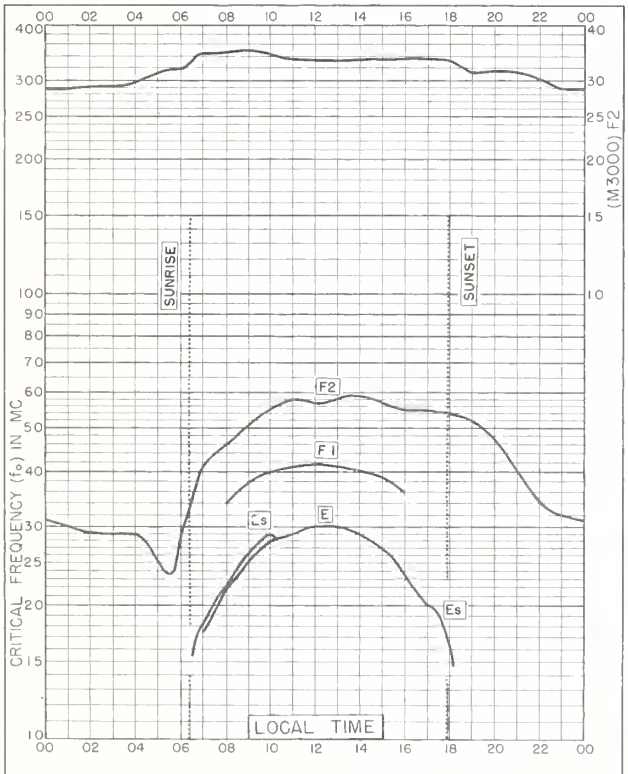



Fig. 135. FREIBURG, GERMANY
48.1°N, 7.8°E MARCH 1955

NBS 503

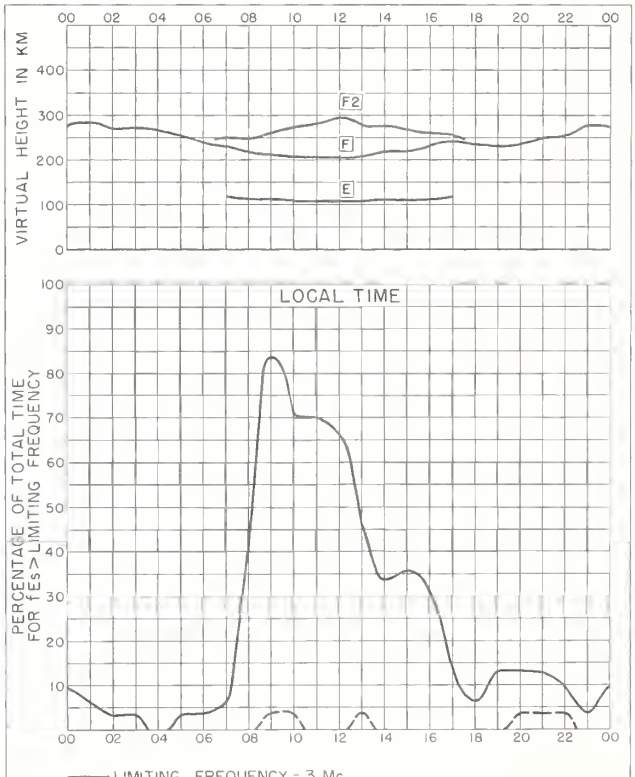



Fig. 136. FREIBURG, GERMANY MARCH 1955

NBS 490

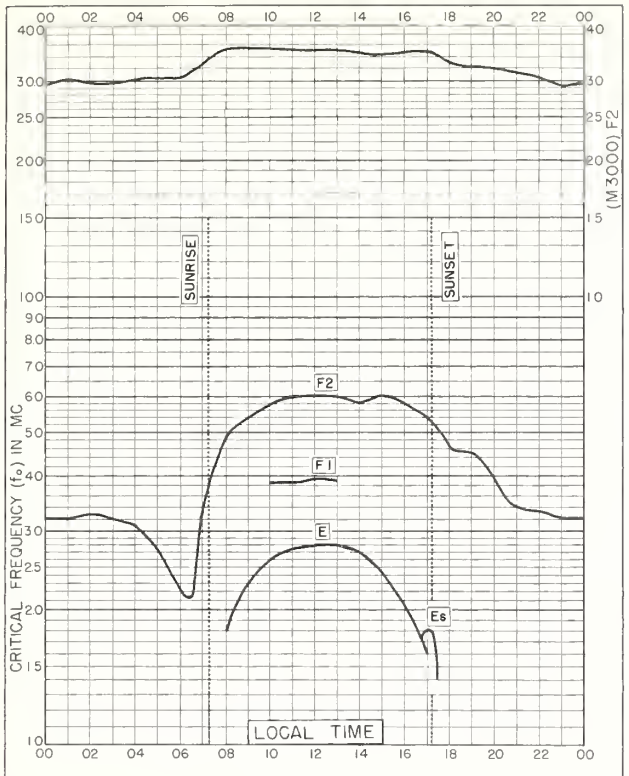



Fig. 137. FREIBURG, GERMANY
48.1°N, 7.8°E FEBRUARY 1955

NBS 503

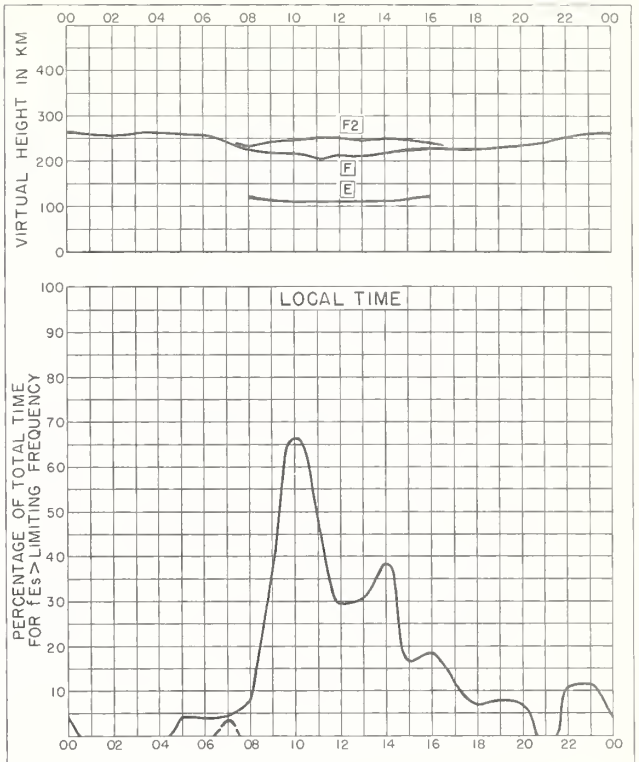



Fig. 138. FREIBURG, GERMANY FEBRUARY 1955

NBS 490

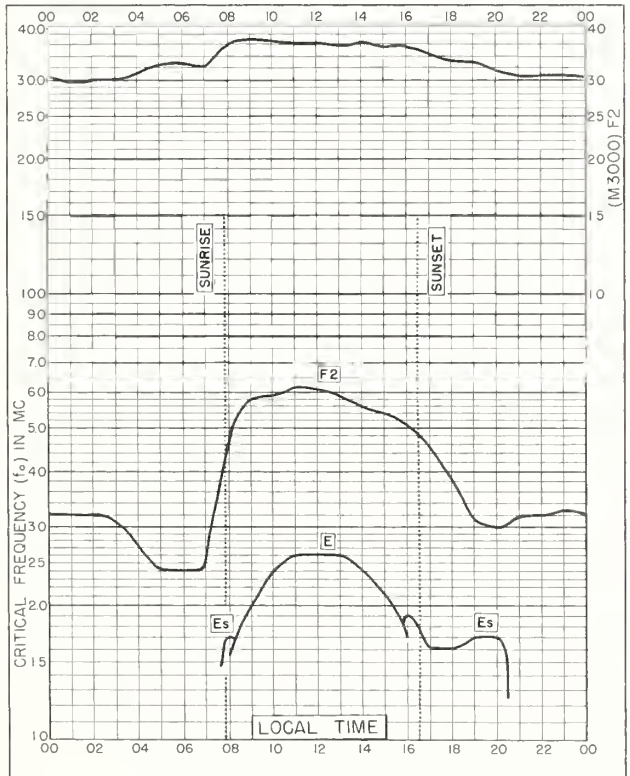



Fig. 139. FREIBURG, GERMANY
48.1°N, 7.8°E JANUARY 1955

NBS 503

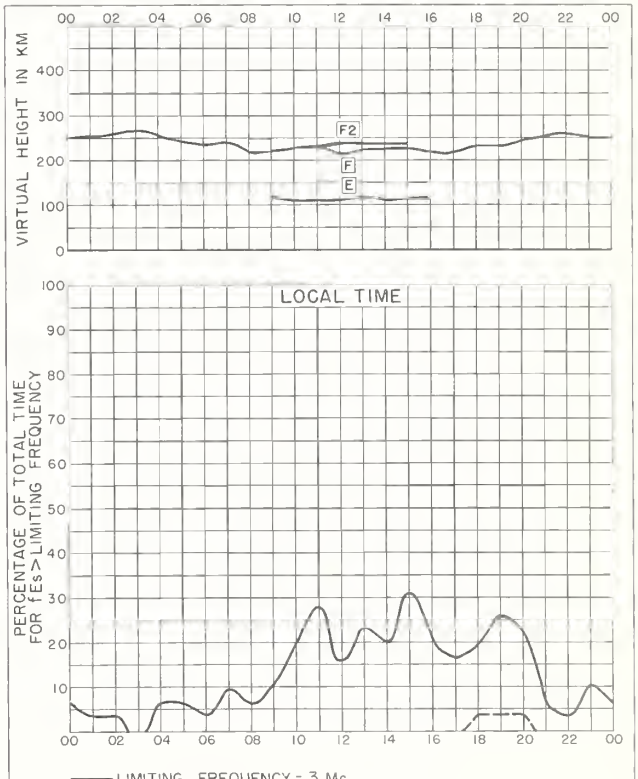



Fig. 140. FREIBURG, GERMANY JANUARY 1955

NBS 490

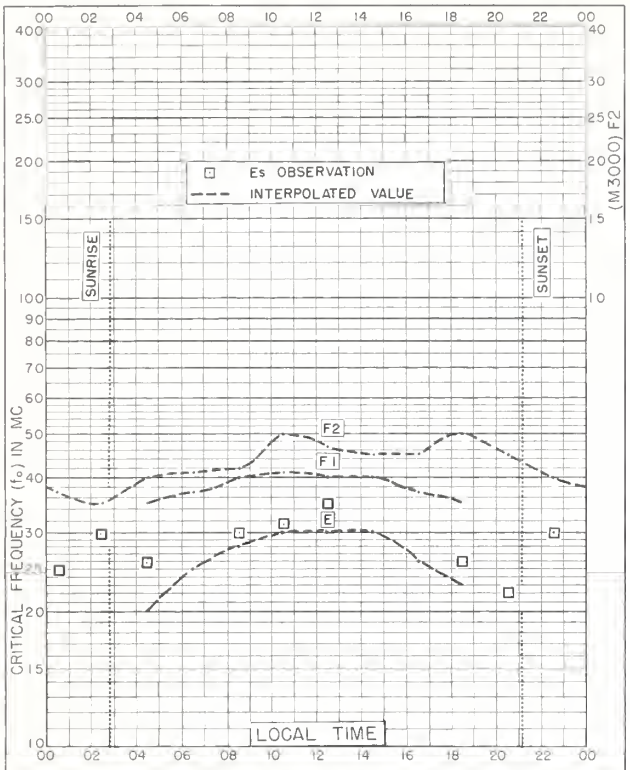



Fig. 141. LULEA, SWEDEN
65.6°N, 22.1°E MAY 1953

NBS 503

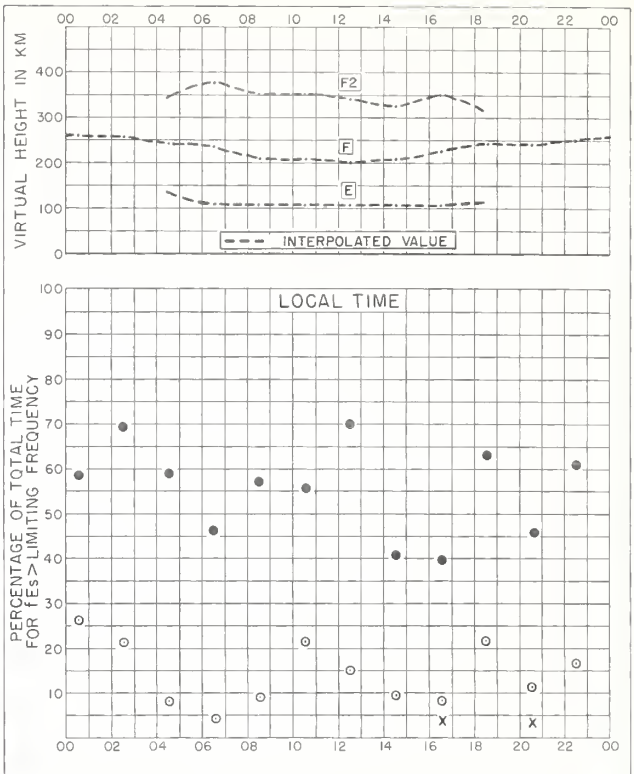



Fig. 142. LULEA, SWEDEN MAY 1953

NBS 490

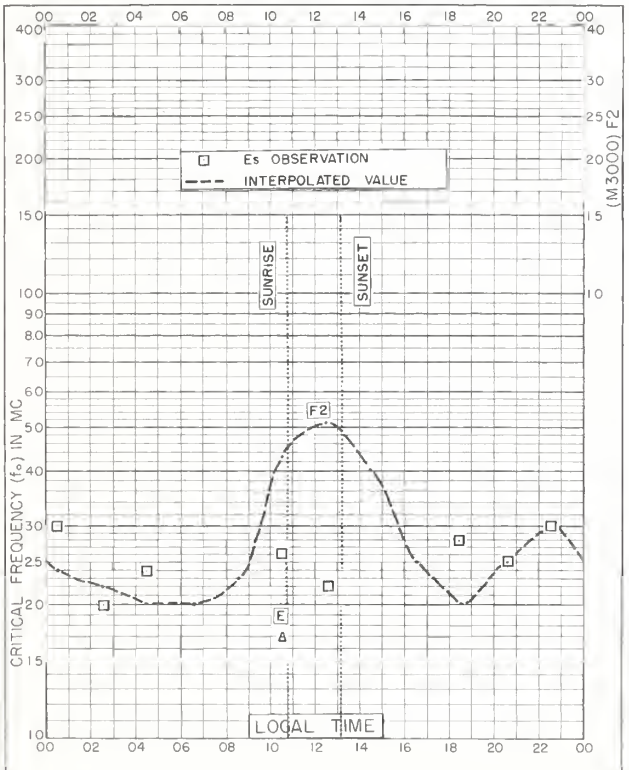



Fig. 143. LULEA, SWEDEN
65.6°N, 22.1°E DECEMBER 1952

NBS 503

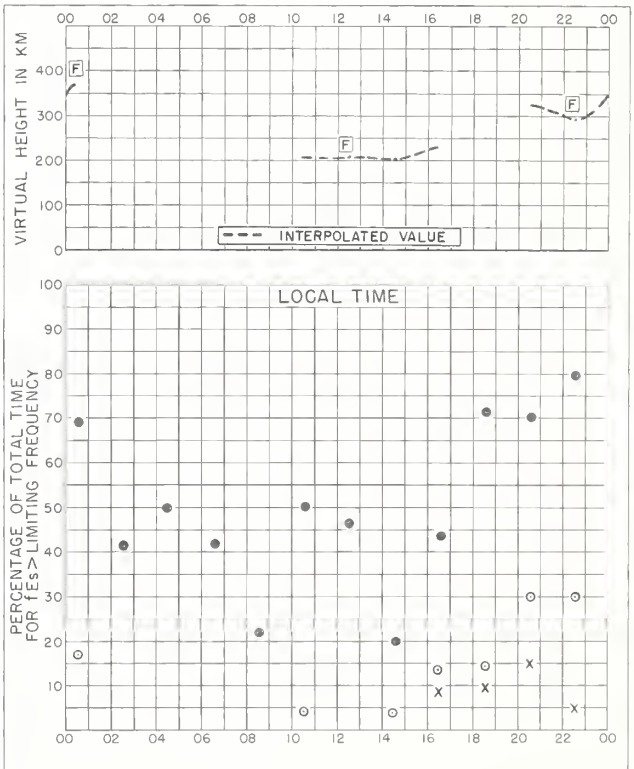



Fig. 144. LULEA, SWEDEN DECEMBER 1952

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## in CRPL-F199 (Part A)

Index (CRPL-F199 (Part A), continued)

Index (CRPL-F199 (Part A), concluded)

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CRPL—F. (Part A). Ionospheric Data.
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Limited distribution. These publications are in general disseminated only to those individuals or scientific organizations which collaborate in the exchange of ionospheric, solar, geomagnetic, or other radio propagation data.

*Catalog of Data:*

A catalog of records and data on file at the U. S. IGY World Data Center A for Airglow and Ionosphere, Boulder Laboratories, National Bureau of Standards, which includes a fee schedule to cover the cost of supplying copies, is available upon request.

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

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NBS Circular 465. Instructions for the Use of Basic Radio Propagation Predictions. 30 cents.

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